FINAL

ANNUAL (FOURTH QUARTER) 2014 GROUNDWATER SAMPLING REPORT

FORT MONMOUTH, OCEANPORT, MONMOUTH COUNTY, NEW JERSEY

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LIST OF ACRONYMS

ACRONYM	DEFINITION
Accutest	Accutest Laboratories
amsl	above mean sea level
BRAC	Base Closure and Realignment
CWA	Charles Wood Area
DoD	Department of Defense
ELAP	Environmental Laboratory Accreditation Program
FTMM	Fort Monmouth
FS	Feasibility Study
FSPM	Field Sampling Procedures Manual
GWQS	Ground Water Quality Standards
HASP	Health and Safety Plan
LFPS	Low-Flow Purging and Sampling
MCL	Maximum Contaminant Level
MP	Main Post
MTBE	methyl tert-butyl ether
NELAP	National Environmental Laboratory Accreditation Program
NJDEP	New Jersey Department of Environmental Protection
Parsons	Parsons Government Services, Inc.
PCB	polychlorinated biphenyls
PCE	tetrachloroethene
PDB	Passive Diffusion Bag
PVC	polyvinyl chloride
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
QSM	Quality Systems Manual
RI	Remedial Investigation
SAP	Sampling Analysis Plan
SVOC	semi-volatile organic compound
TBA	tert-butyl alcohol
TCE	trichloroethene
TCL	target compound list
TIC	tentatively identified compound

TO	Task Order
TRSR	Technical Requirements for Site Remediation
USAESCH	United States Army Engineering & Support Center, Huntsville
USEPA	United States Environmental Protection Agency
VC	vinyl chloride
VOC	volatile organic compounds
WERS	Worldwide Environmental Restoration Services

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1.0 INTRODUCTION

This report presents the results for the annual (fourth quarter) 2014 groundwater sampling event performed at 14 sites within Fort Monmouth (FTMM) by Parsons Government Services, Inc. (Parsons) to support the Remedial Investigation (RI), Feasibility Study (FS), and Decision Documents project at FTMM, Oceanport, Monmouth County, New Jersey.

The work was conducted under the Worldwide Environmental Restoration Services (WERS) contract number W912DY-09-D-0062 of the United States Army Engineering & Support Center, Huntsville (USAESCH).

The activities discussed within this report were conducted in accordance with:

- New Jersey Department of Environmental Protection (NJDEP) Technical Requirements for Site Remediation (TRSR) (N.J.A.C. 7:26E); and
- New Jersey Field Sampling Procedures Manual (FSPM) (February 2006).

1.1 PURPOSE AND SCOPE

Groundwater sampling was conducted between September 29, 2014 and December 19, 2014. The sampling program implemented is consistent with the recommendations for quarterly/annual sampling made in the August 2013 Baseline Groundwater Sampling Report (Parsons, 2014), and accepted by the NJDEP in a letter dated February 5, 2015. Analytical results for the samples collected in 2014 were also used to evaluate the FTMM's long-term groundwater sampling program and the potential for removal of monitoring wells or analytes in comparison to historical groundwater concentrations.

1.2 REPORT ORGANIZATION

This Annual (Fourth Quarter) 2014 Groundwater Sampling Report includes the following sections:

- Section 1 provides an introduction and organization to the report;
- Section 2 presents general information on the annual (fourth quarter) 2014 groundwater sampling event, a description of any significant deviations or events that may have impacted results, and the usability of laboratory analytical data;
- Section 3 provides the applicable remedial standards;
- Section 4 summarizes the approach to findings and recommendations for the FTMM Groundwater Sampling Program Sites;
- Section 5 presents the references used in preparation of this report;
- Appendices A through N provide historical groundwater analytical results, annual 2014 groundwater analytical results, and the findings and recommendations for each site;
- Appendix O provides a memorandum regarding data validation for the 2014 annual sampling event; and
- Appendix P provides the laboratory analytical reports, which are included as a CD;
- Appendix Q provides relevant communication with the NJDEP regarding groundwater sampling at the FTMM for 2014.

2.0 GROUNDWATER SAMPLING PROGRAM

2.1 INTRODUCTION

Work performed as part of the FTMM Groundwater Sampling Program was conducted as outlined in the project's Sampling and Analysis Plan (SAP) (Parsons, 2013), and Health and Safety Plan (HASP) (Parsons, 2013). The groundwater sampling event involved depth-to-water level measurements and collection of groundwater samples from 49 monitoring wells. The monitoring wells are located at 14 sites within two areas of FTMM, the Main Post (MP) and Charles Wood Area (CWA). **Table 1** presents the site name, location area, number of wells on the site and number of wells sampled. Prior to groundwater sampling activities, a site reconnaissance was performed to locate each monitoring well and assess its condition and accessibility. The location of FTMM and the 14 sites discussed within this report is provided on **Figure 1.1**, **Figure 1.2**, **and Figure 1.3**.

Further details regarding groundwater sampling activities and results for each individual site can be found in **Appendices A through N**.

2.1.1 Water Level Measurements

Between September 29 and October 1, 2014, depth-to-water measurements were collected from site monitoring wells prior to initiating sampling activities. Levels were obtained with an oil water interface probe from the top of the inner casing of the well. The water level probe was decontaminated in accordance with the SAP. Water level measurements were used to calculate the groundwater elevations, and confirm the previously determined groundwater flow direction. Groundwater contour figures for the 14 sites discussed within this report are provided in **Appendices A through N**.

2.1.2 Monitoring Well Assessment

During depth-to-water measurement in the monitoring wells, the condition of each monitoring well was assessed. Wells were visually inspected for physical damage, obstructions, or the presence of pump tubing in the well casing. The depth to the bottom of each monitoring well was also gauged and compared to the installed depth in order to determine if there was sediment build up in the well. The condition of the monitoring wells at each of the 14 FTMM sites is presented in Section 2.0 of the individual **Appendices A through N** for each FTMM site**.**

2.1.3 Groundwater Sampling

Groundwater samples were collected from 49 monitoring wells between September 30 and October 3 of 2014 using either low-flow purging and sampling (LFPS) or passive diffusion bag (PDB) sampling methodology. NJDEP approved the use of PDB sampling in a letter dated July 29, 2013 at FTMM-22 and FTMM-68, and at that time FTMM-53 was not approved for PBDs because of the historical presence of methyl tert-butyl ether (MTBE) in groundwater (a copy of the letter is provided in **Appendix Q**). However, the August 2013 baseline and first quarter 2014 groundwater sampling results demonstrated that MTBE was no longer present in the wells or detected at very low concentrations slightly above the detection limit on the site (FTMM-53). The NJDEP agreed that this site was deemed eligible for sampling using PDB based on their July 3, 2014 comment letter (refer to **Appendix Q**). PDBs were filled with laboratory-grade de-ionized water, deployed in monitoring wells and allowed to equilibrate for a minimum of two weeks prior to retrieving and collecting groundwater samples. Groundwater sampling activities using PDBs

were performed in accordance with the NJDEP FSPM (NJDEP, 2009) and the SAP. Vertical profiling of well screens for each fully saturated five foot interval was performed, where required, during the annual (fourth quarter) 2014 groundwater sampling event. If vertical profiling had previously been performed on a particular well, it was not repeated.

A groundwater sampling summary, including the Site name, well ID, analytical analysis, sampling method, and the sample date, is presented in **Table 2**.

ALS Environmental of Rochester, NY (NJ cert. #NY004) served as the primary analytical laboratory for the 2014 annual (fourth quarter) groundwater sampling event. Samples were shipped on ice under chain of custody to ALS Environmental via FedEx. Accutest Laboratories (Accutest) of Dayton, NJ (NJ cert. #12129) served as the quality assurance (QA) laboratory. Five percent of groundwater samples collected were "split" and submitted to both ALS Environmental and Accutest consistent with the SAP. Both ALS Environmental and Accutest are Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP) and National Environmental Laboratory Accreditation Program (NELAP) certified laboratories that follow the project specifications of the DOD Quality Systems Manual (QSM) Version 4.1 or the latest version.

Water generated during the groundwater sampling was passed through portable granular activated carbon buckets and discharged to the ground surface adjacent to the well sampled.

2.1.3.1 Groundwater Sampling at FTMM-54

Quarterly groundwater monitoring occurred at FTMM-54 from June 1994 to May 2011 and in 2013 for a baseline sampling event using a network of up to seven monitoring wells. Four of the wells have been historically sampled in association with FTMM-18 to provide groundwater quality data since the former fuel distribution piping associated with FTMM-54 extended beneath the southwestern portion of FTMM-18. One volatile organic compound (benzene) exceeded the NJDEP Groundwater Quality Standards (GWQS) but the exceedances is limited to one monitoring well (296MW06) located within the footprint of FTMM-18. The suspected source of the VOCs are attributed to the numerous fuel spills that occurred during use of diesel and gasoline generators to support field exercises at FTMM-18. The NJDEP approved the no further action for groundwater at FTMM-54 in a letter dated February 4, 2015 based on the VOCs detected in the groundwater at well 296MW06 and will be addressed under the FTMM-18 site. Monitoring of the groundwater was discontinued in 2014 for FTMM-54 and the sampling of wells (296MW04 and 296MW06) is being performed under the FTMM-18 site.

2.1.3.2 Groundwater Sampling at FTMM-56

Based on the August 2013 Baseline Groundwater Sampling Report, one additional round of groundwater monitoring was recommended for FTMM-56 to confirm the August 2013 sampling results, however this was not completed during the 2014 annual (fourth quarter) sampling event. For the 2015 annual sampling event, lead analysis is recommended for one additional sampling event from monitoring well 80MW05 and pesticide analysis is recommended for one sampling round at 80MW02 due to the historical chlordane exceedances. Monitoring wells will be sampled via LFPS methodology.

2.1.4 QA/QC Sampling

Quality Assurance/Quality Control (QA/QC) samples were collected in accordance with the NJDEP FSPM and the Quality Assurance Project Plan (QAPP), which is included as part of the SAP.

2.2 DEVIATIONS FROM QAPP AND SAP

Deviations from the SAP for this sampling event are summarized in **Table 3**. In general, there were no significant deviations that could have adversely affected the sampling procedures or the results of the groundwater sampling presented in this report.

2.3 USABILITY OF LABORATORY ANALYTICAL DATA

A Level IV validation was performed on analytical data collected during the annual (fourth quarter) 2014 groundwater sampling event. Per the project QAPP, the validation for Long Term Monitoring Data includes a minimum of one report per sampling event or 33% of the data throughout the project, whichever is less. The data submitted by the laboratory has been reviewed and validated as per the SAP and was found to be usable for the purposes of this project. The Data Validation and the Data Verification Summary Reports are provided in **Appendix O** and complete laboratory analytical reports for groundwater samples collected are provided in **Appendix P** (on CD). The data validation performed meets the substantive requirements of the NJDEP's *Analytical Laboratory Data Generation, Assessment, and Usability Technical Guidance* (April 2014).

3.0 APPLICABLE REMEDIAL STANDARDS

For FTMM, the applicable remediation standards for groundwater are the NJDEP GWQS for Class IIA waters and the United States Environmental Protection Agency (USEPA) Maximum Contaminant Levels (MCLs) for Chemical Contaminants at Superfund Sites for Tap Water.

Both the GWQS and the USEPA MCL are provided in historical and 2014 groundwater data tables for reference purposes. If a chemical compound has a GWQS, then that standard is used and where the USEPA MCLs are applicable for those compounds where a GWQS is not established.

In a July 3, 2014 comment letter, the NJDEP agreed that metals at FTMM-02, FTMM-04, FTMM-08 (with the exception of lead), FTMM-12 (with the exception of lead), FTMM-25, FTMM-54, FTMM-55, FTMM-67, and FTMM-64, are indicative of background conditions and therefore sampling for metals maybe discontinued for these sites. In this Annual (Fourth Quarter) 2014 Groundwater Sampling Report, background groundwater concentrations of metals, are provided in the analytical results tables for comparison at FTMM-03, FTMM-08, and FTMM-57 where samples were submitted for metals analysis.

3.1 ANOMALOUS RESULTS

An anomaly is an exceedance of the applicable criteria that is not attributable to background concentrations and/or Site contamination. It typically succeeds and precedes non-exceedance sample results and is not representative of historical data for that location. Anomalies can be caused by sample equipment, laboratory equipment, seasonality changes, etc. For the purposes of this report, analytes noted as anomalies will not be considered part of the long term monitoring plan for that site. No anomalous results were reported during this annual sampling event.

4.0 FINDINGS AND RECOMMENDATIONS

Each of the 14 Sites will be discussed as individual Appendices to this report. As part of each Appendix, Findings and Recommendations are presented for that Site. The recommendations provided are for sampling in 2015 to allow for the continued monitoring of groundwater conditions. Remedial investigations are ongoing at several of the sites and these recommendations may be modified based on analysis of new information and evaluation of risk.

For each of the 14 sites, historical data from the last four previous quarterly sampling events or the last two annual sampling events (in this case the last sampling event for 2010/2011 and 2013 baseline sampling event) along with data collected during the annual 2014 sampling event, were evaluated to determine if further sampling is warranted or maybe reduced. Analytical results were evaluated to determine if the detection was an anomaly, potentially part of an overall trend, or affected by seasonal changes. The 2014 groundwater sampling results for each of the 14 sites will be discussed as an individual Appendix to this report. A summary of long term groundwater monitoring recommendations for 2015 is presented in **Table 4.**

5.0 REFERENCES

New Jersey Department of Environmental Protection. *Field Sampling Procedures Manual*, August 2005, Revised April 2009.

New Jersey Department of Environmental Protection. *Letter from Ms. Linda Range, Bureau of Case Management, to Ms. Wanda Green, BRAC Environmental Coordinator at Fort Monmouth.* May 2012.

New Jersey Department of Environmental Protection. *Technical Requirements for Site Remediation*, July 2013.Parsons. *Accident Prevention Plan.* February 2013

Parsons. *Sampling and Analysis Plan for Remedial Investigation/Feasibility Study/Decision Documents*. March 2013.

Parsons. *August* 2013 *Baseline Groundwater Sampling Report.* March 2014.

Roy F. Weston. *Final Site Investigation, Fort Monmouth, New Jersey, Main Post and Charles Wood Area.* December 1995.

New Jersey Department of Environmental Protection. *Letter from Ms. Linda Range, Bureau of Case Management, to Ms. Wanda Green, BRAC Environmental Coordinator at Fort Monmouth.* July 2014.

New Jersey Department of Environmental Protection. *Letter from Ms. Linda Range, Bureau of Case Management, to Ms. Wanda Green, BRAC Environmental Coordinator at Fort Monmouth.* February 2015.

FTMM. *Letter from Ms. Wanda Green, BRAC Environmental Coordinator at Fort Monmouth, to Ms. Linda Range, Bureau of Case Management.* November 2014.

TABLES

Table 1 Monitoring Well Locations
Table 2 Groundwater Sampling Summary
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Table 4 Summary of Long Term Groundwater Monitoring Recommendations

Table 1
Monitoring Well Locations
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site	Area	Number of Wells on the Site	Number of Wells Sampled
FTMM-02: Closed Solid Waste Landfill	MP	16	6
FTMM-03: Closed Solid Waste Landfill	MP	13	2
FTMM-04: Closed Solid Waste Landfill	MP	6	Discontinued in 2013
FTMM-05: Closed Solid Waste Landfill	MP	10	4
FTMM-08: Closed Solid Waste Landfill	MP	14	8
FTMM-12: Closed Solid Waste Landfill	MP	16	Discontinued in 2013
FTMM-14: Closed Solid Waste Landfill	MP	6	Discontinued in 2013
FTMM-18: Closed Solid Waste Landfill/Former Training Area*	MP	8	4
FTMM-22: (CWA-1) Waste Water Treatment Lime Pit	CW	17	6
FTMM-25: (CWA-3A) Landfill	CW	4	Discontinued in 2013
FTMM-53: Building 699 Gasoline Storage	MP	14	8
FTMM-54: Building 296 Gasoline Storage	MP	7	Discontinued*
FTMM-55: Building 290 UST Gasoline	MP	1	Discontinued in 2013
FTMM-56: Building 80 Petroleum Release	MP	6	Not Sampled
FTMM-57: Building 108 UST Gasoline Release	MP	4	1
FTMM-58: Building 2567 UST Gasoline	CW	7	2
FTMM-59: Building 1122 Unknown Discharge	MP	7	1
FTMM-61: B37 Building 283 Gasoline Storage	MP	4	1
FTMM-64: Building 812 UST Gasoline	MP	8	1
FTMM-66: Building 886 Former AST	MP	13	3
FTMM-68: Building 700 Former UST	MP	2	2
Notes:	Total	183	49

MP - Main Post Area

CW - Charles Wood Area

Wells have been discontinued based on recommendations in the 2013 Baseline Groundwater Sampling Report as approved by the NJDEP in the February 5, 2015 comment letter.

*indicates select wells installed at FTMM-54 have been historically sampled in association with FTMM-18 since they are located in or near the boundary of FTMM-18 and now will be sampled under FTMM-18.

Table 2
Groundwater Sampling Summary
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site Name/Well ID	Analytical Analysis	Sampling Method	Sample Date
FTMM-02, Closed Solid Waste Landfill			
M2MW03	VOCs & TICs-EPA Method 8260C	PDB	9/30/14, 12/18/14
M2MW10			9/30/14, 12/18/14
M2MW11			9/30/14, 12/18/14
M2MW21			9/30/14, 12/18/14
M2MW22			9/30/14, 12/18/14
M2MW24			9/30/14, 12/18/14
FTMM-03, Closed Solid Waste Landfill			
M3MW02	VOCs & TICs-EPA Method 8260C Metals-EPA Method 6010C/7470A	LFPS	10/3/2014
M3MW07			10/2/2014
FTMM-04, Closed Solid Waste Landfill - Discontinued in 2013			
FTMM-05, Closed Solid Waste Landfill			
M5MW11	VOCs & TICs-EPA Method 8260C	PDB	10/1/14, 12/19/14
M5MW16			10/1/14, 12/19/14
M5MW20			10/1/14, 12/19/14
M5MW23			10/1/14, 12/19/14
FTMM-08, Closed Solid Waste Landfill			
697MW01	VOCs & TICS-EPA Method 8260C Pesticides-EPA Method 8081B Lead-EPA Method 6010C	LFPS	10/1/2014
M8MW11			10/1/2014
M8MW12			10/2/2014
M8MW15			10/1/2014
M8MW16			10/1/2014
M8MW17			10/2/2014
M8MW21			10/2/2014
RM8MW24			10/1/2014
FTMM-12, Closed Solid Waste Landfill - Discontinued in 2013			
FTMM-14, Closed Solid Waste Landfill - Discontinued in 2013			
FTMM-18, Closed Solid Waste Landfill			
M18MW22	VOCs & TICs-EPA Method 8260C	PDB	10/1/14, 12/19/14
M18MW23			10/1/14, 12/19/14
296MW04			10/1/14, 12/18/14
296MW06			10/1/14, 12/18/14
FTMM-22, (CWA-1) Waste Water Treatment Lime Pit			
CW1MW27	VOCs & TICs-EPA Method 8260C	PDB	9/30/14, 12/18/14
CW1MW28			9/30/14, 12/18/14
CW1MW29			9/30/14, 12/18/14
CW1MW31			9/30/14, 12/18/14
CW1MW37			9/30/14, 12/18/14
CW1MW281			9/30/14, 12/18/14
FTMM-25, CW-3A Landfill - Discontinued in 2013			

Table 2
Groundwater Sampling Summary
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site Name/Well ID	Analytical Analysis	Sampling Method	Sample Date
FTMM-53, Building 699 Gasoline Storage			
699MW01	VOCs & TICs-EPA Method 8260C	PDB	9/30/14, 12/18/14
699MW04			9/30/14, 12/18/14
699MW06			9/30/14, 12/18/14
699MW09			9/30/14, 12/18/14
699MW16			9/30/14, 12/18/14
699RW03			9/30/14, 12/18/14
699RW05			9/30/14, 12/18/14
699RW11			9/30/14, 12/18/14
FTMM-55, Building 290 - Discontinued in 2013			
FTMM-56, Building 80 Petroleum Release			
80MW02	Pb, As, Cd-EPA Method 6010C Pesticides-EPA Method 8081B	LFPS	Not Sampled
80MW05			Not Sampled
FTMM-57, Building 108 UST Gasoline Release			
108MW04	Pb-EPA Method 6010C	LFPS	10/2/2014
FTMM-58, Building 2567 UST Gasoline			
2567MW01	VOCs & TICs-EPA Method 8260C	LFPS	10/2/2015
2567MW03			10/2/2015
FTMM-59, Building 1122 Unknown Discharge			
1122MW07	VOCs & TICs-EPA Method 8260C	LFPS	10/2/2015
FTMM-61, Building 283 Gasoline Storage			
283MW02	VOCs & TICs-EPA Method 8260C	LFPS	10/2/2015
FTMM-64, Building 812 UST Gasoline			
812MW04	VOCs & TICs-EPA Method 8260C	LFPS	10/2/2015
FTMM-66, FTMM-66: Building 886 Former AST			
886RW01	SVOCs-EPA Method 8270D	LFPS	10/3/2015
886RW06			10/3/2015
886RW08			10/3/2015
FTMM-68, FTMM-68: Former Dry Cleaners UST at Building 700			
565MW01	VOCs & TICs-EPA Method 8260C	PDB	9/30/14, 12/18/14
565MW01D			9/30/14, 12/18/14

Notes:
1) LFPS = Low-Flow Purging and Sampling
2) PDB = Passive Diffusion Bags
3) For sites with the PDB sampling method, the first date is date of deployment, the second is retrieval and sample.
4) Wells have been discontinued based on recommendations in the 2013 Baseline Groundwater Sampling Report as approved by the NJDEP in the Febuary 5, 2015 comment letter.
5) Sites FTMM-22, FTMM-53 and FTMM-68 are sampled on a quarterly basis.

Table 3
Groundwater Sampling Deviations
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Well	Site	Sampling Method	Deviation/Comments
M8MW11	FTMM-8 Closed Solid Waste Landfill	LFPS	Well could not be located due to vegetative overgrowth.
N/A			Purged groundwater was passed through granular activated carbon bucket at the well prior to being discharged to the ground surface, instead of being staged in 55-gallon drums for offsite disposal.

Notes:
1. LFPS = Low-Flow Purging and Sampling
2. PDB = Passive Diffusion Bags
3. N/A = not applicable

Table 4
Summary of Long Term Groundwater Monitoring Recommendations
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site	Annual 2014 Sampling				Annual 2014 Exceedances[1]			Recommended Sampling in 2015[2]					Comments
	Number of MWs sampled	Monitoring wells sampled	Analysis	Sampling methodology	MWs Exhibiting Exceedances	Analytes	Historic High Concentrations[3] (µg/L)	Number of MWs to be sampled	MWs to be sampled	Analysis	Sampling Methodology	Frequency	
FTMM-2	6	M2MW03, M2MW10, M2MW11, M2MW21, M2MW22, M2MW24	VOCs-EPA Method 8260C	PDB	M2MW03	Benzene	**Benzene** Historic = 68.23 (2008) 2014 4Q= 2.2 J	6	M2MW03, M2MW10, M2MW11, M2MW21, M2MW22, M2MW24	VOCs-EPA Method 8260C	LFPS	M2MW03, M2MW10, with one additional round of sampling (M2MW11, M2MW21, M2MW22 and M2MW24)	Benzene remains above NJDEP GWQS. Metals sampling previously discontinued due to background sources. Pesticides previously discontinued.
FTMM-3	2	M3MW02, M3MW07	VOCs-EPA Method 8260C Metals-EPA Method 6010C/7470A (M3MW02)	LFPS	M3MW07	VC	**VC** Historic = 35.8 (2009) 2014 4Q = <1	0	N/A	N/A	N/A	Discontinue	VOCs (representative of site conditions) are not present above NJDEP GWQS. Metals sampling previously discontinued due to background sources.
FTMM-5	4	M5MW11, M5MW16, M5MW20, M5MW23	VOCs-EPA Method 8260C	PDB	M5MW11, M5MW16, M5MW20, M5MW23	PCE, TCE	**PCE** Historic = 50 (2013) 2014 4Q = 23; **TCE** Historic = 51.25 (2010) 2014 4Q = 2.1 J	4	M5MW11, M5MW16, M5MW20, M5MW23	VOCs-EPA Method 8260C	PDB	Annual	VOCs remain above NJDEP GWQS.
FTMM-8	7	M8MW11 (not located), M8MW12, M8MW15, M8MW16, M8MW17, M8MW21, M8MW24, 697MW01	Pb-EPA Method 6010C (M8MW11, M8MW17, M8MW21, and 697MW01), VOCs-EPA Method 8260C (M8MW11, M8MW12, M8MW15, M8MW16, M8MW24 and 697MW01) Pesticides-EPA Method 8081B (697MW01)	LFPS	697MW01, M8MW12	PCE, 4,4' DDD	**PCE** Historic = 9.83 (2008) 2014 4Q = 1.6 J; **4,4' DDD** Historic = 1.37 (2009) 2014 4Q = 0.83	3	M8MW11, M8MW12, 697MW01	Pb-EPA Method 6010C (M8MW11), VOCs-EPA Method 8260C (M8MW11, M8MW12, and 697MW01) Pesticides-EPA Method 8081B (697MW01)	LFPS	Annual	VOCs, Pb and pesticides remain above NJDEP GWQS. M8MW11 not sampled in December 2014, must locate and sample for VOC and Pb. Metals sampling previously discontinued due to background sources with the exception of Pb (M8MW11).
FTMM-18	4	M18MW22, M18MW23, 296MW04, 296MW06	VOCs-EPA Method 8260C	PDB	M18MW23	Benzene	**Benzene** Historic = 1078.96 D 2014 4Q = 15	4	M18MW22, M18MW23, 296MW04, 296MW06	VOCs-EPA Method 8260C	PDB	Annual	VOCs remain above NJDEP GWQS. Metals sampling previously discontinued due to background sources. Well 296MW04 to be sampled as delineation point for 296MW06.
FTMM-22	6	CW1MW27, CW1MW28, CW1MW29, CW1MW31, CW1MW37, CW1MW281	VOCs-EPA Method 8260C	PDB	CW1MW28, CW1MW29, CW1MW31, CW1MW281	TCE, VC	**TCE** Historic = 330 E (2014) 2014 4Q = 330 E; **VC** Historic 1.8 J (2014) 2014 4Q = 1.8 J	6	CW1MW27, CW1MW28, CW1MW29, CW1MW31, CW1MW37, CW1MW281	VOCs-EPA Method 8260C	PDB	Quarterly	VOCs remain above NJDEP GWQS. Metals sampling previously discontinued due to background sources.
FTMM-53	8	699MW01, 699MW04, 699MW06, 699MW09, 699MW16, 699RW03, 699RW05, 699RW11	VOCs-EPA Method 8260C	PDB	699MW06, 699MW16, 699RW03, 699RW05, 699RW11	Benzene, PCE, 1,2,4-TMB, 1,3,5-TMB, xylenes, Total Tics	**Benzene** Historic = 879 (2008) 2014 4Q = 3 J; **1,3,5-TMB** Historic = 160 (2014) 2014 4Q = 69; **PCE** Historic = 13.5 (2010) 2014 4Q = 0.89 J; **Xylenes** Historic = 3,596 (2008) 2014 4Q = 620; **1,2,4-TMB** Historic = 790 (2014) 2014 4Q = 200 J; **Total Tics** Historic = 9,140 (2009) 2014 4Q = 1,181 JN	8	699MW01, 699MW04, 699MW06, 699MW09, 699MW16, 699RW03, 699RW05, 699RW11	VOCs-EPA Method 8260C	PDB	Quarterly	VOCs remain above NJDEP GWQS. Metals sampling previously discontinued due to background sources. Wells 699MW01, 699MW04 and 699MW09 sampled using LFPS to determine if wells can be removed from the long term monitoring program.
FTMM-56	0	80MW05, 80MW02	Pb-EPA Method 6010C (80MW05), Pesticides-EPA Method 8081B (80MW02)	LFPS	N/A	N/A	**Pb** Historic = 122 (2011) 2014 4Q = See Comment; **Chlordane** Historic = 9.72 (2008) 2014 4Q = See Comment	2	80MW05, 80MW02	Pb-EPA Method 6010C (80MW05), Pesticides-EPA Method 8081B (80MW02)	LFPS	One additional round	Site was not sampled in 2014, one additional round in 2015.
FTMM-57	1	108MW04	Pb-EPA Method 6010C	LFPS	108MW01, 108MW02, 108MW03	None	**Pb** Historic = 101 (2011) 2014 4Q = <2.5	1	108MW04	Pb-EPA Method 6010C	LFPS	One additional round	Pb will be analyzed at 108MW04 for one additional round in 2015.
FTMM-58	2	2567MW01, 2567MW03	VOC-EPA Method 8260C	LFPS	2567MW01	TBA	**TBA** Historic = 829 (2010) 2014 4Q = 260	2	2567MW01, 2567MW03	VOC-EPA Method 8260C - TBA Only	LFPS	Annual	TBA remains above NJDEP GWQS.
FTMM-59	1	1122MW07	VOC-EPA Method 8260C	LFPS	None	None	**Bromodichloromethane** Historic = 2.26 (2010) 2014 4Q = <1	0	N/A	N/A	N/A	See comment	VOCs are not present above NJDEP GWQS at well 1122MW07. However, monitoring of the groundwater will be evaluated as a whole under the RI/FS process. Metals sampling previously discontinued.
FTMM-61	1	283MW02	VOCs & TICs-EPA Method 8260C	LFPS	None	None	**Benzene** Historic = 76.07 (2008) 2014 4Q = <1	0	N/A	N/A	N/A	Discontinue	VOCs are not present above NJDEP GWQS. Metals sampling previously discontinued.
FTMM-64	1	812MW04	VOCs & TICs-EPA Method 8260C	LFPS	812MW04	VC	**VC** Historic = 40.4 (2008) 2014 4Q = 7.8	1	812MW04	VOC-EPA Method 8260C	LFPS	Annual	VC remains above NJDEP GWQS. Metals analysis previously discontinued due to background conditions.
FTMM-66	3	886RW01, 886RW06, 886RW08	SVOCs-EPA Method 8270D	LFPS	Total SVOC TICs	None	**Bis(2-ethylhexyl) phthalate** Historic = 18.5 B (2010) 2014 4Q = <5.6; **SVOC TICs** Historic = 879 (2013) 2014 4Q = 46.4 J	3	886RW01, 886RW06, 886RW08	SVOCs-EPA Method 8270D	LFPS	One additional round	Total SVOC TICs above NJDEP GWQS in 2013. One additional round is needed as proposed in the 2014 response to NJDEP comments. Sampling frequency will be re-evaluated based on the 2015 results. Metals sampling previously discontinued.
FTMM-68	2	565MW01, 565MW01D	VOCs & TICs-EPA Method 8260C	PDB	565MW01, 565MW01D	PCE, TCE, cis-1,2-DCE, VC	**PCE** Historic = 4,800 (2014) 2014 4Q = 2,400; **cis-1,2-DCE** Historic = 270 (2014) 2014 4Q = 110; **TCE** Historic = 230 (2014) 2014 4Q = 8; **VC** Historic = 18 (2014) 2014 4Q = 1.3 J	2	565MW01, 565MW01D	VOC-EPA Method 8260C	PDB	Quarterly	VOCs remain above NJDEP GWQS. Sampling of wells at FTMM-68 began in August 2013.

Notes:
MWs = monitoring wells
N/A = not applicable
VOCs = volatile organics compounds
SVOCs = semi-volatiles organic compounds
TMB = trimethhylbenzene
VC = vinyl chloride
TCE = tetrachloroethene
PCE = tetrachloroethene
1,1-DCA = 1,1-dichloroethane
1,2-DCA = 1,2-dichloroethane
TBA = tert-Butyl Alcohol

1. Exceedance is defined as a parameter that was greater than NJDEP GWQS or EPA MCL if a NJDEP GWQS has not been established for a compound.
2. The recommendations are for sampling in 2015 to allow for the continued monitoring of groundwater conditions. Remedial investigations are ongoing at many of the sites and these recommendations may be modified based on analysis of new information and evaluation of risk.
3. Comparison between highest historic concentrations and 2014 (Fourth Quarter) highest concentration.

Lab Qualifiers
J = Estimated (detect or non-detect) value
D = Results from dilution of sample
E = Estimated result
JN = Tentatively identified compound, estimated concentration

FIGURES

Figure 1.1 Fort Monmouth Location
Figure 1.2 Main Post Layout
Figure 1.3 Charles Wood Area Layout

Site Description:
Fort Monmouth
Main Post & Charles Wood Area
Monmouth County, NJ
Longitude: 74˚ 2' 33.39" W
Latitude: 40˚ 18' 49.33" N
Longitude and Latitude represent the center point of Main Post.

N

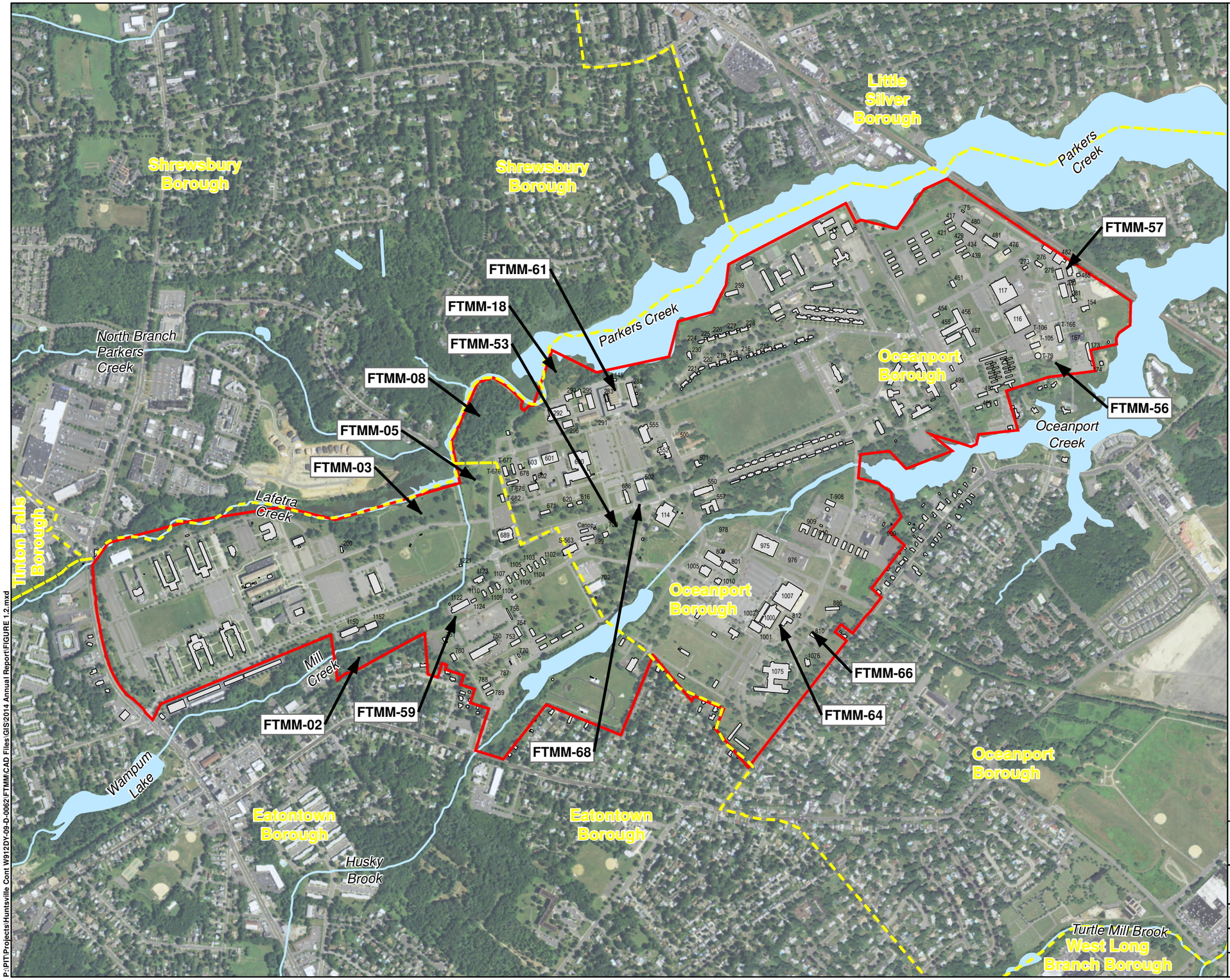
1 inch = 2,500 feet

0 0.5 1 Miles

Source: Bing Maps online imagery; ESRI Data and Maps 2011.

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
Fort Monmouth Location	
CREATED BY: TS	REVIEWED BY: IG
DATE: March 2013	FIGURE NUMBER: Figure 1.1
PROJECT NUMBER: 748810.01000	FILE: Figure1-1_GW_Location.mxd

J:\748\748810 Fort Monmouth\GIS\MXD\GW\Figure1-1_GW_Location.mxd



LEGEND:

- Municipal Boundary
- Installation Boundary
- Building
- Surface Water Feature

N

1 inch = 1,000 feet

0 500 1,000 2,000 Feet

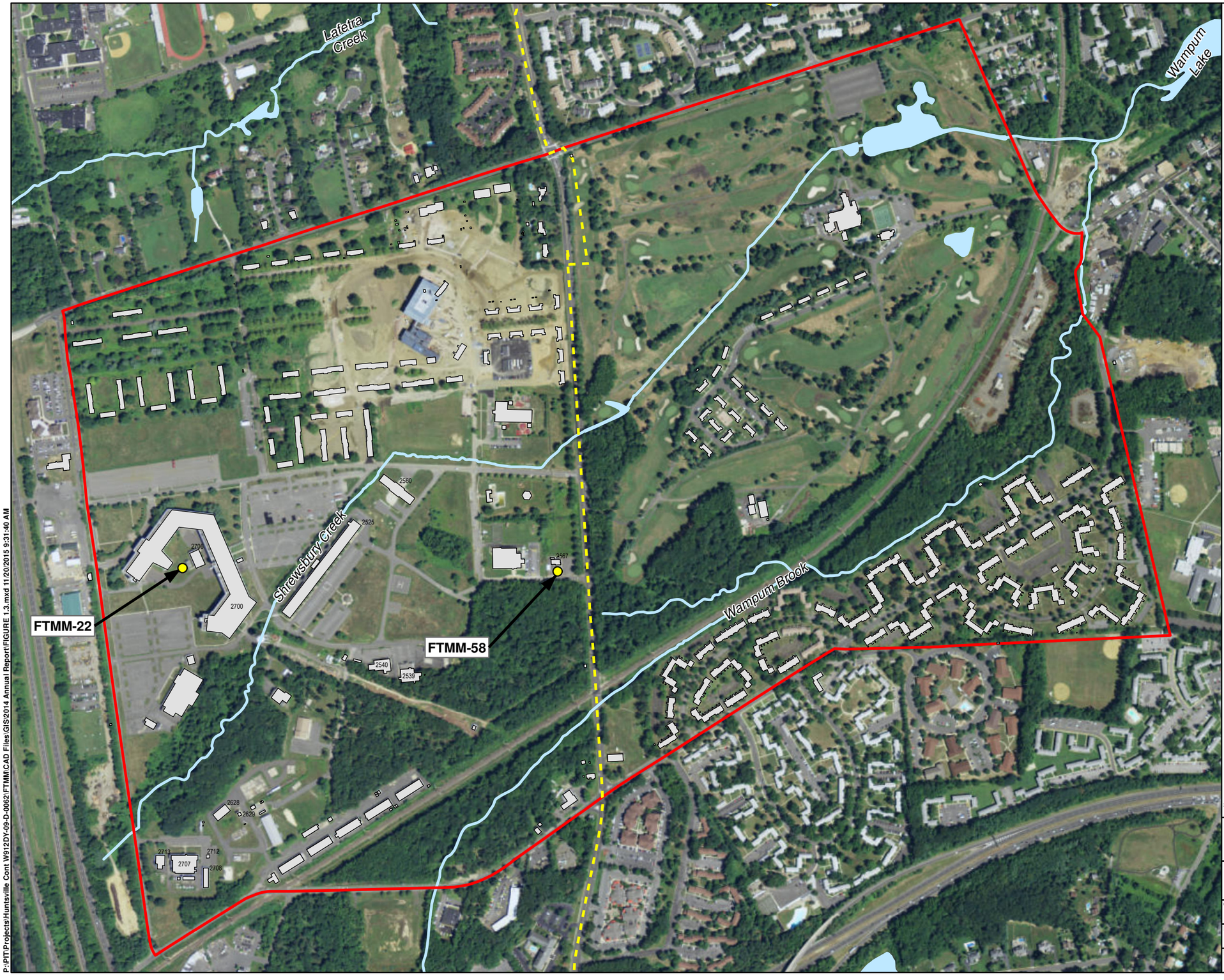
Source: FTMM Supplied CAD, 2013; ESRI Data and Maps, 2011; USGS NHD, 2012.

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey

MAIN POST LAYOUT

CREATED BY: RR	REVIEWED BY: ME
DATE: NOV. 2015	FIGURE NUMBER: FIGURE 1.2
PROJECT NUMBER: 748810-03000	FILE: FIGURE 1.2.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FIGURE 1.2.mxd



LEGEND:

- Municipal Boundary
- Installation Boundary
- Building
- Surface Water Feature

N

1 inch = 600 feet

0 300 600 1,200 Feet

Source: Bing Maps online imagery; ESRI Data and Maps 2011; USGS NHD.

PARSONS 401 Diamond Drive NW, Huntsville AL	**Fort Monmouth** **New Jersey**

CHARLES WOOD AREA LAYOUT

CREATED BY: RR	REVIEWED BY: ME
DATE: NOV. 2015	FIGURE NUMBER: FIGURE 1.3
PROJECT NUMBER: 748810-03000	FILE: FIGURE 1.3.mxd

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APPENDICES

Appendix A FTMM-02: Closed Solid Waste Landfill
Appendix B FTMM-03: Closed Solid Waste Landfill
Appendix C FTMM-05: Closed Solid Waste Landfill
Appendix D FTMM-08: Closed Solid Waste Landfill
Appendix E FTMM-18: Closed Solid Waste Landfill/Former Training Area
Appendix F FTMM-22: Former Waste Water Treatment Lime Pit (CWA-1)
Appendix G FTMM-53: Former Gas Station at Building 699
Appendix H FTMM-57: Building 108 UST Gasoline Release
Appendix I FTMM-58: Building 2567 UST Gasoline
Appendix J FTMM-59: Building 1122 Unknown Discharge
Appendix K FTMM-61: Building 283 Gasoline Storage
Appendix L FTMM-64: Building 812 UST Gasoline
Appendix M FTMM-66: Building 886 Former AST
Appendix N FTMM-68: Former Dry Cleaners UST at Building 700
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Appendix P Laboratory Analytical Results (CD)
Appendix Q NJDEP Correspondence

APPENDIX A

FTMM-02: CLOSED SOLID WASTE LANDFILL

APPENDIX A: FTMM-02 Closed Solid Waste Landfill

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2	PDB Sampling Summary
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2	FTMM-02 Shallow Groundwater Contours - September 30, 2014
3	FTMM-02 Deep Groundwater Contours - September 30, 2014

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Attachment	Title
A	PDB Field Sheets

1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT

Monitoring wells located within FTMM-02 were gauged on September 30, 2014. Monitoring well locations as well as other site features are provided in **Figure 1**. Details regarding the water level measurements are provided in **Table 1**. Groundwater elevations in monitoring wells ranged from 3.29 (M2MW06) to 10.00 (M2MW16) feet above mean sea level (amsl). The inferred shallow and deep groundwater flow directions are to the north-northwest, as shown in **Figures 2 and 3**, respectively.

During the groundwater gauging, the physical condition of FTMM-02 monitoring wells were assessed. However, M2MW08 was not located during this field effort and is only used for gauging purposes. The remaining site monitoring wells were found to be in good condition.

2.0 GROUNDWATER SAMPLING

Groundwater samples were collected from six monitoring wells located at FTMM-02 as part of the annual 4th quarter 2014 groundwater sampling event. FTMM-02 is sampled on an annual basis. The groundwater sampling program included measuring the depths to water in monitoring wells at FTMM-02, and sample collection in selected wells using passive diffusion bags (PDBs). PDBs were deployed September 30, 2014 and October 1, 2014, and samples were retrieved on December 18, 2014. A PDB sampling summary is provided in **Table 2**. Additionally, the wells were profiled, as necessary based on the saturated screen length of five feet, because this was the first time the wells were sampled using PDB. Groundwater samples were analyzed for Target Compound List (TCL) volatile organic compounds and tentatively identified compounds (VOCs+TICs) via United States Environmental Protection Agency (USEPA) Method SW8260C.

The samples were collected in accordance with the New Jersey Department of Environmental Protection (NJDEP) Field Sampling Procedures Manual (FSPM) and the Sampling Analysis Plan (SAP). Field blanks, duplicates, matrix spike, matrix spike duplicate and quality assurance (QA) split samples were collected for every 5% of samples collected per parameter, per matrix, in accordance with the Quality Assurance Project Plan (QAPP). Trip blanks accompanied each cooler each day in which VOCs were collected for laboratory analysis.

Completed PDB field sheets for each well sampled are provided in **Attachment A**.

3.0 HISTORICAL GROUNDWATER SAMPLING RESULTS

Groundwater monitoring has been conducted at FTMM-02 since May 1997. From May 1997 to March 2004, groundwater sampling consisted of VOCs, semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and metals. From June 2004 to December 2009, FTMM-02 monitoring wells were sampled primarily for VOCs. Since December 2010, the last four historical rounds of groundwater sampling have been carried out on a quarterly basis and were comprised of VOC and metals analysis. Historical groundwater analytical results are presented in **Table 3.**

Historically, benzene, chlorobenzene, *tert*-butyl alcohol, aluminum, arsenic, beryllium, chromium, iron, lead, manganese, sodium and vanadium were detected above their respective NJDEP Ground Water Quality Standard (GWQS). Additionally, beryllium, manganese and

sodium were detected in exceedance of their background concentration and are attributed to natural sources from the glauconitic soils beneath the site and are not indicative of historical site uses.

In August 2013 during the baseline sampling event, sixteen monitoring wells were sampled for VOCs and pesticides. Benzene and chlorobenzene were the only VOCs detected in M2MW03 in exceedance of their NJDEP GWQS during the sampling event. Pesticides were not detected in FTMM-02 monitoring wells during the sampling event and groundwater monitoring for pesticides was discontinued in 2014. Results of the August 2013 Baseline Sampling Event are presented in **Table 4**.

The Final August 2013 Baseline Groundwater Sampling Report was accepted by the NJDEP in their February 5, 2015 letter. Based on this approval, 10 out of the 16 groundwater monitoring wells were removed from the long term monitoring program (LTM) including M2MW02, M2MW04, M2MW05, M2MW06, M2MW07, M2MW08, M2MW09, M2MW12, M2MW13, and M2MW23, and monitoring for pesticides was discontinued.

4.0 ANNUAL (FOURTH QUARTER) 2014 GROUNDWATER RESULTS

Groundwater analytical results from the samples collected during the annual 2014 groundwater sampling event are presented in **Table 4.** Benzene was the only VOC detected during this sampling event. Benzene was detected at M2MW03 at an estimated concentration of 2.2J µg/L above the NJDEP GWQS of 1µg/L.

5.0 FINDINGS AND RECOMMENDATIONS

Historically, benzene (M2MW03, M2MW11, M2MW21, and M2MW24), chlorobenzene (M2MW03), and *tert*-butyl alcohol (M2MW22) were detected in exceedance of their NJDEP GWQS. During the annual 2014 sampling event, only benzene exceeded the NJDEP GWQS at monitoring well M2MW03. Benzene concentrations at M2MW03 appear to have stabilized between 4.99 µg/L (March 2010) and 2.2 µg/L (December 2014) based on the last four rounds of data. Monitoring wells M2MW11, M2MW21, M2MW22 and M2MW24 did not contain VOCs above the NJDEP GWQS during this sampling event or the August 2013 Baseline Sampling event.

Based on the collective groundwater analytical results, groundwater monitoring for VOCs will be continued for one additional round at monitoring wells M2MW11, M2MW21, M2MW22, and M2MW24. As per the NJDEP November 18, 2014 comment letter on the August 2013 Baseline Sampling Report, because this round may be a final sampling round for select monitoring wells at FTMM-02, the final sampling round will be conducted using low-flow purging and sampling (LFPS) methodology. Continued monitoring at monitoring wells M2MW03 and M2MW10 is also recommended. A review of the historical groundwater sampling results is presented in **Table 5**, which provides the matrix used to determine the status of the wells relative to future groundwater sampling and analysis.

TABLES

Table 1 Groundwater Gauging Data and Elevations (September 30, 2014)

Table 2 PDB Sampling Summary

Table 3 Historical Groundwater Analytical Results

Table 4 Groundwater Analytical Results - 2013 and 2014

Table 5 Review of Historical Groundwater Sampling Results

Table 1
Groundwater Gauging Data and Elevations (September 30, 2014)
Site FTMM-02 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site/Well ID	Installation Date	Well Permit #	Y Coord. (North)	X Coord. (East)	Depth (ft. bgs)	Casing Length (ft)	Screen Length (ft)	TOC Elevation (ft)	Gauge Time	PID Reading (ppm)	Gauged Depth to Water (ft. TOC)	Gauged Depth to Bottom (ft. TOC)	Calculated Groundwater Elevation (ft)
Shallow Monitoring Wells													
M2MW02	12/13/1994	29-32585	537763.11	616268.14	17.0	7.0	10.0	12.67	14:27	0.0	8.11	17.54	4.56
M2MW03	12/13/1994	29-32586	538141.52	617064.12	15.0	5.0	10.0	11.16	14:07	0.0	7.80	17.10	3.36
M2MW04	12/17/1997	E201008215	537932.07	616545.59	19.0	4.0	15.0	13.07	14:14	0.0	7.98	19.84	5.09
M2MW05	8/24/1998	29-39185	537559.13	616129.66	13.0	3.0	10.0	9.61	14:21	0.0	5.25	12.70	4.36
M2MW06	8/24/1998	29-39184	537821.58	616300.99	15.0	5.0	10.0	11.84	14:17	0.0	8.55	18.24	3.29
M2MW07	8/24/1998	29-39183	537834.06	616291.02	15.0	5.0	10.0	11.37	14:16	0.0	4.62	14.95	6.75
M2MW08*	8/24/1998	29-39182	537955.56	616583.49	15.0	5.0	10.0	10.62	14:50	N/A	N/A	N/A	N/A
M2MW09	8/24/1998	29-39181	538091.59	616838.68	15.0	5.0	10.0	13.00	14:12	0.0	8.28	19.75	4.72
M2MW10	8/31/1998	29-39180	538218.28	617129.44	20.0	5.0	15.0	10.99	14:05	0.0	7.22	22.25	3.77
M2MW13	5/8/2000	29-42771	538121.15	617127.23	20.0	5.0	15.0	14.99	14:08	0.0	7.78	20.45	7.21
M2MW14	4/9/2000	29-42562	538008.08	617054.55	20.0	5.0	15.0	18.10	14:46	0.0	10.20	22.00	7.90
M2MW15	5/8/2000	29-42773	537891.44	616841.76	20.0	5.0	15.0	18.61	14:44	0.0	9.75	23.35	8.86
M2MW16	5/8/2000	29-42774	537753.87	616581.95	20.0	5.0	15.0	17.08	14:35	0.0	7.08	21.32	10.00
M2MW17	5/3/2000	29-42775	537654.08	616396.95	20.0	5.0	15.0	19.03	14:31	0.0	11.62	23.35	7.41
M2MW18	5/8/2000	29-42776	537753.87	616581.97	20.0	5.0	15.0	10.58	14:24	0.0	6.54	22.15	4.04
M2MW21	5/3/2000	29-42779	537814.21	616510.97	20.0	5.0	15.0	15.50	14:38	0.0	10.57	22.55	4.93
M2MW22	5/3/2000	29-42780	537777.23	616178.46	20.0	5.0	15.0	11.62	14:19	0.0	8.22	22.49	3.40
M2MW23	5/2/2000	29-42781	538060.52	616894.50	20.0	5.0	15.0	14.77	14:11	0.0	10.81	23.07	3.96
M2MW24	5/4/2000	29-42772	537805.30	616599.28	20.0	5.0	15.0	15.69	14:37	0.0	7.22	20.25	8.47
Deep Monitoring Wells													
M2MW11	5/4/2000	29-42769	538087.71	616845.63	49.0	29.0	20.0	12.74	14:11	0.0	7.90	51.23	4.84
M2MW12	5/5/2000	29-42770	538147.88	617071.68	50.0	30.0	20.0	13.28	14:09	0.0	7.54	52.50	5.74
M2MW19	5/3/2000	29-42777	537799.46	616596.36	50.0	30.0	20.0	15.57	14:36	0.0	8.95	54.43	6.62
M2MW20	5/2/2000	29-42778	537736.56	616336.75	50.0	30.0	20.0	15.75	14:29	0.0	10.39	52.44	5.36

Notes:
1) The synoptic round of water levels in the wells was collected on September 30, 2014.
2) Information on well permit number, X and Y coordinates, depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
3) ft = feet
4) DTW = depth to water (measured from the top of well casing)
5) DTB = depth to bottom of well (measured from the top of well casing)
6) bgs = below ground surface
7) ppm = parts per million (of VOCs)
8) TOC = Top of Casing
9) Elevation = feet above mean sea level
10) N/A = information not available
* Well was not located during the synoptic round of water levels

Table 2
PDB Sampling Summary
Site FTMM-02 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site/Well ID	Profile Date	Depth (ft. bgs)	Screen Length (ft.)	Screen Interval (ft. bgs)	TOC Elev. (ft)	Gauge Date	Gauge Time	PID Reading (ppm)	Gauged DTW (ft. below TOC)	Gauged DTB (ft. below TOC)	GW Elevation (ft)	Saturated Screen Length (ft)	PDB Depth to Center of Bag #1 (ft. below TOC)	PDB Depth to Center of Bag #2 (ft. below TOC)	PDB Depth to Center of Bag #3 (ft. below TOC)	PDB Depth to Center of Bag #4 (ft. below TOC)	PDB Deploy Date	PDB Deploy Time	PDB Sample Date	PDB Sample Time
M2MW03	12/18/2014	15.0	10.0	7-17	11.16	9/30/2014	14:07	0.0	7.80	17.10	3.36	9.3	10.27	N/A	N/A	N/A	9/30/2014	16:04	12/18/2014	14:50
M2MW10	12/18/2014	20.0	15.0	5-20	10.99	9/30/2014	14:05	0.0	7.22	22.25	3.77	15.0	7.32	12.32	17.32	N/A	10/1/2014	9:50	12/18/2014	14:25
M2MW11	12/18/2014	49.0	20.0	29-49	12.74	9/30/2014	14:11	0.0	7.90	51.23	4.84	20.0	31.91	36.91	41.91	46.91	9/30/2014	16:15	12/18/2014	14:53
M2MW21	12/18/2014	20.0	15.0	5-20	15.50	9/30/2014	14:38	0.0	10.57	22.55	4.93	12.0	8.80	15.97	N/A	N/A	9/30/2014	15:48	12/18/2014	15:35
M2MW22	12/18/2014	20.0	15.0	5-20	11.62	9/30/2014	14:19	0.0	8.22	22.49	3.40	14.3	10.03	16.66	N/A	N/A	9/30/2014	16:00	12/18/2014	15:20
M2MW24	12/18/2014	20.0	15.0	5-20	15.69	9/30/2014	14:37	0.0	7.22	20.25	8.47	13.0	9.97	16.5	N/A	N/A	9/30/2014	15:55	12/18/2014	15:38

Notes:
1) Information on well depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
2) DTW = depth to water (measured from the top of well casing)
3) DTB = depth to bottom of well (measured from the top of well casing)
4) TOC = Top of Casing
5) ft. AMSL = feet above mean sea level
6) LFPS = Low-Flow Purging and Sampling
7) PDB = Passive Diffusion Bag
8) N/A = not applicable
9) bgs = below ground surface

Table 3
Historical Groundwater Analytical Results
Site FTMM-02 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M2MW01			M2MW02																								M2MW03						
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**			Dup	44	44 Dup	45	45 Dup	46	46 Dup	47	47 Dup	LF1	LF1 Dup	49	50	51	LF2	LF3	LF4	LF4 Dup	LF5	LF6	LF6 Dup	LF7	LF8	44	45	46	47	LF1	49	50
Date Collected				12/16/2010	3/14/2011	3/14/2011	3/17/2008	3/17/2008	5/22/2008	5/22/2008	8/26/2008	8/26/2008	12/23/2008	12/23/2008	3/31/2009	3/31/2009	6/19/2009	9/22/2009	12/4/2009	3/9/2010	6/14/2010	9/24/2010	9/24/2010	12/16/2010	3/9/2011	3/9/2011	6/15/2011	8/23/2011	3/17/2008	5/22/2008	8/26/2008	12/23/2008	3/30/2009	6/19/2009	9/22/2009
ANALYTE/Lab ID				10555.08	11107.04	11085.03	80087.04	80087.03	80176.04	80176.03	80308.04	80308.03	80472.04	80472.03	90137.05	90137.03	90249.04	90394.04	90470.04	10077.07	10264.06	10410.04	10410.03	10558.07	11097.04	11088.03	11254.06	11354.06	80087.05	80176.05	80308.05	80472.05	90133.07	90249.05	90394.05
Volatile Organic Compounds (µg/L)																																				
Benzene	1	5	--	NA	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.53	5.48	ND	6.61	ND	5.55	ND
Chlorobenzene	50	100	--	NA	ND	ND	23.95	NA	1.56 J	12.74	4.31	6.09	11.4	11.41	31.71	32.12	31.98	13.81	23.12	22.08	30.05	11.88	10.56	32.7	16.27	ND	27.78	2.1	157.16	157.28	6.05	134.62 E	6.96	151.72	14.19
Chloroethane	NLE	NLE	--	NA	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	NA	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	100	100	--	NA	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	600	600	--	NA	ND	ND	0.47	NA	ND	ND	ND	ND	ND	ND	0.5 J	0.54 J	0.56 J	ND	ND	0.4 J	0.57	ND	ND	0.61	0.28 J	ND	0.44 J	ND	2.4	2.76	ND	2.51	ND	2.39	ND
1,3-Dichlorobenzene	600	NLE	--	NA	ND	ND	0.82	NA	ND	0.45 J	ND	0.31 J	0.47 J	0.42 J	0.97 J	1.02 J	1.09 J	0.44 J	0.78	0.78	1.04	0.53	0.45 J	1.12	0.55	ND	0.9	ND	2.59	3.19	0.4 J	2.33	ND	2.61	ND
1,4-Dichlorobenzene	75	75	--	NA	ND	ND	3.32	NA	ND	1.61 J	0.6 J	0.76 J	1.08 J	1.05 J	3.56	3.71	4.09	1.57	2.44	2.78	3.52	1.81	1.56	4.15	1.89	ND	2.81	0.46 J	6.55	7.77	0.39 J	6.74	0.36 J	6.55	0.64
1,1-Dichloroethane	50	7	--	NA	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	3	NLE	--	NA	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA
cis -1,2-Dichloroethene	70	70	--	NA	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2	J
Methyl *tert* -butyl ether	70	NLE	--	NA	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	ND	0.25 J	ND	ND	
tert -Butyl alcohol	100	NLE	--	NA	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Toluene	600	1000	--	NA	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2,4-Trichlorobenzene	9	70	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	3	5	--	NA	NA	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1000	10,000	--	NA	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	NA	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	7	ND	ND	3	4	4	4	8	ND	ND	4	ND	3	ND	ND	3	ND	ND	ND	ND
Semi-Volatile Organic Compounds (µg/L)																																				
Acenaphthene	400	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.5 J	NA	NA	
Benzyl alcohol	2000	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 J	1 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	
1,3-Dichlorobenzene	600	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.6 J	0.6 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	
1,4-Dichlorobenzene	75	75	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 J	2 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	
TICs*	500	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	50	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12	NA	NA	
Pesticides/PCBs (µg/L)																																				
Aldrin	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	
alpha-BHC	0.02	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.038	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.029	NA	NA	
beta-BHC	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.037	0.048	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	
delta-BHC	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.039	0.059	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	
alpha-Chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	
gamma-Chlordane	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.038	0.046	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	
4,4'-DDD	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.051	0.056	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	
4,4'-DDE	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.055	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	
4,4'-DDT	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.06	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	
Dieldrin	0.03	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.038	0.041	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	
Endosulfan I	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.027	NA	NA	
Endosulfan II	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.038	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	
Endosulfan sulfate	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.043	NA	NA	
Endrin	2	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.043	0.045	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	
Endrin aldehyde	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	
Endrin ketone	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.09	0.146	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	
Heptachlor	0.05	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.046	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.037	NA	NA	
Heptachlor epoxide	0.2	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.027	NA	NA	
Methoxychlor	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.047	0.054	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.043	NA	NA	
Metals (µg/L)																																				
Aluminum	200	NLE	121000	<200	238	229	NA	NA	NA	NA	NA	NA	NA	NA	12.2	15.9	NA	NA	NA	25.7	ND	ND	ND	<200	<200	<200	<200	<200	NA	NA	NA	NA	ND	NA	NA	
Antimony	6	6	20.70	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	20.3	15.3	NA	NA	NA	5.19 ER	9.56 ER	14.4	11	<6.0	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	28	NA	NA	
Arsenic	3	10	89.30	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	65.3	65.7	NA	NA	NA	1.05 ER	1.37 ER	0.72 ER	0.78 ER	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	101	NA	NA	
Barium	6000	2000	699.00	533	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	285	297	NA	NA	NA	266	289	156	160	484	273	<200	246	224	NA	NA	NA	NA	96.1	NA	NA	
Beryllium	1	4	2.10	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	ND	0.049 ER	ND	ND	<1.0	<1.0	4.1	<1.0	<1.0	NA	NA	NA	NA	ND	NA	NA	
Cadmium	4	5	9.50	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	ND	1.62 ER	0.865 ER	1.08 ER	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	ND	NA	NA	
Calcium	NLE	NLE	45400.00	89200	7860	7690	NA	NA	NA	NA	NA	NA	NA	NA	87700	91500	NA	NA	NA	13200	87700	60300	61500	118000	174000	49700	110000	122000	NA	NA	NA	NA	87300	NA	NA	
Chromium	70	100	191.00	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	0.353 ER	1.29 ER	NA	NA	NA	ND	ND	ND	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	0.395 ER	NA	NA	
Cobalt	NLE	NLE	18.30	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.143	NA	NA	NA	ND	ND	ND	ND	<50	<50	<50	<50	<50	NA	NA	NA	NA	ND	NA	NA	
Copper	1300	1300	65.60	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	ND	ND	1.52 ER	1.47 ER	<10	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	
Iron	300	NLE	431000	67400	<100	<100	NA	NA	NA	NA	NA	NA	NA	NA	41200	42700	NA	NA	NA	30100	54100	23800	24500	55200	14500	10000	32200	11100	NA	NA	NA	NA	15900	NA	NA	
Lead	5	15	22.70	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	7.16	ND	NA	NA	NA	ND	3.96 ER	3.32 ER	ND	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	4.59 ER	NA	NA	
Magnesium	NLE	NLE	62700	5720	<5000	<5000	NA	NA	NA	NA	NA	NA	NA	NA	32300	33700	NA	NA	NA	37100	22100	13600	14000	43400	49200	<5000	39000	24400	NA	NA	NA	NA	7070	NA	NA	
Manganese	50	NLE	331	614	38.6	38.5	NA	NA	NA	NA	NA	NA	NA	NA	318	329	NA	NA	NA	296	312	230	236	368	255	74.7	296	1250	NA	NA	NA	NA	501	NA	NA	
Mercury	2	2	0.26	NA	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	ND	0.06 ER	ND	ND	<0.5	<0.20	<0.20	<0.20	<0.20	NA	NA	NA	NA	ND	NA	NA	
Nickel	100	NLE	187	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	5.64	1.55 ER	ND	ND	<10	<10	<10	<10	10.3	NA	NA	NA	NA	ND	NA	NA	
Potassium	NLE	NLE	137000	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	8580	8920	NA	NA	NA	11200	7520	6870	6990	12800	14000	<10000	<10000	11200	NA	NA	NA	NA	10100	NA	NA	
Selenium	40	50	29.60	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	41.2	51.9	NA	NA	NA	ND	NR	ND	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	102	NA	NA	
Silver	40	NLE	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	ND	8.57	1.98	2.27	<10	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	
Sodium	50000	NLE	21500	21500	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	8450	8840	NA	NA	NA	7070	8230	9230	9660	11200	10200	<10000	<10000	<10000	NA	NA	NA	NA	18000	NA	NA	
Thallium	2	2	5.50	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	ND	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	ND	NA	NA	
Vanadium	60	NLE	108	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	5.27	6	NA	NA	NA	5.14	ND	ND	ND	<50	<50	<50	<50	<50	NA	NA	NA	NA	2.39	NA	NA	
Zinc	2000	NLE	233	<20	725	721	NA	NA	NA	NA	NA	NA	NA	NA	9.95	10.6	NA	NA	NA	80.2	ND	ND	1.25	<20	76.1	<20	<20	117	NA	NA	NA	NA	5.31	NA	NA	

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

Sample M2MW01 (4th Quarter 2010) has metals results but not VOCs. Values left blank for missing data.

Sample M2MW05 Duplicate (2nd Quarter 2011) had an elevated sample detection limit due to difficult sample matrix.

Table 3
Historical Groundwater Analytical Results
Site FTMM-02 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M2MW03								M2MW04																				M2MW05									
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	51	LF2	LF3	LF4	LF5	LF6	LF7	LF8	41	42	43	44	LF1	46	47	48	LF2	LF2 Dup	LF3	LF4	LF5	LF6	LF7	LF8	39	40	41	42	42 Dup	LF1	44	44 Dup	45	45 Dup	46
Date Collected				12/4/2009	3/9/2010	6/11/2010	9/23/2010	12/16/2010	3/8/2011	6/14/2011	8/22/2011	3/17/2008	5/22/2008	8/26/2008	12/23/2008	3/30/2009	6/19/2009	9/22/2009	12/4/2009	3/10/2010	3/10/2010	6/14/2010	9/23/2010	12/16/2010	3/8/2011	6/15/2011	8/23/2011	3/17/2008	5/23/2008	8/26/2008	12/27/2008	12/27/2008	3/31/2009	6/22/2009	6/22/2009	9/22/2009	9/22/2009	12/3/2009
ANALYTE/Lab ID				90470.05	10077.08	10261.07	10409.08	10558.05	11092.06	11248.09	11352.05	80087.06	80176.06	80308.06	80472.06	90133.10	90249.06	90394.06	90470.06	10082.04	10082.03	10264.08	10409.09	10558.05	11092.07	11254.05	11354.07	80087.07	80178.04	80308.07	80473.04	80473.03	90137.04	90252.04	90252.03	90394.07	90394.03	90469.04
Volatile Organic Compounds (µg/L)																																								
Benzene	1	5	--	0.26 J	4.99	ND	0.36 J	ND	4.74	ND	3.1	ND	ND	0.34 J	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND
Chlorobenzene	50	100	--	8.14	133.27	7.81	8.4	3.7	127.08 D	4.85	94.6	1.49 J	ND	7.29	1.49 J	0.61 J	ND 1.61	0.5 J	ND	0.62	ND	ND 0.32 J	0.71	0.45 J	ND 0.29	0.46 J	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND
Chloroethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	2.13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND
Styrene	100	100	--	ND	ND	ND	ND	ND	ND	6.25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND
1,2-Dichlorobenzene	600	600	--	ND	2.49	ND	ND	ND	2.77	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	NLE	--	ND	2.59	ND	0.87	ND	3.21	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	0.52	6.39	0.49 J	0.85	ND	7.56	0.5 J	7	ND	ND	0.62 J	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND
1,1-Dichloroethane	50	7	--	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND
Methylene chloride	3	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	NA	NA	NA	NA	NA	NA	NA	1.1 J	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	NA	6.23 J	ND	ND	ND	ND		ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	9	70	--	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA
1,1,2-Trichloroethane	3	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND
Total Xylenes	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	16.2	ND	ND	3	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds (µg/L)																																								
Acenaphthene	400	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
Benzyl alcohol	2000	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.9 J		NA	NA	NA	NA	NA
1,3-Dichlorobenzene	600	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	75	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
TICs*	500	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	23	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	32		NA	NA	NA	NA	NA
Pesticides/PCBs (µg/L)																																								
Aldrin	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
alpha-BHC	0.02	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
beta-BHC	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
delta-BHC	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
alpha-Chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
gamma-Chlordane	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.034		NA	NA	NA	NA	NA
4,4'-DDD	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
4,4'-DDE	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
4,4'-DDT	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
Dieldrin	0.03	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
Endosulfan I	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
Endosulfan II	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
Endosulfan sulfate	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
Endrin	2	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
Endrin aldehyde	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
Endrin ketone	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.034		NA	NA	NA	NA	NA
Heptachlor	0.05	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.038		NA	NA	NA	NA	NA
Heptachlor epoxide	0.2	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA
Methoxychlor	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA
Metals (µg/L)																																								
Aluminum	200	NLE	121000	NA	36.4	ND	18.5	<200	<200	1050	248	NA	NA	NA	NA	ND	NA	NA	NA	22.7	ND	17.2	40.7	<200	<200	<200	<200	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
Antimony	6	6	20.70	NA	6.21 ER	13	20.4	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	18	NA	NA	NA	ND	ND	8.09 ER	11	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	12.8		NA	NA	NA	NA	NA
Arsenic	3	10	89.30	NA	0.75 ER	0.71 ER	2.91 ER	<3.0	<3.0	4.4	<3.0	NA	NA	NA	NA	56.9	NA	NA	NA	ND	ND	1.27 ER	0.77 ER	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	52		NA	NA	NA	NA	NA
Barium	6000	2000	699.00	NA	270	74.7	137	<200	334	<200	229	NA	NA	NA	NA	74.7	NA	NA	NA	51.8	30.6	81	116	<200	<200	<200	<200	NA	NA	NA	NA	NA	93.9		NA	NA	NA	NA	NA
Beryllium	1	4	2.10	NA	ND	ND	ND	<1.0	1.5	<1.0	<1.0	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
Cadmium	4	5	9.50	NA	0.6 ER	ND	0.529 ER	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	0.938 ER	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
Calcium	NLE	NLE	45400.00	NA	186000	69600	133000	77800	163000	62400	112000	NA	NA	NA	NA	28800	NA	NA	NA	24100	14100	25300	30200	28100	26200	39200	37000	NA	NA	NA	NA	NA	28700		NA	NA	NA	NA	NA
Chromium	70	100	191.00	NA	ND	ND	ND	<10	<10	12.7	<10	NA	NA	NA	NA	0.538 ER	NA	NA	NA	ND	ND	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
Cobalt	NLE	NLE	18.30	NA	ND	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
Copper	1300	1300	65.60	NA	ND	ND	4.02 ER	<10	<10	18	<10	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	1.82 ER	<10	<10	<10	<10	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
Iron	300	NLE	431000	NA	42200	14200	3990	16200	41000	29100	35400	NA	NA	NA	NA	13400	NA	NA	NA	9610	5641	15200	23400	23200	14700	23400	22900	NA	NA	NA	NA	NA	22800		NA	NA	NA	NA	NA
Lead	5	15	22.70	NA	ND	ND	ND	<3.0	<3.0	12.4	20.4	NA	NA	NA	NA	6.55	NA	NA	NA	ND	ND	ND	ND	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	2.68	ER	NA	NA	NA	NA	NA
Magnesium	NLE	NLE	62700	NA	16000	5980	11500	5950	12300	6910	13700	NA	NA	NA	NA	4650	NA	NA	NA	4200	2410	4500	4730	<5000	<5000	5790	5380	NA	NA	NA	NA	NA	4770		NA	NA	NA	NA	NA
Manganese	50	NLE	331	NA	624	426	373	606	490	232	393	NA	NA	NA	NA	111	NA	NA	NA	83.9	47.2	70.6	98	93.8	67.4	163	265	NA	NA	NA	NA	NA	53.2		NA	NA	NA	NA	NA
Mercury	2	2	0.26	NA	0.07 ER	ND	ND	<0.5	<0.20	<0.20	0.37	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	0.06 ER	ND	<0.5	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
Nickel	100	NLE	187	NA	ND	ND	5	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA	0.786	ER ND	ND	0.555 ER	<10	<10	<10	<10	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
Potassium	NLE	NLE	137000	NA	12900	8960	13000	11700	10500	<10000	14900	NA	NA	NA	NA	5920	NA	NA	NA	5820	3280	5890	6750	<10000	<10000	<10000	<10000	NA	NA	NA	NA	NA	6110		NA	NA	NA	NA	NA
Selenium	40	50	29.60	NA	ND	NR	ND	<10	<10	<10	<10	NA	NA	NA	NA	85.6	NA	NA	NA	35.8	23.6	NR	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	58.8		NA	NA	NA	NA	NA
Silver	40	NLE	ND	NA	ND	2.07	ND	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	4.29	2.72	<10	<10	<10	<10	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
Sodium	50000	NLE	21500	NA	34900	16200	65200	19800	30800	<10000	275000	NA	NA	NA	NA	8320	NA	NA	NA	6140	4510	7610	8050	<10000	<10000	<10000	<10000	NA	NA	NA	NA	NA	8430		NA	NA	NA	NA	NA
Thallium	2	2	5.50	NA	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA
Vanadium	60	NLE	108	NA	5.43	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	1.4	NA	NA	NA	1.59	0.974	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	NA	1.58		NA	NA	NA	NA	NA
Zinc	2000	NLE	233	NA	2.19	2.19	21.3	<20	<20	111	32.3	NA	NA	NA	NA	ND	NA	NA	NA	4.53	2.08	1.88	2.83	<20	<20	<20	<20	NA	NA	NA	NA	NA	ND		NA	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

Sample M2MW01 (4th Quarter 2010) has metals results but not VOCs. Values left blank for missing data.

Sample M2MW05 Duplicate (2nd Quarter 2011) had an elevated sample detection limit due to difficult sample matrix.

Table 3
Historical Groundwater Analytical Results
Site FTMM-02 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M2MW05																M2MW06														M2MW07			
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	46 Dup	LF2	LF2 Dup	LF3	LF3 Dup	LF4	LF4 Dup	LF5	LF5 Dup	LF6	LF6 Dup	LF7	LF7 Dup	LF8	LF8 Dup	41	42	43	44	LF1	46	47	48	LF2	LF3	LF4	LF5	LF6	LF7	LF8	39	40	40 Dup	41
Date Collected				12/3/2009	3/8/2010	3/8/2010	6/14/2010	6/14/2010	9/22/2010	9/22/2010	12/17/2010	12/17/2010	3/8/2011	3/8/2011	6/13/2011	6/13/2011	8/23/2011	8/23/2011	3/17/2008	5/23/2008	8/26/2008	12/27/2008	3/28/2009	6/22/2009	9/22/2009	12/3/2009	3/9/2010	6/11/2010	9/23/2010	12/17/2010	3/8/2011	6/14/2011	8/24/2011	3/17/2008	5/23/2008	5/23/2008	8/26/2008
ANALYTE/Lab ID				90469.03	10075.04	10075.03	10264.04	10264.03	10404.04	10404.03	10560.04	10560.03	11092.04	11092.03	11247.04	11247.03	11354.04	11354.03	80087.08	80178.05	80308.08	80473.05	90131.06	90252.05	90394.08	90469.05	10077.06	10261.06	10409.07	10560.08	11092.05	11248.08	11355.07	80087.09	80178.06	80178.03	80308.09
Volatile Organic Compounds (µg/L)																																					
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.17 J	0.38 J	ND	ND	ND	ND
Chlorobenzene	50	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.83	9.47	0.89 J	20.52	3.65	3.19	ND	ND	12.58	8.11	1.37	1.7	9.62	11.45	23.1	ND	ND	ND	ND
Chloroethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND
Styrene	100	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	600	600	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.38 J	0.42 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.17 J	0.27 J	0.28 J	ND	ND	ND	ND
1,3-Dichlorobenzene	600	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.41 J	0.4 J	ND	ND	ND	ND	ND	ND	0.28 J	ND	ND	ND	ND	0.26 J	0.47 J	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.94 J	2.2	ND	0.56 J	ND	ND	ND	ND	1.35	0.86	ND	ND	0.68	0.71	1.3	ND	ND	ND	ND
1,1-Dichloroethane	50	7	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	3	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.75 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.19 J	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	9	70	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	3	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	4	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds (µg/L)																																					
Acenaphthene	400	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzyl alcohol	2000	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	600	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	75	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TICs*	500	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides/PCBs (µg/L)																																					
Aldrin	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
alpha-BHC	0.02	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
beta-BHC	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
delta-BHC	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.043	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
alpha-Chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
gamma-Chlordane	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDD	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dieldrin	0.03	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan II	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan sulfate	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin	2	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin aldehyde	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin ketone	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor	0.05	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor epoxide	0.2	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.045	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)																																					
Aluminum	200	NLE	121000	NA	16.2	13.8	ND	ND	48	42.8	<200	<200	<200	<200	3330	8410	9730	13700	NA	NA	NA	NA	ND	NA	NA	NA	19.6	ND	26.5	<200	<200	<200	715	NA	NA	NA	NA
Antimony	6	6	20.70	NA	ND	ND	7.58 ER	10.4	12	10.9	<6.0	<6.0	<6.0	<6.0	<6.0	<30	<6.0	<6.0	NA	NA	NA	NA	23.5	NA	NA	NA	ND	10.2	10.3	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA
Arsenic	3	10	89.30	NA	1.44 ER	1.26 ER	1.94 ER	1.59 ER	1.35 ER	1.26 ER	<3.0	<3.0	<3.0	<3.0	18	134	17.9	20.9	NA	NA	NA	NA	74.1	NA	NA	NA	0.66 ER	1.01 ER	0.67 ER	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA
Barium	6000	2000	699.00	NA	149	147	115	113	88.2	86	<200	<200	<200	<200	662	3930	573	507	NA	NA	NA	NA	95.4	NA	NA	NA	205	125	72.9	<200	304	<200	391	NA	NA	NA	NA
Beryllium	1	4	2.10	NA	ND	ND	ND	ND	ND	ND	<1.0	<1.0	1.3	1.3	<1.0	<5.0	1	1.3	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	<1.0	3.5	<1.0	<1.0	NA	NA	NA	NA
Cadmium	4	5	9.50	NA	0.677 ER	0.665 ER	0.991 ER	0.897 ER	0.981 ER	0.822 ER	<3.0	<3.0	<3.0	<3.0	<3.0	<15	<3.0	<3.0	NA	NA	NA	NA	ND	NA	NA	NA	0.614 ER	ND	ND	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA
Calcium	NLE	NLE	45400.00	NA	61800	60500	43000	43300	31700	31800	33900	33500	29400	29200	45800	73299	44500	51000	NA	NA	NA	NA	56500	NA	NA	NA	85200	67200	47500	43900	119000	74500	77000	NA	NA	NA	NA
Chromium	70	100	191.00	NA	ND	ND	ND	ND	ND	ND	<10	<10	<10	<10	41.8	108	118	153	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA
Cobalt	NLE	NLE	18.30	NA	ND	ND	ND	ND	ND	ND	<50	<50	<50	<50	<50	<250	<50	<50	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA
Copper	1300	1300	65.60	NA	ND	ND	ND	ND	1.58 ER	1.56 ER	<10	<10	<10	<10	<10	<50	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	1.21 ER	<10	<10	<10	14.2	NA	NA	NA	NA
Iron	300	NLE	431000	NA	43800	43100	31300	31300	22500	22000	26200	27800	45600	32700	165000	1630000	121000	148000	NA	NA	NA	NA	12700	NA	NA	NA	32300	18600	9190	11600	38700	16500	61000	NA	NA	NA	NA
Lead	5	15	22.70	NA	ND	ND	2.74 ER	ND	ND	3.19 ER	<3.0	<3.0	<3.0	<3.0	6.8	<15	19.1	20.6	NA	NA	NA	NA	3.11 ER	NA	NA	NA	ND	ND	ND	<3.0	<3.0	<3.0	11	NA	NA	NA	NA
Magnesium	NLE	NLE	62700	NA	10400	10200	7390	7440	5380	5340	5220	5160	<5000	<5000	8080	<25000	9400	11000	NA	NA	NA	NA	5420	NA	NA	NA	10700	7070	5000	<5000	10200	5870	11700	NA	NA	NA	NA
Manganese	50	NLE	331	NA	113	113	80.6	80.8	56.3	55.6	67.4	66.1	58.5	58.2	108	231	124	147	NA	NA	NA	NA	83	NA	NA	NA	453	173	70.5	84.2	318	513	731	NA	NA	NA	NA
Mercury	2	2	0.26	NA	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.19	<0.20	<0.20	<1.6	0.35	0.47	NA	NA	NA	NA	ND	NA	NA	NA	0.08 ER	ND	0.31 ER	<0.5	<0.20	<0.20	<0.20	NA	NA	NA	NA
Nickel	100	NLE	187	NA	ND	0.515 ER	ND	0.711 ER	0.953 ER	ND	<10	<10	<10	<10	<10	<50	16.3	16	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA
Potassium	NLE	NLE	137000	NA	10600	10400	8330	8250	8350	8310	<10000	<10000	<10000	<10000	10400	<50000	14900	17300	NA	NA	NA	NA	6960	NA	NA	NA	8460	6900	6760	<10000	12000	<10000	<10000	NA	NA	NA	NA
Selenium	40	50	29.60	NA	ND	ND	NR	NR	ND	ND	<10	<10	<10	<10	<10	<50	<10	11.7	NA	NA	NA	NA	117	NA	NA	NA	ND	NR	ND	<10	<10	<10	<10	NA	NA	NA	NA
Silver	40	NLE	ND	NA	ND	ND	6.15	6.13	3.14	2.8	<10	<10	<10	<10	<10	<50	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA	ND	3.71	ND	<10	<10	<10	<10	NA	NA	NA	NA
Sodium	50000	NLE	21500	NA	21900	20800	17900	18400	16900	17900	22000	22100	22200	22000	28000	<50000	34000	35600	NA	NA	NA	NA	9830	NA	NA	NA	9910	11300	8110	<10000	13200	18500	29700	NA	NA	NA	NA
Thallium	2	2	5.50	NA	ND	0.53 ER	ND	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	<2.0	<10	<2.0	<2.0	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA
Vanadium	60	NLE	108	NA	4.98	4.87	ND	ND	ND	ND	<50	<50	<50	<50	<50	<250	63.9	88.4	NA	NA	NA	NA	1.73	NA	NA	NA	4.05	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA
Zinc	2000	NLE	233	NA	1.43	1.45	ND	ND	1.35	ND	<20	<20	<20	<20	26	<100	111	147	NA	NA	NA	NA	3.13	NA	NA	NA	14	ND	ND	<20	<20	<20	79.7	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

Sample M2MW01 (4th Quarter 2010) has metals results but not VOCs. Values left blank for missing data.

Sample M2MW05 Duplicate (2nd Quarter 2011) had an elevated sample detection limit due to difficult sample matrix.

Table 3
Historical Groundwater Analytical Results
Site FTMM-02 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M2MW07														M2MW08																		M2MW09							
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	42	LF1	44	45	46	LF2	LF3	LF4	LF3	LF4	LF5	LF6	LF6 Dup	39	40	41	42	LF1	44	45	46	LF2	LF3	LF4	LF5	LF6	LF7	LF7 Dup	LF8	41	42	43	44	LF1	46	47	48
Date Collected				12/27/2008	3/28/2009	6/22/2009	9/22/2009	12/3/2009	3/8/2010	6/10/2010	9/22/2010	12/17/2010	3/7/2011	6/13/2011	8/24/2011	8/24/2011	3/17/2008	5/23/2008	8/26/2008	12/27/2008	3/30/2009	6/22/2009	9/22/2009	12/3/2009	3/8/2010	6/10/2010	9/22/2010	12/17/2010	3/4/2011	6/14/2011	6/14/2011	8/24/2011	3/17/2008	5/23/2008	8/26/2008	12/27/2008	3/28/2009	6/22/2009	9/22/2009	12/3/2009
ANALYTE/Lab ID				80473.06	90131.07	90252.06	90394.09	90469.06	10075.05	10259.07	10404.05	10560.05	11088.06	11247.05	11355.04	11355.03	80087.10	80178.07	80308.10	80473.07	90133.09	90252.07	90394.10	90469.07	10075.06	10259.06	10404.06	10560.06	11085.06	11248.04	11248.03	11355.05	80087.11	80178.08	80308.11	80473.08	90131.04	90252.08	90394.11	90469.08
Volatile Organic Compounds (µg/L)																																										
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	50	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	ND
Chloroethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	100	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	600	600	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	50	7	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	3	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	9	70	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	3	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds (µg/L)																																									
Acenaphthene	400	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Benzyl alcohol	2000	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
1,3-Dichlorobenzene	600	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
1,4-Dichlorobenzene	75	75	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
TICs*	500	NLE	--	NA	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19	NA	NA	NA
Pesticides/PCBs (µg/L)																																									
Aldrin	0.04	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
alpha-BHC	0.02	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
beta-BHC	0.04	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
delta-BHC	NLE	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
alpha-Chlordane	0.5	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
gamma-Chlordane	NLE	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
4,4'-DDD	0.1	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.034	NA	NA	NA
4,4'-DDE	0.1	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.034	NA	NA	NA
4,4'-DDT	0.1	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.044	NA	NA	NA
Dieldrin	0.03	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.031	NA	NA	NA
Endosulfan I	40	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.027	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.028	NA	NA	NA
Endosulfan II	40	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Endosulfan sulfate	40	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.026	NA	NA	NA
Endrin	2	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Endrin aldehyde	NLE	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.023	NA	NA	NA
Endrin ketone	NLE	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.034	NA	NA	NA
Heptachlor	0.05	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.038	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.034	NA	NA	NA
Heptachlor epoxide	0.2	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.027	NA	NA	NA
Methoxychlor	40	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.052	NA	NA	NA
Metals (µg/L)																																									
Aluminum	200	NLE	121000	NA	ND	NA	NA	NA	10.9	ND	ND	<200	<200	<200	362	231	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	<200	<200	1040	418	295	NA	NA	NA	NA	ND	NA	NA	NA
Antimony	6	6	20.70	NA	18.5	NA	NA	NA	6.06 ER	10.1	12.6	<6.0	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	21.9	NA	NA	NA	ND	9.29 ER	13.1	<6.0	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	3	10	89.30	NA	84.3	NA	NA	NA	ND	0.9 ER	ND	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	62.7	NA	NA	NA	ND	ND	ND	<3.0	<3.0	8.2	4	<3.0	NA	NA	NA	NA	90.1	NA	NA	NA
Barium	6000	2000	699.00	NA	85.7	NA	NA	NA	82.9	131	67.4	<200	<200	480	432	291	NA	NA	NA	NA	121	NA	NA	NA	99.8	67.4	55.3	<200	<200	1910	905	257	NA	NA	NA	NA	42.2	NA	NA	NA
Beryllium	1	4	2.10	NA	ND	NA	NA	NA	ND	ND	ND	<1.0	5.1	<1.0	<1.0	<1.0	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	<1.0	1.8	<1.0	<1.0	<1.0	NA	NA	NA	NA	ND	NA	NA	NA
Cadmium	4	5	9.50	NA	ND	NA	NA	NA	ND	ND	0.569 ER	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	0.863 ER	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	ND	NA	NA	NA
Calcium	NLE	NLE	45400.00	NA	47300	NA	NA	NA	48900	41800	49400	48100	51300	52000	72000	66400	NA	NA	NA	NA	39200	NA	NA	NA	38800	33400	43600	39700	37000	47400	39200	30400	NA	NA	NA	NA	50600	NA	NA	NA
Chromium	70	100	191.00	NA	ND	NA	NA	NA	ND	ND	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	<10	<10	13.9	<10	<10	NA	NA	NA	NA	0.442 ER	NA	NA	NA
Cobalt	NLE	NLE	18.30	NA	ND	NA	NA	NA	ND	ND	ND	<50	<50	<50	<50	<50	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	<50	<50	<50	<50	<50	NA	NA	NA	NA	ND	NA	NA	NA
Copper	1300	1300	65.60	NA	ND	NA	NA	NA	ND	ND	1.51 ER	<10	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	1.49 ER	<10	<10	<10	<10	<10	NA	NA	NA	NA	1.05 ER	NA	NA	NA
Iron	300	NLE	431000	NA	20100	NA	NA	NA	13700	14200	8310	16000	40300	116000	83700	54600	NA	NA	NA	NA	24100	NA	NA	NA	26700	12400	14500	26200	39300	310000	173000	67100	NA	NA	NA	NA	3240	NA	NA	NA
Lead	5	15	22.70	NA	5.47	NA	NA	NA	ND	ND	2.66 ER	<3.0	<3.0	<3.0	4.1	3.3	NA	NA	NA	NA	7.38	NA	NA	NA	ND	ND	ND	<3.0	<3.0	6.4	<3.0	3.2	NA	NA	NA	NA	2.01 ER	NA	NA	NA
Magnesium	NLE	NLE	62700	NA	6500	NA	NA	NA	7020	6160	6050	5660	5450	<5000	7830	7380	NA	NA	NA	NA	4890	NA	NA	NA	5130	4450	5680	<5000	<5000	<5000	<5000	<5000	NA	NA	NA	NA	4380	NA	NA	NA
Manganese	50	NLE	331	NA	77.4	NA	NA	NA	75.1	64.8	56.9	63.6	113	107	197	137	NA	NA	NA	NA	39.4	NA	NA	NA	36.8	31.8	40	50.6	39.6	121	82.8	52.7	NA	NA	NA	NA	291	NA	NA	NA
Mercury	2	2	0.26	NA	ND	NA	NA	NA	0.052	ER ND	ND	<0.5	<0.20	<0.20	<0.20	<0.20	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	<0.5	<0.20	<0.40	<0.20	<0.20	NA	NA	NA	NA	ND	NA	NA	NA
Nickel	100	NLE	187	NA	ND	NA	NA	NA	ND	ND	0.407	<10	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA
Potassium	NLE	NLE	137000	NA	5010	NA	NA	NA	6360	4590	5070	<10000	<10000	<10000	<10000	<10000	NA	NA	NA	NA	6730	NA	NA	NA	7820	5890	7540	<10000	<10000	<10000	<10000	<10000	NA	NA	NA	NA	5260	NA	NA	NA
Selenium	40	50	29.60	NA	85.6	NA	NA	NA	22	NR	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	96.3	NA	NA	NA	ND	NR	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	117	NA	NA	NA
Silver	40	NLE	ND	NA	ND	NA	NA	NA	ND	3.08	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA	ND	2.43	1.51	<10	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA
Sodium	50000	NLE	21500	NA	9230	NA	NA	NA	10800	7800	8130	<10000	<10000	<10000	12900	11600	NA	NA	NA	NA	8710	NA	NA	NA	8830	7960	9070	<10000	<10000	<10000	<10000	<10000	NA	NA	NA	NA	8140	NA	NA	NA
Thallium	2	2	5.50	NA	ND	NA	NA	NA	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	ND	NA	NA	NA
Vanadium	60	NLE	108	NA	2.15	NA	NA	NA	1.87	ND	ND	<50	<50	<50	<50	<50	NA	NA	NA	NA	2.39	NA	NA	NA	3.4	ND	ND	<50	<50	<50	<50	<50	NA	NA	NA	NA	1.01	NA	NA	NA
Zinc	2000	NLE	233	NA	3.22	NA	NA	NA	ND	ND	ND	<20	<20	<20	<20	<20	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	<20	<20	<20	<20	<20	NA	NA	NA	NA	21.1	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

Sample M2MW01 (4th Quarter 2010) has metals results but not VOCs. Values left blank for missing data.

Sample M2MW05 Duplicate (2nd Quarter 2011) had an elevated sample detection limit due to difficult sample matrix.

Table 3
Historical Groundwater Analytical Results
Site FTMM-02 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M2MW09							M2MW10																				M2MW11								
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF2	LF3	LF4	LF5	LF6	LF7	LF8	39	40	41	42	LF1	44	45	46	LF2	LF3	LF3 Dup	LF4	LF4 Dup	LF5	LF6	LF6 Dup	LF7	LF8	LF8 Dup	33	33 Dup	34	35	36	LF1	LF1 Dup	38	39	40
Date Collected				3/8/2010	6/10/2010	9/22/2010	12/17/2010	3/7/2011	6/14/2011	8/24/2011	3/17/2008	5/23/2008	8/26/2008	12/27/2008	3/30/2009	6/22/2009	9/22/2009	12/3/2009	3/8/2010	6/10/2010	6/10/2010	9/23/2010	9/23/2010	12/17/2010	3/7/2011	3/7/2011	6/14/2011	8/22/2011	8/22/2011	3/18/2008	3/18/2008	5/22/2008	8/26/2008	12/23/2008	3/28/2009	3/28/2009	6/22/2009	9/23/2009	12/3/2009
ANALYTE/Lab ID				10075.07	10259.05	10404.07	10555.01	11088.05	11248.05	11355.06	80087.12	80178.09	80308.12	80473.09	90133.05	90252.09	90394.12	90469.09	10075.08	10259.04	10259.03	10409.04	10409.03	10560.07	11088.04	11088.03	11248.06	11352.04	11352.03	80088.04	80088.03	80176.07	80308.13	80472.07	90131.05	90131.03	90252.10	90396.04	90469.1
Volatile Organic Compounds (µg/L)																																						
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	ND	ND	ND	ND	68.23	NA	54.5	48.43	100.78 E	ND	ND	12.45	0.2 J	13.39
Chlorobenzene	50	100	--	ND	ND	ND	ND	0.28 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Chloroethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Styrene	100	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	600	600	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	50	7	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	3	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	NA	NA	11.96	NA	10.85	8.21	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	9	70	--	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	3	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND		ND		ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds (µg/L)																																						
Acenaphthene	400	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
Benzyl alcohol	2000	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
1,3-Dichlorobenzene	600	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
1,4-Dichlorobenzene	75	75	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
TICs*	500	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	14	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22	28	NA	NA	NA
Pesticides/PCBs (µg/L)																																						
Aldrin	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
alpha-BHC	0.02	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
beta-BHC	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
delta-BHC	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
alpha-Chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
gamma-Chlordane	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
4,4'-DDD	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
4,4'-DDE	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
4,4'-DDT	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
Dieldrin	0.03	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
Endosulfan I	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.027	ND	NA	NA	NA
Endosulfan II	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
Endosulfan sulfate	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
Endrin	2	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
Endrin aldehyde	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.025	ND	NA	NA	NA
Endrin ketone	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
Heptachlor	0.05	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.033	0.033	NA	NA	NA
Heptachlor epoxide	0.2	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
Methoxychlor	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.048	ND	NA	NA	NA
Metals (µg/L)																																						
Aluminum	200	NLE	121000	75.5	ND	17.2	<200	285	568	854	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND		ND		ND	<200	<200	<200	949	1610	1610	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
Antimony	6	6	20.70	5.73 ER	6.82 ER	12.2	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	19.8	NA	NA	NA	ND	7.21 ER		12.7		15.6	17.9	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	27	15.8	NA	NA	NA
Arsenic	3	10	89.30	1.04 ER	ND	ND	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	70.4	NA	NA	NA	ND	0.94	ER 0.66 ER	0.87 ER		ND		<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	56.7	66.1	NA	NA	NA
Barium	6000	2000	699.00	56.9	30.5	41.6	<200	<200	<200	<200	NA	NA	NA	NA	56.8	NA	NA	NA	27.1	22.8		28		29.1	29.9	<200	<200	<200	675	447	670	NA	NA	NA	NA	NA	28.1	28.1	NA	NA	NA
Beryllium	1	4	2.10	ND	ND	ND	<1.0	3.1	<1.0	<1.0	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND		ND		ND	ND	<1.0	3.9	4.1	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
Cadmium	4	5	9.50	ND	ND	0.966	ER <3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND		ND		0.503	ER ND	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	ND	0.344	ER NA	NA	NA
Calcium	NLE	NLE	45400.00	56400	43100	54800	53200	54700	51500	48900	NA	NA	NA	NA	47100	NA	NA	NA	50000	37100		42200		56500	56400	48900	47400	49700	56200	53800	57000	NA	NA	NA	NA	NA	34200	34100	NA	NA	NA
Chromium	70	100	191.00	ND	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND		ND		ND	ND	<10	<10	<10	17	26.7	28	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
Cobalt	NLE	NLE	18.30	ND	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND		ND		ND	ND	<50	<50	<50	<50	<50	<50	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
Copper	1300	1300	65.60	ND	ND	1.32	ER <10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND		ND		ND	ND	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	0.916	0.899	NA	NA	NA
Iron	300	NLE	431000	6010	ND	5590	6470	14700	25700	15500	NA	NA	NA	NA	3960	NA	NA	NA	1300	1170		1390		1490	1530	3730	9250	10000	70000	47100	69500	NA	NA	NA	NA	NA	86.5	63.6	NA	NA	NA
Lead	5	15	22.70	ND	ND	ND	<3.0	<3.0	<3.0	4.3	NA	NA	NA	NA	4.78	ER NA	NA	NA	ND	ND		ND		ND	ND	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	2.24	ER 14.4	NA	NA	NA
Magnesium	NLE	NLE	62700	5150	3910	5040	<5000	<5000	<5000	<5000	NA	NA	NA	NA	3420	NA	NA	NA	3760	2960		3310		4240	4270	<5000	<5000	<5000	<5000	<5000	<5000	NA	NA	NA	NA	NA	3740	3730	NA	NA	NA
Manganese	50	NLE	331	439	286	273	282	442	577	362	NA	NA	NA	NA	48.9	NA	NA	NA	45.5	40.4		45.8		58.5	58.9	84.8	69.2	74.7	163	196	241	NA	NA	NA	NA	NA	1.54	1.81	NA	NA	NA
Mercury	2	2	0.26	ND	ND	ND	<0.5	<0.20	<0.20	<0.20	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND		ND		0.29	0.31	ER <0.5	<0.20	<0.20	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
Nickel	100	NLE	187	ND	0.597	ER ND	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND		ND		ND	ND	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
Potassium	NLE	NLE	137000	7070	4800	6080	<10000	<10000	<10000	<10000	NA	NA	NA	NA	5660	NA	NA	NA	7040	4550		5190		6830	6790	<10000	<10000	<10000	<10000	<10000	<10000	NA	NA	NA	NA	NA	5370	5300	NA	NA	NA
Selenium	40	50	29.60	35.5	NR	ND	<10	<10	<10	<10	NA	NA	NA	NA	102	NA	NA	NA	49.5	NR		NR		ND	ND	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	111	84.9	NA	NA	NA
Silver	40	NLE	ND	1.39	0.818	ND	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA	2.5	0.788		ND		ND	ND	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
Sodium	50000	NLE	21500	10900	7280	11100	10100	11400	<10000	<10000	NA	NA	NA	NA	8840	NA	NA	NA	9830	6580		8010		8870	8940	<10000	<10000	<10000	<10000	<10000	<10000	NA	NA	NA	NA	NA	3890	3980	NA	NA	NA
Thallium	2	2	5.50	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND		1.83	ER ND		ND	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA
Vanadium	60	NLE	108	1.78	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	0.874	NA	NA	NA	1.38	ND		ND		ND	ND	<50	<50	<50	<50	<50	<50	NA	NA	NA	NA	NA	0.226	0.324	NA	NA	NA
Zinc	2000	NLE	233	36.9	15.1	17.4	<20	104	112	118	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND		ND		ND	ND	<20	<20	<20	<20	23.1	28.7	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

Sample M2MW01 (4th Quarter 2010) has metals results but not VOCs. Values left blank for missing data.

Sample M2MW05 Duplicate (2nd Quarter 2011) had an elevated sample detection limit due to difficult sample matrix.

Table 3
Historical Groundwater Analytical Results
Site FTMM-02 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M2MW11							M2MW12																			M2MW13									
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF2	LF3	LF4	LF5	LF6	LF7	LF8	33	34	35	36	LF1	38	39	40	LF2	LF2 Dup	LF3	LF3 Dup	LF4	LF5	LF6	LF7	LF8	33	34	35	36	LF1	38	39	40	LF2	LF3	LF4	LF5
Date Collected				3/10/2010	6/14/2010	9/24/2010	12/18/2010	3/9/2011	6/15/2011	8/24/2011	3/18/2008	5/22/2008	8/26/2008	12/23/2008	3/30/2009	6/22/2009	9/23/2009	12/3/2009	3/9/2010	3/9/2010	6/11/2010	6/11/2010	9/23/2010	12/15/2010	3/4/2011	6/14/2011	8/24/2011	3/17/2008	5/22/2008	8/27/2008	12/23/2008	3/30/2009	6/19/2009	9/22/2009	12/4/2009	3/9/2010	6/11/2010	9/23/2010	12/16/2010
ANALYTE/Lab ID				10082.08	10264.09	10410.08	10562.05	11097.07	11254.09	11355.09	80088.05	80176.08	80308.14	80472.08	90133.06	90252.11	90396.05	90469.11	10077.04	10077.03	10261.04	10261.03	10409.05	10555.02	11085.05	11248.07	11355.08	80087.13	80176.09	80308.15	80472.09	90133.04	90249.07	90394.13	90470.07	10077.05	10261.05	10409.06	10558.04
Volatile Organic Compounds (µg/L)																																						
Benzene	1	5	--	ND	ND	ND	ND	ND	38.18	42.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	50	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	100	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	600	600	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	50	7	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	3	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	11.2	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	9	70	--	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	3	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Semi-Volatile Organic Compounds (µg/L)																																						
Acenaphthene	400	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
Benzyl alcohol	2000	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	600	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	75	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
TICs*	500	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13	NA	NA	NA	NA	NA	NA	NA
Pesticides/PCBs (µg/L)																																						
Aldrin	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
alpha-BHC	0.02	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
beta-BHC	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
delta-BHC	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
alpha-Chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
gamma-Chlordane	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
4,4'-DDD	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.042	NA	NA	NA	NA	NA	NA	NA
Dieldrin	0.03	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.027	NA	NA	NA	NA	NA	NA	NA
Endosulfan II	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
Endosulfan sulfate	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
Endrin	2	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
Endrin aldehyde	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
Endrin ketone	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.031	NA	NA	NA	NA	NA	NA	NA
Heptachlor	0.05	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.035	NA	NA	NA	NA	NA	NA	NA
Heptachlor epoxide	0.2	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)																																						
Aluminum	200	NLE	121000	ND	ND	27.4	<200	<200	<200	<200	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	11.1	<200	<200	<200	<200	NA	NA	NA	NA	ND	NA	NA	NA	8.52	ND	11.4	<200
Antimony	6	6	20.70	7.22 ER	9.12 ER	15.4	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	22	NA	NA	NA	ND	ND	6.79 ER	7.79 ER	11.1	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	19.4	NA	NA	NA	ND	8.58 ER	13.8	<6.0
Arsenic	3	10	89.30	ND	0.93 ER	0.97 ER	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	66	NA	NA	NA	0.69 ER	ND	1.5 ER	0.7 ER	ND	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	74.1	NA	NA	NA	2.53 ER	1.96 ER	1.57 ER	3.8
Barium	6000	2000	699.00	20.5	26.1	32.9	<200	<200	<200	<200	NA	NA	NA	NA	30.1	NA	NA	NA	30	29.4	27.2	26.6	32.8	<200	<200	<200	<200	NA	NA	NA	NA	153	NA	NA	NA	138	108	111	<200
Beryllium	1	4	2.10	ND	ND	ND	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	<1.0
Cadmium	4	5	9.50	ND	ND	ND	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	1.04 ER	<3.0
Calcium	NLE	NLE	45400.00	25600	29200	41600	34000	34000	37700	41800	NA	NA	NA	NA	34800	NA	NA	NA	35100	34600	30000	29500	40200	35800	34200	43200	43500	NA	NA	NA	NA	52300	NA	NA	NA	43400	37600	48400	46800
Chromium	70	100	191.00	ND	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	<10
Cobalt	NLE	NLE	18.30	ND	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	<50
Copper	1300	1300	65.60	ND	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA	1.14 ER	NA	NA	NA	ND	ND	ND	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	1.45 ER	<10
Iron	300	NLE	431000	130	294	431	294	103	<100	237	NA	NA	NA	NA	201	NA	NA	NA	ND	76.9	468	430	464	288	197	249	266	NA	NA	NA	NA	27300	NA	NA	NA	23600	20900	31000	35700
Lead	5	15	22.70	ND	ND	ND	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	2.44 ER	NA	NA	NA	ND	ND	ND	ND	ND	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	5.49	NA	NA	NA	ND	ND	3.84 ER	<3.0
Magnesium	NLE	NLE	62700	2940	3410	4700	<5000	<5000	<5000	<5000	NA	NA	NA	NA	3580	NA	NA	NA	4040	4020	3510	3450	4530	<5000	<5000	<5000	<5000	NA	NA	NA	NA	5420	NA	NA	NA	4600	4340	6390	7280
Manganese	50	NLE	331	0.763	35.5	19.2	17.3	<15	20.2	24	NA	NA	NA	NA	11.9	NA	NA	NA	7.54	7.59	57.7	53.4	18.5	17.2	<15	20.6	28	NA	NA	NA	NA	218	NA	NA	NA	178	159	198	246
Mercury	2	2	0.26	0.11 ER	ND	ND	<0.5	<0.20	<0.20	<0.20	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	0.29 ER	<0.5	<0.20	<0.20	<0.20	NA	NA	NA	NA	ND	NA	NA	NA	0.08 ER	ND	0.32 ER	<0.5
Nickel	100	NLE	187	0.701 ER	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	0.452 ER	12.8
Potassium	NLE	NLE	137000	4000	4430	6390	<10000	<10000	<10000	<10000	NA	NA	NA	NA	5570	NA	NA	NA	5980	5910	4650	4540	6130	<10000	<10000	<10000	<10000	NA	NA	NA	NA	9720	NA	NA	NA	9930	7660	8890	<10000
Selenium	40	50	29.60	42	NR	ND	<10	<10	<10	<10	NA	NA	NA	NA	101	NA	NA	NA	41	38.6	NR	NR	ND	<10	<10	<10	<10	NA	NA	NA	NA	108	NA	NA	NA	ND	NR	ND	<10
Silver	40	NLE	ND	1.08	1.18	ND	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA	1.76	2.01	1.02	1.01	ND	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA	ND	4.62	3.17	<10
Sodium	50000	NLE	21500	3510	3660	4170	<10000	<10000	<10000	<10000	NA	NA	NA	NA	3560	NA	NA	NA	3170	3210	2730	2360	3410	<10000	<10000	<10000	<10000	NA	NA	NA	NA	20900	NA	NA	NA	16500	17200	34200	61500
Thallium	2	2	5.50	0.86 ER	ND	ND	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	<2.0
Vanadium	60	NLE	108	ND	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	0.629	NA	NA	NA	0.732	0.856	ND	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	2.57	NA	NA	NA	2.79	ND	ND	<50
Zinc	2000	NLE	233	ND	4.68	ND	<20	<20	<20	<20	NA	NA	NA	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	<20	<20	<20	<20	NA	NA	NA	NA	5.13	NA	NA	NA	ND	ND	ND	241

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

Sample M2MW01 (4th Quarter 2010) has metals results but not VOCs. Values left blank for missing data.

Sample M2MW05 Duplicate (2nd Quarter 2011) had an elevated sample detection limit due to difficult sample matrix.

Table 3
Historical Groundwater Analytical Results
Site FTMM-02 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M2MW13						M2MW15	M2MW16	M2MW17	M2MW21																				M2MW22							
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF5 Dup	LF6	LF6 Dup	LF7	LF7 Dup	LF8	1	1	1	33	34	35	35 Dup	36	LF1	38	38 Dup	39	40	40 Dup	LF2	LF3	LF4	LF5	LF6	LF7	LF8	33	34	35	36	LF1	38	39	40
Date Collected				12/16/2010	3/4/2011	3/4/2011	6/15/2011	6/15/2011	8/22/2011	3/14/2011	3/14/2011	3/14/2011	3/17/2008	5/22/2008	8/27/2008	8/27/2008	12/23/2008	3/30/2009	6/19/2009	6/19/2009	9/23/2009	12/4/2009	12/4/2009	3/10/2010	6/11/2010	9/24/2010	12/16/2010	3/8/2011	6/15/2011	8/22/2011	3/17/2008	5/22/2008	8/27/2008	12/23/2008	3/31/2009	6/19/2009	9/23/2009	12/4/2009
ANALYTE/Lab ID				10558.03	11085.04	11085.03	11254.04	11254.03	11352.06	11107.05	11107.06	11107.07	80087.14	80176.10	80309.04	80309.03	80472.10	90133.11	90249.08	90249.03	90396.06	90470.08	90470.03	10082.05	10261.08	10410.05	10558.08	11092.08	11254.07	11352.08	80087.15	80176.11	80309.05	80472.11	90137.06	90249.09	90396.07	90470.09
Volatile Organic Compounds (µg/L)																																						
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.42 J	1.07 J	2.03	1.98 J	1.63 J	1.16 J	0.73 J	0.59 J	1.22	0.89	0.88	0.47 J	0.99	1.14	0.82	1.09	1.04	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	50	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	39.37	31.25	46.85	46.84	34.12	34.61	15.75	10.66	42.93	24.56	24.52	12.37	28.84	50.63	28.79	27.19	37.96	7.5	0.33 J	ND	ND	0.33 J	0.32 J	0.2 J	ND	0.28 J
Chloroethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	100	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	600	600	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.62 J	1.39 J	0.65 J	0.66 J	1.38 J	1.36 J	0.9 J	0.89 J	1.08	0.57	0.62	0.6	1.54	1.04	1.1	1.07	1.49	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.78	2.61	2.89	2.7	1.85 J	2.84	1.33 J	1.16 J	3.05	1.45	1.5	0.99	2.91	3.25	2.41	1.9	3.06	0.66 J	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.43	4.71	4.04	3.93	3.96	5.19	2.46	2.01	4.65	2.28	2.39	1.88	5.41	5.07	3.63	3.59	5.47	1.2	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	50	7	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	3	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.38 J	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	0.9 J	ND	0.64 J	0.95 J	3.07	3.26
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	NA	251.4	228.05	416.66	ND	173.74	264.54	544.33	252.98
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	9	70	--	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.3 J	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	3	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18 J	0.18 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8	ND	4	3	ND	ND	ND	ND	4	ND	ND	ND	14	105	16	4	16	ND	53	53	343	491	47	82	141	54
Semi-Volatile Organic Compounds (µg/L)																																						
Acenaphthene	400	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Benzyl alcohol	2000	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.9 J	NA	NA	NA
1,3-Dichlorobenzene	600	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.7 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
1,4-Dichlorobenzene	75	75	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
TICs*	500	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	450	NA	NA	NA
Pesticides/PCBs (µg/L)																																						
Aldrin	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
alpha-BHC	0.02	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.028	NA	NA	NA
beta-BHC	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
delta-BHC	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.057	NA	NA	NA
alpha-Chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
gamma-Chlordane	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.029	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
4,4'-DDD	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.093	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
4,4'-DDE	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.069	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
4,4'-DDT	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.06	NA	NA	NA
Dieldrin	0.03	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.031	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Endosulfan I	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Endosulfan II	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Endosulfan sulfate	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Endrin	2	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Endrin aldehyde	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Endrin ketone	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.136	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Heptachlor	0.05	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.039	NA	NA	NA
Heptachlor epoxide	0.2	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Methoxychlor	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.048	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.059	NA	NA	NA
Metals (µg/L)																																						
Aluminum	200	NLE	121000	<200	<200	<200	<200	216	459	<200	<200	238	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	154	ND	32.6	<200	<200	204	<200	NA	NA	NA	NA	ND	NA	NA	NA
Antimony	6	6	20.70	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	30	NA	NA	NA	NA	NA	ND	10.3	22.6	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	8.77 ER	NA	NA	NA
Arsenic	3	10	89.30	<3.0	3.5	<3.0	4.6	5.2	3.4	<3.0	13	<3.0	NA	NA	NA	NA	NA	81.5	NA	NA	NA	NA	NA	ND	1.3 ER	1.21 ER	<3.0	<3.0	<3.0	9	NA	NA	NA	NA	38.4	NA	NA	NA
Barium	6000	2000	699.00	<200	<200	<200	<200	<200	<200	<200	298	<200	NA	NA	NA	NA	NA	324	NA	NA	NA	NA	NA	75.5	267	467	533	279	385	<200	NA	NA	NA	NA	68.4	NA	NA	NA
Beryllium	1	4	2.10	<1.0	<1.0	2.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	ND	ND	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	ND	NA	NA	NA
Cadmium	4	5	9.50	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	ND	1.95 ER	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	ND	NA	NA	NA
Calcium	NLE	NLE	45400.00	48600	49800	48400	45100	45500	45500	49200	173000	12300	NA	NA	NA	NA	NA	81500	NA	NA	NA	NA	NA	36700	67900	86300	89200	81200	88300	54100	NA	NA	NA	NA	32200	NA	NA	NA
Chromium	70	100	191.00	<10	<10	<10	<10	<10	19.5	<10	<10	<10	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA
Cobalt	NLE	NLE	18.30	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	0.803	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	ND	NA	NA	NA
Copper	1300	1300	65.60	<10	<10	<10	<10	<10	24.4	<10	<10	<10	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	1.75 ER	ND	3.91 ER	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA
Iron	300	NLE	431000	37000	26400	25500	30400	32400	34000	990	80500	<100	NA	NA	NA	NA	NA	49100	NA	NA	NA	NA	NA	12100	37200	57000	67400	42500	49500	37000	NA	NA	NA	NA	21800	NA	NA	NA
Lead	5	15	22.70	<3.0	<3.0	<3.0	<3.0	3.5	11.1	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	13.1	NA	NA	NA	NA	NA	ND	ND	8.96	<3.0	<3.0	3.5	4.7	NA	NA	NA	NA	4.63 ER	NA	NA	NA
Magnesium	NLE	NLE	62700	7540	<5000	<5000	5070	5100	6140	<5000	24500	<5000	NA	NA	NA	NA	NA	4990	NA	NA	NA	NA	NA	2370	4390	5790	5720	<5000	5310	<5000	NA	NA	NA	NA	5070	NA	NA	NA
Manganese	50	NLE	331	253	212	205	226	223	217	<15	953	44.1	NA	NA	NA	NA	NA	513	NA	NA	NA	NA	NA	148	430	513	614	451	496	298	NA	NA	NA	NA	72.7	NA	NA	NA
Mercury	2	2	0.26	<0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	0.07 ER	0.07 ER	ND	<0.5	<0.20	<0.20	<0.20	NA	NA	NA	NA	ND	NA	NA	NA
Nickel	100	NLE	187	13.4	<10	<10	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	6.56	ND	1.79 ER	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA
Potassium	NLE	NLE	137000	<10000	10100	<10000	<10000	<10000	<10000	<10000	14700	<10000	NA	NA	NA	NA	NA	2620	NA	NA	NA	NA	NA	2860	2530	4090	<10000	<10000	<10000	<10000	NA	NA	NA	NA	6340	NA	NA	NA
Selenium	40	50	29.60	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	78.2	NA	NA	NA	NA	NA	30.9	NR	ND	<10	<10	<10	<10	NA	NA	NA	NA	46.9	NA	NA	NA
Silver	40	NLE	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	6.64	6.32	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA
Sodium	50000	NLE	21500	63600	19900	19500	36000	36800	274000	13000	1330000	<10000	NA	NA	NA	NA	NA	17600	NA	NA	NA	NA	NA	8680	17600	20700	21500	21000	62600	56900	NA	NA	NA	NA	8660	NA	NA	NA
Thallium	2	2	5.50	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	ND	NA	NA	NA
Vanadium	60	NLE	108	<50	<50	<50	<50	<50	<50	<50	<50	<50	NA	NA	NA	NA	NA	4.2	NA	NA	NA	NA	NA	1.87	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	1.27	NA	NA	NA
Zinc	2000	NLE	233	248	<20	<20	24	28.7	38.8	354	<20	315	NA	NA	NA	NA	NA	18.6	NA	NA	NA	NA	NA	50.2	19.7	50.3	<20	<20	34.7	42.9	NA	NA	NA	NA	ND	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

Sample M2MW01 (4th Quarter 2010) has metals results but not VOCs. Values left blank for missing data.

Sample M2MW05 Duplicate (2nd Quarter 2011) had an elevated sample detection limit due to difficult sample matrix.

Table 3
Historical Groundwater Analytical Results
Site FTMM-02 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M2MW22							M2MW23																			M2MW24							
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF2	LF3	LF4	LF5	LF6	LF7	LF8	33	34	35	36	LF1	LF1 Dup	38	39	39 Dup	40	LF2	LF3	LF4	LF5	LF6	LF7	LF8	33	34	35	36	LF1	38	39	40
Date Collected				3/10/2010	6/14/2010	9/24/2010	12/18/2010	3/9/2011	6/16/2011	8/23/2011	3/17/2008	5/22/2008	8/27/2008	12/23/2008	3/30/2009	3/30/2009	6/19/2009	9/23/2009	9/23/2009	12/4/2009	3/10/2010	6/11/2010	9/24/2010	12/17/2010	3/9/2011	6/15/2011	8/23/2011	3/17/2008	5/22/2008	8/27/2008	12/23/2008	3/30/2009	6/19/2009	9/23/2009	12/4/2009
ANALYTE/Lab ID				10082.09	10264.05	10410.09	10562.06	11097.08	11257.05	11354.05	80087.16	80176.12	80309.06	80472.12	90133.08	90133.03	90249.10	90396.08	90396.03	90470.10	10082.06	10261.09	10410.06	10560.09	11097.05	11254.08	11354.08	80087.17	80176.13	80309.07	80472.13	90133.12	90249.11	90396.09	90470.11
Volatile Organic Compounds (µg/L)																																			
Benzene	1	5	--	ND	0.23 J	ND	ND	ND	ND	ND	ND	0.21 J	0.61 J	0.71 J	0.5 J	0.53 J	ND	0.44 J	0.48 J	ND	0.22 J	0.88	ND	ND	ND	ND	ND	2.24	1.82 J	1.59 J	2.65	1.68 J	1.36 J	1.27	1.92
Chlorobenzene	50	100	--	ND	8.82	0.68	0.56	0.35 J	0.37 J	0.46 J	2.76	3.89	28.37	18.25	18.2	18.49	ND	34.17	39.33	3.59	6.12	28.38	19.03	12.16	0.45 J	10.72	0.4 J	7.46	7.36	4.7	7.38	7.35	5.53	4.3	6.03
Chloroethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	100	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	600	600	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.54 J	0.54 J	0.52 J	0.45 J	0.5 J	0.5 J	0.47 J	0.45 J
1,3-Dichlorobenzene	600	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.85 J	0.38 J	0.34 J	0.35 J	ND	0.78	0.88	ND	ND	0.75	0.54	0.29 J	ND	0.3 J	ND	0.58 J	0.6 J	0.59 J	0.62 J	0.59 J	0.53 J	0.5	0.56
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.68	1.24	1.09 J	1.07 J	ND	2.5	2.86	ND	0.57	2.45	1.73	0.83	ND	0.97	ND	3.82	3.82	3.63	3.74	3.62	3.5	3.46	3.49
1,1-Dichloroethane	50	7	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	3	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	3.95	5.44	12.1	13.08	7.43	12.48	15.6	ND	ND	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	277.36	455.06	332.94	304.32	164.35	201.24	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	9	70	--	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	3	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	196	229	458	171	168	204	75	ND	ND	35	ND	ND	ND	ND	8	12	ND	ND	3	4	ND	ND	ND	ND	187	169	264	171	136	179	127	141
Semi-Volatile Organic Compounds (µg/L)																																			
Acenaphthene	400	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.7 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Benzyl alcohol	2000	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.9 J	NA	NA	NA
1,3-Dichlorobenzene	600	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
1,4-Dichlorobenzene	75	75	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.7 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
TICs*	500	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	24	35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	29	NA	NA	NA
Pesticides/PCBs (µg/L)																																			
Aldrin	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.029	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
alpha-BHC	0.02	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.028	0.029	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.031	NA	NA	NA
beta-BHC	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
delta-BHC	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
alpha-Chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.027	NA	NA	NA
gamma-Chlordane	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
4,4'-DDD	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.034	0.035	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.036	NA	NA	NA
4,4'-DDE	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.034	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.033	NA	NA	NA
4,4'-DDT	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.046	0.051	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Dieldrin	0.03	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.029	0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Endosulfan I	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Endosulfan II	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Endosulfan sulfate	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.028	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Endrin	2	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Endrin aldehyde	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.028	0.032	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Endrin ketone	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.069	0.073	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.075	NA	NA	NA
Heptachlor	0.05	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.036	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Heptachlor epoxide	0.2	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Methoxychlor	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.048	0.042	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.059	NA	NA	NA
Metals (µg/L)																																			
Aluminum	200	NLE	121000	ND	ND	ND	<200	<200	<200	<200	NA	NA	NA	NA	15.8	43.4	NA	NA	NA	NA	24.5	ND	14.3	<200	249	515	2790	NA	NA	NA	NA	18.8	NA	NA	NA
Antimony	6	6	20.70	ND	11.3	10.8	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	26.3	22.1	NA	NA	NA	NA	ND	10.4	13.2	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	26.8	NA	NA	NA
Arsenic	3	10	89.30	ND	0.94 ER	ND	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	93.9	74	NA	NA	NA	NA	ND	1.78 ER	1.18 ER	<3.0	<3.0	<3.0	5.3	NA	NA	NA	NA	71.9	NA	NA	NA
Barium	6000	2000	699.00	58.4	71.2	77	<200	<200	<200	<200	NA	NA	NA	NA	227	235	NA	NA	NA	NA	41.9	251	252	219	<200	243	<200	NA	NA	NA	NA	279	NA	NA	NA
Beryllium	1	4	2.10	ND	ND	ND	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	ND	NA	NA	NA
Cadmium	4	5	9.50	ND	0.802 ER	1.32 ER	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	ND	1.7 ER	1.28 ER	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	ND	NA	NA	NA
Calcium	NLE	NLE	45400.00	29300	39000	38300	36600	35200	32400	53300	NA	NA	NA	NA	67400	66800	NA	NA	NA	NA	34400	56600	44500	60400	31900	49800	43300	NA	NA	NA	NA	60500	NA	NA	NA
Chromium	70	100	191.00	ND	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA	0.365 ER	0.598 ER	NA	NA	NA	NA	ND	ND	ND	<10	<10	<10	31	NA	NA	NA	NA	0.346 ER	NA	NA	NA
Cobalt	NLE	NLE	18.30	ND	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	ND	NA	NA	NA
Copper	1300	1300	65.60	ND	ND	1.54 ER	<10	<10	<10	106	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	1.78	<10	<10	12.5	18.8	NA	NA	NA	NA	ND	NA	NA	NA
Iron	300	NLE	431000	15900	27400	31400	26700	29700	29500	11700	NA	NA	NA	NA	27400	28200	NA	NA	NA	NA	6230	58200	37200	19500	2760	37500	11500	NA	NA	NA	NA	64300	NA	NA	NA
Lead	5	15	22.70	ND	ND	2.56 ER	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	10.7	6.39	NA	NA	NA	NA	ND	ND	3.75 ER	<3.0	<3.0	<3.0	10.8	NA	NA	NA	NA	11.9	NA	NA	NA
Magnesium	NLE	NLE	62700	4670	6560	5910	5220	5070	<5000	7060	NA	NA	NA	NA	13100	13100	NA	NA	NA	NA	7090	10600	8320	12400	5940	8800	7680	NA	NA	NA	NA	5050	NA	NA	NA
Manganese	50	NLE	331	69.8	176	85.1	92.6	113	84.4	323	NA	NA	NA	NA	157	161	NA	NA	NA	NA	35.7	231	185	121	<15	188	41.2	NA	NA	NA	NA	647	NA	NA	NA
Mercury	2	2	0.26	ND	0.06 ER	ND	<0.5	<0.20	<0.20	1.2	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	0.09 ER	0.06 ER	ND	<0.5	<0.20	<0.20	<0.20	NA	NA	NA	NA	ND	NA	NA	NA
Nickel	100	NLE	187	0.634 ER	1.55 ER	ND	<10	<10	<10	22.4	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	0.975 ER	1.46 ER	0.622 ER	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA
Potassium	NLE	NLE	137000	6090	7100	7560	<10000	<10000	<10000	<10000	NA	NA	NA	NA	4860	4780	NA	NA	NA	NA	3380	3640	3700	<10000	<10000	<10000	<10000	NA	NA	NA	NA	2830	NA	NA	NA
Selenium	40	50	29.60	31.1	NR	ND	<10	<10	<10	<10	NA	NA	NA	NA	84.2	96.7	NA	NA	NA	NA	31.2	NR	ND	<10	<10	<10	<10	NA	NA	NA	NA	76	NA	NA	NA
Silver	40	NLE	ND	ND	5.78	3.65	<10	<10	<10	<10	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	ND	10.5	4.25	<10	<10	<10	<10	NA	NA	NA	NA	ND	NA	NA	NA
Sodium	50000	NLE	21500	6900	9360	8970	<10000	<10000	<10000	55700	NA	NA	NA	NA	9660	9760	NA	NA	NA	NA	3770	10800	10200	<10000	<10000	38900	92300	NA	NA	NA	NA	14500	NA	NA	NA
Thallium	2	2	5.50	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	2.34 ER	ND	ND	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	ND	NA	NA	NA
Vanadium	60	NLE	108	2.07	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	6.06	6.17	NA	NA	NA	NA	1.49	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	4.63	NA	NA	NA
Zinc	2000	NLE	233	2.45	2.3	ND	<20	<20	<20	58.3	NA	NA	NA	NA	7.31	7.57	NA	NA	NA	NA	10.6	ND	ND	<20	<20	<20	40.2	NA	NA	NA	NA	13.7	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

Sample M2MW01 (4th Quarter 2010) has metals results but not VOCs. Values left blank for missing data.

Sample M2MW05 Duplicate (2nd Quarter 2011) had an elevated sample detection limit due to difficult sample matrix.

Table 3
Historical Groundwater Analytical Results
Site FTMM-02 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M2MW24									
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF2	LF3	LF4	LF5	LF5 Dup	LF6	LF7	LF7 Dup	LF8
Date Collected				3/10/2010	6/14/2010	9/24/2010	12/18/2010	12/18/2010	3/9/2011	6/16/2011	6/16/2011	8/22/2011
ANALYTE/Lab ID				10082.07	10264.07	10410.07	10562.04	10562.03	11097.06	11257.04	11257.03	11352.07
Volatile Organic Compounds (µg/L)												
Benzene	1	5	--	1.9	1.82	1.62	1.49	1.52	1.49	0.86	0.87	1.3
Chlorobenzene	50	100	--	7.82	6.48	8.07	8.73	8.86	6.58	4.14	4.21	4.5
Chloroethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	100	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	600	600	--	0.45 J	0.54	0.51	0.42 J	0.46 J	0.49 J	0.47 J	0.45 J	0.43 J
1,3-Dichlorobenzene	600	NLE	--	0.65	0.62	0.68	0.7	0.69	0.55	0.47 J	0.46 J	0.53 J
1,4-Dichlorobenzene	75	75	--	3.75	3.63	4.03	3.91	3.77	3.46	3.65	3.6	4.1
1,1-Dichloroethane	50	7	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	3	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	4.5
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	0.25 J	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	NA
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	9	70	--	NA	NA	NA	NA	NA	NA	NA	NA	ND
1,1,2-Trichloroethane	3	5	--	0.58	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	131	182	179	256	270	150	114	113	55.5
Semi-Volatile Organic Compounds (µg/L)												
Acenaphthene	400	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzyl alcohol	2000	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	600	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	75	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
TICs*	500	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides/PCBs (µg/L)												
Aldrin	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
alpha-BHC	0.02	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
beta-BHC	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
delta-BHC	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
alpha-Chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
gamma-Chlordane	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDD	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dieldrin	0.03	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan II	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan sulfate	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin	2	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin aldehyde	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin ketone	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor	0.05	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor epoxide	0.2	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)												
Aluminum	200	NLE	121000	36.7	ND	ND	<200	<200	<200	<200	<200	<200
Antimony	6	6	20.70	ND	11.5	16.7	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0
Arsenic	3	10	89.30	ND	0.83 ER	0.92 ER	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Barium	6000	2000	699.00	198	202	297	351	365	386	243	223	312
Beryllium	1	4	2.10	ND	ND	ND	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	4	5	9.50	ND	1.11 ER	2.44 ER	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Calcium	NLE	NLE	45400.00	39900	44300	62400	62400	64600	75400	54400	50300	60200
Chromium	70	100	191.00	ND	ND	ND	<10	<10	<10	<10	<10	<10
Cobalt	NLE	NLE	18.30	ND	ND	ND	<50	<50	<50	<50	<50	<50
Copper	1300	1300	65.60	ND	ND	2.44 ER	<10	<10	<10	<10	<10	<10
Iron	300	NLE	431000	44200	47800	66300	70500	72900	79200	56100	51900	69200
Lead	5	15	22.70	ND	2.85 ER	6.24	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Magnesium	NLE	NLE	62700	3380	3720	4860	<5000	<5000	6210	<5000	<5000	<5000
Manganese	50	NLE	331	427	480	642	686	713	901	700	645	788
Mercury	2	2	0.26	0.11 ER	ND	ND	<0.5	<0.5	<0.20	<0.20	<0.20	<0.20
Nickel	100	NLE	187	1.15 ER	0.471 ER	0.629 ER	<10	<10	<10	<10	<10	<10
Potassium	NLE	NLE	137000	2680	2450	3120	<10000	<10000	<10000	<10000	<10000	<10000
Selenium	40	50	29.60	15.3	NR	ND	<10	<10	<10	<10	<10	<10
Silver	40	NLE	ND	ND	8.83	7.63	<10	<10	<10	<10	<10	<10
Sodium	50000	NLE	21500	9480	11000	14200	14800	15300	15400	15200	14200	21100
Thallium	2	2	5.50	1.17 ER	ND	ND	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Vanadium	60	NLE	108	4.71	ND	ND	<50	<50	<50	<50	<50	<50
Zinc	2000	NLE	233	7.64	2.41	ND	<20	<20	21	<20	<20	<20

Notes:

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Site FTMM-02 Closed Solid Waste Landfill
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Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	M2MW02	M2MW03		M2MW04	M2MW05	M2MW06	M2MW07	M2MW08	M2MW09	M2MW10				
Sample ID			FTMM-2-GW-M2MW02	FTMM-2-GW-M2MW03	FTMM-2-GW-M2MW03-10.27	FTMM-2-GW-M2MW04	FTMM-2-GW-M2MW05	FTMM-2-GW-M2MW06	FTMM-2-GW-M2MW07	FTMM-2-GW-M2MW08	FTMM-2-GW-M2MW09	FTMM-2-GW-M2MW10	FTMM-2-GW-M2MW10	FTMM-2-GW-M2MW10-7.32	FTMM-2-GW-M2MW10-12.32	FTMM-2-GW-M2MW10-17.31
Sample Date			8/22/2013	8/21/2013	12/18/2014	8/22/2013	8/22/2013	8/21/2013	8/21/2013	8/21/2013	8/21/2013	8/22/2013	8/27/2013	12/18/2014	12/18/2014	12/18/2014
QA/QC			SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
Sample Method			LFPS	LFPS	PDB	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	PDB	PDB	PDB
Volatile Organic Compounds (µg/l)																
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	**0.64 J**	< 10	**1.3 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,2-Dichloroethane	2	5	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	**1.4 J**	< 10	**1 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	**4.1 J**	**5.8 J**	**3.9 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Acetone	6,000	NLE	**3.1 J**	< 50	< 5	< 5	< 5	**1.7 J**	< 5	< 5	**1.7 J**	**1.3 J**	NA	**2.5 J**	**1.7 J**	**2.2 J**
Benzene	1	5	< 1	**3.7 J**	**2.2 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Bromobenzene	100	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Bromodichloromethane	1	80	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Bromoform	4	80	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Chlorobenzene	50	100	**38**	**79**	**49**	**0.85 J**	< 1	**0.97 J**	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Chlorodibromomethane	1	80	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Chloroethane	5	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Chloroform	70	80	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Cymene	100	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Ethyl benzene	700	700	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Isopropylbenzene	700	NLE	**0.23 J**	< 10	**0.73 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Meta & Para Xylenes	1,000	NLE	< 2	< 20	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	NA	< 2	< 2	< 2
Methyl bromide	10	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	< 5	< 50	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	NA	< 5	< 5	< 5
Methyl chloride	100	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Methylene chloride	3	5	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Naphthalene	300	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
n-Butylbenzene	100	NLE	**0.48 J**	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Propylbenzene	100	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	**0.72 J**	< 10	**0.35 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Styrene	100	100	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	NA	NA	< 20 UJ	NA	NA	NA	NA	NA	NA	NA	NA	< 20 UJ	< 20 UJ	< 20 UJ
tert-Butylbenzene	100	NLE	**0.44 J**	< 10	**0.43 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Tetrachloroethene	1	5	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Toluene	600	1,000	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Total Xylenes	1,000	10,000	< 3	< 30	NA	< 3	< 3	< 3	< 3	< 3	< 3	< 3	NA	NA	NA	NA
Trans-1,2-Dichloroethene	100	100	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Trichloroethene	1	5	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Vinyl chloride	1	2	< 1	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
TIC VOCs (µg/l)																
Total TIC, Volatile	500	NLE	**6.2 JN**	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND

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Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	M2MW02	M2MW03		M2MW04	M2MW05	M2MW06	M2MW07	M2MW08	M2MW09	M2MW10				
Sample ID			FTMM-2-GW-M2MW02	FTMM-2-GW-M2MW03	FTMM-2-GW-M2MW03-10.27	FTMM-2-GW-M2MW04	FTMM-2-GW-M2MW05	FTMM-2-GW-M2MW06	FTMM-2-GW-M2MW07	FTMM-2-GW-M2MW08	FTMM-2-GW-M2MW09	FTMM-2-GW-M2MW10	FTMM-2-GW-M2MW10	FTMM-2-GW-M2MW10-7.32	FTMM-2-GW-M2MW10-12.32	FTMM-2-GW-M2MW10-17.31
Sample Date			8/22/2013	8/21/2013	12/18/2014	8/22/2013	8/22/2013	8/21/2013	8/21/2013	8/21/2013	8/21/2013	8/22/2013	8/27/2013	12/18/2014	12/18/2014	12/18/2014
QA/QC			SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
Sample Method			LFPS	LFPS	PDB	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	PDB	PDB	PDB
Pesticides (µg/l)																
4,4'-DDD	0.1	NLE	< 0.04	< 0.039	NA	< 0.039	< 0.039	< 0.039	< 0.039	< 0.039	< 0.039	NA	< 0.039	NA	NA	NA
4,4'-DDE	0.1	NLE	< 0.026	< 0.025	NA	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	NA	NA
4,4'-DDT	0.1	NLE	< 0.026	< 0.025	NA	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	NA	NA
Aldrin	0.04	NLE	< 0.026	< 0.025	NA	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	NA	NA
Alpha-BHC	0.02	NLE	< 0.026	< 0.025	NA	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	NA	NA
Alpha-Chlordane	0.5	NLE	< 0.026	< 0.025	NA	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	NA	NA
Beta-BHC	0.04	NLE	< 0.026	< 0.025	NA	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	NA	NA
Delta-BHC	100	NLE	< 0.026	< 0.025	NA	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	NA	NA
Dieldrin	0.03	NLE	< 0.026	< 0.025	NA	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	NA	NA
Endosulfan I	40	NLE	< 0.026	< 0.025	NA	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	NA	NA
Endosulfan II	40	NLE	< 0.026	< 0.025	NA	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	NA	NA
Endosulfan sulfate	40	NLE	< 0.026	< 0.025	NA	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	NA	NA
Endrin	2	2	< 0.026	< 0.025	NA	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	NA	NA
Endrin aldehyde	100	2	< 0.026	< 0.025	NA	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	NA	NA
Endrin ketone	100	NLE	< 0.026	< 0.025	NA	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	NA	NA
Gamma-BHC/Lindane	0.03	0.2	< 0.026	< 0.025	NA	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	NA	NA
gamma-Chlordane	NLE	NLE	< 0.026	< 0.025	NA	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	NA	NA
Heptachlor	0.05	0.4	< 0.026	< 0.025	NA	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	NA	NA
Heptachlor epoxide	0.2	0.2	< 0.026	< 0.025	NA	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	NA	NA
Methoxychlor	40	40	< 0.026	< 0.025	NA	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	NA	NA
Toxaphene	2	3	< 0.51	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	NA	NA	NA

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-02 Closed Solid Waste Landfill
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Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	M2MW11					M2MW12	M2MW13	M2MW21			M2MW22		
Sample ID			FTMM-2-GW-M2MW11	FTMM-2-GW-M2MW11-31.91	FTMM-2-GW-M2MW11-36.91	FTMM-2-GW-M2MW11-41.91	FTMM-2-GW-M2MW11-46.91	FTMM-2-GW-M2MW12	FTMM-2-GW-M2MW13	FTMM-2-GW-M2MW21	FTMM-2-GW-M2MW21-15.97	FTMM-2-GW-M2MW21-8.8	FTMM-2-GW-M2MW22	FTMM-2-GW-M2MW22-10.03	FTMM-2-GW-M2MW22-16.67
Sample Date			8/21/2013	12/18/2014	12/18/2014	12/18/2014	12/18/2014	8/21/2013	8/22/2013	8/22/2013	12/18/2014	12/18/2014	8/23/2013	12/18/2014	12/18/2014
QA/QC			SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
Sample Method			LFPS	PDB	PDB	PDB	PDB	LFPS	LFPS	LFPS	PDB	PDB	LFPS	PDB	PDB
Volatile Organic Compounds (µg/l)															
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**1.1 J**	**0.59 J**	**0.58 J**	< 1	< 1	< 1
1,2-Dichloroethane	2	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**2.2 J**	**0.95 J**	**0.97 J**	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	**0.92 J**	**4.6 J**	**2.1 J**	**2 J**	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	< 1	< 1	< 1 UJ	< 1 UJ	< 1 UJ	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	< 5	**1.7 J**	< 5	< 5	**1.6 J**	**1.3 J**	**1.7 J**	**2.8 J**	< 5	< 5	**2.9 J**	**1.3 J**	< 5
Benzene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.32 J**	< 1	< 1	< 1	< 1	< 1
Bromobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	< 1	< 1	< 1	< 1	< 1	< 1	**0.63 J**	**25**	**22**	**16**	**3.4 J**	**1.5 J**	**2.8 J**
Chlorodibromomethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	70	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Meta & Para Xylenes	1,000	NLE	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl bromide	10	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**1 J**	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**26**	**23**	**17**
Methylene chloride	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
n-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	NA	< 20 UJ	< 20 UJ	< 20 UJ	< 20 UJ	NA	NA	NA	< 20 UJ	< 20 UJ	NA	< 20 UJ	< 20 UJ
tert-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.24 J**	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	600	1,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Total Xylenes	1,000	10,000	< 3	NA	NA	NA	NA	< 3	< 3	< 3	NA	NA	< 3	NA	NA
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TIC VOCs (µg/l)															
Total TIC, Volatile	500	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**48.3**	ND	ND

Table 4
Groundwater Analytical Results - 2013 and 2014
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Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	M2MW11					M2MW12	M2MW13	M2MW21			M2MW22		
Sample ID			FTMM-2-GW-M2MW11	FTMM-2-GW-M2MW11-31.91	FTMM-2-GW-M2MW11-36.91	FTMM-2-GW-M2MW11-41.91	FTMM-2-GW-M2MW11-46.91	FTMM-2-GW-M2MW12	FTMM-2-GW-M2MW13	FTMM-2-GW-M2MW21	FTMM-2-GW-M2MW21-15.97	FTMM-2-GW-M2MW21-8.8	FTMM-2-GW-M2MW22	FTMM-2-GW-M2MW22-10.03	FTMM-2-GW-M2MW22-16.67
Sample Date			8/21/2013	12/18/2014	12/18/2014	12/18/2014	12/18/2014	8/21/2013	8/22/2013	8/22/2013	12/18/2014	12/18/2014	8/23/2013	12/18/2014	12/18/2014
QA/QC			SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
Sample Method			LFPS	PDB	PDB	PDB	PDB	LFPS	LFPS	LFPS	PDB	PDB	LFPS	PDB	PDB
Pesticides (µg/l)															
4,4'-DDD	0.1	NLE	< 0.039	NA	NA	NA	NA	< 0.039	< 0.039	< 0.039	NA	NA	< 0.039	NA	NA
4,4'-DDE	0.1	NLE	< 0.025	NA	NA	NA	NA	< 0.025	< 0.025	< 0.025	NA	NA	< 0.025	NA	NA
4,4'-DDT	0.1	NLE	< 0.025	NA	NA	NA	NA	< 0.025	< 0.025	< 0.025	NA	NA	< 0.025	NA	NA
Aldrin	0.04	NLE	< 0.025	NA	NA	NA	NA	< 0.025	< 0.025	< 0.025	NA	NA	< 0.025	NA	NA
Alpha-BHC	0.02	NLE	< 0.025	NA	NA	NA	NA	< 0.025	< 0.025	< 0.025	NA	NA	< 0.025	NA	NA
Alpha-Chlordane	0.5	NLE	< 0.025	NA	NA	NA	NA	< 0.025	< 0.025	< 0.025	NA	NA	< 0.025	NA	NA
Beta-BHC	0.04	NLE	< 0.025	NA	NA	NA	NA	< 0.025	< 0.025	< 0.025	NA	NA	< 0.025	NA	NA
Delta-BHC	100	NLE	< 0.025	NA	NA	NA	NA	< 0.025	< 0.025	< 0.025	NA	NA	< 0.025	NA	NA
Dieldrin	0.03	NLE	< 0.025	NA	NA	NA	NA	< 0.025	< 0.025	< 0.025	NA	NA	< 0.025	NA	NA
Endosulfan I	40	NLE	< 0.025	NA	NA	NA	NA	< 0.025	< 0.025	< 0.025	NA	NA	< 0.025	NA	NA
Endosulfan II	40	NLE	< 0.025	NA	NA	NA	NA	< 0.025	< 0.025	< 0.025	NA	NA	< 0.025	NA	NA
Endosulfan sulfate	40	NLE	< 0.025	NA	NA	NA	NA	< 0.025	< 0.025	< 0.025	NA	NA	< 0.025	NA	NA
Endrin	2	2	< 0.025	NA	NA	NA	NA	< 0.025	< 0.025	< 0.025	NA	NA	< 0.025	NA	NA
Endrin aldehyde	100	2	< 0.025	NA	NA	NA	NA	< 0.025	< 0.025	< 0.025	NA	NA	< 0.025	NA	NA
Endrin ketone	100	NLE	< 0.025	NA	NA	NA	NA	< 0.025	< 0.025	< 0.025	NA	NA	< 0.025	NA	NA
Gamma-BHC/Lindane	0.03	0.2	< 0.025	NA	NA	NA	NA	< 0.025	< 0.025	< 0.025	NA	NA	< 0.025	NA	NA
gamma-Chlordane	NLE	NLE	< 0.025	NA	NA	NA	NA	< 0.025	< 0.025	< 0.025	NA	NA	< 0.025	NA	NA
Heptachlor	0.05	0.4	< 0.025	NA	NA	NA	NA	< 0.025	< 0.025	< 0.025	NA	NA	< 0.025	NA	NA
Heptachlor epoxide	0.2	0.2	< 0.025	NA	NA	NA	NA	< 0.025	< 0.025	< 0.025	NA	NA	< 0.025	NA	NA
Methoxychlor	40	40	< 0.025	NA	NA	NA	NA	< 0.025	< 0.025	< 0.025	NA	NA	< 0.025	NA	NA
Toxaphene	2	3	< 0.5	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	NA	NA

Table 4
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Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	M2MW23	M2MW24		
Sample ID			FTMM-2-GW-M2MW23	FTMM-2-GW-M2MW24	FTMM-2-GW-M2MW24-16.5	FTMM-2-GW-M2MW24-9.97
Sample Date			8/22/2013	8/23/2013	12/18/2014	12/18/2014
QA/QC			SA	SA	SA	SA
Sample Method			LFPS	LFPS	PDB	PDB
Volatile Organic Compounds (µg/l)						
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	**0.56 J**	**0.41 J**	**0.38 J**
1,2-Dichloroethane	2	5	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	< 1	**0.55 J**	**0.46 J**	**0.54 J**
1,3-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	**0.59 J**	**3.3 J**	**2.6 J**	**2.8 J**
2,2-Dichloropropane	100	NLE	< 1	< 1	< 1 UJ	< 1 UJ
2-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	**3.5 J**	**2 J**	< 5	< 5
Benzene	1	5	< 1	**0.7 J**	**0.46 J**	**0.49 J**
Bromobenzene	100	NLE	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	< 1	< 1	< 1	< 1
Bromoform	4	80	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	**4.9 J**	**4.4 J**	**5.1**	**5 J**
Chlorodibromomethane	1	80	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	< 1	< 1	< 1	< 1
Chloroform	70	80	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1
Cymene	100	NLE	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	< 1	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	< 1	**4.2 J**	**3.5 J**	**3.7 J**
Meta & Para Xylenes	1,000	NLE	< 2	< 2	< 2	< 2
Methyl bromide	10	NLE	< 1	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	< 1	< 1	< 1	< 1
Methylene chloride	3	5	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	< 1	**0.24 J**	< 1	< 1
n-Butylbenzene	100	NLE	< 1	**1.8 J**	**0.34 J**	**0.39 J**
Ortho Xylene	1,000	NLE	< 1	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	< 1	**3.1 J**	**1.7 J**	**1.4 J**
sec-Butylbenzene	100	NLE	< 1	**3.6 J**	**1.5 J**	**1.9 J**
Styrene	100	100	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	NA	NA	< 20 UJ	< 20 UJ
tert-Butylbenzene	100	NLE	< 1	**0.9 J**	**0.6 J**	**0.75 J**
Tetrachloroethene	1	5	< 1	< 1	< 1	< 1
Toluene	600	1,000	< 1	< 1	< 1	< 1
Total Xylenes	1,000	10,000	< 3	< 3	NA	NA
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1
Trichloroethene	1	5	< 1	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	< 1	< 1	< 1	< 1
TIC VOCs (µg/l)						
Total TIC, Volatile	500	NLE	ND	**55.2**	**36.8 JN**	**39.3 JN**

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-02 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	M2MW23	M2MW24		
Sample ID			FTMM-2-GW-M2MW23	FTMM-2-GW-M2MW24	FTMM-2-GW-M2MW24-16.5	FTMM-2-GW-M2MW24-9.97
Sample Date			8/22/2013	8/23/2013	12/18/2014	12/18/2014
QA/QC			SA	SA	SA	SA
Sample Method			LFPS	LFPS	PDB	PDB
Pesticides (µg/l)						
4,4'-DDD	0.1	NLE	< 0.039	< 0.039	NA	NA
4,4'-DDE	0.1	NLE	< 0.025	< 0.025	NA	NA
4,4'-DDT	0.1	NLE	< 0.025	< 0.025	NA	NA
Aldrin	0.04	NLE	< 0.025	< 0.025	NA	NA
Alpha-BHC	0.02	NLE	< 0.025	< 0.025	NA	NA
Alpha-Chlordane	0.5	NLE	< 0.025	< 0.025	NA	NA
Beta-BHC	0.04	NLE	< 0.025	< 0.025	NA	NA
Delta-BHC	100	NLE	< 0.025	< 0.025	NA	NA
Dieldrin	0.03	NLE	< 0.025	< 0.025	NA	NA
Endosulfan I	40	NLE	< 0.025	< 0.025	NA	NA
Endosulfan II	40	NLE	< 0.025	< 0.025	NA	NA
Endosulfan sulfate	40	NLE	< 0.025	< 0.025	NA	NA
Endrin	2	2	< 0.025	< 0.025	NA	NA
Endrin aldehyde	100	2	< 0.025	< 0.025	NA	NA
Endrin ketone	100	NLE	< 0.025	< 0.025	NA	NA
Gamma-BHC/Lindane	0.03	0.2	< 0.025	< 0.025	NA	NA
gamma-Chlordane	NLE	NLE	< 0.025	< 0.025	NA	NA
Heptachlor	0.05	0.4	< 0.025	< 0.025	NA	NA
Heptachlor epoxide	0.2	0.2	< 0.025	< 0.025	NA	NA
Methoxychlor	40	40	< 0.025	< 0.025	NA	NA
Toxaphene	2	3	< 0.5	< 0.5	NA	NA

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-02 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Footnote:
1) All historical data collected prior to 2013 are reported as provided by others.
2) Number of Analyses is the number of detected and non-detected results excluding rejected results. Sample duplicate pairs have not been averaged.
3) NLE = no limit established.
4) ND = not detected in any background sample, no background concentration available.
5) Chemical result qualifiers are assigned by the laboratory and is typically evaluated and modified (if necessary) by during data validation.
6) NA = Not Analyzed

[blank] = detect, i.e. detected chemical result value.
B = Compound detected in the sample and its associated blank sample.
R = Rejected, data validation rejected the results.
U = non-detect, i.e. not detected equal to or above this value.
U-DL = Elevated sample detection limit due to difficult sample matrix.
U-ND = Analyte not detected in sample, but no detection or reporting limit provided.
J = estimated (detect or non-detect) value.
E (or ER) = Estimated result.
D = Results from dilution of sample.
J-DL = Elevated sample detection limit due to difficult sample matrix.
JN = Tentatively identified compound, estimated concentration.

7) Chemical results greater than or equal to the action level (depending on criteria) are highlighted based on the Criteria that are present.
- Cell Shade values represent a result that is above the NJ Ground Water Quality Criteria ####
NJDEP Interim Specific GWQC values are presented for the NJ GWQS where there is not a Specific Ground Water Quality Criteria. A full list of compounds is available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).
NJDEP Interim Generic GWQC values are presented for the NJ GWQS where there is not a Specific Ground Water Quality Criteria or a NJDEP Interim Specific GWQC. Available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).
- Bold Outline represents a result that is above the USEPA 2014-05 MCL. ###

8) Criteria action level source document and web address.
- The NJ Ground Water Quality Criteria refers to the NJDEP Groundwater Quality Standards - Adopted July 22, 2010
http://www.state.nj.us/dep/wms/bwqsa/docs/njac79C.pdf
- The 2014-05 USEPA MCL refers to the USEPA's Region 9 Regional Screening Levels (HQ=1.0) - 5/31/2014 (Last revised)
http://www.epa.gov/region9/superfund/prg/

9) Wells sampled in the fourth quarter are highlighted in yellow. Sample ID

Table 5
Review of Historical Groundwater Sampling Results
Site FTMM-02 Closed Solid Waste landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site Name/ Well ID	Interpretation of Historical and 2014 Results[1]			2014 Evaluation					Rationale
	Chem Class / Analyte	Does it Exceed NJDEP GWQS (Yes or No) (If Yes, Identify Compound)[1]	Do Metals Exceed FTMM Background Concentration Yes or No (If Yes, identify Metal)	Seasonal Effect?[2] (Y/N)	Anomaly? (Y/N)	Exceedance part of overall trend? (Y/N)[3]	Well needed for sentinel purposes? (Y/N)	Retain Analyte/Well (Yes or No)	
FTMM-02									
M2MW03	VOC	Benzene, Chlorobenzene	N/A	No	No	Yes	No	Yes	Continue monitoring for VOCs.
M2MW10		No	N/A	No	No	No	Yes	Yes	Well to be retained for down gradient monitoring of benzene.
M2MW11		Benzene	N/A	No	No	Yes	No	Yes	One additional round of monitoring for VOCs.
M2MW21		Benzene	N/A	No	No	Yes	N/A	Yes	One additional round of monitoring for VOCs.
M2MW22		tert-butyl alcohol	N/A	No	No	Yes	N/A	Yes	One additional round of monitoring for VOCs.
M2MW24		Benzene	N/A	No	No	Yes	N/A	Yes	One additional round of monitoring for VOCs.

Notes:

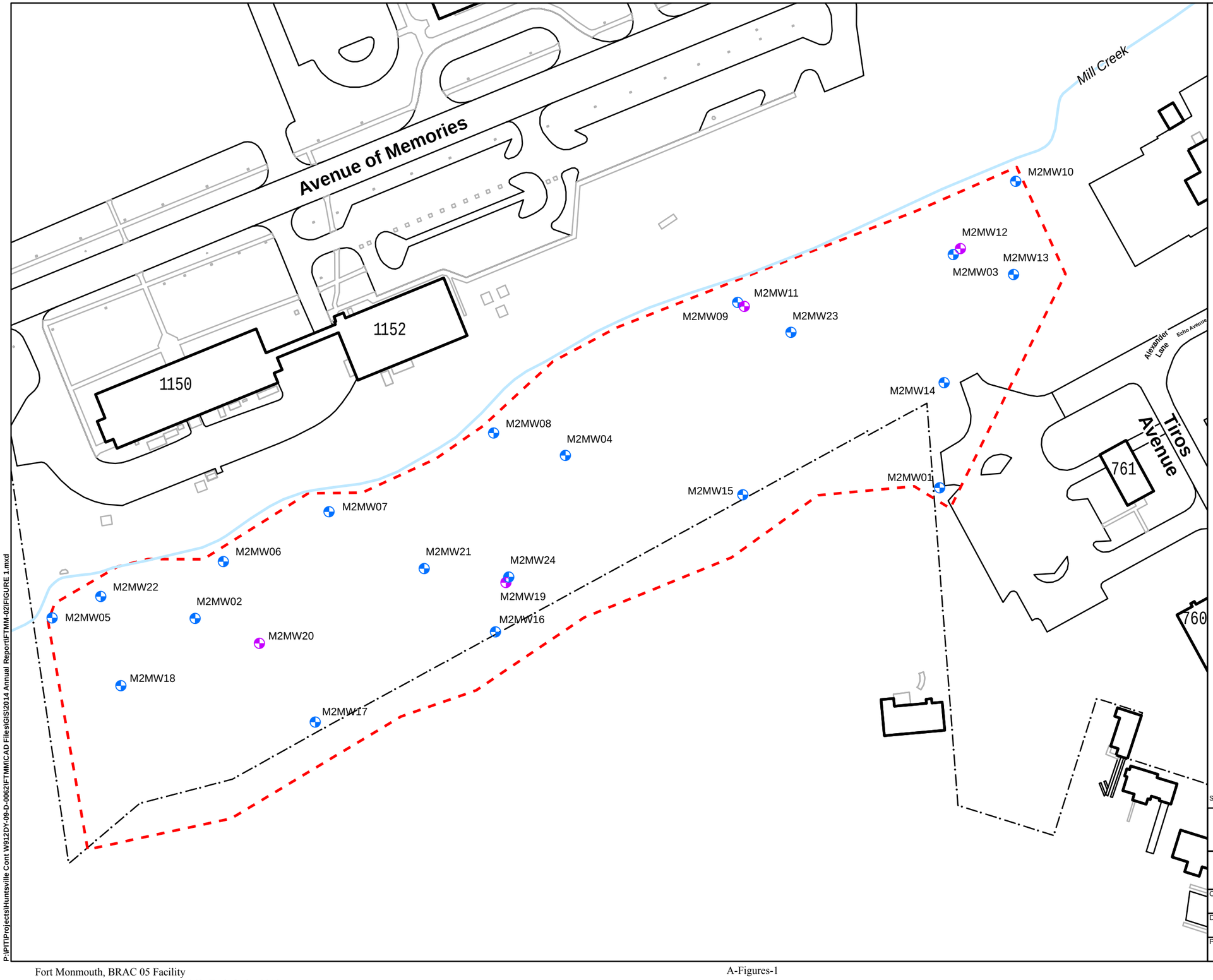
1. Has any of the analyte compounds exceeded the NJDEP GWQS in the 2014 data and the 4 previous quarterly data rounds or 2 previous annual rounds?
   a. If yes then keep analyte in LTM list.
   b. If no then remove this analyte from LTM list.
   c. a and b above may be occasionally superseded on a case-by-case basis, depending on site conditions.
2. Has any of the compounds exceeded the NJDEP GWQS seasonally (winter/spring vs. summer/fall) for the 4 previous data rounds?
3. N/A = Not Applicable
4. Per the 2/5/15 NJDEP approval letter of the Final 2013 Baseline Groundwater Report monitoring wells M2MW02, M2MW04, M2MW05, M2MW06, M2MW07, M2MW08, M2MW09, M2MW12, M2MW13, and M2MW23 were removed from the long term monitoring program for 2014 at FTMM-02. Groundwater monitoring for pesticides and metals were also discontinued in 2014 based on the NJDEP approval letter.

FIGURES

Figure 1 Layout of FTMM-02 Closed Solid Waste Landfill

Figure 2 FTMM-02 Shallow Groundwater Contours - September 30, 2014

Figure 3 FTMM-02 Deep Groundwater Contours - September 30, 2014



LEGEND:

- Shallow Monitoring Well
- Deep Monitoring Well
- M-2 Landfill Revised Boundary
- Surface Water Feature
- Installation Boundary

N

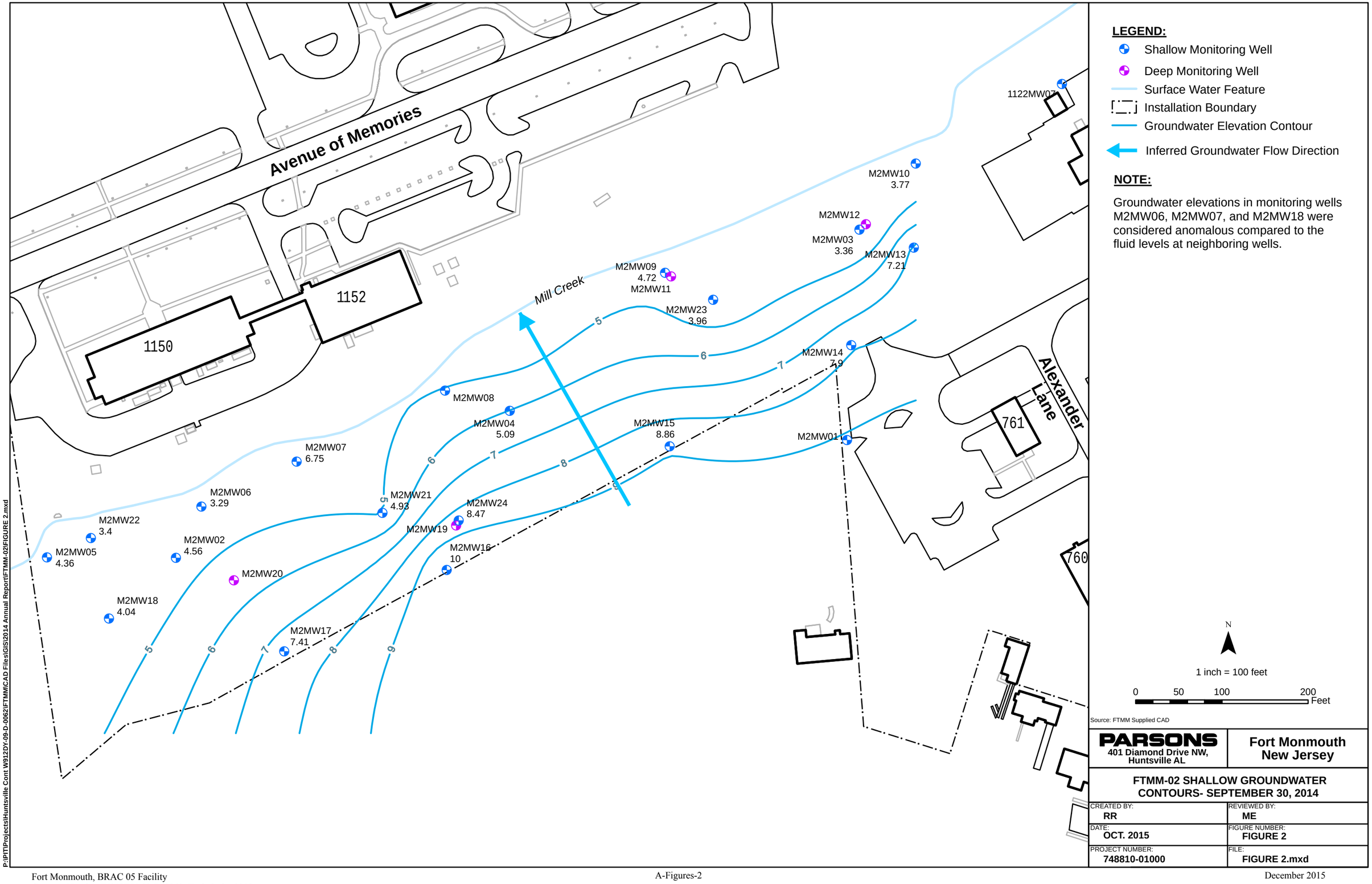
1 inch = 100 feet

0 50 100 200 Feet

Source: FTMM Supplied CAD

PARSONS 401 Diamond Drive NW, Huntsville AL	**Fort Monmouth** **New Jersey**
LAYOUT OF FTMM-02 **CLOSED SOLID WASTE LANDFILL**	
CREATED BY: **RR**	REVIEWED BY: **ME**
DATE: **OCT. 2015**	FIGURE NUMBER: **FIGURE 1**
PROJECT NUMBER: **748810-01000**	FILE: **FIGURE 1.mxd**

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-02\FIGURE 1.mxd



LEGEND:

- Shallow Monitoring Well
- Deep Monitoring Well
- Surface Water Feature
- Installation Boundary
- Groundwater Elevation Contour
- Inferred Groundwater Flow Direction

NOTE:

Groundwater elevations in monitoring wells M2MW06, M2MW07, and M2MW18 were considered anomalous compared to the fluid levels at neighboring wells.

N

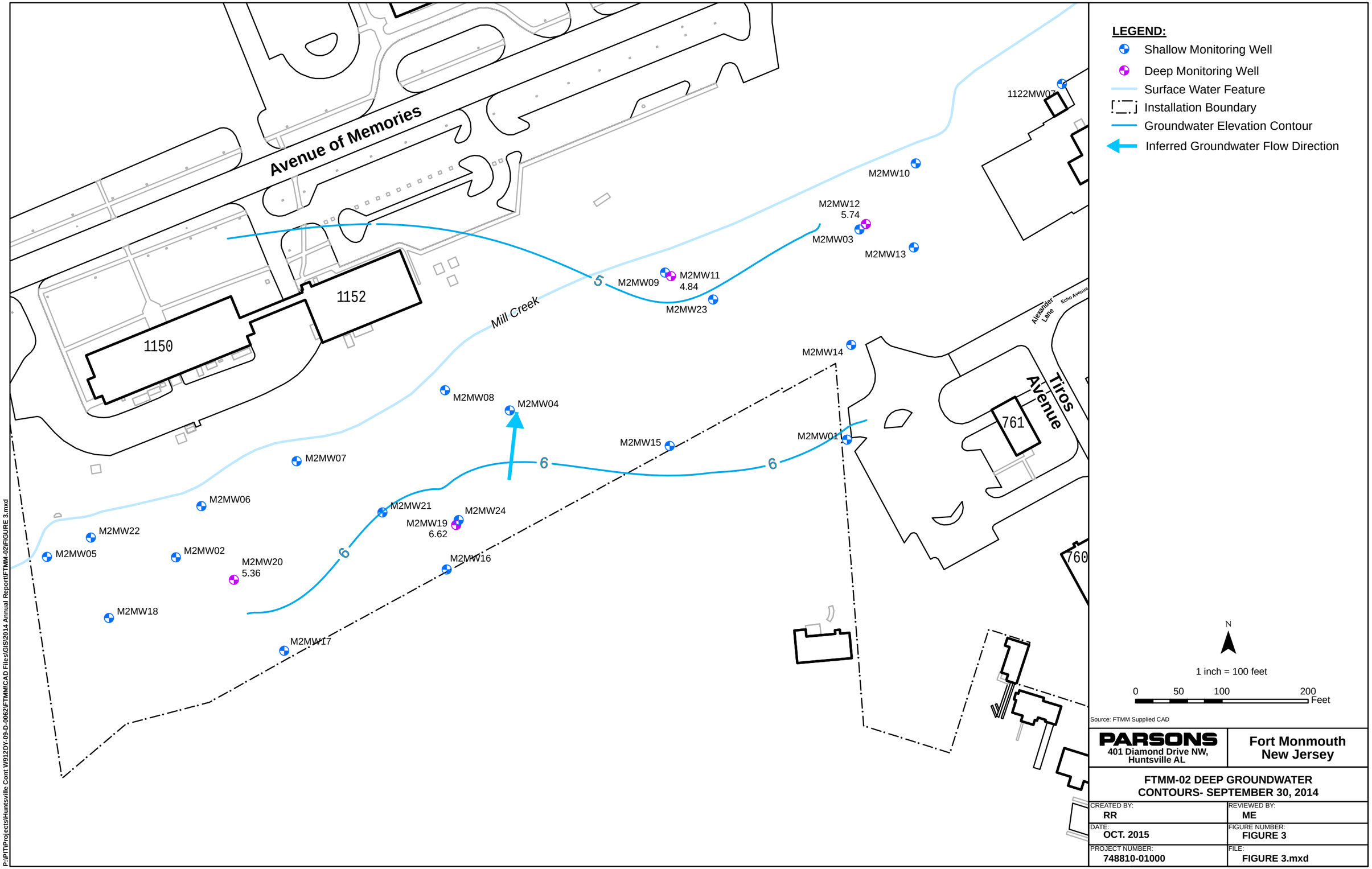
1 inch = 100 feet

0 50 100 200 Feet

Source: FTMM Supplied CAD

PARSONS 401 Diamond Drive NW, Huntsville AL	**Fort Monmouth New Jersey**
FTMM-02 SHALLOW GROUNDWATER CONTOURS- SEPTEMBER 30, 2014	
CREATED BY: **RR**	REVIEWED BY: **ME**
DATE: **OCT. 2015**	FIGURE NUMBER: **FIGURE 2**
PROJECT NUMBER: **748810-01000**	FILE: **FIGURE 2.mxd**

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-02\FIGURE 2.mxd



P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-02\FIGURE 3.mxd

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
FTMM-02 DEEP GROUNDWATER CONTOURS- SEPTEMBER 30, 2014	
CREATED BY: RR	REVIEWED BY: ME
DATE: OCT. 2015	FIGURE NUMBER: FIGURE 3
PROJECT NUMBER: 748810-01000	FILE: FIGURE 3.mxd

ATTACHMENTS

Attachment A PDB Field Sheets

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-2
3. Well Designation: M2MW03
4. Well Permit Number: 2732586

5 Type of Well ☑Monitoring ☐Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish ☑Stick Up ☐Flush Mount

7 Location of Measuring Point ☑Top of Casing ☐Other (specify) _____

8 **NOTE:** PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) 1.48

9 Total Well Depth (fbgs) 15.62

10 Screened interval/open hole (fbgs) 5.62 - 15.62

11 Well Casing Diameter 4 Material ☑PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter) Diameter 4 Material ☑PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot) Screen Slot Size _____

14. Date and Time of Deployment Date: 9/30/14 Time: 1604

15. Depth to Ground Water Depth to ground water at time of deployment 6.32 bgs

16. Date and Time of Retrieval Date: 10/18/14 Time: 1450

17. Depth to Ground Water Depth to ground water at time of retrieval 6.91 TOC

18. Type of Deployment Line Used Diameter: 3/16 Material: poly

19 Material and Mass (oz.) of PDBS Weight Stainless 20 oz (stainless steel recommended)

20 Type of PDBS Used
☐Lab Filled (Modified Trip Blank must be taken at time of deployment)
☑Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21 Dimensions of PDBS Length (in.) 12 Diameter (in.) 1.5 Filled _____

22 Position of PDBS Weight
☑Attached to bottom of PDBS and suspended in well
☐Attached to bottom of deployment line and suspended in well
☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
10.27			
5th PDBS	**6th PDBS**	**7th PDBS**	**8th PDBS**

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☑**No**, this well is being profiled during this sampling round
☐**Yes**, this well was profiled already. Date when well was profiled: _____

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☐**No**, flow testing has not been conducted in this well
☐**Yes**, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet **[Please Attach Results]**

26. Weather Conditions During Deployment Temp. 70°F Wind 0-5mph ☐Sunny ☑Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval Temp. 40°F Wind 10-15mph ☑Sunny ☐Overcast ☐Raining ☐Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Chris Watson	Parsons
Nick Lorenz	

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FMM
2. Location: FMM-2
3. Well Designation: MW10
4. Well Permit Number: 29-3910

5 Type of Well: ☑ Monitoring ☐ Extraction ☐ Residential ☐ Public Supply ☐ Irrigation ☐ Other

6 Well Surface Finish: ☑ Stick Up ☐ Flush Mount

7 Location of Measuring Point: ☑ Top of Casing ☐ Other (specify) _____

8 **NOTE**: PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) 2.40

9 Total Well Depth (fbgs): 19.85

10 Screened interval/open hole (fbgs): 4.85 - 19.85

11 Well Casing: Diameter 2 Material ☑ PVC ☐ Carbon Steel ☐ Stainless Steel

12 Well Screen (or open hole diameter): Diameter 2 Material ☑ PVC ☐ Carbon Steel ☐ Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.01

14. Date and Time of Deployment: Date: ~~4/2/14~~ 10/1/14 Time: 0950

15. Depth to Ground Water: Depth to ground water at time of deployment 4.82

16. Date and Time of Retrieval: Date: 12/17/14 Time: 1425

17. Depth to Ground Water: Depth to ground water at time of retrieval 6.99 TOC

18. Type of Deployment Line Used: Diameter: 3/16" Material: poly

19 Material and Mass (oz.) of PDBS Weight: 20oz stainless (stainless steel recommended)

20 Type of PDBS Used:
☐ Lab Filled (Modified Trip Blank must be taken at time of deployment)
☑ Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21 Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled _____

22 Position of PDBS Weight:
☑ Attached to bottom of PDBS and suspended in well
☐ Attached to bottom of deployment line and suspended in well
☐ Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
7.32	12.32	17.32	
5th PDBS	**6th PDBS**	**7th PDBS**	**8th PDBS**

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☑ No, this well is being profiled during this sampling round
☐ Yes, this well was profiled already. Date when well was profiled: _____

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☐ No, flow testing has not been conducted in this well
☐ Yes, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet **[Please Attach Results]**

26. Weather Conditions During Deployment: Temp. 70°F Wind 0-5 mph ☐ Sunny ☑ Overcast ☐ Raining ☐ Snowing

27. Weather Conditions During Retrieval: Temp. 40°F Wind 5-10 mph ☑ Sunny ☐ Overcast ☐ Raining ☐ Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name: Chris Watson Company: PARSONS

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: ftmm-2
3. Well Designation: M2MW11
4. Well Permit Number: 29-42769

5 Type of Well: ☒Monitoring ☐Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish: ☒Stick Up ☐Flush Mount

7 Location of Measuring Point: ☒Top of Casing ☐Other (specify) _____

8 NOTE: PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) 1.82

9 Total Well Depth (fbgs) ~~29.41~~ 49.41

10 Screened interval/open hole (fbgs) 29.41 - 49.41

11 Well Casing: Diameter 4 Material ☒PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter): Diameter 4 Material ☒PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot): Screen Slot Size _____

14. Date and Time of Deployment: Date: 9/30/14 Time: 1615

15. Depth to Ground Water: Depth to ground water at time of deployment 4.9 BGS

16. Date and Time of Retrieval: Date: 12/8/14 Time: 1458

17. Depth to Ground Water: Depth to groundwater at time of retrieval 8.16 TOC

18. Type of Deployment Line Used: Diameter: 3/16" Material: poly

19 Material and Mass (oz.) of PDBS Weight: stn. steel 20oz (stainless steel recommended)

20 Type of PDBS Used:
☐Lab Filled (Modified Trip Blank must be taken at time of deployment)
☒Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21 Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled _____

22 Position of PDBS Weight:
☒Attached to bottom of PDBS and suspended in well
☐Attached to bottom of deployment line and suspended in well
☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
31.91 BGS	36.91 BGS	41.91 BGS	46.91 BGS
5th PDBS	**6th PDBS**	**7th PDBS**	**8th PDBS**

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☒No, this well is being profiled during this sampling round
☐Yes, this well was profiled already. Date when well was profiled: _____

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☐No, flow testing has not been conducted in this well
☐Yes, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet **[Please Attach Results]**

26. Weather Conditions During Deployment: Temp. 70° Wind 0-5mph ☐Sunny ☒Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval: Temp. 40°F Wind 5-10 mph ☒Sunny ☐Overcast ☐Raining ☐Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Chris Watson	John MacDougall PARSONS
NICK LOIZOS	

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: Fmm
2. Location: Fmm-2
3. Well Designation: M2MW21
4. Well Permit Number: 27-42779

5 Type of Well: ☒Monitoring ☐Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish: ☒Stick Up ☐Flush Mount

7 Location of Measuring Point: ☒Top of Casing ☐Other (specify) _____

8 **NOTE:** PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) 3.0

9 Total Well Depth (fbgs) 19.55

10 Screened interval/open hole (fbgs) 4.55-19.55

11 Well Casing: Diameter 4 Material ☒PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter): Diameter _____ Material ☒PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.01

14. Date and Time of Deployment: Date: 9/30/14 Time: 1548

15. Depth to Ground Water: Depth to ground water at time of deployment 5.22 Bgs

16. Date and Time of Retrieval: Date: 12/18/14 Time: 1535

17. Depth to Ground Water: Depth to ground water at time of retrieval 4.55 TOC

18. Type of Deployment Line Used: Diameter: 3/16" Material: poly

19 Material and Mass (oz.) of PDBS Weight: 2.5oz Stainless Steel (stainless steel recommended)

20 Type of PDBS Used:
☐Lab Filled (Modified Trip Blank must be taken at time of deployment)
☒Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21 Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled _____

22 Position of PDBS Weight:
☐Attached to bottom of PDBS and suspended in well
☒Attached to bottom of deployment line and suspended in well
☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
8.5 Bgs	15.97 Bgs		
5th PDBS	**6th PDBS**	**7th PDBS**	**8th PDBS**

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☒No, this well is being profiled during this sampling round
☐Yes, this well was profiled already. Date when well was profiled: _____

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☐No, flow testing has not been conducted in this well
☐Yes, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet **[Please Attach Results]**

26. Weather Conditions During Deployment: Temp. 70°F Wind 0-5 mph ☐Sunny ☒Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval: Temp. 36°F Wind 0-5 mph ☐Sunny ☒Overcast ☐Raining ☐Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Chris Watson	PARSONS
John McDougall	
Nick Loizos	

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-2
3. Well Designation: MZMW22
4. Well Permit Number: 29-42780

5 Type of Well: ☑ Monitoring ☐ Extraction ☐ Residential ☐ Public Supply ☐ Irrigation ☐ Other

6 Well Surface Finish: ☑ Stick Up ☐ Flush Mount

7 Location of Measuring Point: ☑ Top of Casing ☐ Other (specify) _____

8 NOTE: PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) 2.52

9 Total Well Depth (fbgs): 19.97

10 Screened interval/open hole (fbgs): 14.97-19.97

11 Well Casing: Diameter 4 Material ☑ PVC ☐ Carbon Steel ☐ Stainless Steel

12 Well Screen (or open hole diameter): Diameter 4 Material ☑ PVC ☐ Carbon Steel ☐ Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.01

14 Date and Time of Deployment: Date: 9/30/14 Time: 1600

15 Depth to Ground Water bgs: Depth to ground water at time of deployment 6.72 bgs

16 Date and Time of Retrieval: Date: 10/9/14 Time: 1530

17 Depth to Ground Water: Depth to ground water at time of retrieval 7.85 JDC

18 Type of Deployment Line Used: Diameter: 3/16" Material: poly

19 Material and Mass (oz.) of PDBS Weight: Stainless Steel 250z (stainless steel recommended)

20 Type of PDBS Used:
☐ Lab Filled (Modified Trip Blank must be taken at time of deployment)
☑ Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21 Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled _____

22 Position of PDBS Weight:
☑ Attached to bottom of PDBS and suspended in well
☐ Attached to bottom of deployment line and suspended in well
☐ Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen bgs (ft. from measuring point to center of PDBS):

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
10.03	16.06		

5th PDBS	6th PDBS	7th PDBS	8th PDBS

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☑ No, this well is being profiled during this sampling round
☐ Yes, this well was profiled already. Date when well was profiled: _____

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☐ No, flow testing has not been conducted in this well
☐ Yes, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet [Please Attach Results]

26. Weather Conditions During Deployment: Temp. 70°F Wind 0-5 mph ☐ Sunny ☑ Overcast ☐ Raining ☐ Snowing

27. Weather Conditions During Retrieval: Temp. 30°F Wind 0-5 mph ☐ Sunny ☑ Overcast ☐ Raining ☐ Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Chris Watson	PARSONS
John McIntyre	
Nick Lopez	

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: Ftmm
2. Location: Ftmm-2
3. Well Designation: MzMW24
4. Well Permit Number: 29-42772

5 Type of Well: ☒Monitoring ☐Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish: ☒Stick Up ☐Flush Mount

7 Location of Measuring Point: ☒Top of Casing ☐Other (specify) _____

8 **NOTE** PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) 1.5

9 Total Well Depth (fbgs): ~~0~~ 19.75

10 Screened interval/open hole (fbgs): 4.75-19.75

11 Well Casing: Diameter 4 Material: ☒PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter): Diameter 4 Material: ☒PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.01

14. Date and Time of Deployment: Date: 9/30/14 Time: 1555

15. Depth to Ground Water bgs: Depth to ground water at time of deployment ~~8.22~~ (CW) 6.72

16. Date and Time of Retrieval: Date: 12/18/14 Time: 1538

17. Depth to Ground Water: Depth to ground water at time of retrieval 7.91 TOC

18. Type of Deployment Line Used: Diameter: 3/16" Material: poly

19 Material and Mass (oz.) of PDBS Weight: 20 oz stainless steel (stainless steel recommended)

20 Type of PDBS Used:
☐Lab Filled (Modified Trip Blank must be taken at time of deployment)
☒Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21 Dimensions of PDBS: Length (in.) 12 Diameter (in.) 1.5 Filled _____

22 Position of PDBS Weight:
☒Attached to bottom of PDBS and suspended in well
☐Attached to bottom of deployment line and suspended in well
☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen bgs (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
9.97	16.5		
5th PDBS	**6th PDBS**	**7th PDBS**	**8th PDBS**

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☒No, this well is being profiled during this sampling round
☐Yes, this well was profiled already. Date when well was profiled: _____

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☐No, flow testing has not been conducted in this well
☐Yes, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet **[Please Attach Results]**

26. Weather Conditions During Deployment: Temp. 70°F Wind 0-5 mph ☐Sunny ☒Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval: Temp. 38°F Wind 0-5 mph ☐Sunny ☒Overcast ☐Raining ☐Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Chris Watson	Parsons
John McDonough	
Nick Loizos	

APPENDIX B

FTMM-03: CLOSED SOLID WASTE LANDFILL

APPENDIX B: FTMM-03 Closed Solid Waste Landfill

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2	FTMM-03 Shallow Groundwater Contours - September 29, 2014

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Attachment	Title
A	LFPS Field Sheets

1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT

Monitoring wells located within FTMM-03 were gauged on September 29, 2014. Monitoring well locations as well as other site features are provided in **Figure 1**. Details regarding the water level measurements are provided in **Table 1**. Groundwater elevations in monitoring wells ranged from 1.66 (M3MW07) to 8.24 (M3MW02) feet above mean sea level (amsl). The inferred shallow groundwater flow direction is generally to the north towards Lafetra Creek, as shown in **Figure 2**.

During the groundwater gauging, the physical condition of FTMM-03 monitoring wells was assessed. The site monitoring wells were found to be in good condition.

2.0 GROUNDWATER SAMPLING

Groundwater samples were collected from two monitoring wells located at FTMM-03 as part of the annual (fourth quarter) 2014 groundwater sampling event. FTMM-03 is sampled on an annual basis. The groundwater sampling program included measuring the depth to groundwater in monitoring wells prior to sampling and collection of groundwater samples using low flow purging and sampling (LFPS). Groundwater samples were collected from wells M3MW02 and M3MW07 on October 2, 2014 and October 3, 2014. Groundwater samples were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) via the United States Environmental Protection Agency (USEPA) Method SW8260C. The groundwater sample from M3MW02 was also analyzed for Target Analyte List (TAL) metals via USEPA Method SW6010C/SW7470A, as it was not sampled during the 2013 event due to a low water column and silty conditions.

The samples were collected in accordance with the New Jersey Department of Environmental Protection (NJDEP) Field Sampling Procedures Manual (FSPM) and the Sampling Analysis Plan (SAP). Field blanks, duplicates, matrix spike, matrix spike duplicate and quality assurance (QA) split samples were collected for every 5% of samples collected per parameter, per matrix, in accordance with the Quality Assurance Project Plan (QAPP). Trip blanks accompanied each cooler each day in which VOCs were collected for laboratory analysis.

Completed LFPS field sheets for each well sampled are provided in **Attachment A**.

3.0 HISTORICAL GROUNDWATER SAMPLING RESULTS

Groundwater sampling has been conducted at monitoring wells associated with the FTMM-03 Landfill site since May 1999. Between May 1999 and September 2004, monitoring wells were sampled for VOCs, semi-volatile organic compounds (SVOCS), pesticides, polychlorinated biphenyls (PCBs), and metals. From December 2004 to December 2009, wells were only sampled for VOCs. Between March 2010 and October 2010, FTMM-03 monitoring wells were sampled for VOCs and metals.

Since December 2010, the last four historical rounds of groundwater sampling have been carried out on a quarterly basis and were comprised of VOC and metals analysis. In these last four rounds of groundwater sampling at FTMM-03, metals including aluminum, arsenic, antimony, beryllium, cadmium, iron, manganese, lead, and sodium were detected above their

respective NJDEP Groundwater Quality Standards (GWQS). However, only cadmium was detected above its background concentration established in the 1995 Weston Report (9.50 µg/L) in monitoring wells M3MW04 (12 µg/L and 13.6 µg/L) and M3MW07 (11.2 µg/L). The cadmium detections were anomalous and attributed to background conditions based on further review of the historical data and not associated with historical site operations.

Vinyl chloride (VC) was detected above its NJDEP GWQS in FTMM-03 monitoring well M3MW07 for three out of the last four historical sampling events. Analytical data for the last four historical sampling events are provided in **Table 2**.

The trend of historical VC above the NJDEP GWQS in M3MW07 continued during the August 2013 Baseline Sampling Event (**Table 3**). Since October 23, 1998, vinyl chloride has only been detected in ground water samples collected from M3MW07. This monitoring well is proximate to Lafetra Creek and was sampled on a quarterly basis. Vinyl chloride was detected in 13 of the first 29 groundwater sampling events (maximum of 33.27 µg/L). On November 7, 2005, vinyl chloride became a COC when the NJDEP decreased the NJDEP GWQS to 1 µg/L. Since March 2006, vinyl chloride has been detected at M3MW07 in every quarterly groundwater sampling event through the September 2010 event at concentrations exceeding NJDEP GWQS.

In November 2009, the Army conducted a groundwater investigation in an effort to determine the source and extent of the vinyl chloride detected in monitoring well M3MW07. Groundwater samples were collected from five temporary well point locations installed around the perimeter of M3MW07. Analytical results indicated that vinyl chloride was not detected in the groundwater samples collected.

Given that vinyl chloride was not detected in the groundwater samples collected from the five temporary monitoring points, nor from any of the surface water samples (the monitoring well is adjacent to the stream), the Army believed the source of the vinyl chloride was anomalous and may have been from leaching from the poly vinyl chloride (PVC) pipe used to construct monitoring well M3MW07. To determine if the vinyl chloride result in M3MW07 was anomalous, a new monitoring well, M3MW07A, was installed by the Army adjacent to the existing M3MW07. On August 21, 2010, monitoring well M3MW07A was sampled for VOCs, with a 15-peak library search (VO+15). Analytical results indicated vinyl chloride was non-detect in the sample collected form M3MW07A. This well was also sampled during the August 2013 Baseline Groundwater Sampling Event and vinyl chloride was not detected in the sample. In the July 3, 2014 letter (**Appendix Q**), the NJDEP requested the analytical data and a site map showing the location the temporary wells points prior to their approval of abandoning well M3MW07. This requested information was submitted to the NJDEP in the Army's November 26, 2014 letter response to NJDEP comments on the Final Baseline Groundwater Sampling Report (August 2013). As a result of the Army's groundwater investigation and as previously stated in the August 2013 Baseline Sampling Report, vinyl chloride is not considered a landfill COC at FTMM-03 and is not representative of groundwater conditions in the area.

The Final August 2013 Baseline Groundwater Sampling Report was accepted by the NJDEP in their February 5, 2015 letter. Based on this approval, 11 out of the 12 groundwater monitoring wells were removed from the long term monitoring (LTM) program including: M3MW04, M3MW05, M3MW06, M3MW07A, M3MW08, M3MW09, M3MW10, M3MW11,

M3MW12, M3MW13, and M3MW14; and metals analysis was discontinued with the exception of MW3MW02.

4.0 ANNUAL (FOURTH QUARTER) 2014 GROUNDWATER RESULTS

Groundwater analytical data for samples collected from M3MW02 and M3MW07 during the annual (fourth quarter) 2014 groundwater sampling event are presented in **Table 3**. The only VOC found to be above its NJDEP GWQS was vinyl chloride, detected at an estimated concentration of 4J µg/L in M3MW07, which confirms the previous anomalous detection in this well, but is not representative of groundwater conditions in the area.

Aluminum was the only metal detected in the sample from M3MW02; at a concentration of 685 µg/L, which is above of the NJDEP GWQS of 200 µg/L.

5.0 FINDINGS AND RECOMMENDATIONS

The 2014 Groundwater Sampling Program implemented for the two monitoring wells sampled provides results that define the path forward for the long term monitoring program at FTMM-03.

VOCs were not detected at this well above their NJDEP GWQS. Aluminum was the only metal detected above the NJDEP GWQS at M3MW02 and is attributed to the abundance of this metal in glauconitic soils that underlie the Site and not indicative of groundwater contamination from historical Site uses.

Based on the NJDEP February 5, 2015 letter (**Appendix Q**) discussed in Section 3.0 and the analytical results, M3MW07 will be properly abandoned.

A review of the historical groundwater sampling results is presented in **Table 4**, which provides the matrix used to determine the status of the wells relative to the future groundwater sampling and analysis. Based on the collective results provided in this Annual (Fourth Quarter) 2014 Sampling Event, it is recommended that all groundwater sampling be discontinued at FTMM-03.

TABLES

Table 1 Groundwater Gauging Data and Elevations (September 29, 2014) and LFPS Sampling Summary

Table 2 Historical Groundwater Analytical Results

Table 3 Groundwater Analytical Results - 2013 and 2014

Table 4 Review of Historical Groundwater Sampling Results

Table 1
Groundwater Gauging Data and Elevations (September 29, 2014) and LFPS Sampling Summary
Site FTMM-03 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site/Well ID	Installation Date	Well Permit #	Y Coord. (North)	X Coord. (East)	Depth (ft. bgs)	Casing Length (ft)	Screen Length (ft)	TOC Elevation (ft)	Gauge Time	PID Reading (ppm)	Gauged Depth to Water (ft. TOC)	Gauged Depth to Bottom (ft. TOC)	Calculated Groundwater Elevation (ft)	Well Sampled this Event
Shallow Monitoring Wells														
M3MW02	7/21/2010	E201007326	538840.00	616240.00	20.0	5.0	15.0	28.23	10:33	0.0	19.99	21.80	8.24	x
M3MW04	1/5/1995	29-32568	539122.76	617004.93	23.0	8.0	15.0	18.01	11:01	0.0	13.13	25.35	4.88	
M3MW05	1/9/1995	29-32569	539181.39	616594.09	16.0	6.0	10.0	11.99	11:57	0.0	8.33	18.26	3.66	
M3MW06	1/11/1995	29-32570	539447.49	617189.20	15.0	5.0	10.0	11.18	11:22	0.0	8.45	17.35	2.73	
M3MW07	8/28/1998	29-39173	539504.80	617278.34	15.0	5.0	10.0	11.10	11:16	0.0	9.44	18.66	1.66	x
M3MW07A	7/22/2010	E201007325	539498.40	617250.91	20.0	5.0	15.0	10.18	11:00	0.0	8.19	21.67	1.99	
M3MW08	8/27/1998	29-39174	539447.10	617065.89	15.0	5.0	10.0	7.97	11:25	0.0	5.93	15.50	2.04	
M3MW09	8/27/1998	29-39175	539329.45	616876.57	15.0	5.0	10.0	12.74	11:28	0.0	10.74	16.96	2.00	
M3MW10	8/27/1998	29-39176	539247.41	616555.87	15.0	5.0	10.0	8.10	11:32	0.0	3.82	15.24	4.28	
M3MW11	9/1/1998	29-39145	539208.58	616424.33	15.0	2.0	13.0	10.93	11:38	0.0	7.09	17.15	3.84	
M3MW12	9/29/2010	E201010536	539117.99	616059.93	20.0	5.0	15.0	12.91	11:41	0.0	8.56	22.15	4.35	
M3MW13	9/28/2010	E201010537	539170.38	616415.99	20.0	5.0	15.0	11.28	10:51	0.0	7.45	22.09	3.83	
M3MW14	9/29/2010	E201010538	539283.99	616872.43	20.0	5.0	15.0	12.66	10:44	0.0	9.90	22.15	2.76	

Notes:
1) The synoptic round of water levels in the wells was collected on September 29, 2014.
2) Information on well permit number, X and Y coordinates, depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
3) ft = feet
4) DTW = depth to water (measured from the top of well casing)
5) DTB = depth to bottom of well (measured from the top of well casing)
6) bgs = below ground surface
7) ppm = parts per million (of VOCs)
8) TOC = Top of Casing
9) Elevation = feet above mean sea level
10) N/A = information not available
11) LFPS = Low-Flow Purging and Sampling

Table 2
Historical Groundwater Analytical Results
Site FTMM-03 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M3MW02						M3MW04															
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	1	1 Dup	LF2	LF3	LF4	LF5	44	44 Dup	45	46	46 Dup	47	47 Dup	48	48 Dup	49	49 Dup	50	50 Dup	51	51 Dup	LF52	LF52 Dup
Date Collected				8/20/2010	8/20/2010	12/18/2010	3/10/2011	5/19/2011	8/4/2011	3/26/2008	3/26/2008	6/24/2008	9/9/2008	9/9/2008	12/31/2008	12/31/2008	2/27/2009	2/27/2009	6/13/2009	6/13/2009	9/9/2009	9/9/2009	12/2/2009	12/2/2009	3/11/2010	3/11/2010
ANALYTE/Lab ID				10355.04	10355.03	10563.02	11099.10	1121512	1132508	80097.04	80097.03	80209.04	80325.04	80325.03	80485.04	80485.03	90080.04	90080.03	90236.04	90236.03	90372.04	90372.03	90466.04	90466.03	10086.04	10086.03
Volatile Organic Compounds (µg/L)																										
1,2-Dichlorobenzene	600	600	-	ND	ND	<0.13	<0.13	<0.13	<0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	NLE	-	ND	ND	<0.16	<0.16	<0.16	<0.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	-	ND	ND	<0.15	<0.15	<0.15	<0.26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	-	ND	ND	<0.22	<0.22	<0.22	<2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	6000	NLE	-	7.39	8.23	<0.32	<0.32	<0.32	<7.6	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	-	ND	ND	<0.12	<0.12	<0.12	<0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	700	NLE	-	3.49	3.31	<0.12	<0.12	<0.12	<0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	50	100	-	ND	ND	<0.12	<0.12	<0.12	<0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	NLE	-	ND	ND	<0.32	<0.32	<0.32	<0.37	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	100	NLE	-	NA	NA	NA	NA	NA	<0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	70	-	ND	ND	<0.12	<0.12	<0.12	<0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	-	NA	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m +*p* -xylenes	100	NLE	-	ND	ND	<0.3	<0.3	<0.3	<0.32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	NLE	NLE	-	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o- xylene	100	NLE	-	ND	ND	<0.14	<0.14	<0.14	<0.17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butyl alcohol	100	NLE	-	ND	ND	<1.64	<1.64	<1.64	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	-	ND	ND	<0.12	<0.12	<0.12	<0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100	100	-	ND	ND	<0.14	<0.14	<0.14	<0.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	1	2	-	ND	ND	<0.22	<0.22	<0.22	<0.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (Total)	1000	10,000	-	ND	ND	ND	ND	ND	<0.17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	-	ND	**3**	ND	ND	ND	0	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																										
Aluminum	200	NLE	121000	ND	ND	<200	1,350	487	644	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Antimony	6	6	20.70	ND	ND	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Arsenic	3	10	89.30	0.78 ER	1.31 ER	3.7	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Barium	6000	2000	699.00	37.8	36.9	<200	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	65.2	64.8
Beryllium	1	4	2.10	0.054 ER	ND	<1.0	1.80	<1.0	1.40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.181 ER	0.197 ER
Cadmium	4	5	9.50	ND	ND	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.781 ER	ND
Calcium	NLE	NLE	45400.00	ND	ND	29,300	9,740	5,090	11,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Chromium	70	100	191.00	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Copper	1300	1300	65.60	24.7	21.7	23.0	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Iron	300	NLE	431000	ND	ND	2,290	<100	120.00	490.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Lead	5	15	22.70	ND	ND	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Magnesium	NLE	NLE	62700	ND	ND	10,600	12,500	7,310	11,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Manganese	50	NLE	331	ND	ND	84.9	52.80	22.70	66.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Mercury	2	2	0.26	ND	ND	NA	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Nickel	100	NLE	187	25.7	26.4	32.3	77.5	40.6	103.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22.1	21.6
Potassium	NLE	NLE	137000	ND	ND	<10000	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Selenium	40	50	29.60	NR	NR	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR
Silver	40	NLE	ND	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Sodium	50000	NLE	21500	ND	ND	12,100	11,400	<10000	11,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Thallium	2	2	5.50	ND	ND	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

DUP = field duplicate sample

Table 2
Historical Groundwater Analytical Results
Site FTMM-03 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M3MW04										M3MW05										
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF53	LF53 Dup	LF54	LF54 Dup	LF55	LF56	LF56 Dup	LF57	LF57 Dup	LF58	44	45	45 Dup	46	47	48	49	50	51	LF52	LF53	LF54	LF55
Date Collected				6/18/2010	6/18/2010	9/7/2010	9/7/2010	12/18/2010	3/10/2011	3/10/2011	5/16/2011	5/16/2011	8/4/2011	3/26/2008	6/24/2008	6/24/2008	9/9/2008	12/31/2008	2/27/2009	6/13/2009	9/9/2009	12/2/2009	3/16/2010	6/24/2010	9/7/2010	12/20/2010
ANALYTE/Lab ID				10273.04	10273.03	10377.04	10377.03	10563.01	11099.04	11099.03	1121104	1121103	1132506	80097.05	80209.05	80209.03	80325.05	80485.05	90080.05	90236.05	90372.05	90466.05	10091.06	10285.06	10377.09	10565.08
Volatile Organic Compounds (µg/L)																										
1,2-Dichlorobenzene	600	600	-	ND	ND	ND	ND	<0.13	<0.13	<0.13	<0.13	<0.13	<0.18	ND	0.47 J	0.45 J	ND	ND	ND	ND	0.56	0.39 J	ND	ND	ND	<0.13
1,3-Dichlorobenzene	600	NLE	-	ND	ND	ND	ND	<0.16	<0.16	<0.16	<0.16	<0.16	<0.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.16
1,4-Dichlorobenzene	75	75	-	ND	ND	ND	ND	<0.15	<0.15	<0.15	<0.15	<0.15	<0.26	ND	0.88 J	0.93 J	0.41 J	ND	0.63 J	0.4 J	0.97	0.77	ND	0.35 J	0.49 J	<0.15
2-Butanone	300	NLE	-	ND	ND	ND	ND	<0.22	<0.22	<0.22	<0.22	<0.22	<2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.22
Acetone	6000	NLE	-	ND	ND	ND	ND	<0.32	<0.32	<0.32	<0.32	<0.32	<7.6	2.29	ND	ND	2.86	ND	ND	ND	ND	ND	ND	ND	ND	<0.32
Benzene	1	5	-	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.12	<0.12	<0.22	ND	0.35 J	0.35 J	ND	ND	0.21 J	0.2 J	0.34 J	0.31 J	ND	0.21 J	0.17 J	<0.12
Carbon Disulfide	700	NLE	-	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.12	<0.12	<0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12
Chlorobenzene	50	100	-	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.12	<0.12	<0.22	0.95 J	6.97	7.29	2.29	1.88 J	6.01	3.79	8.1	5.39	0.37 J	3.41	3.85	0.48 J
Chloroethane	5	NLE	-	ND	ND	ND	ND	<0.32	<0.32	<0.32	<0.32	<0.32	<0.37	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.32
Cyclohexane	100	NLE	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	70	-	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.12	<0.12	<0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12
Isopropylbenzene	700	NLE	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m +*p* -xylenes	100	NLE	-	ND	ND	ND	ND	<0.3	<0.3	<0.3	<0.3	<0.3	<0.32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.3
Methylcyclohexane	NLE	NLE	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o- xylene	100	NLE	-	ND	ND	ND	ND	<0.14	<0.14	<0.14	<0.14	<0.14	<0.17	ND	0.16 J	0.18 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.14
tert-Butyl alcohol	100	NLE	-	ND	ND	ND	ND	<1.64	<1.64	<1.64	<1.64	<1.64	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1.64
Toluene	600	1000	-	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.12	<0.12	<0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6	0.52	<0.12
trans-1,2-Dichloroethene	100	100	-	ND	ND	ND	ND	<0.14	<0.14	<0.14	<0.14	<0.14	<0.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.14
Vinyl chloride	1	2	-	ND	ND	ND	ND	<0.22	<0.22	<0.22	<0.22	<0.22	<0.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.22
Xylenes (Total)	1000	10,000	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	ND	27	27	25	ND	29	15	31	22	ND	8	16	ND
Metals (µg/L)																										
Aluminum	200	NLE	121000	ND	ND	ND	ND	251	270	281	302	245	323	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<200
Antimony	6	6	20.70	10	10.6	18.8	12.7	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 ER	9.81 ER	20.4	<6.0
Arsenic	3	10	89.30	1.53 ER	0.96 ER	0.68 ER	1.09 ER	<3.0	<3.0	<3.0	3.3	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.37 ER	ND	1.44 ER	<3.0
Barium	6000	2000	699.00	224	243	301	302	388	216	221	<200	<200	287	NA	NA	NA	NA	NA	NA	NA	NA	NA	64	237	352	<200
Beryllium	1	4	2.10	0.171 ER	0.159 ER	0.116 ER	0.1 ER	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.119 ER	ND	<1.0
Cadmium	4	5	9.50	7.07	7.75	12	12	13.6	6.0	6.1	<3.0	<3.0	9.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	2.69	1.89 ER	<3.0
Calcium	NLE	NLE	45400.00	ND	ND	ND	ND	140,000	61,200	63,000	23,400	21,900	109,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	21,100	70,200	ND	49,200
Chromium	70	100	191.00	ND	ND	ND	ND	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.25	ND	ND	<10
Copper	1300	1300	65.60	ND	ND	1.16 ER	ND	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.07 ER	4.42 ER	2.1 ER	<10
Iron	300	NLE	431000	ND	ND	ND	ND	151	188	180	3,240	1,320	1,860	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	40,700	ND	8,650
Lead	5	15	22.70	ND	3.68 ER	ND	3.37 ER	<3.0	<3.0	<3.0	3	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.59 ER	4.53 ER	6.21	<3.0
Magnesium	NLE	NLE	62700	ND	ND	ND	ND	20,600	12,000	12,300	7,240	6,850	18,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,830	8,550	ND	<5000
Manganese	50	NLE	331	ND	ND	ND	ND	143	66.1	65.1	20.6	18.7	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	96.4	330	ND	265
Mercury	2	2	0.26	0.14 ER	0.15 ER	ND	ND	NA	<0.20	<0.20	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA
Nickel	100	NLE	187	77.8	83.3	82.2	82.3	117	66.6	68.7	40.1	37.5	140	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.86 ER	0.503 ER	1.1 ER	<10
Potassium	NLE	NLE	137000	ND	ND	ND	ND	15,100	<10000	<10000	<10000	<10000	12,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	5,430	ND	<10000
Selenium	40	50	29.60	NR	NR	ND	ND	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	ND	<10
Silver	40	NLE	ND	ND	ND	ND	ND	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	6,016	ND	<10
Sodium	50000	NLE	21500	ND	ND	ND	ND	51,900	32,800	33,800	21,900	20,800	48,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	4,510 ER	15,400	ND	<10000
Thallium	2	2	5.50	ND	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<2.0

Notes:

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Table 2
Historical Groundwater Analytical Results
Site FTMM-03 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M3MW05			M3MW06														M3MW07				
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF56	LF57	LF58	44	45	46	47	48	49	50	51	LF52	LF53	LF54	LF55	LF56	LF57	LF58	40	41	42	43	44
Date Collected				3/10/2011	5/16/2011	8/4/2011	3/26/2008	6/24/2008	9/9/2008	12/31/2008	2/27/2009	6/13/2009	9/9/2009	12/2/2009	3/11/2010	6/18/2010	9/7/2010	12/20/2010	3/10/2011	5/19/2011	8/5/2011	3/26/2008	6/24/2008	9/9/2008	12/31/2008	2/27/2009
ANALYTE/Lab ID				11099.09	1121105	1132507	80097.06	80209.06	80325.06	80485.06	90080.06	90236.06	90372.06	90466.06	10086.06	10273.06	10377.06	10565.05	11099.07	1121506	1132605	80097.07	80209.07	80325.07	80485.07	90080.07
Volatile Organic Compounds (µg/L)																										
1,2-Dichlorobenzene	600	600	-	<0.13	<0.13	0.43 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.13	<0.13	<0.13	<0.18	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	NLE	-	<0.16	<0.16	<0.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.16	<0.16	<0.16	<0.29	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	-	<0.15	<0.15	0.97 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.15	<0.15	<0.15	<0.26	ND	ND	ND	ND	ND
2-Butanone	300	NLE	-	<0.22	<0.22	<2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.22	<0.22	<0.22	<2.9	ND	ND	ND	ND	ND
Acetone	6000	NLE	-	<0.32	<0.32	<7.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.32	<0.32	<0.32	<7.6	ND	ND	ND	ND	ND
Benzene	1	5	-	<0.12	<0.12	0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.22	ND	0.19 J	0.22 J	ND	0.35 J
Carbon Disulfide	700	NLE	-	<0.12	<0.12	<0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.18	ND	ND	ND	ND	ND
Chlorobenzene	50	100	-	0.75	0.46 J	6.4	0.29 J	0.59 J	0.9 J	ND	0.8 J	ND	1.12	0.63	ND	ND	ND	<0.12	<0.12	<0.12	0.33 J	ND	ND	ND	ND	ND
Chloroethane	5	NLE	-	<0.32	<0.32	<0.37	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.32	<0.32	<0.32	<0.37	ND	ND	ND	ND	ND
Cyclohexane	100	NLE	-	NA	NA	<0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.29	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	70	-	<0.12	<0.12	<0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.22	33.77	21.9 3	28.31	47.87	72.51
Isopropylbenzene	700	NLE	-	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA
m +*p* -xylenes	100	NLE	-	<0.3	<0.3	<0.32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.3	<0.3	<0.3	<0.32	ND	ND	ND	ND	ND
Methylcyclohexane	NLE	NLE	-	NA	NA	<0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA	NA
o- xylene	100	NLE	-	<0.14	<0.14	<0.17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.14	<0.14	<0.14	<0.17	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	-	<1.64	<1.64	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1.64	<1.64	<1.64	NA	ND	6.16 J	14.19	ND	ND
Toluene	600	1000	-	<0.12	<0.12	<0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.15	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100	100	-	<0.14	<0.14	<0.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.14	<0.14	<0.14	<0.31	0.34 J	0.32 J	0.53 J	ND	0.7 J
Vinyl chloride	1	2	-	<0.22	<0.22	<0.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.22	<0.22	<0.22	<0.27	10.69	6.45	10.92	29.6	35.77
Xylenes (Total)	1000	10,000	-	ND	ND	<0.17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.17	ND	ND	ND	ND	ND
TICs*	500	NLE	-	ND	ND	29.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	ND	ND	ND	ND	ND
Metals (µg/L)																										
Aluminum	200	NLE	121000	567	568	<200	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<200	<200	472	1,150	NA	NA	NA	NA	NA
Antimony	6	6	20.70	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	10.9	<6.0	<6.0	8.6	<6.0	NA	NA	NA	NA	NA
Arsenic	3	10	89.30	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	2.17 ER	<3.0	<3.0	<3.0	4	NA	NA	NA	NA	NA
Barium	6000	2000	699.00	<200	<200	440	NA	NA	NA	NA	NA	NA	NA	NA	11.8	11.9	10.6	<200	<200	<200	<200	NA	NA	NA	NA	NA
Beryllium	1	4	2.10	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA
Cadmium	4	5	9.50	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	0.575 ER	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA
Calcium	NLE	NLE	45400.00	30,200	36,500	92,800	NA	NA	NA	NA	NA	NA	NA	NA	ND	8,670	ND	86,900	19,800	63,100	32,500	NA	NA	NA	NA	NA
Chromium	70	100	191.00	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	2.71 ER	1.5 ER	ND	<10	<10	<10	17.8	NA	NA	NA	NA	NA
Copper	1300	1300	65.60	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	ND	1 ER	1.88 ER	<10	<10	<10	<10	NA	NA	NA	NA	NA
Iron	300	NLE	431000	15,900	31,700	62,300	NA	NA	NA	NA	NA	NA	NA	NA	639 ER	130 ER	ND	369	792	4,290	28,800	NA	NA	NA	NA	NA
Lead	5	15	22.70	<3.0	6.3	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	3.66 ER	<3.0	<3.0	4	6.5	NA	NA	NA	NA	NA
Magnesium	NLE	NLE	62700	<5000	<5000	11,900	NA	NA	NA	NA	NA	NA	NA	NA	2,620	2,440	ND	7,930	<5000	8,430	7,110	NA	NA	NA	NA	NA
Manganese	50	NLE	331	127	183	432	NA	NA	NA	NA	NA	NA	NA	NA	36.2	36.6	ND	42.8	68.9	222	259	NA	NA	NA	NA	NA
Mercury	2	2	0.26	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.14 ER	ND	NA	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA
Nickel	100	NLE	187	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	2.44 ER	2.22 ER	4.58 ER	15.8	<10	15.1	<10	NA	NA	NA	NA	NA
Potassium	NLE	NLE	137000	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	4,970	4,400	ND	<10000	<10000	<10000	<10000	NA	NA	NA	NA	NA
Selenium	40	50	29.60	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA
Silver	40	NLE	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	1.08 ER	0.558 ER	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA
Sodium	50000	NLE	21500	<10000	<10000	21,900	NA	NA	NA	NA	NA	NA	NA	NA	11,000	11,900	ND	64,700	24,900	39,100	31,300	NA	NA	NA	NA	NA
Thallium	2	2	5.50	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

DUP = field duplicate sample

Table 2
Historical Groundwater Analytical Results
Site FTMM-03 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M3MW07										M3MW07A						M3MW08						
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	45	46	47	LF48	LF49	LF50	LF51	LF52	LF53	LF54	1	LF2	LF2	LF3	LF4	LF5	39	40	41	42	43	44	45
Date Collected				6/13/2009	9/9/2009	12/2/2009	3/16/2010	6/18/2010	9/7/2010	12/21/2010	3/10/2011	5/19/2011	8/5/2011	8/20/2010	12/21/2010	12/21/2010	3/10/2011	5/19/2011	8/5/2011	3/26/2008	6/24/2008	9/9/2008	12/31/2008	2/27/2009	6/13/2009	9/9/2009
ANALYTE/Lab ID				90236.07	90372.07	90466.07	10091.08	10273.07	10377.11	10571.06	11099.05	1121511	1132611	10355.05	10571.04	10571.03	11099.06	1121510	1132608	80097.08	80209.08	80325.08	80485.08	90080.08	90236.08	90372.08
Volatile Organic Compounds (µg/L)																										
1,2-Dichlorobenzene	600	600	-	ND	ND	ND	ND	ND	ND	<0.13	<0.13	<0.13	<0.18	ND	<0.13	<0.13	<0.13	<0.13	<0.18	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	NLE	-	ND	ND	ND	ND	ND	ND	<0.16	<0.16	<0.16	<0.29	ND	<0.16	<0.16	<0.16	<0.16	<0.29	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	-	ND	ND	ND	ND	ND	ND	<0.15	<0.15	<0.15	<0.26	ND	<0.15	<0.15	0.2 J	0.27 J	<0.26	ND	ND	ND	0.63 J	0.38 J	0.54 J	0.26 J
2-Butanone	300	NLE	-	ND	ND	ND	ND	ND	ND	<0.22	<0.22	<0.22	<2.9	ND	<0.22	<0.22	<0.22	<0.22	<2.9	ND	ND	ND	ND	ND	ND	ND
Acetone	6000	NLE	-	ND	ND	ND	ND	ND	ND	<0.32	<0.32	<0.32	<7.6	ND	<0.32	<0.32	<0.32	<0.32	<7.6	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	-	0.21 J	0.19 J	ND	ND	ND	ND	<0.12	<0.12	<0.12	0.35 J	ND	<0.12	<0.12	<0.12	<0.12	<0.22	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	700	NLE	-	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.18	ND	<0.12	<0.12	<0.12	<0.12	<0.18	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	50	100	-	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.22	ND	0.5 J	0.52	0.62	0.72	0.31 J	0.25 J	0.22 J	0.4 J	0.97 J	1.08 J	1.06 J	0.5 J
Chloroethane	5	NLE	-	ND	ND	ND	ND	ND	ND	<0.32	<0.32	<0.32	<0.37	ND	<0.32	<0.32	<0.32	<0.32	<0.37	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	100	NLE	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.29	NA	NA	NA	NA	NA	<0.29	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	70	-	36.09	22.28	5.98	15.35	11.18	8.82	5.10	<0.12	2.12	45.1	ND	<0.12	<0.12	<0.12	<0.12	<0.22	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA
m +*p* -xylenes	100	NLE	-	ND	ND	ND	ND	ND	ND	<0.3	<0.3	<0.3	<0.32	ND	<0.3	<0.3	<0.3	<0.3	<0.32	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	NLE	NLE	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA	NA	NA	NA
o- xylene	100	NLE	-	ND	ND	ND	ND	ND	ND	<0.14	<0.14	<0.14	<0.17	ND	<0.14	<0.14	<0.14	<0.14	<0.17	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	-	ND	ND	ND	ND	ND	ND	<1.64	<1.64	<1.64	NA	ND	<1.64	<1.64	<1.64	<1.64	NA	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	-	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.15	ND	<0.12	<0.12	<0.12	<0.12	<0.15	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100	100	-	0.34 J	0.34 J	ND	0.23 J	ND	ND	<0.14	<0.14	<0.14	0.64 J	ND	<0.14	<0.14	<0.14	<0.14	<0.31	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	1	2	-	15.04	11.57	1.98	11.52	10.21	7.98	2.19	<0.22	1.45	24.3	ND	<0.22	<0.22	<0.22	<0.22	<0.27	ND	ND	ND	ND	ND	ND	ND
Xylenes (Total)	1000	10,000	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.17	ND	ND	ND	ND	ND	<0.17	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	ND	4	3	ND	ND	0	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																										
Aluminum	200	NLE	121000	NA	NA	NA	ND	ND	ND	<200	<200	<200	<200	ND	<200	<200	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA
Antimony	6	6	20.70	NA	NA	NA	10.5 ER	15.8 ER	17.8	<6.0	<6.0	<6.0	<6.0	12.9	<6.0	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA
Arsenic	3	10	89.30	NA	NA	NA	ND	ND	0.72 ER	<3.0	<3.0	<3.0	<3.0	1.82 ER	<3.0	3.1	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA
Barium	6000	2000	699.00	NA	NA	NA	116	145	150	441	<200	<200	<200	96.3	555	564	310	231	<200	NA	NA	NA	NA	NA	NA	NA
Beryllium	1	4	2.10	NA	NA	NA	ND	ND	ND	<1.0	<1.0	<1.0	<1.0	ND	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA
Cadmium	4	5	9.50	NA	NA	NA	ND	0.616 ER	ND	3.9	<3.0	<3.0	11.2	0.595 ER	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA
Calcium	NLE	NLE	45400.00	NA	NA	NA	ND	ND	ND	346,000	172,000	142,000	106,000	ND	354,000	358,000	207,000	160,000	121,000	NA	NA	NA	NA	NA	NA	NA
Chromium	70	100	191.00	NA	NA	NA	ND	ND	ND	<10	<10	<10	<10	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA
Copper	1300	1300	65.60	NA	NA	NA	ND	2.38 ER	1.19 ER	<10	10.7	<10	35.8	1.89 ER	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA
Iron	300	NLE	431000	NA	NA	NA	ND	ND	ND	10,200	4,820	8,250	12,900	ND	45,000	48,900	42,300	32,200	35,200	NA	NA	NA	NA	NA	NA	NA
Lead	5	15	22.70	NA	NA	NA	ND	3.34 ER	ND	<3.0	<3.0	<3.0	<3.0	ND	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA
Magnesium	NLE	NLE	62700	NA	NA	NA	ND	ND	ND	122,000	50,100	47,100	37,600	ND	66,400	70,700	36,100	24,100	22,100	NA	NA	NA	NA	NA	NA	NA
Manganese	50	NLE	331	NA	NA	NA	ND	ND	ND	2,290	1,740	1,300	950	ND	1,900	1,880	1,400	1,120	826	NA	NA	NA	NA	NA	NA	NA
Mercury	2	2	0.26	NA	NA	NA	ND	0.13 ER	0.07 ER	NA	<0.20	<0.20	0.78	ND	NA	NA	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA
Nickel	100	NLE	187	NA	NA	NA	1.24 ER	2.26 ER	1.52 ER	<10	26.6	<10	16.3	1.26 ER	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA
Potassium	NLE	NLE	137000	NA	NA	NA	ND	ND	ND	34,600	16,800	19,900	19,900	ND	19,900	20,600	13,600	10,400	11,500	NA	NA	NA	NA	NA	NA	NA
Selenium	40	50	29.60	NA	NA	NA	NR	NR	ND	<10	<10	<10	<10	NR	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA
Silver	40	NLE	ND	NA	NA	NA	ND	ND	ND	<10	<10	<10	<10	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA
Sodium	50000	NLE	21500	NA	NA	NA	ND	ND	ND	900,000	278,000	298,000	235,000	ND	426,000	42,900	160,000	9,100	86,600	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	5.50	NA	NA	NA	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	ND	<2.0	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

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Table 2
Historical Groundwater Analytical Results
Site FTMM-03 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M3MW08											M3MW09										
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	46	LF47	LF48	LF49	LF50	LF50 Dup	LF51	LF52	LF52 Dup	LF53	LF53 Dup	39	40	41	42	43	44	45	46	LF47	LF48	LF49	LF50
Date Collected				12/2/2009	3/11/2010	6/18/2010	9/7/2010	12/20/2010	12/20/2010	3/14/2011	5/19/2011	5/19/2011	8/5/2011	8/5/2011	3/26/2008	6/24/2008	9/9/2008	12/31/2008	2/27/2009	6/13/2009	9/9/2009	12/2/2009	3/16/2010	6/24/2010	9/7/2010	12/20/2010
ANALYTE/Lab ID				90466.08	10086.05	10273.05	10377.05	10565.04	10565.03	11105.04	1121504	1121503	1132604		80097.09	80209.09	80325.09	80485.09	90080.09	90236.09	90372.09	90466.09	10091.07	10285.07	10377.1	10565.09
Volatile Organic Compounds (µg/L)																										
1,2-Dichlorobenzene	600	600	-	ND	ND	ND	ND	<0.13	<0.13	<0.13	<0.13	<0.13	<0.18	<0.18	0.64 J	0.72 J	0.46 J	0.45 J	0.47 J	0.59 J	0.71	0.71	0.54	0.7	0.51	0.61
1,3-Dichlorobenzene	600	NLE	-	ND	ND	ND	ND	<0.16	<0.16	<0.16	<0.16	<0.16	<0.29	<0.29	ND	0.26 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.16
1,4-Dichlorobenzene	75	75	-	0.65	0.66	0.57	ND	0.47 J	<0.15	0.49 J	0.54	0.55	<0.26	<0.26	ND	0.26 J	ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	1.42
2-Butanone	300	NLE	-	ND	ND	ND	ND	<0.22	<0.22	<0.22	<0.22	<0.22	<2.9	<2.9	1.47 J	1.83 J	1.28 J	1.02 J	0.74 J	1.23 J	1.53	1.86	1.59	1.9	1.24	<0.22
Acetone	6000	NLE	-	ND	ND	ND	ND	<0.32	<0.32	<0.32	<0.32	<0.32	<7.6	<7.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.32
Benzene	1	5	-	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.12	<0.12	<0.22	<0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12
Carbon Disulfide	700	NLE	-	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.12	<0.12	<0.18	<0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12
Chlorobenzene	50	100	-	0.82	1.4	1.31	ND	0.82	<0.12	0.92	0.96	0.97	0.51 J	0.49 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.79
Chloroethane	5	NLE	-	ND	ND	ND	ND	<0.32	<0.32	<0.32	<0.32	<0.32	<0.37	<0.37	11.88	11.81	11.25	10.82	10.05	10.01	12.38	10.78	9.08	11.62	8.04	<0.32
Cyclohexane	100	NLE	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.29	<0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	70	-	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.12	<0.12	<0.22	<0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12
Isopropylbenzene	700	NLE	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m +*p* -xylenes	100	NLE	-	ND	ND	ND	ND	<0.3	<0.3	<0.3	<0.3	<0.3	<0.32	<0.32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.3
Methylcyclohexane	NLE	NLE	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.18	<0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o- xylene	100	NLE	-	ND	ND	ND	ND	<0.14	<0.14	<0.14	<0.14	<0.14	<0.17	<0.17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.14
tert-Butyl alcohol	100	NLE	-	ND	ND	ND	ND	<1.64	<1.64	<1.64	<1.64	<1.64	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1.64
Toluene	600	1000	-	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.12	<0.12	<0.15	<0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.38 J	ND	<0.12
trans-1,2-Dichloroethene	100	100	-	ND	ND	ND	ND	<0.14	<0.14	<0.14	<0.14	<0.14	<0.31	<0.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.14
Vinyl chloride	1	2	-	ND	ND	ND	ND	<0.22	<0.22	<0.22	<0.22	<0.22	<0.27	<0.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.22
Xylenes (Total)	1000	10,000	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.17	<0.17	ND	ND	0.18 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	0	4	4	69	ND	ND	4	4	4	4	6	4	6
Metals (µg/L)																										
Aluminum	200	NLE	121000	NA	ND	ND	ND	<200	<200	<200	301	205	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	324
Antimony	6	6	20.70	NA	ND	13.8	16.9	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	ND	9.34	10.6	<6.0
Arsenic	3	10	89.30	NA	ND	ND	4.31 ER	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	0.67 ER	<3.0
Barium	6000	2000	699.00	NA	185	210	485	608	592	210	310	286	252	252	NA	NA	NA	NA	NA	NA	NA	NA	281	280	307	317
Beryllium	1	4	2.10	NA	ND	0.042 ER	ND	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.134 ER	ND	<1.0
Cadmium	4	5	9.50	NA	0.588 ER	1.51 ER	3.68	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	1.54 ER	4.28	1.9 ER	<3.0
Calcium	NLE	NLE	45400.00	NA	ND	ND	ND	155,000	151,000	63,600	61,500	62,100	64,200	63,400	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	51,700
Chromium	70	100	191.00	NA	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<10
Copper	1300	1300	65.60	NA	ND	2.69 ER	2.64 ER	<10	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	11	9.77	3.25 ER	27.0
Iron	300	NLE	431000	NA	ND	ND	ND	83,400	81,200	40,400	73,600	64,100	60,300	62,800	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	61,500
Lead	5	15	22.70	NA	ND	4.43 ER	8.37	<3.0	<3.0	<3.0	4.5	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	2.56 ER	4.08 ER	3.29 ER	<3.0
Magnesium	NLE	NLE	62700	NA	ND	ND	ND	73,900	72,200	19,800	19,400	20,100	17,600	17,800	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	8,920
Manganese	50	NLE	331	NA	ND	ND	ND	1,650	1,600	682	763	758	813	825	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	700
Mercury	2	2	0.26	NA	ND	0.14 ER	ND	NA	NA	<0.20	<0.20	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA
Nickel	100	NLE	187	NA	1.55 ER	ND	3.08 ER	<10	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	4.66 ER	0.889 ER	1.42 ER	10.7
Potassium	NLE	NLE	137000	NA	ND	ND	ND	19,100	19,000	<10000	<10000	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<10000
Selenium	40	50	29.60	NA	NR	NR	ND	<10	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	ND	<10
Silver	40	NLE	ND	NA	ND	ND	ND	<10	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<10
Sodium	50000	NLE	21500	NA	ND	ND	ND	530,000	526,000	84500	78,600	82,900	44800	45,200	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	17,300
Thallium	2	2	5.50	NA	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<2.0

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

DUP = field duplicate sample

Table 2
Historical Groundwater Analytical Results
Site FTMM-03 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M3MW09				M3MW10														M3MW11			
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF51	LF51 Dup	LF52	LF53	39	40	41	42	43	44	45	46	LF47	LF48	LF49	LF50	LF51	LF52	LF53	39	40	41	42
Date Collected				3/14/2011	3/14/2011	5/19/2011	8/5/2011	3/26/2008	6/24/2008	9/9/2008	12/31/2008	2/27/2009	6/13/2009	9/9/2009	12/2/2009	3/16/2010	6/24/2010	9/7/2010	12/20/2010	3/14/2011	5/19/2011	8/5/2011	3/26/2008	6/24/2008	9/9/2008	12/31/2008
ANALYTE/Lab ID				11105.05	11105.03	1121507	1132610	80097.10	80209.10	80325.10	80485.10	90080.10	90236.10	90372.10	90466.10	10091.05	10285.05	10377.08	10565.07	11105.06	1121507.00	1132609	80097.11	80209.11	80325.11	80485.11
Volatile Organic Compounds (µg/L)																										
1,2-Dichlorobenzene	600	600	-	0.4 J	0.36 J	<0.13	0.65 J	0.4 J	ND	0.45 J	0.42 J	0.42 J	ND	0.35 J	0.43 J	0.43 J	0.46 J	0.41 J	0.48 J	0.41 J	0.32 J	0.38 J	ND	ND	ND	ND
1,3-Dichlorobenzene	600	NLE	-	0.16 J	<0.16	<0.16	<0.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.16	<0.16	<0.16	<0.29	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	-	1.2	1.07	<0.15	1.7	1.14 J	0.88 J	1.08 J	1.29 J	1 J	0.72 J	0.98	1.29	1.25	1.28	1.23	1.15	1.06	0.88	1.1	0.61 J	1.17 J	1.34 J	0.67 J
2-Butanone	300	NLE	-	<0.22	<0.22	<0.22	<2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.22	<0.22	<0.22	<2.9	ND	ND	ND	ND
Acetone	6000	NLE	-	<0.32	<0.32	<0.32	<7.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.32	<0.32	<0.32	<7.6	ND	ND	ND	ND
Benzene	1	5	-	<0.12	<0.12	<0.12	<0.22	0.19 J	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	ND	<0.12	<0.12	<0.12	<0.22	ND	ND	ND	ND
Carbon Disulfide	700	NLE	-	<0.12	<0.12	<0.12	<0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.18	ND	ND	ND	ND
Chlorobenzene	50	100	-	7.89	7.27	0.89	10.7	10.62	7.98	6.7	12	10.98	6.11	9.25	11.03	10.62	11.1	10.37	11.66	10.34	8.2	9.8	2.03	3.09	3.73	1.34 J
Chloroethane	5	NLE	-	<0.32	<0.32	<0.32	<0.37	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.32	<0.32	<0.32	<0.37	ND	ND	ND	ND
Cyclohexane	100	NLE	-	NA	NA	NA	<0.29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.61 J	NA	NA	NA	NA
cis-1,2-Dichloroethene	70	70	-	<0.12	<0.12	<0.12	<0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.22	ND	ND	ND	ND
Isopropylbenzene	700	NLE	-	NA	NA	NA	<0.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA	NA
m +*p* -xylenes	100	NLE	-	<0.3	<0.3	<0.3	<0.32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.3	<0.3	<0.3	<0.32	ND	ND	ND	ND
Methylcyclohexane	NLE	NLE	-	NA	NA	NA	<0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA
o- xylene	100	NLE	-	<0.14	<0.14	<0.14	<0.17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.14	<0.14	<0.14	<0.17	ND	ND	ND	ND
tert-Butyl alcohol	100	NLE	-	<1.64	<1.64	<1.64	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1.64	<1.64	<1.64	NA	ND	ND	ND	ND
Toluene	600	1000	-	<0.12	<0.12	<0.12	<0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.15	ND	ND	ND	ND
trans-1,2-Dichloroethene	100	100	-	<0.14	<0.14	<0.14	<0.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.14	<0.14	<0.14	<0.31	ND	ND	ND	ND
Vinyl chloride	1	2	-	<0.22	<0.22	<0.22	<0.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.22	<0.22	<0.22	<0.27	ND	ND	ND	ND
Xylenes (Total)	1000	10,000	-	ND	ND	ND	<0.17	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.16 J	0.2 J	ND	ND	ND	<0.17	ND	ND	ND	ND
TICs*	500	NLE	-	3	ND	ND	5.1 J	38	14	6	18	24	15	22	23	24	42	ND	44	26	14	22.4	4	4	40	ND
Metals (µg/L)																										
Aluminum	200	NLE	121000	864	742	940	<200	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<200	<200	2,080	1,050	NA	NA	NA	NA
Antimony	6	6	20.70	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	ND	13.7	16.9	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA
Arsenic	3	10	89.30	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	1.04 ER	<3.0	<3.0	6.5	3.3	NA	NA	NA	NA
Barium	6000	2000	699.00	236	237	305	336	NA	NA	NA	NA	NA	NA	NA	NA	242	527	626	769	660	736	681	NA	NA	NA	NA
Beryllium	1	4	2.10	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.125 ER	ND	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
Cadmium	4	5	9.50	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	ND	3.56	2.01	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA
Calcium	NLE	NLE	45400.00	37,200	37,800	41,700	50,600	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	126,000	103,000	104,000	99,600	NA	NA	NA	NA
Chromium	70	100	191.00	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<10	<10	13.9	10.9	NA	NA	NA	NA
Copper	1300	1300	65.60	21.4	17.4	53.4	12.3	NA	NA	NA	NA	NA	NA	NA	NA	ND	4.49 ER	2.18 ER	<10	<10	19.1	<10	NA	NA	NA	NA
Iron	300	NLE	431000	51,300	51,400	59,300	62,300	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	85,200	93,300	105,000	82,000	NA	NA	NA	NA
Lead	5	15	22.70	4.4	3.6	8.4	3.4	NA	NA	NA	NA	NA	NA	NA	NA	ND	6.17	6.2	<3.0	<3.0	10.5	5.4	NA	NA	NA	NA
Magnesium	NLE	NLE	62700	7,000	7,050	8,580	9,040	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	15,700	15,000	15,400	14,200	NA	NA	NA	NA
Manganese	50	NLE	331	464	469	865	666	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	819	884	873	706	NA	NA	NA	NA
Mercury	2	2	0.26	<0.20	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	0.07 ER	ND	ND	NA	<0.20	<0.20	<0.20	NA	NA	NA	NA
Nickel	100	NLE	187	<10	<10	20.2	14.3	NA	NA	NA	NA	NA	NA	NA	NA	1.35 ER	ND	0.952 ER	<10	<10	<10	<10	NA	NA	NA	NA
Potassium	NLE	NLE	137000	<10000	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	11,200	<10000	10,500	10,800	NA	NA	NA	NA
Selenium	40	50	29.60	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	ND	<10	<10	<10	<10	NA	NA	NA	NA
Silver	40	NLE	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA
Sodium	50000	NLE	21500	19,800	17,900	25,700	14,200	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	26,400	22,000	20,300	20,100	NA	NA	NA	NA
Thallium	2	2	5.50	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA

Notes:

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Site FTMM-03 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M3MW11													M3MW12								M3MW13	
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	43	44	45	46	LF47	LF47 Dup	LF48	LF48 Dup	LF49	LF50	LF51	LF52	LF53	LF1	LF1 Dup	LF2	LF 2 Dup	LF3	LF4	LF5	LF6	LF1	LF2
Date Collected				2/27/2009	6/13/2009	9/9/2009	12/2/2009	3/16/2010	3/16/2010	6/24/2010	6/24/2010	9/7/2010	12/20/2010	3/14/2011	5/19/2011	8/5/2011	10/7/2010	10/7/2010	10/21/2010	10/21/2010	12/21/2010	3/14/2011	5/19/2011	8/5/2011	10/7/2010	10/21/2010
ANALYTE/Lab ID				90080.11	90236.11	90372.11	90466.11	10091.04	10091.03	10285.04	10285.03	10377.07	10565.06	11105.07	1121505	1132606	10432.04	10432.03	10452.04	10452.03	10571.05	11105.08	1121509	1132607	10432.06	10452.06
Volatile Organic Compounds (µg/L)																										
1,2-Dichlorobenzene	600	600	-	ND	ND	0.27 J	ND	ND	ND	ND	ND	ND	<0.13	0.22 J	0.18 J	0.33 J	ND	ND	ND	ND	<0.13	<0.13	<0.13	<0.18	ND	0.41 J
1,3-Dichlorobenzene	600	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.16	<0.16	<0.16	<0.29	ND	ND	ND	ND	<0.16	<0.16	<0.16	<0.29	ND	ND
1,4-Dichlorobenzene	75	75	-	0.72 J	0.39 J	0.86	1.31	0.54	0.54	0.67	0.6	0.78	0.70	0.65	0.5 J	1.5	ND	ND	ND	ND	<0.15	<0.15	<0.15	<0.26	1.73	1.82
2-Butanone	300	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.22	<0.22	<0.22	<2.9	ND	ND	ND	ND	<0.22	<0.22	<0.22	<2.9	ND	ND
Acetone	6000	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.32	<0.32	<0.32	<7.6	ND	ND	ND	ND	<0.32	<0.32	<0.32	<7.6	ND	ND
Benzene	1	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.22	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.22	ND	ND
Carbon Disulfide	700	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.18	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.18	ND	ND
Chlorobenzene	50	100	-	2.24	1.18 J	3.99	3.38	1.76	1.79	3.19	2.96	4.11	2.32	2.26	1.75	3.7	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.22	3.97	3.93
Chloroethane	5	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.32	<0.32	<0.32	<0.37	ND	ND	ND	ND	<0.32	<0.32	<0.32	<0.37	ND	ND
Cyclohexane	100	NLE	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.29	NA	NA	NA	NA	NA	NA	NA	<0.29	NA	NA
cis-1,2-Dichloroethene	70	70	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.22	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.22	ND	ND
Isopropylbenzene	700	NLE	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.25 J	NA	NA	NA	NA	NA	NA	NA	<0.19	NA	NA
m +*p* -xylenes	100	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.3	<0.3	<0.3	<0.32	ND	ND	ND	ND	<0.3	<0.3	<0.3	<0.32	ND	ND
Methylcyclohexane	NLE	NLE	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA	NA	NA	NA	<0.18	NA	NA
o- xylene	100	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.14	<0.14	<0.14	<0.17	ND	ND	ND	ND	<0.14	<0.14	<0.14	<0.17	ND	ND
tert-Butyl alcohol	100	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1.64	<1.64	<1.64	NA	ND	ND	ND	ND	<1.64	<1.64	<1.64	NA	ND	ND
Toluene	600	1000	-	ND	ND	0.21 J	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.15	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.15	ND	ND
trans-1,2-Dichloroethene	100	100	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.14	<0.14	<0.14	<0.31	ND	ND	ND	ND	<0.14	<0.14	<0.14	<0.31	ND	ND
Vinyl chloride	1	2	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.22	<0.22	<0.22	<0.27	ND	ND	ND	ND	<0.22	<0.22	<0.22	<0.27	ND	ND
Xylenes (Total)	1000	10,000	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.17	ND	ND	ND	ND	ND	ND	ND	<0.17	ND	ND
TICs*	500	NLE	-	ND	ND	19	13	3	3	14	10	30	4	5	ND	6.7 J	ND	ND	ND	ND	ND	ND	ND	0	9	7
Metals (µg/L)																										
Aluminum	200	NLE	121000	NA	NA	NA	NA	ND	ND	ND	ND	ND	<200	<200	435	460	ND	ND	ND	ND	<200	<200	332	<200	ND	ND
Antimony	6	6	20.70	NA	NA	NA	NA	ND	ND	9.9 ER	11.3	16.4	<6.0	<6.0	<6.0	<6.0	ND	13.7	ND	ND	<6.0	<6.0	<6.0	<6.0	ND	7.23
Arsenic	3	10	89.30	NA	NA	NA	NA	ND	ND	ND	0.72 ER	0.87 ER	<3.0	<3.0	<3.0	<3.0	3.4	2.35 ER	2.25 ER	2.37 ER	<3.0	<3.0	<3.0	3.9	3.4	0.73 ER
Barium	6000	2000	699.00	NA	NA	NA	NA	169	141	189	184	201	338	312	276	352	75.6	73.2	74.7	74.4	<200	<200	<200	<200	620	593
Beryllium	1	4	2.10	NA	NA	NA	NA	ND	ND	0.143 ER	0.119 ER	ND	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	ND	<1.0	<1.0	<1.0	<1.0	ND	ND
Cadmium	4	5	9.50	NA	NA	NA	NA	ND	ND	2.32	2.78	0.752 ER	<3.0	<3.0	<3.0	5.3	0.797 ER	0.506 ER	1.35 ER	1.53 ER	<3.0	<3.0	<3.0	<3.0	1.37 ER	3.24
Calcium	NLE	NLE	45400.00	NA	NA	NA	NA	ND	ND	ND	ND	ND	162,000	123,000	112,000	114,000	ND	ND	ND	ND	25,100	23,900	23,600	23,100	ND	ND
Chromium	70	100	191.00	NA	NA	NA	NA	ND	ND	ND	ND	ND	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	<10	<10	ND	1.91 ER
Copper	1300	1300	65.60	NA	NA	NA	NA	6.73	8.25	4.58 ER	4.31 ER	1.3 ER	11.8	12.5	37.8	29.3	ND	ND	1.86 ER	1.65 ER	<10	<10	<10	<10	ND	5.16
Iron	300	NLE	431000	NA	NA	NA	NA	ND	ND	ND	ND	ND	51,200	60,200	69,300	67,500	ND	ND	ND	ND	34,300	42,300	43,600	31,800	ND	ND
Lead	5	15	22.70	NA	NA	NA	NA	ND	ND	3.41 ER	3.08 ER	ND	<3.0	<3.0	4.2	3	ND	ND	ND	ND	<3.0	<3.0	3.5	<3.0	4.43 ER	ND
Magnesium	NLE	NLE	62700	NA	NA	NA	NA	ND	ND	ND	ND	ND	12,300	10,600	10,000	10,900	ND	ND	ND	ND	<5000	<5000	<5000	<5000	ND	ND
Manganese	50	NLE	331	NA	NA	NA	NA	ND	ND	ND	ND	ND	1,340	1,010	1,010	802	ND	ND	ND	ND	145	138	141	218	ND	ND
Mercury	2	2	0.26	NA	NA	NA	NA	0.07 ER	ND	ND	ND	ND	NA	<0.20	0.36	0.33	ND	ND	ND	ND	NA	<0.20	0.29	<0.20	ND	ND
Nickel	100	NLE	187	NA	NA	NA	NA	79.5	64.1	4.1 ER	4.61 ER	2.23 ER	64.2	17.3	65.4	82.3	1.25 ER	1.17 ER	ND	ND	<10	<10	<10	<10	3.23 ER	ND
Potassium	NLE	NLE	137000	NA	NA	NA	NA	ND	ND	ND	ND	ND	<10000	<10000	<10000	<10000	ND	ND	ND	ND	<10000	10,100	<10000	<10000	ND	ND
Selenium	40	50	29.60	NA	NA	NA	NA	NR	NR	NR	NR	ND	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	<10	<10	ND	ND
Silver	40	NLE	ND	NA	NA	NA	NA	ND	ND	ND	ND	ND	<10	<10	<10	<10	ND	ND	ND	ND	<10	<10	<10	<10	ND	ND
Sodium	50000	NLE	21500	NA	NA	NA	NA	ND	ND	ND	ND	ND	27,800	16,800	14,200	15,300	ND	ND	ND	ND	<10000	<10000	<10000	<10000	ND	ND
Thallium	2	2	5.50	NA	NA	NA	NA	ND	ND	ND	0.79 ER	ND	<2.0	<2.0	<2.0	<2.0	ND	0.73 ER	0.72 ER	1.04 ER	<2.0	<2.0	<2.0	<2.0	ND	ND

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

DUP = field duplicate sample

Table 2
Historical Groundwater Analytical Results
Site FTMM-03 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M3MW13					M3MW14					
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF3	LF4	LF5	LF6	LF6 Dup	LF1	LF2	LF3	LF4	LF5	LF6
Date Collected				12/21/2010	3/14/2011	5/19/2011	8/4/2011	8/4/2011	10/7/2010	10/21/2010	12/21/2010	3/10/2011	5/16/2011	8/4/2011
ANALYTE/Lab ID				10571.08	11105.09	1121513	1132504	1132503	10432.05	10452.05	10571.07	11099.08	1121106	1132505
Volatile Organic Compounds (µg/L)														
1,2-Dichlorobenzene	600	600	-	0.48 J	0.46 J	0.54	0.5 J	0.53 J	0.44 J	0.58	0.6	0.7	0.54	0.56 J
1,3-Dichlorobenzene	600	NLE	-	<0.16	0.2 J	0.17 J	<0.29	<0.29	ND	0.32 J	0.44 J	0.4 J	0.35 J	0.42 J
1,4-Dichlorobenzene	75	75	-	2.06	1.86	2.33	3	2.9	1.47	2.09	1.82	2.03	2.03	2.2
2-Butanone	300	NLE	-	<0.22	<0.22	<0.22	<2.9	<2.9	ND	ND	<0.22	<0.22	<0.22	<2.9
Acetone	6000	NLE	-	<0.32	<0.32	<0.32	<7.6	<7.6	ND	ND	<0.32	<0.32	<0.32	<7.6
Benzene	1	5	-	<0.12	<0.12	<0.12	<0.22	<0.22	0.23 J	0.3 J	0.28 J	0.32 J	0.3 J	0.29 J
Carbon Disulfide	700	NLE	-	<0.12	<0.12	<0.12	<0.18	<0.18	ND	ND	<0.12	<0.12	<0.12	<0.18
Chlorobenzene	50	100	-	3.57	3	2.97	3.8	3.80	8.63	10.54	9.78	10.22	13.31	12.30
Chloroethane	5	NLE	-	<0.32	<0.32	<0.32	<0.37	<0.37	ND	ND	<0.32	<0.32	<0.32	<0.37
Cyclohexane	100	NLE	-	NA	NA	NA	<0.29	<0.29	NA	NA	NA	NA	NA	<0.29
cis-1,2-Dichloroethene	70	70	-	<0.12	<0.12	<0.12	<0.22	<0.22	ND	ND	<0.12	<0.12	<0.12	<0.22
Isopropylbenzene	700	NLE	-	NA	NA	NA	<0.19	<0.19	NA	NA	NA	NA	NA	<0.19
m +*p* -xylenes	100	NLE	-	<0.3	<0.3	<0.3	<0.32	<0.32	ND	ND	<0.3	<0.3	<0.3	<0.32
Methylcyclohexane	NLE	NLE	-	NA	NA	NA	<0.18	<0.18	NA	NA	NA	NA	NA	0.47 J
o- xylene	100	NLE	-	<0.14	<0.14	<0.14	<0.17	<0.17	ND	ND	<0.14	<0.14	<0.14	<0.17
tert-Butyl alcohol	100	NLE	-	<1.64	<1.64	<1.64	NA	NA	ND	ND	<1.64	<1.64	<1.64	NA
Toluene	600	1000	-	<0.12	<0.12	<0.12	<0.15	<0.15	ND	ND	<0.12	<0.12	<0.12	<0.15
trans-1,2-Dichloroethene	100	100	-	<0.14	<0.14	<0.14	<0.31	<0.31	ND	ND	<0.14	<0.14	<0.14	<0.31
Vinyl chloride	1	2	-	<0.22	<0.22	<0.22	<0.27	<0.27	ND	ND	<0.22	<0.22	<0.22	<0.27
Xylenes (Total)	1000	10,000	-	ND	ND	ND	<0.17	<0.17	ND	ND	ND	ND	ND	<0.17
TICs*	500	NLE	-	13	5	4	5.5 J	5.9 J	18	50	54	46	51	13 J
Metals (µg/L)														
Aluminum	200	NLE	121000	<200	<200	370	790	1,820	ND	ND	<200	<200	254	<200
Antimony	6	6	20.70	<6.0	<6.0	<6.0	<6.0	<6.0	ND	6.84	<6.0	<6.0	<6.0	<6.0
Arsenic	3	10	89.30	<3.0	<3.0	<3.0	<3.0	3.2	2.38 ER	1.35 ER	<3.0	<3.0	<3.0	<3.0
Barium	6000	2000	699.00	673	656	535	599	652	191	226	255	243	223	<200
Beryllium	1	4	2.10	<1.0	<1.0	<1.0	<1.0	<1.0	ND	ND	<1.0	<1.0	<1.0	<1.0
Cadmium	4	5	9.50	<3.0	<3.0	<3.0	<3.0	<3.0	1.01 ER	3.39	<3.0	<3.0	<3.0	<3.0
Calcium	NLE	NLE	45400.00	93,300	121,000	75,900	77,300	81,100	ND	ND	64,400	59,100	52,700	54,400
Chromium	70	100	191.00	<10	<10	<10	<10	13.4	ND	1.32 ER	<10	<10	<10	<10
Copper	1300	1300	65.60	<10	<10	<10	<10	<10	ND	5.1	<10	<10	<10	<10
Iron	300	NLE	431000	67,100	88,300	76,100	74,900	82,300	ND	ND	75,000	77,800	73,300	54,900
Lead	5	15	22.70	<3.0	<3.0	5	8.7	18.2	ND	2.99 ER	<3.0	<3.0	4.6	<3.0
Magnesium	NLE	NLE	62700	10,500	14,900	11,700	11,300	12,200	ND	ND	12,000	12,700	11,200	11,000
Manganese	50	NLE	331	665	1,120	827	705	745	ND	ND	603	602	578	505
Mercury	2	2	0.26	NA	<0.20	<0.20	<0.20	0.21	0.60	ND	NA	<0.20	<0.20	0.51
Nickel	100	NLE	187	<10	<10	<10	<10	<10	4.15 ER	ND	<10	<10	<10	<10
Potassium	NLE	NLE	137000	<10000	<10000	<10000	<10000	<10000	ND	ND	<10000	<10000	<10000	<10000
Selenium	40	50	29.60	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10
Silver	40	NLE	ND	<10	<10	<10	<10	<10	ND	ND	<10	<10	<10	<10
Sodium	50000	NLE	21500	12,700	14,700	13,900	12,600	12,900	ND	ND	10,700	10,200	<10000	<10000
Thallium	2	2	5.50	<2.0	<2.0	<2.0	<2.0	<2.0	ND	ND	<2.0	<2.0	<2.0	<2.0

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

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Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-03 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	Weston 1995 Background (Main Post)	M3MW02		M3MW04	M3MW05	M3MW06	M3MW07		M3MW07A		M3MW08	M3MW09	M3MW10	M3MW11
Sample ID				FTMM-3-GW-M3MW02-21	FTMM-3-GW-M3MW102-21	FTMM-3-GW-M3MW04	FTMM-3-GW-M3MW05	FTMM-3-GW-M3MW06	FTMM-3-GW-M3MW07	FTMM-3-GW-M3MW07-13.85	FTMM-3-GW-M3MW07A	FTMM-3-GW-M3MW17A	FTMM-3-GW-M3MW08	FTMM-3-GW-M3MW09	FTMM-3-GW-M3MW10	FTMM-3-GW-M3MW11
Sample Date				10/3/2014	10/3/2014	8/23/2013	8/23/2013	8/23/2013	8/23/2013	10/2/2014	8/23/2013	8/23/2013	8/23/2013	8/23/2013	8/23/2013	8/23/2013
QA/QC				SA	DU	SA	SA	SA	SA	SA	SA	DU	SA	SA	SA	SA
Sample Method				Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Volatile Organic Compounds (µg/l)																
1,1,1,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.46 J**	**0.4 J**	**0.24 J**
1,2-Dichloroethane	2	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.38 J**	**0.39 J**	**0.96 J**	**1.5 J**	**1.4 J**	**0.76 J**
2,2-Dichloropropane	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	-	< 5	**2 J**	< 5	**6.7**	< 5	**3 J**	**2.4 J**	**2.9 J**	**2.2 J**	**2.8 J**	**2.3 J**	**4.6 J**	**2.2 J**
Benzene	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromobenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	-	< 1	< 1	< 1	**0.59 J**	< 1	< 1	< 1	**0.84 J**	**0.83 J**	**1.7 J**	**8.9**	**11**	**2.4 J**
Chlorodibromomethane	1	80	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	70	80	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	-	< 1	< 1	< 1	< 1	< 1	**0.81 J**	**3 J**	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.31 J**	**0.52 J**
Meta & Para Xylenes	1,000	NLE	-	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl bromide	10	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.33 J**	< 1	< 1	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	3	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**1.2 J**	< 1
n-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.38 J**	< 1
Ortho Xylene	1,000	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.21 J**	< 1
p-Chlorotoluene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.26 J**	< 1
sec-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.3 J**	**0.66 J**	< 1
Styrene	100	100	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	-	< 20	< 20	NA	NA	NA	NA	< 20	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.31 J**	**0.35 J**	**0.32 J**	**0.47 J**	**0.49 J**	< 1
Tetrachloroethene	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	600	1,000	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Total Xylenes	1,000	10,000	-	NA	NA	< 3	< 3	< 3	< 3	NA	< 3	< 3	< 3	< 3	**0.21 J**	< 3
Trans-1,2-Dichloroethene	100	100	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	-	< 1	< 1	< 1	< 1	< 1	**2.9 J**	**4 J**	< 1	< 1	< 1	< 1	< 1	< 1
TIC VOCs (mg/l)																
Total TIC, Volatile	500	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**8.7 JN**	ND

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-03 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	Weston 1995 Background (Main Post)	M3MW02		M3MW04	M3MW05	M3MW06	M3MW07		M3MW07A		M3MW08	M3MW09	M3MW10	M3MW11
Sample ID				FTMM-3-GW-M3MW02-21	FTMM-3-GW-M3MW102-21	FTMM-3-GW-M3MW04	FTMM-3-GW-M3MW05	FTMM-3-GW-M3MW06	FTMM-3-GW-M3MW07	FTMM-3-GW-M3MW07-13.85	FTMM-3-GW-M3MW07A	FTMM-3-GW-M3MW17A	FTMM-3-GW-M3MW08	FTMM-3-GW-M3MW09	FTMM-3-GW-M3MW10	FTMM-3-GW-M3MW11
Sample Date				10/3/2014	10/3/2014	8/23/2013	8/23/2013	8/23/2013	8/23/2013	10/2/2014	8/23/2013	8/23/2013	8/23/2013	8/23/2013	8/23/2013	8/23/2013
QA/QC				SA	DU	SA	SA	SA	SA	SA	SA	DU	SA	SA	SA	SA
Sample Method				Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Inorganics (µg/l)																
Aluminum	200	NLE	121,000	**685**	**660**	**288**	**258**	**63.1 J**	< 25	NA	< 25	< 25	**40.4 J**	**224**	< 25	< 25
Antimony	6	6	20.7	< 30	**3.8 J**	< 4	**2.7 J**	**3.3 J**	< 4	NA	< 4	< 4	< 4	< 4	< 4	< 4
Arsenic	3	10	89.3	< 5	< 5	< 5	< 5	< 5	< 5	NA	< 5	< 5	< 5	< 5	< 5	< 5
Barium	6,000	2,000	699	**48.6 B**	**47.7 B**	**104**	**151**	**15.9 J**	**455**	NA	**369**	**358**	**383**	**377**	**862**	**429**
Beryllium	1	4	2.1	**0.905 J**	**0.837 J**	**0.256 J**	< 0.3	< 0.3	< 0.3	NA	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Cadmium	4	5	9.5	**0.483 J**	**0.203 J**	**2.6**	< 0.4	**0.278 J**	< 0.4	NA	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Calcium	NLE	NLE	45,400	**4,930**	**4,620**	**35,300**	**43,100**	**12,600**	**532,000**	NA	**247,000**	**237,000**	**76,400**	**49,900**	**128,000**	**161,000**
Chromium	70	100	191	< 5	< 5	**1.7**	**2.4**	**1.5**	**1**	NA	**0.561 J**	**0.613 J**	**0.47 J**	**1.2**	**0.532 J**	**0.605 J**
Cobalt	100	NLE	18.3	**5.5 J**	**4.9 J**	**15.7**	< 1	< 1	< 1	NA	< 1	< 1	< 1	< 1	< 1	< 1
Copper	1,300	1,300	65.6	< 10	< 10	< 4	**4.1 J**	**3.2 J**	**4.7 J**	NA	**1.6 J**	**1.1 J**	**1.7 J**	**25**	< 4	**3.3 J**
Iron	300	NLE	431,000	**101**	**97.8 J**	**1,110**	**28,700**	**897**	**43,900**	NA	**58,600**	**57,300**	**45,100**	**64,700**	**86,000**	**76,400**
Lead	5	15	22.7	< 2.5	< 2.5	< 2	**0.952 J**	< 2	< 2	NA	< 2	< 2	< 2	**7.8**	< 2	< 2
Magnesium	NLE	NLE	62,700	**10,200**	**9,910**	**8,300**	**5,360**	**4,100**	**68,200**	NA	**46,000**	**45,000**	**16,600**	**12,400**	**23,000**	**23,400**
Manganese	50	NLE	331	**32.4**	**31**	**32.9**	**180**	**57.2**	**2,600**	NA	**1,810**	**1,770**	**664**	**769**	**669**	**1,140**
Mercury	2	2	0.26	< 0.1	< 0.1	< 0.08	< 0.08	< 0.08	< 0.08	NA	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
Nickel	100	NLE	187	**55.3**	**50.5**	**61.2**	< 5	**2.3 J**	**0.86 J**	NA	< 5	< 5	< 5	**3.5 J**	< 5	**35.5**
Potassium	NLE	NLE	137,000	**3,090**	**2,990**	**8,170**	**4,390**	**4,830**	**24,100**	NA	**14,800**	**14,700**	**7,290**	**8,350**	**11,900**	**10,400**
Selenium	40	50	29.6	< 10	< 10	< 5	**3.2 J**	**2.8 J**	**4.5 J**	NA	**4.1 J**	**2 J**	**3.8 J**	**4.2 J**	< 5	< 5
Silver	40	NLE	ND	< 5	< 5	**0.785 J**	**0.664 J**	**0.464 J**	**1 J**	NA	**0.875 J**	**0.408 J**	**0.556 J**	< 2	< 2	< 2
Sodium	50,000	NLE	21,500	**12,300**	**12,200**	**32,600**	**16,300**	**31,800**	**1,020,000**	NA	**338,000**	**331,000**	**157,000**	**53,200**	**129,000**	**278,000**
Thallium	2	2	5.5	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	< 10	< 10	< 10	< 10	< 10
Vanadium	NLE	NLE	108	< 25	< 25	**0.711 J**	**2.5 J**	**0.6 J**	< 0.6	NA	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	**0.368 J**
Zinc	2,000	NLE	233	**102**	**96.8**	**117**	**16.5 J**	**76.7**	**135**	NA	**0.575 J**	**0.915 J**	**4.5 J**	**72.2**	**0.92 J**	**40.7**

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-03 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	Weston 1995 Background (Main Post)	M3MW12	M3MW13	M3MW14
Sample ID				FTMM-3-GW-M3MW12	FTMM-3-GW-M3MW13	FTMM-3-GW-M3MW14
Sample Date				8/23/2013	8/23/2013	8/23/2013
QA/QC				SA	SA	SA
Sample Method				Low Flow	Low Flow	Low Flow
Volatile Organic Compounds (µg/l)						
1,1,1,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	-	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	-	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	-	< 1	< 1	< 1
1,1-Dichloroethene	1	7	-	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	-	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	-	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	-	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	-	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	-	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	-	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	-	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	-	< 1	**0.47 J**	**0.61 J**
1,2-Dichloroethane	2	5	-	< 1	< 1	< 1
1,2-Dichloropropane	1	5	-	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	-	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	-	< 1	**0.26 J**	**0.39 J**
1,3-Dichloropropane	100	NLE	-	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	-	< 1	**2.5 J**	**2.3 J**
2,2-Dichloropropane	100	NLE	-	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	-	< 1	< 1	< 1
Acetone	6,000	NLE	-	< 5	**2.2 J**	**2 J**
Benzene	1	5	-	< 1	< 1	**0.24 J**
Bromobenzene	100	NLE	-	< 1	< 1	< 1
Bromochloromethane	100	NLE	-	< 1	< 1	< 1
Bromodichloromethane	1	80	-	< 1	< 1	< 1
Bromoform	4	80	-	< 1	< 1	< 1
Carbon tetrachloride	1	5	-	< 1	< 1	< 1
Chlorobenzene	50	100	-	< 1	**3.4 J**	**9.9**
Chlorodibromomethane	1	80	-	< 1	< 1	< 1
Chloroethane	5	NLE	-	< 1	< 1	< 1
Chloroform	70	80	-	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	-	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 1
Cymene	100	NLE	-	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	-	< 1	< 1	< 1
Ethyl benzene	700	700	-	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	-	< 1	< 1	< 1
Isopropylbenzene	700	NLE	-	< 1	< 1	< 1
Meta & Para Xylenes	1,000	NLE	-	< 2	< 2	< 2
Methyl bromide	10	NLE	-	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	-	< 5	< 5	< 5
Methyl chloride	100	NLE	-	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	-	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	-	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	-	< 1	< 1	< 1
Methylene chloride	3	5	-	< 1	< 1	< 1
Naphthalene	300	NLE	-	< 1	< 1	< 1
n-Butylbenzene	100	NLE	-	< 1	< 1	**0.39 J**
Ortho Xylene	1,000	NLE	-	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	-	< 1	< 1	< 1
Propylbenzene	100	NLE	-	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	-	< 1	**0.3 J**	**1.2 J**
Styrene	100	100	-	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	-	NA	NA	NA
tert-Butylbenzene	100	NLE	-	< 1	**0.5 J**	**0.81 J**
Tetrachloroethene	1	5	-	< 1	< 1	< 1
Toluene	600	1,000	-	< 1	< 1	< 1
Total Xylenes	1,000	10,000	-	< 3	< 3	< 3
Trans-1,2-Dichloroethene	100	100	-	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 1
Trichloroethene	1	5	-	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	-	< 1	< 1	< 1
Vinyl chloride	1	2	-	< 1	< 1	< 1
TIC VOCs (mg/l)						
Total TIC, Volatile	500	NLE	-	ND	ND	**20.6 JN**

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-03 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	Weston 1995 Background (Main Post)	M3MW12	M3MW13	M3MW14
Sample ID				FTMM-3-GW-M3MW12	FTMM-3-GW-M3MW13	FTMM-3-GW-M3MW14
Sample Date				8/23/2013	8/23/2013	8/23/2013
QA/QC				SA	SA	SA
Sample Method				Low Flow	Low Flow	Low Flow
Inorganics (µg/l)						
Aluminum	200	NLE	121,000	< 25	**70.3 J**	< 25
Antimony	6	6	20.7	< 4	< 4	**2.1 J**
Arsenic	3	10	89.3	**2.3 J**	< 5	**2.1 J**
Barium	6,000	2,000	699	**96.6**	**575**	**241**
Beryllium	1	4	2.1	< 0.3	< 0.3	< 0.3
Cadmium	4	5	9.5	< 0.4	< 0.4	< 0.4
Calcium	NLE	NLE	45,400	**23,300**	**79,300**	**50,600**
Chromium	70	100	191	< 1	**0.223 J**	**0.399 J**
Cobalt	100	NLE	18.3	< 1	< 1	< 1
Copper	1,300	1,300	65.6	< 4	< 4	< 4
Iron	300	NLE	431,000	**43,000**	**43,600**	**71,400**
Lead	5	15	22.7	< 2	< 2	< 2
Magnesium	NLE	NLE	62,700	**4,640**	**21,100**	**11,400**
Manganese	50	NLE	331	**114**	**401**	**628**
Mercury	2	2	0.26	< 0.08	< 0.08	< 0.08
Nickel	100	NLE	187	< 5	< 5	< 5
Potassium	NLE	NLE	137,000	**9,960**	**12,100**	**7,400**
Selenium	40	50	29.6	< 5	< 5	< 5
Silver	40	NLE	ND	**0.277 J**	< 2	< 2
Sodium	50,000	NLE	21,500	**7,900**	**212,000**	**13,100**
Thallium	2	2	5.5	< 10	< 10	< 10
Vanadium	NLE	NLE	108	< 0.6	< 0.6	< 0.6
Zinc	2,000	NLE	233	**3.8 J**	**5.8 J**	< 4

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-03 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Footnote:
1) All historical data collected prior to 2013 are reported as provided by others.
2) Number of Analyses is the number of detected and non-detected results excluding rejected results. Sample duplicate pairs have not been averaged.
3) NLE = no limit established.
4) ND = not detected in any background sample, no background concentration available.

5) Chemical result qualifiers are assigned by the laboratory and is typically evaluated and modified (if necessary) by during data validation.
[blank] = detect, i.e. detected chemical result value.
B = Compound detected in the sample and its associated blank sample.
R = Rejected, data validation rejected the results.
U = non-detect, i.e. not detected equal to or above this value.
U-DL = Elevated sample detection limit due to difficult sample matrix.
U-ND = Analyte not detected in sample, but no detection or reporting limit provided.
J = estimated (detect or non-detect) value.
E (or ER) = Estimated result.
D = Results from dilution of sample.
J-DL = Elevated sample detection limit due to difficult sample matrix.
JN = Tentatively identified compound, estimated concentration.

6) Chemical results greater than or equal to the action level (depending on criteria) are highlighted based on the Criteria that are present.
- Cell Shade values represent a result that is above the NJ Ground Water Quality Criteria ####

NJDEP Interim Specific GWQC values are presented for the NJ GWQS where there is not a Specific Ground Water Quality Criteria. A full list of compounds is available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).

NJDEP Interim Generic GWQC values are presented for the NJ GWQS where there is not a XXXXX or a NJDEP Interim Specific GWQC. Available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).

- Bold Outline represent a result that is above the USEPA 2014-05 MCL. ###
- Cell Style values represent a result that is above the Weston 1995 Background (Main Post). ###
n/a = all concentrations were less than the detection limit, therefore, no location of maximum value identified.
Dash (-) = only background concentrations for metals are being used as comparison criteria.

7) Criteria action level source document and web address.
- The NJ Ground Water Quality Criteria refers to the NJDEP Groundwater Quality Standards - Adopted July 22, 2010
http://www.state.nj.us/dep/wms/bwqsa/docs/njac79C.pdf
- The 2014-05 USEPA MCL refers to the USEPA's Region 9 Regional Screening Levels (HQ=1.0) - 5/31/2014 (Last revised)
http://www.epa.gov/region9/superfund/prg/
- The Weston 1995 Background (Main Post) refers to the FTMM reports.
NA

8) Wells sampled in the fourth quarter are highlighted in yellow. Sample ID

Table 4
Review of Historical Groundwater Sampling Results
Site FTMM-03 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site Name/ Well ID	Interpretation of Historical and 2014 Results[1]			2014 Evaluation				Retain Analyte/Well (Yes or No)	Rationale
	Chem Class / Analyte	Does it Exceed NJDEP GWQS (Yes or No) (If Yes, identify compound)	Do Metals Exceed FTMM Background Concentration (Yes or No) (If Yes, identify Metal)	Seasonal Effect?[2] (Y/N)	Anomaly? (Y/N)	Exceedance part of overall trend? (Y/N)	Well needed for sentinel purposes? (Y/N)		
FTMM-03									
M3MW02	VOC/Metals	Al	No	No	No	No	No	No	No metal exceedances above background concentration. Recommend removing well from long term monitoring program.
M3MW07	VOC	VC	N/A	No	Yes	No	No	No	VC is anomalous and not representative of groundwater conditions. Data from M3MW07A is representative of this area. Well M3MW07 will be abandoned per NJDEP 2/5/15 letter.

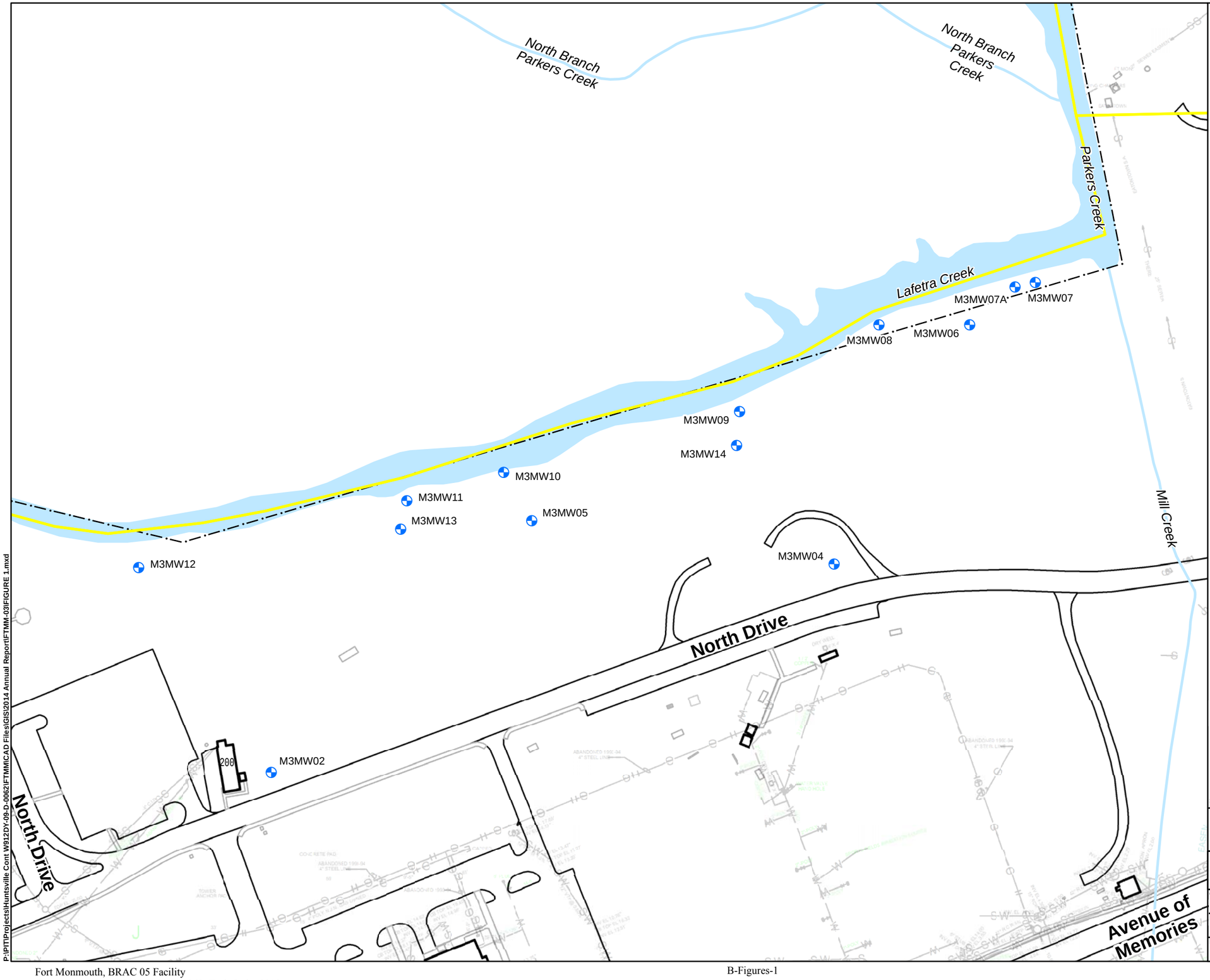
Notes

1. Has any of the analyte compounds exceeded the NJDEP GWQS in the 2014 data and the 4 previous quarterly data rounds or 2 previous annual rounds?
   a. If yes then keep analyte in LTM list
   b. If no then remove this analyte from LTM list
   c. a and b above may be occasionally superseded on a case-by-case basis, depending on site conditions.
2. Has any of the analyte compounds exceeded the NJDEP GWQS seasonally (winter spring vs. summer fall)?
3. VC - vinyl chloride
4. N/A - Not applicable
5. Per the 2/5/15 NJDEP approval letter of the Final 2013 Baseline Groundwater Report, groundwater monitoring wellsM3MW04, M3MW05, M3MW06, M3MW07A, M3MW08, M3MW09, M3MW10, M3MW11, M3MW12, M3MW13, and M3MW14 were removed from the long term monitoring sampling program and metals (except for M3MW02) were discontinued in 2014.

FIGURES

Figure 1 Layout of FTMM-03 Closed Solid Waste Landfill

Figure 2 FTMM-03 Shallow Groundwater Contours - September 29, 2014



LEGEND:

- Shallow Monitoring Well
- FTMM-03 Landfill Revised Boundary
- Surface Water Feature
- Municipal Boundary
- Installation Boundary
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line

N

1 inch = 130 feet

0 65 130 260 Feet

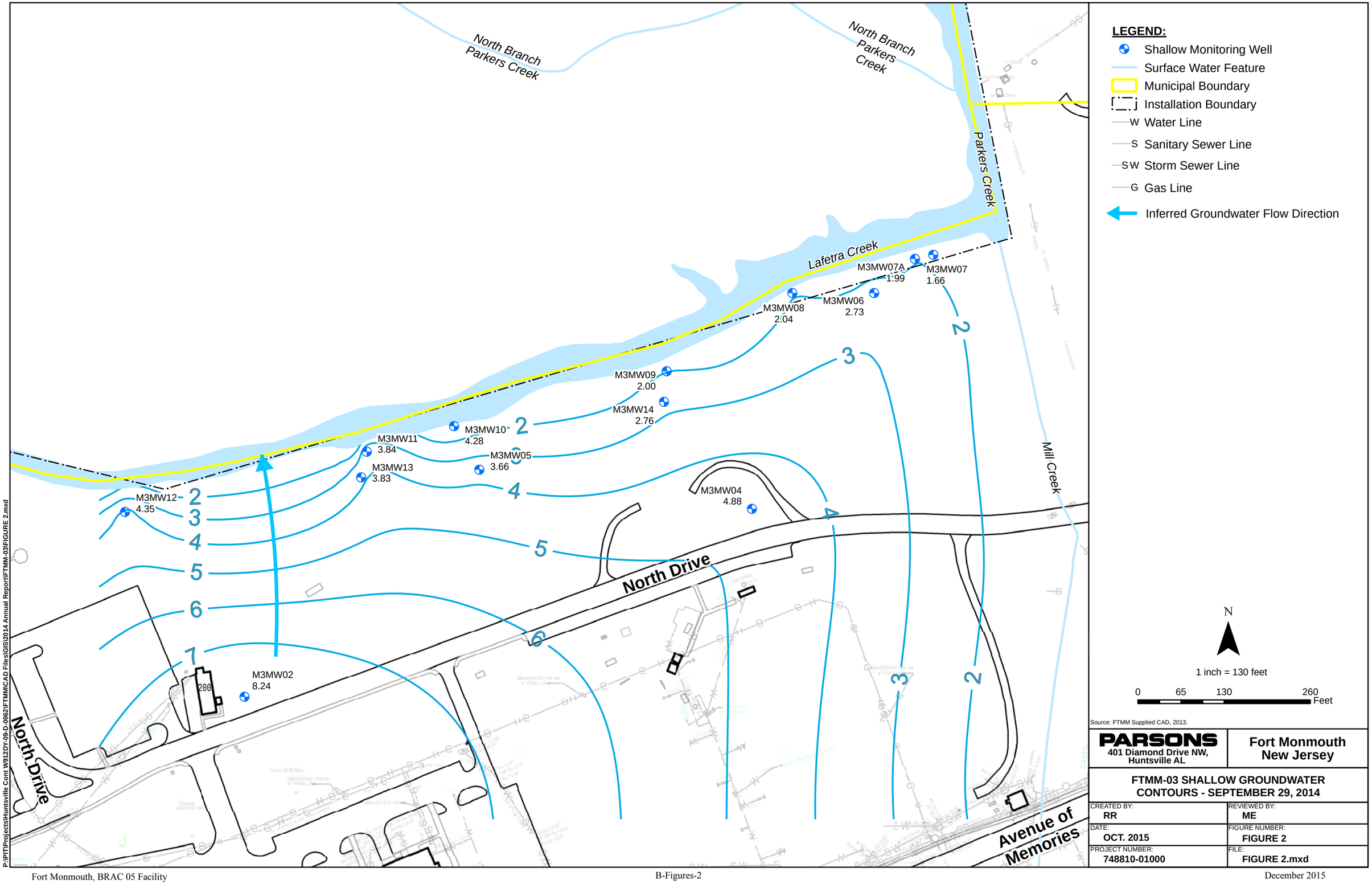
Source: FTMM Supplied CAD, 2013.

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey

LAYOUT OF FTMM-03
CLOSED SOLID WASTE LANDFILL

CREATED BY: RR	REVIEWED BY: ME
DATE: OCT. 2015	FIGURE NUMBER: FIGURE 1
PROJECT NUMBER: 748810-01000	FILE: FIGURE 1.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-03\FIGURE 1.mxd



P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-03\FIGURE 2.mxd

ATTACHMENTS

Attachment A LFPS Field Sheets

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | CLIENT: ACOE | WELL #: M3 MW62

PROJECT: FTMM 4Q GW sampling | WELL PERMIT #: EA0100726

AOC # (AREA): M-3 | DATE: 10/3/14

SCREENED INTERVAL (TOC): 6.85 - 21.85 | SAMPLING PERSONNEL NAME: C. Watson

WELL DIAMETER (in.): 4 | SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0 | FEET OF SATURATED SCREEN (ft): 1.74

WELL DEPTH (TOC): 21.85 | DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 20.1

FEET OF WATER IN WELL (ft): ~~0~~ 1.74 | PUMP INTAKE DEPTH (ft below TOC): 21

PURGING AND SAMPLING *, *

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1110	X		3.46	NA	0.240	NA	309.8	NA	1.60	NA	12.9	NA	18.27	NA	20.36	300
1115	X		3.42	0.04	0.240	0	314.7	4.9	1.74	0.14	3.4	9.5	17.95	0.32	20.62	200
1120	X		3.44	0.02	0.240	0	309.2	5.5	1.64	0.10	1.7	1.7	18.09	0.84	20.76	125
1125	X		3.42	0.02	0.241	0.001	351.5	42.3	1.31	0.33	3.9	2.2	17.43	0.66	20.81	125
1130	X		3.43	0.01	0.240	0.001	368.4	16.9	1.29	0.02	4.4	0.5	17.37	0.06	20.89	125
1135	X		3.43	0	0.239	0.001	382.3	13.9	1.24	0.05	5.9	1.5	17.61	0.24	20.98	125
1140	X		3.43	0	0.240	0.001	385.6	3.3	1.26	0.02	5.8	0.1	17.67	0.06	21.06	125
1145		X	3.43	0	0.239	0.001	385.9	0.3	1.26	0	5.2	0.6	17.70	0.03	21.15	125

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

* DTW and pumping Rate swapped - SEE Above

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | CLIENT: AEOE | WELL #: M3MW07

PROJECT: ETMM 4QGW | WELL PERMIT #: 39-39173

AOC # (AREA): ETMM-3 | DATE: 10/2/14

SCREENED INTERVAL (TOC): 8.85 - 18.85 | SAMPLING PERSONNEL NAME: N. Loizos

WELL DIAMETER (in.) 2 | SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0

WELL DEPTH (TOC): 18.68

FEET OF WATER IN WELL (ft): 9.23

FEET OF SATURATED SCREEN (ft): 8.80

DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 9.45

PUMP INTAKE DEPTH (ft below TOC): 13.85

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1440	X		6.48	NA	3.468	NA	-12.8	NA	3.09	NA	381.0	NA	18.10	NA	350	10.61
1445	X		6.58	0.16	3.490	.022	-36.8	24.0	2.47	0.62	321.6	59.4	18.30	.20	325	11.30
1450	X		6.51	0.07	3.493	.003	-37.8	1.0	1.83	0.64	253.0	68.6	18.49	.19	100	11.36
1455	X		6.50	0.01	3.496	.003	-38.4	0.6	1.89	0.06	253.7	0.7	18.64	.15	100	11.39
1500	X		6.48	0.02	3.513	.017	-43.2	3.8	1.59	0.30	253.9	0.2	17.98	.66	100	11.43
1505	X		6.47	0.01	3.524	.011	-44.4	2.2	1.56	0.03	194.4	59.5	17.61	.37	100	11.46
1510	X		6.46	0.01	3.533	.009	-46.4	2.0	1.60	0.04	137.2	57.2	17.25	.36	100	11.49
1515	X		6.47	0.01	3.538	.005	-46.1	0.3	1.71	0.11	134.2	3.0	17.40	.15	100	11.50
1520	X		6.47	0	3.530	.008	-48.5	2.4	1.74	0.03	137.9	3.7	17.42	.02	100	11.53
1525		X	6.46	0.01	3.529	.001	-49.6	1.1	1.74	0	129.5	8.4	17.19	.23	100	11.49

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

APPENDIX C

FTMM-05: CLOSED SOLID WASTE LANDFILL

APPENDIX C: FTMM-05 Closed Solid Waste Landfill

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1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT

Monitoring wells located within FTMM-05 were gauged on September 29, 2014. Monitoring well locations as well as other site features are provided in **Figure 1**. Details regarding the water level measurements are provided in **Table 1**. Groundwater elevations in monitoring wells ranged from 0.34 (M5MW14) to 10.73 (M5MW15) feet above mean sea level (amsl). The inferred shallow flow direction is to the north-northwest towards Parkers Creek, as shown in **Figure 2**.

During the groundwater gauging, the physical condition of FTMM-05 monitoring wells were assessed. The site monitoring wells were found to be in good condition.

2.0 GROUNDWATER SAMPLING

Groundwater samples were collected from four monitoring wells located at FTMM-05 as part of the annual (fourth quarter) 2014 groundwater sampling event. FTMM-05 is sampled on an annual basis. The groundwater sampling program included measuring the depths to water in monitoring wells at FTMM-05, and sample collection in selected wells using passive diffusion bags (PDBs). PDBs were deployed October 1, 2014 and samples were retrieved on December 19, 2014. A PDB sampling summary is provided in **Table 2**. Groundwater samples were analyzed for Target Compound List (TCL) volatile organic compounds and tentatively identified compounds (VOCs+TICs) via United States Environmental Protection Agency (USEPA) Method SW8260C.

The samples were collected in accordance with the New Jersey Department of Environmental Protection (NJDEP) Field Sampling Procedures Manual (FSPM) and the Sampling Analysis Plan (SAP). Field blanks, duplicates, matrix spike, matrix spike duplicate and quality assurance (QA) split samples were collected for every 5% of samples collected per parameter, per matrix, in accordance with the Quality Assurance Project Plan (QAPP). Trip blanks accompanied each cooler each day in which VOCs were collected for laboratory analysis.

Completed PDB field sheets for each well sampled are provided in **Attachment A**.

3.0 HISTORICAL GROUNDWATER SAMPLING RESULTS

From May 1997 to July 2003, groundwater monitoring wells were sampled for VOCs, semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), and metals at FTMM-05. From July 2003 to December 2009, monitoring wells were sampled solely for VOCs, and from December 2009 to June 2011, monitoring wells were sampled for VOCs and metals.

Since July 2011, the last four historical rounds of groundwater sampling were conducted on a bi-monthly basis and have been comprised of VOC and metals analysis. Several metals were detected in exceedance of their respective NJDEP Ground Water Quality Standards (GWQS) including aluminum, arsenic, iron, lead, manganese, and sodium. However, these metals did not exceed their background concentration established in the 1995 Weston Report.

FTMM-05 monitoring wells M5MW11, M5MW16, M5MW19, M5MW20, and M5MW23 exhibited detections above the NJDEP GWQS of either tetrachloroethene (PCE),

trichloroethene (TCE), vinyl chloride (VC) or a combination of these compounds within the last four historical groundwater monitoring events. Historical groundwater analytical results are presented in **Table 3**.

Groundwater analytical data from samples collected from 10 monitoring wells during the August 2013 event are presented in **Table 4**. Monitoring wells sampled in 2013 exhibited detections above the NJDEP GWQS for PCE (M5MW11, M5MW23), TCE (M5MW20, M5MW23), or VC (M5MW16). The detections from August 2013 appear to be part of a trend of low-level VOC exceedances.

The Final August 2013 Baseline Groundwater Sampling Report was approved by the NJDEP in their February 5, 2015 letter. Based on this approval, 6 out of the 10 groundwater monitoring wells were removed from the long term monitoring program including M5MW10, M5MW12, M5MW13, M5MW14, M5WM18 and M5MW19.

4.0 ANNUAL 2014 (FOURTH QUARTER) GROUNDWATER RESULTS

Groundwater analytical data from the four samples collected during the annual 2014 event are presented in **Table 4**. PCE was detected in the four samples (M5MW11 [1.8J µg/L], M5MW16 [1.7J µg/L], M5MW20 [1.2J µg/L] and M5MW23 [23 µg/L]) at concentrations above the NJDEP GWQS of 1 µg/L. TCE was also detected at M5MW23 with an estimated concentration of 2.8J µg/L above the NJDEP GWQS of 1 µg/L. These detections are located upgradient of and limited to the northern portion of the FTMM-03 landfill.

5.0 FINDINGS AND RECOMMENDATIONS

Historically PCE (M5MW11, M5MW16, M5MW20, and M5MW23) and TCE (M5MW23) have been detected in the groundwater in exceedance of their NJDEP GWQS, respectively. The concentrations appear to be part of an overall trend of low-level VOC exceedances above the NJDEP GWQS with the exception of M5MW23. While TCE concentrations at M5MW23 are part of this same trend, PCE has fluctuated over time ranging from 1.76J µg/L (December 2009) to 50 µg/L (August 2013). Based on the available historical information the fluctuations do not appear to be seasonal. Additionally, PCE concentrations at M5MW23 have decreased from the August 2013 detection of 50 µg/L.

Based on the annual 2014 results, it is recommended that groundwater sampling be continued at M5MW11, M5MW16, M5MW20, and M5MW23 for the analysis of VOCs. These wells will continue to be sampled via PDBs. A review of the historical groundwater sampling results is presented in **Table 5**, which provides the matrix used to determine the status of the wells relative to future groundwater sampling and analysis.

TABLES

Table 1 Groundwater Gauging Data and Elevations (September 29, 2014)

Table 2 PDB Sampling Summary

Table 3 Historical Groundwater Analytical Results

Table 4 Groundwater Analytical Results - 2013 and 2014

Table 5 Review of Historical Groundwater Sampling Results

Table 1
Groundwater Gauging Data and Elevations (September 29, 2014)
Site FTMM-05 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site/Well ID	Installation Date	Well Permit #	Y Coord. (North)	X Coord. (East)	Depth (ft. bgs)	Casing Length (ft)	Screen Length (ft)	TOC Elevation (ft)	Gauge Time	PID Reading (ppm)	Gauged Depth to Water (ft. TOC)	Gauged Depth to Bottom (ft. TOC)	Calculated Groundwater Elevation (ft)
Shallow Monitoring Wells													
M5MW09	12/10/2010	E201015344	539680.00	617420.00	20.0	5.0	15.0	7.90	12:10	0.0	6.16	21.83	1.74
M5MW10	12/14/1994	29-32574	539469.99	617436.96	15.0	5.0	10.0	6.05	11:20	0.0	4.48	17.44	1.57
M5MW11	12/15/1994	29-32575	539702.46	617582.95	15.0	5.0	10.0	10.61	10:17	0.0	7.22	17.15	3.39
M5MW12	8/27/1998	29-39179	539502.58	617410.72	15.0	5.0	10.0	8.58	12:25	0.0	5.95	16.15	2.63
M5MW13	8/31/1998	29-39178	539367.03	617437.99	20.0	5.0	10.0	4.33	11:24	0.0	2.98	18.94	1.35
M5MW14	8/31/1998	29-39177	539178.16	617477.33	20.0	5.0	10.0	4.66	11:27	0.0	4.32	20.43	0.34
M5MW15	3/24/1999	29-40120	539573.94	618119.39	18.0	5.0	13.0	17.40	11:47	0.0	6.67	16.98	10.73
M5MW16	3/24/1999	29-40121	539431.44	618031.86	16.0	3.0	13.0	14.08	11:38	0.0	7.34	18.07	6.74
M5MW18	3/26/1999	29-40123	539430.13	617754.75	18.0	3.0	15.0	13.35	10:33	0.0	7.69	20.45	5.66
M5MW19	3/26/1999	29-40124	539558.48	617759.52	18.0	3.0	15.0	12.93	10:30	0.0	7.54	20.20	5.39
M5MW20	3/25/1999	29-40122	539591.51	617684.12	14.0	4.0	10.0	11.55	10:26	0.0	6.43	16.38	5.12
M5MW23	3/26/1999	29-40125	539824.40	617693.49	18.0	3.0	15.0	11.91	10:13	0.0	8.10	17.92	3.81

Notes:
1) The synoptic round of water levels in the wells was collected on September 29, 2014.
2) Information on well permit number, X and Y coordinates, depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
3) ft = feet
4) DTW = depth to water (measured from the top of well casing)
5) DTB = depth to bottom of well (measured from the top of well casing)
6) bgs = below ground surface
7) ppm = parts per million (of VOCs)
8) TOC = Top of Casing
9) Elevation = feet above mean sea level
10) N/A = information not available

Table 2
PDB Sampling Summary
Site FTMM-05 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site/Well ID	Profile Date	Depth (ft. bgs)	Screen Length (ft.)	Screen Interval (ft. bgs)	TOC Elev. (ft)	Gauge Date	Gauge Time	PID Reading (ppm)	Gauged DTW (ft. below TOC)	Gauged DTB (ft. below TOC)	GW Elevation (ft)	Saturated Screen Length (ft)	PDB Depth to Center of Bag #1 (ft. below TOC)	PDB Depth to Center of Bag #2 (ft. below TOC)	PDB Deploy Date	PDB Deploy Time	PDB Sample Date	PDB Sample Time
M5MW11	8/27/2013	15.0	10.0	5-15	10.61	9/29/2014	10:17	0.0	7.22	17.15	3.39	7.78	9.46	N/A	10/1/2014	13:20	12/19/2014	8:23
M5MW16	8/27/2013	16.0	13.0	3-16	14.08	9/29/2014	11:38	0.0	7.34	18.07	6.74	8.66	14.57	N/A	10/1/2014	11:59	12/19/2014	8:27
M5MW20	8/27/2013	14.0	10.0	4-15	11.55	9/29/2014	10:26	0.0	6.43	16.38	5.12	7.57	13.65	N/A	10/1/2014	13:46	12/9/2014	8:35
M5MW23	8/27/2013	18.0	15.0	3-18	11.91	9/29/2014	10:13	0.0	8.10	17.92	3.81	9.90	10.82	N/A	10/1/2014	13:00	12/9/2014	8:34

Notes:
1) Information on well depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
2) DTW = depth to water (measured from the top of well casing)
3) DTB = depth to bottom of well (measured from the top of well casing)
4) TOC = Top of Casing
5) ft. AMSL = feet above mean sea level
6) LFPS = Low-Flow Purging and Sampling
7) PDB = Passive Diffusion Bag
8) N/A = not applicable
9) bgs = below ground surface

Table 3
Historical Groundwater Analytical Results
Site FTMM-05 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M5MW09			M5MW10																				
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF1	LF2	LF3	46	46 Dup	47	47 Dup	48	48 Dup	49	49 Dup	50	51		52	53	LF54		LF55		LF56		LF57	LF58	LF59	LF60
Date Collected				3/9/2011	6/8/2011	8/13/2011	3/11/2008	3/11/2008	6/3/2008	6/3/2008	8/25/2008	8/25/2008	11/10/2008	11/10/2008	2/26/2009	6/12/2009		9/18/2009	12/28/2009	3/31/2010		6/30/2010		9/26/2010		1/11/2011	2/23/2011	6/8/2011	8/13/2011
ANALYTE/Lab ID				1109501	1124305	1134008	80077.04	80077.03	80185.04	80185.03	80306.04	80306.03	80404.04	80404.03	90077.04	90235.04		90390.04	90490.04	10115.04		10298.08		10411.05		1101905	1106512	1124306	1134007
Volatile Organic Compounds (µg/L)																												
Acetone	6000	NLE	-	<0.32	<0.32	<7.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND		ND		<0.32	<0.32	<0.32	<7.6
Bromodichloromethane	1	80	-	<0.12	<0.12	<0.23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND		ND		<0.12	<0.12	<0.12	<0.23
2-Butanone	300	NLE	-	<0.22	<0.22	<2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND		ND		<0.22	<0.22	<0.22	<2.9
Carbon disulfide	700	NLE	-	<0.12	<0.12	<0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND		ND		<0.12	<0.12	<0.12	<0.18
Chloroform	70	80	-	<0.35	<0.35	<0.21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND		ND		<0.35	<0.35	<0.35	<0.21
1,3-Dichlorobenzene	600	NLE	-	<0.16	<0.16	<0.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND		ND		<0.16	<0.16	<0.16	<0.29
1,1-Dichloroethene	1	7	-	<0.15	<0.15	<0.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND		ND		<0.15	<0.15	<0.15	<0.28
cis-l,2-Dichloroethene	70	70	-	<0.12	<0.12	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND		ND		<0.12	<0.12	<0.12	<0.22
trans -1,2-Dichloroethene	100	100	-	<0.14	<0.14	<0.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND		ND		<0.14	<0.14	<0.14	<0.31
Methylene chloride	3	5	-	<0.26	<0.26	<0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND		ND		<0.26	<0.26	<0.26	<0.2
Tetrachloroethene	1	5	-	<0.14	<0.14	<0.32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND		ND		<0.14	<0.14	<0.14	<0.32
Toluene	600	1000	-	<0.12	<0.12	<0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.65	J	ND	ND	ND		ND		ND		<0.12	<0.12	<0.12	<0.15
Trichloroethene	1	5	-	<0.11	<0.11	<0.21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND		ND		<0.11	<0.11	<0.11	<0.21
Vinyl chloride	1	2	-	<0.22	<0.22	<0.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND		ND		<0.22	<0.22	<0.22	<0.27
TICs*	500	NLE	-	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND		ND		0	0	0	0
Metals (µg/L)																												
Aluminum	200	NLE	121000	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	20.7		ND		13.8		<200	<200	<200	<200
Antimony	6	6	20.70	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	5.45	ER	ND		7.59	ER	<6.0	<6.0	<6.0	<6.0
Arsenic	3	10	89.30	<3.0	5.9	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	ND		ND		ND		<3.0	<3.0	<3.0	<3.0
Barium	6000	2000	699.00	473	817	416	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	24.6		24		36.2		<200	<200	<200	<200
Beryllium	1	4	2.10	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	ND		ND		ND		<1.0	<1.0	<1.0	<1.0
Cadmium	4	5	9.50	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	ND		ND		ND		<3.0	<3.0	<3.0	<3.0
Calcium	NLE	NLE	45400.00	94300	91600	54600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	14100		12600		14000		38800	33900	16600	13500
Chromium	70	100	191.00	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	ND		1.17	ER	1.15	ER	<10	<10	<10	<10
Cobalt	NLE	NLE	18.30	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	ND		ND		ND		<50	<50	<50	<50
Copper	1300	1300	65.60	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	ND		3.14	ER	ND		<10	<10	<10	<10
Iron	300	NLE	431000	17000	65600	29100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	4230		3660		3880		4990	4810	5190	4200
Lead	5	15	22.70	<3.0	10.4	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	ND		ND		ND		<3.0	<3.0	<3.0	<3.0
Magnesium	NLE	NLE	62700	11500	11100	8030	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	15500		17000		18800		44100	33200	20200	17800
Manganese	50	NLE	331	483	723	402	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	185		40.1		41.3		286	557	77.3	46.2
Mercury	2	2	0.26	<0.2	<0.2	<0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	ND		ND		ND		NA	<0.2	<0.2	<0.2
Nickel	100	NLE	187	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	ND		ND		0.42	ER	<10	<10	<10	<10
Potassium	NLE	NLE	137000	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	12700		17800		18800		27400	16000	17100	18600
Selenium	40	50	29.60	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	13.7		NR		ND		<10	<10	<10	<10
Silver	40	NLE	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	ND		0.81	ER	0.531		<10	<10	<10	<10
Sodium	50000	NLE	21500	39800	40100	46800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	59900		19800		25900		292000	267000	67400	37600
Thallium	2	2	5.50	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	ND		ND		ND		<2.0	<2.0	<2.0	<2.0
Vanadium	NLE	NLE	108	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	ND		ND		ND		<50	<50	<50	<50
Zinc	2000	NLE	233	589	831	175	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	3.3	ER	ND		ND		<20	<20	<20	<20

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for total VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP = NJDEP Ground Water Quality Standards as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

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b - Elevated sample detection limit due to difficult sample matrix

MCLs for bromodichlormethane and chloroform are for total trihalomethanes

Table 3
Historical Groundwater Analytical Results
Site FTMM-05 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M5MW11																						
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	45	46	47	48	49	49 Dup	50	51	52	LF53	LF54	LF54 Dup	LF55	LF56	LF56 Dup	LF57	LF58	LF59	LF60	LF61	LF62	LF63
Date Collected				3/11/2008	6/3/2008	8/25/2008	11/10/2008	2/26/2009	2/26/2009	6/12/2009	9/18/2009	12/28/2009	3/30/2010	6/30/2010	6/30/2010	9/26/2010	1/5/2011	1/5/2011	2/23/2011	4/12/2011	4/15/2011	4/22/2011	4/29/2011	6/6/2011	7/5/2011
ANALYTE/Lab ID				80077.05	80185.05	80306.05	80404.05	90077.05	90077.03	90235.05	90390.05	90490.05	10113.01	10298.04	10298.03	10411.11	1100904	1100903	1106509	1114205	1114905	1116504	1118204	1123709	1127604
Volatile Organic Compounds (µg/L)																										
Acetone	6000	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<7.6
Bromodichloromethane	1	80	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.23
2-Butanone	300	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<2.9
Carbon disulfide	700	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.18
Chloroform	70	80	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35	<0.21
1,3-Dichlorobenzene	600	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J	ND	ND	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.29
1,1-Dichloroethene	1	7	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.28
cis-l,2-Dichloroethene	70	70	-	0.4 J	0.53 J	8.4	6.93	1.55	1.28 J	2.6	11.56	1.62	ND	2.22	2.18	17.06	5.89	6.02	5.05	11.31	7.14	3.58	0.63	7.47	3
trans -1,2-Dichloroethene	100	100	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.31
Methylene chloride	3	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.2
Tetrachloroethene	1	5	-	2.02	2.93	ND	2.47	0.94	1.16 J	2.74	1	1.73	0.69	2.51	2.61	0.85	2.28	2.33	2.23	1.16	2.04	2.63	3.08	1.35	3.6
Toluene	600	1000	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.15
Trichloroethene	1	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.21
Vinyl chloride	1	2	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.27
TICs*	500	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	0	0	0	0	0	0	0	0
Metals (µg/L)																										
Aluminum	200	NLE	121000	NA	NA	NA	NA	NA	NA	NA	NA	NA	292	29.5	45.3	23.8	<200	<200	<200	NA	NA	NA	NA	<200	NA
Antimony	6	6	20.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	6.9 ER	9.99 ER	<6.0	<6.0	<6.0	NA	NA	NA	NA	<6.0	NA
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	1.04 ER	0.95 ER	1.07 ER	<3.0	<3.0	<3.0	NA	NA	NA	NA	5.2	NA
Barium	6000	2000	699.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.74	9.71	9.96	10.9	<200	<200	<200	NA	NA	NA	NA	<200	NA
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0	NA
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.555 ER	0.672 ER	1.71 ER	<3.0	<3.0	<3.0	NA	NA	NA	NA	<3.0	NA
Calcium	NLE	NLE	45400.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	13000	38000	38900	22700	20400	21000	16500	NA	NA	NA	NA	18000	NA
Chromium	70	100	191.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 ER	ND	ND	1.27 ER	<10	<10	<10	<0.01[1]	NA	NA	NA	<10	<0.01[a]
Cobalt	NLE	NLE	18.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	1.27	<50	<50	<50	NA	NA	NA	NA	<50	NA
Copper	1300	1300	65.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.42 ER	3.72 ER	3.86 ER	2.17 ER	<10	<10	<10	NA	NA	NA	NA	<10	NA
Iron	300	NLE	431000	NA	NA	NA	NA	NA	NA	NA	NA	NA	1670	3040	3780	38000	1500	1640	782	12600	3950	4690	2670	38600	7110
Lead	5	15	22.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	2.77 ER	4.45 ER	<3.0	<3.0	<3.0	NA	NA	NA	NA	<3.0	NA
Magnesium	NLE	NLE	62700	NA	NA	NA	NA	NA	NA	NA	NA	NA	1610	15300	15600	8810	5330	5510	<5000	NA	NA	NA	NA	6770	NA
Manganese	50	NLE	331	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.98 ER	26.4	29.8	70.5	<15	<15	<15	26.7	<15	<15	<15	63.2	25.3
Mercury	2	2	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.12 ER	ND	ND	ND	NA	NA	<0.2	NA	NA	NA	NA	<0.2	NA
Nickel	100	NLE	187	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.47 ER	1.83 ER	2.05 ER	2.97 ER	<10	<10	<10	NA	NA	NA	NA	<10	NA
Potassium	NLE	NLE	137000	NA	NA	NA	NA	NA	NA	NA	NA	NA	2700	2760	2820	1580	<10000	<10000	<10000	NA	NA	NA	NA	<10000	NA
Selenium	40	50	29.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	21.4	NR	NR	ND	<10	<10	<10	NA	NA	NA	NA	<10	NA
Silver	40	NLE	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.11 ER	ND	ND	5	<10	<10	<10	NA	NA	NA	NA	<10	NA
Sodium	50000	NLE	21500	NA	NA	NA	NA	NA	NA	NA	NA	NA	3720	40400	41800	58400	22200	22800	18400	NA	NA	NA	NA	53600	NA
Thallium	2	2	5.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<2.0	<2.0	<2.0	NA	NA	NA	NA	<2.0	NA
Vanadium	NLE	NLE	108	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.15 ER	ND	0.735 ER	ND	<50	<50	<50	NA	NA	NA	NA	<50	NA
Zinc	2000	NLE	233	NA	NA	NA	NA	NA	NA	NA	NA	NA	20.7 ER	133	139	147	86.2	89.5	82.7	NA	NA	NA	NA	88.9	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for total VOCs and SVOCs. No individual compound can exceed 100 µg/L.

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MCLs for bromodichlormethane and chloroform are for total trihalomethanes

Table 3
Historical Groundwater Analytical Results
Site FTMM-05 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M5MW11				M5MW12																					
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF64	LF65	LF66	LF66 Dup	38	39	40	41	42	43	43 Dup	44	45	LF46		LF47		LF48		LF48 Dup		LF49	LF49 Dup	LF50	LF51
Date Collected				7/29/2011	8/13/2011	8/19/2011	8/19/2011	3/11/2008	6/3/2008	8/25/2008	11/10/2008	2/26/2009	6/12/2009	6/12/2009	9/18/2009	12/28/2009	3/31/2010		6/30/2010		9/26/2010		9/26/2010		1/11/2011	1/11/2011	2/23/2011	6/8/2011
ANALYTE/Lab ID				1131504	1134012	1134804		80077.06	80185.06	80306.06	80404.06	90077.06	90235.06	90235.03	90390.06	90490.06	10115.03		10298.07		10411.04		10411.03		1101904	1101903	1106511	1124304
Volatile Organic Compounds (µg/L)																												
Acetone	6000	NLE	-	<7.6	<7.6	<7.6	<7.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		<0.32	<0.32	<0.32	<0.32
Bromodichloromethane	1	80	-	<0.23	<0.23	<0.23	<0.23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		<0.12	<0.12	<0.12	<0.12
2-Butanone	300	NLE	-	<2.9	<2.9	<2.9	<2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		<0.22	<0.22	<0.22	<0.22
Carbon disulfide	700	NLE	-	<0.18	<0.18	<0.18	<0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		<0.12	<0.12	<0.12	<0.12
Chloroform	70	80	-	<0.21	<0.21	<0.21	<0.21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		<0.35	<0.35	<0.35	<0.35
1,3-Dichlorobenzene	600	NLE	-	<0.29	<0.29	<0.29	<0.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		<0.16	<0.16	<0.16	<0.16
1,1-Dichloroethene	1	7	-	<0.28	<0.28	<0.28	<0.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		<0.15	<0.15	<0.15	<0.15
cis-l,2-Dichloroethene	70	70	-	4.7	10.4	2.2	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		<0.12	<0.12	<0.12	<0.12
trans -1,2-Dichloroethene	100	100	-	<0.31	<0.31	<0.31	<0.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		<0.14	<0.14	<0.14	<0.14
Methylene chloride	3	5	-	<0.2	<0.2	<0.2	<0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		<0.26	<0.26	<0.26	<0.26
Tetrachloroethene	1	5	-	1.1	<0.32	4.9	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		<0.14	<0.14	<0.14	<0.14
Toluene	600	1000	-	<0.15	<0.15	<0.15	<0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		<0.12	<0.12	<0.12	<0.12
Trichloroethene	1	5	-	<0.21	<0.21	<0.21	<0.21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		<0.11	<0.11	<0.11	<0.11
Vinyl chloride	1	2	-	<0.27	<0.27	<0.27	<0.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		<0.22	<0.22	<0.22	<0.22
TICs*	500	NLE	-	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		0	0	0	0
Metals (µg/L)																												
Aluminum	200	NLE	121000	NA	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	46.6		24.2		14.6		8.4		<200	<200	<200	<200
Antimony	6	6	20.70	NA	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.31	ER	5.26	ER	27.5		24.1		<6.0	<6.0	<6.0	<6.0
Arsenic	3	10	89.30	NA	5.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		1.03	ER	6.08		5.98		<3.0	<3.0	<3.0	<3.0
Barium	6000	2000	699.00	NA	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	64.3		21.5		214		203		415	426	313	<200
Beryllium	1	4	2.10	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		ND		<1.0	<1.0	<1.0	<1.0
Cadmium	4	5	9.50	NA	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		0.692	ER	1.57	ER	1.44	ER	<3.0	<3.0	<3.0	<3.0
Calcium	NLE	NLE	45400.00	NA	19900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	26500		24700		131000		120000		99900	105000	68100	36200
Chromium	70	100	191.00	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		1.79	ER	ND		ND		<10	<10	<10	<10
Cobalt	NLE	NLE	18.30	NA	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		ND		<50	<50	<50	<50
Copper	1300	1300	65.60	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		4.17	ER	2.5	ER	2.57	ER	<10	<10	<10	<10
Iron	300	NLE	431000	31100	38500	6340	5720	NA	NA	NA	NA	NA	NA	NA	NA	NA	11600		9260		38800		35900		35700	37600	25400	21500
Lead	5	15	22.70	NA	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		4.43	ER	4.66	ER	<3.0	<3.0	<3.0	<3.0
Magnesium	NLE	NLE	62700	NA	7450	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	32400		39000		143000		129000		76900	82200	47700	42000
Manganese	50	NLE	331	62.9	67.6	20.5	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	176		64.9		1230		1170		1320	1350	978	251
Mercury	2	2	0.26	NA	<0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		ND		NA	NA	<0.2	<0.2
Nickel	100	NLE	187	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		ND		<10	<10	<10	<10
Potassium	NLE	NLE	137000	NA	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21000		25500		53600		47400		32200	34200	17700	23000
Selenium	40	50	29.60	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.9		NR		ND		ND		<10	<10	<10	<10
Silver	40	NLE	ND	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		1.38	ER	3.88		3.42		<10	<10	<10	<10
Sodium	50000	NLE	21500	NA	64500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	109000		89100		744000		683000		544000	625000	400000	173000
Thallium	2	2	5.50	NA	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		ND		<2.0	<2.0	<2.0	<2.0
Vanadium	NLE	NLE	108	NA	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.38	ER	ND		ND		ND		<50	<50	<50	<50
Zinc	2000	NLE	233	NA	109	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.37	ER	ND		ND		ND		<20	<20	<20	<20

Notes:

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MCLs for bromodichlormethane and chloroform are for total trihalomethanes

Table 3
Historical Groundwater Analytical Results
Site FTMM-05 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M5MW12			M5MW13															M5MW14		
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF51 Dup	LF52	LF52 Dup	42	43	44	45	46	47	48	49	LF50		LF51		LF52		LF53	LF54	LF55	LF56	41	42	43
Date Collected				6/8/2011	8/13/2011	8/13/2011	3/11/2008	6/3/2008	8/25/2008	11/10/2008	2/26/2009	6/12/2009	9/18/2009	12/28/2009	3/31/2010		6/30/2010		9/26/2010		1/11/2011	2/23/2011	6/8/2011	8/13/2011	3/11/2008	6/3/2008	8/25/2008
ANALYTE/Lab ID				1124303	1134004	11340	80077.07	80185.07	80306.07	80404.07	90077.07	90235.07	90390.07	90490.07	10115.05		10298.09		10411.06		1101906	1106513	1124307	1134005	80077.08	80185.08	80306.08
Volatile Organic Compounds (µg/L)																											
Acetone	6000	NLE	-	<0.32	<7.6	<7.6	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.32	<0.32	<0.32	<7.6	ND	ND	ND
Bromodichloromethane	1	80	-	<0.12	<0.23	<0.23	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.12	<0.12	<0.12	<0.23	ND	ND	ND
2-Butanone	300	NLE	-	<0.22	<2.9	<2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.22	<0.22	<0.22	<2.9	ND	ND	ND
Carbon disulfide	700	NLE	-	<0.12	<0.18	<0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.12	<0.12	<0.12	<0.18	ND	ND	ND
Chloroform	70	80	-	<0.35	<0.21	<0.21	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.35	<0.35	<0.35	<0.21	ND	ND	ND
1,3-Dichlorobenzene	600	NLE	-	<0.16	<0.29	<0.29	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.16	<0.16	<0.16	<0.29	ND	ND	ND
1,1-Dichloroethene	1	7	-	<0.15	<0.28	<0.28	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.15	<0.15	<0.15	<0.28	ND	ND	ND
cis-l,2-Dichloroethene	70	70	-	<0.12	<0.22	<0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.12	<0.12	<0.12	<0.22	ND	ND	ND
trans -1,2-Dichloroethene	100	100	-	<0.14	<0.31	<0.31	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.14	<0.14	<0.14	<0.31	ND	ND	ND
Methylene chloride	3	5	-	<0.26	<0.2	<0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.26	<0.26	<0.26	<0.2	ND	ND	ND
Tetrachloroethene	1	5	-	<0.14	<0.32	<0.32	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.14	<0.14	<0.14	<0.32	ND	ND	ND
Toluene	600	1000	-	<0.12	<0.15	<0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.12	<0.12	<0.12	<0.15	ND	ND	ND
Trichloroethene	1	5	-	<0.11	<0.21	<0.21	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.11	<0.11	<0.11	<0.21	ND	ND	ND
Vinyl chloride	1	2	-	<0.22	<0.27	<0.27	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.22	<0.22	<0.22	<0.27	ND	ND	ND
TICs*	500	NLE	-	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		0	0	0	0	ND	ND	ND
Metals (µg/L)																											
Aluminum	200	NLE	121000	350	725	791	NA	NA	NA	NA	NA	NA	NA	NA	19.5		22.4		ND		<200	<200	<200	<200	NA	NA	NA
Antimony	6	6	20.70	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	6.28	ER	6.32	ER	30.1		<6.0	<6.0	<6.0	<6.0	NA	NA	NA
Arsenic	3	10	89.30	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		6.4		<3.0	<3.0	<3.0	<3.0	NA	NA	NA
Barium	6000	2000	699.00	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	114		91.7		359		436	238	<200	<200	NA	NA	NA
Beryllium	1	4	2.10	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<1.0	<1.0	<1.0	<1.0	NA	NA	NA
Cadmium	4	5	9.50	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	0.514	ER	ND		1.25	ER	<3.0	<3.0	<3.0	<3.0	NA	NA	NA
Calcium	NLE	NLE	45400.00	37700	33800	31900	NA	NA	NA	NA	NA	NA	NA	NA	28400		23900		154000		79500	49700	33400	29800	NA	NA	NA
Chromium	70	100	191.00	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<10	<10	<10	14.3	NA	NA	NA
Cobalt	NLE	NLE	18.30	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<50	<50	<50	<50	NA	NA	NA
Copper	1300	1300	65.60	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	ND		3.12	ER	1.94	ER	<10	<10	<10	<10	NA	NA	NA
Iron	300	NLE	431000	30800	28300	19700	NA	NA	NA	NA	NA	NA	NA	NA	8990		8550		24400		7830	7190	8040	8180	NA	NA	NA
Lead	5	15	22.70	<3.0	5	5.1	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		3.4	ER	<3.0	<3.0	<3.0	<3.0	NA	NA	NA
Magnesium	NLE	NLE	62700	43200	41600	40100	NA	NA	NA	NA	NA	NA	NA	NA	19200		20600		245000		82000	43700	27000	27100	NA	NA	NA
Manganese	50	NLE	331	271	192	160	NA	NA	NA	NA	NA	NA	NA	NA	320		195		1170		885	600	391	313	NA	NA	NA
Mercury	2	2	0.26	<0.2	<0.2	<0.2	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		NA	<0.2	<0.2	<0.2	NA	NA	NA
Nickel	100	NLE	187	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<10	<10	<10	<10	NA	NA	NA
Potassium	NLE	NLE	137000	23800	25800	24400	NA	NA	NA	NA	NA	NA	NA	NA	9190		12600		68300		33300	15100	11300	14000	NA	NA	NA
Selenium	40	50	29.60	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	40.2		NR		ND		<10	<10	<10	<10	NA	NA	NA
Silver	40	NLE	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	ND		1.7	ER	0.529		<10	<10	<10	<10	NA	NA	NA
Sodium	50000	NLE	21500	188000	177000	171000	NA	NA	NA	NA	NA	NA	NA	NA	143000		106000		1870000		587000	378000	217000	233000	NA	NA	NA
Thallium	2	2	5.50	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<2.0	<2.0	<2.0	<2.0	NA	NA	NA
Vanadium	NLE	NLE	108	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	0.817	ER	ND		ND		<50	<50	<50	<50	NA	NA	NA
Zinc	2000	NLE	233	<20	32.9	40.3	NA	NA	NA	NA	NA	NA	NA	NA	1.26		ND		ND		<20	<20	<20	<20	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for total VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP = NJDEP Ground Water Quality Standards as per N.J.A.C. 7:9-6 (July 22, 2010)
USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)
LF = Low-flow sampling method used to collect sample
< = Analyte does not exceed the detection limit shown
J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)
NA = Not analyzed
ND = Not detected
NLE = No limit established
ER = Estimated Result
b - Elevated sample detection limit due to difficult sample matrix
MCLs for bromodichlormethane and chloroform are for total trihalomethanes

Table 3
Historical Groundwater Analytical Results
Site FTMM-05 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M5MW14														M5MW16							
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	44	45	46	47	47 Dup	LF48	LF49	LF50	LF51	LF52	LF53	LF54	LF55	38	39	40	41	42	43	44	45
Date Collected				11/10/2008	2/26/2009	6/12/2009	9/18/2009	9/18/2009	12/28/2009	3/31/2010	6/30/2010	9/26/2010	1/11/2011	2/23/2011	6/8/2011	8/13/2011	3/11/2008	6/3/2008	8/25/2008	11/10/2008	2/26/2009	6/12/2009	9/18/2009	12/28/2009
ANALYTE/Lab ID				80404.08	90077.08	90235.08	90390.08	90390.03	90490.08	10115.06	10298.1	10411.07	1101907	1106510	1124308	1134006	80077.09	80185.09	80306.09	80404.09	90077.09	90235.09	90390.09	90490.09
Volatile Organic Compounds (µg/L)																								
Acetone	6000	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.32	<0.32	<0.32	<7.6	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.23	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.22	<0.22	<0.22	<2.9	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.18	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.35	<0.35	<0.35	<0.21	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.16	<0.16	<0.16	<0.29	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	1	7	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.15	<0.15	<0.15	<0.28	ND	ND	ND	ND	ND	ND	ND	ND
cis-l,2-Dichloroethene	70	70	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.22	8.48	3.23	13.2	4.23	14.93	5.14	1.87	2.52
trans -1,2-Dichloroethene	100	100	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.14	<0.14	<0.14	<0.31	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	3	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.26	<0.26	<0.26	<0.2	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.14	<0.14	<0.14	<0.32	6.93	4.42	5.92	4.43	1.75 J	2.99	1.95	4.9
Toluene	600	1000	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.15	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.11	<0.11	<0.11	<0.21	0.74 J	0.75 J	1.99 J	1.36 J	1.58 J	0.5 J	ND	ND
Vinyl chloride	1	2	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.22	<0.22	<0.22	<0.27	ND	ND	1.2 J	ND	1.28 J	ND	ND	ND
TICs*	500	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																								
Aluminum	200	NLE	121000	NA	NA	NA	NA	NA	NA	21.2	ND	ND	<200	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	6	6	20.70	NA	NA	NA	NA	NA	NA	10.4	6.04 ER	15.4	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	NA	ND	1.24 ER	ND	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA
Barium	6000	2000	699.00	NA	NA	NA	NA	NA	NA	26.9	25.6	30.7	<200	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	NA	ND	ND	ND	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	NA	ND	ND	ND	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	NLE	NLE	45400.00	NA	NA	NA	NA	NA	NA	43800	49600	63300	45600	51000	59700	54300	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	70	100	191.00	NA	NA	NA	NA	NA	NA	ND	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NLE	NLE	18.30	NA	NA	NA	NA	NA	NA	ND	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1300	1300	65.60	NA	NA	NA	NA	NA	NA	ND	2.22 ER	1.02 ER	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Iron	300	NLE	431000	NA	NA	NA	NA	NA	NA	1080	563	701	5010	1550	13900	11500	NA	NA	NA	NA	NA	NA	NA	NA
Lead	5	15	22.70	NA	NA	NA	NA	NA	NA	ND	ND	ND	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	NLE	NLE	62700	NA	NA	NA	NA	NA	NA	16000	16300	20600	20200	17800	18900	19800	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	50	NLE	331	NA	NA	NA	NA	NA	NA	16.5	14.7	17.4	73	27.6	112	79.3	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	2	0.26	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	<0.2	0.28	0.46	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	100	NLE	187	NA	NA	NA	NA	NA	NA	ND	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	NLE	NLE	137000	NA	NA	NA	NA	NA	NA	12900	12200	15700	13200	13200	12000	12700	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	40	50	29.60	NA	NA	NA	NA	NA	NA	60.8	NR	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Silver	40	NLE	ND	NA	NA	NA	NA	NA	NA	2.04	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	50000	NLE	21500	NA	NA	NA	NA	NA	NA	8060	8900	11100	42400	10200	64600	89400	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	5.50	NA	NA	NA	NA	NA	NA	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	NLE	NLE	108	NA	NA	NA	NA	NA	NA	ND	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	2000	NLE	233	NA	NA	NA	NA	NA	NA	1.44 ER	ND	ND	<20	<20	71.8	35.8	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for total VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP = NJDEP Ground Water Quality Standards as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

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b - Elevated sample detection limit due to difficult sample matrix

MCLs for bromodichlormethane and chloroform are for total trihalomethanes

Table 3
Historical Groundwater Analytical Results
Site FTMM-05 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M5MW16																																	
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF46		LF47		LF48		LF48 Dup		LF49		LF49 Dup		LF50	LF51		LF51 Dup		LF52		LF52 Dup		LF53		LF53 Dup		LF54		LF54 Dup		LF55		LF55 Dup		LF56		LF56 Dup		LF57		LF57 Dup	
Date Collected				3/30/2010		6/30/2010		9/27/2010		9/27/2010		1/4/2011		1/4/2011		2/23/2011	4/12/2011		4/12/2011		4/15/2011		4/15/2011		4/22/2011		4/22/2011		4/29/2011		4/29/2011		6/6/2011		6/6/2011		7/5/2011		7/5/2011		7/29/2011		7/29/2011	
ANALYTE/Lab ID				10113.03		10298.05		10412.04		10412.03		1100704		1100703		1106505	1114204		1114203		1114904		1114903		1116505		1116503		1118205		1118203		1123704		1123703		1127605		1127603		1131505		1131503	
Volatile Organic Compounds (µg/L)																																										
Acetone	6000	NLE	-	ND		ND		ND		ND		<0.32		<0.32		<0.32	0.32		<0.32		<0.32		<0.32		<0.32		<0.32		<0.32		<0.32		<0.32		<0.32		<7.6		<7.6		15.3		15.8	
Bromodichloromethane	1	80	-	ND		ND		ND		ND		<0.12		<0.12		<0.12	0.12		<0.12		<0.12		<0.12		<0.12		<0.12		<0.12		<0.12		<0.12		<0.12		<0.23		<0.23		<0.23		<0.23	
2-Butanone	300	NLE	-	ND		ND		ND		ND		<0.22		<0.22		<0.22	0.22		<0.22		<0.22		<0.22		<0.22		<0.22		<0.22		<0.22		<0.22		<0.22		<2.9		<2.9		<2.9		<2.9	
Carbon disulfide	700	NLE	-	ND		ND		ND		ND		<0.12		<0.12		<0.12	0.12		<0.12		<0.12		<0.12		<0.12		<0.12		<0.12		<0.12		<0.12		<0.12		<0.18		<0.18		0.4	J	0.42	J
Chloroform	70	80	-	ND		ND		ND		ND		<0.35		<0.35		<0.35	0.35		<0.35		<0.35		<0.35		<0.35		<0.35		<0.35		<0.35		<0.35		<0.35		<0.21		<0.21		2.9		2.9	
1,3-Dichlorobenzene	600	NLE	-	ND		ND		ND		ND		<0.16		<0.16		<0.16	0.16		<0.16		<0.16		<0.16		<0.16		<0.16		<0.16		<0.16		<0.16		<0.16		<0.29		<0.29		<0.29		<0.29	
1,1-Dichloroethene	1	7	-	ND		ND		ND		ND		<0.15		<0.15		<0.15	0.15		<0.15		<0.15		<0.15		<0.15		<0.15		<0.15		<0.15		<0.15		<0.15		<0.28		<0.28		<0.28		<0.28	
cis-l,2-Dichloroethene	70	70	-	10.26		10.27		1.71		1.84		4.64		4.37		33.47	8.45		9.11		4.13		3.57		16.63		15.21		8.57		8.94		5.17		4.97		2.1		2.1		22		23.2	
trans -1,2-Dichloroethene	100	100	-	ND		ND		ND		ND		<0.14		<0.14		<0.14	0.14		<0.14		<0.14		<0.14		<0.14		<0.14		<0.14		<0.14		<0.14		<0.14		<0.31		<0.31		<0.31		<0.31	
Methylene chloride	3	5	-	ND		ND		ND		ND		<0.26		<0.26		<0.26	0.26		<0.26		<0.26		<0.26		<0.26		<0.26		<0.26		<0.26		<0.26		<0.26		1.2		<0.2		<0.2		<0.2	
Tetrachloroethene	1	5	-	1.36		1.56		3.39		3.86		3.72		3.6		<0.14	0.86		0.88		1.57		<0.14		1.12		0.94		0.88		1.06		0.96		0.88		1.8		1.8		3.2		3.2	
Toluene	600	1000	-	ND		ND		ND		ND		<0.12		<0.12		<0.12	0.12		<0.12		<0.12		<0.12		<0.12		<0.12		<0.12		<0.12		<0.12		<0.12		<0.15		<0.15		<0.15		<0.15	
Trichloroethene	1	5	-	1.84		1.13		0.73		0.81		0.45	J	0.41	J	0.97	0.88		0.94		0.44	J	0.42	J	1.54		1.36		0.89		1.02		0.38	J	0.35	J	<0.21		<0.21		1.9		2.1	
Vinyl chloride	1	2	-	ND		1.15		ND		ND		<0.22		<0.22		1.65	0.34	J	0.36	J	<0.22		<0.22		0.46	J	0.41	J	0.28	J	0.27	J	0.33	J	0.28	J	<0.27		<0.27		1.9		2	
TICs*	500	NLE	-	ND		ND		ND		ND		0		0		0	0		0		0		0		0		0		0		0		0		0		0		0		0		0	
Metals (µg/L)																																										
Aluminum	200	NLE	121000	334		155		203		210		208		225		297	NA		NA		NA		NA		NA		NA		NA		398		788		NA		NA		NA		NA	
Antimony	6	6	20.70	6.25	ER	ND		ND		ND		<6.0		<6.0		<6.0	NA		NA		NA		NA		NA		NA		NA		NA		<6.0		<6.0		NA		NA		NA		NA	
Arsenic	3	10	89.30	1.26	ER	4.51	ER	4.68	ER	4.52	ER	<3.0		<3.0		<3.0	NA		NA		NA		NA		NA		NA		NA		NA		6.8		6.5		NA		NA		NA		NA	
Barium	6000	2000	699.00	66.7		128		91.2		91.7		<200		<200		<200	NA		NA		NA		NA		NA		NA		NA		NA		<200		<200		NA		NA		NA		NA	
Beryllium	1	4	2.10	0.079	ER	0.124	ER	0.171		0.213	ER	<1.0		<1.0		<1.0	NA		NA		NA		NA		NA		NA		NA		NA		<1.0		<1.0		NA		NA		NA		NA	
Cadmium	4	5	9.50	0.667	ER	0.785	ER	ND		ND		<3.0		<3.0		<3.0	NA		NA		NA		NA		NA		NA		NA		NA		<3.0		<3.0		NA		NA		NA		NA	
Calcium	NLE	NLE	45400.00	11500		14600		8510		8610		<5000		<5000		7180	NA		NA		NA		NA		NA		NA		NA		NA		6320		5660		NA		NA		NA		NA	
Chromium	70	100	191.00	ND		ND		ND		ND		<10		<10		<10	<0.01	a	<0.01	a	NA		NA		NA		NA		NA		NA		<10		<10		<0.01	a	<0.01	a	NA		NA	
Cobalt	NLE	NLE	18.30	0.746		2.24		0.84		0.742		<50		<50		<50	NA		NA		NA		NA		NA		NA		NA		NA		<50		<50		NA		NA		NA		NA	
Copper	1300	1300	65.60	ND		3.15	ER	1.09	ER	1.05	ER	<10		<10		<10	NA		NA		NA		NA		NA		NA		NA		NA		<10		<10		NA		NA		NA		NA	
Iron	300	NLE	431000	12700		15500		5640		5400		563		586		8110	17500		15200		8210		8740		10500		12400		8390		7740		9280		10400		5440		7110		74300		160000	b
Lead	5	15	22.70	ND		ND		ND		ND		<3.0		<3.0		<3.0	NA		NA		NA		NA		NA		NA		NA		NA		<3.0		<3.0		NA		NA		NA		NA	
Magnesium	NLE	NLE	62700	4400		6260		3670		3710		<5000		<5000		<5000	NA		NA		NA		NA		NA		NA		NA		NA		<5000		<5000		NA		NA		NA		NA	
Manganese	50	NLE	331	57.4		87.8		65.2		65.4		35.4		35.8		33.3	106		107		132		134		34.9		33.1		73.6		70.6		45.3		43.2		27.3		27.9		79.8		108	b
Mercury	2	2	0.26	0.12	ER	ND		ND		ND		NA		NA		<0.2	NA		NA		NA		NA		NA		NA		NA		NA		<0.2		<0.2		NA		NA		NA		NA	
Nickel	100	NLE	187	2.27	ER	5.05		3.12	ER	3.07	ER	<10		<10		<10	NA		NA		NA		NA		NA		NA		NA		NA		<10		<10		NA		NA		NA		NA	
Potassium	NLE	NLE	137000	5510		5410		4350		4290		<10000		<10000		<10000	NA		NA		NA		NA		NA		NA		NA		NA		<10000		<10000		NA		NA		NA		NA	
Selenium	40	50	29.60	7.16		NR		1.56	ER	ND		<10		<10		<10	NA		NA		NA		NA		NA		NA		NA		NA		<10		<10		NA		NA		NA		NA	
Silver	40	NLE	ND	ND		2.81		1.05	ER	0.606		<10		<10		<10	NA		NA		NA		NA		NA		NA		NA		NA		<10		<10		NA		NA		NA		NA	
Sodium	50000	NLE	21500	50600		93500		109000		109000		52600		52900		37400	NA		NA		NA		NA		NA		NA		NA		NA		106000		101000		NA		NA		NA		NA	
Thallium	2	2	5.50	ND		ND		ND		ND		<2.0		<2.0		<2.0	NA		NA		NA		NA		NA		NA		NA		NA		<2.0		<2.0		NA		NA		NA		NA	
Vanadium	NLE	NLE	108	1.04	ER	ND		ND		ND		<50		<50		<50	NA		NA		NA		NA		NA		NA		NA		NA		<50		<50		NA		NA		NA		NA	
Zinc	2000	NLE	233	19.9	ER	46.7		43.5		44.1		50.9		61		50.8	NA		NA		NA		NA		NA		NA		NA		NA		56.9		56.7		NA		NA		NA		NA	

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for total VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP = NJDEP Ground Water Quality Standards as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

b - Elevated sample detection limit due to difficult sample matrix

MCLs for bromodichlormethane and chloroform are for total trihalomethanes

Table 3
Historical Groundwater Analytical Results
Site FTMM-05 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M5MW16			M5MW18																M5MW19			
Round No.				LF58		LF59	38	39	40	41	42	43	44	45	45 Dup	LF46		LF47		LF48		LF49	LF50		LF51	LF52	38	39	40	41
Date Collected	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	8/13/2011		8/19/2011	3/11/2008	6/3/2008	8/25/2008	11/10/2008	2/26/2009	6/12/2009	9/18/2009	12/28/2009	12/28/2009	3/31/2010		6/29/2010		9/26/2010		1/4/2011	2/23/2011		6/6/2011	8/13/2011	3/11/2008	6/3/2008	8/25/2008	11/10/2008
ANALYTE/Lab ID				1134013		1134805	80077.10	80185.10	80306.10	80404.10	90077.10	90235.10	90390.10	90490.10	90490.03	10115.02		10294.01		10411.08		1100707	1106504		1123705	1134009	80077.11	80185.11	80306.11	80404.11
Volatile Organic Compounds (µg/L)																													
Acetone	6000	NLE	-	11.6		<7.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.32	<0.32		<0.32	<7.6	ND		ND		ND		ND
Bromodichloromethane	1	80	-	<0.23		<0.23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.12	<0.12		<0.12	<0.23	ND		ND		ND		ND
2-Butanone	300	NLE	-	7.4		<2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.22	<0.22		<0.22	<2.9	ND		ND		ND		ND
Carbon disulfide	700	NLE	-	<0.18		<0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.12	<0.12		<0.12	<0.18	ND		ND		ND		ND
Chloroform	70	80	-	1.7		0.86	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.35	<0.35		<0.35	<0.21	ND		ND		ND		ND
1,3-Dichlorobenzene	600	NLE	-	<0.29		<0.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.16	<0.16		<0.16	<0.29	ND		ND		ND		ND
1,1-Dichloroethene	1	7	-	<0.28		<0.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.15	<0.15		<0.15	<0.28	ND		ND		ND		ND
cis-l,2-Dichloroethene	70	70	-	50		29.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.12	<0.12		<0.12	<0.22	1.25	J	1.11	J	0.57	J	8.5
trans -1,2-Dichloroethene	100	100	-	<0.31		<0.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.14	<0.14		<0.14	<0.31	ND		ND		ND		ND
Methylene chloride	3	5	-	0.5	J	<0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.26	<0.26		<0.26	<0.2	ND		ND		ND		ND
Tetrachloroethene	1	5	-	3.2		3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.14	<0.14		<0.14	<0.32	0.58	J	ND		0.75	J	2.01
Toluene	600	1000	-	<0.15		<0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.12	<0.12		<0.12	<0.15	ND		ND		ND		ND
Trichloroethene	1	5	-	3.2		2	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.28	J	ND		ND		<0.11	0.16	J	<0.11	<0.21	1.34	J	ND		0.33	J	3.68
Vinyl chloride	1	2	-	7.1		3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		<0.22	<0.22		<0.22	<0.27	ND		ND		ND		ND
TICs*	500	NLE	-	0		0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		0	0		0	0	ND		ND		ND		ND
Metals (µg/L)																													
Aluminum	200	NLE	121000	7510		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	30.6		ND		44.2		<200	<200		<200	<200	NA		NA		NA		NA
Antimony	6	6	20.70	<6.0		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		9.81	ER	<6.0	<6.0		<6.0	<6.0	NA		NA		NA		NA
Arsenic	3	10	89.30	24.5		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.77	ER	3.26	ER	1.38	ER	<3.0	<3.0		9.4	3.3	NA		NA		NA		NA
Barium	6000	2000	699.00	242		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	131		112		259		<200	<200		416	229	NA		NA		NA		NA
Beryllium	1	4	2.10	1.2		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<1.0	<1.0		<1.0	<1.0	NA		NA		NA		NA
Cadmium	4	5	9.50	<3.0		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.23	ER	1.07	ER	0.661	ER	<3.0	<3.0		<3.0	<3.0	NA		NA		NA		NA
Calcium	NLE	NLE	45400.00	30300		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27200		27200		23400		19500	27500		28300	34000	NA		NA		NA		NA
Chromium	70	100	191.00	90.4		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<10	<10		<10	<10	NA		NA		NA		NA
Cobalt	NLE	NLE	18.30	<50		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<50	<50		<50	<50	NA		NA		NA		NA
Copper	1300	1300	65.60	<10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		4.85	ER	ND		<10	<10		<10	<10	NA		NA		NA		NA
Iron	300	NLE	431000	49800		12700	NA	NA	NA	NA	NA	NA	NA	NA	NA	32400		21700		19100		4270	22800		76400	33200	NA		NA		NA		NA
Lead	5	15	22.70	12.2		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		2.99	ER	ND		<3.0	<3.0		<3.0	<3.0	NA		NA		NA		NA
Magnesium	NLE	NLE	62700	13700		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4830		4770		4030		<5000	<5000		<5000	5880	NA		NA		NA		NA
Manganese	50	NLE	331	112		73.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	61.4		63.2		42.6		41.9	69.7		74.1	81.6	NA		NA		NA		NA
Mercury	2	2	0.26	<0.2		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		NA	<0.2		<0.2	<0.2	NA		NA		NA		NA
Nickel	100	NLE	187	39.7		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		0.446	ER	1.1	ER	<10	<10		<10	<10	NA		NA		NA		NA
Potassium	NLE	NLE	137000	11800		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9040		8550		9820		<10000	<10000		<10000	<10000	NA		NA		NA		NA
Selenium	40	50	29.60	14.4		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21.9		NR		ND		<10	<10		<10	<10	NA		NA		NA		NA
Silver	40	NLE	ND	<10		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		4.35	ER	2.09		<10	<10		<10	<10	NA		NA		NA		NA
Sodium	50000	NLE	21500	615000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9240		8930		19700		16700	10600		10700	17000	NA		NA		NA		NA
Thallium	2	2	5.50	<2.0		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<2.0	<2.0		<2.0	<2.0	NA		NA		NA		NA
Vanadium	NLE	NLE	108	<50		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.17	ER	ND		ND		<50	<50		<50	<50	NA		NA		NA		NA
Zinc	2000	NLE	233	144		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	ER	3.32	ER	5.55		<20	<20		<20	<20	NA		NA		NA		NA

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MCLs for bromodichlormethane and chloroform are for total trihalomethanes

Table 3
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Site FTMM-05 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M5MW19														M5MW20								
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	42	43	44	45	LF46	LF47	LF48	LF49	LF50	LF50 Dup	LF51	LF52	38	39	40	41	42	43	44	45	LF46
Date Collected				2/26/2009	6/12/2009	9/18/2009	12/28/2009	3/31/2010	6/30/2010	9/27/2010	1/4/2011	2/23/2011	2/23/2011	6/6/2011	8/13/2011	3/11/2008	6/3/2008	8/25/2008	########	2/26/2009	6/12/2009	9/18/2009	12/28/2009	3/30/2010
ANALYTE/Lab ID				90077.11	90235.11	90390.11	90490.11	10115.01	10298.06	10412.05	1100706	1106507	1106503	1123706	1134014	80077.12	80185.12	80306.12	80404.12	90077.12	90235.12	90390.12	90490.12	10113.04
Volatile Organic Compounds (µg/L)																								
Acetone	6000	NLE	-	ND	ND	ND	ND	ND	ND	ND	<0.32	<0.32	<0.32	<0.32	<7.6	2.15	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	-	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	2.13	<0.23	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	-	ND	ND	ND	ND	ND	ND	ND	<0.22	<0.22	<0.22	<0.22	<2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	-	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.12	<0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	-	ND	ND	ND	ND	ND	ND	ND	<0.35	<0.35	<0.35	18.2	10.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	NLE	-	ND	ND	ND	ND	ND	ND	ND	<0.16	<0.16	<0.16	<0.16	<0.29	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	1	7	-	ND	ND	ND	ND	ND	ND	ND	<0.15	<0.15	<0.15	<0.15	<0.28	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-l,2-Dichloroethene	70	70	-	2.96	5.05	1.75	1.4	0.48 J	3.35	2.12	6.91	1.82	1.91	0.48 J	<0.22	ND	3.71	21.55	6.61	20.33	2.91	13.16	1.44	2.4
trans -1,2-Dichloroethene	100	100	-	ND	ND	ND	ND	ND	ND	ND	<0.14	<0.14	<0.14	<0.14	<0.31	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	3	5	-	ND	ND	ND	ND	ND	ND	ND	<0.26	<0.26	<0.26	<0.26	<0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1	5	-	3.03	3.17	ND	0.44 J	0.66	ND	ND	<0.14	1.1	1.2	0.38 J	<0.32	0.95 J	1.28 J	2.41	2.19	2.13	1.86 J	1.73	0.96	6.79
Toluene	600	1000	-	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.12	<0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	-	2.9	0.51 J	ND	0.88	0.86	0.53	ND	0.84	0.9	0.97	0.25 J	<0.21	ND	0.55 J	1.65 J	0.7 J	3.59	0.7 J	1.7	0.3 J	2.47
Vinyl chloride	1	2	-	ND	ND	ND	ND	ND	ND	ND	<0.22	<0.22	<0.22	<0.22	<0.27	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	-	ND	ND	ND	ND	ND	ND	ND	0	0	0	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																								
Aluminum	200	NLE	121000	NA	NA	NA	NA	ND	16.2	57.4	<200	<200	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	574
Antimony	6	6	20.70	NA	NA	NA	NA	6.48 ER	ND	ND	<6.0	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	14.1
Arsenic	3	10	89.30	NA	NA	NA	NA	1.98 ER	2.01 ER	4 ER	<3.0	<3.0	<3.0	3.4	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	ND
Barium	6000	2000	699.00	NA	NA	NA	NA	45.2	48.5	29.7	<200	<200	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	13.7
Beryllium	1	4	2.10	NA	NA	NA	NA	ND	ND	ND	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	ND
Cadmium	4	5	9.50	NA	NA	NA	NA	0.724 ER	0.754 ER	ND	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	ND
Calcium	NLE	NLE	45400.00	NA	NA	NA	NA	20400	21600	8860	6790	18400	17700	14000	12700	NA	NA	NA	NA	NA	NA	NA	NA	33000
Chromium	70	100	191.00	NA	NA	NA	NA	ND	ND	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	3.22 ER
Cobalt	NLE	NLE	18.30	NA	NA	NA	NA	ND	ND	ND	<50	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	ND
Copper	1300	1300	65.60	NA	NA	NA	NA	ND	2.75 ER	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	ND
Iron	300	NLE	431000	NA	NA	NA	NA	11400	12000	3040	1590	10700	10900	10100	5300	NA	NA	NA	NA	NA	NA	NA	NA	2140
Lead	5	15	22.70	NA	NA	NA	NA	ND	ND	ND	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	ND
Magnesium	NLE	NLE	62700	NA	NA	NA	NA	3700	4040	2270	<5000	<5000	<5000	<5000	<5000	NA	NA	NA	NA	NA	NA	NA	NA	8890
Manganese	50	NLE	331	NA	NA	NA	NA	45.3	48.2	22	23.9	46.2	47.5	36.1	32.1	NA	NA	NA	NA	NA	NA	NA	NA	29.2
Mercury	2	2	0.26	NA	NA	NA	NA	ND	ND	ND	NA	<0.2	<0.2	<0.2	<0.2	NA	NA	NA	NA	NA	NA	NA	NA	0.12 ER
Nickel	100	NLE	187	NA	NA	NA	NA	ND	ND	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	2.12 ER
Potassium	NLE	NLE	137000	NA	NA	NA	NA	8800	8480	4660	<10000	<10000	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	4420
Selenium	40	50	29.60	NA	NA	NA	NA	32.3	NR	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	45.6
Silver	40	NLE	ND	NA	NA	NA	NA	ND	1.95 ER	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	1.87 ER
Sodium	50000	NLE	21500	NA	NA	NA	NA	7460	8590	22500	25100	15000	15400	26500	23000	NA	NA	NA	NA	NA	NA	NA	NA	134000
Thallium	2	2	5.50	NA	NA	NA	NA	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	ND
Vanadium	NLE	NLE	108	NA	NA	NA	NA	ND	ND	1.49 ER	<50	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	3.35 ER
Zinc	2000	NLE	233	NA	NA	NA	NA	2.59 ER	7.44 ER	4.87 ER	<20	<20	<20	<20	<20	NA	NA	NA	NA	NA	NA	NA	NA	9.67 ER

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for total VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP = NJDEP Ground Water Quality Standards as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

b - Elevated sample detection limit due to difficult sample matrix

MCLs for bromodichlormethane and chloroform are for total trihalomethanes

Table 3
Historical Groundwater Analytical Results
Site FTMM-05 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

| | | | | M5MW20 | | | |

Table 3
Historical Groundwater Analytical Results
Site FTMM-05 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M5MW23												
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF53	LF54	LF55		LF56		LF57	LF58	LF59
Date Collected				4/22/2011	4/29/2011	6/6/2011		7/5/2011		7/29/2011	8/13/2011	8/19/2011
ANALYTE/Lab ID				1116506	1118206	1123708		1127606		1131506	1134010	1134806
Volatile Organic Compounds (µg/L)												
Acetone	6000	NLE	-	<0.32	<0.32	<0.32		<7.6		<7.6	<7.6	<7.6
Bromodichloromethane	1	80	-	<0.12	<0.12	<0.12		<0.23		<0.23	<0.23	<0.23
2-Butanone	300	NLE	-	<0.22	<0.22	<0.22		<2.9		<2.9	<2.9	<2.9
Carbon disulfide	700	NLE	-	<0.12	<0.12	<0.12		<0.18		<0.18	<0.18	<0.18
Chloroform	70	80	-	<0.35	<0.35	<0.35		<0.21		<0.21	<0.21	<0.21
1,3-Dichlorobenzene	600	NLE	-	<0.16	<0.16	<0.16		<0.29		<0.29	<0.29	<0.29
1,1-Dichloroethene	1	7	-	<0.15	<0.15	<0.15		<0.28		<0.28	<0.28	<0.28
cis-l,2-Dichloroethene	70	70	-	<0.12	<0.12	<0.12		<0.22		<0.22	<0.22	<0.22
trans -1,2-Dichloroethene	100	100	-	<0.14	<0.14	<0.14		<0.31		<0.31	<0.31	<0.31
Methylene chloride	3	5	-	<0.26	<0.26	<0.26		1.2	J	<0.2	<0.2	<0.2
Tetrachloroethene	1	5	-	18.94	22.07	47.83		12.5		7.5	5.2	3.3
Toluene	600	1000	-	<0.12	<0.12	<0.12		<0.15		<0.15	<0.15	<0.15
Trichloroethene	1	5	-	<0.11	<0.11	<0.11		<0.21		<0.21	<0.21	<0.21
Vinyl chloride	1	2	-	<0.22	<0.22	<0.22		<0.27		<0.27	<0.27	<0.27
TICs*	500	NLE	-	0	0	0		0		0	0	0
Metals (µg/L)												
Aluminum	200	NLE	121000	NA	NA	<2000	b	NA		NA	<200	NA
Antimony	6	6	20.70	NA	NA	<60	b	NA		NA	<6.0	NA
Arsenic	3	10	89.30	NA	NA	<30	b	NA		NA	<3.0	NA
Barium	6000	2000	699.00	NA	NA	<2000	b	NA		NA	<200	NA
Beryllium	1	4	2.10	NA	NA	<10	b	NA		NA	<1.0	NA
Cadmium	4	5	9.50	NA	NA	<30	b	NA		NA	<3.0	NA
Calcium	NLE	NLE	45400.00	NA	NA	135000	b	NA		NA	9070	NA
Chromium	70	100	191.00	NA	NA	<100	b	<0.01	a	NA	<10	NA
Cobalt	NLE	NLE	18.30	NA	NA	<500	b	NA		NA	<50	NA
Copper	1300	1300	65.60	NA	NA	<100	b	NA		NA	<10	NA
Iron	300	NLE	431000	1210	428	88400	b	2250		2210	1630	6670
Lead	5	15	22.70	NA	NA	<302		NA		NA	<3.0	NA
Magnesium	NLE	NLE	62700	NA	NA	<50000	b	NA		NA	<5000	NA
Manganese	50	NLE	331	<15	<15	245	b	<15		<15	<15	<15
Mercury	2	2	0.26	NA	NA	<0.2	b	NA		NA	<0.2	NA
Nickel	100	NLE	187	NA	NA	<100	b	NA		NA	<10	NA
Potassium	NLE	NLE	137000	NA	NA	<100000	b	NA		NA	<10000	NA
Selenium	40	50	29.60	NA	NA	<100	b	NA		NA	<10	NA
Silver	40	NLE	ND	NA	NA	<100	b	NA		NA	<10	NA
Sodium	50000	NLE	21500	NA	NA	474000	b	NA		NA	31000	NA
Thallium	2	2	5.50	NA	NA	<20	b	NA		NA	<2.0	NA
Vanadium	NLE	NLE	108	NA	NA	<500	b	NA		NA	<50	NA
Zinc	2000	NLE	233	NA	NA	<200	b	NA		NA	<20	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

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MCLs for bromodichlormethane and chloroform are for total trihalomethanes

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-05 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	M5MW10		M5MW11				M5MW12		M5MW13		M5MW14
Sample ID			FTMM-5-GW-M5MW10-9.9	FTMM-5-GW-M5MW10-14.9	FTMM-5-GW-M5MW11-14.4	FTMM-5-GW-M5MW11-14.4	FTMM-5-GW-M5MW11-9.46	FTMM-5-GW-M5MW11-9.46	FTMM-5-GW-M5MW12-10.4	FTMM-5-GW-M5MW12-15.4	FTMM-5-GW-M5MW13-12.87	FTMM-5-GW-M5MW13-7.87	FTMM-5-GW-M5MW14-8.63
Sample Date			8/27/2013	8/27/2013	8/27/2013	8/27/2013	8/27/2013	12/18/2014	8/27/2013	8/27/2013	8/27/2013	8/27/2013	8/27/2013
QA/QC			SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
Sample Method			PDB	PDB	PDB	Low Flow	PDB	PDB	PDB	PDB	PDB	PDB	PDB
Volatile Organic Compounds (µg/l)													
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	**2 J**	**2.1 J**	**1.6 J**	**1.4 J**	**2 J**	**2.5 J**	**1.7 J**	**1.6 J**	**1.8 J**	**1.5 J**	**2.8 J**
Benzene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	70	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 1	< 1	**0.33 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Meta & Para Xylenes	1,000	NLE	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl bromide	10	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
n-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	NA	NA	NA	NA	NA	< 20 UJ	NA	NA	NA	NA	NA
tert-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	1	5	< 1	< 1	**1 J**	**3.5 J**	**1.1 J**	**1.8 J**	< 1	< 1	< 1	< 1	< 1
Toluene	600	1,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Total TIC, Volatile	500	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1,000	10,000	< 3	< 3	< 3	< 3	< 3	NA	< 3	< 3	< 3	< 3	< 3
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-05 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	M5MW14		M5MW16				M5MW18	
Sample ID			FTMM-5-GW-M5MW14-13.65	FTMM-5-GW-M5MW14-18.63	FTMM-5-GW-M5MW16-8.8	FTMM-5-GW-M5MW16-14.57	FTMM-5-GW-M5MW16-14.5	FTMM-5-GW-M5MW16-14.57	FTMM-5-GW-M5MW18-8.6	FTMM-5-GW-M5MW18-16.98
Sample Date			8/27/2013	8/27/2013	8/27/2013	8/27/2013	8/28/2013	12/18/2014	8/27/2013	8/27/2013
QA/QC			SA	SA	SA	SA	SA	SA	SA	SA
Sample Method			PDB	PDB	PDB	PDB	Low Flow	PDB	PDB	PDB
Volatile Organic Compounds (µg/l)										
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	**2.2 J**	**2 J**	**2.3 J**	**2.2 J**	**1.5 J**	**3.3 J**	**1.4 J**	**2.5 J**
Benzene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	< 1	< 1	**0.37 J**	**0.54 J**	**0.5 J**	< 1	< 1	< 1
Chloroform	70	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 1	**6**	**8**	**8.7**	**1.6 J**	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Meta & Para Xylenes	1,000	NLE	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl bromide	10	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
n-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	NA	NA	NA	NA	NA	< 20 UJ	NA	NA
tert-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	1	5	< 1	< 1	**0.67 J**	**0.3 J**	**0.86 J**	**1.7 J**	< 1	< 1
Toluene	600	1,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Total TIC, Volatile	500	NLE	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1,000	10,000	< 3	< 3	< 3	< 3	< 3	NA	< 3	< 3
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	< 1	< 1	**0.43 J**	**0.45 J**	**0.47 J**	< 1	**0.22 J**	< 1
Trichlorofluoromethane	2,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	< 1	< 1	**1.2 J**	**2.2 J**	**2.6 J**	< 1	< 1	< 1

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-05 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	M5MW19		M5MW20	M5MW20			M5MW23		
Sample ID			FTMM-5-GW-M5MW19-10.34	FTMM-5-GW-M5MW19-16.35	FTMM-5-GW-M5MW20-8.65	FTMM-5-GW-M5MW20-13.65	FTMM-5-GW-M5MW20-13.65	FTMM-5-GW-M5MW20-13.65	FTMM-5-GW-M5MW23-10.82	FTMM-5-GW-M5MW23-17.02	FTMM-5-GW-M5MW23-10.82
Sample Date			8/27/2013	8/27/2013	8/27/2013	8/27/2013	8/28/2013	12/18/2014	8/27/2013	8/27/2013	12/18/2014
QA/QC			SA	SA	SA	SA	SA	SA	SA	SA	SA
Sample Method			PDB	PDB	PDB	PDB	Low Flow	PDB	PDB	PDB	PDB
Volatile Organic Compounds (µg/l)											
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	**2.2 J**	**2.7 J**	**1.7 J**	**1.9 J**	< 5	**2.1 J**	**1.8 J**	**1.4 J**	**1.4 J**
Benzene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	70	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	**1.2 J**	< 1	**15**	**42**	**46**	**2.5 J**	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Meta & Para Xylenes	1,000	NLE	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl bromide	10	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
n-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	NA	NA	NA	NA	NA	< 20 UJ	NA	NA	< 20 UJ
tert-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	1	5	< 1	< 1	< 1	**0.45 J**	**0.57 J**	**1.2 J**	**50**	**47**	**23**
Toluene	600	1,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Total TIC, Volatile	500	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1,000	10,000	< 3	< 3	< 3	< 3	< 3	NA	< 3	< 3	NA
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	**0.72 J**	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	**0.69 J**	< 1	**2.8 J**	**5.4**	**8**	**0.73 J**	**1.3 J**	**2.1 J**	**2.1 J**
Trichlorofluoromethane	2,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-05 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Footnote:
1) All historical data collected prior to 2013 are reported as provided by others.
2) Number of Analyses is the number of detected and non-detected results excluding rejected results. Sample duplicate pairs have not been averaged.
3) NLE = no limit established.
4) ND = not detected in any background sample, no background concentration available.

5) Chemical result qualifiers are assigned by the laboratory and is typically evaluated and modified (if necessary) by during data validation.
[blank] = detect, i.e. detected chemical result value.
B = Compound detected in the sample and its associated blank sample.
R = Rejected, data validation rejected the results.
U = non-detect, i.e. not detected equal to or above this value.
U-DL = Elevated sample detection limit due to difficult sample matrix.
U-ND = Analyte not detected in sample, but no detection or reporting limit provided.
J = estimated (detect or non-detect) value.
E (or ER) = Estimated result.
D = Results from dilution of sample.
J-DL = Elevated sample detection limit due to difficult sample matrix.
JN = Tentatively identified compound, estimated concentration.

6) Chemical results greater than or equal to the action level (depending on criteria) are highlighted based on the Criteria that are present.
- Cell Shade values represent a result that is above the NJ Ground Water Quality Criteria ####

NJDEP Interim Specific GWQC values are presented for the NJ GWQS where there is not a Specific Ground Water Quality Criteria. A full list of compounds is available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).

NJDEP Interim Generic GWQC values are presented for the NJ GWQS where there is not a XXXXX or a NJDEP Interim Specific GWQC. Available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).

- Bold Outline represent a result that is above the USEPA 2014-05 MCL. ###

7) Criteria action level source document and web address.
- The NJ Ground Water Quality Criteria refers to the NJDEP Groundwater Quality Standards - Adopted July 22, 2010
  http://www.state.nj.us/dep/wms/bwqsa/docs/njac79C.pdf
- The 2014-05 USEPA MCL refers to the USEPA's Region 9 Regional Screening Levels (HQ=1.0) - 5/31/2014 (Last revised)
  http://www.epa.gov/region9/superfund/prg/

8) Wells sampled in the fourth quarter are highlighted in yellow. Sample ID

Table 5
Review of Historical Groundwater Sampling Results
Site FTMM-05 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site Name/ Well ID	Interpretation of Historical and 2014 Results [1]			2014 Evaluation					Rationale
	Chem Class / Analyte	Does it Exceed NJDEP GWQS (Yes or No) (If Yes, identify compound)	Do Metals Exceed FTMM Background Concentration (Yes or No) (If Yes, identify Metal)	Seasonal Effect?[2] (Y/N)	Anomaly? (Y/N)	Exceedance part of overall trend? (Y/N)	Well needed for sentinel purposes? (Y/N)	Retain Analyte/Well (Yes or No)	
FTMM-05									
M5MW11	VOC	PCE	N/A	No	No	Yes	N/A	Yes	PCE exceedance part of low-level trend
M5MW16		TCE, PCE,VC	N/A	No	No	Yes	N/A	Yes	PCE exceedance part of low-level trend
M5MW20		PCE, TCE	N/A	No	No	Yes	N/A	Yes	PCE exceedance part of low-level trend
M5MW23		PCE, TCE	N/A	No	No	Yes	N/A	Yes	TCE and PCE part of overall exceedance trend.

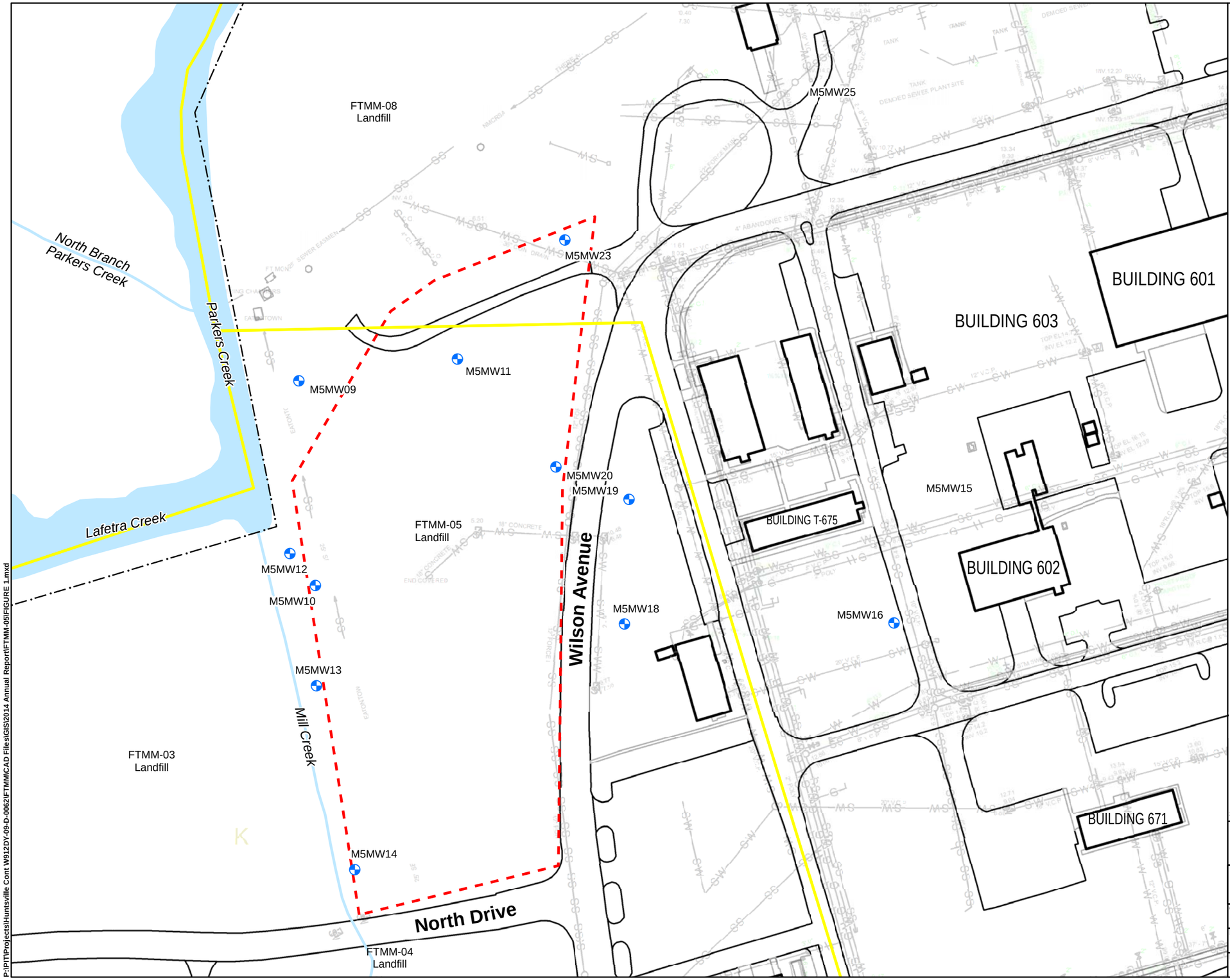
Notes

1. Has any of the compounds exceeded the NJDEP GWQS in the annual 2014 data and the 4 previous quarterly data rounds or 2 previous annual rounds?
   a. If yes then keep analyte in LTM list.
   b. If no then remove this analyte from LTM list.
   c. a and b above may be occasionally superceded on a case-by-case basis, depending on site conditions.
2. Has any of the compounds exceeded the NJDEP GWQS seasonally (winter/spring vs. summer/fall) for the 4 previous data rounds ?
3. PCE - tetrachloroethene
4. TCE - trichloroethene
5. VC - vinyl chloride
6. N/A = Not applicable
7. Per the 2/5/15 NJDEP approval letter of the Final 2013 Baseline Groundwater Report, groundwater monitoring wells M5MW10, M5MW12, M5MW13, M5MW14, M5WM18 and M5MW19 were removed from the long term monitoring sampling program.

FIGURES

Figure 1 Layout of FTMM-05 Closed Solid Waste Landfill

Figure 2 FTMM-05 Shallow Groundwater Contours - September 29, 2014



LEGEND:

- Shallow Monitoring Well
- FTMM-05 Landfill Revised Boundary
- FTMM-03 Landfill Boundary
- FTMM-04 Landfill Boundary
- FTMM-08 Landfill Boundary
- Surface Water Feature
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Municipal Boundary
- Installation Boundary

N

1 inch = 100 feet

0 25 50 100 150 200 Feet

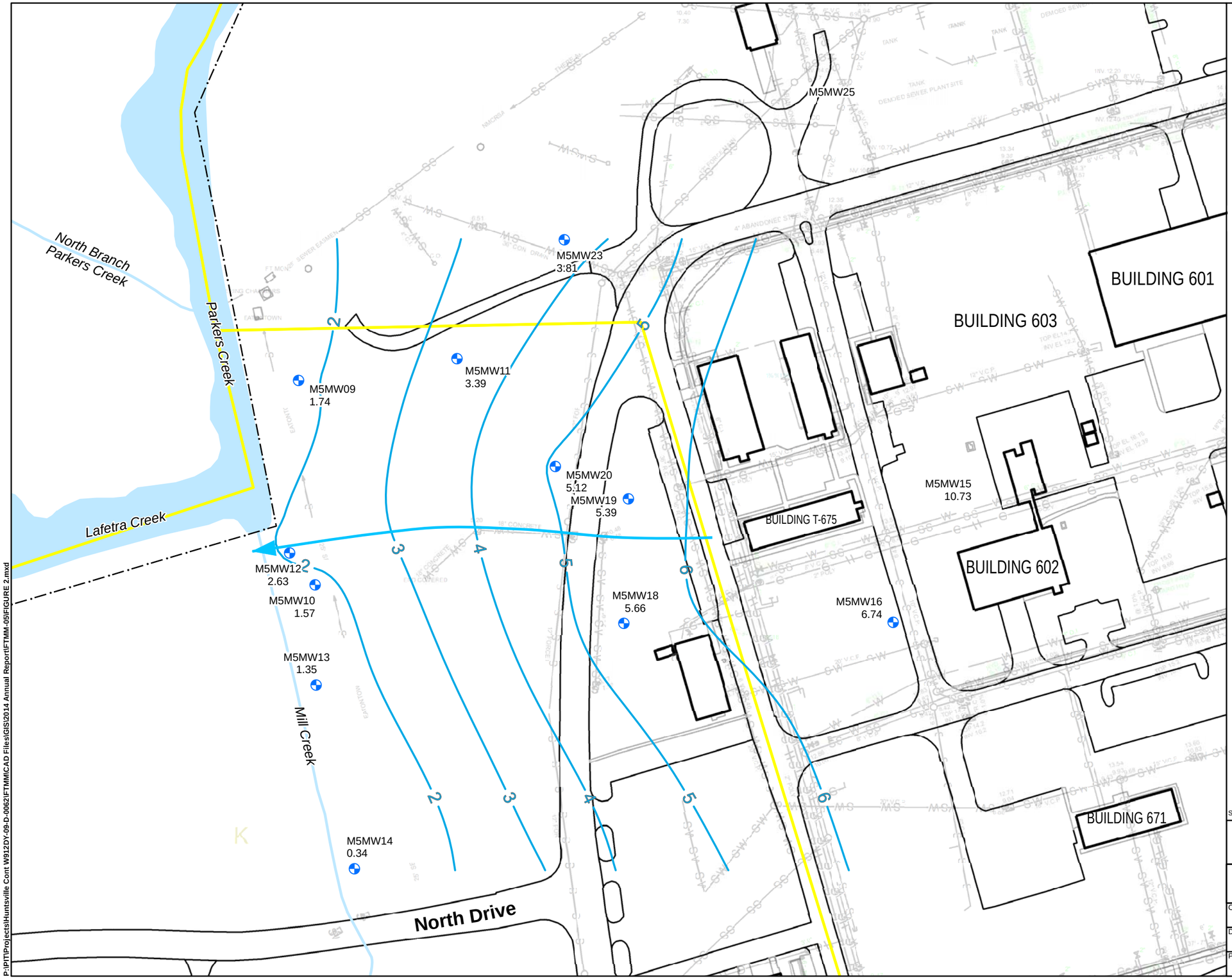
Source: FTMM Supplied CAD, 2013.

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey

**LAYOUT OF FTMM-05
CLOSED SOLID WASTE LANDFILL**

CREATED BY: RR	REVIEWED BY: ME
DATE: OCT. 2015	FIGURE NUMBER: FIGURE 1
PROJECT NUMBER: 748810-01000	FILE: FIGURE 1.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-05\FIGURE 1.mxd



LEGEND:

- Shallow Monitoring Well
- Surface Water Feature
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Municipal Boundary
- Installation Boundary
- Groundwater Elevation Contour
- Inferred Groundwater Flow Direction

N

1 inch = 100 feet

0 25 50 100 150 200 Feet

Source: FTMM Supplied CAD, 2013.

PARSONS 401 Diamond Drive NW, Huntsville AL	**Fort Monmouth** **New Jersey**

FTMM-05 SHALLOW GROUNDWATER CONTOURS - SEPTEMBER 29, 2014

CREATED BY: RR	REVIEWED BY: ME
DATE: OCT. 2015	FIGURE NUMBER: FIGURE 2
PROJECT NUMBER: 748810-01000	FILE: FIGURE 2.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-05\FIGURE 2.mxd

ATTACHMENTS

Attachment A NJDEP PDB Checklists

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-5
3. Well Designation: M5MW11
4. Well Permit Number: 29-32575

5 Type of Well: ☒ Monitoring ☐ Extraction ☐ Residential ☐ Public Supply ☐ Irrigation ☐ Other

6 Well Surface Finish: ☒ Stick Up ☐ Flush Mount

7 Location of Measuring Point: ☒ Top of Casing ☐ Other (specify) _____

8 **NOTE**: PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) 1.9

9 Total Well Depth (fbgs): 15.15

10 Screened interval/open hole (fbgs): 5.15 - 15.15

11 Well Casing: Diameter 4 Material ☒ PVC ☐ Carbon Steel ☐ Stainless Steel

12 Well Screen (or open hole diameter): Diameter 4 Material ☒ PVC ☐ Carbon Steel ☐ Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.01

14 Date and Time of Deployment: Date: 10/1/14 Time: 1320

15 Depth to Ground Water: Depth to ground water at time of deployment 5.34

16 Date and Time of Retrieval: Date: 12/19/14 Time: 0823

17 Depth to Ground Water: Depth to ground water at time of retrieval 6.44 TOC

18 Type of Deployment Line Used: Diameter: 3/16" Material: poly

19 Material and Mass (oz.) of PDBS Weight: 20oz Stainless (stainless steel recommended)

20 Type of PDBS Used:
☐ Lab Filled (Modified Trip Blank must be taken at time of deployment)
☒ Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21 Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled _____

22 Position of PDBS Weight:
☒ Attached to bottom of PDBS and suspended in well
☐ Attached to bottom of deployment line and suspended in well
☐ Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
9.46			
5th PDBS	**6th PDBS**	**7th PDBS**	**8th PDBS**

24 If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐ **No**, this well is being profiled during this sampling round
☒ **Yes**, this well was profiled already. Date when well was profiled: 8/27/13

25 If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☐ **No**, flow testing has not been conducted in this well
☐ **Yes**, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet **[Please Attach Results]**

26 Weather Conditions During Deployment: Temp. 68°F Wind 0-5mph ☐ Sunny ☒ Overcast ☐ Raining ☐ Snowing

27 Weather Conditions During Retrieval: Temp. 38°F Wind 0-5 mph ☐ Sunny ☒ Overcast ☐ Raining ☐ Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Chris Watson	PARSONS

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-5
3. Well Designation: MSMW16
4. Well Permit Number: 29-40121

5	Type of Well	☒ Monitoring	☐ Extraction	☐ Residential	☐ Public Supply	☐ Irrigation	☐ Other
6	Well Surface Finish	☒ Stick Up	☐ Flush Mount				
7	Location of Measuring Point	☒ Top of Casing	☐ Other (specify)				

8 **NOTE** PDBS represent a point sample within the screened interval or open hole of the well It is critical to know the exact depth within the well where the PDBS is deployed Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs) If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS Please identify below, any differences between the measuring point identified above and actual ground surface at the well head

Distance between measuring point and ground surface (ft.) 1.5

9	Total Well Depth (fbgs)	16.6					
10	Screened interval/open hole (fbgs)	3.6 - 16.6					
11	Well Casing	Diameter 4"	Material	☒ PVC	☐ Carbon Steel	☐ Stainless Steel	
12	Well Screen (or open hole diameter)	Diameter 4"	Material	☒ PVC	☐ Carbon Steel	☐ Stainless Steel	
13	Screen Size (slot)	Screen Slot Size 0.01					

14.	Date and Time of Deployment	Date: 10/1/14 Time: 1159
15.	Depth to Ground Water	Depth to ground water at time of deployment 5.9
16.	Date and Time of Retrieval	Date: 12/19/14 Time: 0827
17.	Depth to Ground Water	Depth to ground water at time of retrieval 6.04 TOC
18.	Type of Deployment Line Used	Diameter: 3/16" Material: poly

19	Material and Mass (oz.) of PDBS Weight	stainless 20 oz (stainless steel recommended)
20	Type of PDBS Used	☐ Lab Filled (Modified Trip Blank must be taken at time of deployment)
		☒ Field Filled (Modified equipment blank of fill water must be taken at time of deployment If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed Blank is then taken.)
21	Dimensions of PDBS	Length (in.) 18 Diameter (in.) 1.5 Filled
22	Position of PDBS Weight	☒ Attached to bottom of PDBS and suspended in well
		☐ Attached to bottom of deployment line and suspended in well
		☐ Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
14.57			
5th PDBS	**6th PDBS**	**7th PDBS**	**8th PDBS**

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
- ☐ No, this well is being profiled during this sampling round
- ☒ Yes, this well was profiled already. Date when well was profiled: 8/27/13

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
- ☐ No, flow testing has not been conducted in this well
- ☐ Yes, flow testing of this well was conducted. Date of testing: _____
  - Type of flow meter used: _____
  - Measurements taken every _____ feet **[Please Attach Results]**

26.	Weather Conditions During Deployment	Temp. 65F	Wind 0-5 mph	☐ Sunny	☒ Overcast	☒ Raining	☐ Snowing
27.	Weather Conditions During Retrieval	Temp. 30F	Wind 0-5 mph	☒ Sunny	☐ Overcast	☐ Raining	☐ Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Chris Watson	PARSONS

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: ftmm
2. Location: ftmm-5
3. Well Designation: M5MW20
4. Well Permit Number: 29-40122

5. Type of Well: ☒ Monitoring ☐ Extraction ☐ Residential ☐ Public Supply ☐ Irrigation ☐ Other
6. Well Surface Finish: ☒ Stick Up ☐ Flush Mount
7. Location of Measuring Point: ☒ Top of Casing ☐ Other (specify) _____
8. **NOTE**: PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.
   Distance between measuring point and ground surface (ft.) 2.0
9. Total Well Depth (fbgs): 14.36
10. Screened interval/open hole (fbgs): 4.36-14.36
11. Well Casing: Diameter 4 Material: ☒ PVC ☐ Carbon Steel ☐ Stainless Steel
12. Well Screen (or open hole diameter): Diameter 4 Material: ☒ PVC ☐ Carbon Steel ☐ Stainless Steel
13. Screen Size (slot): Screen Slot Size 0.01

14. Date and Time of Deployment: Date: 10/1/14 Time: 1346
15. Depth to Ground Water: Depth to ground water at time of deployment 4.35
16. Date and Time of Retrieval: Date: 12/19/14 Time: 0835
17. Depth to Ground Water: Depth to ground water at time of retrieval 5.55 TOC
18. Type of Deployment Line Used: Diameter: 3/16" Material: poly
19. Material and Mass (oz.) of PDBS Weight: stainless 20oz (stainless steel recommended)
20. Type of PDBS Used:
    ☐ Lab Filled (Modified Trip Blank must be taken at time of deployment)
    ☒ Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)
21. Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled _____
22. Position of PDBS Weight:
    ☒ Attached to bottom of PDBS and suspended in well
    ☐ Attached to bottom of deployment line and suspended in well
    ☐ Attached to bottom of deployment line and resting on bottom of well (preferred)
23. Position of PDBS in Well Screen (ft. from measuring point to center of PDBS):

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
13.67			
5th PDBS	**6th PDBS**	**7th PDBS**	**8th PDBS**

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
    ☐ No, this well is being profiled during this sampling round
    ☒ Yes, this well was profiled already. Date when well was profiled: 8/27/13
25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
    ☐ No, flow testing has not been conducted in this well
    ☐ Yes, flow testing of this well was conducted. Date of testing: _____
    Type of flow meter used: _____
    Measurements taken every _____ feet **[Please Attach Results]**
26. Weather Conditions During Deployment: Temp. 68°F Wind 0-5mph ☐ Sunny ☒ Overcast ☒ Raining ☐ Snowing
27. Weather Conditions During Retrieval: Temp. 38°F Wind 0-5 Mph ☐ Sunny ☒ Overcast ☐ Raining ☐ Snowing

28. Field Sampling Technician: Name(s) and Company (please print clearly)

Name	Company
Chris Watson	PARSONS

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-5
3. Well Designation: MSMW23
4. Well Permit Number: 29-40125

5 Type of Well: ☒Monitoring ☐Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish: ☒Stick Up ☐Flush Mount

7 Location of Measuring Point: ☒Top of Casing ☐Other (specify) _____

8 **NOTE** PDBS represent a point sample within the screened interval or open hole of the well It is critical to know the exact depth within the well where the PDBS is deployed Well construction specifications, which are typically used to determine where to set the PDBS in the well are measured in feet below ground surface (fbgs) If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS Please identify below, any differences between the measuring point identified above and actual ground surface at the well head

Distance between measuring point and ground surface (ft) 2.41

9 Total Well Depth (fbgs) 15.84

10 Screened interval/open hole (fbgs) 02'-15.84

11 Well Casing Diameter 4 Material ☒PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter) Diameter 4 Material ☒PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot) Screen Slot Size 0.01

14. Date and Time of Deployment Date: 10/1/14 Time: 1308

15. Depth to Ground Water Depth to ground water at time of deployment 5.66

16. Date and Time of Retrieval Date: 12/19/14 Time: 0834

17. Depth to Ground Water Depth to ground water at time of retrieval 7.41 TOC

18. Type of Deployment Line Used Diameter: 3/16" Material: poly

19 Material and Mass (oz.) of PDBS Weight 20oz. stainless (stainless steel recommended)

20 Type of PDBS Used
☐Lab Filled (Modified Trip Blank must be taken at time of deployment)
☒Field Filled (Modified equipment blank of fill water must be taken at time of deployment If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed Blank is then taken)

21 Dimensions of PDBS Length (in) 18 Diameter (in) 1.5 Filled _____

22 Position of PDBS Weight
☒Attached to bottom of PDBS and suspended in well
☐Attached to bottom of deployment line and suspended in well
☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
10.82			
5th PDBS	**6th PDBS**	**7th PDBS**	**8th PDBS**

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐No, this well is being profiled during this sampling round
☒Yes, this well was profiled already. Date when well was profiled: 8/27/13

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☐No, flow testing has not been conducted in this well
☐Yes, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet [Please Attach Results]

26. Weather Conditions During Deployment Temp. 68°F Wind 0-5 mph ☐Sunny ☒Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval Temp. 40°F Wind 0-5 mph ☒Sunny ☐Overcast ☐Raining ☐Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Chris Watson	Parsons

APPENDIX D

FTMM-08: CLOSED SOLID WASTE LANDFILL

APPENDIX D: FTMM-08 Closed Solid Waste Landfill

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1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT

Monitoring wells located within FTMM-08 were gauged on September 29, 2014. Monitoring well locations as well as other site features are provided in **Figure 1**. Details regarding the water level measurements are provided in **Table 1**. Groundwater elevations in monitoring wells ranged from 1.80 (M8MW18) to 5.49 (M8MW12) feet above mean sea level (amsl). The inferred shallow groundwater flow direction is generally to the north-northwest towards Parkers Creek, as shown in **Figure 2**.

During the groundwater gauging, the physical condition of FTMM-08 monitoring wells were assessed. The site monitoring wells were found to be in good condition, however monitoring well M8MW11 could not be visually located due to vegetative overgrowth and therefore was not gauged or sampled.

2.0 GROUNDWATER SAMPLING

Groundwater samples were collected from seven monitoring wells located at FTMM-08 as part of the annual (fourth quarter) 2014 groundwater sampling event. FTMM-08 is sampled on an annual basis. The groundwater sampling program included measuring the depth to groundwater in monitoring wells prior to sampling and collection of groundwater samples using low-flow purging and sampling (LFPS). Groundwater samples were collected from wells M8MW12, M8MW15, M8MW16, M8MW17, M8MW21, RM8MW24 and 697MW01 on October 1, 2014 and October 2, 2014. Groundwater samples were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) via the United States Environmental Protection Agency (USEPA) Method SW8260C at wells M8MW12, M8MW15, M8MW16, RM8MW24 and 697MW01. The groundwater samples from 697MW01, M8MW17 and M8MW21 were also analyzed for lead via USEPA Method SW6010C. In addition, the groundwater sample from 697MW01 was analyzed for pesticides via EPA Method 8081B. It should be noted that 697MW01 was not located in 2013, but was located and sampled for the 2014 sampling event.

The samples were collected in accordance with the New Jersey Department of Environmental Protection (NJDEP) Field Sampling Procedures Manual (FSPM) and the Sampling Analysis Plan (SAP). Field blanks, duplicates, matrix spike, matrix spike duplicate and quality assurance (QA) split samples were collected for every 5% of samples collected per parameter, per matrix, in accordance with the Quality Assurance Project Plan (QAPP). Trip blanks accompanied each cooler each day in which VOCs were collected for laboratory analysis.

Completed LFPS field sheets for each well sampled can be found in **Attachment A**.

3.0 HISTORICAL GROUNDWATER SAMPLING RESULTS

From June 1997 to March 2004, groundwater samples were collected for VOCs, semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs) and pesticides from FTMM-08 monitoring wells. From June 2004 to December 2009, monitoring wells were primarily sampled for VOCs. From March 2010 to September 2010, groundwater samples were collected for VOC and metals.

From December 2010 to August 2011, the last four historical rounds of groundwater sampling conducted at the FTMM-08 site have consisted of VOC and metals analysis and were conducted on a quarterly basis. During this period, several metals including aluminum, arsenic, barium, calcium, iron, lead, manganese, magnesium and sodium were detected above of their respective NJDEP Ground Water Quality Standards (GWQS) in the majority of the Site monitoring wells. Beryllium, cadmium, chromium, calcium, magnesium, manganese, lead and sodium were detected in FTMM-08 monitoring wells above their background concentration established in the 1995 Weston Report. However, these metals are not associated with historical site operations.

Between December 2010 and August 2011, benzene (M8MW11 and M8MW15) and tetrachloroethene (PCE) (M8MW12 and 697MW01) were detected above their NJDEP GWQS of 1 µg/L. Historical groundwater analytical results are presented in **Table 2**.

Groundwater analytical data from samples collected from 13 monitoring wells during the August 2013 event are presented in **Table 3**. Groundwater samples were analyzed for VOCs, pesticides, and lead. PCE was detected at an estimated concentration of 1.3J µg/L in M8MW12, which is above the NJDEP GWQS of 1 µg/L for PCE. There were no pesticides or lead detections above the NJDEP GWQS in the August 2013 baseline groundwater sampling event.

The Final August 2013 Baseline Groundwater Sampling Report was approved by the NJDEP in their February 5, 2015 letter. Based on this approval, six monitoring wells out of the 14 monitoring wells were removed from the long term monitoring program including M8MW13, M8MW14, M8MW18, M8MW19, M8MW20, and M8MW22. Additionally, groundwater monitoring for pesticides and metals other than lead were discontinued for all remaining wells, except 697MW01.

4.0 ANNUAL (FOURTH QUARTER) 2014 GROUNDWATER RESULTS

Groundwater analytical data from samples collected from seven monitoring wells during the annual (fourth quarter) 2014 groundwater sampling event are presented in **Table 3**. Groundwater samples were analyzed for VOCs at wells M8MW12, M8MW15, M8MW16, RM8MW24 and 697MW01. Tetrachloroethene (PCE) was the only VOC detected at an estimated concentration of 1.3J µg/L and 1.6J µg/L at monitoring wells M8MW12 and 697MW01, respectively, only slightly above the NJDEP GWQS of 1 µg/L. The groundwater samples from 697MW01, M8MW17 and M8MW21, were also analyzed for lead and it was not detected in the samples. In addition, the groundwater sample from 697MW01 was analyzed for pesticides, 4'4-DDD was detected at a concentration of 0.83 µg/L, above the NJDEP GWQS of 0.1 µg/L.

5.0 FINDINGS AND RECOMMENDATIONS

Based on the historical and annual 2014 groundwater sampling results, continued sampling for select wells is recommended at FTMM-08 using LFPS methods. Sampling at M8MW11 for lead and VOCs will be resumed once the monitoring well is located. Based on 2014 PCE

detections slightly above the NJDEP GWQS of 1 µg/L sampling for VOCs only will continue at M8MW12.

Based on 2014 concentrations, PCE and 4'4-DDD in 697MW01 exceeded their NJDEP GWQS of 1 µg/L and 0.1 µg/L respectively, and sampling for VOCs and pesticides will continue at this well. Sampling for lead at this well will be discontinued, since historically lead has not been detected at 697MW01.

Historically, lead has been detected above the NJDEP GWQS at monitoring wells M8MW17 and M8MW21. However, lead has not been detected above its NJDEP GWQS of 5 µg/L in the last three sampling event at these wells. Therefore it is recommended that groundwater sampling at monitoring wells M8MW17 and M8MW21 be discontinued and these wells be removed from the monitoring program.

Historically, benzene has been detected slightly above its NJDEP GWQS at monitoring wells M8MW15 and M8MW16. However, benzene has not been detected in the last three sampling events above its NJDEP GWQS of 1 µg/L at these two wells. In addition, VOCs have not been detected above the NJDEP GWQS in the samples collected from RM8MW24 during the last three sampling events. Therefore it is recommended that groundwater sampling at monitoring wells M8MW15, M8MW16 and RM8MW24 be discontinued and these wells be removed from the monitoring program.

A review of the historical groundwater sampling results is presented in **Table 4**, which provides the matrix used to determine the status of the wells relative to the future groundwater sampling and analyses.

TABLES

Table 1 Groundwater Gauging Data and Elevations (September 29, 2014) and LFPS Sampling Summary

Table 2 Historical Groundwater Analytical Results

Table 3 Groundwater Analytical Results - 2013 and 2014

Table 4 Review of Historical Groundwater Sampling Results

Table 1
Groundwater Gauging Data and Elevations (September 29, 2014) and LFPS Sampling Summary
Site FTMM-08 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site/Well ID	Installation Date	Well Permit #	Y Coord. (North)	X Coord. (East)	Depth (ft. bgs)	Casing Length (ft)	Screen Length (ft)	TOC Elevation (ft)	Gauge Time	PID Reading (ppm)	Gauged Depth to Water (ft. TOC)	Gauged Depth to Bottom (ft. TOC)	Calculated Groundwater Elevation (ft)	Well Sampled this Event
Shallow Monitoring Wells														
697MW01	9/13/1994	29-31776	540045.28	617862.74	17.5	2.5	15.0	16.85	11:55	0.0	11.98	18.85	4.87	x
M8MW11	10/18/2010	E201010528	540361.12	617765.50	20.0	5.0	15.0	26.52	N/A	N/A	N/A	N/A	N/A	
M8MW12	12/20/1994	29-32560	539906.21	617853.00	15.0	5.0	10.0	13.95	12:25	0.0	8.46	16.60	5.49	x
M8MW13	1/17/1995	29-32561	540014.96	617348.99	15.0	5.0	10.0	7.11	10:52	0.0	4.75	11.26	2.36	
M8MW14	1/16/1995	29-32562	540451.09	617548.16	15.0	5.0	10.0	9.06	11:15	0.0	6.42	16.00	2.64	
M8MW15	1/17/1995	29-32563	540412.78	617974.38	14.5	4.5	10.0	6.96	11:33	0.0	4.30	15.82	2.66	x
M8MW16	9/10/1998	29-39146	540315.41	618083.30	13.0	3.0	10.0	9.62	11:35	0.0	7.45	14.68	2.17	x
M8MW17	8/31/1998	29-39147	540500.10	617872.41	13.0	3.0	10.0	8.15	11:29	0.0	5.34	14.66	2.81	x
M8MW18	8/22/1998	29-39148	540556.90	617597.86	18.0	3.0	15.0	7.75	11:22	0.0	5.95	15.87	1.80	
M8MW19	8/22/1998	29-39149	540404.26	617517.43	18.0	3.0	15.0	8.62	11:05	0.0	6.25	16.71	2.37	
M8MW20	8/22/1998	29-39150	540195.12	617424.24	15.0	5.0	10.0	8.01	10:59	0.0	5.52	16.63	2.49	
M8MW21	8/20/1998	29-39151	540021.38	617350.27	20.0	5.0	15.0	6.95	10:50	0.0	4.71	14.99	2.24	x
M8MW22	8/20/1998	29-39152	539816.01	617344.32	20.0	5.0	15.0	7.23	10:43	0.0	5.31	17.42	1.92	
M8MW23	3/30/1999	29-40128	539990.86	617686.60	15.0	3.0	12.0	10.73	11:59	0.0	7.45	15.87	3.28	
RM8MW24	3/29/1999	29-40127	1/11/3379	8/10/3591	18.0	3.0	15.0	20.76	11:42	0.0	18.34	39.51	2.42	x

Notes:
1) The synoptic round of water levels in the wells was collected on September 29, 2014.
2) Information on well permit number, X and Y coordinates, depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
3) ft = feet
4) DTW = depth to water (measured from the top of well casing)
5) DTB = depth to bottom of well (measured from the top of well casing)
6) bgs = below ground surface
7) ppm = parts per million (of VOCs)
8) TOC = Top of Casing
9) Elevation = feet above mean sea level
10) N/A = information not available, well not located in the field
11) LFPS = Low-Flow Purging and Sampling

Table 2
Historical Groundwater Analytical Results
Site FTMM-08 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M8MW11			M8MW12																				M8MW13					
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**		LF		44	44 Dup	45	46	46 Dup	47	47 Dup	48	49	50	51	52	LF1	LF2	LF3	LF4	LF5	LF6	LF7	44	45	45 Dup	46	47	48
Date Collected				3/9/2011	8/11/2011		3/13/2008	3/13/2008	6/5/2008	9/4/2008	9/4/2008	11/21/2008	11/21/2008	2/9/2009	2/23/2009	6/27/2009	9/21/2009	12/10/2009	3/19/2010	6/29/2010	9/29/2010	12/23/2010	3/9/2011	5/26/2011	8/11/2011	3/13/2008	6/5/2008	6/5/2008	9/4/2008	11/21/2008	2/23/2009
Volatile Organic Compounds (µg/L)																																
Tert-butyl alcohol	100	NLE	--	56.38	NA		ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	<5	<5	<5	NA	ND	ND	ND	ND	ND	ND
Acetone	6000	NLE	--	18.68	<10		ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<10	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	0.43	<2	J	ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	2.1	<10		ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<10	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	0.52	1.3		ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND
Chlorobenzene	50	100	--	4.23	10.9		ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	<0.5	<5		ND	NA	ND	ND	ND	ND	ND	NA	ND	2.06	ND	ND	ND	3.72	0.81	<0.5	<0.5	<0.5	0.55	J	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	<0.5	<1		ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	9.47	ND	<0.5	<0.5	<0.5	2.3		ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	NLE	--	<0.5	<1		ND	NA	ND	ND	ND	ND	ND	NA	ND	0.28	J ND	ND	ND	0.76	ND	<0.5	<0.5	<0.5	<1		ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	<0.5	<1		ND	NA	ND	2.79	2.63	5	4.88	NA	0.85	J ND	0.38	J ND	ND	ND	ND	<0.5	<0.5	<0.5	0.33	J	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	NLE	--	0.26	J 0.53	J	ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1		ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	2.79	7.4		ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1		ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	600	600	--	0.44	J 0.88	J	ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1		ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	<0.5	0.43	J	ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1		ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	<0.5	1.3	J	ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2		ND	ND	ND	ND	ND	ND
Methylene chloride	3	5	--	<0.5	<2		ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2		ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	70	NLE	--	<0.5	<1		ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1		ND	ND	ND	ND	ND	ND
Tetrachloroethene	1	5	--	<0.5	<1		ND	NA	0.71	J 2.34	2.67	9.83	9.75	NA	4.3	0.49	J 1.55	0.58	1.31	1.92	3.19	2.19	1.62	1.79	3		ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	0.23	J 1.7		ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1		ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	<0.5	<1		ND	NA	ND	0.52	J 0.59	J 5.12	5.06	NA	2.13	ND	0.57	ND	ND	ND	ND	<0.5	<0.5	<0.5	0.34	J	ND	ND	ND	ND	ND	ND
Total Xylenes	1000	10,000	--	ND	1		ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	<1	<1	<1	<1		ND	ND	ND	ND	ND	ND
Vinyl Chloride	1	2	--	<0.5	<1		ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1		ND	ND	ND	ND	ND	ND
TICs	500	ND	--	ND	55.7		ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND
Pesticides/PCBs (µg/L)																																
beta-BHC	0.04	NLE	--	NA	NA		NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
Alpha-chlordane	0.5	NLE	--	NA	NA		NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
Gamma-chlordane	0.5	NLE	--	NA	NA		NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
4-4'-DDD	0.1	NLE	--	NA	NA		NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
4-4'-DDE	0.1	NLE	--	NA	NA		NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
4,4'-DDT	0.1	NLE	--	NA	NA		NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
Dieldrin	0.03	NLE	--	NA	NA		NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
Endosulfan I	40	NLE	--	NA	NA		NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
Endrin	2	2	--	NA	NA		NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
Endrin aldehyde	NLE	NLE	--	NA	NA		NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
Endrin ketone	NLE	NLE	--	NA	NA		NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
Heptachlor	0.05	0.4	--	NA	NA		NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
Methoxychlor	40	40	--	NA	NA		NA	NA	NA	NA	NA	NA	NA	ND	0.044	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
Metals (µg/L)																																
Aluminum	200	NLE	121000	735	5540	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1480	215	179	<200	1490	<200	315		NA	NA	NA	NA	NA	NA
Antimony	6	6	20.70	<6	<12	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<6	<6	<6	<6		NA	NA	NA	NA	NA	NA
Arsenic	3	10	89.30	11.5	21.6	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.59	ER 1	ER 2.11	ER <3	<3	<3	5.7		NA	NA	NA	NA	NA	NA
Barium	6000	2000	699.00	299	727	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	15.3	12.5	2.93	ER <200	<200	<200	<200		NA	NA	NA	NA	NA	NA
Beryllium	1	4	2.10	<1	<2	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.049	ER ND	ND	<1	<1	<1	<1		NA	NA	NA	NA	NA	NA
Cadmium	4	5	9.50	<3	<6	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<3	<3	<3	<3		NA	NA	NA	NA	NA	NA
Calcium	NLE	NLE	45400.00	384000	377000	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8170	8270	3930	10200	5070	25500	<5000		NA	NA	NA	NA	NA	NA
Chromium	70	100	191.00	19	48.8	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.6	2.14	ER ND	<10	11.8	<10	<10		NA	NA	NA	NA	NA	NA
Cobalt	NLE	NLE	18.30	<50	<100	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<50	<50	<50	<50		NA	NA	NA	NA	NA	NA
Copper	1300	1300	65.60	11.7	<20	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	4.64	ER 1.32	ER <10	<10	<10	<10		NA	NA	NA	NA	NA	NA
Iron	300	NLE	431000	33900	163000	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4640	1350	900	372	4950	7750	3270		NA	NA	NA	NA	NA	NA
Lead	5	15	22.70	8.9	49.8	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<3	<3	<3	<3		NA	NA	NA	NA	NA	NA
Magnesium	NLE	NLE	62700	53800	55900	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1950	1650	1130	<5000	<5000	5220	<5000		NA	NA	NA	NA	NA	NA
Manganese	50	NLE	331	1620	948	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.33	3.73	6	<15	<15	54.7	<15		NA	NA	NA	NA	NA	NA
Mercury	2	2	0.26	<0.2	<0.2		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND		<0.2	<0.2	<0.2		NA	NA	NA	NA	NA	NA
Nickel	100	NLE	187	<10	26.8	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.14	ER 1.1	ER 1.9	ER <10	<10	<10	<10		NA	NA	NA	NA	NA	NA
Potassium	NLE	NLE	137000	56900	70600	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4590	3800	2000	<10000	<10000	<10000	<10000		NA	NA	NA	NA	NA	NA
Selenium	40	50	29.60	<10	<20	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.5	NR	ND	<10	<10	<10	<10		NA	NA	NA	NA	NA	NA
Silver	40	NLE	ND	<10	<20	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.919	ND	<10	<10	<10	<10		NA	NA	NA	NA	NA	NA
Sodium	5000	NLE	21500	212000	269000	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	58700	68100	160000	226000	50800	269000	128000		NA	NA	NA	NA	NA	NA
Thallium	2	2	5.50	<2	<4	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<2	<2	<2	<2		NA	NA	NA	NA	NA	NA
Vanadium	60	NLE	108	<50	<100	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.56	1.45	1.66	<50	<50	<50	<50		NA	NA	NA	NA	NA	NA
Zinc	2000	NLE	233	<20	111	/a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.6	3.39	2.17	<20	<20	<20	<20		NA	NA	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

/a = Elevated sample detection limit due to difficult sample matrix

Table 2
Historical Groundwater Analytical Results
Site FTMM-08 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M8MW13													M8MW14																
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	49	50	51	LF1	LF2	LF2 Dup	LF3	LF3 Dup	LF4	LF5	LF6	LF7	LF7 Dup	44	44	45	46	47	48	49	50	50 Dup	LF1	LF1 Dup	LF2	LF3	LF4
Date Collected				6/27/2009	9/21/2009	12/8/2009	3/17/2010	6/25/2010	6/25/2010	9/28/2010	9/28/2010	12/23/2010	3/7/2011	5/20/2011	8/10/2011	8/10/2011	3/13/2008	6/5/2008	9/4/2008	11/21/2008	2/23/2009	6/27/2009	9/21/2009	12/10/2009	12/10/2009	3/18/2010	3/18/2010	6/28/2010	9/28/2010	12/23/2010
Volatile Organic Compounds (µg/L)																																
Tert-butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	<5	<5	<5	NA	NA	5.68	10.79	13.87	ND	ND	7.04 J	ND	ND	ND	ND	ND	ND	ND	<5
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<10	<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2	<2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<10	<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5
Chlorobenzene	50	100	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	9.58	9.68	6.3	3.84	5.89	8.04	6.16	6.49	6.73	5.87	5.8	1.67	1.64	<0.5
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5
Dibromochloromethane	1	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5
1,3-Dichlorobenzene	600	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	2.34	2.64	1.77 J	1.14 J	1.51 J	2.2	1.76	2	2.11	1.55	1.53	0.55	0.51	<0.5
1,2-Dichlorobenzene	600	600	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5
Isopropylbenzene	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2	<2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5
Methylene chloride	3	5	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2	<2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5
Methyl tert butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5
Tetrachloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5
Total Xylenes	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	<1	<1	<1	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1
Vinyl Chloride	1	2	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5
TICs	500	ND	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9	7	21	ND	3	6	4	4	4	3	3	ND	ND	ND
Pesticides/PCBs (µg/L)																																
beta-BHC	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alpha-chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gamma-chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-4'-DDD	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-4'-DDE	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dieldrin	0.03	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin	2	2	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin aldehyde	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin ketone	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor	0.05	0.4	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	40	40	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)																																
Aluminum	200	NLE	121000	NA	NA	NA	57.7	ND	24	255	209	<200	<200	964	544	488	NA	NA	NA	NA	NA	NA	NA	NA	NA	103	76.7	53.8	96.6	<200
Antimony	6	6	20.70	NA	NA	NA	10.2	11	11.9	15.6	15.2	<6	<6	<6	<6	<6	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6	10.8	12.7	21	<6
Arsenic	3	10	89.30	NA	NA	NA	0.73 ER	ND	ND	1.9 ER	ND	<3	<3	<3	<3	<3	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.85	ND	ND	2.2 ER	<3
Barium	6000	2000	699.00	NA	NA	NA	52.3	78.2	84.3	58.5	56.8	<200	<200	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	547	575	167	196	<200
Beryllium	1	4	2.10	NA	NA	NA	ND	0.094 ER	0.101 ER	ND	ND	<1	<1	<1	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	0.105 ER	ND	<1
Cadmium	4	5	9.50	NA	NA	NA	0.991 ER	1.24 ER	1.36 ER	0.761 ER	0.596 ER	<3	<3	<3	<3	<3	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.609	ND	1.59 ER	1.09 ER	<3
Calcium	NLE	NLE	45400.00	NA	NA	NA	138000	193000	204000	89000	85000	230000	131000	206000	169000	165000	NA	NA	NA	NA	NA	NA	NA	NA	NA	191000	200000	93300	129000	111000
Chromium	70	100	191.00	NA	NA	NA	ND	ND	ND	ND	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<10
Cobalt	NLE	NLE	18.30	NA	NA	NA	1.21	ND	ND	ND	ND	<50	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	0.55	ND	<50
Copper	1300	1300	65.60	NA	NA	NA	6.21	6.71	6.9	17.6	16.8	<10	12.8	21.3	17.6	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	1.26 ER	3.66 ER	<10
Iron	300	NLE	431000	NA	NA	NA	2980	2670	3270	585	430	272	370	9400	6440	6530	NA	NA	NA	NA	NA	NA	NA	NA	NA	35400	37600	20900	24700	39100
Lead	5	15	22.70	NA	NA	NA	ND	ND	ND	3.52 ER	2.67 ER	<3	<3	16.8	8.7	9.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	3.98 ER	3.68 ER	<3
Magnesium	NLE	NLE	62700	NA	NA	NA	28200	29500	3200	21400	20500	83500	28800	42400	27200	26800	NA	NA	NA	NA	NA	NA	NA	NA	NA	38200	41300	14700	18200	15100
Manganese	50	NLE	331	NA	NA	NA	182	239	253	48.4	47.4	39	<15	146	184	181	NA	NA	NA	NA	NA	NA	NA	NA	NA	607	640	641	1030	1610
Mercury	2	2	0.26	NA	NA	NA	ND	ND	ND	0.29 ER	0.23 ER		<0.2	0.23	<0.2	0.21	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	0.26 ER	
Nickel	100	NLE	187	NA	NA	NA	6.94	6.02	6.28	6.92	6.19	<10	<10	13.6	13.8	13.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.74 ER	2.1 ER	2.58 ER	3.37 ER	<10
Potassium	NLE	NLE	137000	NA	NA	NA	12500	14000	15100	18400	17400	34600	12600	20700	17000	16900	NA	NA	NA	NA	NA	NA	NA	NA	NA	31800	32900	15400	18000	14300
Selenium	40	50	29.60	NA	NA	NA	85.4	NR	NR	1.5	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	67.1	63.9	NR	ND	<10
Silver	40	NLE	ND	NA	NA	NA	6.13	ND	ND	ND	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	1.8	1.53	<10
Sodium	5000	NLE	21500	NA	NA	NA	127000	109000	116000	211000	202000	711000	153000	291000	126000	129000	NA	NA	NA	NA	NA	NA	NA	NA	NA	73900	75700	43100	47400	56400
Thallium	2	2	5.50	NA	NA	NA	ND	ND	ND	ND	ND	<2	<2	<2	<2	<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<2
Vanadium	60	NLE	108	NA	NA	NA	1.91	ND	ND	1.08	0.949	<50	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.22	6.85	ND	ND	<50
Zinc	2000	NLE	233	NA	NA	NA	574	325	352	259	246	432	424	628	400	399	NA	NA	NA	NA	NA	NA	NA	NA	NA	61	40.8	14.1	132	26.1

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

/a = Elevated sample detection limit due to difficult sample matrix

Table 2
Historical Groundwater Analytical Results
Site FTMM-08 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M8MW14			M8MW15																			M8MW16			
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF5	LF6	LF7	44	44 Dup	45	45 Dup	46	46 Dup	47	48	49	50	51	LF1	LF2	LF3	LF4	LF5	LF6	LF7	40	41	42	43
Date Collected				3/7/2011	5/25/2011	8/11/2011	3/14/2008	3/14/2008	6/11/2008	6/11/2008	9/5/2008	9/5/2008	11/21/2008	2/23/2009	6/27/2009	9/21/2009	12/10/2009	3/18/2010	6/28/2010	9/28/2010	12/23/2010	3/8/2011	5/25/2011	8/11/2011	3/14/2008	6/11/2008	9/5/2008	11/21/2008
Volatile Organic Compounds (µg/L)																													
Tert-butyl alcohol	100	NLE	--	<5	<5	NA	ND	NA	12.36	13.59	13.53	15.41	ND	ND	9.57 J	ND	ND	ND	ND	ND	<5	<5	<5	NA	ND	ND	ND	ND
Acetone	6000	NLE	--	<0.5	<0.5	<10	ND	NA	ND	1.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<10	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	<0.5	<0.5	<2	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2	ND	ND	ND	ND
2-Butanone	300	NLE	--	<0.5	<0.5	<10	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<10	ND	ND	ND	ND
Benzene	1	5	--	<0.5	<0.5	<1	0.31 J	NA	0.61 J	0.61 J	0.19 J	0.19 J	ND	ND	0.87 J	0.62	0.87	0.32 J	0.19 J	ND	0.3 J	0.82	1.19	<1	0.7 J	1.13 J	0.68 J	0.54 J
Chlorobenzene	50	100	--	2.07	6.34	6.2	13.2	NA	23.73	23.54	26.76	26.33	12.04	9.02	30.46	35.16	32.09	7.45	28.76	25.6	17.47	17.21	35.91	37.1	9.83	20.32	24.78	18.26
Bromodichloromethane	1	80	--	<0.5	<0.5	<1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND
Chloroform	70	80	--	<0.5	<0.5	<1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND
Dibromochloromethane	1	NLE	--	<0.5	<0.5	<1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	<0.5	<0.5	<1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND
1,3-Dichlorobenzene	600	NLE	--	<0.5	<0.5	<1	1.5 J	NA	2.33	2.16	2.69	2.63	1.02 J	1.05 J	1.98 J	2.67	2.22	0.66	2.47	2.18	1.38	1.38	2.66	3.1	ND	0.58 J	0.99 J	0.57 J
1,4-Dichlorobenzene	75	75	--	0.65	1.87	2.2	2.95	NA	4.59	4.6	5.44	5.29	2.1	2.02	4.43	5.93	4.76	1.35	5.3	4.53	2.78	3.04	6.05	6.6	0.82 J	2.18	3.42	2.15
1,2-Dichlorobenzene	600	600	--	<0.5	<0.5	<1	1.02 J	NA	1.48 J	1.46 J	1.94 J	1.86 J	0.68 J	0.77 J	1.12 J	1.67	1.42	0.47 J	1.64	1.31	0.92	0.93	1.81	2	ND	ND	0.51 J	ND
Ethylbenzene	700	700	--	<0.5	<0.5	<1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	<0.5	<0.5	<2	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	1 J	ND	ND	ND	ND
Methylene chloride	3	5	--	<0.5	<0.5	1.5 J	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	0.83 J	ND	ND	ND	ND
Methyl tert butyl ether	70	NLE	--	<0.5	<0.5	<5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND
Tetrachloroethene	1	5	--	<0.5	<0.5	<1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND
Toluene	600	1000	--	<0.5	<0.5	<1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	0.47 J	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND
Trichloroethene	1	5	--	<0.5	<0.5	<1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND
Total Xylenes	1000	10,000	--	<1	<1	<1	ND	NA	0.19 J	0.19 J	0.57 J	0.56 J	ND	ND	0.21	0.66 J	0.67 J	ND	ND	0.63 J	<1	<1	<1	0.32 J	ND	ND	ND	ND
Vinyl Chloride	1	2	--	<0.5	<0.5	<1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND
TICs	500	ND	--	ND	7	ND	23	NA	25	25	74	76	13	9	43	51	62	9	45	30	ND	ND	53	31	ND	3	16	ND
Pesticides/PCBs (µg/L)																												
beta-BHC	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alpha-chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gamma-chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-4'-DDD	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-4'-DDE	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dieldrin	0.03	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin	2	2	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin aldehyde	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin ketone	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor	0.05	0.4	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	40	40	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)																												
Aluminum	200	NLE	121000	<200	<200	486	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	96.4	48.9	55.9	<200	<200	<200	<200	NA	NA	NA	NA
Antimony	6	6	20.70	<6	<6	<6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.54	14.8	22.4	<6	<6	<6	<6	NA	NA	NA	NA
Arsenic	3	10	89.30	<3	<3	5.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.79	1.47 ER	2.52 ER	<3	<3	<3	<3	NA	NA	NA	NA
Barium	6000	2000	699.00	460	494	427	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	144	227	221	<200	<200	270	257	NA	NA	NA	NA
Beryllium	1	4	2.10	<1	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.094 ER	ND	<1	<1	<1	<1	NA	NA	NA	NA
Cadmium	4	5	9.50	<3	<3	3.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	1.5 ER	0.542 ER	<3	<3	<3	<3	NA	NA	NA	NA
Calcium	NLE	NLE	45400.00	160000	186000	160000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	357000	290000	273000	257000	289000	264000	270000	NA	NA	NA	NA
Chromium	70	100	191.00	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<10	11.4	<10	<10	NA	NA	NA	NA
Cobalt	NLE	NLE	18.30	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	18.6	1.96	1.65	<50	<50	<50	<50	NA	NA	NA	NA
Copper	1300	1300	65.60	<10	<10	26.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	3.83 ER	2.87 ER	<10	<10	<10	<10	NA	NA	NA	NA
Iron	300	NLE	431000	43000	48800	49200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40300	15000	19400	27000	20000	16400	15400	NA	NA	NA	NA
Lead	5	15	22.70	<3	3.7	<3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	3 ER	3.6 ER	<3	<3	<3	<3	NA	NA	NA	NA
Magnesium	NLE	NLE	62700	33200	57300	61600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	54800	70000	74200	57600	55400	60400	59700	NA	NA	NA	NA
Manganese	50	NLE	331	740	546	434	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3390	675	744	1650	1100	563	672	NA	NA	NA	NA
Mercury	2	2	0.26	<0.2	<0.2	<0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	0.26 ER		<0.2	<0.2	<0.2	NA	NA	NA	NA
Nickel	100	NLE	187	<10	<10	10.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	30.1	12.5	6.24	<10	<10	<10	<10	NA	NA	NA	NA
Potassium	NLE	NLE	137000	29500	42100	39500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	17300	40400	38300	30300	26800	37800	39600	NA	NA	NA	NA
Selenium	40	50	29.60	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	67.8	NR	ND	<10	<10	<10	11.7	NA	NA	NA	NA
Silver	40	NLE	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.44	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA
Sodium	5000	NLE	21500	71300	211000	255000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	104000	199000	210000	182000	124000	155000	169000	NA	NA	NA	NA
Thallium	2	2	5.50	<2	<2	<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<2	<2	<2	<2	NA	NA	NA	NA
Vanadium	60	NLE	108	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.45	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA
Zinc	2000	NLE	233	28.4	182	820	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.71	2.35	ND	<20	<20	<20	26.6	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

/a = Elevated sample detection limit due to difficult sample matrix

Table 2
Historical Groundwater Analytical Results
Site FTMM-08 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M8MW16											M8MW17													
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	44	45	46	47	LF1	LF2	LF3	LF4	LF5	LF6	LF7	40	41	42	43	44	45	45 Dup	46	46 Dup	47	47 Dup	LF1	LF2	LF3
Date Collected				2/23/2009	6/27/2009	9/21/2009	12/10/2009	3/19/2010	6/28/2010	9/29/2010	12/23/2010	3/8/2011	5/25/2011	8/11/2011	3/14/2008	6/11/2008	9/5/2008	11/21/2008	2/23/2009	6/27/2009	6/27/2009	9/21/2009	9/21/2009	12/8/2009	12/8/2009	3/17/2010	6/25/2010	9/28/2010
Volatile Organic Compounds (µg/L)																												
Tert-butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	<5	<5	<5	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	1.27 J	1.32 J	0.47 J	ND	1.41	0.68	0.28 J	0.31 J	<0.5	0.63	0.57 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	50	100	--	25.26	25.42	20.03	0.39 J	20.86	14	30.96	28.6	22.07	12.82	28.4	ND	0.3 J	2.62	ND	ND	0.4 J	0.3 J	0.17 J	ND	ND	ND	0.8	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	NLE	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	0.2 J	0.17 J	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	NLE	--	0.43 J	0.54 J	0.53	ND	0.55	0.41 J	1.19	0.91	0.58	0.27 J	0.67 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	1.74 J	2.46	2.33	ND	3.47	1.83	4.66	4.05	3.17	3.41	3.1	ND	ND	0.67 J	ND	ND	ND	ND	ND	ND	ND	ND	0.41 J	ND	ND
1,2-Dichlorobenzene	600	600	--	ND	ND	ND	ND	0.44 J	ND	0.76	0.56	0.45 J	0.21 J	0.39 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	3	5	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	0.97 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	<1	<1	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	1	2	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs	500	ND	--	ND	4	3	ND	8	ND	3	ND	ND	ND	ND	ND	12	42	4	ND	ND	ND	ND	ND	ND	ND	14	14	ND
Pesticides/PCBs (µg/L)																												
beta-BHC	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alpha-chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gamma-chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-4'-DDD	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-4'-DDE	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dieldrin	0.03	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin	2	2	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin aldehyde	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin ketone	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor	0.05	0.4	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	40	40	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)																												
Aluminum	200	NLE	121000	NA	NA	NA	NA	71.4	ND	ND	<200	1050	3410	693	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	64.6	ND	ND
Antimony	6	6	20.70	NA	NA	NA	NA	9.81	ND	7.08	<6	<6	<6	<6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.88 ER	12.5	25.2
Arsenic	3	10	89.30	NA	NA	NA	NA	ND	ND	0.66 ER	<3	<3	<3	<3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	2.73 ER
Barium	6000	2000	699.00	NA	NA	NA	NA	87.1	ND	309	<200	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	135	138	287
Beryllium	1	4	2.10	NA	NA	NA	NA	ND	ND	ND	<1	<1	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.072 ER	ND
Cadmium	4	5	9.50	NA	NA	NA	NA	5.98	0.516 ER	0.816 ER	<3	<3	8.5	11.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.521 ER	ND
Calcium	NLE	NLE	45400.00	NA	NA	NA	NA	165000	ND	284000	193000	144000	136000	198000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	299000	295000	399000
Chromium	70	100	191.00	NA	NA	NA	NA	ND	ND	1.2 ER	<10	13.6	13.7	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
Cobalt	NLE	NLE	18.30	NA	NA	NA	NA	0.608	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
Copper	1300	1300	65.60	NA	NA	NA	NA	ND	ND	5.08	<10	<10	24.5	21.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	1	2.01
Iron	300	NLE	431000	NA	NA	NA	NA	19000	ND	9290	12900	17200	23000	9770	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6640	1560	3550
Lead	5	15	22.70	NA	NA	NA	NA	ND	ND	ND	<3	<3	9.7	<3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
Magnesium	NLE	NLE	62700	NA	NA	NA	NA	41000	ND	3000000	78300	52600	30900	89200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	30700	32000	130000
Manganese	50	NLE	331	NA	NA	NA	NA	477	ND	570	561	496	668	535	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	521	378	554
Mercury	2	2	0.26	NA	NA	NA	NA	ND	ND	ND		<0.2	0.44	0.46	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	0.22 ER
Nickel	100	NLE	187	NA	NA	NA	NA	15.9	ND	2.35 ER	<10	12.3	29.9	24.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.909 ER	ND	ND
Potassium	NLE	NLE	137000	NA	NA	NA	NA	18900	38.6	93600	35900	23200	15900	35300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10700	11600	32800
Selenium	40	50	29.60	NA	NA	NA	NA	71.9	NR	1.95	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	91.3	NR	ND
Silver	40	NLE	ND	NA	NA	NA	NA	1.87	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12.4	ND	ND
Sodium	5000	NLE	21500	NA	NA	NA	NA	92800	ND	2140000	405000	165000	56100	518000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	43600	49200	931000 E
Thallium	2	2	5.50	NA	NA	NA	NA	ND	ND	ND	<2	<2	<2	<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
Vanadium	60	NLE	108	NA	NA	NA	NA	3.46	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.23	ND	ND
Zinc	2000	NLE	233	NA	NA	NA	NA	274	2.09	9.27	80	125	272	183	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.8	ND	ND

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

/a = Elevated sample detection limit due to difficult sample matrix

Table 2
Historical Groundwater Analytical Results
Site FTMM-08 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M8MW17						M8MW18																		M8MW19							
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF4	LF5	LF6	LF6 Dup	LF7		39	40	41	42	43	44	45	46	LF1		LF2		LF3	LF4	LF5	LF6	LF6 Dup	LF7	39	40	41	42	43	44	45	46
Date Collected				12/23/2010	3/8/2011	5/20/2011	5/20/2011	8/10/2011		3/13/2008	6/5/2008	9/4/2008	11/21/2008	2/23/2009	6/27/2009	9/21/2009	12/10/2009	3/19/2010		6/28/2010		9/29/2010	12/23/2010	3/8/2011	5/26/2011	5/26/2011	8/11/2011	3/13/2008	6/5/2008	9/4/2008	11/21/2008	2/23/2009	6/27/2009	9/21/2009	12/8/2009
Volatile Organic Compounds (µg/L)																																			
Tert-butyl alcohol	100	NLE	--	<5	<5	<5	<5	NA		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	<5	<5	<5	<5	NA	ND	8.86	ND	ND	ND	ND	ND	ND
Acetone	6000	NLE	--	<0.5	<0.5	<0.5	<0.5	<10		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	<0.5	<0.5	<0.5	<0.5	<10	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	<0.5	<0.5	<0.5	<0.5	<2		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	<0.5	<0.5	<0.5	<0.5	<2	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	<0.5	<0.5	<0.5	<0.5	<10		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	<0.5	<0.5	<0.5	<0.5	<10	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	<0.5	<0.5	<0.5	<0.5	<1		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	50	100	--	0.5	0.7	<0.5	<0.5	0.41	J	11.39	6.95	13.34	8.59	13.26	7.85	11.99	0.37	J 10.23		8.92		8.8	6.34	2.68	6.7	6.22	14.8	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	<0.5	<0.5	<0.5	<0.5	<1		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	<0.5	<0.5	<0.5	<0.5	<1		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	NLE	--	<0.5	<0.5	<0.5	<0.5	<1		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	<0.5	<0.5	<0.5	<0.5	<1		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	NLE	--	<0.5	<0.5	<0.5	<0.5	<1		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	<0.5	<0.5	<0.5	<0.5	0.33	J ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	<0.5	<0.5	<0.5	<0.5	<1		2.42	1.87	J 4.73	2.02	3.39	1.07	J 3.15	ND	2.71		2.61		2.34	1.84	<0.5	1.2	1.03	4.1	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	600	600	--	<0.5	<0.5	<0.5	<0.5	<1		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	<0.5	<0.5	<0.5	<0.5	0.38	J ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	<0.5	<0.5	<0.5	<0.5	<1		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	<0.5	<0.5	<0.5	<0.5	<2		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	<0.5	<0.5	<0.5	<0.5	<2	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	3	5	--	<0.5	<0.5	<0.5	<0.5	<2		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	<0.5	<0.5	<0.5	<0.5	2.1	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	70	NLE	--	<0.5	<0.5	<0.5	<0.5	<1		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1	5	--	<0.5	<0.5	<0.5	<0.5	<1		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	<0.5	<0.5	<0.5	<0.5	0.27	J	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	<0.5	<0.5	<0.5	<0.5	<1		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1000	10,000	--	<1	<1	<1	<1	<1		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	<1	<1	<1	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	1	2	--	<0.5	<0.5	<0.5	<0.5	<1		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND
TICs	500	ND	--	ND	ND	ND	ND	ND		9.5	ND	24	4	4	13	7	ND	3		ND		3	ND	ND	3	7	ND	14	8	10	5	ND	9	11	11
Pesticides/PCBs (µg/L)																																			
beta-BHC	0.04	NLE	--	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alpha-chlordane	0.5	NLE	--	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gamma-chlordane	0.5	NLE	--	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-4'-DDD	0.1	NLE	--	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-4'-DDE	0.1	NLE	--	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	0.1	NLE	--	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dieldrin	0.03	NLE	--	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	40	NLE	--	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin	2	2	--	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin aldehyde	NLE	NLE	--	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin ketone	NLE	NLE	--	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor	0.05	0.4	--	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	40	40	--	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)																																			
Aluminum	200	NLE	121000	3990	<200	<200	300	<200		NA	NA	NA	NA	NA	NA	NA	NA	23.6		ND		ND	420	<200	470	275	235	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	6	6	20.70	<6	<6	<6	<6	<6		NA	NA	NA	NA	NA	NA	NA	NA	10.8		11.3		8.76	<6	<6	<6	<6	<6	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	3	10	89.30	11.6	<3	3.1	9.6	5		NA	NA	NA	NA	NA	NA	NA	NA	0.88	ER	ND		2.61	ER <3	<3	<3	<3	<3	NA	NA	NA	NA	NA	NA	NA	NA
Barium	6000	2000	699.00	<200	<200	<200	<200	<200		NA	NA	NA	NA	NA	NA	NA	NA	277		278		406	<200	<200	356	331	453	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	1	4	2.10	<1	<1	<1	<1	<1		NA	NA	NA	NA	NA	NA	NA	NA	ND		0.105	ER	ND	<1	<1	<1	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	4	5	9.50	<3	<3	<3	<3	<3		NA	NA	NA	NA	NA	NA	NA	NA	0.728	ER	1.77	ER	0.618	ER <3	<3	<3	<3	5	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	NLE	NLE	45400.00	280000	264000	308000	301000	296000		NA	NA	NA	NA	NA	NA	NA	NA	152000		149000		225000	92400	117000	147000	144000	154000	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	70	100	191.00	33.4	<10	<10	<10	<10		NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NLE	NLE	18.30	<50	<50	<50	<50	<50		NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND	<50	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1300	1300	65.60	41.7	<10	<10	<10	<10		NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		3.22	ER 11	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Iron	300	NLE	431000	52100	7220	11300	21200	11600		NA	NA	NA	NA	NA	NA	NA	NA	15200		23500		18700	1610	1480	25000	22900	24300	NA	NA	NA	NA	NA	NA	NA	NA
Lead	5	15	22.70	33.1	<3	<3	4.4	<3		NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		3.07	ER <3	<3	16.3	9.7	4.7	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	NLE	NLE	62700	39600	31000	29300	29000	33300		NA	NA	NA	NA	NA	NA	NA	NA	39700		46300		97200	100000	39200	42700	41600	48600	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	50	NLE	331	947	594	489	502	520		NA	NA	NA	NA	NA	NA	NA	NA	840		604		1070	35.1	348	681	651	739	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	2	0.26		<0.2	<0.2	<0.2	<0.2		NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<0.2	<0.2	<0.2	<0.2	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	100	NLE	187	16.5	<10	<10	<10	<10		NA	NA	NA	NA	NA	NA	NA	NA	1.88	ER	2.3	ER	0.565	ER <10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	NLE	NLE	137000	13200	10500	10800	10800	13700		NA	NA	NA	NA	NA	NA	NA	NA	25300		27100		38000	44900	17700	32500	31200	37700	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	40	50	29.60	<10	<10	<10	<10	<10		NA	NA	NA	NA	NA	NA	NA	NA	66.5		NR		ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Silver	40	NLE	ND	<10	<10	<10	<10	<10		NA	NA	NA	NA	NA	NA	NA	NA	3.64		0.505		ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	5000	NLE	21500	254000	98600	40600	41300	79500		NA	NA	NA	NA	NA	NA	NA	NA	118000		182000		463000	883000	147000	154000	150000	198000	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	5.50	<2	<2	<2	<2	<2		NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND	<2	<2	<2	<2	<2	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	60	NLE	108	<50	<50	<50	<50	<50		NA	NA	NA	NA	NA	NA	NA	NA	3.82		ND		ND	<50	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	2000	NLE	233	155	<20	<20	24.9	<20		NA	NA	NA	NA	NA	NA	NA	NA	89.4		ND		ND	216	254	123	79.8	274	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

/a = Elevated sample detection limit due to difficult sample matrix

Table 2
Historical Groundwater Analytical Results
Site FTMM-08 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M8MW19								M8MW20																M8MW21			
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF1	LF2	LF2 Dup	LF3	LF4	LF5	LF6	LF7	39	40	41	42	43	44	45	46	LF1	LF2	LF3	LF4	LF5	LF6	LF7	LF7 Dup	39	40	41	42
Date Collected				3/17/2010	6/28/2010	6/28/2010	9/28/2010	12/23/2010	3/7/2011	5/20/2011	8/10/2011	3/13/2008	6/5/2008	9/4/2008	11/21/2008	2/23/2009	6/27/2009	9/21/2009	12/8/2009	3/17/2010	6/28/2010	9/28/2010	12/23/2010	3/7/2011	5/25/2011	8/11/2011	8/11/2011	3/13/2008	6/5/2008	9/4/2008	11/21/2008
Volatile Organic Compounds (µg/L)																															
Tert-butyl alcohol	100	NLE	--	ND	ND	ND	ND	<5	<5	<5	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<5	<5	<5	NA	NA	ND	ND	ND	ND
Acetone	6000	NLE	--	ND	ND	ND	ND	<0.5	<0.5	<0.5	<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<10	<10	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2	<2	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	<0.5	<0.5	<0.5	<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<10	<10	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND
Chlorobenzene	50	100	--	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	1.57 J	0.3 J	2.12	1.39 J	1.83 J	1.35 J	1.45	1.06	1.16	0.45 J	0.42 J	0.34 J	0.26 J	1.84	1.8	1.9	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND
Dibromochloromethane	1	NLE	--	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND
1,3-Dichlorobenzene	600	NLE	--	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	0.35 J	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	0.16 J	<1	<1	ND	ND	ND	ND
1,2-Dichlorobenzene	600	600	--	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2	<2	ND	ND	ND	ND
Methylene chloride	3	5	--	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	2	<2	ND	ND	ND	ND
Methyl tert butyl ether	70	NLE	--	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND
Tetrachloroethene	1	5	--	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND
Total Xylenes	1000	10,000	--	ND	ND	ND	ND	<1	<1	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1	<1	<1	<1	<1	ND	ND	ND	ND
Vinyl Chloride	1	2	--	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	<1	ND	ND	ND	ND
TICs	500	ND	--	14	5	5	4	ND	ND	9	ND	ND	ND	4	ND	ND	ND	ND	ND	8	ND	ND	ND	ND	16	ND	ND	ND	ND	ND	ND
Pesticides/PCBs (µg/L)																															
beta-BHC	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alpha-chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gamma-chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-4'-DDD	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-4'-DDE	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dieldrin	0.03	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin	2	2	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin aldehyde	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin ketone	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor	0.05	0.4	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	40	40	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)																															
Aluminum	200	NLE	121000	44.4	ND	ND	ND	<200	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	20.6	ND	37.4	<200	<200	<200	<200	<200	NA	NA	NA	NA
Antimony	6	6	20.70	11.5	9.6 ER	10.2	30.3	<6	<6	<6	<6	NA	NA	NA	NA	NA	NA	NA	NA	7.8 ER	14.2	34.1	<6	<6	<6	<6	<6	NA	NA	NA	NA
Arsenic	3	10	89.30	1.71 ER	ND	ND	4.21 ER	<3	<3	<3	<3	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	1.46 ER	<3	<3	<3	3.8	<3	NA	NA	NA	NA
Barium	6000	2000	699.00	48.8	96.1	98.3	511	<200	<200	<200	273	NA	NA	NA	NA	NA	NA	NA	NA	110	148	238	<200	<200	360	409	422	NA	NA	NA	NA
Beryllium	1	4	2.10	ND	0.117 ER	0.118 ER	0.057 ER	<1	<1	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.073 ER	ND	<1	<1	<1	<1	<1	NA	NA	NA	NA
Cadmium	4	5	9.50	ND	0.826 ER	0.932 ER	1.29 ER	<3	<3	<3	3.8	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<3	<3	<3	<3	<3	NA	NA	NA	NA
Calcium	NLE	NLE	45400.00	92500	166000	170000	607000 E	42800	135000	126000	306000	NA	NA	NA	NA	NA	NA	NA	NA	136000	184000	344000	58400	137000	318000	330000	349000	NA	NA	NA	NA
Chromium	70	100	191.00	ND	ND	ND	3.68 ER	<10	12.1	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	ND	7.25	4.89 ER	<10	16.5	<10	10.6	<10	NA	NA	NA	NA
Cobalt	NLE	NLE	18.30	ND	ND	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<50	<50	<50	<50	<50	NA	NA	NA	NA
Copper	1300	1300	65.60	ND	2.55 ER	2.14 ER	2.69 ER	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	1.96 ER	<10	<10	<10	<10	<10	NA	NA	NA	NA
Iron	300	NLE	431000	5850	12000	12100	30200	4440	9870	4070	13000	NA	NA	NA	NA	NA	NA	NA	NA	478	720	3310	5550	1230	3390	6990	4190	NA	NA	NA	NA
Lead	5	15	22.70	ND	ND	ND	3.34 ER	<3	<3	<3	<3	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<3	<3	<3	<3	<3	NA	NA	NA	NA
Magnesium	NLE	NLE	62700	37200	65400	67100	295000	6720	43100	44000	150000	NA	NA	NA	NA	NA	NA	NA	NA	43500	96000	293000	7700	92900	64600	110000	120000	NA	NA	NA	NA
Manganese	50	NLE	331	219	386	394	1230	1010	421	461	801	NA	NA	NA	NA	NA	NA	NA	NA	93.6	160	332	70.6	125	336	321	338	NA	NA	NA	NA
Mercury	2	2	0.26	ND	ND	ND	0.25 ER		<0.2	<0.2	<0.2	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	0.24 ER		<0.2	<0.2	<0.2	<0.2	NA	NA	NA	NA
Nickel	100	NLE	187	1.31 ER	ND	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	0.624 ER	ND	0.506 ER	<10	<10	<10	10.1	<10	NA	NA	NA	NA
Potassium	NLE	NLE	137000	12800	20600	21000	57500	<10000	16600	21100	42300	NA	NA	NA	NA	NA	NA	NA	NA	17400	39600	90000	11300	36100	28500	43300	47200	NA	NA	NA	NA
Selenium	40	50	29.60	69.3	NR	NR	1.61	<10	<10	<10	12.4	NA	NA	NA	NA	NA	NA	NA	NA	86.5	NR	3.01	<10	<10	<10	12.1	11.5	NA	NA	NA	NA
Silver	40	NLE	ND	3.16	ND	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	6.84	ND	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA
Sodium	5000	NLE	21500	337000	445000	435000	2010000 E	69700	357000	408000	1030000	NA	NA	NA	NA	NA	NA	NA	NA	140000	570000	1890000 E	30200	533000	180000	527000	596000	NA	NA	NA	NA
Thallium	2	2	5.50	ND	ND	ND	ND	<2	<2	<2	<2	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<2		<2	<2	<2	NA	NA	NA	NA
Vanadium	60	NLE	108	3.39	ND	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	3.83	7.54	1.07	<50	<50	<50	<50	<50	NA	NA	NA	NA
Zinc	2000	NLE	233	8.02	1.25	2.57	ND	<20	117	33.7	198	NA	NA	NA	NA	NA	NA	NA	NA	16.6	ND	ND	<20	<20	39.5	71.6	33	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

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Table 2
Historical Groundwater Analytical Results
Site FTMM-08 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M8MW21												M8MW22															
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	43	44	45	46	LF1	LF2	LF3	LF4	LF5	LF6	LF6 Dup	LF7	39	40	41	42	43	44	45	46	LF1	LF2	LF3	LF3 Dup	LF4	LF5	LF6	LF7
Date Collected				2/23/2009	6/27/2009	9/21/2009	12/8/2009	3/17/2010	6/28/2010	9/28/2010	12/23/2010	3/7/2011	5/25/2011	5/25/2011	8/10/2011	3/13/2008	6/5/2008	9/4/2008	11/21/2008	2/23/2009	6/27/2009	9/21/2009	12/8/2009	3/17/2010	6/28/2010	9/29/2010	9/29/2010	12/23/2010	3/7/2011	5/25/2011	8/10/2011
Volatile Organic Compounds (µg/L)																															
Tert-butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	<5	<5	<5	<5	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<5	<5	<5	NA
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<0.5	<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<10
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<0.5	<2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<0.5	<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<10
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
Chlorobenzene	50	100	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
Dibromochloromethane	1	NLE	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<0.5	<1	0.36 J	0.27 J	0.31 J	ND	ND	0.24 J	ND	0.21 J	0.19 J	ND	0.2 J	0.22 J	0.23 J	0.18 J	0.19 J	<1
1,3-Dichlorobenzene	600	NLE	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
1,2-Dichlorobenzene	600	600	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
Isopropylbenzene	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<0.5	<2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2
Methylene chloride	3	5	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<0.5	<2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2
Methyl tert butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	0.18 J	<1
Tetrachloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
Total Xylenes	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	<1	<1	<1	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1	<1	<1	<1
Vinyl Chloride	1	2	--	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
TICs	500	ND	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.1
Pesticides/PCBs (µg/L)																															
beta-BHC	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alpha-chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gamma-chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-4'-DDD	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-4'-DDE	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dieldrin	0.03	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin	2	2	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin aldehyde	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin ketone	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor	0.05	0.4	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	40	40	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)																															
Aluminum	200	NLE	121000	NA	NA	NA	NA	857	ND	137	<200	1020	24500	8720	<200	NA	NA	NA	NA	NA	NA	NA	NA	ND	50	13.7	ND	<200	<200	785	355
Antimony	6	6	20.70	NA	NA	NA	NA	ND	11	28.2	<6	<6	<6	<6	<6	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	6.42	7.38	<6	<6	<6	<6
Arsenic	3	10	89.30	NA	NA	NA	NA	ND	ND	0.99 ER	6.4	<3	13	5.3	<3	NA	NA	NA	NA	NA	NA	NA	NA	8.49	10.63	9.23	7.79	6.9	5.2	38.1	34.2
Barium	6000	2000	699.00	NA	NA	NA	NA	10.1	36.2	72.4	<200	<200	257	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	ND	1.31 ER	3.78 ER	4.33 ER	<200	<200	<200	<200
Beryllium	1	4	2.10	NA	NA	NA	NA	ND	0.067 ER	ND	<1	<1	2.4	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<1	<1	<1	<1
Cadmium	4	5	9.50	NA	NA	NA	NA	ND	1.55 ER	1.81 ER	<3	<3	14.9	5.7	<3	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<3	<3	<3	<3
Calcium	NLE	NLE	45400.00	NA	NA	NA	NA	34500	133000	158000	23400	21900	122000	124000	187000	NA	NA	NA	NA	NA	NA	NA	NA	8120	6370	67200	64400	151000	56300	14000	13000
Chromium	70	100	191.00	NA	NA	NA	NA	1.74 ER	ND	ND	<10	<10	118	43.1	<10	NA	NA	NA	NA	NA	NA	NA	NA	1.08 ER	3.99 ER	ND	ND	<10	<10	11.4	11.7
Cobalt	NLE	NLE	18.30	NA	NA	NA	NA	ND	ND	ND	<50	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<50	<50	<50	<50
Copper	1300	1300	65.60	NA	NA	NA	NA	6.73	5.27	9.08	<10	14.6	81	30	<10	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	4.09 ER	3.3 ER	<10	<10	<10	<10
Iron	300	NLE	431000	NA	NA	NA	NA	2290	1950	1880	15700	1900	73700	31400	7380	NA	NA	NA	NA	NA	NA	NA	NA	2210	1760	11700	12800	50100	11500	56500	40300
Lead	5	15	22.70	NA	NA	NA	NA	ND	ND	ND	<3	<3	65	24.9	<3	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<3	<3	14.3	4.5
Magnesium	NLE	NLE	62700	NA	NA	NA	NA	19400	75800	166000	<5000	19900	114000	95500	141000	NA	NA	NA	NA	NA	NA	NA	NA	12000	9100	127000	121000	240000	88300	16600	15700
Manganese	50	NLE	331	NA	NA	NA	NA	39.6	132	207	57.1	17	274	202	306	NA	NA	NA	NA	NA	NA	NA	NA	14.5	15.5	326	324	663	234	92.1	88.6
Mercury	2	2	0.26	NA	NA	NA	NA	ND	ND	0.27 ER		<0.2	0.71	0.26	<0.2	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND		<0.2	<0.2	<0.2
Nickel	100	NLE	187	NA	NA	NA	NA	4.66 ER	7.83	9.15	<10	<10	54.5	25.7	<10	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	1.68 ER	2.13 ER	<10	<10	<10	<10
Potassium	NLE	NLE	137000	NA	NA	NA	NA	13800	28400	56200	<10000	13500	47100	40000	54700	NA	NA	NA	NA	NA	NA	NA	NA	15900	13500	43700	42600	69200	37800	19300	19300
Selenium	40	50	29.60	NA	NA	NA	NA	46.2	NR	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	19.3	NR	1.62	2.16	<10	<10	<10	<10
Silver	40	NLE	ND	NA	NA	NA	NA	1.38	ND	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	0.876	ND	<10	<10	<10	<10
Sodium	5000	NLE	21500	NA	NA	NA	NA	172000	426000	1160000 E	47000	243000	739000	671000	1000000	NA	NA	NA	NA	NA	NA	NA	NA	125000	124000	715000	694000 E	493000	236000	146000	153000
Thallium	2	2	5.50	NA	NA	NA	NA	ND	ND	ND	<2	<2	<2	<2	<2	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<2	<2	<2	<2
Vanadium	60	NLE	108	NA	NA	NA	NA	3.25	0.639	ND	<50	<50	60.6	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	4.23	7.11	0.704	0.674	<50	<50	<50	<50
Zinc	2000	NLE	233	NA	NA	NA	NA	86.5	200	201	<20	91.2	1300	588	127	NA	NA	NA	NA	NA	NA	NA	NA	8.09	10.4	31.1	47	128	51.5	147	124

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

/a = Elevated sample detection limit due to difficult sample matrix

Table 2
Historical Groundwater Analytical Results
Site FTMM-08 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M8MW23																M8MW24											
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	37	38	39	40	41	44	45	46	LF1	LF2	LF3	LF4	LF5	LF6	LF7	36	37	38	39	40	41	42	43	44	LF1	LF2	LF2 Dup
Date Collected				3/13/2008	6/5/2008	9/5/2008	11/21/2008	2/23/2009	6/27/2009	9/21/2009	12/10/2009	3/19/2010	6/29/2010	9/29/2010	12/23/2010	3/9/2011	5/25/2011	8/11/2011	3/14/2008	6/5/2008	9/5/2008	11/21/2008	2/9/2009	2/23/2009	6/27/2009	9/21/2009	12/8/2009	3/19/2010	6/29/2010	6/29/2010
Volatile Organic Compounds (µg/L)																														
Tert-butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<5	<5	<5	NA	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<10	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<10	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	0.74 J	ND	0.24 J	ND	NA	ND	0.26 J	0.22 J	ND	1.21	0.21 J	0.24 J
Chlorobenzene	50	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	5.08	2.35	3.68	2.3	NA	3.31	4.03	3.98	2.68	9.88	3.27	3.51
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	0.33 J	ND	11.67	5.6	2.09	ND	6.48	1.11	ND	3.07	5.06 J	2.58	0.32 J	1.19	6.1	ND	ND	0.31 J	ND	NA	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	0.3 J	ND	0.33 J	ND	NA	ND	ND	ND	ND	0.64	ND	0.26 J
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	1.03 J	0.53 J	1.04 J	0.53 J	NA	0.58 J	0.8 J	0.83	0.7	2.37	0.84	0.92
1,2-Dichlorobenzene	600	600	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	3	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Methyl tert butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	2.06	ND	ND	0.19 J	ND	1.02	ND	<0.5	0.17 J	0.84	0.62 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1	<1	<1	<1	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	1	2	--	ND	ND	2.73	0.79 J	ND	ND	0.71	ND	ND	ND	1.59	0.67	<0.5	<0.5	0.6 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
TICs	500	ND	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8	ND	17	4	NA	4	5	6	ND	7	5	5
Pesticides/PCBs (µg/L)																														
beta-BHC	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA
Alpha-chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA
Gamma-chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.043	NA	NA	NA	NA	NA	NA
4-4'-DDD	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	NA	NA	NA
4-4'-DDE	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	NA	NA	NA
4,4'-DDT	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.156	NA	NA	NA	NA	NA	NA
Dieldrin	0.03	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.049	NA	NA	NA	NA	NA	NA
Endosulfan I	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.021	NA	NA	NA	NA	NA	NA
Endrin	2	2	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.026	NA	NA	NA	NA	NA	NA
Endrin aldehyde	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.056	NA	NA	NA	NA	NA	NA
Endrin ketone	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.055	NA	NA	NA	NA	NA	NA
Heptachlor	0.05	0.4	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA
Methoxychlor	40	40	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.15	NA	NA	NA	NA	NA	NA
Metals (µg/L)																														
Aluminum	200	NLE	121000	NA	NA	NA	NA	NA	NA	NA	NA	258	210	48.8	<200	807	312	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	34	69.6	58
Antimony	6	6	20.70	NA	NA	NA	NA	NA	NA	NA	NA	10.1	9.13 ER	ND	<6	<6	<6	<6	NA	NA	NA	NA	NA	NA	NA	NA	NA	14.4	9.82 ER	9.04 ER
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	NA	NA	NA	0.67 ER	3.9 ER	0.77 ER	<3	<3	5.1	<3	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.64 ER	0.7 ER	0.9 ER
Barium	6000	2000	699.00	NA	NA	NA	NA	NA	NA	NA	NA	7.51	33.5	37.9	<200	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	393	182	179
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<1	<1	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	0.05 ER
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	NA	NA	NA	1.22 ER	ND	ND	<3	<3	<3	<3	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	0.73 ER
Calcium	NLE	NLE	45400.00	NA	NA	NA	NA	NA	NA	NA	NA	62700	41200	32000	42800	18500	32800	33400	NA	NA	NA	NA	NA	NA	NA	NA	NA	141000	66400	65300
Chromium	70	100	191.00	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
Cobalt	NLE	NLE	18.30	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.584	ND	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
Copper	1300	1300	65.60	NA	NA	NA	NA	NA	NA	NA	NA	12	6.11	1.61 ER	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	5.7	6.23
Iron	300	NLE	431000	NA	NA	NA	NA	NA	NA	NA	NA	359	3740	5490	4440	2590	2550	2800	NA	NA	NA	NA	NA	NA	NA	NA	NA	23000	10100	9940
Lead	5	15	22.70	NA	NA	NA	NA	NA	NA	NA	NA	ND	3.06 ER	ND	<3	6	3.3	<3	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	3.31 ER	3.89 ER
Magnesium	NLE	NLE	62700	NA	NA	NA	NA	NA	NA	NA	NA	7280	7360	6610	6720	<5000	6250	6230	NA	NA	NA	NA	NA	NA	NA	NA	NA	27300	11700	11600
Manganese	50	NLE	331	NA	NA	NA	NA	NA	NA	NA	NA	20	636	829	1010	158	439	530	NA	NA	NA	NA	NA	NA	NA	NA	NA	177	78	77
Mercury	2	2	0.26	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND		<0.2	<0.2	<0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	0.08 ER
Nickel	100	NLE	187	NA	NA	NA	NA	NA	NA	NA	NA	5.26	10.6	3.82 ER	<10	<10	16.6	10.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.63 ER	0.846 ER	0.853 ER
Potassium	NLE	NLE	137000	NA	NA	NA	NA	NA	NA	NA	NA	5750	3450	3760	<10000	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	25200	12400	12100
Selenium	40	50	29.60	NA	NA	NA	NA	NA	NA	NA	NA	47.7	NR	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	65.1	NR	NR
Silver	40	NLE	ND	NA	NA	NA	NA	NA	NA	NA	NA	3.51	0.627	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.871	0.764
Sodium	5000	NLE	21500	NA	NA	NA	NA	NA	NA	NA	NA	7880	64600	54600	69700	20300	87400	79400	NA	NA	NA	NA	NA	NA	NA	NA	NA	110000	44600	44300
Thallium	2	2	5.50	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<2	<2	<2	<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
Vanadium	60	NLE	108	NA	NA	NA	NA	NA	NA	NA	NA	1.97	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.62	ND	ND
Zinc	2000	NLE	233	NA	NA	NA	NA	NA	NA	NA	NA	275	461	9.8	<20	472	1730	345	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.86	3.4	3.66

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

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Table 2
Historical Groundwater Analytical Results
Site FTMM-08 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M8MW24					697MW01															
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF3	LF4	LF5	LF6	LF7	44	45	46	47	48	48 Dup	49	50	51	LF1	LF2	LF3	LF4	LF5	LF6	LF7
Date Collected				9/29/2010	12/23/2010	3/8/2011	5/26/2011	8/11/2011	3/14/2008	6/5/2008	9/5/2008	11/21/2008	2/23/2009	2/23/2009	6/27/2009	9/21/2009	12/8/2009	3/19/2010	6/29/2010	9/29/2010	12/23/2010	3/9/2011	5/26/2011	8/11/2011
Volatile Organic Compounds (µg/L)																								
Tert-butyl alcohol	100	NLE	--	ND	<5	<5	<5	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<5	<5	<5	NA
Acetone	6000	NLE	--	ND	<0.5	<0.5	<0.5	<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.54	<0.5	<0.5	<10
Carbon disulfide	700	NLE	--	ND	<0.5	<0.5	<0.5	<2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2
2-Butanone	300	NLE	--	ND	<0.5	<0.5	<0.5	<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	97.04 J	<0.5	<0.5	<10
Benzene	1	5	--	0.53	<0.5	0.32 J	0.21 J	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.96	0.45 J	0.21 J	0.96	0.35 J	<0.5	<1
Chlorobenzene	50	100	--	4.76	1.43	2.25	3.47	1	0.42 J	ND	ND	ND	ND	ND	0.22 J	ND	0.26 J	5.63	2.52	1.08	3.14	1.11	<0.5	<1
Bromodichloromethane	1	80	--	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
Chloroform	70	80	--	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
Dibromochloromethane	1	NLE	--	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
cis -1,2-Dichloroethene	70	70	--	ND	<0.5	<0.5	<0.5	<1	ND	ND	0.39 J	ND	ND	ND	ND	ND	ND	0.6	0.4 J	0.19 J	0.49	0.42 J	<0.5	<1
1,3-Dichlorobenzene	600	NLE	--	0.38 J	<0.5	0.17 J	0.25 J	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
1,4-Dichlorobenzene	75	75	--	1.22	<0.5	0.55	0.79	0.43 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
1,2-Dichlorobenzene	600	600	--	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
Ethylbenzene	700	700	--	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
Isopropylbenzene	700	NLE	--	ND	<0.5	<0.5	<0.5	<2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2
Methylene chloride	3	5	--	ND	<0.5	<0.5	<0.5	<2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<2
Methyl tert butyl ether	70	NLE	--	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
Tetrachloroethene	1	5	--	ND	<0.5	<0.5	<0.5	<1	0.86 J	1.01 J	1.15 J	1.44 J	1.16 J	1.19 J	0.98 J	1.85 J	1.71	ND	ND	ND	<0.5	0.31 J	0.96	1.1
Toluene	600	1000	--	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
Trichloroethene	1	5	--	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	0.57	0.7 J
Total Xylenes	1000	10,000	--	ND	<1	<1	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1	<1	<1	<1
Vinyl Chloride	1	2	--	ND	<0.5	<0.5	<0.5	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.5	<0.5	<0.5	<1
TICs	500	ND	--	11	ND	ND	4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides/PCBs (µg/L)																								
beta-BHC	0.04	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alpha-chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.628	0.54	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gamma-chlordane	0.5	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.461	0.512	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-4'-DDD	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.28	1.37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-4'-DDE	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.048	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	0.1	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.301	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dieldrin	0.03	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.055	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	40	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin	2	2	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin aldehyde	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Endrin ketone	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor	0.05	0.4	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.071	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	40	40	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.035	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)																								
Aluminum	200	NLE	121000	ND	<200	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.1	ND	9.01	<200	<200	<200	<200
Antimony	6	6	20.70	5.35	<6	<6	<6	<6	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.4	7.69 ER	ND	<6	<6	<6	<6
Arsenic	3	10	89.30	0.84 ER	<3	<3	<3	<3	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.35	4.2 ER	2.9 ER	6.4	<3	<3	<3
Barium	6000	2000	699.00	343	<200	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	54.6	38.5	36.3	<200	<200	<200	<200
Beryllium	1	4	2.10	ND	<1	<1	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<1	<1	<1	<1
Cadmium	4	5	9.50	0.651 ER	<3	<3	<3	<3	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.809 ER	ND	<3	<3	<3	<3
Calcium	NLE	NLE	45400.00	111000	58400	74700	58900	40200	NA	NA	NA	NA	NA	NA	NA	NA	NA	125000	51900	26900	23400	15000	13100	18400
Chromium	70	100	191.00	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<10	<10	<10	<10
Cobalt	NLE	NLE	18.30	ND	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.785	0.832	<50	<50	<50	<50
Copper	1300	1300	65.60	2.59 ER	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	6.26	ND	<10	<10	<10	<10
Iron	300	NLE	431000	23000	5550	10300	8290	4840	NA	NA	NA	NA	NA	NA	NA	NA	NA	14100	10100	3940	15700	7880	1080	568
Lead	5	15	22.70	2.92 ER	<3	<3	3.9	<3	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<3	<3	<3	<3
Magnesium	NLE	NLE	62700	24600	7700	11100	10000	6350	NA	NA	NA	NA	NA	NA	NA	NA	NA	14400	8890	6200	<5000	<5000	<5000	<5000
Manganese	50	NLE	331	168	70.6	88.5	69.3	48.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	107	59.5	37.7	57.1	35.8	<15	<15
Mercury	2	2	0.26	ND		<0.2	<0.2	<0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<0.2	<0.2	<0.2	<0.2
Nickel	100	NLE	187	1.1 ER	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.45 ER	4.09 ER	7.19	<10	<10	<10	<10
Potassium	NLE	NLE	137000	19400	11300	12500	12200	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	5980	3570	3410	<10000	<10000	<10000	<10000
Selenium	40	50	29.60	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	65.7	NR	1.38	<10	<10	<10	<10
Silver	40	NLE	ND	1.55	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.44	1.14	ND	<10	<10	<10	<10
Sodium	5000	NLE	21500	115000	30200	42600	44100	30300	NA	NA	NA	NA	NA	NA	NA	NA	NA	30300	50100	47400	47000	42100	57100	72800
Thallium	2	2	5.50	ND	<2	<2	<2	<2	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<2	<2	<2	<2
Vanadium	60	NLE	108	ND	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.35	ND	ND	<50	<50	<50	<50
Zinc	2000	NLE	233	ND	<20	<20	<20	<20	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.12	1.45	2.12	<20	<20	<20	<20

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

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J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

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NLE = No limit established

ER = Estimated Result

/a = Elevated sample detection limit due to difficult sample matrix

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-08 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	Weston 1995 Background (Main Post)	697MW01	M8MW12		M8MW13	M8MW14		M8MW15		M8MW16	M8MW16	M8MW17	
Sample ID				FTMM-8-GW-697MW01-16.45	FTMM-8-GW-M8MW12	FTMM-8-GW-M8MW12-13.55	FTMM-8-GW-M8MW13	FTMM-8-GW-M8MW114	FTMM-8-GW-M8MW14	FTMM-8-GW-M8MW15	FTMM-8-GW-M8MW15-11.30	FTMM-8-GW-M8MW16	FTMM-8-GW-M8MW16-11.74	FTMM-8-GW-M8MW17	FTMM-8-GW-M8MW17-10.90
Sample Date				10/1/2014	8/16/2013	10/2/2014	8/15/2013	8/16/2013	8/16/2013	8/19/2013	10/1/2014	8/20/2013	10/1/2014	8/16/2013	10/2/2014
QA/QC				SA	SA	SA	SA	DU	SA	SA	SA	SA	SA	SA	SA
Sample Method				Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Volatile Organic Compounds (µg/l)															
1,1,1,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
1,1,1-Trichloroethane	30	200	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
1,1,2,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
1,1,2-Trichloroethane	3	5	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
1,1-Dichloroethane	50	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
1,1-Dichloroethene	1	7	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
1,1-Dichloropropene	100	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
1,2,3-Trichlorobenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
1,2,3-Trichloropropane	0.03	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
1,2,4-Trichlorobenzene	9	70	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
1,2,4-Trimethylbenzene	100	NLE	-	< 1 UJ	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
1,2-Dibromo-3-chloropropane	0.02	0.2	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
1,2-Dibromoethane	0.03	0.05	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
1,2-Dichlorobenzene	600	600	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	**1.1 J**	**0.56 J**	**0.52 J**	**0.34 J**	NA
1,2-Dichloroethane	2	5	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
1,2-Dichloropropane	1	5	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
1,3,5-Trimethylbenzene	100	NLE	-	< 1 UJ	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
1,3-Dichlorobenzene	600	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	**1.3 J**	**0.92 J**	**0.85 J**	**0.37 J**	NA
1,3-Dichloropropane	100	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
1,4-Dichlorobenzene	75	75	-	< 1	< 1	< 1	< 1	**1.2 J**	**1.4 J**	**2.5 J**	**3.4 J**	**3.4 J**	**3.1 J**	**1.3 J**	NA
2,2-Dichloropropane	100	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
2-Chlorotoluene	100	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Acetone	6,000	NLE	-	< 5	< 5	< 5	**2.7 J**	**3.1 J**	**2.9 J**	**14 J**	**13**	**2.6 J**	**3.5 J**	**2.5 J**	NA
Benzene	1	5	-	**0.28 J**	< 1	< 1	< 1	< 2	< 1	< 10	< 1	**0.77 J**	**0.38 J**	< 1	NA
Bromobenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Bromochloromethane	100	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Bromodichloromethane	1	80	-	**0.7 J**	**0.98 J**	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Bromoform	4	80	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Carbon tetrachloride	1	5	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Chlorobenzene	50	100	-	**1.6 J**	< 1	< 1	< 1	**3.3 J**	**3.7 J**	**12 J**	**14**	**29**	**29**	**4.6 J**	NA
Chlorodibromomethane	1	80	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Chloroethane	5	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Chloroform	70	80	-	**2.7 J**	**7.1**	**4.7 J**	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Cis-1,2-Dichloroethene	70	70	-	**0.42 J**	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Cis-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Cymene	100	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Dichlorodifluoromethane	1,000	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Ethyl benzene	700	700	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Hexachlorobutadiene	1	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Isopropylbenzene	700	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	**0.29 J**	< 1	< 1	NA
Meta & Para Xylenes	1,000	NLE	-	< 2 UJ	< 2	< 2	< 2	< 4	< 2	< 20	< 2	< 2	< 2	< 2	NA
Methyl bromide	10	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Methyl butyl ketone	300	NLE	-	< 5	< 5	< 5	< 5	< 10	< 5	< 50	< 5	< 5	< 5	< 5	NA
Methyl chloride	100	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	**0.32 J**	< 1	**0.21 J**	< 1	NA
Methyl ethyl ketone	300	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	**0.92 J**	< 1	< 1	< 1	NA
Methyl isobutyl ketone	100	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Methyl Tertbutyl Ether	70	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Methylene chloride	3	5	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Naphthalene	300	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	**0.24 B**	< 1	< 1	**0.23 J**	NA
n-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Ortho Xylene	1,000	NLE	-	< 1 UJ	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
p-Chlorotoluene	100	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Propylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
sec-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Styrene	100	100	-	< 1 UJ	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Tert Butyl Alcohol	100	NLE	-	< 20	NA	< 20	NA	NA	NA	NA	< 20	NA	< 20	NA	NA
tert-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	**0.24 J**	< 1	< 1	NA
Tetrachloroethene	1	5	-	**1.6 J**	**1.3 J**	**1.3 J**	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Toluene	600	1,000	-	< 1	< 1	< 1	< 1	< 2	**0.22 J**	< 10	< 1	< 1	< 1	< 1	NA
Total Xylenes	1,000	10,000	-	NA	< 3	NA	< 3	< 6	< 3	< 30	NA	< 3	NA	< 3	NA
Trans-1,2-Dichloroethene	100	100	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Trans-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Trichloroethene	1	5	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Trichlorofluoromethane	2,000	NLE	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
Vinyl chloride	1	2	-	< 1	< 1	< 1	< 1	< 2	< 1	< 10	< 1	< 1	< 1	< 1	NA
TIC VOCs (µg/l)															
Total TIC, Volatile	500	NLE	-	ND	ND	ND	ND	ND	ND	ND	**7.4 JN**	ND	ND	ND	NA

Table 3
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Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	Weston 1995 Background (Main Post)	697MW01	M8MW12		M8MW13	M8MW14		M8MW15		M8MW16	M8MW16	M8MW17	
Sample ID				FTMM-8-GW-697MW01-16.45	FTMM-8-GW-M8MW12	FTMM-8-GW-M8MW12-13.55	FTMM-8-GW-M8MW13	FTMM-8-GW-M8MW114	FTMM-8-GW-M8MW14	FTMM-8-GW-M8MW15	FTMM-8-GW-M8MW15-11.30	FTMM-8-GW-M8MW16	FTMM-8-GW-M8MW16-11.74	FTMM-8-GW-M8MW17	FTMM-8-GW-M8MW17-10.90
Sample Date				10/1/2014	8/16/2013	10/2/2014	8/15/2013	8/16/2013	8/16/2013	8/19/2013	10/1/2014	8/20/2013	10/1/2014	8/16/2013	10/2/2014
QA/QC				SA	SA	SA	SA	DU	SA	SA	SA	SA	SA	SA	SA
Sample Method				Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Pesticides (µg/l)															
4,4'-DDD	0.1	NLE	-	**0.83**	< 0.04	NA	< 0.039	< 0.039	< 0.039	< 0.039	NA	< 0.039	NA	< 0.039	NA
4,4'-DDE	0.1	NLE	-	< 0.025	< 0.026	NA	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	< 0.025	NA
4,4'-DDT	0.1	NLE	-	**0.042 J**	< 0.026	NA	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	< 0.025	NA
Aldrin	0.04	NLE	-	< 0.025	< 0.026	NA	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	< 0.025	NA
Alpha-BHC	0.02	NLE	-	< 0.025	< 0.026	NA	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	< 0.025	NA
Alpha-Chlordane	0.5	NLE	-	**0.24**	< 0.026	NA	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	< 0.025	NA
Beta-BHC	0.04	NLE	-	< 0.028	< 0.026	NA	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	< 0.025	NA
Delta-BHC	100	NLE	-	< 0.025	< 0.026	NA	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	< 0.025	NA
Dieldrin	0.03	NLE	-	< 0.025	< 0.026	NA	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	< 0.025	NA
Endosulfan I	40	NLE	-	< 0.025	< 0.026	NA	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	< 0.025	NA
Endosulfan II	40	NLE	-	< 0.025	< 0.026	NA	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	< 0.025	NA
Endosulfan sulfate	40	NLE	-	< 0.025	< 0.026	NA	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	< 0.025	NA
Endrin	2	2	-	< 0.025	< 0.026	NA	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	< 0.025	NA
Endrin aldehyde	100	2	-	< 0.025 UJ	< 0.026	NA	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	< 0.025	NA
Endrin ketone	100	NLE	-	< 0.035	< 0.026	NA	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	< 0.025	NA
Gamma-BHC/Lindane	0.03	0.2	-	< 0.025	< 0.026	NA	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	< 0.025	NA
Gamma-Chlordane	0.5	NLE	-	**0.23**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
gamma-Chlordane	NLE	NLE	-	NA	< 0.026	NA	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	< 0.025	NA
Heptachlor	0.05	0.4	-	< 0.025	< 0.026	NA	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	< 0.025	NA
Heptachlor epoxide	0.2	0.2	-	< 0.025	< 0.026	NA	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	< 0.025	NA
Methoxychlor	40	40	-	< 0.025	< 0.026	NA	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	NA	< 0.025	NA
Toxaphene	2	3	-	< 0.5	< 0.51	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	NA	< 0.5	NA
Inorganics (µg/l)															
Lead	5	15	22.7	< 2.5	< 2	NA	< 2	< 2	< 2	< 2	NA	< 2	NA	< 2	< 2.5

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Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	Weston 1995 Background (Main Post)	M8MW18	M8MW19	M8MW20	M8MW21		M8MW22	M8MW23	RM8MW24	
Sample ID				FTMM-8-GW-M8MW18	FTMM-8-GW-M8MW19	FTMM-8-GW-M8MW20	FTMM-8-GW-M8MW21	FTMM-8-GW-M8MW21-14.31	FTMM-8-GW-M8MW22	FTMM-8-GW-M8MW23	FTMM-8-GW-RM8MW24	FTMM-8-GW-RM8MW24-29.68
Sample Date				8/19/2013	8/15/2013	8/15/2013	8/15/2013	10/2/2014	8/16/2013	8/19/2013	8/19/2013	10/1/2014
QA/QC				SA	SA	SA	SA	SA	SA	SA	SA	SA
Sample Method				Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Volatile Organic Compounds (µg/l)												
1,1,1,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	**0.22 J**
1,3-Dichloropropane	100	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	-	**1.2 J**	**0.33 J**	< 10	< 1	NA	< 1	< 1	**0.56 J**	**0.62 J**
2,2-Dichloropropane	100	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	-	**4.8 J**	**3.9 J**	< 50	**2.1 J**	NA	**8.8**	< 5	**2.4 J**	< 5
Benzene	1	5	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Bromobenzene	100	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Bromoform	4	80	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	-	**7.7**	< 1	< 10	< 1	NA	< 1	< 1	**1.5 J**	**2.1 J**
Chlorodibromomethane	1	80	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Chloroform	70	80	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	-	< 1	< 1	< 10	< 1	NA	< 1	**5.2**	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Cymene	100	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Meta & Para Xylenes	1,000	NLE	-	< 2	< 2	< 20	< 2	NA	< 2	< 2	< 2	< 2
Methyl bromide	10	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	-	< 5	< 5	< 50	< 5	NA	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Methylene chloride	3	5	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
n-Butylbenzene	100	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Styrene	100	100	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	-	NA	NA	NA	NA	NA	NA	NA	NA	< 20
tert-Butylbenzene	100	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Tetrachloroethene	1	5	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Toluene	600	1,000	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Total Xylenes	1,000	10,000	-	< 3	< 3	< 30	< 3	NA	< 3	< 3	< 3	NA
Trans-1,2-Dichloroethene	100	100	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Trichloroethene	1	5	-	< 1	< 1	< 10	< 1	NA	< 1	**0.62 J**	< 1	< 1
Trichlorofluoromethane	2,000	NLE	-	< 1	< 1	< 10	< 1	NA	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	-	< 1	< 1	< 10	< 1	NA	< 1	**0.68 J**	< 1	< 1
TIC VOCs (µg/l)												
Total TIC, Volatile	500	NLE	-	ND	ND	ND	ND	NA	ND	ND	ND	ND

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Sample ID				FTMM-8-GW-M8MW18	FTMM-8-GW-M8MW19	FTMM-8-GW-M8MW20	FTMM-8-GW-M8MW21	FTMM-8-GW-M8MW21-14.31	FTMM-8-GW-M8MW22	FTMM-8-GW-M8MW23	FTMM-8-GW-RM8MW24	FTMM-8-GW-RM8MW24-29.68
Sample Date				8/19/2013	8/15/2013	8/15/2013	8/15/2013	10/2/2014	8/16/2013	8/19/2013	8/19/2013	10/1/2014
QA/QC				SA	SA	SA	SA	SA	SA	SA	SA	SA
Sample Method				Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Pesticides (µg/l)												
4,4'-DDD	0.1	NLE	-	< 0.039	< 0.039	< 0.039	< 0.039	NA	< 0.039	< 0.039	< 0.04	NA
4,4'-DDE	0.1	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	< 0.025	< 0.026	NA
4,4'-DDT	0.1	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	< 0.025	< 0.026	NA
Aldrin	0.04	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	< 0.025	< 0.026	NA
Alpha-BHC	0.02	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	< 0.025	< 0.026	NA
Alpha-Chlordane	0.5	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	< 0.025	< 0.026	NA
Beta-BHC	0.04	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	< 0.025	< 0.026	NA
Delta-BHC	100	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	< 0.025	< 0.026	NA
Dieldrin	0.03	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	< 0.025	< 0.026	NA
Endosulfan I	40	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	< 0.025	< 0.026	NA
Endosulfan II	40	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	< 0.025	< 0.026	NA
Endosulfan sulfate	40	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	< 0.025	< 0.026	NA
Endrin	2	2	-	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	< 0.025	< 0.026	NA
Endrin aldehyde	100	2	-	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	< 0.025	< 0.026	NA
Endrin ketone	100	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	< 0.025	< 0.026	NA
Gamma-BHC/Lindane	0.03	0.2	-	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	< 0.025	< 0.026	NA
Gamma-Chlordane	0.5	NLE	-	NA	NA	NA	NA	NA	NA	NA	NA	NA
gamma-Chlordane	NLE	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	< 0.025	< 0.026	NA
Heptachlor	0.05	0.4	-	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	< 0.025	< 0.026	NA
Heptachlor epoxide	0.2	0.2	-	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	< 0.025	< 0.026	NA
Methoxychlor	40	40	-	< 0.025	< 0.025	< 0.025	< 0.025	NA	< 0.025	< 0.025	< 0.026	NA
Toxaphene	2	3	-	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.51	NA
Inorganics (µg/l)												
Lead	5	15	22.7	< 2	< 2	< 2	< 2	< 2.5	< 2	**2.4 J**	< 2	NA

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-08 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Footnote:
1) All historical data collected prior to 2013 are reported as provided by others.
2) Number of Analyses is the number of detected and non-detected results excluding rejected results. Sample duplicate pairs have not been averaged.
3) NLE = no limit established.
4) ND = not detected in any background sample, no background concentration available.

5) Chemical result qualifiers are assigned by the laboratory and is typically evaluated and modified (if necessary) by during data validation.
[blank] = detect, i.e. detected chemical result value.
B = Compound detected in the sample and its associated blank sample.
R = Rejected, data validation rejected the results.
U = non-detect, i.e. not detected equal to or above this value.
U-DL = Elevated sample detection limit due to difficult sample matrix.
U-ND = Analyte not detected in sample, but no detection or reporting limit provided.
J = estimated (detect or non-detect) value.
E (or ER) = Estimated result.
D = Results from dilution of sample.
J-DL = Elevated sample detection limit due to difficult sample matrix.
JN = Tentatively identified compound, estimated concentration.

6) Chemical results greater than or equal to the action level (depending on criteria) are highlighted based on the Criteria that are present.
- Cell Shade values represent a result that is above the NJ Ground Water Quality Criteria ####

NJDEP Interim Specific GWQC values are presented for the NJ GWQS where there is not a Specific Ground Water Quality Criteria. A full list of compounds is available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).

NJDEP Interim Generic GWQC values are presented for the NJ GWQS where there is not a XXXXX or a NJDEP Interim Specific GWQC. Available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).

- Bold Outline represent a result that is above the USEPA 2014-05 MCL. ###

7) Criteria action level source document and web address.
- The NJ Ground Water Quality Criteria refers to the NJDEP Groundwater Quality Standards - Adopted July 22, 2010
  http://www.state.nj.us/dep/wms/bwqsa/docs/njac79C.pdf
- The 2014-05 USEPA MCL refers to the USEPA's Region 9 Regional Screening Levels (HQ=1.0) - 5/31/2014 (Last revised)
  http://www.epa.gov/region9/superfund/prg/

8) Well sampled in the fourth quarter are highlighted in yellow. Sample ID

Table 4
Review of Historical Groundwater Sampling Results
Site FTMM-08 Closed Solid Waste Landfill
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site Name/ Well ID	Interpretation of Historical and 2014 Results[1]			2014 Evaluation					Rationale
	Chem Class / Analyte	Does a Compound Exceed NJDEP GWQS (Yes or No) (If Yes, identify compound)	Do Metals Exceed FTMM Background Concentration (Yes or No) (If Yes, identify Metal)	Seasonal Effect? (Y/N)[2]	Anomaly? (Y/N)	Exceedance part of overall trend? (Y/N)	Well needed for sentinel purposes? (Y/N)	Retain Analyte/Well (Yes or No)	
FTMM-08									
697MW01	VOCs, Pb, and pesticides	Beta-BHC, alpha- and gamma- chlordane, 4-4'-DDD, 4-4'-DDT, Dieldrin, heptachlor, PCE	No	No	No	Yes	No	Yes (VOCs, and pesticides)	Well could not be located and was not sampled in August 2013. Well located and sampled in October 2014. Beta-BHC, alpha- and gamma- chlordane, 4-4'-DDT, Dieldrin, and heptachlor exceed NJDEP GWQS in 2009 (last sampling event) 4-4' DDD and PCE were above standard in 2014.
M8MW11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes (VOCs and Pb)	Continue sampling for Pb and VOCs. Well could not be located and was not sampled in October 2014. Mn and Na are considered background concentrations and are not related to site historical use.
M8MW12	VOCs	PCE	N/A	No	No	Yes	No	Yes (VOCs only)	PCE exceeded in 2013 and 2014. Na is considered a background concentration and not from historical site use.
M8MW15	VOCs	No	N/A	No	No	No	No	No	Discontinue monitoring well. Ca, Mn and Na are considered background concentrations and are not related to site historical use.
M8MW16	VOCs	No	N/A	No	No	No	No	No	Discontinue monitoring well. Ca, Mg, Mn and Na are considered background concentrations and are not related to site historical use. Benzene will continue to be sampled.
M8MW17	Pb	No	N/A	No	No	No	No	No	Discontinue monitoring well. Ca, Mn and Na are considered background concentrations and are not related to site historical use.
M8MW21	Pb	No	N/A	No	No	No	No	No	Discontinue monitoring well. Be, Cd, Cr, Mn and Na are considered background concentrations and are not related to site historical use.
RM8MW24	VOCs	No	N/A	No	No	No	No	No	Discontinue monitoring well. Fe, Mn and Na are considered background concentrations and are not related to site historical use.

Notes:

1. Has any of the compounds exceeded the NJDEP GWQS in the annual 2014 data and the 4 previous quarterly data rounds or 2 previous annual rounds?
   a. If yes then keep analyte in LTM list.
   b. If no then remove this analyte from LTM list.
   c. a and b above may be occasionally superceded on a case-by-case basis, depending on site conditions.
2. Has any of the compounds exceeded the NJDEP GWQS seasonally (winter/spring vs. summer/fall) for the 4 previous data rounds?
3. N/A = Not applicable
4. Per the 2/5/15 NJDEP approval letter of the Final 2013 Baseline Groundwater Report, groundwater monitoring wells M8MW13, M8MW14, M8MW18, M8MW19, M8MW20, and M8MW22 were removed from the long term monitoring sampling program. Additionally groundwater monitoring for pesticides and metals other than lead were discontinued for all remaining wells, except 697MW01.

FIGURES

Figure 1 Layout of FTMM-08 Closed Solid Waste Landfill

Figure 2 FTMM-08 Shallow Groundwater Contours - September 29, 2014

M8MW18
M8MW17
M8MW14
M8MW19
M8MW15
M8MW11
M8MW16
RM8MW24
M8MW24
M8MW20
697MW01
M8MW21
M8MW23
M8MW13
M8MW12
M8MW22
Parkers Creek
North Branch Parkers Creek
Sherrill Avenue
BUILDING 292
BUILDING 601
BUILDING 603

LEGEND:

- Shallow Monitoring Well
- FTMM-08 Landfill Revised Boundary
- FTMM-05 Landfill Boundary
- FTMM-18 Landfill Boundary
- Municipal Boundary
- Installation Boundary
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line

N

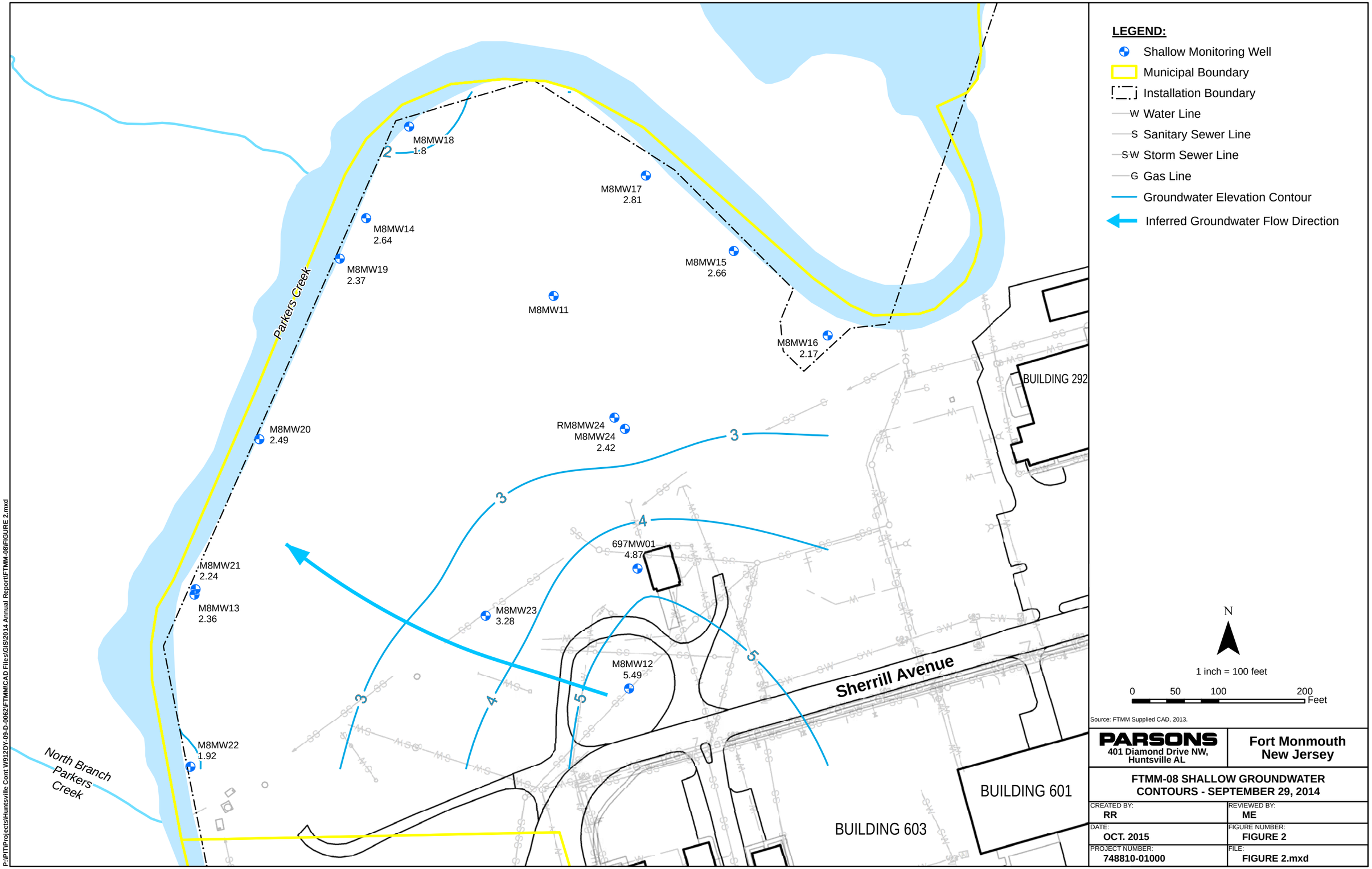
1 inch = 100 feet

0 50 100 200 Feet

Source: FTMM Supplied CAD, 2013.

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
LAYOUT OF FTMM-08 CLOSED SOLID WASTE LANDFILL	
CREATED BY: RR	REVIEWED BY: ME
DATE: OCT. 2015	FIGURE NUMBER: FIGURE 1
PROJECT NUMBER: 748810-01000	FILE: FIGURE 1.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-08\FIGURE 1.mxd



P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-08\FIGURE 2.mxd

PARSONS
401 Diamond Drive NW, Huntsville AL

Fort Monmouth
New Jersey

FTMM-08 SHALLOW GROUNDWATER CONTOURS - SEPTEMBER 29, 2014

CREATED BY:	REVIEWED BY:
RR	ME
DATE:	FIGURE NUMBER:
OCT. 2015	FIGURE 2
PROJECT NUMBER:	FILE:
748810-01000	FIGURE 2.mxd

ATTACHMENTS

Attachment A LFPS Field Sheets

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | CLIENT: ACOE | WELL #: 697MW01

PROJECT: FTMM 4QGW Sampling | WELL PERMIT #: 29-31176

AOC # (AREA): FTMM-8 | DATE: 10/1/14

SCREENED INTERVAL (TOC): 13.75 – 16.75 | SAMPLING PERSONNEL NAME: D. Lewis

WELL DIAMETER (in.): 4 | SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.6

WELL DEPTH (TOC): 19.90

FEET OF WATER IN WELL (ft): 6.90

FEET OF SATURATED SCREEN (ft): 6.90

DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 13.00

PUMP INTAKE DEPTH (ft below TOC): 16.45

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1020	X		6.11	NA	0.606	NA	-29.3	NA	10.31	NA	20.7	NA	17.53	NA	300	13.21
1025	X		6.08	.03	0.619	.007	-26.4	2.9	11.93	1.62	35.0	14.3	17.51	.02	300	13.14
1030	X		6.07	.01	0.603	.016	-31.6	4.8	9.84	2.09	16.1	18.9	17.54	.03	300	13.15
1035	X		6.04	.03	0.590	.013	-16.4	5.2	7.38	2.46	14.4	1.7	17.56	.02	300	13.14
1040	X		6.03	.01	0.580	.010	-9.8	6.6	5.63	1.75	12.8	1.6	17.55	.01	300	13.14
1045	X		6.01	.01	0.573	.008	-4.6	5.2	2.61	3.02	12.8	0	17.55	0	300	13.16
1050	X		5.98	.03	0.561	.011	2.2	6.8	3.09	0.48	16.4	3.6	17.54	.01	300	13.15
1055	X		5.96	0	0.557	.004	5.9	3.7	3.17	0.08	13.7	2.7	17.54	0	300	13.15
1100	X		5.97	.01	0.554	.003	6.3	0.4	3.10	0.07	12.6	1.1	17.54	0	300	13.14
1105		X	5.97	0	0.556	.002	7.1	0.8	3.01	0.09	13.1	0.5	17.55	.01	300	13.14

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | **CLIENT:** ACOE | **WELL #:** MSMW12

PROJECT: FTMM 4Q GW
AOC # (AREA): FTMM-8
SCREENED INTERVAL (TOC): 7.55 - 17.55
WELL DIAMETER (in.) 4

WELL PERMIT #: 29-32560
DATE: 10/2/14
SAMPLING PERSONNEL NAME: J. McDougall
SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0
WELL DEPTH (TOC): 17.55'
FEET OF WATER IN WELL (ft): 8'

FEET OF SATURATED SCREEN (ft): 8'
DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 9.55
PUMP INTAKE DEPTH (ft below TOC): 13.55

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/L)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*		
1100			6.52	NA	0.302	NA	107.4	NA	7.72	NA	35.1	NA	18.98	NA	250	9.65
1105			6.14	.38	0.299	.003	129.2	21.8	7.79	.07	33.7	1.4	19.11	.13	250	9.68
1110			5.90	.24	0.280	.019	143.7	14.5	7.98	.19	31.6	2.1	19.21	.10	250	9.71
1115			5.86	.04	0.280	0	146.9	3.2	8.44	.46	22.2	.6	19.27	.6	100	9.89
1120			5.79	.07	0.281	.001	151.6	4.7	7.63	.81	31.6	9.4	19.28	.01	100	9.41
1125			5.73	.06	0.281	0	160.2	8.6	7.12	.51	32.0	.4	19.26	.02	100	9.90
1130			5.73	0	0.281	0	163.4	3.2	6.90	.22	32.2	.2	19.25	.01	100	9.91
1135			5.73	0	0.282	.001	163.6	.2	6.89	.01	32.3	.1	19.24	.01	100	9.40

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | **CLIENT:** ACOE | **WELL #:** MSMW-5

PROJECT: FTMM-40 GW
AOC # (AREA): FTMM-8
SCREENED INTERVAL (TOC): 6.3 - 16.3
WELL DIAMETER (in.): 4

WELL PERMIT #: 29-32563
DATE: 10/11/14
SAMPLING PERSONNEL NAME: T. McDougall
SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0
WELL DEPTH (TOC): 16.75
FEET OF WATER IN WELL (ft): 11.44

FEET OF SATURATED SCREEN (ft): 10
DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 5.31
PUMP INTAKE DEPTH (ft below TOC): 11.3

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1250			6.59	NA	2.814	NA	-5.4	NA	5.89	NA	88.8	NA	17.63	NA	300	5.45
1255			6.60	.01	2.812	.002	-5.9	.5	6.03	.14	99.8	11	17.65	.02	200	5.79
1300			6.61	.01	2.810	.002	-6.3	.4	6.16	.13	101.2	1.4	17.67	.02	100	5.95
1305			6.63	.02	2.809	.001	-7.0	.7	6.24	.08	101.8	.6	17.70	.03	100	5.98
1310			6.65	.02	2.808	.001	-8.0	1	6.62	.38	123.5	21.7	17.74	.04	100	5.99
1315			6.70	.05	2.806	.002	-10.6	2.6	7.11	.49	126.2	2.7	17.77	.03	100	5.99
1320			6.72	.02	2.804	.002	-11.7	1.1	7.26	.15	147.7	21.5	17.77	0	100	5.99
1325			6.77	.05	2.803	.001	-14.3	2.6	7.72	.46	156.9	9.2	17.78	.01	100	5.98
1330			6.82	.05	2.801	.002	-16.8	2.5	8.09	.37	165.4	9	17.81	.03	100	5.99
1335			6.88	.06	2.802	.001	-19.5	2.7	8.45	.36	171.6	5.7	17.86	.05	100	6.00
1340			7.13	.25	2.796	.006	-19.7	.2	9.95	-1.5	171.5	.1	18.13	.27	100	6.00
1345			7.13	0	2.798	.002	-18.1	.4	10.05	.1	172.1	.6	18.13	0	100	6.00

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

2012

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | **CLIENT:** ACOE | **WELL #:** M8MW15

PROJECT: FTMM 4Q GW | **WELL PERMIT #:** 29-32563

AOC # (AREA): | **DATE:** 10/1/14

SCREENED INTERVAL (TOC): | **SAMPLING PERSONNEL NAME:** J. McDougall

WELL DIAMETER (in.) | **SAMPLING PERSONNEL NAME:**

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0

WELL DEPTH (TOC): 16.75

FEET OF WATER IN WELL (ft): 11.44

FEET OF SATURATED SCREEN (ft): 10

DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 5.31

PUMP INTAKE DEPTH (ft below TOC): 11.3

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1350			7.13	0 ~~NA~~	2.805	.001 ~~NA~~	~~-2~~ -3.3	5.8 ~~NA~~	10.19	.14 ~~NA~~	181.6	9.8 ~~NA~~	18.13	0 ~~NA~~	100	5.99
1355			7.14	.01	2.810	.005	-7.7	1.6	10.19	0	178.6	3	18.13	0	100	6.00
1400			7.14	0	2.812	.002	-2.4	5.3	10.36	.21	188.3	-9.7	18.13	0	100	5.95

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | CLIENT: ACOE | WELL #: MSMW16

PROJECT: FTMM - 4QGW Sampling | WELL PERMIT #: 29 - 39146

AOC # (AREA): FTMM-8 | DATE: 10/1/14

SCREENED INTERVAL (TOC): 5.2 - 15.2 | SAMPLING PERSONNEL NAME: D. Gibbs

WELL DIAMETER (in.): 2 | SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0

WELL DEPTH (TOC): 16.65

FEET OF WATER IN WELL (ft): 8.38

FEET OF SATURATED SCREEN (ft): 6.93

DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 8.27

PUMP INTAKE DEPTH (ft below TOC): 11.74

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1235	X		6.52	NA	1.794	NA	-56.8	NA	0.39	NA	210.6	NA	16.93	NA	300	8.35
1240	X		6.58	.06	1.726	.068	-61.2	4.4	0.20	.09	189.4	21.2	16.72	.21	300	8.38
1245	X		6.55	.03	1.690	.036	-44.8	16.4	0.13	.07	118.4	71.0	16.69	.03	300	8.40
1250	X		6.51	.04	1.818	.128	-34.2	10.6	0.12	.01	68.7	49.7	16.73	.04	300	8.45
1255	X		6.48	.03	2.039	.221	-29.0	5.2	0.13	.01	44.6	24.1	16.70	.03	300	8.46
1300	X		6.47	.01	2.226	.187	-28.8	0.2	0.12	.01	30.5	14.1	16.66	.04	300	8.47
1305	X		6.45	.02	2.375	.149	-30.5	1.7	0.11	.01	19.1	11.4 (#6)	16.64	.02	300	8.47
1310	X		6.44	.01	2.517	.142	-33.5	3.0	0.10	.01	12.8	6.3	16.61	.03	300	8.46
1315	X		6.43	.01	2.670	.153	-38.1	4.6	0.09	.01	11.0	1.8	16.59	.02	300	8.47
1320	X		6.44	.01	2.641	.029	-39.7	1.6	0.10	.01	8.5	2.5	16.58	.01	300	8.49
1325	X		6.44	0	2.599	.042	-39.1	0.6	0.11	.01	8.6	(#6) 0.1	16.58	0	300	8.47
1330		X	6.44	0	2.613	.014	-38.0	1.1	0.10	.01	8.8	(#6) 0.2	16.59	.01	300	8.48

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | CLIENT: NOE | WELL #: MSMW17

PROJECT: FTMM GWQM

AOC # (AREA): FTMM-8

SCREENED INTERVAL (TOC): 5.85 – 15.85

WELL DIAMETER (In.): 2

WELL PERMIT #: 39-39147

DATE: 10/2/14

SAMPLING PERSONNEL NAME: D. Loizos

SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0

WELL DEPTH (TOC): 15.59

FEET OF WATER IN WELL (ft): ~~9.74~~ (NL) 9.38

FEET OF SATURATED SCREEN (ft): ~~9.74~~ (NL) 9.38

DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): ~~7.85~~ (NL) 6.31

PUMP INTAKE DEPTH (ft below TOC): ~~11.40~~ (2) 10.90

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
0935	X		6.48	NA	3.368	NA	-55.5	NA	1.79	NA	147.3	NA	18.18	NA	300	6.88
0940	X		6.55	.07	3.678	.247	-64.4	8.9	1.17	0.62	110.8	37.1	18.33	.21	300	6.34
0945	X		6.62	.07	4.460	.831	-79.2	14.8	0.77	0.40	55.2	55.0	18.60	.27	300	6.48
0950	X		6.64	.02	4.829	.369	-91.2	12.0	0.66	0.11	31.2	24.0	18.65	.05	250	6.38
0955	X		6.65	.01	4.955	.126	-97.6	6.4	0.70	0.04	20.4	10.8	18.68	.03	250	6.36
1000	X		6.65	0	5.030	.075	-103.3	5.7	0.50	0.20	14.5	5.9	18.68	0	250	6.35
1005	X		6.65	0	5.111	.081	-109.9	6.6	0.55	0.05	10.4	4.1	18.67	.01	250	6.34
1010	X		6.65	0	5.157	.046	-113.4	3.5	0.59	0.04	10.1	0.3	18.67	0	250	6.34
1015		X	6.65	0	5.162	.005	-113.9	0.5	0.56	0.03	9.5	0.6	18.65	.02	250	6.32

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | **CLIENT:** ACOE | **WELL #:** M8MW21

PROJECT: FTMM 4Q GW
AOC # (AREA): FTMM-8
SCREENED INTERVAL (TOC): 6.81 - 21.81
WELL DIAMETER (in.) 2

WELL PERMIT #: 29-39151
DATE: 10/2/14
SAMPLING PERSONNEL NAME: J. McDonough
SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0
WELL DEPTH (TOC): 21.81
FEET OF WATER IN WELL (ft): 15.95

FEET OF SATURATED SCREEN (ft): 15
DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 5.86
PUMP INTAKE DEPTH (ft below TOC): 14.31

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
0930			6.40	NA	10.14	NA	-7.2	NA	5.53	NA	165.7	NA	16.95	NA	250	5.95
0935			6.41	.01	10.11	.03	-5.3	1.9	5.50	.03	168.2	2.5	16.95	0	100	6.21
0940			6.43	.02	10.12	.01	11.10	16.46	4.65	.85	72.8	95.4	17.01	.06	100	6.29
0945			6.44	.01	10.10	.02	14.7	3.54	3.96	.69	66.7	6.1	17.22	.21	100	6.25
0950			6.45	.01	10.10	0	14.0	.7	3.31	.65	47.1	19.6	17.38	.16	100	6.26
0955			6.46	.01	10.10	0	13.5	.5	2.83	.48	37.2	7.9	17.47	.09	100	6.26
1000			6.46	0	10.10	0	10.4	3.1	2.52	.31	31.4	7.8	17.58	.11	100	6.31
1005			6.47	.01	10.10	0	11.5	1.1	2.46	.06	35.2	4.2	17.56	.02	100	6.28
1010			6.47	0	10.10	0	12.4	.9	2.44	.02	30.7	4.5	17.56	0	100	6.29

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | **CLIENT:** ACOE | **WELL #:** MSMW24

PROJECT: FTMM 4Q GW | **WELL PERMIT #:** 29-41724

AOC # (AREA): FTMM-8 | **DATE:** 10/1/14

SCREENED INTERVAL (TOC): 14.25 - 39.25 | **SAMPLING PERSONNEL NAME:** J. McDougall

WELL DIAMETER (in.): 4 | **SAMPLING PERSONNEL NAME:**

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0

WELL DEPTH (TOC): 39.25

FEET OF WATER IN WELL (ft): 20.15

FEET OF SATURATED SCREEN (ft): 20.15

DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 19.10

PUMP INTAKE DEPTH (ft below TOC): 29.68

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/L)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*		
1040			5.69	NA	.766	NA	38.0	NA	3.15	NA	6.3	NA	14.54	NA	250	19.33
1045			5.70	.01	.765	.001	37.9	.1	3.13	.02	6.0	.3	14.51	.03	250	19.42
1050			5.69	.01	.766	.001	37.8	.1	2.88	.27	6.1	.1	14.48	.03	250	19.43
1055			5.71	.02	.768	.002	37.1	0.7	2.35	.53	8.1	2.0	14.41	.07	250	19.48
1100			5.73	.02	.768	0	36.1	1.0	2.01	.34	5.8	2.3	14.37	.04	250	19.50
1105			5.76	.03	.769	.001	34.2	1.9	1.65	.36	6.9	1.1	14.36	.01	250	19.54
1110			5.80	.04	.771	.002	32.8	1.4	1.42	.23	5.3	1.6	14.53	.17	250	19.55
1115			5.81	.01	.772	.001	32.1	.7	1.40	.02	5.1	.2	14.52	.01	150	19.56
1120			5.82	.01	.773	.001	31.8	.3	1.34	.06	5.5	.4	14.55	.03	150	19.55
1125			5.83	.01	.773	0	31.8	0	1.32	.02	5.0	.5	14.55	0	150	19.55

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

APPENDIX E

FTMM-18: CLOSED SOLID WASTE LANDFILL/FORMER TRAINING AREA

APPENDIX E: FTMM-18 Closed Solid Waste Landfill/Former Training Area

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A	NJDEP PDB Checklists

1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT

Monitoring wells located at or near FTMM-18 were gauged on September 29, 2014. Monitoring well locations as well as other site features are provided in **Figure 1**. Details regarding the water level measurements are provided in **Table 1**. Groundwater elevations in monitoring wells ranged from 0.79 (MP18MW24) to 4.98 (M18MW23) feet above mean sea level (amsl). The inferred shallow groundwater flow direction is to the north-northwest towards Parkers Creek, as shown in **Figure 2**.

During the groundwater gauging, the physical condition monitoring wells at or near FTMM-18 were assessed. The site monitoring wells were found to be in good condition.

2.0 GROUNDWATER SAMPLING

Groundwater samples were collected from four monitoring wells (296MW04, 296MW06, M18MW22 and M18MW23) located at FTMM-18 as part of the annual (fourth quarter) 2014 groundwater sampling event. FTMM-18 is sampled on an annual basis. The groundwater sampling program included measuring the depths to water in monitoring wells and the sample collection in selected wells using passive diffusion bags (PDBs). PDBs were deployed October 1, 2014 and samples were retrieved on December 19, 2014. A PDB sampling summary is provided in **Table 2**. Additionally, monitoring wells 296MW04, 296MW06, and M18MW23 were profiled because this is the first time the wells were sampled using PDB methods. Groundwater samples were analyzed for Target Compound List (TCL) volatile organic compounds and tentatively identified compounds (VOCs+TICs) via United States Environmental Protection Agency (USEPA) Method SW8260C.

The samples were collected in accordance with the New Jersey Department of Environmental Protection (NJDEP) Field Sampling Procedures Manual (FSPM) and the Sampling Analysis Plan (SAP). Field blanks, duplicates, matrix spike, matrix spike duplicate and quality assurance (QA) split samples were collected for every 5% of samples collected per parameter, per matrix, in accordance with the Quality Assurance Project Plan (QAPP). Trip blanks accompanied each cooler each day in which VOCs were collected for laboratory analysis.

Completed PDB field sheets for each well sampled are provided in **Attachment A**.

3.0 HISTORICAL GROUNDWATER SAMPLING RESULTS

From June 1997 through November 2004, FTMM-18 monitoring wells were sampled for VOCs, semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), and metals. From February 2005 to September 2010, monitoring wells were sampled primarily for metals.

In the last four historical rounds of groundwater sampling conducted on a monthly basis at FTMM-18 from October 2010 to April 2011, samples were analyzed for VOCs and metals. Several metals including aluminum, beryllium, cadmium, iron, manganese, nickel, and sodium were detected above their respective NJDEP Ground Water Quality Standards (GWQS). However, only antimony, beryllium, manganese and sodium were detected at concentrations greater than their background concentrations established in the 1995 Weston Report. The background concentration for sodium however is lower than the NJDEP GWQS. Elevated

sodium concentrations are most likely attributable to the site's proximity to the ocean and other estuarine water bodies. Glauconitic sediments underlying the site are rich in antimony, beryllium and manganese, resulting in high concentrations of these analytes in groundwater. Historical groundwater analytical results are presented in **Table 3.**

Additionally, within the four most recent historical rounds of sampling (October 2010 – April 2011), benzene was detected in 18MW22 (1.58 µg/L to 1.99 µg/L) and M18MW23 (664.44 µg/L to 1,078.96 µg/L) above its NJDEP GWQS of 1 µg/L.

Groundwater samples were collected for only VOCs analysis in August 2013. 1,2-dichloroethane (1,2-DCA) was detected in the two PDB samples collected from M18MW22 above its NJDEP GWQS of 2 µg/L; concentrations ranged from 13 µg/L to 26 µg/L. Additionally, benzene was detected in only one of the PDB samples in M18MW22 and at a concentration of 0.37 µg/L, below its NJDEP GWQS of 1 µg/L. Groundwater analytical detections from samples collected during the August 2013 sampling event are presented in **Table 4**.

The Final August 2013 Baseline Groundwater Sampling Report was accepted by the NJDEP in their February 5, 2015 letter. Based on this approval, two out of the four groundwater monitoring wells were removed from the long term monitoring (LTM) program including MP18MW24 and MP18MW25.

Four (296MW03, 296MW04, 296MW06, and 296MW07) of seven monitoring wells originally installed for FTMM-54 and have been historically sampled in association with FTMM-18 to provide groundwater quality data since the former fuel distribution piping associated with FTMM-54 extended beneath the southwestern portion of FTMM-18. One VOC (benzene) exceeded the NJDEP GWQS but the exceedance is limited to well 296MW06 which is located in the footprint of FTMM-18. In a February 4, 2015 letter, the NJDEP issued a no further action for groundwater at FTMM-54 based on the VOCs detected in monitoring well (296MW06) are addressed under the FTMM-18 site since the suspected source of the impacts are attributed to the fuel spills that occurred during use of diesel and gasoline generators to support field exercises at FTMM-18.

4.0 ANNUAL (FOURTH QUARTER) 2014 GROUNDWATER RESULTS

Benzene was detected in only two (296MW06 and 18MW23) of the four wells sampled at concentrations above the NJDEP GWQS of 1 µg/L. Benzene was detected in the two PDB samples collected from 296MW06 at concentrations of 1.6 µg/L (sample depth of 5.07 ft.) and 15 µg/L (sample depth of 10.1 ft.), and M18MW23 at concentrations of 6.5 µg/L (sample depth of 16.22 ft.) and 9.1 µg/L (sample depth of 9.28 ft.). Groundwater analytical results for samples collected during the annual (fourth quarter) 2014 sampling event are presented in **Table 4**.

5.0 FINDINGS AND RECOMMENDATIONS

Due to the historical concentrations of 1,2-DCA and benzene detected above the NJDEP GWQS in M18MW22 and the 2014 benzene detection at M18MW23, continued sampling for VOCs is recommended at FTMM-18.

A comparison of 1,2-DCA and benzene results from historical LFPS sampling events (2010 though 2011 [**Table 3**]) to samples collected using the PDB method in 2013 and 2014 (**Table 4**) shows a decrease in concentrations at both monitoring wells M18MW22 and M18MW23. The decrease in concentrations is likely due to a combination of two primary factors: 1) natural degradation of the concentration between 2011 and 2013, and 2) a low-bias for results obtained using PDBs compared to LFPS. However, even though it has been shown that PDB results are biased slightly low, the PDBs provide reasonable and representative results for a long term monitoring program at FTMM-18. Therefore, these two wells will continue to be monitored using PDB sampling methodology on an annual basis. Monitoring will continue until VOCs are detected below the NJDEP GWQS for two sampling events, then a final round of samples will be collected using LFPS to confirm PDB analytical results.

A review of the historical groundwater sampling results is presented in **Table 5**, which provides the matrix used to determine the status of the future groundwater sampling and analyses.

TABLES

Table 1 Groundwater Gauging Data and Elevations (September 29, 2014)

Table 2 PDB Sampling Summary

Table 3 Historical Groundwater Analytical Results

Table 4 Groundwater Analytical Results - 2013 and 2014

Table 5 Review of Historical Groundwater Sampling Results

Table 1
Groundwater Gauging Data and Elevations (September 29, 2014)
Site FTMM-18 Closed Solid Waste Landfill/Former Training Area
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site/Well ID	Installation Date	Well Permit #	Y Coord. (North)	X Coord. (East)	Depth (ft. bgs)	Casing Length (ft)	Screen Length (ft)	TOC Elevation (ft)	Gauge Time	PID Reading (ppm)	Gauged Depth to Water (ft. TOC)	Gauged Depth to Bottom (ft. TOC)	Calculated Groundwater Elevation (ft)
Shallow Monitoring Wells													
M18MW22	10/14/2010	E201011280	540600.00	618880.00	20.0	5.0	15.0	12.54	9:15	0.0	9.21	22.15	3.33
M18MW23	10/14/2010	E201010529	540589.39	618871.98	20.0	5.0	15.0	12.58	9:19	0.0	7.60	20.30	4.98
MP18MW24	1/13/1995	29-32565	540648.28	618515.37	14.5	4.5	10.0	7.04	10:16	0.0	6.25	17.21	0.79
MP18MW25	1/13/1995	29-32566	540648.91	618639.30	14.5	4.5	10.0	7.06	10:19	0.0	5.52	16.98	1.54
296MW01	7/14/1994	29-30979	540081.71	618533.76	15.0	2.0	13.0	15.28	9:41	0.0	10.53	17.90	4.75
296MW02	7/13/1994	29-30980	540193.06	618540.94	12.5	2.0	10.5	9.05	9:35	0.0	4.86	11.30	4.19
296MW03	7/14/1994	29-30975	540535.82	618291.32	12.5	2.0	10.5	7.92	10:04	0.0	6.51	16.50	1.41
296MW04	9/12/1995	29-33989	540596.93	618368.47	10.0	0.5	9.5	4.18	10:09	0.0	2.31	12.30	1.87
296MW06	7/14/1994	29-30978	540526.26	618399.81	12.5	2.0	10.5	7.97	10:00	0.0	5.11	15.20	2.86
296MW07	7/12/1994	29-30973	540363.85	618299.95	12.5	2.0	10.5	7.37	9:34	0.0	5.53	12.16	1.84
296MW08	7/12/1994	29-30974	540344.64	518501.44	12.5	2.0	10.5	7.61	9:10	0.0	4.00	10.74	3.61
290MW01	7/15/1994	29-30961	540254.28	618641.32	12.5	2.0	10.5	12.83	9:06	0.0	8.48	16.08	4.35

Notes:
1) The synoptic round of water levels in the wells was collected on September 29, 2014.
2) Information on well permit number, X and Y coordinates, depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
3) ft = feet
4) DTW = depth to water (measured from the top of well casing)
5) DTB = depth to bottom of well (measured from the top of well casing)
6) bgs = below ground surface
7) ppm = parts per million (of VOCs)
8) TOC = Top of Casing
9) Elevation = feet above mean sea level
10) N/A = information not available

Table 2
PDB Sampling Summary
Site FTMM-18 Closed Solid Waste Landfill/Former Training Area
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site/Well ID	Profile Date	Depth (ft. bgs)	Screen Length (ft.)	Screen Interval (ft. bgs)	TOC Elev. (ft)	Gauge Date	Gauge Time	PID Reading (ppm)	Gauged DTW (ft. below TOC)	Gauged DTB (ft. below TOC)	GW Elevation (ft)	Saturated Screen Length (ft)	PDB Depth to Center of Bag #1 (ft. below TOC)	PDB Depth to Center of Bag #2 (ft. below TOC)	PDB Deploy Date	PDB Deploy Time	PDB Sample Date	PDB Sample Time
M18MW22	8/30/2013	20.0	15.0	5-20'	12.54	9/29/2014	9:15	0.0	8.21	21.15	4.33	11.79	18.91	N/A	10/1/2014	10:52	12/19/2014	8:51
M18MW23	12/19/2014	20.0	15.0	5-20'	12.58	9/29/2014	9:19	0.0	6.60	19.30	5.98	13.40	9.28	16.22	10/1/2014	11:22	12/19/2014	8:57
296MW04	12/18/2015	10.0	9.5	0.5-10	4.18	9/29/2014	10:09	0.0	1.31	11.3	2.87	9.50	6.35	N/A	10/1/2014	15:00	12/18/2014	16:15
296MW06	12/18/2015	12.5	10.5	2-12.5	7.97	9/29/2014	10:00	0.0	4.11	14.2	3.86	10.50	5.07	10.10	10/1/2014	14:38	12/18/2014	16:14

Notes:
1) Information on well depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
2) DTW = depth to water (measured from the top of well casing)
3) DTB = depth to bottom of well (measured from the top of well casing)
4) TOC = Top of Casing
5) ft. AMSL = feet above mean sea level
6) LFPS = Low-Flow Purging and Sampling
7) PDB = Passive Diffusion Bag
8) N/A = not applicable
9) bgs = below ground surface

Table 3
Historical Groundwater Analytical Results
Site FTMM-18 Closed Solid Waste Landfill/Former Training Area
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

| | | | | M18MW22 | | | |

Table 3
Historical Groundwater Analytical Results
Site FTMM-18 Closed Solid Waste Landfill/Former Training Area
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M18MW24											M18MW25		
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	49	50	51	52	53	54	LF1	LF2	LF3	LF4	LF5	46	47	48
Date Collected				10/24/2008	3/25/2009	6/2/2009	9/17/2009	11/23/2009	2/2/2010	5/14/2010	9/14/2010	11/12/2010	2/24/2011	4/20/2011	3/4/2008	5/14/2008	8/13/2008
ANALYTE/Lab ID				80387.01	90121.01	90219.01	90385.01	90458.01	10046.01	10193.05	10389.05	1048402	1106803	1116102	80067.02	80162.02	80296.02
Volatile Organic Compounds (µg/L)																	
1,2-Dichloroethane	2	74	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.11	<0.11	<0.11	ND	ND	ND
1,2-Dichloropropane	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	ND	ND	ND
Acetone	6000	NLE	--	4.04	ND	ND	ND	ND	ND	ND	ND	<0.32	<0.32	<0.32	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	ND	ND	ND
Carbon Tetrachloride	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	ND	ND	ND
tert-Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	<1.64	<1.64	<1.64	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	<0.11	<0.11	<0.11	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	5.00 JN	ND	ND	ND	ND	ND
Metals (µg/L)																	
Aluminum	200	NLE	121000	624.00	250.00	21.10	166.00	41.70 ER	179.00	ND	69.20 ER	<13.0	<200	<200	130.00	ND	ND
Antimony	6	6	20.70	ND	28.20	8.00 ER	ND	ND	ND	15.90	24.50	<4.70	<6.0	<6.0	ND	ND	ND
Arsenic	3	10	89.30	ND	140.00	ND	42.90	1.33 ER	1.86	1.25	1.64 ER	3.44 ER	<3.0	<3.0	4.61 ER	7.00	13.50
Barium	6000	2000	699.00	310.00	279.00	225.00	289.00	460.00	182.00	158.00	312.00	294.00	<200	<200	43.90	39.30	295.00
Beryllium	1	4	2.10	ND	ND	0.11 ER	ND	ND	ND	ND	ND	0.45 ER	<1.0	<1.0	ND	0.10 ER	0.12 ER
Cadmium	4	5	9.50	0.57 ER	ND	ND	3.17	ND	ND	0.94 ER	3.99	0.79 ER	<3.0	<3.0	0.26 ER	2.40	8.83
Calcium	NLE	NLE	45400.00	595000.00	495000.00	491000.00	539000.00 E	943000.00	495000.00	383000.00	623000.00 E	975000.00 E	523000.00	260000.00	117000.00	97700.00	429000.00
Chromium	70	100	191.00	2.00 ER	3.90 ER	1.85 ER	ND	ND	ND	ND	1.89 ER	<0.60	<10	<10	ND	2.20 ER	ND
Cobalt	NLE	NLE	18.30	3.69	1.27 ER	0.74 ER	1.06 ER	0.56 ER	0.78 ER	ND	ND	16.90	<50	<50	2.66	1.80 ER	ND
Copper	1300	1300	65.60	ND	25.50	ND	ND	ND	ND	ND	3.45 ER	<0.80	<10	<10	9.21	ND	ND
Iron	300	NLE	431000	46400.00	23700.00	49300.00	81400.00	18900.00	3540.00	25400.00	78700.00	13900.00	11300.00	11000.00	19100.00	25500.00	82600.00
Lead	5	15	22.70	ND	5.87	3.07 ER	ND	ND	ND	3.58 ER	8.89	<2.10	3.60	9.10	ND	3.00 ER	6.89
Magnesium	NLE	NLE	62700	44100.00	30100.00	39100.00	48200.00	60300.00	30300.00	27100.00	55500.00	63900.00	35400.00	14300.00	20100.00	16500.00	116000.00
Manganese	50	NLE	331	429.00	339.00	420.00	335.00	422.00	296.00	345.00	392.00	499.00	453.00	288.00	966.00	1090.00	694.00
Mercury	2	2	0.26	ND	ND	ND	ND	ND	ND	ND	0.09 ER	<0.254	<0.20	<0.20	ND	ND	ND
Nickel	100	NLE	187	3.60 ER	ND	ND	ND	ND	1.88 ER	0.90 ER	2.19 ER	58.90	<10	<10	20.80	3.00 ER	ND
Potassium	NLE	NLE	137000	20300.00	14700.00	15400.00	18700.00	30200.00	16000.00	13700.00	19400.00	40300.00	18500.00	10400.00	5790.00	5600.00	41500.00
Selenium	40	50	29.60	ND	36.70	ND	ND	ND	15.00	NR	1.91 ER	<1.36	<10	<10	ND	ND	7.79 ER
Silver	40	NLE	ND	ND	ND	ND	ND	35.60	26.20	ND	2.56 ER	<0.60	<10	<10	ND	2.00 ER	11.10
Sodium	50000	NLE	21500	63200.00	34600.00	42400.00	68800.00	256000.00	59900.00	62300.00	113000.00	238000.00	88500.00	21900.00	58200.00	30700.00	774000.00 E
Thallium	2	2	5.50	7.19 ER	36.50	ND	ND	ND	ND	ND	ND	<0.53	<2.0	<2.0	3.31 ER	ND	ND
Vanadium	NLE	NLE	108	2.41 ER	7.60	2.27 ER	14.40	7.20	4.95 ER	ND	ND	<0.50	<50	<50	ND	0.90 ER	3.35 ER
Zinc	2000	NLE	233	99.90	82.10	6.88 ER	10.70 ER	4.69 ER	5.45 ER	ND	ND	532.00	<20	<20	25.80	ND	ND

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

D = Diluted Sample

Table 3
Historical Groundwater Analytical Results
Site FTMM-18 Closed Solid Waste Landfill/Former Training Area
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				M18MW25													296MW03
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	49	50	51	52	53	54	LF1	LF1 Dup	LF2	LF2 Dup	LF3	LF4	LF5	44
Date Collected				10/24/2008	3/25/2009	6/2/2009	9/17/2009	11/23/2009	2/2/2010	5/14/2010	5/14/2010	9/14/2010	9/14/2010	11/12/2010	2/24/2011	4/20/2011	3/4/2008
ANALYTE/Lab ID				80387.02	90121.02	90219.02	90385.02	90458.02	10046.02	10193.04	10193.03	10389.04	10389.03	1048401	1106804	1116101	80065.06
Volatile Organic Compounds (µg/L)																	
1,2-Dichloroethane	2	74	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.11	<0.11	<0.11	ND
1,2-Dichloropropane	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	ND
Acetone	6000	NLE	--	ND	6.86	ND	ND	ND	ND	ND	ND	ND	ND	<0.32	<0.32	<0.32	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	0.29 J	<0.12	ND
Carbon Tetrachloride	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	ND
tert-Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1.64	<1.64	<1.64	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.11	<0.11	<0.11	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	4.00 JN	ND	ND	ND	ND	ND
Metals (µg/L)																	
Aluminum	200	NLE	121000	745.00	81.00 ER	ND	136.00	ND	46.70 ER	ND	ND	ND	ND	<13.0	<200	<200	242
Antimony	6	6	20.70	11.70	22.70	6.19 ER	ND	ND	6.43 ER	16.30	14.70	33.10	31.70	<4.70	<6.0	<6.0	ND
Arsenic	3	10	89.30	ND	112.00	15.40	52.00	2.98 ER	8.11	2.15	1.28 ER	7.58	4.82 ER	<0.62	<3.0	10.80	ND
Barium	6000	2000	699.00	376.00	147.00	133.00	352.00	170.00	44.00	118.00	109.00	459.00	441.00	526.00	230.00	<200	3.53 ER
Beryllium	1	4	2.10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.40	<1.0	<1.0	ND
Cadmium	4	5	9.50	ND	ND	ND	2.05	ND	ND	1.20 ER	0.95 ER	2.09	2.32 ER	2.65	<3.0	<3.0	1.22 ER
Calcium	NLE	NLE	45400.00	325000.00	211000.00	ND	506000.00	295000.00 E	112000.00	214000.00	198000.00	640000.00 E	612000.00 E	661000.00 E	367000.00	71800.00	5050
Chromium	70	100	191.00	4.29 ER	0.92 ER	ND	ND	ND	ND	ND	ND	ND	ND	<0.60	<10	<10	1.76 ER
Cobalt	NLE	NLE	18.30	2.68	0.42	0.56 ER	0.50 ER	ND	ND	ND	ND	ND	ND	<0.30	<50	<50	ND
Copper	1300	1300	65.60	3.43 ER	2.37 ER	ND	ND	ND	ND	ND	ND	4.09 ER	3.90 ER	<0.80	<10	<10	1.31 ER
Iron	300	NLE	431000	150000.00	47500.00	48600.00	60400.00	30200.00	ND	31400.00	28500.00	48600.00	47700.00	42400.00	4860.00	7950.00	3110
Lead	5	15	22.70	ND	11.50	ND	ND	ND	ND	3.31 ER	3.08 ER	ND	3.56 ER	2.80 ER	<3.0	<3.0	ND
Magnesium	NLE	NLE	62700	151000.00	909000.00	153000.00	155000.00	64100.00	18700.00	39700.00	36900.00	181000.00	175000.00	177000.00	100000.00	11600.00	1800
Manganese	50	NLE	331	477.00	451.00	419.00	1130.00	819.00	594.00	610.00	569.00	1120.00	1090.00	1120.00	912.00	543.00	14.8
Mercury	2	2	0.26	ND	ND	ND	ND	ND	ND	ND	ND	0.07 ER	0.09 ER	<0.254	<0.20	<0.20	ND
Nickel	100	NLE	187	ND	ND	ND	0.82 ER	ND	2.20 ER	ND	ND	1.33 ER	1.03 ER	<0.70	<10	<10	5.61
Potassium	NLE	NLE	137000	58300.00	33000.00	50400.00	51500.00	17800.00	6750.00	14700.00	13100.00	42000.00	40600.00	67500.00	28600.00	<10000	1560
Selenium	40	50	29.60	ND	73.40	6.19 ER	24.60	ND	ND	NR	NR	1.61 ER	2.34 ER	<1.36	<10	<10	ND
Silver	40	NLE	ND	ND	ND	ND	ND	ND	ND	1.37 ER	1.07 ER	ND	ND	2.38 ER	<10	<10	ND
Sodium	50000	NLE	21500	1090000.00	647000.00	1040000.00	948000.00 E	347000.00	45500.00	232000.00	214000.00	1060000.00 E	1020000.00 E	118000.00 E	608000.00	23200.00	12200
Thallium	2	2	5.50	2.21 ER	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.53	<2.0	<2.0	ND
Vanadium	NLE	NLE	108	12.90	10.70	3.59 ER	12.70	7.00	3.46 ER	ND	ND	ND	ND	<0.50	<50	<50	1.70
Zinc	2000	NLE	233	38.60	16.60 ER	ND	3.81 ER	ND	2.28 ER	ND	ND	ND	ND	<2.50	<20	<20	48.2

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

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NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

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Historical Groundwater Analytical Results
Site FTMM-18 Closed Solid Waste Landfill/Former Training Area
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				296MW03																											
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	45		46		47		48		48 Dup		49		50		51		52		LF1		LF1 Dup		LF2		LF2 Dup		LF3	LF4
Date Collected				5/14/2008		8/13/2008		10/24/2008		3/25/2009		3/25/2009		6/2/2009		9/17/2009		11/23/2009		2/2/2010		5/21/2010		5/21/2010		9/13/2010		11/26/2010		2/24/2011	4/20/2011
ANALYTE/Lab ID				80161.06		80295.06		80386.06		90122.04		90122.03		90217.06		90384.06		90456.06		10045.06		10208.04		10208.03		10386.08		1051204		1106709	1116301
Volatile Organic Compounds (µg/L)																															
1,2-Dichloroethane	2	74	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		<0.11		<0.11	<0.11
1,2-Dichloropropane	1	5	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		<0.12		<0.12	<0.12
Acetone	6000	NLE	--	ND		ND		6.89		ND		ND		ND		ND		ND		ND		ND		ND		ND		<0.32		<0.32	<0.32
Benzene	1	5	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		<0.12		<0.12	<0.12
Carbon Tetrachloride	1	5	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		<0.12		<0.12	<0.12
tert-Butyl alcohol	100	NLE	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		<1.64		<1.64	<1.64
Trichloroethene	1	5	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		<0.11		<0.11	<0.11
TICs*	500	NLE	--	ND		ND		9.00	J	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	ND
Metals (µg/L)																															
Aluminum	200	NLE	121000	131.00		372		166.00		274.00		196		166.00		263.00		174.00		157		30.6		22.3		3920.00		1310.00		<200	222.00
Antimony	6	6	20.70	ND		ND		ND		9.10	ER	9.54	ER	3.05	ER	6.05	ER	ND		ND		ND		ND		26.60		5.59	ER	<6.0	<6.0
Arsenic	3	10	89.30	ND		ND		3.55	ER	21.90		19.00		ND		8.49		0.71	ER	0.72	ER	ND		ND		7.05		2.10	ER	<3.0	<3.0
Barium	6000	2000	699.00	4.77	ER	10.40		5.71		3.55	ER	3.42	ER	2.09	ER	6.91		6.64		4.73	ER	2.10	ER	2.33	ER	102.00		115.00		<200	<200
Beryllium	1	4	2.10	0.21	ER	0.17	ER	ND		ND		ND		ND		0.12	ER	ND		ND		ND		ND		0.95		0.49	ER	<1.0	<1.0
Cadmium	4	5	9.50	1.86	ER	3.91		1.71	ER	1.39	ER	1.41	ER	0.69	ER	3.53		1.63	ER	1.18	ER	ND		0.87	ER	46.20		13.70		<3.0	<3.0
Calcium	NLE	NLE	45400.00	4980.00		28400		15900.00		8460.00		7800		4120.00		19500.00		20400.00		9810		5940		6020		488000.00		250000.00		11200.00	<5000
Chromium	70	100	191.00	0.98	ER	1.46	ER	1.85	ER	2.30	ER	1.57	ER	1.98	ER	1.45	ER	ND		1.93	ER	ND		ND		ND		<0.60		<10	<10
Cobalt	NLE	NLE	18.30	0.67	ER	0.721		0.59	ER	ND		ND		ND		1.03	ER	0.59	ER	ND		ND		ND		8.19		5.41		<50	<50
Copper	1300	1300	65.60	ND		ND		ND		ND		ND		ND		ND		ND		1.40	ER	ND		ND		3.84	ER	<0.80		<10	<10
Iron	300	NLE	431000	151.00		1760		3160.00		3780.00		1870		668.00		1530.00		1590.00		1220		119		ND		25700.00		557.00		903.00	737.00
Lead	5	15	22.70	ND		ND		ND		5.51		7.33		2.56	ER	ND		ND		ND		ND		ND		ND		<2.10		<3.0	<3.0
Magnesium	NLE	NLE	62700	1650.00		11100		6400.00		3520.00		3210		1630.00		7350.00		8000.00		3880		2470		2490		209000.00		114000.00		<5000	<5000
Manganese	50	NLE	331	22.90		27.9		27.00		16.40		15.6		7.53		37.80		30.40		20.1		6.65		6.81		680.00		279.00		<15	<15
Mercury	2	2	0.26	ND		ND		ND		ND		ND		ND		0.15	ER	ND		ND		ND		ND		ND		<0.254		<0.20	<0.20
Nickel	100	NLE	187	4.00	ER	5.59		2.81	ER	1.31	ER	2.01	ER	2.10	ER	5.51		4.52	ER	4.17	ER	0.97	ER	1.46	ER	56.70		25.60		<10	<10
Potassium	NLE	NLE	137000	2040.00		5570		4370.00		2130.00		2050		1830.00		5350.00		3650.00		4190		2390		2430		22700.00		25900.00		<10000	<10000
Selenium	40	50	29.60	4.83	ER	ND		ND		46.80		51.50		ND		22.10		ND		ND		NR		NR		1.93	ER	<1.36		<10	<10
Silver	40	NLE	ND	ND		0.56		0.71	ER	ND		ND		ND		ND		ND		0.66		0.58		ND		ND		<0.60		<10	<10
Sodium	50000	NLE	21500	9990.00		99400		53200.00		37400.00		34300		21500.00		36400.00		83700.00		36200		45300		44400		739000.00	E	694000.00	E	60400.00	16600.00
Thallium	2	2	5.50	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		<0.53		<2.0	<2.0
Vanadium	NLE	NLE	108	ND		2.13		0.97	ER	3.30	ER	2.28		1.22	ER	1.09	ER	1.64	ER	1.57		ND		ND		ND		1.03	ER	<50	<50
Zinc	2000	NLE	233	57.30		147		97.00		59.80		59.1		33.50		151.00		91.70		59.9		38.1		39.3		1580.00		833.00		54.50	35.20

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

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Site FTMM-18 Closed Solid Waste Landfill/Former Training Area
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				296MW02																				
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	46		47		48		49		50		51		52		53		54		55		56		57		58		59		59 Dup		60	
Date Collected				3/4/2008		5/14/2008		8/13/2008		10/22/2008		3/26/2009		6/2/2009		9/17/2009		11/23/2009		2/2/2010		5/21/2010		9/13/2010		11/23/2010		2/24/2011		4/20/2011		4/20/2011		8/9/2011	
ANALYTE/Lab ID																																	
Volatile Organic Compounds (µg/L)																																	
Acetone	6000	NLE	-	ND		ND		ND		ND		5.89		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Benzene	1	5	-	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Ethylbenzene	700	700	-	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
m +*p* -xylenes	100	NLE	-	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
MTBE	70	NLE	-	ND		0.86		0.93		0.91		ND		0.36		0.24	J	ND		ND		ND		ND		ND		ND		ND		ND		ND	
o- xylene	100	NLE	-	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Toluene	600	1000	-	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
TICs*	500	NLE	-	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Metals (µg/L)																																	
Aluminum	200	NLE	121000	1340		83.8		130		327		642		294		2740		272		205000		472		200		ND		216		622		1010		2020	
Antimony	6	6	20.70	ND		1.89		ND		ND		7.54		2.43		ND		ND		ND		11.8		17		ND		< 6		< 6		< 6		< 6	
Arsenic	3	10	89.30	5.75		4.59		3.15		5.21		26.7		5.01		7.47		2.6		75.08		0.83		2.92		ND		< 3		< 3		< 3		< 3	
Barium	6000	2000	699.00	106		7.46		7.59		6.75		8.58		14.3		39.7		15.9		1270		210		122		61.4		< 200		< 200		< 200		< 200	
Beryllium	1	4	2.10	0.716		ND		ND		ND		ND		ND		0.107		ND		9.99		0.067		ND		ND		< 1		< 1		< 1		< 1	
Cadmium	4	5	9.50	13.1		1.58		0.654		0.49		1.17		0.729		2.86		ND		184		8.51		1.78		0.598		3.1		3.2		3		< 3	
Calcium	NLE	NLE	45400.00	10000		1820		1760		1830		4270		3910		6250		4760		93700		80900		40300		30700		42000		57400		55700		23900	
Chromium	70	100	191.00	5.21		0.986		1.63		2.45		4.49		2.46		12.2		1.86		840		ND		ND		ND		< 10		< 10		< 10		10.4	
Copper	1300	1300	65.60	ND		10.5		12.3		22.4		30.7		15.5		128		62.3		5440		47.1		11.6		1.55		16.3		16.5		22.3		47.7	
Iron	300	NLE	431000	23200		366		398		860		3780		607		10100		1180		579000	E	7130		39600		12800		1100		4650		7100		18900	
Lead	5	15	22.70	21.7		1.96		ND		ND		7.34		ND		36.1		2.73		1060		4.51		4.83				< 3		3.3		6		9.8	
Magnesium	NLE	NLE	62700	2050		468		498		586		925		1010		2640		1150		77900		12900		11200		7080		6680		7370		6870		5760	
Manganese	50	NLE	331	296		17		18.6		15.5		95.3		76.7		176		55.6		5590		780		510		284		282		287		269		284	
Mercury	2	2	0.26	ND		ND		ND		ND		ND		ND		0.18		ND		0.69		ND		ND		ND		< 0.2		< 0.2		< 0.2		< 0.2	
Nickel	100	NLE	187	44		4.82		3.16		2.54		3.6		5.14		10.3		6.45		514		23		20.8		9.84		13.3		13.4		17.6		15.7	
Potassium	NLE	NLE	137000	2450		2920		2770		3060		3650		2200		4700		3050		59700		14800		11900		32900		< 10000		10900		10500		< 10000	
Selenium	40	50	29.60	ND		4.8		3.58				42.7		ND		ND		11.8		ND		NR		2.13		1.47		< 10		< 10		< 10		10.1	
Silver	40	NLE	ND	ND		ND		0.708		1.08		ND		ND		ND		ND		ND		1.08		6.6		2.37		< 10		< 10		< 10		< 10	
Sodium	50000	NLE	21500	128000		239000		255000		255000		317000		281000		286000		270000		475000		2670000	E	1320000	E	929000	E	818000		802000		720000		578000	
Thallium	2	2	5.50	1.69		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		< 2		< 2		< 2		< 2	
Vanadium	60	NLE	108	41.9		2.19		2.65		2.85		12.2		2.2		16.9		1.74		989		1.75		ND		ND		< 50		< 50		< 50		< 50	
Zinc	2000	5000	233	466		30.9		19		38		83.8		60.3		173		162		13200		458		191		89.1		2110		10800		9920		6980	

Notes:

Yellow highlight indicates an exceedence of NJDEP Class IIA GWQS
TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.
NJDEP GWQS = NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, (2012)
LF = Low-flow sampling method used to collect sample
< = Analyte does not exceed the detection limit shown
dup = duplicate sample collected
ER - Estimated result
J - Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)
NA - Not analyzed
ND - Not detected
NLE - No limit established
NR - Not reported

Table 3
Historical Groundwater Analytical Results
Site FTMM-18 Closed Solid Waste Landfill/Former Training Area
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				296MW03																				
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	46	47	48	49	50	50 Dup	51	52	53	54	55	55 Dup	56	57	57 Dup	58	59	60
Date Collected				3/4/2008	5/14/2008	8/13/2008	10/22/2008	3/25/2009	3/25/2009	6/2/2009	9/17/2009	11/23/2009	2/2/2010	5/21/2010	5/21/2010	9/13/2010	11/24/2010	11/24/2010	2/24/2011	4/21/2011	8/9/2011
ANALYTE/Lab ID																					
Volatile Organic Compounds (µg/L)																					
Acetone	6000	NLE	-	ND	ND	ND	6.89	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m +*p* -xylenes	100	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE	70	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o- xylene	100	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																					
Aluminum	200	NLE	121000	242	131	372	166	274	196	166	263	174	157	30.6	22.3	3920	1310	1240	< 200	222	< 200
Antimony	6	6	20.70	ND	ND	ND	ND	9.1	9.54	3.05	6.05	ND	ND	ND	ND	26.6	5.59	9.76	< 6	< 6	< 6
Arsenic	3	10	89.30	ND	ND	ND	3.55	21.9	19	ND	8.49	0.71	0.72	ND	ND	7.05	2.1	1.3	< 3	< 3	< 3
Barium	6000	2000	699.00	3.53	4.77	10.4	5.71	3.55	3.42	2.09	6.91	6.64	4.73	2.1	2.33	102	115	115	< 200	< 200	< 200
Beryllium	1	4	2.10	ND	0.214	0.167	ND	ND	ND	ND	0.122	ND	ND	ND	ND	0.946	0.485	0.434	< 1	< 1	< 1
Cadmium	4	5	9.50	1.22	1.86	3.91	1.71	1.39	1.41	0.689	3.53	1.63	1.18	ND	0.874	46.2	13.7	13.5	< 3	< 3	< 3
Calcium	NLE	NLE	45400.00	5050	4980	28400	15900	8460	7800	4120	19500	20400	9810	5940	6020	488000	250000	242000	11200	< 5000	14700
Chromium	70	100	191.00	1.76	0.98	1.46	1.85	2.3	1.57	1.98	1.45	ND	1.93	ND	ND	ND	ND	ND	< 10	< 10	< 10
Copper	1300	1300	65.60	1.31	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	3.84	ND	ND	< 10	< 10	< 10
Iron	300	NLE	431000	3110	151	1760	3160	3780	1870	668	1530	1590	1220	119	ND	25700	557	486	903	737	1120
Lead	5	15	22.70	ND	ND	ND	ND	5.51	7.33	2.56	ND	ND	ND	ND	ND	ND	ND	ND	< 3	< 3	< 3
Magnesium	NLE	NLE	62700	1800	1650	11100	6400	3520	3210	1630	7350	8000	3880	2470	2490	209000	114000	113000	< 5000	< 5000	6660
Manganese	50	NLE	331	14.8	22.9	27.9	27	16.4	15.6	7.53	37.8	30.4	20.1	6.65	6.81	680	279	273	< 15	< 15	24.5
Mercury	2	2	0.26	ND	ND	ND	ND	ND	ND	ND	0.15	ND	ND	ND	ND	ND	ND	ND	< 0.2	< 0.2	< 0.2
Nickel	100	NLE	187	5.61	4	5.59	2.81	1.31	2.01	2.1	5.51	4.52	4.17	0.974	1.46	56.7	25.6	25.6	< 10	< 10	< 10
Potassium	NLE	NLE	137000	1560	2040	5570	4370	2130	2050	1830	5350	3650	4190	2390	2430	22700	25900	21000	< 10000	< 10000	< 10000
Selenium	40	50	29.60	ND	4.83	ND	ND	46.8	51.5	ND	22.1	ND	ND	NR	NR	1.93	ND	1.4	< 10	< 10	< 10
Silver	40	NLE	ND	ND	ND	0.564	0.707	ND	ND	ND	ND	ND	0.659	0.58	ND	ND	ND	ND	< 10	< 10	< 10
Sodium	50000	NLE	21500	12200	9990	99400	53200	37400	34300	21500	36400	83700	36200	45300	44400	739000 E	694000 E	679000 E	60400	16600	111000
Thallium	2	2	5.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	< 2	< 2	< 2
Vanadium	60	NLE	108	1.7	ND	2.13	0.971	3.3	2.28	1.22	1.09	1.64	1.57	ND	ND	ND	1.03	1.23	< 50	< 50	< 50
Zinc	2000	5000	233	48.2	57.3	147	97	59.8	59.1	33.5	151	91.7	59.9	38.1	39.3	1580	833	812	54.5	35.2	75

Notes:

Yellow highlight indicates an exceedence of NJDEP Class IIA GWQS

TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

dup = duplicate sample collected

ER - Estimated result

J - Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA - Not analyzed

ND - Not detected

NLE - No limit established

NR - Not reported

Table 3
Historical Groundwater Analytical Results
Site FTMM-18 Closed Solid Waste Landfill/Former Training Area
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				296MW04																	
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	46	47	48	49	50	51	52	53	54		55	56		57		58	58 Dup	59	60
Date Collected				3/4/2008	5/14/2008	8/13/2008	10/22/2008	3/26/2009	6/2/2009	9/17/2009	11/23/2009	2/2/2010		5/21/2010	9/13/2010		11/23/2010		2/24/2011	2/24/2011	4/21/2011	8/9/2011
ANALYTE/Lab ID																						
Volatile Organic Compounds (µg/L)																						
Acetone	6000	NLE	-	ND	ND	2.93	ND	ND	ND	ND	ND	ND		ND	ND		ND		ND	ND	ND	ND
Benzene	1	5	-	ND	0.18	ND	ND	0.39	0.38	ND	ND	0.27	J	ND	ND		ND		ND	ND	ND	ND
Ethylbenzene	700	700	-	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND		ND		ND	ND	ND	ND
m +*p* -xylenes	100	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND		ND		ND	ND	ND	ND
MTBE	70	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND		ND		ND	ND	ND	ND
o- xylene	100	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND		ND		ND	ND	ND	ND
Toluene	600	1000	-	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND		ND		ND	ND	ND	ND
TICs*	500	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND		ND		ND	ND	11	ND
Metals (µg/L)																						
Aluminum	200	NLE	121000	103	83.4	ND	251	57	10.3	126	ND	441		511	ND		ND		< 200	< 200	653	< 200
Antimony	6	6	20.70	ND	1.29	ND	ND	19.4	4.06	7.82	ND	ND		ND	40.1		ND		< 6	< 6	< 6	< 6
Arsenic	3	10	89.30	ND	ND	2.57	ND	67	20.3	28	1.76	1.48		13.59	13.46		ND		< 3	< 3	< 3	< 3
Barium	6000	2000	699.00	11.2	27	112	180	26.5	33.3	62.8	71.2	21.1		5.8	379		48.9		< 200	< 200	< 200	< 200
Beryllium	1	4	2.10	ND	ND	ND	ND	ND	ND	ND	ND	ND		0.048	ND		ND		< 1	< 1	< 1	< 1
Cadmium	4	5	9.50	0.59	0.579	0.94	0.725	ND	ND	ND	ND	ND		ND	2.63		0.789		< 3	< 3	< 3	< 3
Calcium	NLE	NLE	45400.00	28000	35100	119000	190000	49300	46300	77800	10000	34200		12400	667000	E	66600		41700	56200	11900	131000
Chromium	70	100	191.00	0.609	0.758	ND	ND	1.38	ND	ND	ND	2.1		5.79	6.61		ND		< 10	< 10	< 10	< 10
Copper	1300	1300	65.60	1.19	1.4	ND	1.81	2.23	ND	ND	ND	ND		1.17	4.92		ND		< 10	< 10	< 10	< 10
Iron	300	NLE	431000	3690	3120	9210	1.71	8810	8500	6390	15300	11500		3450	54100		13200		11000	8430	4000	14700
Lead	5	15	22.70	1.1	4.2	ND	16600	7.39	3.92	ND	ND	2.4		ND	7.24		ND		< 3	< 3	8.3	< 3
Magnesium	NLE	NLE	62700	14500	29700	108000	251000	35000	38900	71900	99100	31300		6870	830000	E	82300		41700	44300	7140	191000
Manganese	50	NLE	331	70.7	129	166	225	173	189	342	484	182		49.7	1780		347		204	185	31.9	441
Mercury	2	2	0.26	ND	ND	ND	ND	ND	ND	0.18	ND	ND		ND	0.11		ND		< 0.2	< 0.2	< 0.2	< 0.2
Nickel	100	NLE	187	4.03	1.49	2.01	1.69	ND	1.91	0.642	1.78	3.05		0.716	14		ND		< 10	< 10	< 10	< 10
Potassium	NLE	NLE	137000	3190	7540	25100	57500	6800	9610	17100	15100	10600		2930	148000		33400		11300	11400	< 10000	44000
Selenium	40	50	29.60	ND	ND	10.6	ND	117	4.8	63.2	ND	ND		NR	4.72		ND		< 10	< 10	< 10	< 10
Silver	40	NLE	ND	ND	ND	0.662	ND	ND	ND	ND	ND	ND		0.733	ND		2.08		< 10	< 10	< 10	< 10
Sodium	50000	NLE	21500	119000	232000	796000	E 1830000	272000	314000	483000	688000	268000		82400	5610000	E	814000	E	461000	472000	119000	1420000
Thallium	2	2	5.50	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND		ND		< 2	< 2	< 2	< 2
Vanadium	60	NLE	108	2.28	4.28	3.08	3.19	6.15	2.46	4.5	5.03	7.09		5.39	ND		2.12		< 50	< 50	< 50	< 50
Zinc	2000	5000	233	35.6	16.7	ND	55.6	19	9.49	12	9.38	39		12.7	3.82		ND		< 20	35.5	< 20	< 20

Notes:

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Table 3
Historical Groundwater Analytical Results
Site FTMM-18 Closed Solid Waste Landfill/Former Training Area
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				296MW06																
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	46	47	47 Dup	48	49	50	51	52	53	54	55	56	57		58	59	59 Dup	60
Date Collected				3/4/2008	5/14/2008	5/14/2008	8/13/2008	10/22/2008	3/25/2009	6/2/2009	9/17/2009	11/23/2009	2/2/2010	5/21/2010	9/13/2010	11/24/2010		2/24/2011	4/21/2011	4/21/2011	8/9/2011
ANALYTE/Lab ID																					
Volatile Organic Compounds (µg/L)																					
Acetone	6000	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND
Benzene	1	5	-	0.56	0.51	0.55	0.48	1.74	ND	ND	ND	ND	ND	27.45	12.81	61.13		75.98	ND	ND	ND
Ethylbenzene	700	700	-	ND	ND	ND	ND	4.98	ND	ND	ND	ND	ND	2.94	1.25	7.5		7.24	ND	ND	ND
m +*p* -xylenes	100	NLE	-	ND	ND	ND	ND	0.68	ND	ND	ND	ND	ND	2.43	1.04	6.81		5.16	ND	ND	ND
MTBE	70	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND
o- xylene	100	NLE	-	ND	ND	ND	ND	1.24	ND	ND	ND	ND	ND	1.24	0.66	3.72		2.5	ND	ND	ND
Toluene	600	1000	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.58		0.53	ND	ND	ND
TICs*	500	NLE	-	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	110	71	206		258	ND	ND	ND
Metals (µg/L)																					
Aluminum	200	NLE	121000	76.3	146	142	391	126	70.6	237	226	240	150	58.9	327	ND		294	1880	1590	3050
Antimony	6	6	20.70	ND	ND	1.85	ND	ND	38.1	2.94	11	ND	ND	10.7	24.6	ND		< 6	< 6	< 6	< 6
Arsenic	3	10	89.30	ND	ND	ND	2.51	ND	67.6	6.66	35.2	1.34	ND	22.9	2.38	4.06		< 3	< 3	< 3	4
Barium	6000	2000	699.00	8.19	3.09	3.18	4.73	49.6	102	4.97	102	10	7.39	0.73	82.1	325		299	< 200	< 200	< 200
Beryllium	1	4	2.10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.044	ND	ND		< 1	< 1	< 1	< 1
Cadmium	4	5	9.50	ND	0.265	0.239	0.395	ND	ND	ND	1.41	ND	ND	2.04	1.19	4.74		< 3	< 3	< 3	< 3
Calcium	NLE	NLE	45400.00	19900	7720	7620	10900	62600	182000	8800	150000	18400	16900	133000	147000	386000		360000	< 5000	7360	8080
Chromium	70	100	191.00	0.587	1.04	1.42	4.35	ND	ND	2.24	1.13	3.21	ND	ND	ND	ND		< 10	23.2	19.4	43.5
Copper	1300	1300	65.60	2.35	7.03	7.33	3.06	0.959	ND	17.6	4.17	ND	1.22	ND	6.8	ND		< 10	25.4	30.5	31.1
Iron	300	NLE	431000	3050	1350	1320	3540	20600	56800	1740	49400	6130	4310	39700	41200	98500		111000	6360	25700	11100
Lead	5	15	22.70	ND	ND	ND	ND	ND	7.43	1.81	6.43	ND	ND	4.5	ND	12.1		< 3	< 3	< 3	3.5
Magnesium	NLE	NLE	62700	4550	1640	1620	3050	21900	59100	2280	48700	5850	4630	47400	55800	145000		146000	< 5000	< 5000	< 5000
Manganese	50	NLE	331	103	41.4	40.7	89.3	460	1560	65.9	1310	151	137	1090	1240	2700		3130	28.1	63.8	70.4
Mercury	2	2	0.26	ND	ND	ND	ND	ND	ND	ND	0.39	0.06	ND	ND	0.08	ND		< 0.2	< 0.2	< 0.2	< 0.2
Nickel	100	NLE	187	5.33	1.48	1.56	1.56	ND	ND	2.44	1.68	1.21	2.66	ND	1.59	1.27		< 10	< 10	< 10	< 10
Potassium	NLE	NLE	137000	1030	990	1560	1850	4920	7110	903	11300	1500	3040	7090	10200	28200		16400	< 10000	< 10000	< 10000
Selenium	40	50	29.60	ND	3.13	ND	ND	ND	68.9	ND	60.3	ND	ND	NR	1.98	ND		< 10	< 10	< 10	< 10
Silver	40	NLE	ND	ND	ND	ND	1.08	ND	ND	ND	ND	ND	ND	4.34	5.07	20.7		< 10	< 10	< 10	< 10
Sodium	50000	NLE	21500	58400	31200	31000	42200	4920	258000	46100	218000	48500	66800	232000	254000	697000	E	616000	28700	32400	55600
Thallium	2	2	5.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		< 2	< 2	< 2	< 2
Vanadium	60	NLE	108	2.06	2.28	2.38	8.35	3.27	7.68	6.43	9.85	5.14	2.28	ND	ND	1.09		< 50	< 50	< 50	< 50
Zinc	2000	5000	233	8.39	3.84	3.77	ND	5.37	16.6	5.24	ND	ND	2.39	ND	ND	ND		< 20	26	27.6	< 20

Notes:

Yellow highlight indicates an exceedence of NJDEP Class IIA GWQS
TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.
NJDEP GWQS = NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, (2012)
LF = Low-flow sampling method used to collect sample
< = Analyte does not exceed the detection limit shown
dup = duplicate sample collected
ER - Estimated result
J - Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)
NA - Not analyzed
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Table 3
Historical Groundwater Analytical Results
Site FTMM-18 Closed Solid Waste Landfill/Former Training Area
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				296MW07															
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	46	47	48	49	50	51	52	52 Dup	53	53 Dup	54	54 Dup	55	56	56 Dup	57	58
Date Collected				3/4/2008	5/14/2008	8/13/2008	10/22/2008	3/26/2009	6/2/2009	9/17/2009	9/17/2009	11/23/2009	11/23/2009	2/2/2010	2/2/2010	5/20/2010	9/13/2010	9/13/2010	11/22/2010	2/24/2011
ANALYTE/Lab ID																				
Volatile Organic Compounds (µg/L)																				
Acetone	6000	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m +*p* -xylenes	100	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE	70	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o- xylene	100	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																				
Aluminum	200	NLE	121000	165	63	104	145	175	271	225	263	109	118	382	409	48.4	45.8	46.5	14.8	< 200
Antimony	6	6	20.70	ND	ND	ND	ND	21.2	2.3	ND	ND	ND	ND	ND	ND	ND	ND	37.5	ND	< 6
Arsenic	3	10	89.30	ND	4.24	5.22	3.82	33.1	15.1	11.1	16.3	2.91	3.28	2.61	2.69	3.01	2.29	2.68	1.52	< 3
Barium	6000	2000	699.00	7.29	7.83	22.3	41.6	57.7	114	14.4	17.3	37.4	36.7	24.8	29	7.47	7.79	7.6	5.78	< 200
Beryllium	1	4	2.10	ND	0.132	ND	ND	ND	0.103	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	< 1
Cadmium	4	5	9.50	0.819	1	1.05	0.773	0.962	2.02	0.524	0.808	0.556	ND	ND	ND	ND	ND	ND	ND	< 3
Calcium	NLE	NLE	45400.00	12800	14000	12400	13600	15300	18900	19200	18200	31200	33000	14100	14200	14500	12900	13100	15200	13900
Chromium	70	100	191.00	1.35	1.24	0.973	ND	0.848	0.365	2.33	2.56	ND	ND	3.2	3.58	ND	ND	ND	ND	< 10
Copper	1300	1300	65.60	1.75	ND	ND	ND	ND	4.55	ND	ND	ND	ND	ND	ND	1.52	1.11	1.44	3.95	< 10
Iron	300	NLE	431000	6720	8850	7690	11200	25500	28300	7990	8730	13700	14100	10600	11700	2950	4180	4040	2200	6830
Lead	5	15	22.70	ND	ND	ND	ND	8.39	1.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	< 3
Magnesium	NLE	NLE	62700	2690	3180	2450	2800	2960	2580	4680	4400	7370	7730	3130	3120	3520	2830	2870	3390	< 5000
Manganese	50	NLE	331	101	79.8	49.8	62.1	72.8	92.8	83.2	79.9	128	134	69.6	68.1	46.7	51.9	53.5	50.4	47.1
Mercury	2	2	0.26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.09	ND	0.08	ND	ND	< 0.2
Nickel	100	NLE	187	5.22	1.88	0.989	0.874	ND	1.14	0.925	1.41	3.12	3.5	3.01	2.72	0.61	1.78	1.23	1.31	< 10
Potassium	NLE	NLE	137000	5910	5860	7330	7690	6570	9340	8340	7860	8240	8460	7720	7880	6590	7460	7580	8050	< 10000
Selenium	40	50	29.60	ND	ND	ND	ND	39.9	ND	13.4	ND	ND	ND	ND	ND	NR	1.57	1.37	ND	< 10
Silver	40	NLE	ND	ND	ND	1.67	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	1.57	ND	< 10
Sodium	50000	NLE	21500	7820	13600	7520	10300	12200	5650	15400	13400	34100	34900	23400	22200	21200	8110	7720	15700	28800
Thallium	2	2	5.50	ND	ND	ND	ND	ND	2.41	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	< 2
Vanadium	60	NLE	108	0.626	1.09	1.31	ND	4.41	1.81	4.07	3.64	3.02	3	3.99	3.69	1.11	0.64	0.673	1.28	< 50
Zinc	2000	5000	233	61.8	26.5	12.5	44.9	85.5	178	58.5	56.7	84.7	90.1	36.9	372	55.2	24.5	24.9	44.1	71.5

Notes:

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Table 3
Historical Groundwater Analytical Results
Site FTMM-18 Closed Solid Waste Landfill/Former Training Area
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				296MW07			296MW08														
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	59	59 Dup	60	46	47	48	49	50	51	52	53	54	55	56	57	57 Dup	58	59	60
Date Collected				4/19/2011	4/19/2011	8/9/2011	3/4/2008	5/14/2008	8/13/2008	10/22/2008	3/26/2009	6/2/2009	9/17/2009	11/23/2009	2/2/2010	5/21/2010	9/13/2010	11/23/2010	11/23/2010	2/24/2011	4/19/2011	8/9/2011
ANALYTE/Lab ID																						
Volatile Organic Compounds (µg/L)																						
Acetone	6000	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m +*p* -xylenes	100	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE	70	NLE	-	0.21 J	0.2 J	ND	1.24	ND	ND	ND	ND	0.45	ND	ND	ND	0.81	0.46 J	ND	ND	0.39 J	0.79	ND
o- xylene	100	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	49	48	7	ND	ND
Metals (µg/L)																						
Aluminum	200	NLE	121000	315	306	902	419	88.1	ND	273	372	399	1040	452	1230	998	567	286	322	1140	1330	648
Antimony	6	6	20.70	< 6	< 6	< 6	ND	ND	ND	3.06	25	2.53	ND	ND	ND	10	9.95	ND	ND	< 6	< 6	< 6
Arsenic	3	10	89.30	< 3	< 3	7.2	18.7	48.8	135	42.3	54.3	57.1	81.1	23.8	22.53	8.84	19.4	9.18	9.54	6.1	3.4	97.1
Barium	6000	2000	699.00	< 200	< 200	< 200	56.3	40.6	23.7	30.9	56.2	64.5	63.5	53	107	133	73.2	38.5	40	< 200	< 200	< 200
Beryllium	1	4	2.10	< 1	< 1	< 1	0.109	0.193	ND	ND	ND	0.178	0.083	0.051	0.11	0.297	0.181	ND	ND	< 1	< 1	< 1
Cadmium	4	5	9.50	< 3	< 3	< 3	1.01	10.1	14.2	ND	ND	1.03	3.88		2.57	4.02	3.1	2.65	2.95	< 3	< 3	3
Calcium	NLE	NLE	45400.00	30300	29900	13500	35800	29100	27300	19800	27200	30400	27900	23600	41300	44700	25700	17600	18000	41800	46000	48000
Chromium	70	100	191.00	< 10	< 10	< 10	ND	ND	ND	ND	ND	ND	2.63	ND	ND	ND	ND	1.28	1.18	< 10	< 10	< 10
Copper	1300	1300	65.60	< 10	< 10	< 10	2.08	ND	ND	2.35	ND	0.921	ND	ND	ND	ND	4.02	ND	ND	< 10	< 10	< 10
Iron	300	NLE	431000	5450	6840	47100	96700	96700	124000	77100	47400	60200	83600	53400	59300	31700	56600	45100	46100	24900	25700	158000
Lead	5	15	22.70	< 3	< 3	< 3	ND	11.8	11.9	ND	13.2	4.25	10	6.1	8.58		3.38	8.27	6.51	< 3	< 3	< 3
Magnesium	NLE	NLE	62700	8750	8690	< 5000	25400	18700	15600	14300	20400	21000	20000	17500	31900	37700	20000	12200	12600	35100	38700	28500
Manganese	50	NLE	331	93.8	91.7	67	302	285	289	167	196	234	254	185	293	316	215	150	154	329	357	556
Mercury	2	2	0.26	< 0.2	< 0.2	< 0.2	ND	ND	ND	ND	ND	ND	0.09	ND	ND	ND	0.11	ND	ND	< 0.2	< 0.2	< 0.2
Nickel	100	NLE	187	< 10	< 10	< 10	19.6	11.2	7.24	8.24	17.2	22.6	16.7	15.3	38.4	46.7	20.6	12.5	12.5	49.2	56.6	24
Potassium	NLE	NLE	137000	< 10000	< 10000	< 10000	3540	4180	3980	4040	3790	4530	5650	4170	7390	5670	5540	6120	5770	< 10000	< 10000	< 10000
Selenium	40	50	29.60	< 10	< 10	< 10	ND	ND	ND	ND	45.1	4.46	ND	ND	ND	NR	1.57	ND	ND	< 10	< 10	< 10
Silver	40	NLE	ND	< 10	< 10	< 10	ND	9.67	18.5	ND	ND	ND	ND	ND	ND	4.73	8.12	9.61	9.35	< 10	< 10	< 10
Sodium	50000	NLE	21500	105000	103000	10800	168000	148000	157000	119000	129000	127000	148000	121000	148000	136000	131000	105000	107000	135000	124000	300000
Thallium	2	2	5.50	< 2	< 2	< 2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	< 2	< 2	< 2
Vanadium	60	NLE	108	< 50	< 50	< 50	ND	0.348	0.525	0.261	5.24	0.683	13.2	9.72	11.1	ND	ND	0.78	1.14	< 50	< 50	< 50
Zinc	2000	5000	233	177	182	115	122	69.1	17.4	58.1	128	121	122	99.4	232	262	122	71.4	73.6	309	390	183

Notes:

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Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-18 Closed Solid Waste Landfill/Former Training Area
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	Weston 1995 Background (Main Post)	M18MW22			M18MW23		M18MW24	M18MW25		296MW01
Sample ID				FTMM-18-GW-M18MW22-12.33	FTMM-18-GW-M18MW22-18.98	FTMM-18-GW-M18MW22-18.91	FTMM-18-GW-M18MW23-16.22	FTMM-18-GW-M18MW23-9.28	FTMM-18-GW-M18MW24-10.9	FTMM-18-GW-M18MW25-13.81	FTMM-18-GW-M18MW25-8.81	FTMM-54-GW-296MW01
Sample Date				8/30/2013	8/30/2013	12/19/2014	12/19/2014	12/19/2014	8/30/2013	8/30/2013	8/30/2013	8/16/2013
QA/QC				SA	SA	SA	SA	SA	SA	SA	SA	SA
Filtered				PDB	PDB	PDB	PDB	PDB	PDB	PDB	PDB	LFPS
Volatile Organic Compounds (µg/l)												
1,1,1,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	-	**13**	**26**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	-	**2.4 J**	**3.5 J**	**2.6 J**	< 5	< 5	**3 J**	**2.1 J**	**2.3 J**	< 5
Benzene	1	5	-	< 1	**0.37 J**	< 1	**6.5**	**9.1**	< 1	< 1	< 1	< 1
Bromobenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	1	80	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	70	80	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Meta & Para Xylenes	1,000	NLE	-	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl bromide	10	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	3	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
n-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	100	100	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	-	NA	NA	< 20 UJ	< 20 UJ	< 20 UJ	NA	NA	NA	NA
tert-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	600	1,000	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Total Xylenes	1,000	10,000	-	< 3	< 3	NA	NA	NA	< 3	< 3	< 3	< 3
Trans-1,2-Dichloroethene	100	100	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TIC VOCs (µg/l)												
Total TIC, Volatile	500	NLE	-	ND	**6.9 JN**	ND	ND	ND	ND	ND	ND	ND
Inorganics (µg/l)												
Lead	5	15	22.7	NA	NA	NA	NA	NA	NA	NA	NA	< 2

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-18 Closed Solid Waste Landfill/Former Training Area
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	Weston 1995 Background (Main Post)	296MW02	296MW03	296MW04		296MW06				296MW07	296MW08
Sample ID				FTMM-54-GW-296MW02	FTMM-54-GW-296MW03	FTMM-54-GW-296MW04	FTMM-54-GW-296MW04-6.35	FTMM-54-GW-296MW06	FTMM-54-GW-296MW106	FTMM-54-GW-296MW06-10.1	FTMM-54-GW-296MW06-5.07	FTMM-54-GW-296MW07	FTMM-54-GW-296MW08
Sample Date				8/19/2013	8/19/2013	8/20/2013	12/18/2014	8/19/2013	8/19/2013	12/18/2014	12/18/2014	8/19/2013	8/19/2013
QA/QC				SA	SA	SA	SA	SA	DU	SA	SA	SA	SA
Filtered				LFPS	LFPS	LFPS	PDB	LFPS	LFPS	PDB	PDB	LFPS	LFPS
Volatile Organic Compounds (µg/l)													
1,1,1,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	**0.2 J**	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.23 J**
2,2-Dichloropropane	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	-	**5.9**	< 5	< 5	**2 J**	**2.2 J**	**2.4 J**	< 5	**1.9 J**	**2.1 J**	**4.9 J**
Benzene	1	5	-	< 1	< 1	< 1	< 1	**11**	**12**	**15**	**1.6 J**	< 1	< 1
Bromobenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	1	80	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	70	80	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	-	< 1	< 1	< 1	< 1 UJ	< 1	< 1	< 1 UJ	< 1 UJ	< 1	< 1
Ethyl benzene	700	700	-	< 1	< 1	< 1	< 1	**0.72 J**	**0.72 J**	**0.2 J**	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	-	< 1	< 1	< 1	< 1	**0.8 J**	**0.85 J**	**0.76 J**	**0.34 J**	< 1	< 1
Meta & Para Xylenes	1,000	NLE	-	< 2	< 2	< 2	< 2	**0.47 J**	**0.49 J**	**0.51 J**	< 2	< 2	< 2
Methyl bromide	10	NLE	-	< 1	< 1	< 1	< 1 UJ	< 1	< 1	< 1 UJ	< 1 UJ	< 1	< 1
Methyl butyl ketone	300	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	-	**1.8 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	3	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	-	< 1	< 1	< 1	< 1	**1.1 J**	**1.1 J**	**0.66 J**	**0.37 J**	< 1	< 1
n-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	-	< 1	< 1	< 1	< 1	**0.23 J**	**0.25 J**	**0.22 J**	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	**0.27 J**	**0.26 J**	< 1	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	100	100	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	-	NA	NA	NA	< 20	NA	NA	< 20	< 20	NA	NA
tert-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	600	1,000	-	< 1	< 1	< 1	< 1	< 1	< 1	**0.26 J**	< 1	< 1	< 1
Total Xylenes	1,000	10,000	-	< 3	< 3	< 3	NA	**0.7 J**	**0.74 J**	NA	NA	< 3	< 3
Trans-1,2-Dichloroethene	100	100	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TIC VOCs (µg/l)													
Total TIC, Volatile	500	NLE	-	ND	ND	ND	ND	**23.9**	**24.3 JN**	**24.3 JN**	**6.9 JN**	ND	ND
Inorganics (µg/l)													
Lead	5	15	22.7	< 2	< 2	< 2	NA	< 2	< 2	NA	NA	< 2	< 2

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-18 Closed Solid Waste Landfill/Former Training Area
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Footnote:
1) All historical data collected prior to 2013 are reported as provided by others.
2) Number of Analyses is the number of detected and non-detected results excluding rejected results. Sample duplicate pairs have not been averaged.
3) NLE = no limit established.
4) ND = not detected in any background sample, no background concentration available.

5) Chemical result qualifiers are assigned by the laboratory and is typically evaluated and modified (if necessary) by during data validation.
[blank] = detect, i.e. detected chemical result value.
B = Compound detected in the sample and its associated blank sample.
R = Rejected, data validation rejected the results.
U = non-detect, i.e. not detected equal to or above this value.
U-DL = Elevated sample detection limit due to difficult sample matrix.
U-ND = Analyte not detected in sample, but no detection or reporting limit provided.
J = estimated (detect or non-detect) value.
E (or ER) = Estimated result.
D = Results from dilution of sample.
J-DL = Elevated sample detection limit due to difficult sample matrix.
JN = Tentatively identified compound, estimated concentration.

6) Chemical results greater than or equal to the action level (depending on criteria) are highlighted based on the Criteria that are present.
- Cell Shade values represent a result that is above the NJ Ground Water Quality Criteria ####

NJDEP Interim Specific GWQC values are presented for the NJ GWQS where there is not a Specific Ground Water Quality Criteria. A full list of compounds is available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).

NJDEP Interim Generic GWQC values are presented for the NJ GWQS where there is not a XXXXX or a NJDEP Interim Specific GWQC. Available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).
- Bold Outline represent a result that is above the USEPA 2014-05 MCL. ###

7) Criteria action level source document and web address.
- The NJ Ground Water Quality Criteria refers to the NJDEP Groundwater Quality Standards - Adopted July 22, 2010
  http://www.state.nj.us/dep/wms/bwqsa/docs/njac79C.pdf
- The 2014-05 USEPA MCL refers to the USEPA's Region 9 Regional Screening Levels (HQ=1.0) - 5/31/2014 (Last revised)
  http://www.epa.gov/region9/superfund/prg/

8) Wells sampled in the fourth quarter are highlighted in yellow. Sample ID

Table 5
Review of Historical Groundwater Sampling Results
Site FTMM-18 Closed Solid Waste Landfill/Former Training Area
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site Name/ Well ID	Interpretation of Historical and 2014 Results[1]			2014 Evaluation					Rationale
	Chem Class / Analyte	Does a Compound Exceed NJDEP GWQS (Yes or No) (If Yes, identify compound)	Do Metals Exceed FTMM Background Concentration (Yes or No) (If Yes, identify Metal)	Seasonal Effect? (Y/N)[2]	Anomaly? (Y/N)	Exceedance part of overall trend? (Y/N)	Well needed for sentinel purposes? (Y/N)	Retain Analyte/Well (Yes or No)	
FTMM-18									
M18MW22	VOCs	1,2 DCA, Benzene	No	No	No	Yes	No	Yes (VOCs only)	
M18MW23		Benzene, carbon tetrachloride (minor detections)	No	No	No	Yes	No	Yes (VOCs only)	Historical carbon tetrachloride exceedance (minor detections). Benzene exceedence in 2014. Well could not be located and was not sampled in August 2013.
296MW04		No	N/A	No	No	No	Yes	Yes (VOCs)	Analyzed for VOCs as a downgradient delineation point.
296MW06		Benzene	N/A	No	No	Yes	No	Yes (VOCs)	Continued benzene exceedances.

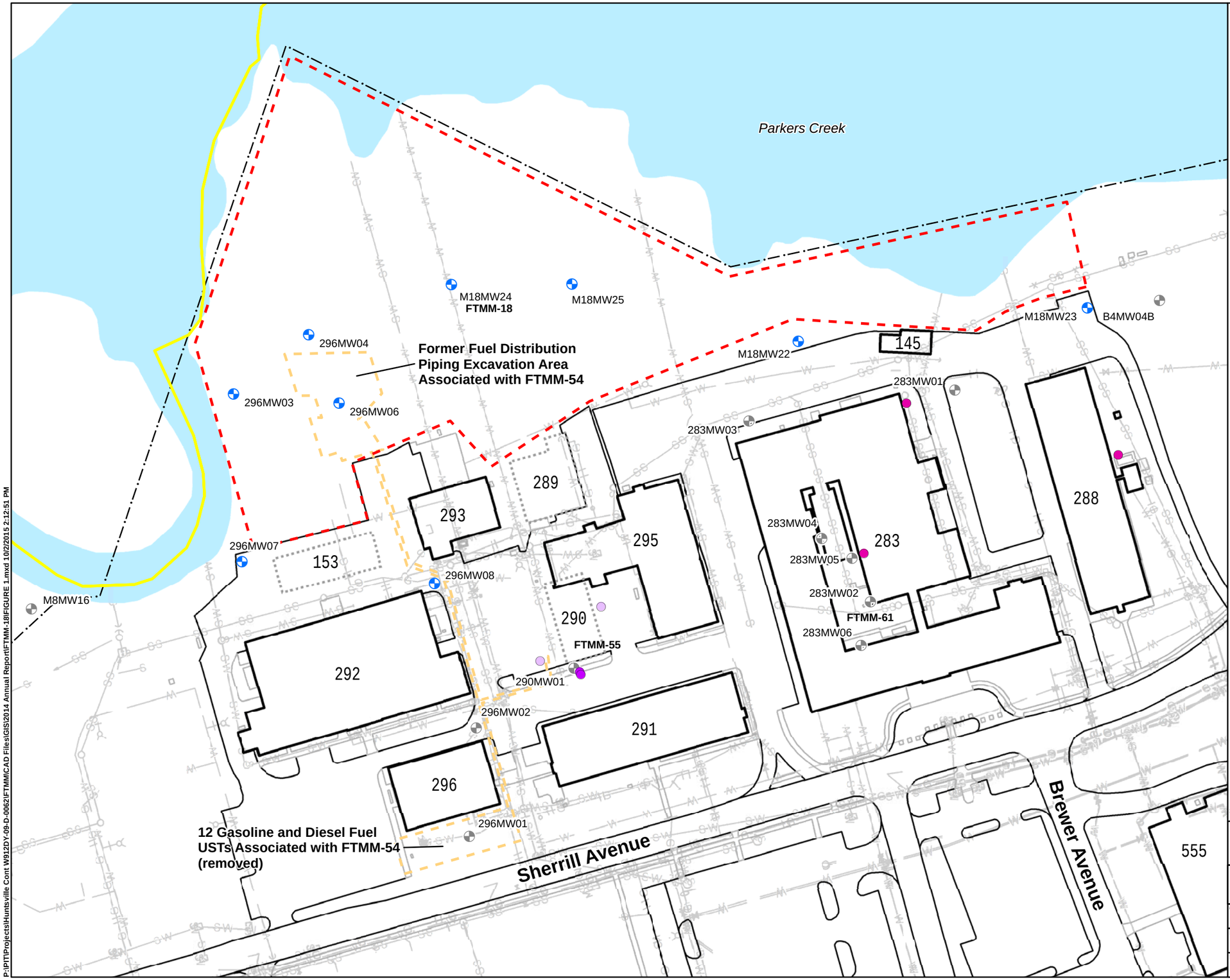
Notes

1. Has any of the analyte compounds exceeded the NJDEP GWQS in the 2014 data and the 4 previous quarterly data rounds or 2 previous annual rounds?
   a. If yes then keep analyte in LTM list
   b. If no then remove this analyte from LTM list
   c. a and b above may be occasionally superseded on a case-by-case basis, depending on site conditions.
2. Has any of the analyte compounds exceeded the NJDEP GWQS seasonally (winter spring vs. summer fall) for the 4 previous data rounds?
3. 1,2-DCA = 1,2-dichloroethane
4. Per the 2/5/15 NJDEP approval letter of the Final 2013 Baseline Groundwater Report, groundwater monitoring wells MP18MW24, MP18MW25, 296MW01, 296MW02, 296MW03, 296MW07, and 296MW08 were removed from the long term monitoring sampling program for FTMM-18 and former FTMM-54, lead was also discontinued from the former FTMM-54 wells. Per the 2/4/15 groundwater NFA issued by the NJDEP at site FTMM-54, monitoring wells 296MW04 and 296MW06 have been incorporated into the FTMM-18 site.

FIGURES

Figure 1 Layout of FTMM-18 Closed Solid Waste Landfill/Former Training Area

Figure 2 FTMM-18 Shallow Groundwater Contours - September 29, 2014



LEGEND:

- Shallow Monitoring Well
- Shallow Monitoring Well Associated with FTMM-54 / FTMM-55 / FTMM-61
- Removed Fiberglass UST associated with FTMM-55 (Building 290)
- Removed Steel UST associated with FTMM-55 (Building 290)
- Removed Steel UST associated with FTMM-61 (Building 283)
- FTMM-18 Landfill Boundary
- FTMM-08 Boundary
- FTMM-54 Boundary
- Municipal Boundary
- Installation Boundary
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Former Building (Demolished)

N

1 inch = 100 feet

0 50 100 200 Feet

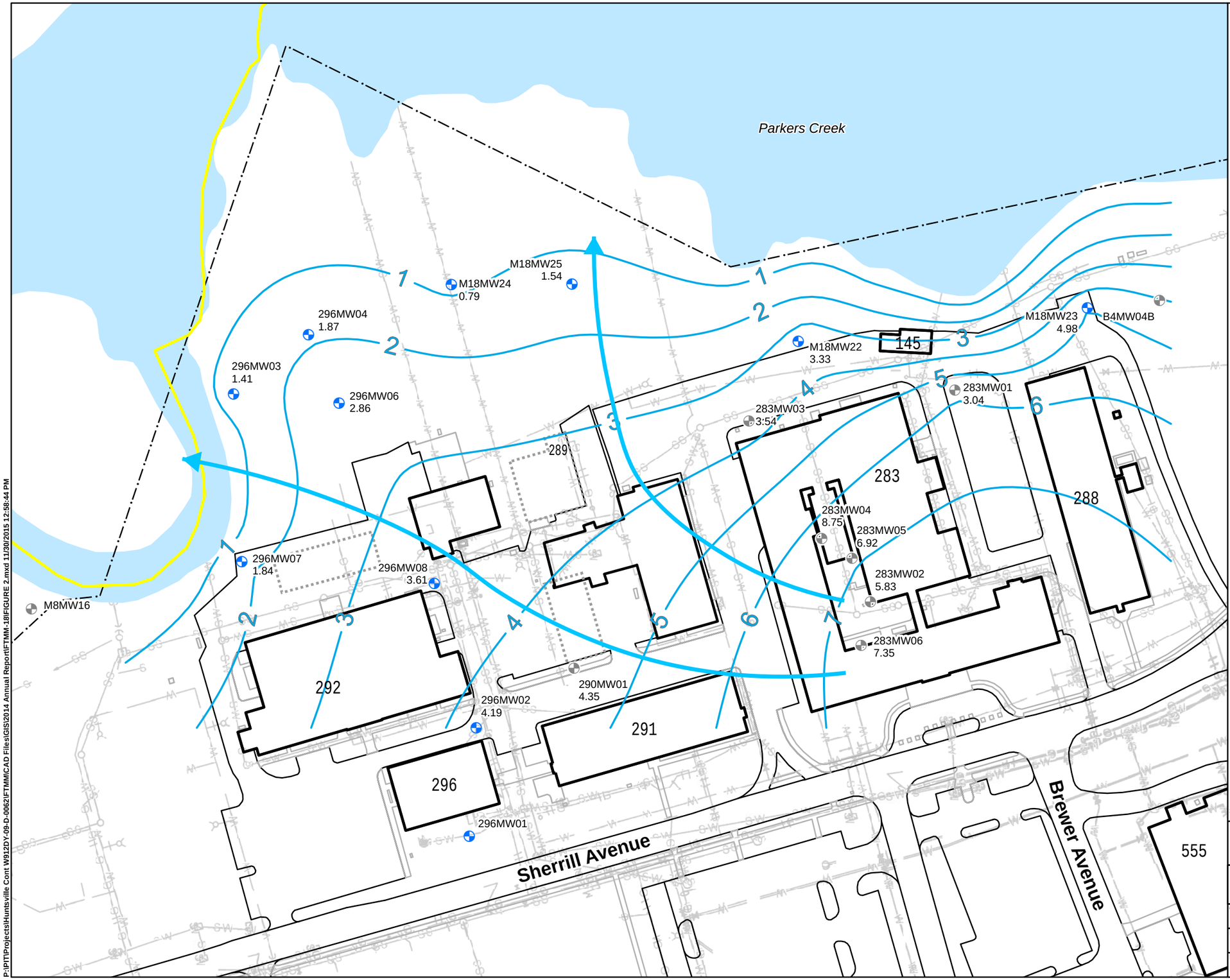
Source: FTMM Supplied CAD, 2013.

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey

LAYOUT OF FTMM-18 CLOSED SOLID WASTE LANDIFLL/FORMER TRAINING AREA

CREATED BY: RR	REVIEWED BY: ME
DATE: OCT. 2015	FIGURE NUMBER: FIGURE 1
PROJECT NUMBER: 748810-01000	FILE: FIGURE 1.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-18\FIGURE 1.mxd 10/2/2015 2:12:51 PM



LEGEND:

- Shallow Monitoring Well
- Shallow Monitoring Well Associated with FTMM-54 / FTMM-55 / FTMM-61
- Municipal Boundary
- Installation Boundary
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Groundwater Elevation Contour
- Former Building (Demolished)
- Inferred Groundwater Flow Direction

NOTE:

The groundwater elevation at monitoring well 283MW04 was considered anomalous compared to the fluid levels at neighboring wells.

N

1 inch = 100 feet

0 50 100 200 Feet

Source: FTMM Supplied CAD, 2013.

PARSONS 401 Diamond Drive NW, Huntsville AL	**Fort Monmouth** **New Jersey**

FTMM-18 SHALLOW GROUNDWATER CONTOURS - SEPTEMBER 29, 2014

CREATED BY: RR	REVIEWED BY: ME
DATE: NOV. 2015	FIGURE NUMBER: FIGURE 2
PROJECT NUMBER: 748810-01000	FILE: FIGURE 2.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-18\FIGURE 2.mxd 11/30/2015 12:58:44 PM

ATTACHMENTS

Attachment A NJDEP PDB Checklists

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: Ftmm
2. Location: Ftmm-18
3. Well Designation: MWMW22
4. Well Permit Number: F20101280

5 Type of Well: ☒Monitoring ☐Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish: ☒Stick Up ☐Flush Mount

7 Location of Measuring Point: ☒Top of Casing ☐Other (specify) _____

8 **NOTE** PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft) 2.05

9 Total Well Depth (fbgs) ~~19.1~~

10 Screened interval/open hole (fbgs) 4.1-19.1

11 Well Casing: Diameter 4 Material ☒PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter): Diameter 4 Material ☒PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.01

14. Date and Time of Deployment: ~~10/1/14~~ Date: 10/1/14 Time: 1052

15. Depth to Ground Water: Depth to ground water at time of deployment 9.21

16. Date and Time of Retrieval: Date: 12/19/14 Time: 0851

17. Depth to Ground Water: Depth to ground water at time of retrieval 4.10 TOC

18. Type of Deployment Line Used: Diameter: 3/16 Material: poly

19 Material and Mass (oz.) of PDBS Weight: 20 oz Stainless Steel (stainless steel recommended)

20 Type of PDBS Used:
☐Lab Filled (Modified Trip Blank must be taken at time of deployment)
☒Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21 Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled _____

22 Position of PDBS Weight:
☒Attached to bottom of PDBS and suspended in well
☐Attached to bottom of deployment line and suspended in well
☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
18.91			
5th PDBS	**6th PDBS**	**7th PDBS**	**8th PDBS**

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐No, this well is being profiled during this sampling round
☒Yes, this well was profiled already. Date when well was profiled: 8/30/13

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☐No, flow testing has not been conducted in this well
☐Yes, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet **[Please Attach Results]**

26. Weather Conditions During Deployment: Temp. 68°F Wind 0-5 mph ☐Sunny ☒Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval: Temp. 40°F Wind 0-5 mph ☐Sunny ☒Overcast ☐Raining ☐Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name: Chris Watson Company: PARSONS

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM - 18
3. Well Designation: M18MW23
4. Well Permit Number: E20101O529

5. Type of Well: ☑ Monitoring ☐ Extraction ☐ Residential ☐ Public Supply ☐ Irrigation ☐ Other
6. Well Surface Finish: ☐ Stick Up ☑ Flush Mount
7. Location of Measuring Point: ☑ Top of Casing ☐ Other (specify) _____
8. **NOTE:** PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below any differences between the measuring point identified above and actual ground surface at the well head.

   Distance between measuring point and ground surface (ft) -0.40
9. Total Well Depth (fbgs) ~~19.70~~
10. Screened interval/open hole (fbgs) 4.70-19.70
11. Well Casing — Diameter 4 — Material: ☑ PVC ☐ Carbon Steel ☐ Stainless Steel
12. Well Screen (or open hole diameter) — Diameter 4 — Material: ☑ PVC ☐ Carbon Steel ☐ Stainless Steel
13. Screen Size (slot) — Screen Slot Size 0.01

14. Date and Time of Deployment — Date: 10/1/14 Time: 1122
15. Depth to Ground Water — Depth to ground water at time of deployment 5.80 bgs
16. Date and Time of Retrieval — Date: 10/19/14 Time: 0857 FOC
17. Depth to Ground Water — Depth to ground water at time of retrieval 4.10 TOC
18. Type of Deployment Line Used — Diameter: 3/16" Material: poly

19. Material and Mass (oz.) of PDBS Weight: Stainless 2 oz (stainless steel recommended)
20. Type of PDBS Used
    ☐ Lab Filled (Modified Trip Blank must be taken at time of deployment)
    ☑ Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)
21. Dimensions of PDBS — Length (in.) 12 Diameter (in.) 1.5 Filled _____
22. Position of PDBS Weight
    ☑ Attached to bottom of PDBS and suspended in well
    ☐ Attached to bottom of deployment line and suspended in well
    ☐ Attached to bottom of deployment line and resting on bottom of well (preferred)
23. Position of PDBS in Well Screen (ft from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
9.28 bgs	16.22 bgs		
5th PDBS	**6th PDBS**	**7th PDBS**	**8th PDBS**

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
    ☑ **No**, this well is being profiled during this sampling round
    ☐ **Yes**, this well was profiled already. Date when well was profiled: _____
25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
    ☐ **No**, flow testing has not been conducted in this well
    ☐ **Yes**, flow testing of this well was conducted. Date of testing: _____
    Type of flow meter used: _____
    Measurements taken every _____ feet **[Please Attach Results]**
26. Weather Conditions During Deployment — Temp. 68°F Wind 0-5 mph ☐ Sunny ☐ Overcast ☑ Raining ☐ Snowing
27. Weather Conditions During Retrieval — Temp. 39°F Wind 0-5 mph ☐ Sunny ☑ Overcast ☐ Raining ☐ Snowing

28. Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Chris Watson	PARSONS

APPENDIX F

FTMM-22: FORMER WASTE WATER TREATMENT LIME PIT (CWA-1)

APPENDIX F: FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)

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1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT

Monitoring wells located within FTMM-22 were gauged on September 30, 2014. Monitoring well locations as well as other site features are provided in **Figure 1**. Details regarding the water level measurements are provided in **Table 1**. Groundwater elevations in monitoring wells ranged from 47.57 (CW1MW39) to 51.97 (CW1MW30) feet above mean sea level (amsl). The inferred shallow and deep groundwater flow directions are to the east, as shown in **Figures 2 and 3**, respectively.

During the groundwater gauging, the physical condition of FTMM-22 monitoring wells were assessed. The site monitoring wells were found to be in good condition. However, three wells (CW1MW35, CW1MW36 and CW1MW37) were found to have significant accumulations of silt within the well.

2.0 GROUNDWATER SAMPLING

Groundwater samples were collected from six monitoring wells (CW1MW27, CW1MW28, CW1MW29, CW1MW31, CW1MW37, and CW1MW281) located at FTMM-22 as part of the annual (fourth quarter) 2014 groundwater sampling event. FTMM-22 is sampled on a quarterly basis. The groundwater sampling program included measuring the depths to water in monitoring wells at FTMM-22, and sample collection in selected wells using passive diffusion bags (PDBs). PDBs were deployed September 30, 2014 and samples were retrieved on December 18, 2014. A PDB sampling summary is provided in **Table 2**. Groundwater samples were analyzed for Target Compound List (TCL) volatile organic compounds and tentatively identified compounds (VOCs+TICs) via United States Environmental Protection Agency (USEPA) Method SW8260C.

The samples were collected in accordance with the New Jersey Department of Environmental Protection (NJDEP) Field Sampling Procedures Manual (FSPM) and the Sampling Analysis Plan (SAP). Field blanks, duplicates, matrix spike, matrix spike duplicate and quality assurance (QA) split samples were collected for every 5% of samples collected per parameter, per matrix, in accordance with the Quality Assurance Project Plan (QAPP). Trip blanks accompanied each cooler each day in which VOCs were collected for laboratory analysis.

Completed PDB field sheets for each well sampled are provided in **Attachment A**.

3.0 HISTORICAL GROUNDWATER SAMPLING RESULTS

From April 1997 through February 2004, FTMM-22 monitoring wells were sampled primarily for VOCs, semi-volatile organic compounds (SVOCs) and metals. From March 2004 to January 2010, monitoring wells were sampled for VOCs. From April 2010 to August 2010, groundwater sampling consisted of VOCs and metals analysis.

In the last four historical rounds of groundwater sampling conducted on a quarterly basis from October 2010 to July 2011, samples were analyzed for VOCs and metals. Aluminum, antimony, arsenic, beryllium, cadmium, chromium, iron, lead, manganese, sodium and vanadium were detected in exceedance of their respective NJDEP Ground Water Quality Standards (GWQS). Arsenic, selenium, and sodium were detected at concentrations greater than their background concentration as established in the 1995 Weston Report in several

monitoring wells; however selenium and sodium have background concentrations lower than the NJDEP GWQS.

NJDEP approved a no further action determination for monitoring of metals in groundwater at FTMM-22, dated May 7, 2012, therefore metals analysis will be discontinued at the Site.

In samples collected during the quarterly sampling events from April 2008 to July 2011, trichloroethene (TCE) was detected above its GWQS of 1 µg/L at monitoring wells CW1MW27 (1.5 µg/L), CW1MW28 (1.64J - 13.15 µg/L) CW1MW29 (1.03 - 29.08 µg/L), CW1MW31 (1.82J - 14.95 µg/L), CW1MW37 (1.29J µg/L) and CW1MW281 (1.15J - 109.9D µg/L). Historical groundwater analytical results are presented in **Table 3.**

Groundwater analytical detections from samples collected during the August 2013 Baseline Sampling Event are presented in **Table 4**. Groundwater samples were analyzed for VOCs from 16 monitoring wells. TCE was detected above its GWQS of 1 µg/L in monitoring well CW1MW29 at an estimated concentration of 2.5J µg/L.

The Final August 2013 Baseline Groundwater Sampling Report was accepted by the NJDEP in their February 5, 2015 letter. Based on this approval, 12 out of the 18 groundwater monitoring wells were removed from the long term monitoring program (LTM) including: CW1MW26, CW1MW30, CW1MW32, CW1MW33, CW1MW34, CW1MW35, CW1MW36, CW1MW38, CW1MW39, CW1MW40, CW1MW282, and CW1MW291.

Groundwater sampling at FTMM-22 was conducted on a quarterly basis for 2014, in January, May, and September. This data is presented in reports submitted quarterly to the NJDEP. It should be noted that January 2014 and May 2014 sampling events also coincided with a remedial investigation (RI) conducted at the Site. NJDEP FSPM requires that RI related groundwater samples be collected using LFPS methods. Once the RI investigation samples were collected, PDB methods were used to collect the quarterly long term monitoring samples in September 2014, which is consistent with the NJDEP FSPM.

TCE and vinyl chloride were the only VOCs detected above their NJDEP GWQS during the previous three 2014 quarterly sampling events. TCE was detected above its GWQS of 1 µg/L in the monitoring wells: CW1MW28 (1.5J - 8 µg/L), CW1MW29 (2.5 - 13 µg/L), CW1MW31 (0.47J - 6.8 µg/L), and CW1MW281 (8.6 - 160 µg/L). Vinyl chloride was detected above its GWQS of 1 µg/L in only one monitoring well, CW1MW281 (0.52J - 1.8J µg/L). Groundwater analytical detections from samples collected during the previous 2014 quarterly sampling events are presented in **Table 4**.

4.0 ANNUAL (FOURTH QUARTER) 2014 GROUNDWATER RESULTS

TCE and vinyl chloride were the only VOCs detected at concentrations above their NJDEP GWSQ during the 2014 annual sampling event. TCE was detected in four samples [CW1MW28 (4.6J µg/L), CW1MW29 (4.7J µg/L), CW1MW31 (4.4J µg/L) and CW1MW281 (330 µg/L)] above its NJDEP GWQS of 1 µg/L. Vinyl chloride was also detected at CW1MW281 above its NJDEP GWQS of 1 µg/L, at an estimated concentration of 1.8J µg/L. Groundwater analytical results from samples collected during the annual (fourth quarter) 2014 groundwater sampling event are presented in **Table 4**.

5.0 FINDINGS AND RECOMMENDATIONS

TCE continues to be detected in monitoring wells CW1MW28, CW1MW29, CW1MW31 and CW1MW281 in exceedance of the NJDEP GWQS of 1 µg/L. Concentrations of TCE appear to have remained steady at wells CW1MW28, CW1MW29, and CWMW31. However, the last two sampling events at CW1MW281 show a significant fluctuation of TCE concentrations ranging from 8.9 µg/L (January 2014) to 330 µg/L (December 2014). A review of historical data also indicate that there have been similar TCE fluctuation trends in past sampling events (non-detect August 2010 to 109 µg/L January 2010). Vinyl chloride concentrations have been detected in only two wells (CW1MW29 and CW1MW281) during the 2014 quarterly sampling events. Concentrations detected in CW1MW29 (1st and 3rd quarters) have been below the NJDEP GWQS of 1 µg/L while concentrations detected (in 3rd and 4th quarters) in CW1MW281 were slightly above the GWQS.

Based on the available data, monitoring of the groundwater for VOCs is recommended to continue on a quarterly basis via the PDB sampling methodology at FTMM-22. Similarly to other FTMM sites, and as agreed to by NJDEP, PDBs will be used for LTM until a time where a decision is made to terminate groundwater sampling (PDB results are below the GWQS) and at that time, LFPS methods will be used to collect groundwater samples for the confirmatory round(s).

A review of the historical groundwater sampling results is presented in **Table 5**, which provides the matrix used to determine the status of the wells relative to future groundwater sampling and analyses.

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Table 1 Groundwater Gauging Data and Elevations (September 30, 2014)

Table 2 PDB Sampling Summary

Table 3 Historical Groundwater Analytical Results

Table 4 Groundwater Analytical Results - 2013 and 2014

Table 5 Review of Historical Groundwater Sampling Results

Table 1
Groundwater Gauging Data and Elevations (September 30, 2014)
Site FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site/Well ID	Installation Date	Well Permit #	Y Coord. (North)	X Coord. (East)	Depth (ft. bgs)	Casing Length (ft)	Screen Length (ft)	TOC Elevation (ft)	Gauge Time	PID Reading (ppm)	Gauged Depth to Water (ft. TOC)	Gauged Depth to Bottom (ft. TOC)	Calculated Groundwater Elevation (ft)
Shallow Monitoring Wells													
CW1MW26	12/19/1994	29-32590	532932.46	607087.71	15.0	5.0	10.0	60.81	11:55	0.0	9.39	17.07	51.42
CW1MW27	12/19/1994	29-32591	532942.54	607079.91	15.0	5.0	10.0	60.85	11:54	0.0	9.13	17.15	51.72
CW1MW28	12/19/1994	29-32592	532962.81	607087.57	15.0	5.0	10.0	59.09	11:56	0.0	7.51	14.91	51.58
CW1MW29	12/19/1994	29-32593	532952.80	607110.86	15.0	5.0	10.0	58.40	11:58	0.0	7.05	14.70	51.35
CW1MW30	7/13/2000	29-43188	532932.46	607094.40	17.0	7.0	10.0	61.93	11:59	0.0	9.96	21.10	51.97
CW1MW31	7/17/2000	29-43189	532952.95	607141.85	19.0	4.0	15.0	61.47	11:57	0.0	10.44	22.00	51.03
CW1MW32	7/17/2000	29-43190	532953.17	607188.33	22.0	7.0	15.0	62.18	12:03	0.0	11.59	22.20	50.59
CW1MW33	7/17/2000	29-43191	532902.61	607196.32	20.0	5.0	15.0	62.27	12:03	0.0	11.41	23.57	50.86
CW1MW34	7/17/2000	29-43192	533014.20	607257.78	20.0	5.0	15.0	58.63	12:07	0.0	8.86	19.60	49.77
CW1MW35	7/18/2000	29-43193	532973.91	607296.71	20.0	5.0	15.0	58.09	12:06	0.0	8.52	16.71	49.57
CW1MW36	7/18/2000	29-43194	533014.49	607319.77	20.0	5.0	15.0	58.70	12:07	0.0	9.35	16.59	49.35
CW1MW37	7/18/2000	29-43195	532953.85	607335.55	20.0	5.0	15.0	59.21	12:05	0.0	9.05	13.86	50.16
CW1MW282	5/2/1996	29-35313	533064.25	607141.33	16.0	6.0	10.0	60.29	12:02	0.0	9.21	18.26	51.08
CW1MW291	5/3/1996	29-35314	532993.64	607188.15	16.0	6.0	10.0	62.21	11:59	0.0	10.62	18.36	51.59
Deep Monitoring Wells													
CW1MW25	10/12/2010	E201010535	533033.51	607133.86	48.0	38.0	10.0	61.82	12:00	0.0	13.82	50.39	48.00
CW1MW38	7/11/2000	29-43186	532922.20	607056.76	50.0	30.0	20.0	61.93	11:54	0.0	12.44	50.05	49.49
CW1MW39	7/10/2000	29-43185	533064.22	607133.58	48.0	28.0	20.0	61.51	12:01	0.0	13.94	52.00	47.57
CW1MW40	7/14/2000	29-43187	532973.22	607149.50	50.0	30.0	20.0	62.35	11:59	0.0	14.53	51.26	47.82
CW1MW281	5/2/1996	29-35312	532962.89	607103.06	41.0	31.0	10.0	58.20	11:57	0.0	9.00	39.95	49.20

Notes:
1) The synoptic round of water levels in the wells was collected on September 30, 2014.
2) Information on well permit number, X and Y coordinates, depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
3) ft = feet
4) DTW = depth to water (measured from the top of well casing)
5) DTB = depth to bottom of well (measured from the top of well casing)
6) bgs = below ground surface
7) ppm = parts per million (of VOCs)
8) TOC = Top of Casing
9) Elevation = feet above mean sea level
10) N/A = information not available

Table 2
PDB Sampling Summary
Site FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site/Well ID	Profile Date	Depth (ft. bgs)	Screen Length (ft.)	Screen Interval (ft. bgs)	TOC Elev. (ft)	Gauge Date	Gauge Time	PID Reading (ppm)	Gauged DTW (ft. below TOC)	Gauged DTB (ft. below TOC)	GW Elevation (ft)	Saturated Screen Length (ft)	PDB Depth to Center of Bag #1 (ft. below TOC)	PDB Depth to Center of Bag #2 (ft. below TOC)	PDB Deploy Date	PDB Deploy Time	PDB Sample Date	PDB Sample Time
CW1MW27	8/28/2013	15.0	10.0	5-15	60.85	9/30/2014	11:54	0.0	9.13	17.15	51.72	8.02	17.63	N/A	9/30/2014	12:50	12/18/2014	13:50
CW1MW28	9/30/2014	15.0	10.0	5-15	59.09	9/30/2014	11:56	0.0	6.51	13.91	52.58	7.40	11.21	N/A	9/30/2014	13:08	12/18/2014	13:15
CW1MW29	8/28/2013	15.0	10.0	5-15	58.40	9/30/2014	11:58	0.0	6.05	13.70	52.35	7.65	10.85	N/A	9/30/2014	12:59	12/18/2014	13:30
CW1MW31	8/28/2013	19.0	15.0	4-19	61.47	9/30/2014	11:57	0.0	10.44	22.00	51.03	11.56	16.40	N/A	9/30/2014	13:04	12/18/2014	13:44
CW1MW37	8/28/2013	20.0	15.0	5-20	59.21	9/30/2014	12:05	0.0	8.05	12.86	51.16	4.81	11.78	N/A	9/30/2014	13:12	12/18/2014	13:37
CW1MW281	9/30/2014	41.0	10.0	31-41	58.20	9/30/2014	11:57	0.0	9.00	39.95	49.20	10.00	33.74	N/A	9/30/2014	12:55	12/18/2014	13:22

Notes:
1) Information on well depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
2) DTW = depth to water (measured from the top of well casing)
3) DTB = depth to bottom of well (measured from the top of well casing)
4) TOC = Top of Casing
5) ft. AMSL = feet above mean sea level
6) LFPS = Low-Flow Purging and Sampling
7) PDB = Passive Diffusion Bag
8) N/A = not applicable
9) bgs = below ground surface

Table 3
Historical Groundwater Analytical Results
Site FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				CW1MW25										CW1MW26											
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Charles Wood)**	LF1		LF2		LF2 Dup		LF3	LF4	LF5	LF5 Dup	80	80 Dup	81	81 Dup	82	82 Dup	83	83 Dup	84	84 Dup	85	85 Dup	86	86 Dup
Date Collected				10/28/2010		11/10/2010		11/10/2010		2/17/2011	4/27/2011	7/14/2011	7/14/2011	2/25/2008	2/25/2008	4/10/2008	4/10/2008	7/29/2008	7/29/2008	12/8/2008	12/8/2008	2/18/2009	2/18/2009	5/15/2009	5/15/2009	7/29/2009	7/29/2009
ANALYTE/Lab ID				10466.01		10479.04		10479.03		11059.07	11173.05	11297.04	11297.03	80055.04	80055.03	80121.04	80121.03	80267.04	80267.03	80450.04	80450.03	90059.04	90059.03	90198.04	90198.03	90318.04	90318.03
Volatile Organic Compounds (µg/L)																									
Acetone	6000	NLE	--	35.85		32.96		32.93		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	3.76		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	2.49		2.57		2.6		ND	ND	0.66	J 1.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NLE	NLE	--	ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	NLE	--	ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100	0.1	--	ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	30	0.2	--	ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																									
Aluminum	200	NLE	8210	2320		1010		1010		<200	<200	319	307	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	6	6	ND	6.91	ER	5.07	ER	ND		<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	3	10	25.10	5.15		2.29	ER	2.59	ER	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	6000	2000	192.00	742		827		820		329	355	614	600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	1	4	2.80	ND		ND		ND		<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	4	5	3.70	ND		ND		ND		<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	NLE	NLE	8700.00	206000		250000		252000		147000	128000	325000	315000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	70	100	49.60	17.4		0.8	ER	0.937	ER	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NLE	NLE	30.60	ND		ND		ND		<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1300	1300	9.80	0.89	ER	ND		ND		<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	300	NLE	19600	7700		3120		3460		1610	5590	<100	214	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	5	15	7.30	ND		ND		ND		<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	NLE	NLE	7160	1650		500	ER	543	ER	<5000	<5000	<5000	<5000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	50	NLE	232	31.7		14.4		16.1		<15	48.4	<15	<15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	2	ND	ND		ND		ND		<0.20	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	100	NLE	48.3	3.03	ER	1.07	ER	0.773	ER	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	NLE	NLE	4630	189000		120000		120000		18000	15100	19500	19200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	40	50	3.80	ND		ND		ND		<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	40	NLE	ND	7.56		ND		ND		<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	50000	NLE	36400	217000		164000		163000		38400	23700	64800	63800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	ND	ND		ND		ND		<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	60	NLE	28.9	8.57		3.76	ER	3.37	ER	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	2000	NLE	133	6.65	ER	ND		ND		<20	<20	<20	<20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

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ER = Estimated Result

D = Diluted Sample

CW1MW32 - Third Quarter 2010 metals data is incomplete due to missing data sheet in the analytical data package.

Table 3
Historical Groundwater Analytical Results
Site FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				CW1MW26																		CW1MW27			
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Charles Wood)**	87	87 Dup	88	88 Dup	LF1	LF1 Dup	LF2	LF2 Dup	LF3	LF3 Dup	LF4	LF4 Dup	LF5	LF5 Dup	LF6	LF6 Dup	80	81	82	83
Date Collected				10/14/2009	10/14/2009	1/20/2010	1/20/2010	4/19/2010	4/19/2010	8/10/2010	8/10/2010	10/20/2010	10/20/2010	2/16/2011	2/16/2011	4/26/2011	4/26/2011	7/13/2011	7/13/2011	2/25/2008	4/10/2008	7/29/2008	12/8/2008
ANALYTE/Lab ID				90415.04	90415.03	10026.04	10026.03	10150.04	10150.03	10338.04	10338.03	10449.04	10449.03	11058.04	11058.03	11169.04	11169.03	11295.04	11295.03	80055.05	80121.05	80267.05	80450.05
Volatile Organic Compounds (µg/L)																							
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100	0.1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	30	0.2	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3 J	0.3 J	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																							
Aluminum	200	NLE	8210	NA	NA	NA	NA	2080	2270	180	189	80.8 ER	122	<200	<200	575	573	285	315	NA	NA	NA	NA
Antimony	6	6	ND	NA	NA	NA	NA	ND	ND	ND	5.09 ER	ND	ND	<6.0	<6.0	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA
Arsenic	3	10	25.10	NA	NA	NA	NA	0.72 ER	ND	ND	ND	ND	ND	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA
Barium	6000	2000	192.00	NA	NA	NA	NA	60.4	67.9	17.7	18.2	18.1	17.1	<200	<200	<200	<200	<200	<200	NA	NA	NA	NA
Beryllium	1	4	2.80	NA	NA	NA	NA	0.892	0.987	0.223 ER	0.216 ER	ND	ND	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
Cadmium	4	5	3.70	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA
Calcium	NLE	NLE	8700.00	NA	NA	NA	NA	30700	34100	7660	7950	6470	6140	10700	10900	16800	15900	7960	8140	NA	NA	NA	NA
Chromium	70	100	49.60	NA	NA	NA	NA	ND	ND	2.4 ER	2.67 ER	1.27 ER	1.5 ER	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA
Cobalt	NLE	NLE	30.60	NA	NA	NA	NA	2.63	2.62	0.979 ER	0.941 ER	0.55 ER	0.576 ER	<50	<50	<50	<50	<50	<50	NA	NA	NA	NA
Copper	1300	1300	9.80	NA	NA	NA	NA	ND	ND	1.51 ER	1.43 ER	ND	ND	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA
Iron	300	NLE	19600	NA	NA	NA	NA	148 ER	ND	ND	ND	ND	ND	<100	<100	138	217	<100	110	NA	NA	NA	NA
Lead	5	15	7.30	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA
Magnesium	NLE	NLE	7160	NA	NA	NA	NA	3980	4350	1250	1290	1100	1050	<5000	<5000	<5000	<5000	<5000	<5000	NA	NA	NA	NA
Manganese	50	NLE	232	NA	NA	NA	NA	17.9	19.5	7.68	7.76	6.79	6.42	<15	<15	<15	<15	<15	<15	NA	NA	NA	NA
Mercury	2	2	ND	NA	NA	NA	NA	0.06 ER	ND	ND	ND	ND	ND	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	NA	NA	NA	NA
Nickel	100	NLE	48.3	NA	NA	NA	NA	3.59 ER	4.41 ER	0.804 ER	1.33 ER	0.954 ER	1.1 ER	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA
Potassium	NLE	NLE	4630	NA	NA	NA	NA	2550	2840	2980	3100	2970	2860	<10000	<10000	<10000	<10000	<10000	<10000	NA	NA	NA	NA
Selenium	40	50	3.80	NA	NA	NA	NA	NR	NR	12.9 ER	12.1 ER	ND	ND	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA
Silver	40	NLE	ND	NA	NA	NA	NA	ND	ND	ND	ND	0.733 ER	0.648 ER	<10	<10	<10	<10	<10	<10	NA	NA	NA	NA
Sodium	50000	NLE	36400	NA	NA	NA	NA	9930	11800	28500	29900	21700	20300	16700	17600	<10000	<10000	<10000	<10000	NA	NA	NA	NA
Thallium	2	2	ND	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA
Vanadium	60	NLE	28.9	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	<50	<50	<50	<50	<50	<50	NA	NA	NA	NA
Zinc	2000	NLE	133	NA	NA	NA	NA	12 ER	12.5 ER	5.64 ER	5.04 ER	3.3 ER	2.75 ER	<20	<20	<20	<20	<20	<20	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

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D = Diluted Sample

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Table 3
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Site FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				CW1MW27												CW1MW28										
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Charles Wood)**	84	85	86	87	88	LF1	LF2	LF3	LF4	LF5	LF6	69	70	71	72	73	74	75	76	77	LF1
Date Collected				2/18/2009	5/15/2009	7/29/2009	10/14/2009	1/20/2010	4/19/2010	8/11/2010	10/20/2010	2/16/2011	5/3/2011	7/13/2011	2/25/2008	4/10/2008	7/29/2008	12/8/2008	2/18/2009	5/15/2009	7/29/2009	10/14/2009	1/20/2010	4/23/2010
ANALYTE/Lab ID				90059.05	90198.05	90318.05	90415.05	10026.05	10150.05	10338.05	10449.05	11058.06	11189.05	11295.05	80055.06	80121.06	80267.06	80450.06	90059.06	90198.06	90318.06	90415.06	10026.06	10162.07
Volatile Organic Compounds (µg/L)																								
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100	0.1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	30	0.2	--	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	0.9	0.58	1.5	2.99	1.64 J	10.53	ND	ND	2.49	ND	ND	0.25 J	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																								
Aluminum	200	NLE	8210	NA	NA	NA	NA	NA	847	267	200	12600	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	132
Antimony	6	6	ND	NA	NA	NA	NA	NA	ND	ND	ND	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Arsenic	3	10	25.10	NA	NA	NA	NA	NA	ND	ND	ND	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Barium	6000	2000	192.00	NA	NA	NA	NA	NA	68.4	20.1	26.5	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	31.2
Beryllium	1	4	2.80	NA	NA	NA	NA	NA	0.236 ER	0.179 ER	ND	1.1	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.173 ER
Cadmium	4	5	3.70	NA	NA	NA	NA	NA	ND	ND	ND	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Calcium	NLE	NLE	8700.00	NA	NA	NA	NA	NA	15500	6030	5280	166000	16500	<5000	NA	NA	NA	NA	NA	NA	NA	NA	NA	2620
Chromium	70	100	49.60	NA	NA	NA	NA	NA	ND	3.23 ER	0.981 ER	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.09 ER
Cobalt	NLE	NLE	30.60	NA	NA	NA	NA	NA	1.67 ER	1.34 ER	0.712 ER	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.33 ER
Copper	1300	1300	9.80	NA	NA	NA	NA	NA	ND	1.94 ER	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Iron	300	NLE	19600	NA	NA	NA	NA	NA	ND	ND	9.97	<100	<100	<100	NA	NA	NA	NA	NA	NA	NA	NA	NA	100 ER
Lead	5	15	7.30	NA	NA	NA	NA	NA	ND	ND	ND	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Magnesium	NLE	NLE	7160	NA	NA	NA	NA	NA	2620	1400	1210	13400	<5000	<5000	NA	NA	NA	NA	NA	NA	NA	NA	NA	1160
Manganese	50	NLE	232	NA	NA	NA	NA	NA	19	8.38	9.02	307	30	<15	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.19
Mercury	2	2	ND	NA	NA	NA	NA	NA	0.08 ER	ND	ND	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Nickel	100	NLE	48.3	NA	NA	NA	NA	NA	3.57 ER	1.39 ER	1.1 ER	22.9	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.915 ER
Potassium	NLE	NLE	4630	NA	NA	NA	NA	NA	3860	2300	2260	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	14600
Selenium	40	50	3.80	NA	NA	NA	NA	NA	NR	14.7 ER	1.44 ER	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR
Silver	40	NLE	ND	NA	NA	NA	NA	NA	ND	0.737 ER	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Sodium	50000	NLE	36400	NA	NA	NA	NA	NA	68900	48600	46500	16800	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	34200
Thallium	2	2	ND	NA	NA	NA	NA	NA	ND	ND	ND	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Vanadium	60	NLE	28.9	NA	NA	NA	NA	NA	ND	ND	ND	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Zinc	2000	NLE	133	NA	NA	NA	NA	NA	9.06 ER	7.8 ER	3.56 ER	111	<20	<20	NA	NA	NA	NA	NA	NA	NA	NA	NA	118

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

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Table 3
Historical Groundwater Analytical Results
Site FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				CW1MW28							CW1MW29															CW1MW29	
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Charles Wood)**	LF2		LF3		LF4	LF5	LF5 Dup	LF6	69	70	71	72	73	74	75	76	77	LF1		LF2		LF3		LF4	LF5	LF5 Dup	LF6	
Date Collected				8/25/2010		10/28/2010		2/18/2011	4/28/2011	4/28/2011	7/14/2011	2/25/2008	4/10/2008	7/29/2008	12/8/2008	2/18/2009	5/15/2009	7/29/2009	10/14/2009	1/20/2010	4/19/2010		8/11/2010		10/20/2010		2/16/2011	4/27/2011	4/27/2011	7/14/2011	
ANALYTE/Lab ID				10362.08		10465.10		11062.05	11175.04	11175.03	11297.10	80055.07	80121.07	80267.07	80450.07	90059.07	90198.07	90318.07	90415.07	10026.07	10150.06		10338.09		10449.06		11058.08	11173.04	11173.03	11297.11	
Volatile Organic Compounds (µg/L)																														
Acetone	6000	NLE	--	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	
Bromodichloromethane	1	80	--	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	0.85	J
2-Butanone	300	NLE	--	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	
Carbon disulfide	700	NLE	--	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	
Chloroform	70	80	--	ND		ND		ND	ND	ND	0.28	J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	
Chloromethane	NLE	NLE	--	6.09		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	
Dibromochloromethane	1	NLE	--	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	
1,4-Dichlorobenzene	75	75	--	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	
cis -1,2-Dichloroethene	70	70	--	ND		ND		ND	ND	ND	ND	ND	ND	3.83	ND	ND	ND	ND	ND	ND	ND		0.39	J	4.93		3.29	ND	ND	0.77	J
trans-1,2-Dichloroethene	100	0.1	--	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		0.26	J	ND	ND	ND	ND	
Methyl *tert* -butyl ether	70	NLE	--	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	
Toluene	600	1000	--	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	
1,1,1-Trichloroethane	30	0.2	--	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	
Trichloroethene	1	5	--	2.69		1		13.15	1.07	1.09	4.9	ND	ND	29.08	ND	ND	ND	0.55	ND	ND	0.39	J	2		7.66		4.31	1.12	1.03	24.3	
TICs*	500	NLE	--	ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	
Metals (µg/L)																														
Aluminum	200	NLE	8210	72.5	ER	95.2	ER	1480	NA	NA	444	NA	NA	NA	NA	NA	NA	NA	NA	NA	108		106		212		<200	539	316	308	
Antimony	6	6	ND	ND		ND		<6.0	NA	NA	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		10.3		5.03	ER	<6.0	<6.0	<6.0	<6.0	
Arsenic	3	10	25.10	1	ER	ND		<3.0	NA	NA	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.02	ER	0.81	ER	ND		<3.0	<3.0	<3.0	<3.0	
Barium	6000	2000	192.00	18.1		17.9		<200	NA	NA	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	13.9		35.6		47.3		<200	<200	<200	<200	
Beryllium	1	4	2.80	0.095	ER	ND		<1.0	NA	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.043	ER	0.06	ER	ND		<1.0	<1.0	<1.0	<1.0	
Cadmium	4	5	3.70	ND		ND		<3.0	NA	NA	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.29		1.55	ER	2.92		5.3	3	3.2	8.2	
Calcium	NLE	NLE	8700.00	1980		2300		21900	NA	NA	14600	NA	NA	NA	NA	NA	NA	NA	NA	NA	16100		31000		47400		48200	61300	53600	102000	
Chromium	70	100	49.60	ND		1.68	ER	<10	NA	NA	16.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.33	ER	1.81	ER	ND		<10	<10	<10	18.2	
Cobalt	NLE	NLE	30.60	1.07	ER	0.745	ER	<50	NA	NA	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		0.404	ER	ND		<50	<50	<50	<50	
Copper	1300	1300	9.80	1.02	ER	ND		<10	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		2.3	ER	ND		<10	<10	<10	<10	
Iron	300	NLE	19600	ND		ND		<100	137	155	173	NA	NA	NA	NA	NA	NA	NA	NA	NA	82.3	ER	79.7	ER	147	ER	182	787	461	329	
Lead	5	15	7.30	ND		ND		<3.0	NA	NA	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<3.0	<3.0	<3.0	<3.0	
Magnesium	NLE	NLE	7160	897	ER	809	ER	<5000	NA	NA	<5000	NA	NA	NA	NA	NA	NA	NA	NA	NA	1960		3880		6470		<5000	5590	<5000	9200	
Manganese	50	NLE	232	5.46		5.35		15.3	<15	<15	22.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.31	ER	3.95	ER	26.4		<15	<15	<15	<15	
Mercury	2	2	ND	ND		ND		<0.20	NA	NA	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.07	ER	ND		ND		<0.20	<0.20	<0.20	<0.20	
Nickel	100	NLE	48.3	1.2	ER	1.12	ER	<10	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.48	ER	1.83	ER	4.65	ER	<10	<10	<10	<10	
Potassium	NLE	NLE	4630	3780		3210		<10000	NA	NA	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	2710		3570		4280		<10000	<10000	<10000	<10000	
Selenium	40	50	3.80	12.4	ER	ND		<10	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR		41.7		ND		<10	<10	<10	<10	
Silver	40	NLE	ND	ND		ND		<10	NA	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		2.76	ER	<10	<10	<10	<10	
Sodium	50000	NLE	36400	24600		28000		48300	NA	NA	57200	NA	NA	NA	NA	NA	NA	NA	NA	NA	14800		30200		15700		29100	36300	24400	91500	
Thallium	2	2	ND	ND		ND		<2.0	NA	NA	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<2.0	<2.0	<2.0	<2.0	
Vanadium	60	NLE	28.9	ND		0.73	ER	<50	NA	NA	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2	ER	2.11	ER	2.29	ER	<50	<50	<50	<50	
Zinc	2000	NLE	133	2.45	ER	ND		<20	NA	NA	<20	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.07	ER	7.69	ER	15.8	ER	<20	<20	<20	<20	

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

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D = Diluted Sample

CW1MW32 - Third Quarter 2010 metals data is incomplete due to missing data sheet in the analytical data package.

Table 3
Historical Groundwater Analytical Results
Site FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				CW1MW30																CW1MW31					
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Charles Wood)**	54	55	56	57	58	59	60	61	62	LF1	LF2	LF3	LF4	LF5	LF6	54	55	56	57	58	59
Date Collected				2/25/2008	4/10/2008	7/29/2008	12/8/2008	2/18/2009	5/15/2009	7/29/2009	10/14/2009	1/20/2010	4/19/2010	8/11/2010	10/20/2010	2/17/2011	4/26/2011	7/13/2011	2/25/2008	4/10/2008	7/29/2008	12/8/2008	2/18/2009	5/15/2009
ANALYTE/Lab ID				80055.08	80121.08	80267.08	80450.08	90059.08	90198.08	90318.08	90415.08	10026.08	10150.07	10338.06	10449.07	11059.14	11169.05	11295.06	80055.09	80121.09	80267.09	80450.09	90059.09	90198.09
Volatile Organic Compounds (µg/L)																									
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100	0.1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	30	0.2	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.82 J	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																									
Aluminum	200	NLE	8210	NA	NA	NA	NA	NA	NA	NA	NA	NA	17.8 ER	84.2 ER	162	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA
Antimony	6	6	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA
Arsenic	3	10	25.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	1.27 ER	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA
Barium	6000	2000	192.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	10	11.0	86.7	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA
Beryllium	1	4	2.80	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.09 ER	ND	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA
Cadmium	4	5	3.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA
Calcium	NLE	NLE	8700.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	518 ER	3360	3340	<5000	<5000	<5000	NA	NA	NA	NA	NA	NA	NA
Chromium	70	100	49.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.13 ER	ND	0.689 ER	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA
Cobalt	NLE	NLE	30.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	2.79	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA
Copper	1300	1300	9.80	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	1.69 ER	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA
Iron	300	NLE	19600	NA	NA	NA	NA	NA	NA	NA	NA	NA	119 ER	ND	59.5	<100	<100	<100	NA	NA	NA	NA	NA	NA	NA
Lead	5	15	7.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA
Magnesium	NLE	NLE	7160	NA	NA	NA	NA	NA	NA	NA	NA	NA	538 ER	496 ER	3410	<5000	<5000	<5000	NA	NA	NA	NA	NA	NA	NA
Manganese	50	NLE	232	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.86 ER	1.96 ER	23.9	19.3	<15	<15	NA	NA	NA	NA	NA	NA	NA
Mercury	2	2	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1 ER	ND	ND	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA
Nickel	100	NLE	48.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.919 ER	0.636 ER	4.99 ER	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA
Potassium	NLE	NLE	4630	NA	NA	NA	NA	NA	NA	NA	NA	NA	2100	1220	5730	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA
Selenium	40	50	3.80	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR	ND	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA
Silver	40	NLE	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	0.86 ER	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA
Sodium	50000	NLE	36400	NA	NA	NA	NA	NA	NA	NA	NA	NA	15800	3730 ER	73500	71000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	1.09 ER	ND	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA
Vanadium	60	NLE	28.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.689 ER	ND	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA
Zinc	2000	NLE	133	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.26 ER	5.67 ER	7.26 ER	<20	<20	<20	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

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Table 3
Historical Groundwater Analytical Results
Site FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				CW1MW31													CW1MW32								
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Charles Wood)**	60	61	62	62 Dup	LF1	LF1 Dup	LF2	LF3	LF3 Dup	LF4	LF5	LF6	54	55	56	57	58	59	60	61	62
Date Collected				7/29/2009	10/14/2009	1/22/2010	1/22/2010	4/20/2010	4/20/2010	8/11/2010	10/26/2010	10/26/2010	2/17/2011	5/3/2011	7/14/2011	2/25/2008	4/10/2008	7/29/2008	12/8/2008	2/18/2009	5/15/2009	7/29/2009	10/14/2009	1/22/2010
ANALYTE/Lab ID				90318.09	90415.09	10031.04	10031.03	10154.04	10154.03	10338.08	10461.04	10461.03	11059.05	11189.06	11297.09	80055.10	80121.10	80267.10	80450.10	90059.10	90198.10	90318.10	90415.10	10031.05
Volatile Organic Compounds (µg/L)																								
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21.23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.06	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	3.26	3.27	ND	1.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100	0.1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	30	0.2	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	14.95	14.64	ND	5.47	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																								
Aluminum	200	NLE	8210	NA	NA	NA	NA	339	350	842	134	133	644	<2000	2410	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	6	6	ND	NA	NA	NA	NA	ND	ND	7.66 ER	ND	ND	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	3	10	25.10	NA	NA	NA	NA	ND	ND	ND	ND	ND	<3.0	98.5	38.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	6000	2000	192.00	NA	NA	NA	NA	106	117	263	61.6	61.8	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	1	4	2.80	NA	NA	NA	NA	0.23 ER	0.245 ER	0.783	ND	ND	<1.0	<10	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	4	5	3.70	NA	NA	NA	NA	ND	ND	ND	ND	ND	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	NLE	NLE	8700.00	NA	NA	NA	NA	9670	10600	23000	5470	5550	15100	<5000	<5000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	70	100	49.60	NA	NA	NA	NA	1.01 ER	ND	ND	ND	ND	<10	176	36.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NLE	NLE	30.60	NA	NA	NA	NA	1.7 ER	1.78 ER	4.48	0.851 ER	0.848 ER	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1300	1300	9.80	NA	NA	NA	NA	ND	ND	1.96 ER	ND	ND	<10	30.1	10.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	300	NLE	19600	NA	NA	NA	NA	91.4 ER	ND	ND	ND	ND	<100	3730	6250	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	5	15	7.30	NA	NA	NA	NA	ND	ND	ND	ND	ND	<3.0	<3.0	8.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	NLE	NLE	7160	NA	NA	NA	NA	1270	1360	2730	593 ER	597 ER	<5000	<5000	<5000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	50	NLE	232	NA	NA	NA	NA	11	11.9	23.9	6.7	5.5	<15	<15	18.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	2	ND	NA	NA	NA	NA	0.12 ER	0.09 ER	ND	ND	ND	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	100	NLE	48.3	NA	NA	NA	NA	3.91 ER	3.75 ER	6.51	1.99 ER	1.84 ER	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	NLE	NLE	4630	NA	NA	NA	NA	7550	8070	15500	7750	7810	14800	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	40	50	3.80	NA	NA	NA	NA	NR	NR	36.2	1.88 ER	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	40	NLE	ND	NA	NA	NA	NA	ND	ND	ND	ND	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	50000	NLE	36400	NA	NA	NA	NA	15100	16000	41900	22100	22600	42700	1640000	173000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	ND	NA	NA	NA	NA	ND	ND	ND	ND	ND	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	60	NLE	28.9	NA	NA	NA	NA	ND	ND	ND	ND	0.744 ER	<50	160	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	2000	NLE	133	NA	NA	NA	NA	5.3 ER	5.62 ER	13 ER	ND	ND	<20	41.6	39.3	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

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NA = Not analyzed

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D = Diluted Sample

CW1MW32 - Third Quarter 2010 metals data is incomplete due to missing data sheet in the analytical data package.

Table 3
Historical Groundwater Analytical Results
Site FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				CW1MW32							CW1MW33												
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Charles Wood)**	LF1	LF2	LF3	LF4	LF4 Dup	LF5	LF6	57	58	59	60	61	62	63	64	65	LF1	LF2	LF2 Dup	LF3
Date Collected				4/20/2010	8/27/2010	10/26/2010	2/17/2011	2/17/2011	4/26/2011	7/13/2011	2/25/2008	4/10/2008	7/29/2008	12/8/2008	2/18/2009	5/15/2009	7/29/2009	10/14/2009	1/22/2010	4/20/2010	8/17/2010	8/17/2010	10/26/2010
ANALYTE/Lab ID				10154.05	10367.01	10461.05	11059.04	11059.03	11169.06	11295.07	80055.11	80121.11	80267.11	80450.11	90059.11	90198.11	90318.11	90415.11	10031.06	10154.06	10346.04	10346.03	10461.06
Volatile Organic Compounds (µg/L)																							
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100	0.1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	30	0.2	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																							
Aluminum	200	NLE	8210	364		116	636	629	724	268	NA	NA	NA	NA	NA	NA	NA	NA	NA	118	345	394	576
Antimony	6	6	ND	ND	ND	ND	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND
Arsenic	3	10	25.10	ND	ND	ND	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	1.27 ER	0.89 ER	ND
Barium	6000	2000	192.00	185	85.2	76	<200	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	22.9	45.3	47.4	54.1
Beryllium	1	4	2.80	0.252 ER	0.07 ER	ND	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.219 ER	0.401 ER	0.442 ER	0.693
Cadmium	4	5	3.70	0.65 ER	ND	ND	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND
Calcium	NLE	NLE	8700.00	9760		17300	16600	16700	24800	20100	NA	NA	NA	NA	NA	NA	NA	NA	NA	9440	9050	9620	9920
Chromium	70	100	49.60	ND	ND	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.33 ER	1.22 ER	2.86 ER	1.85 ER
Cobalt	NLE	NLE	30.60	7.78		2.35	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.01 ER	1.62 ER	1.64 ER	2.83
Copper	1300	1300	9.80	ND	2.18 ER	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND
Iron	300	NLE	19600	82.6 ER		ND	<100	<100	<100	<100	NA	NA	NA	NA	NA	NA	NA	NA	NA	227 ER	ND	98.5 ER	234 ER
Lead	5	15	7.30	ND	ND	ND	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND
Magnesium	NLE	NLE	7160	10400		4770	9470	9520	8210	<5000	NA	NA	NA	NA	NA	NA	NA	NA	NA	2360	3390	3600	4890
Manganese	50	NLE	232	67.7		22.8	64.1	63.6	46.8	22.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.71 ER	8.67	10.6	13.1
Mercury	2	2	ND	0.14 ER	ND	ND	<0.20	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.12 ER	ND	ND	ND
Nickel	100	NLE	48.3	11.2	4.74 ER	3.48 ER	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.04 ER	3.4 ER	4.19 ER	4.53 ER
Potassium	NLE	NLE	4630	2440		2420	<10000	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	1620	1270	1380	1800
Selenium	40	50	3.80	NR	NR	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR	26.3	13.6 ER	ND
Silver	40	NLE	ND	ND		ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND
Sodium	50000	NLE	36400	23700		33400	49300	48700	51600	38400	NA	NA	NA	NA	NA	NA	NA	NA	NA	3910 ER	10700	11300	14900
Thallium	2	2	ND	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND
Vanadium	60	NLE	28.9	ND		0.652 ER	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	1.07 ER
Zinc	2000	NLE	133	21.7 ER		7.18 ER	24	23.3	24	<20	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.03 ER	18.6 ER	20.4 ER	16.3 ER

Notes:

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Table 3
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Site FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				CW1MW33			CW1MW34																		CW1MW35	
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Charles Wood)**	LF4	LF5	LF6	54	55	56	57	58	59	59 Dup	60	60 Dup	61	62	LF1		LF2		LF3		LF4	LF5	LF6	54	55
Date Collected				2/17/2011	4/26/2011	7/13/2011	2/25/2008	4/10/2008	7/29/2008	12/8/2008	2/18/2009	5/18/2009	5/18/2009	8/4/2009	8/4/2009	10/19/2009	1/22/2010	4/20/2010		8/17/2010		10/26/2010		2/17/2011	5/2/2011	7/14/2011	2/25/2008	4/10/2008
ANALYTE/Lab ID				11059.06	11169.07	11295.08	80055.12	80121.12	80267.12	80450.12	90059.12	90201.04	90201.03	90327.04	90327.03	90420.04	10031.07	10154.07		10346.06		10461.07		11059.08	11186.06	11297.12	80055.13	80121.13
Volatile Organic Compounds (µg/L)																											
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	ND
Chloromethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	ND
Dibromochloromethane	1	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100	0.1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	ND
1,1,1-Trichloroethane	30	0.2	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND	ND	ND	ND
Metals (µg/L)																											
Aluminum	200	NLE	8210	337	297	498	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	95.1	ER	54.7	ER	41.9	ER	<200	<200	<200	NA	NA
Antimony	6	6	ND	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<6.0	<6.0	<6.0	NA	NA
Arsenic	3	10	25.10	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<3.0	<3.0	<3.0	NA	NA
Barium	6000	2000	192.00	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	17.1		23		26.6		<200	<200	<200	NA	NA
Beryllium	1	4	2.80	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.111	ER	0.05	ER	ND		<1.0	<1.0	<1.0	NA	NA
Cadmium	4	5	3.70	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<3.0	<3.0	<3.0	NA	NA
Calcium	NLE	NLE	8700.00	11700	7000	7990	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3020		2490		2790		5810	<5000	<5000	NA	NA
Chromium	70	100	49.60	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<10	<10	<10	NA	NA
Cobalt	NLE	NLE	30.60	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.417	ER	ND		0.939	ER	<50	<50	<50	NA	NA
Copper	1300	1300	9.80	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<10	<10	<10	NA	NA
Iron	300	NLE	19600	156	141	218	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<100	178	<100	NA	NA
Lead	5	15	7.30	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<3.0	<3.0	<3.0	NA	NA
Magnesium	NLE	NLE	7160	<5000	<5000	<5000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1610		1820		2470		<5000	<5000	<5000	NA	NA
Manganese	50	NLE	232	<15	<15	<15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.11		7.44		9.09		17.5	<15	<15	NA	NA
Mercury	2	2	ND	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.13	ER	ND		ND		<0.20	<0.20	<0.20	NA	NA
Nickel	100	NLE	48.3	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.92	ER	2.13	ER	2.2	ER	<10	<10	<10	NA	NA
Potassium	NLE	NLE	4630	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2830		3740		3560		<10000	<10000	<10000	NA	NA
Selenium	40	50	3.80	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR		12.6	ER	ND		<10	<10	<10	NA	NA
Silver	40	NLE	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<10	<10	<10	NA	NA
Sodium	50000	NLE	36400	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	17200		22100		20200		47400	10600	<10000	NA	NA
Thallium	2	2	ND	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<2.0	<2.0	<2.0	NA	NA
Vanadium	60	NLE	28.9	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		<50	<50	<50	NA	NA
Zinc	2000	NLE	133	<20	<20	<20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.31	ER	19.1	ER	4.59	ER	<20	<20	<20	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

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NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

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Table 3
Historical Groundwater Analytical Results
Site FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				CW1MW35														CW1MW36							
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Charles Wood)**	56	57	57 Dup	58	59	60	61	62	LF1	LF2	LF3	LF4	LF5	LF6	54	55	56	57	58	59	60	61
Date Collected				7/29/2008	1/13/2009	1/13/2009	2/18/2009	5/18/2009	8/4/2009	10/19/2009	1/22/2010	4/22/2010	8/17/2010	10/26/2010	2/17/2011	5/2/2011	7/14/2011	2/25/2008	4/10/2008	7/29/2008	1/13/2009	2/18/2009	5/18/2009	8/4/2009	10/19/2009
ANALYTE/Lab ID				80267.13	90015.04	90015.03	90059.13	90201.05	90327.05	90420.05	10031.08	10160.05	10346.05	10461.08	11059.09	11186.05	11297.14	8005.14	80121.14	80267.14	90015.05	90059.14	90201.06	90327.06	90420.06
Volatile Organic Compounds (µg/L)																									
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100	0.1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	30	0.2	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																									
Aluminum	200	NLE	8210	NA	NA	NA	NA	NA	NA	NA	NA	481	184	143	204	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	6	6	ND	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	3	10	25.10	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.68 ER	ND	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA
Barium	6000	2000	192.00	NA	NA	NA	NA	NA	NA	NA	NA	58.4	59.8	56.9	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	1	4	2.80	NA	NA	NA	NA	NA	NA	NA	NA	0.201 ER	0.283 ER	0.41 ER	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	4	5	3.70	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	NLE	NLE	8700.00	NA	NA	NA	NA	NA	NA	NA	NA	6650	5840	6000	6350	5080	6950	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	70	100	49.60	NA	NA	NA	NA	NA	NA	NA	NA	5.56	1.4 ER	0.712 ER	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NLE	NLE	30.60	NA	NA	NA	NA	NA	NA	NA	NA	5.35	4.03	4.36	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1300	1300	9.80	NA	NA	NA	NA	NA	NA	NA	NA	2.12 ER	ND	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Iron	300	NLE	19600	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<100	151	208	NA	NA	NA	NA	NA	NA	NA	NA
Lead	5	15	7.30	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	NLE	NLE	7160	NA	NA	NA	NA	NA	NA	NA	NA	8020	6710	6850	8700	5400	<5000	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	50	NLE	232	NA	NA	NA	NA	NA	NA	NA	NA	33.8	27.6	27.2	42	24.6	<15	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	2	ND	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	100	NLE	48.3	NA	NA	NA	NA	NA	NA	NA	NA	12	5.76	5.74	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	NLE	NLE	4630	NA	NA	NA	NA	NA	NA	NA	NA	2600	1720	2010	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	40	50	3.80	NA	NA	NA	NA	NA	NA	NA	NA	ND	15.2 ER	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Silver	40	NLE	ND	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	50000	NLE	36400	NA	NA	NA	NA	NA	NA	NA	NA	7610	4730 ER	5800	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	ND	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	60	NLE	28.9	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	2000	NLE	133	NA	NA	NA	NA	NA	NA	NA	NA	20.5 ER	25.7 ER	17.7 ER	29.3	<20	<20	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

D = Diluted Sample

CW1MW32 - Third Quarter 2010 metals data is incomplete due to missing data sheet in the analytical data package.

Table 3
Historical Groundwater Analytical Results
Site FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				CW1MW36										CW1MW37																	
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Charles Wood)**	62	LF1		LF1 Dup		LF2		LF3		LF4	LF5	LF5 Dup	LF6	54	55		56		56 Dup		57	58		59		60	61	62	LF1	
Date Collected				1/22/2010	4/22/2010		4/22/2010		8/17/2010		10/26/2010		2/17/2011	5/3/2011	5/3/2011	7/14/2011	2/25/2008	4/10/2008		7/31/2008		7/31/2008		1/13/2009	2/18/2009		5/18/2009		8/4/2009	10/19/2009	1/22/2010	4/23/2010	
ANALYTE/Lab ID				10031.09	10160.04		10160.03		10346.07		10461.09		11059.11	11189.03	11189.04	11297.13	80055.15	80121.15		80273.04		80273.03		90015.06	90059.15		90201.07		90327.07	90420.07	10031.10	10162.08	
Volatile Organic Compounds (µg/L)																																
Acetone	6000	NLE	--	ND	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND		ND		ND		ND	ND		ND		ND	ND	ND	
Bromodichloromethane	1	80	--	ND	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND		ND		ND		ND	ND		ND		ND	ND	ND	
2-Butanone	300	NLE	--	ND	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND		ND		ND		ND	ND		ND		ND	ND	ND	
Carbon disulfide	700	NLE	--	ND	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND		ND		ND		ND	ND		ND		ND	ND	ND	
Chloroform	70	80	--	ND	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND		ND		ND		ND	ND		ND		ND	ND	ND	
Chloromethane	NLE	NLE	--	ND	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND		ND		ND		ND	ND		ND		ND	ND	ND	
Dibromochloromethane	1	NLE	--	ND	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND		ND		ND		ND	ND		ND		ND	ND	ND	
1,4-Dichlorobenzene	75	75	--	ND	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND		ND		ND		ND	ND		ND		ND	ND	ND	
cis -1,2-Dichloroethene	70	70	--	ND	ND		ND		ND		ND		ND	ND	ND	ND	ND	2.62		1.31	J	1.27	J	ND	0.26	J	0.43	J	2.04	ND	0.75	0.98	
trans-1,2-Dichloroethene	100	0.1	--	ND	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND		ND		ND		ND	ND		ND		ND	ND	ND	
Methyl *tert* -butyl ether	70	NLE	--	ND	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND		ND		ND		ND	ND		ND		ND	ND	ND	
Toluene	600	1000	--	ND	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND		ND		ND		ND	ND		ND		ND	ND	ND	
1,1,1-Trichloroethane	30	0.2	--	ND	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND		ND		ND		ND	ND		ND		ND	ND	ND	
Trichloroethene	1	5	--	ND	ND		ND		ND		ND		ND	ND	ND	ND	ND	1.29	J	0.71	J	0.74	J	ND	0.48	J	0.42	J	0.86	ND	0.57	0.68	
TICs*	500	NLE	--	ND	ND		ND		ND		ND		ND	10	ND	ND	ND	ND		ND		ND		ND	ND		ND		ND	ND	ND	
Metals (µg/L)																																
Aluminum	200	NLE	8210	NA	89	ER	102		142		86.9	ER	<200	262	277	<200	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	33.7	ER
Antimony	6	6	ND	NA	12.9		13.6		5.87	ER	6.38	ER	<6.0	<6.0	<6.0	<6.0	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	10.7	
Arsenic	3	10	25.10	NA	ND		0.78	ER	0.86	ER	ND		<3.0	<3.0	<3.0	<3.0	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	ND	
Barium	6000	2000	192.00	NA	265		256		104		79.8		<200	375	368	<200	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	57.6	
Beryllium	1	4	2.80	NA	0.102	ER	0.121	ER	0.108	ER	ND		<1.0	<1.0	<1.0	<1.0	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	ND	
Cadmium	4	5	3.70	NA	1.52	ER	1.85	ER	ND		ND		<3.0	<3.0	<3.0	<3.0	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	0.565	ER
Calcium	NLE	NLE	8700.00	NA	222000		221000		55000		45500		196000	85300	94600	75700	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	53500	
Chromium	70	100	49.60	NA	ND		ND		ND		ND		<10	<10	<10	<10	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	ND	
Cobalt	NLE	NLE	30.60	NA	1.14	ER	1.17	ER	ND		1.06	ER	<50	<50	<50	<50	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	4.87	
Copper	1300	1300	9.80	NA	16.8		15.4		2.47	ER	ND		<10	<10	<10	<10	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	ND	
Iron	300	NLE	19600	NA	ND		ND		ND		74.9		<100	<100	133	<100	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	ND	
Lead	5	15	7.30	NA	ND		2.66	ER	ND		ND		<3.0	<3.0	<3.0	<3.0	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	ND	
Magnesium	NLE	NLE	7160	NA	33400		32700		7950		5910		25400	22500	23200	12100	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	13000	
Manganese	50	NLE	232	NA	71.7		69.5		16.6		13.4		19	72.1	71.4	26.2	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	214	
Mercury	2	2	ND	NA	ND		ND		ND		ND		<0.20	<0.20	<0.20	<0.20	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	ND	
Nickel	100	NLE	48.3	NA	12		11.5		4.34	ER	3.38	ER	<10	16.5	16.1	<10	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	13.8	
Potassium	NLE	NLE	4630	NA	13100		12800		6900		5790		<10000	<10000	<10000	<10000	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	4640	
Selenium	40	50	3.80	NA	58.5		64.7		64.9		ND		<10	<10	<10	<10	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	NR	
Silver	40	NLE	ND	NA	ND		ND		ND		0.933	ER	<10	<10	<10	<10	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	ND	
Sodium	50000	NLE	36400	NA	329000		322000		116000		83500		351000	203000	210000	217000	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	65000	
Thallium	2	2	ND	NA	ND		ND		ND		ND		<2.0	<2.0	<2.0	<2.0	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	ND	
Vanadium	60	NLE	28.9	NA	0.747	ER	ND		ND		ND		<50	<50	<50	<50	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	ND	
Zinc	2000	NLE	133	NA	41.6	ER	39.6	ER	20.1	ER	6.28	ER	28.2	47.9	48.7	<20	NA	NA		NA		NA		NA	NA		NA		NA	NA	NA	36.2	ER

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

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CW1MW32 - Third Quarter 2010 metals data is incomplete due to missing data sheet in the analytical data package.

Table 3
Historical Groundwater Analytical Results
Site FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				CW1MW37																															
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Charles Wood)**	LF2		LF3		LF4		LF5		LF6	54	55	55 Dup	56	57	58	59	60	61	62	LF1		LF2		LF2 Dup		LF3		LF3 Dup	
Date Collected				8/17/2010		10/28/2010		2/17/2011		5/2/2011		7/14/2011	2/27/2008	4/11/2008	4/11/2008	7/31/2008	1/13/2009	2/25/2009	5/18/2009	7/30/2009	10/19/2009	1/22/2010	4/22/2010		8/24/2010		8/24/2010		10/28/2010		10/28/2010	
ANALYTE/Lab ID				10346.09		10465.11		11059.13		11186.07		11297.15	80061.04	80127.04	80127.03	80273.05	90015.07	90074.04	90201.08	90323.04	90420.08	10031.11	10160.08		10362.04		10362.03		10465.04		10465.03	
Volatile Organic Compounds (µg/L)																																			
Acetone	6000	NLE	--	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND	
Bromodichloromethane	1	80	--	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND	
2-Butanone	300	NLE	--	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND	
Carbon disulfide	700	NLE	--	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND	
Chloroform	70	80	--	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND	
Chloromethane	NLE	NLE	--	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		2.93		4.74		ND		ND	
Dibromochloromethane	1	NLE	--	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND	
1,4-Dichlorobenzene	75	75	--	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND	
cis -1,2-Dichloroethene	70	70	--	ND		ND		ND		0.5		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND	
trans-1,2-Dichloroethene	100	0.1	--	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND	
Methyl *tert* -butyl ether	70	NLE	--	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND	
Toluene	600	1000	--	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND	
1,1,1-Trichloroethane	30	0.2	--	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND	
Trichloroethene	1	5	--	ND		ND		0.17	J	0.27	J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND	
TICs*	500	NLE	--	ND		ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND	
Metals (µg/L)																																			
Aluminum	200	NLE	8210	ND		ND		<200		677		<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.1	ER	ND		20.6	ER	ND		ND	
Antimony	6	6	ND	6.58	ER	9.12	ER	<6.0		<6.0		<6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.3		9.16	ER	8.65	ER	ND		ND	
Arsenic	3	10	25.10	1.13	ER	0.74	ER	<3.0		<3.0		<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.67	ER	5.06		5.06		3.82	ER	3.65	ER
Barium	6000	2000	192.00	45.6		32.5		<200		<200		<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	242		176		193		199		199	
Beryllium	1	4	2.80	ND		ND		<1.0		<1.0		<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		ND		ND	
Cadmium	4	5	3.70	ND		0.507	ER	<3.0		<3.0		<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9	ER	1.48	ER	1.87	ER	2.45		2.44	
Calcium	NLE	NLE	8700.00	56600		43200		43100		40600		46200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	65700		50300		52400		47800		49000	
Chromium	70	100	49.60	ND		ND		<10		<10		<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		ND		ND	
Cobalt	NLE	NLE	30.60	2.68		2.18		<50		<50		<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		ND		ND	
Copper	1300	1300	9.80	ND		ND		<10		<10		<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		1.9	ER	2.09	ER	ND		ND	
Iron	300	NLE	19600	ND		123		<100		1890		379	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	62800		41900		45000		46000		46300	
Lead	5	15	7.30	ND		ND		<3.0		<3.0		<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.33		5.29		3.58	ER	ND		ND	
Magnesium	NLE	NLE	7160	12200		8790		8140		8190		8950	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10700		7990		8390		7390		7430	
Manganese	50	NLE	232	159		124		84.9		198		125	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	353		271		283		262		261	
Mercury	2	2	ND	ND		ND		<0.20		<0.20		<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		ND		ND	
Nickel	100	NLE	48.3	11.5		8.19		<10		<10		<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.18		4.91	ER	4.88	ER	2.73	ER	2.6	ER
Potassium	NLE	NLE	4630	4920		3830		<10000		<10000		<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9440		7260		7630		7650		7870	
Selenium	40	50	3.80	69.3		ND		<10		<10		<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	32.8		7.12	ER	67.7		ND		ND	
Silver	40	NLE	ND	ND		1.54	ER	<10		<10		<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3		5.65		6.47		ND		ND	
Sodium	50000	NLE	36400	63800		65500		69100		58200		56700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	18900		15800		16900		15500		15600	
Thallium	2	2	ND	ND		ND		<2.0		<2.0		<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		ND		ND	
Vanadium	60	NLE	28.9	0.79	ER	ND		<50		<50		<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		ND		ND	
Zinc	2000	NLE	133	35.3	ER	17.7	ER	<20		<20		<20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND		ND		ND		ND		ND	

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

D = Diluted Sample

CW1MW32 - Third Quarter 2010 metals data is incomplete due to missing data sheet in the analytical data package.

Table 3
Historical Groundwater Analytical Results
Site FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				CW1MW38			CW1MW39															CW1MW40		
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Charles Wood)**	LF4	LF5	LF6	54	55	56	57	58	59	60	60 Dup	61	62	LF1	LF2	LF3	LF4	LF5	LF6	54	55	56
Date Collected				2/18/2011	5/3/2011	7/14/2011	2/27/2008	4/11/2008	7/31/2008	1/13/2009	2/25/2009	5/18/2009	7/30/2009	7/30/2009	10/19/2009	1/22/2010	4/22/2010	8/25/2010	10/28/2010	2/17/2011	4/27/2011	7/14/2011	2/25/2008	4/11/2008	7/31/2008
ANALYTE/Lab ID				11062.06	11189.07	11297.08	80061.05	80127.05	80273.06	90015.08	90074.05	90201.09	90323.05	90323.03	90420.09	10031.12	10160.07	10362.05	10465.05	11059.12	11173.06	11297.05	80055.16	80127.06	80273.07
Volatile Organic Compounds (µg/L)																									
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.86	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100	0.1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	0.56 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	30	0.2	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																									
Aluminum	200	NLE	8210	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	160	110	117	<200	<200	<200	NA	NA	NA
Antimony	6	6	ND	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12.4	12.9	ND	<6.0	<6.0	<6.0	NA	NA	NA
Arsenic	3	10	25.10	6.4	7.2	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	25.92	36.4	30.43	17.8	5.8	28.3	NA	NA	NA
Barium	6000	2000	192.00	222	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	54.9	42.2	43.1	<200	<200	<200	NA	NA	NA
Beryllium	1	4	2.80	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.219 ER	0.118 ER	ND	<1.0	<1.0	<1.0	NA	NA	NA
Cadmium	4	5	3.70	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.75 ER	1.3 ER	2.2	<3.0	<3.0	<3.0	NA	NA	NA
Calcium	NLE	NLE	8700.00	53100	54000	41600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	64700	55000	58500	56500	58100	54500	NA	NA	NA
Chromium	70	100	49.60	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<10	<10	<10	NA	NA	NA
Cobalt	NLE	NLE	30.60	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.27	3.73	4.01	<50	<50	<50	NA	NA	NA
Copper	1300	1300	9.80	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	2.31 ER	ND	<10	<10	<10	NA	NA	NA
Iron	300	NLE	19600	51000	53200	41200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	46700	35700	37900	32400	59500	25700	NA	NA	NA
Lead	5	15	7.30	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.67 ER	3.83 ER	ND	<3.0	<3.0	<3.0	NA	NA	NA
Magnesium	NLE	NLE	7160	8120	8700	5610	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	16000	14300	14600	13800	10900	13000	NA	NA	NA
Manganese	50	NLE	232	309	300	241	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	317	272	277	291	316	304	NA	NA	NA
Mercury	2	2	ND	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<0.20	<0.20	<0.20	NA	NA	NA
Nickel	100	NLE	48.3	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	32.2	30.4	29.5	31.2	15.1	30.8	NA	NA	NA
Potassium	NLE	NLE	4630	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9130	7180	8100	<10000	<10000	<10000	NA	NA	NA
Selenium	40	50	3.80	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.9	75.4	ND	<10	<10	<10	NA	NA	NA
Silver	40	NLE	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.43	5.23	ND	<10	<10	<10	NA	NA	NA
Sodium	50000	NLE	36400	19300	20800	11800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	54700	51900	55900	59100	27600	57200	NA	NA	NA
Thallium	2	2	ND	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<2.0	<2.0	<2.0	NA	NA	NA
Vanadium	60	NLE	28.9	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<50	<50	<50	NA	NA	NA
Zinc	2000	NLE	133	<20	<20	<20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	14.2 ER	13.3 ER	11.7 ER	<20	<20	32.3	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

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CW1MW32 - Third Quarter 2010 metals data is incomplete due to missing data sheet in the analytical data package.

Table 3
Historical Groundwater Analytical Results
Site FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				CW1MW40														CW1MW281							
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Charles Wood)**	57	58	59	60	61	62	LF1	LF1 Dup	LF2	LF3	LF4	LF5	LF6	80	81	82	83	84	84 Dup	85	86
Date Collected				1/13/2009	2/25/2009	5/18/2009	7/30/2009	10/19/2009	1/22/2010	4/23/2010	4/23/2010	8/25/2010	10/28/2010	2/16/2011	4/27/2011	7/14/2011	2/25/2008	4/11/2008	7/31/2008	1/13/2009	2/25/2009	2/25/2009	5/18/2009	7/29/2009
ANALYTE/Lab ID				90015.09	90074.06	90201.10	90323.06	90420.10	10031.13	10162.04	10162.03	10362.06	10465.06	11058.07	11173.07	11297.06	80055.17	80127.07	80273.08	90015.10	90074.07	90074.03	90201.11	90318.12
Volatile Organic Compounds (µg/L)																									
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.38	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	112.73	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	3.82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	ND	ND
trans-1,2-Dichloroethene	100	0.1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	30	0.2	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.65	ND	1.15 J	2.52	20.1	18.58	15.58	3.25
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9	ND	ND	ND	ND
Metals (µg/L)																									
Aluminum	200	NLE	8210	NA	NA	NA	NA	NA	NA	85.7 ER	73.1 ER	29 ER	33.6 ER	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	6	6	ND	NA	NA	NA	NA	NA	NA	7 ER	8.99 ER	6.94 ER	4.91 ER	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	3	10	25.10	NA	NA	NA	NA	NA	NA	9.69	9.61	10.21	12.33	14.2	4.9	<3.0	NA	NA	NA	NA	NA	NA	NA	NA
Barium	6000	2000	192.00	NA	NA	NA	NA	NA	NA	57.8	55.4	41.9	40	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	1	4	2.80	NA	NA	NA	NA	NA	NA	0.138 ER	0.095 ER	0.045 ER	ND	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	4	5	3.70	NA	NA	NA	NA	NA	NA	0.932 ER	1.18 ER	1.11 ER	1.67 ER	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	NLE	NLE	8700.00	NA	NA	NA	NA	NA	NA	43400	43100	36600	38600	33000	37300	40500	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	70	100	49.60	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NLE	NLE	30.60	NA	NA	NA	NA	NA	NA	1.75 ER	1.82 ER	1.48 ER	1.86 ER	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1300	1300	9.80	NA	NA	NA	NA	NA	NA	ND	ND	2.09 ER	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Iron	300	NLE	19600	NA	NA	NA	NA	NA	NA	35000	33900	24500	26600	19600	25200	6120	NA	NA	NA	NA	NA	NA	NA	NA
Lead	5	15	7.30	NA	NA	NA	NA	NA	NA	ND	ND	2.86 ER	ND	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	NLE	NLE	7160	NA	NA	NA	NA	NA	NA	10100	10100	8630	8800	8780	8160	8580	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	50	NLE	232	NA	NA	NA	NA	NA	NA	222	220	183	192	224	205	233	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	2	ND	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	100	NLE	48.3	NA	NA	NA	NA	NA	NA	19.5	19.4	18.6	16.9	34.8	15.7	22.1	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	NLE	NLE	4630	NA	NA	NA	NA	NA	NA	7690	7680	6030	6840	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	40	50	3.80	NA	NA	NA	NA	NA	NA	NR	NR	61.9	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Silver	40	NLE	ND	NA	NA	NA	NA	NA	NA	5	4.68 ER	3.81 ER	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	50000	NLE	36400	NA	NA	NA	NA	NA	NA	17100	17400	16500	16500	19400	15900	17400	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	ND	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	60	NLE	28.9	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	2000	NLE	133	NA	NA	NA	NA	NA	NA	2.56 ER	2.6 ER	2.94 ER	ND	<20	<20	24.3	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

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Table 3
Historical Groundwater Analytical Results
Site FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				CW1MW281								CW1MW282											
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Charles Wood)**	87	88	89	90	LF3	LF4	LF5	LF6	80	81	82	83	84	85	86	87	88	LF1	LF2	LF3
Date Collected				10/19/2009	1/22/2010	4/23/2010	8/25/2010	10/28/2010	2/16/2011	4/27/2011	7/14/2011	2/27/2008	4/10/2008	7/31/2008	12/8/2008	2/18/2009	5/18/2009	7/29/2009	10/19/2009	1/20/2010	4/22/2010	8/11/2010	10/28/2010
ANALYTE/Lab ID				90420.11	10031.14	10162.06	10362.07	10465.09	11058.05	11173.08	11297.07	80061.06	80121.16	80273.09	80450.13	90059.16	90201.12	90318.13	90420.12	10026.09	10160.06	10338.07	10465.07
Volatile Organic Compounds (µg/L)																							
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	2.38	3.8	ND	ND	ND	0.2 J	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NLE	NLE	--	ND	ND	ND	2.71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	3.16	1	ND	ND	2.11	0.58	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100	0.1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	0.24 J	1.67	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	3.51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	30	0.2	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	10.25	109.9 D	37.62	ND	ND	91.55	13.47	29.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																							
Aluminum	200	NLE	8210	NA	NA	65.6 ER	ND	ND	266	<200	617	NA	NA	NA	NA	NA	NA	NA	NA	NA	59.9 ER	262	420
Antimony	6	6	ND	NA	NA	7.07 ER	5.7 ER	4.9 ER	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
Arsenic	3	10	25.10	NA	NA	1.06 ER	1.54 ER	1.02 ER	<3.0	<3.0	4.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	0.93 ER
Barium	6000	2000	192.00	NA	NA	94.3	115	156	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.89 ER	142	12.6
Beryllium	1	4	2.80	NA	NA	ND	ND	ND	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.139 ER	ND
Cadmium	4	5	3.70	NA	NA	1.77 ER	1.13 ER	1.27 ER	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
Calcium	NLE	NLE	8700.00	NA	NA	433000	32000	41000	35200	50000	44400	NA	NA	NA	NA	NA	NA	NA	NA	NA	11900	6510	3660
Chromium	70	100	49.60	NA	NA	ND	ND	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	2.05 ER
Cobalt	NLE	NLE	30.60	NA	NA	ND	ND	ND	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	4.96	ND
Copper	1300	1300	9.80	NA	NA	ND	1.79 ER	3.09 ER	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	1.66 ER	ND
Iron	300	NLE	19600	NA	NA	55500	29800	41400	20100	41400	34400	NA	NA	NA	NA	NA	NA	NA	NA	NA	197 ER	ND	492 ER
Lead	5	15	7.30	NA	NA	4.88 ER	2.45 ER	ND	<3.0	<3.0	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
Magnesium	NLE	NLE	7160	NA	NA	6940	4070	5130	6510	7400	8070	NA	NA	NA	NA	NA	NA	NA	NA	NA	1400	6230	646 ER
Manganese	50	NLE	232	NA	NA	256	143	197	115	259	205	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.595 ER	47.8	3.08 ER
Mercury	2	2	ND	NA	NA	ND	ND	ND	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
Nickel	100	NLE	48.3	NA	NA	5.38	ND	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.463 ER	8.53	0.993 ER
Potassium	NLE	NLE	4630	NA	NA	9080	6410	7730	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	2330	7600	1550
Selenium	40	50	3.80	NA	NA	NR	52.4	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.85 ER	13.5 ER	ND
Silver	40	NLE	ND	NA	NA	7.77	4.37 ER	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
Sodium	50000	NLE	36400	NA	NA	22900	8090	10300	231000	75800	81700	NA	NA	NA	NA	NA	NA	NA	NA	NA	6050	94700	4700 ER
Thallium	2	2	ND	NA	NA	ND	ND	ND	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.93 ER	ND
Vanadium	60	NLE	28.9	NA	NA	ND	ND	ND	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.52 ER	ND	1.2 ER
Zinc	2000	NLE	133	NA	NA	12.8 ER	ND	ND	<20	<20	25.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	17.6 ER	2.9 ER

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

D = Diluted Sample

CW1MW32 - Third Quarter 2010 metals data is incomplete due to missing data sheet in the analytical data package.

Table 3
Historical Groundwater Analytical Results
Site FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				CW1MW282			CW1MW291																	
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Charles Wood)**	LF4	LF5	LF6	80	81	82	83	84	85	86	87	87 Dup	88	LF1	LF2	LF3	LF4	LF4 Dup	LF5	LF5 Dup	LF6
Date Collected				2/17/2011	4/27/2011	7/13/2011	2/27/2008	4/10/2008	7/31/2008	12/8/2008	2/18/2009	5/18/2009	7/29/2009	10/19/2009	10/19/2009	1/20/2010	4/23/2010	8/17/2010	10/28/2010	2/18/2011	2/18/2011	5/2/2011	5/2/2011	7/13/2011
ANALYTE/Lab ID				11059.10	11173.09	11295.10	80061.07	80121.17	80273.10	80450.14	90059.17	90201.13	90318.14	90420.13	90420.03	10026.10	10162.05	10346.08	10465.08	11062.04	11062.03	11186.03	11186.04	11295.09
Volatile Organic Compounds (µg/L)																								
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	75	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100	0.1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	30	0.2	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	ND	ND	ND	ND	ND	ND	0.59	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	ND
Metals (µg/L)																								
Aluminum	200	NLE	8210	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	76.5 ER	172	80.5 ER	<200	<200	1120	<200	<200
Antimony	6	6	ND	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<6.0	<6.0	<6.0	<6.0	<6.0
Arsenic	3	10	25.10	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.68 ER	ND	<3.0	<3.0	<3.0	<3.0	<3.0
Barium	6000	2000	192.00	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	15.9	135	51.5	<200	<200	<200	<200	<200
Beryllium	1	4	2.80	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.12 ER	ND	<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	4	5	3.70	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<3.0	<3.0	<3.0	<3.0	<3.0
Calcium	NLE	NLE	8700.00	11200	7580	9940	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	17500	6410	2450	7420	7240	9840	9900	5580
Chromium	70	100	49.60	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<10	<10	<10	<10	<10
Cobalt	NLE	NLE	30.60	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	1.93 ER	0.817 ER	<50	<50	<50	<50	<50
Copper	1300	1300	9.80	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	1.22 ER	ND	<10	<10	10.9	<10	<10
Iron	300	NLE	19600	184	<100	121	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<100	<100	1080	<100	<100
Lead	5	15	7.30	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	2.21 ER	<3.0	<3.0	<3.0	<3.0	<3.0
Magnesium	NLE	NLE	7160	<5000	<5000	<5000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2030	3530	1350	<5000	<5000	<5000	<5000	<5000
Manganese	50	NLE	232	<15	<15	<15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.41 ER	14.8	7.08	<15	<15	<15	<15	<15
Mercury	2	2	ND	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel	100	NLE	48.3	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	3.67 ER	1.99 ER	<10	<10	<10	<10	<10
Potassium	NLE	NLE	4630	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6670	20300	13100	<10000	<10000	<10000	<10000	<10000
Selenium	40	50	3.80	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR	17.9 ER	ND	<10	<10	<10	<10	<10
Silver	40	NLE	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<10	<10	<10	<10	<10
Sodium	50000	NLE	36400	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	61200	76400	49000	46400	46600	46900	38200	28400
Thallium	2	2	ND	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	<2.0
Vanadium	60	NLE	28.9	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.748 ER	ND	ND	<50	<50	<50	<50	<50
Zinc	2000	NLE	133	<20	<20	<20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.49 ER	14.9 ER	2.97 ER	<20	<20	<20	<20	<20

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

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NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

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CW1MW32 - Third Quarter 2010 metals data is incomplete due to missing data sheet in the analytical data package.

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-22 Former Waste Water Treatmment Lime Pit (CWA-1)
Annual 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	CW1MW26	CW1MW27							CW1MW28		
Sample ID			FTMM-22-GW-CW1MW26-12.79	FTMM-22-GW-CW1MW127-12.63	FTMM-22-GW-CW1MW27-12.63	FTMM-22-GW-CW1MW27-12.63	FTMM-22-GW-CW1MW27-11.9	FTMM-22-GW-CW1MW27-11.52	FTMM-22-GW-CW1MW27-12.63	FTMM-22-GW-CW1MW27-12.63	FTMM-22-GW-CW1MW28-10.75	FTMM-22-GW-CW1MW28-10.6	FTMM-22-GW-CW1MW28-11.21
Sample Date			8/28/2013	8/28/2013	8/28/2013	8/28/2013	1/24/2014	5/8/2014	9/30/2014	12/18/2014	1/24/2014	5/8/2014	9/30/2014
QA/QC			SA	DU	SA	SA	SA	SA	SA	SA	SA	SA	SA
Sampling Method			PDB	PDB	PDB	PDB	LFPS	LFPS	PDB	PDB	LFPS	LFPS	PDB
Volatile Organic Compounds (µg/l)													
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	**2.4 J**	**2.1 J**	**1.7 J**	< 5	< 5	**2 J**	**7.2 B**	**1.8 J**	< 5	< 5	**7.4 B**
Benzene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	70	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 1	< 1	< 1
Ethyl benzene	700	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Meta & Para Xylenes	1,000	NLE	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl bromide	10	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
n-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	NA	NA	NA	NA	NA	NA	< 20	< 20	NA	NA	< 20
tert-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	600	1,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Total TIC, Volatile	500	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1,000	10,000	< 3	< 3	< 3	< 3	< 3	NA	NA	NA	< 3	NA	NA
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	< 1	< 1	< 1	< 1	**0.45 J**	**0.99 J**	< 1	**0.68 J**	**8**	**2.8 J**	**1.5 J**
Trichlorofluoromethane	2,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-22 Former Waste Water Treatmment Lime Pit (CWA-1)
Annual 2014 Groundwater Sampling Report
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Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	CW1MW28	CW1MW281						CW1MW282	CW1MW29		
Sample ID			FTMM-22-GW-CW1MW28-11.21	FTMM-22-GW-CW1MW281-33.5	FTMM-22-GW-CW1MW281-38.5	FTMM-22-GW-CW1MW281-35.8	FTMM-22-GW-CW1MW281-33.74	FTMM-22-GW-CW1MW281-38.74	FTMM-22-GW-CW1MW281-33.74	FTMM-22-GW-CW1MW282-12.62	FTMM-22-GW-CW1MW29-10.85	FTMM-22-GW-CW1MW29-10.9	FTMM-22-GW-CW1MW129-10.4
Sample Date			12/18/2014	1/24/2014	1/24/2014	5/8/2014	9/30/2014	9/30/2014	12/18/2014	8/28/2013	8/28/2013	1/24/2014	5/8/2014
QA/QC			SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	DU
Sampling Method			PDB	LFPS	LFPS	LFPS	PDB	PDB	PDB	PDB	PDB	LFPS	LFPS
Volatile Organic Compounds (µg/l)													
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 1	< 1	< 1	**0.69 J**	**0.64 J**	**0.82 J**	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.41 J**	**0.54 J**
1,2,4-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 1	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	**1.9 J**	< 5	< 5	< 5	**6.2 B**	**5.5 B**	< 5	**2.2 J**	**1.9 J**	< 5	< 5
Benzene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.33 J**	< 1
Chloroform	70	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	< 1	**2.6 J**	**2.4 J**	**3.4 J**	**14**	**14**	**23**	< 1	< 1	**6.5**	**0.59 J**
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1 UJ	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Meta & Para Xylenes	1,000	NLE	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl bromide	10	NLE	< 1 UJ	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 1	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
n-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	< 20	NA	NA	NA	< 20	< 20	< 20	NA	NA	NA	NA
tert-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	600	1,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Total TIC, Volatile	500	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1,000	10,000	NA	< 3	< 3	NA	NA	NA	NA	< 3	< 3	< 3	NA
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.99 J**	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	**4.6 J**	**8.9**	**8.6**	**14**	**150**	**160**	**300**	< 1	**2.5 J**	**7.4**	**13**
Trichlorofluoromethane	2,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	< 1	< 1	< 1	**0.52 J**	**1.1 J**	**1.1 J**	**1.8 J**	< 1	< 1	**0.78 J**	< 1

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-22 Former Waste Water Treatmment Lime Pit (CWA-1)
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Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	CW1MW29			CW1MW291	CW1MW30	CW1MW31					
Sample ID			FTMM-22-GW-CW1MW29-10.4	FTMM-22-GW-CW1MW29-10.85	FTMM-22-GW-CW1MW29-10.85	FTMM-22-GW-CW1MW291-14.77	FTMM-22-GW-CW1MW30-14.27	FTMM-22-GW-CW1MW31-18.36	FTMM-22-GW-CW1MW31-8.86	FTMM-22-GW-CW1MW131-13	FTMM-22-GW-CW1MW31-13	FTMM-22-GW-CW1MW31-18.7	FTMM-22-GW-CW1MW31-14.3
Sample Date			5/8/2014	9/30/2014	12/18/2014	8/28/2013	8/28/2013	8/28/2013	8/28/2013	1/24/2014	1/24/2014	1/24/2014	5/8/2014
QA/QC			SA	SA	SA	SA	SA	SA	SA	DU	SA	SA	SA
Sampling Method			LFPS	PDB	PDB	PDB	PDB	PDB	PBD	LFPS	LFPS	LFPS	LFPS
Volatile Organic Compounds (µg/l)													
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1 UJ	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	**0.46 J**	< 1	< 1	< 1	< 1	< 1	< 1	**0.32 J**	**0.3 J**	**0.37 J**	< 1
1,2,4-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	< 1	< 1	< 1 UJ	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	< 5	**5.6 B**	**2.1 J**	**1.8 J**	**2.3 J**	**1.3 J**	**1.8 J**	< 5	< 5	< 5	< 5
Benzene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	70	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	**0.55 J**	**5.6**	**0.83 J**	< 1	< 1	< 1	< 1	**2.7 J**	**2.9 J**	**2.6 J**	< 1
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1	< 1	< 1 UJ	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Meta & Para Xylenes	1,000	NLE	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl bromide	10	NLE	< 1	< 1	< 1 UJ	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
n-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	NA	< 20	< 20	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	600	1,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Total TIC, Volatile	500	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1,000	10,000	NA	NA	NA	< 3	< 3	< 3	< 3	< 3	< 3	< 3	NA
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	**13**	**3.9 J**	**4.7 J**	< 1	< 1	< 1	< 1	**5.2**	**5.1**	**5.2**	**6.8**
Trichlorofluoromethane	2,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	< 1	**0.47 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-22 Former Waste Water Treatmment Lime Pit (CWA-1)
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Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	CW1MW31		CW1MW32		CW1MW33		CW1MW34		CW1MW35	
Sample ID			FTMM-22-GW-CW1MW31-16.40	FTMM-22-GW-CW1MW31-16.4	FTMM-22-GW-CW1MW32-14.72	FTMM-22-GW-CW1MW32-21.55	FTMM-22-GW-CW1MW33-14.0	FTMM-22-GW-CW1MW33-19.6	FTMM-22-GW-CW1MW34-11.43	FTMM-22-GW-CW1MW34-17.17	FTMM-22-GW-CW1MW35-11.26	FTMM-22-GW-CW1MW35-17.09
Sample Date			9/30/2014	12/18/2014	8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013
QA/QC			SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
Sampling Method			PDB	PDB	PDB	PDB	PDB	PDB	PDB	PDB	PDB	PDB
Volatile Organic Compounds (µg/l)												
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	**0.26 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	**6.1 B**	< 5	**2.2 J**	**2 J**	**2.5 J**	**2.4 J**	**2.9 J**	**3 J**	**1.9 J**	**1.7 J**
Benzene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	70	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1	< 1 UJ	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Meta & Para Xylenes	1,000	NLE	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl bromide	10	NLE	< 1	< 1 UJ	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
n-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	< 20	< 20	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	600	1,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Total TIC, Volatile	500	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1,000	10,000	NA	NA	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	**0.47 J**	**4.4 J**	< 1	**0.49 J**	< 1	< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-22 Former Waste Water Treatmment Lime Pit (CWA-1)
Annual 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	CW1MW36			CW1MW37				CW1MW38			
Sample ID			FTMM-22-GW-CW1MW136-11.86	FTMM-22-GW-CW1MW36-11.86	FTMM-22-GW-CW1MW36-17.29	FTMM-22-GW-CW1MW37-11.66	FTMM-22-GW-CW1MW37-17.15	FTMM-22-GW-CW1MW37-11.78	FTMM-22-GW-CW1MW37-11.78	FTMM-22-GW-CW1MW38-35.18	FTMM-22-GW-CW1MW38-40.18	FTMM-22-GW-CW1MW38-45.18	FTMM-22-GW-CW1MW38-50.18
Sample Date			8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013	9/30/2014	12/18/2014	8/28/2013	8/28/2013	8/28/2013	8/28/2013
QA/QC			DU	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
Sampling Method			PDB	PDB	PDB	PDB	PDB	PDB	PDB	PDB	PDB	PDB	PDB
Volatile Organic Compounds (µg/l)													
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	**1.5 J**	**2.6 J**	**2.3 J**	**1.6 J**	**2.3 J**	**6.7 B**	< 5	**2.7 J**	**2.9 J**	**2.1 J**	**2.1 J**
Benzene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	70	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Meta & Para Xylenes	1,000	NLE	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl bromide	10	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 1	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
n-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	NA	NA	NA	NA	NA	< 20	< 20	NA	NA	NA	NA
tert-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	600	1,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Total TIC, Volatile	500	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1,000	10,000	< 3	< 3	< 3	< 3	< 3	NA	NA	< 3	< 3	< 3	< 3
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	< 1	< 1	< 1	< 1	**0.28 J**	< 1	**0.23 J**	< 1	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-22 Former Waste Water Treatmment Lime Pit (CWA-1)
Annual 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	CW1MW39					CW1MW40			
Sample ID			FTMM-22-GW-CW1MW39-33.35	FTMM-22-GW-CW1MW39-38.35	FTMM-22-GW-CW1MW39-43.35	FTMM-22-GW-CW1MW39-48.35	FTMM-22-GW-CW1MW39-38.35	FTMM-22-GW-CW1MW40-35.17	FTMM-22-GW-CW1MW40-40.17	FTMM-22-GW-CW1MW40-45.17	FTMM-22-GW-CW1MW40-50.17
Sample Date			8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/29/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013
QA/QC			SA	SA	SA	SA	SA	SA	SA	SA	SA
Sampling Method			PDB	PDB	PDB	PDB	Low Flow	PDB	PDB	PDB	PDB
Volatile Organic Compounds (µg/l)											
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	**3 J**	**2.9 J**	**2.3 J**	**3 J**	< 5	**2 J**	**2 J**	**2 J**	**2.6 J**
Benzene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	70	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Meta & Para Xylenes	1,000	NLE	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl bromide	10	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
n-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	600	1,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Total TIC, Volatile	500	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1,000	10,000	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)
Annual 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Footnote:
1) All historical data collected prior to 2013 are reported as provided by others.
2) Number of Analyses is the number of detected and non-detected results excluding rejected results. Sample duplicate pairs have not been averaged.
3) NLE = no limit established.
4) ND = not detected in any background sample, no background concentration available.

5) Chemical result qualifiers are assigned by the laboratory and is typically evaluated and modified (if necessary) by during data validation.
[blank] = detect, i.e. detected chemical result value.
B = Compound detected in the sample and its associated blank sample.
R = Rejected, data validation rejected the results.
U = non-detect, i.e. not detected equal to or above this value.
U-DL = Elevated sample detection limit due to difficult sample matrix.
U-ND = Analyte not detected in sample, but no detection or reporting limit provided.
J = estimated (detect or non-detect) value.
E (or ER) = Estimated result.
D = Results from dilution of sample.
J-DL = Elevated sample detection limit due to difficult sample matrix.
JN = Tentatively identified compound, estimated concentration.

6) Chemical results greater than or equal to the action level (depending on criteria) are highlighted based on the Criteria that are present.
- Cell Shade values represent a result that is above the NJ Ground Water Quality Criteria ####

NJDEP Interim Specific GWQC values are presented for the NJ GWQS where there is not a Specific Ground Water Quality Criteria. A full list of compounds is available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).

NJDEP Interim Generic GWQC values are presented for the NJ GWQS where there is not a XXXXX or a NJDEP Interim Specific GWQC. Available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).
- Bold Outline represent a result that is above the USEPA 2014-05 MCL. ###

7) Criteria action level source document and web address.
- The NJ Ground Water Quality Criteria refers to the NJDEP Groundwater Quality Standards - Adopted July 22, 2010
  http://www.state.nj.us/dep/wms/bwqsa/docs/njac79C.pdf
- The 2014-05 USEPA MCL refers to the USEPA's Region 9 Regional Screening Levels (HQ=1.0) - 5/31/2014 (Last revised)
  http://www.epa.gov/region9/superfund/prg/

Table 5
Review of Historical Groundwater Sampling Results
Site FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site Name/ Well ID	Interpretation of Historical and 2014 Results[1]			2014 Evaluation					Rationale
	Chem Class / Analyte	Does it Exceed NJDEP GWQS (Yes or No) (If Yes, identify compound)[1]	Do Metals Exceed FTMM Background Concentration (Yes or No) (If Yes, identify Metal)	Seasonal Effect?[2] (Y/N)	Anomaly? (Y/N)	Exceedance part of overall trend? (Y/N)[3]	Well needed for sentinel purposes? (Y/N)	Retain Analyte/Well (Yes or No)	
FTMM-22, CW-1									
CW1MW27	VOC	TCE	N/A	No	No	No	No	Yes (VOCs)	Metals attributed to background conditions and are not related to historical site uses, metals discontinued in 2013. TCE currently detected at levels just below the NJDEP GWQS. Will require a sampling event using LFPS methods to remove well from LTM.
CW1MW28		TCE	N/A	No	No	Yes	No	Yes (VOCs)	Metals attributed to background concentrations not historical site uses, metals discontinued in 2013.
CW1MW29		TCE	N/A	No	No	Yes	No	Yes (VOCs)	Metals attributed to background concentrations not historical site uses, metals discontinued in 2013.
CW1MW31		TCE	N/A	No	No	Yes	No	Yes (VOCs)	Metals attributed to background concentrations not historical site uses, metals discontinued in 2013.
CW1MW37		N/A	N/A	N/A	N/A	N/A	Yes	Yes (VOCs)	Metals attributed to background conditions and are not related to historical site uses. Well retained for sentinel purposes.
CW1MW281		TCE, VC	N/A	No	No	Yes	No	Yes (VOCs)	Metals slightly greater than background however are not related to historical site uses, metals discontinued in 2013.

Notes:

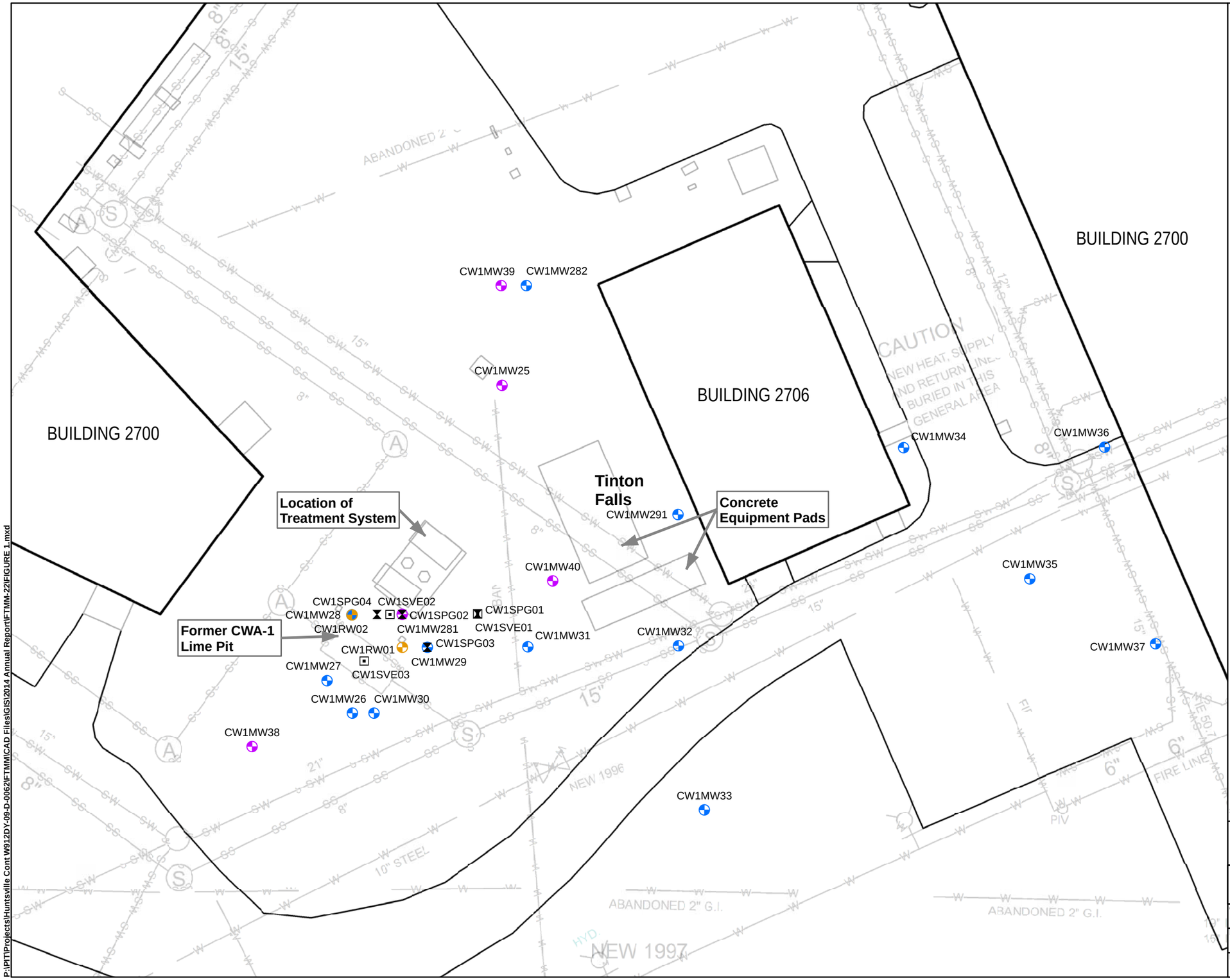
1. Has any of the compounds exceeded the NJDEP GWQS in the annual 2014 data and the 4 previous quarterly data rounds or 2 previous annual rounds?
   a. If yes then keep analyte in LTM list
   b. If no then remove this analyte from LTM list
   c. a and b above may be occasionally superceded on a case-by-case basis, depending on site conditions.
2. Has any of the analyte compounds exceeded the NJDEP GWQS seasonally (winter spring vs. summer fall) for the 4 previous data rounds?
3. TCE - trichloroethene
4. VC - vinyl chloride
5. Per the 2/5/15 NJDEP approval letter of the Final 2013 Baseline Groundwater Report, groundwater monitoring wells CW1MW26, CW1MW30, CW1MW32, CW1MW33, CW1MW34, CW1MW35, CW1MW36, CW1MW38, CW1MW39, CW1MW40, CW1MW282, and CW1MW291 were removed from the long term monitoring sampling program.

FIGURES

Figure 1 Layout of FTMM-22 Former Waste Water Treatment Lime Pit (CWA-1)

Figure 2 FTMM-22 Shallow Groundwater Contours September 30, 2014

Figure 3 FTMM-22 Deep Groundwater Contours September 30, 2014



LEGEND:

- Shallow Monitoring Well
- Deep Monitoring well
- Recovery Well
- Air Sparge Well
- SVE
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Former CW1 Lime Pit
- Municipal Boundary
- Installation Boundary

N

1 inch = 30 feet

0 15 30 60 Feet

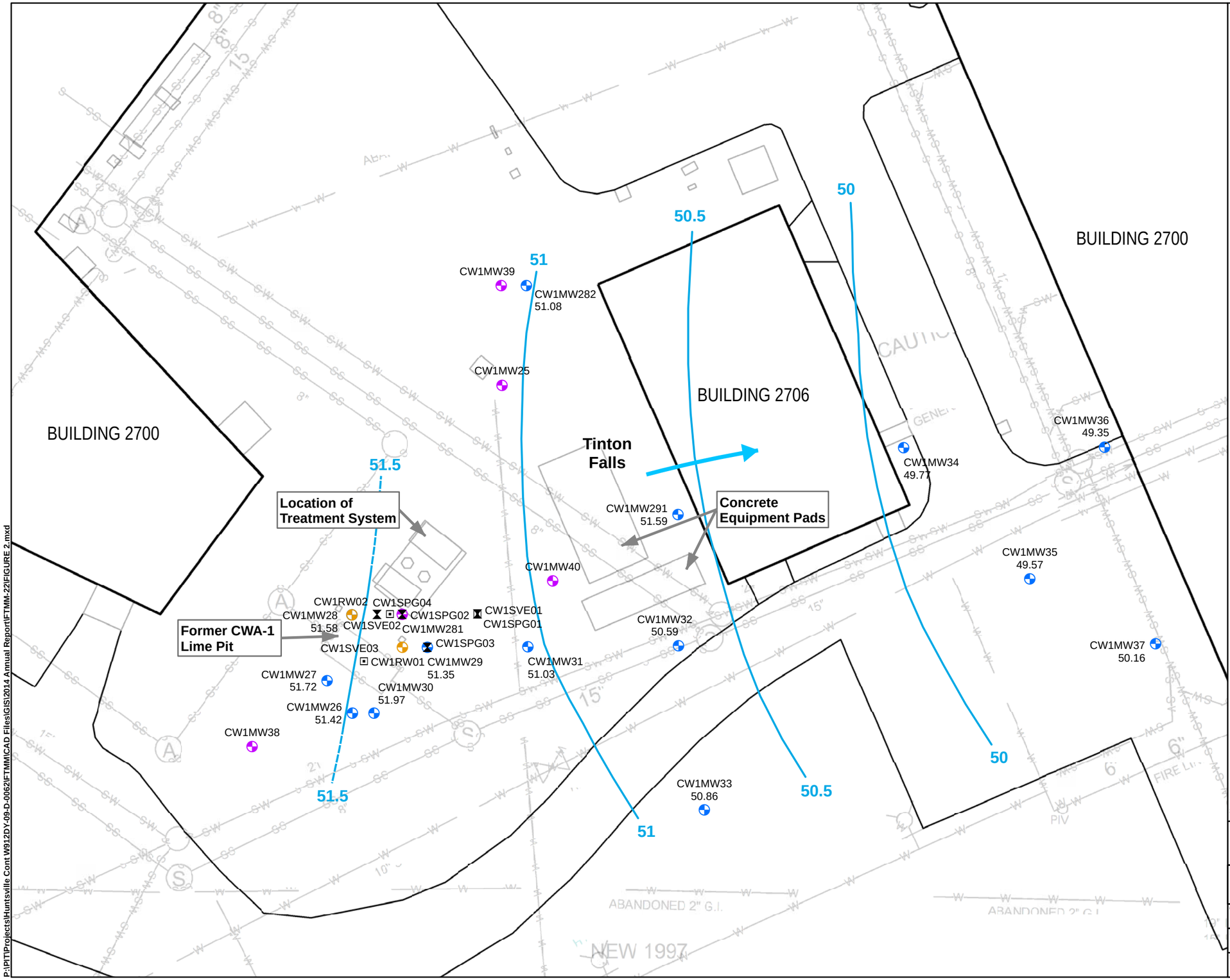
Source: FTMM Supplied CAD

PARSONS 401 Diamond Drive NW, Huntsville AL	**Fort Monmouth** **New Jersey**

LAYOUT OF FTMM-22 FORMER WASTE WATER TREATMENT LIME PIT (CWA-1)

CREATED BY: RR	REVIEWED BY: ME
DATE: OCT. 2015	FIGURE NUMBER: FIGURE 1
PROJECT NUMBER: 748810-01000	FILE: FIGURE 1.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-22\FIGURE 1.mxd



LEGEND:

- Shallow Monitoring Well
- Deep Monitoring Well
- Recovery Well
- Air Sparge Well
- SVE
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Former CW1 Lime Pit
- Municipal Boundary
- Installation Boundary
- Groundwater Elevation Contour
- Inferred Groundwater Elevation Contour
- Inferred Groundwater Flow Direction

NOTE:

The groundwater elevations at monitoring wells CW1MW30, CW1MW291, and CW1MW37 were considered anomalous and were not used to develop groudwater contours

N

1 inch = 30 feet

0 15 30 60 Feet

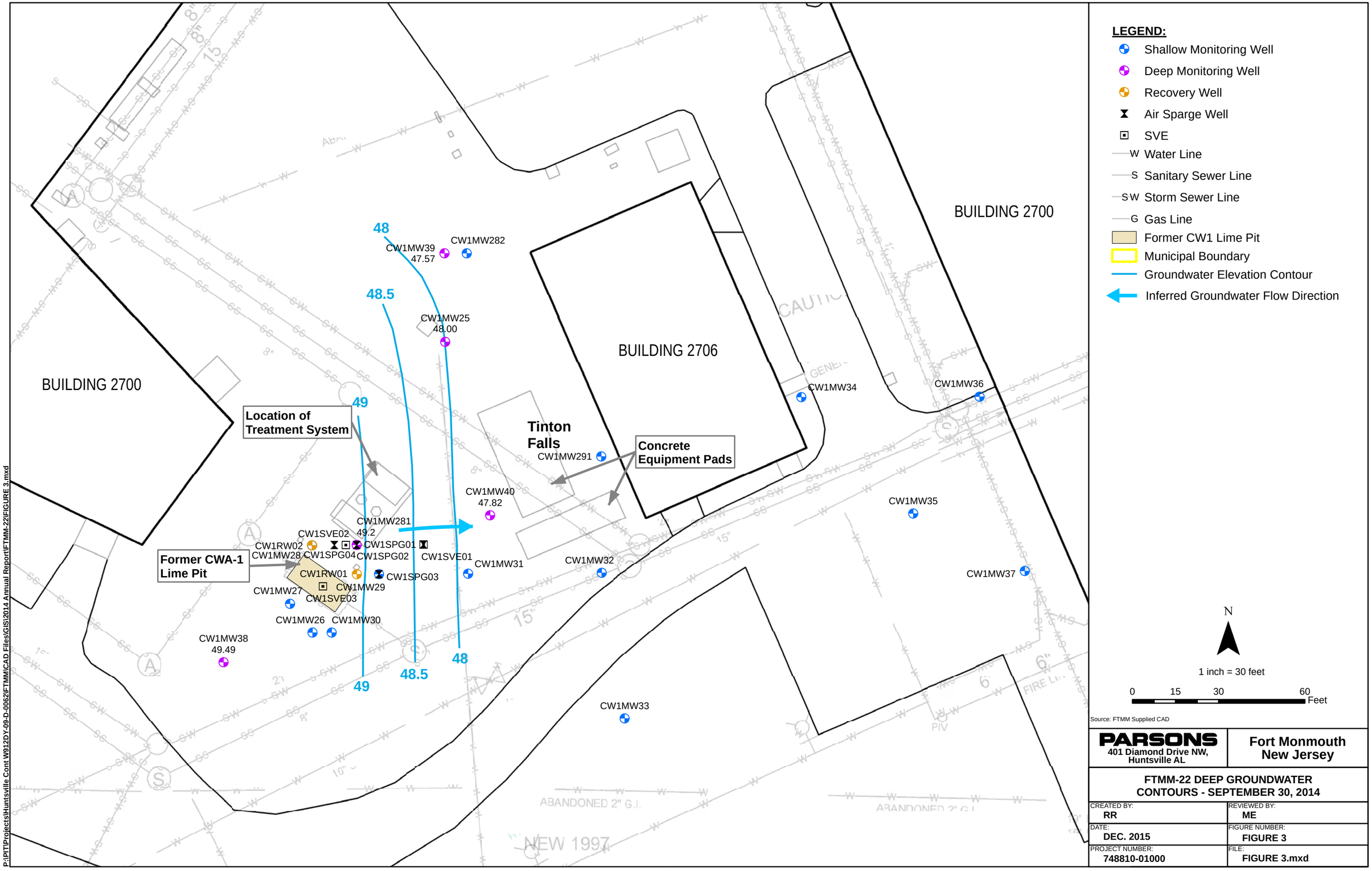
Source: FTMM Supplied CAD

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey

FTMM-22 SHALLOW GROUNDWATER CONTOURS - SEPTEMBER 30, 2014

CREATED BY: RR	REVIEWED BY: ME
DATE: DEC. 2015	FIGURE NUMBER: FIGURE 2
PROJECT NUMBER: 748810-01000	FILE: FIGURE 2.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-22\FIGURE 2.mxd



LEGEND:

- Shallow Monitoring Well
- Deep Monitoring Well
- Recovery Well
- Air Sparge Well
- SVE
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Former CW1 Lime Pit
- Municipal Boundary
- Groundwater Elevation Contour
- Inferred Groundwater Flow Direction

N

1 inch = 30 feet

0 15 30 60 Feet

Source: FTMM Supplied CAD

PARSONS 401 Diamond Drive NW, Huntsville AL	**Fort Monmouth** **New Jersey**
FTMM-22 DEEP GROUNDWATER CONTOURS - SEPTEMBER 30, 2014	
CREATED BY: **RR**	REVIEWED BY: **ME**
DATE: **DEC. 2015**	FIGURE NUMBER: **FIGURE 3**
PROJECT NUMBER: **748810-01000**	FILE: **FIGURE 3.mxd**

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-22\FIGURE 3.mxd

ATTACHMENTS

Attachment A NJDEP PDB Checklists

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMP
2. Location: FTM #27, CW-1
3. Well Designation: CW1MW27
4. Well Permit Number: 29-32591

5. Type of Well: ☒ Monitoring ☐ Extraction ☐ Residential ☐ Public Supply ☐ Irrigation ☐ Other
6. Well Surface Finish: ☒ Stick Up ☐ Flush Mount
7. Location of Measuring Point: ☒ Top of Casing ☐ Other (specify) _____
8. **NOTE:** PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.
   Distance between measuring point and ground surface (ft.) 1.57
9. Total Well Depth (fbgs): 15.54
10. Screened interval/open hole (fbgs): 5.54-15.54
11. Well Casing: Diameter 4 Material ☒ PVC ☐ Carbon Steel ☐ Stainless Steel
12. Well Screen (or open hole diameter): Diameter 4 Material ☒ PVC ☐ Carbon Steel ☐ Stainless Steel
13. Screen Size (slot): Screen Slot Size 0.01

14. Date and Time of Deployment: Date: 9/30/14 Time: 1250
15. Depth to Ground Water: Depth to ground water at time of deployment 9.13
16. Date and Time of Retrieval: Date: 12/18/14 Time: 1350
17. Depth to Ground Water: Depth to ground water at time of retrieval 8.25 toc
18. Type of Deployment Line Used: Diameter: 3/16" Material: poly

19. Material and Mass (oz.) of PDBS Weight: stainless Steel 20oz (stainless steel recommended)
20. Type of PDBS Used:
    ☐ Lab Filled (Modified Trip Blank must be taken at time of deployment)
    ☒ Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)
21. Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled _____
22. Position of PDBS Weight:
    ☒ Attached to bottom of PDBS and suspended in well
    ☐ Attached to bottom of deployment line and suspended in well
    ☐ Attached to bottom of deployment line and resting on bottom of well (preferred)
23. Position of PDBS in Well Screen (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
12.63			

5th PDBS	6th PDBS	7th PDBS	8th PDBS

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
    ☐ **No**, this well is being profiled during this sampling round
    ☒ **Yes**, this well was profiled already. Date when well was profiled: 8/28/13
25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
    ☐ **No**, flow testing has not been conducted in this well
    ☐ **Yes**, flow testing of this well was conducted. Date of testing: _____
    Type of flow meter used: _____
    Measurements taken every _____ feet **[Please Attach Results]**
26. Weather Conditions During Deployment: Temp. 66F Wind 0-5 mph ☐ Sunny ☒ Overcast ☐ Raining ☐ Snowing
27. Weather Conditions During Retrieval: Temp. 40°F Wind 10-15 mph ☒ Sunny ☐ Overcast ☐ Raining ☐ Snowing

28. Field Sampling Technician: Name(s) and Company (please print clearly)

Name	Company
Chris Warren	Parsons
John McDougall	
Nick Loizos	

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-22 EW-1
3. Well Designation: EW1MW28
4. Well Permit Number: 25-32592

5 Type of Well ☒Monitoring ☐Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish. ☐Stick Up ☒Flush Mount

7 Location of Measuring Point ☒Top of Casing ☐Other (specify) _____

8 **NOTE**: PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) -0.31

9 Total Well Depth (fbgs) 15.11

10 Screened interval/open hole (fbgs) 5.11-15.11

11 Well Casing Diameter: 4 Material: ☒PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter) Diameter: 4 Material: ☒PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot) Screen Slot Size 0.01

14. Date and Time of Deployment Date: 9/30/14 Time: 1208

15. Depth to Ground Water Depth to ground water at time of deployment 6.51

16. Date and Time of Retrieval Date: 12/18/14 Time: 1315

17. Depth to Ground Water Depth to ground water at time of retrieval 6.60 TOC

18. Type of Deployment Line Used Diameter: 3/16" Material: poly

19. Material and Mass (oz.) of PDBS Weight Stainless Steel 20 oz (stainless steel recommended)

20. Type of PDBS Used
☐Lab Filled (Modified Trip Blank must be taken at time of deployment)
☒Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21. Dimensions of PDBS Length (in.) 18 Diameter (in.) 1.5 Filled _____

22. Position of PDBS Weight
☒Attached to bottom of PDBS and suspended in well
☐Attached to bottom of deployment line and suspended in well
☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23. Position of PDBS in Well Screen (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
11.21			

5th PDBS	6th PDBS	7th PDBS	8th PDBS

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐No, this well is being profiled during this sampling round
☒Yes, this well was profiled already. Date when well was profiled: _____

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☒No, flow testing has not been conducted in this well
☐Yes, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet [Please Attach Results]

26. Weather Conditions During Deployment Temp. 65F Wind 0-5 mph ☐Sunny ☒Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval Temp. 40F Wind 10-15mph ☒Sunny ☐Overcast ☐Raining ☐Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Chris Watson	PARSONS
Nick Cokes	
John McDougall	

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: ftmm-22, CW-1
3. Well Designation: CW-MW24
4. Well Permit Number: 29-32593

5. Type of Well: ☒Monitoring ☐Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other
6. Well Surface Finish: ☒Stick Up ☐Flush Mount
7. Location of Measuring Point: ☒Top of Casing ☐Other (specify) _____
8. NOTE: PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.
   Distance between measuring point and ground surface (ft.) -0.80
9. Total Well Depth (fbgs): 15.55
10. Screened interval/open hole (fbgs): 5.55-15.55
11. Well Casing: Diameter 4 Material ☒PVC ☐Carbon Steel ☐Stainless Steel
12. Well Screen (or open hole diameter): Diameter 4 Material ☒PVC ☐Carbon Steel ☐Stainless Steel
13. Screen Size (slot): Screen Slot Size 0.01

14. Date and Time of Deployment: Date: 9/30/14 Time: 1259
15. Depth to Ground Water: Depth to ground water at time of deployment 6.05
16. Date and Time of Retrieval: Date: 12/18/14 Time: 1330
17. Depth to Ground Water: Depth to ground water at time of retrieval 6.30
18. Type of Deployment Line Used: Diameter: 3/16" Material: poly

19. Material and Mass (oz.) of PDBS Weight: stainless steel 20 oz (stainless steel recommended)
20. Type of PDBS Used:
    ☐Lab Filled (Modified Trip Blank must be taken at time of deployment)
    ☒Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)
21. Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled _____
22. Position of PDBS Weight:
    ☒Attached to bottom of PDBS and suspended in well
    ☐Attached to bottom of deployment line and suspended in well
    ☐Attached to bottom of deployment line and resting on bottom of well (preferred)
23. Position of PDBS in Well Screen (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
10.55			

5th PDBS	6th PDBS	7th PDBS	8th PDBS

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
    ☐No, this well is being profiled during this sampling round
    ☒Yes, this well was profiled already. Date when well was profiled: 9/28/13
25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
    ☐No, flow testing has not been conducted in this well
    ☐Yes, flow testing of this well was conducted. Date of testing: _____
    Type of flow meter used: _____
    Measurements taken every _____ feet [Please Attach Results]
26. Weather Conditions During Deployment: Temp. 65°F Wind 0-5 mph ☐Sunny ☒Overcast ☐Raining ☐Snowing
27. Weather Conditions During Retrieval: Temp. 40°'s Wind 10-15 mph ☒Sunny ☐Overcast ☐Raining ☐Snowing

28. Field Sampling Technician. Name(s) and Company (please print clearly)

Name	Company
Chris Eaton	PARSONS
John McDougall	PARSONS
Nick Lewis	PARSONS

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-22, CW-1
3. Well Designation: CW1MW31
4. Well Permit Number: 29-43185

5 Type of Well: ☒ Monitoring ☐ Extraction ☐ Residential ☐ Public Supply ☐ Irrigation ☐ Other

6 Well Surface Finish: ☒ Stick Up ☐ Flush Mount

7 Location of Measuring Point: ☒ Top of Casing ☐ Other (specify) _____

8 NOTE: PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) 2.16

9 Total Well Depth (fbgs): 20.75

10 Screened interval/open hole (fbgs): 5.59 - 20.75

11 Well Casing: Diameter 4 Material ☒ PVC ☐ Carbon Steel ☐ Stainless Steel

12 Well Screen (or open hole diameter): Diameter 4 Material ☒ PVC ☐ Carbon Steel ☐ Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.01

14. Date and Time of Deployment: Date: 9/30/14 Time: 1304

15. Depth to Ground Water: Depth to ground water at time of deployment 10.44

16. Date and Time of Retrieval: Date: 12/18/14 Time: 1344

17. Depth to Ground Water: Depth to ground water at time of retrieval 9.78 toc

18. Type of Deployment Line Used: Diameter: 3/16" Material: poly

19 Material and Mass (oz.) of PDBS Weight: stainless steel 20 oz (stainless steel recommended)

20 Type of PDBS Used:
☐ Lab Filled (Modified Trip Blank must be taken at time of deployment)
☒ Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21 Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled _____

22 Position of PDBS Weight:
☒ Attached to bottom of PDBS and suspended in well
☐ Attached to bottom of deployment line and suspended in well
☐ Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
16.40 (8.26)			
5th PDBS	**6th PDBS**	**7th PDBS**	**8th PDBS**

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐ No, this well is being profiled during this sampling round
☒ Yes, this well was profiled already. Date when well was profiled: 9/20/13

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☐ No, flow testing has not been conducted in this well
☐ Yes, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet **[Please Attach Results]**

26. Weather Conditions During Deployment: Temp. 65°F Wind 0-5mph ☐ Sunny ☒ Overcast ☐ Raining ☐ Snowing

27. Weather Conditions During Retrieval: Temp. 42°F Wind 10-15mph ☒ Sunny ☐ Overcast ☐ Raining ☐ Snowing

28 Field Sampling Technician: Name(s) and Company (please print clearly)

Name	Company
Chris Watson	John McDougall (PARSONS)
Nick Loizos	

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-22 CW-1
3. Well Designation: CW1MW37
4. Well Permit Number: 29-43195

5. Type of Well: ☑ Monitoring ☐ Extraction ☐ Residential ☐ Public Supply ☐ Irrigation ☐ Other
6. Well Surface Finish: ☒ Stick Up ☐ Flush Mount
7. Location of Measuring Point: ☑ Top of Casing ☐ Other (specify) _____
8. **NOTE:** PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below any differences between the measuring point identified above and actual ground surface at the well head.
   Distance between measuring point and ground surface (ft): -0.54
9. Total Well Depth (fbgs): 14.24
10. Screened interval/open hole (fbgs): - 14.24
11. Well Casing: Diameter 4 Material ☑ PVC ☐ Carbon Steel ☐ Stainless Steel
12. Well Screen (or open hole diameter): Diameter 4 Material ☑ PVC ☐ Carbon Steel ☐ Stainless Steel
13. Screen Size (slot): Screen Slot Size .010

14. Date and Time of Deployment: Date: 9/30/14 Time: 1312
15. Depth to Ground Water: Depth to ground water at time of deployment 8.05
16. Date and Time of Retrieval: Date: 12/15/14 Time: 1337
17. Depth to Ground Water: Depth to ground water at time of retrieval 8.60 TOC
18. Type of Deployment Line Used: Diameter: 3/16" Material: poly

19. Material and Mass (oz.) of PDBS Weight: stainless steel 2oz (stainless steel recommended)
20. Type of PDBS Used:
    ☐ Lab Filled (Modified Trip Blank must be taken at time of deployment)
    ☑ Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)
21. Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled _____
22. Position of PDBS Weight:
    ☐ Attached to bottom of PDBS and suspended in well
    ☑ Attached to bottom of deployment line and suspended in well
    ☐ Attached to bottom of deployment line and resting on bottom of well (preferred)
23. Position of PDBS in Well Screen (ft. from measuring point to center of PDBS):

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
11.78			
5th PDBS	**6th PDBS**	**7th PDBS**	**8th PDBS**

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
    ☐ No, this well is being profiled during this sampling round
    ☑ Yes, this well was profiled already. Date when well was profiled: 8/28/13
25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
    ☐ No, flow testing has not been conducted in this well
    ☐ Yes, flow testing of this well was conducted. Date of testing: _____
    Type of flow meter used: _____
    Measurements taken every _____ feet **[Please Attach Results]**
26. Weather Conditions During Deployment: Temp. 65° Wind 0-5mph ☐ Sunny ☑ Overcast ☐ Raining ☐ Snowing
27. Weather Conditions During Retrieval: Temp. 40°F Wind 10-15mph ☑ Sunny ☐ Overcast ☐ Raining ☐ Snowing

28. Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Chris Wilson	PARSONS
Nick Lorenz	

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-22, CW-1
3. Well Designation: CW1MW28
4. Well Permit Number: 29-35312

5 Type of Well: ☒ Monitoring ☐ Extraction ☐ Residential ☐ Public Supply ☐ Irrigation ☐ Other

6 Well Surface Finish: ☐ Stick Up ☒ Flush Mount

7 Location of Measuring Point: ☒ Top of Casing ☐ Other (specify) _____

8 **NOTE:** PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) -1.00

9 Total Well Depth (fbgs): 41.24

10 Screened interval/open hole (fbgs): 31.24 - 41.24

11 Well Casing: Diameter 4" Material: ☒ PVC ☐ Carbon Steel ☐ Stainless Steel

12 Well Screen (or open hole diameter): Diameter 4" Material: ☒ PVC ☐ Carbon Steel ☐ Stainless Steel

13 Screen Size (slot): Screen Slot Size .02

14. Date and Time of Deployment: Date: 9/30/14 Time: 1255

15. Depth to Ground Water: Depth to ground water at time of deployment 9.00

16. Date and Time of Retrieval: Date: 12/18/14 Time: 1322

17. Depth to Ground Water: Depth to ground water at time of retrieval 8.46

18. Type of Deployment Line Used: Diameter: 3/16" Material: poly

19. Material and Mass (oz.) of PDBS Weight: stainless steel 20oz (stainless steel recommended)

20. Type of PDBS Used:
☐ Lab Filled (Modified Trip Blank must be taken at time of deployment)
☒ Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21. Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled _____

22. Position of PDBS Weight:
☒ Attached to bottom of PDBS and suspended in well
☐ Attached to bottom of deployment line and suspended in well
☐ Attached to bottom of deployment line and resting on bottom of well (preferred)

23. Position of PDBS in Well Screen (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
33.74			

5th PDBS	6th PDBS	7th PDBS	8th PDBS

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐ No, this well is being profiled during this sampling round
☒ Yes, this well was profiled already. Date when well was profiled: 9/30/14

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☐ No, flow testing has not been conducted in this well
☐ Yes, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet **[Please Attach Results]**

26. Weather Conditions During Deployment: Temp. 65°F Wind 0-5 mph ☐ Sunny ☒ Overcast ☐ Raining ☐ Snowing

27. Weather Conditions During Retrieval: Temp. 40°F Wind 10-15 Mph ☒ Sunny ☐ Overcast ☐ Raining ☐ Snowing

28. Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
John McDougall	PARSONS
Nick Lorenz	PARSONS
Chris Watson	PARSONS

APPENDIX G

FTMM-53: FORMER GAS STATION AT BUILDING 699

APPENDIX G: FTMM-53 Former Gas Station at Building 699

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1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT

Monitoring wells located within the FTMM-53 site were gauged on September 30, 2014. Monitoring well locations as well as other site features are provided in **Figure 1**. Details regarding the water level measurements are provided in **Table 1.** Groundwater elevations in monitoring wells ranged from 7.06 (699RW11) to 11.93 (699MW06) feet above mean sea level (amsl) and the inferred groundwater flow direction is to the east (**Figure 2**).

During the groundwater gauging, the physical condition of FTMM-53 monitoring wells were assessed. The site monitoring wells were found to be in good condition.

2.0 GROUNDWATER SAMPLING

Groundwater sampling was conducted at eight monitoring wells (699MW01, 699MW04, 699MW06, 699MW09, 699MW16, 699RW03, 699RW05, and 699RW11) located in FTMM-53 as part of the annual (fourth quarter) 2014 groundwater sampling event. FTMM-53 is sampled on a quarterly basis. The groundwater sampling program included measuring the depths to water in monitoring wells at FTMM-53, and sample collection in selected wells using passive diffusion bags (PDBs). PDBs were deployed September 30, 2014 and samples were retrieved on December 18, 2014. A PDB sampling summary is provided in **Table 2**. Groundwater samples were analyzed for Target Compound List (TCL) volatile organic compounds and tentatively identified compounds (VOCs+TICs) via United States Environmental Protection Agency (USEPA) Method SW8260C.

The samples were collected in accordance with the New Jersey Department of Environmental Protection (NJDEP) Field Sampling Procedures Manual (FSPM) and the SAP. Field blanks, duplicates, matrix spike, matrix spike duplicate and quality assurance (QA) split samples were collected for every 5% of samples collected per parameter, per matrix, in accordance with the Quality Assurance Project Plan (QAPP). Trip blanks accompanied each cooler each day in which VOCs were collected for laboratory analysis.

Completed NJDEP PDB checklists for each well sampled are provided in **Attachment A**.

3.0 HISTORICAL GROUNDWATER SAMPLING RESULTS

From April 1997 through June 2010, FTMM-53 monitoring wells were sampled for VOCs and metals.

In the last four historical rounds of quarterly groundwater sampling conducted at FTMM-53 from June 2010 to June 2011, samples were submitted for VOCs and metals. Historically, several metals were detected in exceedance of both their NJDEP Ground Water Quality Standard (GWQS) and background concentrations established in the 1995 Weston Report, including beryllium, cadmium, iron, lead, manganese, nickel and sodium. These metals are attributed to background conditions and are not associated with historical site operations.

Historically, several VOCs have been found to be in exceedance of their respective NJDEP GWQS in FTMM-53 monitoring wells. These VOCs include benzene, tetrachloroethene (PCE), trichloroethene (TCE), *tert*-butyl-alcohol (TBA), and tentatively identified compounds (TICs). Historical groundwater analytical results are presented in **Table 3**.

During the August 2013 Baseline Sampling Event, 14 monitoring wells were sampled for VOCs at FTMM-53. Benzene was detected above its NJDEP GWQS of 1 µg/L in monitoring wells 699MW06, 699RW03, 699RW05 and 699RW11. PCE (699MW16), 1,2,4-trimethylbenzene (699RW03, 699WR05), 1,3,5–trimethylbenzene (699RW05) and total xylenes (699RW05) were detected in exceedance of their respective NJDEP GWQS. Groundwater analytical detections from samples collected during the August 2013 Sampling Event are presented in **Table 3**.

The Final August 2013 Baseline Groundwater Sampling Report was accepted by the NJDEP in their February 5, 2015 letter. Based on this approval, 6 out of the 14 groundwater monitoring wells were removed from the long term monitoring (LTM) program including 616MW01, 699MW02, 699MW05, 699MW08, 699MW12, and 699MW15, and the remaining wells were to be sampled quarterly and analyzed for VOCs.

Groundwater sampling at FTMM-53 has been conducted on a quarterly basis for 2014, in March, May, and September. This data has been presented in reports submitted quarterly to the NJDEP. Low-flow purging and sampling (LFPS) and PDB methods were used in the first quarterly sampling event (March 2014) to confirm that MTBE was not present in the groundwater at the wells. Based on the absence of MTBE using LFPS, the PDB method was employed as the sampling method for FTMM-53.

Six VOCs (benzene, 1,2,4-trimethylbenzene 1,3,5–trimethylbenzene, xylenes, total VOC TICs and tetrachloroethene) were detected above their NJDEP GWQS during the previous three 2014 quarterly sampling events. Benzene was detected above its GWQS of 1 µg/L in monitoring wells 699RW03 (3.7J µg/L - 4.8J µg/L), 699RW05 (2.8 µg/L - 7.2 µg/L), 699RW11 (2.7 µg/L -11 µg/L), and 699MW06 (9 µg/L). 1,2,4-trimethylbenzene was detected above its GWQS of 100 µg/L in monitoring wells 699RW03 (110 µg/L -130 µg/L) and 699WR05 (130 µg/L- 790 µg/L). 1,3,5–trimethylbenzene was detected above its GWQS of 100 µg/L in one monitoring well, 699RW05 (23 µg/L -160 µg/L). Xylene (total) was detected above its GWQS of 1000 µg/L in monitoring well 699WR05 (720 µg/L- 2,410 µg/L). Total VOC TICs were detected above its GWQS of 500 µg/L at monitoring wells 699RW03 (813 µg/L) and 699RW05 (2,338 µg/L). Tetrachloroethene was detected above its NJDEP GWQS of 1 µg/L in one monitoring well, 699MW16 (1.3 µg/L). The groundwater analytical data for the samples collected during the three 2014 quarterly events are presented in **Table 4**.

4.0 ANNUAL (FOURTH QUARTER) 2014 GROUNDWATER RESULTS

Several VOCs were detected in groundwater samples collected during this annual (fourth quarter) event in conducted in December 2014. However, benzene, 1,2,4-trimethylbenzene and estimated total TICs were the only VOCs detected in the groundwater at FTMM-53 above their respective NJDEP GWQS in two wells. Benzene (1.9J µg/L), 1,2,4-trimethylbenzene (200J µg/L) and total TICs (1,181JN µg/L) were detected above their GWQS of 1 µg/L, 100 µg/L and 500 µg/L, respectively, at monitoring well 699RW05. Benzene was detected at well 699RW11 at an estimated concentration of 3J µg/L. Groundwater analytical detections from samples collected during the annual (fourth quarter) 2014 groundwater sampling event are presented in **Table 4**.

5.0 FINDINGS AND RECOMMENDATIONS

VOCs (benzene, 1,2,4-trimethylbenzene 1,3,5–trimethylbenzene, xylenes, total VOC TICs and tetrachloroethene) were detected above their NJDEP GWQS at least once during the 2014 quarterly sampling events. Benzene continues to be detected at monitoring wells 699RW05 and 699RW11 in exceedance of the NJDEP GWQS of 1 µg/L. 1,2,4-trimethylbenzene concentrations have been detected at monitoring wells 699RW03 and 699RW05 during the quarterly sampling with exceedances occurring in March 2014 (699RW03 and 699RW05) and in December 2014 (699RW05). 1,3,5–trimethylbenzene concentrations have been detected at monitoring well 699RW05 during the quarterly sampling with an exceedance occurring in March 2014. Concentrations of PCE continue to fluctuate around the NJDEP GWQS of 1 µg/L at 699MW16, with one NJDEP GWQS exceedance during the September 2014 sampling event. Fluctuation of total VOC TICs concentrations at wells 699RW03 and 699RW05 have been observed during the last four quarters from 813 µg/L to 2,338 µg/L (699RW03) in March 2014 and non-detect to 7.1 µg/L (699RW05) in July 2014. A review of historical data for VOC TICs shows similar fluctuation trends in past sampling events. Fluctuations of xylenes concentrations detected at well 699RW05 have occurred during the last four quarters, from 1.88J µg/L in September 2014 to 2,228 µg/L in March 2014. A review of historical data also indicates similar xylenes fluctuation trends in past sampling events.

Based on the available data, it is recommended that groundwater monitoring for VOCs continue on a quarterly basis using PDB sampling methodology at FTMM-53. Additionally**,** it is recommended that monitoring wells 699MW01, 699MW04 and 699MW09 be sampled using LFPS methods to determine if these monitoring wells meet the criteria to be removed from LTM program during the next sampling event. A review of historical groundwater sampling results is presented **Table 5**, which provides the matrix used to determine the status of the wells relative to future groundwater sampling and analyses.

TABLES

Table 1 Groundwater Gauging Data and Elevations (September 30, 2014)

Table 2 PDB Sampling Summary

Table 3 Historical Groundwater Analytical Results

Table 4 Groundwater Analytical Results - 2013 and 2014

Table 5 Review of Historical Groundwater Sampling Results

Table 1
Groundwater Gauging Data and Elevations (September 30, 2014)
Site FTMM-53 Former Gas Station at Building 699
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site/Well ID	Installation Date	Well Permit #	Y Coord. (North)	X Coord. (East)	Depth (ft. bgs)	Casing Length (ft)	Screen Length (ft)	TOC Elevation (ft)	Gauge Time	PID Reading (ppm)	Gauged Depth to Water (ft. TOC)	Gauged Depth to Bottom (ft. TOC)	Calculated Groundwater Elevation (ft)
Shallow Monitoring Wells													
616MW01	8/17/1995	29-33760	539282.81	618630.81	14.0	4.0	10.0	17.64	8:49	0.0	8.33	16.53	9.31
699MW01	11/2/1989	29-23677-1	539094.96	618689.92	15.0	2.0	13.0	14.48	8:26	0.0	5.27	13.36	9.21
699MW02	11/2/1989	29-23678-9	539212.46	618724.12	17.0	2.0	15.0	15.13	8:48	0.0	5.10	16.61	10.03
699MW03	11/2/1989	29-23679	539127.36	618797.76	15.0	1.5	13..5	15.80	8:41	0.0	5.30	12.06	10.50
699MW04	11/2/1989	29-23680-7	539111.31	618732.39	20.0	2.0	18.0	15.03	8:23	0.0	5.68	17.34	9.35
699MW05	11/30/1989	29-23808	539142.50	618894.90	15.0	3.0	12.0	13.22	8:42	0.0	5.79	14.86	7.43
699MW06	12/1/1989	29-23809-1	539071.24	618810.05	15.0	2.0	13.0	16.75	8:38	0.0	4.82	14.94	11.93
699MW08	12/1/1989	29-23811	539060.01	618593.22	15.0	2.0	13.0	14.88	8:29	0.0	5.54	13.20	9.34
699MW09	5/1/1990	29-24639	538950.01	618849.41	15.0	2.0	13.0	14.70	8:35	0.0	6.10	12.30	8.60
699MW12	10/14/1992	29-28907	538918.90	618702.39	15.0	5.0	10.0	15.50	8:32	0.0	6.21	16.76	9.29
699MW15	8/17/1995	29-33753	539404.56	618692.15	13.5	3.5	10.0	15.70	8:50	0.0	5.91	13.92	9.79
699MW16	8/17/1995	29-33757	538859.18	618896.35	13.5	3.5	10.0	15.27	8:36	0.0	6.16	14.10	9.11
699RW03	10/26/2000	29-43891	539070.64	618693.86	20.0	5.0	15.0	14.87	8:25	0.0	5.66	17.75	9.21
699RW04	10/26/2000	29-43892	538969.45	618694.38	19.0	4.0	15.0	15.38	8:30	0.0	4.89	12.10	10.49
699RW05	9/18/2007	29-56509	539121.71	618786.56	15.0	4.5	10.0	13.91	8:40	0.0	4.72	12.85	9.19
699RW11	5/20/1992	29-28031	539063.44	618770.99	20.0	5.0	15.0	13.13	8:44	0.0	6.07	17.08	7.06
600MW01	7/8/1994	29-30968	539100.48	618593.01	15.0	2.0	13.0	15.27	8:28	0.0	3.76	4.35	11.51

Notes:
1) The synoptic round of water levels in the wells was collected on September 30, 2014.
2) Information on well permit number, X and Y coordinates, depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
3) ft = feet
4) DTW = depth to water (measured from the top of well casing)
5) DTB = depth to bottom of well (measured from the top of well casing)
6) bgs = below ground surface
7) ppm = parts per million (of VOCs)
8) TOC = Top of Casing
9) Elevation = feet above mean sea level
10) N/A = information not available

Table 2
PDB Sampling Summary
Site FTMM-53 Former Gas Station at Building 699
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site/Well ID	Profile Date	Depth (ft. bgs)	Screen Length (ft.)	Screen Interval (ft. bgs)	TOC Elev. (ft)	Gauge Date	Gauge Time	PID Reading (ppm)	Gauged DTW (ft. below TOC)	Gauged DTB (ft. below TOC)	GW Elevation (ft)	Saturated Screen Length (ft)	PDB Depth to Center of Bag #1 (ft. below TOC)	PDB Depth to Center of Bag #2 (ft. below TOC)	PDB Deploy Date	PDB Deploy Time	PDB Sample Date	PDB Sample Time
699MW01	3/31/2014	15.0	13.0	2-15	14.48	9/30/2014	8:26	0.0	5.27	13.36	9.21	8.09	7.50	N/A	9/30/2014	10:35	12/18/2014	9:53
699MW04	3/31/2014	20.0	18.0	2-20	15.03	9/30/2014	8:23	0.0	5.68	17.34	9.35	11.66	7.68	N/A	9/30/2014	11:00	12/18/2014	10:15
699MW06	3/31/2014	15.0	13.0	2-15	16.75	9/30/2014	8:38	0.0	4.82	14.94	11.93	10.12	10.20	N/A	9/30/2014	10:46	12/18/2014	9:36
699MW09	3/31/2014	15.0	13.0	2-15	14.70	9/30/2014	8:35	0.0	5.10	11.30	9.60	6.20	7.35	N/A	9/30/2014	10:12	12/18/2014	9:42
699MW16	3/31/2014	13.5	10.0	3.5-13.5	15.27	9/30/2014	8:36	0.0	5.16	13.10	10.11	7.94	7.50	N/A	9/30/2014	10:07	12/18/2014	10:00
699RW03	3/31/2014	20.0	15.0	5-20	14.87	9/30/2014	8:25	0.0	4.66	16.75	10.21	12.09	8.20	N/A	9/30/2014	10:31	12/18/2014	9:30
699RW05	3/31/2014	15.0	10.0	5-15	13.91	9/30/2014	8:40	0.0	4.72	12.85	9.19	8.13	10.00	N/A	9/30/2014	10:58	12/18/2014	10:08
699RW11	3/31/2014	20.0	15.0	5-20	13.13	9/30/2014	8:44	0.0	6.07	17.08	7.06	11.01	8.30	N/A	9/30/2014	10:40	12/18/2014	9:48

Notes:
1) Information on well depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
2) DTW = depth to water (measured from the top of well casing)
3) DTB = depth to bottom of well (measured from the top of well casing)
4) TOC = Top of Casing
5) ft. AMSL = feet above mean sea level
6) LFPS = Low-Flow Purging and Sampling
7) PDB = Passive Diffusion Bag
8) N/A = not applicable
9) bgs = below ground surface

Table 3
Historical Groundwater Analytical Results
Site FTMM-53 Former Gas Station at Building 699
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				699MW01																			
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	43	43 Dup	44	45	46	46 Dup	47	48	48 Dup	49	50	LF1	LF2	LF3	LF4	LF5	LF6	LF6 Dup
Date Collected				3/30/2008	3/30/2008	6/4/2008	9/29/2008	12/30/2008	12/30/2008	3/27/2009	6/25/2009	6/25/2009	8/26/2009	11/16/2009	3/25/2010	6/16/2010	9/17/2010	1/10/2011	3/15/2011	6/3/2011	6/3/2011
ANALYTE/Lab ID				80100.04	80100.03	80190.04	80345.04	80482.04	80482.03	90129.04	90262.07	90262.03	90359.04	90444.04	10108.06	10268.06	10398.05	11017.06	11109.08	11236.04	11236.03
Volatile Organic Compounds (µg/L)																					
Acetone	6000	NLE	--	9.38	NA	1.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	7.04	NA	1.16 J	1.9 J	3.61	3.5	10.5	0.7 J	0.77 J	9.63	6.56 D	1.41	0.99	9.65	0.3 J	ND	0.35 J	0.48 J
Bromodichloromethane	1	80	--	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	1		--	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	248.83	NA	44.45	146.77	195.49	190.2	419.87 D	5.68	8.35	587.78 D	376.59 D	45.63	11.97	143.24 D	16.25	1.18	12.68	17.45
4-Methyl-2-pentanone	NLE		--	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.36 J	0.3 J
Styrene	100	100	--	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3		--	2.62	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	39.13	NA	4.06	9.25	15.06	14.94	53.67 D	0.31 J	0.49 J	30.28	13.27 D	1.72	ND	9.9	0.31 J	ND	0.67	0.92
m +*p* -Xylenes	1000	10,000	--	571.88	NA	60.92	75.57	197.66	193.83	874.09 D	2.09 J	3.94 J	606.88 D	218.2 D	12.23	0.38 J	4.25	0.74 J	ND	13.24	18.57
o -Xylene	1000	10,000	--	462.49	NA	96.17	155	235.14	231.05	940.67 D	15.21	22.31	866.01 D	448.44 D	36.35	13.8	97.6 D	6.32	2.42	14.23	20.51
TICs*	500	NLE	--	438	NA	238	477	642	654	1018	80	106	462	9140	562	281	1983	139	7	154	188
Metals (µg/L)																					
Aluminum	200	NLE	121000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	883	1390	198	375	1620	1620	2810
Antimony	6	6	20.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.65 ER	7.44 ER	6.88 ER	<6.0	<6.0	<6.0	<6.0
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.49 ER	3.07 ER	11.79	<3.0	<3.0	9	12.1
Barium	6000	2000	699.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	76	63.1	41.9	<200	<200	<200	<200
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.428 ER	1.65	0.1 ER	<1.0	<1.0	<1.0	<1.0
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.13	ND	0.835 ER	<3.0	<3.0	<3.0	<3.0
Calcium	NLE	NLE	45400.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	54000	20500	23500	114000	15700	16600	16700
Chromium	70	100	191.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<10	11.2	<10	<10
Cobalt	NLE	NLE	18.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.36	10.8	2.42	<50	<50	<50	<50
Copper	1300	1300	65.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	2.03 ER	1.28 ER	<10	13.8	<10	<10
Iron	300	NLE	431000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	18600	3710	23000	3990	3880	7640	10500
Lead	5	15	22.70	0.914 ER	1.8 ER	16.6	9.2	3.72 ER	3.07 ER	7.3	5.62	6.34	ND	2.53 ER	ND	ND	ND	<3.0	6	<3.0	5.8
Magnesium	NLE	NLE	62700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19200	12400	13300	21600	<5000	6470	6620
Manganese	50	NLE	331	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	819	565	561	345	21.9	323	328
Mercury	2	2	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.1 ER	ND	ND	<0.20	<0.20	<0.20
Nickel	100	NLE	187	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.24	12.4	1.49 ER	<10	<10	<10	<10
Potassium	NLE	NLE	137000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9530	5400	6520	13100	<10000	<10000	<10000
Selenium	40	50	29.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.6	NR	2.7 ER	<10	<10	<10	<10
Silver	40	NLE	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	1.04 ER	3.7 ER	<10	<10	<10	<10
Sodium	50000	NLE	21500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	529000 E	285000	316000	577000	121000	248000	254000
Thallium	2	2	5.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<2.0	<2.0	<2.0	<2.0
Vanadium	60	NLE	108	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.31 ER	ND	ND	<50	<50	<50	<50
Zinc	2000	NLE	233	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	48.2 ER	74.6	ND	<20	<20	25.3	38.2

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

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LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

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Table 3
Historical Groundwater Analytical Results
Site FTMM-53 Former Gas Station at Building 699
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				699MW02																	
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	44	45	46	47	48	49	49 Dup	50	51	51 Dup	LF1	LF1 Dup	LF2	LF3	LF4	LF5	LF6	LF6 Dup
Date Collected				3/30/2008	6/4/2008	9/29/2008	12/30/2008	3/27/2009	6/24/2009	6/24/2009	8/26/2009	11/16/2009	11/16/2009	3/26/2010	3/26/2010	6/15/2010	9/16/2010	1/6/2011	3/15/2011	5/27/2011	5/27/2011
ANALYTE/Lab ID				80100.05	80190.05	80345.05	80482.05	90129.05	90261.04	90261.03	90359.05	90444.05	90444.03	10109.04	10109.03	10265.05	10396.01	11014.01	11109.04	11229.04	11229.03
Volatile Organic Compounds (µg/L)																					
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NLE		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	100	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m +*p* -Xylenes	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o -Xylene	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																					
Aluminum	200	NLE	121000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	129	139	68.2 ER	68.6 ER	<200	437	2550	1570
Antimony	6	6	20.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.66 ER	7.2 ER	7.15 ER	15.4	<6.0	<6.0	<6.0	<6.0
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.36 ER	0.67 ER	1.92 ER	2.77 ER	<3.0	<3.0	<3.0	5.7
Barium	6000	2000	699.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.46	9.43	10.4	15.1	<200	<200	<200	<200
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	0.158 ER	0.157 ER	<1.0	<1.0	<1.0	<1.0
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.19 ER	0.938 ER	0.572 ER	1.44 ER	<3.0	<3.0	<3.0	<3.0
Calcium	NLE	NLE	45400.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	72800	69600	52900	66600	128000	62800	<5000	109000
Chromium	70	100	191.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<10	<10	19.8	10.8
Cobalt	NLE	NLE	18.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.8 ER	0.716 ER	4.52	7.47	<50	<50	<50	<50
Copper	1300	1300	65.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.22 ER	5.74	1.64 ER	2.11 ER	<10	<10	<10	<10
Iron	300	NLE	431000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	186 ER	240 ER	3380	5800	<100	865	5000	7760
Lead	5	15	22.70	ND	ND	2.48 ER	4.18 ER	2.33 ER	1.65 ER	1.76 ER	ND	6.58	ND	ND	ND	3.05 ER	ND	<3.0	<3.0	5.3	5.7
Magnesium	NLE	NLE	62700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5110	4890	8560	12200	27500	5040	<5000	13600
Manganese	50	NLE	331	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.12	6.42	38.8	117	69.2	<15	23.7	123
Mercury	2	2	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	0.07 ER	ND	ND	<0.20	<0.20	<0.20
Nickel	100	NLE	187	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.82	5.25	9.75	12.2	26.8	<10	10.6	20.4
Potassium	NLE	NLE	137000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2860	2880	3100	5820	10200	25900	<10000	13300
Selenium	40	50	29.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	62	59.2	NR	1.53 ER	<10	<10	<10	<10
Silver	40	NLE	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 ER	3.12 ER	ND	ND	<10	<10	<10	<10
Sodium	50000	NLE	21500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12700	11100	14700	18300	60200	16300	<10000	33900
Thallium	2	2	5.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.86 ER	ND	ND	ND	<2.0	<2.0	<2.0	<2.0
Vanadium	60	NLE	108	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 ER	1.64 ER	ND	0.771 ER	<50	<50	<50	<50
Zinc	2000	NLE	233	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27.5 ER	30.2 ER	49.2 ER	62.7	61.7	77.4	51	96.7

Notes:

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NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

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Table 3
Historical Groundwater Analytical Results
Site FTMM-53 Former Gas Station at Building 699
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				699MW04						699MW04										
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	42	43	43 Dup	44	44 Dup	45	46	47	48	49	LF1	LF2	LF3	LF4	LF4 Dup	LF5	LF6
Date Collected				3/30/2008	6/4/2008	6/4/2008	9/29/2008	9/29/2008	12/30/2008	3/27/2009	6/25/2009	8/26/2009	11/16/2009	3/26/2010	6/16/2010	9/17/2010	1/10/2011	1/10/2011	3/15/2011	6/2/2011
ANALYTE/Lab ID				80100.06	80190.06	80190.03	80345.06	80345.03	80482.06	90129.06	90262.08	90359.06	90444.06	10109.05	10268.07	10398.06	11017.04	11017.03	11109.09	11236.05
Volatile Organic Compounds (µg/L)																				
Acetone	6000	NLE	--	1.47 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	9.35	32.21	45.15	25.37	25.44	13.31	20.32	21.62	4.69	7.34	ND	ND	9.07	1.62	1.8	ND	58.16
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	39.32	36.72	88.46	17.61	18.31	53.28	118.21 D	289.42 D	5.46	66.76	0.99	1.71	93.76	3.83	4.04	0.3 J	85.35
4-Methyl-2-pentanone	NLE		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	78.05	48.41	115.01	40.79	41.42	27.62	49.49	47.72	5.05	22.77	6.16	3.03	25.13	10.87	10.06	1.95	12.58
Styrene	100	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.67	ND	ND	ND	8.35
Tetrachloroethene	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	3.77	2.53	3.53	2.36	2.57	4.2	5.65	16.03	0.48 J	2.73	ND	ND	10.33	ND	ND	ND	7.35
m +*p* -Xylenes	1000	10,000	--	85.47	52.71	140.04	25.36	26.96	81.63	139.14 D	540.66 D	7.71	71.01	0.97 J	ND	36.73	1.92	1.95	0.46 J	100.97
o -Xylene	1000	10,000	--	48.91	35.43	43.03	15.05	16.09	71.16	141.12 D	396.44 D	4.57	70.77	1.1	1.34	30.9	0.52	0.42 J	0.3 J	63.17
TICs*	500	NLE	--	296	503	575	747	807	405	1302	923	778	626	ND	4	1219	90	108	ND	968
Metals (µg/L)																				
Aluminum	200	NLE	121000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2430	1470	161	287	262	4080	4220
Antimony	6	6	20.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.88 ER	9.37 ER	12.8	<6.0	<6.0	<6.0	<6.0
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.11 ER	1.18 ER	4.18 ER	<3.0	<3.0	<3.0	6.7
Barium	6000	2000	699.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	60.7	51.5	15.1	<200	<200	<200	<200
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.46	1.33	0.078 ER	<1.0	<1.0	1.1	1.1
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.09	1.39 ER	1.4 ER	<3.0	<3.0	4.3	<3.0
Calcium	NLE	NLE	45400.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	85100	58700	22500	24500	25200	89600	50700
Chromium	70	100	191.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<10	<10	<10	<10
Cobalt	NLE	NLE	18.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	23.8	6.44	0.876 ER	<50	<50	<50	<50
Copper	1300	1300	65.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<10	<10	<10	<10
Iron	300	NLE	431000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1510	838	27700	4110	4470	1800	14600
Lead	5	15	22.70	ND	4.56 ER	4.25 ER	4.69 ER	8.37	4.31 ER	6.92	1.63 ER	ND	ND	ND	ND	ND	<3.0	<3.0	<3.0	3.5
Magnesium	NLE	NLE	62700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22300	16000	6260	6250	6390	22500	14200
Manganese	50	NLE	331	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	854	470	149	226	228	651	528
Mercury	2	2	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.09 ER	ND	ND	ND	<0.20	<0.20
Nickel	100	NLE	187	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	46.7	14	1.95 ER	<10	<10	34.2	19.8
Potassium	NLE	NLE	137000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8630	6000	3020	<10000	<10000	<10000	<10000
Selenium	40	50	29.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	61.9	NR	1.77 ER	<10	<10	<10	<10
Silver	40	NLE	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.03 ER	ND	4.2 ER	<10	<10	<10	<10
Sodium	50000	NLE	21500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	256000	177000	102000	111000	113000	293000	201000
Thallium	2	2	5.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<2.0	<2.0	<2.0	<2.0
Vanadium	60	NLE	108	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.42 ER	0.622 ER	ND	<50	<50	<50	<50
Zinc	2000	NLE	233	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	376	90.6	13.3 ER	20.3	<20	180	107

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

Third Quarter 2011 data is not included due to an incomplete analytical data package.

Table 3
Historical Groundwater Analytical Results
Site FTMM-53 Former Gas Station at Building 699
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				699MW05																	
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	44	45	46	47	48	49	50	51	LF1	LF1 Dup	LF2	LF3	LF4	LF5	LF5 Dup	LF6
Date Collected				3/30/2008	6/4/2008	9/29/2008	12/30/2008	3/27/2009	6/24/2009	8/26/2009	11/16/2009	3/24/2010	3/24/2010	6/16/2010	9/16/2010	1/5/2011	3/11/2011	3/11/2011	6/1/2011
ANALYTE/Lab ID				80100.07	80190.07	80345.07	80482.07	90129.07	90261.05	90359.07	90444.07	10105.04	10105.03	10268.05	10396.04	11010.01	11103.07	11103.03	11233.06
Volatile Organic Compounds (µg/L)																			
Acetone	6000	NLE	--	10.92	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	3.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NLE		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	100	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m +*p* -Xylenes	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o -Xylene	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																			
Aluminum	200	NLE	121000	NA	NA	NA	NA	NA	NA	NA	NA	432	367	27.9 ER	4860	2650	1640	1620	3020
Antimony	6	6	20.70	NA	NA	NA	NA	NA	NA	NA	NA	5.38 ER	9.89 ER	6.14 ER	10	<6.0	<6.0	<6.0	<6.0
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	NA	NA	NA	1.76 ER	0.84 ER	ND	1.44 ER	<3.0	<3.0	<3.0	<3.0
Barium	6000	2000	699.00	NA	NA	NA	NA	NA	NA	NA	NA	51.4	59.5	41.2	181	<200	<200	<200	<200
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	3.59	1.2	<1.0	<1.0	1.7
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	0.579 ER	1.98 ER	<3.0	<3.0	<3.0	<3.0
Calcium	NLE	NLE	45400.00	NA	NA	NA	NA	NA	NA	NA	NA	29100	35000	20700	28300	30000	21800	22000	29500
Chromium	70	100	191.00	NA	NA	NA	NA	NA	NA	NA	NA	1.87 ER	1.77 ER	ND	ND	<10	<10	<10	<10
Cobalt	NLE	NLE	18.30	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	8.46	<50	<50	<50	<50
Copper	1300	1300	65.60	NA	NA	NA	NA	NA	NA	NA	NA	8.44	9.08	2.01 ER	1.38 ER	<10	<10	<10	<10
Iron	300	NLE	431000	NA	NA	NA	NA	NA	NA	NA	NA	827	619	ND	54 ER	220	1060	983	754
Lead	5	15	22.70	ND	ND	1.99 ER	2.8 ER	ND	ND	ND	ND	ND	ND	ND	ND	<3.0	<3.0	<3.0	<3.0
Magnesium	NLE	NLE	62700	NA	NA	NA	NA	NA	NA	NA	NA	3040	3640	2990	8200	6590	<5000	<5000	6180
Manganese	50	NLE	331	NA	NA	NA	NA	NA	NA	NA	NA	51.7	59.9	46.7	268	285	127	128	288
Mercury	2	2	0.26	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	0.06 ER	ND	ND	<0.20	<0.20	<0.20
Nickel	100	NLE	187	NA	NA	NA	NA	NA	NA	NA	NA	4.49 ER	4.17 ER	1.37 ER	19.1	10.8	<10	<10	16.6
Potassium	NLE	NLE	137000	NA	NA	NA	NA	NA	NA	NA	NA	15000	15900	6370	4350	<10000	<10000	<10000	<10000
Selenium	40	50	29.60	NA	NA	NA	NA	NA	NA	NA	NA	29.6	42.5	NR	1.45 ER	<10	<10	<10	<10
Silver	40	NLE	ND	NA	NA	NA	NA	NA	NA	NA	NA	2.13 ER	3.01 ER	0.903 ER	ND	<10	<10	<10	<10
Sodium	50000	NLE	21500	NA	NA	NA	NA	NA	NA	NA	NA	862000 E	1030000 E	530000 E	246000	267000	192000	190000	256000
Thallium	2	2	5.50	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<2.0	<2.0	<2.0	<2.0
Vanadium	60	NLE	108	NA	NA	NA	NA	NA	NA	NA	NA	4.09 ER	3.45 ER	1.23 ER	0.679 ER	<50	<50	<50	<50
Zinc	2000	NLE	233	NA	NA	NA	NA	NA	NA	NA	NA	17.5 ER	18.8 ER	49.2 ER	137	58.1	155	142	61.9

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

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Table 3
Historical Groundwater Analytical Results
Site FTMM-53 Former Gas Station at Building 699
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				699MW06																699MW08	
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	43	44	45	46	47	48	49	50	LF1	LF2	LF3	LF4	LF5	LF6	LF6 Dup	44	45
Date Collected				3/30/2008	6/4/2008	9/29/2008	12/30/2008	3/27/2009	6/24/2009	8/26/2009	11/16/2009	3/26/2010	6/16/2010	9/17/2010	1/5/2011	3/11/2011	6/2/2011	6/2/2011	3/30/2008	6/4/2008
ANALYTE/Lab ID				80100.08	80190.08	80345.08	80482.08	90129.08	90261.12	90359.08	90444.08	10109.06	10268.08	10398.07	11010.04	11103.05	11235.04	11235.03	80100.09	80190.09
Volatile Organic Compounds (µg/L)																				
Acetone	6000	NLE	--	2.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	6.27	34.82	73.8	9.24	26.73	ND	13.93	2.08	0.59	1.03	4.22	ND	ND	0.69	0.78	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	22.95	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	50.27	283.29	333.11	44.48	427.63 D	ND	735.48 D	31.39	26.31	11.82	3.02	ND	ND	89.43	98.65	ND	ND
4-Methyl-2-pentanone	NLE		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	6.02	2.93	0.72 J	0.58 J	0.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	100	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	2.69	13.82	5.1	1.21 J	14.15	ND	11.3	0.44 J	1.43	ND	ND	ND	ND	0.83	0.91	ND	ND
m +*p* -Xylenes	1000	10,000	--	65.44	224.14	176.29	33.93	541.18 D	ND	1047.96 D	38.73	37.9	6.55	3.32	ND	ND	78.95	88.01	ND	ND
o -Xylene	1000	10,000	--	29.01	108.41	25.77	14.49	197.76 D	ND	146.76 D	5.82	16.54	0.75	1.2	ND	ND	20.48	21.27	ND	ND
TICs*	500	NLE	--	86	210	212	123	632	ND	533	75	57	56	104	ND	ND	294	319	ND	ND
Metals (µg/L)																				
Aluminum	200	NLE	121000	NA	NA	NA	NA	NA	NA	NA	NA	12900	852	232	<200	3400	3070	2000	NA	NA
Antimony	6	6	20.70	NA	NA	NA	NA	NA	NA	NA	NA	7.69 ER	ND	13.2	<6.0	<6.0	<6.0	<6.0	NA	NA
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	NA	NA	NA	10.16	2.2 ER	2.04 ER	<3.0	<3.0	16	12.7	NA	NA
Barium	6000	2000	699.00	NA	NA	NA	NA	NA	NA	NA	NA	63.1	22.5	19.9	<200	<200	<200	<200	NA	NA
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	NA	NA	NA	0.819	0.066 ER	ND	<1.0	<1.0	<1.0	<1.0	NA	NA
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	NA	NA	NA	1.84 ER	ND	0.552 ER	<3.0	<3.0	<3.0	<3.0	NA	NA
Calcium	NLE	NLE	45400.00	NA	NA	NA	NA	NA	NA	NA	NA	39400	18400	27900	74200	11500	20300	20400	NA	NA
Chromium	70	100	191.00	NA	NA	NA	NA	NA	NA	NA	NA	104	7.24	8.12	<10	29.3	33.5	22.8	NA	NA
Cobalt	NLE	NLE	18.30	NA	NA	NA	NA	NA	NA	NA	NA	6.02	ND	0.662 ER	<50	<50	<50	<50	NA	NA
Copper	1300	1300	65.60	NA	NA	NA	NA	NA	NA	NA	NA	1.41 ER	ND	6.86	<20	13.5	<10	<10	NA	NA
Iron	300	NLE	431000	NA	NA	NA	NA	NA	NA	NA	NA	21000	1710	2840	489	7480	12200	8590	NA	NA
Lead	5	15	22.70	ND	5.99	3.76 ER	2.53 ER	6.11	ND	ND	ND	8.68	ND	ND	<3.0	4.8	5	3.1	ND	ND
Magnesium	NLE	NLE	62700	NA	NA	NA	NA	NA	NA	NA	NA	8290	3790	4360	8660	<5000	<5000	<5000	NA	NA
Manganese	50	NLE	331	NA	NA	NA	NA	NA	NA	NA	NA	73.3	48.7	14.5	<15	23.2	36.3	34.2	NA	NA
Mercury	2	2	0.26	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.08 ER	ND	ND	<0.20	<0.20	<0.20	NA	NA
Nickel	100	NLE	187	NA	NA	NA	NA	NA	NA	NA	NA	18.7	4.11 ER	4.6 ER	<10	<10	<10	<10	NA	NA
Potassium	NLE	NLE	137000	NA	NA	NA	NA	NA	NA	NA	NA	8810	2330	2340	<10000	<10000	<10000	<10000	NA	NA
Selenium	40	50	29.60	NA	NA	NA	NA	NA	NA	NA	NA	23.8	NR	2.62 ER	<10	<10	<10	<10	NA	NA
Silver	40	NLE	ND	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.885 ER	ND	<10	<10	<10	<10	NA	NA
Sodium	50000	NLE	21500	NA	NA	NA	NA	NA	NA	NA	NA	63100	62300	72600	78200	20500	57200	57000	NA	NA
Thallium	2	2	5.50	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	NA	NA
Vanadium	60	NLE	108	NA	NA	NA	NA	NA	NA	NA	NA	56.2	3.5 ER	2.16 ER	<50	<50	<50	<50	NA	NA
Zinc	2000	NLE	233	NA	NA	NA	NA	NA	NA	NA	NA	121	18 ER	16.7 ER	<20	21.9	36.6	30.1	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

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Table 3
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Site FTMM-53 Former Gas Station at Building 699
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				699MW08														699MW09							
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	46	47	48	48 Dup	49	50	51	LF1	LF2	LF2 Dup	LF3	LF4	LF5	LF6	44	45	46	47	48	49	50	51
Date Collected				9/29/2008	12/30/2008	3/27/2009	3/27/2009	6/24/2009	8/26/2009	11/16/2009	3/24/2010	6/16/2010	6/16/2010	9/16/2010	12/30/2010	3/11/2011	6/2/2011	3/30/2008	6/4/2008	9/29/2008	12/30/2008	3/27/2009	6/24/2009	8/26/2009	11/16/2009
ANALYTE/Lab ID				80345.09	80482.09	90129.09	90129.03	90261.06	90359.13	90444.09	10105.06	10268.04	10268.03	10396.05	10577.05	11103.08	11235.05	80100.10	80190.10	80345.10	80482.10	90129.10	90261.08	90359.09	90444.10
Volatile Organic Compounds (µg/L)																									
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NLE		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.07 J	ND	ND	ND	ND	ND
Styrene	100	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.97	ND	ND	ND	1.65	1.88
1,1,2,2-Tetrachloroethane	3		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m +*p* -Xylenes	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o -Xylene	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																									
Aluminum	200	NLE	121000	NA	NA	NA	NA	NA	NA	NA	2110	6020	6090	6330	6060	3780	5160	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	6	6	20.70	NA	NA	NA	NA	NA	NA	NA	9.45 ER	10.5	12.3	14.6	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	NA	NA	ND	1.5 ER	ND	1.19 ER	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA
Barium	6000	2000	699.00	NA	NA	NA	NA	NA	NA	NA	153	320	322	405	339	230	306	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	NA	NA	0.885	2.46	2.51	3.31	2.2	1.5	2.1	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	NA	NA	3.16	2.88	2.77	3.01	<3.0	<3.0	4	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	NLE	NLE	45400.00	NA	NA	NA	NA	NA	NA	NA	56000	50500	51200	53400	49900	48900	54800	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	70	100	191.00	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NLE	NLE	18.30	NA	NA	NA	NA	NA	NA	NA	24.5	18.6	19	22.9	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1300	1300	65.60	NA	NA	NA	NA	NA	NA	NA	1.25 ER	ND	ND	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Iron	300	NLE	431000	NA	NA	NA	NA	NA	NA	NA	88.2 ER	ND	ND	ND	167	404	597	NA	NA	NA	NA	NA	NA	NA	NA
Lead	5	15	22.70	ND	4.27 ER	ND	ND	ND	ND	ND	ND	2.74 ER	ND	ND	<3.0	<3.0	<3.0	ND	1.51 ER	6.44	4.34 ER	2.25 ER	ND	ND	ND
Magnesium	NLE	NLE	62700	NA	NA	NA	NA	NA	NA	NA	22900	29900	30300	32100	26100	21100	23400	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	50	NLE	331	NA	NA	NA	NA	NA	NA	NA	1950	980	997	1280	965	1150	1500	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	2	0.26	NA	NA	NA	NA	NA	NA	NA	ND	0.08 ER	0.09 ER	ND	ND	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	100	NLE	187	NA	NA	NA	NA	NA	NA	NA	42.9	30.2	30.4	34.8	30.3	31.8	43.6	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	NLE	NLE	137000	NA	NA	NA	NA	NA	NA	NA	10600	9280	9360	13300	<10000	<10000	11800	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	40	50	29.60	NA	NA	NA	NA	NA	NA	NA	52.8	NR	NR	1.41 ER	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Silver	40	NLE	ND	NA	NA	NA	NA	NA	NA	NA	3.12 ER	ND	ND	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	50000	NLE	21500	NA	NA	NA	NA	NA	NA	NA	248000	265000	268000	296000	265000	261000	275000	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	5.50	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	60	NLE	108	NA	NA	NA	NA	NA	NA	NA	1.06 ER	ND	ND	ND	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	2000	NLE	233	NA	NA	NA	NA	NA	NA	NA	75	111	112	148	125	105	114	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

Third Quarter 2011 data is not included due to an incomplete analytical data package.

Table 3
Historical Groundwater Analytical Results
Site FTMM-53 Former Gas Station at Building 699
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				699MW09						699MW12														
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF1	LF2	LF3	LF4	LF5	LF6	44	45	46	47	48	49	50	51	LF1	LF2	LF3	LF3 Dup	LF4	LF4 Dup	LF5	LF6
Date Collected				3/26/2010	6/16/2010	9/17/2010	1/5/2011	3/11/2011	6/1/2011	3/30/2008	6/4/2008	9/29/2008	12/30/2008	3/27/2009	6/24/2009	8/26/2009	11/16/2009	3/24/2010	6/15/2010	9/17/2010	9/17/2010	12/30/2010	12/30/2010	3/11/2011	6/2/2011
ANALYTE/Lab ID				10109.08	10268.09	10398.08	11010.03	11103.04	11233.05	80100.11	80190.11	80345.11	80482.11	90129.11	90261.07	90359.10	90444.11	10105.05	10265.07	10398.04	10398.03	10577.04	10577.03	11103.06	11235.06
Volatile Organic Compounds (µg/L)																									
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	0.53	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NLE		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	1.78	2.93	ND	ND	0.51 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	100	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	ND	0.51	2.32	1.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m +*p* -Xylenes	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o -Xylene	1000	10,000	--	ND	ND	0.28 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																									
Aluminum	200	NLE	121000	2810	3310	2700	3540	1430	5180	NA	NA	NA	NA	NA	NA	NA	NA	2650	3000	1640	1540	1310	1330	2080	3160
Antimony	6	6	20.70	ND	ND	6.6 ER	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	5.04 ER	6.01 ER	6.33 ER	ND	<6.0	<6.0	<6.0	<6.0
Arsenic	3	10	89.30	0.65 ER	0.77 ER	ND	<3.0	<3.0	3.6	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<3.0	<3.0	<3.0	<3.0
Barium	6000	2000	699.00	33.4	90.9	90.5	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	101	150	137	128	<200	<200	<200	<200
Beryllium	1	4	2.10	1.02	1.31	1.35	1.8	<1.0	1.9	NA	NA	NA	NA	NA	NA	NA	NA	1.03	1.88	1.98	1.86	1.1	1.1	1	1.6
Cadmium	4	5	9.50	ND	0.793 ER	1.22 ER	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	1.68 ER	1.73 ER	1.67 ER	1.07 ER	<3.0	<3.0	<3.0	<3.0
Calcium	NLE	NLE	45400.00	2250	12700	11100	13900	<5000	9230	NA	NA	NA	NA	NA	NA	NA	NA	21900	20200	10300	9690	8580	8700	15300	25600
Chromium	70	100	191.00	2.48 ER	ND	1.95 ER	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	ND	1.3 ER	ND	ND	<10	<10	<10	<10
Cobalt	NLE	NLE	18.30	4.68	7.91	7.32	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	12.2	15.1	13	12.1	<50	<50	<50	<50
Copper	1300	1300	65.60	ND	ND	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	2.89 ER	<10	<10	<10	<10
Iron	300	NLE	431000	1520	954	1640	2390	545	4150	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<100	<100	353	162
Lead	5	15	22.70	ND	ND	ND	<3.0	<3.0	<3.0	ND	ND	ND	3.64 ER	2.09 ER	ND	ND	ND	ND	ND	ND	ND	<3.0	<3.0	<3.0	<3.0
Magnesium	NLE	NLE	62700	3690	4450	3970	6680	<5000	6320	NA	NA	NA	NA	NA	NA	NA	NA	20600	24900	19300	18200	14700	14800	17500	21900
Manganese	50	NLE	331	10.1	61.8	63.5	68.8	<15	54.9	NA	NA	NA	NA	NA	NA	NA	NA	171	121	78.5	73.8	66.3	66.9	109	202
Mercury	2	2	0.26	ND	0.08 ER	ND	ND	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	<0.20	<0.20
Nickel	100	NLE	187	10.7	11.9	12.1	23.5	<10	22.3	NA	NA	NA	NA	NA	NA	NA	NA	37.5	49.4	44.3	42.7	36.6	37	36.7	43
Potassium	NLE	NLE	137000	1250	1470	1860	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	4840	4120	4550	4280	<10000	<10000	<10000	<10000
Selenium	40	50	29.60	ND	NR	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	21.5	NR	ND	1.8 ER	<10	<10	<10	<10
Silver	40	NLE	ND	ND	0.628 ER	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	1.33 ER	ND	ND	ND	<10	<10	<10	<10
Sodium	50000	NLE	21500	42300	97100	106000	153000	31700	141000	NA	NA	NA	NA	NA	NA	NA	NA	51800	64500	65000	62000	29400	29800	39500	66700
Thallium	2	2	5.50	0.68 ER	ND	ND	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<2.0	<2.0	<2.0	<2.0
Vanadium	60	NLE	108	1.01 ER	ND	1.32 ER	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<50	<50	<50	<50
Zinc	2000	NLE	233	49.1 ER	178	159	142	37.5	187	NA	NA	NA	NA	NA	NA	NA	NA	130	167	172	165	143	144	130	158

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

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Table 3
Historical Groundwater Analytical Results
Site FTMM-53 Former Gas Station at Building 699
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				699MW15																699MW16				
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	44	45	46	47	48	49	50	51	LF1	LF1 Dup	LF2	LF3	LF4	LF4 Dup	LF5	LF6	44	45	46	47	48
Date Collected				3/30/2008	6/4/2008	9/29/2008	12/30/2008	3/27/2009	6/24/2009	8/26/2009	11/16/2009	3/25/2010	3/25/2010	6/15/2010	9/16/2010	1/7/2011	1/7/2011	3/15/2011	5/27/2011	3/30/2008	6/4/2008	9/29/2008	12/30/2008	3/27/2009
ANALYTE/Lab ID				80100.12	80190.12	80345.12	80482.12	90129.12	90261.11	90359.11	90444.12	10108.04	10108.03	10265.06	10396.03	11016.04	11016.03	11109.06	11229.06	80100.13	80190.13	80345.13	80482.13	90129.13
Volatile Organic Compounds (µg/L)																								
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.41 J	ND	ND	0.45 J
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.88 J	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	32.23	39.61	4.68	23.77	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NLE		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	100	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.72 J	1.93 J	0.51 J	0.65 J
1,1,2,2-Tetrachloroethane	3		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m +*p* -Xylenes	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o -Xylene	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																								
Aluminum	200	NLE	121000	NA	NA	NA	NA	NA	NA	NA	NA	10200	6350	273	971	903	895	2460	3620	NA	NA	NA	NA	NA
Antimony	6	6	20.70	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	8.17 ER	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	NA	NA	NA	4.64 ER	4.25 ER	2.06 ER	2.27 ER	<3.0	<3.0	<3.0	3.5	NA	NA	NA	NA	NA
Barium	6000	2000	699.00	NA	NA	NA	NA	NA	NA	NA	NA	112	90.3	61.3	63.6	<200	<200	<200	<200	NA	NA	NA	NA	NA
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	NA	NA	NA	0.469 ER	0.26 ER	0.071 ER	0.088 ER	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	NA	NA	NA	0.649 ER	ND	ND	ND	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA
Calcium	NLE	NLE	45400.00	NA	NA	NA	NA	NA	NA	NA	NA	20900	17900	10800	6460	6860	6790	11000	9630	NA	NA	NA	NA	NA
Chromium	70	100	191.00	NA	NA	NA	NA	NA	NA	NA	NA	53.8	32.9	1.46 ER	4.15 ER	<10	<10	14.2	19.3	NA	NA	NA	NA	NA
Cobalt	NLE	NLE	18.30	NA	NA	NA	NA	NA	NA	NA	NA	0.969 ER	0.643 ER	ND	2.88	<50	<50	<50	<50	NA	NA	NA	NA	NA
Copper	1300	1300	65.60	NA	NA	NA	NA	NA	NA	NA	NA	42.6	32.9	13.7	12.6	11.8	13.1	34.2	26.7	NA	NA	NA	NA	NA
Iron	300	NLE	431000	NA	NA	NA	NA	NA	NA	NA	NA	15900	9990	163 ER	1450	1390	1390	4540	6670	NA	NA	NA	NA	NA
Lead	5	15	22.70	2.29 ER	7.12	5.62	7.16	1.79 ER	3.85 ER	3.04 ER	2.71 ER	31.1	19.7	3.5 ER	ND	3	3.2	10.9	13.3	ND	ND	ND	4 ER	ND
Magnesium	NLE	NLE	62700	NA	NA	NA	NA	NA	NA	NA	NA	5420	4230	2300	2400	<5000	<5000	<5000	<5000	NA	NA	NA	NA	NA
Manganese	50	NLE	331	NA	NA	NA	NA	NA	NA	NA	NA	28	20.2	17.9	41	<15	<15	20.2	23.4	NA	NA	NA	NA	NA
Mercury	2	2	0.26	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	0.07 ER	ND	ND	ND	<0.20	<0.20	NA	NA	NA	NA	NA
Nickel	100	NLE	187	NA	NA	NA	NA	NA	NA	NA	NA	8.68	6.39	2.14 ER	4.07 ER	<10	<10	<10	<10	NA	NA	NA	NA	NA
Potassium	NLE	NLE	137000	NA	NA	NA	NA	NA	NA	NA	NA	8200	6310	3330	3680	<10000	<10000	<10000	<10000	NA	NA	NA	NA	NA
Selenium	40	50	29.60	NA	NA	NA	NA	NA	NA	NA	NA	12.2 ER	15.1 ER	NR	1.75 ER	<10	<10	<10	<10	NA	NA	NA	NA	NA
Silver	40	NLE	ND	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	0.841 ER	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA
Sodium	50000	NLE	21500	NA	NA	NA	NA	NA	NA	NA	NA	6230	5490	5100	4880 ER	<10000	<10000	<10000	<10000	NA	NA	NA	NA	NA
Thallium	2	2	5.50	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA
Vanadium	60	NLE	108	NA	NA	NA	NA	NA	NA	NA	NA	36.8	22.4	ND	2.84 ER	<50	<50	<50	<50	NA	NA	NA	NA	NA
Zinc	2000	NLE	233	NA	NA	NA	NA	NA	NA	NA	NA	135	ND	57.5	91.5	71	72.5	82.6	121	NA	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

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Table 3
Historical Groundwater Analytical Results
Site FTMM-53 Former Gas Station at Building 699
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				699MW16												699RW03								
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	49	50	50 Dup	51	LF1	LF2	LF2 Dup	LF3	LF4	LF5	LF6	LF6 Dup	1	2	3	4	5	6	7	8	9
Date Collected				6/24/2009	8/26/2009	8/26/2009	11/16/2009	3/26/2010	6/17/2010	6/17/2010	9/17/2010	1/5/2011	3/15/2011	6/1/2011	6/1/2011	12/30/2008	3/27/2009	6/25/2009	8/26/2009	11/16/2009	3/31/2010	6/17/2010	9/27/2010	1/10/2011
ANALYTE/Lab ID				90261.09	90359.12	90359.03	90444.13	10109.07	10271.04	10271.03	10398.09	11010.02	11109.07	11233.04	11233.03	80482.14	90129.15	90262.04	90359.14	90444.15	10116.01	10271.05	10413.01	11017.07
Volatile Organic Compounds (µg/L)																								
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	26.93	257.57 D	42.28 D	32.01	13.49	ND	11.29	1.3	9.75
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	0.42 J	ND	ND	ND	ND	143.23	230.43 D	146.89 D	78.96 D	85.08	0.96	24.37	15.89	93.59
4-Methyl-2-pentanone	NLE		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	24.58	48.59	20.22	18.89	17.26	ND	8.96	1.69	5.57
Styrene	100	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	46.89	ND	ND	28.08	ND	8.81
Tetrachloroethene	1		--	ND	0.93	1.04	1.09	0.96	0.99	0.97	1.71	1.06	0.59	0.42 J	0.41 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.54	378.26 D	16.08	3.77	1.96	ND	0.58	2.21	2.39
m +*p* -Xylenes	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	269.83	444.31 D	245.27 D	75.41	71.66	0.68 J	6.02	45.92	72.6
o -Xylene	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	0.22 J	ND	ND	ND	ND	115.12	201.3 D	125.01 D	39.17	51.14	0.19 J	8.02	36.84	61.47
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	646	1140	455	348	187	8	468	313	858
Metals (µg/L)																								
Aluminum	200	NLE	121000	NA	NA	NA	NA	2540	1470	1580	2160	2520	1830	1910	1910	NA	NA	NA	NA	NA	1390	79600	2390	19800
Antimony	6	6	20.70	NA	NA	NA	NA	ND	ND	ND	ND	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	5.94 ER	7.49 ER	8.4 ER	<6.0
Arsenic	3	10	89.30	NA	NA	NA	NA	ND	1.76 ER	1.74 ER	ND	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	ND	19.42	1.74 ER	10.5
Barium	6000	2000	699.00	NA	NA	NA	NA	20.4	17.2	18.9	19.7	<200	<200	<200	<200	NA	NA	NA	NA	NA	11.4	36.9	111	<200
Beryllium	1	4	2.10	NA	NA	NA	NA	0.654	0.524	0.544	0.682	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	0.063 ER	10.5	0.86	3.6
Cadmium	4	5	9.50	NA	NA	NA	NA	ND	ND	ND	0.981 ER	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	0.548 ER	13.5	3.71	<3.0
Calcium	NLE	NLE	45400.00	NA	NA	NA	NA	7870	5230	5670	4990	5640	<5000	<5000	<5000	NA	NA	NA	NA	NA	15500	19300	28800	23900
Chromium	70	100	191.00	NA	NA	NA	NA	ND	1.03 ER	1.21 ER	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	5.28	17.2	2.21 ER	<10
Cobalt	NLE	NLE	18.30	NA	NA	NA	NA	5.99	4.13	4.41	5.43	<50	<50	<50	<50	NA	NA	NA	NA	NA	1.9 ER	720	10.1	151
Copper	1300	1300	65.60	NA	NA	NA	NA	ND	ND	ND	2.31 ER	<10	<10	<10	<10	NA	NA	NA	NA	NA	12	ND	12	<10
Iron	300	NLE	431000	NA	NA	NA	NA	98.3 ER	2920	3080	659	183	741	607	1010	NA	NA	NA	NA	NA	2930	287000 ER	23600	84900
Lead	5	15	22.70	ND	ND	ND	ND	ND	ND	ND	ND	<3.0	<3.0	<3.0	<3.0	2.61 ER	12.9	11.3	ND	7.14	ND	29.3	2.82 ER	<3.0
Magnesium	NLE	NLE	62700	NA	NA	NA	NA	19000	14500	15500	18000	16400	11700	11100	10800	NA	NA	NA	NA	NA	3770	702 ER	17400	31200
Manganese	50	NLE	331	NA	NA	NA	NA	73.1	51.2	54.6	58.7	61.5	46.1	41.3	41.3	NA	NA	NA	NA	NA	45.4	15200	615	785
Mercury	2	2	0.26	NA	NA	NA	NA	ND	0.12 ER	0.08 ER	ND	ND	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	ND	0.14 ER	0.28 ER	ND
Nickel	100	NLE	187	NA	NA	NA	NA	27.5	20.1	20.7	25.6	25	18.2	19.6	21	NA	NA	NA	NA	NA	4.35 ER	1430	16.4	346
Potassium	NLE	NLE	137000	NA	NA	NA	NA	3700	3320	3630	4260	<10000	<10000	<10000	<10000	NA	NA	NA	NA	NA	3250	8410	5810	<10000
Selenium	40	50	29.60	NA	NA	NA	NA	8.1 ER	NR	NR	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	25.4	NR	2.07 ER	<10
Silver	40	NLE	ND	NA	NA	NA	NA	ND	1.25 ER	0.814 ER	ND	<10	<10	<10	<10	NA	NA	NA	NA	NA	ND	37.7	2.85 ER	<10
Sodium	50000	NLE	21500	NA	NA	NA	NA	16600	11600	12000	14500	12500	12100	12900	12300	NA	NA	NA	NA	NA	118000	152000	286000	292000
Thallium	2	2	5.50	NA	NA	NA	NA	1.41 ER	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	ND	0.94 ER	ND	<4.0
Vanadium	60	NLE	108	NA	NA	NA	NA	ND	ND	ND	ND	<50	<50	<50	<50	NA	NA	NA	NA	NA	3.5 ER	40.9	ND	<50
Zinc	2000	NLE	233	NA	NA	NA	NA	57.7	45.5 ER	46.6 ER	89.7	65.8	46.2	47.2	52.5	NA	NA	NA	NA	NA	357	3920	2300	950

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

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NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

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Table 3
Historical Groundwater Analytical Results
Site FTMM-53 Former Gas Station at Building 699
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				699RW03		699RW04					699RW05										
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	10	11	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11
Date Collected				3/15/2011	6/3/2011	3/30/2008	6/4/2008	9/29/2008	3/27/2009	6/3/2011	6/4/2008	9/29/2008	12/30/2008	6/25/2009	8/26/2009	11/16/2009	6/17/2010	9/30/2010	1/10/2011	3/15/2011	6/3/2011
ANALYTE/Lab ID				11109.10	11236.07	80100.14	80190.15	80345.16	90129.16	11236.06	80190.16	80345.15	80482.15	90262.06	90359.15	90444.16	10271.07	10420.01	11017.08	11109.12	11236.09
Volatile Organic Compounds (µg/L)																					
Acetone	6000	NLE	--	ND	6.85	6.19	2.54	ND	ND	ND	34.42	37.06	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	16.33	4.49	23.33	28.19	0.38 J	1.43 J	ND	878.97	87.27	499.65	177.44 D	212.5 D	2.87	8.64	2.2	ND	0.19 J	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	3.88	ND	ND	ND	ND	ND	1.16 J	0.98 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	0.78	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	88.78	5.5	94.27	27.78	ND	0.77 J	ND	770.76	215.88	647.7	73.58 D	178.64 D	0.9	8.43	ND	0.78	7.44	ND
4-Methyl-2-pentanone	NLE		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	10.23	8.39	24.27	30.85	9.96	2.21	ND	38.69	1.94 J	10.37	43.36	25.01	2.31	1.01	ND	ND	ND	ND
Styrene	100	100	--	ND	ND	0.37 J	ND	ND	ND	ND	6.94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	21.19	108.06	106.76	183.71	33.67	ND	ND	ND	ND	ND	139.97	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	ND	5.81	ND	0.72 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	1.24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	4.14	1.45	24.81	10.11	ND	ND	ND	1338.47	1005.58	2611.43	55.93 D	235.6 D	1.74	13.16	ND	ND	4.78	0.41 J
m +*p* -Xylenes	1000	10,000	--	141.87	12.54	252.17	44.87	ND	1.25 J	ND	2391.41	624.26	2484.88	108.35 D	359.37 D	2.43	23.02	ND	2.47	34.85	0.95 J
o -Xylene	1000	10,000	--	74.75	7.35	88.98	27.17	ND	0.43 J	ND	785.91	269.99	1110.8	60.47 D	197.15 D	2.51	7.78	ND	1.34	14.91	0.54
TICs*	500	NLE	--	934	193	186	170	9	ND	6	400	359	189	450	748	ND	69	ND	ND	15	ND
Metals (µg/L)																					
Aluminum	200	NLE	121000	65900	57300	NA	NA	NA	NA	5180	NA	NA	NA	NA	NA	NA	1110	1180	10600	54700	1770
Antimony	6	6	20.70	<6.0	<6.0	NA	NA	NA	NA	<6.0	NA	NA	NA	NA	NA	NA	7.85 ER	12.8	<6.0	<12	<6.0
Arsenic	3	10	89.30	11.9	21.7	NA	NA	NA	NA	<3.0	NA	NA	NA	NA	NA	NA	2.02 ER	23.95	7.2	26.8	<3.0
Barium	6000	2000	699.00	<400	<200	NA	NA	NA	NA	<200	NA	NA	NA	NA	NA	NA	22.3	35	<200	<400	<200
Beryllium	1	4	2.10	10	4.1	NA	NA	NA	NA	1.9	NA	NA	NA	NA	NA	NA	0.069 ER	0.214 ER	<1.0	4	<1.0
Cadmium	4	5	9.50	<3.0	13.7	NA	NA	NA	NA	6.5	NA	NA	NA	NA	NA	NA	ND	ND	<3.0	<6.0	<3.0
Calcium	NLE	NLE	45400.00	36900	41100	NA	NA	NA	NA	58700	NA	NA	NA	NA	NA	NA	35800	15300	80300	28600	16500
Chromium	70	100	191.00	<10	86.1	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA	7.97	5.08	72.2	424	14.8
Cobalt	NLE	NLE	18.30	323	220	NA	NA	NA	NA	<50	NA	NA	NA	NA	NA	NA	ND	ND	<50	<100	<50
Copper	1300	1300	65.60	<10	64.2	NA	NA	NA	NA	93.2	NA	NA	NA	NA	NA	NA	4.25 ER	15.6	31.2	122	<10
Iron	300	NLE	431000	177000	233000	NA	NA	NA	NA	3990	NA	NA	NA	NA	NA	NA	3270	1670	17700	120000	4090
Lead	5	15	22.70	5.5	22.9	6.87	21.8	9.68	6.02	10.6	9.22	5.84	3.96 ER	45	ND	64.1	ND	4.12 ER	11.2	82.2	<3.0
Magnesium	NLE	NLE	62700	48900	34100	NA	NA	NA	NA	21800	NA	NA	NA	NA	NA	NA	4150	20.1 ER	6350	13200	<5000
Manganese	50	NLE	331	757	676	NA	NA	NA	NA	1600	NA	NA	NA	NA	NA	NA	95.3	28500	113	980	27.8
Mercury	2	2	0.26	<0.20	<0.20	NA	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	NA	0.14 ER	ND	ND	<0.40	<0.20
Nickel	100	NLE	187	892	664	NA	NA	NA	NA	53.8	NA	NA	NA	NA	NA	NA	3.45 ER	3.37 ER	10.2	55.2	<10
Potassium	NLE	NLE	137000	<20000	<10000	NA	NA	NA	NA	12600	NA	NA	NA	NA	NA	NA	4350	2380	<10000	23200	<10000
Selenium	40	50	29.60	<10	<10	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA	NR	2.68 ER	<10	<20	<10
Silver	40	NLE	ND	<10	<10	NA	NA	NA	NA	<10	NA	NA	NA	NA	NA	NA	1 ER	ND	<10	<20	<10
Sodium	50000	NLE	21500	303000	169000	NA	NA	NA	NA	308000	NA	NA	NA	NA	NA	NA	198000	28500	311000	96900	36000
Thallium	2	2	5.50	<2.0	<2.0	NA	NA	NA	NA	<2.0	NA	NA	NA	NA	NA	NA	ND	ND	<2.0	<4.0	<2.0
Vanadium	60	NLE	108	<50	56.2	NA	NA	NA	NA	<50	NA	NA	NA	NA	NA	NA	4.6 ER	5.92	<50	213	<50
Zinc	2000	NLE	233	2310	2430	NA	NA	NA	NA	385	NA	NA	NA	NA	NA	NA	17 ER	44.5 ER	180	624	<20

Notes:
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Table 3
Historical Groundwater Analytical Results
Site FTMM-53 Former Gas Station at Building 699
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				699RW11					699RW11									616MW01					
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	44	45	46	47	48	49	50	51	52	53	54	55	56	57	44	45	46	47	48	49
Date Collected				3/30/2008	6/4/2008	9/29/2008	12/30/2008	3/27/2009	6/25/2009	8/26/2009	11/16/2009	3/31/2010	6/17/2010	9/27/2010	1/10/2011	3/15/2011	6/3/2011	3/30/2008	6/4/2008	9/29/2008	12/30/2008	3/27/2009	6/24/2009
ANALYTE/Lab ID				80100.15	80190.17	80345.17	80482.16	90129.17	90262.05	90359.16	90444.17	10116.02	10271.06	10413.02	11017.05	11109.11	11236.08	80100.16	80190.14	80345.14	80482.17	90129.14	90261.10
Volatile Organic Compounds (µg/L)																							
Acetone	6000	NLE	--	5.2	4.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	0.58 J	158	2.94	248.4	0.87 J	8.41	0.25 J	4.06	0.33 J	6.11	ND	6.65	97.92	6.39	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	0.29 J	224.45	ND	29.66	ND	5.22	ND	1	ND	3.55	ND	ND	108.63 D	0.99	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NLE		--	ND	1.29 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	7.92	16.33	4.59	13.4	0.44 J	1.8 J	ND	9.94	2.34	15.53	ND	2.97	2.96	1.52	ND	ND	ND	ND	ND	ND
Styrene	100	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	165.09	ND	ND	ND	15.29	119.7	ND	185.93	112.41	237.89	ND	ND	ND	6.87	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	ND	ND	ND	ND	ND	0.57 J	ND	2.86	ND	13.52	ND	0.42 J	0.62	0.3 J	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	0.83	ND	2.83	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	7.53	0.41 J	16.32	ND	1.7 J	ND	ND	ND	0.3 J	ND	0.4 J	3.81	0.39 J	ND	ND	ND	ND	ND	ND
m +*p* -Xylenes	1000	10,000	--	0.38 J	302.59	0.86 J	34.32	ND	4.78	ND	ND	ND	ND	0.62 J	0.54 J	151.75	0.87 J	ND	ND	ND	ND	ND	ND
o -Xylene	1000	10,000	--	ND	82.49	0.59 J	16.36	ND	0.68 J	ND	ND	ND	ND	0.43 J	0.42 J	25.59	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	278	136	459	ND	159	ND	182	5	436	ND	35	739	181	ND	ND	ND	ND	ND	ND
Metals (µg/L)																							
Aluminum	200	NLE	121000	NA	NA	NA	NA	NA	NA	NA	NA	26700	46600	2840	5280	9220	36100	NA	NA	NA	NA	NA	NA
Antimony	6	6	20.70	NA	NA	NA	NA	NA	NA	NA	NA	ND	14	17.6	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	NA	NA	NA	ND	2.34 ER	1.61 ER	<3.0	<3.0	6.1	NA	NA	NA	NA	NA	NA
Barium	6000	2000	699.00	NA	NA	NA	NA	NA	NA	NA	NA	48.2	18.2	66.7	<200	<200	<200	NA	NA	NA	NA	NA	NA
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	NA	NA	NA	2.46	3.96	0.585	<1.0	<1.0	2.8	NA	NA	NA	NA	NA	NA
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	NA	NA	NA	17.7	14.4	4.39	3.8	4.9	8.9	NA	NA	NA	NA	NA	NA
Calcium	NLE	NLE	45400.00	NA	NA	NA	NA	NA	NA	NA	NA	49000	28300	55200	29200	67200	45300	NA	NA	NA	NA	NA	NA
Chromium	70	100	191.00	NA	NA	NA	NA	NA	NA	NA	NA	3.75 ER	22.8	ND	<10	<10	30	NA	NA	NA	NA	NA	NA
Cobalt	NLE	NLE	18.30	NA	NA	NA	NA	NA	NA	NA	NA	144	253	30.5	<50	<50	136	NA	NA	NA	NA	NA	NA
Copper	1300	1300	65.60	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	2.66 ER	<10	<10	<10	NA	NA	NA	NA	NA	NA
Iron	300	NLE	431000	NA	NA	NA	NA	NA	NA	NA	NA	97200	261000 E	147 ER	11700	27800	138000	NA	NA	NA	NA	NA	NA
Lead	5	15	22.70	ND	3.37 ER	3.54 ER	3 ER	2.47 ER	3.91 ER	ND	9.16	2.85 ER	24.2	ND	<3.0	<3.0	<3.0	ND	ND	ND	5.45	2.64 ER	2.13 ER
Magnesium	NLE	NLE	62700	NA	NA	NA	NA	NA	NA	NA	NA	26200	39600	16200	7640	15500	24800	NA	NA	NA	NA	NA	NA
Manganese	50	NLE	331	NA	NA	NA	NA	NA	NA	NA	NA	402	570	601	709	414	572	NA	NA	NA	NA	NA	NA
Mercury	2	2	0.26	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.12 ER	0.26 ER	ND	<0.20	<0.20	NA	NA	NA	NA	NA	NA
Nickel	100	NLE	187	NA	NA	NA	NA	NA	NA	NA	NA	365	663	83.9	62.4	93.8	372	NA	NA	NA	NA	NA	NA
Potassium	NLE	NLE	137000	NA	NA	NA	NA	NA	NA	NA	NA	6540	5730	6990	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA
Selenium	40	50	29.60	NA	NA	NA	NA	NA	NA	NA	NA	ND	NR	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA
Silver	40	NLE	ND	NA	NA	NA	NA	NA	NA	NA	NA	ND	41.5	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA
Sodium	50000	NLE	21500	NA	NA	NA	NA	NA	NA	NA	NA	162000	158000	197000	118000	140000	185000	NA	NA	NA	NA	NA	NA
Thallium	2	2	5.50	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA
Vanadium	60	NLE	108	NA	NA	NA	NA	NA	NA	NA	NA	7.72	ND	ND	<50	<50	<50	NA	NA	NA	NA	NA	NA
Zinc	2000	NLE	233	NA	NA	NA	NA	NA	NA	NA	NA	1570	2810	432	239	367	1390	NA	NA	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

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ER = Estimated Result

Third Quarter 2011 data is not included due to an incomplete analytical data package.

Table 3
Historical Groundwater Analytical Results
Site FTMM-53 Former Gas Station at Building 699
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				616MW01									
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	50	51	LF1	LF2	LF2 Dup	LF3	LF4	LF5	LF5 Dup	LF6
Date Collected				8/26/2009	11/16/2009	3/25/2010	6/15/2010	6/15/2010	9/16/2010	1/7/2011	3/15/2011	3/15/2011	5/27/2011
ANALYTE/Lab ID				90359.17	90444.14	10108.05	10265.04	10265.03	10396.02	11016.05	11109.05	11109.03	11229.05
Volatile Organic Compounds (µg/L)													
Acetone	6000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NLE		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	100	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	3		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m +*p* -Xylenes	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o -Xylene	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)													
Aluminum	200	NLE	121000	NA	NA	681	121	122	119	508	1770	1740	2560
Antimony	6	6	20.70	NA	NA	ND	ND	ND	ND	<6.0	<6.0	<6.0	<6.0
Arsenic	3	10	89.30	NA	NA	0.87 ER	ND	ND	ND	<3.0	<3.0	<3.0	6.9
Barium	6000	2000	699.00	NA	NA	29.8	75.6	74	80.7	<200	<200	<200	<200
Beryllium	1	4	2.10	NA	NA	ND	0.331 ER	0.345 ER	0.269 ER	<1.0	<1.0	<1.0	<1.0
Cadmium	4	5	9.50	NA	NA	ND	ND	ND	ND	<3.0	<3.0	<3.0	<3.0
Calcium	NLE	NLE	45400.00	NA	NA	8070	1520	1600	1870	<5000	5680	5470	108000
Chromium	70	100	191.00	NA	NA	5.51	ND	ND	ND	<10	14.9	14.4	16.1
Cobalt	NLE	NLE	18.30	NA	NA	ND	1.12 ER	1.17 ER	1.05 ER	<50	<50	<50	<50
Copper	1300	1300	65.60	NA	NA	ND	1	2.15 ER	2.75 ER	<10	14.2	<10	<10
Iron	300	NLE	431000	NA	NA	1310	ND	ND	151 ER	180	4070	3930	9520
Lead	5	15	22.70	3.33 ER	ND	ND	ND	ND	ND	<3.0	5	4	9.4
Magnesium	NLE	NLE	62700	NA	NA	2750	2570	2600	2530	<5000	<5000	<5000	13600
Manganese	50	NLE	331	NA	NA	7.31	14.3	15.2	13	24.5	<15	<15	125
Mercury	2	2	0.26	NA	NA	ND	ND	ND	ND	ND	<0.20	<0.20	<0.20
Nickel	100	NLE	187	NA	NA	3.05 ER	5.98	6.38	7.43	14.3	<10	<10	22.5
Potassium	NLE	NLE	137000	NA	NA	2420	1570	1540	1780	<10000	<10000	<10000	13500
Selenium	40	50	29.60	NA	NA	14 ER	NR	NR	ND	<10	<10	<10	<10
Silver	40	NLE	ND	NA	NA	ND	1.06 ER	1.55 ER	ND	<10	<10	<10	<10
Sodium	50000	NLE	21500	NA	NA	4040 ER	6270	5900	5900	<10000	<10000	<10000	33600
Thallium	2	2	5.50	NA	NA	ND	ND	ND	ND	<2.0	<2.0	<2.0	<2.0
Vanadium	60	NLE	108	NA	NA	3.15 ER	ND	ND	0.641 ER	<50	<50	<50	<50
Zinc	2000	NLE	233	NA	NA	8.97 ER	17.3 ER	17.7 ER	20.9 ER	34.2	38.9	20.4	109

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

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ER = Estimated Result

Third Quarter 2011 data is not included due to an incomplete analytical data package.

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-53 Former Gas Station at Building 699
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	616MW01	699MW01								699MW02	699MW04
Sample ID			FTMM-53-GW-616MW01	FTMM-53-GW-699MW01	FTMM-53-GW-699MW01-10.55	FTMM-53-GW-699MW101-10.5	FTMM-53-GW-699MW01-12.5	FTMM-53-GW-699MW01-7.5	FTMM-53-GW-699MW01-7.5	FTMM-53-GW-699MW01-7.5	FTMM-53-GW-699MW01-7.5	FTMM-53-GW-699MW02	FTMM-53-GW-699MW04
Sample Date			8/19/2013	8/21/2013	3/12/2014	3/12/2014	3/31/2014	3/31/2014	7/1/2014	9/30/2014	12/16/2014	8/19/2013	8/21/2013
QA/QC			SA	SA	SA	DU	SA	SA	SA	SA	SA	SA	SA
Sampling Method			LFPS	LFPS	LFPS	LFPS	PDB	PDB	PDB	PDB	PDB	LFPS	LFPS
Volatile Organic Compounds (µg/l)													
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 1	< 1
1,1,2-Trichloroethane	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	< 1	**4.6 J**	**0.31 J**	**0.26 J**	< 1	< 1	**0.3 J**	**1.3 J**	< 1	< 1	**3.3 J**
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	< 1	**0.21 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 1	< 1
2-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	**1.4 J**	< 5	< 5	< 5	< 5	< 5	**1.7 J**	**6.4 B**	< 5	**2.3 J**	< 5
Benzene	1	5	< 1	**0.25 J**	< 1	< 1	< 1	< 1	**0.31 J**	**0.52 J**	< 1	< 1	**0.97 J**
Bromobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	70	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 1	< 1
Ethyl benzene	700	700	< 1	**7.1**	**0.55 J**	**0.59 J**	< 1	< 1	**0.27 J**	**1.6 J**	< 1	< 1	**2.7 J**
Hexachlorobutadiene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	< 1	**2 J**	**0.25 J**	**0.28 J**	< 1	< 1	< 1	**0.29 J**	< 1	< 1	**1.4 J**
Meta & Para Xylenes	1,000	NLE	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	**1.3 J**
Methyl bromide	10	NLE	< 1	< 1	< 1	< 1	**0.32 J**	< 1	< 1	< 1	< 1 UJ	< 1	< 1
Methyl butyl ketone	300	NLE	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	< 1	**1.2 J**	< 1	< 1	< 1	< 1	**0.3 J**	**0.39 J**	< 1	< 1	**1.3 J**
n-Butylbenzene	100	NLE	< 1	**0.59 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.27 J**
Ortho Xylene	1,000	NLE	< 1	**0.28 J**	< 1	< 1	< 1	< 1	< 1	**0.4 J**	< 1	< 1	**4.4 J**
p-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	< 1	**4.2 J**	**0.42 J**	**0.43 J**	< 1	< 1	< 1	**0.39 J**	< 1	< 1	**0.9 J**
sec-Butylbenzene	100	NLE	< 1	**0.71 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.87 J**
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	NA	NA	NA	NA	NA	NA	NA	< 20	< 20	NA	NA
tert-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.23 J**
Tetrachloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	600	1,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.27 J**	< 1	< 1	**0.46 J**
Total Xylenes	1,000	10,000	< 3	**0.28 J**	< 3	< 3	< 3	< 3	< 3	**0.4 J**	< 3	< 3	**5.7 J**
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TIC VOCs (µg/l)													
Total TIC, Volatile	500	NLE	ND	**49.8**	ND	ND	ND	ND	ND	ND	ND	ND	**117.8**

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-53 Former Gas Station at Building 699
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	699MW04						699MW05	699MW06		
Sample ID			FTMM-53-GW-699MW04-10.3	FTMM-53-GW-699MW04-13.85	FTMM-53-GW-699MW04-6.85	FTMM-53-GW-699MW04-6.85	FTMM-53-GW-699MW04-6.85	FTMM-53-GW-699MW04-8.0	FTMM-53-GW-699MW05	FTMM-53-GW-699MW06	FTMM-53-GW-699MW06-10	FTMM-53-GW-699MW06-10.20
Sample Date			3/12/2014	3/31/2014	3/31/2014	7/1/2014	9/30/2014	12/18/2014	8/20/2013	8/20/2013	3/12/2014	3/31/2014
QA/QC			SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
Sampling Method			LFPS	PDB	PDB	PDB	PDN	PDB	LFPS	LFPS	LFPS	PDB
Volatile Organic Compounds (µg/l)												
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.26 J**
1,2,4-Trimethylbenzene	100	NLE	< 1	**1.9 J**	**2.3 J**	< 1	**0.25 J**	**4.6 J**	< 1	**76**	**0.8 J**	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	< 1	**0.78 J**	**0.99 J**	< 1	< 1	**3 J**	< 1	**10**	< 1	< 1
1,3-Dichlorobenzene	600	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 1	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	**1.5 J**	< 5	< 5	**2.2 J**	**11 B**	**8.4**	< 5	< 5	< 5	**2.2 J**
Benzene	1	5	< 1	**0.23 J**	**0.23 J**	< 1	**0.37 J**	< 1	< 1	**1.5 J**	< 1	< 1
Bromobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	70	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.25 J**	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	< 1	**0.87 J**	**1.1 J**	< 1	**0.28 J**	< 1	< 1	**83**	**1.5 J**	< 1
Hexachlorobutadiene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**7.6**	**0.23 J**	< 1
Meta & Para Xylenes	1,000	NLE	< 2	**3 J**	**3.4 J**	< 2	< 2	< 2	< 2	**100**	**1.2 J**	< 2
Methyl bromide	10	NLE	< 1	**0.33 J**	**0.47 J**	< 1	< 1	< 1 UJ	< 1	< 1	< 1	**0.43 J**
Methyl butyl ketone	300	NLE	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**2.5 J**	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	< 1	**1.5 J**	**0.52 J**	< 1	< 1	**0.25 J**	**0.23 J**	**15**	**0.23 J**	< 1
n-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	< 1	**2.4 J**	**2.5 J**	< 1	**1 J**	**0.52 J**	< 1	**5.5**	**0.31 J**	< 1
p-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**12**	**0.24 J**	< 1
sec-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.71 J**	< 1	< 1
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	NA	NA	NA	NA	< 20	< 20	NA	NA	NA	NA
tert-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	600	1,000	< 1	< 1	< 1	< 1	**0.27 J**	< 1	< 1	**0.59 J**	< 1	< 1
Total Xylenes	1,000	10,000	< 3	**5.4 J**	**5.9 J**	< 3	**1 J**	**0.52 J**	< 3	**105.5**	**1.51 J**	< 3
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TIC VOCs (µg/l)												
Total TIC, Volatile	500	NLE	ND	ND	ND	ND	ND	ND	ND	**179**	ND	ND

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-53 Former Gas Station at Building 699
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Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	699MW06					699MW08		699MW09			
Sample ID			FTMM-53-GW-699MW06-10.2	FTMM-53-GW-699MW06-10.2	FTMM-53-GW-699MW106-10.2	FTMM-53-GW-699MW06-10.2	FTMM-53-GW-699MW106-10.2	FTMM-53-GW-699MW08	FTMM-53-GW-699MW108	FTMM-53-GW-699MW09	FTMM-53-GW-699MW09-8	FTMM-53-GW-699MW09-7.70	FTMM-53-GW-699MW09-7.75
Sample Date			7/1/2014	9/30/2014	9/30/2014	12/18/2014	12/18/2014	8/20/2013	8/20/2013	8/20/2013	3/12/2014	3/31/2014	7/1/2014
QA/QC			SA	SA	DU	SA	DU	SA	DU	SA	SA	SA	SA
Sampling Method			PDB	PDB	PDB	PDB	PDB	LFPS	LFPS	LFPS	LFPS	PDB	PDB
Volatile Organic Compounds (µg/l)													
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	< 1	**54**	**52**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	< 1	**5.7**	**5.7**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	**2.6 J**	**12 B**	**12 B**	**2.2 J**	**2 J**	< 5	**4.4 J**	< 5	< 5	**1.5 J**	**1.4 J**
Benzene	1	5	< 1	**9**	**9.2**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	70	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.25 J**	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1	< 1	< 1	< 1 UJ	< 1 UJ	< 1	< 1	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	< 1	**140 J**	**150**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	< 1	**14**	**14**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Meta & Para Xylenes	1,000	NLE	< 2	**120 J**	**120**	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl bromide	10	NLE	< 1	< 1	< 1	< 1 UJ	< 1 UJ	< 1	< 1	< 1	< 1	**0.34 J**	< 1
Methyl butyl ketone	300	NLE	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	**0.38 J**	< 1	< 1	< 1
Methylene chloride	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	< 1	**22**	**22**	< 1	< 1	**0.49 J**	**0.56 J**	< 1	**0.26 J**	< 1	< 1
n-Butylbenzene	100	NLE	< 1	**0.27 J**	**0.25 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	< 1	**9.3**	**9.2**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	< 1	**11**	**11**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	< 1	**0.48 J**	**0.35 J**	< 1	< 1	**0.48 J**	**0.51 J**	< 1	< 1	< 1	< 1
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	NA	< 20	< 20	< 20	< 20	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	600	1,000	< 1	**1.5 J**	**1.4 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Total Xylenes	1,000	10,000	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TIC VOCs (µg/l)													
Total TIC, Volatile	500	NLE	ND	**138 JN**	**137.5 JN**	ND	ND	**8.5**	**14.1**	ND	ND	ND	ND

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-53 Former Gas Station at Building 699
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Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	699MW09		699MW12	699MW15	699MW16						
Sample ID			FTMM-53-GW-699MW09-7.75	FTMM-53-GW-699MW09-7.75	FTMM-53-GW-699MW12	FTMM-53-GW-699MW15	FTMM-53-GW-699MW16	FTMM-53-GW-699MW16-8.5	FTMM-53-GW-699MW16-11.5	FTMM-53-GW-699MW16-6.5	FTMM-53-GW-699MW16-6.5	FTMM-53-GW-699MW16-6.5	FTMM-53-GW-699MW16-7.5
Sample Date			9/30/2014	12/18/2014	8/20/2013	8/20/2013	8/20/2013	3/12/2014	3/31/2014	3/31/2014	7/1/2014	9/30/2014	12/18/2014
QA/QC			SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
Sampling Method			PDB	PDB	LFPS	LFPS	LFPS	LFPS	PDB	PDB	PDB	PDB	PDB
Volatile Organic Compounds (µg/l)													
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1 UJ	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1 UJ
1,1,2-Trichloroethane	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	< 1	< 1 UJ	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1 UJ
2-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	**6.6 B**	**1.8 J**	**2.2 J**	< 5	< 5	< 5	**1.7 J**	**1.4 J**	**2.2 J**	**6.3 B**	**2 J**
Benzene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	70	80	< 1	< 1	< 1	< 1	**0.47 J**	**5.2**	**8**	**7.7**	**3.1 J**	**1.6 J**	**7.8**
Cis-1,2-Dichloroethene	70	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1	< 1 UJ	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1 UJ
Ethyl benzene	700	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Meta & Para Xylenes	1,000	NLE	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl bromide	10	NLE	< 1	< 1 UJ	< 1	< 1	< 1	< 1	**0.34 J**	< 1	< 1	< 1	< 1 UJ
Methyl butyl ketone	300	NLE	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	**0.49 J**	**0.58 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	< 1	< 1	**0.31 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
n-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	< 20	< 20	NA	NA	NA	NA	NA	NA	NA	< 20	< 20
tert-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	1	5	**0.33 J**	< 1	< 1	< 1	**1.1 J**	**0.9 J**	**0.47 J**	**0.34 J**	**0.48 J**	**1.3 J**	**0.89 J**
Toluene	600	1,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Total Xylenes	1,000	10,000	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TIC VOCs (µg/l)													
Total TIC, Volatile	500	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-53 Former Gas Station at Building 699
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	699RW03							699RW05			
Sample ID			FTMM-53-GW-699RW03	FTMM-53-GW-699RW03-11.4	FTMM-53-GW-699RW03-14.59	FTMM-53-GW-699RW03-8.20	FTMM-53-GW-699RW03-8.2	FTMM-53-GW-699RW03-8.2	FTMM-53-GW-699RW03-8.2	FTMM-53-GW-699RW05	FTMM-53-GW-699RW05-8.6	FTMM-53-GW-699RW05-4.8	FTMM-53-GW-699RW05-9.80
Sample Date			8/20/2013	3/12/2014	3/31/2014	3/31/2014	7/1/2014	9/30/2014	12/18/2014	8/20/2013	3/12/2014	3/31/2014	3/31/2014
QA/QC			SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
Sampling Method			LFPS	LFPS	PDB	PDB	PDB	PDB	PDB	LFPS	LFPS	PDB	PDB
Volatile Organic Compounds (µg/l)													
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
1,1,1-Trichloroethane	30	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 5	< 5	< 2	< 2.5
1,1,2-Trichloroethane	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
1,1-Dichloroethane	50	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
1,1-Dichloroethene	1	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
1,1-Dichloropropene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
1,2,4-Trichlorobenzene	9	70	< 1	< 1	< 1	**0.27 J**	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
1,2,4-Trimethylbenzene	100	NLE	**170**	**130**	**120**	**110**	**42**	**26**	**3 J**	**610**	**790**	**150**	**130**
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
1,2-Dibromoethane	0.03	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
1,2-Dichloroethane	2	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
1,2-Dichloropropane	1	5	**0.39 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
1,3,5-Trimethylbenzene	100	NLE	**11**	**32**	**17**	**16**	**3.1 J**	< 1	**0.26 J**	**130**	**160**	**30**	**23**
1,3-Dichlorobenzene	600	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
1,3-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
2,2-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 5	< 5	< 2	< 2.5
2-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Acetone	6,000	NLE	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 25	< 25	< 10	< 13
Benzene	1	5	**2.2 J**	**4.8 J**	**3.7 J**	**3.5 J**	**0.88 J**	**0.46 J**	< 1	**7.1 J**	**7.2 J**	**2.8 J**	**3.1 J**
Bromobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Bromochloromethane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Bromodichloromethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Bromoform	4	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Carbon tetrachloride	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Chlorobenzene	50	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Chlorodibromomethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Chloroethane	5	NLE	< 1	**0.47 J**	< 1	< 1	< 1	< 1	< 1	< 5	**1.6 J**	< 2	< 2.5
Chloroform	70	80	< 1	< 1	< 1	< 1	**0.28 J**	**0.29 J**	< 1	< 5	< 5	< 2	< 2.5
Cis-1,2-Dichloroethene	70	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Cymene	100	NLE	**3.2 J**	**3.2 J**	**0.91 J**	**0.8 J**	**0.59 J**	**0.63 J**	**0.29 J**	**2.4 J**	**3.7 J**	< 2	< 2.5
Dichlorodifluoromethane	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 5	< 5	< 2	< 2.5
Ethyl benzene	700	700	**35**	**50**	**49**	**46**	**17**	**8.4**	**0.58 J**	**370**	**700**	**150**	**160**
Hexachlorobutadiene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Isopropylbenzene	700	NLE	**18**	**21**	**14**	**13**	**7**	**3.7 J**	**0.37 J**	**29**	**52**	**7.4 J**	**8.1 J**
Meta & Para Xylenes	1,000	NLE	**15**	**71**	**62**	**59**	**9.8 J**	**0.77 J**	**0.45 J**	**840**	**1,600**	**430**	**390**
Methyl bromide	10	NLE	< 1	< 1	< 1	**0.33 J**	< 1	< 1	< 1 UJ	< 5	< 5	< 2	**0.88 J**
Methyl butyl ketone	300	NLE	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 25	< 25	< 10	< 13
Methyl chloride	100	NLE	< 1	**0.29 J**	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Methyl ethyl ketone	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Methyl isobutyl ketone	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Methyl Tertbutyl Ether	70	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Methylene chloride	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Naphthalene	300	NLE	**33**	**29**	**19**	**15**	**6.5**	**2.9 J**	< 1	**190**	**270**	**60**	**54**
n-Butylbenzene	100	NLE	**7.9**	**12**	< 1	< 1	**0.9 J**	**1.2 J**	< 1	**3.4 J**	< 5	< 2	< 2.5
Ortho Xylene	1,000	NLE	**42**	**90**	**78**	**76**	**14**	**6.4**	**0.86 J**	**390**	**810**	**290**	**270**
p-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Propylbenzene	100	NLE	**34**	**34**	**18**	**16**	**12**	**6.6**	**0.38 J**	**64**	**100**	**8.9 J**	**9.7 J**
sec-Butylbenzene	100	NLE	**7.6**	**7.4**	**1.9 J**	**1.6 J**	**1.3 J**	**1.5 J**	< 1	**5.1 J**	**6.3 J**	< 2	< 2.5
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Tert Butyl Alcohol	100	NLE	NA	NA	NA	NA	NA	< 20	< 20	NA	NA	NA	NA
tert-Butylbenzene	100	NLE	**0.32 J**	**0.68 J**	**0.26 J**	**0.29 J**	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Tetrachloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	**0.8 J**
Toluene	600	1,000	**0.72 J**	**1.7 J**	**1.4 J**	**1.3 J**	**0.22 J**	**0.21 J**	< 1	**50**	**23 J**	**7.1 J**	**7 J**
Total Xylenes	1,000	10,000	**67**	**161**	**140**	**135**	**23.8 J**	< 3	**1.31 J**	**1,230**	**2,410**	**720**	**660**
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Trichloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Trichlorofluoromethane	2,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
Vinyl chloride	1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 2	< 2.5
TIC VOCs (µg/l)													
Total TIC, Volatile	500	NLE	**898.4**	**813**	**362**	**302**	**7.1**	**129.7 JN**	**16 JN**	**1,703**	**2,338**	**417.8**	**369.4**

Table 4
Groundwater Analytical Results - 2013 and 2014
Site FTMM-53 Former Gas Station at Building 699
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
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Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	699RW05			699RW11						
Sample ID			FTMM-53-GW-699RW05-4.8	FTMM-53-GW-699RW05-4.8	FTMM-53-GW-699RW05-10	FTMM-53-GW-699RW11	FTMM-53-GW-699RW11-11.1	FTMM-53-GW-699RW11-14.08	FTMM-53-GW-699RW11-8.03	FTMM-53-GW-699RW11-8.3	FTMM-53-GW-699RW11-8.3	FTMM-53-GW-699RW11-5.3
Sample Date			7/1/2014	9/30/2014	12/18/2014	8/20/2013	3/12/2014	3/31/2014	3/31/2014	7/1/2014	9/30/2014	12/18/2014
QA/QC			SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
Sampling Method			PDB	PDB	PDB	LFPS	LFPS	PDB	PDB	PDB	PDB	PDB
Volatile Organic Compounds (µg/l)												
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1 UJ	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	**7.8**	**1.4 J**	**200 J**	< 1	**0.24 J**	< 1	< 1	**0.21 J**	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	**3.9 J**	**0.22 J**	**69**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	< 1	< 1	< 1 UJ	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	< 5	**14 B**	< 5	< 5	< 5	< 5	< 5	< 5	< 5	**28**
Benzene	1	5	**0.21 J**	< 1	**1.9 J**	**3.6 J**	**11**	**6.5**	**6.5**	**2.7 J**	**2.4 J**	**3 J**
Bromobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	70	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	< 1	< 1	**1.3 J**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1	< 1	< 1 UJ	< 1	< 1	< 1	< 1	< 1	< 1	< 1 UJ
Ethyl benzene	700	700	**0.74 J**	**0.51 J**	**120**	**0.21 J**	**0.45 J**	**0.26 J**	**0.25 J**	**0.28 J**	< 1	< 1
Hexachlorobutadiene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	**0.45 J**	< 1	**7.7**	**6.9**	**8.9**	**1.2 J**	**1.2 J**	**4.3 J**	**6.3**	**1.3 J**
Meta & Para Xylenes	1,000	NLE	**6.3 J**	**0.88 J**	**330**	**0.41 J**	**0.45 J**	**0.33 J**	**0.35 J**	< 2	< 2	< 2
Methyl bromide	10	NLE	< 1	< 1	< 1 UJ	< 1	< 1	**0.35 J**	**0.29 J**	< 1	< 1	< 1 UJ
Methyl butyl ketone	300	NLE	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	< 1	< 1	< 1	< 1	**0.23 J**	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	**7.6**	**0.33 J**	**71**	**1.7 J**	**1.5 J**	**0.61 J**	**0.75 J**	**0.74 J**	**0.59 J**	**0.98 J**
n-Butylbenzene	100	NLE	< 1	< 1	< 1	**0.46 J**	< 1	< 1	< 1	< 1	**0.29 J**	< 1
Ortho Xylene	1,000	NLE	**16**	**1 J**	**290**	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	< 1	< 1	**9.7**	**4.8 J**	**9.4**	**0.71 J**	**0.68 J**	**5.1**	**3.5 J**	**0.28 J**
sec-Butylbenzene	100	NLE	< 1	< 1	**1.2 J**	**2 J**	**1.6 J**	< 1	< 1	**0.33 J**	**1.1 J**	**0.6 J**
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	NA	< 20	< 20	NA	NA	NA	NA	NA	< 20	< 20
tert-Butylbenzene	100	NLE	< 1	< 1	**0.28 J**	**0.41 J**	**0.36 J**	< 1	< 1	< 1	< 1	**0.3 J**
Tetrachloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	600	1,000	**0.46 J**	< 1	**6.8**	**0.34 J**	**0.37 J**	**0.3 J**	**0.36 J**	**0.22 J**	< 1	< 1
Total Xylenes	1,000	10,000	**22.3 J**	**1.88 J**	**620**	**0.41 J**	**0.45 J**	**0.33 J**	**0.35 J**	< 3	< 3	< 3
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TIC VOCs (µg/l)												
Total TIC, Volatile	500	NLE	ND	**5.7 JN**	**1,181 JN**	**153.9**	**122.9**	ND	ND	ND	**83.2 JN**	**76.9 JN**

Table 4
Groundwater Analytical Results - 2013 and 2014
FTMM-53 Former Gas Station at Building 699
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Footnote:
1) All historical data collected prior to 2013 are reported as provided by others.
2) Number of Analyses is the number of detected and non-detected results excluding rejected results. Sample duplicate pairs have not been averaged.
3) NLE = no limit established.
4) ND = not detected in any background sample, no background concentration available.

5) Chemical result qualifiers are assigned by the laboratory and is typically evaluated and modified (if necessary) by during data validation.
[blank] = detect, i.e. detected chemical result value.
B = Compound detected in the sample and its associated blank sample.
R = Rejected, data validation rejected the results.
U = non-detect, i.e. not detected equal to or above this value.
U-DL = Elevated sample detection limit due to difficult sample matrix.
U-ND = Analyte not detected in sample, but no detection or reporting limit provided.
J = estimated (detect or non-detect) value.
E (or ER) = Estimated result.
D = Results from dilution of sample.
J-DL = Elevated sample detection limit due to difficult sample matrix.
JN = Tentatively identified compound, estimated concentration.

6) Chemical results greater than or equal to the action level (depending on criteria) are highlighted based on the Criteria that are present.
- Cell Shade values represent a result that is above the NJ Ground Water Quality Criteria ####

NJDEP Interim Specific GWQC values are presented for the NJ GWQS where there is not a Specific Ground Water Quality Criteria. A full list of compounds is available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).

NJDEP Interim Generic GWQC values are presented for the NJ GWQS where there is not a XXXXX or a NJDEP Interim Specific GWQC. Available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).

- Bold Outline represent a result that is above the USEPA 2014-05 MCL. ###

7) Criteria action level source document and web address.
- The NJ Ground Water Quality Criteria refers to the NJDEP Groundwater Quality Standards - Adopted July 22, 2010
  http://www.state.nj.us/dep/wms/bwqsa/docs/njac79C.pdf
- The 2014-05 USEPA MCL refers to the USEPA's Region 9 Regional Screening Levels (HQ=1.0) - 5/31/2014 (Last revised)
  http://www.epa.gov/region9/superfund/prg/

8) Wells sampled in the fourth quarter are highlighted in yellow. Sample ID

Table 5
Review of Historical Groundwater Sampling Results
Site FTMM-53 Former Gas Station at Building 699
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site Name/ Well ID	Interpretation of Historical and 2014 Results [1]			2014 Evaluation					Rationale
	Chem Class / Analyte	Does it Exceed NJDEP GWQS (Yes or No) (If Yes, identify Compound)[1]	Do Metals Exceed FTMM Background Concentration (Yes or No) (If Yes, identify Metal)	Seasonal Effect?[2] (Y/N)	Anomaly? (Y/N)	Exceedance part of overall trend? (Y/N)[3]	Well needed for sentinel purposes? (Y/N)	Retain Analyte/Well (Yes or No)	
FTMM-53, B699									
699MW01	VOC	No	N/A	No	No	No	No	Yes	Benzene currently detected at levels just below the NJDEP GWQS. Continue sampling using PDBs until next annual event, then switch to LFPS to confirm that benzene levels are below NJDEP GWQS.
699MW04		No	N/A	No	No	No	No	Yes	Benzene currently detected at levels just below the NJDEP GWQS. Continue sampling using PDBs until next annual event, then switch to LFPS to confirm that benzene levels are below NJDEP GWQS.
699MW06		Benzene	N/A	No	No	Yes	No	Yes	
699MW09		No	N/A	No	No	No	No	Yes	PCE currently detected at levels just below the NJDEP GWQS. Continue sampling using PDBs until next annual event, then switch to LFPS to confirm that benzene levels are below NJDEP GWQS.
699MW16		PCE	N/A	No	No	No	No	Yes	
699RW03		1,2,4-trimethylbezene, benzene, TICs	N/A	No	No	Yes	No	Yes	
699RW05		1,2,4-trimethylbezene, 1,3,5-trimethylbenzene, benzene, xylenes, TICs	N/A	No	No	Yes	No	Yes	
699RW11		Benzene	N/A	No	No	Yes	No	Yes	

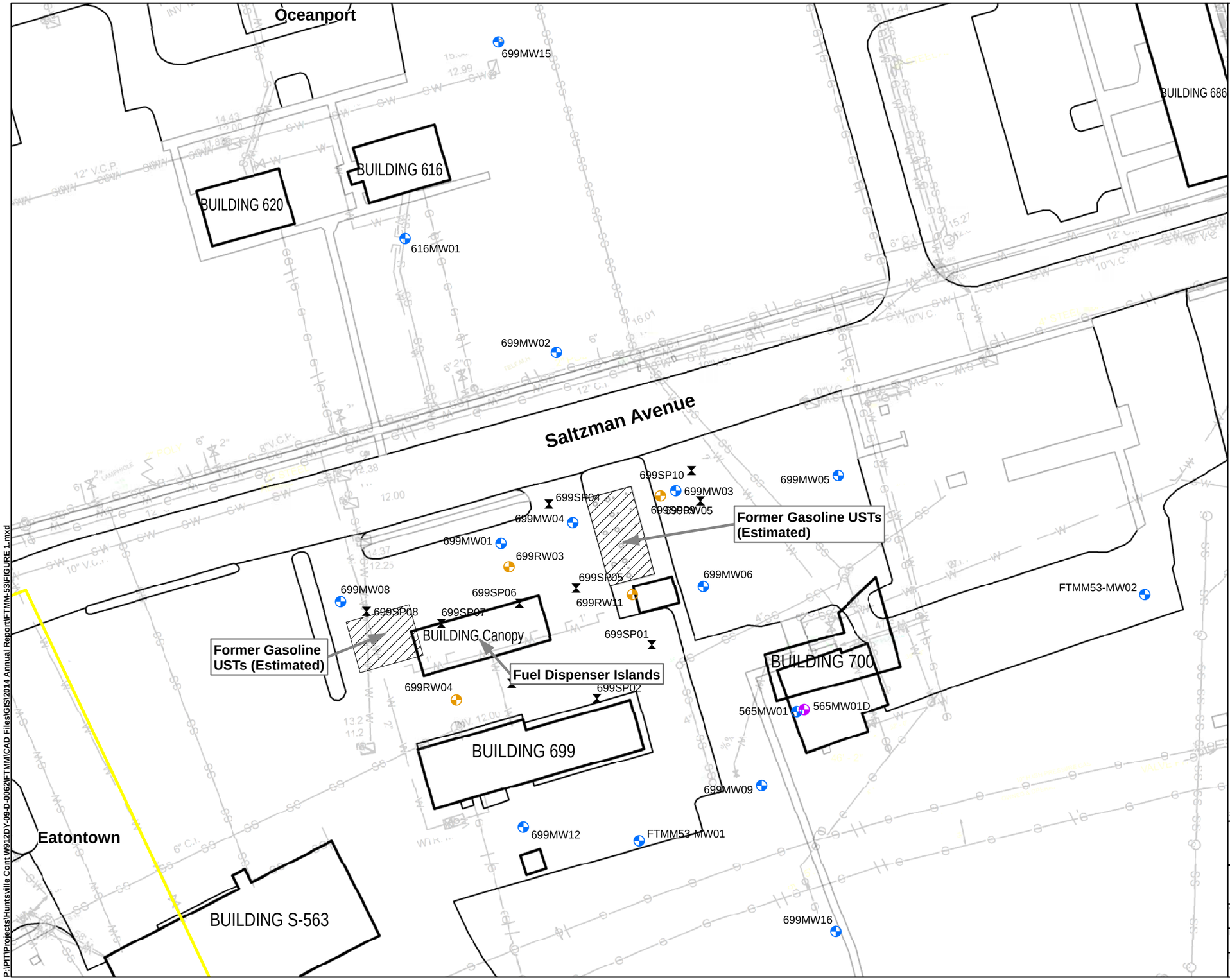
Notes:

1. Has any of the compounds exceeded the NJDEP GWQS in the annual 2014 data and the 4 previous quarterly data rounds or 2 previous annual rounds?
   a. If yes then keep analyte in LTM list
   b. If no then remove this analyte from LTM list
   c. a and b above may be occasionally superceded on a case-by-case basis, depending on site conditions.
2. Has any of the analyte compounds exceeded the NJDEP GWQS seasonally (winter spring vs. summer fall) for the 4 previous data rounds?
3. PCE - tetrachloroethene
4. TICs - Tentatively identified compounds
5. Per the 2/5/15 NJDEP approval letter of the Final 2013 Baseline Groundwater Report, groundwater monitoring wells 616MW01, 699MW02, 699MW05, 699MW08, 699MW12, and 699MW15 were removed from the long term monitoring sampling program.

FIGURES

Figure 1 Layout of FTMM-53 Former Gas Station at Building 699

Figure 2 FTMM-53 Shallow Groundwater Contours September 30, 2014



LEGEND:

- Deep Monitoring Well
- Shallow Monitoring Well
- Vapor Monitoring Well
- Recovery Well
- Air Sparge Well
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Municipal Boundary
- Installation Boundary

N

1 inch = 60 feet

0 30 60 120 Feet

Source: FTMM Supplied CAD

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey

LAYOUT OF FTMM-53
FORMER GAS STATION AT BUILDING 699

CREATED BY: RR	REVIEWED BY: ME
DATE: DEC. 2015	FIGURE NUMBER: FIGURE 1
PROJECT NUMBER: 748810-01000	FILE: FIGURE 1.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-53\FIGURE 1.mxd

699MW15
9.79
BUILDING 686
BUILDING 616
BUILDING 620
616MW01
9.31
699MW02
10.03
Saltzman Avenue
699VP11
699SP10
699RW05
9.48
699MW03
699SP09
10.5
699MW05
7.43
600MW01
11.51
699SP04
699RW02
699MW13
699MW04
699VP05
9.35
699MW01
9.21
699RW03
9.21
699RW01
699VP10
699MW06
11.93
699VP07
699RW11
699MW14
7.06
699VP04
699VP06
699MW08
9.34
699VP09
699SP08
699VP08
699SP06
699SP05
699SP07
699SP01
699VP02
699VP01
699MW07
699SP03
699SP02
699RW04
10.49
699MW09
8.6
699MW12
9.29
FTMM53-MW01
699MW16
9.11
FTMM53-MW02
FTMM-68-MW-01
565MW01
565MW01D
565MW01D
BUILDING Canopy
BUILDING 700
BUILDING 699
BUILDING S-563
Former Gasoline USTs (Estimated)
Former Gasoline USTs (Estimated)
Fuel Dispenser Islands
10
9

LEGEND:

- Deep Monitoring Well
- Shallow Monitoring Well
- Vapor Monitoring Well
- Recovery Well
- Air Sparge Well
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Groundwater Elevation Contour
- Inferred Groundwater Flow Direction

NOTE:

The groundwater elevation at monitoring well 699RW11 was considered anomalous compared to the fluid levels at neighboring wells.

N

1 inch = 60 feet

0 30 60 120 Feet

Source: FTMM Supplied CAD

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey

FTMM-53 SHALLOW GROUNDWATER CONTOURS - SEPTEMBER 30, 2014

CREATED BY: RR	REVIEWED BY: ME
DATE: DEC. 2015	FIGURE NUMBER: FIGURE 2
PROJECT NUMBER: 748810-01000	FILE: FIGURE 2.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-53\FIGURE 2.mxd

ATTACHMENTS

Attachment A NJDEP PDB Checklists

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-53
3. Well Designation: ~~G-[illegible]~~ (new) G97MW01
4. Well Permit Number: ~~29-23600-RCW~~ 29236771

5. Type of Well: ☑ Monitoring ☐ Extraction ☐ Residential ☐ Public Supply ☐ Irrigation ☐ Other
6. Well Surface Finish: ☐ Stick Up ☑ Flush Mount
7. Location of Measuring Point: ☑ Top of Casing ☐ Other (specify) _____
8. NOTE: PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below any differences between the measuring point identified above and actual ground surface at the well head.
   Distance between measuring point and ground surface (ft.): -.75
9. Total Well Depth (fbgs): 15.12
10. Screened interval/open hole (fbgs): 1.12-14.12
11. Well Casing: Diameter 4 Material ☑ PVC ☐ Carbon Steel ☐ Stainless Steel
12. Well Screen (or open hole diameter): Diameter 4 Material ☑ PVC ☐ Carbon Steel ☐ Stainless Steel
13. Screen Size (slot): Screen Slot Size 0.02

14. Date and Time of Deployment: Date: 9/30/14 Time: 1035
15. Depth to Ground Water: Depth to ground water at time of deployment 5.27
16. Date and Time of Retrieval: Date: 12/18/14 Time: 0953
17. Depth to Ground Water: Depth to ground water at time of retrieval 2.61 TOC
18. Type of Deployment Line Used: Diameter: 3/16" Material: poly

19. Material and Mass (oz.) of PDBS Weight: Stainless Steel 20 oz (stainless steel recommended)
20. Type of PDBS Used:
    ☐ Lab Filled (Modified Trip Blank must be taken at time of deployment)
    ☑ Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)
21. Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled _____
22. Position of PDBS Weight:
    ☑ Attached to bottom of PDBS and suspended in well
    ☐ Attached to bottom of deployment line and suspended in well
    ☐ Attached to bottom of deployment line and resting on bottom of well (preferred)
23. Position of PDBS in Well Screen (ft. from measuring point to center of PDBS):

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
7.5			

5th PDBS	6th PDBS	7th PDBS	8th PDBS

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
    ☐ No, this well is being profiled during this sampling round
    ☑ Yes, this well was profiled already. Date when well was profiled: 3/31/14
25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
    ☐ No, flow testing has not been conducted in this well
    ☐ Yes, flow testing of this well was conducted. Date of testing: _____
    Type of flow meter used: _____
    Measurements taken every _____ feet [Please Attach Results]
26. Weather Conditions During Deployment: Temp. 65°F Wind 0-5 mph ☐ Sunny ☑ Overcast ☐ Raining ☐ Snowing
27. Weather Conditions During Retrieval: Temp. 40°F Wind 10-15 mph ☐ Sunny ☑ Overcast ☐ Raining ☐ Snowing

28. Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Nick Loiaza	Tom MacDougall / PARSONS
Chris Worton	

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-63
3. Well Designation: 63MW04
4. Well Permit Number: 29-23680-7

5 Type of Well: ☒Monitoring ☐Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish: ☐Stick Up ☒Flush Mount

7 Location of Measuring Point: ☒Top of Casing ☐Other (specify) _____

8 **NOTE** PDBS represent a point sample within the screened interval or open hole of the well It is critical to know the exact depth within the well where the PDBS is deployed Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs) If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS Please identify below, any differences between the measuring point identified above and actual ground surface at the well head

Distance between measuring point and ground surface (ft) -.31

9 Total Well Depth (fbgs): 17.61

10 Screened interval/open hole (fbgs): 0.61-17.61

11 Well Casing: Diameter 4 Material ☒PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter): Diameter 4 Material ☒PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.02

14. Date and Time of Deployment: Date: 9/30/14 Time: 1100

15. Depth to Ground Water: Depth to ground water at time of deployment 5.68

16. Date and Time of Retrieval: Date: 12/18/14 Time: 1015

17. Depth to Ground Water: Depth to ground water at time of retrieval 2.65 TOC

18. Type of Deployment Line Used: Diameter: 3/16" Material: poly

19 Material and Mass (oz) of PDBS Weight: Stainless 20 oz (stainless steel recommended)

20 Type of PDBS Used:
☐Lab Filled (Modified Trip Blank must be taken at time of deployment)
☒Field Filled (Modified equipment blank of fill water must be taken at time of deployment If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed Blank is then taken)

21 Dimensions of PDBS: Length (in) 18 Diameter (in) 1.5 Filled _____

22 Position of PDBS Weight:
☐Attached to bottom of PDBS and suspended in well
☒Attached to bottom of deployment line and suspended in well
☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
7.68			

5th PDBS	6th PDBS	7th PDBS	8th PDBS

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐No, this well is being profiled during this sampling round
☒Yes, this well was profiled already. Date when well was profiled: 3/31/14

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☐No, flow testing has not been conducted in this well
☐Yes, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet [Please Attach Results]

26. Weather Conditions During Deployment: Temp. 65°F Wind 0-5mph ☐Sunny ☒Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval: Temp. 40°F Wind 5-10mph ☒Sunny ☐Overcast ☐Raining ☐Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Chris Watson	Parsons
John McDougall	
Nick Lorenz	

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-53
3. Well Designation: 699/MW06
4. Well Permit Number: 25-23809-1

5 Type of Well: ☑Monitoring ☐Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish: ☑Stick Up ☐Flush Mount

7 Location of Measuring Point: ☑Top of Casing ☐Other (specify) _____

8. **NOTE:** PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) 1.04

9 Total Well Depth (fbgs): 13.90

10 Screened interval/open hole (fbgs): 3.90-13.90

11 Well Casing: Diameter 4 Material ☑PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter): Diameter 4 Material ☑PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.02

14. Date and Time of Deployment: Date: 9/30/14 Time: ~~1032~~ 1046

15. Depth to Ground Water: Depth to ground water at time of deployment 4.82

16. Date and Time of Retrieval: Date: 12/18/14 Time: 0936

17. Depth to Ground Water: Depth to ground water at time of retrieval 4.45 toc

18. Type of Deployment Line Used: Diameter: 3/16" Material: poly

19 Material and Mass (oz.) of PDBS Weight: stainless steel 20 oz (stainless steel recommended)

20 Type of PDBS Used:
☐Lab Filled (Modified Trip Blank must be taken at time of deployment)
☐Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21 Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled _____

22 Position of PDBS Weight:
☐Attached to bottom of PDBS and suspended in well
☐Attached to bottom of deployment line and suspended in well
☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
10.2 (2 BAGS)			
5th PDBS	**6th PDBS**	**7th PDBS**	**8th PDBS**

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐No, this well is being profiled during this sampling round
☑Yes, this well was profiled already. Date when well was profiled: 3/31/14

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☐No, flow testing has not been conducted in this well
☐Yes, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet **[Please Attach Results]**

26. Weather Conditions During Deployment: Temp. 65°F Wind 0-5 mph ☐Sunny ☑Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval: Temp. 40°F Wind 5-10 mph ☐Sunny ☑Overcast ☐Raining ☐Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Chris Watson	PARSONS
John McDougall	
Nick Lorzo	

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-53
3. Well Designation: 699 MW07
4. Well Permit Number: 27-24637

5 Type of Well: ☒Monitoring ☐Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish: ☐Stick Up ☒Flush Mount

7 Location of Measuring Point: ☒Top of Casing ☐Other (specify) _____

8 **NOTE**: PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) -0.3

9 Total Well Depth (fbgs): 17.50

10 Screened interval/open hole (fbgs): 0.50-12.50

11 Well Casing: Diameter 4 Material ☒PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter): Diameter 4 Material ☒PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.02

14. Date and Time of Deployment: Date: 9/30/14 Time: 1017

15. Depth to Ground Water: Depth to ground water at time of deployment 5.16

16. Date and Time of Retrieval: Date: 12/18/14 Time: 0942

17. Depth to Ground Water: Depth to ground water at time of retrieval 2.37 toc

18. Type of Deployment Line Used: Diameter: 3/16" Material: poly

19 Material and Mass (oz.) of PDBS Weight: stainless steel 20oz (stainless steel recommended)

20 Type of PDBS Used:
☐Lab Filled (Modified Trip Blank must be taken at time of deployment)
☒Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21 Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled _____

22 Position of PDBS Weight:
☒Attached to bottom of PDBS and suspended in well
☐Attached to bottom of deployment line and suspended in well
☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
7.75			
5th PDBS	**6th PDBS**	**7th PDBS**	**8th PDBS**

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐No, this well is being profiled during this sampling round
☒Yes, this well was profiled already. Date when well was profiled: 3/31/14

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☐No, flow testing has not been conducted in this well
☐Yes, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet **[Please Attach Results]**

26. Weather Conditions During Deployment: Temp. 69°F Wind 0-5mph ☐Sunny ☒Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval: Temp. 41°F Wind 5-10 mph ☐Sunny ☒Overcast ☐Raining ☐Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Chris Welton	PARSONS
Nick Lorenz	
John McDaniel	

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-53
3. Well Designation: C99MW16
4. Well Permit Number: 24-33767

5 Type of Well: ☑Monitoring ☐Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish: ☐Stick Up ☑Flush Mount

7 Location of Measuring Point: ☑Top of Casing ☐Other (specify) _____

8 **NOTE**: PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) 0.65

9 Total Well Depth (fbgs): 14.70

10 Screened interval/open hole (fbgs): 4.70-14.70

11 Well Casing: Diameter 4 Material ☑PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter): Diameter 4 Material ☑PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.02

14. Date and Time of Deployment: Date: 9/30/14 Time: 1007

15. Depth to Ground Water: Depth to ground water at time of deployment 5.16

16. Date and Time of Retrieval: Date: 12/18/14 Time: 1000

17. Depth to Ground Water: Depth to ground water at time of retrieval 1.82 toc

18. Type of Deployment Line Used: Diameter: 3/16" Material: poly

19 Material and Mass (oz.) of PDBS Weight: stainless steel 20oz (stainless steel recommended)

20 Type of PDBS Used:
☐Lab Filled (Modified Trip Blank must be taken at time of deployment)
☑Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21 Dimensions of PDBS: Length (in.) 12 Diameter (in.) 1.5 Filled _____

22 Position of PDBS Weight:
☑Attached to bottom of PDBS and suspended in well
☐Attached to bottom of deployment line and suspended in well
☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
7.5			
5th PDBS	**6th PDBS**	**7th PDBS**	**8th PDBS**

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐No, this well is being profiled during this sampling round
☑Yes, this well was profiled already. Date when well was profiled: 3/31/14

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☐No, flow testing has not been conducted in this well
☐Yes, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet **[Please Attach Results]**

26. Weather Conditions During Deployment: Temp. 65°F Wind 0-5mph ☐Sunny ☑Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval: Temp. 40°F Wind 10-15mph ☐Sunny ☑Overcast ☐Raining ☐Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Chris Watson	PARSONS
Nick Lucas	

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-53
3. Well Designation: 699RN03
4. Well Permit Number: 29-43511

5 Type of Well: ☒ Monitoring ☐ Extraction ☐ Residential ☐ Public Supply ☐ Irrigation ☐ Other

6 Well Surface Finish: ☐ Stick Up ☒ Flush Mount

7 Location of Measuring Point: ☒ Top of Casing ☐ Other (specify) _____

8 **NOTE:** PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) -0.7

9 Total Well Depth (fbgs): 17.87

10 Screened interval/open hole (fbgs): 2.57-17.87

11 Well Casing: Diameter 6 Material ☒ PVC ☐ Carbon Steel ☐ Stainless Steel

12 Well Screen (or open hole diameter): Diameter 6 Material ☒ PVC ☐ Carbon Steel ☐ Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.6

14. Date and Time of Deployment: Date: 9/30/14 Time: 4:30 PM 0831

15. Depth to Ground Water: Depth to ground water at time of deployment 4.30

16. Date and Time of Retrieval: Date: 12/12/14 Time: 0935

17. Depth to Ground Water: Depth to ground water at time of retrieval 2.83 TOC

18. Type of Deployment Line Used: Diameter: 3/16" Material: poly

19 Material and Mass (oz.) of PDBS Weight: stainless steel 20oz (stainless steel recommended)

20 Type of PDBS Used:
☐ Lab Filled (Modified Trip Blank must be taken at time of deployment)
☐ Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21 Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled _____

22 Position of PDBS Weight:
☐ Attached to bottom of PDBS and suspended in well
☐ Attached to bottom of deployment line and suspended in well
☐ Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
8.2			

5th PDBS	6th PDBS	7th PDBS	8th PDBS

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐ No, this well is being profiled during this sampling round
☒ Yes, this well was profiled already. Date when well was profiled: 3/31/14

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☐ No, flow testing has not been conducted in this well
☐ Yes, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet [Please Attach Results]

26. Weather Conditions During Deployment: Temp. 65°F Wind 0-5 mph ☐ Sunny ☒ Overcast ☐ Raining ☐ Snowing

27. Weather Conditions During Retrieval: Temp. 40°F Wind 5-10 mph ☐ Sunny ☒ Overcast ☐ Raining ☐ Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Chris Watson	NTK 10120
John McDougall	

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-53
3. Well Designation: C99RW05
4. Well Permit Number: 29-56509

5 Type of Well: ☐Monitoring ☑Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish: ☐Stick Up ☑Flush Mount

7 Location of Measuring Point: ☑Top of Casing ☐Other (specify) _____

8 **NOTE:** PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) -1.15

9 Total Well Depth (fbgs): 13.49

10 Screened interval/open hole (fbgs): 3.44-13.44

11 Well Casing: Diameter 6 Material ☑PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter): Diameter 6 Material ☑PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot): Screen Slot Size 0.01

14. Date and Time of Deployment: Date: 7/30/14 Time: 1058

15. Depth to Ground Water: Depth to ground water at time of deployment 5.71

16. Date and Time of Retrieval: Date: 12/18/14 Time: 1008

17. Depth to Ground Water: Depth to ground water at time of retrieval 2.63 TOC

18. Type of Deployment Line Used: Diameter: 3/16" Material: poly

19. Material and Mass (oz.) of PDBS Weight: Stainless Steel 20oz (stainless steel recommended)

20. Type of PDBS Used:
☐Lab Filled (Modified Trip Blank must be taken at time of deployment)
☐Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21. Dimensions of PDBS: Length (in.) 18 Diameter (in.) 1.5 Filled _____

22. Position of PDBS Weight:
☐Attached to bottom of PDBS and suspended in well
☐Attached to bottom of deployment line and suspended in well
☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23. Position of PDBS in Well Screen (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
10 ~~11.8~~			
5th PDBS	**6th PDBS**	**7th PDBS**	**8th PDBS**

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐No, this well is being profiled during this sampling round
☑Yes, this well was profiled already. Date when well was profiled: 3/31/14

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☐No, flow testing has not been conducted in this well
☐Yes, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet **[Please Attach Results]**

26. Weather Conditions During Deployment: Temp. 65°F Wind 0-5mph ☐Sunny ☑Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval: Temp. 41°F Wind 5-10 mph ☑Sunny ☐Overcast ☐Raining ☐Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Chris Watson	PARSONS
Nick Lorens	

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-53
3. Well Designation: 699RW11
4. Well Permit Number: 29-26031

5 Type of Well ☐Monitoring ☒Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish ☐Stick Up ☒Flush Mount

7 Location of Measuring Point ☒Top of Casing ☐Other (specify) _____

8 **NOTE:** PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) -0.58

9 Total Well Depth (fbgs) 17.62

10 Screened interval/open hole (fbgs) 2.68 - 17.62

11 Well Casing Diameter 11 Material ☒PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter) Diameter 11 Material ☒PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot) Screen Slot Size 0.02

14. Date and Time of Deployment Date: 9/31/14 Time: 1040

15. Depth to Ground Water Depth to ground water at time of deployment 6.07

16. Date and Time of Retrieval Date: 12/10/14 Time: 0948

17. Depth to Ground Water Depth to ground water at time of retrieval 3.15 TOC

18. Type of Deployment Line Used Diameter: 3/16" Material: poly

19 Material and Mass (oz.) of PDBS Weight stainless steel 20oz (stainless steel recommended)

20 Type of PDBS Used ☐Lab Filled (Modified Trip Blank must be taken at time of deployment)

☒Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21 Dimensions of PDBS Length (in.) 18 Diameter (in.) 1.5 Filled _____

22 Position of PDBS Weight

☒Attached to bottom of PDBS and suspended in well

☐Attached to bottom of deployment line and suspended in well

☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
8.3			

5th PDBS	6th PDBS	7th PDBS	8th PDBS

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?

☐**No**, this well is being profiled during this sampling round

☒**Yes**, this well was profiled already. Date when well was profiled: 3/31/14

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?

☐**No**, flow testing has not been conducted in this well

☐**Yes**, flow testing of this well was conducted. Date of testing: _____

Type of flow meter used: _____

Measurements taken every _____ feet **[Please Attach Results]**

26. Weather Conditions During Deployment Temp. 65°F Wind 0-5 mph ☐Sunny ☒Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval Temp. 40°F Wind 10-15 mph ☐Sunny ☒Overcast ☐Raining ☐Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Chris Watson	PARSONS
John McDougall	
Nick Lorenz	

APPENDIX H

FTMM-57: BUILDING 108 UST GASOLINE RELEASE

APPENDIX H: FTMM-57 Building 108 UST Gasoline Release

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1	Layout of FTMM-57 Building 108 UST Gasoline Release
2	FTMM-57 Shallow Groundwater Contours - October 2, 2014

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Attachment	Title
A	LFPS Field Sheets

1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT

Monitoring wells located within FTMM-57 were gauged on October 2, 2014. Monitoring well locations as well as other site features are provided in **Figure 1**. Details regarding the water level measurements are provided in **Table 1**. Groundwater elevations in monitoring wells ranged from 3.76 (108MW03) to 6.54 (108MW01) feet above mean sea level (amsl). The inferred shallow groundwater flow direction is generally to the southeast towards Oceanport Creek, as shown in **Figure 2**.

During the groundwater gauging, the physical condition of FTMM-57 monitoring wells were assessed. The site monitoring wells were found to be in good condition.

2.0 GROUNDWATER SAMPLING

A groundwater sample was collected from one monitoring well (108MW04) located at FTMM-57 as part of the annual (fourth quarter) 2014 groundwater sampling event. FTMM-57 is sampled on an annual basis. The groundwater sampling program included measuring the depth to groundwater in monitoring wells prior to sampling and collection of groundwater samples using low-flow purging and sampling (LFPS). The groundwater sample was collected from well 108MW04 on October 2, 2014 and analyzed for lead via USEPA Method SW6010C.

The samples were collected in accordance with the New Jersey Department of Environmental Protection (NJDEP) Field Sampling Procedures Manual (FSPM) and the Sampling Analysis Plan (SAP). Field blanks, duplicates, matrix spike, matrix spike duplicate and quality assurance (QA) split samples were collected for every 5% of samples collected per parameter, per matrix, in accordance with the Quality Assurance Project Plan (QAPP).

The completed LFPS field sheets can be found in **Attachment A**.

3.0 HISTORICAL GROUNDWATER SAMPLING RESULTS

The last four quarterly groundwater sampling events conducted at FTMM-57 consisted solely of metals analysis. During these last four historical events, several metals including aluminum, arsenic, beryllium, chromium, iron, lead, manganese, mercury and sodium were detected in exceedance of the NJDEP Ground Water Quality Standard (GWQS). However, sodium, manganese, mercury and lead were the only metals to exceed their individual background concentration established in the 1995 Weston Report. Sodium and manganese are attributed to background conditions that typically contribute to elevated metal concentrations in groundwater, such as the glauconitic soils that underlie the site. Lead was found in exceedance of its background concentration (Weston, 1995) in site monitoring well 108MW04 during the February and August 2011 groundwater monitoring events. Lead is potentially associated with historical site operations.

Mercury exceeded its NJDEP GWQS and background concentration (Weston, 1995) in November 2010. Prior to and since this exceedance, mercury has not been detected in excess of its NJDEP GWQS. The November 2010 mercury exceedance is anomalous. Historical groundwater analytical results are presented in **Table 2**.

Aluminum, arsenic, iron, manganese and sodium were detected above their respective NJDEP GWQS. Of these metals, only manganese and sodium were the detected at concentrations greater than their background concentrations (Weston, 1995). However, manganese and sodium are found naturally in the glauconitic soil underlying the Site and are considered background conditions and not associated with historical site uses. No volatile organic compounds (VOCs) or pesticides were detected above their NJDEP GWQS.

During the August 2013 Baseline Sampling Event, four monitoring wells were sampled for VOCs plus tentatively identified VOCs, pesticides and metals. No VOCs, or pesticides were detected above the NJDEP GWQS. Metals detected at the four wells above the NJDEP GWQS were attributed to site background conditions. Groundwater analytical detections from samples collected during the August 2013 sampling event are presented in **Table 3**.

The Final August 2013 Baseline Groundwater Sampling Report was accepted by the NJDEP in their February 5, 2015 letter. Based on this approval, three out of the four groundwater monitoring wells were removed from the long term monitoring (LTM) program including: 108MW01, 108MW02 and 108MW03; and VOCs, pesticides and metals analysis were discontinued with the exception of lead.

4.0 ANNUAL (FOURTH QUARTER) 2014 GROUNDWATER RESULTS

Lead was not detected at monitoring well 108MW04 during the annual (fourth quarter) 2014 sampling event.

5.0 FINDINGS AND RECOMMENDATIONS

Historically, well 108MW04 contained lead concentrations (ranging from non-detect to 101 µg/L) above the NJDEP GWQS of 5 µg/L and its background concentration (Weston, 1995), however lead was not detected above the method detection limit during the August 2013 and 2014 sampling events. A review of historical groundwater sampling results is presented in **Table 4**, which also provides the matrix used to determine the status of the wells relative to future groundwater sampling and analyses. Based on the collective groundwater sampling results, it is recommended that one additional groundwater sample be collected at well 108MW04 and analyzed for lead. If this sample confirms a second non-detect for lead, groundwater sampling at FTMM-57 will be recommended to be discontinued.

TABLES

Table 1 Groundwater Gauging Data and Elevations (October 2, 2014) and LFPS Sampling Summary

Table 2 Historical Groundwater Analytical Results

Table 3 Groundwater Analytical Results - 2013 and 2014

Table 4 Review of Historical Groundwater Sampling Results

Table 1
Groundwater Gauging Data and Elevations (October 2, 2014) and LFPS Sampling Summary
Site FTMM-57 Building 108 UST Gasoline Release
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site/Well ID	Installation Date	Well Permit #	Y Coord. (North)	X Coord. (East)	Depth (ft. bgs)	Casing Length (ft)	Screen Length (ft)	TOC Elevation (ft)	Gauge Time	PID Reading (ppm)	Gauged Depth to Water (ft. TOC)	Gauged Depth to Bottom (ft. TOC)	Calculated Groundwater Elevation (ft)	Well Sampled this Event
Shallow Monitoring Wells														
108MW01	6/13/1993	29-29739	541684.19	623725.94	13.0	3.0	10.0	10.76	9:27	0.0	4.22	9.60	6.54	
108MW02	6/14/1993	29-29740	541706.21	623800.79	13.0	3.0	10.0	9.80	9:24	0.0	5.57	14.20	4.23	
108MW03	6/13/1993	29-29741	541636.38	623762.37	13.0	3.0	10.0	7.07	9:35	0.0	3.31	10.42	3.76	
108MW04	8/16/1995	29-33762	541737.89	623706.93	12.0	2.0	10.0	8.40	9:20	0.0	4.55	12.00	3.85	x

Notes:
1) The synoptic round of water levels in the wells was collected on October 2, 2014.
2) Information on well permit number, X and Y coordinates, depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
3) ft = feet
4) DTW = depth to water (measured from the top of well casing)
5) DTB = depth to bottom of well (measured from the top of well casing)
6) bgs = below ground surface
7) ppm = parts per million (of VOCs)
8) TOC = Top of Casing
9) Elevation = feet above mean sea level
10) N/A = information not available
11) LFPS = Low-Flow Purging and Sampling

Table 2
Historical Groundwater Analytical Results
Site FTMM-57 Building 108 UST Gasoline Release
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				108MW01																									
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	44		44 Dup		45		45 Dup		46		46 Dup		47		47 Dup		48		48 Dup		49		49 Dup		50	
Date Collected				8/3/2007		8/3/2007		12/3/2007		12/3/2007		3/6/2008		3/6/2008		4/30/2008		4/30/2008		8/6/2008		8/6/2008		10/15/2008		10/15/2008		2/17/2009	
ANALYTE / Lab ID				70293.03		70293.02		70502.03		70502.02		80070.03		80070.02		80144.03		80144.02		80282.03		80282.02		80370.03		80370.02		90057.03	
Metals (µg/L)																													
Antimony	6	6	20.7	**0.955**	ER	ND		ND		ND		ND		ND		**3.13**	ER	**1.57**	ER	**1.69**	ER	ND		ND		ND		**11.4**	
Arsenic	3	10	89.3	**10.1**		**7.67**		ND		ND		**4.32**		ND		**3.82**	ER	ND		**4.5**	ER	**5.03**		**7.7**		**6.93**		**11.7**	
Barium	6,000	2,000	699	**41.8**		**40.8**		**22.3**		**21.7**		**29.6**		**29**		**29.7**		**3.13**	ER	**46.8**		**47.6**		**62.5**		**56.1**		**41.8**	
Beryllium	1	4	2.1	ND		ND		ND		ND		ND		ND		**0.237**	ER	**0.282**	ER	ND		ND		**0.41**	ER	**0.379**	ER	ND	
Cadmium	4	5	9.5	ND		ND		ND		**0.321**	ER	**0.229**	ER	**0.235**	ER	**0.409**	ER	**0.345**	ER	**0.37**	ER	**0.447**	ER	**0.644**	ER	**0.581**	ER	ND	
Chromium	70	100	191	**0.917**	ER	**0.259**	ER	**1.29**	ER	**1.19**	ER	**1.47**	ER	**1.13**	ER	**5.39**		**1.42**	ER	**0.962**	ER	**0.96**	ER	**15.8**		**6.62**		**1.07**	ER
Copper	1,300	1,300 *	65.6	**3.49**	ER	**2.77**	ER	**1.58**	ER	**1.93**	ER	**9.84**	ER	**9.91**		**2.82**	ER	**4.49**	ER	**1.49**	ER	**2.35**	ER	**13.3**		**9.61**		**7.85**	
Lead	5	15	22.7	ND		ND		**0.955**	ER	**1.47**	ER	**4.85**	ER	**4.25**	ER	**5.43**		**10.9**		**2.45**	ER	**4.41**	ER	**30.8**		**20.9**		**16.1**	
Mercury	2	2	0.26	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Nickel	100	NLE	187	ND		**0.336**	ER	ND		ND		**6.12**		**6.71**		**2.74**	ER	**1.97**	ER	**0.931**	ER	**0.993**	ER	**2.12**	ER	**1.18**	ER	ND	
Selenium	40	50	29.6	**9.86**	ER	**10.3**		ND		**5.03**	ER	ND		ND		**10.2**		**8.67**	ER	**11.5**		**11.2**		**5.63**	ER	**4.33**	ER	**113**	
Thallium	2	2	5.5	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	

Notes:

Detections are bolded

Shaded cells = concentrations exceed the NJDEP GWQS

NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 27, 2007)

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Table 2
Historical Groundwater Analytical Results
Site FTMM-57 Building 108 UST Gasoline Release
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				108MW01																		108MW02					
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	51		52		53		LF3		LF4		LF4 Dup		LF5		LF6	LF7	LF8	LF9	44		45		46	
Date Collected				6/30/2009		8/28/2009		11/6/2009		2/19/2010		5/10/2010		5/10/2010		8/19/2010		11/22/2010	2/18/2011	5/3/2011	8/19/2011	8/3/2007		12/3/2007		3/6/2008	
ANALYTE / Lab ID				90270.03		90362.03		90439.03		10062.03		10180.03		10180.02		10352.03		1050204	1106006	1118802	1135006	70293.04		70502.04		80070.04	
Metals (µg/L)																											
Antimony	6	6	20.7	**6.94**	ER	**7.06**	ER	**6.34**	ER	ND		**12.1**		**10.7**		**8.82**	ER	< 4.7	< 6	< 6	< 6	ND		ND		ND	
Arsenic	3	10	89.3	**28.2**		**32.1**		**10.32**		**2.33**	ER	**2.61**	ER	**2.91**	ER	**3.16**	ER	**1.19**	< 3	< 3	**15.6**	**6.33**		ND		**5.52**	
Barium	6,000	2,000	699	**34.5**		**43.7**		**44.7**		**14.3**		**23.7**		**23.9**		**46.2**		**36**	< 200	< 200	< 200	**42.3**		**26.4**		**38.5**	
Beryllium	1	4	2.1	ND		**0.06**	ER	**0.108**	ER	ND		ND		ND		ND		< 0.4	< 1	< 1	< 1	ND		ND		ND	
Cadmium	4	5	9.5	ND		ND		ND		ND		ND		ND		ND		< 0.4	< 3	< 3	< 3	**0.484**	ER	ND		**0.406**	ER
Chromium	70	100	191	ND		ND		**5.77**		**2.88**	ER	**1.8**	ER	**1.75**	ER	ND		< 0.6	< 10	< 10	< 10	**1.12**	ER	**1.15**	ER	**1.14**	ER
Copper	1,300	1,300 *	65.6	**5.68**		**6.23**		**7.58**		**3.11**	ER	**1.95**	ER	**1.85**	ER	**3.95**	ER	**0.986**	< 10	**13.1**	< 10	**9.9**		**6.92**		**19.5**	
Lead	5	15	22.7	**2.9**	ER	**10.4**		**26**		ND		ND		ND		**6.91**		< 2.1	< 3	**3.3**	< 3	**2.05**	ER	**3.07**	ER	**6.73**	
Mercury	2	2	0.26	ND		ND		ND		ND		**0.12**	ER	**0.12**	ER	ND		**3.97**	< 0.2	< 0.2	< 0.2	ND		ND		ND	
Nickel	100	NLE	187	**2.78**	ER	**1.01**	ER	**2.32**	ER	**0.779**	ER	**1.02**	ER	**1.27**	ER	**1.21**	ER	**1.49**	< 10	< 10	< 10	**1.84**	ER	ND		**7.11**	
Selenium	40	50	29.6	**40.8**		**77.9**		**13.6**	ER	**45**		NR		NR		**103**		**3.97**	< 10	< 10	< 10	**7.23**	ER	ND		ND	
Thallium	2	2	5.5	ND		ND		ND		ND		ND		ND		ND		< 0.53	< 2	< 2	< 2	ND		ND		ND	

Notes:

Detections are bolded

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Table 2
Historical Groundwater Analytical Results
Site FTMM-57 Building 108 UST Gasoline Release
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				108MW02																						108MW03	
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	47		48		49		50		51		52		53		LF3		LF4		LF5		LF6	LF7	LF8	LF9	44	
Date Collected				4/30/2008		8/6/2008		10/15/2008		2/17/2009		6/30/2009		8/28/2009		11/6/2009		2/19/2010		5/7/2010		8/19/2010		11/19/2010	2/18/2011	5/3/2011	8/19/2011	8/3/2007	
ANALYTE / Lab ID				80144.04		80282.04		80370.04		90057.04		90270.04		90362.04		90439.04		10062.04		10178.04		10352.02		1050104	1106004	1118803	1135004	70293.05	
Metals (µg/L)																													
Antimony	6	6	20.7	ND		ND		**1.65**	ER	**18.2**		**4.62**	ER	**5.71**	ER	ND		**6.48**	ER	**6.32**	ER	**9.33**	ER	**6.54**	< 6	< 6	< 6	ND	
Arsenic	3	10	89.3	ND		**13.8**		**19.6**		**81.2**		**25.1**		**58.2**		**6.42**		**9.18**		**2.64**	ER	**6.68**		**4.24**	< 3	**15.9**	**12.3**	**10.6**	
Barium	6,000	2,000	699	**39.5**		**53**		**74.3**		**40.1**		**55.1**		**94.1**		**67.8**		**50.2**		**47.3**		**62.1**		**74**	< 200	< 200	< 200	**24.7**	
Beryllium	1	4	2.1	**0.133**	ER	ND		**0.236**	ER	ND		ND		**0.337**	ER	ND		**0.11**	ER	ND		ND		< 0.4	< 1	< 1	< 1	ND	
Cadmium	4	5	9.5	**0.331**	ER	**1.57**	ER	**0.46**	ER	ND		ND		**2.25**		ND		**0.505**	ER	ND		**1.33**	ER	**0.888**	< 3	< 3	< 3	**0.226**	ER
Chromium	70	100	191	**0.969**	ER	**1.9**	ER	**14.3**		**3.28**	ER	**6.1**		**5.34**		ND		**16.2**		**2.61**	ER	ND		< 0.6	**15.4**	**22.7**	**12.2**	**0.758**	ER
Copper	1,300	1,300 *	65.6	**7.75**		**3.5**	ER	**18.1**		**9.93**		**11.7**		**2.72**	ER	**3.25**	ER	**9.64**		**4.26**	ER	**7.72**		**1.7**	**12.5**	**31.9**	**12.5**	**11.3**	
Lead	5	15	22.7	**2.54**	ER	**5.59**		**7.42**		**12.6**		**6.2**		**16**		**2.82**	ER	**7.6**		ND		**5**		< 2.1	**5.6**	**14.5**	**4.5**	ND	
Mercury	2	2	0.26	ND		ND		ND		ND		ND		ND		ND		ND		**0.14**	ER	ND		< 0.254	< 0.2	< 0.2	< 0.2	ND	
Nickel	100	NLE	187	**2.54**	ER	**2.55**	ER	**2.51**	ER	ND		**4.56**	ER	**4.69**	ER	**1.66**	ER	**2.89**	ER	**1.58**	ER	**4.45**	ER	**2.8**	< 10	< 10	< 10	ND	
Selenium	40	50	29.6	**6.63**	ER	**4.6**	ER	ND		**85.1**		35.5		**116**		**9.21**	ER	**55**		NR		**94.8**		< 1.36	< 10	< 10	< 10	**5.3**	ER
Thallium	2	2	5.5	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		< 0.53	< 2	< 2	< 2	ND	

Notes:

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Table 2
Historical Groundwater Analytical Results
Site FTMM-57 Building 108 UST Gasoline Release
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				108MW03																															
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	45		46		47		48		49		50		51		52		53		LF3		LF4		LF5		LF6	LF6 Dup	LF7						
Date Collected				12/3/2007		3/6/2008		4/30/2008		8/6/2008		10/15/2008		2/17/2009		6/30/2009		8/28/2009		11/6/2009		2/19/2010		5/7/2010		8/19/2010		11/22/2010	11/22/2010	2/18/2011						
ANALYTE / Lab ID				70502.05		80070.05		80144.05		80282.05		80370.05		90057.05		90270.05		90362.05		90439.05		10062.05		10178.05		10352.04		1050203	1050202	1106005						
Metals (µg/L)																																			
Antimony	6	6	20.7	ND		**0.804**	ER	ND		ND		ND		**19.5**		**8.73**	ER	ND		ND		**8.66**	ER	**7.64**	ER	**7.97**	ER	< 4.7	< 4.7	< 6						
Arsenic	3	10	89.3	**3.13**	ER	**5.86**		**2.47**	ER	**6.6**		**13.8**		**124**		**35.7**		**37.7**		**6.54**		**2.31**	ER	**4.13**	ER	**9.1**		**2.83**	**2.59**	< 3						
Barium	6,000	2,000	699	**13.9**		**31.8**		**14.7**		**16**		**35.7**		**36.5**		**105**		**41.3**		**27.6**		**32.7**		**33.4**		**27.4**		**14.8**	**14.7**	< 200						
Beryllium	1	4	2.1	ND		ND		**0.111**	ER	ND		**0.411**	ER	ND		ND		ND		ND		ND		ND		ND		< 0.4	< 0.4	< 1						
Cadmium	4	5	9.5	**0.394**	ER	**1.33**	ER	**0.607**	ER	**0.627**	ER	**1.97**	ER	**0.565**	ER	**0.541**	ER	ND		ND		ND		ND		ND		< 0.4	< 0.4	< 3						
Chromium	70	100	191	**0.877**	ER	**1.96**	ER	**1.32**	ER	**2.52**	ER	**26.8**		**0.583**	ER	ND		ND		ND		ND		ND		ND		**2.73**	**1.47**	< 10						
Copper	1,300	1,300 *	65.6	**18.7**		**29.5**		**19.4**		**5.32**		**60.3**		**9.81**		**8.49**		**2.22**	ER	ND		**4.27**	ER	**2.55**	ER	**4.7**	ER	**5.31**	**2.98**	< 10						
Lead	5	15	22.7	**2.69**	ER	**1.19**	ER	**5.26**		**1.39**	ER	**12.5**		**4.98**	ER	**1.61**	ER	**2.43**	ER	ND		ND		ND		ND		< 2.1	< 2.1	< 3						
Mercury	2	2	0.26	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**0.14**	ER	ND		< 0.254	< 0.254	< 0.2						
Nickel	100	NLE	187	ND		**6.37**		**2.55**	ER	**0.631**	ER	**5.43**		ND		**2.48**	ER	**0.617**	ER	**1.95**	ER	**1.12**	ER	**1.27**	ER	**1.23**	ER	**0.789**	**1.17**	< 10						
Selenium	40	50	29.6	**3.68**	ER	ND		**3.92**	ER	**4**	ER	**3.38**	ER	**107**		**46.4**		**73.1**		ND		**55.2**		NR		**70.4**		**1.67**	< 1.36	< 10						
Thallium	2	2	5.5	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		< 0.53	< 0.53	< 2						

Notes:

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Historical Groundwater Analytical Results
Site FTMM-57 Building 108 UST Gasoline Release
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				108MW03		108MW04																									
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF8	LF9	45		46		47		48		49		50		51		51 Dup		52		52 Dup		53		53 Dup		54	
Date Collected				5/11/2011	8/19/2011	8/3/2007		12/3/2007		3/6/2008		4/30/2008		8/6/2008		10/15/2008		2/17/2009		2/17/2009		6/30/2009		6/30/2009		8/28/2009		8/28/2009		11/6/2009	
ANALYTE / Lab ID				1120401	1135005	70293.06		70502.06		80070.06		80144.06		80282.06		80370.06		90057.06		90057.02		90270.06		90270.02		90362.06		90362.02		90439.06	
Metals (µg/L)																															
Antimony	6	6	20.7	< 6	< 6	ND		ND		ND		ND		ND		ND		**7.85**	ER	**14**		**1.35**	ER	**7.37**		**7.58**	ER	**7.4**	ER	ND	
Arsenic	3	10	89.3	**4.9**	**3.3**	**6.59**		**4.17**	ER	**4.54**	ER	**9.53**		**4.92**	ER	**3.23**	ER	**52.9**		**72.9**		**19.2**		**22.6**		**31.9**		**36.1**		**9.73**	
Barium	6,000	2,000	699	< 200	< 200	**36.5**		**9.99**		**7.68**		**8.87**		**9.76**		**18**		**14.6**		**13.8**		**33.1**		**36.9**		**40.8**		**44.8**		**10.8**	
Beryllium	1	4	2.1	< 1	< 1	ND		ND		ND		**0.147**	ER	ND		**0.281**	ER	ND		ND		**0.418**	ER	**0.669**	ER	ND		ND		ND	
Cadmium	4	5	9.5	< 3	< 3	ND		ND		ND		ND		**0.323**	ER	**0.352**	ER	ND		**0.695**	ER	**0.63**	ER	**0.377**	ER	ND		ND		ND	
Chromium	70	100	191	< 10	< 10	ND		**1.81**	ER	**1.2**	ER	**0.613**	ER	**1.91**	ER	**9.47**		**1.57**	ER	**2.76**	ER	**30.4**		**72.5**		**6.02**		**5.85**		**3.41**	ER
Copper	1,300	1,300 *	65.6	< 10	< 10	**30.4**		**29.8**		**18.3**		**5.25**		**7.9**		**25.3**		**18.5**		**11.7**		81.8		**59.4**		**19.1**		**11.9**		**11.7**	
Lead	5	15	22.7	< 3	**4.7**	ND		**6.49**		ND		ND		ND		**5.38**		**9.74**		**1.71**	ER	**25.1**		**22.7**		**5.26**		**4.04**	ER	**3.55**	ER
Mercury	2	2	0.26	< 0.2	< 0.2	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Nickel	100	NLE	187	< 10	< 10	**0.665**	ER	ND		**5.78**		**1.58**	ER	**0.824**	ER	**1.32**	ER	ND		**1.96**	ER	**5.16**		**5.58**		**0.42**	ER	**0.572**	ER	**1.37**	ER
Selenium	40	50	29.6	< 10	< 10	**9.78**	ER	**3.9**	ER	ND		**3.12**	ER	**3.68**	ER	**6.99**	ER	**71.8**		**43.4**		**17**		**10.4**		**89.2**		**81.4**		**8.1**	ER
Thallium	2	2	5.5	< 2	< 2	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	

Notes:

Detections are bolded

Shaded cells = concentrations exceed the NJDEP GWQS

NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 27, 2007)

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Historical Groundwater Analytical Results
Site FTMM-57 Building 108 UST Gasoline Release
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

| | | | | 108MW04 | | | |

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-57 Building 108 UST Gasoline Release
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	Weston 1995 Background (Main Post)	108MW01	108MW02	108MW03	108MW04	
Sample ID				FTMM-57-GW-108MW01	FTMM-57-GW-108MW02	FTMM-57-GW-108MW03	FTMM-57-GW-108MW04	FTMM-57-GW-108MW04-8.25
Sample Date				8/19/2013	8/19/2013	8/19/2013	8/19/2013	10/2/2014
QA/QC				SA	SA	SA	SA	SA
Sample Method				LFPS	LFPS	LFPS	LFPS	LFPS
Volatile Organic Compounds (µg/l)								
1,1,1,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 1	< 1	NA
1,1,1-Trichloroethane	30	200	-	< 1	< 1	< 1	< 1	NA
1,1,2,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 1	< 1	NA
1,1,2-Trichloroethane	3	5	-	< 1	< 1	< 1	< 1	NA
1,1-Dichloroethane	50	NLE	-	< 1	< 1	< 1	< 1	NA
1,1-Dichloroethene	1	7	-	< 1	< 1	< 1	< 1	NA
1,1-Dichloropropene	100	NLE	-	< 1	< 1	< 1	< 1	NA
1,2,3-Trichlorobenzene	100	NLE	-	< 1	< 1	< 1	< 1	NA
1,2,3-Trichloropropane	0.03	NLE	-	< 1	< 1	< 1	< 1	NA
1,2,4-Trichlorobenzene	9	70	-	< 1	< 1	< 1	< 1	NA
1,2,4-Trimethylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	NA
1,2-Dibromo-3-chloropropane	0.02	0.2	-	< 1	< 1	< 1	< 1	NA
1,2-Dibromoethane	0.03	0.05	-	< 1	< 1	< 1	< 1	NA
1,2-Dichlorobenzene	600	600	-	< 1	< 1	< 1	< 1	NA
1,2-Dichloroethane	2	5	-	< 1	< 1	< 1	< 1	NA
1,2-Dichloropropane	1	5	-	< 1	< 1	< 1	< 1	NA
1,3,5-Trimethylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	NA
1,3-Dichlorobenzene	600	NLE	-	< 1	< 1	< 1	< 1	NA
1,3-Dichloropropane	100	NLE	-	< 1	< 1	< 1	< 1	NA
1,4-Dichlorobenzene	75	75	-	< 1	< 1	< 1	< 1	NA
2,2-Dichloropropane	100	NLE	-	< 1	< 1	< 1	< 1	NA
2-Chlorotoluene	100	NLE	-	< 1	< 1	< 1	< 1	NA
Acetone	6,000	NLE	-	< 5	**2.9 J**	< 5	**1.4 J**	NA
Benzene	1	5	-	< 1	< 1	< 1	< 1	NA
Bromobenzene	100	NLE	-	< 1	< 1	< 1	< 1	NA
Bromochloromethane	100	NLE	-	< 1	< 1	< 1	< 1	NA
Bromodichloromethane	1	80	-	< 1	< 1	< 1	< 1	NA
Bromoform	4	80	-	< 1	< 1	< 1	< 1	NA
Carbon tetrachloride	1	5	-	< 1	< 1	< 1	< 1	NA
Chlorobenzene	50	100	-	< 1	< 1	< 1	< 1	NA
Chlorodibromomethane	1	80	-	< 1	< 1	< 1	< 1	NA
Chloroethane	5	NLE	-	< 1	< 1	< 1	< 1	NA
Chloroform	70	80	-	< 1	< 1	< 1	< 1	NA
Cis-1,2-Dichloroethene	70	70	-	< 1	< 1	< 1	< 1	NA
Cis-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 1	< 1	NA
Cymene	100	NLE	-	< 1	< 1	< 1	< 1	NA
Dichlorodifluoromethane	1,000	NLE	-	< 1	< 1	< 1	< 1	NA
Ethyl benzene	700	700	-	< 1	< 1	< 1	< 1	NA
Hexachlorobutadiene	1	NLE	-	< 1	< 1	< 1	< 1	NA
Isopropylbenzene	700	NLE	-	< 1	< 1	< 1	< 1	NA
Meta & Para Xylenes	1,000	NLE	-	< 2	< 2	< 2	< 2	NA
Methyl bromide	10	NLE	-	< 1	< 1	< 1	< 1	NA
Methyl butyl ketone	300	NLE	-	< 5	< 5	< 5	< 5	NA
Methyl chloride	100	NLE	-	< 1	< 1	< 1	< 1	NA
Methyl ethyl ketone	300	NLE	-	< 1	< 1	< 1	< 1	NA
Methyl isobutyl ketone	100	NLE	-	< 1	< 1	< 1	< 1	NA
Methyl Tertbutyl Ether	70	NLE	-	< 1	< 1	< 1	< 1	NA
Methylene chloride	3	5	-	< 1	< 1	< 1	< 1	NA
Naphthalene	300	NLE	-	< 1	< 1	< 1	< 1	NA
n-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	NA
Ortho Xylene	1,000	NLE	-	< 1	< 1	< 1	< 1	NA
p-Chlorotoluene	100	NLE	-	< 1	< 1	< 1	< 1	NA
Propylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	NA
sec-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	NA
Styrene	100	100	-	< 1	< 1	< 1	< 1	NA
tert-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	NA
Tetrachloroethene	1	5	-	< 1	< 1	< 1	< 1	NA
Toluene	600	1,000	-	< 1	< 1	< 1	< 1	NA
Total TIC, Volatile	0.5	NLE	-	ND	ND	ND	ND	NA

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-57 Building 108 UST Gasoline Release
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	Weston 1995 Background (Main Post)	108MW01	108MW02	108MW03	108MW04	
Sample ID				FTMM-57-GW-108MW01	FTMM-57-GW-108MW02	FTMM-57-GW-108MW03	FTMM-57-GW-108MW04	FTMM-57-GW-108MW04-8.25
Sample Date				8/19/2013	8/19/2013	8/19/2013	8/19/2013	10/2/2014
QA/QC				SA	SA	SA	SA	SA
Sample Method				LFPS	LFPS	LFPS	LFPS	LFPS
Total Xylenes	1,000	10,000	-	< 3	< 3	< 3	< 3	NA
Trans-1,2-Dichloroethene	100	100	-	< 1	< 1	< 1	< 1	NA
Trans-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 1	< 1	NA
Trichloroethene	1	5	-	< 1	< 1	< 1	< 1	NA
Trichlorofluoromethane	2,000	NLE	-	< 1	< 1	< 1	< 1	NA
Vinyl chloride	1	2	-	< 1	< 1	< 1	< 1	NA
Pesticides (µg/l)								
4,4'-DDD	0.1	NLE	-	< 0.039	< 0.039	< 0.039	< 0.039	NA
4,4'-DDE	0.1	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA
4,4'-DDT	0.1	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA
Aldrin	0.04	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA
Alpha-BHC	0.02	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA
Alpha-Chlordane	0.5	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA
Beta-BHC	0.04	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA
Decachlorobiphenyl	NLE	NLE	-	**40.87**	**37**	**46.08**	**63.15**	NA
Delta-BHC	100	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA
Dieldrin	0.03	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA
Endosulfan I	40	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA
Endosulfan II	40	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA
Endosulfan sulfate	40	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA
Endrin	2	2	-	< 0.025	< 0.025	< 0.025	< 0.025	NA
Endrin aldehyde	100	2	-	< 0.025	< 0.025	< 0.025	< 0.025	NA
Endrin ketone	100	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA
Gamma-BHC/Lindane	0.03	0.2	-	< 0.025	< 0.025	< 0.025	< 0.025	NA
gamma-Chlordane	NLE	NLE	-	< 0.025	< 0.025	< 0.025	< 0.025	NA
Heptachlor	0.05	0.4	-	< 0.025	< 0.025	< 0.025	< 0.025	NA
Heptachlor epoxide	0.2	0.2	-	< 0.025	< 0.025	< 0.025	< 0.025	NA
Methoxychlor	40	40	-	< 0.025	< 0.025	< 0.025	< 0.025	NA
Tetrachloro-m-xylene	NLE	NLE	-	**102.21**	**88.36**	**91.16**	**106.57**	NA
Toxaphene	2	3	-	< 0.5	< 0.5	< 0.5	< 0.5	NA
Inorganics (µg/l)								
Aluminum	200	NLE	121,000	**606**	**94.8 J**	**169**	**33.6 J**	NA
Antimony	6	6	20.7	**4.4 J**	< 4	**2.5 J**	< 4	NA
Arsenic	3	10	89.3	< 5	**9 J**	**5.4 J**	< 5	NA
Barium	6,000	2,000	699	**38.3**	**43.1**	**22.6**	**23**	NA
Beryllium	1	4	2.1	< 0.3	< 0.3	< 0.3	< 0.3	NA
Cadmium	4	5	9.5	< 0.4	< 0.4	< 0.4	< 0.4	NA
Calcium	NLE	NLE	45,400	**67,500**	**37,700**	**31,700**	**51,200**	NA
Chromium	70	100	191	**5.3**	**3.9**	**2**	**1.8**	NA
Cobalt	100	NLE	18.3	< 1	**1.2 J**	< 1	< 1	NA
Copper	1,300	1,300	65.6	**8.4 J**	**2.9 J**	**5 J**	**3.4 J**	NA
Iron	300	NLE	431,000	**3,230**	**14,700**	**1,820**	**98.8 J**	NA
Lead	5	15	22.7	**2.5 J**	< 2	< 2	< 2	< 2.5
Magnesium	NLE	NLE	62,700	**5,190**	**8,290**	**3,670**	**4,370**	NA
Manganese	50	NLE	331	**19.8**	**363**	**52.3**	**1.5 J**	NA
Mercury	2	2	0.26	< 0.08	< 0.08	< 0.08	< 0.08	NA
Nickel	100	NLE	187	< 5	**3.5 J**	< 5	< 5	NA
Potassium	NLE	NLE	137,000	**8,520**	**2,970**	**6,100**	**4,540**	NA
Selenium	40	50	29.6	**6.4 J**	**3.6 J**	**4 J**	**4.4 J**	NA
Silver	40	NLE	ND	**0.893 J**	**0.545 J**	**0.773 J**	**0.601 J**	NA
Sodium	50,000	NLE	21,500	**64,700**	**102,000**	**81,800**	**6,930**	NA
Thallium	2	2	5.5	< 10	< 10	< 10	< 10	NA
Vanadium	NLE	NLE	108	**6.4**	**12.3**	**11.2**	**2.3 J**	NA
Zinc	2,000	NLE	233	**86.2**	**3 J**	**30.5**	**19 J**	NA

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-57 Building 108 UST Gasoline Release
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Footnote:
1) All historical data collected prior to 2013 are reported as provided by others.
2) Number of Analyses is the number of detected and non-detected results excluding rejected results. Sample duplicate pairs have not been averaged.
3) NLE = no limit established.
4) ND = not detected in any background sample, no background concentration available.

5) Chemical result qualifiers are assigned by the laboratory and is typically evaluated and modified (if necessary) by during data validation.
[blank] = detect, i.e. detected chemical result value.
B = Compound detected in the sample and its associated blank sample.
R = Rejected, data validation rejected the results.
U = non-detect, i.e. not detected equal to or above this value.
U-DL = Elevated sample detection limit due to difficult sample matrix.
U-ND = Analyte not detected in sample, but no detection or reporting limit provided.
J = estimated (detect or non-detect) value.
E (or ER) = Estimated result.
D = Results from dilution of sample.
J-DL = Elevated sample detection limit due to difficult sample matrix.
JN = Tentatively identified compound, estimated concentration.

6) Chemical results greater than or equal to the action level (depending on criteria) are highlighted based on the Criteria that are present.
- Cell Shade values represent a result that is above the NJ Ground Water Quality Criteria ####
NJDEP Interim Specific GWQC values are presented for the NJ GWQS where there is not a Specific Ground Water Quality Criteria. A full list of compounds is available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).
NJDEP Interim Generic GWQC values are presented for the NJ GWQS where there is not a XXXXX or a NJDEP Interim Specific GWQC. Available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).
- Bold Outline represent a result that is above the USEPA 2014-05 MCL. ###
- Cell Style values represent a result that is above the Weston 1995 Background (Main Post). ###
n/a = all concentrations were less than the detection limit, therefore, no location of maximum value identified.
Dash (-) = only background concentrations for metals are being used as comparison criteria.

7) Criteria action level source document and web address.
- The NJ Ground Water Quality Criteria refers to the NJDEP Groundwater Quality Standards - Adopted July 22, 2010
http://www.state.nj.us/dep/wms/bwqsa/docs/njac79C.pdf
- The 2014-05 USEPA MCL refers to the USEPA's Region 9 Regional Screening Levels (HQ=1.0) - 5/31/2014 (Last revised)
http://www.epa.gov/region9/superfund/prg/
- The Weston 1995 Background (Main Post) refers to the FTMM reports.
NA

8) Wells sampled in the fourth quarter are highlighted in yellow. Sample ID

Table 4
Review of Historical Groundwater Sampling Results
Site FTMM-57 Building 108 UST Gasoline Release
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site Name/ Well ID	Interpretation of Historical and 2014 Results [1]			2014 Evaluation				Retain Analyte/Well (Yes or No)	Rationale
	Chem Class / Analyte	Does it Exceed NJDEP GWQS (Yes or No) (If Yes, identify compound)	Do Metals Exceed FTMM Background Concentration (Yes or No) (If Yes, identify Metal)	Seasonal Effect?[2] (Y/N)	Anomaly? (Y/N)	Exceedance part of overall trend? (Y/N)	Well needed for sentinel purposes? (Y/N)		
FTMM-57, B108									
108MW04	Pb	Pb	No	No	No	N/A	No	Yes	Pb not detected in 2014 or 2013 sampling events. One more sampling round for Pb is recommended for this well

Notes

1. Has any of the analyte compounds exceeded the NJDEP GWQS in the 2014 data and the 4 previous quarterly data rounds or 2 previous annual rounds?
   a. If yes then keep analyte in LTM list
   b. If no then remove this analyte from LTM list
   c. a and b above may be occasionally superceded on a case-by-case basis, depending on site conditions.
2. Has any of the analyte compounds exceeded the NJDEP GWQS seasonally (winter spring vs. summer fall)?
3. N/A - Not applicable
4. Per the 2/5/15 NJDEP approval letter of the Final 2013 Baseline Groundwater Report, groundwater monitoring wells 108MW01, 108MW02 and 108MW03; were removed from the long term monitoring sampling program and VOCs, pesticides and metals analysis were discontinued in 2014 with the exception of lead.

FIGURES

Figure 1 Layout of FTMM-57 Building 108 UST Gasoline Release

Figure 2 FTMM-57 Shallow Groundwater Contours - October 2, 2014

LEGEND:

- Shallow Monitoring Well
- Former Building 108
- Municipal Boundary
- Installation Boundary
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Surface Water Feature

N

1 inch = 100 feet

0 50 100 200 Feet

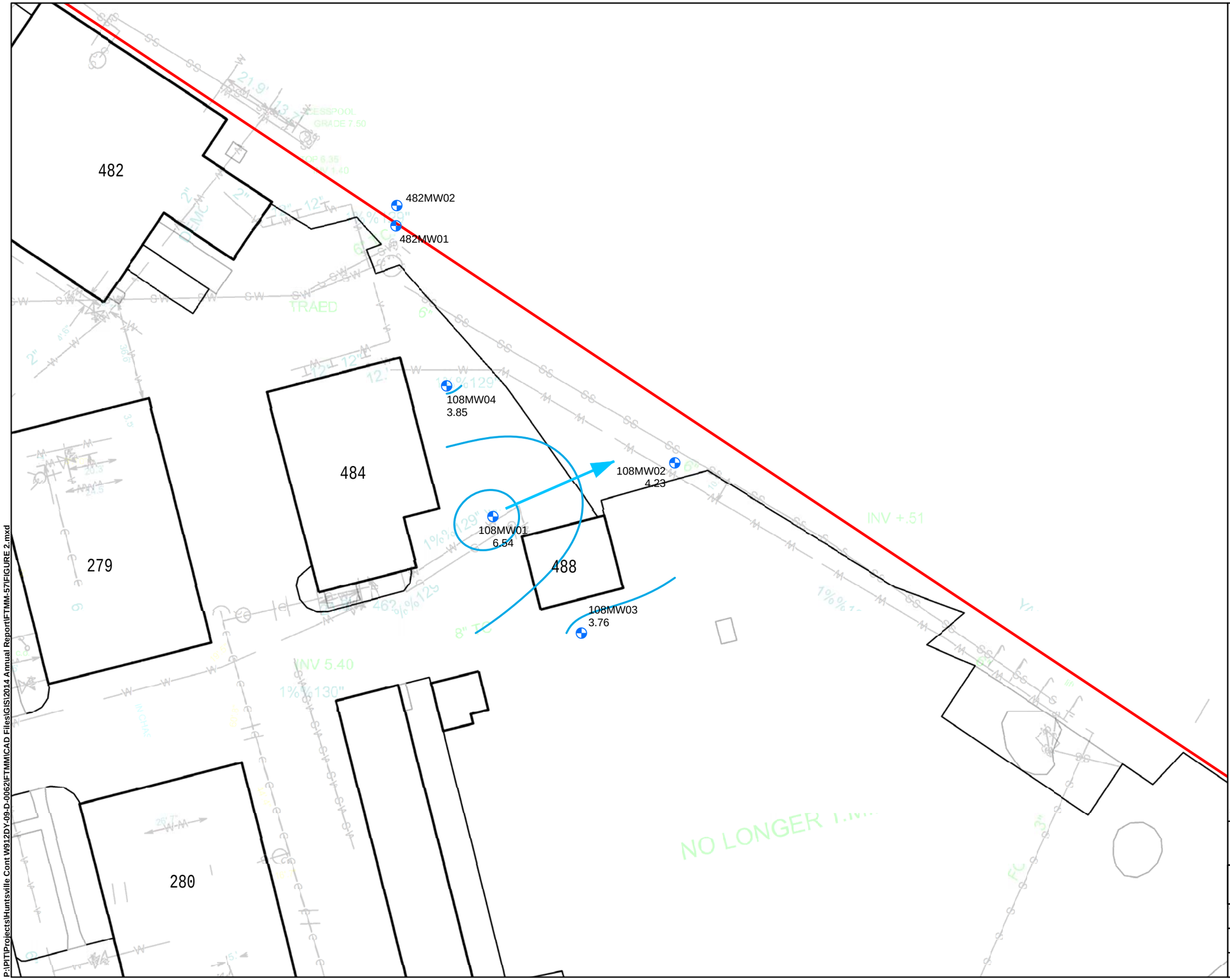
Source: FTMM Supplied CAD

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey

LAYOUT OF FTMM-57
BUILDING 108 UST GASOLINE RELEASE

CREATED BY: RR	REVIEWED BY: ME
DATE: OCT. 2015	FIGURE NUMBER: FIGURE 1
PROJECT NUMBER: 748810-01000	FILE: FIGURE 1.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-57\FIGURE 1.mxd



LEGEND:

- Shallow Monitoring Well
- Former Building 108
- Installation Boundary
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Surface Water Feature
- Groundwater Elevation Contour
- Inferred Groundwater Flow Direction

N

1 inch = 40 feet

0 20 40 80 Feet

Source: FTMM Supplied CAD

PARSONS 401 Diamond Drive NW, Huntsville AL	**Fort Monmouth** **New Jersey**

FTMM-57 SHALLOW GROUNDWATER CONTOURS - OCTOBER 2, 2014

CREATED BY: RR	REVIEWED BY: ME
DATE: OCT. 2015	FIGURE NUMBER: FIGURE 2
PROJECT NUMBER: 748810-01000	FILE: FIGURE 2.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-57\FIGURE 2.mxd

ATTACHMENTS

Attachment A LFPS Field Sheets

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS	CLIENT: FtMM	WELL #: 108MW09

PROJECT: FtMm 4Q GW Sampling
WELL PERMIT #: 29-33762
AOC # (AREA): M-57
DATE: 10/2/14
SCREENED INTERVAL (TOC): 2-12
SAMPLING PERSONNEL NAME: C. Watson
WELL DIAMETER (in.): 4
SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	(2)	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0
FEET OF SATURATED SCREEN (ft): 7.45
WELL DEPTH (TOC): 12.0
DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 4.55
FEET OF WATER IN WELL (ft): 7.45
PUMP INTAKE DEPTH (ft below TOC): 8.25

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
0955	X		7.24	NA	0.355	NA	88.8	NA	4.21	NA	28.3	NA	20.64	NA	310	4.66
1000	X		7.19	.05	0.327	.028	50.1	38.7	3.00	1.21	26.4	1.9	21.17	0.53	300	4.81
1005	X		7.14	.05	0.322	.005	55.0	4.9	4.80	1.80	22.5	3.9	21.26	0.09	275	4.94
1010	X		7.06	.08	~~0.318~~ 0.318	.002	61.7	6.7	9.24	4.44	17.8	4.7	21.34	0.08	250	5.07
1015	X		7.02	.04	0.316	.002	66.2	4.5	4.91	4.33	10.5	7.3	21.42	0.08	200	5.15
1020	X		6.98	.04	0.320	.004	70.4	4.2	4.98	.07	7.8	2.7	21.24	0.18	200	5.25
1025	X		6.97	↓	0.320	↓	70.3	0.1	4.94	.04	3.6	4.2	21.43	0.19	175	5.30
1030	X		6.97	.01	0.319	0.001	70.4	0.1	4.92	.02	3.4	0.2	21.44	0.01	175	5.33
1035		X	6.97	↓	0.319	~~0.001~~ ↓	70.5	0.1	4.90	.02	3.5	0.1	21.43	0.01	175	5.37

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

APPENDIX I

FTMM-58: BUILDING 2567 UST GASOLINE

APPENDIX I: FTMM-58 Building 2567 UST Gasoline

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3.0 HISTORICAL GROUNDWATER SAMPLING RESULTS I-1
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2	FTMM-58 Shallow Groundwater Contours - September 29, 2014

LIST OF ATTACHMENTS

Attachment	Title
A	LFPS Field Sheets

1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT

Monitoring wells located within FTMM-58 were gauged on September 29, 2014. Monitoring well locations as well as other site features are provided in **Figure 1**. Details regarding the water level measurements are provided in **Table 1**. Groundwater elevations in monitoring wells ranged from 26.10 (2567MW06) to 30.85 (2567MW02) feet above mean sea level (amsl). The inferred shallow groundwater flow direction is generally to the southeast, as shown in **Figure 2**.

During the groundwater gauging, the physical condition of FTMM-58 monitoring wells were assessed. The site monitoring wells were found to be in good condition.

2.0 GROUNDWATER SAMPLING

Groundwater samples were collected from two monitoring wells (2567MW01 and 2567MW03) located at FTMM-58 as part of the annual (fourth quarter) 2014 groundwater sampling event. FTMM-58 is sampled on an annual basis. The groundwater sampling program included measuring the depth to groundwater in monitoring wells prior to sampling and collection of groundwater samples using low-flow purging and sampling (LFPS). Groundwater samples were collected from wells 2567MW01 and 2567MW03 on October 2, 2014. The groundwater samples were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) via the United States Environmental Protection Agency (USEPA) Method SW8260C.

The samples were collected in accordance with the New Jersey Department of Environmental Protection (NJDEP) Field Sampling Procedures Manual (FSPM) and the Sampling Analysis Plan (SAP). Field blanks, duplicates, matrix spike, matrix spike duplicate and quality assurance (QA) split samples were collected for every 5% of samples collected per parameter, per matrix, in accordance with the Quality Assurance Project Plan (QAPP). Trip blanks accompanied each cooler each day in which VOCs were collected for laboratory analysis.

Completed LFPS field sheets for each well sampled can be found in **Attachment A**.

3.0 HISTORICAL GROUNDWATER SAMPLING RESULTS

Groundwater monitoring has been conducted at FTMM-58 beginning in April 1997. Groundwater monitoring has consisted of sampling for select VOCs, semi-volatile organic compounds (SVOCs), and metals. The four most recent historical quarterly groundwater sampling events consisted of sampling for VOCs and metals.

Tert-butyl alcohol (TBA) was detected in FTMM-58 monitoring well 2567MW01 above the NJDEP Groundwater Quality Standards (GWQS) in March and June 2010, but was not detected in the subsequent groundwater sampling event conducted in September 2010. TBA was also detected in 2567MW03 at a concentration of 486.99 µg/L in September 2010. The NJDEP GWQS for TBA is 100 µg/L.

The November 2011 Remedial Action Progress Report for FTMM-58 prepared by CALIBRE Systems, Inc. stated that in an effort to reduce the TBA exceedances exhibited in monitoring wells 2567MW01 and 2567MW03, *in-situ* chemical oxidation injections would be performed

in this area. Three injections of RegenOx®/ORC Advanced™ were conducted between November 2010 and June 2011 under an approved NJDEP Permit by Rule letter dated October 28, 2010.

Antimony was detected in monitoring wells 2567MW01, 2567MW02, 2567MW03, 2567MW04 and 2567MW05 above the NJDEP GWQS in at least one of the last four historical sampling rounds. Lead was also detected above the NJDEP GWQS in the September and June 2010 sampling events. Both antimony and lead were well below the background conditions for each compound and are not related to former site operations. Historical groundwater analytical data are presented in **Table 2**.

During the August 2013 Baseline Sampling Event, seven monitoring wells were sampled for VOCs. No VOCs were detected above their respective NJDEP GWQS during August 2013 sampling event. Results of the August 2013 sampling event are presented in **Table 3**

The Final August 2013 Baseline Groundwater Sampling Report was accepted by the NJDEP in their February 5, 2015 letter. Based on this approval, five out of the seven groundwater monitoring wells were removed from the long term monitoring program (LTM) including 2567MW02, 2567MW04, 2567MW05, 2567MW06 and 2567MW07; and the volatile organic compound list were reduced to TBA only.

4.0 ANNUAL (FOURTH QUARTER) 2014 GROUNDWATER RESULTS

TBA was detected in only monitoring well 2567MW01, at a concentration of 260 µg/L which is above the NJDEP GWQS of 100 µg/L. Groundwater analytical results from samples collected during the annual (fourth quarter) 2014 groundwater sampling event are presented in **Table 3**.

5.0 FINDINGS AND RECOMMENDATIONS

Overall, concentrations of TBA detected at monitoring well 2567MW01 have been decreasing from a high of 829.45 µg/L (June 2010) to 260 µg/L (December 2014); concentrations remain above the NJDEP GWQS (100 µg/L). Concentrations of TBA detected at monitoring well 2567MW03 have fluctuated and have ranged from 486.99 µg/L in September 2010 to non-detect in December 2014. Based on the collective groundwater analytical results, groundwater monitoring for TBA is recommended to continue for monitoring wells 2567MW01 and 2567MW03. A review of historical groundwater sampling results is presented in **Table 4**, which also provides the matrix used to determine the status of wells relative to future groundwater sampling and analyses.

TABLES

Table 1 Groundwater Gauging Data and Elevations (September 29, 2014) and LFPS Sampling Summary

Table 2 Historical Groundwater Analytical Results

Table 3 Groundwater Analytical Results - 2013 and 2014

Table 4 Review of Historical Groundwater Sampling Results

Table 1
Groundwater Gauging Data and Elevations (September 29, 2014) and LFPS Sampling Summary
Site FTMM-58 Building 2567 UST Gasoline
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site/Well ID	Installation Date	Well Permit #	Y Coord. (North)	X Coord. (East)	Depth (ft. bgs)	Casing Length (ft)	Screen Length (ft)	TOC Elevation (ft)	Gauge Time	PID Reading (ppm)	Gauged Depth to Water (ft. TOC)	Gauged Depth to Bottom (ft. TOC)	Calculated Groundwater Elevation (ft)	Well Sampled this Event
Shallow Monitoring Wells														
2567MW01	9/30/1991	29-26925	532956.75	609537.78	13.0	3.0	10.0	32.86	14:46	0.0	3.34	12.80	29.52	x
2567MW02	10/1/1991	29-26926	533016.73	609468.76	13.0	3.0	10.0	34.17	14:40	0.0	3.32	12.46	30.85	
2567MW03	10/1/1991	29-26927	532929.32	609472.36	13.0	3.0	10.0	32.79	14:50	0.0	3.47	12.67	29.32	x
2567MW04	9/30/1991	29-26928	533042.70	609544.26	12.0	2.0	10.0	32.42	14:44	0.0	2.76	11.85	29.66	
2567MW05	9/23/1994	29-31783	532871.13	609697.52	12.5	2.5	10.0	33.90	15:30	0.0	5.91	15.00	27.99	
2567MW06	5/12/2000	29-42585	532869.38	609542.57	13.0	3.0	10.0	34.01	15:20	0.0	7.91	15.98	26.10	
2567MW07	5/12/2000	29-42586	532879.49	609473.42	13.0	3.0	10.0	35.25	15:23	0.0	7.49	15.02	27.76	

Notes:
1) The synoptic round of water levels in the wells was collected on September 29, 2014.
2) Information on well permit number, X and Y coordinates, depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
3) ft = feet
4) DTW = depth to water (measured from the top of well casing)
5) DTB = depth to bottom of well (measured from the top of well casing)
6) bgs = below ground surface
7) ppm = parts per million (of VOCs)
8) TOC = Top of Casing
9) Elevation = feet above mean sea level
10) N/A = information not available
11) LFPS = Low-Flow Purging and Sampling

Table 2
Historical Groundwater Analytical Results
Site FTMM-58 Building 2567 UST Gasoline
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				2567MW01										2567MW02											
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	51	51 Dup	LF1		LF2		LF2 Dup		LF3		51	LF1		LF1 Dup		LF2		LF2 Dup		LF3		LF3 Dup	
Date Collected				10/26/2009	10/26/2009	3/4/2010		6/9/2010		6/9/2010		9/16/2010		10/26/2009	3/4/2010		3/4/2010		6/8/2010		6/8/2010		9/15/2010		9/15/2010	
ANALYTE / Lab ID				90428.04	90428.03	10069.08		10251.04		10251.03		10395.05		90428.05	10069.04		10069.03		10248.04		10248.03		10392.04		10392.03	
Volatile Organic Compounds (µg/L)																									
Acetone	6,000	NLE	--	ND	ND	ND		ND		ND		ND		ND	ND		ND		ND		ND		ND		ND	
Benzene	1	5	--	ND	ND	ND		ND		ND		ND		ND	--		--		ND		--		--		--	
2-Butanone	300	NLE	--	ND	ND	--		--		--		--		ND	ND		ND		ND		ND		ND		ND	
Methyl *tert* -butyl ether	70	NLE	--	**0.90**	**0.92**	**1.28**		**1.15**		**1.11**		ND		ND	--		--		ND		--		--		--	
tert -Butyl alcohol	100	NLE	--	**13.13**	**13.13**	**662.11**		**829.45**		**736.09**		ND		ND	--		--		ND		--		--		--	
Toluene	600	1,000	--	ND	ND	ND		ND		ND		ND		ND	--		--		ND		--		--		--	
Xylenes (total)	1,000	10,000	--	ND	ND	ND		ND		ND		ND		ND	--		--		ND		--		--		--	
TICs*	NLE	NLE	--	ND	ND	ND		**9**		**6**		**234**		**15**	ND		ND		ND		ND		**20**		**26**	
Metals (µg/L)																									
Antimony	6	6	20.7	NA	NA	**6.88**	ER	**10.7**		**12.6**		**18.7**		NA	ND		**6.13**	ER	**9.73**	ER	**9.89**	ER	**13.2**		**11.1**	
Arsenic	3	10	89.3	NA	NA	**1.14**	ER	ND		**0.69**	ER	ND		NA	**1.01**	ER	**0.91**	ER	**0.70**	ER	**1.00**	ER	**1.46**	ER	**1.06**	ER
Barium	6,000	2,000	699	NA	NA	**845**		**1120**		**1110**		**885**		NA	**377**		**407**		**340**		**339**		**434**		**443**	
Beryllium	1	4	2.1	NA	NA	ND		**0.06**	ER	**0.07**	ER	ND		NA	ND		ND		**0.136**	ER	**0.15**	ER	ND		ND	
Cadmium	4	5	9.5	NA	NA	ND		ND		ND		ND		NA	ND		ND		ND		ND		--		--	
Chromium	70	100	191	NA	NA	ND		ND		ND		ND		NA	ND		ND		ND		ND		ND		ND	
Copper	1,300	1,300 **	65.6	NA	NA	ND		ND		ND		**1.54**	ER	NA	ND		ND		ND		ND		**3.02**	ER	**2.32**	ER
Lead	5	15	22.7	ND	ND	ND		ND		ND		ND		ND	ND		ND		ND		ND		ND		ND	
Mercury	2	2	0.26	NA	NA	ND		ND		ND		ND		NA	ND		ND		ND		ND		**0.08**	ER	**0.08**	ER
Nickel	100	NLE	187	NA	NA	**1.02**	ER	ND		ND		ND		NA	ND		ND		ND		ND		**1.07**	ER	**1.63**	ER
Selenium	40	50	29.6	NA	NA	NR		NR		NR		ND		NA	NR		NR		NR		NR		**1.96**		ND	
Thallium	2	2	5.5	NA	NA	ND		ND		ND		ND		NA	ND		ND		ND		ND		ND		ND	

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

** Value is the USEPA Action Level.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

< = Analyte does not exceed the detection limit shown

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

NA = Not analyzed

ND = Not detected

NLE = No limit established

ER = Estimated Result

LF = Low flow sampling method used to collect sample

DUP = field duplicate sample

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

Table 2
Historical Groundwater Analytical Results
Site FTMM-58 Building 2567 UST Gasoline
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				2567MW03	2567MW03					2567MW04						2567MW05											
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	51	LF1		LF2		LF3		51	LF1		LF2		LF3		51	LF1		LF1 Dup		LF2		LF3		LF3 Dup	
Date Collected				10/26/2009	3/5/2010		6/9/2010		9/15/2010		10/26/2009	3/4/2010		6/8/2010		9/15/2010		10/26/2009	3/5/2010		3/5/2010		6/8/2010		9/16/2010		9/16/2010	
ANALYTE / Lab ID				90428.06	10073.05		10251.05		10392.08		90428.07	10069.05		10248.05		10392.05		90428.08	10073.04		10073.03		10248.08		10395.04		10395.03	
Volatile Organic Compounds (µg/L)																													
Acetone	6,000	NLE	--	ND	ND		ND		ND		ND	ND		ND		ND		ND	ND		ND		ND		ND		ND	
Benzene	1	5	--	ND	ND		ND		ND		ND	--		--		--		ND	--		--		--		--		--	
2-Butanone	300	NLE	--	ND	ND		ND		ND		ND	ND		ND		ND		ND	ND		ND		ND		ND		ND	
Methyl *tert* -butyl ether	70	NLE	--	**0.74**	**0.42**	J	**0.25**	J	**1.26**		ND	ND		ND		ND		ND	--		--		--		--		--	
tert -Butyl alcohol	100	NLE	--	ND	ND		ND		**486.99**		ND	--		--		--		ND	--		--		--		--		--	
Toluene	600	1,000	--	ND	ND		ND		ND		ND	--		--		--		ND	ND		ND		ND		ND		ND	
Xylenes (total)	1,000	10,000	--	ND	ND		ND		ND		ND	--		--		--		ND	--		--		--		--		--	
TICs*	NLE	NLE	--	**227**	**53**		**5**		**18**		ND	ND		ND		ND		ND	ND		ND		ND		ND		ND	
Metals (µg/L)																													
Antimony	6	6	20.7	NA	ND		**9.45**	ER	**16.5**		NA	**5.51**	ER	**6.42**		**8.64**	ER	NA	ND		ND		ND		ND		**7.31**	ER
Arsenic	3	10	89.3	NA	ND		ND		--		NA	**2.37**	ER	**1.80**	ER	**2.22**	ER	NA	ND		**0.71**	ER	**1.30**	ER	**2.57**	ER	**2.41**	ER
Barium	6,000	2,000	699	NA	**195**		**382**		**1120**		NA	**74.3**		**136**		**175**		NA	**105**		**106**		**49.5**		**41.5**		**38.1**	
Beryllium	1	4	2.1	NA	ND		**0.04**	ER	ND		NA	**0.38**	ER	**0.32**	ER	**0.20**	ER	NA	**0.24**	ER	**0.20**	ER	**0.44**	ER	**0.36**	ER	**0.33**	ER
Cadmium	4	5	9.5	NA	ND		ND		--		NA	**0.58**	ER	ND		ND		NA	**1.48**	ER	**1.36**	ER	ND		ND		ND	
Chromium	70	100	191	NA	ND		ND		ND		NA	**1.78**	ER	ND		ND		NA	ND		ND		**11.4**		**7.39**		**6.77**	
Copper	1,300	1,300 **	65.6	NA	ND		ND		**2.46**	ER	NA	**1.39**	ER	ND		**2.15**	ER	NA	**5.22**		**5.22**		**16.6**		**13.1**		**12.5**	
Lead	5	15	22.7	ND	ND		ND		ND		ND	ND		ND		ND		ND	ND		ND		**11.9**		**7.02**		**6.19**	
Mercury	2	2	0.26	NA	ND		ND		**0.07**	ER	NA	ND		ND		**0.07**	ER	NA	ND		ND		ND		ND		ND	
Nickel	100	NLE	187	NA	ND		ND		**3.11**	ER	NA	**11.4**		**10.9**		**3.7**	ER	NA	**11.1**		**11.7**		**6.93**		**6.1**	ER	**5.34**	
Selenium	40	50	29.6	NA	NR		NR		ND		NA	NR		NR		ND		NA	NR		NR		NR		**1.7**		ND	
Thallium	2	2	5.5	NA	ND		ND		ND		NA	ND		ND		ND		NA	ND		ND		ND		ND		ND	

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

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NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

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Table 2
Historical Groundwater Analytical Results
Site FTMM-58 Building 2567 UST Gasoline
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				2567MW07	2567MW07					
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	38	LF1		LF2		LF3	
Date Collected				10/26/2009	3/4/2010		6/8/2010		9/15/2010	
ANALYTE / Lab ID				90428.10	10069.07		10248.07		10392.07	
Volatile Organic Compounds (µg/L)										
Acetone	6,000	NLE	--	ND	ND		ND		ND	
Benzene	1	5	--	ND	--		--		--	
2-Butanone	300	NLE	--	ND	--		--		--	
Methyl *tert* -butyl ether	70	NLE	--	ND	ND		ND		ND	
tert -Butyl alcohol	100	NLE	--	ND	ND		ND		ND	
Toluene	600	1,000	--	ND	--		--		--	
Xylenes (total)	1,000	10,000	--	ND	--		--		--	
TICs*	NLE	NLE	--	ND	ND		ND		ND	
Metals (µg/L)										
Antimony	6	6	20.7	NA	ND		**5.50**	ER	**7.47**	ER
Arsenic	3	10	89.3	NA	**0.64**	ER	**2.71**	ER	**8.20**	
Barium	6,000	2,000	699	NA	**223**		**71.5**		**172**	
Beryllium	1	4	2.1	NA	**0.22**	ER	**0.19**	ER	**0.04**	ER
Cadmium	4	5	9.5	NA	ND		ND		ND	
Chromium	70	100	191	NA	ND		ND		ND	
Copper	1,300	1,300 **	65.6	NA	**4.06**	ER	**2.15**	ER	**2.39**	ER
Lead	5	15	22.7	**3.05**	ND		ND		ND	
Mercury	2	2	0.26	NA	NA		ND		**0.06**	ER
Nickel	100	NLE	187	NA	**15.6**		**5.22**		**9.89**	
Selenium	40	50	29.6	NA	NR		NR		**1.43**	
Thallium	2	2	5.5	NA	ND		ND		ND	

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.

** Value is the USEPA Action Level.

NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

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ER = Estimated Result

LF = Low flow sampling method used to collect sample

DUP = field duplicate sample

J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-58 Building 2567 UST Gasoline
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, NJ

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	2567MW01		2567MW02	2567MW03				2567MW04	2567MW05	
Sample ID			FTMM-58-GW-2567MW01-8.33	FTMM-58-GW-2567MW01-8.73	FTMM-58-GW-2567MW02-8.06	FTMM-58-GW-2567MW03-10.5	FTMM-58-GW-2567MW03-10.5LF	FTMM-58-GW-2567MW03-5.11	FTMM-58-GW-2567MW03-8.03	FTMM-58-GW-2567MW04-7.09	FTMM-58-GW-2567MW05-9.65	FTMM-58-GW-2567MW105-9
Sample Date			8/29/2013	10/2/2014	8/29/2013	8/29/2013	8/29/2013	8/29/2013	10/2/2014	8/29/2013	8/29/2013	8/29/2013
QA/QC			SA	SA	SA	SA	SA	SA	SA	SA	SA	DU
Sample Method			PDB	LFPS	PDB	PDB	LFPS	PDB	LFPS	PDB	PDB	PDB
Volatile Organic Compounds (µg/l)												
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	**2.5 J**	**1.7 J**	**2.9 J**	**2.8 J**	< 5	**3.5 BJ**	< 5	**2.8 J**	**2.9 J**	**2.7 J**
Benzene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	70	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	< 1	< 1	< 1	< 1	< 1	< 1	**2 J**	< 1	< 1	< 1
Meta & Para Xylenes	1,000	NLE	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl bromide	10	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	**0.34 J**	**0.8 J**	< 1	< 1	**0.3 J**	< 1	< 1	< 1	< 1	< 1
Methylene chloride	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
n-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	**1.9 J**	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	NA	**260**	NA	NA	NA	NA	< 20	NA	NA	NA
tert-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	600	1,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Total Xylenes	1,000	10,000	< 3	NA	< 3	< 3	< 3	< 3	NA	< 3	< 3	< 3
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TIC VOCs (µg/l)												
Total TIC, Volatile	500	NLE	ND	ND	ND	ND	ND	ND	**10.1 J**	ND	ND	ND

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-58 Building 2567 UST Gasoline
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, NJ

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	2567MW06	2567MW07
Sample ID			FTMM-58-GW-2567MW06-11.48	FTMM-58-GW-2567MW07-10.99
Sample Date			8/29/2013	8/29/2013
QA/QC			SA	SA
Sample Method			PDB	PDB
Volatile Organic Compounds (µg/l)				
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1
1,1,2-Trichloroethane	3	5	< 1	< 1
1,1-Dichloroethane	50	NLE	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1
1,2,4-Trichlorobenzene	9	70	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1
1,2-Dichloroethane	2	5	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	< 1	< 1
1,3-Dichlorobenzene	600	NLE	< 1	< 1
1,3-Dichloropropane	100	NLE	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1
2,2-Dichloropropane	100	NLE	< 1	< 1
2-Chlorotoluene	100	NLE	< 1	< 1
Acetone	6,000	NLE	**2.1 J**	**3.3 J**
Benzene	1	5	< 1	< 1
Bromobenzene	100	NLE	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 1
Bromodichloromethane	1	80	< 1	< 1
Bromoform	4	80	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 1
Chlorobenzene	50	100	< 1	< 1
Chlorodibromomethane	1	80	< 1	< 1
Chloroethane	5	NLE	< 1	< 1
Chloroform	70	80	< 1	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1
Cymene	100	NLE	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1	< 1
Ethyl benzene	700	700	< 1	< 1
Hexachlorobutadiene	1	NLE	< 1	< 1
Isopropylbenzene	700	NLE	< 1	< 1
Meta & Para Xylenes	1,000	NLE	< 2	< 2
Methyl bromide	10	NLE	< 1	< 1
Methyl butyl ketone	300	NLE	< 5	< 5
Methyl chloride	100	NLE	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	< 1	< 1
Methylene chloride	3	5	< 1	< 1
Naphthalene	300	NLE	< 1	< 1
n-Butylbenzene	100	NLE	< 1	< 1
Ortho Xylene	1,000	NLE	< 1	< 1
p-Chlorotoluene	100	NLE	< 1	< 1
Propylbenzene	100	NLE	< 1	< 1
sec-Butylbenzene	100	NLE	< 1	< 1
Styrene	100	100	< 1	< 1
Tert Butyl Alcohol	100	NLE	NA	NA
tert-Butylbenzene	100	NLE	< 1	< 1
Tetrachloroethene	1	5	< 1	< 1
Toluene	600	1,000	< 1	< 1
Total Xylenes	1,000	10,000	< 3	< 3
Trans-1,2-Dichloroethene	100	100	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1
Trichloroethene	1	5	< 1	< 1
Trichlorofluoromethane	2,000	NLE	< 1	< 1
Vinyl chloride	1	2	< 1	< 1
TIC VOCs (µg/l)				
Total TIC, Volatile	500	NLE	ND	ND

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-58 Building 2567 UST Gasoline
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Footnote:
1) All historical data collected prior to 2013 are reported as provided by others.
2) Number of Analyses is the number of detected and non-detected results excluding rejected results. Sample duplicate pairs have not been averaged.
3) NLE = no limit established.
4) ND = not detected in any background sample, no background concentration available.

5) Chemical result qualifiers are assigned by the laboratory and is typically evaluated and modified (if necessary) by during data validation.
[blank] = detect, i.e. detected chemical result value.
B = Compound detected in the sample and its associated blank sample.
R = Rejected, data validation rejected the results.
U = non-detect, i.e. not detected equal to or above this value.
U-DL = Elevated sample detection limit due to difficult sample matrix.
U-ND = Analyte not detected in sample, but no detection or reporting limit provided.
J = estimated (detect or non-detect) value.
E (or ER) = Estimated result.
D = Results from dilution of sample.
J-DL = Elevated sample detection limit due to difficult sample matrix.
JN = Tentatively identified compound, estimated concentration.

6) Chemical results greater than or equal to the action level (depending on criteria) are highlighted based on the Criteria that are present.
- Cell Shade values represent a result that is above the NJ Ground Water Quality Criteria ####
NJDEP Interim Specific GWQC values are presented for the NJ GWQS where there is not a Specific Ground Water Quality Criteria. A full list of compounds is available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).
NJDEP Interim Generic GWQC values are presented for the NJ GWQS where there is not a XXXXX or a NJDEP Interim Specific GWQC. Available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).
- Bold Outline represent a result that is above the USEPA 2014-05 MCL. ###
- Cell Style values represent a result that is above the Weston 1995 Background (Main Post). ###
n/a = all concentrations were less than the detection limit, therefore, no location of maximum value identified.
Dash (-) = only background concentrations for metals are being used as comparison criteria.

7) Criteria action level source document and web address.
- The NJ Ground Water Quality Criteria refers to the NJDEP Groundwater Quality Standards - Adopted July 22, 2010
http://www.state.nj.us/dep/wms/bwqsa/docs/njac79C.pdf
- The 2014-05 USEPA MCL refers to the USEPA's Region 9 Regional Screening Levels (HQ=1.0) - 5/31/2014 (Last revised)
http://www.epa.gov/region9/superfund/prg/
- The Weston 1995 Background (Main Post) refers to the FTMM reports.
NA

8) Wells sampled in the fourth quarter are highlighted in yellow. Sample ID

Table 4
Review of Historical Groundwater Sampling Results
Site FTMM-58 Building 2567 UST Gasoline
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site Name/ Well ID	Interpretation of Historical and 2014 Results [1]			2014 Evaluation				Retain Analyte/Well (Yes or No)	Rationale
	Chem Class / Analyte	Does it Exceed NJDEP GWQS (Yes or No) (If Yes, identify compound)	Do Metals Exceed FTMM Background Concentration (Yes or No) (If Yes, identify Metal)	Seasonal Effect?[2] (Y/N)	Anomaly? (Y/N)	Exceedance part of overall trend? (Y/N)	Well needed for sentinel purposes? (Y/N)		
FTMM-58, B2567									
2567MW01	VOC	TBA	N/A	N/A	N/A	N/A	NO	Yes (VOCs)	
2567MW03		NO	N/A	N/A	N/A	N/A	NO	Yes (VOCs)	Well will be analyzed for VOCs for two additional rounds to confirm presence or lack of contaminant.

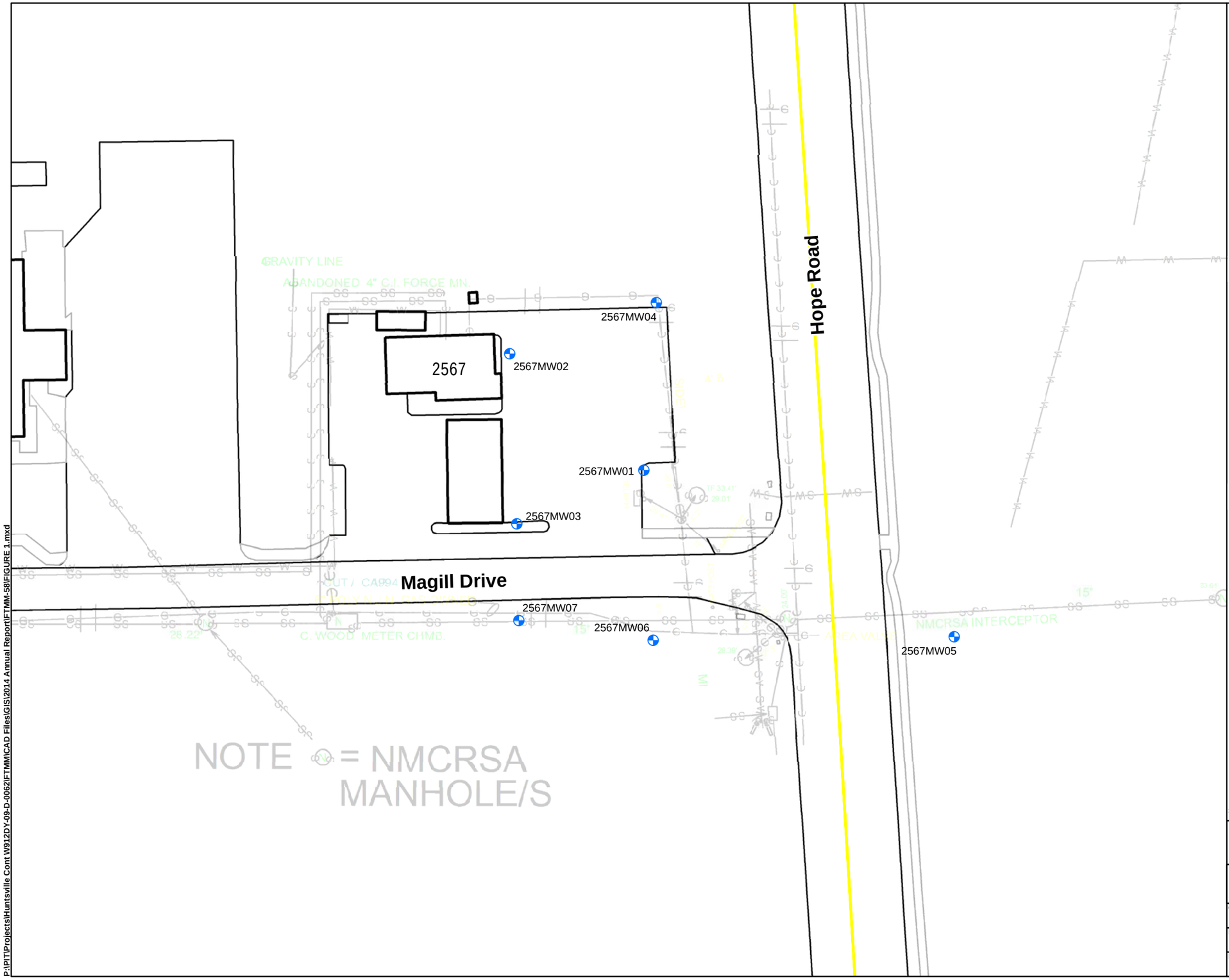
Notes

1. Has any of the analyte compounds exceeded the NJDEP GWQS in the 2014 data and the 4 previous quarterly data rounds or 2 previous annual rounds?
   a. If yes then keep analyte in LTM list
   b. If no then remove this analyte from LTM list
   c. a and b above may be occasionally superseded on a case-by-case basis, depending on site conditions.
2. Has any of the analyte compounds exceeded the NJDEP GWQS seasonally (winter spring vs. summer fall)?
3. TBA - Tert-butyl-alcohol
4. N/A - Not applicable
5. Per the 2/5/15 NJDEP approval letter of the Final 2013 Baseline Groundwater Report, groundwater monitoring wells 2567MW02, 2567MW04, 2567MW05, 2567MW06 and 2567MW07 were removed from the long term monitoring sampling program and the volatile organic compound list has been reduced to TBA only.

FIGURES

Figure 1 Layout of FTMM-58 Building 2567 UST Gasoline

Figure 2 FTMM-58 Shallow Groundwater Contours – September 29, 2014



LEGEND:

- Shallow Monitoring Well
- Municipal Boundary
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line

N

1 inch = 50 feet

0 25 50 100 Feet

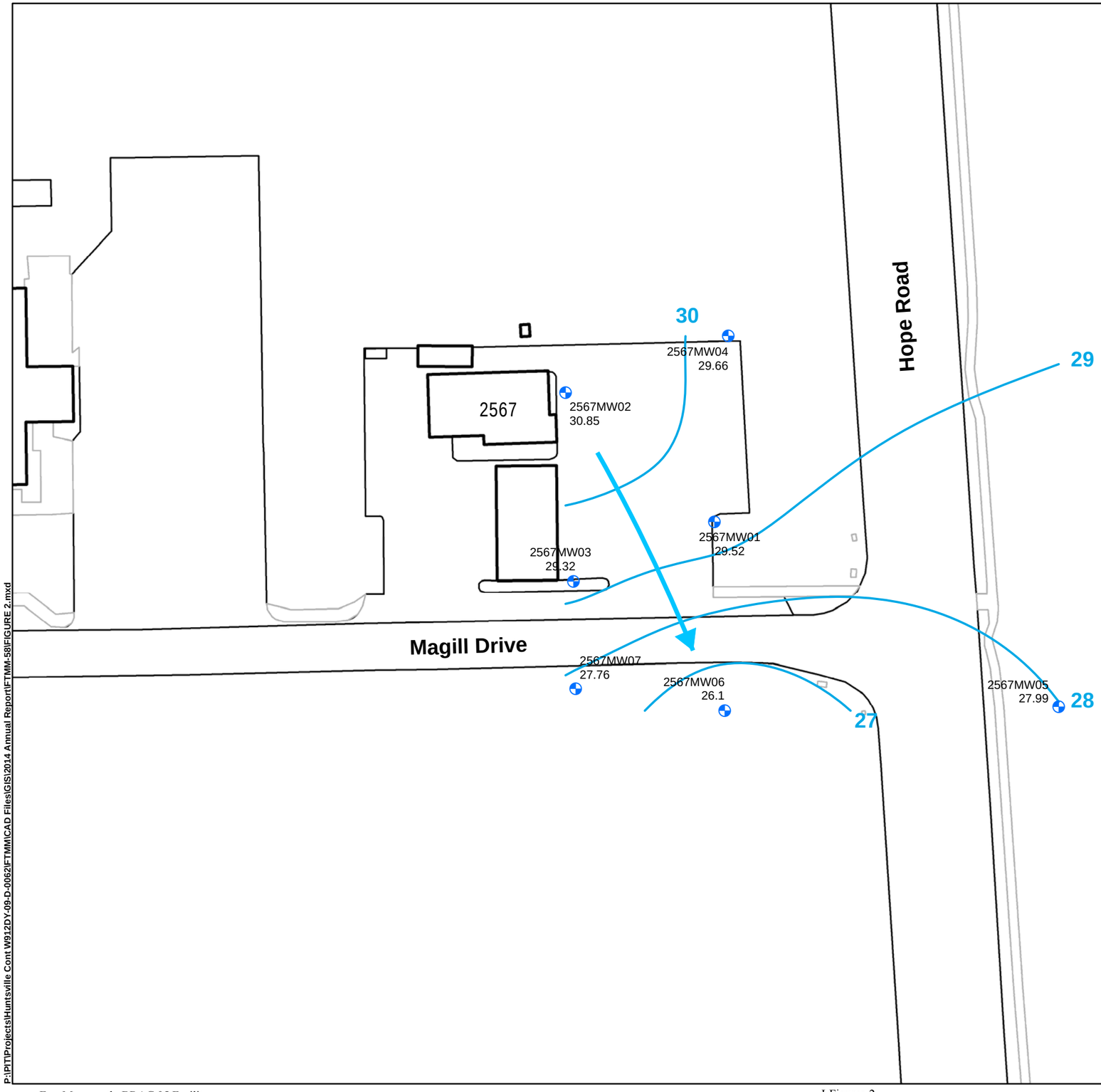
Source: FTMM Supplied CAD

PARSONS 401 Diamond Drive NW, Huntsville AL	**Fort Monmouth** **New Jersey**

LAYOUT OF FTMM-58
BUILDING 2567 UST GASOLINE

CREATED BY: RR	REVIEWED BY: ME
DATE: OCT. 2015	FIGURE NUMBER: FIGURE 1
PROJECT NUMBER: 748810-01000	FILE: FIGURE 1.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-58\FIGURE 1.mxd



LEGEND:

- Shallow Monitoring Well
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Groundwater Elevation Contour
- Inferred Groundwater Flow Direction

N

1 inch = 50 feet

0 25 50 100 Feet

Source: FTMM Supplied CAD

PARSONS 401 Diamond Drive NW, Huntsville AL	**Fort Monmouth** **New Jersey**
FTMM-58 SHALLOW GROUNDWATER CONTOURS - SEPTEMBER 29, 2014	
CREATED BY: **RR**	REVIEWED BY: **ME**
DATE: **OCT. 2015**	FIGURE NUMBER: **FIGURE 2**
PROJECT NUMBER: **748810-01000**	FILE: **FIGURE 2.mxd**

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-58\FIGURE 2.mxd

ATTACHMENTS

Attachment A LFPS Field Sheets

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS	CLIENT: FTMM	WELL #: 2567MW01

PROJECT: FTMM 4Q GW Sampling
AOC # (AREA): M-58
SCREENED INTERVAL (TOC): 3.1 - 13.1
WELL DIAMETER (in.): 4

WELL PERMIT #: 29-26925
DATE: 10/2/14
SAMPLING PERSONNEL NAME: C. Watson
SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	(4)	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0
WELL DEPTH (TOC): 13.1
FEET OF WATER IN WELL (ft): 8.75

FEET OF SATURATED SCREEN (ft): 8.75
DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 4.35
PUMP INTAKE DEPTH (ft below TOC): 8.73

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/L)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*		
1215	X		7.71	NA	0.894	NA	-45.0	NA	2.61	NA	11.2	NA	21.55	NA	300	4.49
1220	X		7.74	0.03	0.892	0.002	-52.3	7.3	3.53	0.92	12.3	1.1	21.53	-.06	300	4.78
1225	X		7.75	0.01	0.890	0.002	-53.6	1.3	2.01	1.52	13.3	1.0	21.55	-.02	250	4.81
1230	X		7.76	0.01	0.882	0.008	-55.2	1.6	1.98	0.03	12.9	0.4	21.63	.13	250	4.83
1235	X		7.76	0	0.876	0.006	-55.6	0.4	1.86	0.12	12.4	0.5	21.63	0	250	4.84
1240	X		7.77	0.01	0.870	0.006	-57.0	1.4	1.47	0.39	11.9	0.5	21.66	0.03	250	4.84
1245	X		7.78	0.01	0.871	0.001	-60.1	3.1	1.45	0.02	11.6	0.3	21.68	0.02	250	4.84
1250		X	7.78	0	0.868	0.003	-61.3	1.2	1.43	0.02	11.1	0.5	21.70	0.02	250	4.84

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS	CLIENT: FTMM	WELL #: 2567MW03
PROJECT: FTMM-58 (ow) 4Q GW Sampling		WELL PERMIT #: 2926927
AOC # (AREA): FTMM-58		DATE: 10/2/14
SCREENED INTERVAL (TOC): 2.71-12.71		SAMPLING PERSONNEL NAME: C. Watson
WELL DIAMETER (In.): 4		SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0
WELL DEPTH (TOC): 12.71
FEET OF WATER IN WELL (ft): 9.32
FEET OF SATURATED SCREEN (ft): 9.36
DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 3.35
PUMP INTAKE DEPTH (ft below TOC): 8.03

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1405	X		7.75	NA	1.219	NA	-65.9	NA	2.44	NA	37.8	NA	21.99	NA	275	3.60
1410	X		7.73	0.02	1.244	0.025	-64.8	1.1	4.69	2.25	29.4	8.4	22.11	0.12	275	3.65
1415	X		7.71	0.02	1.306	0.062	-61.4	3.4	4.13	0.56	22.1	7.3	22.15	0.04	275	3.67
1420	X		7.70	0.01	1.368	0.062	-60.1	1.3	3.86	0.27	18.9	0.29	22.14	0.01	275	3.70
1425	X		7.69	0.01	1.481	0.113	-59.7	0.4	3.73	0.13	15.8	0.14	22.07	0.07	275	3.71
1430	X		7.68	0.01	1.467	0.014	-57.6	2.1	3.47	0.26	14.7	1.1	22.05	0.02	275	3.71
1435	X		7.68	0	1.465	0.002	-58.8	1.2	3.58	0.11	15.5	0.8	22.06	0.01	275	3.71
1440		X	7.68	0	1.467	0.002	-58.2	0.6	3.54	0.04	15.9	0.4	22.06	0	275	3.71

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

APPENDIX J

FTMM-59: BUILDING 1122 UNKNOWN DISCHARGE

APPENDIX J: FTMM-59 Building 1122 Unknown Discharge

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4	Review of Historical Groundwater Sampling Results

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Figure 2	FTMM-59 Shallow Groundwater Contours - September 29, 2014

LIST OF ATTACHMENTS

Attachment	Title
A	LFPS Field Sheets

1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT

Monitoring wells located within FTMM-59 were gauged on September 29, 2014. Monitoring well locations as well as other site features are provided in **Figure 1**. Details regarding the water level measurements are provided in **Table 1**. Groundwater elevations in monitoring wells ranged from 5.94 (1122MW02) to 10.03 (1122MW06) feet above mean sea level (amsl). The inferred shallow groundwater flow direction is generally to the northwest, as shown in **Figure 2**.

During the groundwater gauging, the physical condition of FTMM-59 monitoring wells were assessed. The site monitoring wells were found to be in good condition.

2.0 GROUNDWATER SAMPLING

One groundwater sample was collected from monitoring well 1122MW07 located at FTMM-59 as part of the annual (fourth quarter) 2014 groundwater sampling event. FTMM-59 is sampled on an annual basis. The groundwater sampling program included measuring the depth to groundwater in monitoring wells prior to sampling and collection of the groundwater sample using low-flow purging and sampling (LFPS). The groundwater sample was collected on October 2, 2014. The groundwater sample was analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) via the United States Environmental Protection Agency (USEPA) Method SW8260C.

The sample was collected in accordance with the New Jersey Department of Environmental Protection (NJDEP) Field Sampling Procedures Manual (FSPM) and the Sampling Analysis Plan (SAP). Field blanks, duplicates, matrix spike, matrix spike duplicate and quality assurance (QA) split samples were collected for every 5% of samples collected per parameter, per matrix, in accordance with the Quality Assurance Project Plan (QAPP). Trip blanks accompanied each cooler each day in which VOCs were collected for laboratory analysis.

Completed LFPS field sheets for each well sampled can be found in **Attachment A**.

3.0 HISTORICAL GROUNDWATER SAMPLING RESULTS

From October 2007 through April 2010, FTMM-59 monitoring wells were sampled for VOCs.

The last five rounds of historical quarterly sampling conducted at FTMM-59, from July 2010 to August 2011, consisted of VOC and metals analysis. Arsenic, beryllium, cadmium, iron, lead, and selenium were detected above their respective NJDEP GWQS. However, only beryllium, cadmium, and selenium were detected in site monitoring wells at concentrations greater than their respective background concentrations as established in the 1995 Weston Report. Cadmium, selenium, and beryllium are not associated with historical site operations and are attributed to background conditions. No VOCs were detected in exceedance of their applicable standards. Historical groundwater analytical results are presented in **Table 2.**

During the August 2013 Baseline Sampling Event, seven monitoring wells were sampled for VOCs. No VOCs were detected in exceedance of their respective NJDEP GWQS during the August 2013 sampling event. Results of the August 2013 sampling event are presented in **Table 3**.

The Final August 2013 Baseline Groundwater Sampling Report was accepted by the NJDEP in

their February 5, 2015 letter. Based on this approval, six out of the seven groundwater monitoring wells were removed from the long term monitoring (LTM) program including 1122MW01, 1122MW02, 1122MW03, 1122MW04, 1122MW05, and 1122MW06.

4.0 ANNUAL (FOURTH QUARTER) 2014 GROUNDWATER RESULTS

Seven VOCs were detected in the groundwater sample collected from well 1122MW07, and concentrations detected were significantly below their respective NJDEP GWQS during the annual 2014 (fourth quarter) sampling event. Groundwater analytical data from the sample collected during the annual (fourth quarter) 2014 groundwater sampling event are presented in **Table 3**.

5.0 FINDINGS AND RECOMMENDATIONS

Historical and recent (2013 and 2014) groundwater sampling at FTMM-59 indicates that VOCs concentration detected in the groundwater continue to be below their respective NJDEP GWQS. The NJDEP, in their July 3, 2014 comment letter (see **Appendix Q**) approved one additional round of sampling to confirm the 2013 VOCs results at monitoring well 1122MW07 before discontinuing the LTM program at FTMM-59. These 2014 results demonstrate that VOCs continue to be significantly below their respective NJDEP GWQS in well 1122MW07 and confirms the 2013 results. However, monitoring of the groundwater will be evaluated as a whole under the RI/FS. A review of the historical groundwater results are presented in **Table 4**, which provides the matrix used to determine the status of wells relative to future groundwater sampling and analyses.

TABLES

Table 1 Groundwater Gauging Data and Elevations (September 29, 2014) and LFPS Sampling Summary

Table 2 Historical Groundwater Analytical Results

Table 3 Groundwater Analytical Results - 2013 and 2014

Table 4 Review of Historical Groundwater Sampling Results

Table 1
Groundwater Gauging Data and Elevations (September 29, 2014) and LFPS Sampling Summary
Site FTMM-59 Building 1122 Unknown Discharge
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site/Well ID	Installation Date	Well Permit #	Y Coord. (North)	X Coord. (East)	Depth (ft. bgs)	Casing Length (ft)	Screen Length (ft)	TOC Elevation (ft)	Gauge Time	PID Reading (ppm)	Gauged Depth to Water (ft. TOC)	Gauged Depth to Bottom (ft. TOC)	Calculated Groundwater Elevation (ft)	Well Sampled this Event
Shallow Monitoring Wells														
1122MW01	9/12/1995	29-33755	538337.82	617448.40	18.0	5.0	13.0	15.04	14:05	0.0	6.15	17.51	8.89	
1122MW02	9/12/1995	29-33754	538372.26	617371.00	15.0	3.0	12.0	15.12	13:56	0.0	9.18	17.49	5.94	
1122MW03	7/20/2000	29-43196	538342.09	617406.39	14.0	4.0	10.0	13.10	13:54	0.0	6.21	13.92	6.89	
1122MW04	7/20/2000	29-43197	538378.35	617471.60	14.0	4.0	10.0	13.54	13:49	0.0	5.55	13.75	7.99	
1122MW05	7/20/2000	29-43198	538393.77	617423.28	15.0	5.0	10.0	12.54	13:59	0.0	6.34	15.90	6.20	
1122MW06	7/20/2010	E201007327	538240.00	617520.00	20.0	5.0	15.0	17.53	14:00	0.0	7.50	21.61	10.03	
1122MW07	8/17/2011	N/A	N/A	N/A	20.0	5.0	15.0	0.00	14:15	0.0	10.40	21.78	N/A	x

Notes:
1) The synoptic round of water levels in the wells was collected on September 29, 2014.
2) Information on well permit number, X and Y coordinates, depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
3) ft = feet
4) DTW = depth to water (measured from the top of well casing)
5) DTB = depth to bottom of well (measured from the top of well casing)
6) bgs = below ground surface
7) ppm = parts per million (of VOCs)
8) TOC = Top of Casing
9) Elevation = feet above mean sea level
10) N/A = information not available
11) LFPS = Low-Flow Purging and Sampling

Table 2
Historical Groundwater Analytical Results
Site FTMM-59 Building 1122 Unknown Discharge
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				1122MW01											
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	45	45 Dup	46	46 Dup	47	47 Dup	48	48 Dup	49	49 Dup	50	50 Dup
Date Collected				10/3/2007	10/3/2007	1/8/2008	1/8/2008	4/3/2008	4/3/2008	7/10/2008	7/10/2008	10/9/2008	10/9/2008	1/23/2009	1/23/2009
ANALYTE / Lab ID				70368.04	70368.03	80006.04	80006.03	80109.04	80109.03	80226.04	80226.03	80360.04	80360.03	90021.04	90021.03
VOCs (µg/L)															
Acetone	6000		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	50	7	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	ND	ND	ND	ND	0.49 J	0.50 J	ND	ND	ND	ND	0.61 J	0.73 J
Toluene	7000	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)															
Antimony	6	6	20.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	6000	2000	699.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	70	100	191.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1300	1300	65.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	300	NLE	431000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	5	15	22.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	2	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	100	NLE	187	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	40	50	29.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	5.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Shaded cells = concentrations exceed the NJDEP GWQS
*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.
**NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 27, 2007)
USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)
(1) Low-flow sampling method used to collect sample
J - Estimated concentration exceeds the MDL and is less than the RL
NA - Not analyzed
ND - Not detected
NR - Not reported
Sampling for SVOCs, Pesticides/PCBs, and Metals were discontinued after the 10/7/04 sampling event as per NJDEP approval letter dated 11/2004.

Table 2
Historical Groundwater Analytical Results
Site FTMM-59 Building 1122 Unknown Discharge
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				1122MW01											
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	51	51 Dup	52	53	54	LF3	LF4	LF5	LF6	LF6 Dup	LF7	LK8
Date Collected				4/13/2009	4/13/2009	7/20/2009	11/4/2009	1/12/2010	4/5/2010	7/19/2010	10/5/2010	1/20/2011	1/20/2011	4/4/2011	7/5/2011
ANALYTE / Lab ID				90159.04	90159.03	90302.04	90435.04	10016.04	10122.06	10308.05	1042405	1102604	1102603	1112705	1127705
VOCs (µg/L)															
Acetone	6000		--	ND	ND	ND	ND	ND	20.57	ND	<0.32	<0.32	<0.32	<0.32	<10
Benzene	1	5	--	0.46 J	0.44 J	0.45 J	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.12	<1
Bromodichloromethane	1		--	ND	ND	ND	ND	ND	2.26	ND	<0.12	<0.12	<0.12	<0.12	<1
2-Butanone	300		--	ND	ND	ND	ND	ND	ND	ND	<0.22	<0.22	<0.22	<0.22	<10
Chloroform	70		--	ND	ND	ND	ND	ND	7.36	ND	<0.35	<0.35	<0.35	<0.35	<1
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.12	<1
Dibromochloromethane	1		--	ND	ND	ND	ND	ND	0.52	ND	<0.12	<0.12	<0.12	<0.12	<1
1,1-Dichloroethane	50	7	--	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.12	<1
Methyl *tert* -butyl ether	70	NLE	--	0.63 J	0.56 J	0.88	ND	ND	ND	ND	<0.11	<0.11	<0.11	<0.11	<1
Tetrachloroethene	1		--	ND	ND	ND	ND	0.42 J	ND	ND	<0.14	0.38 J	0.35 J	0.33 J	<1
Toluene	7000	1000	--	ND	ND	0.37 J	ND	ND	ND	ND	<0.12	<0.12	<0.12	<0.12	<1
TICs*	500	NLE	--	ND	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND
Metals (µg/L)															
Antimony	6	6	20.70	NA	NA	NA	NA	NA	NA	ND	<10	<6	<6	<6	<6
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	NA	2.82 ER	2.05	<3	<3	3.2	5.1
Barium	6000	2000	699.00	NA	NA	NA	NA	NA	NA	13.4	4.33	291	291	<200	<200
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	NA	0.053 ER	<0.5	<1	<1	<1	<1
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	NA	1.52 ER	7.3	25.6	25.6	10.3	3.9
Chromium	70	100	191.00	NA	NA	NA	NA	NA	NA	7.22	3.36	<10	<10	25.4	24.7
Copper	1300	1300	65.60	NA	NA	NA	NA	NA	NA	91.4	12.8	<10	<10	52.5	58.9
Iron	300	NLE	431000	NA	NA	NA	NA	NA	NA	2630	1440	251	232	12700	12800
Lead	5	15	22.70	NA	NA	NA	NA	NA	NA	2.46 ER	<5	<3	<3	11.9	13.9
Mercury	2	2	0.26	NA	NA	NA	NA	NA	NA	0.130 ER	<0.5	<0.2	<0.2	<0.2	<0.2
Nickel	100	NLE	187	NA	NA	NA	NA	NA	NA	2.48 ER	1.27	<10	<10	13	12.9
Selenium	40	50	29.60	NA	NA	NA	NA	NR	NR	19.9	<5	<10	<10	<10	<10
Thallium	2	2	5.50	NA	NA	NA	NA	NA	NA	ND	<5	<2	<2	<2	<2

Notes:
Shaded cells = concentrations exceed the NJDEP GWQS
*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.
**NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 27, 2007)
USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)
(1) Low-flow sampling method used to collect sample
J - Estimated concentration exceeds the MDL and is less than the RL
NA - Not analyzed
ND - Not detected
NR - Not reported
Sampling for SVOCs, Pesticides/PCBs, and Metals were discontinued after the 10/7/04 sampling event as per NJDEP approval letter dated 11/2004.

Table 2
Historical Groundwater Analytical Results
Site FTMM-59 Building 1122 Unknown Discharge
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				1122MW02												
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	45	46	47	48	49	50	51	52	52 Dup	53	53 Dup	54	54 Dup
Date Collected				10/3/2007	1/8/2008	4/3/2008	7/10/2008	10/9/2008	1/23/2009	4/13/2009	7/20/2009	7/20/2009	11/4/2009	11/4/2009	1/12/2010	1/12/2010
ANALYTE / Lab ID				70368.05	80006.05	80109.05	80226.05	80360.05	90021.05	90159.05	90302.05	90302.03	90435.05	90435.03	10016.05	10016.03
VOCs (µg/L)																
Acetone	6000		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	50	7	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	0.55 J	ND	ND	0.28 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	ND	ND	ND	0.39 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	7000	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	42	ND	ND	ND	4	ND	ND	ND	ND	ND	ND
Metals (µg/L)																
Antimony	6	6	20.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	6000	2000	699.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	70	100	191.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1300	1300	65.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	300	NLE	431000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	5	15	22.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	2	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	100	NLE	187	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	40	50	29.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	5.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Shaded cells = concentrations exceed the NJDEP GWQS
*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.
**NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 27, 2007)
USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)
(1) Low-flow sampling method used to collect sample
J - Estimated concentration exceeds the MDL and is less than the RL
NA - Not analyzed
ND - Not detected
NR - Not reported
Sampling for SVOCs, Pesticides/PCBs, and Metals were discontinued after the 10/7/04 sampling event as per NJDEP approval letter dated 11/2004.

Table 2
Historical Groundwater Analytical Results
Site FTMM-59 Building 1122 Unknown Discharge
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				1122MW02								1122MW03				
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF3	LF3 Dup	LF4	LF4 Dup	LF5	LF6	LF7	LF8	33	34	35	36	37
Date Collected				4/5/2010	4/5/2010	7/20/2010	7/20/2010	10/5/2010	1/19/2011	4/4/2011	7/5/2011	10/3/2007	1/8/2008	4/3/2008	7/10/2008	10/9/2008
ANALYTE / Lab ID				10122.04	10122.03	10311.04	10311.03	1042407	1102405	1112707	1127707	70368.06	80006.06	80109.06	80226.06	80360.06
VOCs (µg/L)																
Acetone	6000		--	ND	ND	ND	ND	<0.32	<0.32	<0.32	<10	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	<0.12	<0.12	<0.12	<1	ND	ND	ND	ND	ND
Bromodichloromethane	1		--	ND	ND	ND	ND	<0.12	<0.12	<0.12	<1	ND	ND	ND	ND	ND
2-Butanone	300		--	ND	ND	ND	ND	<0.22	<0.22	<0.22	<10	ND	ND	ND	ND	ND
Chloroform	70		--	ND	ND	ND	ND	<0.35	<0.35	<0.35	<1	ND	ND	0.41 J	ND	1.03 J
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	<0.12	<0.12	<0.12	<1	ND	ND	ND	ND	ND
Dibromochloromethane	1		--	ND	ND	ND	ND	<0.12	<0.12	<0.12	<1	ND	ND	ND	ND	ND
1,1-Dichloroethane	50	7	--	ND	ND	ND	ND	<0.12	<0.12	<0.12	<1	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	<0.11	<0.11	<0.11	<1	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	ND	ND	ND	ND	<0.14	<0.14	<0.14	<1	ND	ND	0.7 J	0.39 J	0.63 J
Toluene	7000	1000	--	ND	ND	ND	ND	<0.12	<0.12	<0.12	<1	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	9	ND	68	ND	ND	ND	ND	ND	ND
Metals (µg/L)																
Antimony	6	6	20.70	NA	NA	ND	ND	<10	<6	<6	<6	NA	NA	NA	NA	NA
Arsenic	3	10	89.30	NA	NA	2.84 ER	2.53 ER	2.18	<3	6.4	14.7	NA	NA	NA	NA	NA
Barium	6000	2000	699.00	NA	NA	14.4	14.3	14.9	<200	<200	<200	NA	NA	NA	NA	NA
Beryllium	1	4	2.10	NA	NA	0.088 ER	0.118 ER	<0.5	<1	<1	<1	NA	NA	NA	NA	NA
Cadmium	4	5	9.50	NA	NA	0.823 ER	0.735 ER	0.669	<3	<3	<3	NA	NA	NA	NA	NA
Chromium	70	100	191.00	NA	NA	10.4	10.8	10.7	<10	<10	10.6	NA	NA	NA	NA	NA
Copper	1300	1300	65.60	NA	NA	7.21	8.01	2.46	<10	<10	<10	NA	NA	NA	NA	NA
Iron	300	NLE	431000	NA	NA	5480	5540	4140	1370	13600	19700	NA	NA	NA	NA	NA
Lead	5	15	22.70	NA	NA	3.69 ER	ND	<5	<3	<3	<3	NA	NA	NA	NA	NA
Mercury	2	2	0.26	NA	NA	0.190 ER	0.120 ER	<0.5	<0.2	<0.2	<0.2	NA	NA	NA	NA	NA
Nickel	100	NLE	187	NA	NA	2.53 ER	2.20 ER	1.64	<10	<10	<10	NA	NA	NA	NA	NA
Selenium	40	50	29.60	NA	NA	19.2	19.1	<5	<10	<10	<10	NA	NA	NA	NA	NA
Thallium	2	2	5.50	NA	NA	ND	ND	<5	<2	<2	<2	NA	NA	NA	NA	NA

Notes:
Shaded cells = concentrations exceed the NJDEP GWQS
*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.
**NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 27, 2007)
USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)
(1) Low-flow sampling method used to collect sample
J - Estimated concentration exceeds the MDL and is less than the RL
NA - Not analyzed
ND - Not detected
NR - Not reported
Sampling for SVOCs, Pesticides/PCBs, and Metals were discontinued after the 10/7/04 sampling event as per NJDEP approval letter dated 11/2004.

Table 2
Historical Groundwater Analytical Results
Site FTMM-59 Building 1122 Unknown Discharge
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				1122MW03											1122MW04	
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	38	39	40	41	41	LF3	LF4	LF5	LF6	LF7	LF8	33	34
Date Collected				1/23/2009	4/13/2009	7/20/2009	11/4/2009	1/12/2010	4/5/2010	7/20/2010	10/5/2010	1/20/2011	4/4/2011	7/5/2011	10/3/2007	1/8/2008
ANALYTE / Lab ID				90021.06	90159.06	90302.06	90435.06	10016.06	10122.08	10311.05	1042408	1102605	1112708	1127708	70368.07	80006.07
VOCs (µg/L)																
Acetone	6000		--	ND	ND	ND	ND	ND	ND	ND	<0.32	<0.32	<0.32	<10	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<1	ND	ND
Bromodichloromethane	1		--	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<1	ND	ND
2-Butanone	300		--	ND	ND	ND	ND	ND	ND	ND	<0.22	<0.22	<0.22	<10	ND	ND
Chloroform	70		--	0.74 J	ND	ND	ND	ND	ND	ND	<0.35	<0.35	<0.35	<1	ND	ND
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<1	ND	ND
Dibromochloromethane	1		--	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<1	ND	ND
1,1-Dichloroethane	50	7	--	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12	<0.12	<1	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	<0.11	<0.11	<0.11	<1	ND	ND
Tetrachloroethene	1		--	0.68 J	ND	ND	0.69	0.69	0.51	ND	0.37 J	0.94	0.84	0.66 J	ND	ND
Toluene	7000	1000	--	ND	ND	ND	ND	1.04	ND	ND	<0.12	<0.12	<0.12	<1	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																
Antimony	6	6	20.70	NA	NA	NA	NA	NA	NA	ND	<10	<6	<6	<6	NA	NA
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	NA	ND	0.81	<3	<3	<3	NA	NA
Barium	6000	2000	699.00	NA	NA	NA	NA	NA	NA	166	129	<200	<200	<200	NA	NA
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	NA	2.64	1.86	1.9	2.2	1.3	NA	NA
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	NA	1.31 ER	<2	<3	<3	<3	NA	NA
Chromium	70	100	191.00	NA	NA	NA	NA	NA	NA	1.53 ER	<5	<10	<10	<10	NA	NA
Copper	1300	1300	65.60	NA	NA	NA	NA	NA	NA	ND	<5	<10	<10	<10	NA	NA
Iron	300	NLE	431000	NA	NA	NA	NA	NA	NA	ND	64	<100	<100	572	NA	NA
Lead	5	15	22.70	NA	NA	NA	NA	NA	NA	ND	<5	<3	<3	<3	NA	NA
Mercury	2	2	0.26	NA	NA	NA	NA	NA	NA	0.190 ER	<0.5	<0.2	<0.2	<0.2	NA	NA
Nickel	100	NLE	187	NA	NA	NA	NA	NA	NA	20.7	15.3	20.5	23.1	12.7	NA	NA
Selenium	40	50	29.60	NA	NA	NA	NA	NA	NA	43.2	<5	<10	<10	<10	NA	NA
Thallium	2	2	5.50	NA	NA	NA	NA	NA	NA	ND	<5	<2	<2	<2	NA	NA

Notes:
Shaded cells = concentrations exceed the NJDEP GWQS
*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.
**NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 27, 2007)
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(1) Low-flow sampling method used to collect sample
J - Estimated concentration exceeds the MDL and is less than the RL
NA - Not analyzed
ND - Not detected
NR - Not reported
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Table 2
Historical Groundwater Analytical Results
Site FTMM-59 Building 1122 Unknown Discharge
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				1122MW04											
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	35	36	37	38	39	40	41	42	LF3	LF4	LF5	LF5 Dup
Date Collected				4/3/2008	7/10/2008	10/9/2008	1/23/2009	4/13/2009	7/20/2009	11/4/2009	1/12/2010	4/5/2010	7/20/2010	10/6/2010	10/6/2010
ANALYTE / Lab ID				80109.07	80226.07	80360.07	90021.07	90159.07	90302.07	90435.07	10016.07	10122.09	10311.06	1042904	1042903
VOCs (µg/L)															
Acetone	6000		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.32	<0.32
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12
Bromodichloromethane	1		--	ND	ND	ND	ND	ND	0.21 J	ND	ND	ND	ND	<0.12	<0.12
2-Butanone	300		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.22	<0.22
Chloroform	70		--	ND	3.96	3.42	2.77	ND	3.8	ND	ND	ND	ND	<0.35	<0.35
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12
Dibromochloromethane	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12
1,1-Dichloroethane	50	7	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.12	<0.12
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.11	<0.11
Tetrachloroethene	1		--	0.59 J	0.53 J	0.52 J	0.41 J	0.40 J	0.57	0.35 J	0.41 J	0.49 J	ND	<0.14	<0.14
Toluene	7000	1000	--	ND	ND	ND	ND	ND	ND	ND	3.19	ND	ND	<0.12	<0.12
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND
Metals (µg/L)															
Antimony	6	6	20.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.88	<10	5.81
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	1.03	1.08
Barium	6000	2000	699.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	423	408	399
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.95	2.11	2.05
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.57	1.83	1.39
Chromium	70	100	191.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	<5	<5
Copper	1300	1300	65.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	<5	<5
Iron	300	NLE	431000	NA	NA	NA	NA	NA	NA	NA	NA	NA	428	739	779
Lead	5	15	22.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	<5	<5
Mercury	2	2	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.340 ER	<0.5	<0.5
Nickel	100	NLE	187	NA	NA	NA	NA	NA	NA	NA	NA	NA	26.3	26	25.7
Selenium	40	50	29.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	57.5	<5	<5
Thallium	2	2	5.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	<5	<5

Notes:
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Table 2
Historical Groundwater Analytical Results
Site FTMM-59 Building 1122 Unknown Discharge
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				1122MW04			1122MW05								
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF6	LF7	LF8	33	34	35	36	37	38	39	40	41
Date Collected				1/20/2011	4/4/2011	7/5/2011	10/3/2007	1/8/2008	4/3/2008	7/10/2008	10/9/2008	1/23/2009	4/13/2009	7/20/2009	11/4/2009
ANALYTE / Lab ID				1102606	1112709	1127709	70368.08	80006.08	80109.08	80226.08	80360.08	90021.08	90159.08	90302.08	90435.08
VOCs (µg/L)															
Acetone	6000		--	<0.32	<0.32	<10	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	<0.12	<0.12	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1		--	<0.12	<0.12	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300		--	<0.22	<0.22	<10	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70		--	<0.35	<0.35	<1	ND	ND	ND	ND	ND	ND	ND	0.36 J	ND
cis -1,2-Dichloroethene	70	70	--	<0.12	<0.12	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1		--	<0.12	<0.12	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	50	7	--	<0.12	<0.12	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	<0.11	<0.11	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	<0.14	0.31 J	0.43 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	7000	1000	--	<0.12	<0.12	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)															
Antimony	6	6	20.70	<6	<6	<6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	3	10	89.30	<3	<3	<3	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	6000	2000	699.00	425	385	337	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	1	4	2.10	1.6	1.4	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	4	5	9.50	<3	<3	<3	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	70	100	191.00	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1300	1300	65.60	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	300	NLE	431000	427	4930	9260	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	5	15	22.70	<3	<3	<3	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	2	0.26	<0.2	<0.2	<0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	100	NLE	187	26.4	25.5	21.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	40	50	29.60	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	5.50	<2	<2	<2	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
Shaded cells = concentrations exceed the NJDEP GWQS
*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.
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Table 2
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Site FTMM-59 Building 1122 Unknown Discharge
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				1122MW05								1122MW06				
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	42	LF3	LF4	LF4 Dup	LF5	LF6	LF07	LF8	LF1	LF1 Dup	LF2	LF2 Dup	LF3
Date Collected				1/12/2010	4/5/2010	7/19/2010	7/19/2010	10/5/2010	1/19/2011	4/4/2011	7/5/2011	8/19/2010	8/19/2010	10/5/2010	10/5/2010	1/19/2011
ANALYTE / Lab ID				10016.08	10122.05	10308.04	10308.03	1042406	1102406	1112706	1127706	1035104	1035103	1042404	1042403	1102404
VOCs (µg/L)																
Acetone	6000		--	ND	ND	ND	ND	<0.32	<0.32	<0.32	<10	<0.32	<0.32	<0.32	<0.32	<0.32
Benzene	1	5	--	ND	ND	ND	ND	<0.12	<0.12	<0.12	<1	<0.12	<0.12	<0.12	<0.12	<0.12
Bromodichloromethane	1		--	ND	ND	ND	ND	<0.12	<0.12	<0.12	<1	<0.12	<0.12	<0.12	<0.12	<0.12
2-Butanone	300		--	ND	ND	ND	ND	<0.22	<0.22	<0.22	<10	<0.22	<0.22	<0.22	<0.22	<0.22
Chloroform	70		--	ND	ND	ND	ND	<0.35	<0.35	<0.35	<1	<0.35	<0.35	<0.35	<0.35	<0.35
cis -1,2-Dichloroethene	70	70	--	ND	ND	ND	ND	<0.12	<0.12	<0.12	<1	<0.12	<0.12	<0.12	<0.12	<0.12
Dibromochloromethane	1		--	ND	ND	ND	ND	<0.12	<0.12	<0.12	<1	<0.12	<0.12	<0.12	<0.12	<0.12
1,1-Dichloroethane	50	7	--	ND	ND	ND	ND	<0.12	<0.12	<0.12	<1	<0.12	<0.12	<0.12	<0.12	<0.12
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	<0.11	<0.11	<0.11	<1	<0.11	<0.11	<0.11	<0.11	<0.11
Tetrachloroethene	1		--	ND	ND	ND	ND	<0.14	<0.14	<0.14	<1	<0.14	<0.14	<0.14	<0.14	<0.14
Toluene	7000	1000	--	ND	ND	ND	ND	<0.12	<0.12	<0.12	<1	<0.12	<0.12	<0.12	<0.12	<0.12
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																
Antimony	6	6	20.70	NA	NA	4.81 ER	ND	<10	<6	<6	<6	<10	7.09	<10	<10	<6
Arsenic	3	10	89.30	NA	NA	ND	0.730 ER	3.29	<3	<3	<3	1	1.19	1.52	<5	<3
Barium	6000	2000	699.00	NA	NA	385	387	16.1	<200	<200	<200	344	299	317	330	317
Beryllium	1	4	2.10	NA	NA	0.995 ER	1.02	<0.5	<1	<1	<1	1.96	1.69	1.79	1.85	1.5
Cadmium	4	5	9.50	NA	NA	1.46 ER	1.68 ER	0.413	<3	<3	<3	1.01	1.11	1.26	1.35	<3
Chromium	70	100	191.00	NA	NA	1.85 ER	2.39 ER	47.9	<10	19.2	18.4	1.12	<5	<5	0.712	<10
Copper	1300	1300	65.60	NA	NA	2.80 ER	3.61 ER	11.3	<10	<10	<10	4.53	4.12	1.86	2.33	<10
Iron	300	NLE	431000	NA	NA	497	542	11600	1170	5060	4940	162	162	79.2	81.8	<100
Lead	5	15	22.70	NA	NA	ND	ND	4.46	<3	<3	NR	<5	<5	<5	<5	<3
Mercury	2	2	0.26	NA	NA	0.170 ER	ND	<0.5	<0.2	<0.2	0.2	<0.5	<0.5	<0.5	<0.5	<0.2
Nickel	100	NLE	187	NA	NA	12.8	12.8	4.48	<10	<10	<10	31.1	27	28.1	28.1	32.9
Selenium	40	50	29.60	NA	NA	33.5	34.8	1.64	<10	<10	<10	59.2	42.1	<5	2.34	<10
Thallium	2	2	5.50	NA	NA	ND	ND	<5	<2	<2	<2	<5	<5	<5	<5	<2

Notes:
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				1122MW06				
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF3 Dup	LF4	LF4 Dup	LF5	LF5 Dup
Date Collected				1/19/2011	4/4/2011	4/4/2011	7/5/2011	7/5/2011
ANALYTE / Lab ID				1102403	1112704	1112703	1127704	1127703
VOCs (µg/L)								
Acetone	6000		--	<0.32	<0.32	<0.32	<10	<10
Benzene	1	5	--	<0.12	<0.12	<0.12	<1	<1
Bromodichloromethane	1		--	<0.12	<0.12	<0.12	<1	<1
2-Butanone	300		--	<0.22	<0.22	<0.22	<10	<10
Chloroform	70		--	<0.35	<0.35	<0.35	<1	<1
cis -1,2-Dichloroethene	70	70	--	<0.12	<0.12	<0.12	<1	<1
Dibromochloromethane	1		--	<0.12	<0.12	<0.12	<1	<1
1,1-Dichloroethane	50	7	--	<0.12	<0.12	<0.12	<1	<1
Methyl *tert* -butyl ether	70	NLE	--	<0.11	<0.11	<0.11	<1	<1
Tetrachloroethene	1		--	<0.14	<0.14	<0.14	<1	<1
Toluene	7000	1000	--	<0.12	<0.12	<0.12	<1	<1
TICs*	500	NLE	--	ND	ND	ND	ND	ND
Metals (µg/L)								
Antimony	6	6	20.70	<6	<6	<6	<6	<6
Arsenic	3	10	89.30	<3	<3	<3	<3	<3
Barium	6000	2000	699.00	324	218	<200	<200	<200
Beryllium	1	4	2.10	1.5	1.1	1	<1	<1
Cadmium	4	5	9.50	<3	<3	<3	<3	<3
Chromium	70	100	191.00	<10	<10	10.2	12.4	<10
Copper	1300	1300	65.60	<10	<10	<10	<10	<10
Iron	300	NLE	431000	<100	2060	2580	3170	1620
Lead	5	15	22.70	<3	<3	<3	<3	<3
Mercury	2	2	0.26	<0.2	<0.2	<0.2	<0.2	<0.2
Nickel	100	NLE	187	33.4	23.9	22.6	18.4	18
Selenium	40	50	29.60	<10	<10	<10	<10	<10
Thallium	2	2	5.50	<2	<2	<2	<2	<2

Notes:
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Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-59 Building 1122 Unknown Discharge
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Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	1122MW01		1122MW02		1122MW03	1122MW04	1122MW05	
Sample ID			FTMM-59-GW-1122MW01-14.75	FTMM-59-GW-1122MW01-8.25	FTMM-59-GW-1122MW02-14.6	FTMM-59-GW-1122MW02-8.6	FTMM-59-GW-1122MW03-9.72	FTMM-59-GW-1122MW04-9.1	FTMM-59-GW-1122MW05-12.5	FTMM-59-GW-1122MW05-7.5
Sample Date			8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013
QA/QC			SA	SA	SA	SA	SA	SA	SA	SA
Sampling Method			PDB	PDB	PDB	PDB	PDB	PDB	PDB	PDB
Volatile Organic Compounds (µg/l)										
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	**2.7 BJ**	**2.4 BJ**	**2.2 BJ**	**2.2 BJ**	**2.3 J**	**1.9 BJ**	**2.6 BJ**	**2.4 BJ**
Benzene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	70	80	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Meta & Para Xylenes	1,000	NLE	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Methyl bromide	10	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	3	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	< 1	< 1	< 1	< 1	**0.71 J**	< 1	< 1	< 1
n-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	600	1,000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Total Xylenes	1,000	10,000	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TIC VOCs (µg/l)										
Total TIC, Volatile	500	NLE	ND	ND	ND	ND	ND	ND	ND	ND

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-59 Building 1122 Unknown Discharge
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	1122MW05	1122MW06		1122MW07		
Sample ID			FTMM-59-GW-1122MW105-12	FTMM-59-GW-1122MW06-10.67	FTMM-59-GW-1122MW06-18.11	FTMM-59-GW-1122MW07-15.22	FTMM-59-GW-1122MW07-16.67	FTMM-59-GW-1122MW107-16.67
Sample Date			8/29/2013	8/29/2013	8/29/2013	8/29/2013	10/2/2014	10/2/2014
QA/QC			DU	SA	SA	SA	SA	DU
Sampling Method			PDB	PDB	PDB	PDB	LFPS	LFPS
Volatile Organic Compounds (µg/l)								
1,1,1,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	< 1	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	< 1	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	< 1	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	**2.5 BJ**	**3.3 J**	**4 BJ**	**2.8 J**	**2.7 J**	**2.6 J**
Benzene	1	5	< 1	< 1	< 1	< 1	< 1	< 1
Bromobenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	< 1	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	< 1	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	< 1	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	1	80	< 1	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	< 1	< 1	< 1	< 1	< 1	< 1
Chloroform	70	80	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	< 1	< 1	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	< 1	< 1	< 1	**0.58 J**	**0.83 J**	**0.83 J**
Meta & Para Xylenes	1,000	NLE	< 2	< 2	< 2	< 2	< 2	< 2
Methyl bromide	10	NLE	< 1	< 1	< 1	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	< 5	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	< 1	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	< 1	< 1	< 1	< 1	< 1	< 1
Methylene chloride	3	5	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	< 1	< 1	< 1	< 1	**0.8 B**	**1.1 B**
n-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	< 1	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	< 1	< 1	< 1	< 1	**0.33 J**	**0.37 J**
sec-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	**0.43 J**	**0.46 J**
Styrene	100	100	< 1	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	NA	NA	NA	NA	< 20	< 20
tert-Butylbenzene	100	NLE	< 1	< 1	< 1	< 1	**0.37 J**	**0.37 J**
Tetrachloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1
Toluene	600	1,000	< 1	< 1	< 1	< 1	< 1	< 1
Total Xylenes	1,000	10,000	< 3	< 3	< 3	< 3	NA	NA
Trans-1,2-Dichloroethene	100	100	< 1	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	< 1	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	< 1	< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	< 1	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	< 1	< 1	< 1	< 1	< 1	< 1
TIC VOCs (µg/l)								
Total TIC, Volatile	500	NLE	ND	ND	ND	ND	**7.2 JN**	**13.7 JN**

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-59 Building 1122 Unknown Discharge
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Footnote:
1) All historical data collected prior to 2013 are reported as provided by others.
2) Number of Analyses is the number of detected and non-detected results excluding rejected results. Sample duplicate pairs have not been averaged.
3) NLE = no limit established.
4) ND = not detected in any background sample, no background concentration available.

5) Chemical result qualifiers are assigned by the laboratory and is typically evaluated and modified (if necessary) by during data validation.

[blank] = detect, i.e. detected chemical result value.
B = Compound detected in the sample and its associated blank sample.
R = Rejected, data validation rejected the results.
U = non-detect, i.e. not detected equal to or above this value.
U-DL = Elevated sample detection limit due to difficult sample matrix.
U-ND = Analyte not detected in sample, but no detection or reporting limit provided.
J = estimated (detect or non-detect) value.
E (or ER) = Estimated result.
D = Results from dilution of sample.
J-DL = Elevated sample detection limit due to difficult sample matrix.
JN = Tentatively identified compound, estimated concentration.

6) Chemical results greater than or equal to the action level (depending on criteria) are highlighted based on the Criteria that are present.
- Cell Shade values represent a result that is above the NJ Ground Water Quality Criteria ####

NJDEP Interim Specific GWQC values are presented for the NJ GWQS where there is not a Specific Ground Water Quality Criteria. A full list of compounds is available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).

NJDEP Interim Generic GWQC values are presented for the NJ GWQS where there is not a XXXXX or a NJDEP Interim Specific GWQC. Available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).
- Bold Outline represent a result that is above the USEPA 2014-05 MCL. ###

7) Criteria action level source document and web address.
- The NJ Ground Water Quality Criteria refers to the NJDEP Groundwater Quality Standards - Adopted July 22, 2010
  http://www.state.nj.us/dep/wms/bwqsa/docs/njac79C.pdf
- The 2014-05 USEPA MCL refers to the USEPA's Region 9 Regional Screening Levels (HQ=1.0) - 5/31/2014 (Last revised)
  http://www.epa.gov/region9/superfund/prg/

8) Wells sampled in the fourth quarter are highlighted in yellow. Sample ID

Table 4
Review of Historical Groundwater Sampling Results
Site FTMM-59 Building 1122 Unknown Discharge
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site Name/ Well ID	Interpretation of Historical and 2014 Results [1]			2014 Evaluation				Retain Analyte/Well (Yes or No)	Rationale
	Chem Class / Analyte	Does it Exceed NJDEP GWQS (Yes or No) (If Yes, identify compound)	Do Metals Exceed FTMM Background Concentration (Yes or No) (If Yes, identify Metal)	Seasonal Effect?[2] (Y/N)	Anomaly? (Y/N)	Exceedance part of overall trend? (Y/N)	Well needed for sentinel purposes? (Y/N)		
FTMM-59, B1122									
1122MW07	VOC	No	N/A	No	N/A	N/A	No	No	VOCs not detected above GWQS in 2014, confirming the 2013 result. However, monitoring will be evaluated as a whole under the RI/FS process.

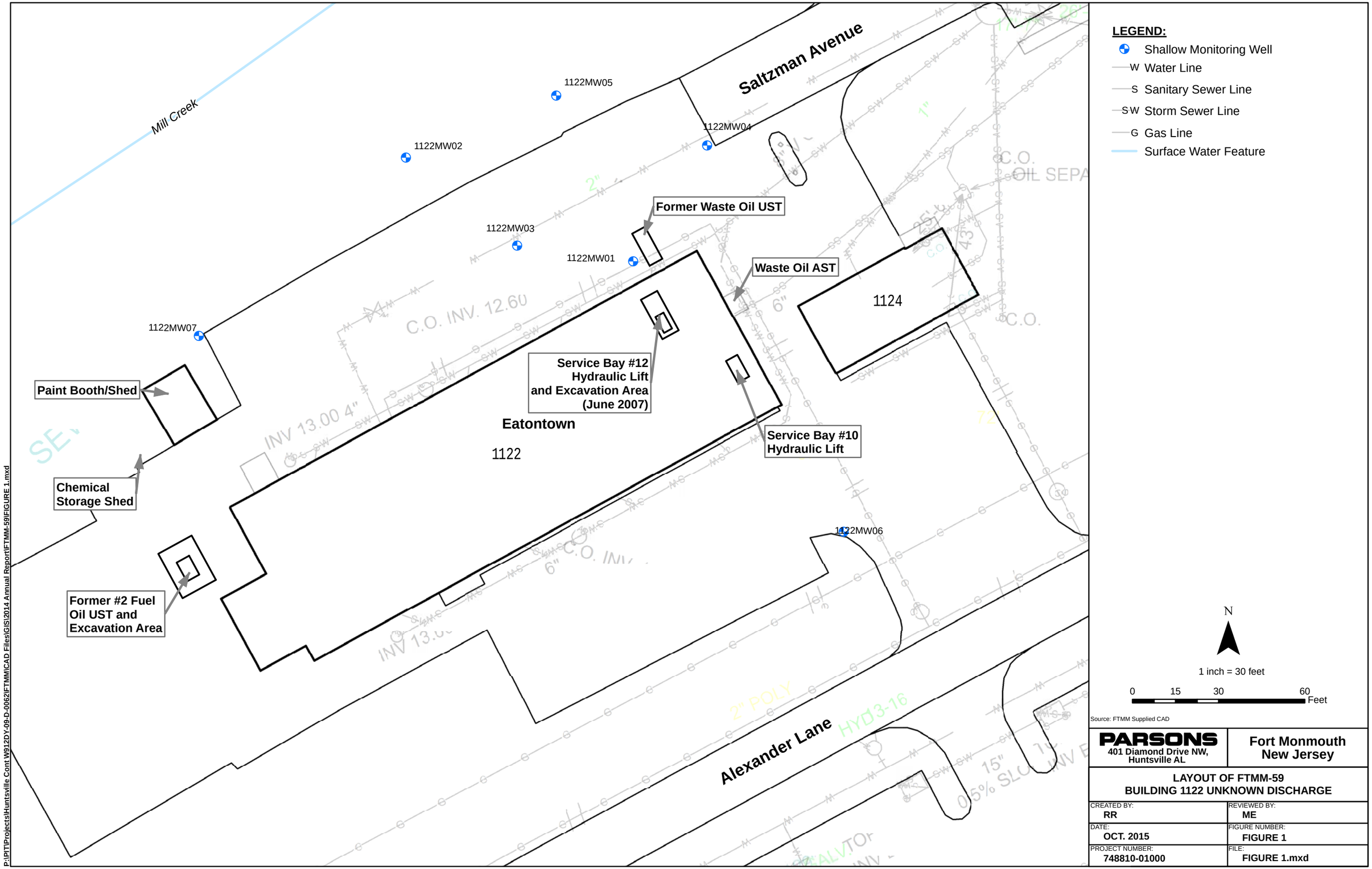
Notes:

1. Has any of the analyte compounds exceeded the NJDEP GWQS in the 2014 data and the 4 previous quarterly data rounds or 2 previous annual rounds?
   a. If yes then keep analyte in LTM list
   b. If no then remove this analyte from LTM list
   c. a and b above may be occasionally superceded on a case-by-case basis, depending on site conditions.
2. Has any of the analyte compounds exceeded the NJDEP GWQS seasonally (winter spring vs. summer fall)?
3. N/A - Not applicable
4. Per the 2/5/15 NJDEP approval letter of the Final 2013 Baseline Groundwater Report, groundwater monitoring wells 1122MW01, 1122MW02, 1122MW03, 1122MW04, 1122MW05, and 1122MW06 were removed from the long term monitoring sampling program.

FIGURES

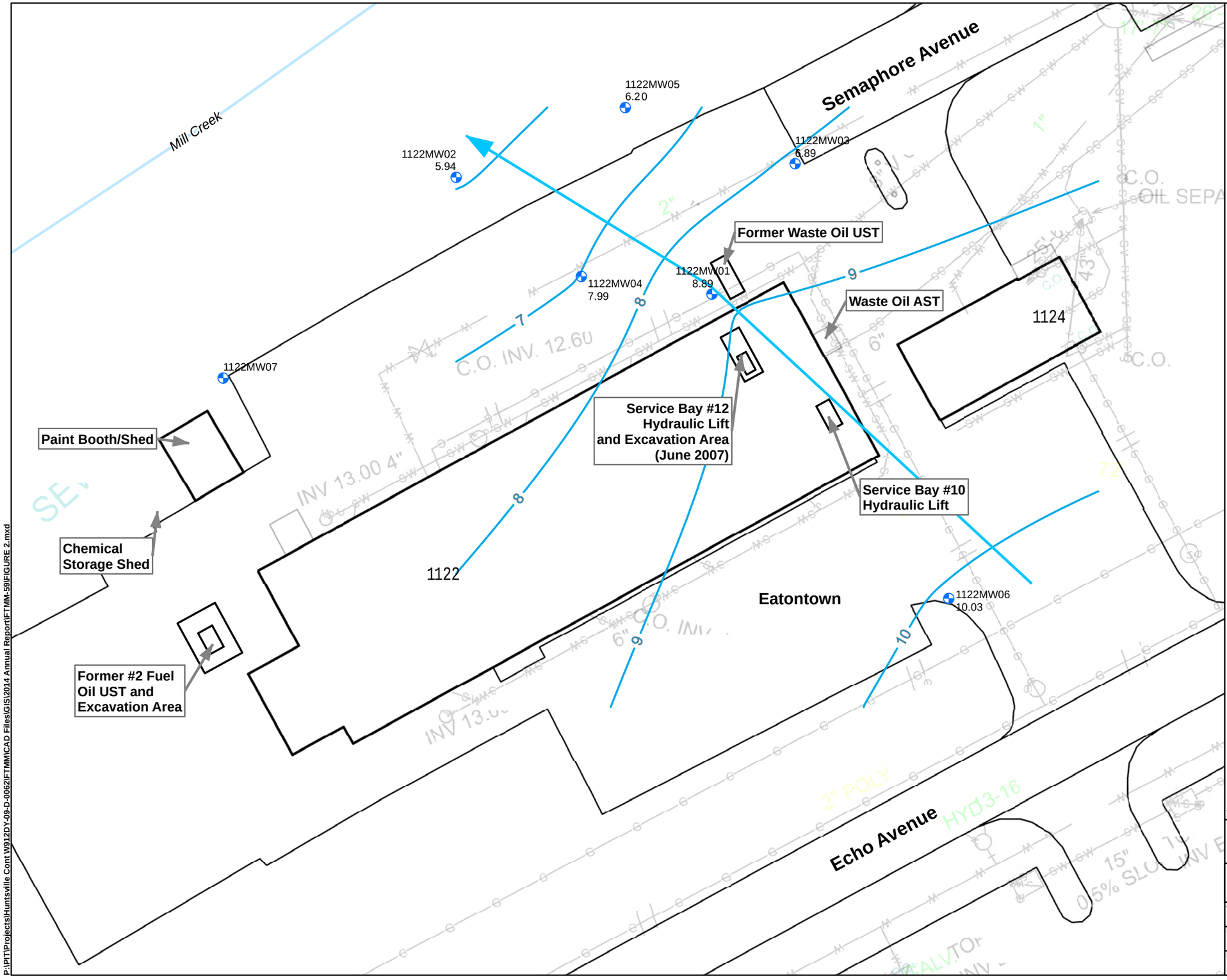
Figure 1 Layout of FTMM-59 Building 1122 Unknown Release

Figure 2 FTMM-59 Shallow Groundwater Contours - September 29, 2014



P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-59\FIGURE 1.mxd

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
LAYOUT OF FTMM-59 BUILDING 1122 UNKNOWN DISCHARGE	
CREATED BY: RR	REVIEWED BY: ME
DATE: OCT. 2015	FIGURE NUMBER: FIGURE 1
PROJECT NUMBER: 748810-01000	FILE: FIGURE 1.mxd



LEGEND:

- Shallow Monitoring Well
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Surface Water Feature
- Groundwater Elevation Contour
- Inferred Groundwater Flow Direction

N

1 inch = 30 feet

0 15 30 60 Feet

Source: FTMM Supplied CAD

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
FTMM-59 SHALLOW GROUNDWATER CONTOURS - SEPTEMBER 29, 2014	
CREATED BY: RR	REVIEWED BY: ME
DATE: OCT. 2015	FIGURE NUMBER: FIGURE 2
PROJECT NUMBER: 748810-01000	FILE: FIGURE 2.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-59\FIGURE 2.mxd

ATTACHMENTS

Attachment A LFPS Field Sheets

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS	CLIENT:	WELL #: 1122MW07

PROJECT: FTMM 4Q GW
AOC # (AREA): FTMM-59
SCREENED INTERVAL (TOC): 6.83 - 21.83
WELL DIAMETER (in.): 4

WELL PERMIT #:
DATE: 10/2/14
SAMPLING PERSONNEL NAME: T. McDougall
SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0
WELL DEPTH (TOC): ~~21.83~~ 21.83
FEET OF WATER IN WELL (ft): 10.33

FEET OF SATURATED SCREEN (ft): 10.33
DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 11.50
PUMP INTAKE DEPTH (ft below TOC): 16.67

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1315			6.04	NA	0.854	NA	-32.7	NA	5.60	NA	115.6	NA	18.81	NA	250	11.70
1320			6.11	.07	0.838	.016	-28.5	4.2	5.15	.45	128.4	12.8	18.74	.07	100	12.00
1325			6.13	.02	0.811	.027	-23.9	4.6	4.98	.17	158.3	29.9	18.91	.17	100	12.00
1330			6.14	.01	0.801	.010	-17.4	6.5	4.80	.18	170.2	11.9	18.91	0	100	12.02
1335			6.14	0	0.783	.018	-13.8	6.4	4.25	.55	140.9	20.7	19.05	.14	100	11.98
1340			6.14	0	0.742	.041	-9.6	4.2	4.51	.26	239.1	98.2	19.10	.05	100	11.95
1345			6.10	.04	0.675	.067	1.8	11.4	5.24	.73	269.9	30.8	19.03	.07	100	11.99
1350			6.09	.01	0.668	.007	4.1	2.3	4.89	.35	264.1	5.8	19.04	.06	100	11.97
1355			6.09	0	0.668	0	5.4	1.3	4.35	.54	267.0	2.9	19.11	.07	100	11.99
1400			6.06	.01	0.666	.002	8.9	3.5	4.80	.45	268.8	1.8	19.10	.01	100	12.02
1405			6.08	0	0.665	.001	6.7	2.2	4.62	.38	269.1	.3	19.10	0	100	12.00
1410			6.09	.01	0.667	.002	3.7	3.0	5.01	.39	244.6	14.5	19.10	0	100	11.98

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

APPENDIX K

FTMM-61: BUILDING 283 GASOLINE STORAGE

APPENDIX K: FTMM-61 Building 283 Gasoline Storage

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5.0 FINDINGS AND RECOMMENDATIONS K-2

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3	Groundwater Analytical Results - 2013 and 2014
4	Review of Historical Groundwater Sampling Results

LIST OF FIGURES

Figure No.	Title
1	Layout of FTMM-61 Building 283 Gasoline Storage
2	FTMM-61 Shallow Groundwater Contours - September 29, 2014

LIST OF ATTACHMENTS

Attachment	Title
A	LFPS Field Sheets

1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT

Monitoring wells located within FTMM-61 were gauged on September 29, 2014. Monitoring well locations as well as other site features are provided in **Figure 1**. Details regarding the water level measurements are provided in **Table 1**. Groundwater elevations in monitoring wells ranged from 3.04 (283MW01) to 8.75 (283MW04) feet above mean sea level (amsl). The inferred shallow groundwater flow direction is generally to the northwest, as shown in **Figure 2**.

During the groundwater gauging, the physical condition of FTMM-61 monitoring wells were assessed. The site monitoring wells were found to be in good condition.

2.0 GROUNDWATER SAMPLING

A groundwater sample was collected from monitoring well 283MW02 located at FTMM-61 as part of the annual (fourth quarter) 2014 groundwater sampling event. FTMM-61 is sampled on an annual basis. The groundwater sampling program included measuring the depth to groundwater in monitoring wells prior to sampling and collection of groundwater samples using low-flow purging and sampling (LFPS). The groundwater sample was collected on October 2, 2014. The groundwater sample was analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) via the United States Environmental Protection Agency (USEPA) Method SW8260C.

The sample was collected in accordance with the New Jersey Department of Environmental Protection (NJDEP) Field Sampling Procedures Manual (FSPM) and the Sampling Analysis Plan (SAP). Field blanks, duplicates, matrix spike, matrix spike duplicate and quality assurance (QA) split samples were collected for every 5% of samples collected per parameter, per matrix, in accordance with the Quality Assurance Project Plan (QAPP). Trip blanks accompanied each cooler each day in which VOCs were collected for laboratory analysis.

The completed LFPS field sheets can be found in **Attachment A**.

3.0 HISTORICAL GROUNDWATER SAMPLING RESULTS

From March 2008 to November 2010, groundwater samples were collected from FTMM-61 monitoring wells and analyzed for VOCs and metals.

The last four historical rounds of quarterly groundwater sampling conducted at FTMM-61, from November 2010 to August 2011, also consisted of VOC and metals analysis. Historically, benzene, VOC tentatively identified compounds (TICS), aluminum, antimony, arsenic, beryllium, iron, manganese, lead and sodium were detected above their respective NJDEP Ground Water Quality Standard (GWQS). Cadmium, sodium, and beryllium were detected at concentrations greater than their background concentrations established in the 1995 Weston Report. Elevated sodium concentrations are attributable to the proximity of the site to the ocean and brackish water bodies. Beryllium and cadmium were both one-time detections attributed to background conditions (Weston, 1995) and not associated with historical site operations. Historical groundwater analytical results are presented in **Table 2.**

Groundwater samples collected from four monitoring wells during the August 2013 Baseline Groundwater Sampling Event and were analyzed for VOCs and lead. No analytes were detected above their respective NJDEP GWQS. Groundwater analytical detections from samples collected during the August 2013 sampling event are presented in **Table 3**.

The Final August 2013 Baseline Groundwater Sampling Report was accepted by the NJDEP in their February 5, 2015 letter. Based on this approval, three out of the four groundwater monitoring wells were removed from the long term monitoring (LTM) program including 283MW01, 283MW03 and 283MW04; and lead analysis was discontinued.

4.0 ANNUAL (FOURTH QUARTER) 2014 GROUNDWATER RESULTS

No VOCs were detected above their method detection limit in the sample collected at monitoring well 283MW02. Groundwater analytical detections from the sample collected during the annual (fourth quarter) 2014 sampling event are presented in **Table 3**.

5.0 FINDINGS AND RECOMMENDATIONS

Historically, monitoring well 283MW02 has exhibited concentrations above the NJDEP GWQS for benzene and VOC TICs. Concentrations of these compounds have been decreasing over time and currently benzene and VOC TICs concentrations were non-detect during the 2013 and 2014 sampling events. The NJDEP, in their July 3, 2014 comment letter (see **Appendix Q**), approved one additional round of sampling to confirm the 2013 VOCs results at monitoring well 283MW02 before discontinuing the LTM program at FTMM-61. The 2014 results confirm the 2013 results; concentrations of VOCs were non-detect in the groundwater sample at well 283MW02. Therefore, based on the collective groundwater sampling results, it is recommended that the groundwater LTM program be discontinued at FTMM-61. A review of the historical groundwater results are presented in **Table 4**, which provides the matrix used to determine the status of wells relative to future groundwater sampling and analyses.

TABLES

Table 1 Groundwater Gauging Data and Elevations (September 29, 2014) and LFPS Sampling Summary

Table 2 Historical Groundwater Analytical Results

Table 3 Groundwater Analytical Results - 2013 and 2014

Table 4 Review of Historical Groundwater Sampling Results

Table 1
Groundwater Gauging Data and Elevations (September 29, 2014) and LFPS Sampling Summary
Site FTMM-61 Building 283 Gasoline Storage
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site/Well ID	Installation Date	Well Permit #	Y Coord. (North)	X Coord. (East)	Depth (ft. bgs)	Casing Length (ft)	Screen Length (ft)	TOC Elevation (ft)	Gauge Time	PID Reading (ppm)	Gauged Depth to Water (ft. TOC)	Gauged Depth to Bottom (ft. TOC)	Calculated Groundwater Elevation (ft)	Well Sampled this Event
Shallow Monitoring Wells														
283MW01	3/28/2000	29-40367	540322.37	618946.24	25.0	5.0	20.0	10.25	8:40	0.0	7.21	19.10	3.04	
283MW02	7/28/1999	29-40887	540539.91	619033.20	20.0	5.0	15.0	12.43	8:51	0.0	6.60	19.95	5.83	x
283MW03	3/28/2000	29-41650	540508.03	618821.32	20.0	5.0	15.0	10.77	8:53	0.0	7.23	24.80	3.54	
283MW04	10/13/2004	29-00050701	540387.14	618896.25	18.0	3.0	15.0	13.93	8:49	0.0	5.18	18.15	8.75	
283MW05	10/13/2004	29-00050702	540367.06	618927.34	18.0	3.0	15.0	13.82	8:45	0.0	6.90	17.20	6.92	
283MW06	9/22/2004	29-00050703	540277.76	618936.66	18.0	3.0	15.0	13.56	8:38	0.0	6.21	18.19	7.35	

Notes:
1) The synoptic round of water levels in the wells was collected on September 29, 2014.
2) Information on well permit number, X and Y coordinates, depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
3) ft = feet
4) DTW = depth to water (measured from the top of well casing)
5) DTB = depth to bottom of well (measured from the top of well casing)
6) bgs = below ground surface
7) ppm = parts per million (of VOCs)
8) TOC = Top of Casing
9) Elevation = feet above mean sea level
10) N/A = information not available
11) LFPS = Low-Flow Purging and Sampling

Table 2
Historical Groundwater Analytical Results
Site FTMM-61 Building 283 Gasoline Storage
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				283MW01																											
Round No.	NJDEP GWQS	USEPA MCL	Weston 1995 Background (Main Post)	34		34 Dup		35		35 Dup		36		36 Dup		37		37 Dup		38		38 Dup		39		39 Dup		40	
Date Collected				3/6/2008		3/6/2008		5/2/2008		5/2/2008		8/6/2008		8/6/2008		10/23/2008		10/23/2008		3/12/2009		3/12/2009		5/19/2009		5/19/2009		8/19/2009	
ANALYTE/Lab ID				80069.04		80069.03		80150.04		80150.03		80280.04		80280.03		80385.04		80385.02		90104.04		90104.03		90203.04		90203.04		90348.04	
Volatile Organic Compounds (µg/L)																															
Benzene	1	5	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Bromodichloromethane	1	80	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Chloroform	70	80	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Cyclohexane	100.0	NLE	--	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Ethylbenzene	700	700	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Isopropylbenzene	700	NLE	--	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Methylcyclohexane	NLE	NLE	--	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
4-Methyl-2-pentanone	NLE	NLE	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Styrene	100	100	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Toluene	600	1000	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Xylenes (Total)	1000	10,000	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
TICs*	500	NLE	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Metals (µg/L)																															
Aluminum	200	NLE	121000	6400.00		6450.00		4890.00		4830.00		4590.00		4620.00		4650.00		4710.00		3820.00		3810.00		2710.00		2640.00		3050.00			
Antimony	6	6	20.70	ND		ND		ND		ND		ND		ND		ND		ND		ND		10.30		1.20		2.03	ER	ND			
Arsenic	3	10	89.30	ND		ND		ND		ND		ND		ND		ND		3.95	ER	2.98	ER	16.00		12.40		11.90		5.48			
Barium	6000	2000	699.00	133.00		134.00		112.00		110.00		118.00		117.00		111.00		113.00		87.80		88.30		72.60		70.30		90.20			
Beryllium	1	4	2.10	1.14	ER	1.16	ER	1.23	ER	1.15	ER	1.28	ER	1.27	ER	1.20	ER	1.21	ER	0.79		0.83		0.71		0.68		1.01			
Cadmium	4	5	9.50	0.62	ER	0.58	ER	ND		0.29	ER	0.48	ER	0.36	ER	0.87	ER	0.84	ER	ND		ND		0.61	ER	0.40	ER	ND			
Calcium	NLE	NLE	45400.00	14300.00		14400.00		11400.00		11300.00		10300.00		10300.00		11100.00		11300.00		9610.00		9970.00		8670.00		8360.00		9130.00			
Chromium	70	100	191.00	0.95	ER	1.10	ER	0.53	ER	0.80	ER	1.26	ER	1.23	ER	1.05	ER	1.08	ER	1.43	ER	1.28	ER	0.66	ER	0.39	ER	1.58	ER		
Cobalt	NLE	NLE	18.30	6.73		6.76		5.79		5.54		5.52		5.41		5.45		5.47		4.70		4.73		3.83		3.71		4.09			
Copper	1300	1300	65.60	5.77		4.08	ER	1.53	ER	2.01	ER	2.14	ER	2.39	ER	1.98	ER	2.16	ER	2.48	ER	2.32	ER	2.49	ER	2.15	ER	2.78	ER		
Iron	300	NLE	431000	ND		ND		72.20		44.70		135.00		113.00		216.00		227.00		146.00	ER	75.30	ER	83.50	ER	67.70	ER	170.00	ER		
Lead	5	15	22.70	ND		ND		ND		ND		ND		ND		ND		2.48	ER	1.53	ER	ND		2.62	ER	ND		ND			
Magnesium	NLE	NLE	62700	27500.00		27600.00		22500.00		22300.00		20600.00		20600.00		21400.00		21700.00		18500.00		18500.00		13800.00		13400.00		16400.00			
Manganese	50	NLE	331	64.20		64.60		52.80		52.00		48.50		48.30		52.00		51.60		44.20		44.40		35.10		33.90		39.30			
Mercury	2	2	0.26	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		0.16	ER		
Nickel	100	NLE	187	21.40		20.00		14.90		15.10		13.40		12.90		12.90		13.00		11.20		12.10		9.80		9.33		11.60			
Potassium	NLE	NLE	137000	7700.00		7920.00		6550.00		6310.00		6730.00		6620.00		7280.00		7280.00		5360.00		5350.00		5300.00		5130.00		7270.00			
Selenium	40	50	29.60	ND		4.20 ER	ER	5.65	ER	6.32	ER	8.88	ER	3.90	ER	6.58	ER	6.52	ER	47.80		50.90		5.02	ER	ND		19.30			
Silver	40	NLE	ND	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND			
Sodium	50000	NLE	21500	138000.00		140000.00		125000.00		123000.00		125000.00		126000.00		121000.00		121000.00		118000.00		118000.00		94300.00		91700.00		107000.00			
Thallium	2	2	5.50	ND		ND		ND		ND		ND		ND		ND		1.60	ER	ND		ND		ND		ND		ND			
Vanadium	60	NLE	108	1.02		0.79		0.23		0.50		ND		ND		ND		ND		0.43	ER	0.83	ER	ND		0.37	ER	ND			
Zinc	2000	NLE	233	131.00		131.00		96.20		95.90		81.70		81.60		92.10		94.10		78.00		78.60		64.60		62.50		75.70			

Notes:
Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.
NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)
LF = Low-flow sampling method used to collect sample
< = Analyte does not exceed the detection limit shown
J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)
NA = Not analyzed
ND = Not detected
NLE = No limit established
ER = Estimated Result

Table 2
Historical Groundwater Analytical Results
Site FTMM-61 Building 283 Gasoline Storage
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				283MW01																283MW02							
Round No.	NJDEP GWQS	USEPA MCL	Weston 1995 Background (Main Post)	41		42		LF3		LF4		LF5		LF5 Dup		LF6	LF7	LF8	Dup	37		38		39		40	
Date Collected				11/5/2009		1/26/2010		5/17/2010		9/29/2010		11/18/2010		11/18/2010		2/22/2011	4/19/2011	8/18/2011	8/18/2011	3/6/2008		5/2/2008		8/6/2008		10/23/2008	
ANALYTE/Lab ID				90437.04		10035.04		10194.05		10416.02		10499.04		10499.03		11064.08	11154.01	11346.04	11346.03	80069.05		80150.05		80280.05		80385.05	
Volatile Organic Compounds (µg/L)																											
Benzene	1	5	--	ND		ND		ND		ND		ND		ND		ND	ND	ND	ND	27.91		26.57		76.07		48.45	
Bromodichloromethane	1	80	--	ND		ND		ND		ND		ND		ND		ND	ND	ND	ND	ND		ND		ND		ND	
Chloroform	70	80	--	ND		ND		ND		ND		ND		ND		ND	ND	ND	ND	ND		ND		ND		ND	
Cyclohexane	100.0	NLE	--	NA		NA		NA		NA		NA		NA		NA	NA	ND	ND	NA		NA		NA		NA	
Ethylbenzene	700	700	--	ND		ND		ND		ND		ND		ND		ND	ND	ND	ND	374.24		322.15		317.43		358.50	
Isopropylbenzene	700	NLE	--	NA		NA		NA		NA		NA		NA		NA	NA	ND	ND	NA		NA		NA		NA	
Methylcyclohexane	NLE	NLE	--	NA		NA		NA		NA		NA		NA		NA	NA	ND	ND	NA		NA		NA		NA	
4-Methyl-2-pentanone	NLE	NLE	--	ND		ND		ND		ND		ND		ND		ND	ND	ND	ND	1.04	J	ND		ND		ND	
Styrene	100	100	--	ND		ND		ND		ND		ND		ND		ND	ND	ND	ND	0.90	J	0.97	J	ND		ND	
Toluene	600	1000	--	ND		ND		ND		ND		ND		ND		ND	ND	ND	ND	27.72		21.68		35.37		28.06	
Xylenes (Total)	1000	10,000	--	ND		ND		ND		ND		ND		ND		ND	ND	ND	ND	484.87		305.69		545.78		484.30	
TICs*	500	NLE	--	ND		ND		ND		ND		ND		ND		ND	ND	ND	ND	184.00		185.00		229.00		252.00	
Metals (µg/L)																											
Aluminum	200	NLE	121000	3580.00		4050.00		3370.00		1770.00		2190.00		2030.00		3990.00	2820.00	2410.00	2420.00	396.00		272.00		190.00		222.00	
Antimony	6	6	20.70	ND		5.09	ER	ND		6.72	ER	ND		ND		<6.0	<6.0	<6.0	<6.0	ND		ND		ND		ND	
Arsenic	3	10	89.30	1.27	ER	ND		1.34	ER	ND		ND		ND		<3.0	<3.0	<3.0	<3.0	7.67		23.20		8.48		13.30	
Barium	6000	2000	699.00	95.20		97.80		79.50		67.00		86.50		80.00		<200	<200	<200	<200	41.30		38.70		48.90		29.70	
Beryllium	1	4	2.10	1.00		0.90		0.84		0.55		0.88		0.85		1.50	<1.0	<1.0	<1.0	ND		0.21	ER	ND		0.20	ER
Cadmium	4	5	9.50	ND		ND		ND		ND		0.70	ER	0.54	ER	<3.0	10.20	<3.0	<3.0	ND		0.30	ER	0.64	ER	0.28	ER
Calcium	NLE	NLE	45400.00	8650.00		10300.00		8300.00		13800.00		15500.00		14100.00		9590.00	14900.00	7660.00	7970.00	1440.00		1770.00		1280.00		962.00	
Chromium	70	100	191.00	ND		ND		ND		ND		ND		ND		<10	<10	<10	<10	4.89	ER	2.98	ER	2.57	ER	1.80	ER
Cobalt	NLE	NLE	18.30	4.56		5.02		4.13		2.29		3.71		3.48		<50	<50	<50	<50	ND		ND		0.23		ND	
Copper	1300	1300	65.60	ND		ND		1.54	ER	6.57		1.92	ER	1.16	ER	<10	<10	<10	<10	2.04	ER	ND		ND		ND	
Iron	300	NLE	431000	148.00	ER	83.80	ER	ND		35.50		167.00	ER	1.81		<100	504.00	127.00	285.00	2880.00		2800.00		3260.00		1700.00	
Lead	5	15	22.70	ND		ND		ND		ND		ND		ND		<3.0	<3.0	<3.0	<3.0	7.86		8.05		4.73	ER	7.34	
Magnesium	NLE	NLE	62700	17100.00		20200.00		16400.00		11400.00		14100.00		12800.00		16700.00	13200.00	12300.00	12500.00	999.00		898.00		1040.00		683.00	
Manganese	50	NLE	331	39.90		56.70		39.50		29.90		34.90		31.70		51.90	43.20	43.90	39.20	5.19		5.62		4.67		3.57	
Mercury	2	2	0.26	ND		ND		ND		ND		ND		ND		<0.20	<0.20	<0.20	<0.20	ND		ND		ND		ND	
Nickel	100	NLE	187	12.10		15.50		10.10		8.21		11.30		10.40		12.90	11.30	10.90	<10	5.16		2.18	ER	1.95	ER	2.45	ER
Potassium	NLE	NLE	137000	6630.00		6740.00		6280.00		7170.00		8930.00		8320.00		<10000	<10000	<10000	<10000	1640.00		1650.00		ND		1300.00	
Selenium	40	50	29.60	18.00	ER	ND		NR		ND		2.33	ER	ND		<10	<10	<10	<10	9.64	ER	9.33	ER	9.83	ER	8.33	ER
Silver	40	NLE	ND	ND		1.81	ER	ND		ND		ND		ND		<10	<10	<10	<10	ND		ND		1.01		ND	
Sodium	50000	NLE	21500	114000.00		121000.00		104000.00		119000.00		119000.00		111000.00		116000.00	116000.00	101000.00	90700.00	14700.00		14900.00		14700.00		13100.00	
Thallium	2	2	5.50	ND		ND		ND		ND		ND		ND		<2.0	<2.0	<2.0	<2.0	ND		ND		ND		1.48	ER
Vanadium	60	NLE	108	0.82	ER	1.35	ER	ND		0.75	ER	0.69	ER	ND		<50	<50	<50	<50	2.30		2.02		0.38		ND	
Zinc	2000	NLE	233	77.10		71.60		74.30		54.40		68.70		62.70		88.80	85.60	78.50	73.30	12.00		3.43		ND		6.81	

Notes:
Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for VOCs and SVOCs. No individual compound can exceed 100 µg/L.
NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)
LF = Low-flow sampling method used to collect sample
< = Analyte does not exceed the detection limit shown
J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)
NA = Not analyzed
ND = Not detected
NLE = No limit established
ER = Estimated Result

Table 2
Historical Groundwater Analytical Results
Site FTMM-61 Building 283 Gasoline Storage
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				283MW02												283MW03		
Round No.	NJDEP GWQS	USEPA MCL	Weston 1995 Background (Main Post)	41	42	43	44	45	LF3	LF3 Dup	LF4	LF5	LF6	LF7	LF8	34	35	36
Date Collected				3/12/2009	5/19/2009	8/19/2009	11/5/2009	1/26/2010	5/20/2010	5/20/2010	9/30/2010	11/18/2010	2/22/2011	4/18/2011	8/18/2011	3/6/2008	5/2/2008	8/6/2008
ANALYTE/Lab ID				90104.05	90203.05	90348.05	90437.05	10035.05	10204.04	10204.03	10419.07	10499.07	11064.05	11152.05	11346.09	80096.06	80150.06	80280.06
Volatile Organic Compounds (µg/L)																		
Benzene	1	5	--	20.86	19.57	4.03	1.57 J	3.83	ND	ND	0.87 J	2.99	1.29	1.08	1.60	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	100.0	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	23.90	NA	NA	NA
Ethylbenzene	700	700	--	241.36 D	287.82 D	26.78	7.13	117.05 D	6.51	8.72	34.01	1.03	2.02	85.23	38.30	ND	ND	ND
Isopropylbenzene	700	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.20	NA	NA	NA
Methylcyclohexane	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.50	NA	NA	NA
4-Methyl-2-pentanone	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	100	100	--	0.51 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	15.06	30.58	4.88	1.22 J	6.97	1.04 J	1.23 J	1.15 J	2.66	1.87	3.24	1.70	ND	ND	ND
Xylenes (Total)	1000	10,000	--	155.23 D	582.38 D	89.24	17.30	260.18	86.67	95.71	63.60	118.66	131.82	185.03	88.10	ND	ND	ND
TICs*	500	NLE	--	231.00	247.00	249.00	134.00	1840.00	2920.00	3161.00	586.00	4805.00	2405.00	1982.00	263.70	ND	ND	ND
Metals (µg/L)																		
Aluminum	200	NLE	121000	1120.00	288.00	347.00	409.00	2.73	75.90 ER	73.50 ER	111.00	111.00	<200	1570.00	3150.00	88.80	ND	ND
Antimony	6	6	20.70	1.29 ER	ND	10.30	ND	ND	6.27 ER	10.20	6.29 ER	6.95 ER	<6.0	<6.0	<6.0	ND	ND	ND
Arsenic	3	10	89.30	39.10	14.40	38.20	10.25	8.38	22.61	23.28	12.98	14.49	4.90	7.50	7.90	5.62	5.45	4.06 ER
Barium	6000	2000	699.00	37.30	29.80	29.40	49.00	26.30	23.40	23.50	36.70	53.10	<200	<200	<200	227.00	168.00	231.00
Beryllium	1	4	2.10	ND	ND	ND	ND	ND	0.04 ER	ND	ND	ND	<1.0	<1.0	<1.0	ND	0.24 ER	ND
Cadmium	4	5	9.50	ND	0.47 ER	ND	ND	ND	ND	ND	ND	0.74 ER	<3.0	<3.0	<3.0	0.23 ER	2.87	2.47
Calcium	NLE	NLE	45400.00	2190.00	1210.00	116000.00	168000.00	65800.00	19700.00	20100.00	44500.00	56800.00	21400.00	<5000	29100.00	23400.00	24300.00	26000.00
Chromium	70	100	191.00	14.00	2.91 ER	17.80	13.50	6.12	1.44 ER	1.44 ER	2.84 ER	2.19 ER	<10	<10	33.10	ND	ND	ND
Cobalt	NLE	NLE	18.30	0.66 ER	0.29 ER	ND	ND	ND	ND	ND	ND	0.32 ER	<50	<50	<50	1.27	1.46	1.59
Copper	1300	1300	65.60	ND	ND	6.55	2.11 ER	ND	ND	ND	4.54 ER	2.50 ER	<10	11.20	13.80	1.38 ER	ND	ND
Iron	300	NLE	431000	4220.00	2010.00	ND	530.00	625.00	1260.00	1210.00	461.00 ER	1030.00	1120.00	3350.00	8040.00	24700.00	24500.00	23000.00
Lead	5	15	22.70	10.40	6.03	6.52	5.53	6.95	11.50	10.20	4.12 ER	6.90	4.40	3.90	7.80	ND	1.43 ER	ND
Magnesium	NLE	NLE	62700	1160.00	799.00 ER	237.00 ER	2950.00	1080.00	747.00 ER	765.00 ER	4300.00	2120.00	<5000	<5000	<5000	4480.00	4740.00	4940.00
Manganese	50	NLE	331	7.12	4.30 ER	4.74 ER	30.10	7.08	8.41	7.91	9.42	25.70	16.60	<15	27.90	65.60	73.30	76.30
Mercury	2	2	0.26	0.55	ND	ND	ND	ND	ND	ND	ND	ND	<0.20	<0.20	<0.20	ND	ND	ND
Nickel	100	NLE	187	1.64 ER	2.05 ER	1.94 ER	7.75	5.12	2.07 ER	2.37 ER	1.62 ER	4.63 ER	<10	<10	<10	12.30	10.60	11.00
Potassium	NLE	NLE	137000	2340.00	1180.00	4690.00	3440.00	2240.00	1400.00	1440.00	2850.00	2650.00	<10000	<10000	<10000	10900.00	11000.00	10500.00
Selenium	40	50	29.60	30.30	7.34 ER	126.00	50.70	19.20 ER	NR	NR	8.33	4.69 ER	<10	<10	<10	ND	ND	ND
Silver	40	NLE	ND	ND	ND	ND	7.54	4.42 ER	ND	ND	ND	ND	<10	<10	<10	ND	2.92	3.53
Sodium	50000	NLE	21500	14000.00	11800.00	17900.00	17100.00	14400.00	12800.00	14300.00	17900.00	13800.00	16000.00	11300.00	24000.00	10600.00	10700.00	11700.00
Thallium	2	2	5.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	<2.0	<2.0	<2.0	ND	ND	ND
Vanadium	60	NLE	108	6.56	1.80 ER	7.24	8.39	5.42	1.26 ER	0.64 ER	2.63 ER	1.64 ER	<50	<50	<50	ND	ND	ND
Zinc	2000	NLE	233	9.64 ER	6.70 ER	5.17 ER	16.00 ER	ND	7.74 ER	8.23 ER	2.30 ER	5.00 ER	<20	30.50	30.60	19.30	7.27	ND

Notes:
Shaded cells = concentrations exceed the NJDEP GWQS

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NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)
LF = Low-flow sampling method used to collect sample
< = Analyte does not exceed the detection limit shown
J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)
NA = Not analyzed
ND = Not detected
NLE = No limit established
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Table 2
Historical Groundwater Analytical Results
Site FTMM-61 Building 283 Gasoline Storage
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				283MW03																					
Round No.	NJDEP GWQS	USEPA MCL	Weston 1995 Background (Main Post)	37		38		39		40		41		42		LF3		LF3 Dup		LF4		LF5		LF5 Dup		LF6	LF7	LF8
Date Collected				10/23/2008		3/12/2009		5/19/2009		8/19/2009		11/5/2009		1/26/2010		5/17/2010		5/17/2010		9/29/2010		11/17/2010		11/17/2010		2/22/2011	4/19/2011	8/18/2011
ANALYTE/Lab ID				80385.06		90104.06		90203.06		90348.06		90437.06		10035.06		10194.04		10194.03		10416.01		10495.04		10495.03		11064.09	11154.02	11346.05
Volatile Organic Compounds (µg/L)																												
Benzene	1	5	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	ND	ND
Bromodichloromethane	1	80	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	ND	ND
Chloroform	70	80	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	ND	ND
Cyclohexane	100.0	NLE	--	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	NA	ND
Ethylbenzene	700	700	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	ND	ND
Isopropylbenzene	700	NLE	--	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	NA	ND
Methylcyclohexane	NLE	NLE	--	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	NA	ND
4-Methyl-2-pentanone	NLE	NLE	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	ND	ND
Styrene	100	100	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	ND	ND
Toluene	600	1000	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	ND	ND
Xylenes (Total)	1000	10,000	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	ND	ND
TICs*	500	NLE	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	ND	ND
Metals (µg/L)																												
Aluminum	200	NLE	121000	79.00		31.50	ER	33.60	ER	116.00		78.30	ER	23.80	ER	21.20	ER	19.80	ER	84.10	ER	19.20	ER	ND		<200	<200	377.00
Antimony	6	6	20.70	ND		12.10		1.44	ER	4.97	ER	ND		ND		ND		ND		ND		ND		ND		<6.0	<6.0	<6.0
Arsenic	3	10	89.30	ND		64.00		20.50		20.90		4.75	ER	3.69	ER	3.59	ER	3.95	ER	3.69	ER	4.33	ER	3.79	ER	<3.0	6.90	6.20
Barium	6000	2000	699.00	205.00		320.00		136.00		407.00		227.00		307.00		92.80		81.20		92.80		93.60		90.80		<200	271.00	479.00
Beryllium	1	4	2.10	0.21	ER	0.14	ER	ND		0.28	ER	0.16	ER	0.12	ER	0.05	ER	0.07	ER	0.07	ER	ND		ND		3.20	<1.0	<1.0
Cadmium	4	5	9.50	ND		ND		0.45	ER	1.23	ER	ND		ND		ND		ND		ND		0.84	ER	0.58	ER	<3.0	<3.0	<3.0
Calcium	NLE	NLE	45400.00	23200.00		22200.00		19200.00		21200.00		18700.00		18500.00		15600.00		13900.00		14300.00		15600.00		15300.00		14000.00	13600.00	13900.00
Chromium	70	100	191.00	ND		1.11	ER	ND		ND		ND		ND		ND		ND		ND		0.78	ER	0.74	ER	<10	<10	<10
Cobalt	NLE	NLE	18.30	1.73		1.58	ER	2.17		1.79	ER	1.64	ER	1.47	ER	1.71	ER	1.37	ER	1.77	ER	2.01		2.02		<50	<50	<50
Copper	1300	1300	65.60	ND		ND		ND		1.09	ER	ND		ND		ND		ND		1.29	ER	ND		ND		<10	<10	<10
Iron	300	NLE	431000	19700.00		21400.00		12500.00		22400.00		16100.00		21500.00		8970.00		7940.00		7480.00		9390.00		8910.00		12500.00	30600.00	29500.00
Lead	5	15	22.70	ND		7.10		2.12	ER	ND		ND		ND		ND		ND		ND		ND		ND		3.20	<3.0	<3.0
Magnesium	NLE	NLE	62700	4570.00		4200.00		3730.00		4090.00		3570.00		3660.00		3070.00		2790.00		2920.00		2970.00		2920.00		<5000	<5000	<5000
Manganese	50	NLE	331	67.20		63.30		57.00		61.60		49.90		51.30		42.40		38.40		38.90		44.20		41.10		46.10	44.60	48.80
Mercury	2	2	0.26	ND		ND		ND		0.08	ER	ND		ND		ND		ND		ND		ND		ND		<0.20	<0.20	<0.20
Nickel	100	NLE	187	9.78		7.29		10.30		12.00		10.20		11.10		7.50		6.89		10.80		10.70		10.10		<10	<10	<10
Potassium	NLE	NLE	137000	11200.00		10800.00		10000.00		10800.00		9540.00		10700.00		9640.00		8580.00		7990.00		10200.00		10000.00		<10000	<10000	10100.00
Selenium	40	50	29.60	ND		43.30		6.11	ER	8.19	ER	ND		ND		NR		NR		ND		ND		1.42	ER	<10	<10	<10
Silver	40	NLE	ND	ND		ND		ND		3.50	ER	ND		ND		0.86	ER	0.55	ER	1.30	ER	1.44	ER	1.26	ER	<10	<10	<10
Sodium	50000	NLE	21500	10600.00		18300.00		9860.00		10000.00		9620.00		10300.00		10600.00		8940.00		9850.00		10600.00		9980.00		<10000	<10000	11300.00
Thallium	2	2	5.50	1.75	ER	ND		ND		ND		1.03	ER	ND		ND		ND		ND		ND		ND		<2.0	<2.0	<2.0
Vanadium	60	NLE	108	ND		2.04	ER	0.41	ER	2.32	ER	2.47	ER	ND		ND		ND		ND		ND		ND		<50	<50	<50
Zinc	2000	NLE	233	12.80		20.70	ER	10.80	ER	27.00		9.61	ER	ND		8.67	ER	7.26	ER	10.70	ER	9.50	ER	9.31	ER	<20	<20	27.90

Notes:
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NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)
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Table 2
Historical Groundwater Analytical Results
Site FTMM-61 Building 283 Gasoline Storage
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				283MW04																					
Round No.	NJDEP GWQS	USEPA MCL	Weston 1995 Background (Main Post)	14		15		16		17		18		19		20		21		21 Dup		22		22 Dup		LF1		LF2		LF3		LF4
Date Collected				3/6/2008		5/2/2008		8/6/2008		10/23/2008		3/12/2009		5/19/2009		8/19/2009		11/5/2009		11/5/2009		1/26/2010		1/26/2010		5/17/2010		9/30/2010		11/18/2010		2/22/2011
ANALYTE/Lab ID				80069.07		80150.07		80280.07		80385.07		90104.07		90203.07		90348.07		90437.07		90437.03		10035.07		10035.03		10194.07		10419.05		10499.05		11064.04
Volatile Organic Compounds (µg/L)																															
Benzene	1	5	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Bromodichloromethane	1	80	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Chloroform	70	80	--	2.77		1.89	J	2.79		ND		0.74	J	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Cyclohexane	100.0	NLE	--	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Ethylbenzene	700	700	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Isopropylbenzene	700	NLE	--	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Methylcyclohexane	NLE	NLE	--	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
4-Methyl-2-pentanone	NLE	NLE	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Styrene	100	100	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Toluene	600	1000	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Xylenes (Total)	1000	10,000	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
TICs*	500	NLE	--	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Metals (µg/L)																															
Aluminum	200	NLE	121000	961.00		448.00		1580.00		ND		874.00		1070.00		2160.00		2560.00		3560.00		2420.00		1780.00		41.80	ER	319.00		70.30	ER	3170.00
Antimony	6	6	20.70	ND		ND		ND		ND		ND		2.57	ER	ND		ND		ND		5.43	ER	ND		ND		ND		ND		<6.0
Arsenic	3	10	89.30	ND		ND		ND		ND		ND		ND		10.90		41.87		69.48		38.13		26.55		1.44	ER	ND		ND		7.60
Barium	6000	2000	699.00	21.40		11.80		37.10		6.56		13.90		15.10		27.70		24.00		36.40		22.20		21.50		3.76	ER	8.99		5.27		<200
Beryllium	1	4	2.10	0.11	ER	0.21	ER	0.12	ER	0.20	ER	ND		0.12	ER	0.21	ER	0.20	ER	0.26	ER	0.12	ER	0.09	ER	ND		ND		ND		2.10
Cadmium	4	5	9.50	ND		ND		0.50	ER	0.25	ER	0.21	ER	0.73	ER	ND		ND		ND		ND		ND		ND		ND		ND		<3.0
Calcium	NLE	NLE	45400.00	1550.00		1410.00		1580.00		1110.00		1230.00		1270.00		1510.00		1360.00		1680.00		1980.00		1510.00		737.00	ER	715.00	ER	701.00	ER	<5000
Chromium	70	100	191.00	6.84		2.03	ER	3.66	ER	0.66	ER	2.02	ER	3.77	ER	6.84		9.60		11.60		4.96	ER	8.28		ND		2.68	ER	1.79	ER	34.50
Cobalt	NLE	NLE	18.30	0.26		0.34		0.87		0.31		0.46	ER	0.85	ER	0.52	ER	0.40		0.78	ER	0.63	ER	ND		ND		ND		0.32	ER	<50
Copper	1300	1300	65.60	3.47	ER	ND		7.02		ND		3.33	ER	3.62	ER	10.60		5.00		9.65		6.41		1.32	ER	ND		ND		ND		<10
Iron	300	NLE	431000	1510.00		2230.00		2280.00		543.00		1350.00		1530.00		5640.00		7860.00		6220.00		3010.00		2800.00		ND		814.00		268.00	ER	9520.00
Lead	5	15	22.70	ND		ND		ND		2.37	ER	ND		2.66	ER	ND		ND		ND		ND		ND		ND		ND		ND		5.50
Magnesium	NLE	NLE	62700	1860.00		1590.00		2170.00		1210.00		1350.00		1260.00		1670.00		1460.00		1870.00		1840.00		1590.00		756.00	ER	911.00	ER	795.00	ER	<5000
Manganese	50	NLE	331	2.48		2.40		2.51		2.79		2.23	ER	2.06	ER	5.44		3.50	ER	4.79	ER	3.83	ER	3.72	ER	0.82	ER	1.31	ER	1.04	ER	<15
Mercury	2	2	0.26	ND		ND		ND		ND		ND		ND		0.15	ER	0.09	ER	0.15	ER	ND		ND		ND		ND		ND		<0.20
Nickel	100	NLE	187	4.98	ER	2.15	ER	2.38	ER	1.17	ER	ND		0.80	ER	2.89	ER	2.00	ER	3.33	ER	4.17	ER	3.46	ER	ND		ND		1.41	ER	<10
Potassium	NLE	NLE	137000	2290.00		1860.00		832.00		1740.00		1620.00		1780.00		2150.00		1930.00		2280.00		2180.00		2260.00		1820.00		1480.00		2960.00		<10000
Selenium	40	50	29.60	ND		6.65	ER	5.98	ER	7.28	ER	5.11	ER	2.57	ER	ND		ND		ND		ND		ND		NR		3.01	ER	3.02	ER	<10
Silver	40	NLE	ND	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		<10
Sodium	50000	NLE	21500	16100.00		15000.00		12800.00		13400.00		13100.00		10800.00		12000.00		10800.00		10600.00		12500.00		11500.00		9780.00		10000.00		10700.00		<10000
Thallium	2	2	5.50	ND		ND		ND		2.05	ER	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		<2.0
Vanadium	60	NLE	108	3.04		2.34		2.51		ND		2.44	ER	1.96	ER	6.84		9.20		10.20		5.49		5.01		ND		1.20	ER	0.69	ER	<50
Zinc	2000	NLE	233	15.30		5.99		6.89		6.88		8.90	ER	7.89	ER	18.50	ER	14.00	ER	17.40	ER	ND		ND		3.10	ER	3.90	ER	3.40	ER	33.30

Notes:
Shaded cells = concentrations exceed the NJDEP GWQS

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NJDEP GWQS = Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

USEPA MCL = U.S. Environmental Protection Agency Maximum Contaminant Level (2012)
LF = Low-flow sampling method used to collect sample
< = Analyte does not exceed the detection limit shown
J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)
NA = Not analyzed
ND = Not detected
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Table 2
Historical Groundwater Analytical Results
Site FTMM-61 Building 283 Gasoline Storage
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				283MW04		283MW05																	
Round No.	NJDEP GWQS	USEPA MCL	Weston 1995 Background (Main Post)	LF5	LF6	14	15	16	17	18	19	20	21	22	LF1	LF2	LF3	LF4	LF4 Dup	LF5
Date Collected				4/18/2011	8/18/2011	3/6/2008	5/2/2008	8/6/2008	10/23/2008	3/12/2009	5/19/2009	9/17/2009	11/5/2009	1/26/2010	5/17/2010	9/30/2010	11/18/2010	2/22/2011	2/22/2011	4/18/2011
ANALYTE/Lab ID				11152.07	11346.07	80069.08	80150.08	80280.08	80385.08	90104.08	90203.08	90387.01	90437.08	10035.08	10194.08	10419.06	10499.06	11064.07	11064.03	11152.06
Volatile Organic Compounds (µg/L)																				
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	0.30 J	0.27 J	0.66 J	0.48 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	1.78 J	1.80 J	3.88	2.80	0.44 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	100.0	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylcyclohexane	NLE	NLE	--	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	100	100	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (Total)	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																				
Aluminum	200	NLE	121000	508.00	1800.00	1380.00	446.00	2080.00	243.00	1010.00	1140.00	24000.00	1240.00	339.00	98.20 ER	339.00	222.00	615.00	592.00	320.00
Antimony	6	6	20.70	<6.0	<6.0	ND	ND	ND	ND	ND	1.66 ER	ND	ND	ND	ND	ND	ND	<6.0	<6.0	<6.0
Arsenic	3	10	89.30	<3.0	3.40	ND	2.76 ER	ND	6.81	ND	6.54	41.60	18.95	4.24 ER	1.15 ER	ND	ND	<3.0	<3.0	<3.0
Barium	6000	2000	699.00	<200	<200	54.70	41.80	84.00	20.00	49.50	46.20	172.00	44.40	17.60	18.50	13.10	25.80	<200	<200	<200
Beryllium	1	4	2.10	<1.0	<1.0	0.15 ER	0.22 ER	0.20 ER	0.27 ER	0.15 ER	1.32	1.48	0.12 ER	ND	0.05 ER	ND	ND	<1.0	<1.0	<1.0
Cadmium	4	5	9.50	<3.0	<3.0	0.29 ER	ND	0.54 ER	0.33 ER	ND	0.55 ER	2.19	ND	ND	ND	ND	0.42 ER	<3.0	<3.0	<3.0
Calcium	NLE	NLE	45400.00	<5000	<5000	1410.00	1470.00	1660.00	1010.00	1190.00	1090.00	1320.00	1090.00	1340.00	1030.00	665.00 ER	766.00 ER	<5000	<5000	<5000
Chromium	70	100	191.00	<10	25.20	8.56	1.09 ER	3.25 ER	0.72 ER	1.61 ER	1.50 ER	272.00	4.53 ER	1.24 ER	ND	3.38 ER	3.03 ER	<10	<10	<10
Cobalt	NLE	NLE	18.30	<50	<50	0.36	0.52	1.07	0.28	0.49 ER	0.94 ER	4.49	0.44 ER	ND	ND	ND	0.36 ER	<50	<50	<50
Copper	1300	1300	65.60	<10	<10	4.09 ER	ND	4.96 ER	ND	2.11 ER	3.64 ER	13.20	ND	ND	ND	1.03 ER	ND	<10	<10	<10
Iron	300	NLE	431000	1380.00	5640.00	1810.00	2370.00	3610.00	432.00	1170.00	1190.00	61300.00	5320.00	904.00	ND	1000.00	574.00	1500.00	1210.00	803.00
Lead	5	15	22.70	<3.0	<3.0	ND	ND	ND	2.13 ER	ND	ND	14.70	ND	ND	ND	ND	2.60 ER	<3.0	<3.0	<3.0
Magnesium	NLE	NLE	62700	<5000	<5000	2980.00	2720.00	3280.00	1760.00	2440.00	2050.00	11400.00	2120.00	2020.00	1750.00	1190.00	1660.00	<5000	<5000	<5000
Manganese	50	NLE	331	<15	<15	5.16	4.47	6.09	2.54	4.69 ER	3.68 ER	41.80	5.21	3.54 ER	2.32 ER	2.11 ER	2.85 ER	<15	<15	<15
Mercury	2	2	0.26	<0.20	<0.20	ND	ND	ND	ND	ND	ND	0.21 ER	ND	ND	ND	ND	ND	<0.20	<0.20	<0.20
Nickel	100	NLE	187	<10	<10	6.42	3.16 ER	4.34 ER	1.34 ER	0.99 ER	2.03 ER	15.40	2.80 ER	2.58 ER	ND	0.69 ER	2.01 ER	<10	<10	<10
Potassium	NLE	NLE	137000	<10000	<10000	1930.00	1560.00	844.00	1350.00	1480.00	1460.00	15000.00	1810.00	1730.00	1930.00	1290.00	2740.00	<10000	<10000	<10000
Selenium	40	50	29.60	<10	<10	ND	4.24 ER	3.67 ER	4.95 ER	20.10	8.75 ER	ND	ND	ND	NR	2.70 ER	3.39 ER	<10	<10	<10
Silver	40	NLE	ND	<10	<10	ND	ND	0.87	ND	ND	ND	ND	ND	ND	ND	ND	ND	<10	<10	<10
Sodium	50000	NLE	21500	<10000	13600.00	11100.00	1140.00	8580.00	10600.00	9630.00	7560.00	8560.00	7910.00	9260.00	9010.00	7150.00	8580.00	<10000	<10000	<10000
Thallium	2	2	5.50	<2.0	<2.0	ND	ND	ND	1.40 ER	ND	ND	ND	ND	ND	ND	ND	ND	<2.0	<2.0	<2.0
Vanadium	60	NLE	108	<50	<50	3.63	2.17	3.11	ND	1.37 ER	1.37 ER	111.00	5.87	1.41 ER	ND	1.64 ER	ND	<50	<50	<50
Zinc	2000	NLE	233	<20	<20	22.20	11.20	18.10	10.00	12.90 ER	12.20 ER	91.80	9.07 ER	ND	6.51 ER	5.58 ER	7.69 ER	<20	<20	<20

Notes:
Shaded cells = concentrations exceed the NJDEP GWQS

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Table 2
Historical Groundwater Analytical Results
Site FTMM-61 Building 283 Gasoline Storage
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				283MW05	283MW06																					
Round No.	NJDEP GWQS	USEPA MCL	Weston 1995 Background (Main Post)	LF6	14		15		16		17		18		19		20		20 Dup		21		22		LF1		LF2		LF2 Dup		LF3	
Date Collected				8/18/2011	3/6/2008		5/2/2008		8/6/2008		10/23/2008		3/12/2009		5/19/2009		8/19/2009		8/19/2009		11/5/2009		1/26/2010		5/17/2010		9/30/2010		9/30/2010		11/17/2010	
ANALYTE/Lab ID				11346.08	80069.09		80150.09		80280.09		80385.09		90104.09		90203.09		90348.08		90348.03		90437.09		10035.09		10194.06		10419.04		10419.03		10495.06	
Volatile Organic Compounds (µg/L)																															
Benzene	1	5	--	ND	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Bromodichloromethane	1	80	--	ND	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Chloroform	70	80	--	ND	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Cyclohexane	100.0	NLE	--	ND	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Ethylbenzene	700	700	--	ND	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Isopropylbenzene	700	NLE	--	ND	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
Methylcyclohexane	NLE	NLE	--	ND	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
4-Methyl-2-pentanone	NLE	NLE	--	ND	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Styrene	100	100	--	ND	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Toluene	600	1000	--	ND	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Xylenes (Total)	1000	10,000	--	ND	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
TICs*	500	NLE	--	ND	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Metals (µg/L)																															
Aluminum	200	NLE	121000	4330.00	759.00		561.00		999.00		180.00		965.00		570.00		6060.00		4340.00		3080.00		1480.00		316.00		281.00		422.00		198.00	
Antimony	6	6	20.70	<6.0	ND		ND		ND		ND		ND		3.29	ER	ND		4.87	ER	ND		ND		ND		5.85	ER	ND		ND	
Arsenic	3	10	89.30	8.40	ND		4.45	ER	ND		ND		ND		5.09		13.80		11.20		30.76		14.32		2.22	ER	1.20	ER	0.67	ER	ND	
Barium	6000	2000	699.00	<200	49.60		46.30		48.00		24.80		64.40		30.20		133.00		91.90		106.00		57.40		19.10		69.00		70.10		42.50	
Beryllium	1	4	2.10	<1.0	0.10	ER	0.22	ER	ND		0.24	ER	0.12	ER	ND		0.79		0.54		0.46	ER	0.20	ER	ND		ND		ND		ND	
Cadmium	4	5	9.50	<3.0	0.25	ER	0.39	ER	0.44	ER	0.23	ER	0.29	ER	0.58	ER	0.53	ER	ND		ND		ND		ND		ND		ND		ND	
Calcium	NLE	NLE	45400.00	<5000	430.00		503.00		331.00		585.00		545.00	ER	282.00	ER	14500.00		11400.00		46700.00		13200.00		11300.00		16000.00		15500.00		8940.00	
Chromium	70	100	191.00	50.40	6.07		2.57	ER	2.36	ER	0.66	ER	2.83	ER	1.46	ER	12.10		11.70		19.20		7.70		4.11	ER	8.00		8.67		6.30	
Cobalt	NLE	NLE	18.30	<50	ND		ND		0.25		ND		ND		0.45	ER	ND		0.48	ER	0.87	ER	ND		ND		ND		ND		ND	
Copper	1300	1300	65.60	<10	1.99	ER	0.73	ER	1.20	ER	ND		3.21	ER	1.70	ER	24.00		16.80		5.70		ND		ND		1.06	ER	1.64	ER	ND	
Iron	300	NLE	431000	12200.00	1310.00		2970.00		2320.00		434.00		1550.00		1070.00		4700.00		4670.00		8510.00		3830.00		234.00	ER	570.00		927.00		587.00	
Lead	5	15	22.70	4.60	ND		ND		ND		1.80	ER	3.42	ER	ND		6.67		3.76	ER	5.25		ND		ND		ND		ND		ND	
Magnesium	NLE	NLE	62700	<5000	1090.00		907.00		738.00		617.00		957.00	ER	478.00	ER	1310.00		981.00	ER	1480.00		970.00	ER	583.00	ER	2220.00		2280.00		1200.00	
Manganese	50	NLE	331	18.20	2.32		2.83		3.11		1.52		3.64	ER	3.45	ER	11.90		10.50		11.60		9.34		2.88	ER	3.49	ER	3.97	ER	2.12	ER
Mercury	2	2	0.26	<0.20	ND		ND		ND		ND		ND		ND		0.39	ER	0.25	ER	ND		ND		ND		ND		ND		ND	
Nickel	100	NLE	187	<10	4.90	ER	1.83	ER	0.87	ER	0.96	ER	ND		0.68	ER	9.01		2.64	ER	5.30		3.76	ER	ND		1.21	ER	2.05	ER	1.71	ER
Potassium	NLE	NLE	137000	<10000	1210.00		833.00		ND		837.00		836.00	ER	757.00	ER	1300.00		1350.00		1360.00		1320.00		1520.00		1480.00		1620.00		2460.00	
Selenium	40	50	29.60	<10	3.65	ER	5.86	ER	4.39	ER	7.72	ER	ND		6.29	ER	19.80		18.00		21.40		ND		NR		4.45	ER	4.04	ER	4.51	ER
Silver	40	NLE	ND	<10	ND		ND		0.85		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Sodium	50000	NLE	21500	<10000	11500.00		11800.00		11100.00		9850.00		10100.00		8430.00		11200.00		11200.00		10900.00		13100.00		10000.00		11600.00		11700.00		11700.00	
Thallium	2	2	5.50	<2.0	ND		ND		ND		1.55	ER	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Vanadium	60	NLE	108	<50	2.41		2.52		2.01		ND		1.80	ER	1.50	ER	6.79		6.70		9.47		3.94	ER	0.95	ER	1.85	ER	2.65	ER	1.54	ER
Zinc	2000	NLE	233	30.60	15.20		5.60		ND		5.92		10.50	ER	3.54	ER	50.30		19.90	ER	31.10	ER	ND		2.05	ER	4.56	ER	5.03	ER	2.93	ER

Notes:
Shaded cells = concentrations exceed the NJDEP GWQS

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Table 2
Historical Groundwater Analytical Results
Site FTMM-61 Building 283 Gasoline Storage
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				283MW06			
Round No.	NJDEP GWQS	USEPA MCL	Weston 1995 Background (Main Post)	LF4	LF5	LF5 Dup	LF6
Date Collected				2/22/2011	4/18/2011	4/18/2011	8/18/2011
ANALYTE/Lab ID				11064.06	11152.03	11152.04	11346.06
Volatile Organic Compounds (µg/L)							
Benzene	1	5	--	ND	ND	ND	ND
Bromodichloromethane	1	80	--	ND	ND	ND	ND
Chloroform	70	80	--	ND	ND	ND	ND
Cyclohexane	100.0	NLE	--	NA	NA	NA	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	NA	NA	NA	ND
Methylcyclohexane	NLE	NLE	--	NA	NA	NA	ND
4-Methyl-2-pentanone	NLE	NLE	--	ND	ND	ND	ND
Styrene	100	100	--	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND
Xylenes (Total)	1000	10,000	--	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND
Metals (µg/L)							
Aluminum	200	NLE	121000	412.00	507.00	862.00	5940.00
Antimony	6	6	20.70	<6.0	<6.0	<6.0	<6.0
Arsenic	3	10	89.30	<3.0	<3.0	<3.0	9.20
Barium	6000	2000	699.00	<200	<200	<200	<200
Beryllium	1	4	2.10	<1.0	<1.0	<1.0	<1.0
Cadmium	4	5	9.50	<3.0	<3.0	<3.0	<3.0
Calcium	NLE	NLE	45400.00	<5000	<5000	<5000	<5000
Chromium	70	100	191.00	<10	<10	<10	60.30
Cobalt	NLE	NLE	18.30	<50	<50	<50	<50
Copper	1300	1300	65.60	<10	<10	<10	11.00
Iron	300	NLE	431000	747.00	1080.00	2180.00	15900.00
Lead	5	15	22.70	<3.0	<3.0	<3.0	4.20
Magnesium	NLE	NLE	62700	<5000	<5000	<5000	<5000
Manganese	50	NLE	331	<15	<15	<15	23.70
Mercury	2	2	0.26	<0.20	<0.20	<0.20	<0.20
Nickel	100	NLE	187	<10	<10	<10	<10
Potassium	NLE	NLE	137000	<10000	<10000	<10000	<10000
Selenium	40	50	29.60	<10	<10	<10	<10
Silver	40	NLE	ND	<10	<10	<10	<10
Sodium	50000	NLE	21500	<10000	<10000	<10000	21000.00
Thallium	2	2	5.50	<2.0	<2.0	<2.0	<2.0
Vanadium	60	NLE	108	<50	<50	<50	<50
Zinc	2000	NLE	233	<20	21.60	66.80	33.50

Notes:
Shaded cells = concentrations exceed the NJDEP GWQS

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J = Estimated concentration exceeds the method detection limit (MDL) and is less than the reporting limit (RL)
NA = Not analyzed
ND = Not detected
NLE = No limit established
ER = Estimated Result

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-61 Building 283 Gasoline Storage
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	Weston 1995 Background (Main Post)	283MW01	283MW02		283MW03	283MW04
Sample ID				FTMM-61-GW-283MW01	FTMM-61-GW-283MW02	FTMM-61-GW-283MW02-13.26	FTMM-61-GW-283MW03	FTMM-61-GW-283MW04
Sample Date				8/15/2013	8/16/2013	10/2/2014	8/15/2013	8/16/2013
QA/QC				SA	SA	SA	SA	SA
Study ID				Baseline - August 2013	Baseline - August 2013	2014-Q4 QGW	Baseline - August 2013	Baseline - August 2013
Sampling Method				LFPS	LFPS	LFPS	LFPS	LFPS
Volatile Organic Compounds (µg/l)								
1,1,1,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	-	< 1	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	-	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	-	< 1	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	7	-	< 1	< 1	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	-	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	-	< 1	< 1	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	-	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	-	**1.2 J**	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	-	< 1	< 1	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	-	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	-	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	5	-	< 1	< 1	< 1	< 1	< 1
1,2-Dichloropropane	1	5	-	< 1	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	-	**0.59 J**	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	-	< 1	< 1	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	-	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	-	< 1	< 1	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	-	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	-	< 1	< 1	< 1	< 1	< 1
Acetone	6,000	NLE	-	< 5	**2.1 J**	< 5	**1.4 J**	< 5
Benzene	1	5	-	< 1	< 1	< 1	< 1	< 1
Bromobenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1
Bromochloromethane	100	NLE	-	< 1	< 1	< 1	< 1	< 1
Bromodichloromethane	1	80	-	< 1	< 1	< 1	< 1	< 1
Bromoform	4	80	-	< 1	< 1	< 1	< 1	< 1
Carbon tetrachloride	1	5	-	< 1	< 1	< 1	< 1	< 1
Chlorobenzene	50	100	-	< 1	< 1	< 1	< 1	< 1
Chlorodibromomethane	1	80	-	< 1	< 1	< 1	< 1	< 1
Chloroethane	5	NLE	-	< 1	< 1	< 1	< 1	< 1
Chloroform	70	80	-	< 1	< 1	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	-	< 1	< 1	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 1	< 1	< 1
Cymene	100	NLE	-	< 1	< 1	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	-	< 1	< 1	< 1	< 1	< 1
Ethyl benzene	700	700	-	**1 J**	< 1	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	-	< 1	< 1	< 1	< 1	< 1
Isopropylbenzene	700	NLE	-	< 1	< 1	< 1	< 1	< 1
Meta & Para Xylenes	1,000	NLE	-	**1.9 J**	< 2	< 2	< 2	< 2
Methyl bromide	10	NLE	-	< 1	< 1	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	-	< 5	< 5	< 5	< 5	< 5
Methyl chloride	100	NLE	-	< 1	< 1	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	-	< 1	< 1	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	-	< 1	< 1	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	-	< 1	< 1	< 1	< 1	< 1

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-61 Building 283 Gasoline Storage
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	Weston 1995 Background (Main Post)	283MW01	283MW02		283MW03	283MW04
Sample ID				FTMM-61-GW-283MW01	FTMM-61-GW-283MW02	FTMM-61-GW-283MW02-13.26	FTMM-61-GW-283MW03	FTMM-61-GW-283MW04
Sample Date				8/15/2013	8/16/2013	10/2/2014	8/15/2013	8/16/2013
QA/QC				SA	SA	SA	SA	SA
Study ID				Baseline - August 2013	Baseline - August 2013	2014-Q4 QGW	Baseline - August 2013	Baseline - August 2013
Sampling Method				LFPS	LFPS	LFPS	LFPS	LFPS
Methylene chloride	3	5	-	< 1	< 1	< 1	< 1	< 1
Naphthalene	300	NLE	-	**0.25 J**	< 1	< 1	< 1	< 1
n-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	-	**0.23 J**	< 1	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	-	< 1	< 1	< 1	< 1	< 1
Propylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1
Styrene	100	100	-	< 1	< 1	< 1	< 1	< 1
Tert Butyl Alcohol	100	NLE	-	NA	NA	< 20	NA	NA
tert-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1
Tetrachloroethene	1	5	-	< 1	< 1	< 1	< 1	< 1
Toluene	600	1,000	-	< 1	< 1	< 1	< 1	< 1
Total Xylenes	1,000	10,000	-	**2.13 J**	< 3	NA	< 3	< 3
Trans-1,2-Dichloroethene	100	100	-	< 1	< 1	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 1	< 1	< 1
Trichloroethene	1	5	-	< 1	< 1	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	-	< 1	< 1	< 1	< 1	< 1
Vinyl chloride	1	2	-	< 1	< 1	< 1	< 1	< 1
TIC VOCs (µg/l)								
Total TIC, Volatile	500	NLE	-	**5.2 JN**	ND	ND	ND	ND
Inorganics (µg/l)								
Lead	5	15	22.7	< 2	< 2	NA	< 2	< 2

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-61 Building 283 Gasoline Storage
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Footnote:
1) All historical data collected prior to 2013 are reported as provided by others.
2) Number of Analyses is the number of detected and non-detected results excluding rejected results. Sample duplicate pairs have not been averaged.
3) NLE = no limit established.
4) ND = not detected in any background sample, no background concentration available.

5) Chemical result qualifiers are assigned by the laboratory and is typically evaluated and modified (if necessary) by during data validation.
[blank] = detect, i.e. detected chemical result value.
B = Compound detected in the sample and its associated blank sample.
R = Rejected, data validation rejected the results.
U = non-detect, i.e. not detected equal to or above this value.
U-DL = Elevated sample detection limit due to difficult sample matrix.
U-ND = Analyte not detected in sample, but no detection or reporting limit provided.
J = estimated (detect or non-detect) value.
E (or ER) = Estimated result.
D = Results from dilution of sample.
J-DL = Elevated sample detection limit due to difficult sample matrix.
JN = Tentatively identified compound, estimated concentration.

6) Chemical results greater than or equal to the action level (depending on criteria) are highlighted based on the Criteria that are present.
- Cell Shade values represent a result that is above the NJ Ground Water Quality Criteria ####

NJDEP Interim Specific GWQC values are presented for the NJ GWQS where there is not a Specific Ground Water Quality Criteria. A full list of compounds is available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).

NJDEP Interim Generic GWQC values are presented for the NJ GWQS where there is not a XXXXX or a NJDEP Interim Specific GWQC. Available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).

- Bold Outline represent a result that is above the USEPA 2014-05 MCL. ###
- Cell Style values represent a result that is above the Weston 1995 Background (Main Post). ###

n/a = all concentrations were less than the detection limit, therefore, no location of maximum value identified.
Dash (-) = only background concentrations for metals are being used as comparison criteria.

7) Criteria action level source document and web address.
- The NJ Ground Water Quality Criteria refers to the NJDEP Groundwater Quality Standards - Adopted July 22, 2010
  http://www.state.nj.us/dep/wms/bwqsa/docs/njac79C.pdf
- The 2014-05 USEPA MCL refers to the USEPA's Region 9 Regional Screening Levels (HQ=1.0) - 5/31/2014 (Last revised)
  http://www.epa.gov/region9/superfund/prg/
- The Weston 1995 Background (Main Post) refers to the FTMM reports.
  NA

8) Wells sampled in the fourth quarter are highlighted in yellow. Sample ID

Table 4
Review of Historical Groundwater Sampling Results
Site FTMM-61 Building 283 Gasoline Storage
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site Name/ Well ID	Interpretation of Historical and 2014 Results [1]			2014 Evaluation				Retain Analyte/Well (Yes or No)	Rationale
	Chem Class / Analyte	Does it Exceed NJDEP GWQS (Yes or No) (If Yes, identify compound)	Do Metals Exceed FTMM Background Concentration (Yes or No) (If Yes, identify Metal)	Seasonal Effect?[2] (Y/N)	Anomaly? (Y/N)	Exceedance part of overall trend? (Y/N)	Well needed for sentinel purposes? (Y/N)		
FTMM-61, B283									
283MW02	VOC	Benzene	No	N/A	No	N/A	N/A	No	Benzene non-detect 2013 and 2014. The confirmation of the 2013 results in 2014 (using LFPS methods) is consistent with the NJDEP's July 3, 2014 comment letter, which specifies acceptance of one additional round of sampling in well 283MW02. Recommend discontinuing well. Sb is attributed to background conditions and not associated with historical site operations.

Notes

1. Has any of the analyte compounds exceeded the NJDEP GWQS in the 2014 data and the 4 previous quarterly data rounds or two previous annual rounds?
   a. If yes then keep analyte in LTM list
   b. If no then remove this analyte from LTM list
   c. a and b above may be occasionally superseded on a case-by-case basis, depending on site conditions.
2. Has any of the analyte compounds exceeded the NJDEP GWQS seasonally (winter spring vs. summer fall)?
3. N/A - Not applicable
4. Per the 2/5/15 NJDEP approval letter of the Final 2013 Baseline Groundwater Report, groundwater monitoring wells 283MW01, 283MW01 and 283MW04 were removed from the long term monitoring sampling program and lead were discontinued in 2014.

FIGURES

Figure 1 Layout of FTMM-61 Building 283 Gasoline Storage

Figure 2 FTMM-61 Shallow Groundwater Contours - September 29, 2014

283MW01
UST-283-59
Former 10,000 Gallon
No. 2 Fuel Oil UST
283MW03
288
283
283MW04
UST-283-58
283MW05
283MW02
UST-283-229
Former 3,000 Gallon
Gasoline UST
FTMM-61
283MW06
295

LEGEND:

- Shallow Monitoring Well
- Removed Gasoline UST associated with FTMM-61
- Removed Steel UST associated with FTMM-61 (Building 283)
- FTMM-61 Boundary
- Municipal Boundary
- Installation Boundary
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line

N

1 inch = 30 feet

0 15 30 60 Feet

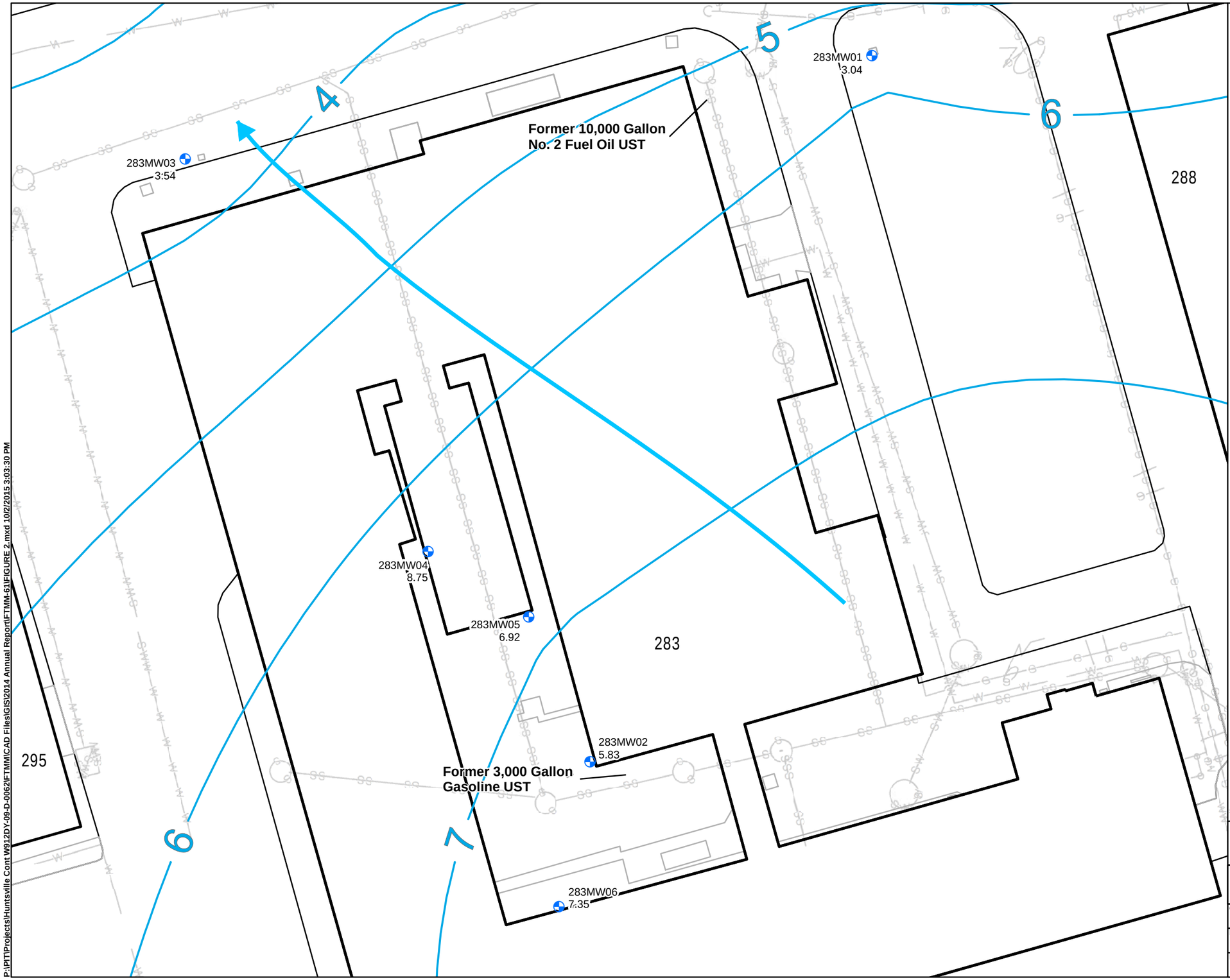
Source: FTMM Supplied CAD, 2013.

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey

LAYOUT OF FTMM-61
B37 BUILDING 283 GASOLINE STORAGE

CREATED BY: RR	REVIEWED BY: ME
DATE: OCT. 2015	FIGURE NUMBER: FIGURE 1
PROJECT NUMBER: 748810-01000	FILE: FIGURE 1.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-61\FIGURE 1.mxd 10/2/2015 2:46:20 PM



LEGEND:

- Shallow Monitoring Well
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Groundwater Elevation Contour
- Inferred Groundwater Flow Direction

NOTE:

The groundwater elevation at monitoring well 283MW04 was considered anomalous compared to the fluid levels at neighboring wells.

N

1 inch = 30 feet

0 15 30 60 Feet

Source: FTMM Supplied CAD, 2013.

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
FTMM-61 SHALLOW GROUNDWATER CONTOURS - SEPTEMBER 29, 2014	
CREATED BY: RR	REVIEWED BY: ME
DATE: OCT. 2015	FIGURE NUMBER: FIGURE 2
PROJECT NUMBER: 748810-01000	FILE: FIGURE 2.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-61\FIGURE 2.mxd 10/2/2015 3:03:30 PM

ATTACHMENTS

Attachment A LFPS Field Sheets

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | **CLIENT:** ACOE | **WELL #:** 383MW02

PROJECT: FTMM 4Q GW | **WELL PERMIT #:** 39-40687

AOC # (AREA): FTMM-61 | **DATE:** 10/2/14

SCREENED INTERVAL (TOC): 5-20 | **SAMPLING PERSONNEL NAME:** D. Lizos

WELL DIAMETER (in.): 4 | **SAMPLING PERSONNEL NAME:**

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0

WELL DEPTH (TOC): 19.90

FEET OF WATER IN WELL (ft): 13.38

FEET OF SATURATED SCREEN (ft): 13.38

DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 6.67

PUMP INTAKE DEPTH (ft below TOC): 13.26

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/L)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*		
1105	X		7.22	NA	0.501	NA	74.7	NA	2.84	NA	9.5	NA	17.81	NA	350	6.64
1110	X		4.11	3.11	0.468	.033	180.7	106.0	2.10	.74	5.5	4.0	17.95	.14	350	6.72
1115	X		3.99	0.12	0.470	.002	209.1	28.4	2.47	.37	5.2	0.3	17.93	.02	350	6.75
1120	X		3.96	0.03	0.470	0	225.2	16.1	2.63	.16	4.6	0.6	17.85	.08	350	6.78
1125	X		3.95	0.01	0.470	0	237.6	12.4	2.85	.22	4.6	0	17.83	.02	350	6.79
1130	X		3.94	0.01	0.468	.002	239.1	1.5	2.79	.06	4.3	0.3	17.76	.07	350	6.78
1135		X	3.94	0	0.468	0	245.0	5.9	2.65	.10	4.2	0.1	17.80	.04	350	6.78

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

APPENDIX L

FTMM-64: BUILDING 812 UST GASOLINE

APPENDIX L: FTMM-64 Building 812 UST Gasoline

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2.0 GROUNDWATER SAMPLING L-1
3.0 HISTORICAL GROUNDWATER SAMPLING RESULTS L-1
4.0 ANNUAL (FOURTH QUARTER) 2014 GROUNDWATER RESULTS L-2
5.0 FINDINGS AND RECOMMENDATIONS L-2

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1	Groundwater Gauging Data and Elevations (September 29, 2014) and LFPS Sampling Summary
2	Historical Groundwater Analytical Results
3	Groundwater Analytical Results - 2013 and 2014
4	Review of Historical Groundwater Sampling Results

LIST OF FIGURES

Figure No.	Title
1	Layout of FTMM-64 Building 812 UST Gasoline
2	FTMM-64 Shallow Groundwater Contours - September 29, 2014

LIST OF ATTACHMENTS

Attachment	Title
A	LFPS Field Sheets

1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT

Monitoring wells located within FTMM-64 were gauged on September 29, 2014. Monitoring well locations as well as other site features are provided in **Figure 1**. Details regarding the water level measurements are provided in **Table 1**. Groundwater elevations in monitoring wells ranged from 14.16 (812MW13) to 12.88 (812MW12) feet above mean sea level (amsl). The inferred shallow and deep groundwater flow direction is generally to the north. **Figure 2** shows the shallow groundwater flow direction, deep wells were not included in the creation of the shallow groundwater contours.

During the groundwater gauging, the physical condition of FTMM-64 monitoring wells were assessed. The site monitoring wells were found to be in good condition.

2.0 GROUNDWATER SAMPLING

One groundwater sample was collected from monitoring well 812MW04 located at FTMM-64 as part of the annual (fourth quarter) 2014 groundwater sampling event. FTMM-64 is sampled on an annual basis. The groundwater sampling program included measuring the depth to groundwater in monitoring wells prior to sampling and collection of groundwater samples using low-flow purging and sampling (LFPS). The groundwater sample was collected on October 2, 2014. The groundwater sample was analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) via the United States Environmental Protection Agency (USEPA) Method SW8260C.

This sample was collected in accordance with the New Jersey Department of Environmental Protection (NJDEP) Field Sampling Procedures Manual (FSPM) and the Sampling Analysis Plan (SAP). Field blanks, duplicates, matrix spike, matrix spike duplicate and quality assurance (QA) split samples were collected for every 5% of samples collected per parameter, per matrix, in accordance with the Quality Assurance Project Plan (QAPP). Trip blanks accompanied each cooler each day in which VOCs were collected for laboratory analysis.

The completed LFPS field sheets can be found in **Attachment A**.

3.0 HISTORICAL GROUNDWATER SAMPLING RESULTS

From February 2008 through July 2011, FTMM-64 monitoring wells were sampled for volatile organic compounds (VOCs) and metals.

In the last four historical groundwater sampling events conducted at FTMM-64 from November 2010 to July 2011, samples were submitted for VOCs and metals. Monitoring wells within FTMM-64 were sampled on a staggered quarterly basis during this period. Within the last four events of groundwater sampling at FTMM-64, aluminum, antimony, arsenic, beryllium, cadmium, iron, lead, manganese and sodium were detected above their respective NJDEP Ground Water Quality Standard (GWQS). However, only sodium, manganese, and cadmium were detected above the background concentrations (Weston, 1995). Monitoring wells 812MW04, 812MW05, 812MW06 812MW07, 812MW08, and 812MW14 contained detections of sodium above the background concentration of 21,500 µg/l (Weston, 1995). Monitoring wells 812MW05 (419 - 32 µg/L), 812MW07 (374 - 771 µg/L), and 812MW08 (348 µg/L) contained detections of manganese above the background concentration of 331 µg/l

(Weston, 1995). Cadmium was detected in 812MW08 (10.6 - 54 µg/L) above the background concentration of 9.5 µg/L (Weston, 1995).

In the last four historical quarterly groundwater sampling events, vinyl chloride (1.05 - 4.9 µg/L) has historically been detected in 812MW04 above the NJDEP GWQS of 1 µg/L. Historical groundwater analytical results are presented in **Table 2**.

During the August 2013 Baseline Sampling Event, eight monitoring wells were sampled for VOCs and lead. Lead was detected in monitoring well 812MW04 at a concentration of 7.5 µg/L, above the NJDEP GWQS of 5 µg/L. However, this result is below the background concentration of 22.7 µg/L for lead (Weston, 1995). Concentrations of VOCs were non-detect during the August 2013 baseline groundwater sampling event. Groundwater analytical detections from samples collected during the August 2013 sampling event are presented in **Table 3.**

The Final August 2013 Baseline Groundwater Sampling Report was accepted by the NJDEP in their February 5, 2015 letter. Based on this approval, seven out of the eight groundwater monitoring wells were removed from the long term monitoring (LTM) program including: 812MW01, 812MW02, 812MW05, 812MW06, 812MW07, 812MW08 and 812MW14; and lead analysis was discontinued.

4.0 ANNUAL (FOURTH QUARTER) 2014 GROUNDWATER RESULTS

Vinyl chloride was the only VOC detected in monitoring well 812MW04 at a concentration of 7.8 µg/L, above the NJDEP GWQS of 1 µg/L. Groundwater analytical results for this well are presented in **Table 3**.

5.0 FINDINGS AND RECOMMENDATIONS

Vinyl chloride continues to be detected in well 812MW04 at concentrations above the NJDEP GWQS of 1 µg/L. Concentrations during the last six sampling events (e.g., last four quarterly and two annual events) ranged from 1.05 µg/L (April 2011) to 7.8 µg/L (October 2014). Based on the collective groundwater analytical results, groundwater monitoring for VOCs annually will continue for well 812MW04. A review of historical groundwater sampling results is presented in **Table 4**, which also provides the matrix used to determine the status of wells relative to future groundwater sampling and analyses.

TABLES

Table 1 Groundwater Gauging Data and Elevations (September 29, 2014) and LFPS Sampling Summary

Table 2 Historical Groundwater Analytical Results

Table 3 Groundwater Analytical Results - 2013 and 2014

Table 4 Review of Historical Groundwater Sampling Results

Table 1
Groundwater Gauging Data and Elevations (September 29, 2014) and LFPS Sampling Summary
Site FTMM-64 Building 812 UST Gasoline
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site/Well ID	Installation Date	Well Permit #	Y Coord. (North)	X Coord. (East)	Depth (ft. bgs)	Casing Length (ft)	Screen Length (ft)	TOC Elevation (ft)	Gauge Time	PID Reading (ppm)	Gauged Depth to Water (ft. TOC)	Gauged Depth to Bottom (ft. TOC)	Calculated Groundwater Elevation (ft)	Well Sampled this Event
Shallow Monitoring Wells														
812MW04	4/26/2000	29-42575	537927.03	620620.87	7.0	2.0	5.0	19.90	15:43	0.0	4.32	6.80	15.58	x
812MW05	5/4/2000	29-42576	537893.36	620502.25	18.0	8.0	10.0	21.64	15:05	0.0	9.23	17.71	12.41	
812MW06	4/26/2000	29-42577	537917.09	620674.17	16.0	6.0	10.0	18.18	15:39	0.0	6.82	15.40	11.36	
812MW07	5/3/2000	29-42578	537966.22	620504.46	18.0	8.0	10.0	20.60	15:47	0.0	9.75	17.48	10.85	
812MW08	5/2/2000	29-42579	537955.95	620658.94	16.0	6.0	10.0	17.13	15:37	0.0	6.00	14.47	11.13	
812MW09	5/2/2000	29-42580	538025.14	620745.02	16.0	6.0	10.0	14.98	15:18	0.0	4.59	14.70	10.39	
812MW10	5/3/2000	29-42581	538060.18	620800.53	16.0	6.0	10.0	14.42	15:16	0.0	5.03	15.49	9.39	
812MW11	5/2/2000	29-42582	538010.79	620911.32	15.0	5.0	10.0	14.02	15:21	0.0	4.65	14.60	9.37	
812MW12	5/3/2000	29-42583	537833.43	620758.45	16.0	6.0	10.0	16.11	14:59	0.0	3.23	5.92	12.88	
812MW13	5/4/2000	29-42584	537800.11	620386.04	19.0	9.0	10.0	24.15	15:07	0.0	9.99	18.82	14.16	
812MW14	5/12/2000	29-42888	538042.22	620663.45	15.0	5.0	10.0	16.43	15:31	0.0	6.42	14.22	10.01	
Deep Monitoring Wells														
812MW01	5/4/2000	29-42572	537928.67	620621.94	50.0	30.0	20.0	19.05	15:41	0.0	7.79	47.05	11.26	
812MW02	4/26/2000	29-42573	537983.57	620692.55	50.0	30.0	20.0	16.38	15:29	0.0	6.18	48.46	10.20	
812MW03	5/5/2000	29-42574	537893.56	620721.26	50.0	30.0	20.0	17.07	15:01	0.0	5.87	46.98	11.20	

Notes:
1) The synoptic round of water levels in the wells was collected on September 29, 2014.
2) Information on well permit number, X and Y coordinates, depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
3) ft = feet
4) DTW = depth to water (measured from the top of well casing)
5) DTB = depth to bottom of well (measured from the top of well casing)
6) bgs = below ground surface
7) ppm = parts per million (of VOCs)
8) TOC = Top of Casing
9) Elevation = feet above mean sea level
10) N/A = information not available
11) LFPS = Low-Flow Purging and Sampling

Table 2
Historical Groundwater Analytical Results
Site FTMM-64 Building 812 UST Gasoline
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				812MW01																	
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main)**	31	32	32 Dup	33	34	34 Dup	35	36	37	38	39	LF1	LF1 Dup	LF2	LF2 Dup		Dup			Dup
Date Collected				2/20/2008	4/9/2008	4/9/2008	7/25/2008	10/22/2008	10/22/2008	2/6/2009	4/28/2009	8/10/2009	10/9/2009	1/14/2010	5/13/2010	5/13/2010	7/28/2010	7/28/2010	11/3/2010	11/3/2010	2/14/2011	4/14/2011	4/14/2011
ANALYTE/Lab ID				80051.04	80120.04	80120.03	80256.04	80383.04	80383.03	90039.04	90171.04	90336.04	90412.04	10018.04	10191.04	10191.03	10323.04	10323.03	10471.04	10471.03	11051.01	11148.04	11148.03
Volatile Organic Compounds (µg/L)																							
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -l,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans -l,2-Dichloroethene	100			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	1			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (Total)	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																							
Aluminum	200	NLE	121000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	40.0 ER	ND	15.0 ER	15.6 ER	<200	<200	<200
Antimony	6	6	20.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.7	6.21 ER	11.0	8.04 ER	ND	5.26 ER	<6.0	<6.0	<6.0
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.24 ER	0.780 ER	0.910 ER	6.04	2.24 ER	2.01 ER	<3.0	<3.0	<3.0
Barium	6000	2000	699.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.68	6.78	8.60	6.84	11.3	10.6	<200	<200	<200
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	<1.0	<1.0	<1.0
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	<3.0	<3.0	<3.0
Calcium	NLE	NLE	45400.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	53700	47400	59900	52800	63700	58900	60400	59000	60400
Chromium	70	100	191.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	<10	<10	<10
Cobalt	NLE	NLE	18.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	<50	<50	<50
Copper	1300	1300	65.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.09 ER	ND	3.00 ER	ND	ND	ND	<10	13.0	20.7
Iron	300	NLE	431000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	387 ER	218 ER	640	131 ER	3870	3530	2070	2660	4610
Lead	5	15	22.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	<3.0	<3.0	<3.0
Magnesium	NLE	NLE	62700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2430	2230	2850	2460	3160	2940	<5000	<5000	<5000
Manganese	50	NLE	331	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	14.5	12.6	68.1	57.6	258	238	176	191	207
Mercury	2	2	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.210 ER	0.150 ER	ND	ND	ND	ND	<0.20	<0.20	<0.20
Nickel	100	NLE	187	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.15 ER	0.855 ER	1.00 ER	0.712 ER	ND	ND	<10	<10	<10
Potassium	NLE	NLE	137000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3780	3540	3590	2700	3240	3040	<10000	<10000	<10000
Selenium	40	50	29.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	67.0	70.6	ND	ND	<10	<10	<10
Silver	40	NLE	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	1.41 ER	1.32 ER	<10	<10	<10
Sodium	50000	NLE	21500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6040	7570	7500	5680	6660	5940	<10000	<10000	<10000
Thallium	2	2	5.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	<2.0	<2.0	<2.0
Vanadium	60	NLE	108	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.840 ER	ND	ND	ND	ND	ND	<50	<50	<50
Zinc	2000	NLE	233	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.42 ER	2.18 ER	6.00 ER	ND	ND	ND	<20	<20	<20

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for total VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

ER - Estimated result

J - Estimated concentration exceeds the MDL and is less than the RL

NA - Not analyzed NR - Not reported

ND - Not detected

NLE - No limit established

a/ Elevated sample detection limit due to difficult sample matrix.

Table 2
Historical Groundwater Analytical Results
Site FTMM-64 Building 812 UST Gasoline
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				812MW01	812MW02														812MW04			
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main)**		31	32	33	34	35	36	37	38	39	40	41					31	32	33	34
Date Collected				7/8/2011	2/20/2008	4/9/2008	7/25/2008	10/22/2008	2/6/2009	4/28/2009	8/10/2009	10/9/2009	1/14/2010	5/13/2010	7/28/2010	11/3/2010	2/14/2011	4/14/2011	7/8/2011	2/20/2008	4/9/2008	7/25/2008	10/22/2008
ANALYTE/Lab ID				11287.10	80051.05	80120.05	80256.05	80383.05	90039.05	90171.05	90336.05	90412.05	10018.05	10191.05	10323.05	10471.05	11051.02	11148.05	11287.11	80051.06	80120.06	80256.06	80383.06
Volatile Organic Compounds (µg/L)																							
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.49 J	2.19
tert -Butyl alcohol	100	NLE	--	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	10.66	ND
1,1-Dichloroethane				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -l,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.11 J	0.44 J
trans -l,2-Dichloroethene	100			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.05 J	1.07 J
Chloroethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	29.01	37.12
Isopropylbenzene	700	NLE	--	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.99	7.36
Vinyl chloride	1			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22.47	40.41
Xylenes (Total)	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	45.47	33.86
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	133	104
Metals (µg/L)																							
Aluminum	200	NLE	121000	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	99.2 ER	ND	<200	<200	<200	NA	NA	NA	NA
Antimony	6	6	20.70	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.56 ER	9.96 ER	6.80 ER	<6.0	<6.0	<6.0	NA	NA	NA	NA
Arsenic	3	10	89.30	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.41 ER	1.36 ER	2.83 ER	<3.0	4.0	<3.0	NA	NA	NA	NA
Barium	6000	2000	699.00	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	17.0	19.1	20.0	<200	<200	<200	NA	NA	NA	NA
Beryllium	1	4	2.10	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<1.0	<1.0	<1.0	NA	NA	NA	NA
Cadmium	4	5	9.50	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<3.0	<3.0	<3.0	NA	NA	NA	NA
Calcium	NLE	NLE	45400.00	55300	NA	NA	NA	NA	NA	NA	NA	NA	NA	52900	58500	57100	60400	57600	57100	NA	NA	NA	NA
Chromium	70	100	191.00	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<10	<10	<10	NA	NA	NA	NA
Cobalt	NLE	NLE	18.30	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<50	<50	<50	NA	NA	NA	NA
Copper	1300	1300	65.60	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	1.71 ER	ND	<10	<10	<10	NA	NA	NA	NA
Iron	300	NLE	431000	2030	NA	NA	NA	NA	NA	NA	NA	NA	NA	128 ER	297 ER	646	588	2080	254	NA	NA	NA	NA
Lead	5	15	22.70	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<3.0	<3.0	<3.0	NA	NA	NA	NA
Magnesium	NLE	NLE	62700	<5000	NA	NA	NA	NA	NA	NA	NA	NA	NA	2540	3200	3320	<5000	<5000	<5000	NA	NA	NA	NA
Manganese	50	NLE	331	158	NA	NA	NA	NA	NA	NA	NA	NA	NA	63.2	32.6	204	132	62.3	102	NA	NA	NA	NA
Mercury	2	2	0.26	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.210 ER	ND	ND	<0.20	<0.20	<0.20	NA	NA	NA	NA
Nickel	100	NLE	187	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<10	<10	<10	NA	NA	NA	NA
Potassium	NLE	NLE	137000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	5360	5380	4670	<10000	<10000	<10000	NA	NA	NA	NA
Selenium	40	50	29.60	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR	55.0	ND	<10	<10	<10	NA	NA	NA	NA
Silver	40	NLE	ND	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	1.56 ER	<10	<10	<10	NA	NA	NA	NA
Sodium	50000	NLE	21500	19500	NA	NA	NA	NA	NA	NA	NA	NA	NA	10200	16100	11300	12400	12500	<10000	NA	NA	NA	NA
Thallium	2	2	5.50	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	<2.0	<2.0	<2.0	NA	NA	NA	NA
Vanadium	60	NLE	108	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.668 ER	ND	<50	<50	<50	NA	NA	NA	NA
Zinc	2000	NLE	233	<20	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	7.23 ER	ND	<20	<20	<20	NA	NA	NA	NA

Notes:

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NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

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a/ Elevated sample detection limit due to difficult sample matrix.

Table 2
Historical Groundwater Analytical Results
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Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				812MW04											812MW05							
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main)**	35	36	37	38	39	LF1	LF2					31	32	33	34	35	36	37	38
Date Collected				2/6/2009	4/28/2009	8/10/2009	10/9/2009	1/14/2010	5/13/2010	8/3/2010	11/5/2010	2/15/2011	4/14/2011	7/8/2011	2/20/2008	4/9/2008	7/25/2008	10/22/2008	2/6/2009	4/28/2009	8/10/2009	10/9/2009
ANALYTE/Lab ID				90039.06	90171.06	90336.06	90412.06	10018.06	10191.07	10326.07	10474.06	11053.08	11148.09	11287.09	80051.07	80120.07	80256.07	80383.07	90039.07	90171.07	90336.07	90412.06
Volatile Organic Compounds (µg/L)																						
Benzene	1	5	--	ND	ND	0.27 J	ND	ND	ND	0.31 J	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.31 J	18.89	7.32	2.02	13.86	7.27	8.36	22.57
1,1-Dichloroethene				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.37 J
cis -l,2-Dichloroethene	70	70	--	ND	ND	0.89	0.51	ND	ND	1.67	ND	ND	ND	0.49 J	ND	ND	ND	ND	ND	ND	ND	ND
trans -l,2-Dichloroethene	100			ND	ND	0.66	0.26 J	ND	ND	0.70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.69	3.63	ND	8.14	1.68 J	0.64	1.83
Ethylbenzene	700	700	--	0.98 J	ND	4.89	0.30 J	ND	ND	0.33 J	ND	ND	ND	0.62 J	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.60 J	NA	NA	NA	NA	NA	NA	NA	NA
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.44 J
1,1,1-Trichloroethane				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.49 J	1.62 J	1.02 J	3.43	2.44	2.07	3.34
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31 J
Toluene	600	1000	--	ND	ND	0.55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	1			ND	ND	12.25	5.11	1.95	1.77	9.79	ND	ND	1.05	4.9	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (Total)	1000	10,000	--	0.38 J	ND	3.06	0.40 J	ND	ND	0.87	ND	ND	ND	0.74 J	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	26	3	ND	ND	13	ND	ND	ND	5.6	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																						
Aluminum	200	NLE	121000	NA	NA	NA	NA	NA	65.2 ER	49.0 ER	2490	8070	1240	<200	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	6	6	20.70	NA	NA	NA	NA	NA	8.73 ER	13.0	5.24 ER	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	3.34 ER	5.49	4.33 ER	9.6	3.1	9.4	NA	NA	NA	NA	NA	NA	NA	NA
Barium	6000	2000	699.00	NA	NA	NA	NA	NA	23.2	34.7	27.0	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	ND	ND	ND	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	ND	1.10 ER	0.723 ER	4.3	7.4	<3.0	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	NLE	NLE	45400.00	NA	NA	NA	NA	NA	41300	92300	50100	19400	37500	95200	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	70	100	191.00	NA	NA	NA	NA	NA	ND	ND	12.8	41.9	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NLE	NLE	18.30	NA	NA	NA	NA	NA	ND	ND	0.544 ER	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1300	1300	65.60	NA	NA	NA	NA	NA	16.1	11.0	13.0	27.2	61.2	11.0	NA	NA	NA	NA	NA	NA	NA	NA
Iron	300	NLE	431000	NA	NA	NA	NA	NA	ND	1630	5670	17300	3900	1280	NA	NA	NA	NA	NA	NA	NA	NA
Lead	5	15	22.70	NA	NA	NA	NA	NA	ND	ND	6.98	21.0	18.4	<3.0	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	NLE	NLE	62700	NA	NA	NA	NA	NA	2750	5070	2740	<5000	<5000	<5000	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	50	NLE	331	NA	NA	NA	NA	NA	12.1	64.2	13.8	35.5	34.9	66.1	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	2	0.26	NA	NA	NA	NA	NA	0.210 ER	ND	ND	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	100	NLE	187	NA	NA	NA	NA	NA	1.06 ER	2.46 ER	2.66 ER	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	NLE	NLE	137000	NA	NA	NA	NA	NA	8370	12600	8210	<10000	<10000	10900	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	40	50	29.60	NA	NA	NA	NA	NA	NR	73.4	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Silver	40	NLE	ND	NA	NA	NA	NA	NA	ND	ND	0.708 ER	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	50000	NLE	21500	NA	NA	NA	NA	NA	43800	59900	34800	30300	32100	75100	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	5.50	NA	NA	NA	NA	NA	ND	ND	0.870 ER	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	60	NLE	108	NA	NA	NA	NA	NA	3.63 ER	2.68 ER	11.1	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	2000	NLE	233	NA	NA	NA	NA	NA	21.3 ER	24.0 ER	31.8 ER	74.5	95.5	48.3	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for total VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

ER - Estimated result

J - Estimated concentration exceeds the MDL and is less than the RL

NA - Not analyzed NR - Not reported

ND - Not detected

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a/ Elevated sample detection limit due to difficult sample matrix.

Table 2
Historical Groundwater Analytical Results
Site FTMM-64 Building 812 UST Gasoline
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				812MW05							812MW06									
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main)**	39	LF1	LF2					31	32	33	34	35	36	37	38	39	LF1
Date Collected				1/14/2010	5/13/2010	8/3/2010	11/5/2010	2/15/2011	4/14/2011	7/8/2011	2/20/2008	4/9/2008	7/25/2008	10/22/2008	2/6/2009	4/28/2009	8/10/2009	10/9/2009	1/14/2010	5/11/2010
ANALYTE/Lab ID				10018.07	10191.06	10326.06	10474.05	11053.07	11148.08	11287.08	80051.08	80120.08	80256.08	80383.08	90039.08	90171.08	90336.08	90412.08	10018.08	10186.04
Volatile Organic Compounds (µg/L)																				
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane				2.44	2.01	ND	ND	4.58	3.81	15.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -l,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans -l,2-Dichloroethene	100			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	NLE	NLE	--	ND	ND	ND	ND	0.67	ND	0.54 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.75
Tetrachloroethene	1		--	ND	ND	ND	ND	ND	ND	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane				1.11	1.53	ND	ND	2.41	1.33	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	1			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (Total)	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																				
Aluminum	200	NLE	121000	NA	5370	5590	4250	2690	3740	3810	NA	NA	NA	NA	NA	NA	NA	NA	NA	2590
Antimony	6	6	20.70	NA	6.29 ER	8.09 ER	ND	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Arsenic	3	10	89.30	NA	ND	ND	ND	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Barium	6000	2000	699.00	NA	287	322	239	<200	227	217	NA	NA	NA	NA	NA	NA	NA	NA	NA	97.0
Beryllium	1	4	2.10	NA	1.10	1.56	1.46	<1.0	1.0	1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.481 ER
Cadmium	4	5	9.50	NA	ND	ND	ND	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Calcium	NLE	NLE	45400.00	NA	39900	46100	36400	24000	32500	30500	NA	NA	NA	NA	NA	NA	NA	NA	NA	29000
Chromium	70	100	191.00	NA	ND	ND	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Cobalt	NLE	NLE	18.30	NA	18.7	22.0	16.5	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.2
Copper	1300	1300	65.60	NA	8.54	4.50 ER	1.91 ER	11.2	<10	16.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Iron	300	NLE	431000	NA	ND	620	728	927	1250	1930	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Lead	5	15	22.70	NA	ND	ND	2.24 ER	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Magnesium	NLE	NLE	62700	NA	30800	32400	22000	11300	18400	18200	NA	NA	NA	NA	NA	NA	NA	NA	NA	19100
Manganese	50	NLE	331	NA	255	432	330	220	419	425	NA	NA	NA	NA	NA	NA	NA	NA	NA	182
Mercury	2	2	0.26	NA	0.170 ER	ND	ND	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.150 ER
Nickel	100	NLE	187	NA	31.9	32.4	24.8	13.9	19.7	23.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	17.6
Potassium	NLE	NLE	137000	NA	5120	5490	12900	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	6280
Selenium	40	50	29.60	NA	NR	56.0	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR
Silver	40	NLE	ND	NA	ND	ND	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Sodium	50000	NLE	21500	NA	401000	374000	349000	348000	348000	339000	NA	NA	NA	NA	NA	NA	NA	NA	NA	108000
Thallium	2	2	5.50	NA	ND	ND	ND	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Vanadium	60	NLE	108	NA	0.887 ER	ND	0.817 ER	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Zinc	2000	NLE	233	NA	129	135	99.8	82.3	98.7	102	NA	NA	NA	NA	NA	NA	NA	NA	NA	63.7

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

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NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

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J - Estimated concentration exceeds the MDL and is less than the RL

NA - Not analyzed NR - Not reported

ND - Not detected

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a/ Elevated sample detection limit due to difficult sample matrix.

Table 2
Historical Groundwater Analytical Results
Site FTMM-64 Building 812 UST Gasoline
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				812MW06								812MW07									
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main)**	LF1 Dup	LF2			Dup			Dup	31	32	33	34	35	36	37	38	39	LF1
Date Collected				5/11/2010	7/28/2010	11/3/2010	2/15/2011	2/15/2011	4/14/2011	7/8/2011	7/8/2011	2/20/2008	4/9/2008	7/25/2008	10/22/2008	2/6/2009	4/28/2009	8/10/2009	10/9/2009	1/14/2010	5/11/2010
ANALYTE/Lab ID				10186.03	10323.07	10471.06	11053.04	11053.03	11148.06	11287.04	11287.03	80051.09	80120.09	80256.09	80383.09	90039.09	90171.09	90336.09	90412.09	10018.09	10186.07
Volatile Organic Compounds (µg/L)																					
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane				ND	ND	ND	ND	ND	ND	ND	ND	ND	1.16 J	12.02	5.0	0.41 J	1.39 J	0.96	0.77	ND	ND
1,1-Dichloroethene				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -l,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans -l,2-Dichloroethene	100			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.58	1.89 J	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl *tert* -butyl ether	70	NLE	--	0.73	0.56	0.34 J	0.34 J	0.33 J	0.21 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	1			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (Total)	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																					
Aluminum	200	NLE	121000	2620	2140	2670	2620	2590	2920	2120	2160	NA	NA	NA	NA	NA	NA	NA	NA	NA	2720
Antimony	6	6	20.70	7.91 ER	7.00 ER	ND	<6.0	<6.0	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.97 ER
Arsenic	3	10	89.30	ND	ND	1.08 ER	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.61 ER
Barium	6000	2000	699.00	96.5	102	122	<200	<200	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	154
Beryllium	1	4	2.10	0.462 ER	0.500	0.890	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.483 ER
Cadmium	4	5	9.50	ND	ND	0.652 ER	<3.0	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Calcium	NLE	NLE	45400.00	28500	26500	27600	30800	30200	25700	29900	27300	NA	NA	NA	NA	NA	NA	NA	NA	NA	23600
Chromium	70	100	191.00	ND	ND	0.861 ER	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Cobalt	NLE	NLE	18.30	11.3	10.8	12.3	<50	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	14.3
Copper	1300	1300	65.60	ND	2.00 ER	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Iron	300	NLE	431000	ND	ND	84.9	<100	<100	1320	838	1400	NA	NA	NA	NA	NA	NA	NA	NA	NA	4280
Lead	5	15	22.70	ND	ND	ND	<3.0	<3.0	<3.0	<3.0	4.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Magnesium	NLE	NLE	62700	19100	18600	20400	18700	18400	15600	17000	15500	NA	NA	NA	NA	NA	NA	NA	NA	NA	27900
Manganese	50	NLE	331	179	169	175	202	195	188	239	218	NA	NA	NA	NA	NA	NA	NA	NA	NA	453
Mercury	2	2	0.26	0.180 ER	ND	ND	<0.20	<0.20	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.160 ER
Nickel	100	NLE	187	17.8	17.0	19.9	21.3	20.8	19.4	17.9	18.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.4
Potassium	NLE	NLE	137000	6100	6670	6460	<10000	<10000	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	6020
Selenium	40	50	29.60	NR	31.0	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR
Silver	40	NLE	ND	ND	ND	ND	<10	<10	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Sodium	50000	NLE	21500	106000	114000	122000	126000	123000	115000	130000	119000	NA	NA	NA	NA	NA	NA	NA	NA	NA	157000
Thallium	2	2	5.50	ND	ND	ND	<2.0	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Vanadium	60	NLE	108	ND	ND	ND	<50	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Zinc	2000	NLE	233	63.2	62.0	71.8	70.4	70.0	66.2	65.1	94.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	77.2

Notes:

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Site FTMM-64 Building 812 UST Gasoline
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Fort Monmouth, New Jersey

				812MW07						812MW08													
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main)**	LF2		Dup				31	31 Dup	32	33	34	35	35 Dup	36	36 Dup	37	37 Dup	38	38 Dup	39
Date Collected				8/3/2010	11/5/2010	11/5/2010	2/15/2011	4/14/2011	7/8/2011	2/20/2008	2/20/2008	4/9/2008	7/25/2008	10/22/2008	2/6/2009	2/6/2009	4/28/2009	4/28/2009	8/10/2009	8/10/2009	10/9/2009	10/9/2009	1/14/2010
ANALYTE/Lab ID				10326.05	10474.04	10474.03	11053.06	11148.07	11287.07	80051.10	80051.03	80120.10	80256.10	80383.10	90039.10	90039.03	90171.10	90171.03	90336.10	90336.03	90412.10	90412.03	10018.10
Volatile Organic Compounds (µg/L)																							
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane				ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene				ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -l,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans -l,2-Dichloroethene	100			ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	NA	0.42 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane				ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	1			ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (Total)	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																							
Aluminum	200	NLE	121000	3980	3570	3460	8790	3160	4060	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	6	6	20.70	7.94 ER	ND	ND	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	3	10	89.30	1.12 ER	0.930 ER	0.690 ER	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	6000	2000	699.00	174	182	184	462	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	1	4	2.10	0.702	0.800	0.799	1.3	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	4	5	9.50	1.09 ER	5.09	4.55	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	NLE	NLE	45400.00	23200	20200	19500	21100	11000	20900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	70	100	191.00	ND	ND	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NLE	NLE	18.30	17.0	61.8	59.1	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1300	1300	65.60	1.58 ER	2.07 ER	1.66 ER	13.1	<10	24.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	300	NLE	431000	1650	2360	2030	10900	19300	32800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	5	15	22.70	4.22 ER	3.33 ER	5.37	3.8	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	NLE	NLE	62700	42900	28600	28000	26900	13000	23000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	50	NLE	331	771	376	359	374	324	530	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2	2	0.26	ND	ND	ND	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	100	NLE	187	59.1	65.0	61.9	56.4	14.7	21.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	NLE	NLE	137000	5860	8330	7280	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	40	50	29.60	35.9	ND	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	40	NLE	ND	ND	ND	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	50000	NLE	21500	189000	185000	181000	175000	158000	263000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	5.50	ND	ND	0.900 ER	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	60	NLE	108	ND	0.520 ER	0.871 ER	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	2000	NLE	233	144	547	542	708	111	186	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

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NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

ER - Estimated result

J - Estimated concentration exceeds the MDL and is less than the RL

NA - Not analyzed NR - Not reported

ND - Not detected

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a/ Elevated sample detection limit due to difficult sample matrix.

Table 2
Historical Groundwater Analytical Results
Site FTMM-64 Building 812 UST Gasoline
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				812MW08							812MW14											
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main)**	39 Dup	LF1	LF2					31	32	33	33 Dup	34	35	36	37	38	39	LF1	LF2
Date Collected				1/14/2010	5/11/2010	7/28/2010	11/3/2010	2/14/2011	4/13/2011	7/8/2011	2/20/2008	4/9/2008	7/25/2008	7/25/2008	10/22/2008	2/6/2009	4/28/2009	8/10/2009	10/9/2009	1/14/2010	5/11/2010	8/3/2010
ANALYTE/Lab ID				10018.03	10186.05	10323.06	10471.07	11051.03	11145.05	11287.05	80051.11	80120.11	80256.11	80256.03	80383.11	90039.11	90171.11	90336.11	90412.11	10018.11	10186.06	10326.04
Volatile Organic Compounds (µg/L)																						
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis -l,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans -l,2-Dichloroethene	100			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	0.38 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	1			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (Total)	1000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																						
Aluminum	200	NLE	121000	NA	4910	4400	3950	5610	4180	3760	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.4 ER	135
Antimony	6	6	20.70	NA	12.3	8.69 ER	ND	<6.0	<6.0	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	9.83 ER
Arsenic	3	10	89.30	NA	1.10 ER	0.630 ER	0.870 ER	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.650 ER
Barium	6000	2000	699.00	NA	90.6	108	102	<200	<200	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27.5	44.2
Beryllium	1	4	2.10	NA	1.34	1.59	1.54	1.3	1.2	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Cadmium	4	5	9.50	NA	54.0	3.09	12.5	17.1	10.6	5.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13.7	1.22 ER
Calcium	NLE	NLE	45400.00	NA	53500	43400	32000	44500	42300	35200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	25700	33400
Chromium	70	100	191.00	NA	ND	ND	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Cobalt	NLE	NLE	18.30	NA	13.7	12.9	12.8	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Copper	1300	1300	65.60	NA	3.22 ER	3.89 ER	1.90 ER	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	1.55 ER
Iron	300	NLE	431000	NA	320 ER	325 ER	124	453	1350	1160	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	216 ER
Lead	5	15	22.70	NA	2.48 ER	3.41 ER	2.20 ER	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Magnesium	NLE	NLE	62700	NA	21000	19700	17300	23800	19900	17700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7040	11100
Manganese	50	NLE	331	NA	290	235	192	302	348	293	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	14.7	74.1
Mercury	2	2	0.26	NA	0.210 ER	ND	ND	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.210 ER	ND
Nickel	100	NLE	187	NA	15.5	16.1	18.5	19.7	15.3	22.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.32 ER	0.928 ER
Potassium	NLE	NLE	137000	NA	4840	5300	5300	<10000	<10000	<10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4320	4350
Selenium	40	50	29.60	NA	NR	55.2	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR	47.3
Silver	40	NLE	ND	NA	ND	ND	ND	<10	<10	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Sodium	50000	NLE	21500	NA	239000	226000	160000	236000	249000	233000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	223000	257000
Thallium	2	2	5.50	NA	ND	ND	ND	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Vanadium	60	NLE	108	NA	ND	ND	ND	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.77 ER	3.32 ER
Zinc	2000	NLE	233	NA	104	100	103	116	96.2	88.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.31 ER	2.31 ER

Notes:

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NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

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a/ Elevated sample detection limit due to difficult sample matrix.

Table 2
Historical Groundwater Analytical Results
Site FTMM-64 Building 812 UST Gasoline
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				812MW14					
Round No.	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main)**	LF2 Dup				Dup	
Date Collected				8/3/2010	11/3/2010	2/15/2011	4/13/2011	4/13/2011	7/8/2011
ANALYTE/Lab ID				10326.03	10471.08	11053.05	11145.04	11145.03	11287.06
Volatile Organic Compounds (µg/L)									
Benzene	1	5	--	ND	ND	ND	ND	ND	ND
tert -Butyl alcohol	100	NLE	--	ND	ND	ND	ND	ND	NA
1,1-Dichloroethane				ND	ND	ND	ND	ND	ND
1,1-Dichloroethene				ND	ND	ND	ND	ND	ND
cis -l,2-Dichloroethene	70	70	--	ND	ND	ND	ND	ND	ND
trans -l,2-Dichloroethene	100			ND	ND	ND	ND	ND	ND
Chloroethane	NLE	NLE	--	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND
Isopropylbenzene	700	NLE	--	NA	NA	NA	NA	NA	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1		--	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane				ND	ND	ND	ND	ND	ND
Trichloroethene	1	5	--	ND	ND	ND	ND	ND	ND
Toluene	600	1000	--	ND	ND	ND	ND	ND	ND
Vinyl chloride	1			ND	ND	ND	ND	ND	ND
Xylenes (Total)	1000	10,000	--	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	ND	ND
Metals (µg/L)									
Aluminum	200	NLE	121000	284	1030	293	4790	5990	2770
Antimony	6	6	20.70	9.31 ER	5.21 ER	<6.0	<6.0	<6.0	<6.0
Arsenic	3	10	89.30	0.650 ER	2.16 ER	<3.0	3.8	5.0	3.3
Barium	6000	2000	699.00	45.7	31.3	<200	<200	<200	<200
Beryllium	1	4	2.10	ND	ND	<1.0	<1.0	<1.0	<1.0
Cadmium	4	5	9.50	1.15 ER	ND	<3.0	<3.0	<3.0	<3.0
Calcium	NLE	NLE	45400.00	35700	27300	50400	34900	35800	37200
Chromium	70	100	191.00	ND	5.34	<10	24.4	29.7	16.2
Cobalt	NLE	NLE	18.30	ND	ND	<50	<50	<50	<50
Copper	1300	1300	65.60	1.76 ER	ND	<10	<10	<10	<10
Iron	300	NLE	431000	450 ER	2000	553	11000	13700	6580
Lead	5	15	22.70	ND	ND	<3.0	3.8	4.4	<3.0
Magnesium	NLE	NLE	62700	11300	8530	8290	10100	10600	14300
Manganese	50	NLE	331	92.3	46.7	<15	353	466	318
Mercury	2	2	0.26	ND	ND	<0.20	<0.20	<0.20	<0.20
Nickel	100	NLE	187	1.00 ER	ND	<10	<10	<10	<10
Potassium	NLE	NLE	137000	4710	3670	<10000	<10000	<10000	<10000
Selenium	40	50	29.60	44.3	ND	<10	<10	<10	<10
Silver	40	NLE	ND	ND	ND	<10	<10	<10	<10
Sodium	50000	NLE	21500	263000	189000	309000	235000	241000	237000
Thallium	2	2	5.50	ND	ND	<2.0	<2.0	<2.0	<2.0
Vanadium	60	NLE	108	4.10 ER	5.09	<50	<50	<50	<50
Zinc	2000	NLE	233	3.09 ER	2.61 ER	<20	24.3	27.7	22.4

Notes:

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Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-64 Building 812 UST Gasoline
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	Weston 1995 Background (Main Post)	812MW01	812MW02	812MW04		812MW05	812MW06	812MW07	812MW08	812MW14
Sample ID				FTMM-64-GW-812MW01	FTMM-64-GW-812MW02	FTMM-64-GW-812MW04	FTMM-64-GW-812MW04-5.53	FTMM-64-GW-812MW05	FTMM-64-GW-812MW06	FTMM-64-GW-812MW07	FTMM-64-GW-812MW08	FTMM-64-GW-812MW14
Sample Date				8/16/2013	8/15/2013	8/16/2013	10/2/2014	8/15/2013	8/15/2013	8/15/2013	8/15/2013	8/15/2013
QA/QC				SA	SA	SA	SA	SA	SA	SA	SA	SA
Sample Method				LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS
Volatile Organic Compounds (µg/l)												
1,1,1,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
1,1,1-Trichloroethane	30	200	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
1,1,2,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
1,1,2-Trichloroethane	3	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
1,1-Dichloroethane	50	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
1,1-Dichloroethene	1	7	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
1,1-Dichloropropene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
1,2,3-Trichlorobenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
1,2,3-Trichloropropane	0.03	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
1,2,4-Trichlorobenzene	9	70	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
1,2,4-Trimethylbenzene	100	NLE	-	< 1	< 1	< 1	**0.52 J**	< 1	< 1	< 1	< 10	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
1,2-Dibromoethane	0.03	0.05	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
1,2-Dichlorobenzene	600	600	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
1,2-Dichloroethane	2	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
1,2-Dichloropropane	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
1,3,5-Trimethylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
1,3-Dichlorobenzene	600	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
1,3-Dichloropropane	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
1,4-Dichlorobenzene	75	75	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
2,2-Dichloropropane	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
2-Chlorotoluene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Acetone	6,000	NLE	-	< 5	< 5	< 5	**3.2 J**	< 5	**1.4 J**	**1.4 J**	< 50	< 5
Benzene	1	5	-	< 1	< 1	< 1	**0.32 J**	< 1	< 1	< 1	< 10	< 1
Bromobenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Bromochloromethane	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Bromodichloromethane	1	80	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Bromoform	4	80	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Carbon tetrachloride	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Chlorobenzene	50	100	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Chlorodibromomethane	1	80	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Chloroethane	5	NLE	-	< 1	< 1	< 1	**0.93 J**	< 1	< 1	< 1	< 10	< 1
Chloroform	70	80	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Cis-1,2-Dichloroethene	70	70	-	< 1	< 1	< 1	**0.77 J**	< 1	< 1	< 1	< 10	< 1
Cis-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Cymene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Dichlorodifluoromethane	1,000	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Ethyl benzene	700	700	-	< 1	< 1	< 1	**1.4 J**	< 1	< 1	< 1	< 10	< 1
Hexachlorobutadiene	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Isopropylbenzene	700	NLE	-	< 1	< 1	< 1	**0.48 J**	< 1	< 1	< 1	< 10	< 1
Meta & Para Xylenes	1,000	NLE	-	< 2	< 2	< 2	**1.1 J**	< 2	< 2	< 2	< 20	< 2
Methyl bromide	10	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Methyl butyl ketone	300	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 50	< 5
Methyl chloride	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Methyl ethyl ketone	300	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Methyl isobutyl ketone	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Methyl Tertbutyl Ether	70	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Methylene chloride	3	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Naphthalene	300	NLE	-	< 1	< 1	< 1	**0.38 B**	< 1	< 1	< 1	< 10	< 1
n-Butylbenzene	100	NLE	-	< 1	< 1	< 1	**0.23 J**	< 1	< 1	< 1	< 10	< 1
Ortho Xylene	1,000	NLE	-	< 1	< 1	< 1	**0.59 J**	< 1	< 1	< 1	< 10	< 1
p-Chlorotoluene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Propylbenzene	100	NLE	-	< 1	< 1	< 1	**0.65 J**	< 1	< 1	< 1	< 10	< 1
sec-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Styrene	100	100	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Tert Butyl Alcohol	100	NLE	-	NA	NA	NA	< 20	NA	NA	NA	NA	NA
tert-Butylbenzene	100	NLE	-	< 1	< 1	< 1	**0.23 J**	< 1	< 1	< 1	< 10	< 1
Tetrachloroethene	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Toluene	600	1,000	-	< 1	< 1	< 1	**0.37 J**	< 1	< 1	< 1	< 10	< 1
Total TIC, Volatile	0.5	NLE	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1,000	10,000	-	< 3	< 3	< 3	NA	< 3	< 3	< 3	< 30	< 3
Trans-1,2-Dichloroethene	100	100	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Trans-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Trichloroethene	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Trichlorofluoromethane	2,000	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 10	< 1
Vinyl chloride	1	2	-	< 1	< 1	< 1	**7.8**	< 1	< 1	< 1	< 10	< 1
Inorganics (µg/l)												
Lead	5	15	22.7	< 2	< 2	**7.5**	NA	**0.855 J**	**2.1 J**	< 2	< 2	< 2

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-64 Building 812 UST Gasoline
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Footnote:
1) All historical data collected prior to 2013 are reported as provided by others.
2) Number of Analyses is the number of detected and non-detected results excluding rejected results. Sample duplicate pairs have not been averaged.
3) NLE = no limit established.
4) ND = not detected in any background sample, no background concentration available.

5) Chemical result qualifiers are assigned by the laboratory and is typically evaluated and modified (if necessary) by during data validation.
[blank] = detect, i.e. detected chemical result value.
B = Compound detected in the sample and its associated blank sample.
R = Rejected, data validation rejected the results.
U = non-detect, i.e. not detected equal to or above this value.
U-DL = Elevated sample detection limit due to difficult sample matrix.
U-ND = Analyte not detected in sample, but no detection or reporting limit provided.
J = estimated (detect or non-detect) value.
E (or ER) = Estimated result.
D = Results from dilution of sample.
J-DL = Elevated sample detection limit due to difficult sample matrix.
JN = Tentatively identified compound, estimated concentration.

6) Chemical results greater than or equal to the action level (depending on criteria) are highlighted based on the Criteria that are present.
- Cell Shade values represent a result that is above the NJ Ground Water Quality Criteria ####

NJDEP Interim Specific GWQC values are presented for the NJ GWQS where there is not a Specific Ground Water Quality Criteria. A full list of compounds is available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).

NJDEP Interim Generic GWQC values are presented for the NJ GWQS where there is not a XXXXX or a NJDEP Interim Specific GWQC. Available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).
- Bold Outline represent a result that is above the USEPA 2014-05 MCL. ###
- Cell Style values represent a result that is above the Weston 1995 Background (Main Post). ###
n/a = all concentrations were less than the detection limit, therefore, no location of maximum value identified.
Dash (-) = only background concentrations for metals are being used as comparison criteria.

7) Criteria action level source document and web address.
- The NJ Ground Water Quality Criteria refers to the NJDEP Groundwater Quality Standards - Adopted July 22, 2010
http://www.state.nj.us/dep/wms/bwqsa/docs/njac79C.pdf
- The 2014-05 USEPA MCL refers to the USEPA's Region 9 Regional Screening Levels (HQ=1.0) - 5/31/2014 (Last revised)
http://www.epa.gov/region9/superfund/prg/
- The Weston 1995 Background (Main Post) refers to the FTMM reports.
NA

8) Wells sampled in the fourth quarter are highlighted in yellow. Sample ID

Table 4
Review of Historical Groundwater Sampling Results
Site FTMM-64 Building 812 UST Gasoline
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site Name/ Well ID	Interpretation of Historical and 2014 Results [1]			2014 Evaluation				Retain Analyte/Well (Yes or No)	Rationale
	Chem Class / Analyte	Does it Exceed NJDEP GWQS (Yes or No) (If Yes, identify compound)	Do Metals Exceed FTMM Background Concentration (Yes or No) (If Yes, identify Metal)	Seasonal Effect?[2] (Y/N)	Anomaly? (Y/N)	Exceedance part of overall trend? (Y/N)	Well needed for sentinel purposes? (Y/N)		
FTMM-64,B812									
812MW04	VOC	VC	N/A	No	No	Yes	No	Yes	VC was found above GWQS. VOCs will continue to be monitored.

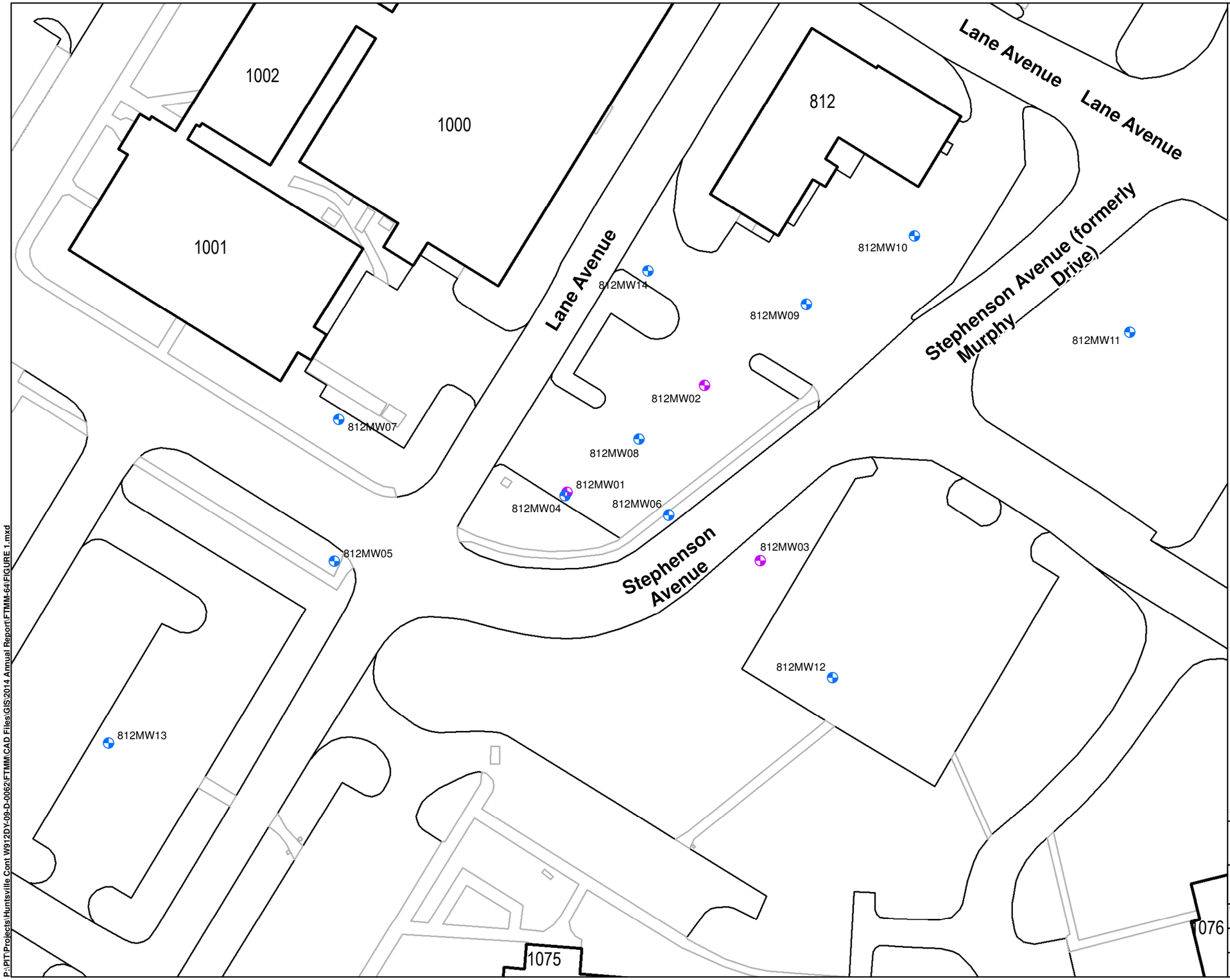
Notes

1. Has any of the analyte compounds exceeded the NJDEP GWQS in the 2014 data and the 4 previous quarterly data rounds or two previous annual rounds?
   a. If yes then keep analyte in LTM list
   b. If no then remove this analyte from LTM list
   c. a and b above may be occasionally superseded on a case-by-case basis, depending on site conditions.
2. Has any of the analyte compounds exceeded the NJDEP GWQS seasonally (winter spring vs. summer fall)?
3. VC - vinyl chloride
4. N/A - Not applicable
5. Per the 2/5/15 NJDEP approval letter of the Final 2013 Baseline Groundwater Report, groundwater monitoring wells 812MW01, 812MW02, 812MW05, 812MW06, 812MW07, 812MW08 and 812MW14, were removed from the long term monitoring sampling program and lead was discontinued in 2014.

FIGURES

Figure 1 Layout of FTMM-64 Building 812 UST Gasoline

Figure 2 FTMM-64 Shallow Groundwater Contours - September 29, 2014



LEGEND:

- Deep Monitoring Well
- Shallow Monitoring Well
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Surface Water Feature

N

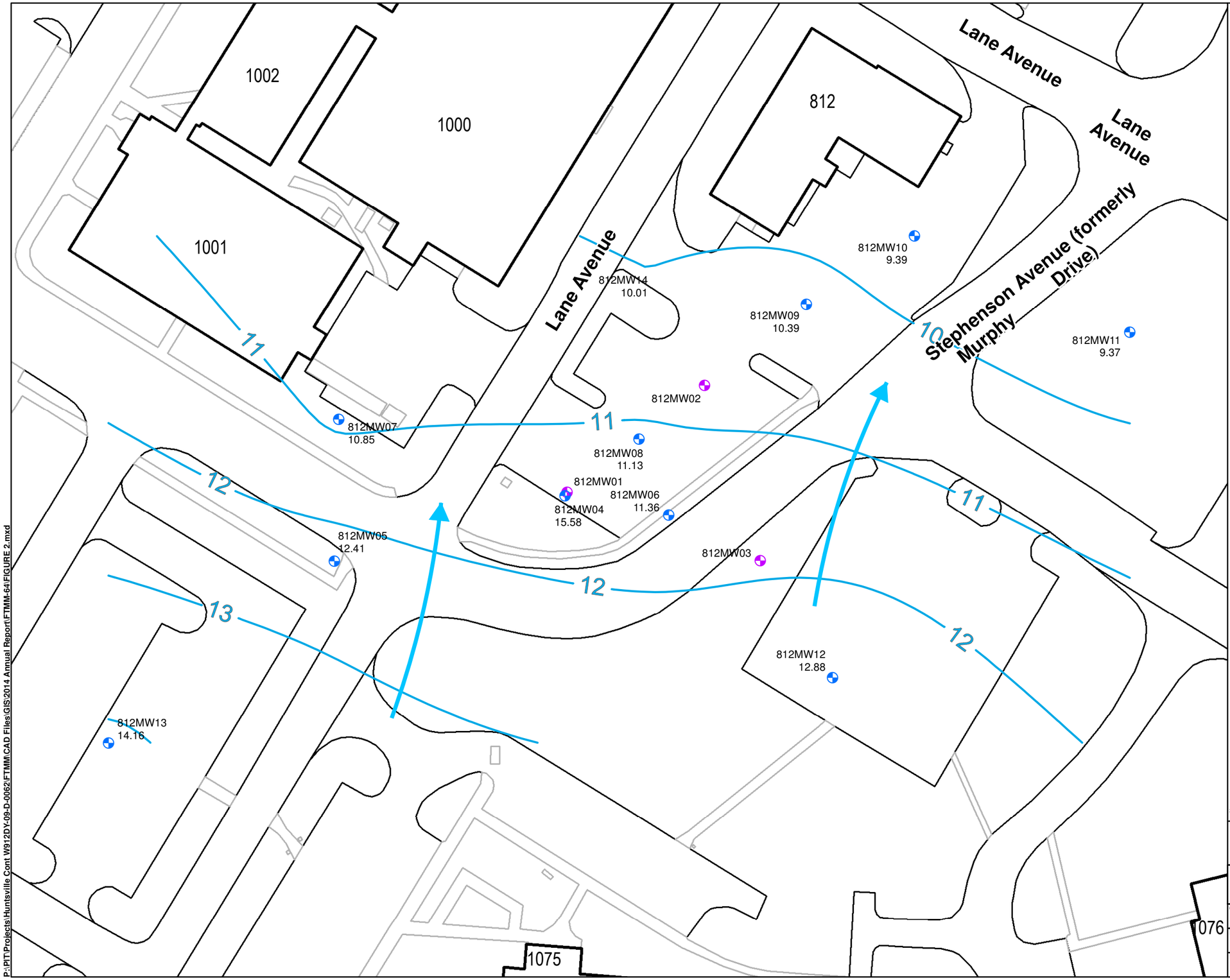
1 inch = 50 feet

0 25 50 100 Feet

Source: FTMM Supplied CAD

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
LAYOUT OF FTMM-64 BUILDING 812 UST GASOLINE	
CREATED BY: RR	REVIEWED BY: ME
DATE: NOV. 2015	FIGURE NUMBER: FIGURE 1
PROJECT NUMBER: 748810-01000	FILE: FIGURE 1.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-64\FIGURE 1.mxd



LEGEND:

- Deep Monitoring Well
- Shallow Monitoring Well
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Surface Water Feature
- Groundwater Elevation Contour
- Inferred Groundwater Flow Direction

NOTE:

The groundwater elevation at monitoring well 812MW04 was considered anomalous compared to the fluid levels at neighboring wells.

N

1 inch = 50 feet

0 25 50 100 Feet

Source: FTMM Supplied CAD

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
FTMM-64 SHALLOW GROUNDWATER CONTOURS - SEPTEMBER 29, 2014	
CREATED BY: RR	REVIEWED BY: ME
DATE: OCT. 2015	FIGURE NUMBER: FIGURE 2
PROJECT NUMBER: 748810-01000	FILE: FIGURE 2.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-64\FIGURE 2.mxd

ATTACHMENTS

Attachment A LFPS Field Sheets

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | **CLIENT:** ACOE | **WELL #:** 813 MW 04

PROJECT: FTMM 4QGW | **WELL PERMIT #:** 29-42575

AOC # (AREA): FTMM -04 | **DATE:** 10/2/14

SCREENED INTERVAL (TOC): 2-7 | **SAMPLING PERSONNEL NAME:** D. Gibson

WELL DIAMETER (In.): 4 | **SAMPLING PERSONNEL NAME:**

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0

WELL DEPTH (TOC): 6.61

FEET OF WATER IN WELL (ft): 2.15

FEET OF SATURATED SCREEN (ft): 2.15

DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 4.46

PUMP INTAKE DEPTH (ft below TOC): 5.53

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1315	X		5.87	NA	0.351	NA	66.3	NA	2.49	NA	64.2	NA	20.67	NA	300	4.36
1320	X		6.33	0.46	0.376	.003	10.8	55.5	1.34	1.15	108.8	44.6	20.77	0.10	250	4.61
1325	X		6.50	0.17	0.379	.001	-14.7	25.5	0.93	0.41	87.0	81.8	20.91	0.14	175	4.80
1330	X		6.57	0.07	0.380	.001	-24.4	9.7	0.86	0.13	24.9	2.1	20.76	0.15	100	4.86
1335	X		6.59	0.02	0.382	.002	-30.8	6.4	0.89	0.03	23.5	1.4	20.60	0.16	100	4.88
1340	X		6.60	0.01	0.382	0	-33.6	2.8	0.86	0.03	23.2	0.3	20.56	0.04	100	4.89
1345		X	6.60	0	0.384	.002	-35.1	1.5	0.84	0.02	23.6	0.4	20.63	0.07	100	4.88

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

APPENDIX M

FTMM-66: BUILDING 886 FORMER AST

APPENDIX M: FTMM-66 Building 886 Former AST

TABLE OF CONTENTS

1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT M-1
2.0 GROUNDWATER SAMPLING M-1
3.0 HISTORICAL GROUNDWATER SAMPLING RESULTS M-1
4.0 ANNUAL (FOURTH QUARTER) 2014 GROUNDWATER RESULTS M-2
5.0 FINDINGS AND RECOMMENDATIONS M-2

LIST OF TABLES

Table No.	Title
1	Groundwater Gauging Data and Elevations (September 29, 2014) and LFPS Sampling Summary
2	Historical Groundwater Analytical Results
3	Groundwater Analytical Results - 2013 and 2014
4	Review of Historical Groundwater Sampling Results

LIST OF FIGURES

Figure No.	Title
1	Layout of FTMM-66 Building 886 Former AST
2	FTMM-66 Shallow Groundwater Contours - September 29, 2014

LIST OF ATTACHMENTS

Attachment	Title
A	LFPS Field Sheets

1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT

Monitoring wells located within FTMM-66 were gauged on September 29, 2014. Monitoring well locations as well as other site features are provided in **Figure 1**. Details regarding the water level measurements are provided in **Table 1**. Groundwater elevations in monitoring wells ranged from 6.67 (886MW01) to 10.16 (886MW04) feet above mean sea level (amsl). The inferred shallow groundwater flow direction is generally to the northwest, as shown in **Figure 2**.

During the groundwater gauging, the physical condition of FTMM-66 monitoring wells were assessed. The site monitoring wells were found to be in good condition.

2.0 GROUNDWATER SAMPLING

Groundwater samples were collected from three monitoring wells located at FTMM-66 as part of the annual (fourth quarter) 2014 groundwater sampling event. The groundwater sampling program included measuring the depth to groundwater in monitoring wells prior to sampling and collection of groundwater samples using low-flow purging and sampling (LFPS). Groundwater samples were collected from wells 886RW01, 886RW06 and 886RW08 on October 3, 2014. Groundwater samples were analyzed for Target Compound List (TCL) semi-volatile organic compounds (SVOCs) via USEPA method SW8270D.

The samples were collected in accordance with the New Jersey Department of Environmental Protection (NJDEP) Field Sampling Procedures Manual (FSPM) and the Sampling Analysis Plan (SAP). Field blanks, duplicates, matrix spike, matrix spike duplicate and quality assurance (QA) split samples were collected for every 5% of samples collected per parameter, per matrix, in accordance with the Quality Assurance Project Plan (QAPP). Trip blanks accompanied each cooler each day in which VOCs were collected for laboratory analysis.

The completed LFPS field sheets can be found in **Attachment A**.

3.0 HISTORICAL GROUNDWATER SAMPLING RESULTS

From February 2003 through October 2004, FTMM-66 monitoring wells were sampled for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total petroleum hydrocarbons (TPH) and metals. From January 2005 to December 2009, FTMM-66 wells were sampled for VOCs and SVOCs. From February 2010 to May 2010, monitoring wells were sampled for VOCs, SVOCs and metals.

In the last four rounds of quarterly groundwater sampling conducted at FTMM-66 from August 2010 to April 2011, samples were also analyzed for VOCs, SVOCs and metals. Within the last four rounds of groundwater sampling at FTMM-66, bis(2-ethylhexyl) phthalate, antimony, arsenic, beryllium and lead were detected above their respective NJDEP Ground Water Quality Standard (GWQS) in monitoring well 886MW01. The bis(2-ethylhexyl) phthalate detections appear to be anomalous as there is no historical trend of bis(2-ethylhexyl) phthalate detections above the GWQS. The detection of phthalates is attributed to the laboratory; it is considered a common laboratory contaminant since it is present in all laboratory equipment and reagents. The concentrations of antimony, arsenic, beryllium and lead were all below site background conditions (Weston, 1995).

No VOCs or SVOCs were detected in exceedance of any NJDEP GWQS within the last four rounds of historical groundwater sampling. Historical groundwater analytical results are presented in **Table 2**.

During the August 2013 Baseline Sampling Event, thirteen monitoring wells were sampled for VOCs, SVOCs and lead. One compound, SVOCs total tentatively identified compounds (TICs) was detected above its NJDEP GWQS of 500 µg/L at monitoring wells 886RW01 (879 JN µg/L) and 886RW08 (707 JN µg/L). Groundwater analytical results from samples collected during the August 2013 sampling event are presented in **Table 3**.

The Final August 2013 Baseline Groundwater Sampling Report was accepted by the NJDEP in their February 5, 2015 letter. Based on this approval, 10 out of the 13 groundwater monitoring wells were removed from the long term monitoring (LTM) program including 886MW01, 886MW02, 886MW03, 886MW04, 886MW05, 886RW02, 886RW03, 886RW04, 886RW05 and 886RW07; and VOC and lead analysis were discontinued.

4.0 ANNUAL (FOURTH QUARTER) 2014 GROUNDWATER RESULTS

SVOC total TICs was the only compound detected in monitoring wells 886RW01 and 886RW08 during the 2014 annual sampling event. Concentrations (15.4J µg/L and 46.4J µg/L respectively) were below the NJDEP GWQS of 500 µg/L. SVOCs were none-detect in the sample collected from 886RW06. Groundwater analytical results from 2014 sampling event are presented in **Table 3**.

5.0 FINDINGS AND RECOMMENDATIONS

Concentrations of SVOCs (including total TICs) detected during the last four historical sampling events and the 2014 annual sampling event were non-detect or below any of the NJDEP GWQS in wells 886RW01, 886RW06 and 886RW08. However, only the SVOCs total TICs detected during the 2013 sampling event for two (886RW01 and 886RW08) of the three wells exceeded the NJDEP GWQS of 500 µg/L. Based on the available data, one additional round of sampling for SVOCs at 886RW01, 886RW06 and 886RW08 is recommended to confirm that SVOCs concentrations are below the NJDEP GWQS. A review of the historical groundwater sampling results is presented in **Table 4,** which provides the matrix used to determine the status of the wells relative to future groundwater sampling and analyses.

TABLES

Table 1 Groundwater Gauging Data and Elevations (September 29, 2014) and LFPS Sampling Summary

Table 2 Historical Groundwater Analytical Results

Table 3 Groundwater Analytical Results - 2013 and 2014

Table 4 Review of Historical Groundwater Sampling Results

Table 1
Groundwater Gauging Data and Elevations (September 29, 2014) and LFPS Sampling Summary
Site FTMM-66 Building 886 Former AST
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site/Well ID	Installation Date	Well Permit #	Y Coord. (North)	X Coord. (East)	Depth (ft. bgs)	Casing Length (ft)	Screen Length (ft)	TOC Elevation (ft)	Gauge Time	PID Reading (ppm)	Gauged Depth to Water (ft. TOC)	Gauged Depth to Bottom (ft. TOC)	Calculated Groundwater Elevation (ft)	Well Sampled this Event
Shallow Monitoring Wells														
886MW01	1/8/2003	29-47835	538325.48	620981.00	17.0	2.0	15.0	12.95	13:53	0.0	6.28	17.25	6.67	
886MW02	1/8/2003	29-47836	538217.44	620928.79	17.0	2.0	15.0	12.90	14:12	0.0	5.66	16.80	7.24	
886MW03	1/8/2003	29-47837	538302.92	621071.25	17.0	2.0	15.0	13.70	13:45	0.0	6.79	17.16	6.91	
886MW04	1/8/2003	29-47838	538089.47	621100.44	17.0	2.0	15.0	18.22	13:40	0.0	8.06	20.26	10.16	
886MW05	1/8/2003	29-47839	538253.49	621193.80	17.0	2.0	15.0	18.29	13:43	0.0	10.97	19.34	7.32	
886MW06	12/9/2010	E201012412	538300.00	620950.00	20.0	5.0	15.0	13.84	13:59	0.0	5.69	19.75	8.15	
886RW01	1/7/2003	29-47840	538241.42	620972.44	17.0	2.0	15.0	13.62	14:10	0.0	6.55	16.20	7.07	x
886RW02	1/7/2003	29-47841	538251.08	620895.34	17.0	2.0	15.0	13.92	14:08	0.0	6.90	17.13	7.02	
886RW03	1/7/2003	29-47842	538274.31	620998.04	17.0	2.0	15.0	13.96	14:03	0.0	6.95	16.14	7.01	
886RW04	1/7/2003	29-47843	538263.45	620990.21	17.0	2.0	15.0	13.80	14:05	0.0	6.76	16.72	7.04	
886RW05	1/7/2003	29-47844	538280.46	620985.98	17.0	2.0	15.0	13.71	14:02	0.0	6.82	15.05	6.89	
886RW06	1/7/2003	29-47845	538273.33	621052.87	17.0	2.0	15.0	15.00	13:48	0.0	7.06	15.18	7.94	x
886RW07	1/9/2003	29-47846	538252.30	621047.21	17.0	2.0	15.0	14.32	13:50	0.0	7.28	15.94	7.04	
886RW08	1/10/2003	29-47847	538229.91	621038.87	17.0	2.0	15.0	13.84	13:51	0.0	6.61	15.52	7.23	x

Notes:
1) The synoptic round of water levels in the wells was collected on September 29, 2014.
2) Information on well permit number, X and Y coordinates, depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
3) ft = feet
4) DTW = depth to water (measured from the top of well casing)
5) DTB = depth to bottom of well (measured from the top of well casing)
6) bgs = below ground surface
7) ppm = parts per million (of VOCs)
8) TOC = Top of Casing
9) Elevation = feet above mean sea level
10) N/A = information not available
11) LFPS = Low-Flow Purging and Sampling

Table 2
Historical Groundwater Analytical Results
Site FTMM-66 Building 886 Former AST
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				886MW01																	
WELL ID	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	886MW01	MW01 Dup	886MW01	MW01 Dup	886MW01	MW01 Dup	886MW01	MW01 Dup	886MW01	886MW01	MW01 Dup	886MW01	886MW01	MW01 Dup	886MW01	886MW01	MW01 Dup	LF1
Date Collected				8/2/2007	8/2/2007	10/12/2007	10/12/2007	3/27/2008	3/27/2008	6/25/2008	6/25/2008	9/16/2008	11/12/2008	11/12/2008	2/11/2009	6/10/2009	6/10/2009	9/28/2009	12/15/2009	12/15/2009	2/24/2010
Volatile Organic Compounds (µg/L)																					
Acetone	6,000	NLE	--	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone (2-Butanone)	300	NLE	--	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	700	NLE	--	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	3.86	4.46	2.48	NA	16.76	17.05	3.88	2.21	2.29	ND	0.24 J	0.26 J	4.85	0.92	0.85	1.44
Tetrachloroethylene	1	5	--	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1,000	--	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (total)	1,000	10,000	--	ND	ND	ND	ND	0.38 J	NA	ND	ND	ND	ND	ND	ND	0.26 J	0.26 J	ND	0.31 J	0.31 J	ND
TICs*	500	NLE		ND	ND	ND	ND	242	NA	ND	ND	ND	13	11	200	119	124	ND	84	82	41
Total Petroleum Hydrocarbons (mg/L)																					
Total Petroleum Hydrocarbons	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semi-Volatile Organic Compounds (µg/L)																					
Acenaphthene	400	NLE	--	ND	ND	ND	ND	6.18	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.91	1.93	2.08
Anthracene	2,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	3	NLE	--	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	1.3 J	ND
1,1'-Biphenyl	400	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	--	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7 J	1.8 J	2.2 J
Diethyl phthalate	6,000	NLE	--	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-*n* -octyl phthalate	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	300	NLE	--	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.96	1.91	2.31
2-Methylnaphthalene	NLE	NLE	--	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6 J	1.6 J	ND
4-Methylphenol	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	300	NLE	--	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	--	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	200	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	170.46	NA	ND	ND	61	19	4	15	96	90	ND	84.9	78.9	43.5
Metals (µg/L)																					
Antimony	6	6	20.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.00 ER
Barium	6,000	2,000	699.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	15.7
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Chromium	70	100	191.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Copper	1,300	1,300	65.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Lead	5	15	22.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Nickel	100	NLE	187	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.90 ER
Selenium	40	50	29.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for total VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

ER - Estimated result

J - Estimated concentration exceeds the MDL and is less than the RL

NA - Not analyzed NR - Not reported

ND - Not detected

NLE - No limit established

a/ Elevated sample detection limit due to difficult sample matrix.

Table 2
Historical Groundwater Analytical Results
Site FTMM-66 Building 886 Former AST
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				886MW01						886MW02											
WELL ID	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF2	LF3	LF4	LF5	LF5 Dup	LF6	886MW02	886MW02	886MW02	886MW02	886MW02	886MW02	886MW02	MW02 Dup	886MW02	886MW02	886MW02	LF1
Date Collected				5/24/2010	8/5/2010	10/13/2010	2/11/2011	2/11/2011	4/7/2011	8/2/2007	10/12/2007	3/27/2008	6/25/2008	9/16/2008	11/12/2008	2/11/2009	2/11/2009	6/10/2009	9/28/2009	12/15/2009	2/22/2010
Volatile Organic Compounds (µg/L)																					
Acetone	6,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone (2-Butanone)	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	1	1.98	0.73	0.32 J	0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND	0.27 J
Tetrachloroethylene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.43 J
Xylenes (total)	1,000	10,000	--	ND	ND	ND	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE		27	ND	ND	99	99	123	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Petroleum Hydrocarbons (mg/L)																					
Total Petroleum Hydrocarbons	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semi-Volatile Organic Compounds (µg/L)																					
Acenaphthene	400	NLE	--	0.535	ND	ND	4	3.85	3.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	2,000	NLE	--	ND	ND	ND	0.166	0.164	0.179	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	3	NLE	--	1.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1'-Biphenyl	400	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	--	1.9 J	ND	ND	2.6 J	2.6 J	3.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	6,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-*n* -octyl phthalate	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	300	NLE	--	1.65	ND	ND	3.17	3.19	3.71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	300	NLE	--	ND	ND	ND	ND	ND	1.39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	--	ND	ND	ND	0.345	0.339	0.241	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	200	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	9	ND	ND	97	105.6	167.9	ND	15	39.3	ND	23	4	11	14	6	10	ND	5.9
Metals (µg/L)																					
Antimony	6	6	20.70	5.01 ER	9.32 ER	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.62 ER
Arsenic	3	10	89.30	9.1	2.81 ER	2.25	9.8	10.3	19.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.80 ER
Barium	6,000	2,000	699.00	8.79	40.2	82.3	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	130
Beryllium	1	4	2.10	0.051 ER	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0446 ER
Cadmium	4	5	9.50	0.511 ER	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.53
Chromium	70	100	191.00	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.55 ER
Copper	1,300	1,300	65.60	1.27 ER	1.98 ER	ND	ND	ND	93.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Lead	5	15	22.70	3.68 ER	ND	ND	ND	ND	6.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
Nickel	100	NLE	187	ND	4.37 ER	13.6	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	31.7
Selenium	40	50	29.60	NR	NR	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for total VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

ER - Estimated result

J - Estimated concentration exceeds the MDL and is less than the RL

NA - Not analyzed NR - Not reported

ND - Not detected

NLE - No limit established

a/ Elevated sample detection limit due to difficult sample matrix.

Table 2
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Site FTMM-66 Building 886 Former AST
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Fort Monmouth, New Jersey

				886MW02											886MW03								
WELL ID	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF1 Dup	LF2	LF2 Dup	LF3	LF3 Dup	LF4	LF4 Dup	LF5	LF5 Dup	LF6	LF6 Dup	886MW03	886MW03	886MW03	MW03 Dup	886MW03	886MW03	886MW03	886MW03	886MW03
Date Collected				2/22/2010	5/24/2010	5/24/2010	8/4/2010	8/4/2010	10/12/2010	10/12/2010	2/9/2011	2/9/2011	4/7/2011	4/7/2011	8/2/2007	10/12/2007	3/28/2008	3/28/2008	6/25/2008	9/16/2008	11/12/2008	2/11/2009	6/10/2009
Volatile Organic Compounds (µg/L)																							
Acetone	6,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
Methyl ethyl ketone (2-Butanone)	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
Carbon Disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	0.28 J	0.32 J	0.28 J	0.28 J	0.31 J	0.26 J	0.24 J	0.23 J	0.23 J	0.31 J	0.33 J	ND	ND	ND	NA	ND	ND	ND	ND	ND
Tetrachloroethylene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
Toluene	600	1,000	--	0.48 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
Xylenes (total)	1,000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
TICs*	500	NLE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Petroleum Hydrocarbons (mg/L)																							
Total Petroleum Hydrocarbons	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semi-Volatile Organic Compounds (µg/L)																							
Acenaphthene	400	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
Anthracene	2,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	3	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
1,1'-Biphenyl	400	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	6,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-*n* -octyl phthalate	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
4-Methylphenol	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
Pyrene	200	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	5.8	ND	ND	ND	ND	ND	5.8	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	8	10	7
Metals (µg/L)																							
Antimony	6	6	20.70	ND	10.6	12.1	10.5	12.6	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	3	10	89.30	2.73 ER	2.82 ER	3.01 ER	3.01 ER	3.51 ER	1.71	1.63	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	6,000	2,000	699.00	141	118	114	139	144	141	134	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	1	4	2.10	ND	0.141 ER	0.139 ER	0.0887 ER	0.092 ER	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	4	5	9.50	5.33	0.973 ER	0.903 ER	1.28 ER	1.21 ER	1.68	1.15	3.7	3.8	4.7	4.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	70	100	191.00	1.68 ER	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1,300	1,300	65.60	ND	ND	1.26 ER	ND	1.27 ER	ND	ND	ND	ND	15.7	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	5	15	22.70	ND	2.95 ER	ND	ND	ND	ND	ND	ND	ND	ND	3.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	100	NLE	187	34.3	25.3	23.4	29.7	31.2	27.8	26	27.9	28.5	28.5	27.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	40	50	29.60	NR	NR	NR	NR	NR	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for total VOCs and SVOCs. No individual compound can exceed 100 µg/L.

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				886MW03								886MW04											
WELL ID	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	886MW03	886MW03	LF1	LF2	LF3	LF4	LF5	LF6	886MW04	886MW04	886MW04	886MW04	886MW04	886MW04	886MW04	886MW04	886MW04	LF1	LF2	LF3
Date Collected				9/28/2009	12/15/2009	2/22/2010	5/24/2010	8/5/2010	10/12/2010	2/10/2011	4/7/2011	8/2/2007	10/12/2007	3/28/2008	6/25/2008	9/16/2008	11/12/2008	2/11/2009	6/10/2009	9/28/2009	12/15/2009	2/24/2010	5/24/2010	8/5/2010
Volatile Organic Compounds (µg/L)																							
Acetone	6,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone (2-Butanone)	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.26	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (total)	1,000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Petroleum Hydrocarbons (mg/L)																							
Total Petroleum Hydrocarbons	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semi-Volatile Organic Compounds (µg/L)																							
Acenaphthene	400	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	2,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	3	NLE	--	1.4 J	1.8 J	ND	1.9 J	ND	ND	1.1 J	ND	ND	3.76 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1'-Biphenyl	400	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	6,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-*n* -octyl phthalate	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	--	ND	ND	ND	ND	ND	ND	43.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	300	NLE	--	ND	ND	ND	ND	ND	ND	112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	200	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	8.1	ND	ND	327	ND	ND	4	ND	ND	14	12	12	6	ND	ND	ND	64.2	ND
Metals (µg/L)																							
Antimony	6	6	20.70	NA	NA	9.92 ER	9.76 ER	10.7	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	5.56 ER	5.10 ER
Arsenic	3	10	89.30	NA	NA	1.77 ER	5.86	9.07	8.57	ND	8.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.750 ER	1.20 ER
Barium	6,000	2,000	699.00	NA	NA	47.2	20.3	22.1	38.6	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.38 ER	15	34.8
Beryllium	1	4	2.10	NA	NA	ND	0.122 ER	0.135 ER	0.673	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.091 ER	0.195 ER	0.229 ER
Cadmium	4	5	9.50	NA	NA	1.72 ER	0.531 ER	1.12 ER	1.5	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
Chromium	70	100	191.00	NA	NA	ND	1.08 ER	10.2	59.2	ND	44.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.52	ND	ND
Copper	1,300	1,300	65.60	NA	NA	9.33	28.1	23	154	21.2	50.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.38 ER	ND	1.31 ER
Lead	5	15	22.70	NA	NA	ND	5.09	7.09	19.3	4.4	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND
Nickel	100	NLE	187	NA	NA	1.81 ER	2.46 ER	6.52	15.4	ND	11.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.66 ER	1.81 ER	5.28
Selenium	40	50	29.60	NA	NA	NR	NR	NR	1.67	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR

Notes:
Shaded cells = concentrations exceed the NJDEP GWQS
*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for total VOCs and SVOCs. No individual compound can exceed 100 µg/L.
NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)
U.S. Environmental Protection Agency Maximum Contaminant Level (2012)
LF = Low-flow sampling method used to collect sample
ER - Estimated result
J - Estimated concentration exceeds the MDL and is less than the RL
NA - Not analyzed NR - Not reported
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a/ Elevated sample detection limit due to difficult sample matrix.

Table 2
Historical Groundwater Analytical Results
Site FTMM-66 Building 886 Former AST
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				886MW04			886MW05															
WELL ID	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF4	LF5	LF6	886MW05	886MW05	886MW05	886MW05	886MW05	886MW05	886MW05	886MW05	886MW05	886MW05	LF1	LF1 Dup	LF2	LF3	LF4	LF5	LF6
Date Collected				10/13/2010	2/11/2011	4/7/2011	8/2/2007	10/12/2007	3/28/2008	6/25/2008	9/16/2008	11/12/2008	2/11/2009	6/10/2009	9/28/2009	12/15/2009	2/24/2010	2/24/2010	5/24/2010	8/4/2010	10/12/2010	2/10/2011	4/7/2011
Volatile Organic Compounds (µg/L)																						
Acetone	6,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone (2-Butanone)	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (total)	1,000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE		ND	ND	ND	28	35	6	23	17	60	ND	3	95	ND	ND	ND	6	22	9	ND	ND
Total Petroleum Hydrocarbons (mg/L)																						
Total Petroleum Hydrocarbons	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semi-Volatile Organic Compounds (µg/L)																						
Acenaphthene	400	NLE	--	ND	ND	ND	ND	2.88 J	ND	ND	ND	ND	ND	ND	1.72	ND	ND	ND	0.414	1.34	ND	ND	ND
Anthracene	2,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.401	ND	ND	ND	ND	0.268	ND	ND	ND
Bis(2-ethylhexyl) phthalate	3	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7 B	ND	ND	ND	ND	ND	ND
1,1'-Biphenyl	400	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	--	ND	ND	ND	ND	2.05 J	ND	ND	ND	ND	ND	ND	1.9 J	ND	ND	ND	0.41 J	1.5 J	ND	ND	ND
Diethyl phthalate	6,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-*n* -octyl phthalate	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	300	NLE	--	ND	ND	ND	ND	3.29 J	ND	ND	ND	ND	ND	ND	2.67	ND	ND	ND	0.552	2.13	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	--	ND	ND	ND	13.7	24.29	ND	ND	ND	11	ND	ND	0.91 J	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	300	NLE	--	ND	ND	ND	1.15 J	1.02 J	ND	ND	ND	ND	ND	ND	0.439	ND	ND	ND	ND	0.167	ND	ND	ND
Phenanthrene	NLE	NLE	--	ND	ND	ND	ND	1.44 J	ND	ND	ND	ND	ND	ND	1.35	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	200	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	21	100	10.1	34	90	67	17	7	103.6	12.4	ND	ND	7.5	9.2	187.9	ND	4.3
Metals (µg/L)																						
Antimony	6	6	20.70	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Arsenic	3	10	89.30	0.66	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	2.78 ER	3.57 ER	ND	ND	3.2
Barium	6,000	2,000	699.00	53.4	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.69	6.95	3.83 ER	4.14 ER	15.2	ND	ND
Beryllium	1	4	2.10	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.044 ER	ND	0.053 ER	ND	ND	ND	ND
Cadmium	4	5	9.50	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Chromium	70	100	191.00	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.46 ER	1.61 ER	ND	ND	ND	ND	ND
Copper	1,300	1,300	65.60	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	2.27 ER	1.36	ND	ND
Lead	5	15	22.70	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	2.82 ER	ND	ND	ND	ND
Nickel	100	NLE	187	8.35	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.25 ER	1.85 ER	ND	ND	ND	ND	ND
Selenium	40	50	29.60	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	NR	ND	ND	ND

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for total VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

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J - Estimated concentration exceeds the MDL and is less than the RL

NA - Not analyzed NR - Not reported

ND - Not detected

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a/ Elevated sample detection limit due to difficult sample matrix.

Table 2
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Site FTMM-66 Building 886 Former AST
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Fort Monmouth, New Jersey

				886MW06		886RW01																886RW02		
WELL ID	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF5	LF6	886RW01	886RW01	886RW01	886RW01	886RW01	886RW01	886RW01	886RW01	886RW01	886RW01	LF1	LF2	LF3	LF4	LF5	LF6	886RW02	886RW02	886RW02
Date Collected				1/6/2011	4/7/2011	8/2/2007	10/11/2007	3/27/2008	6/25/2008	9/16/2008	11/12/2008	2/11/2009	6/10/2009	9/28/2009	12/16/2009	3/2/2010	5/25/2010	8/10/2010	10/14/2010	2/14/2011	4/11/2011	8/2/2007	10/11/2007	3/27/2008
Volatile Organic Compounds (µg/L)																								
Acetone	6,000	NLE	--	ND	ND	ND	ND	4.16	8.98	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	0.65 J	1.75 J	0.67 J	1.14	0.87	0.56	0.68	0.51	1.63	0.94	ND	0.30 J	ND	ND	ND	0.46 J	0.79 J	0.31 J	0.84 J
Methyl ethyl ketone (2-Butanone)	300	NLE	--	ND	ND	ND	ND	0.93 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	700	NLE	--	ND	0.68J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	5.81	9	3.34	3.05	1.84	1.5	0.29 J	1.32	2.5	ND	ND	ND	ND	ND	ND	ND	ND	0.46 J
Methyl *tert* -butyl ether	70	NLE	--	0.25J	0.54	ND	3.86	ND	10.14	4.3	4.83	2.86	7.13	1.11	0.33 J	ND	0.67	1.63	1.8	ND	ND	4.14	2.75	5.03
Tetrachloroethylene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1,000	--	ND	ND	ND	ND	ND	ND	ND	0.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (total)	1,000	10,000	--	ND	ND	ND	1.92 J	2.09 J	1.02	1.16	0.97	ND	0.30 J	ND	0.27 J	ND	0.30 J	ND	0.27 J	ND	ND	ND	ND	0.88 J
TICs*	500	NLE		ND	ND	519	93	333	271	169	159	176	160	216	190	ND	179	100	75	ND	123	77	35	97
Total Petroleum Hydrocarbons (mg/L)																								
Total Petroleum Hydrocarbons	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semi-Volatile Organic Compounds (µg/L)																								
Acenaphthene	400	NLE	--	ND	0.123	3.21 J	3.59 J	ND	ND	ND	ND	ND	ND	2.07	2.74	ND	2.47	1.9	1.98	ND	2.13	ND	ND	ND
Anthracene	2,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.136	0.153	0.15	ND	0.149	ND	ND	ND
Bis(2-ethylhexyl) phthalate	3	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1'-Biphenyl	400	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	--	ND	ND	2.43 J	2.84 J	ND	ND	ND	ND	ND	ND	1.9 J	1.6 J	ND	2.5 J	2.1 J	2.1 J	ND	1.4 J	2.0 J	ND	ND
Diethyl phthalate	6,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-*n* -octyl phthalate	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	300	NLE	--	ND	ND	3.60 J	4.04 J	ND	ND	ND	ND	ND	ND	2.93	2.73	ND	2.88	2.46	2.38	ND	1.96	1.8 J	ND	ND
2-Methylnaphthalene	NLE	NLE	--	ND	ND	35.03	18.28	ND	ND	ND	ND	15	ND	4.4	9.6	ND	1.6	ND	ND	ND	18.3	16.05	18.48	ND
4-Methylphenol	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	300	NLE	--	0.167	0.275	1.67 J	1.34 J	ND	ND	ND	ND	ND	ND	0.994	0.871	ND	0.627	ND	ND	ND	0.663	ND	ND	ND
Phenanthrene	NLE	NLE	--	ND	ND	2.71 J	2.91 J	ND	ND	ND	ND	ND	ND	0.82	1.01	ND	0.875	0.224	0.171	ND	1.53	ND	ND	ND
Pyrene	200	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.347	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	313	301	516.23	30	135	391	424	433	776	441.4	7.2	135.3	46.1	69	ND	246.3	71	99	51.08
Metals (µg/L)																								
Antimony	6	6	20.70	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	8.67 ER	10.2	ND	ND	ND	NA	NA	NA
Arsenic	3	10	89.30	10.2 /a	16.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.39 ER	10.75	ND	5.9	ND	5.3	NA	NA	NA
Barium	6,000	2,000	699.00	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	24.8	41.7	59.8	54	ND	ND	NA	NA	NA
Beryllium	1	4	2.10	ND	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.080 ER	ND	ND	ND	ND	NA	NA	NA
Cadmium	4	5	9.50	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.789 ER	1.05 ER	0.812 ER	0.724	ND	ND	NA	NA	NA
Chromium	70	100	191.00	62.4 /a	61.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.40 ER	1.33 ER	1.87 ER	1.5	ND	ND	NA	NA	NA
Copper	1,300	1,300	65.60	ND	77.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.60 ER	ND	2.68 ER	1.64	ND	ND	NA	NA	NA
Lead	5	15	22.70	11 /a	11.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	2.50 ER	ND	ND	ND	ND	NA	NA	NA
Nickel	100	NLE	187	42.8 /a	33.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.95 ER	ND	1.61 ER	ND	ND	ND	NA	NA	NA
Selenium	40	50	29.60	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	ND	ND	ND	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

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NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

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ER - Estimated result

J - Estimated concentration exceeds the MDL and is less than the RL

NA - Not analyzed NR - Not reported

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a/ Elevated sample detection limit due to difficult sample matrix.

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Site FTMM-66 Building 886 Former AST
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Fort Monmouth, New Jersey

				886RW02														886RW03					
WELL ID	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	886RW02	886RW02	RW02 Dup	886RW02	886RW02	886RW02	886RW02	886RW02	LF1	LF2	LF3	LF4	LF5	LF5 Dup	LF6	886RW03	886RW03	886RW03	886RW03	886RW03	886RW03
Date Collected				6/25/2008	9/16/2008	9/16/2008	11/12/2008	2/11/2009	6/10/2009	9/28/2009	12/16/2009	3/2/2010	5/25/2010	8/10/2010	10/14/2010	2/14/2011	2/14/2011	4/11/2011	8/2/2007	10/11/2007	3/27/2008	6/25/2008	9/16/2008	11/12/2008
Volatile Organic Compounds (µg/L)																							
Acetone	6,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	0.3	0.98	ND	ND	0.35 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone (2-Butanone)	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	1.32	5.26	5.62	2.9	4.07	0.52	1.07	0.75	ND	ND	0.45 J	1.22	ND	ND	ND	ND	1.71 J	ND	ND	ND	ND
Tetrachloroethylene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (total)	1,000	10,000	--	ND	ND	ND	ND	ND	ND	ND	0.22 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE		ND	46	30	36	41	ND	29	75	ND	ND	ND	ND	ND	ND	ND	ND	7	ND	ND	12	ND
Total Petroleum Hydrocarbons (mg/L)																								
Total Petroleum Hydrocarbons	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semi-Volatile Organic Compounds (µg/L)																								
Acenaphthene	400	NLE	--	ND	ND	ND	ND	ND	ND	2.12	2.03	ND	0.146	ND	0.166	0.126	ND	0.207	ND	ND	ND	ND	ND	ND
Anthracene	2,000	NLE	--	ND	ND	ND	ND	ND	ND	0.139	0.22	ND	ND	ND	0.17	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	3	NLE	--	ND	ND	ND	ND	ND	ND	ND	1.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1'-Biphenyl	400	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	--	ND	ND	ND	ND	ND	ND	0.98 J	0.90 J	ND	ND	ND	0.64 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	6,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-*n* -octyl phthalate	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	300	NLE	--	ND	ND	ND	ND	ND	ND	2.05	2.38	ND	ND	ND	0.222	ND	ND	0.218	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	--	ND	ND	ND	ND	15	ND	3.6	7.9	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND
4-Methylphenol	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	300	NLE	--	ND	ND	ND	ND	ND	ND	0.328	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	--	ND	ND	ND	ND	ND	ND	0.204	0.351	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	200	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	14	132	185	50	400	ND	68.6	94.7	ND	5.7	ND	5.3	ND	ND	4.2	ND	ND	ND	ND	ND	7
Metals (µg/L)																								
Antimony	6	6	20.70	NA	NA	NA	NA	NA	NA	NA	NA	ND	8.76 ER	12.8	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	NA	NA	NA	4.46 ER	9.68	ND	18.56	ND	ND	5.5	NA	NA	NA	NA	NA	NA
Barium	6,000	2,000	699.00	NA	NA	NA	NA	NA	NA	NA	NA	41	42.1	45.7	42.8	ND	ND	ND	NA	NA	NA	NA	NA	NA
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	NA	NA	NA	0.065 ER	0.238 ER	0.085 ER	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	NA	NA	NA	ND	2.42	2.00 ER	1.38	ND	ND	ND	NA	NA	NA	NA	NA	NA
Chromium	70	100	191.00	NA	NA	NA	NA	NA	NA	NA	NA	3.97 ER	4.52 ER	5.72	2.13	ND	ND	ND	NA	NA	NA	NA	NA	NA
Copper	1,300	1,300	65.60	NA	NA	NA	NA	NA	NA	NA	NA	6.66	16.1	5.82	3.32	ND	ND	ND	NA	NA	NA	NA	NA	NA
Lead	5	15	22.70	NA	NA	NA	NA	NA	NA	NA	NA	ND	5.42	4.96 ER	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA
Nickel	100	NLE	187	NA	NA	NA	NA	NA	NA	NA	NA	10.5	12.4	11	5.41	ND	ND	11.5	NA	NA	NA	NA	NA	NA
Selenium	40	50	29.60	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	1.68	ND	ND	ND	NA	NA	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for total VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

ER - Estimated result

J - Estimated concentration exceeds the MDL and is less than the RL

NA - Not analyzed NR - Not reported

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a/ Elevated sample detection limit due to difficult sample matrix.

Table 2
Historical Groundwater Analytical Results
Site FTMM-66 Building 886 Former AST
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				886RW03												886RW04								
WELL ID	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	886RW03	886RW03	886RW03	886RW03	LF1	LF2	LF2 Dup	LF3	LF4	LF5	LF6	LF6 Dup	886RW04	886RW04	RW04 Dup	886RW04	886RW04	886RW04	886RW04	886RW04	886RW04
Date Collected				2/11/2009	6/10/2009	9/28/2009	12/16/2009	2/22/2010	5/25/2010	5/25/2010	8/5/2010	10/12/2010	2/10/2011	4/8/2011	4/8/2011	8/2/2007	10/11/2007	10/11/2007	3/27/2008	6/25/2008	9/16/2008	11/12/2008	2/11/2009	6/10/2009
Volatile Organic Compounds (µg/L)																								
Acetone	6,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone (2-Butanone)	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.28	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	1.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.22	4.71	4.78	15.92	11.48	6.65	4.62	9.93	6.85
Tetrachloroethylene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31	ND	ND	ND
Xylenes (total)	1,000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18	0.65	ND	ND	ND
TICs*	500	NLE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	102	23	14	97	81	72	59	35	54
Total Petroleum Hydrocarbons (mg/L)																								
Total Petroleum Hydrocarbons	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semi-Volatile Organic Compounds (µg/L)																								
Acenaphthene	400	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.20 J	ND	ND	ND	ND	ND
Anthracene	2,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	3	NLE	--	ND	ND	ND	ND	18.5 B	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	2.68 J	ND	ND	ND	ND	ND
1,1'-Biphenyl	400	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	6,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-*n* -octyl phthalate	100	NLE	--	ND	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.30 J	ND	ND	ND	ND	ND	ND	1	ND
2-Methylnaphthalene	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.63	7.14 J	10.23	ND	ND	ND	ND	ND	ND
4-Methylphenol	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	200	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	19	6	ND	ND	ND	ND	4.2	ND	ND	54.6	ND	ND	201	62	106	196.46	ND	339	6	68	161
Metals (µg/L)																								
Antimony	6	6	20.70	NA	NA	NA	NA	9.54 ER	5.92 ER	ND	6.76 ER	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	3	10	89.30	NA	NA	NA	NA	ND	1.65 ER	1.61 ER	1.17 ER	1.46	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	6,000	2,000	699.00	NA	NA	NA	NA	128	18.4	17.6	28	35.2	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	1	4	2.10	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	4	5	9.50	NA	NA	NA	NA	ND	ND	ND	ND	0.409	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	70	100	191.00	NA	NA	NA	NA	ND	ND	ND	2.90 ER	19.1	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	1,300	1,300	65.60	NA	NA	NA	NA	ND	ND	ND	3.38 ER	2.22	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	5	15	22.70	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	100	NLE	187	NA	NA	NA	NA	3.04 ER	ND	ND	0.973 ER	2.92	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	40	50	29.60	NA	NA	NA	NA	NR	NR	NR	NR	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for total VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

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a/ Elevated sample detection limit due to difficult sample matrix.

Table 2
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Site FTMM-66 Building 886 Former AST
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Fort Monmouth, New Jersey

				886RW04								886RW05													
WELL ID	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	886RW04	886RW04	LF1	LF2	LF3	LF4	LF5	LF6	886RW05	886RW05	886RW05	886RW05	886RW05	886RW05	886RW05	886RW05	886RW05	RW05 Dup	886RW05	RW05 Dup	LF1	LF2
Date Collected				9/28/2009	12/16/2009	3/2/2010	5/25/2010	8/9/2010	10/14/2010	2/11/2011	4/11/2011	8/2/2007	10/11/2007	3/27/2008	6/25/2008	9/16/2008	11/12/2008	2/11/2009	6/10/2009	9/28/2009	9/28/2009	12/16/2009	12/16/2009	2/24/2010	5/25/2010
Volatile Organic Compounds (µg/L)																									
Acetone	6,000	NLE	--	ND	ND	ND	ND	ND	8.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone (2-Butanone)	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	4.93	1.65	ND	0.51	0.73	1.01	ND	0.81	ND	ND	2.36	ND	0.36	0.33	1.3	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1,000	--	ND	ND	ND	ND	ND	0.46 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (total)	1,000	10,000	--	ND	ND	ND	ND	ND	0.25 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE		68	36	ND	ND	31	49	13	22	ND	ND	4	ND	4	ND	4	ND	ND	ND	ND	ND	ND	ND
Total Petroleum Hydrocarbons (mg/L)																									
Total Petroleum Hydrocarbons	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semi-Volatile Organic Compounds (µg/L)																									
Acenaphthene	400	NLE	--	0.665	0.656	ND	0.441	0.804	1	ND	0.636	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	2,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	3	NLE	--	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1'-Biphenyl	400	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	--	0.58 J	0.65 J	ND	ND	0.86 J	0.89 J	ND	0.50 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	6,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-*n* -octyl phthalate	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND
Fluorene	300	NLE	--	0.622	0.945	ND	0.351	1.19	1.09	ND	0.769	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.53 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	300	NLE	--	ND	ND	ND	ND	0.118	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	0.176	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	200	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	159.5	64.9	4.2	ND	10.9	62.5	108.9	4.7	ND	20	10	ND	60	13	69	21	ND	4	ND	ND	ND	ND
Metals (µg/L)																									
Antimony	6	6	20.70	NA	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.21 ER	ND
Arsenic	3	10	89.30	NA	NA	5.02	6.6	ND	4.8	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	5.28
Barium	6,000	2,000	699.00	NA	NA	28.5	27.6	23.1	31.9	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.66 ER	18.4
Beryllium	1	4	2.10	NA	NA	0.104 ER	0.307 ER	0.117 ER	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.058 ER	0.174 ER
Cadmium	4	5	9.50	NA	NA	1.36 ER	1.08 ER	0.864 ER	1.01	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	1.08 ER
Chromium	70	100	191.00	NA	NA	5.99	22.2	9.06	3.25	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.22	13.7
Copper	1,300	1,300	65.60	NA	NA	6.12	5.61	4.99 ER	3.04	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.7	18.9
Lead	5	15	22.70	NA	NA	3.70 ER	5.56	2.93 ER	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	4.79 ER
Nickel	100	NLE	187	NA	NA	6.01	8.32	4.61 ER	18.5	18.4	11.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.59 ER	1.31 ER
Selenium	40	50	29.60	NA	NA	NR	NR	NR	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

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a/ Elevated sample detection limit due to difficult sample matrix.

Table 2
Historical Groundwater Analytical Results
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Fort Monmouth, New Jersey

				886RW05						886RW06														
WELL ID	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF3	LF3 Dup	LF4	LF4 Dup	LF5	LF6	886RW06	886RW06	886RW06	886RW06	886RW06	886RW06	886RW06	886RW06	886RW06	886RW06	LF1	LF2	LF3	LF4	LF4 Dup
Date Collected				8/9/2010	8/9/2010	10/14/2010	10/14/2010	2/11/2011	4/8/2011	8/2/2007	10/11/2007	3/28/2008	6/25/2008	9/16/2008	11/12/2008	2/11/2009	6/10/2009	9/28/2009	12/15/2009	2/22/2010	5/25/2010	8/5/2010	10/13/2010	10/13/2010
Volatile Organic Compounds (µg/L)																								
Acetone	6,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone (2-Butanone)	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	0.27 J	0.26 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (total)	1,000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Petroleum Hydrocarbons (mg/L)																								
Total Petroleum Hydrocarbons	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semi-Volatile Organic Compounds (µg/L)																								
Acenaphthene	400	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	2,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	3	NLE	--	ND	10.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7 J	ND	ND	ND	ND	ND	ND
1,1'-Biphenyl	400	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	6,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-*n* -octyl phthalate	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	200	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	ND	ND	9.3	ND	ND	17	ND	ND	100	37	23	14	ND	ND	ND	ND	ND	4.9	ND
Metals (µg/L)																								
Antimony	6	6	20.70	6.83 ER	9.38 ER	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND
Arsenic	3	10	89.30	6.5	6	10.42	11.13	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.35 ER	4.14 ER	5.3	2.22	2.27
Barium	6,000	2,000	699.00	19.4	21.6	44.6	45.1	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28.1	20.7	31.1	26.8	27
Beryllium	1	4	2.10	0.120 ER	0.124 ER	1.23	1.2	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.124 ER	0.259 ER	ND	ND
Cadmium	4	5	9.50	2.68	3	3.66	3.45	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND
Chromium	70	100	191.00	8.45	9.68	81	79.1	ND	15.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.47 ER	9.82	26.5	7.9	7.71
Copper	1,300	1,300	65.60	13.7	15.4	54	55.4	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.20 ER	6.45	16.1	4.92	5.02
Lead	5	15	22.70	ND	2.91 ER	15.1	12.2	ND	3.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	4.78 ER	9.54	ND	3.45
Nickel	100	NLE	187	2.94 ER	2.87 ER	8.44	8.73	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.60 ER	2.02 ER	4.63 ER	2.7	2.96
Selenium	40	50	29.60	NR	NR	1.43	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	1.5	ND

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for total VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

LF = Low-flow sampling method used to collect sample

ER - Estimated result

J - Estimated concentration exceeds the MDL and is less than the RL

NA - Not analyzed NR - Not reported

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a/ Elevated sample detection limit due to difficult sample matrix.

Table 2
Historical Groundwater Analytical Results
Site FTMM-66 Building 886 Former AST
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

				886RW06		886RW07																886RW08	
WELL ID	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	LF5	LF6	886RW07	886RW07	886RW07	886RW07	886RW07	886RW07	886RW07	886RW07	886RW07	886RW07	LF1	LF2	LF3	LF4	LF5	LF6	LF6 Dup	886RW08	886RW08
Date Collected				2/11/2011	4/8/2011	8/2/2007	10/12/2007	3/28/2008	6/25/2008	9/16/2008	11/12/2008	2/11/2009	6/10/2009	9/28/2009	12/15/2009	3/2/2010	5/25/2010	8/9/2010	10/13/2010	2/11/2011	4/11/2011	4/11/2011	8/2/2007	10/12/2007
Volatile Organic Compounds (µg/L)																								
Acetone	6,000	NLE	--	ND	ND	ND	ND	ND	2.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.11
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone (2-Butanone)	300	NLE	--	ND	ND	ND	ND	ND	3.37	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	0.49 J	ND	0.37	0.36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1,000	--	ND	ND	ND	ND	ND	0.73	1.13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (total)	1,000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE		ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Petroleum Hydrocarbons (mg/L)																								
Total Petroleum Hydrocarbons	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semi-Volatile Organic Compounds (µg/L)																								
Acenaphthene	400	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	2,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	3	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1'-Biphenyl	400	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	6,000	NLE	--	ND	ND	ND	ND	ND	3.0 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-*n* -octyl phthalate	100	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	200	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	ND	ND	9	ND	ND	7	5	32	33	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	17
Metals (µg/L)																								
Antimony	6	6	20.70	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	5.32 ER	7.46 ER	ND	ND	ND	ND	NA	NA
Arsenic	3	10	89.30	ND	4.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.28 ER	3.16 ER	ND	4.27	ND	3.7	4.3	NA	NA
Barium	6,000	2,000	699.00	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.79	6.28	7.66	20.1	ND	ND	ND	NA	NA
Beryllium	1	4	2.10	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.045 ER	0.113 ER	ND	ND	ND	ND	NA	NA
Cadmium	4	5	9.50	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.09 ER	1.09 ER	0.503 ER	0.859	ND	ND	ND	NA	NA
Chromium	70	100	191.00	ND	27.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.65 ER	2.78 ER	8.57	24.1	ND	22.6	23.7	NA	NA
Copper	1,300	1,300	65.60	ND	10.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.2	14.1	11.3	31.9	10.4	18.4	19.8	NA	NA
Lead	5	15	22.70	ND	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	2.62 ER	8.3	ND	5.4	5.5	NA	NA
Nickel	100	NLE	187	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.52 ER	0.556 ER	4.60 ER	4.93	ND	ND	ND	NA	NA
Selenium	40	50	29.60	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	ND	ND	ND	ND	NA	NA

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

*TICs - Tentatively identified compounds, cannot exceed 500 µg/L for total VOCs and SVOCs. No individual compound can exceed 100 µg/L.

NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

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Historical Groundwater Analytical Results
Site FTMM-66 Building 886 Former AST
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Fort Monmouth, New Jersey

				886RW08														
WELL ID	**NJDEP GWQS**	**USEPA MCL**	**Weston 1995 Background (Main Post)**	886RW08	886RW08	886RW08	886RW08	886RW08	886RW08	886RW08	886RW08	LF1	LF1 Dup	LF2	LF3	LF4	LF5	LF6
Date Collected				3/28/2008	6/25/2008	9/16/2008	11/12/2008	2/11/2009	6/10/2009	9/28/2009	12/15/2009	3/2/2010	3/2/2010	5/25/2010	8/5/2010	10/13/2010	2/11/2011	4/8/2011
Volatile Organic Compounds (µg/L)																		
Acetone	6,000	NLE	--	2.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone (2-Butanone)	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	700	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	700	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl *tert* -butyl ether	70	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	1	5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	600	1,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (total)	1,000	10,000	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Petroleum Hydrocarbons (mg/L)																		
Total Petroleum Hydrocarbons	NLE	NLE	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semi-Volatile Organic Compounds (µg/L)																		
Acenaphthene	400	NLE	--	ND	ND	ND	ND	ND	ND	0.158	ND	ND	ND	ND	ND	ND	ND	0.232
Anthracene	2,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	3	NLE	--	ND	ND	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	ND	ND	ND
1,1'-Biphenyl	400	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	6,000	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-*n* -octyl phthalate	100	NLE	--	ND	ND	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	300	NLE	--	ND	ND	ND	ND	ND	ND	0.137	ND	ND	ND	ND	ND	ND	ND	0.219
2-Methylnaphthalene	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	300	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	200	NLE	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TICs*	500	NLE	--	241.85	ND	36	34	19	22	4.1	4.1	ND	ND	ND	ND	ND	ND	ND
Metals (µg/L)																		
Antimony	6	6	20.70	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	8.41 ER	7.60 ER	ND	ND	ND
Arsenic	3	10	89.30	NA	NA	NA	NA	NA	NA	NA	NA	1.06 ER	1.10 ER	3.59 ER	3.72 ER	4.88	ND	3.6
Barium	6,000	2,000	699.00	NA	NA	NA	NA	NA	NA	NA	NA	8.95	8.65	10.4	22.8	19.4	ND	ND
Beryllium	1	4	2.10	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	0.080 ER	0.261 ER	ND	ND	ND
Cadmium	4	5	9.50	NA	NA	NA	NA	NA	NA	NA	NA	0.861 ER	0.759 ER	0.984 ER	1.39 ER	1.12	ND	ND
Chromium	70	100	191.00	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	5.85	18.8	26.4	10.5	ND
Copper	1,300	1,300	65.60	NA	NA	NA	NA	NA	NA	NA	NA	10.6	9.99	12	30.4	13.7	ND	ND
Lead	5	15	22.70	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	3.75 ER	5.89	5.87	ND	ND
Nickel	100	NLE	187	NA	NA	NA	NA	NA	NA	NA	NA	0.717 ER	0.793 ER	2.49 ER	5.43	6.04	ND	ND
Selenium	40	50	29.60	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	NR	ND	ND	ND

Notes:

Shaded cells = concentrations exceed the NJDEP GWQS

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NJDEP Ground Water Quality Criteria as per N.J.A.C. 7:9-6 (July 22, 2010)

U.S. Environmental Protection Agency Maximum Contaminant Level (2012)

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Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-66 Building 886 Former AST
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	Weston 1995 Background (Main Post)	886MW01	886MW02	886MW03	886MW04	886MW05	886RW01		886RW02	886RW03	886RW04
Sample ID				FTMM-66-GW-886MW01	FTMM-66-GW-886MW02	FTMM-66-GW-886MW03	FTMM-66-GW-886MW04	FTMM-66-GW-886MW05	FTMM-66-GW-886RW01	FTMM-66-GW-886RW01-11.55	FTMM-66-GW-886RW02	FTMM-66-GW-886RW03	FTMM-66-GW-886RW04
Sample Date				8/23/2013	8/22/2013	8/22/2013	8/22/2013	8/22/2013	8/23/2013	10/3/2014	8/22/2013	8/22/2013	8/22/2013
QA/QC				SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
Sampling Method				LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS
Volatile Organic Compounds (µg/l)													
1,1,1,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,1,1-Trichloroethane	30	200	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,1,2-Trichloroethane	3	5	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,1-Dichloroethane	50	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,1-Dichloroethene	1	7	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,1-Dichloropropene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,2,3-Trichlorobenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,2,3-Trichloropropane	0.03	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,2,4-Trichlorobenzene	9	70	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,2,4-Trimethylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	0.02	0.2	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,2-Dibromoethane	0.03	0.05	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,2-Dichlorobenzene	600	600	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,2-Dichloroethane	2	5	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,2-Dichloropropane	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,3,5-Trimethylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,3-Dichlorobenzene	600	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,3-Dichloropropane	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
1,4-Dichlorobenzene	75	75	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
2,2-Dichloropropane	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
2-Chlorotoluene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Acetone	6,000	NLE	-	< 5	< 5	**1.8 J**	**1.4 J**	**1.6 J**	**2.1 J**	NA	**1.4 J**	< 5	**3.3 J**
Benzene	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Bromobenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Bromochloromethane	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Bromodichloromethane	1	80	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Bromoform	4	80	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Carbon tetrachloride	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Chlorobenzene	50	100	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Chlorodibromomethane	1	80	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Chloroethane	5	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Chloroform	70	80	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Cis-1,2-Dichloroethene	70	70	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Cis-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Cymene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Dichlorodifluoromethane	1,000	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Ethyl benzene	700	700	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Hexachlorobutadiene	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Isopropylbenzene	700	NLE	-	< 1	< 1	< 1	< 1	**0.34 J**	**0.32 J**	NA	< 1	< 1	< 1
Meta & Para Xylenes	1,000	NLE	-	< 2	< 2	< 2	< 2	< 2	< 2	NA	< 2	< 2	< 2
Methyl bromide	10	NLE	-	**0.3 J**	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Methyl butyl ketone	300	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	NA	< 5	< 5	< 5
Methyl chloride	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Methyl ethyl ketone	300	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Methyl isobutyl ketone	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Methyl Tertbutyl Ether	70	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Methylene chloride	3	5	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Naphthalene	300	NLE	-	< 1	< 1	< 1	< 1	**0.21 J**	< 1	NA	< 1	< 1	< 1
n-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Ortho Xylene	1,000	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
p-Chlorotoluene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Propylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	**0.46 J**	**0.3 J**	NA	< 1	< 1	< 1
sec-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Styrene	100	100	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
tert-Butylbenzene	100	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Tetrachloroethene	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Toluene	600	1,000	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Total TIC, Volatile	500	NLE	-	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND
Total Xylenes	1,000	10,000	-	< 3	< 3	< 3	< 3	< 3	< 3	NA	< 3	< 3	< 3
Trans-1,2-Dichloroethene	100	100	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Trans-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Trichloroethene	1	5	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Trichlorofluoromethane	2,000	NLE	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1
Vinyl chloride	1	2	-	< 1	< 1	< 1	< 1	< 1	< 1	NA	< 1	< 1	< 1

Table 3
Groundwater Analytical Results - 2013 and 2014
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Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	Weston 1995 Background (Main Post)	886MW01	886MW02	886MW03	886MW04	886MW05	886RW01		886RW02	886RW03	886RW04
Sample ID				FTMM-66-GW-886MW01	FTMM-66-GW-886MW02	FTMM-66-GW-886MW03	FTMM-66-GW-886MW04	FTMM-66-GW-886MW05	FTMM-66-GW-886RW01	FTMM-66-GW-886RW01-11.55	FTMM-66-GW-886RW02	FTMM-66-GW-886RW03	FTMM-66-GW-886RW04
Sample Date				8/23/2013	8/22/2013	8/22/2013	8/22/2013	8/22/2013	8/23/2013	10/3/2014	8/22/2013	8/22/2013	8/22/2013
QA/QC				SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
Sampling Method				LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS
Semivolatile Organic Compounds (µg/l)													
1,2,4-Trichlorobenzene	9	70	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
1,2-Dichlorobenzene	600	600	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
1,2-Diphenylhydrazine	20	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
1,3-Dichlorobenzene	600	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
1,4-Dichlorobenzene	75	75	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
2,4,5-Trichlorophenol	700	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
2,4,6-Trichlorophenol	20	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
2,4-Dichlorophenol	20	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
2,4-Dimethylphenol	100	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
2,4-Dinitrophenol	40	NLE	-	< 25	< 25	< 25	< 25	< 25	< 25	< 26	< 25	< 25	< 25
2,4-Dinitrotoluene	10	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
2,6-Dinitrotoluene	10	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
2-Chloronaphthalene	600	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
2-Chlorophenol	40	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
2-Methylnaphthalene	30	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
2-Methylphenol	100	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
2-Nitroaniline	100	NLE	-	< 25	< 25	< 25	< 25	< 25	< 25	< 26	< 25	< 25	< 25
2-Nitrophenol	100	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
3,3'-Dichlorobenzidine	30	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3 UJ	< 5	< 5	< 5
3+4-Methylphenol	NLE	NLE	-	< 10	< 10	< 10	< 10	< 10	< 10	NA	< 10	< 10	< 10
3-Nitroaniline	100	NLE	-	< 25	< 25	< 25	< 25	< 25	< 25	< 26	< 25	< 25	< 25
4,6-Dinitro-2-methylphenol	1	NLE	-	< 25	< 25	< 25	< 25	< 25	< 25	< 26	< 25	< 25	< 25
4-Bromophenyl phenyl ether	100	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
4-Chloro-3-methylphenol	100	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
4-Chloroaniline	30	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
4-Chlorophenyl phenyl ether	100	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
4-Methylphenol	NLE	NLE	-	NA	NA	NA	NA	NA	NA	< 11	NA	NA	NA
4-Nitroaniline	5	NLE	-	< 25	< 25	< 25	< 25	< 25	< 25	< 26	< 25	< 25	< 25
4-Nitrophenol	100	NLE	-	< 25	< 25	< 25	< 25	< 25	< 25	< 26	< 25	< 25	< 25
Acenaphthene	400	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Acenaphthylene	100	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Anthracene	2,000	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Benzidine	20	NLE	-	< 100	< 100	< 100	< 100	< 100	< 100	< 110 UJ	< 100	< 100	< 100
Benzo(a)anthracene	0.1	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Benzo(a)pyrene	0.1	0.2	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Benzo(b)fluoranthene	0.2	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Benzo(ghi)perylene	100	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Benzo(k)fluoranthene	0.5	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Benzyl alcohol	2,000	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Bis(2-Chloroethoxy)methane	100	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Bis(2-Chloroethyl)ether	7	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Bis(2-Chloroisopropyl)ether	300	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Bis(2-Ethylhexyl)phthalate	3	6	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Butyl benzyl phthalate	100	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Carbazole	100	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Chrysene	5	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Dibenz(a,h)anthracene	0.3	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Dibenzofuran	100	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Diethyl phthalate	6,000	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Dimethyl phthalate	100	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Di-n-butylphthalate	700	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Di-n-octylphthalate	100	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Fluoranthene	300	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Fluorene	300	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Hexachlorobenzene	0.02	1	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Hexachlorobutadiene	1	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Hexachlorocyclopentadiene	40	50	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Hexachloroethane	7	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Indeno(1,2,3-cd)pyrene	0.2	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Isophorone	40	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Naphthalene	300	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Nitrobenzene	6	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
N-Nitrosodimethylamine	0.8	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
N-Nitroso-di-n-propylamine	10	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
N-Nitrosodiphenylamine	10	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Pentachlorophenol	0.3	1	-	< 25	< 25	< 25	< 25	< 25	< 25	< 26	< 25	< 25	< 25
Phenanthrene	100	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5

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Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	Weston 1995 Background (Main Post)	886MW01	886MW02	886MW03	886MW04	886MW05	886RW01		886RW02	886RW03	886RW04
Sample ID				FTMM-66-GW-886MW01	FTMM-66-GW-886MW02	FTMM-66-GW-886MW03	FTMM-66-GW-886MW04	FTMM-66-GW-886MW05	FTMM-66-GW-886RW01	FTMM-66-GW-886RW01-11.55	FTMM-66-GW-886RW02	FTMM-66-GW-886RW03	FTMM-66-GW-886RW04
Sample Date				8/23/2013	8/22/2013	8/22/2013	8/22/2013	8/22/2013	8/23/2013	10/3/2014	8/22/2013	8/22/2013	8/22/2013
QA/QC				SA	SA	SA	SA	SA	SA	SA	SA	SA	SA
Sampling Method				LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS
Phenol	2,000	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
Pyrene	200	NLE	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5.3	< 5	< 5	< 5
TIC SVOCs (µg/l)													
Total TIC, Semi-Volatile	500	NLE	-	**64.2**	**14 J**	**12 J**	**65 JN**	**18.3 J**	**878.9 JN**	**15.4 J**	**39.7 J**	ND	**15 J**
Inorganics (µg/l)													
Lead	5	15	22.7	< 2	< 2	**1.9 J**	< 2	< 2	< 2	NA	< 2	**1.9 J**	**0.863 J**

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Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	Weston 1995 Background (Main Post)	886RW05		886RW06			886RW07	886RW08	
Sample ID				FTMM-66-GW-886RW05	FTMM-66-GW-886RW105	FTMM-66-GW-886RW06	FTMM-66-GW-886RW06-10.12	FTMM-66-GW-886RW106-10.12	FTMM-66-GW-886RW07	FTMM-66-GW-886RW08	FTMM-66-GW-886RW08-11.22
Sample Date				8/22/2013	8/22/2013	8/22/2013	10/3/2014	10/3/2014	8/22/2013	8/22/2013	10/3/2014
QA/QC				SA	DU	SA	SA	DU	SA	SA	SA
Sampling Method				LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS
Volatile Organic Compounds (µg/l)											
1,1,1,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
1,1,1-Trichloroethane	30	200	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
1,1,2,2-Tetrachloroethane	1	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
1,1,2-Trichloroethane	3	5	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
1,1-Dichloroethane	50	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
1,1-Dichloroethene	1	7	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
1,1-Dichloropropene	100	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
1,2,3-Trichlorobenzene	100	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
1,2,3-Trichloropropane	0.03	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
1,2,4-Trichlorobenzene	9	70	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
1,2,4-Trimethylbenzene	100	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
1,2-Dibromo-3-chloropropane	0.02	0.2	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
1,2-Dibromoethane	0.03	0.05	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
1,2-Dichlorobenzene	600	600	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
1,2-Dichloroethane	2	5	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
1,2-Dichloropropane	1	5	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
1,3,5-Trimethylbenzene	100	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
1,3-Dichlorobenzene	600	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
1,3-Dichloropropane	100	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
1,4-Dichlorobenzene	75	75	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
2,2-Dichloropropane	100	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
2-Chlorotoluene	100	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Acetone	6,000	NLE	-	< 5	< 5	< 5	NA	NA	< 5	**1.6 J**	NA
Benzene	1	5	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Bromobenzene	100	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Bromochloromethane	100	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Bromodichloromethane	1	80	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Bromoform	4	80	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Carbon tetrachloride	1	5	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Chlorobenzene	50	100	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Chlorodibromomethane	1	80	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Chloroethane	5	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Chloroform	70	80	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Cis-1,2-Dichloroethene	70	70	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Cis-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Cymene	100	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Dichlorodifluoromethane	1,000	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Ethyl benzene	700	700	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Hexachlorobutadiene	1	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Isopropylbenzene	700	NLE	-	< 1	< 1	< 1	NA	NA	< 1	**0.31 J**	NA
Meta & Para Xylenes	1,000	NLE	-	< 2	< 2	< 2	NA	NA	< 2	< 2	NA
Methyl bromide	10	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Methyl butyl ketone	300	NLE	-	< 5	< 5	< 5	NA	NA	< 5	< 5	NA
Methyl chloride	100	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Methyl ethyl ketone	300	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Methyl isobutyl ketone	100	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Methyl Tertbutyl Ether	70	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Methylene chloride	3	5	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Naphthalene	300	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
n-Butylbenzene	100	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Ortho Xylene	1,000	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
p-Chlorotoluene	100	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Propylbenzene	100	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
sec-Butylbenzene	100	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Styrene	100	100	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
tert-Butylbenzene	100	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Tetrachloroethene	1	5	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Toluene	600	1,000	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Total TIC, Volatile	500	NLE	-	ND	ND	ND	NA	NA	ND	ND	NA
Total Xylenes	1,000	10,000	-	< 3	< 3	< 3	NA	NA	< 3	< 3	NA
Trans-1,2-Dichloroethene	100	100	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Trans-1,3-Dichloropropene	1	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Trichloroethene	1	5	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Trichlorofluoromethane	2,000	NLE	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA
Vinyl chloride	1	2	-	< 1	< 1	< 1	NA	NA	< 1	< 1	NA

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-66 Building 886 Former AST
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	Weston 1995 Background (Main Post)	886RW05		886RW06			886RW07	886RW08	
Sample ID				FTMM-66-GW-886RW05	FTMM-66-GW-886RW105	FTMM-66-GW-886RW06	FTMM-66-GW-886RW06-10.12	FTMM-66-GW-886RW106-10.12	FTMM-66-GW-886RW07	FTMM-66-GW-886RW08	FTMM-66-GW-886RW08-11.22
Sample Date				8/22/2013	8/22/2013	8/22/2013	10/3/2014	10/3/2014	8/22/2013	8/22/2013	10/3/2014
QA/QC				SA	DU	SA	SA	DU	SA	SA	SA
Sampling Method				LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS
Semivolatile Organic Compounds (µg/l)											
1,2,4-Trichlorobenzene	9	70	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
1,2-Dichlorobenzene	600	600	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
1,2-Diphenylhydrazine	20	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
1,3-Dichlorobenzene	600	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
1,4-Dichlorobenzene	75	75	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
2,4,5-Trichlorophenol	700	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
2,4,6-Trichlorophenol	20	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
2,4-Dichlorophenol	20	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
2,4-Dimethylphenol	100	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
2,4-Dinitrophenol	40	NLE	-	< 25	< 25	< 25	< 28	< 28	< 25	< 25	< 28
2,4-Dinitrotoluene	10	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
2,6-Dinitrotoluene	10	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
2-Chloronaphthalene	600	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
2-Chlorophenol	40	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
2-Methylnaphthalene	30	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
2-Methylphenol	100	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
2-Nitroaniline	100	NLE	-	< 25	< 25	< 25	< 28	< 28	< 25	< 25	< 28
2-Nitrophenol	100	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
3,3'-Dichlorobenzidine	30	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
3+4-Methylphenol	NLE	NLE	-	< 10	< 10	< 10	NA	NA	< 10	< 10	NA
3-Nitroaniline	100	NLE	-	< 25	< 25	< 25	< 28	< 28	< 25	< 25	< 28
4,6-Dinitro-2-methylphenol	1	NLE	-	< 25	< 25	< 25	< 28	< 28	< 25	< 25	< 28
4-Bromophenyl phenyl ether	100	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
4-Chloro-3-methylphenol	100	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
4-Chloroaniline	30	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
4-Chlorophenyl phenyl ether	100	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
4-Methylphenol	NLE	NLE	-	NA	NA	NA	< 11	< 11	NA	NA	< 11
4-Nitroaniline	5	NLE	-	< 25	< 25	< 25	< 28	< 28	< 25	< 25	< 28
4-Nitrophenol	100	NLE	-	< 25	< 25	< 25	< 28	< 28	< 25	< 25	< 28
Acenaphthene	400	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Acenaphthylene	100	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Anthracene	2,000	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Benzidine	20	NLE	-	< 100	< 100	< 100	< 110 UJ	< 110 UJ	< 100	< 100	< 110
Benzo(a)anthracene	0.1	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Benzo(a)pyrene	0.1	0.2	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Benzo(b)fluoranthene	0.2	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Benzo(ghi)perylene	100	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Benzo(k)fluoranthene	0.5	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Benzyl alcohol	2,000	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Bis(2-Chloroethoxy)methane	100	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Bis(2-Chloroethyl)ether	7	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Bis(2-Chloroisopropyl)ether	300	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Bis(2-Ethylhexyl)phthalate	3	6	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Butyl benzyl phthalate	100	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Carbazole	100	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Chrysene	5	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Dibenz(a,h)anthracene	0.3	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Dibenzofuran	100	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Diethyl phthalate	6,000	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Dimethyl phthalate	100	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Di-n-butylphthalate	700	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Di-n-octylphthalate	100	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Fluoranthene	300	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Fluorene	300	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Hexachlorobenzene	0.02	1	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Hexachlorobutadiene	1	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Hexachlorocyclopentadiene	40	50	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Hexachloroethane	7	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Indeno(1,2,3-cd)pyrene	0.2	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Isophorone	40	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Naphthalene	300	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Nitrobenzene	6	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
N-Nitrosodimethylamine	0.8	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
N-Nitroso-di-n-propylamine	10	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
N-Nitrosodiphenylamine	10	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Pentachlorophenol	0.3	1	-	< 25	< 25	< 25	< 28	< 28	< 25	< 25	< 28
Phenanthrene	100	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-66 Building 886 Former AST
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	Weston 1995 Background (Main Post)	886RW05		886RW06			886RW07	886RW08	
Sample ID				FTMM-66-GW-886RW05	FTMM-66-GW-886RW105	FTMM-66-GW-886RW06	FTMM-66-GW-886RW06-10.12	FTMM-66-GW-886RW106-10.12	FTMM-66-GW-886RW07	FTMM-66-GW-886RW08	FTMM-66-GW-886RW08-11.22
Sample Date				8/22/2013	8/22/2013	8/22/2013	10/3/2014	10/3/2014	8/22/2013	8/22/2013	10/3/2014
QA/QC				SA	DU	SA	SA	DU	SA	SA	SA
Sampling Method				LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS	LFPS
Phenol	2,000	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
Pyrene	200	NLE	-	< 5	< 5	< 5	< 5.6	< 5.6	< 5	< 5	< 5.6
TIC SVOCs (µg/l)											
Total TIC, Semi-Volatile	500	NLE	-	ND	ND	**468.7 J**	ND	ND	**13 J**	**707 JN**	**46.4 J**
Inorganics (µg/l)											
Lead	5	15	22.7	**2.2 J**	**1.4 J**	**1.4 J**	NA	NA	**1.7 J**	< 2	NA

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-66 Building 886 Former AST
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Footnote:
1) All historical data collected prior to 2013 are reported as provided by others.
2) Number of Analyses is the number of detected and non-detected results excluding rejected results. Sample duplicate pairs have not been averaged.
3) NLE = no limit established.
4) ND = not detected in any background sample, no background concentration available.

5) Chemical result qualifiers are assigned by the laboratory and is typically evaluated and modified (if necessary) by during data validation.
[blank] = detect, i.e. detected chemical result value.
B = Compound detected in the sample and its associated blank sample.
R = Rejected, data validation rejected the results.
U = non-detect, i.e. not detected equal to or above this value.
U-DL = Elevated sample detection limit due to difficult sample matrix.
U-ND = Analyte not detected in sample, but no detection or reporting limit provided.
J = estimated (detect or non-detect) value.
E (or ER) = Estimated result.
D = Results from dilution of sample.
J-DL = Elevated sample detection limit due to difficult sample matrix.
JN = Tentatively identified compound, estimated concentration.

6) Chemical results greater than or equal to the action level (depending on criteria) are highlighted based on the Criteria that are present.
- Cell Shade values represent a result that is above the NJ Ground Water Quality Criteria ####

NJDEP Interim Specific GWQC values are presented for the NJ GWQS where there is not a Specific Ground Water Quality Criteria. A full list of compounds is available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).

NJDEP Interim Generic GWQC values are presented for the NJ GWQS where there is not a XXXXX or a NJDEP Interim Specific GWQC. Available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).
- Bold Outline represent a result that is above the USEPA 2014-05 MCL. ###
- Cell Style values represent a result that is above the Weston 1995 Background (Main Post). ###
n/a = all concentrations were less than the detection limit, therefore, no location of maximum value identified.
Dash (-) = only background concentrations for metals are being used as comparison criteria.

7) Criteria action level source document and web address.
- The NJ Ground Water Quality Criteria refers to the NJDEP Groundwater Quality Standards - Adopted July 22, 2010
http://www.state.nj.us/dep/wms/bwqsa/docs/njac79C.pdf
- The 2014-05 USEPA MCL refers to the USEPA's Region 9 Regional Screening Levels (HQ=1.0) - 5/31/2014 (Last revised)
http://www.epa.gov/region9/superfund/prg/
- The Weston 1995 Background (Main Post) refers to the FTMM reports.
NA

8) Wells sampled in the fourth quarter are highlighted in yellow. Sample ID

Table 4
Review of Historical Groundwater Sampling Results
Site FTMM-66 Building 886 Former AST
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site Name/ Well ID	Interpretation of Historical and 2014 Results [1]			2014 Evaluation				Retain Analyte/Well (Yes or No)	Rationale
	Chem Class / Analyte	Does it Exceed NJDEP GWQS (Yes or No) (If Yes, identify compound)	Do Metals Exceed FTMM Background Concentration (Yes or No) (If yes, identify compound)	Seasonal Effect?[2] (Y/N)	Anomaly? (Y/N)	Exceedance part of overall trend? (Y/N)	Well needed for sentinel purposes? (Y/N)		
FTMM-66, B886									
886RW01	SVOC	SVOC Total TICs	No	No	No	No	No	Yes	Metals and VOCs discontinued in 2013. Continue sampling one additional round to confirm annual 2014 groundwater sampling results are below NJDEP GWQS.
886RW06		As, Pb	No	N/A	N/A	N/A	Yes	Yes	Metals and VOCs discontinued in 2013. Continue sampling one additional round to confirm annual 2014 groundwater sampling results are below NJDEP GWQS.
886RW08		SVOC Total TICs	No	No	No	No	No	Yes	Metals and VOCs discontinued in 2013. Continue sampling one additional round to confirm annual 2014 groundwater sampling results are below NJDEP GWQS.

Notes

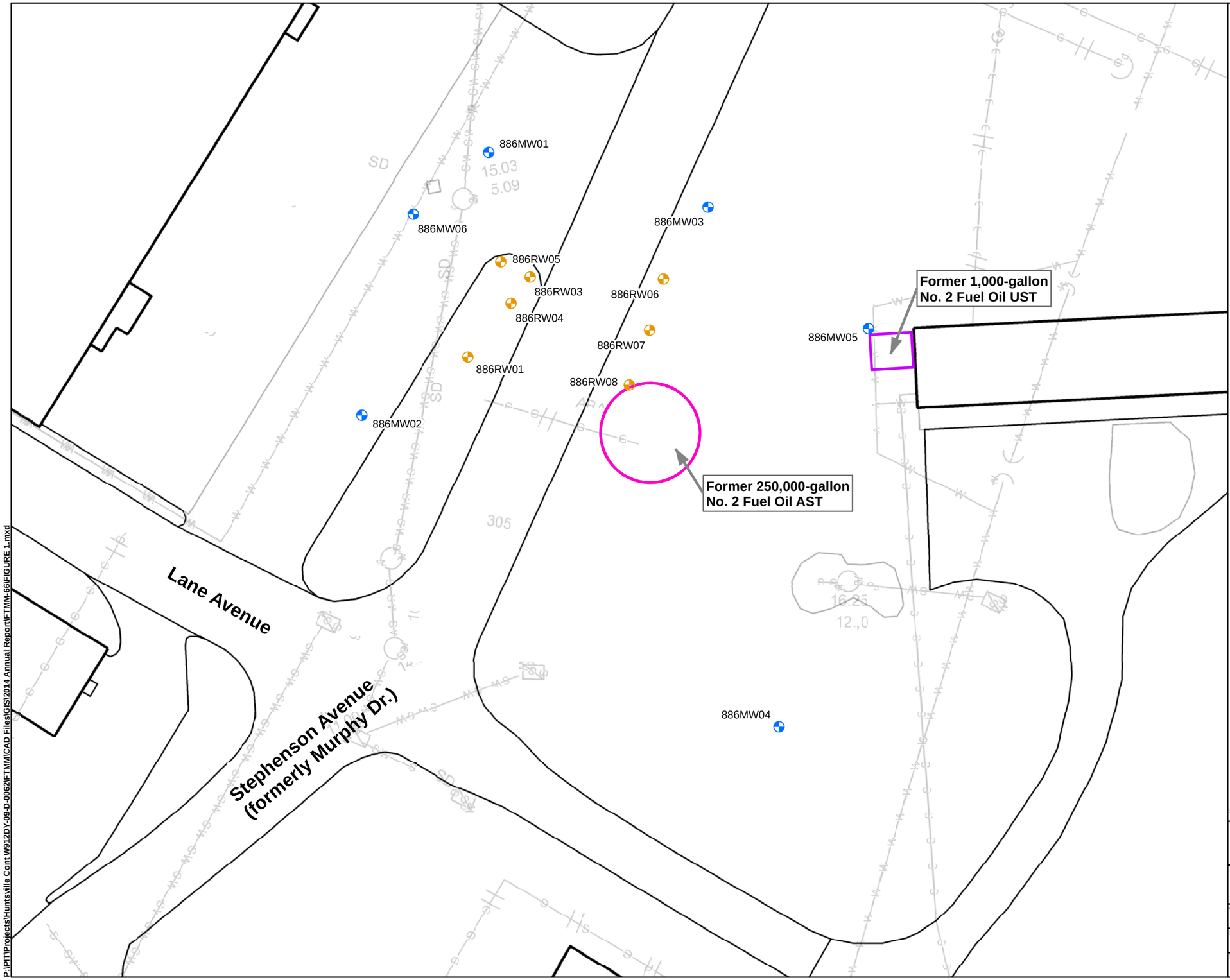
1. Has any of the analyte compounds exceeded the NJDEP GWQS in the 2014 data and the 4 previous quarterly data rounds or 2 previous annual rounds?
   a. If yes then keep analyte in LTM list
   b. If no then remove this analyte from LTM list
   c. a and b above may be occasionally superseded on a case-by-case basis, depending on site conditions.
2. Has any of the analyte compounds exceeded the NJDEP GWQS seasonally (winter spring vs. summer fall)?
3. TIC - Tentatively Identified Compound
4. N/A - Not applicable

5. Per the 2/5/15 NJDEP approval letter of the Final 2013 Baseline Groundwater Report, groundwater monitoring wells 886MW01, 886MW02, 886MW03, 886MW04, 886MW05, 886RW02, 886RW03, 886RW04, 886RW05 and 886RW07 were removed from the long term monitoring sampling program and VOC and lead analysis were discontinued in 2014.

FIGURES

Figure 1 Layout of FTMM-66 Building 886 Former AST

Figure 2 FTMM-66 Shallow Groundwater Contours - September 29, 2014



LEGEND:

- Shallow Monitoring Well
- Recovery Well
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line

N

1 inch = 40 feet

0 20 40 80 Feet

Source: FTMM Supplied CAD, 2013.

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey

LAYOUT OF FTMM-66
BUILDING 886 FORMER AST

CREATED BY: RR	REVIEWED BY: ME
DATE: NOV. 2015	FIGURE NUMBER: FIGURE 1
PROJECT NUMBER: 748810-01000	FILE: FIGURE 1.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-66\FIGURE 1.mxd

886MW01
6.67

886MW06
8.15

886MW03
6.91

886RW05
6.89

886RW03
7.01

886RW04
7.04

886RW02
7.02

886RW01
7.07

886RW06
7.94

886RW07
7.04

886RW08
7.23

886MW05
7.32

886MW02
7.24

886MW04
10.16

812MW10

812MW11

Former 1,000-gallon
No. 2 Fuel Oil UST

Former 250,000-gallon
No. 2 Fuel Oil AST

Lane Avenue

Stephenson Avenue
(formerly Murphy Dr.)

LEGEND:

- Shallow Monitoring Well
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line
- Groundwater Elevation Contour
- Inferred Groundwater Flow Direction

NOTE:

The groundwater elevation at monitoring well 886MW06 was considered anomalous compared to the fluid levels at neighboring wells.

N

1 inch = 40 feet

0 20 40 80 Feet

Source: FTMM Supplied CAD, 2013.

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
FTMM-66 SHALLOW GROUNDWATER CONTOURS - SEPTEMBER 29, 2014	
CREATED BY: RR	REVIEWED BY: ME
DATE: OCT. 2015	FIGURE NUMBER: FIGURE 2
PROJECT NUMBER: 748810-01000	FILE: FIGURE 2.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-66\FIGURE 2.mxd

ATTACHMENTS

Attachment A LFPS Field Sheets

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LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS	CLIENT: ACOE	WELL #: 886RW01

PROJECT: Fmr 4A GW sampling
AOC # (AREA): M-66
SCREENED INTERVAL (TOC): 1.45-16.45
WELL DIAMETER (in.): 6

WELL PERMIT #: 29-47846
DATE: 10/3/14
SAMPLING PERSONNEL NAME: C. Watson
SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	(6)	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0
WELL DEPTH (TOC): 16.45
FEET OF WATER IN WELL (ft): 9.8

FEET OF SATURATED SCREEN (ft): 7.8
DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 6.65
PUMP INTAKE DEPTH (ft below TOC): 11.55

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
0935	X		7.09	NA	0.207	NA	28.3	NA	1.30	NA	311.8	NA	18.15	NA	300	6.70
0940	X		6.77	.32	0.194	0.013	39.4	11.1	0.30	1.00	310.6	1.2	18.50	0.35	300	6.79
0945	X		6.70	0.07	0.197	0.003	42.1	2.7	1.17	0.87	293.0	17.6	18.64	0.14	300	6.89
0950	X		6.69	0.01	0.205	0.008	41.6	0.5	1.12	0.05	278.2	14.8	18.67	0.03	300	6.96
0955	X		6.69	⊘	0.216	0.011	41.4	0.2	1.10	0.02	253.6	24.6	18.69	0.02	250	6.98
1000	X		6.71	0.02	0.220	0.004	40.6	0.8	1.10	⊘	249.8	3.8	18.70	0.01	250	6.98
1005	X		6.72	0.01	0.224	0.004	40.2	0.4	1.08	0.02	244.4	5.4	18.74	0.04	250	6.98
1010	X		6.74	0.02	0.224	⊘	39.8	0.4	1.09	0.01	244.1	0.3	18.77	0.03	250	6.99
1015		X	6.74	⊘	0.226	0.002	39.2	0.6	1.07	0.02	242.1	2.0	18.78	0.01	250	6.99

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | **CLIENT:** ACOE | **WELL #:** 856RW06

PROJECT: FTMM UGGW | **WELL PERMIT #:** 29-47845

AOC # (AREA): FTMM-66 | **DATE:** 10/3/14

SCREENED INTERVAL (TOC): 2-17 | **SAMPLING PERSONNEL NAME:** N. Gibbs

WELL DIAMETER (In.): 6 | **SAMPLING PERSONNEL NAME:**

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0

WELL DEPTH (TOC): 15.30

FEET OF WATER IN WELL (ft): 5.95

FEET OF SATURATED SCREEN (ft): 5.95

DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 9.15

PUMP INTAKE DEPTH (ft below TOC): 10.10

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
1045	X		6.13	NA	0.167	NA	55.0	NA	6.49	NA	76.3	NA	19.39	NA	400	7.84
1050	X		6.00	.13	0.156	.011	102.7	17.7	7.98	0.53	67.7	6.4	18.05	1.34	400	7.56
1055	X		6.03	.02	0.156	0	104.5	1.8	7.97	0.01	68.4	0.3	18.38	0.33	300	7.63
1100	X		6.00	-.02	0.156	0	111.1	6.6	7.87	0.10	81.4	1.0	18.09	0.41	300	7.70
1105	X		5.96	.04	0.156	0	118.7	7.6	7.80	0.07	80.0	1.4	18.46	0.33	300	7.72
1110		X	5.99	.03	0.156	0	120.0	1.3	7.84	0.04	79.8	0.2	18.50	0.04	300	7.74

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

LOW FLOW PURGE AND SAMPLING (LFPS) RECORD - GROUNDWATER

PARSONS | CLIENT: ACOE | WELL #: SS61RWCB

PROJECT: STMM 4Q(4)
AOC # (AREA): STMM-66
SCREENED INTERVAL (TOC): 2-17
WELL DIAMETER (in.) 6

WELL PERMIT #: 29-478447
DATE: 10/3/14
SAMPLING PERSONNEL NAME: N. Wilcox
SAMPLING PERSONNEL NAME:

BOREHOLE DIAMETER FACTORS

DIAMETER (INCHES):	1	1.5	2	3	4	5	6	7	8	9	10
GALLONS/FOOT:	0.041	0.092	0.163	0.367	0.654	1.02	1.47	2	2.61	3.3	5.87

WELL HEAD VOC CONCENTRATION (ppm): 0.0
WELL DEPTH (TOC): 15.72
FEET OF WATER IN WELL (ft): 9.00

FEET OF SATURATED SCREEN (ft): 9.00
DEPTH TO WATER BEFORE PUMP INSTALLATION (ft below TOC): 6.72
PUMP INTAKE DEPTH (ft below TOC): 11.72

PURGING AND SAMPLING

TIME	PURGING	SAMPLING	pH (pH units) READING	pH CHANGE*	SPECIFIC CONDUCTIVITY (mS/cm) READING	SPECIFIC CONDUCTIVITY CHANGE*	REDOX POTENTIAL (mv) READING	REDOX POTENTIAL CHANGE*	DISSOLVED OXYGEN (mg/L) READING	DISSOLVED OXYGEN CHANGE*	TURBIDITY (NTU) READING	TURBIDITY CHANGE*	TEMPERATURE (degrees C) READING	TEMPERATURE CHANGE*	PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
0925	X		6.90	NA	0.236	NA	-20.6	NA	2.33	NA	54.3	NA	17.31	NA	350	6.74
0930	X		6.15	.75	0.195	.041	2.0	22.6	0.68	1.65	46.1	8.2	17.20	.11	350	7.04
0935	X		6.02	.13	0.194	.001	6.5	4.5	0.56	0.12	37.4	8.7	17.30	.10	300	7.22
0940	X		6.01	.01	0.193	.001	7.8	1.3	0.56	0	40.5	3.1	17.36	.06	250	7.31
0945	X		5.97	.04	0.193	0	10.6	2.8	0.54	0.02	39.0	1.5	17.30	.06	200	7.40
0950	X		5.96	.01	0.194	.001	11.5	0.9	0.56	0.02	37.7	1.3	17.54	.24	150	7.43
0955	X		6.00	.02	0.194	0	12.0	0.5	0.57	0.01	37.0	0.7	17.64	.10	150	7.45
1000		X	5.99	.01	0.194	0	12.5	0.5	0.55	0.02	37.5	0.5	17.63	.01	150	7.47

*Indicator readings have stabilized when 3 consecutive readings are within: +/- 0.1 for pH; =+/- 3% for Specific Conductivity and Temperature; +/- 10 mv for Redox Potential; and +/- 10% for Dissolved Oxygen and Turbidity

APPENDIX N

FTMM-68: FORMER DRY CLEANERS UST AT BUILDING 700

APPENDIX N: FTMM-68 Former Dry Cleaners UST at Building 700

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3	Groundwater Analytical Results - 2013 and 2014
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1	Layout of FTMM-68 Former Dry Cleaners UST at Building 700

LIST OF ATTACHMENTS

Attachment	Title
A	NJDEP PDB Checklists

1.0 WATER LEVEL MEASUREMENTS AND WELL ASSESSMENT

Monitoring wells located within FTMM-68 were gauged on September 30, 2014. Monitoring well locations as well as other site features are provided in **Figure 1**. Details regarding the water level measurements are provided in **Table 1**. The depth to groundwater measured from the top of well casing in monitoring wells 565MW01 and 565MW01D was 9.06 and 9.20 feet, respectively. Well details, including the top of well casing elevations, were not available at the time of this report, therefore groundwater elevations could not be calculated. Groundwater is expected to flow towards the east toward Huskey Brook based on local topography and groundwater elevations calculated in nearby monitoring wells at FTMM-53.

Additionally, monitoring wells were inspected for their physical condition during the groundwater gauging. FTMM-68 monitoring wells were found to be in good condition upon inspection.

2.0 GROUNDWATER SAMPLING

Groundwater samples were collected from two monitoring wells (565MW01 and 565MW01D) located within FTMM-68 as part of the annual (fourth quarter) 2014 groundwater sampling event. FTMM-68 is sampled on a quarterly basis. The groundwater sampling program included measuring the depth to groundwater in the two FTMM-68 monitoring wells prior to sampling and collection of groundwater samples using passive diffusion bags (PDBs) methodology. PDBs were deployed in FTMM-68 monitoring wells on September 30, 2014 and samples were retrieved on December 18, 2014. A PDB sampling summary is provided in **Table 2**. Groundwater samples were analyzed for Target Compound List (TCL) volatile organic compounds and tentatively identified compounds (VOCs+TICs) via United States Environmental Protection Agency (USEPA) Method SW8260C.

The samples were collected in accordance with the New Jersey Department of Environmental Protection (NJDEP) Field Sampling Procedures Manual (FSPM) and the Sampling Analysis Plan (SAP). Field blanks, duplicates, matrix spike, matrix spike duplicate and quality assurance (QA) split samples were collected for every 5% of samples collected per parameter, per matrix, in accordance with the Quality Assurance Project Plan (QAPP). Trip blanks accompanied each cooler each day in which VOCs were collected for laboratory analysis.

Completed NJDEP PDB checklists for each well sampled are provided in **Attachment A**.

3.0 HISTORICAL GROUNDWATER SAMPLING RESULTS

The groundwater sampling event conducted in August 2013 was the initial sampling event for monitoring wells 565MW01 and 565MW01D since they were installed.

Groundwater analytical results from samples collected from the two wells for VOC analysis during the August 2013 sampling event are presented in **Table 3**. The compounds cis-1,2-dichloroethene (cis-1,2-DCE), tetrachloroethene (PCE), trichloroethene (TCE), and vinyl chloride (VC) were detected in exceedance of their respective NJDEP Ground Water Quality Standards (GWQS) in monitoring well 565MW01 at FTMM-68. Additionally, PCE and TCE were detected above their respective NJDEP GWQS in 565MW01D.

Groundwater sampling at FTMM-68 has been conducted on a quarterly basis for 2014, in March, May, and September. This data has been presented in reports submitted quarterly to the NJDEP. The groundwater analytical data for the samples collected during the three 2014 quarterly events are presented in **Table 3**.

In the three 2014 quarterly groundwater sampling events (March, July, and September), 1,1-dichloroethene (1,1 DCE), cis-1,2-DCE, PCE, TCE, and VC were detected above their respective NJDEP GWQS in monitoring well 565MW01. 1,1 DCE was detected above its GWQS (1µg/L) at concentrations ranging from 2 µg/L to 3.2 µg/L. Cis-1,2-DCE was detected above its GWQS (70 µg/L) at concentrations ranging from 190 µg/L to 270 µg/L. PCE was detected above its GWQS (1µg/L) at concentrations ranging from 350 µg/L to 700 µg/L. TCE was detected above its GWQS (1µg/L) at concentrations ranging from 160 µg/L to 230 µg/L. VC was detected above its GWQS (1µg/L) at concentrations ranging from 13 µg/L to 18 µg/L.

Additionally, cis-1,2-DCE, PCE, TCE and VC were detected in 565MW01D above their respective NJDEP GWQS. Cis-1,2-DCE was detected above its GWQS (70µg/L) at concentrations ranging from 120 µg/L to 140 µg/L. PCE was detected above its GWQS (1µg/L) at concentrations ranging from 1,500 µg/L to 4,800 µg/L. TCE was detected above its GWQS of (1µg/L) at concentrations ranging from 18 µg/L to 110 µg/L. VC was detected above its GWQS (1µg/L) at concentrations ranging from 5.5 µg/L to 6.1 µg/L.

4.0 ANNUAL (FOURTH QUARTER) 2014 GROUNDWATER RESULTS

Four chlorinated VOCs (cis-1,2-DCE, PCE, TCE, and VC) were detected in groundwater samples collected during the annual (fourth quarter) 2014 event at concentrations above their respective NJDEP GWQS of 70 µg/L, 1 µg/L, 1 µg/L and 1 µg/L. Cis-1,2-DCE (110 µg/L), PCE (180 µg/L) TCE (86 µg/L), and VC (1.3J µg/L) were detected at well 565MW01. PCE and TCE were detected at concentrations of 2,400 µg/L and 41J µg/L at monitoring well 565MW01D. Groundwater analytical results for the annual (fourth quarter) 2014 groundwater sampling event is presented in **Table 3**.

5.0 FINDINGS AND RECOMMENDATIONS

Concentrations of five VOCc (1,1-DCE, cis-1,2-DCE, TCE, PCE and VC) were detected above their NJDEP GWQS at least once during the 2014 quarterly sampling events. 1,1-DCE concentrations have been detected at well 565MW01 during the quarterly sampling with exceedences occurring in second and third quarter of 2014. Cis-1,2-DCE and VC concentrations have been detected above their NJDEP GWQS in all four quarters of 2014 at well 565MW01 and only in the first quarter of 2014 at well 565MW01D. TCE and PCE were detected above the NJDEP GWQS in all four quarters of 2014 at both wells. The detection of TCE degradation byproducts (e.g. 1,1 DCE, cis-1,2 DCE and vinyl chloride) indicates that natural attenuation is taking place at both of the wells. Due to the continued presence of VOCs at concentrations above the NJDEP GWQS during 2014 quarterly groundwater sampling events, it is recommended that groundwater monitoring for VOCs using PDB sampling methodology be continued in FTMM-68 monitoring wells on a quarterly basis.

Currently FTMM-68 has not been fully characterized, however, a remedial investigation (RI) is proposed for this site in 2015 and sampling of existing and proposed wells using the low-flow purging and sampling (LFPS) method will be implemented. In the meantime, PDBs will continue to be used to monitor and characterize the groundwater concentrations at FTMM-68. The two existing wells are located in the potential source area and the detected VOCs have a high enough concentrations for the use of PDBs (even though they can provide results that are biased low) to effectively characterize the VOC concentrations. Additionally, once the RI is complete, the long term monitoring plan for FTMM-68 will be evaluated and revised, if necessary.

A review of the historical groundwater sampling results is presented in **Table 4**, which also provides the matrix used to determine the status of wells relative to future groundwater sampling and analyses.

TABLES

Table 1 Groundwater Gauging Data and Elevations (September 30, 2014)

Table 2 Historical Groundwater Analytical Results

Table 3 Groundwater Analytical Results - 2013 and 2014

Table 4 Review of Historical Groundwater Sampling Results

Table 1
Groundwater Gauging Data and Elevations (September 30, 2014)
Site FTMM-68 Former Dry Cleaners UST at Building 700
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site/Well ID	Installation Date	Well Permit #	Y Coord. (North)	X Coord. (East)	Depth (ft. bgs)	Casing Length (ft)	Screen Length (ft)	TOC Elevation (ft)	Gauge Time	PID Reading (ppm)	Gauged Depth to Water (ft. TOC)	Gauged Depth to Bottom (ft. TOC)	Calculated Groundwater Elevation (ft)
Shallow Monitoring Wells													
565MW01	8/16/2011	N/A	N/A	N/A	15.0	5.0	10.0	0.00	8:34	0.0	9.06	17.15	N/A
Deep Monitoring Wells													
565MW01D	8/16/2011	N/A	N/A	N/A	23.0	18.0	5.0	0.00	8:35	0.0	9.20	25.38	N/A

Notes:
1) The synoptic round of water levels in the wells was collected on September 30, 2014.
2) Information on well permit number, X and Y coordinates, depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
3) ft = feet
4) DTW = depth to water (measured from the top of well casing)
5) DTB = depth to bottom of well (measured from the top of well casing)
6) bgs = below ground surface
7) ppm = parts per million (of VOCs)
8) TOC = Top of Casing
9) Elevation = feet above mean sea level
10) N/A = information not available

Table 2
PDB Sampling Summary
Site FTMM-68 Former Dry Cleaners UST at Building 700
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

Site/Well ID	Profile Date	Depth (ft. bgs)	Screen Length (ft.)	Screen Interval (ft. bgs)	TOC Elev. (ft)	Gauge Date	Gauge Time	PID Reading (ppm)	Gauged DTW (ft. below TOC)	Gauged DTB (ft. below TOC)	GW Elevation (ft)	Saturated Screen Length (ft)	PDB Depth to Center of Bag #1 (ft. below TOC)	PDB Depth to Center of Bag #2 (ft. below TOC)	PDB Deploy Date	PDB Deploy Time	PDB Sample Date	PDB Sample Time
565MW01	8/29/2013	15.0	10.0	5-15	0.00	9/30/2014	8:34	0.0	9.06	17.15	N/A	8.09	11.99	N/A	9/30/2014	10:35	12/18/2014	10:36
565MW01D	8/29/2013	23.0	5.0	18-23	0.00	9/30/2014	8:35	0.0	9.20	25.38	N/A	5.00	22.31	N/A	9/30/2014	10:20	12/18/2014	10:28

Notes:
1) Information on well depth, screen length, screen interval and TOC elevation were provided by FTMM in a table in June 2013.
2) DTW = depth to water (measured from the top of well casing)
3) DTB = depth to bottom of well (measured from the top of well casing)
4) TOC = Top of Casing
5) ft. AMSL = feet above mean sea level
6) LFPS = Low-Flow Purging and Sampling
7) PDB = Passive Diffusion Bag
8) N/A = not applicable
9) bgs = below ground surface

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-68 Former Dry Cleaners UST at Building 700
Annual (Fourth Quarter) 2014 Groundwater Sampling Event
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	565MW01				
Sample ID			FTMM-68-GW-565MW01-11.99	FTMM-68-GW-565MW01-11.99	FTMM-68-GW-565MW01-11.99	FTMM-68-GW-565MW01-11.99	FTMM-68-GW-565MW01-11.99
Sample Date			8/29/2013	3/31/2014	7/1/2014	9/30/2014	12/18/2014
QA/QC			SA	SA	SA	SA	SA
Sampling Method			PDB	PDB	PDB	PDB	PDB
Volatile Organic Compounds (µg/l)							
1,1,1,2-Tetrachloroethane	1	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
1,1,1-Trichloroethane	30	200	< 2.5	< 2.5	< 2.5	< 5	< 2
1,1,2,2-Tetrachloroethane	1	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
1,1,2-Trichloroethane	3	5	< 2.5	< 2.5	< 2.5	< 5	< 2
1,1-Dichloroethane	50	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
1,1-Dichloroethene	1	7	< 2.5	**2 J**	**2.1 J**	**3.2 J**	< 2
1,1-Dichloropropene	100	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
1,2,3-Trichlorobenzene	100	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
1,2,3-Trichloropropane	0.03	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
1,2,4-Trichlorobenzene	9	70	< 2.5	< 2.5	< 2.5	< 5	< 2
1,2,4-Trimethylbenzene	100	NLE	< 2.5	**0.83 J**	< 2.5	< 5	< 2
1,2-Dibromo-3-chloropropane	0.02	0.2	< 2.5	< 2.5	< 2.5	< 5	< 2
1,2-Dibromoethane	0.03	0.05	< 2.5	< 2.5	< 2.5	< 5	< 2
1,2-Dichlorobenzene	600	600	< 2.5	< 2.5	< 2.5	< 5	< 2
1,2-Dichloroethane	2	5	< 2.5	< 2.5	< 2.5	< 5	< 2
1,2-Dichloropropane	1	5	< 2.5	< 2.5	< 2.5	< 5	< 2
1,3,5-Trimethylbenzene	100	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
1,3-Dichlorobenzene	600	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
1,3-Dichloropropane	100	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
1,4-Dichlorobenzene	75	75	< 2.5	< 2.5	< 2.5	< 5	< 2
2,2-Dichloropropane	100	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
2-Chlorotoluene	100	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
Acetone	6,000	NLE	**7 BJ**	< 13	**3.2 J**	**13 J**	< 10
Benzene	1	5	< 2.5	< 2.5	< 2.5	< 5	< 2
Bromobenzene	100	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
Bromochloromethane	100	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
Bromodichloromethane	1	80	< 2.5	< 2.5	< 2.5	< 5	< 2
Bromoform	4	80	< 2.5	< 2.5	< 2.5	< 5	< 2
Carbon tetrachloride	1	5	< 2.5	< 2.5	< 2.5	< 5	< 2
Chlorobenzene	50	100	< 2.5	< 2.5	< 2.5	< 5	< 2
Chlorodibromomethane	1	80	< 2.5	< 2.5	< 2.5	< 5	< 2
Chloroethane	5	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
Chloroform	70	80	< 2.5	**0.85 J**	< 2.5	< 5	< 2
Cis-1,2-Dichloroethene	70	70	**150**	**270**	**190**	**210**	**110**
Cis-1,3-Dichloropropene	1	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
Cymene	100	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
Dichlorodifluoromethane	1,000	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2 UJ
Ethyl benzene	700	700	< 2.5	< 2.5	< 2.5	< 5	< 2
Hexachlorobutadiene	1	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
Isopropylbenzene	700	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
Meta & Para Xylenes	1,000	NLE	< 5	< 5	< 5	< 10	< 4
Methyl bromide	10	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2 UJ
Methyl butyl ketone	300	NLE	< 13	< 13	< 13	< 25	< 10
Methyl chloride	100	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
Methyl ethyl ketone	300	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
Methyl isobutyl ketone	100	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
Methyl Tertbutyl Ether	70	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
Methylene chloride	3	5	< 2.5	< 2.5	< 2.5	< 5	< 2
Naphthalene	300	NLE	< 2.5	**4.8 J**	< 2.5	< 5	< 2
n-Butylbenzene	100	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
Ortho Xylene	1,000	NLE	< 2.5	**0.58 J**	< 2.5	< 5	< 2
p-Chlorotoluene	100	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
Propylbenzene	100	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
sec-Butylbenzene	100	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
Styrene	100	100	< 2.5	< 2.5	< 2.5	< 5	< 2
Tert Butyl Alcohol	100	NLE	NA	NA	NA	< 100	< 40
tert-Butylbenzene	100	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
Tetrachloroethene	1	5	**300**	**440**	**350**	**700**	**180**
Toluene	600	1,000	< 2.5	< 2.5	< 2.5	< 5	< 2
Total TIC, Volatile	0.5	NLE	ND	ND	ND	ND	ND
Total Xylenes	1,000	10,000	< 7.5	**0.58 J**	NA	NA	NA
Trans-1,2-Dichloroethene	100	100	< 2.5	**1.9 J**	**1.3 J**	< 5	**0.78 J**
Trans-1,3-Dichloropropene	1	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-68 Former Dry Cleaners UST at Building 700
Annual (Fourth Quarter) 2014 Groundwater Sampling Event
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	565MW01				
Sample ID			FTMM-68-GW-565MW01-11.99	FTMM-68-GW-565MW01-11.99	FTMM-68-GW-565MW01-11.99	FTMM-68-GW-565MW01-11.99	FTMM-68-GW-565MW01-11.99
Sample Date			8/29/2013	3/31/2014	7/1/2014	9/30/2014	12/18/2014
QA/QC			SA	SA	SA	SA	SA
Sampling Method			PDB	PDB	PDB	PDB	PDB
Trichloroethene	1	5	**120**	**230**	**160**	**210**	**86**
Trichlorofluoromethane	2,000	NLE	< 2.5	< 2.5	< 2.5	< 5	< 2
Vinyl chloride	1	2	**11 J**	**18**	**13**	**16 J**	**1.3 J**

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-68 Former Dry Cleaners UST at Building 700
Annual (Fourth Quarter) 2014 Groundwater Sampling Event
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	565MW01D					
Sample ID			FTMM-68-GW-565MW01D-22.31	FTMM-68-GW-565MW01D-22.31	FTMM-68-GW-565MW101D-22.31	FTMM-68-GW-565MW01D-22.31	FTMM-68-GW-565MW01D-22.31	FTMM-68-GW-565MW01D-22.31
Sample Date			8/29/2013	3/31/2014	3/31/2014	7/1/2014	9/30/2014	12/18/2014
QA/QC			SA	SA	DU	SA	SA	SA
Sampling Method			PDB	PDB	PDB	PDB	PDB	PDB
Volatile Organic Compounds (µg/l)								
1,1,1,2-Tetrachloroethane	1	NLE	< 50	< 1	< 10	< 10	< 50	< 20
1,1,1-Trichloroethane	30	200	< 50	< 1	< 10	< 10	< 50	< 20
1,1,2,2-Tetrachloroethane	1	NLE	< 50	< 1	< 10	< 10	< 50	< 20
1,1,2-Trichloroethane	3	5	< 50	< 1	< 10	< 10	< 50	< 20
1,1-Dichloroethane	50	NLE	< 50	< 1	< 10	< 10	< 50	< 20
1,1-Dichloroethene	1	7	< 50	**0.67 J**	< 10	< 10	< 50	< 20
1,1-Dichloropropene	100	NLE	< 50	< 1	< 10	< 10	< 50	< 20
1,2,3-Trichlorobenzene	100	NLE	< 50	< 1	< 10	< 10	< 50	< 20
1,2,3-Trichloropropane	0.03	NLE	< 50	< 1	< 10	< 10	< 50	< 20
1,2,4-Trichlorobenzene	9	70	< 50	< 1	< 10	< 10	< 50	< 20
1,2,4-Trimethylbenzene	100	NLE	< 50	< 1	**4.6 J**	< 10	< 50	< 20
1,2-Dibromo-3-chloropropane	0.02	0.2	< 50	< 1	< 10	< 10	< 50	< 20
1,2-Dibromoethane	0.03	0.05	< 50	< 1	< 10	< 10	< 50	< 20
1,2-Dichlorobenzene	600	600	< 50	< 1	< 10	< 10	< 50	< 20
1,2-Dichloroethane	2	5	< 50	< 1	< 10	< 10	< 50	< 20
1,2-Dichloropropane	1	5	< 50	< 1	< 10	< 10	< 50	< 20
1,3,5-Trimethylbenzene	100	NLE	< 50	< 1	< 10	< 10	< 50	< 20
1,3-Dichlorobenzene	600	NLE	< 50	< 1	< 10	< 10	< 50	< 20
1,3-Dichloropropane	100	NLE	< 50	< 1	< 10	< 10	< 50	< 20
1,4-Dichlorobenzene	75	75	< 50	< 1	< 10	< 10	< 50	< 20
2,2-Dichloropropane	100	NLE	< 50	< 1	< 10	< 10	< 50	< 20
2-Chlorotoluene	100	NLE	< 50	< 1	< 10	< 10	< 50	< 20
Acetone	6,000	NLE	**200 J**	**1.5 J**	< 50	< 50	< 250	< 100
Benzene	1	5	< 50	< 1	< 10	< 10	< 50	< 20
Bromobenzene	100	NLE	< 50	< 1	< 10	< 10	< 50	< 20
Bromochloromethane	100	NLE	< 50	< 1	< 10	< 10	< 50	< 20
Bromodichloromethane	1	80	< 50	< 1	< 10	< 10	< 50	< 20
Bromoform	4	80	< 50	< 1	< 10	< 10	< 50	< 20
Carbon tetrachloride	1	5	< 50	< 1	< 10	< 10	< 50	< 20
Chlorobenzene	50	100	< 50	< 1	< 10	< 10	< 50	< 20
Chlorodibromomethane	1	80	< 50	< 1	< 10	< 10	< 50	< 20
Chloroethane	5	NLE	< 50	< 1	< 10	< 10	< 50	< 20
Chloroform	70	80	< 50	< 1	**2.7 J**	< 10	< 50	< 20
Cis-1,2-Dichloroethene	70	70	< 50	**140**	**120**	**34 J**	< 50	**49 J**
Cis-1,3-Dichloropropene	1	NLE	< 50	< 1	< 10	< 10	< 50	< 20
Cymene	100	NLE	< 50	< 1	< 10	< 10	< 50	< 20
Dichlorodifluoromethane	1,000	NLE	< 50	< 1	< 10	< 10	< 50	< 20 UJ
Ethyl benzene	700	700	< 50	< 1	< 10	< 10	< 50	< 20
Hexachlorobutadiene	1	NLE	< 50	< 1	< 10	< 10	< 50	< 20
Isopropylbenzene	700	NLE	< 50	< 1	< 10	< 10	< 50	< 20
Meta & Para Xylenes	1,000	NLE	< 100	< 2	< 20	< 20	< 100	< 40
Methyl bromide	10	NLE	< 50	**0.33 J**	< 10	< 10	< 50	< 20 UJ
Methyl butyl ketone	300	NLE	< 250	< 5	< 50	< 50	< 250	< 100
Methyl chloride	100	NLE	< 50	< 1	< 10	< 10	< 50	< 20
Methyl ethyl ketone	300	NLE	< 50	< 1	< 10	< 10	< 50	< 20
Methyl isobutyl ketone	100	NLE	< 50	< 1	< 10	< 10	< 50	< 20
Methyl Tertbutyl Ether	70	NLE	< 50	< 1	< 10	< 10	< 50	< 20
Methylene chloride	3	5	< 50	< 1	< 10	< 10	< 50	< 20
Naphthalene	300	NLE	< 50	< 1	**12 J**	< 10	< 50	< 20
n-Butylbenzene	100	NLE	< 50	< 1	< 10	< 10	< 50	< 20
Ortho Xylene	1,000	NLE	< 50	< 1	< 10	< 10	< 50	< 20
p-Chlorotoluene	100	NLE	< 50	< 1	< 10	< 10	< 50	< 20
Propylbenzene	100	NLE	< 50	< 1	< 10	< 10	< 50	< 20
sec-Butylbenzene	100	NLE	< 50	< 1	< 10	< 10	< 50	< 20
Styrene	100	100	< 50	< 1	< 10	< 10	< 50	< 20
Tert Butyl Alcohol	100	NLE	NA	NA	NA	NA	< 1000	< 400
tert-Butylbenzene	100	NLE	< 50	< 1	< 10	< 10	< 50	< 20
Tetrachloroethene	1	5	**4,600**	**1,500**	**1,500**	**1,800**	**4,800**	**2,400**
Toluene	600	1,000	< 50	< 1	< 10	< 10	< 50	< 20
Total TIC, Volatile	0.5	NLE	ND	ND	ND	ND	ND	ND
Total Xylenes	1,000	10,000	< 150	< 3	< 30	NA	NA	NA
Trans-1,2-Dichloroethene	100	100	< 50	**1.4 J**	< 10	< 10	< 50	< 20
Trans-1,3-Dichloropropene	1	NLE	< 50	< 1	< 10	< 10	< 50	< 20

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-68 Former Dry Cleaners UST at Building 700
Annual (Fourth Quarter) 2014 Groundwater Sampling Event
Fort Monmouth, New Jersey

Loc ID	NJ Ground Water Quality Criteria	2014-05 USEPA MCL	565MW01D					
Sample ID			FTMM-68-GW-565MW01D-22.31	FTMM-68-GW-565MW01D-22.31	FTMM-68-GW-565MW101D-22.31	FTMM-68-GW-565MW01D-22.31	FTMM-68-GW-565MW01D-22.31	FTMM-68-GW-565MW01D-22.31
Sample Date			8/29/2013	3/31/2014	3/31/2014	7/1/2014	9/30/2014	12/18/2014
QA/QC			SA	SA	DU	SA	SA	SA
Sampling Method			PDB	PDB	PDB	PDB	PDB	PDB
Trichloroethene	1	5	**44 J**	**110**	**96**	**42 J**	**18 J**	**41 J**
Trichlorofluoromethane	2,000	NLE	< 50	< 1	< 10	< 10	< 50	< 20
Vinyl chloride	1	2	< 50	**6.1**	**5.5 J**	< 10	< 50	< 20

Table 3
Groundwater Analytical Results - 2013 and 2014
Site FTMM-68 Former Dry Cleaners UST at Building 700
Annual (Fourth Quarter) 2014 Groundwater Sampling Event
Fort Monmouth, New Jersey

Footnote:
1) All historical data collected prior to 2013 are reported as provided by others.
2) Number of Analyses is the number of detected and non-detected results excluding rejected results. Sample duplicate pairs have not been averaged.
3) NLE = no limit established.
4) ND = not detected in any background sample, no background concentration available.

5) Chemical result qualifiers are assigned by the laboratory and is typically evaluated and modified (if necessary) by during data validation.
[blank] = detect, i.e. detected chemical result value.
B = Compound detected in the sample and its associated blank sample.
R = Rejected, data validation rejected the results.
U = non-detect, i.e. not detected equal to or above this value.
U-DL = Elevated sample detection limit due to difficult sample matrix.
U-ND = Analyte not detected in sample, but no detection or reporting limit provided.
J = estimated (detect or non-detect) value.
E (or ER) = Estimated result.
D = Results from dilution of sample.
J-DL = Elevated sample detection limit due to difficult sample matrix.
JN = Tentatively identified compound, estimated concentration.

6) Chemical results greater than or equal to the action level (depending on criteria) are highlighted based on the Criteria that are present.
- Cell Shade values represent a result that is above the NJ Ground Water Quality Criteria ####

NJDEP Interim Specific GWQC values are presented for the NJ GWQS where there is not a Specific Ground Water Quality Criteria. A full list of compounds is available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).

NJDEP Interim Generic GWQC values are presented for the NJ GWQS where there is not a XXXXX or a NJDEP Interim Specific GWQC. Available at (http://www.nj.gov/dep/wms/bwqsa/gwqs_interim_criteria_table.htm).
- Bold Outline represent a result that is above the USEPA 2014-05 MCL. ###

7) Criteria action level source document and web address.
- The NJ Ground Water Quality Criteria refers to the NJDEP Groundwater Quality Standards - Adopted July 22, 2010
  http://www.state.nj.us/dep/wms/bwqsa/docs/njac79C.pdf
- The 2014-05 USEPA MCL refers to the USEPA's Region 9 Regional Screening Levels (HQ=1.0) - 5/31/2014 (Last revised)
  http://www.epa.gov/region9/superfund/prg/

8) Wells sampled in the fourth quarter are highlighted in yellow. Sample ID

Table 4
Review of Historical Groundwater Sampling Results
Site FTMM-68 Former Dry Cleaners UST at Building 700
Annual (Fourth Quarter) 2014 Groundwater Sampling Report
Fort Monmouth, New Jersey

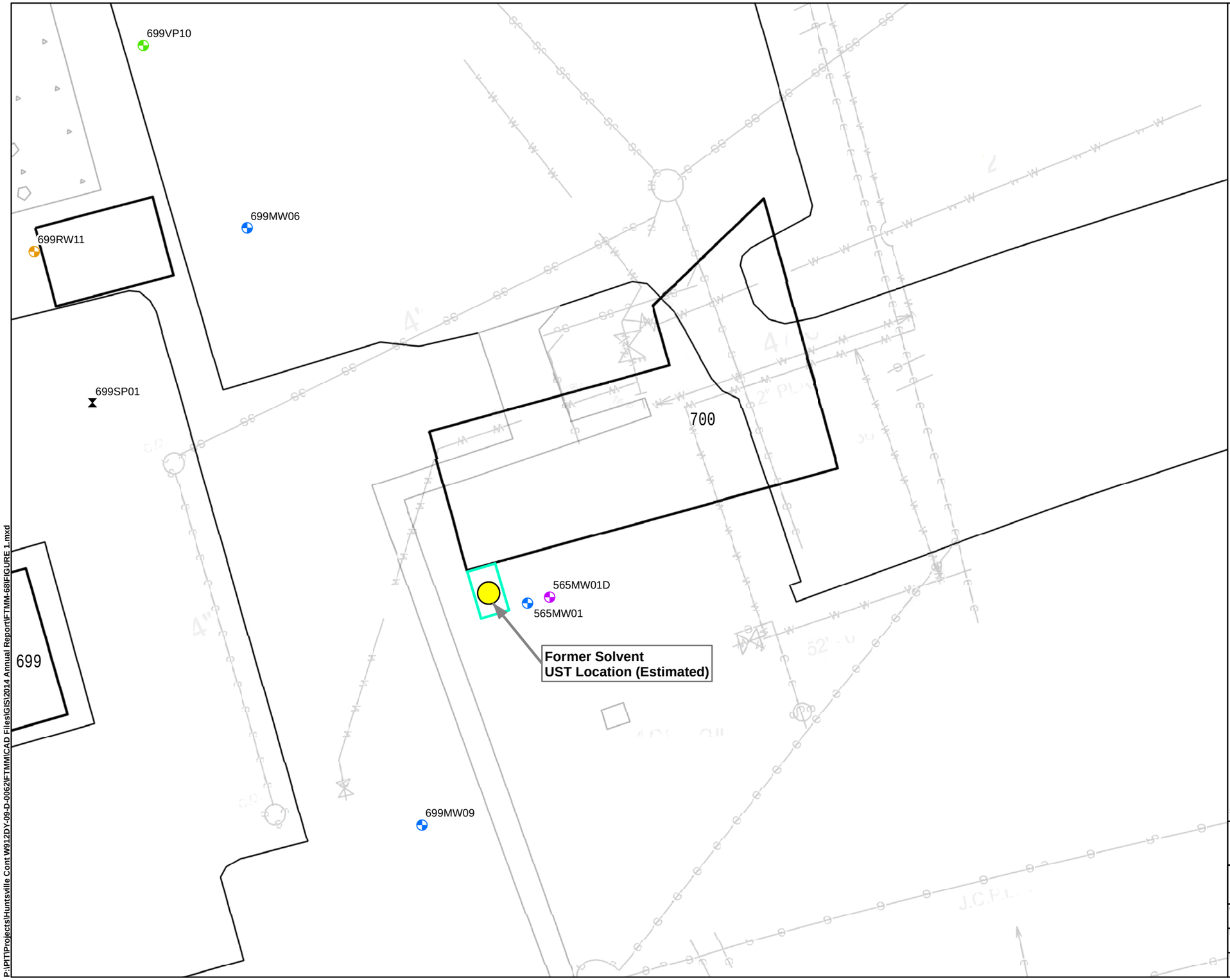
Site Name/ Well ID	Interpretation of Historical and 2014 Results [1]			2014 Evaluation				Retain Analyte/ Well (Yes or No)	Rationale
	Chem Class / Analyte	Does it Exceed NJDEP GWQS (Yes or No) (If Yes, identify compound)	Do Metals Exceed FTMM Background Concentration (Yes or No) (If Yes, identify Metal)	Seasonal Effect?[2] (Y/N)	Anomaly? (Y/N)	Exceedance part of overall trend? (Y/N)	Well needed for sentinel purposes? (Y/N)		
FTMM-68, B700									
565MW01	VOC	1,1 DCE, cis-1,2-DCE, PCE, TCE, VC	N/A	No	No	Yes	Yes	Yes	VOCs were detected in the 2014 quarterly events. Continue quarterly sampling
565MW01D		Cis-1,2-DCE, PCE, TCE, Cis-1,2-DCE, VC	N/A	No	No	Yes	Yes	Yes	VOCs were detected in the 2014 quarterly events. Continue quarterly sampling.

Notes

1. Has any of the analyte compounds exceeded the NJDEP GWQS in the 2014 data and the 4 previous quarterly data rounds or two previous annual rounds?
   a. If yes then keep analyte in LTM list
   b. If no then remove this analyte from LTM list
   c. a and b above may be occasionally superceded on a case-by-case basis, depending on site conditions.
2. Has any of the analyte compounds exceeded the NJDEP GWQS seasonally (winter spring vs. summer fall)?
3. 1,1 DCE = 1,1-Dichloroethene
4. cis-1,2-DCE = cis-1,2-dichloroethene
5. PCE = tetrachloroethene
6. TCE = trichloroethene
7. VC = vinyl chloride

FIGURES

Figure 1 Layout of FTMM-68 Former Dry Cleaners UST at Building 700



LEGEND:

- Shallow Monitoring Well
- Deep Monitoring Well
- Vapor Monitoring Well
- Recovery Well
- Air Sparge Well
- UST Excavation Footprint
- Municipal Boundary
- W Water Line
- S Sanitary Sewer Line
- SW Storm Sewer Line
- G Gas Line

N

1 inch = 20 feet

0 10 20 40 Feet

Source: FTMM Supplied CAD

PARSONS 401 Diamond Drive NW, Huntsville AL	Fort Monmouth New Jersey
LAYOUT OF FTMM-68 FORMER DRY CLEANERS UST AT BUILDING 700	
CREATED BY: RR	REVIEWED BY: ME
DATE: NOV. 2015	FIGURE NUMBER: FIGURE 1
PROJECT NUMBER: 748810-01000	FILE: FIGURE 1.mxd

P:\PIT\Projects\Huntsville Cont W912DY-09-D-0062\FTMM\CAD Files\GIS\2014 Annual Report\FTMM-68\FIGURE 1.mxd

ATTACHMENTS

Attachment A NJDEP PDB Checklists

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-68
3. Well Designation: 56SMW01
4. Well Permit Number: —

5 Type of Well ☑Monitoring ☐Extraction ☐Residential ☐Public Supply ☐Irrigation ☐Other

6 Well Surface Finish ☑Stick Up ☐Flush Mount

7 Location of Measuring Point ☑Top of Casing ☐Other (specify) _____

8 NOTE: PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.

Distance between measuring point and ground surface (ft.) 1.79

9 Total Well Depth (fbgs) 15.29

10 Screened interval/open hole (fbgs) 5.29-15.29

11 Well Casing Diameter 4 Material ☑PVC ☐Carbon Steel ☐Stainless Steel

12 Well Screen (or open hole diameter) Diameter 4 Material ☑PVC ☐Carbon Steel ☐Stainless Steel

13 Screen Size (slot) Screen Slot Size 0.01

14. Date and Time of Deployment Date: 9/30/14 Time: 1035

15. Depth to Ground Water Depth to ground water at time of deployment 9.06

16. Date and Time of Retrieval Date: 12/18/14 Time: 1036

17. Depth to Ground Water Depth to ground water at time of retrieval 5.37 TOC

18. Type of Deployment Line Used Diameter: 3/16" Material: poly

19 Material and Mass (oz.) of PDBS Weight stainless steel 30.2 (stainless steel recommended)

20 Type of PDBS Used
☐Lab Filled (Modified Trip Blank must be taken at time of deployment)
☑Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)

21 Dimensions of PDBS Length (in.) 18 Diameter (in.) 1.5 Filled _____

22 Position of PDBS Weight
☑Attached to bottom of PDBS and suspended in well
☐Attached to bottom of deployment line and suspended in well
☐Attached to bottom of deployment line and resting on bottom of well (preferred)

23 Position of PDBS in Well Screen (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
11.99			

5th PDBS	6th PDBS	7th PDBS	8th PDBS

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
☐No, this well is being profiled during this sampling round
☑Yes, this well was profiled already. Date when well was profiled: 8/29/14

25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
☐No, flow testing has not been conducted in this well
☐Yes, flow testing of this well was conducted. Date of testing: _____
Type of flow meter used: _____
Measurements taken every _____ feet [Please Attach Results]

26. Weather Conditions During Deployment Temp. 65F Wind 0-5mph ☐Sunny ☑Overcast ☐Raining ☐Snowing

27. Weather Conditions During Retrieval Temp. 40°F Wind 10-15mph ☑Sunny ☐Overcast ☐Raining ☐Snowing

28 Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Nick Leiroz	Parsons
Chris Watson	

PARSONS

Checklist for the Submission of Sampling Data for Passive Diffusion Bag Samplers (PDBS)

1. Site: FTMM
2. Location: FTMM-68
3. Well Designation: 56FMW010
4. Well Permit Number:

5. Type of Well: ☑ Monitoring ☐ Extraction ☐ Residential ☐ Public Supply ☐ Irrigation ☐ Other
6. Well Surface Finish: ☑ Stick Up ☐ Flush Mount
7. Location of Measuring Point: ☑ Top of Casing ☐ Other (specify) _____
8. **NOTE:** PDBS represent a point sample within the screened interval or open hole of the well. It is critical to know the exact depth within the well where the PDBS is deployed. Well construction specifications, which are typically used to determine where to set the PDBS in the well, are measured in feet below ground surface (fbgs). If the depth interval for PDBS deployment is measured from the reference point identified above, the difference between this reference point and the ground surface must be measured and accounted for to determine the proper depth interval to set the PDBS. Please identify below, any differences between the measuring point identified above and actual ground surface at the well head.
   Distance between measuring point and ground surface (ft.) 1.87
9. Total Well Depth (fbgs): 23.46
10. Screened interval/open hole (fbgs): 18.46 - 23.46
11. Well Casing: Diameter 4" Material: ☑ PVC ☐ Carbon Steel ☐ Stainless Steel
12. Well Screen (or open hole diameter): Diameter 4" Material: ☑ PVC ☐ Carbon Steel ☐ Stainless Steel
13. Screen Size (slot): Screen Slot Size 0.01

14. Date and Time of Deployment: Date: 9/30/14 Time: 1020
15. Depth to Ground Water: Depth to ground water at time of deployment 9.20
16. Date and Time of Retrieval: Date: 12/18/14 Time: 1028
17. Depth to Ground Water: Depth to ground water at time of retrieval 6.25 TOC
18. Type of Deployment Line Used: Diameter: 3/16" Material: poly
19. Material and Mass (oz.) of PDBS Weight: stainless steel 20oz (stainless steel recommended)
20. Type of PDBS Used:
    ☐ Lab Filled (Modified Trip Blank must be taken at time of deployment)
    ☑ Field Filled (Modified equipment blank of fill water must be taken at time of deployment. If PDBS isn't filled at well head, blank must travel with samplers until last sampler is deployed. Blank is then taken.)
21. Dimensions of PDBS: Length (in.) 12 Diameter (in.) 1.5 Filled _____
22. Position of PDBS Weight:
    ☑ Attached to bottom of PDBS and suspended in well
    ☐ Attached to bottom of deployment line and suspended in well
    ☐ Attached to bottom of deployment line and resting on bottom of well (preferred)
23. Position of PDBS in Well Screen (ft. from measuring point to center of PDBS)

1st PDBS	2nd PDBS	3rd PDBS	4th PDBS
22.31			

5th PDBS	6th PDBS	7th PDBS	8th PDBS

24. If the saturated portion of the well screen or open hole is greater than 5 feet, has the well been vertically profiled to assess the potential for contaminant stratification?
    ☐ **No**, this well is being profiled during this sampling round
    ☑ **Yes**, this well was profiled already. Date when well was profiled: 8/29/13
25. If the saturated portion of the well screen or open hole is greater than 10 feet, has the well been flow tested to assess the potential for vertical flow to be present within the well?
    ☐ **No**, flow testing has not been conducted in this well
    ☐ **Yes**, flow testing of this well was conducted. Date of testing: _____
    Type of flow meter used: _____
    Measurements taken every _____ feet **[Please Attach Results]**
26. Weather Conditions During Deployment: Temp. 65 Wind 0-5 mph ☐ Sunny ☑ Overcast ☐ Raining ☐ Snowing
27. Weather Conditions During Retrieval: Temp. 40°F Wind 10-15 mph ☑ Sunny ☐ Overcast ☐ Raining ☐ Snowing

28. Field Sampling Technician Name(s) and Company (please print clearly)

Name	Company
Chris Watson	John McDougall / PARSONS
With Lotsof	

APPENDIX O

DATA VALIDATION MEMORANDUM

DATA VALIDATION SUMMARY REPORT

for samples collected from

FORT MONMOUTH

OCEANPORT, NEW JERSEY

Data Validation by: Sandra de las Fuentes

Date: November 17, 2014

Parsons - Austin

INTRODUCTION

The following data validation summary report covers water samples and the associated field quality control (QC) samples collected from Fort Monmouth in Oceanport, New Jersey on September 30, October 1, 2, and 3, 2014. Samples were logged in under the following Sample Delivery Groups (SDGs):

R1407813 and R1407825

The samples in these SDGs were analyzed for volatile organic compounds (VOCs) plus tentatively identified compounds (TICs), semivolatile organic compounds (SVOCs) plus TICs, organochlorine pesticides and metals. The field QC samples collected in R1407813 included two field duplicate (FD) samples, one matrix spike/matrix spike duplicate (MS/MSD) pair, four equipment blanks, one trip blank and one source blank sample. The field QC samples in R1407825 included two FD samples, one MS/MSD pair, one EB and one TB sample.

All samples were collected by Parsons and shipped to ALS Environmental in Rochester, New York. There was 1 cooler shipped for R1407813 and two coolers shipped for R1407825. The cooler for R1407813 was received at 8.7°C and the coolers in R1407825 were received at 5.1°C and 5.4°C. During login of the coolers, ALS noted ice was present in all coolers, which indicates the cooling process was ongoing; therefore sample preservation was not compromised.

All samples were prepared and analyzed following the procedures outlined in the Department of Defense (DoD) Quality Systems Manual (QSM) version 4.2, and the procedures outlined in the Standard Subcontract and the project-specific Uniform Federal Policy for Quality Assurance Project Plan (UFP-QAPP).

SAMPLE IDs AND REQUESTED PARAMETERS

Sample ID	SDG	Matrix	VOCs, plus TICs	SVOCs, plus TICs	Pesticides	TAL Metals	Arsenic, Cadmium, and Lead only	Lead Only	Comments
FTMM-8-GW-697MW01-16.45	R1407813	W	X		X			X	MS/MSD
FTMM-8-GW-M8MW24-29.68	R1407813	W	X						
FTMM-8-GW-M8MW16-11.74	R1407813	W	X						
FTMM-8-GW-M8MW15-11.30	R1407813	W	X						
FTMM-56-GW-80MW05-7.14	R1407813	W			X				
FTMM-56-GW-80MW02-8.10	R1407813	W					X		
FTMM-EB-100114-01	R1407813	W	X		X		X		Equipment Blank
FTMM-EB-100114-02	R1407813	W	X						Equipment Blank
FTMM-56-GW-80MW105-7.14	R1407813	W			X				FD of FTMM-56-GW-80MW05-7.14
FTMM-3-GW-M3MW07-13.85	R1407813	W	X						
FTMM-64-GW812MW04-5.53	R1407813	W	X						
FTMM-61-GW-283MW02-13.26	R1407813	W	X						
FTMM-8-GW-M8MW17-10.90	R1407813	W						X	
FTMM-8-GW-M8MW21-14.31	R1407813	W						X	
FTMM-8-GW-M8MW12-13.55	R1407813	W	X						
FTMM-59-GW-1122MW07-16.67	R1407813	W	X						
FTMM-TB-100214	R1407813	W	X						Trip Blank
FTMM-EB-093014	R1407813	W	X						Equipment Blank applies to R1407806
FTMM-DI-093014	R1407813	W	X						DI/Source Water Blank
FTMM-EB-100214	R1407813	W	X					X	Equipment Blank
FTMM-59-GW-1122MW107-16.67	R1407813	W	X						FD of FTMM-59-GW-1122MW07-16.67
FTMM-EB-100314	R1407825	W	X	X		X			Equipment Blank
FTMM-TB-100314	R1407825	W	X						Trip Blank
FTMM-3-GW-M3MW02-21	R1407825	W	X			X			MS/MSD
FTMM-3-GW-M3MW102-21	R1407825	W	X			X			FD of FTMM-3-GW-M3MW02-21
FTMM-66-GW-886RW01-11.55	R1407825	W		X					MS/MSD
FTMM-66-GW-886RW06-10.12	R1407825	W		X					
FTMM-66-GW-886RW106-10.12	R1407825	W		X					FD of FTMM-66-886RW06-10.12
FTMM-66-GW-886RW08-11.22	R1407825	W		X					
FTMM-58-GW-2567MW03-8.03	R1407825	W	X						
FTMM-58-GW-2567MW01-8.73	R1407825	W	X						
FTMM-57-GW-108MW04-8.25	R1407825	W						X	

W = Water

EXTRACTION AND ANALYTICAL METHODS:

PARAMETER	MATRIX	EXTRACTION METHOD	ANALYTICAL METHOD	UNITS	DRY WT. VS. WET WT
VOCs	W	5035	8260C	µg/L	NA
Metals	W	3010A	6010C	µg/L	NA
Mercury	W	7470A	7470A	µg/L	NA
SVOCs	W	3510C	8270D	µg/L	NA
Pesticides	W	3510C	8081B	µg/L	NA

EVALUATION CRITERIA

The data submitted by the laboratory has been validated following the guidelines outlined in the project-specific UFP-QAPP. A "Level IV" validation was performed and the information reviewed in the data packages included sample results; field and laboratory quality control results; calibrations; case narratives; raw data; cooler receipt forms; and chain-of-custody (COC) forms. The analyses and findings presented in this report are based on the reviewed information, and whether guidelines in the UFP-QAPP were met.

The precision criterion for the relative percent difference (RPD) of the field duplicate samples is RPD $\leq$ 40 for water, as per the project-specific UFP-QAPP.

VOLATILE ORGANIC COMPOUNDS

General

The VOC portion consisted of twenty-six (26) water samples, including five EBs, two TBs, two FDs, one DI water and two pairs of MS/MSD samples. The samples were collected on September 30, October 1, 2, and 3, 2014 and were analyzed for the full list of VOCs as specified in the project-specific UFP-QAPP.

The VOCs analyses were performed according to USEPA SW846 Method 8260C. All samples in this SDG were analyzed following the procedures outlined in the project-specific UFP-QAPP. All samples were prepared and analyzed within the holding time required by the method.

The following samples in this SDG reported TICs:

FTMM-8-GW-M8MW15-11.30
FTMM-59-GW-1122MW07-16.67
FTMM-59-GW-1122MW107-16.67
FTMM-58-GW-2567MW03-8.03

The samples for VOCs were analyzed in three batches (#415258, #415409, and #416090) under two ICALs. All analyses were performed undiluted.

Accuracy

Accuracy was evaluated using the percent recovery obtained from the LCS, the MS, MSD samples, and the surrogate spikes. There were two MS/MSD pairs designated on the COCs. Samples FTMM-8-GW-697MW01-16.45 (R1407803) and FTMM-3-GW-M3MW02-21 (R1407825) were designated for MS/MSD purposes.

Three LCSs were analyzed for VOCs, one for each batch. All LCS and surrogate spike recoveries were within acceptance criteria.

The MS and MSD recoveries were within acceptance criteria, except for the following:

FTMM-8-GW-697MW01-16.45

Analyte	MS %R	MSD %R	Criteria
1,2,4-Trimethylbenzene	30	31	75-130
1,3,5-Trimethylbenzene	32	34	75-130
Styrene	15	15	65-135
m,p-Xylene	67	70	75-130
o-Xylene	73	76	80-120

The non-compliant analytes were flagged “UJ” as non-detect and estimated in the parent sample due to the possible low bias demonstrated by the MS/MSD pair.

Precision

Precision was evaluated using the RPD obtained from the two pairs of MS/MSD concentrations. Precision was further evaluated by comparing the two field duplicate analyte results. FTMM-59-GW-1122MW107-16.67 was collected and analyzed as the FD for FTMM-59-GW-1122MW07-16.67 (R1407813) and FTMM-3-GW-M3MW102-21 was collected and analyzed as the FD for FTMM-3-GW-M3M02-21 (R1407825).

All MS/MSD RPDs were within acceptance criteria.

All target VOCs were non-detect above the Limit of Quantitation (LOQ) in both pairs of parent and field duplicate samples.

Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents actual site conditions. Representativeness has been evaluated by:

- Comparing the COC procedures to those described in the Work Plan;
- Comparing actual analytical procedures to those described in the Work Plan;
- Evaluating holding times; and
- Examining the laboratory blank for cross contamination of samples during sample analysis.

The samples in this SDG were analyzed following the COC and the analytical procedures described in the QAPP. All samples were prepared and analyzed within the holding time required by the method.

- All initial calibration criteria were met.
- All SSV criteria were met.
- All instrument performance check criteria were met.
- All CCV criteria were met.
- All internal standard (IS) criteria were met.
- All manual integrations performed by the laboratory were reviewed and verified.
- The MDLs were compliant with the requirements of the DOD QSM Version 4.2.

Three method blanks, two trip blanks, five equipment blanks and one source water blank were analyzed for VOCs. All method blanks were less than one-half the LOQs, as required by the project-specific UFP-QAPP, so no corrective action was required. Low concentrations (< 1.0 µg/L; LOQs of 5.0 µg/L) of 1,2,4-Trichlorobenzene, bromomethane, hexachlorobutadiene, and/or naphthalene were detected in one or more MBs.

The trip blank was non-detect for all target VOCs, except as follows:

TB ID	Analyte	Conc. (µg/L)	LOQ (µg/L)
FTMM-TB-100214	1,2,4-Trichlorobenzene	0.24 J	5.0
	Naphthalene	0.22 J	5.0

The following samples were flagged "B" for possible blank contamination as indicated in the trip blank sample:

Sample ID	Analyte	Conc. (µg/L)	Applied Flag
FTMM-8-GW-M8M15-11.30	Naphthalene	0.24 J	B
FTMM-64-GW-812MW04-5.53	Naphthalene	0.38 J	B
FTMM-59-GW-1122MW07-16.67	Naphthalene	0.80 J	B
FTMM-59-GW-1122MW107-16.67	Naphthalene	1.1 J	B

There were no 1,2,4-Trichlorobenzene detections in any of the associated samples.

The equipment blank was non-detect for all analytes, except for the following:

Blank ID	Analyte	Conc. (µg/L)	LOQ (µg/L)
FTMM-EB093014	Acetone	2.2	5.0

Although the above EB was shipped with samples in R1407813, the EB was collected and is associated with samples collected in SDG R1407806. All sample results for acetone with concentrations within five times the amount detected in the equipment blank were "B" flagged by the Parsons data validator. Refer to the DVR for SDG R1407806 for details.

The source blank was non-detect for all target analytes.

Completeness

Completeness has been evaluated by comparing the total number of samples collected with the total number of samples with valid analytical data.

All VOC results for the samples in this SDG were considered usable. The completeness for the VOC portion of this SDG is 100%, which meets the minimum acceptance criteria of 95%.

SEMIVOLATILE ORGANIC COMPOUNDS

General

The SVOC portion of SDG R140785 consisted of seven (7) water samples, including one EB, one MS/MSD pair, and one FD sample. The samples were collected on October 3, 2014 and were analyzed for the full list of semivolatiles as listed in the project-specific UFP-QAPP.

The SVOC analyses were performed according to USEPA SW846 Method 8270D. The samples were prepared and analyzed following the procedures outlined in the UFP-QAPP. The samples were prepared and analyzed within the holding time required by the method.

The samples for SVOCs were analyzed in a single batch (#415497) under one ICAL. The following samples in this SDG reported TICs:

FTMM-EB-100314
FTMM-66-GW-886RW01-11.55
FTMM-66-GW-886RW08-11.22

All analyses were performed undiluted.

Accuracy

Accuracy was evaluated using the percent recovery obtained from the LCS, LCSD, MS, MSD samples, and the surrogate spikes. Sample FTMM-66-GW-886RW01-11.55 was designated for MS/MSD analysis on the COC.

The LCS, LCSD were analyzed for SVOCs and all spike recoveries were within acceptance criteria, except as follows:

LCS ID	Analyte	LCS %R	LCSD %R	Criteria
LCS/LCSD	Benzidine	0	0	10-130%
Batch # 415497	Di-n-butyl Phthalate	(110)	116	55-115%

Benzidine was non-detect in all associated samples and were therefore flagged “UJ” due to the non-recovery in the LCS and LCSD. The following samples were flagged “UJ” for benzidine:

FTMM-66-GW-886RW01-11.55
FTMM-66-GW-886RW06-10.12
FTMM-66-GW-886RW106-10.12

No flags were applied due to the slightly high recovery (<1%) of Di-n-butyl Phthalate in the MSD since the associated samples were non-detect and the MS recovery was within acceptance criteria.

All surrogate spike recoveries were within acceptance criteria.

All MS/MSD recoveries were within acceptance criteria, except for the following:

FTMM-66-GW-886RW01-11.55

Analyte	MS %R	MSD %R	Criteria
3,3'-Dichlorobenzidine	0	0	20-110%
Benzidine	0	0	10-130%

The parent sample results for 3,3'-Dichlorobenzidine was flagged "UJ" due to the non-recovery in the MS and MSD. Benzidine was previously flagged in the associated samples due to the non-recoveries in the LCS and LCSD. It should be noted that although Benzidine didn't recover in the LCS, LCSD, MS or MSD, the associated samples were not rejected (only estimated with a "J" flag) since other laboratory QC met criteria, including the ICALs, ICVs and CCVs.

Precision

Precision was evaluated using the RPD obtained from the MS/MSD concentrations. Precision was further evaluated by comparing the field duplicate analyte values. FTMM-66-GW-886RW106-10.12 was collected and analyzed as the FD for FTMM-66-GW-886RW06-10.12.

All LCS/LCSD and MS/MSD RPDs were within acceptance criteria, except the RPD calculations for 3,3'-Dichlorobenzidine and benzidine were not possible since neither the LCS/LCSD and/or MS/MSD recovered for these analytes.

All target SVOCs were non-detect in sample FTMM-66-GW-886RW06-10.12 and the associated field duplicate sample FTMM-66-GW-886RW106-10.12.

Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents actual site conditions. Representativeness has been evaluated by:

- Comparing the COC procedures to those described in the Work Plan;
- Comparing actual analytical procedures to those described in the Work Plan;
- Evaluating holding times; and
- Examining laboratory blanks for cross contamination of samples during analysis.

All samples were analyzed following the COC and the analytical procedures described in the QAPP. All samples were prepared and analyzed within the holding time required by the method.

- All initial calibration criteria were met.
- All SSV criteria were met.
- All instrument performance check criteria were met.
- All CCV criteria were met.
- All internal standard criteria were met.

- All manual integrations performed by the laboratory were reviewed and verified.
- The MDLs were compliant with the requirements of the DOD QSM Version 4.2.

One method blank and one equipment blank were analyzed for SVOCs. The blanks were non-detect for all target SVOCs.

Completeness

Completeness has been evaluated by comparing the total number of samples collected with the total number of samples with valid analytical data.

All SVOC results for the sample in this SDG were considered usable. Thus, the completeness for the SVOC portion of this SDG is 100%, which meets the minimum acceptance criteria of 95%.

ORGANOCHLORINE PESTICIDES

General

The pesticides portion of SDG R1407813 consisted of this SDG consisted of six (6) water samples, including a EB, a FD and a MS/MSD pair. The samples were collected on October 1, 2014 and were analyzed for the full list of pesticides as specified in the UFP-QAPP.

The pesticide analyses were performed according to the United States Environmental Protection Agency (USEPA) SW846 Method 8081B. All samples in this SDG were analyzed following the procedures outlined in the project-specific UFP-QAPP. All samples were prepared and analyzed within the holding time required by the method.

The samples for pesticide analysis were extracted in a single batch (#415375). The samples were analyzed under a single initial calibration (ICAL). All analyses were performed undiluted.

It should be noted that Toxaphene was not included in the extracted LCS QC sample. Toxaphene is included in the ICAL and CCVs for pattern recognition. Had Toxaphene been detected in any of the field samples, the sample and QC, including toxaphene, would have been re-analyzed. Toxaphene is a multi-peak responding compound and cannot be included in the LCS spike mix without interfering with the other compounds. Spiking Toxaphene in LCS (or MS/MSDs) is not a requirement of SW846. When surrogates and other target compounds have acceptable %Rs in the LCS and when the samples are ND for Toxaphene, is it reasonable to accept all pesticide data, including Toxaphene.

Accuracy

Accuracy was evaluated using the percent recovery (%R) obtained from the LCS, LCSD and the surrogate spikes. Sample FTMM-8-GW-697MW01-16.45 was designated for MS/MSD analysis on the COC.

It should be noted that the pesticide surrogate limits reported by ALS differ from the limits provided in the UFP-QAPP. According to USEPA's Region 2 Quality Assurance

for Pesticide Data Validation (SOP No. HW-36 Revision 4), if both surrogate recoveries are greater than or equal to 30%, and less than or equal to 150%, qualification of the data is not necessary. If any surrogate recovery is greater than or equal to 10%, and less than 30%, qualify detected target compounds as biased low (J) and qualify non-detected target compounds as approximated (UJ). For any surrogate recovery less than 10%, the reviewer should examine the sample chromatogram to assess the qualitative validity of the analysis. If sample dilution is not a factor, qualify detected target compounds as biased low (J) and qualify non-detected target compounds as unusable (R).

All LCS/LCSD recoveries were within acceptance criteria, except as follows:

LCS ID	Analyte	LCS %R	LCSD %R	Criteria
LCS/LCSD Batch # 415375	Endrin Aldehyde	14	16	55-135

All associated sample results for Endrin Aldehyde were flagged "UJ" due to the low recoveries in the LCS and LCSD. The following samples were flagged "UJ" for Endrin Aldehyde:

FTMM-8-GW-697MW01-16.45
FTMM-56-GW-80MW05-7.14
FTMM-56-GW-80MW105-7.14

All MS/MSD recoveries were within acceptance criteria, except for the following:

FTMM-8-GW-697MW01-16.45

Analyte	MS %R	MSD %R	Criteria
Endrin Aldehyde	17	15	55-135

Endrin Aldehyde was previously flagged in the associated samples due to the low recoveries in the LCS and LCSD. No further action is required.

All surrogate spike recoveries were within acceptance criteria.

Precision

Precision was evaluated using the RPD obtained from the LCS/LCSD and MS/MSD concentrations. Precision was further evaluated by comparing the field duplicate analyte values. Sample FTMM-56-GW-80MW105-7.14 was collected and analyzed as the FD of FTMM-56-GW-80MW05-7.14.

All LCS/LCSD and MS/MSD RPDs were within acceptance criteria.

All target pesticides were non-detect in sample FTMM-56-GW-80MW05-7.14 and the associated field duplicate sample FTMM-56-GW-80MW105-7.14.

Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents actual site conditions. Representativeness has been evaluated by:

- Comparing the COC procedures to those described in the Work Plan;
- Comparing actual analytical procedures to those described in the Work Plan;
- Evaluating holding times; and
- Examining the laboratory blanks for cross contamination of samples during sample analysis.

The samples in this SDG were analyzed following the COC and the analytical procedures described in the Work Plan. All samples were prepared and analyzed within the holding time required by the method.

- All initial calibration criteria were met.
- All secondary source verification (SSV) criteria were met.
- All continuing calibration verification (CCV) criteria were met.
- All breakdown criteria were met.
- The MDLs met the requirements listed in the DoD QSM version 4.2.

There was one method blank and one equipment blank associated with the pesticides analyses in this SDG. Both blanks were non-detect for all target pesticides.

Completeness

Completeness has been evaluated by comparing the total number of samples collected with the total number of samples with valid analytical data.

All pesticide results for the samples in this SDG were considered usable. The completeness for the pesticide portion of this SDG is 100%, which meets the minimum acceptance criteria of 95%.

METALS

General

The metals portion consisted of fourteen (14) water samples, including three EBs, one FD and two pairs of MS/MSD samples. The samples were collected on September 30, October 1, 2, and 3, 2014. Not all samples were analyzed for all metals, see Sample IDs and Requested Parameters table in the introduction section above.

The metals analyses were performed using USEPA SW846 Method 6010C. All samples in this SDG were analyzed following the procedures outlined in the project-specific UFP-QAPP. All samples were prepared and analyzed within the holding time required by the method.

The samples for metals analyses were digested in a single batch (#220154) and analyzed in two batches under two different ICALs. All samples were performed undiluted.

It should be noted that several metals were reported at different LOQs than as stated in the UFP-QAPP. The LOQs are routinely updated by the laboratory, and are generally

done so annually. For each metal, the revised LOQ remains lower than the NJ Groundwater Quality Limits (Specific Ground Water Quality Criteria - Class IIA and Practical Quantitation Levels), with the exception of arsenic, which is 3 µg/L. Note the original UFP-QAPP limit provided for arsenic was also above the NJ Groundwater Quality Limit.

Accuracy

Accuracy was evaluated using the percent recovery obtained from the LCS. Samples FTMM-8-GW-697MW01-16.45 (R1407813) and FTMM-3-GW-M3MW02-21 (R1407825) were designated on the COCs for MS/MSD analysis.

All LCSs, MSs and MSDs were within acceptance criteria.

Precision

Precision was evaluated using the RPD obtained from the LCS/LCSD and MS/MSD concentrations. Precision was further evaluated by comparing the field duplicate analyte values. Sample FTMM-3-GW-M3MW102-21 was collected and analyzed as the FD of FTMM-3-GW-M3MW02-21.

All LCS/LCSD and MS/MSD RPDs were within acceptance criteria.

All target metals were non-detect above the Limit of Quantitation (LOQ) in both the parent and field duplicate samples in the parent/FD pair, except as follows:

Parent: FTMM-3-GW-M3MW02-21

Analyte	Parent (µg/kg)	FD (µg/kg)	RPD	Criteria
Aluminum	685	660	3.7	RPD ≤ 40
Barium	48.6	47.7	1.9	
Calcium	4930	4620	6.5	
Potassium	3090	2990	3.3	
Magnesium	10200	9910	2.9	
Manganese	32.4	31.0	4.4	
Sodium	12300	12200	0.8	
Nickel	55.3	50.5	9.1	
Zinc	102	96.8	5.2	

Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents actual site conditions. Representativeness has been evaluated by:

- Comparing the COC procedures to those described in the Work Plan;

- Comparing actual analytical procedures to those described in the Work Plan;
- Evaluating preservation and holding times; and
- Examining laboratory blanks for cross contamination of samples during analysis.

The samples in this SDG were analyzed following the COC and the analytical procedures described in the QAPP. The samples were prepared and analyzed within the holding times required by the method.

- All instrument calibration criteria were met.
- All second source criteria were met. The ICV samples were prepared using a secondary source.
- All continuing calibration verification (CCV) criteria were met.
- All interference check (ICSA/ICSAB) criteria were met.
- The MDLs met the requirements listed in the DoD QSM version 4.2.
- The dilution test (DT) was performed on sample FTMM-8-GW-697MW01-16.45 (R1407813; lead only) and FTMM-3-GW-M3MW02-21 (R1407825; all 22 metals). Only metals greater than 50 times the method detection limit (MDL) were evaluated.
- The post digestion spike (PDS) was performed on the same samples as the DT. The PDS was applicable for all metals and all metals met criteria as follows:

FTMM-8-GW-697MW01-16.45

Metal	%R	Criteria
Lead	95	75 – 125%

FTMM-3-GW-M3MW02-21

Metal	%R	Criteria
Silver	97	75 – 125%
Aluminum	93	
Arsenic	99	
Barium	100	
Beryllium	97	
Calcium	97	
Cadmium	97	
Cobalt	97	
Chromium	102	
Copper	100	
Iron	101	
Potassium	98	
Magnesium	90	

Metal	%R	Criteria
Manganese	100	
Sodium	98	
Nickel	102	
Lead	98	
Antimony	101	
Selenium	118	
Thallium	93	
Vanadium	98	
Zinc	102	

There were two method blanks, three EBs and several calibration blanks associated with the metals analyses in this SDG. All blanks were compliant, except as follows:

Both method blanks contained several metals at less than one-half the LOQs, as required by the project-specific UFP-QAPP, with the following exceptions:

Blank ID	Analyte	Conc. (µg/L)	LOQ (µg/L)
Method Blank Batch # 220154; SDG R1407825	Barium	11.09	20

All sample results for barium with concentrations within five times the amount detected in the equipment blank were "B" flagged by the Parsons data validator. The following samples were flagged "B" for possible blank contamination of Barium:

Sample ID	Metal	Conc. (µg/L)	Applied Flag
FTMM-3-GW-M3MW02-21	Barium	48.6	B
FTMM-3-GW-M3MW102-21	Barium	47.7	B

The equipment blank was non-detect for all analytes, except for the following:

Blank ID	Analyte	Conc. (µg/L)	LOQ (µg/L)
FTMM-EB0100314	Arsenic	1.5 J	10
	Magnesium	16.2 J	1000
	Manganese	0.444 J	10
	Sodium	49.3 J	1000

All associated samples reported results greater than 5 times the amount of the metal concentrations found in the EB; therefore, no corrective action was required since the impact on the sample results is considered insignificant.

Completeness

Completeness has been evaluated by comparing the total number of samples collected with the total number of samples with valid analytical data.

All metals results for the samples in this SDG were considered usable. Therefore, the completeness for the metals portion of this SDG is 100%, which meets the minimum acceptance criteria of 95%.

MERCURY

General

The mercury portion consisted of five (5) water samples, including one EB, one FD and a MS/MSD pair. The samples were collected on October 3, 2014. The samples were analyzed for mercury as specified in the project-specific UFP-QAPP.

The mercury analyses were performed using USEPA SW846 Method 7470A. All samples in this SDG were analyzed following the procedures outlined in the project-specific QAPP. All samples were prepared and analyzed within the holding time required by the method.

The samples for mercury were digested in a single batch (#220311). The samples were analyzed in a single batch under one ICAL. All analyses were performed undiluted.

Accuracy

Accuracy was evaluated using the percent recovery obtained from the LCS, MS and MSD samples. Sample FTMM-3-GW-M3MW02-21 was designated on the COC for MS/MSD analysis.

The LCS, MS and MSD recoveries for mercury were within acceptance criteria.

Precision

Precision was evaluated using the RPD obtained from the MS/MSD concentrations. Precision was further evaluated by comparing the field duplicate analyte values. Sample FTMM-3-GW-M3MW102-21 was collected and analyzed as the FD of FTMM-3-GW-M3MW02-21.

The MS/MSD RPDs were within acceptance criteria.

Mercury was non-detect in both the parent and field duplicate samples.

Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents actual site conditions. Representativeness has been evaluated by:

- Comparing the COC procedures to those described in the Work Plan;
- Comparing actual analytical procedures to those described in the Work Plan;
- Evaluating preservation and holding times; and
- Examining laboratory blanks for cross contamination of samples during analysis.

The samples in this SDG were analyzed following the COC and the analytical procedures described in the QAPP. The samples were prepared and analyzed within the holding times required by the method.

- All instrument calibration criteria were met.
- All second source criteria were met. The ICV samples were prepared using a secondary source.
- All CCV criteria were met.
- The MDLs met the requirements listed in the DoD QSM version 4.2.
- A dilution test was not required for mercury because all sample results for mercury were non-detect.

There was a method blank, a EB and several calibration blanks associated with the metals analyses in this SDG. Mercury was non-detect in the method blank, the EB and all calibration blanks.

Completeness

Completeness has been evaluated by comparing the total number of samples collected with the total number of samples with valid analytical data.

All mercury results for the samples in this SDG were considered usable. Therefore, the completeness for the mercury portion of this SDG is 100%, which meets the minimum acceptance criteria of 95%.

COMPARABILITY

All data was generated using contract-specific standard methods and reported with known data quality, type of analysis, units, etc.

DATA USABILITY

The purpose of this data validation report is to ensure the integrity and reliability of analytical laboratory data. The data quality is evaluated based on precision, accuracy, representativeness, comparability, and completeness (PARCC) characteristics of the data. The validated data indicated that the laboratory correctly performed the analyses. Based on the data quality assessment, none of the data were qualified as rejected. All data in this SDG are considered usable for the purposes of this project. All sample LODs and LOQs met the requirements listed in the project QAPP. All Method Quality Objectives have been met.

DATA VERIFICATION SUMMARY REPORT

for samples collected from

FORT MONMOUTH

OCEANPORT, NEW JERSEY

Data Verification by: Sandra de las Fuentes

Date: January 27, 2015

Parsons - Austin

INTRODUCTION

The following data verification summary report covers water samples and the associated field quality control (QC) samples collected from Fort Monmouth in Oceanport, New Jersey on December 18 and 19, 2014 as part of the 4th Groundwater Quarterly Event. Samples were logged in under the following Sample Delivery Groups (SDGs):

R1410303 and R1410307

This verification report covers all of the analyses in the SDGs listed above.

The samples in this SDG were analyzed for volatile organic compounds (VOCs) plus tentatively identified compounds (TICs). The table below lists all samples associated with this SDG. The QC samples collected including a trip blank, a field duplicate sample and a matrix spike/matrix spike duplicate (MS/MSD) pair.

All samples were collected by Parsons and shipped to ALS Environmental in Rochester, New York in two coolers. All coolers were received by the laboratory at temperatures of 0.3°C and 2.4°C. The project-specific UFP-QAPP recommends cooler temperatures to be within the 2-6°C range. Although one cooler was received at less than the recommended range, there were no signs of freezing, therefore sample integrity remained intact.

The laboratory is DOD ELAP and NELAP certified. All samples were prepared and analyzed following the procedures outlined in the Department of Defense (DoD) Quality Systems Manual (QSM) version 4.2, and the procedures outlined in the Standard Subcontract and the project-specific Uniform Federal Policy for Quality Assurance Project Plan (UFP-QAPP).

QC IDENTIFICATION TABLE:

Sample ID	SDG	Matrix	VOCs, plus TICS	Comments
FTMM-53-GW-699MW01-7.5	R1410303	W	X	
FTMM-53-GW-699RW05-10	R1410303	W	X	Lab selected MS/MSD
FTMM-53-GW-699RW11-5.3	R1410303	W	X	
FTMM-53-GW-699MW06-10.2	R1410303	W	X	MS/MSD
FTMM-53-GW-699MW106-10.2	R1410303	W	X	FD of FTMM-53-GW-699MW06-10.2
FTMM-53-GW-699MW09-7.75	R1410303	W	X	
FTMM-53-GW-699MW16-7.5	R1410303	W	X	
FTMM-53-GW-699RW03-8.2	R1410303	W	X	
FTMM-53-GW-699MW04-8.0	R1410303	W	X	
FTMM-68-GW-565MW01D-22.31	R1410303	W	X	
FTMM-68-GW-565MW01-11.99	R1410303	W	X	
FTMM-22-GW-CW1MW29-10.85	R1410303	W	X	
FTMM-22-GW-CW1MW281-33.74	R1410303	W	X	
FTMM-22-GW-CW1MW28-11.21	R1410303	W	X	
FTMM-22-GW-CW1MW27-12.63	R1410303	W	X	
FTMM-22-GW-CW1MW31-16.40	R1410303	W	X	
FTMM-22-GW-CW1MW37-11.78	R1410303	W	X	
FTMM-54-GW-296MW06-5.07	R1410303	W	X	
FTMM-54-GW-296MW06-10.1	R1410303	W	X	
FTMM-54-GW-296MW06-6.35	R1410303	W	X	
FTMM-2-GW-M2MW21-8.8	R1410307	W	X	
FTMM-2-GW-M2MW21-15.97	R1410307	W	X	
FTMM-2-GW-M2MW10-17.31	R1410307	W	X	
FTMM-2-GW-M2MW10-7.32	R1410307	W	X	
FTMM-2-GW-M2MW10-12.32	R1410307	W	X	
FTMM-2-GW-M2MW24-9.97	R1410307	W	X	
FTMM-2-GW-M2MW24-16.5	R1410307	W	X	
FTMM-2-GW-M2MW11-36.91	R1410307	W	X	
FTMM-2-GW-M2MW11-46.91	R1410307	W	X	
FTMM-2-GW-M2MW11-41.91	R1410307	W	X	
FTMM-2-GW-M2MW11-31.91	R1410307	W	X	Lab selected MS/MSD
FTMM-2-GW-M2MW22-10.03	R1410307	W	X	
FTMM-2-GW-M2MW22-16.67 *	R1410307	W	X	
FTMM-2-GW-M2MW03-10.27	R1410307	W	X	
FTMM-5-GW-M5MW11-9.46	R1410307	W	X	
FTMM-5-GW-M5MW16-14.57	R1410307	W	X	
FTMM-5-GW-M5MW20-13.65	R1410307	W	X	
FTMM-5-GW-M5MW23-10.82	R1410307	W	X	
FTMM-18-GW-M18MW22-18.91	R1410307	W	X	

Sample ID	SDG	Matrix	VOCs, plus TICS	Comments
FTMM-18-GW-M18MW23-9.28	R1410307	W	X	
FTMM-18-GW-M18MW23-16.22	R1410307	W	X	
FTMM-TB-121914	R1410307	W	X	Trip Blank

W = Water

* = Sample mistakenly logged in as FTMM-2-GW-M2MW22-10.67.

EXTRACTION AND ANALYTICAL METHODS:

PARAMETER	MATRIX	EXTRACTION METHOD	ANALYTICAL METHOD	UNITS	DRY WT. VS. WET WT
VOCs	W	5030	8260C	µg/L	NA

EVALUATION CRITERIA

The data submitted by the laboratory has been verified following the guidelines outlined in the project-specific UFP-QAPP. A verification was performed and the information reviewed in the data packages included sample results; field and laboratory quality control results; case narratives; cooler receipt forms; and chain-of-custody (COC) forms. The analyses and findings presented in this report are based on the reviewed information, and whether guidelines in the UFP-QAPP were met.

This verification report discusses only the non-compliant QC issues that required qualifying the data. All other QC not detailed in this report was either compliant or did not require flagging (i.e. high biased QC associated with non-detected results).

The precision criterion for the relative percent difference (RPD) of the field duplicate samples is RPD $\leq$ 40 for water, as per the project-specific UFP-QAPP.

VOLATILE ORGANIC COMPOUNDS

General

The VOCs analyses were performed according to USEPA SW846 Method 8260C. All samples in this SDG were analyzed following the procedures outlined in the project-specific UFP-QAPP. All samples were prepared and analyzed within the holding time required by the method.

All analyses were performed undiluted, except as follows:

FTMM-53-GW-696RW05-10 at 2.5x for o-xylene only;
FTMM-22-GW-CW1MW281-33.74 at 5x for trichloroethene only.

There were TICs detected in samples:

FTMM-53-GW-699RW05-10
FTMM-53-GW-699RW11-5.3
FTMM-53-GW-699RW03-8.2
FTMM-54-GW-296MW06-5.07
FTMM-54-GW-296MW06-10.1
FTMM-2-GW-M2MW24-9.97
FTMM-2-GW-M2MW24-16.5

Accuracy

Accuracy was evaluated using the percent recovery obtained from the LCSs, MSs, MSDs and the surrogate spikes.

All LCS recoveries were within acceptance criteria, except as follows:

LCS ID	Analyte	%R	Criteria
Batch #427512	Chloromethane	134	40-125%

There were no detections of Chloromethane in the associated samples for batch # 7427512; therefore no action was required.

All MS/MSD recoveries were within acceptance criteria for sample FTMM-53-GW-699MW05-10, except for the following:

Analyte	MS %R	MSD %R	Criteria
1,2,4-Trimethylbenzene	45	41	75-130

The parent sample FTMM-53-GW-699MW05-10 was qualified with “J” flag for 1,2,4-Trimethylbenzene as required by the project-specific UFP-QAPP.

All MS/MSD recoveries were within acceptance criteria for sample FTMM-2-GW-M2MW11-31.91, except for the following:

Analyte	MS %R	MSD %R	Criteria
Chloromethane	131	(122)	40-125

( ) indicates the recovery met criteria.

Since the MS recovered high and there were no associated detections for chloromethane in the associated samples, no corrective action was deemed necessary.

All surrogate spike recoveries were within acceptance criteria for VOCs.

Precision

Precision was evaluated using the RPD obtained from the MS/MSD concentrations. Precision was further evaluated by comparing the field duplicate analyte results. Sample FTMM-53-GW-699MW106-10.2 was collected as the field duplicate of FTMM-53-GW-699MW06-10.2.

All MS/MSD RPDs were within acceptance criteria, except for bromomethane at 40% with criteria of 30% in sample FTMM-2-GW-M2MW11-31.91. No action was taken based on RPD results only, since the recoveries for both the MS and MSD were within criteria.

All target VOCs were non-detect above the Limit of Quantitation (LOQ) in both the parent and field duplicate samples in the parent/FD pair.

Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represents actual site conditions. Representativeness has been evaluated by:

- Comparing the COC procedures to those described in the Work Plan;
- Comparing actual analytical procedures to those described in the Work Plan;
- Evaluating holding times; and
- Examining the laboratory blank for cross contamination of samples during sample analysis.

The samples in this SDG were analyzed following the COC and the analytical procedures described in the QAPP. All samples were prepared and analyzed within the holding time required by the method.

- All initial calibration criteria were met.
- All SSV criteria were met.
- GC/MS tuning criteria for BFB were within QC criteria for all batches.
- All CCV criteria were met, with the following exceptions:

Inst #, CCV Date	Analyte	%R	Criteria
MSVOA10, 12/30/14 1:08	2,2-Dichloropropane 1,1,2,2-Tetrachloroethane Bromomethane Dichlorodifluoromethane	72.5 79.5 70.0 79.3	80-120%

Inst #, CCV Date	Analyte	%R	Criteria
MSVOA10, 12/31/14 11:21	Bromomethane Dichlorodifluoromethane	61.6 74.4	80-120%

Inst #, CCV Date	Analyte	%R	Criteria
MSVOA-12, 12/30/14 12:10	Tert-butyl alcohol Chloromethane	71 128.5	80-120%

Inst #, CCV Date	Analyte	%R	Criteria
MSVOA-12, 12/31/14 12:53	2,2-Dichloropropane Tert-butyl alcohol	69.9 73.4	80-120%

The following samples required "J" flagging due to the low recoveries in the CCVs:

- All samples in SDG R1410303 were flagged "J" for Bromomethane and Dichlorodifluoromethane;
- Also in R1410303, FTMM-53-GW-699MW01-7.5, FTMM-53-GW-699RW05-10, FTMM-53-GW-699MW09-7.75, FTMM-53-GW-699MW16-7.5, FTMM-53-GW-699RW03-8.2, FTMM-53-GW-699MW04-8.0, FTMM-22-GW-CW1MW29-10.85, FTMM-22-GW-CW1MW281-33.74, FTMM-22-GW-CW1MW281-33.74, and FTMM-22-GW-CW1MW27-12.63 were flagged for 2,2-Dichloropropane and 1,1,2,2-Tetrachloroethane;
- All samples in SDG R1410307 were flagged for Tert-butyl alcohol;
- Also in R1410307, FTMM-2-GW-M2MW24-9.97, FTMM-2-GW-M2MW24-16.5, FTMM-2-GW-M2MW11-36.91, FTMM-2-GW-M2MW11-46.91, and FTMM-2-GW-M2MW11-41.91 were flagged for 2,2-Dichloropropane.

- All internal standard (IS) criteria were met.
- All manual integrations performed by the laboratory were reviewed and verified.
- The MDLs were compliant with the requirements of the DOD QSM Version 4.2.

There were four method blanks and one trip blank analyzed for VOCs. See below for details.

Method Blanks:

Four method blanks were analyzed for VOCs, two in each SDG. All method blanks had detections less than one-half the LOQs, as required by the project-specific UFP-QAPP; therefore no corrective action was required. Three of the four method blanks contained low concentrations (< 0.36 µg/L) of 1,2,4-trichlorobenzene; and two of the four method blanks contained low concentrations of hexachlorobutadiene (<0.67 µg/L), and naphthalene (<0.28 µg/L). Since all associated samples were non-detect for the analytes listed in the method blanks, no corrective action was required. At the time of sample analyses, ALS did not consider any of these analytes as common laboratory contaminants.

Trip Blank:

FTMM-TB-121914 had detections of 1,2,4-trichlorobenzene and Naphthalene at 0.29 µg/L and 0.21 µg/L, respectively. Since there were no detections of either analyte in the associated samples, no corrective action was required.

Completeness

Completeness has been evaluated by comparing the total number of samples collected with the total number of samples with valid analytical data.

All VOC results for the samples in this SDG were considered usable. The completeness for the VOC portion of this SDG is 100%, which meets the minimum acceptance criteria of 95%.

COMPARABILITY

All data was generated using contract-specific standard methods and reported with known data quality, type of analysis, units, etc.

DATA USABILITY

The purpose of this data validation report is to ensure the integrity and reliability of analytical laboratory data. The data quality is evaluated based on precision, accuracy, representativeness, comparability, and completeness (PARCC) characteristics of the data. The validated data indicated that the laboratory correctly performed the analyses. Based on the data quality assessment, none of the data were qualified as rejected.
All data in this SDG are considered usable for the purposes of this project. All sample LODs and LOQs met the requirements listed in the project QAPP. All Method Quality Objectives have been met.

APPENDIX P

LABORATORY ANALYTICAL RESULTS

October 24, 2014 Service Request No: R1407813

Tammy Chang
Parsons, Inc.
8000 Centre Park Drive, Suite 200
Austin, TX 78754

Laboratory Results for: FTMM 4QGW/748810-03000

Dear Tammy:

Enclosed are the results of the sample(s) submitted to our laboratory on October 3, 2014. For your reference, these analyses have been assigned our service request number **R1407813**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Janice Jaeger
Client Services Manager

Page 1 of 109

CC: Sandra de las Fuentes

ADDRESS 1565 Jefferson Rd, Building 300, Suite 360, Rochester, NY 14623 PHONE 585-288-5380 | FAX 585-288-8475
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CASE NARRATIVE

Client:	Parsons Engineering Science	**Service Request No.:**	R1307813
Project:	FTMM 4QGW	**Project No.:**	748810-0300
Sample Matrix:	Water	**Date Received:**	10/03/14

General Comments

The DOD QSM 4.1 requires detections reported to the Method Detection Limit (MDL). Values greater than the MDL and less than the Limit of Quantitation (LOQ) were flagged as estimates (J). Values less than the MDL and Limit of Detection (LOD) were reported as non-detect (ND). The LOD for each analyte is verified quarterly by the laboratory using procedures defined in DOD Quality Systems Manual Version 4.1.

Sample Receipt

Samples were collected on 09/30/14-10/02/14 and received in good condition at a cooler temperature of and 8.8°C as noted on the cooler receipt and preservation check form. The client was notified of the out of temperature cooler and the samples analyzed. The samples were stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the batching form for a cross-reference between Client ID and ALS Job #.

Volatile Organics

Sixteen water samples were analyzed for TCL Volatile organics by SW-846 method 8260C. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

Library Searches against the NBS/EPA library were conducted on all samples. The 20 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

All Tuning criteria for BFB were and within QC limits.

Internal Standard Areas were within QC limits.

All the initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within acceptance limits for all samples.

The Blank Spike (LCS) recoveries were all acceptable.

A Matrix Spike/Matrix spike duplicate (MS/MSD) was done on sample FTMM-8-GW-697MW01-16.45. All outlying QC has been flagged with an "*".

The Method Blanks associated with these samples were free of contamination except for "J" flagged values for 1,2,4-Trichlorobenzene, Hexachlorobutadiene, Naphthalene and Bromomethane. No data was affected.

R1307813
Page 2

Pesticide Analysis

Four water samples were analyzed for TCL Pesticides by SW-846 method 8081B. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

All the initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within acceptance limits for all samples except DCB for sample FTMM-2-GW-M2MW24. The recovery was flagged with an "*".

The Blank Spike/Blank Spike Duplicate (LCS/LCSD) recoveries were all acceptable except Endrin aldehyde and has been flagged with an "*". All samples are possibly biased low for this compound.

The Matrix Spike/Matrix Spike Duplicate was performed on FTMM-8-GW-697MW01-16.45. All outlying QC has been flagged with an "*". The recovery for 4,4'-DDD could not be accurately determined as the amount present in the sample was greater than four times the amount added as spike as noted by the "#".

The Method Blanks associated with these samples were free of contamination.

Metals Analysis

Six water samples were analyzed for a site specific list of metals by method 6010C from SW-846. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

All blank spike recoveries (LCS) were within QC limits of 80 – 120 %.

A Matrix Spike and Duplicate were done on sample FTMM-8-GW-697-MW01-16.45. All recoveries were within QC limits.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #:	748810-03000	Batch Complete:	Yes	Date Revised:	
Submission:	R1407813	Diskette Requested:	No	Date Due:	10/24/14
Client:	Parsons Engineering Science	Date:	10/3/14	Protocol:	SW846
Client Rep:	JJAEGER	Custody Seal: Present/Absent:		Shipping No.:	
Project:	FTMM 4QGW	Chain of Custody: Present/Absent:		SDG #:	FTMM-8-GW-697MW01-16.45

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1407813-001QC	FTMM-8-GW-697MW01-16.45	Water	8260C, 8081B, 6010C	10/1/14	10/3/14			
R1407813-004	FTMM-8-GW-M8MW24-29.68	Water	8260C	10/1/14	10/3/14			
R1407813-005	FTMM-8-GW-M8MW16-11.74	Water	8260C	10/1/14	10/3/14			
R1407813-006	FTMM-8-GW-M8MW15-11.30	Water	8260C	10/1/14	10/3/14			
R1407813-007	FTMM-56-GW-80MW05-7.14	Water	8081B	10/1/14	10/3/14			
R1407813-009	FTMM-56-GW-80MW02-8.10	Water	6010C	10/1/14	10/3/14			
R1407813-010	FTMM-EB-100114-01	Water	6010C, 8081B, 8260C	10/1/14	10/3/14			
R1407813-011	FTMM-EB-100114-02	Water	8260C	10/1/14	10/3/14			
R1407813-012	FTMM-56-GW-80MW105-7.14	Water	8081B	10/1/14	10/3/14			
R1407813-013	FTMM-3-GW-M3MW07-13.85	Water	8260C	10/2/14	10/3/14			
R1407813-014	FTMM-64-GW-812MW04-5.53	Water	8260C	10/2/14	10/3/14			
R1407813-015	FTMM-61-GW-283MW02-13.26	Water	8260C	10/2/14	10/3/14			
R1407813-016	FTMM-8-GW-M8MW17-10.90	Water	6010C	10/2/14	10/3/14			
R1407813-017	FTMM-8-GW-M8MW21-14.31	Water	6010C	10/2/14	10/3/14			
R1407813-018	FTMM-8-GW-M8MW12-13.55	Water	8260C	10/2/14	10/3/14			
R1407813-019	FTMM-59-GW-1122MW07-16.67	Water	8260C	10/2/14	10/3/14			
~~R1407813-020~~	~~FTMM-58-GW-2567MW03-8.03~~	Water	8260C	10/2/14	10/3/14	} did not receive samples		
~~R1407813-021~~	~~FTMM-57-GW-108MW04-8.25~~	Water	6010C	10/2/14	10/3/14			sent 10/22/14
~~R1407813-022~~	~~FTMM-58-GW-2567-MW01-8.73~~	Water	8260C	10/2/14	10/3/14			
R1407813-023	FTMM-TB-100214	Water	8260C	10/2/14	10/3/14			
R1407813-024	FTMM-EB-093014	Water	8260C	9/30/14	10/3/14			
R1407813-025	FTMM-DI-093014	Water	8260C	9/30/14	10/3/14			
R1407813-026	FTMM-EB-100214	Water	8260C, 6010C	10/2/14	10/3/14			
R1407813-027	FTMM-59-GW-1122MW107-16.67	Water	8260C	10/2/14	10/3/14			

4004

Folder Comments: DoD reporting

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

INORGANIC PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	3010A
200.8	ILM05.3
6010C	3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3010A
6010 SPLP (1312) extract	3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 1

Project Name: FTMM 4QGW	Project Number: 748810-03000
Project Manager: Cris Grill	Report CC:
Company/Address: Parsons	
100 High Street, Boston, MA 02210	
Phone #: 617-449-1583	Email: cris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: Nick Leitzo

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs + TICs ◦ 8260 ◦ 624 ◦ CLP	GC/MS SVOAs ◦ 8270 ◦ 625	GC VOAs ◦ 8021 ◦ 601/602	PESTICIDES ◦ 8081 ◦ 608	PCBs ◦ 8082 ◦ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Hetals, Pb	Pb, As, Cd	REMARKS/ ALTERNATE DESCRIPTION
FTMM-8-GW-GWMW01-16.45	-001	10/1/14	1105	GW	5	X			X				X		
FTMM-8-GW-GWMW01-16.45-MS QC		10/1/14	1105		4	X			X						
FTMM-8-GW-GWMW01-16.45-MSD QC		10/1/14	1105		4	X			X						
FTMM-8-GW-MWMW34-19.68	-004	10/1/14	1130		3	X									
FTMM-8-GW-MWMW16-11.74	-005	10/1/14	1330		3	X									
FTMM-8-GW-MWMW15-11.30		10/1/14	1400		3	X									
FTMM-56-GW-80MW03-7.14		10/1/14	1620		1				X						
FTMM-56-GW-80MW02-8.10		10/1/14	1625		1								X		
FTMM-EB-100114-01		10/1/14	1700		5	X			X				X	X	
FTMM-EB-100114-02		10/1/14	1630		3	X									
FTMM-56-GW-80MW05-7.14		10/1/14	1400		1				X						

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

In cooler wt of temp.

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
STANDARD
REQUESTED REPORT DATE

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
Edata ____ Yes ____ No

INVOICE INFORMATION
PO #
BILL TO:
2140781 3

STATE WHERE SAMPLES WERE COLLECTED

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: Nick Leitzo	Printed Name: J. Stannard	Printed Name	Printed Name	Printed Name	
Firm: Parsons	Firm: ALS	Firm	Firm	Firm	
Date/Time: 10/2/14 1730	Date/Time: 10/3 1020	Date/Time	Date/Time	Date/Time	

R1407813 5
Parsons, Inc.
FTMM 4QGW

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

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Project Name: FTMM 4QGW	Project Number: 748810-03000
Project Manager: Cris Grill	Report CC:
Company/Address: 100 High St, Boston, MA 02210	
Phone #: 617-449-1583	Email: Cris.Grill@PARSONS.com
Sampler's Signature:	Sampler's Printed Name: C. Watson, N. Loizos, J. McCaull

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE

NUMBER OF CONTAINERS

GC/MS VOAs ◦ 8260 ◦ 624 ◦ CLP + TICs | GC/MS SVOAs ◦ 8270 ◦ 625 | GC VOAs ◦ 8021 ◦ 601/602 | PESTICIDES ◦ 6081 ◦ 608 | PCBs ◦ 8082 ◦ 608 | METALS, TOTAL (List in comments below) | METALS, DISSOLVED (List in comments below) | Pb | REMARKS/ ALTERNATE DESCRIPTION

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs + TICs	GC/MS SVOAs	GC VOAs	PESTICIDES	PCBs	METALS, TOTAL	METALS, DISSOLVED	Pb	REMARKS/ ALTERNATE DESCRIPTION
FTMM-3-GW-M3MW07-13.85		10/2/14	1525	GW	3	X								
FTMM-64-GW-812MW64-5.53		10/2/14	1345	GW	3	X								
FTMM-61-GW-283MW02-13.26		10/2/14	1135	GW	3	X								
FTMM-8-GW-M8MW17-10.90		10/2/14	1015	GW	1								X	
FTMM-8-GW-M8MW21-14.31		10/2/14	1010	GW	1								X	
FTMM-8-GW-M8MW12-13.55		10/2/14	1135	GW	3	X								
FTMM-59-GW-1122MW07-16.67		10/2/14	1410	GW	3	X								
FTMM-58-GW-2567MW03-8.03		10/2/14	1440	GW	3	X								
FTMM-57-GW-102MW01-8.25		10/2/14	1035	GW	1								X	
FTMM-58-GW-2567-MW01-8.73		10/2/14	1250	GW	3	X								
FTMM-TB-100214		10/2/14	—	GW	3	X								

SPECIAL INSTRUCTIONS/COMMENTS
Metals

In cooler out of temp.

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
Standard
REQUESTED REPORT DATE
_____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
Edata ____ Yes ____ No

INVOICE INFORMATION
PO #
BILL TO:
R1407813

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: Nick Loizos	Printed Name: J Sewell	Printed Name	Printed Name	Printed Name	Printed Name
Firm: Parsons	Firm: ALS	Firm	Firm	Firm	Firm
Date/Time: 10/2/14 @ 17:30	Date/Time: 10/3 1020	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Lab Copy; Yellow - Return to Originator

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ALS Environmental

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

19150

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE _____ OF _____

Project Name: FTMM 4Q GW	Project Number: 714661.0 - 03000
Project Manager: Chris Gorill	Report CC:
Company/Address: Parsons 100 High St, Boston, MA 02110	
Phone #: 617-449-1583	Email: chris.gorill@parsons.com
Sampler's Signature:	Sampler's Printed Name: Nick Loizos

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GCMS VOAs • 8260 • 624 • CLP	GCMS SVOAs • 8270 • 625	GC VOAs • 8021 • 601/602	PESTICIDES • 8081 • 608	PCBs • 8082 • 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	ALS	REMARKS/ ALTERNATE DESCRIPTION
FTMM-EB-093014		9/30/14	1430	EB	3	X								
FTMM-DI-093014		9/30/14	0945	DI	3	X								
FTMM-EB-100314		10/3/14	1530	EB	4	X							X	
FTMM-59-GW-112MW07-16-27		10/3/14	1230	GW	3	X								

SPECIAL INSTRUCTIONS/COMMENTS
Metals

In cooler out of temp.

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
REQUESTED REPORT DATE
_____

REPORT REQUIREMENTS
_____ I. Results Only
_____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
_____ III. Results + QC and Calibration Summaries
_____ IV. Data Validation Report with Raw Data
Edata _____ Yes _____ No

INVOICE INFORMATION
PO #
BILL TO:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: Nick Loizos	Printed Name: J. Schwarz	Printed Name	Printed Name	Printed Name	Printed Name
Firm: Parsons	Firm: ALS	Firm	Firm	Firm	Firm
Date/Time: 10/3/14 @ 1730	Date/Time: 10/3 1720	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Lab Copy; Yellow - Return to Originator

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Cooler Receipt and Preservation Check Form

Project/Client Parsons. Folder Number R1407813

Cooler received on 10/3 by: SG

COURIER: ALS UPS ~~FEDEX~~ VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y) N	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	(Y) N NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	ALS/ROC CLIENT
4	Circle: ~~Wet Ice~~ **Dry Ice** **Gel packs** present?	(Y) N	7	Soil VOA received as:	Bulk Encore 5035set (NA)

8. Temperature Readings Date: 10/3 Time: 1103 ID: (IR#3) IR#4 From: ~~Temp Blank~~ Sample Bottle

Observed Temp (°C)	3.8	8.7					
Correction Factor (°C)	-0.2	+0.1					
Corrected Temp (°C)	3.6	8.8					
Within 0-6°C?	(Y) N	Y (N)	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off **Client notified by:** OK per client email

All samples held in storage location: RWR by JG on 10/3 at 1103
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: JMS 10/5/14

Cooler Breakdown: Date: 10-6-14 Time: 16:05 by: ME

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? YES NO
2. Did all bottle labels and tags agree with custody papers? YES NO
3. Were correct containers used for the tests indicated? YES NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated N/A

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3	✓		BDF2613TE	08/15				
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	4113070	08/15				

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 060914-2AAW, 031014-1BMG, 4-002-003

Other Comments:

* TRIP BLANK + EQUIP BLANK – 1 vial w/ headspace

ACI : 4112120 exp 08/15

R1407813 5
Parsons, Inc.
FTMM 4QGW

PC Secondary Review: JMS 10/7/14

*significant air bubbles: VOA > 5-6 mm : WC > 1 in. diameter

P:\INTRANET\QAQC\Forms Controlled\Cooler Receipt rev7.doc 5/6/14

00019

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/1/14 1105
Date Received: 10/3/14
Date Analyzed: 10/9/14 13:25

Sample Name: FTMM-8-GW-697MW01-16.45
Lab Code: R1407813-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100914\M9582.D\

Analysis Lot: 415409
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	0.28	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	0.70	J	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/1/14 1105
Date Received: 10/3/14
Date Analyzed: 10/9/14 13:25

Sample Name: FTMM-8-GW-697MW01-16.45
Lab Code: R1407813-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100914\M9582.D\

Analysis Lot: 415409
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	**1.6**	**J**	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**2.7**	**J**	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**1.6**	J	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**0.42**	**J**	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1105
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 13:25
Sample Name:	FTMM-8-GW-697MW01-16.45	**Units:**	µg/L
Lab Code:	R1407813-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9582.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	10/9/14 13:25	
Dibromofluoromethane	97	85-115	10/9/14 13:25	
Toluene-d8	95	85-120	10/9/14 13:25	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/1/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 1325

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-8-GW-697MW01-16.45	**Units:**	µg/L
Lab Code:	R1407813-001	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1130
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/8/14 23:28
Sample Name:	FTMM-8-GW-M8MW24-29.68	**Units:**	µg/L
Lab Code:	R1407813-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9563.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**0.22**	J	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**0.62**	J	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/1/14 1130
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/8/14 23:28
Sample Name:	FTMM-8-GW-M8MW24-29.68	**Units:**	µg/L
Lab Code:	R1407813-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9563.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	**2.1**	J	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1130
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/8/14 23:28
Sample Name:	FTMM-8-GW-M8MW24-29.68	**Units:**	µg/L
Lab Code:	R1407813-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9563.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	10/8/14 23:28	
Dibromofluoromethane	99	85-115	10/8/14 23:28	
Toluene-d8	100	85-120	10/8/14 23:28	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/1/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/8/14 2328

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-8-GW-M8MW24-29.68	**Units:**	µg/L
Lab Code:	R1407813-004	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM-4QGW/748810-03000	**Date Collected:**	10/1/14 1330
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 00:01
Sample Name:	FTMM-8-GW-M8MW16-11.74	**Units:**	µg/L
Lab Code:	R1407813-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9564.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**0.52**	J	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**0.85**	J	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**3.1**	J	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**3.5**	J	5.0	5.0	1.3	
71-43-2	Benzene	**0.38**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/ 1/14 1330
Date Received: 10/ 3/14
Date Analyzed: 10/9/14 00:01

Sample Name: FTMM-8-GW-M8MW16-11.74
Lab Code: R1407813-005

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100814\M9564.D\

Analysis Lot: 415258
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	**29**		5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	**0.21**	J	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1330
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 00:01
Sample Name:	FTMM-8-GW-M8MW16-11.74	**Units:**	µg/L
Lab Code:	R1407813-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9564.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	10/9/14 00:01	
Dibromofluoromethane	98	85-115	10/9/14 00:01	
Toluene-d8	100	85-120	10/9/14 00:01	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/1/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 0001

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-8-GW-M8MW16-11.74	**Units:**	µg/L
Lab Code:	R1407813-005	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/ 1/14 1400
Date Received: 10/ 3/14
Date Analyzed: 10/9/14 00:33

Sample Name: FTMM-8-GW-M8MW15-11.30
Lab Code: R1407813-006

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\100814\M9565.D\

Analysis Lot: 415258
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**1.1**	J	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**1.3**	J	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**3.4**	J	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	0.92	J	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**13**		5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM-4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/-1/14 1400
Date Received: 10/ 3/14
Date Analyzed: 10/9/14 00:33

Sample Name: FTMM-8-GW-M8MW15-11.30
Lab Code: R1407813-006

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\100814\M9565.D\

Analysis Lot: 415258
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	**14**		5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	**0.32**	J	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.24**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM-4QGW/748810-03000	**Date Collected:**	10/1/14 1400
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 00:33
Sample Name:	FTMM-8-GW-M8MW15-11.30	**Units:**	µg/L
Lab Code:	R1407813-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\msvoa12\Data\100814\M9565.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	10/9/14 00:33	
Dibromofluoromethane	101	85-115	10/9/14 00:33	
Toluene-d8	101	85-120	10/9/14 00:33	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/1/14
Date Received: 10/3/14
Date Analyzed: 10/9/14 0033

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-8-GW-M8MW15-11.30
Lab Code: R1407813-006

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000496-11-7	Indane	10.97	7.4	JN

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1700
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 01:05
Sample Name:	FTMM-EB-100114-01	**Units:**	µg/L
Lab Code:	R1407813-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9566.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1700
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 01:05
Sample Name:	FTMM-EB-100114-01	**Units:**	µg/L
Lab Code:	R1407813-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9566.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1700
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 01:05
Sample Name:	FTMM-EB-100114-01	**Units:**	µg/L
Lab Code:	R1407813-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9566.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	75-120	10/9/14 01:05	
Dibromofluoromethane	100	85-115	10/9/14 01:05	
Toluene-d8	97	85-120	10/9/14 01:05	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/1/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 0105

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-EB-100114-01	**Units:**	µg/L
Lab Code:	R1407813-010	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/1/14 1630
Date Received: 10/3/14
Date Analyzed: 10/9/14 01:38

Sample Name: FTMM-EB-100114-02
Lab Code: R1407813-011

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100814\M9567.D\

Analysis Lot: 415258
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/1/14 1630
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 01:38
Sample Name:	FTMM-EB-100114-02	**Units:**	µg/L
Lab Code:	R1407813-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9567.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/1/14 1630
Date Received: 10/3/14
Date Analyzed: 10/9/14 01:38

Sample Name: FTMM-EB-100114-02
Lab Code: R1407813-011

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100814\M9567.D\

Analysis Lot: 415258
Instrument Name: R-MS-12
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	10/9/14 01:38	
Dibromofluoromethane	100	85-115	10/9/14 01:38	
Toluene-d8	100	85-120	10/9/14 01:38	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000-	**Date Collected:**	10/1/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 0138

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-EB-100114-02	**Units:**	µg/L
Lab Code:	R1407813-011	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1525
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 02:10
Sample Name:	FTMM-3-GW-M3MW07-13.85	**Units:**	µg/L
Lab Code:	R1407813-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9568.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.4**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/2/14 1525
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 02:10
Sample Name:	FTMM-3-GW-M3MW07-13.85	**Units:**	µg/L
Lab Code:	R1407813-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9568.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**4.0**	**J**	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**3.0**	**J**	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/2/14 1525
Date Received: 10/3/14
Date Analyzed: 10/9/14 02:10

Sample Name: FTMM-3-GW-M3MW07-13.85
Lab Code: R1407813-013

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100814\M9568.D\

Analysis Lot: 415258
Instrument Name: R-MS-12
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	10/9/14 02:10	
Dibromofluoromethane	97	85-115	10/9/14 02:10	
Toluene-d8	102	85-120	10/9/14 02:10	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM.4QGW.748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/2/14
Date Received: 10/3/14
Date Analyzed: 10/9/14 0210

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-3-GW-M3MW07-13.85
Lab Code: R1407813-013

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/2/14 1345
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 13:57
Sample Name:	FTMM-64-GW-812MW04-5.53	**Units:**	µg/L
Lab Code:	R1407813-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9583.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**0.52**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**3.2**	J	5.0	5.0	1.3	
71-43-2	Benzene	**0.32**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM-4QGW/748810-03000	**Date Collected:**	10/2/14 1345
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 13:57
Sample Name:	FTMM-64-GW-812MW04-5.53	**Units:**	µg/L
Lab Code:	R1407813-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9583.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	**0.93**	J	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**1.4**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**0.48**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.38**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.37**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**7.8**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**0.77**	J	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**1.1**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	**0.23**	J	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**0.65**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	**0.59**	J	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.23**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1345
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 13:57
Sample Name:	FTMM-64-GW-812MW04-5.53	**Units:**	µg/L
Lab Code:	R1407813-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9583.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	10/9/14 13:57	
Dibromofluoromethane	99	85-115	10/9/14 13:57	
Toluene-d8	96	85-120	10/9/14 13:57	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/2/14
Date Received: 10/3/14
Date Analyzed: 10/9/14 1357

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-64-GW-812MW04-5.53
Lab Code: R1407813-014

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/2/14 1135
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 14:29
Sample Name:	FTMM-61-GW-283MW02-13.26	**Units:**	µg/L
Lab Code:	R1407813-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9584.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1135
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 14:29
Sample Name:	FTMM-61-GW-283MW02-13.26	**Units:**	µg/L
Lab Code:	R1407813-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9584.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 11:35
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 14:29
Sample Name:	FTMM-61-GW-283MW02-13.26	**Units:**	µg/L
Lab Code:	R1407813-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9584.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	75-120	10/9/14 14:29	
Dibromofluoromethane	98	85-115	10/9/14 14:29	
Toluene-d8	101	85-120	10/9/14 14:29	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/2/14
Date Received: 10/3/14
Date Analyzed: 10/9/14 1429

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-61-GW-283MW02-13.26
Lab Code: R1407813-015

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/2/14 1135
Date Received: 10/3/14
Date Analyzed: 10/9/14 15:02

Sample Name: FTMM-8-GW-M8MW12-13.55
Lab Code: R1407813-018

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100914\M9585.D\

Analysis Lot: 415409
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/2/14 1135
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 15:02
Sample Name:	FTMM-8-GW-M8MW12-13.55	**Units:**	µg/L
Lab Code:	R1407813-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9585.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**4.7**	**J**	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**1.3**	**J**	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1135
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 15:02
Sample Name:	FTMM-8-GW-M8MW12-13.55	**Units:**	µg/L
Lab Code:	R1407813-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9585.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	10/9/14 15:02	
Dibromofluoromethane	100	85-115	10/9/14 15:02	
Toluene-d8	99	85-120	10/9/14 15:02	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/2/14
Date Received: 10/3/14
Date Analyzed: 10/9/14 1502

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-8-GW-M8MW12-13.55
Lab Code: R1407813-018

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/2/14 1410
Date Received: 10/3/14
Date Analyzed: 10/9/14 15:34

Sample Name: FTMM-59-GW-1122MW07-16.67
Lab Code: R1407813-019

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100914\M9586.D\

Analysis Lot: 415409
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	2.7	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/2/14 1410
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 15:34
Sample Name:	FTMM-59-GW-1122MW07-16.67	**Units:**	µg/L
Lab Code:	R1407813-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9586.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**0.83**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.80**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**0.33**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**0.43**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.37**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/2/14 1410
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 15:34
Sample Name:	FTMM-59-GW-1122MW07-16.67	**Units:**	µg/L
Lab Code:	R1407813-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9586.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	10/9/14 15:34	
Dibromofluoromethane	96	85-115	10/9/14 15:34	
Toluene-d8	98	85-120	10/9/14 15:34	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/2/14
Date Received: 10/3/14
Date Analyzed: 10/9/14 1534

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-59-GW-1122MW07-16.67
Lab Code: R1407813-019

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
027133-93-3	2,3-Dihydro-1-methylindene	11.92	7.2	JN

Comments:

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/2/14
Date Received: 10/3/14
Date Analyzed: 10/9/14 12:20

Sample Name: FTMM-TB-100214
Lab Code: R1407813-023

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100914\M9580.D\

Analysis Lot: 415409
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	0.24	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810=03000	**Date Collected:**	10/ 2/14
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 12:20
Sample Name:	FTMM-TB-100214	**Units:**	µg/L
Lab Code:	R1407813-023	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9580.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.22**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/2/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 12:20
Sample Name:	FTMM-TB-100214	**Units:**	µg/L
Lab Code:	R1407813-023	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9580.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	10/9/14 12:20	
Dibromofluoromethane	97	85-115	10/9/14 12:20	
Toluene-d8	101	85-120	10/9/14 12:20	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/2/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 1220

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-TB-100214	**Units:**	µg/L
Lab Code:	R1407813-023	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM-4QGW/748810-03000	**Date Collected:**	9/30/14 1430
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/8/14 22:23
Sample Name:	FTMM-EB-093014	**Units:**	µg/L
Lab Code:	R1407813-024	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9561.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	2.2	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	9/30/14 1430
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/8/14 22:23
Sample Name:	FTMM-EB-093014	**Units:**	µg/L
Lab Code:	R1407813-024	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9561.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	9/30/14 1430
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/8/14 22:23
Sample Name:	FTMM-EB-093014	**Units:**	µg/L
Lab Code:	R1407813-024	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9561.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	10/8/14 22:23	
Dibromofluoromethane	97	85-115	10/8/14 22:23	
Toluene-d8	101	85-120	10/8/14 22:23	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	9/30/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/8/14 2223

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-EB-093014	**Units:**	µg/L
Lab Code:	R1407813-024	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	9/30/14 0945
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/8/14 22:56
Sample Name:	FTMM-DI-093014	**Units:**	µg/L
Lab Code:	R1407813-025	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9562.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 9/30/14 0945
Date Received: 10/ 3/14
Date Analyzed: 10/8/14 22:56

Sample Name: FTMM-DI-093014
Lab Code: R1407813-025

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100814\M9562.D\

Analysis Lot: 415258
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	9/30/14 0945
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/8/14 22:56
Sample Name:	FTMM-DI-093014	**Units:**	µg/L
Lab Code:	R1407813-025	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9562.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	75-120	10/8/14 22:56	
Dibromofluoromethane	97	85-115	10/8/14 22:56	
Toluene-d8	99	85-120	10/8/14 22:56	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 9/30/14
Date Received: 10/3/14
Date Analyzed: 10/8/14 2256

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-DI-093014
Lab Code: R1407813-025

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1530
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 12:53
Sample Name:	FTMM-EB-100214	**Units:**	µg/L
Lab Code:	R1407813-026	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9581.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/ 2/14 1530
Date Received: 10/ 3/14
Date Analyzed: 10/9/14 12:53

Sample Name: FTMM-EB-100214
Lab Code: R1407813-026

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100914\M9581.D\

Analysis Lot: 415409
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1530
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 12:53
Sample Name:	FTMM-EB-100214	**Units:**	µg/L
Lab Code:	R1407813-026	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9581.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	10/9/14 12:53	
Dibromofluoromethane	97	85-115	10/9/14 12:53	
Toluene-d8	101	85-120	10/9/14 12:53	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/2/14
Date Received: 10/3/14
Date Analyzed: 10/9/14 1253

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-EB-100214
Lab Code: R1407813-026

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/2/14 1230
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 16:06
Sample Name:	FTMM-59-GW-1122MW107-16.67	**Units:**	µg/L
Lab Code:	R1407813-027	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9587.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	2.6	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/2/14 1230
Date Received: 10/3/14
Date Analyzed: 10/9/14 16:06

Sample Name: FTMM-59-GW-1122MW107-16.67
Lab Code: R1407813-027

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100914\M9587.D\

Analysis Lot: 415409
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	0.83	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	1.1	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	0.37	J	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	0.46	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	0.37	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/2/14 1230
Date Received: 10/3/14
Date Analyzed: 10/9/14 16:06

Sample Name: FTMM-59-GW-1122MW107-16.67
Lab Code: R1407813-027

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100914\M9587.D\

Analysis Lot: 415409
Instrument Name: R-MS-12
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	75-120	10/9/14 16:06	
Dibromofluoromethane	100	85-115	10/9/14 16:06	
Toluene-d8	100	85-120	10/9/14 16:06	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/2/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 1606

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-59-GW-1122MW107-16.67	**Units:**	µg/L
Lab Code:	R1407813-027	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
	unknown	10.98	**5.4**	J
000767-58-8	Indan, 1-methyl-	11.92	**8.3**	JN

Comments:

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: NA
Date Received: NA
Date Analyzed: 10/8/14 18:37

Sample Name: Method Blank
Lab Code: RQ1412142-04

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100814\M9554.D\

Analysis Lot: 415258
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.31**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.29**	J	5.0	1.0	0.29	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM-4QGW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/8/14 18:37
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412142-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9554.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**0.62**	J	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.26**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/8/14 18:37
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412142-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9554.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	75-120	10/8/14 18:37	
Dibromofluoromethane	98	85-115	10/8/14 18:37	
Toluene-d8	102	85-120	10/8/14 18:37	

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Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: NA
Date Received: NA
Date Analyzed: 10/8/14 1837

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1412142-04

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: NA
Date Received: NA
Date Analyzed: 10/9/14 11:50

Sample Name: Method Blank
Lab Code: RQ1412180-04

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100914\M9579.D\

Analysis Lot: 415409
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.35**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.29**	J	5.0	1.0	0.29	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/9/14 11:50
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412180-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9579.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.25**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-I,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/9/14 11:50
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412180-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9579.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	10/9/14 11:50	
Dibromofluoromethane	96	85-115	10/9/14 11:50	
Toluene-d8	103	85-120	10/9/14 11:50	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: NA
Date Received: NA
Date Analyzed: 10/9/14 1150

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1412180-04

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

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Form 1B

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SuperSet Reference: 14-0000307104 rev 00

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Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/1/14
Date Received: 10/3/14
Date Analyzed: 10/ 9/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-8-GW-697MW01-16.45
Lab Code: R1407813-001

Units: µg/L
Basis: NA

Analytical Method: 8260C

Analyte Name	Sample Result	FTMM-8-GW-697MW01-16.45 MS Matrix Spike RQ1412180-05 Result	Spike Amount	% Rec		FTMM-8-GW-697MW01-16.45 DMS Duplicate Matrix Spike RQ1412180-06 Result	Spike Amount	% Rec		% Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND	47.2	50.0	94		48.3	50.0	97		80 - 130	2	30
1,1,1-Trichloroethane (TCA)	ND	48.1	50.0	96		49.5	50.0	99		65 - 130	3	30
1,1,2,2-Tetrachloroethane	ND	53.8	50.0	108		53.5	50.0	107		65 - 130	<1	30
1,1,2-Trichloroethane	ND	56.2	50.0	112		55.1	50.0	110		75 - 125	2	30
1,1-Dichloroethane (1,1-DCA)	ND	47.2	50.0	94		48.6	50.0	97		70 - 135	3	30
1,1-Dichloroethene (1,1-DCE)	ND	54.2	50.0	108		56.5	50.0	113		70 - 130	4	30
1,1-Dichloropropene	ND	46.8	50.0	94		48.7	50.0	97		75 - 130	4	30
1,2,3-Trichlorobenzene	ND	49.3	50.0	99		51.5	50.0	103		75 - 125	4	30
1,2,3-Trichloropropane	ND	53.1	50.0	106		52.9	50.0	106		75 - 125	<1	30
1,2,4-Trichlorobenzene	ND	49.9	50.0	100		52.6	50.0	105		65 - 135	5	30
1,2,4-Trimethylbenzene	ND	15.0	50.0	30	*	15.5	50.0	31	*	75 - 130	3	30
1,2-Dibromo-3-chloropropane (DBC	ND	54.6	50.0	109		54.7	50.0	109		50 - 130	<1	30
1,2-Dibromoethane	ND	55.7	50.0	111		55.4	50.0	111		80 - 120	<1	30
1,2-Dichlorobenzene	ND	51.5	50.0	103		53.5	50.0	107		70 - 120	4	30
1,2-Dichloroethane	ND	46.0	50.0	92		45.4	50.0	91		70 - 130	1	30
1,2-Dichloropropane	ND	49.8	50.0	100		50.9	50.0	102		75 - 125	2	30
1,3,5-Trimethylbenzene	ND	15.9	50.0	32	*	17.1	50.0	34	*	75 - 130	7	30
1,3-Dichlorobenzene	ND	51.2	50.0	102		53.9	50.0	108		75 - 125	5	30
1,3-Dichloropropane	ND	48.5	50.0	97		48.5	50.0	97		75 - 125	<1	30
1,4-Dichlorobenzene	ND	51.2	50.0	102		54.0	50.0	108		75 - 125	5	30
2,2-Dichloropropane	ND	44.8	50.0	90		45.2	50.0	90		70 - 135	<1	30
2-Butanone (MEK)	ND	48.0	50.0	96		42.3	50.0	85		30 - 150	12	30
2-Chlorotoluene	ND	48.2	50.0	96		50.8	50.0	102		75 - 125	5	30
2-Hexanone	ND	44.4	50.0	89		41.5	50.0	83		55 - 130	7	30
tert-Butyl Alcohol	ND	1170	1000	117		1100	1000	110		50 - 150	6	30
4-Chlorotoluene	ND	43.9	50.0	88		46.2	50.0	92		75 - 130	5	30
p-Isopropyltoluene	ND	39.4	50.0	79		42.1	50.0	84		75 - 130	7	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/1/14
Date Received: 10/3/14
Date Analyzed: 10/ 9/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-8-GW-697MW01-16.45
Lab Code: R1407813-001

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-8-GW-697MW01-16.45 MS Matrix Spike RQ1412180-05				FTMM-8-GW-697MW01-16.45 DMS Duplicate Matrix Spike RQ1412180-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
4-Methyl-2-pentanone	ND	51.8	50.0	104		48.0	50.0	96	60 - 135	8	30
Acetone	ND	41.8	50.0	84		38.6	50.0	77	40 - 140	8	30
Benzene	0.28	53.8	50.0	107		55.3	50.0	110	80 - 120	3	30
Bromobenzene	ND	50.9	50.0	102		53.4	50.0	107	75 - 125	5	30
Bromochloromethane	ND	52.4	50.0	105		53.9	50.0	108	65 - 130	3	30
Bromodichloromethane	0.70	48.0	50.0	95		49.4	50.0	97	75 - 120	3	30
Bromoform	ND	41.4	50.0	83		41.7	50.0	83	70 - 130	<1	30
Bromomethane	ND	35.0	50.0	70		43.3	50.0	87	30 - 145	21	30
Carbon Tetrachloride	ND	44.0	50.0	88		45.9	50.0	92	65 - 140	4	30
Chlorobenzene	1.6	53.2	50.0	103		54.7	50.0	106	80 - 120	3	30
Chloroethane	ND	49.6	50.0	99		51.7	50.0	103	60 - 135	4	30
Chloroform	2.7	49.9	50.0	94		50.6	50.0	96	65 - 135	1	30
Chloromethane	ND	44.2	50.0	88		47.4	50.0	95	40 - 125	7	30
Dibromochloromethane	ND	47.2	50.0	94		47.7	50.0	95	60 - 135	1	30
Dichlorodifluoromethane (CFC 12)	ND	49.9	50.0	100		51.9	50.0	104	30 - 155	4	30
Methylene Chloride	ND	50.8	50.0	102		53.3	50.0	107	55 - 140	5	30
Ethylbenzene	ND	43.0	50.0	86		44.6	50.0	89	75 - 125	4	30
Hexachlorobutadiene	ND	44.0	50.0	88		48.0	50.0	96	50 - 140	9	30
Isopropylbenzene (Cumene)	ND	46.8	50.0	94		48.6	50.0	97	75 - 125	4	30
Methyl tert-Butyl Ether	ND	54.1	50.0	108		54.6	50.0	109	65 - 125	<1	30
Naphthalene	ND	56.1	50.0	112		56.8	50.0	114	55 - 140	1	30
Styrene	ND	7.28	50.0	15	*	7.54	50.0	15	* 65 - 135	4	30
Tetrachloroethene (PCE)	1.6	53.0	50.0	103		54.6	50.0	106	45 - 150	3	30
Toluene	ND	47.0	50.0	94		49.1	50.0	98	75 - 120	4	30
Trichloroethene (TCE)	ND	54.2	50.0	108		55.9	50.0	112	70 - 125	3	30
Trichlorofluoromethane (CFC 11)	ND	47.7	50.0	95		49.0	50.0	98	60 - 145	3	30
Vinyl Chloride	ND	46.4	50.0	93		48.6	50.0	97	50 - 145	5	30

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Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/1/14
Date Received: 10/3/14
Date Analyzed: 10/ 9/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-8-GW-697MW01-16.45
Lab Code: R1407813-001

Units: µg/L
Basis: NA

Analytical Method: 8260C

Analyte Name	Sample Result	FTMM-8-GW-697MW01-16.45 MS Matrix Spike RQ1412180-05 Result	Spike Amount	% Rec		FTMM-8-GW-697MW01-16.45 DMS Duplicate Matrix Spike RQ1412180-06 Result	Spike Amount	% Rec		% Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	0.42	53.8	50.0	107		55.7	50.0	110		70 - 125	3	30
cis-1,3-Dichloropropene	ND	51.2	50.0	102		52.3	50.0	104		70 - 130	2	30
m,p-Xylenes	ND	67.5	100	67	*	70.0	100	70	*	75 - 130	4	30
n-Butylbenzene	ND	44.8	50.0	90		47.3	50.0	95		70 - 135	5	30
n-Propylbenzene	ND	45.1	50.0	90		47.7	50.0	95		70 - 130	6	30
o-Xylene	ND	36.5	50.0	73	*	37.9	50.0	76	*	80 - 120	4	30
sec-Butylbenzene	ND	46.8	50.0	94		49.6	50.0	99		70 - 125	6	30
tert-Butylbenzene	ND	52.1	50.0	104		54.6	50.0	109		70 - 130	5	30
trans-1,2-Dichloroethene	ND	51.1	50.0	102		52.6	50.0	105		60 - 140	3	30
trans-1,3-Dichloropropene	ND	49.6	50.0	99		49.2	50.0	98		55 - 140	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Analyzed: 10/ 8/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 415258

Analyte Name	Lab Control Sample RQ1412142-03 Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	19.0	20.0	95	80 - 130
1,1,1-Trichloroethane (TCA)	19.2	20.0	96	65 - 130
1,1,2,2-Tetrachloroethane	22.5	20.0	112	65 - 130
1,1,2-Trichloroethane	22.2	20.0	111	75 - 125
1,1-Dichloroethane (1,1-DCA)	20.4	20.0	102	70 - 135
1,1-Dichloroethene (1,1-DCE)	24.1	20.0	120	70 - 130
1,1-Dichloropropene	20.7	20.0	103	75 - 130
1,2,3-Trichlorobenzene	22.1	20.0	110	75 - 125
1,2,3-Trichloropropane	22.0	20.0	110	75 - 125
1,2,4-Trichlorobenzene	21.8	20.0	109	65 - 135
1,2,4-Trimethylbenzene	22.0	20.0	110	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	21.6	20.0	108	50 - 130
1,2-Dibromoethane	22.0	20.0	110	80 - 120
1,2-Dichlorobenzene	21.5	20.0	108	70 - 120
1,2-Dichloroethane	18.6	20.0	93	70 - 130
1,2-Dichloropropane	21.3	20.0	107	75 - 125
1,3,5-Trimethylbenzene	22.4	20.0	112	75 - 130
1,3-Dichlorobenzene	21.5	20.0	107	75 - 125
1,3-Dichloropropane	20.4	20.0	102	75 - 125
1,4-Dichlorobenzene	21.3	20.0	106	75 - 125
2,2-Dichloropropane	20.4	20.0	102	70 - 135
2-Butanone (MEK)	17.8	20.0	89	30 - 150
2-Chlorotoluene	21.2	20.0	106	75 - 125
2-Hexanone	17.3	20.0	87	55 - 130
tert-Butyl Alcohol	410	400	102	50 - 150
4-Chlorotoluene	21.7	20.0	108	75 - 130
p-Isopropyltoluene	22.8	20.0	114	75 - 130
4-Methyl-2-pentanone	19.7	20.0	98	60 - 135
Acetone	17.3	20.0	86	40 - 140
Benzene	21.9	20.0	110	80 - 120
Bromobenzene	21.3	20.0	106	75 - 125
Bromochloromethane	21.9	20.0	109	65 - 130
Bromodichloromethane	21.0	20.0	105	75 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Analyzed: 10/ 8/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 415258

Lab Control Sample
RQ1412142-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromoform	21.0	20.0	105	70 - 130
Bromomethane	17.2	20.0	86	30 - 145
Carbon Tetrachloride	18.5	20.0	92	65 - 140
Chlorobenzene	21.3	20.0	106	80 - 120
Chloroethane	21.9	20.0	109	60 - 135
Chloroform	20.2	20.0	101	65 - 135
Chloromethane	20.4	20.0	102	40 - 125
Dibromochloromethane	21.4	20.0	107	60 - 135
Dichlorodifluoromethane (CFC 12)	21.0	20.0	105	30 - 155
Methylene Chloride	21.8	20.0	109	55 - 140
Ethylbenzene	20.0	20.0	100	75 - 125
Hexachlorobutadiene	20.8	20.0	104	50 - 140
Isopropylbenzene (Cumene)	22.0	20.0	110	75 - 125
Methyl tert-Butyl Ether	22.8	20.0	114	65 - 125
Naphthalene	23.7	20.0	119	55 - 140
Styrene	22.1	20.0	111	65 - 135
Tetrachloroethene (PCE)	20.3	20.0	101	45 - 150
Toluene	21.8	20.0	109	75 - 120
Trichloroethene (TCE)	21.0	20.0	105	70 - 125
Trichlorofluoromethane (CFC 11)	19.5	20.0	98	60 - 145
Vinyl Chloride	21.4	20.0	107	50 - 145
cis-1,2-Dichloroethene	21.4	20.0	107	70 - 125
cis-1,3-Dichloropropene	21.7	20.0	109	70 - 130
m,p-Xylenes	43.7	40.0	109	75 - 130
n-Butylbenzene	22.2	20.0	111	70 - 135
n-Propylbenzene	22.0	20.0	110	70 - 130
o-Xylene	22.1	20.0	110	80 - 120
sec-Butylbenzene	22.2	20.0	111	70 - 125
tert-Butylbenzene	22.1	20.0	110	70 - 130
trans-1,2-Dichloroethene	22.2	20.0	111	60 - 140
trans-1,3-Dichloropropene	22.2	20.0	111	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Analyzed: 10/ 9/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 415409

Lab Control Sample
RQ1412180-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	19.0	20.0	95	80 - 130
1,1,1-Trichloroethane (TCA)	19.6	20.0	98	65 - 130
1,1,2,2-Tetrachloroethane	22.1	20.0	111	65 - 130
1,1,2-Trichloroethane	22.4	20.0	112	75 - 125
1,1-Dichloroethane (1,1-DCA)	19.9	20.0	100	70 - 135
1,1-Dichloroethene (1,1-DCE)	24.5	20.0	122	70 - 130
1,1-Dichloropropene	19.5	20.0	98	75 - 130
1,2,3-Trichlorobenzene	22.8	20.0	114	75 - 125
1,2,3-Trichloropropane	20.8	20.0	104	75 - 125
1,2,4-Trichlorobenzene	21.9	20.0	110	65 - 135
1,2,4-Trimethylbenzene	21.6	20.0	108	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	22.0	20.0	110	50 - 130
1,2-Dibromoethane	22.9	20.0	115	80 - 120
1,2-Dichlorobenzene	21.3	20.0	107	70 - 120
1,2-Dichloroethane	18.9	20.0	95	70 - 130
1,2-Dichloropropane	20.6	20.0	103	75 - 125
1,3,5-Trimethylbenzene	21.6	20.0	108	75 - 130
1,3-Dichlorobenzene	21.2	20.0	106	75 - 125
1,3-Dichloropropane	20.1	20.0	100	75 - 125
1,4-Dichlorobenzene	21.4	20.0	107	75 - 125
2,2-Dichloropropane	20.3	20.0	102	70 - 135
2-Butanone (MEK)	18.0	20.0	90	30 - 150
2-Chlorotoluene	20.4	20.0	102	75 - 125
2-Hexanone	17.7	20.0	88	55 - 130
tert-Butyl Alcohol	445	400	111	50 - 150
4-Chlorotoluene	21.1	20.0	105	75 - 130
p-Isopropyltoluene	22.2	20.0	111	75 - 130
4-Methyl-2-pentanone	20.5	20.0	103	60 - 135
Acetone	18.1	20.0	91	40 - 140
Benzene	21.4	20.0	107	80 - 120
Bromobenzene	21.1	20.0	105	75 - 125
Bromochloromethane	21.6	20.0	108	65 - 130
Bromodichloromethane	20.4	20.0	102	75 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Analyzed: 10/ 9/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 415409

Lab Control Sample
RQ1412180-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromoform	20.4	20.0	102	70 - 130
Bromomethane	17.0	20.0	85	30 - 145
Carbon Tetrachloride	18.5	20.0	93	65 - 140
Chlorobenzene	20.9	20.0	104	80 - 120
Chloroethane	20.6	20.0	103	60 - 135
Chloroform	19.7	20.0	98	65 - 135
Chloromethane	19.4	20.0	97	40 - 125
Dibromochloromethane	20.7	20.0	104	60 - 135
Dichlorodifluoromethane (CFC 12)	20.4	20.0	102	30 - 155
Methylene Chloride	21.2	20.0	106	55 - 140
Ethylbenzene	19.9	20.0	100	75 - 125
Hexachlorobutadiene	20.9	20.0	104	50 - 140
Isopropylbenzene (Cumene)	21.0	20.0	105	75 - 125
Methyl tert-Butyl Ether	22.7	20.0	113	65 - 125
Naphthalene	24.6	20.0	123	55 - 140
Styrene	22.1	20.0	110	65 - 135
Tetrachloroethene (PCE)	19.8	20.0	99	45 - 150
Toluene	21.6	20.0	108	75 - 120
Trichloroethene (TCE)	21.1	20.0	105	70 - 125
Trichlorofluoromethane (CFC 11)	18.8	20.0	94	60 - 145
Vinyl Chloride	20.2	20.0	101	50 - 145
cis-1,2-Dichloroethene	20.9	20.0	104	70 - 125
cis-1,3-Dichloropropene	21.8	20.0	109	70 - 130
m,p-Xylenes	42.9	40.0	107	75 - 130
n-Butylbenzene	21.5	20.0	108	70 - 135
n-Propylbenzene	21.1	20.0	106	70 - 130
o-Xylene	21.8	20.0	109	80 - 120
sec-Butylbenzene	21.8	20.0	109	70 - 125
tert-Butylbenzene	21.9	20.0	109	70 - 130
trans-1,2-Dichloroethene	22.4	20.0	112	60 - 140
trans-1,3-Dichloropropene	22.1	20.0	110	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1105
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 17:43
Sample Name:	FTMM-8-GW-697MW01-16.45	**Units:**	µg/L
Lab Code:	R1407813-001	**Basis:**	NA

Organochlorine Pesticides by Gas Chromatography

Analytical Method:	8081B	**Analysis Lot:**	415375
Prep Method:	EPA 3510C	**Extraction Lot:**	219959
Data File Name:	I:\ACQUDATA\6890D\DATA\100814\FR670.D\	**Instrument Name:**	R-GC-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
72-54-8	4,4'-DDD	**0.83**		0.050	0.025	0.025	
72-55-9	4,4'-DDE	ND	U	0.050	0.025	0.025	
50-29-3	4,4'-DDT	**0.042**	**J**	0.050	0.025	0.025	
309-00-2	Aldrin	ND	U	0.050	0.025	0.025	
60-57-1	Dieldrin	ND	U	0.050	0.025	0.025	
959-98-8	Endosulfan I	ND	U	0.050	0.025	0.025	
33213-65-9	Endosulfan II	ND	U	0.050	0.025	0.025	
1031-07-8	Endosulfan Sulfate	ND	U	0.050	0.025	0.025	
72-20-8	Endrin	ND	U	0.050	0.025	0.025	
7421-93-4	Endrin Aldehyde	ND	U	0.050	0.025	0.025	
53494-70-5	Endrin Ketone	ND	U	0.050	0.035	0.035	
76-44-8	Heptachlor	ND	U	0.050	0.025	0.025	
1024-57-3	Heptachlor Epoxide	ND	U	0.050	0.025	0.025	
72-43-5	Methoxychlor	ND	U	0.50	0.025	0.025	
8001-35-2	Toxaphene	ND	U	1.0	0.50	0.27	
319-84-6	alpha-BHC	ND	U	0.050	0.025	0.025	
5103-71-9	alpha-Chlordane	**0.24**		0.050	0.025	0.025	
319-85-7	beta-BHC	ND	U	0.050	0.028	0.028	
319-86-8	delta-BHC	ND	U	0.050	0.025	0.025	
58-89-9	gamma-BHC (Lindane)	ND	U	0.050	0.025	0.025	
5566-34-7	gamma-Chlordane	**0.23**		0.050	0.045	0.045	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	37	30-135	10/8/14 17:43	
Tetrachloro-m-xylene	74	25-140	10/8/14 17:43	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1620
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 19:25
Sample Name:	FTMM-56-GW-80MW05-7.14	**Units:**	µg/L
Lab Code:	R1407813-007	**Basis:**	NA

Organochlorine Pesticides by Gas Chromatography

Analytical Method:	8081B	**Analysis Lot:**	415375
Prep Method:	EPA 3510C	**Extraction Lot:**	219959
Data File Name:	I:\ACQUDATA\6890D\DATA\100814\FR673.D\	**Instrument Name:**	R-GC-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
72-54-8	4,4'-DDD	ND	U	0.050	0.025	0.025	
72-55-9	4,4'-DDE	ND	U	0.050	0.025	0.025	
50-29-3	4,4'-DDT	ND	U	0.050	0.025	0.025	
309-00-2	Aldrin	ND	U	0.050	0.025	0.025	
60-57-1	Dieldrin	ND	U	0.050	0.025	0.025	
959-98-8	Endosulfan I	ND	U	0.050	0.025	0.025	
33213-65-9	Endosulfan II	ND	U	0.050	0.025	0.025	
1031-07-8	Endosulfan Sulfate	ND	U	0.050	0.025	0.025	
72-20-8	Endrin	ND	U	0.050	0.025	0.025	
7421-93-4	Endrin Aldehyde	ND	U	0.050	0.025	0.025	
53494-70-5	Endrin Ketone	ND	U	0.050	0.035	0.035	
76-44-8	Heptachlor	ND	U	0.050	0.025	0.025	
1024-57-3	Heptachlor Epoxide	ND	U	0.050	0.025	0.025	
72-43-5	Methoxychlor	ND	U	0.50	0.025	0.025	
8001-35-2	Toxaphene	ND	U	1.0	0.50	0.27	
319-84-6	alpha-BHC	ND	U	0.050	0.025	0.025	
5103-71-9	alpha-Chlordane	ND	U	0.050	0.025	0.025	
319-85-7	beta-BHC	ND	U	0.050	0.028	0.028	
319-86-8	delta-BHC	ND	U	0.050	0.025	0.025	
58-89-9	gamma-BHC (Lindane)	ND	U	0.050	0.025	0.025	
5566-34-7	gamma-Chlordane	ND	U	0.050	0.045	0.045	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	36	30-135	10/8/14 19:25	
Tetrachloro-m-xylene	57	25-140	10/8/14 19:25	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1700
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 19:59
Sample Name:	FTMM-EB-100114-01	**Units:**	µg/L
Lab Code:	R1407813-010	**Basis:**	NA

Organochlorine Pesticides by Gas Chromatography

Analytical Method:	8081B	**Analysis Lot:**	415375
Prep Method:	EPA 3510C	**Extraction Lot:**	219959
Data File Name:	I:\ACQUDATA\6890D\DATA\100814\FR674.D\	**Instrument Name:**	R-GC-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
72-54-8	4,4'-DDD	ND	U	0.050	0.025	0.025	
72-55-9	4,4'-DDE	ND	U	0.050	0.025	0.025	
50-29-3	4,4'-DDT	ND	U	0.050	0.025	0.025	
309-00-2	Aldrin	ND	U	0.050	0.025	0.025	
60-57-1	Dieldrin	ND	U	0.050	0.025	0.025	
959-98-8	Endosulfan I	ND	U	0.050	0.025	0.025	
33213-65-9	Endosulfan II	ND	U	0.050	0.025	0.025	
1031-07-8	Endosulfan Sulfate	ND	U	0.050	0.025	0.025	
72-20-8	Endrin	ND	U	0.050	0.025	0.025	
7421-93-4	Endrin Aldehyde	ND	U	0.050	0.025	0.025	
53494-70-5	Endrin Ketone	ND	U	0.050	0.035	0.035	
76-44-8	Heptachlor	ND	U	0.050	0.025	0.025	
1024-57-3	Heptachlor Epoxide	ND	U	0.050	0.025	0.025	
72-43-5	Methoxychlor	ND	U	0.50	0.025	0.025	
8001-35-2	Toxaphene	ND	U	1.0	0.50	0.27	
319-84-6	alpha-BHC	ND	U	0.050	0.025	0.025	
5103-71-9	alpha-Chlordane	ND	U	0.050	0.025	0.025	
319-85-7	beta-BHC	ND	U	0.050	0.028	0.028	
319-86-8	delta-BHC	ND	U	0.050	0.025	0.025	
58-89-9	gamma-BHC (Lindane)	ND	U	0.050	0.025	0.025	
5566-34-7	gamma-Chlordane	ND	U	0.050	0.045	0.045	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	45	30-135	10/8/14 19:59	
Tetrachloro-m-xylene	77	25-140	10/8/14 19:59	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1400
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 21:08
Sample Name:	FTMM-56-GW-80MW105-7.14	**Units:**	µg/L
Lab Code:	R1407813-012	**Basis:**	NA

Organochlorine Pesticides by Gas Chromatography

Analytical Method:	8081B	**Analysis Lot:**	415375
Prep Method:	EPA 3510C	**Extraction Lot:**	219959
Data File Name:	I:\ACQUDATA\6890D\DATA\100814\FR676.D\	**Instrument Name:**	R-GC-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
72-54-8	4,4'-DDD	ND	U	0.050	0.025	0.025	
72-55-9	4,4'-DDE	ND	U	0.050	0.025	0.025	
50-29-3	4,4'-DDT	ND	U	0.050	0.025	0.025	
309-00-2	Aldrin	ND	U	0.050	0.025	0.025	
60-57-1	Dieldrin	ND	U	0.050	0.025	0.025	
959-98-8	Endosulfan I	ND	U	0.050	0.025	0.025	
33213-65-9	Endosulfan II	ND	U	0.050	0.025	0.025	
1031-07-8	Endosulfan Sulfate	ND	U	0.050	0.025	0.025	
72-20-8	Endrin	ND	U	0.050	0.025	0.025	
7421-93-4	Endrin Aldehyde	ND	U	0.050	0.025	0.025	
53494-70-5	Endrin Ketone	ND	U	0.050	0.035	0.035	
76-44-8	Heptachlor	ND	U	0.050	0.025	0.025	
1024-57-3	Heptachlor Epoxide	ND	U	0.050	0.025	0.025	
72-43-5	Methoxychlor	ND	U	0.50	0.025	0.025	
8001-35-2	Toxaphene	ND	U	1.0	0.50	0.27	
319-84-6	alpha-BHC	ND	U	0.050	0.025	0.025	
5103-71-9	alpha-Chlordane	ND	U	0.050	0.025	0.025	
319-85-7	beta-BHC	ND	U	0.050	0.028	0.028	
319-86-8	delta-BHC	ND	U	0.050	0.025	0.025	
58-89-9	gamma-BHC (Lindane)	ND	U	0.050	0.025	0.025	
5566-34-7	gamma-Chlordane	ND	U	0.050	0.045	0.045	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	41	30-135	10/8/14 21:08	
Tetrachloro-m-xylene	60	25-140	10/8/14 21:08	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 14:51
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412023-01	**Basis:**	NA

Organochlorine Pesticides by Gas Chromatography

Analytical Method:	8081B	**Analysis Lot:**	415375
Prep Method:	EPA 3510C	**Extraction Lot:**	219959
Data File Name:	I:\ACQUDATA\6890D\DATA\100814\FR665.D\	**Instrument Name:**	R-GC-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
72-54-8	4,4'-DDD	ND	U	0.050	0.025	0.025	
72-55-9	4,4'-DDE	ND	U	0.050	0.025	0.025	
50-29-3	4,4'-DDT	ND	U	0.050	0.025	0.025	
309-00-2	Aldrin	ND	U	0.050	0.025	0.025	
60-57-1	Dieldrin	ND	U	0.050	0.025	0.025	
959-98-8	Endosulfan I	ND	U	0.050	0.025	0.025	
33213-65-9	Endosulfan II	ND	U	0.050	0.025	0.025	
1031-07-8	Endosulfan Sulfate	ND	U	0.050	0.025	0.025	
72-20-8	Endrin	ND	U	0.050	0.025	0.025	
7421-93-4	Endrin Aldehyde	ND	U	0.050	0.025	0.025	
53494-70-5	Endrin Ketone	ND	U	0.050	0.035	0.035	
76-44-8	Heptachlor	ND	U	0.050	0.025	0.025	
1024-57-3	Heptachlor Epoxide	ND	U	0.050	0.025	0.025	
72-43-5	Methoxychlor	ND	U	0.50	0.025	0.025	
8001-35-2	Toxaphene	ND	U	1.0	0.50	0.27	
319-84-6	alpha-BHC	ND	U	0.050	0.025	0.025	
5103-71-9	alpha-Chlordane	ND	U	0.050	0.025	0.025	
319-85-7	beta-BHC	ND	U	0.050	0.028	0.028	
319-86-8	delta-BHC	ND	U	0.050	0.025	0.025	
58-89-9	gamma-BHC (Lindane)	ND	U	0.050	0.025	0.025	
5566-34-7	gamma-Chlordane	ND	U	0.050	0.045	0.045	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	61	30-135	10/8/14 14:51	
Tetrachloro-m-xylene	78	25-140	10/8/14 14:51	

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/1/14
Date Received: 10/3/14
Date Analyzed: 10/ 8/14

Matrix Spike Summary
Organochlorine Pesticides by Gas Chromatography

Sample Name: FTMM-8-GW-697MW01-16.45
Lab Code: R1407813-001

Units: µg/L
Basis: NA

Analytical Method: 8081B
Prep Method: EPA 3510C

		FTMM-8-GW-697MW01-16.45 MS Matrix Spike RQ1412023-04			FTMM-8-GW-697MW01-16.45 DMS Duplicate Matrix Spike RQ1412023-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
4,4'-DDD	0.83	1.06	0.200	118 #	1.16	0.200	166 #	25 - 150	9	30
4,4'-DDE	ND	0.206	0.200	103	0.215	0.200	107	35 - 140	4	30
4,4'-DDT	0.042	0.184	0.200	71	0.185	0.200	71	45 - 140	<1	30
Aldrin	ND	0.150	0.200	75	0.160	0.200	80	25 - 140	7	30
Dieldrin	ND	0.178	0.200	89	0.191	0.200	96	60 - 130	7	30
Endosulfan I	ND	0.183	0.200	91	0.209	0.200	104	50 - 110	13	30
Endosulfan II	ND	0.180	0.200	90	0.190	0.200	95	30 - 130	6	30
Endosulfan Sulfate	ND	0.172	0.200	86	0.179	0.200	90	55 - 135	4	30
Endrin	ND	0.197	0.200	99	0.210	0.200	105	55 - 135	6	30
Endrin Aldehyde	ND	0.0339	0.200	17 *	0.0309	0.200	15 *	55 - 135	9	30
Endrin Ketone	ND	0.164	0.200	82	0.175	0.200	88	75 - 125	7	30
Heptachlor	ND	0.164	0.200	82	0.176	0.200	88	40 - 130	7	30
Heptachlor Epoxide	ND	0.217	0.200	108	0.229	0.200	114	60 - 130	5	30
Methoxychlor	ND	0.194	0.200	97	0.140	0.200	70	55 - 150	32 *	30
alpha-BHC	ND	0.167	0.200	83	0.173	0.200	86	60 - 130	4	30
alpha-Chlordane	0.24	0.425	0.200	91	0.458	0.200	108	65 - 125	8	30
beta-BHC	ND	0.167	0.200	84	0.176	0.200	88	65 - 125	5	30
delta-BHC	ND	0.163	0.200	81	0.170	0.200	85	45 - 135	4	30
gamma-BHC (Lindane)	ND	0.166	0.200	83	0.177	0.200	88	25 - 135	6	30
gamma-Chlordane	0.23	0.412	0.200	92	0.449	0.200	111	60 - 125	9	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Analyzed: 10/ 8/14

Lab Control Sample Summary
Organochlorine Pesticides by Gas Chromatography

Analytical Method: 8081B
Prep Method: EPA 3510C

Units: µg/L
Basis: NA

Extraction Lot: 219959

Analyte Name	Lab Control Sample RQ1412023-02 Result	Spike Amount	% Rec		Duplicate Lab Control Sample RQ1412023-03 Result	Spike Amount	% Rec		% Rec Limits	RPD	RPD Limit
4,4'-DDD	0.186	0.200	93		0.180	0.200	90		25 - 150	3	30
4,4'-DDE	0.180	0.200	90		0.174	0.200	87		35 - 140	3	30
4,4'-DDT	0.151	0.200	76		0.150	0.200	75		45 - 140	<1	30
Aldrin	0.164	0.200	82		0.137	0.200	69		25 - 140	17	30
Dieldrin	0.184	0.200	92		0.178	0.200	89		60 - 130	3	30
Endosulfan I	0.187	0.200	94		0.182	0.200	91		50 - 110	3	30
Endosulfan II	0.187	0.200	94		0.182	0.200	91		30 - 130	3	30
Endosulfan Sulfate	0.183	0.200	91		0.176	0.200	88		55 - 135	4	30
Endrin	0.205	0.200	102		0.200	0.200	100		55 - 135	2	30
Endrin Aldehyde	0.0270	0.200	14	*	0.0323	0.200	16	*	55 - 135	18	30
Endrin Ketone	0.176	0.200	88		0.172	0.200	86		75 - 125	2	30
Heptachlor	0.179	0.200	89		0.175	0.200	88		40 - 130	2	30
Heptachlor Epoxide	0.187	0.200	94		0.182	0.200	91		60 - 130	3	30
Methoxychlor	0.157	0.200	78		0.155	0.200	77		55 - 150	1	30
alpha-BHC	0.176	0.200	88		0.173	0.200	86		60 - 130	2	30
alpha-Chlordane	0.182	0.200	91		0.176	0.200	88		65 - 125	3	30
beta-BHC	0.184	0.200	92		0.181	0.200	90		65 - 125	2	30
delta-BHC	0.159	0.200	80		0.154	0.200	77		45 - 135	3	30
gamma-BHC (Lindane)	0.183	0.200	91		0.178	0.200	89		25 - 135	3	30
gamma-Chlordane	0.180	0.200	90		0.175	0.200	87		60 - 125	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

METALS

COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: R1407813 SDG No.: FTMM-8-GW-6

Lab Code: _____ Case No.: _____ SAS No.: _____

SOW No.: SW846 CLP-M

Sample ID.	Lab Sample No.
FTMM-8-GW-697MW01-16.45	R1407813-001
FTMM-8-GW-697MW01-16.45D	R1407813-001D
FTMM-8-GW-697MW01-16.45S	R1407813-001S
FTMM-56-GW-80MW02-8.10	R1407813-009
FTMM-EB-100114-01	R1407813-010
FTMM-8-GW-M8MW17-10.90	R1407813-016
FTMM-8-GW-M8MW21-14.31	R1407813-017
FTMM-EB-100214	R1407813-026

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: See Attatched Case Narrative

Signature: _____ Name: Janice Jaeger

Date: 10/30/14 Title: Project Manager

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: Parsons Engineering Science
Service Request: FTMM-8-GW-697-MW01-16.45
Project No.: R1407813
Date Collected: 10/1/2014
Project Name:
Date Received: 10/3/2014
Matrix: WATER
Units: ug/L
Basis:

Sample Name: FTMM-8-GW-697MW01-16.45 **Lab Code:** R1407813-001

Analyte	Analysis Method	PQL	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6010C	5.0	2.5	0.807	1.0	10/08/14	10/14/14	2.5	U	

% Solids: 0.0

Comments:

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Parsons Engineering Science	**Service Request:**	FTMM-8-GW-697-MW01-16.45
Project No.:	R1407813	**Date Collected:**	10/1/2014
Project Name:		**Date Received:**	10/3/2014
Matrix:	WATER	**Units:**	ug/L
		Basis:	

Sample Name: FTMM-56-GW-80MW02-8.10 **Lab Code:** R1407813-009

Analyte	Analysis Method	PQL	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6010C	10.0	5.0	1.4	1.0	10/08/14	10/14/14	6.0	J	
Cadmium	6010C	5.0	2.5	0.071	1.0	10/08/14	10/14/14	0.542	J	
Lead	6010C	5.0	2.5	0.807	1.0	10/08/14	10/14/14	1.9	J	

% Solids: 0.0

Comments:

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Parsons Engineering Science	**Service Request:**	FTMM-8-GW-697-MW01-16.45
Project No.:	R1407813	**Date Collected:**	10/1/2014
Project Name:		**Date Received:**	10/3/2014
Matrix:	WATER	**Units:**	ug/L
		Basis:	

Sample Name: FTMM-EB-100114-01 **Lab Code:** R1407813-010

Analyte	Analysis Method	PQL	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6010C	10.0	5.0	1.4	1.0	10/08/14	10/14/14	5.0	U	
Cadmium	6010C	5.0	2.5	0.071	1.0	10/08/14	10/14/14	2.5	U	
Lead	6010C	5.0	2.5	0.807	1.0	10/08/14	10/14/14	2.5	U	

% Solids: 0.0

Comments:

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Parsons Engineering Science	**Service Request:**	FTMM-8-GW-697-MW01-16.45
Project No.:	R1407813	**Date Collected:**	10/2/2014
Project Name:		**Date Received:**	10/3/2014
Matrix:	WATER	**Units:**	ug/L
		Basis:	

Sample Name: FTMM-8-GW-M8MW17-10.90 **Lab Code:** R1407813-016

Analyte	Analysis Method	PQL	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6010C	5.0	2.5	0.807	1.0	10/08/14	10/14/14	2.5	U	

% Solids: 0.0

Comments:

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Parsons Engineering Science	**Service Request:**	FTMM-8-GW-697-MW01-16.45
Project No.:	R1407813	**Date Collected:**	10/2/2014
Project Name:		**Date Received:**	10/3/2014
Matrix:	WATER	**Units:**	ug/L
		Basis:	

Sample Name: FTMM-8-GW-M8MW21-14.31 **Lab Code:** R1407813-017

Analyte	Analysis Method	PQL	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6010C	5.0	2.5	0.807	1.0	10/08/14	10/14/14	2.5	U	

% Solids: 0.0

Comments:

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Parsons Engineering Science	**Service Request:**	FTMM-8-GW-697-MW01-16.45
Project No.:	R1407813	**Date Collected:**	10/2/2014
Project Name:		**Date Received:**	10/3/2014
Matrix:	WATER	**Units:**	ug/L
		Basis:	

Sample Name: FTMM-EB-100214 **Lab Code:** R1407813-026

Analyte	Analysis Method	PQL	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6010C	5.0	2.5	0.807	1.0	10/08/14	10/14/14	2.5	U	

% Solids: 0.0

Comments:

METALS

-3-

BLANKS

Contract: R1407813

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-8-GW-69

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic	1.38	U	2.93	J	1.49	J	1.38	U	1.380	U	P
Cadmium	0.61	J	0.41	J	0.53	J	0.17	J	-0.156	J	P
Lead	1.27	J	0.89	J	0.81	U	1.62	J	0.807	U	P

Comments:

METALS

-3-

BLANKS

Contract: R1407813

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-8-GW-69

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic			1.38	U	1.38	U	1.38	U			P
Cadmium			0.27	J	0.31	J	0.20	J			P
Lead			0.81	U	0.81	U	0.81	U			P

Comments:

METALS

- 5A -

SPIKE SAMPLE RECOVERY

Client:	Parsons Engineering Science	**Service Request:**	FTMM-8-GW-697-MW01-16.45
Project No.:	R1407813	**Units:**	UG/L
Project Name:	NA	**Basis:**	
Matrix:	WATER	**% Solids:**	0.0

Sample Name: FTMM-8-GW-697MW01-16.45S **Lab Code:** R1407813-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Lead	86 - 113	497.00		2.50	U	500.00	99		6010C

An empty field in the Control Limit column indicates the control limit is not applicable

METALS

- 5B -

POST SPIKE SAMPLE RECOVERY

Client: Parsons Engineering Science
Service Request: FTMM-8-GW-697-MW01-16.45
Project No.: R1407813
Units: UG/L
Project Name: NA
Basis:
Matrix: WATER

Sample Name: FTMM-8-GW-697MW01-16.45A
Lab Code: R1407813-001A

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Lead	80 - 120	473.00		2.50	U	500.0	95		6010C

METALS

- 6 -

DUPLICATES

Client:	Parsons Engineering Science	**Service Request:**	FTMM-8-GW-697-MW01-16.45
Project No.:	R1407813	**Units:**	UG/L
Project Name:	NA	**Basis:**	
Matrix:	WATER	**% Solids:**	0.0

Sample Name: FTMM-8-GW-697MW01-16.45D **Lab Code:** R1407813-001D

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Lead		2.50	U	2.50	U			6010C

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS

-7-

LABORATORY CONTROL SAMPLE

Contract: R1407813

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-8-GW-69

Solid LCS Source: _____

Aqueous LCS Source: CPI

Analyte	Aqueous (ug/L			Solid (mg/K				
	True	Found	%R	True	Found	C	Limits	%R
Arsenic	40	38	95					
Cadmium	50	51	102					
Lead	500	506	101					

Comments: _____

October 24, 2014 Service Request No: R1407813

Tammy Chang
Parsons, Inc.
8000 Centre Park Drive, Suite 200
Austin, TX 78754

Laboratory Results for: FTMM 4QGW/748810-03000

Dear Tammy:

Enclosed are the results of the sample(s) submitted to our laboratory on October 3, 2014. For your reference, these analyses have been assigned our service request number **R1407813**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Janice Jaeger
Client Services Manager

Page 1 of 852

CC: Sandra de las Fuentes

Parsons, Inc.
R1407813

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SDG NARRATIVE

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www.alsglobal.com

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CASE NARRATIVE

Client:	Parsons Engineering Science	**Service Request No.:**	R1307813
Project:	FTMM 4QGW	**Project No.:**	748810-0300
Sample Matrix:	Water	**Date Received:**	10/03/14

General Comments

The DOD QSM 4.1 requires detections reported to the Method Detection Limit (MDL). Values greater than the MDL and less than the Limit of Quantitation (LOQ) were flagged as estimates (J). Values less than the MDL and Limit of Detection (LOD) were reported as non-detect (ND). The LOD for each analyte is verified quarterly by the laboratory using procedures defined in DOD Quality Systems Manual Version 4.1.

Sample Receipt

Samples were collected on 09/30/14-10/02/14 and received in good condition at a cooler temperature of and 8.8°C as noted on the cooler receipt and preservation check form. The client was notified of the out of temperature cooler and the samples analyzed. The samples were stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the batching form for a cross-reference between Client ID and ALS Job #.

Volatile Organics

Sixteen water samples were analyzed for TCL Volatile organics by SW-846 method 8260C. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

Library Searches against the NBS/EPA library were conducted on all samples. The 20 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

All Tuning criteria for BFB were and within QC limits.

Internal Standard Areas were within QC limits.

All the initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within acceptance limits for all samples.

The Blank Spike (LCS) recoveries were all acceptable.

A Matrix Spike/Matrix spike duplicate (MS/MSD) was done on sample FTMM-8-GW-697MW01-16.45. All outlying QC has been flagged with an "*".

The Method Blanks associated with these samples were free of contamination except for "J" flagged values for 1,2,4-Trichlorobenzene, Hexachlorobutadiene, Naphthalene and Bromomethane. No data was affected.

R1307813
Page 2

Pesticide Analysis

Four water samples were analyzed for TCL Pesticides by SW-846 method 8081B. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

All the initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within acceptance limits for all samples except DCB for sample FTMM-2-GW-M2MW24. The recovery was flagged with an "*".

The Blank Spike/Blank Spike Duplicate (LCS/LCSD) recoveries were all acceptable except Endrin aldehyde and has been flagged with an "*". All samples are possibly biased low for this compound.

The Matrix Spike/Matrix Spike Duplicate was performed on FTMM-8-GW-697MW01-16.45. All outlying QC has been flagged with an "*". The recovery for 4,4'-DDD could not be accurately determined as the amount present in the sample was greater than four times the amount added as spike as noted by the "#".

The Method Blanks associated with these samples were free of contamination.

Metals Analysis

Six water samples were analyzed for a site specific list of metals by method 6010C from SW-846. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

All blank spike recoveries (LCS) were within QC limits of 80 – 120 %.

A Matrix Spike and Duplicate were done on sample FTMM-8-GW-697-MW01-16.45. All recoveries were within QC limits.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

00004

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 748810-03000	Batch Complete: Yes	Date Revised:
Submission: R1407813	Diskette Requested: No	Date Due: 10/24/14
Client: Parsons Engineering Science	Date: 10/3/14	Protocol: SW846
Client Rep: JJAEGER	Custody Seal: Present/Absent:	Shipping No.:
Project: FTMM 4QGW	Chain of Custody: Present/Absent:	SDG #: FTMM-8-GW-697MW01-16.45

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1407813-001QC	FTMM-8-GW-697MW01-16.45	Water	8260C, 8081B, 6010C	10/1/14	10/3/14			
R1407813-004	FTMM-8-GW-M8MW24-29.68	Water	8260C	10/1/14	10/3/14			
R1407813-005	FTMM-8-GW-M8MW16-11.74	Water	8260C	10/1/14	10/3/14			
R1407813-006	FTMM-8-GW-M8MW15-11.30	Water	8260C	10/1/14	10/3/14			
R1407813-007	FTMM-56-GW-80MW05-7.14	Water	8081B	10/1/14	10/3/14			
R1407813-009	FTMM-56-GW-80MW02-8.10	Water	6010C	10/1/14	10/3/14			
R1407813-010	FTMM-EB-100114-01	Water	6010C, 8081B, 8260C	10/1/14	10/3/14			
R1407813-011	FTMM-EB-100114-02	Water	8260C	10/1/14	10/3/14			
R1407813-012	FTMM-56-GW-80MW105-7.14	Water	8081B	10/1/14	10/3/14			
R1407813-013	FTMM-3-GW-M3MW07-13.85	Water	8260C	10/2/14	10/3/14			
R1407813-014	FTMM-64-GW-812MW04-5.53	Water	8260C	10/2/14	10/3/14			
R1407813-015	FTMM-61-GW-283MW02-13.26	Water	8260C	10/2/14	10/3/14			
R1407813-016	FTMM-8-GW-M8MW17-10.90	Water	6010C	10/2/14	10/3/14			
R1407813-017	FTMM-8-GW-M8MW21-14.31	Water	6010C	10/2/14	10/3/14			
R1407813-018	FTMM-8-GW-M8MW12-13.55	Water	8260C	10/2/14	10/3/14			
R1407813-019	FTMM-59-GW-1122MW07-16.67	Water	8260C	10/2/14	10/3/14			
~~R1407813-020~~	~~FTMM-58-GW-2567MW03-8.03~~	Water	8260C	10/2/14	10/3/14	} did not receive samples dms 10/22/14		
~~R1407813-021~~	~~FTMM-57-GW-108MW04-8.25~~	Water	6010C	10/2/14	10/3/14			
~~R1407813-022~~	~~FTMM-58-GW-2567-MW01-8.73~~	Water	8260C	10/2/14	10/3/14			
R1407813-023	FTMM-TB-100214	Water	8260C	10/2/14	10/3/14			
R1407813-024	FTMM-EB-093014	Water	8260C	9/30/14	10/3/14			
R1407813-025	FTMM-DI-093014	Water	8260C	9/30/14	10/3/14			
R1407813-026	FTMM-EB-100214	Water	8260C, 6010C	10/2/14	10/3/14			
R1407813-027	FTMM-59-GW-1122MW107-16.67	Water	8260C	10/2/14	10/3/14			

5 6 0 9

Folder Comments: DoD reporting

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

INORGANIC PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	3010A
200.8	ILM05.3
6010C	3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3010A
6010 SPLP (1312) extract	3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.

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CHAINS OF CUSTODY

ALS Environmental - Rochester, NY
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Phone (585) 288-5380 Fax (585) 288-8475
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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

19154

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 1

Project Name: FTMM 4QGW	Project Number: 748810-03000
Project Manager: Cris Grill	Report CC:
Company/Address: Parsons 100 High Street, Boston, MA 02210	
Phone #: 617-449-1553	Email: cris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: Nick Loizos

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GCMS VOAs + TICs ◦ 8260 ◦ 624 ◦ CLP	GCMS SVOAs ◦ 8270 ◦ 625	GC VOAs ◦ 8021 ◦ 601/602	PESTICIDES ◦ 8081 ◦ 608	PCBs ◦ 8082 ◦ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Hgkls, Pb	Pb, As, Cd	REMARKS/ ALTERNATE DESCRIPTION
FTMM-8-GW-6ATMW01-16.45	-001	10/1/14	1105	GW	5	X			X				X		
FTMM-8-GW-6ATMW01-16.45-MS	QC	10/1/14	1105		4	X			X						
FTMM-8-GW-6ATMW01-16.45-MSD	QC	10/1/14	1105		4	X			X						
FTMM-8-GW-MSMW24-29.68	-004	10/1/14	1130		3	X									
FTMM-8-GW-MSMW16-11.74	-005	10/1/14	1330		3	X									
FTMM-8-GW-MSMW15-11.30		10/1/14	1400		3	X									
FTMM-56-GW-80MW05-7.14		10/1/14	1620		1				X						
FTMM-56-GW-80MW02-8.16		10/1/14	1625		1								X		
FTMM-EB-100114-01		10/1/14	1700		5	X			X				X	X	
FTMM-EB-100114-02		10/1/14	1630		3	X									
FTMM-56-GW-80MW10S-7.14		10/1/14	1400		1				X						

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

In cooler wit at temp.

See QAPP ☐

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 3 day
STANDARD
REQUESTED REPORT DATE
_____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
Edata ____ Yes ____ No

INVOICE INFORMATION
PO #
BILL TO:
R1407813

STATE WHERE SAMPLES WERE COLLECTED

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: Nick Loizos	Printed Name: J. Steward	Printed Name	Printed Name	Printed Name	
Firm: Parsons	Firm: ALS	Firm	Firm	Firm	
Date/Time: 10/2/14 @ 1730	Date/Time: 10/3 1020	Date/Time	Date/Time	Date/Time	

Distribution: White - Lab Copy; Yellow - Return to Originator

R1407813 5
Parsons, Inc.
FTMM 4QGW

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

19153

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE _____ OF _____

Project Name: FTMM 4QGW	Project Number: 748810-03000
Project Manager: Cris Grill	Report CC:
Company/Address: 100 High St, Boston, MA 02210	
Phone #: 617-449-1583	Email: Cris.Grill@PARSONS.com
Sampler's Signature:	Sampler's Printed Name: C. Watson, N. Loizos, J. McCourt

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ○ 8260 ○ 624 ○ CLP + TICS	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Pb								REMARKS/ ALTERNATE DESCRIPTION
FTMM-3-GW-M3MW07-13.85		10/2/14	1525	GW	3	X															
FTMM-64-GW-812MW64-5.53		10/2/14	1345	GW	3	X															
FTMM-61-GW-283MW02-13.26		10/2/14	1135	GW	3	X															
FTMM-8-GW-M8MW17-10.90		10/2/14	1015	GW	1								X								
FTMM-8-GW-M8MW21-14.31		10/2/14	1010	GW	1								X								
FTMM-8-GW-M8MW12-13.55		10/2/14	1135	GW	3	X															
FTMM-59-GW-1122MW07-16.67		10/2/14	1410	GW	3	X															
FTMM-58-GW-2567MW03-8.03		10/2/14	1440	GW	3	X															
FTMM-57-GW-108MW01-8.25		10/2/14	1035	GW	1								X								
FTMM-58-GW-2567-MW01-8.73		10/2/14	1250	GW	3	X															
FTMM-TB-100214		10/2/14	—	GW	3	X															

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
6. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

In cooler out of temp.

See OAPP ☐

STATE WHERE SAMPLES WERE COLLECTED

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
Standard
REQUESTED REPORT DATE

REPORT REQUIREMENTS
_____ I. Results Only
_____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
_____ III. Results + QC and Calibration Summaries
_____ IV. Data Validation Report with Raw Data
Edata _____ Yes _____ No

INVOICE INFORMATION
PO #
BILL TO:
R1407813

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: Nicholas Loizos	Printed Name: J Sewell	Printed Name	Printed Name	Printed Name	Printed Name
Firm: Parsons	Firm: ALS	Firm	Firm	Firm	Firm
Date/Time: 10/2/14 @ 17:30	Date/Time: 10/3 1020	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Lab Copy; Yellow - Return to Originator

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ALS Environmental

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

19150

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE _____ OF _____

Project Name: FTMM 4Q GW	Project Number: 711666.10 - 03000
Project Manager: Cris Grill	Report CC:
Company/Address: Parsons 100 High St, Boston, MA 02210	
Phone #: 617-449-1583	Email: cris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: Nick Loizos

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ○ 8260 ○ 624 ○ CLP	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCB's ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Pb							REMARKS/ ALTERNATE DESCRIPTION
FTMM-EB-093014		9/30/14	1430	EB	3	X														
FTMM-DI-093014		9/30/14	0945	DI	3	X														
FTMM-EB-100214		10/2/14	1530	EB	4	X							X							
FTMM-59-GW-112MW307-16.67		10/2/14	1230	GW	3	X														

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

In cooler out of temp.

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
Standard
REQUESTED REPORT DATE
_____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
Edata ____Yes ____No

INVOICE INFORMATION
PO #
BILL TO:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: Nick Loizos	Printed Name: J. Seward	Printed Name	Printed Name	Printed Name	Printed Name
Firm: Parsons	Firm: ALS	Firm	Firm	Firm	Firm
Date/Time: 10/2/14 @ 1730	Date/Time: 10/3 1020	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Lab Copy; Yellow - Return to Originator

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Cooler Receipt and Preservation Check Form

Project/Client Parsons. Folder Number R1407813

Cooler received on 10/3 by: SG COURIER: ALS UPS ~~FEDEX~~ VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y) N	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	(Y) N NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	~~ALS/ROC~~ CLIENT
4	Circle: ~~Wet Ice~~ **Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as:	Bulk Encore 5035set (NA)

8. Temperature Readings Date: 10/3 Time: 1103 ID: ~~IR#3~~ IR#4 From: ~~Temp Blank~~ Sample Bottle

Observed Temp (°C)	3.8	8.7					
Correction Factor (°C)	-0.2	+0.1					
Corrected Temp (°C)	3.6	8.8					
Within 0-6°C?	(Y) N	Y (N)	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: OK per client email

All samples held in storage location: RWR by JEN on 10/3 at 1103
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: JMS 10/3/14

Cooler Breakdown: Date: 10-6-14 Time: 16:35 by: ME

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? YES NO
2. Did all bottle labels and tags agree with custody papers? YES NO
3. Were correct containers used for the tests indicated? YES NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated N/A

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3	✓		BDF2615TE	08/15				
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	4113070	08/15				

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Bottle lot numbers: 060914-2ARW, 031014-1BMG, 4-002-003
Other Comments:

* TRIP BLANK + EQUIP BLANK – 1 VIAL w/ headspace

AG : 4112120 exp 08/15

R1407813 5
Parsons, Inc.
FTMM 4QGW

PC Secondary Review: JMS 10/17/14 *significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

P:\INTRANET\QAQC\Forms Controlled\Cooler Receipt f7.doc 5/6/14

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4QGW/748810-03000

Service Request: R1407813

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1407813-001.01					
	8081B				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1651	R-002 / DWARD	
		10/7/14	0609	In Lab / DMURPHY	
R1407813-001.02					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1651	R-002 / DWARD	
		10/7/14	0609	In Lab / DMURPHY	
R1407813-001.03					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-001.04					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-001.05					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-001.06					
	6010C				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1651	R-A01 / DWARD	
		10/8/14	1505	In Lab / CWINKSTERN	
		10/8/14	1536	R-002 / CWINKSTERN	
R1407813-001.07					
		10/6/14	1647	SMO / DWARD	
		10/6/14	1651	R-002 / DWARD	
		10/7/14	0609	In Lab / DMURPHY	
R1407813-001.08					
		10/6/14	1647	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-001.09					
		10/6/14	1647	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-001.10					
		10/6/14	1647	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-001.11					
	8260C				
		10/6/14	1647	SMO / DWARD	

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4QGW/748810-03000

Service Request: R1407813

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		10/6/14	1650	R-001 / DWARD	
		10/8/14	1734	R-001-S12 / KRUEST	
		10/9/14	1143	In Lab / KRUEST	
		10/9/14	1151	R-001-S12 / KRUEST	
R1407813-001.12					
		10/6/14	1647	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-001.13					
		10/6/14	1647	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-004.01					
	8260C				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
		10/8/14	1729	In Lab / KRUEST	
		10/8/14	1734	R-001-S12 / KRUEST	
R1407813-004.02					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-004.03					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-005.01					
	8260C				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
		10/8/14	1729	In Lab / KRUEST	
		10/8/14	1734	R-001-S12 / KRUEST	
R1407813-005.02					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-005.03					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-006.01					
	8260C				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
		10/8/14	1729	In Lab / KRUEST	
		10/8/14	1734	R-001-S12 / KRUEST	
R1407813-006.02					

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4QGW/748810-03000

Service Request: R1407813

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-006.03					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-007.01					
	8081B				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1651	R-002 / DWARD	
		10/7/14	0609	In Lab / DMURPHY	
R1407813-009.01					
	6010C				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1651	R-A01 / DWARD	
		10/8/14	1505	In Lab / CWINKSTERN	
		10/8/14	1536	R-002 / CWINKSTERN	
R1407813-010.01					
	8260C				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
		10/8/14	1729	In Lab / KRUEST	
		10/8/14	1734	R-001-S12 / KRUEST	
R1407813-010.02					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-010.03					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-010.04					
	6010C				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1651	R-A01 / DWARD	
		10/8/14	1505	In Lab / CWINKSTERN	
		10/8/14	1536	R-002 / CWINKSTERN	
R1407813-010.06					
	8081B				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1651	R-002 / DWARD	
		10/7/14	0609	In Lab / DMURPHY	
R1407813-011.01					
	8260C				
		10/6/14	1646	SMO / DWARD	

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4QGW/748810-03000

Service Request: R1407813

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		10/6/14	1650	R-001 / DWARD	
		10/8/14	1729	In Lab / KRUEST	
		10/8/14	1734	R-001-S12 / KRUEST	
R1407813-011.02					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-011.03					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-012.01					
	8081B				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1651	R-002 / DWARD	
		10/7/14	0609	In Lab / DMURPHY	
R1407813-013.01					
	8260C				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
		10/8/14	1729	In Lab / KRUEST	
		10/8/14	1734	R-001-S12 / KRUEST	
R1407813-013.02					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-013.03					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-014.01					
	8260C				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
		10/8/14	1734	R-001-S12 / KRUEST	
		10/9/14	1143	In Lab / KRUEST	
		10/9/14	1151	R-001-S12 / KRUEST	
R1407813-014.02					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-014.03					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-015.01					
	8260C				

Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4QGW/748810-03000

Service Request: R1407813

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
		10/8/14	1734	R-001-S12 / KRUEST	
		10/9/14	1143	In Lab / KRUEST	
		10/9/14	1151	R-001-S12 / KRUEST	
R1407813-015.02					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-015.03					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-016.01					
	6010C				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1651	R-A01 / DWARD	
		10/8/14	1506	In Lab / CWINKSTERN	
		10/8/14	1536	R-002 / CWINKSTERN	
R1407813-017.01					
	6010C				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1651	R-A01 / DWARD	
		10/8/14	1505	In Lab / CWINKSTERN	
		10/8/14	1506	In Lab / CWINKSTERN	
		10/8/14	1536	R-002 / CWINKSTERN	
R1407813-018.01					
	8260C				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
		10/8/14	1734	R-001-S12 / KRUEST	
		10/9/14	1143	In Lab / KRUEST	
		10/9/14	1151	R-001-S12 / KRUEST	
R1407813-018.02					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-018.03					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-019.01					
	8260C				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
		10/8/14	1734	R-001-S12 / KRUEST	

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4QGW/748810-03000

Service Request: R1407813

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		10/9/14	1143	In Lab / KRUEST	
		10/9/14	1151	R-001-S12 / KRUEST	
R1407813-019.02					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-019.03					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-023.01					
	8260C				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
		10/8/14	1734	R-001-S12 / KRUEST	
		10/9/14	1143	In Lab / KRUEST	
		10/9/14	1151	R-001-S12 / KRUEST	
R1407813-023.02					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-023.03					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-024.01					
	8260C				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
		10/8/14	1435	In Lab / KRUEST	
		10/8/14	1734	R-001-S12 / KRUEST	
R1407813-024.02					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-024.03					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-025.01					
	8260C				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
		10/8/14	1435	In Lab / KRUEST	
		10/8/14	1734	R-001-S12 / KRUEST	
R1407813-025.02					
		10/6/14	1646	SMO / DWARD	

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4QGW/748810-03000

Service Request: R1407813

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		10/6/14	1650	R-001 / DWARD	
R1407813-025.03					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-026.03					
	8260C				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
		10/8/14	1734	R-001-S12 / KRUEST	
		10/9/14	1143	In Lab / KRUEST	
		10/9/14	1151	R-001-S12 / KRUEST	
R1407813-026.04					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-026.05					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-026.06					
	6010C				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1651	R-A01 / DWARD	
		10/8/14	1506	In Lab / CWINKSTERN	
		10/8/14	1536	R-002 / CWINKSTERN	
R1407813-027.01					
	8260C				
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
		10/8/14	1734	R-001-S12 / KRUEST	
		10/9/14	1143	In Lab / KRUEST	
		10/9/14	1151	R-001-S12 / KRUEST	
R1407813-027.02					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	
R1407813-027.03					
		10/6/14	1646	SMO / DWARD	
		10/6/14	1650	R-001 / DWARD	

ALS Environmental

VOLATILE ORGANICS QC SUMMARY

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

00020

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/1/14
Date Received: 10/3/14
Date Analyzed: 10/ 9/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-8-GW-697MW01-16.45
Lab Code: R1407813-001

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-8-GW-697MW01-16.45 MS Matrix Spike RQ1412180-05				FTMM-8-GW-697MW01-16.45 DMS Duplicate Matrix Spike RQ1412180-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**		**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	ND	47.2	50.0	94		48.3	50.0	97		80 - 130	2	30
1,1,1-Trichloroethane (TCA)	ND	48.1	50.0	96		49.5	50.0	99		65 - 130	3	30
1,1,2,2-Tetrachloroethane	ND	53.8	50.0	108		53.5	50.0	107		65 - 130	<1	30
1,1,2-Trichloroethane	ND	56.2	50.0	112		55.1	50.0	110		75 - 125	2	30
1,1-Dichloroethane (1,1-DCA)	ND	47.2	50.0	94		48.6	50.0	97		70 - 135	3	30
1,1-Dichloroethene (1,1-DCE)	ND	54.2	50.0	108		56.5	50.0	113		70 - 130	4	30
1,1-Dichloropropene	ND	46.8	50.0	94		48.7	50.0	97		75 - 130	4	30
1,2,3-Trichlorobenzene	ND	49.3	50.0	99		51.5	50.0	103		75 - 125	4	30
1,2,3-Trichloropropane	ND	53.1	50.0	106		52.9	50.0	106		75 - 125	<1	30
1,2,4-Trichlorobenzene	ND	49.9	50.0	100		52.6	50.0	105		65 - 135	5	30
1,2,4-Trimethylbenzene	ND	15.0	50.0	30	*	15.5	50.0	31	*	75 - 130	3	30
1,2-Dibromo-3-chloropropane (DBC	ND	54.6	50.0	109		54.7	50.0	109		50 - 130	<1	30
1,2-Dibromoethane	ND	55.7	50.0	111		55.4	50.0	111		80 - 120	<1	30
1,2-Dichlorobenzene	ND	51.5	50.0	103		53.5	50.0	107		70 - 120	4	30
1,2-Dichloroethane	ND	46.0	50.0	92		45.4	50.0	91		70 - 130	1	30
1,2-Dichloropropane	ND	49.8	50.0	100		50.9	50.0	102		75 - 125	2	30
1,3,5-Trimethylbenzene	ND	15.9	50.0	32	*	17.1	50.0	34	*	75 - 130	7	30
1,3-Dichlorobenzene	ND	51.2	50.0	102		53.9	50.0	108		75 - 125	5	30
1,3-Dichloropropane	ND	48.5	50.0	97		48.5	50.0	97		75 - 125	<1	30
1,4-Dichlorobenzene	ND	51.2	50.0	102		54.0	50.0	108		75 - 125	5	30
2,2-Dichloropropane	ND	44.8	50.0	90		45.2	50.0	90		70 - 135	<1	30
2-Butanone (MEK)	ND	48.0	50.0	96		42.3	50.0	85		30 - 150	12	30
2-Chlorotoluene	ND	48.2	50.0	96		50.8	50.0	102		75 - 125	5	30
2-Hexanone	ND	44.4	50.0	89		41.5	50.0	83		55 - 130	7	30
tert-Butyl Alcohol	ND	1170	1000	117		1100	1000	110		50 - 150	6	30
4-Chlorotoluene	ND	43.9	50.0	88		46.2	50.0	92		75 - 130	5	30
p-Isopropyltoluene	ND	39.4	50.0	79		42.1	50.0	84		75 - 130	7	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/1/14
Date Received: 10/3/14
Date Analyzed: 10/ 9/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-8-GW-697MW01-16.45
Lab Code: R1407813-001

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-8-GW-697MW01-16.45 MS Matrix Spike RQ1412180-05			FTMM-8-GW-697MW01-16.45 DMS Duplicate Matrix Spike RQ1412180-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
4-Methyl-2-pentanone	ND	51.8	50.0	104	48.0	50.0	96	60 - 135	8	30
Acetone	ND	41.8	50.0	84	38.6	50.0	77	40 - 140	8	30
Benzene	0.28	53.8	50.0	107	55.3	50.0	110	80 - 120	3	30
Bromobenzene	ND	50.9	50.0	102	53.4	50.0	107	75 - 125	5	30
Bromochloromethane	ND	52.4	50.0	105	53.9	50.0	108	65 - 130	3	30
Bromodichloromethane	0.70	48.0	50.0	95	49.4	50.0	97	75 - 120	3	30
Bromoform	ND	41.4	50.0	83	41.7	50.0	83	70 - 130	<1	30
Bromomethane	ND	35.0	50.0	70	43.3	50.0	87	30 - 145	21	30
Carbon Tetrachloride	ND	44.0	50.0	88	45.9	50.0	92	65 - 140	4	30
Chlorobenzene	1.6	53.2	50.0	103	54.7	50.0	106	80 - 120	3	30
Chloroethane	ND	49.6	50.0	99	51.7	50.0	103	60 - 135	4	30
Chloroform	2.7	49.9	50.0	94	50.6	50.0	96	65 - 135	1	30
Chloromethane	ND	44.2	50.0	88	47.4	50.0	95	40 - 125	7	30
Dibromochloromethane	ND	47.2	50.0	94	47.7	50.0	95	60 - 135	1	30
Dichlorodifluoromethane (CFC 12)	ND	49.9	50.0	100	51.9	50.0	104	30 - 155	4	30
Methylene Chloride	ND	50.8	50.0	102	53.3	50.0	107	55 - 140	5	30
Ethylbenzene	ND	43.0	50.0	86	44.6	50.0	89	75 - 125	4	30
Hexachlorobutadiene	ND	44.0	50.0	88	48.0	50.0	96	50 - 140	9	30
Isopropylbenzene (Cumene)	ND	46.8	50.0	94	48.6	50.0	97	75 - 125	4	30
Methyl tert-Butyl Ether	ND	54.1	50.0	108	54.6	50.0	109	65 - 125	<1	30
Naphthalene	ND	56.1	50.0	112	56.8	50.0	114	55 - 140	1	30
Styrene	ND	7.28	50.0	15 *	7.54	50.0	15 *	65 - 135	4	30
Tetrachloroethene (PCE)	1.6	53.0	50.0	103	54.6	50.0	106	45 - 150	3	30
Toluene	ND	47.0	50.0	94	49.1	50.0	98	75 - 120	4	30
Trichloroethene (TCE)	ND	54.2	50.0	108	55.9	50.0	112	70 - 125	3	30
Trichlorofluoromethane (CFC 11)	ND	47.7	50.0	95	49.0	50.0	98	60 - 145	3	30
Vinyl Chloride	ND	46.4	50.0	93	48.6	50.0	97	50 - 145	5	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/1/14
Date Received: 10/3/14
Date Analyzed: 10/ 9/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-8-GW-697MW01-16.45
Lab Code: R1407813-001

Units: µg/L
Basis: NA

Analytical Method: 8260C

Analyte Name	Sample Result	FTMM-8-GW-697MW01-16.45 MS Matrix Spike RQ1412180-05 Result	Spike Amount	% Rec		FTMM-8-GW-697MW01-16.45 DMS Duplicate Matrix Spike RQ1412180-06 Result	Spike Amount	% Rec		% Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	0.42	53.8	50.0	107		55.7	50.0	110		70 - 125	3	30
cis-1,3-Dichloropropene	ND	51.2	50.0	102		52.3	50.0	104		70 - 130	2	30
m,p-Xylenes	ND	67.5	100	67	*	70.0	100	70	*	75 - 130	4	30
n-Butylbenzene	ND	44.8	50.0	90		47.3	50.0	95		70 - 135	5	30
n-Propylbenzene	ND	45.1	50.0	90		47.7	50.0	95		70 - 130	6	30
o-Xylene	ND	36.5	50.0	73	*	37.9	50.0	76	*	80 - 120	4	30
sec-Butylbenzene	ND	46.8	50.0	94		49.6	50.0	99		70 - 125	6	30
tert-Butylbenzene	ND	52.1	50.0	104		54.6	50.0	109		70 - 130	5	30
trans-1,2-Dichloroethene	ND	51.1	50.0	102		52.6	50.0	105		60 - 140	3	30
trans-1,3-Dichloropropene	ND	49.6	50.0	99		49.2	50.0	98		55 - 140	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Analyzed: 10/ 8/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 415258

Lab Control Sample
RQ1412142-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	19.0	20.0	95	80 - 130
1,1,1-Trichloroethane (TCA)	19.2	20.0	96	65 - 130
1,1,2,2-Tetrachloroethane	22.5	20.0	112	65 - 130
1,1,2-Trichloroethane	22.2	20.0	111	75 - 125
1,1-Dichloroethane (1,1-DCA)	20.4	20.0	102	70 - 135
1,1-Dichloroethene (1,1-DCE)	24.1	20.0	120	70 - 130
1,1-Dichloropropene	20.7	20.0	103	75 - 130
1,2,3-Trichlorobenzene	22.1	20.0	110	75 - 125
1,2,3-Trichloropropane	22.0	20.0	110	75 - 125
1,2,4-Trichlorobenzene	21.8	20.0	109	65 - 135
1,2,4-Trimethylbenzene	22.0	20.0	110	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	21.6	20.0	108	50 - 130
1,2-Dibromoethane	22.0	20.0	110	80 - 120
1,2-Dichlorobenzene	21.5	20.0	108	70 - 120
1,2-Dichloroethane	18.6	20.0	93	70 - 130
1,2-Dichloropropane	21.3	20.0	107	75 - 125
1,3,5-Trimethylbenzene	22.4	20.0	112	75 - 130
1,3-Dichlorobenzene	21.5	20.0	107	75 - 125
1,3-Dichloropropane	20.4	20.0	102	75 - 125
1,4-Dichlorobenzene	21.3	20.0	106	75 - 125
2,2-Dichloropropane	20.4	20.0	102	70 - 135
2-Butanone (MEK)	17.8	20.0	89	30 - 150
2-Chlorotoluene	21.2	20.0	106	75 - 125
2-Hexanone	17.3	20.0	87	55 - 130
tert-Butyl Alcohol	410	400	102	50 - 150
4-Chlorotoluene	21.7	20.0	108	75 - 130
p-Isopropyltoluene	22.8	20.0	114	75 - 130
4-Methyl-2-pentanone	19.7	20.0	98	60 - 135
Acetone	17.3	20.0	86	40 - 140
Benzene	21.9	20.0	110	80 - 120
Bromobenzene	21.3	20.0	106	75 - 125
Bromochloromethane	21.9	20.0	109	65 - 130
Bromodichloromethane	21.0	20.0	105	75 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Analyzed: 10/ 8/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 415258

Lab Control Sample
RQ1412142-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromoform	21.0	20.0	105	70 - 130
Bromomethane	17.2	20.0	86	30 - 145
Carbon Tetrachloride	18.5	20.0	92	65 - 140
Chlorobenzene	21.3	20.0	106	80 - 120
Chloroethane	21.9	20.0	109	60 - 135
Chloroform	20.2	20.0	101	65 - 135
Chloromethane	20.4	20.0	102	40 - 125
Dibromochloromethane	21.4	20.0	107	60 - 135
Dichlorodifluoromethane (CFC 12)	21.0	20.0	105	30 - 155
Methylene Chloride	21.8	20.0	109	55 - 140
Ethylbenzene	20.0	20.0	100	75 - 125
Hexachlorobutadiene	20.8	20.0	104	50 - 140
Isopropylbenzene (Cumene)	22.0	20.0	110	75 - 125
Methyl tert-Butyl Ether	22.8	20.0	114	65 - 125
Naphthalene	23.7	20.0	119	55 - 140
Styrene	22.1	20.0	111	65 - 135
Tetrachloroethene (PCE)	20.3	20.0	101	45 - 150
Toluene	21.8	20.0	109	75 - 120
Trichloroethene (TCE)	21.0	20.0	105	70 - 125
Trichlorofluoromethane (CFC 11)	19.5	20.0	98	60 - 145
Vinyl Chloride	21.4	20.0	107	50 - 145
cis-1,2-Dichloroethene	21.4	20.0	107	70 - 125
cis-1,3-Dichloropropene	21.7	20.0	109	70 - 130
m,p-Xylenes	43.7	40.0	109	75 - 130
n-Butylbenzene	22.2	20.0	111	70 - 135
n-Propylbenzene	22.0	20.0	110	70 - 130
o-Xylene	22.1	20.0	110	80 - 120
sec-Butylbenzene	22.2	20.0	111	70 - 125
tert-Butylbenzene	22.1	20.0	110	70 - 130
trans-1,2-Dichloroethene	22.2	20.0	111	60 - 140
trans-1,3-Dichloropropene	22.2	20.0	111	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Analyzed: 10/ 9/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 415409

Lab Control Sample
RQ1412180-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	19.0	20.0	95	80 - 130
1,1,1-Trichloroethane (TCA)	19.6	20.0	98	65 - 130
1,1,2,2-Tetrachloroethane	22.1	20.0	111	65 - 130
1,1,2-Trichloroethane	22.4	20.0	112	75 - 125
1,1-Dichloroethane (1,1-DCA)	19.9	20.0	100	70 - 135
1,1-Dichloroethene (1,1-DCE)	24.5	20.0	122	70 - 130
1,1-Dichloropropene	19.5	20.0	98	75 - 130
1,2,3-Trichlorobenzene	22.8	20.0	114	75 - 125
1,2,3-Trichloropropane	20.8	20.0	104	75 - 125
1,2,4-Trichlorobenzene	21.9	20.0	110	65 - 135
1,2,4-Trimethylbenzene	21.6	20.0	108	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	22.0	20.0	110	50 - 130
1,2-Dibromoethane	22.9	20.0	115	80 - 120
1,2-Dichlorobenzene	21.3	20.0	107	70 - 120
1,2-Dichloroethane	18.9	20.0	95	70 - 130
1,2-Dichloropropane	20.6	20.0	103	75 - 125
1,3,5-Trimethylbenzene	21.6	20.0	108	75 - 130
1,3-Dichlorobenzene	21.2	20.0	106	75 - 125
1,3-Dichloropropane	20.1	20.0	100	75 - 125
1,4-Dichlorobenzene	21.4	20.0	107	75 - 125
2,2-Dichloropropane	20.3	20.0	102	70 - 135
2-Butanone (MEK)	18.0	20.0	90	30 - 150
2-Chlorotoluene	20.4	20.0	102	75 - 125
2-Hexanone	17.7	20.0	88	55 - 130
tert-Butyl Alcohol	445	400	111	50 - 150
4-Chlorotoluene	21.1	20.0	105	75 - 130
p-Isopropyltoluene	22.2	20.0	111	75 - 130
4-Methyl-2-pentanone	20.5	20.0	103	60 - 135
Acetone	18.1	20.0	91	40 - 140
Benzene	21.4	20.0	107	80 - 120
Bromobenzene	21.1	20.0	105	75 - 125
Bromochloromethane	21.6	20.0	108	65 - 130
Bromodichloromethane	20.4	20.0	102	75 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Analyzed: 10/ 9/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 415409

Lab Control Sample
RQ1412180-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromoform	20.4	20.0	102	70 - 130
Bromomethane	17.0	20.0	85	30 - 145
Carbon Tetrachloride	18.5	20.0	93	65 - 140
Chlorobenzene	20.9	20.0	104	80 - 120
Chloroethane	20.6	20.0	103	60 - 135
Chloroform	19.7	20.0	98	65 - 135
Chloromethane	19.4	20.0	97	40 - 125
Dibromochloromethane	20.7	20.0	104	60 - 135
Dichlorodifluoromethane (CFC 12)	20.4	20.0	102	30 - 155
Methylene Chloride	21.2	20.0	106	55 - 140
Ethylbenzene	19.9	20.0	100	75 - 125
Hexachlorobutadiene	20.9	20.0	104	50 - 140
Isopropylbenzene (Cumene)	21.0	20.0	105	75 - 125
Methyl tert-Butyl Ether	22.7	20.0	113	65 - 125
Naphthalene	24.6	20.0	123	55 - 140
Styrene	22.1	20.0	110	65 - 135
Tetrachloroethene (PCE)	19.8	20.0	99	45 - 150
Toluene	21.6	20.0	108	75 - 120
Trichloroethene (TCE)	21.1	20.0	105	70 - 125
Trichlorofluoromethane (CFC 11)	18.8	20.0	94	60 - 145
Vinyl Chloride	20.2	20.0	101	50 - 145
cis-1,2-Dichloroethene	20.9	20.0	104	70 - 125
cis-1,3-Dichloropropene	21.8	20.0	109	70 - 130
m,p-Xylenes	42.9	40.0	107	75 - 130
n-Butylbenzene	21.5	20.0	108	70 - 135
n-Propylbenzene	21.1	20.0	106	70 - 130
o-Xylene	21.8	20.0	109	80 - 120
sec-Butylbenzene	21.8	20.0	109	70 - 125
tert-Butylbenzene	21.9	20.0	109	70 - 130
trans-1,2-Dichloroethene	22.4	20.0	112	60 - 140
trans-1,3-Dichloropropene	22.1	20.0	110	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Analyzed: 10/8/14 18:37

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1412142-04
Instrument ID: R-MS-12
File ID: I:\ACQUDATA\MSVOA12\DATA\100814\M9554.D\

Analytical Method: 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1412142-03	I:\ACQUDATA\MSVOA12\DATA\100814\M9552.D\	10/8/14 17:33
FTMM-EB-093014	R1407813-024	I:\ACQUDATA\MSVOA12\DATA\100814\M9561.D\	10/8/14 22:23
FTMM-DI-093014	R1407813-025	I:\ACQUDATA\MSVOA12\DATA\100814\M9562.D\	10/8/14 22:56
FTMM-8-GW-M8MW24-29.68	R1407813-004	I:\ACQUDATA\MSVOA12\DATA\100814\M9563.D\	10/8/14 23:28
FTMM-8-GW-M8MW16-11.74	R1407813-005	I:\ACQUDATA\MSVOA12\DATA\100814\M9564.D\	10/9/14 00:01
FTMM-8-GW-M8MW15-11.30	R1407813-006	I:\ACQUDATA\msvoa12\Data\100814\M9565.D\	10/9/14 00:33
FTMM-EB-100114-01	R1407813-010	I:\ACQUDATA\MSVOA12\DATA\100814\M9566.D\	10/9/14 01:05
FTMM-EB-100114-02	R1407813-011	I:\ACQUDATA\MSVOA12\DATA\100814\M9567.D\	10/9/14 01:38
FTMM-3-GW-M3MW07-13.85	R1407813-013	I:\ACQUDATA\MSVOA12\DATA\100814\M9568.D\	10/9/14 02:10

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Analyzed: 10/9/14 11:50

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1412180-04
Instrument ID: R-MS-12
File ID: I:\ACQUDATA\MSVOA12\DATA\100914\M9579.D\

Analytical Method: 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1412180-03	I:\ACQUDATA\MSVOA12\DATA\100914\M9577.D\	10/9/14 10:45
FTMM-TB-100214	R1407813-023	I:\ACQUDATA\MSVOA12\DATA\100914\M9580.D\	10/9/14 12:20
FTMM-EB-100214	R1407813-026	I:\ACQUDATA\MSVOA12\DATA\100914\M9581.D\	10/9/14 12:53
FTMM-8-GW-697MW01-16.45	R1407813-001	I:\ACQUDATA\MSVOA12\DATA\100914\M9582.D\	10/9/14 13:25
FTMM-64-GW-812MW04-5.53	R1407813-014	I:\ACQUDATA\MSVOA12\DATA\100914\M9583.D\	10/9/14 13:57
FTMM-61-GW-283MW02-13.26	R1407813-015	I:\ACQUDATA\MSVOA12\DATA\100914\M9584.D\	10/9/14 14:29
FTMM-8-GW-M8MW12-13.55	R1407813-018	I:\ACQUDATA\MSVOA12\DATA\100914\M9585.D\	10/9/14 15:02
FTMM-59-GW-1122MW07-16.67	R1407813-019	I:\ACQUDATA\MSVOA12\DATA\100914\M9586.D\	10/9/14 15:34
FTMM-59-GW-1122MW107-16.67	R1407813-027	I:\ACQUDATA\MSVOA12\DATA\100914\M9587.D\	10/9/14 16:06
FTMM-8-GW-697MW01-16.45MS	RQ1412180-05	I:\ACQUDATA\MSVOA12\DATA\100914\M9596.D\	10/9/14 20:57
FTMM-8-GW-697MW01-16.45DMS	RQ1412180-06	I:\ACQUDATA\MSVOA12\DATA\100914\M9597.D\	10/9/14 21:29

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000

Service Request: R1407813
Date Analyzed: 9/09/14 14:37

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\090914\M8728.D\
Instrument ID: R-MS-12

Analytical Method: 8260C
Analysis Lot:

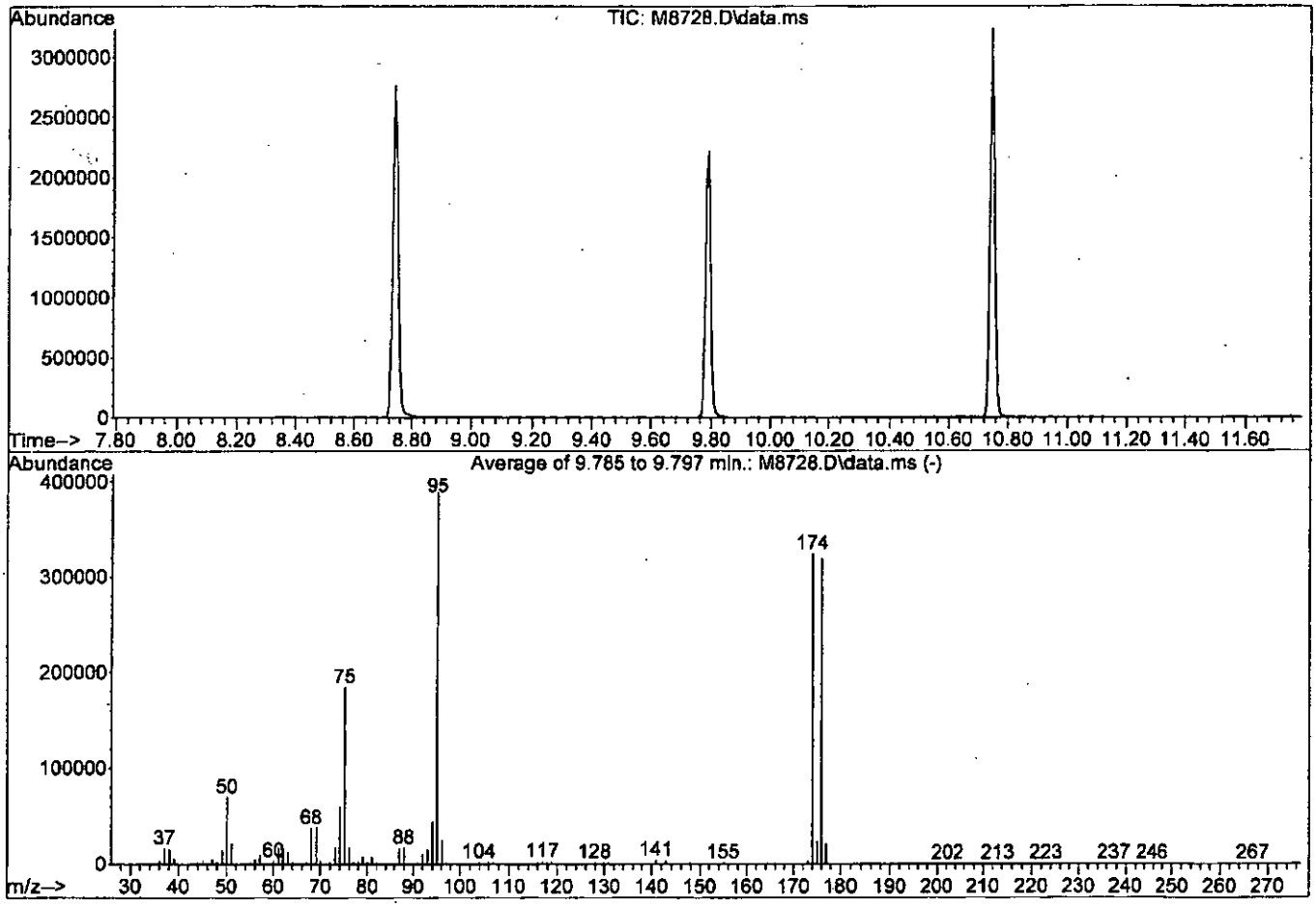
Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	17.8	69235	Pass
75	95	30	60	47.5	184157	Pass
95	95	100	100	100.0	388011	Pass
96	95	5	9	6.3	24410	Pass
173	174	0	2	0.8	2686	Pass
174	95	50	120	83.4	323669	Pass
175	174	5	9	7.1	23053	Pass
176	174	95	101	98.3	318059	Pass
177	176	5	9	6.6	20833	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Initial CalibrationICAL	0.5 ppb	I:\ACQUDATA\msvoa12\Data\090914\M8730.D\	9/09/14 15:42	
Initial CalibrationICAL	1.0 ppb	I:\ACQUDATA\msvoa12\Data\090914\M8731.D\	9/09/14 16:36	
Initial CalibrationICAL	2.0 ppb	I:\ACQUDATA\msvoa12\Data\090914\M8732.D\	9/09/14 17:09	
Initial CalibrationICAL	5.0 ppb	I:\ACQUDATA\msvoa12\Data\090914\M8733.D\	9/09/14 17:41	
Initial CalibrationICAL	20 ppb	I:\ACQUDATA\msvoa12\Data\090914\M8734.D\	9/09/14 18:13	
Initial CalibrationICAL	50 ppb	I:\ACQUDATA\msvoa12\Data\090914\M8735.D\	9/09/14 18:45	
Initial CalibrationICAL	100 ppb	I:\ACQUDATA\msvoa12\Data\090914\M8736.D\	9/09/14 19:18	
Initial CalibrationICAL	200 ppb	I:\ACQUDATA\msvoa12\Data\090914\M8737.D\	9/09/14 19:50	

Data Path : I:\ACQUDATA\msvoa12\Data\090914\
Data File : M8728.D
Acq On : 9 Sep 2014 2:37 pm
Operator : K.Ruest
Sample : TUNE
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Fri Sep 05 08:48:55 2014



AutoFind: Scans 1425, 1426, 1427; Background Corrected with Scan 1420

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	69235	PASS
75	95	30	60	47.5	184157	PASS
95	95	100	100	100.0	388011	PASS
96	95	5	9	6.3	24410	PASS
173	174	0.00	2	0.8	2686	PASS
174	95	50	120	83.4	323669	PASS
175	174	5	9	7.1	23053	PASS
176	174	95	101	98.3	318059	PASS
177	176	5	9	6.6	20833	PASS

W090914.M Tue Sep 09 14:53:14 2014 Page: 1

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000

Service Request: R1407813
Date Analyzed: 10/8/14 16:29

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\100814\M9550.D\
Instrument ID: R-MS-12

Analytical Method: 8260C
Analysis Lot: 415258

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	16.18	78261	Pass
75	95	30	60	44.59	215659	Pass
95	95	100	100	100.00	483627	Pass
96	95	5	9	6.58	31808	Pass
173	174	0	2	0.61	2490	Pass
174	95	50	120	84.46	408491	Pass
175	174	5	9	7.21	29437	Pass
176	174	95	101	95.49	390080	Pass
177	176	5	9	6.22	24264	Pass

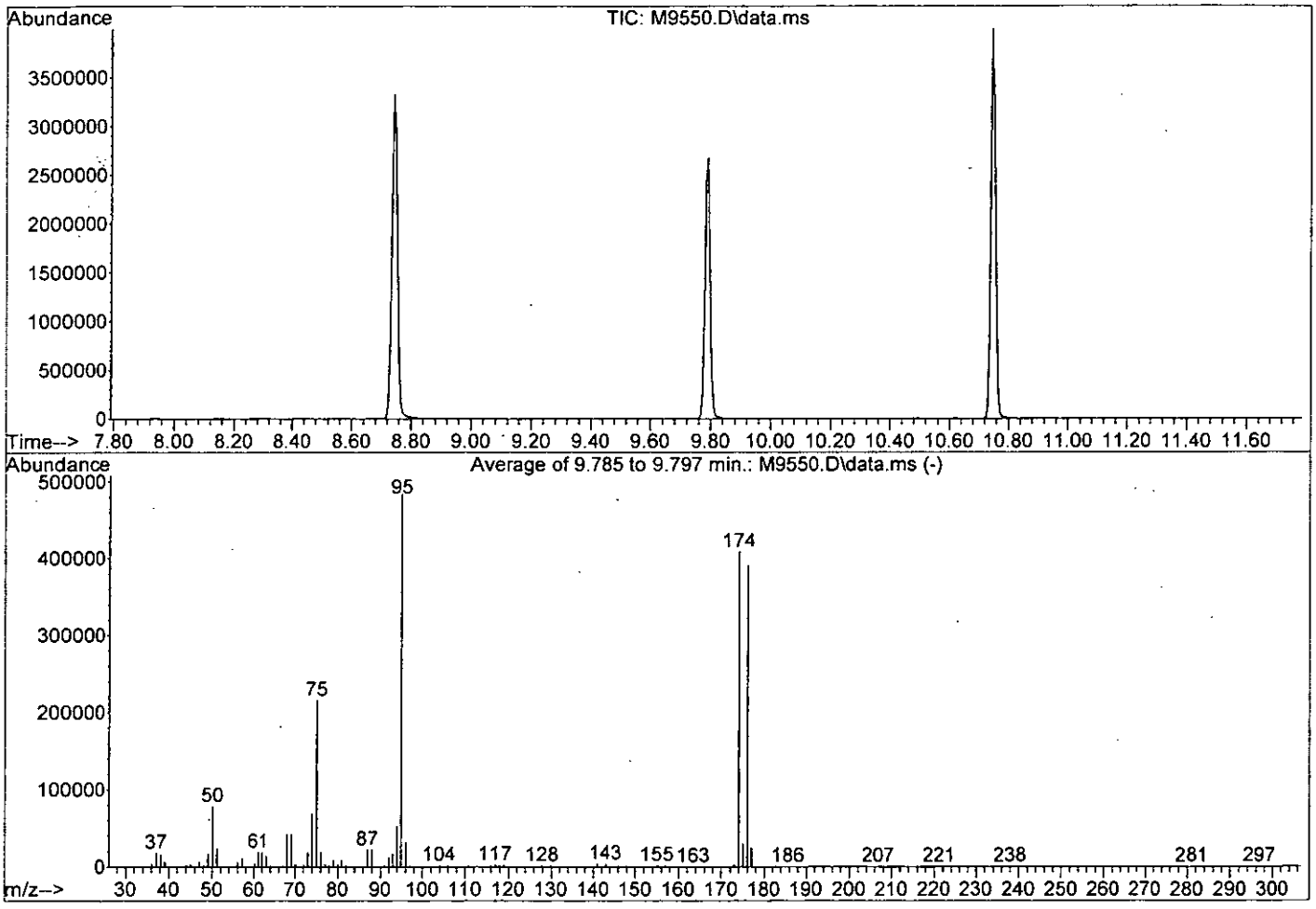
Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1412142-02	I:\ACQUDATA\MSVOA12\DATA\100814\M9551.D\	10/8/14 17:01	
Lab Control Sample	RQ1412142-03	I:\ACQUDATA\MSVOA12\DATA\100814\M9552.D\	10/8/14 17:33	
Method Blank	RQ1412142-04	I:\ACQUDATA\MSVOA12\DATA\100814\M9554.D\	10/8/14 18:37	
FTMM-EB-093014	R1407813-024	I:\ACQUDATA\MSVOA12\DATA\100814\M9561.D\	10/8/14 22:23	
FTMM-DI-093014	R1407813-025	I:\ACQUDATA\MSVOA12\DATA\100814\M9562.D\	10/8/14 22:56	
FTMM-8-GW-M8MW24-29.68	R1407813-004	I:\ACQUDATA\MSVOA12\DATA\100814\M9563.D\	10/8/14 23:28	
FTMM-8-GW-M8MW16-11.74	R1407813-005	I:\ACQUDATA\MSVOA12\DATA\100814\M9564.D\	10/9/14 00:01	
FTMM-8-GW-M8MW15-11.30	R1407813-006	I:\ACQUDATA\msvoa12\Data\100814\M9565.D\	10/9/14 00:33	
FTMM-EB-100114-01	R1407813-010	I:\ACQUDATA\MSVOA12\DATA\100814\M9566.D\	10/9/14 01:05	
FTMM-EB-100114-02	R1407813-011	I:\ACQUDATA\MSVOA12\DATA\100814\M9567.D\	10/9/14 01:38	
FTMM-3-GW-M3MW07-13.85	R1407813-013	I:\ACQUDATA\MSVOA12\DATA\100814\M9568.D\	10/9/14 02:10	

Data Path : I:\ACQUDATA\msvoa12\Data\100814\
Data File : M9550.D
Acq On : 8 Oct 2014 4:29 pm
Operator : K.Ruest
Sample : TUNE KQ1412142 - 01,07
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: INTP60.P

KR 10/15/14

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Wed Sep 10 10:41:23 2014



AutoFind: Scans 1425, 1426, 1427; Background Corrected with Scan 1420

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.2	78261	PASS
75	95	30	60	44.6	215659	PASS
95	95	100	100	100.0	483627	PASS
96	95	5	9	6.6	31808	PASS
173	174	0.00	2	0.6	2490	PASS
174	95	50	120	84.5	408491	PASS
175	174	5	9	7.2	29437	PASS
176	174	95	101	95.5	390080	PASS
177	176	5	9	6.2	24264	PASS

W090914.M Wed Oct 08 17:18:06 2014 Page: 1

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000

Service Request: R1407813
Date Analyzed: 10/9/14 09:42

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\100914\M9575.D\
Instrument ID: R-MS-12

Analytical Method: 8260C
Analysis Lot: 415409

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	15.37	68077	Pass
75	95	30	60	46.20	204629	Pass
95	95	100	100	100.00	442923	Pass
96	95	5	9	6.95	30803	Pass
173	174	0	2	0.67	2546	Pass
174	95	50	120	85.50	378688	Pass
175	174	5	9	7.15	27072	Pass
176	174	95	101	97.61	369621	Pass
177	176	5	9	6.45	23835	Pass

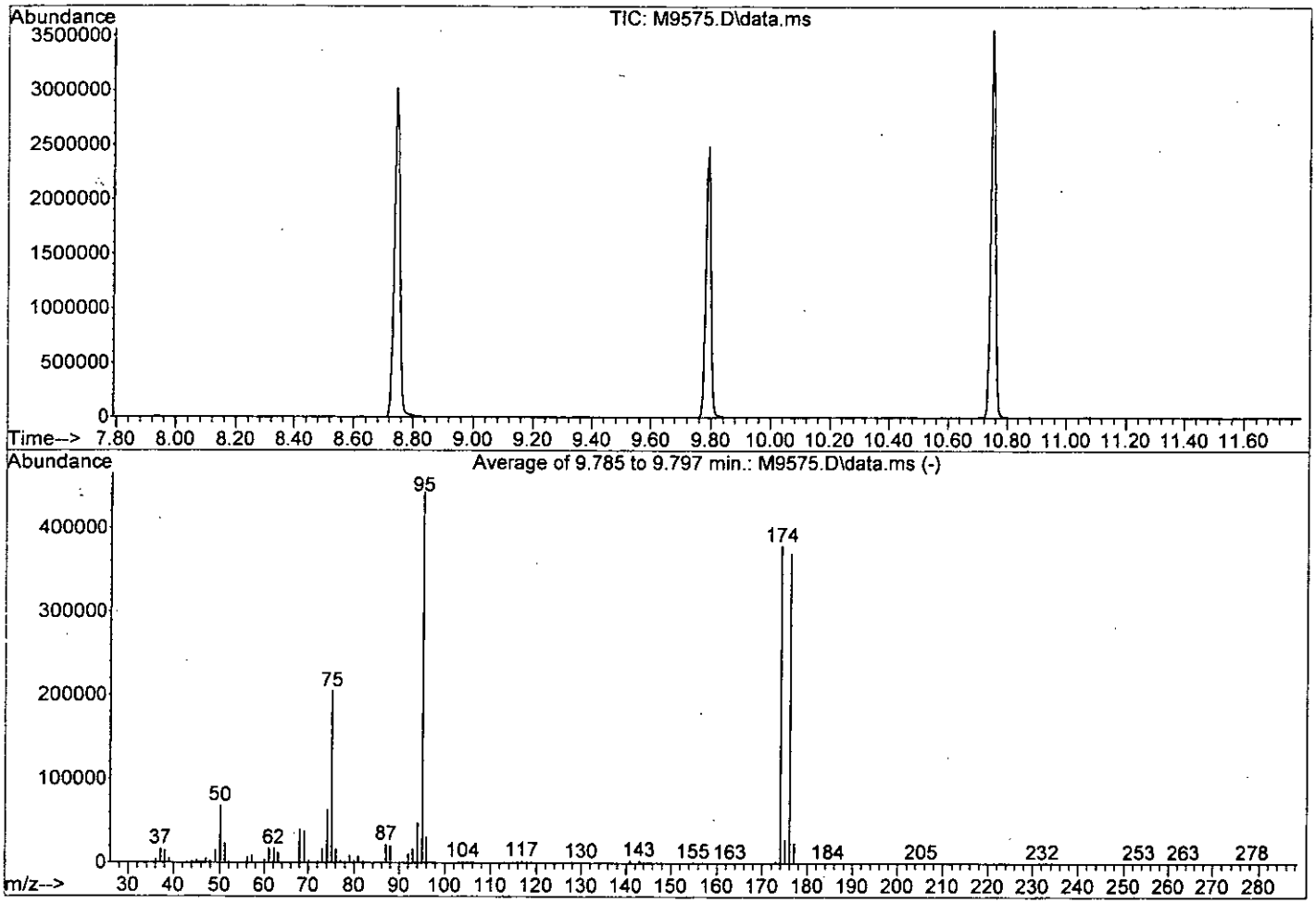
Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1412180-02	I:\ACQUDATA\MSVOA12\DATA\100914\M9576.D\	10/9/14 10:13	
Lab Control Sample	RQ1412180-03	I:\ACQUDATA\MSVOA12\DATA\100914\M9577.D\	10/9/14 10:45	
Method Blank	RQ1412180-04	I:\ACQUDATA\MSVOA12\DATA\100914\M9579.D\	10/9/14 11:50	
FTMM-TB-100214	R1407813-023	I:\ACQUDATA\MSVOA12\DATA\100914\M9580.D\	10/9/14 12:20	
FTMM-EB-100214	R1407813-026	I:\ACQUDATA\MSVOA12\DATA\100914\M9581.D\	10/9/14 12:53	
FTMM-8-GW-697MW01-16.45	R1407813-001	I:\ACQUDATA\MSVOA12\DATA\100914\M9582.D\	10/9/14 13:25	
FTMM-64-GW-812MW04-5.53	R1407813-014	I:\ACQUDATA\MSVOA12\DATA\100914\M9583.D\	10/9/14 13:57	
FTMM-61-GW-283MW02-13.26	R1407813-015	I:\ACQUDATA\MSVOA12\DATA\100914\M9584.D\	10/9/14 14:29	
FTMM-8-GW-M8MW12-13.55	R1407813-018	I:\ACQUDATA\MSVOA12\DATA\100914\M9585.D\	10/9/14 15:02	
FTMM-59-GW-1122MW07-16.67	R1407813-019	I:\ACQUDATA\MSVOA12\DATA\100914\M9586.D\	10/9/14 15:34	
FTMM-59-GW-1122MW107-16.67	R1407813-027	I:\ACQUDATA\MSVOA12\DATA\100914\M9587.D\	10/9/14 16:06	
FTMM-8-GW-697MW01-16.45MS	RQ1412180-05	I:\ACQUDATA\MSVOA12\DATA\100914\M9596.D\	10/9/14 20:57	
FTMM-8-GW-697MW01-16.45DMS	RQ1412180-06	I:\ACQUDATA\MSVOA12\DATA\100914\M9597.D\	10/9/14 21:29	

Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9575.D
Acq On : 9 Oct 2014 9:42 am
Operator : K.Ruest
Sample : TUNE RQ1412F60-01
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: INTP60.P

KF 10/9/14

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Wed Sep 10 10:41:23 2014



AutoFind: Scans 1425, 1426, 1427; Background Corrected with Scan 1420

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.4	68077	PASS
75	95	30	60	46.2	204629	PASS
95	95	100	100	100.0	442923	PASS
96	95	5	9	7.0	30803	PASS
173	174	0.00	2	0.7	2546	PASS
174	95	50	120	85.5	378688	PASS
175	174	5	9	7.1	27072	PASS
176	174	95	101	97.6	369621	PASS
177	176	5	9	6.4	23835	PASS

W090914.M Thu Oct 09 10:08:17 2014 Page: 1

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000

Service Request: R1407813
Date Analyzed: 10/8/14 17:01

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA12\DATA\100814\M9551.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1412142-02
Analysis Lot: 415258
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
	Results ==>	835,110	10.75	1,661,684	5.45	1,534,797	8.75
	Upper Limit ==>	1,670,220	11.25	3,323,368	5.95	3,069,594	9.25
	Lower Limit ==>	417,555	10.25	830,842	4.95	767,399	8.25
	ICAL Result ==>	633,420	10.75	1,277,051	5.45	1,160,256	8.75
Associated Analyses							
Lab Control Sample	RQ1412142-03	802,946	10.75	1,656,546	5.45	1,536,287	8.74
Method Blank	RQ1412142-04	772,537	10.75	1,673,290	5.45	1,500,242	8.74
FTMM-EB-093014	R1407813-024	756,303	10.75	1,627,325	5.45	1,494,552	8.74
FTMM-DI-093014	R1407813-025	755,974	10.75	1,609,684	5.45	1,469,480	8.74
FTMM-8-GW-M8MW24-29.68	R1407813-004	767,316	10.75	1,604,509	5.45	1,488,641	8.74
FTMM-8-GW-M8MW16-11.74	R1407813-005	765,826	10.75	1,592,932	5.45	1,466,412	8.74
FTMM-8-GW-M8MW15-11.30	R1407813-006	757,408	10.75	1,543,649	5.45	1,443,732	8.74
FTMM-EB-100114-01	R1407813-010	754,131	10.75	1,600,879	5.45	1,478,815	8.74
FTMM-EB-100114-02	R1407813-011	753,786	10.75	1,596,458	5.45	1,469,215	8.74
FTMM-3-GW-M3MW07-13.85	R1407813-013	762,516	10.75	1,595,598	5.45	1,484,054	8.74

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000

Service Request: R1407813
Date Analyzed: 10/8/14 17:01

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA12\DATA\100814\M9551.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1412142-02
Analysis Lot: 415258
Signal ID:

		Pentafluorobenzene	
		Area	**RT**
	Results ==>	999,698	4.25
	Upper Limit ==>	1,999,396	4.75
	Lower Limit ==>	499,849	3.75
	ICAL Result ==>	818,377	4.25
Associated Analyses			
Lab Control Sample	RQ1412142-03	1,022,149	4.25
Method Blank	RQ1412142-04	1,017,846	4.25
FTMM-EB-093014	R1407813-024	1,005,082	4.25
FTMM-DI-093014	R1407813-025	981,102	4.25
FTMM-8-GW-M8MW24-29.68	R1407813-004	992,721	4.25
FTMM-8-GW-M8MW16-11.74	R1407813-005	990,633	4.25
FTMM-8-GW-M8MW15-11.30	R1407813-006	984,303	4.25
FTMM-EB-100114-01	R1407813-010	988,988	4.25
FTMM-EB-100114-02	R1407813-011	994,924	4.25
FTMM-3-GW-M3MW07-13.85	R1407813-013	1,000,507	4.25

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000

Service Request: R1407813
Date Analyzed: 10/9/14 10:13

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA12\DATA\100914\M9576.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1412180-02
Analysis Lot: 415409
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
	Results ==>	761,972	10.75	1,510,223	5.45	1,424,786	8.74
	Upper Limit ==>	1,523,944	11.25	3,020,446	5.95	2,849,572	9.24
	Lower Limit ==>	380,986	10.25	755,112	4.95	712,393	8.24
	ICAL Result ==>	633,420	10.75	1,277,051	5.45	1,160,256	8.75
Associated Analyses							
Lab Control Sample	RQ1412180-03	748,822	10.75	1,506,017	5.45	1,406,284	8.74
Method Blank	RQ1412180-04	696,304	10.75	1,471,091	5.45	1,379,215	8.74
FTMM-TB-100214	R1407813-023	642,077	10.75	1,503,988	5.45	1,381,849	8.74
FTMM-EB-100214	R1407813-026	688,192	10.75	1,506,401	5.45	1,406,679	8.74
FTMM-8-GW-697MW01-16.45	R1407813-001	697,231	10.75	1,475,741	5.45	1,381,091	8.74
FTMM-64-GW-812MW04-5.53	R1407813-014	713,284	10.75	1,486,199	5.45	1,393,329	8.74
FTMM-61-GW-283MW02-13.26	R1407813-015	698,792	10.75	1,495,889	5.45	1,389,555	8.74
FTMM-8-GW-M8MW12-13.55	R1407813-018	696,949	10.75	1,478,824	5.45	1,384,940	8.74
FTMM-59-GW-1122MW07-16.67	R1407813-019	711,986	10.75	1,478,385	5.45	1,375,160	8.74
FTMM-59-GW-1122MW107-16.67	R1407813-027	709,825	10.75	1,445,274	5.45	1,370,925	8.74
FTMM-8-GW-697MW01-16.45MS	RQ1412180-05	753,103	10.75	1,464,007	5.45	1,389,614	8.74
FTMM-8-GW-697MW01-16.45DMS	RQ1412180-06	753,639	10.75	1,483,492	5.45	1,413,321	8.74

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000

Service Request: R1407813
Date Analyzed: 10/9/14 10:13

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA12\DATA\100914\M9576.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1412180-02
Analysis Lot: 415409
Signal ID:

		Pentafluorobenzene	
		Area	**RT**
	Results ==>	944,084	4.25
	Upper Limit ==>	1,888,168	4.75
	Lower Limit ==>	472,042	3.75
	ICAL Result ==>	818,377	4.25
Associated Analyses			
Lab Control Sample	RQ1412180-03	932,030	4.25
Method Blank	RQ1412180-04	923,379	4.25
FTMM-TB-100214	R1407813-023	917,015	4.25
FTMM-EB-100214	R1407813-026	931,777	4.25
FTMM-8-GW-697MW01-16.45	R1407813-001	921,551	4.25
FTMM-64-GW-812MW04-5.53	R1407813-014	939,094	4.25
FTMM-61-GW-283MW02-13.26	R1407813-015	928,319	4.25
FTMM-8-GW-M8MW12-13.55	R1407813-018	940,665	4.25
FTMM-59-GW-1122MW07-16.67	R1407813-019	928,965	4.25
FTMM-59-GW-1122MW107-16.67	R1407813-027	919,056	4.25
FTMM-8-GW-697MW01-16.45MS	RQ1412180-05	935,680	4.25
FTMM-8-GW-697MW01-16.45DMS	RQ1412180-06	942,129	4.25

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Environmental

VOLATILE ORGANICS SAMPLE DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

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00040

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1105
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 13:25
Sample Name:	FTMM-8-GW-697MW01-16.45	**Units:**	µg/L
Lab Code:	R1407813-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9582.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**0.28**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**0.70**	J	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1105
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 13:25
Sample Name:	FTMM-8-GW-697MW01-16.45	**Units:**	µg/L
Lab Code:	R1407813-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9582.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	**1.6**	J	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**2.7**	J	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**1.6**	J	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**0.42**	J	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1105
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 13:25
Sample Name:	FTMM-8-GW-697MW01-16.45	**Units:**	µg/L
Lab Code:	R1407813-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9582.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	10/9/14 13:25	
Dibromofluoromethane	97	85-115	10/9/14 13:25	
Toluene-d8	95	85-120	10/9/14 13:25	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/1/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 1325

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-8-GW-697MW01-16.45	**Units:**	µg/L
Lab Code:	R1407813-001	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407813-001|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9582.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 1:25 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 14:03:32 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	921551	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1475741	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1381091	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	697231	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	399622	48.62	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.24%				
48) surr1,1,2-dichloroetha...	4.664	65	389397	43.95	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 87.90%				
65) SURR3,Toluene-d8	7.322	98	1643738	47.38	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 94.76%				
70) SURR2,BFB	9.791	95	634437	51.08	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.16%				
Target Compounds							Qvalue
15) Acetone	2.055	43	2364	1.25	ppb		73
34) cis-1,2-Dichloroethene	3.548	96	3826	0.42	ppb	#	75
40) Chloroform	3.938	83	39532	2.66	ppb		92
49) Benzene	4.786	78	9418	0.28	ppb		90
60) Bromodichloromethane	6.481	83	7284	0.70	ppb		85
72) Tetrachloroethene	7.968	164	11207	1.58	ppb	#	83
78) Chlorobenzene	8.773	112	38424	1.57	ppb		93

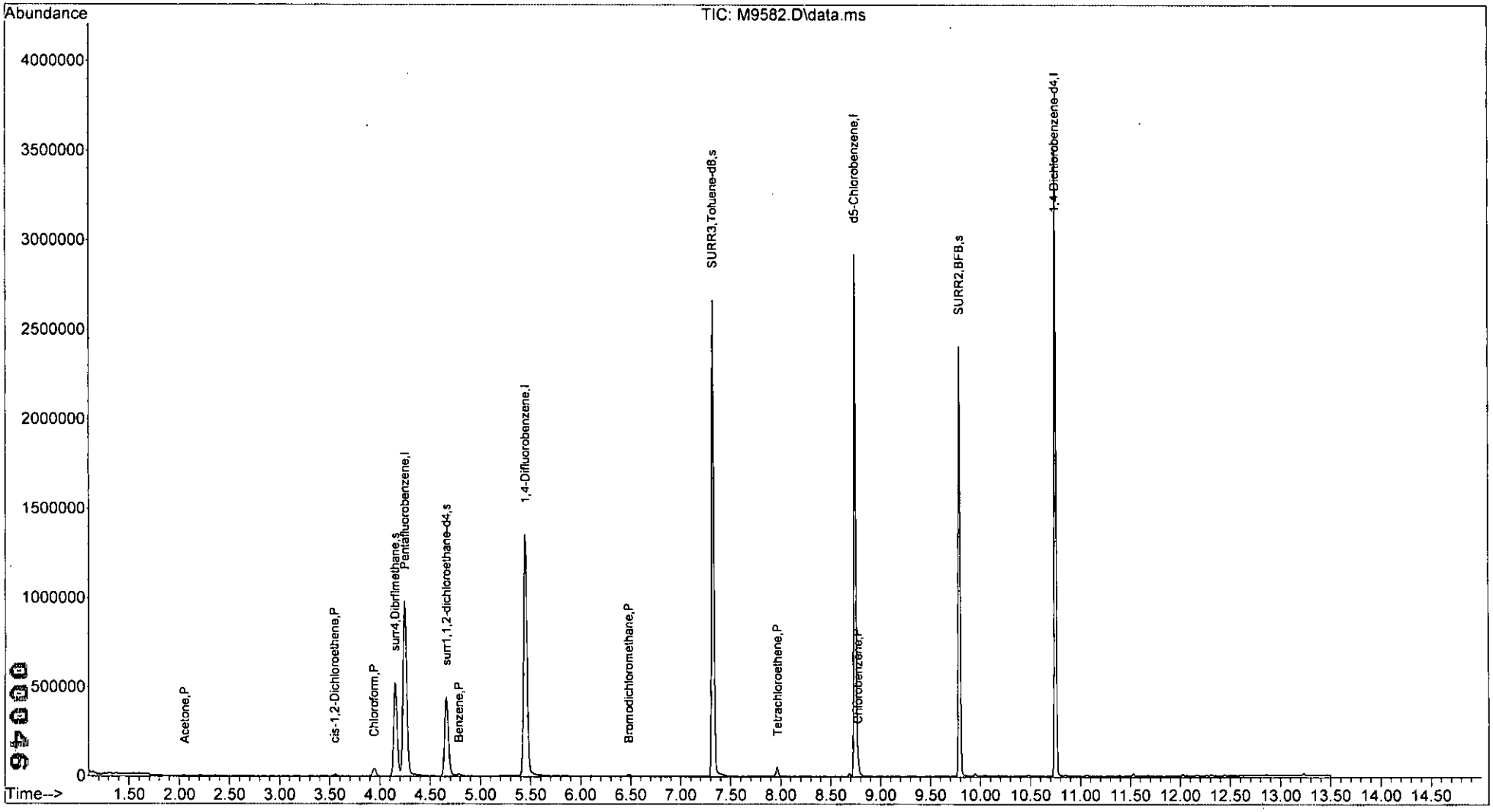
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KB 10/9/14
DL 10/13/14

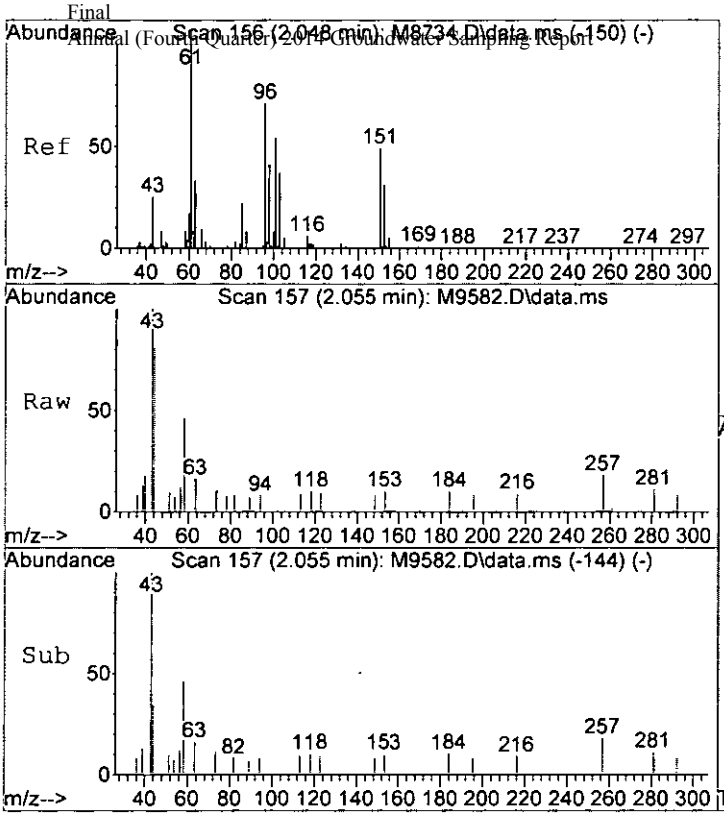
Quantitation Report (QT Reviewed)

Sample : R1407813-001|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9582.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 1:25 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 14:03:32 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



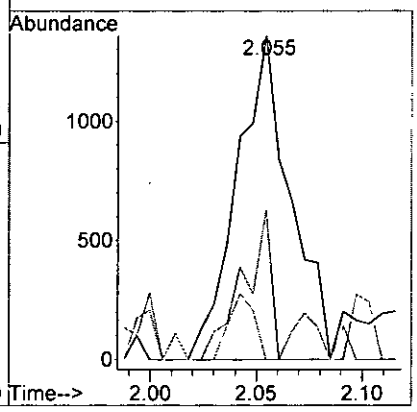
W090914.M Thu Oct 09 14:04:40 2014 Page: 2

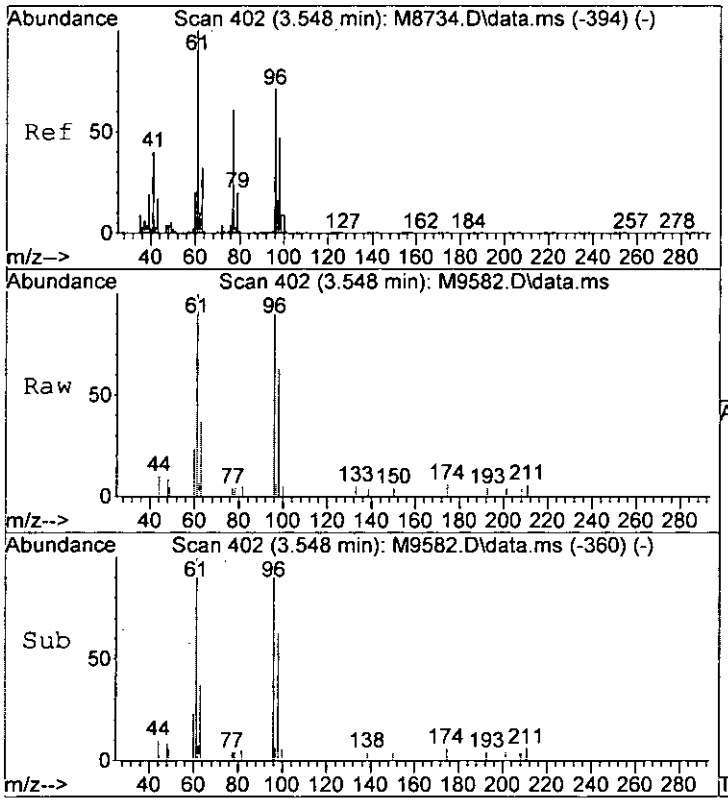


#15
Acetone
Concen: 1.25 ppb
RT: 2.055 min Scan# 157
Delta R.T. 0.006 min
Lab File: M9582.D
Acq: 9 Oct 2014 1:25 pm

Tgt Ion: 43 Resp: 2364

Ion	Ratio	Lower	Upper
43	100		
58	46.0	10.3	50.3
42	0.0	0.0	27.1

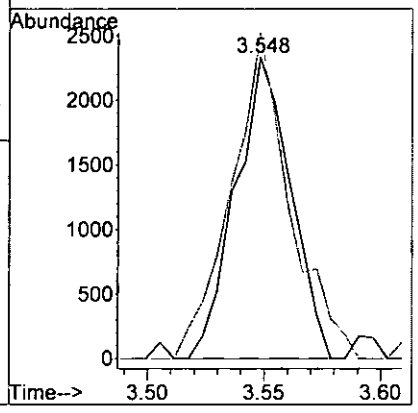


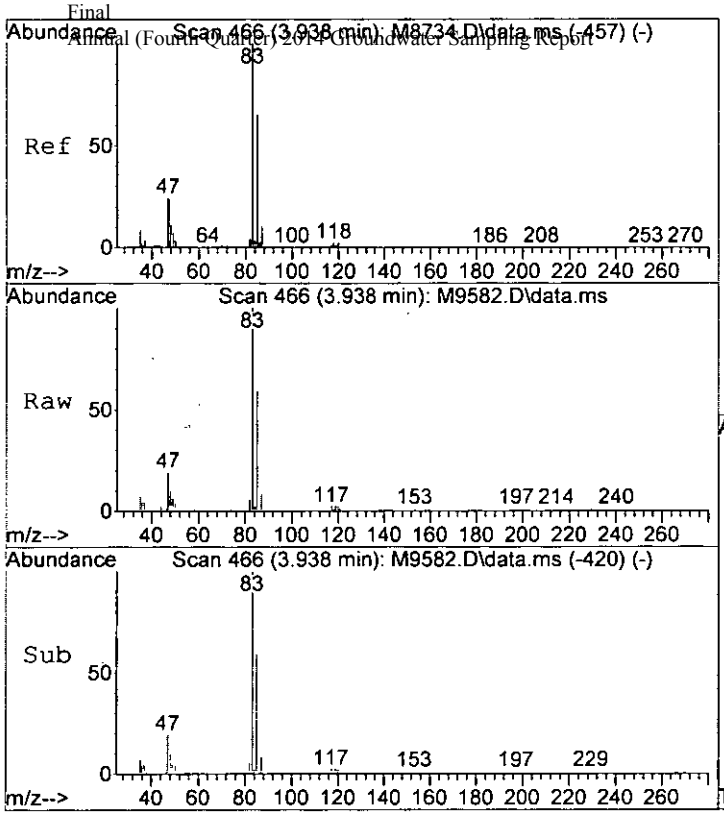


#34
cis-1,2-Dichloroethene
Concen: 0.42 ppb
RT: 3.548 min Scan# 402
Delta R.T. 0.000 min
Lab File: M9582.D
Acq: 9 Oct 2014 1:25 pm

Tgt Ion: 96 Resp: 3826

Ion	Ratio	Lower	Upper
96	100		
61	107.9	117.4	157.4#

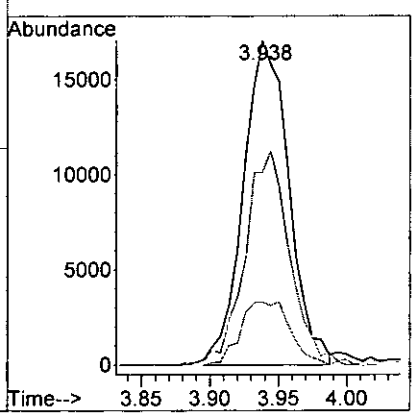


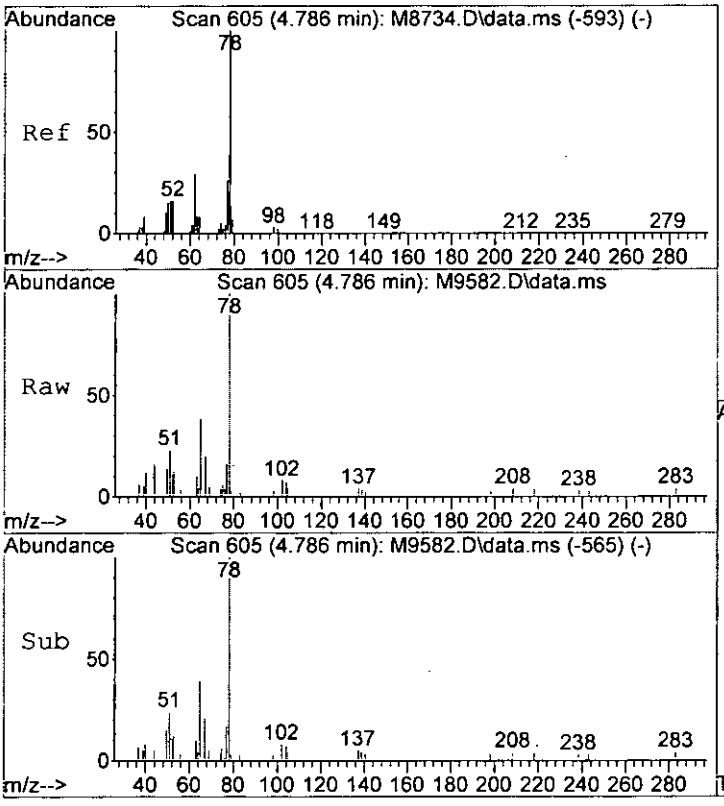


#40
Chloroform
Concen: 2.66 ppb
RT: 3.938 min Scan# 466
Delta R.T. -0.006 min
Lab File: M9582.D
Acq: 9 Oct 2014 1:25 pm

Tgt Ion: 83 Resp: 39532

Ion	Ratio	Lower	Upper
83	100		
85	59.5	45.3	85.3
47	19.3	4.4	44.4

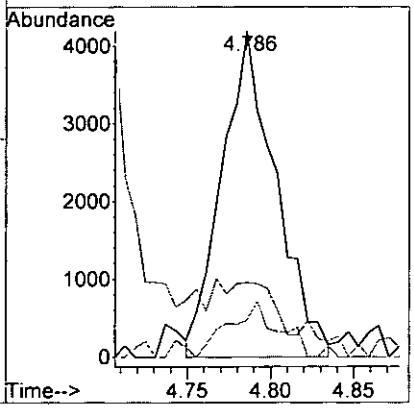


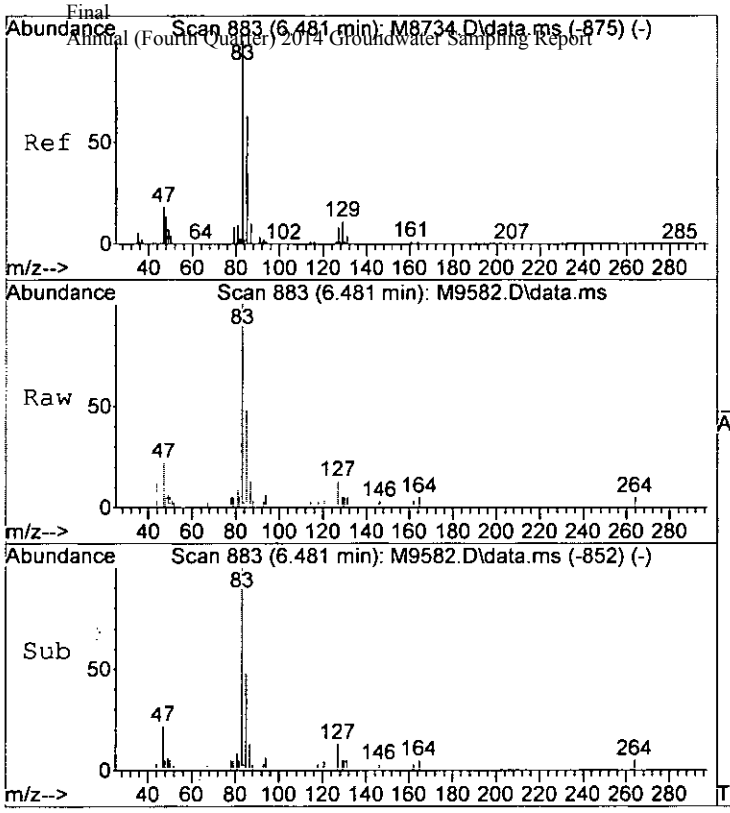


#49
Benzene
Concen: 0.28 ppb
RT: 4.786 min Scan# 605
Delta R.T. 0.000 min
Lab File: M9582.D
Acq: 9 Oct 2014 1:25 pm

Tgt Ion: 78 Resp: 9418

Ion	Ratio	Lower	Upper
78	100		
51	22.9	0.0	39.8
52	11.1	0.0	37.0

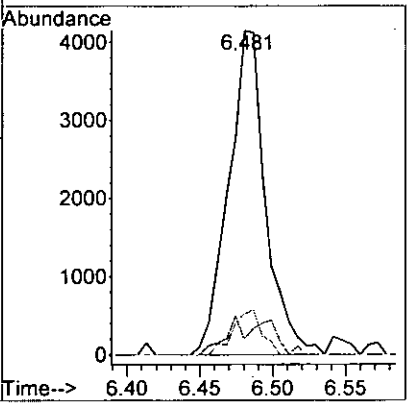


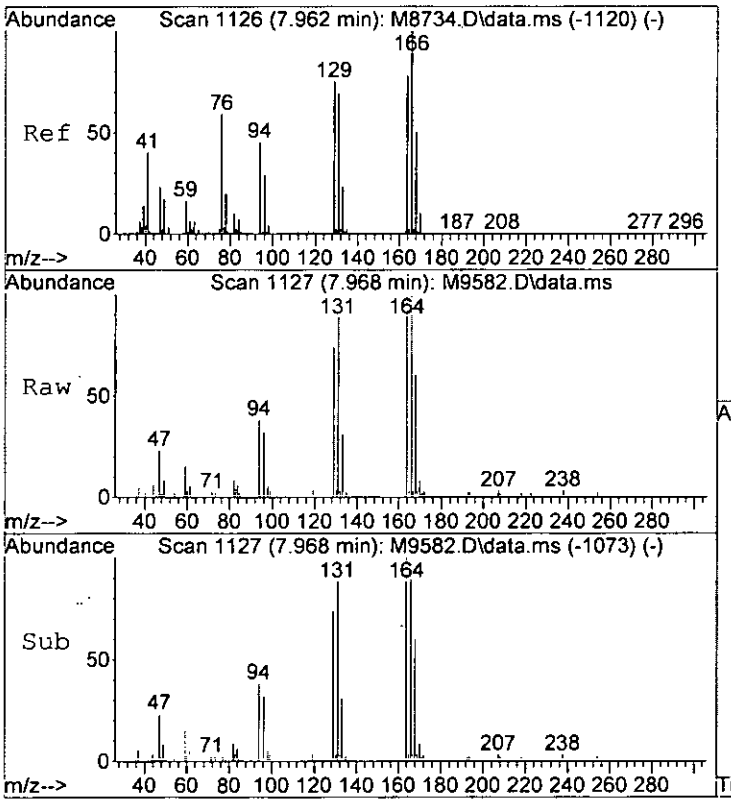


#60
Bromodichloromethane
Concen: 0.70 ppb
RT: 6.481 min Scan# 883
Delta R.T. 0.000 min
Lab File: M9582.D
Acq: 9 Oct 2014 1:25 pm

Tgt Ion: 83 Resp: 7284

Ion	Ratio	Lower	Upper
83	100		
129	4.7	0.0	31.4
127	12.5	0.0	28.7

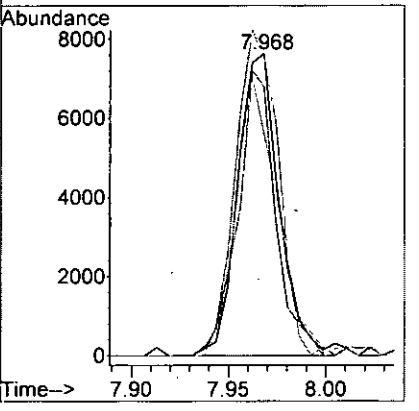


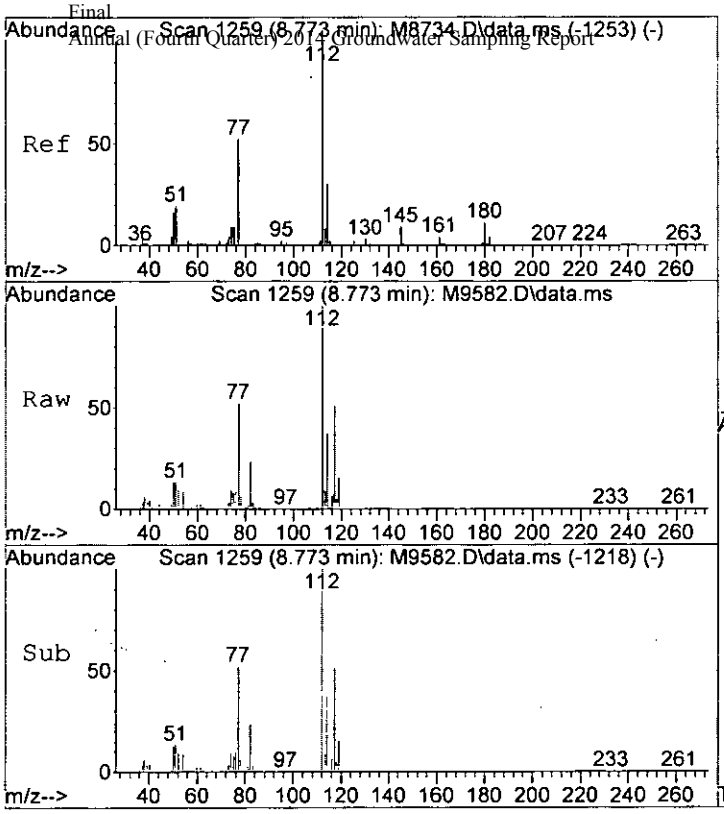


#72
Tetrachloroethene
Concen: 1.58 ppb
RT: 7.968 min Scan# 1127
Delta R.T. 0.000 min
Lab File: M9582.D
Acq: 9 Oct 2014 1:25 pm

Tgt Ion:164 Resp: 11207

Ion	Ratio	Lower	Upper
164	100		
166	101.5	108.1	148.1#
129	73.7	75.7	115.7#
131	89.1	71.0	111.0

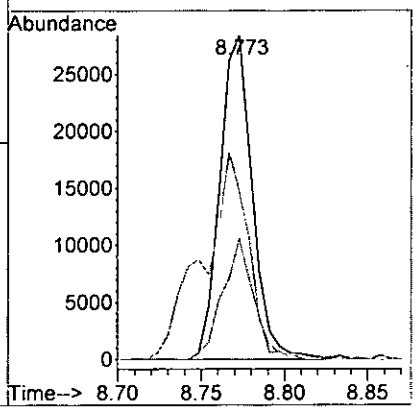




#78
Chlorobenzene
Concen: 1.57 ppb
RT: 8.773 min Scan# 1259
Delta R.T. 0.000 min
Lab File: M9582.D
Acq: 9 Oct 2014 1:25 pm

Tgt Ion:112 Resp: 38424

Ion	Ratio	Lower	Upper
112	100		
114	37.2	13.3	53.3
77	51.8	37.1	77.1



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9582.D
Acq On : 9 Oct 2014 1:25 pm
Operator : K.Ruest
Sample : R1407813-001|1.0
Misc : PARSONS 11603 T4
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: M9582.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.938	458	466	474	rBV3	41076	98355	2.42%	0.426%
2	4.152	489	501	509	rBV	522807	1257397	30.96%	5.447%
3	4.249	509	517	531	rVB	971980	2423440	59.68%	10.498%
4	4.664	575	585	599	rBV	441317	1141216	28.10%	4.944%
5	5.450	705	714	731	rBV	1347157	3102965	76.41%	13.442%
6	7.322	1015	1021	1031	rBV	2664524	4061056	100.00%	17.593%
7	7.962	1116	1126	1133	rBV2	53105	84301	2.08%	0.365%
8	8.742	1249	1254	1269	rBV	2917304	3956481	97.42%	17.140%
9	9.791	1421	1426	1441	rBV	2403898	2915839	71.80%	12.632%
10	10.748	1578	1583	1596	rBV	3504096	4042746	99.55%	17.513%

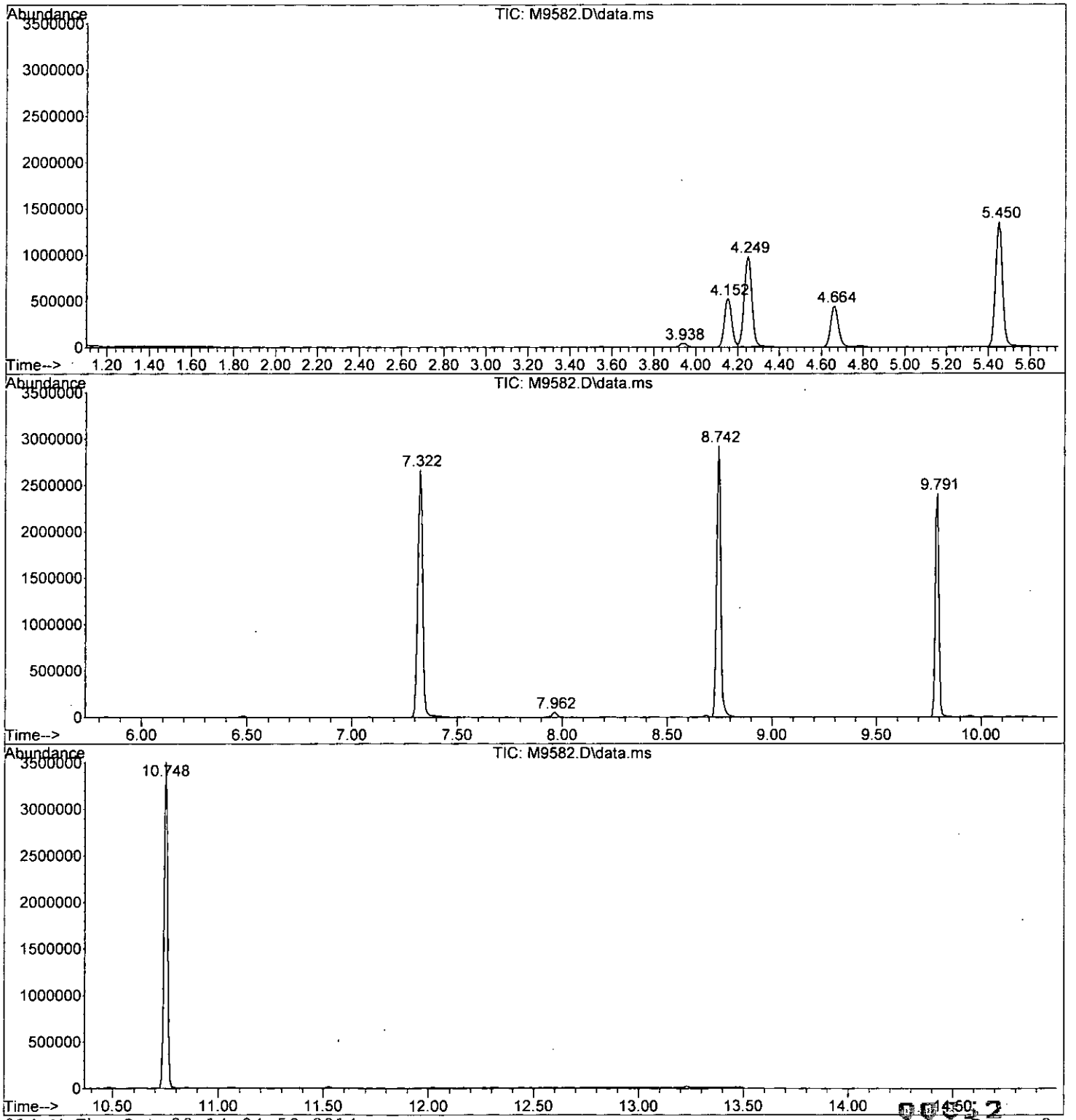
Sum of corrected areas: 23083796

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9582.D
Acq On : 9 Oct 2014 1:25 pm
Operator : K.Ruest
Sample : R1407813-001|1.0
Misc : PARSONS 11603 T4
ALS Vial : 3 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W090914.M Thu Oct 09 14:04:59 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\100914\\
Data File : M9582.D
Acq On : 9 Oct 2014 1:25 pmm
Operator : K.Ruestt
Sample : R1407813-001|1.00
Misc : PARSONS 11603 T44
ALS Vial : 3 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1130
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/8/14 23:28
Sample Name:	FTMM-8-GW-M8MW24-29.68	**Units:**	µg/L
Lab Code:	R1407813-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9563.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**0.22**	**J**	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**0.62**	J	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1130
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/8/14 23:28
Sample Name:	FTMM-8-GW-M8MW24-29.68	**Units:**	µg/L
Lab Code:	R1407813-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9563.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	**2.1**	**J**	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1130
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/8/14 23:28
Sample Name:	FTMM-8-GW-M8MW24-29.68	**Units:**	µg/L
Lab Code:	R1407813-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9563.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	10/8/14 23:28	
Dibromofluoromethane	99	85-115	10/8/14 23:28	
Toluene-d8	100	85-120	10/8/14 23:28	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/1/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/8/14 2328

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-8-GW-M8MW24-29.68	**Units:**	µg/L
Lab Code:	R1407813-004	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407813-004|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9563.D
Misc : PARSONS 11603 T4
Acq On : 8 Oct 2014 11:28 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:07:14 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	992721	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1604509	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1488641	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	767316	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	440830	49.33	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.66%			
48) surr1,1,2-dichloroetha...	4.658	65	433509	45.01	ppb	-0.01
Spiked Amount 50.000	Range 78 - 122		Recovery = 90.02%			
65) SURR3,Toluene-d8	7.322	98	1878761	49.81	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.62%			
70) SURR2,BFB	9.791	95	677398	50.16	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.32%			
Target Compounds						Qvalue
9) Diethyl Ether	1.878	59	52174	8.12	ppb	96
23) TBA	2.402	59	1031	1.89	ppb	62
78) Chlorobenzene	8.773	112	55116	2.09	ppb	98
105) 1,3-Dclbenz	10.699	146	4172	0.22	ppb	94
106) 1,4-Dclbenz	10.766	146	12176	0.62	ppb	82

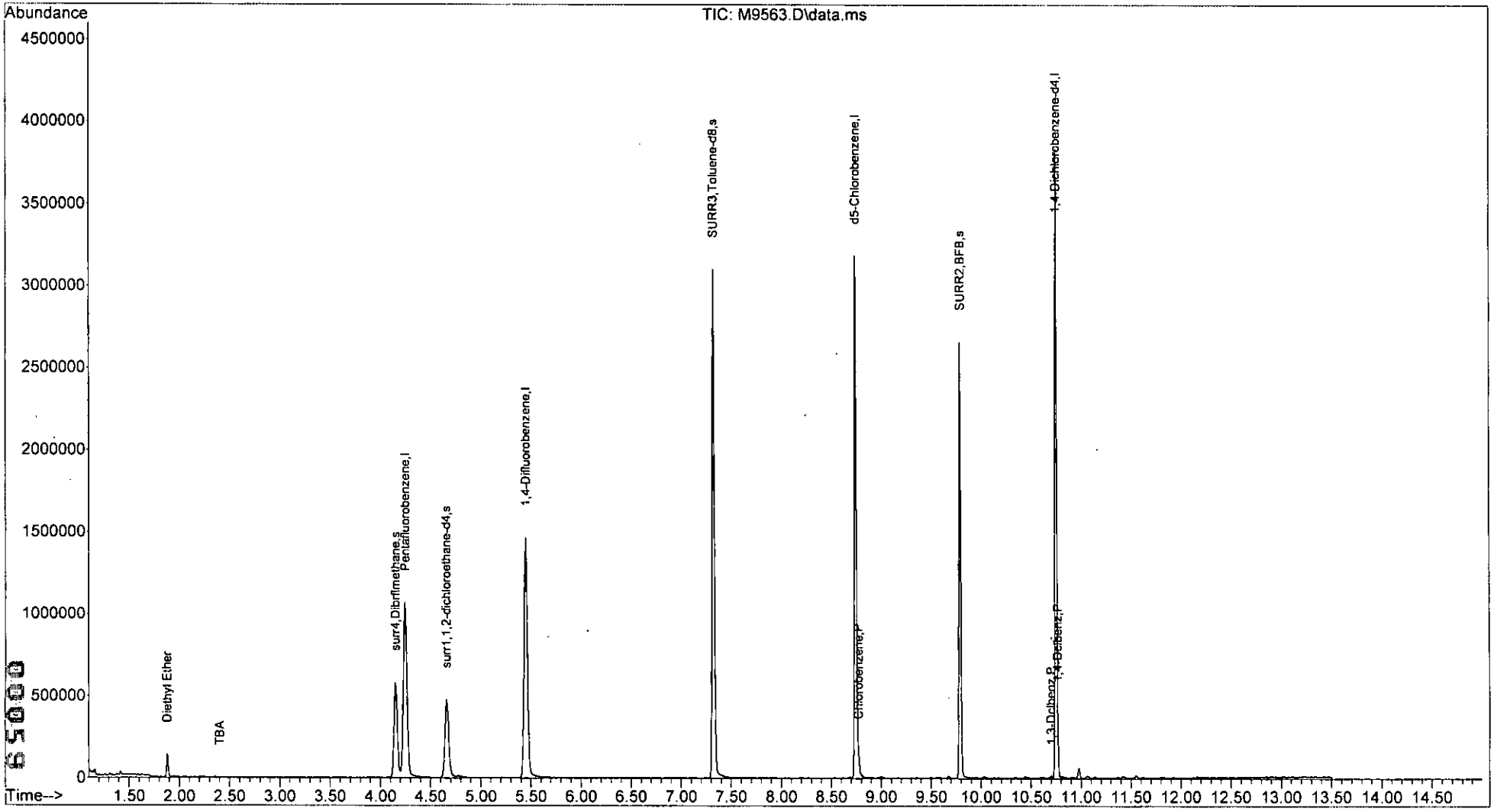
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KL 10/9/14

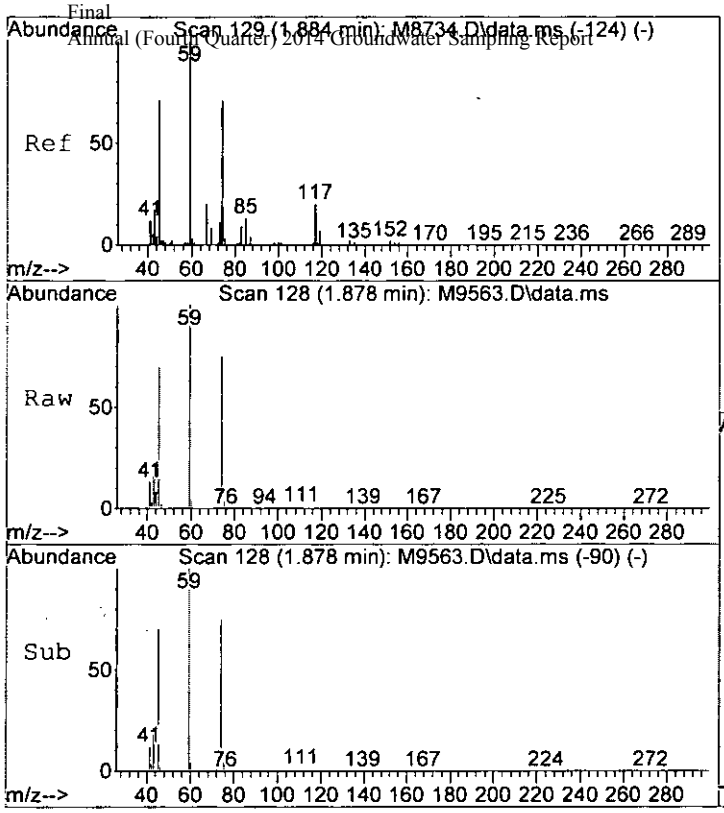
Quantitation Report (QT Reviewed)

Sample : R1407813-004|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9563.D
Misc : PARSONS 11603 T4
Acq On : 8 Oct 2014 11:28 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:07:14 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



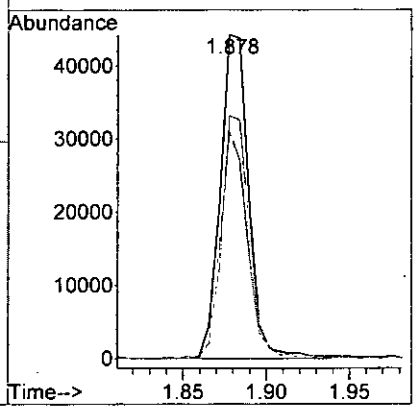
W090914.M Thu Oct 09 10:07:57 2014 Page: 2

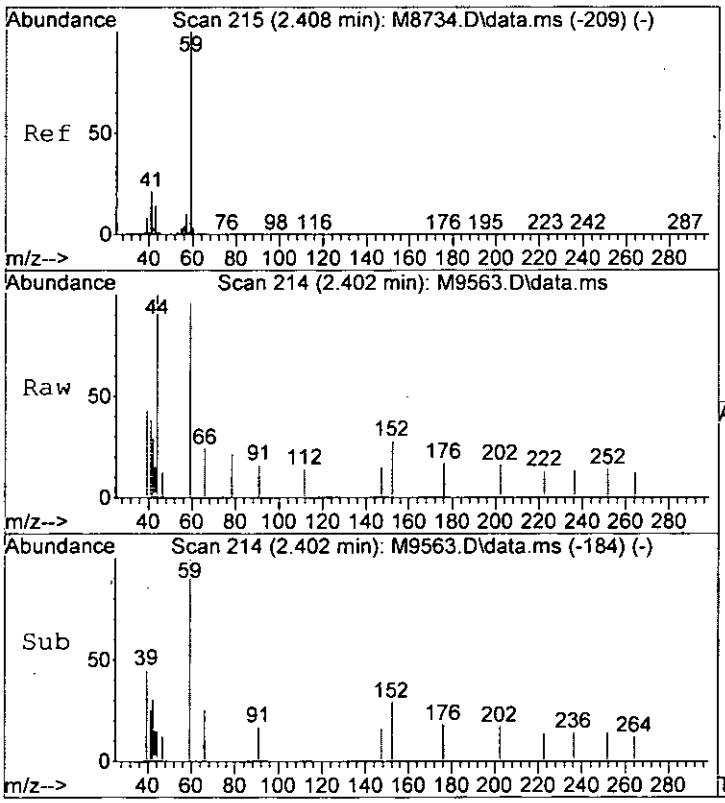


#9
Diethyl Ether
Concen: 8.12 ppb
RT: 1.878 min Scan# 128
Delta R.T. -0.000 min
Lab File: M9563.D
Acq: 8 Oct 2014 11:28 pm

Tgt Ion: 59 Resp: 52174

Ion	Ratio	Lower	Upper
59	100		
45	70.0	53.9	93.9
74	75.0	57.4	97.4

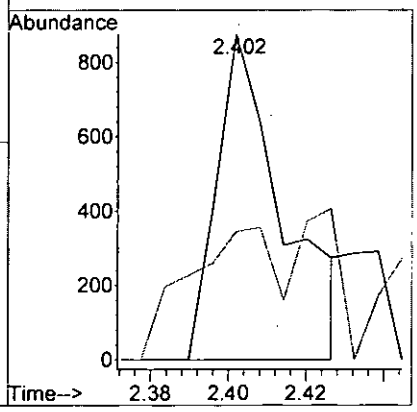


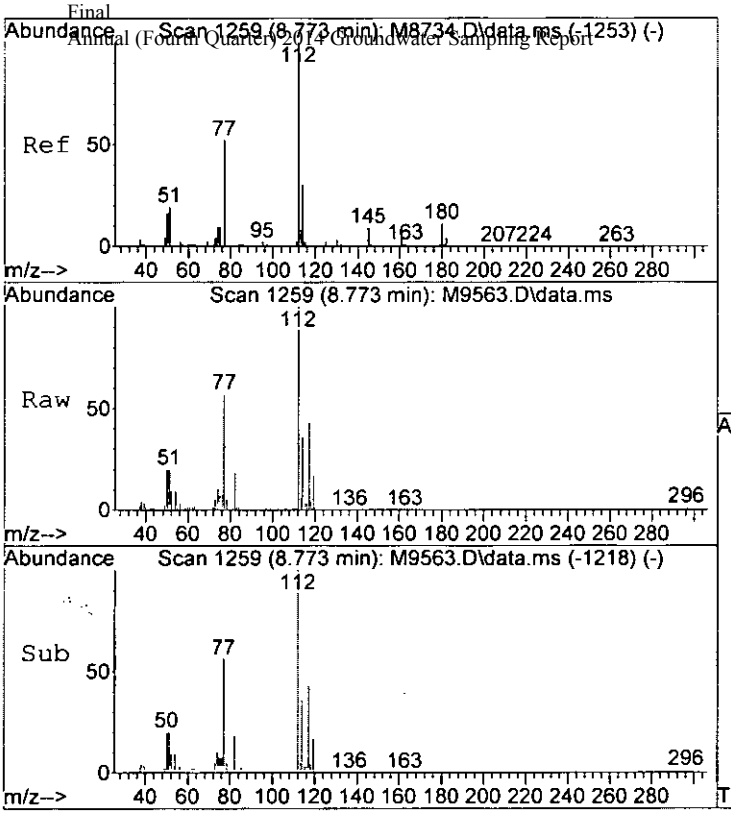


#23
TBA
Concen: 1.89 ppb
RT: 2.402 min Scan# 214
Delta R.T. -0.006 min
Lab File: M9563.D
Acq: 8 Oct 2014 11:28 pm

Tgt Ion: 59 Resp: 1031

Ion	Ratio	Lower	Upper
59	100		
41	39.4	1.6	41.6

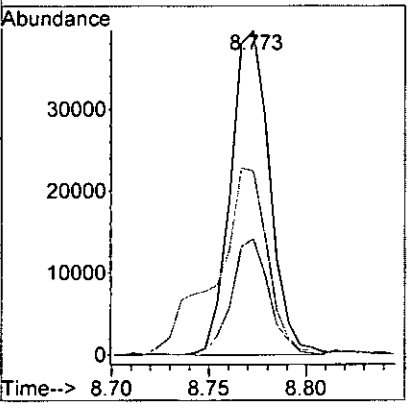


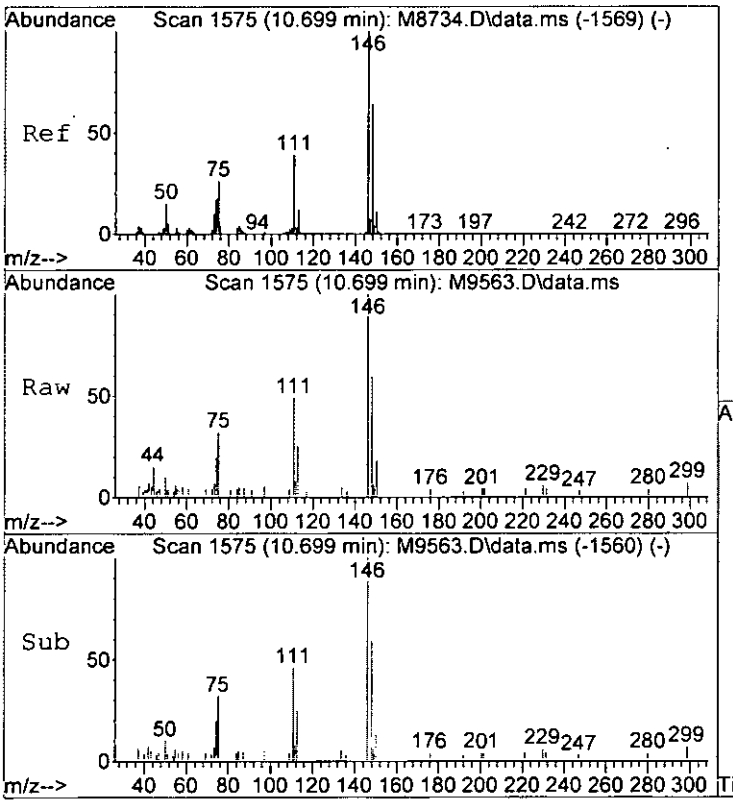


#78
Chlorobenzene
Concen: 2.09 ppb
RT: 8.773 min Scan# 1259
Delta R.T. -0.000 min
Lab File: M9563.D
Acq: 8 Oct 2014 11:28 pm

Tgt Ion:112 Resp: 55116

Ion	Ratio	Lower	Upper
112	100		
114	35.7	13.3	53.3
77	56.8	37.1	77.1

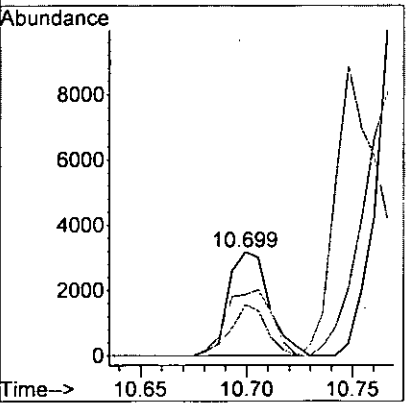




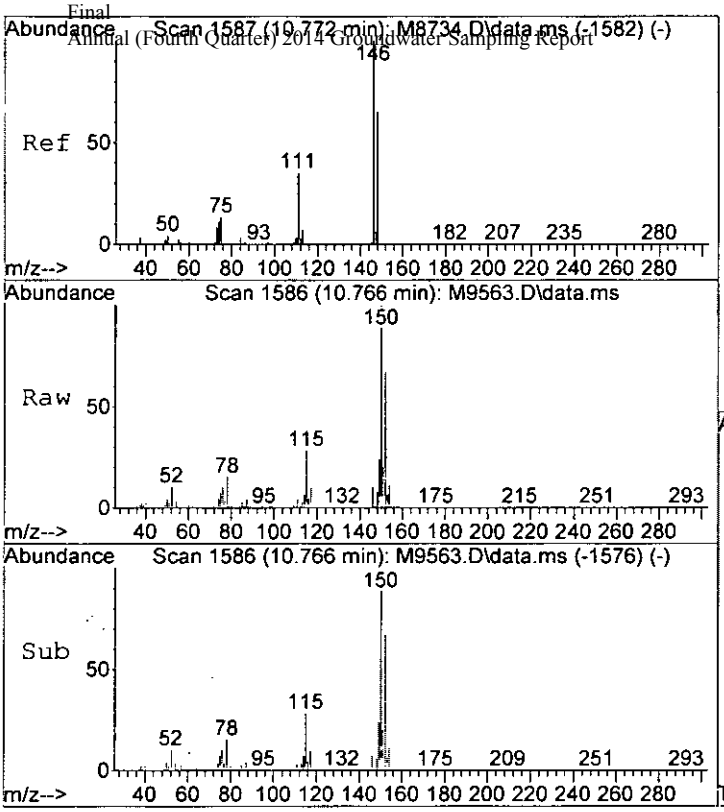
#105
1,3-Dclbenz
Concen: 0.22 ppb
RT: 10.699 min Scan# 1575
Delta R.T. -0.000 min
Lab File: M9563.D
Acq: 8 Oct 2014 11:28 pm

Tgt Ion:146 Resp: 4172

Ion	Ratio	Lower	Upper
146	100		
148	64.6	44.9	84.9
111	48.9	19.4	59.4



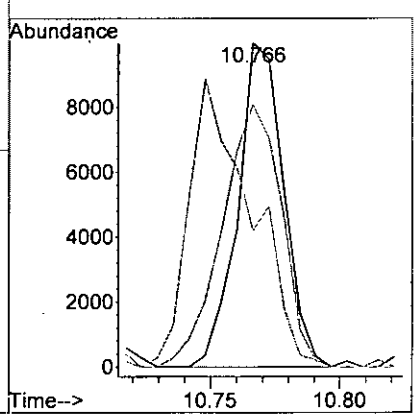
M9563.D W090914.M Thu Oct 09 10:08:01 2014 Page 4



#106
1,4-Dclbenz
Concen: 0.62 ppb
RT: 10.766 min Scan# 1586
Delta R.T. -0.006 min
Lab File: M9563.D
Acq: 8 Oct 2014 11:28 pm

Tgt Ion:146 Resp: 12176

Ion	Ratio	Lower	Upper
146	100		
148	81.0	44.7	84.7
111	42.2	15.1	55.1



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\100814\
Data File : M9563.D
Acq On : 8 Oct 2014 11:28 pm
Operator : K.Ruest
Sample : R1407813-004|1.0
Misc : PARSONS 11603 T4
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: M9563.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.878	125	128	136	rBV	137335	154408	3.27%	0.605%
2	4.152	492	501	509	rBV2	578181	1351878	28.64%	5.293%
3	4.249	509	517	530	rVB	1055761	2594686	54.97%	10.160%
4	4.658	575	584	601	rBV	472400	1246594	26.41%	4.881%
5	5.450	703	714	737	rBV	1463468	3432578	72.72%	13.440%
6	7.322	1013	1021	1040	rBV	3099409	4720218	100.00%	18.482%
7	8.742	1249	1254	1274	rVB	3182457	4351173	92.18%	17.037%
8	9.791	1421	1426	1440	rBV	2657191	3165775	67.07%	12.396%
9	10.748	1578	1583	1593	rBV	3827074	4449546	94.27%	17.422%
10	10.980	1617	1621	1625	rVB	60116	72362	1.53%	0.283%

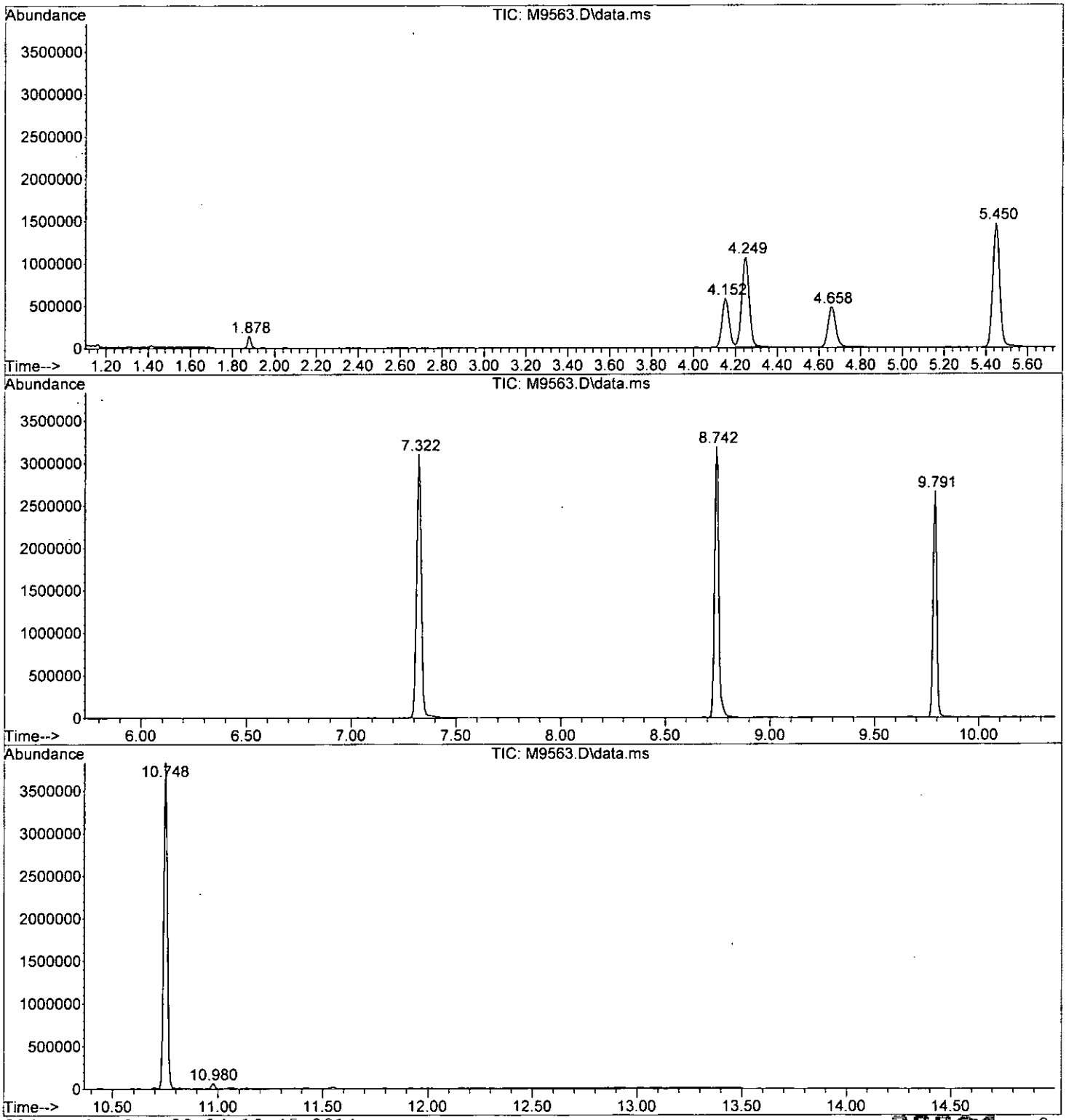
Sum of corrected areas: 25539218

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\100814\
Data File : M9563.D
Acq On : 8 Oct 2014 11:28 pm
Operator : K.Ruest
Sample : R1407813-004|1.0
Misc : PARSONS 11603 T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W090914.M Thu Oct 09 14:19:45 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\100814\\
Data File : M9563.D
Acq On : 8 Oct 2014 11:28 pmm
Operator : K.Ruestt
Sample : R1407813-004|1.00
Misc : PARSONS 11603 T44
ALS Vial : 13 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					|--Internal Standard---|		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/ 1/14 1330
Date Received: 10/ 3/14
Date Analyzed: 10/9/14 00:01

Sample Name: FTMM-8-GW-M8MW16-11.74
Lab Code: R1407813-005

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100814\M9564.D\

Analysis Lot: 415258
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**0.52**	J	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**0.85**	J	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**3.1**	J	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**3.5**	J	5.0	5.0	1.3	
71-43-2	Benzene	**0.38**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/ 1/14 1330
Date Received: 10/ 3/14
Date Analyzed: 10/9/14 00:01

Sample Name: FTMM-8-GW-M8MW16-11.74
Lab Code: R1407813-005

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100814\M9564.D\

Analysis Lot: 415258
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	**29**		5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	**0.21**	J	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1330
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 00:01
Sample Name:	FTMM-8-GW-M8MW16-11.74	**Units:**	µg/L
Lab Code:	R1407813-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9564.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	10/9/14 00:01	
Dibromofluoromethane	98	85-115	10/9/14 00:01	
Toluene-d8	100	85-120	10/9/14 00:01	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/1/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 0001

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-8-GW-M8MW16-11.74	**Units:**	µg/L
Lab Code:	R1407813-005	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407813-005|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9564.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 12:01 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:12:49 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	990633	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1592932	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1466412	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	765826	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	432622	48.76	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.52%			
48) surr1,1,2-dichloroetha:..	4.664	65	439450	45.96	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 91.92%			
65) SURR3,Toluene-d8	7.322	98	1877705	50.14	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.28%			
70) SURR2,BFB	9.791	95	684070	51.02	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.04%			
Target Compounds						Qvalue
3) Chloromethane	1.262	50	2164	0.21	ppb	96
9) Diethyl Ether	1.884	59	22772	3.55	ppb	92
15) Acetone	2.054	43	7172	3.52	ppb	98
23) TBA	2.420	59	1219	2.24	ppb	74
39) Tetrahydrofuran	3.926	42	719	0.43	ppb	85
49) Benzene	4.786	78	13792	0.38	ppb	83
78) Chlorobenzene	8.773	112	741146	28.51	ppb	96
105) 1,3-Dclbenz	10.699	146	16242	0.85	ppb	88
106) 1,4-Dclbenz	10.772	146	61466	3.12	ppb	95
110) 1,2-Dclbenz	11.071	146	9491	0.52	ppb	90

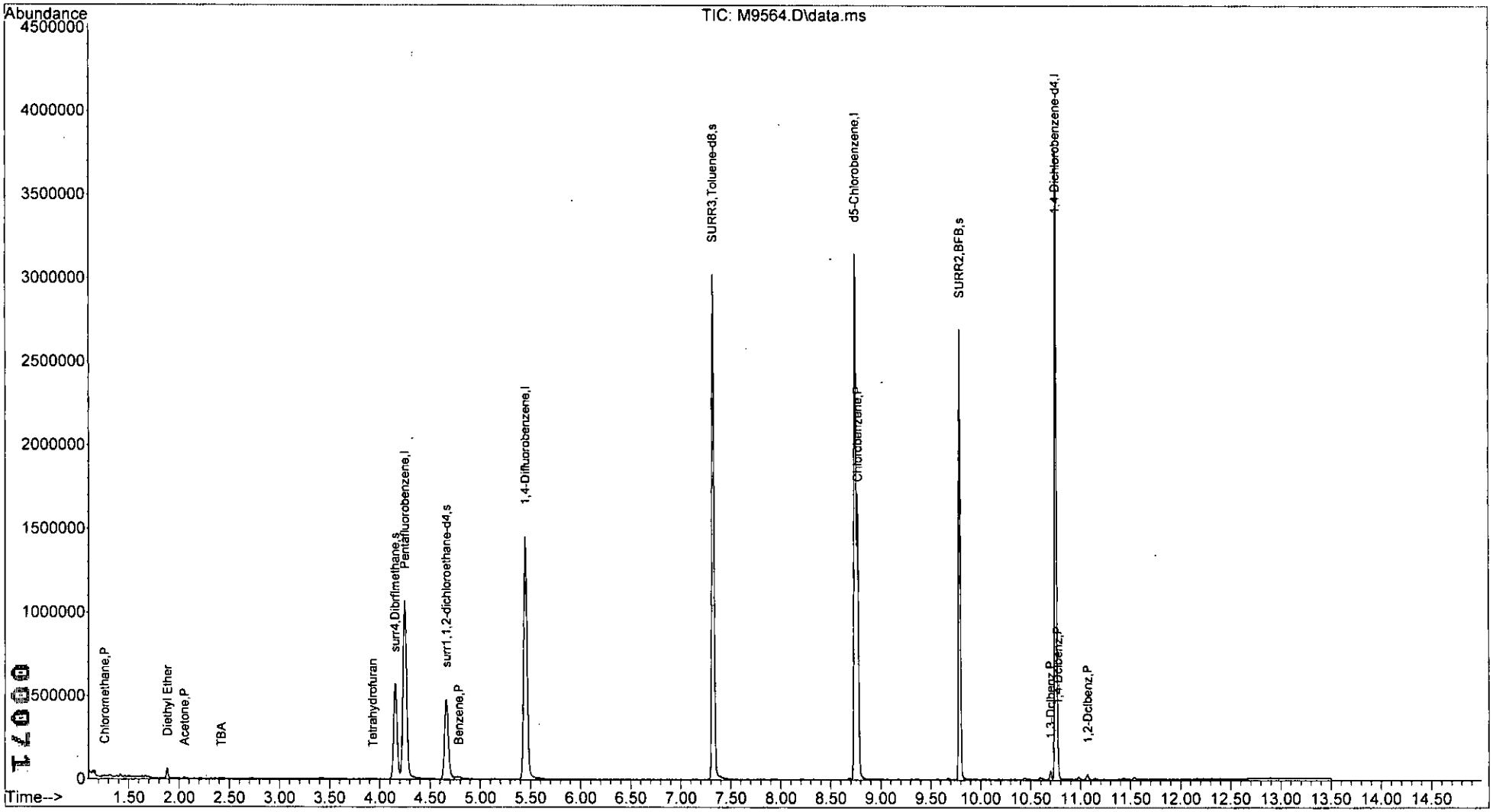
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR 10/14/14 KR

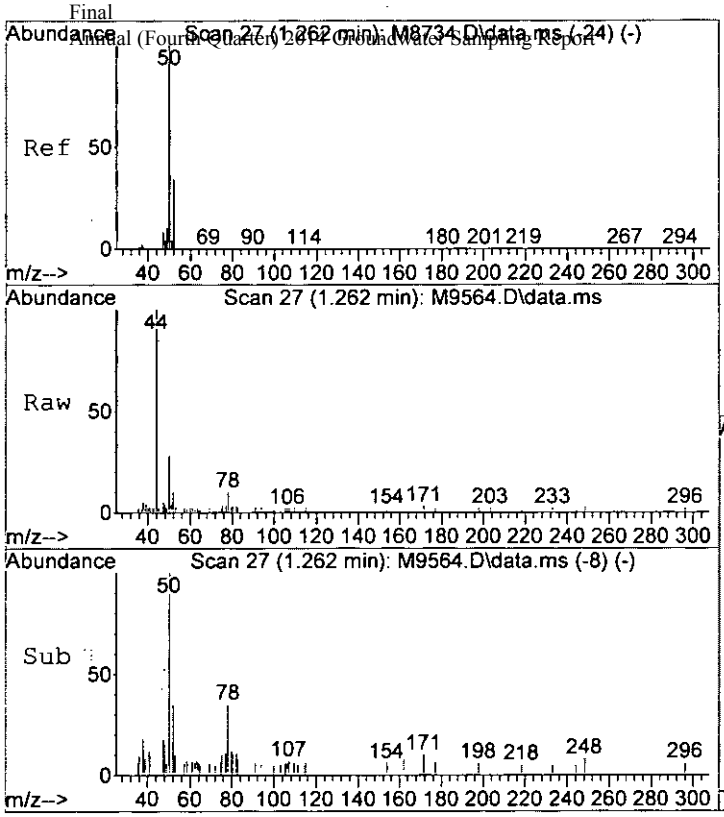
Quantitation Report (QT Reviewed)

Sample : R1407813-005|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9564.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 12:01 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:12:49 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



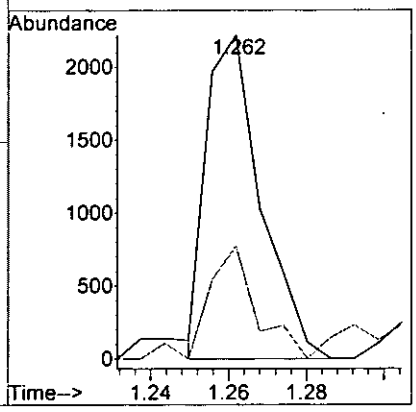
W090914.M Thu Oct 09 10:13:47 2014 Page: 2

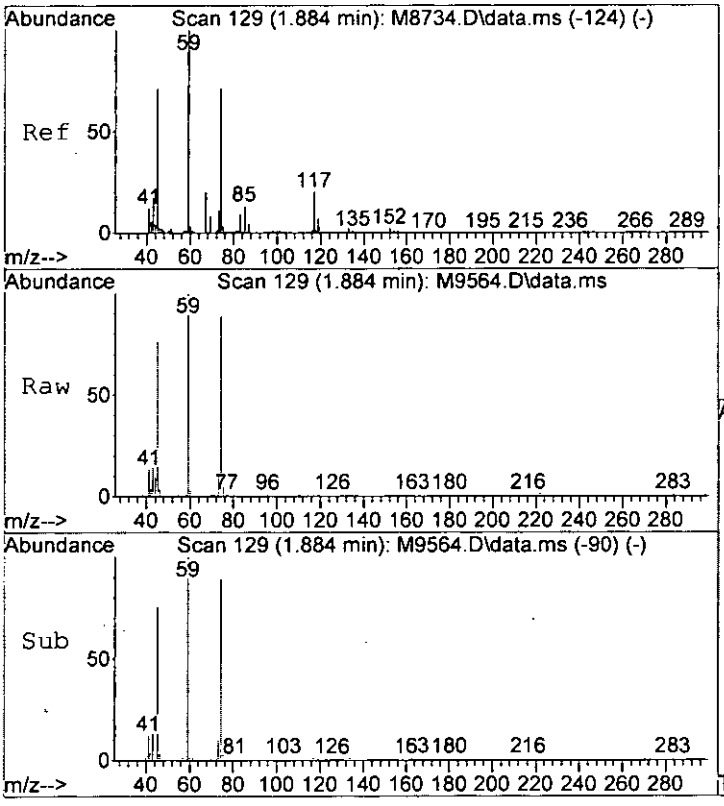


#3
Chloromethane
Concen: 0.21 ppb
RT: 1.262 min Scan# 27
Delta R.T. -0.000 min
Lab File: M9564.D
Acq: 9 Oct 2014 12:01 am

Tgt Ion: 50 Resp: 2164

Ion	Ratio	Lower	Upper
50	100		
52	34.7	12.4	52.4

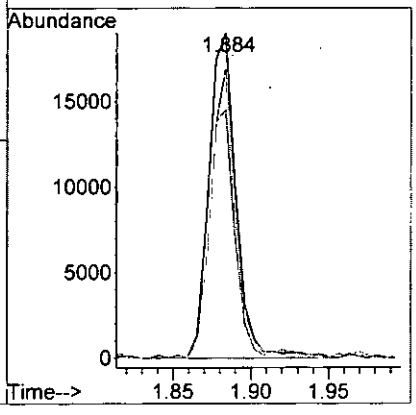


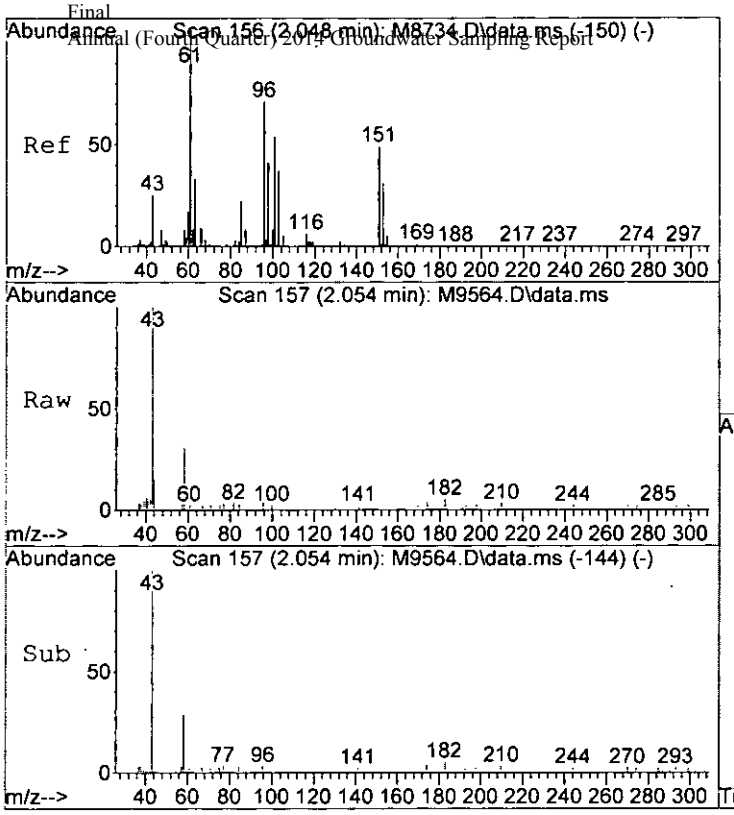


#9
Diethyl Ether
Concen: 3.55 ppb
RT: 1.884 min Scan# 129
Delta R.T. 0.006 min
Lab File: M9564.D
Acq: 9 Oct 2014 12:01 am

Tgt Ion: 59 Resp: 22772

Ion	Ratio	Lower	Upper
59	100		
45	76.4	53.9	93.9
74	89.0	57.4	97.4

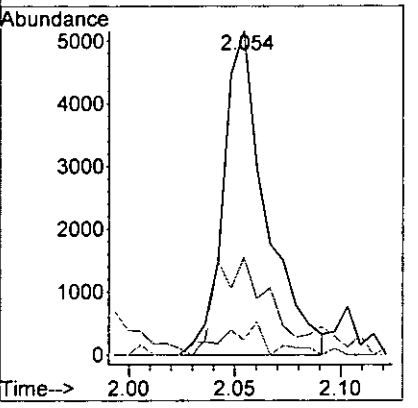


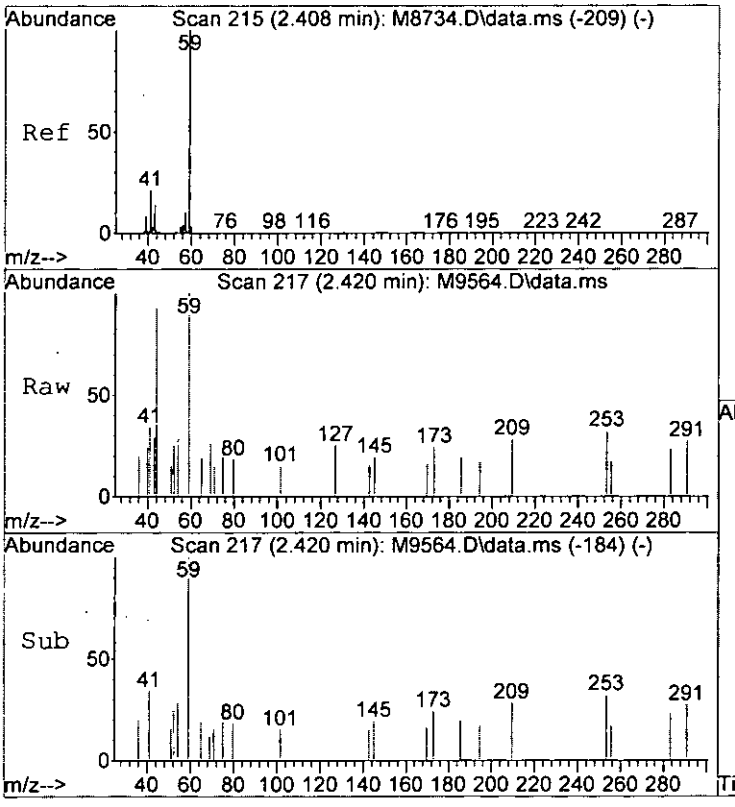


#15
Acetone
Concen: 3.52 ppb
RT: 2.054 min Scan# 157
Delta R.T. 0.006 min
Lab File: M9564.D
Acq: 9 Oct 2014 12:01 am

Tgt Ion: 43 Resp: 7172

Ion	Ratio	Lower	Upper
43	100		
58	30.0	10.3	50.3
42	4.6	0.0	27.1

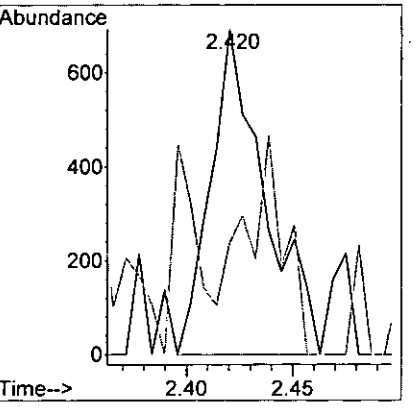


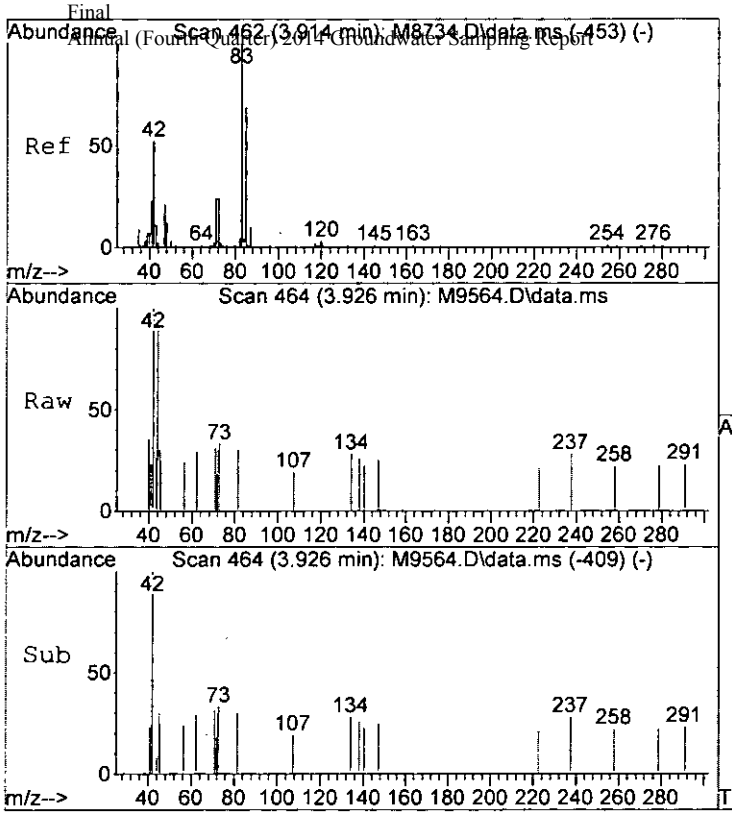


#23
TBA
Concen: 2.24 ppb
RT: 2.420 min Scan# 217
Delta R.T. 0.012 min
Lab File: M9564.D
Acq: 9 Oct 2014 12:01 am

Tgt Ion: 59 Resp: 1219

Ion	Ratio	Lower	Upper
59	100		
41	34.0	1.6	41.6

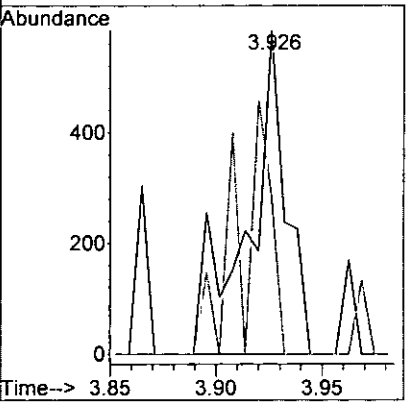


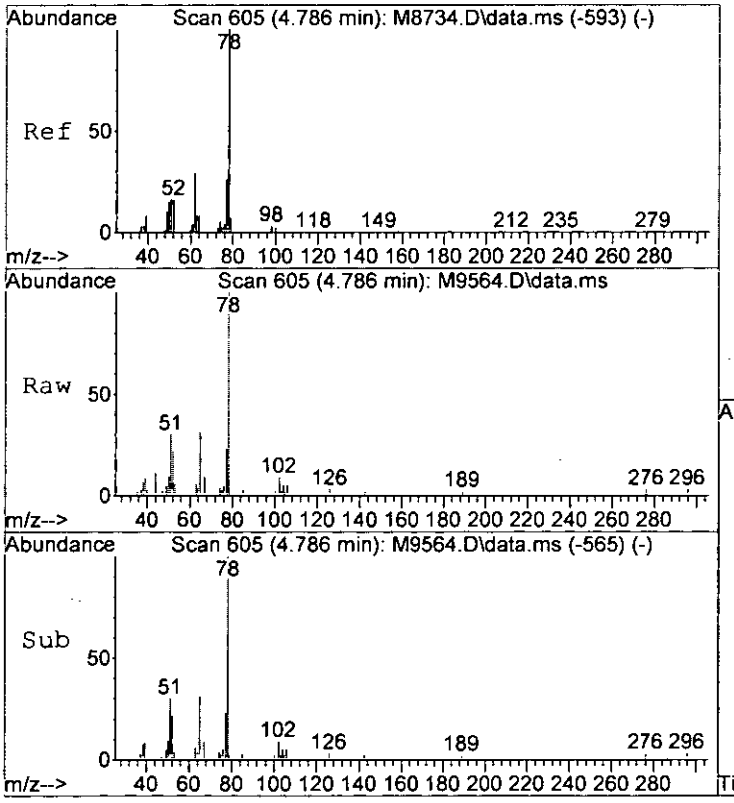


#39
Tetrahydrofuran
Concen: 0.43 ppb
RT: 3.926 min Scan# 464
Delta R.T. 0.018 min
Lab File: M9564.D
Acq: 9 Oct 2014 12:01 am

Tgt Ion: 42 Resp: 719

Ion	Ratio	Lower	Upper
42	100		
72	48.1	18.9	58.9

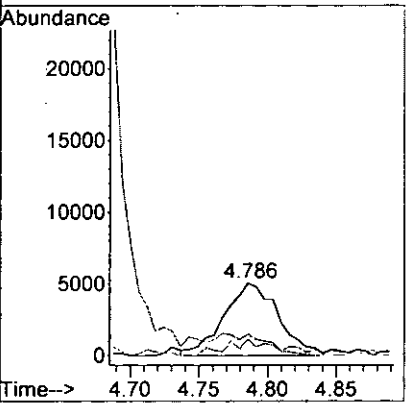


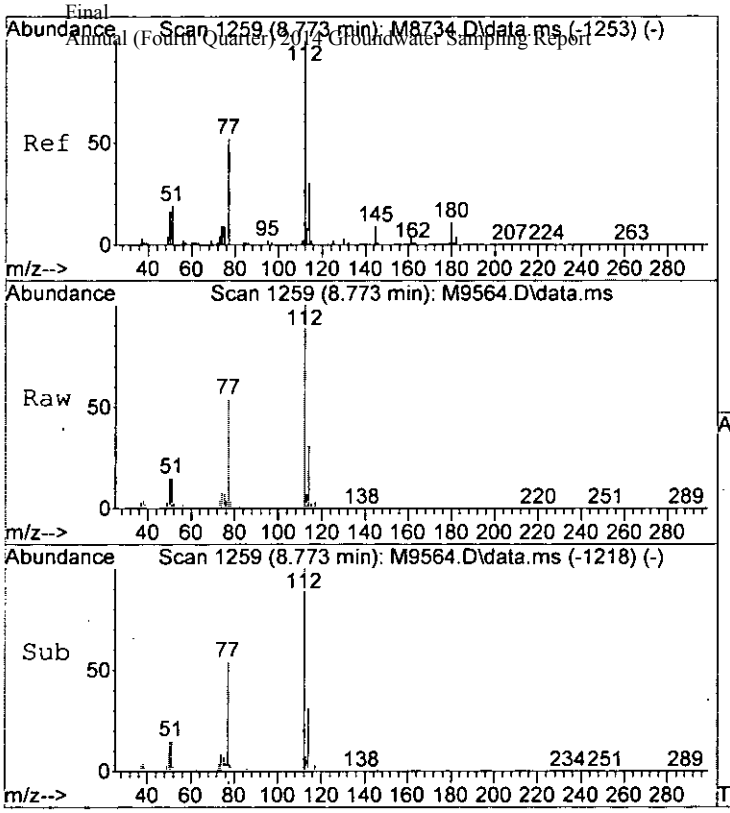


#49
Benzene
Concen: 0.38 ppb
RT: 4.786 min Scan# 605
Delta R.T. -0.000 min
Lab File: M9564.D
Acq: 9 Oct 2014 12:01 am

Tgt Ion: 78 Resp: 13792

Ion	Ratio	Lower	Upper
78	100		
51	29.6	0.0	39.8
52	22.4	0.0	37.0

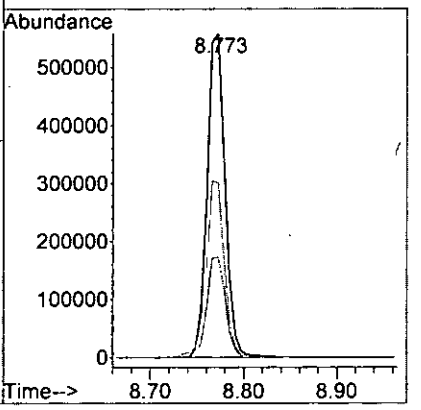


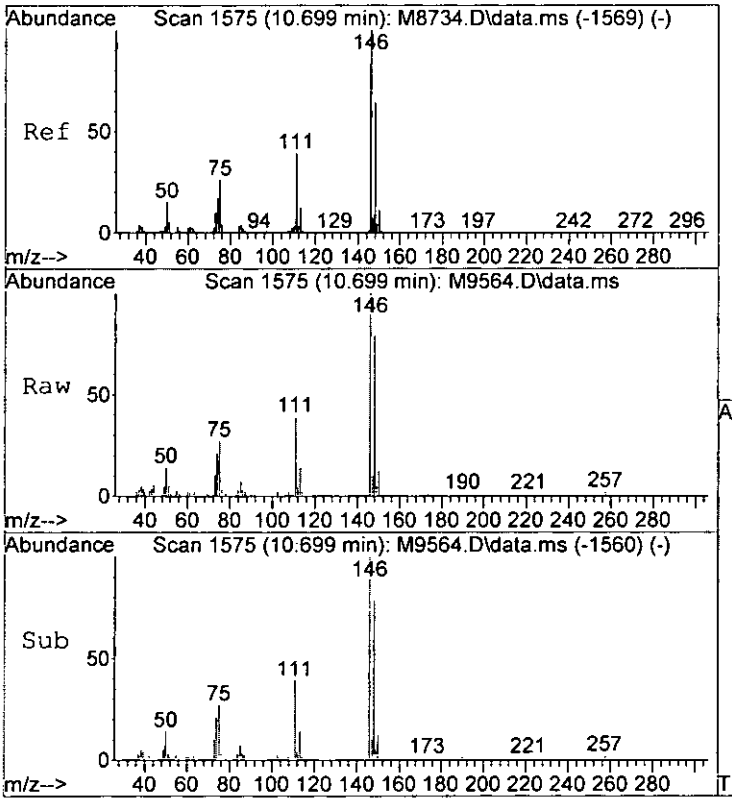


#78
Chlorobenzene
Concen: 28.51 ppb
RT: 8.773 min Scan# 1259
Delta R.T. -0.000 min
Lab File: M9564.D
Acq: 9 Oct 2014 12:01 am

Tgt Ion:112 Resp: 741146

Ion	Ratio	Lower	Upper
112	100		
114	31.0	13.3	53.3
77	53.8	37.1	77.1

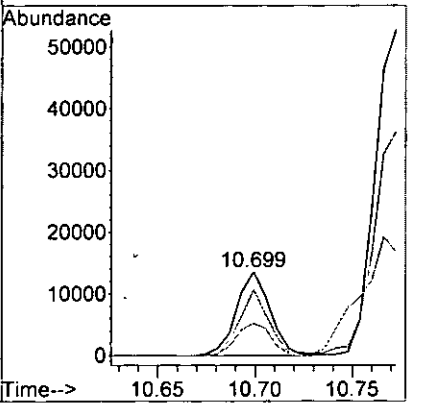


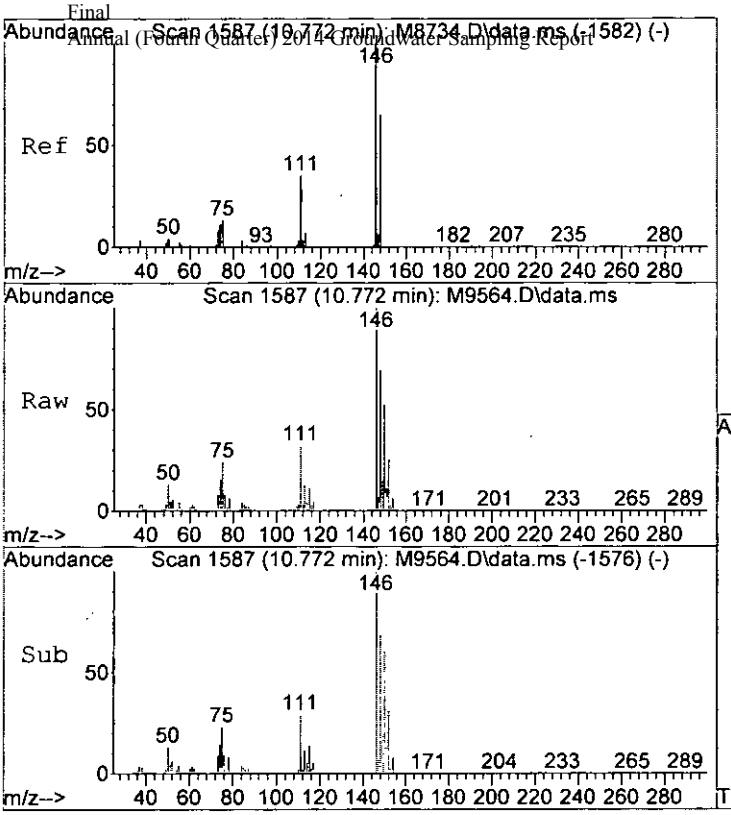


#105
1,3-Dclbenz
Concen: 0.85 ppb
RT: 10.699 min Scan# 1575
Delta R.T. -0.000 min
Lab File: M9564.D
Acq: 9 Oct 2014 12:01 am

Tgt Ion:146 Resp: 16242

Ion	Ratio	Lower	Upper
146	100		
148	78.9	44.9	84.9
111	38.6	19.4	59.4

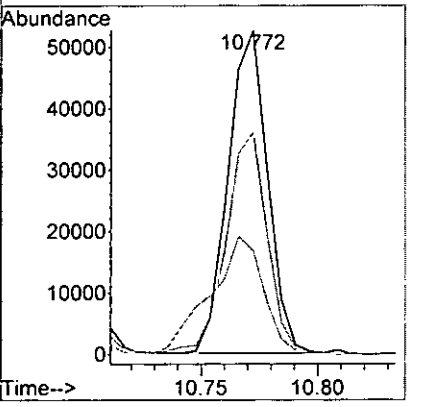


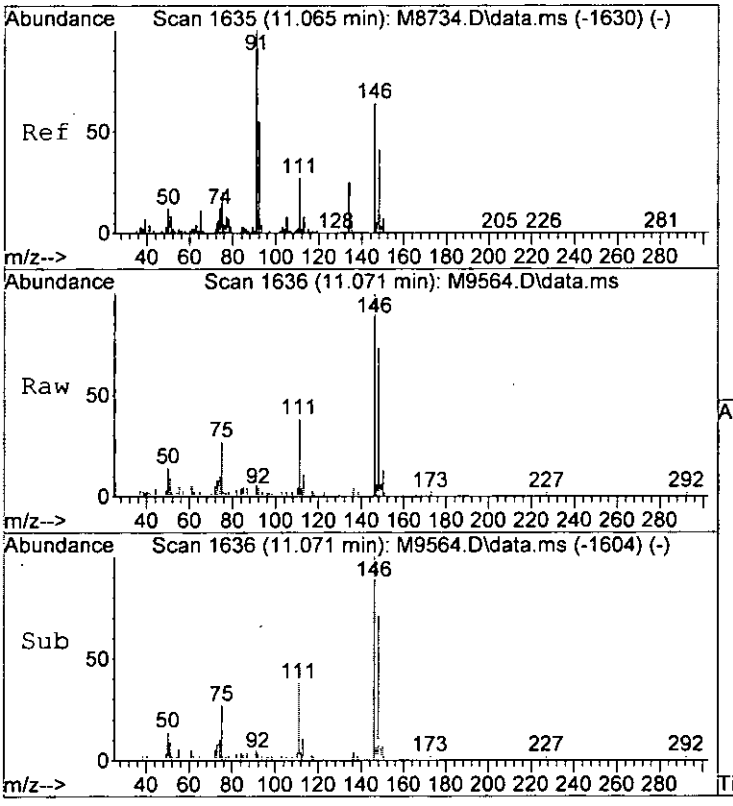


#106
1,4-Dclbenz
Concen: 3.12 ppb
RT: 10.772 min Scan# 1587
Delta R.T. -0.000 min
Lab File: M9564.D
Acq: 9 Oct 2014 12:01 am

Tgt Ion:146 Resp: 61466

Ion	Ratio	Lower	Upper
146	100		
148	68.6	44.7	84.7
111	32.1	15.1	55.1

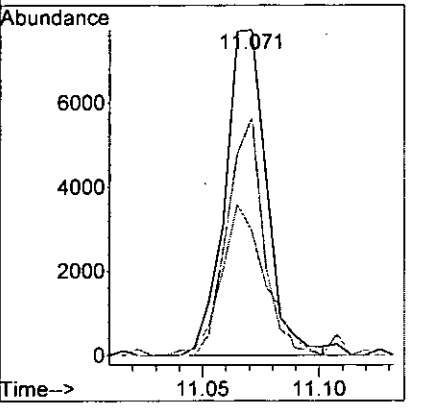




#110
1,2-Dclbenz
Concen: 0.52 ppb
RT: 11.071 min Scan# 1636
Delta R.T. -0.000 min
Lab File: M9564.D
Acq: 9 Oct 2014 12:01 am

Tgt Ion:146 Resp: 9491

Ion	Ratio	Lower	Upper
146	100		
148	73.1	43.1	83.1
111	38.2	21.2	61.2



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\100814\
Data File : M9564.D
Acq On : 9 Oct 2014 12:01 am
Operator : K.Ruest
Sample : R1407813-005|1.0
Misc : PARSONS 11603 T4
ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : : TIC: M9564.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.884	124	129	135	rBV	62636	73384	1.56%	0.267%
2	4.152	492	501	509	rBV	570313	1353423	28.77%	4.917%
3	4.249	509	517	529	rVB	1054403	2586110	54.98%	9.395%
4	4.664	573	585	598	rBV	477647	1255630	26.69%	4.562%
5	5.450	703	714	732	rBV	1451509	3392640	72.13%	12.326%
6	7.322	1015	1021	1039	rBV	3021285	4703675	100.00%	17.089%
7	8.742	1249	1254	1257	rBV	3145728	4477522	95.19%	16.267%
8	8.767	1257	1258	1274	rVB	1708083	1796640	38.20%	6.527%
9	9.791	1421	1426	1433	rBV	2693903	3168263	67.36%	11.510%
10	10.699	1570	1575	1578	rBV	54809	62597	1.33%	0.227%
11	10.748	1578	1583	1592	rVV	3759293	4655118	98.97%	16.912%

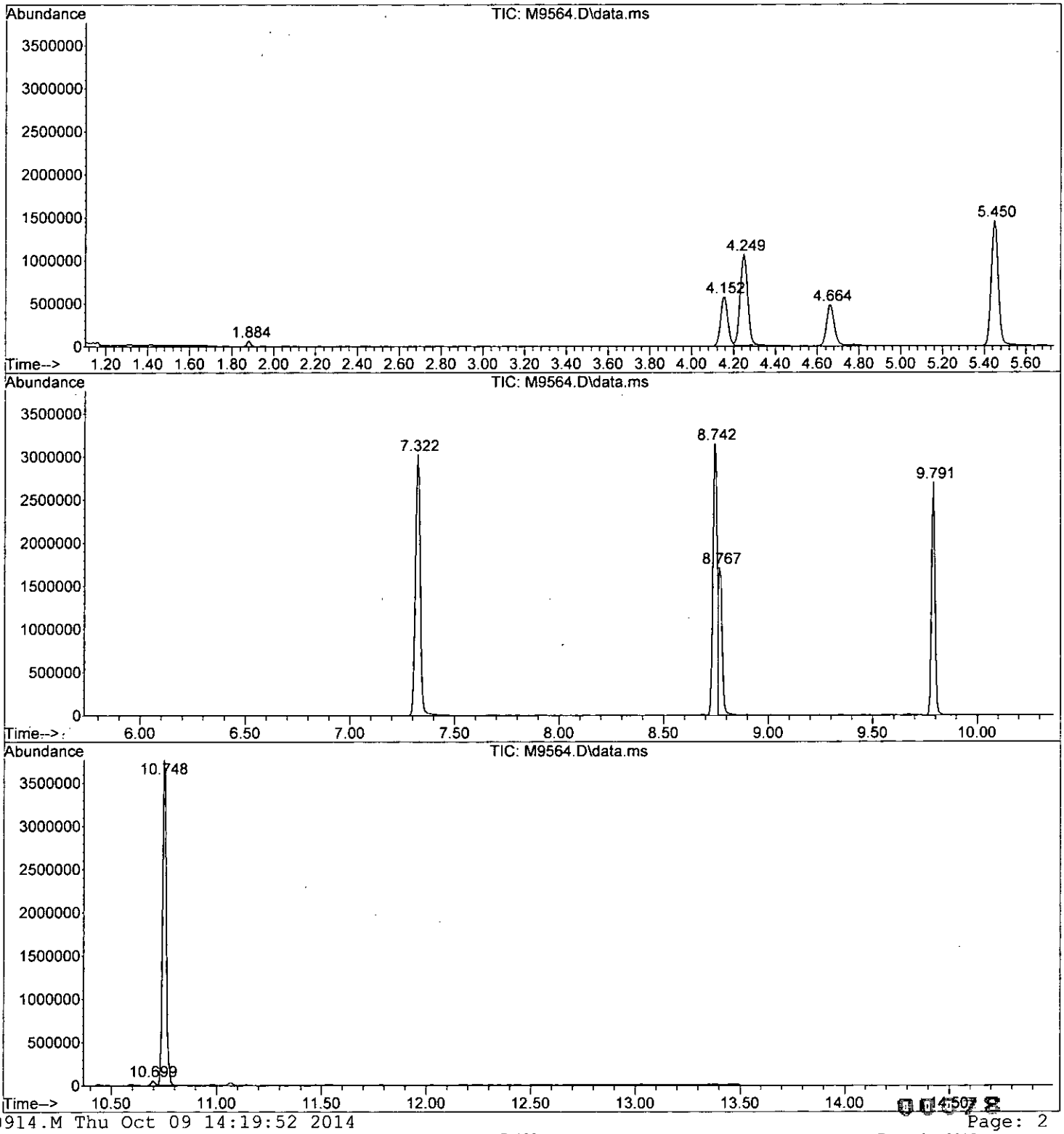
Sum of corrected areas: 27525002

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\100814\
Data File : M9564.D
Acq On : 9 Oct 2014 12:01 am
Operator : K.Ruest
Sample : R1407813-005|1.0
Misc : PARSONS 11603 T4
ALS Vial : 14 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W090914.M Thu Oct 09 14:19:52 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\100814\\
Data File : M9564.D
Acq On : 9 Oct 2014 12:01 amm
Operator : K.Ruestt
Sample : R1407813-005|1.00
Misc : PARSONS 11603 T44
ALS Vial : 14 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					|--Internal Standard---|		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/ 1/14 1400
Date Received: 10/ 3/14
Date Analyzed: 10/9/14 00:33

Sample Name: FTMM-8-GW-M8MW15-11.30
Lab Code: R1407813-006

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\100814\M9565.D\

Analysis Lot: 415258
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**1.1**	J	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**1.3**	J	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**3.4**	J	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**0.92**	J	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**13**		5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1400
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 00:33
Sample Name:	FTMM-8-GW-M8MW15-11.30	**Units:**	µg/L
Lab Code:	R1407813-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\msvoa12\Data\100814\M9565.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	**14**		5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	**0.32**	J	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.24**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1400
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 00:33
Sample Name:	FTMM-8-GW-M8MW15-11.30	**Units:**	µg/L
Lab Code:	R1407813-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\msvoa12\Data\100814\M9565.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	10/9/14 00:33	
Dibromofluoromethane	101	85-115	10/9/14 00:33	
Toluene-d8	101	85-120	10/9/14 00:33	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/1/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 0033

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-8-GW-M8MW15-11.30	**Units:**	µg/L
Lab Code:	R1407813-006	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000496-11-7	Indane	10.97	7.4	JN

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407813-006|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9565.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 12:33 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:15:12 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	984303	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1543649	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1443732	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	757408	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	436182	50.73	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.46%			
48) surr1,1,2-dichloroetha...	4.664	65	436472	47.10	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 94.20%			
65) SURR3,Toluene-d8	7.322	98	1831593	50.47	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.94%			
70) SURR2,BFB	9.791	95	660495	50.84	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.68%			
Target Compounds						Qvalue
3) Chloromethane	1.262	50	3362	0.32	ppb	99
5) Bromomethane	1.512	94	1409m	0.22	ppb	
6) Chloroethane	1.567	64	1374	0.22	ppb	99
9) Diethyl Ether	1.884	59	28125	4.41	ppb	93
15) Acetone	2.049	43	26394	13.04	ppb	93
18) Carbon Disulfide	2.207	76	9018	0.34	ppb	97
23) TBA	2.414	59	2013	3.72	ppb	93
35) 2-Butanone	3.560	43	2425	0.92	ppb	79
39) Tetrahydrofuran	3.926	42	1484	0.90	ppb	79
78) Chlorobenzene	8.773	112	363753	14.21	ppb	97
105) 1,3-Dclbenz	10.699	146	25083	1.33	ppb	97
106) 1,4-Dclbenz	10.772	146	65944	3.39	ppb	95
110) 1,2-Dclbenz	11.065	146	18991	1.06	ppb	94
117) Naphthalen	12.303	128	5262	0.24	ppb	95

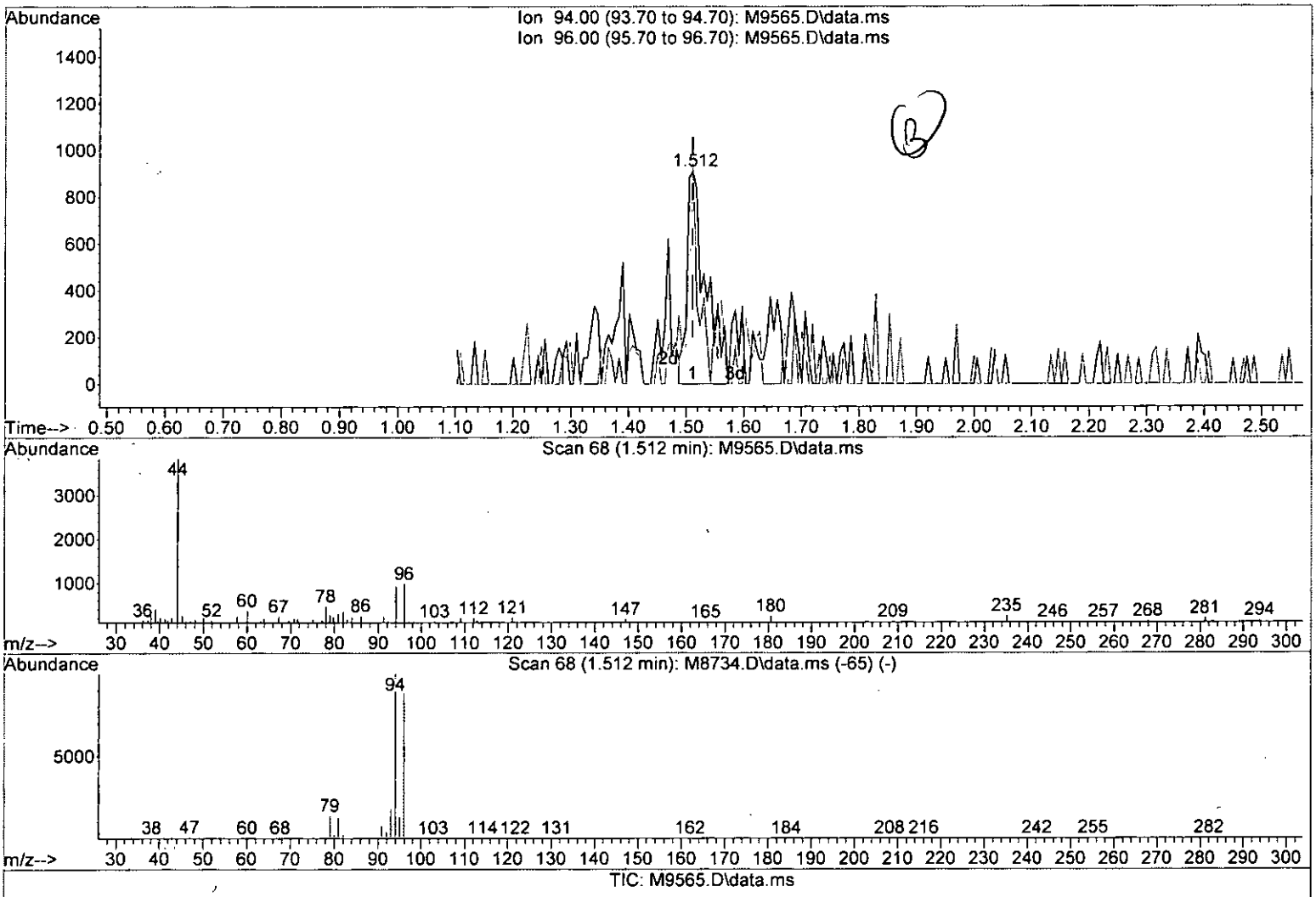
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR 10/9/14

Quantitation Report (Qedit)

Sample : R1407813-006|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9565.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 12:33 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 00:47:53 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



TIC: M9565.D\data.ms

(5) Bromomethane (P)

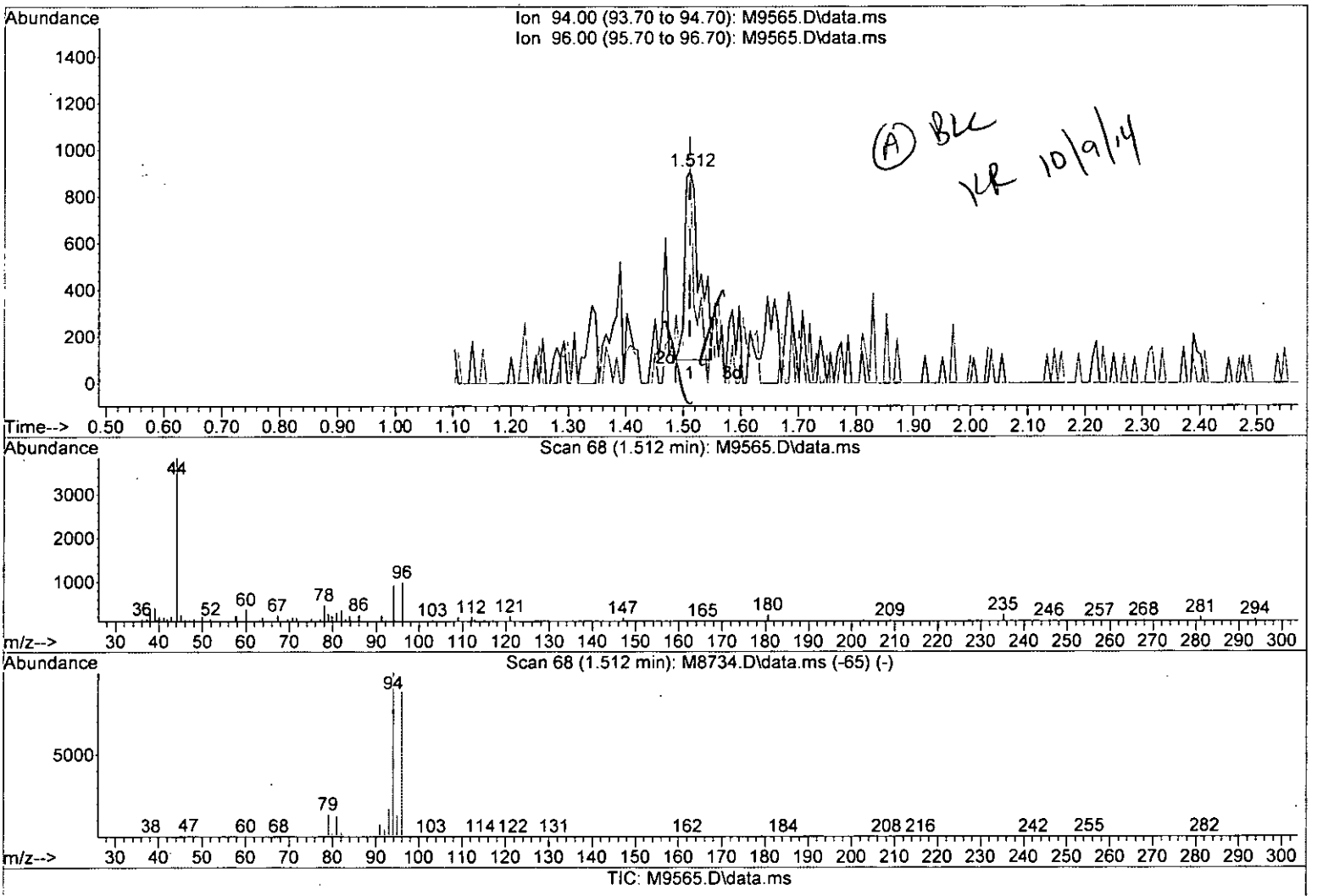
1.512min (+0.000) 0.32 ppb

response 2030

Ion	Exp%	Act%
94.00	100	100
96.00	95.40	107.90
0.00	0.00	0.00
0.00	0.00	0.00

Sample : R1407813-006!1.0
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9565.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 12:33 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 00:47:53 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



TIC: M9565.D\data.ms

(5) Bromomethane (P)

1.512min (+0.000) 0.22 ppb m

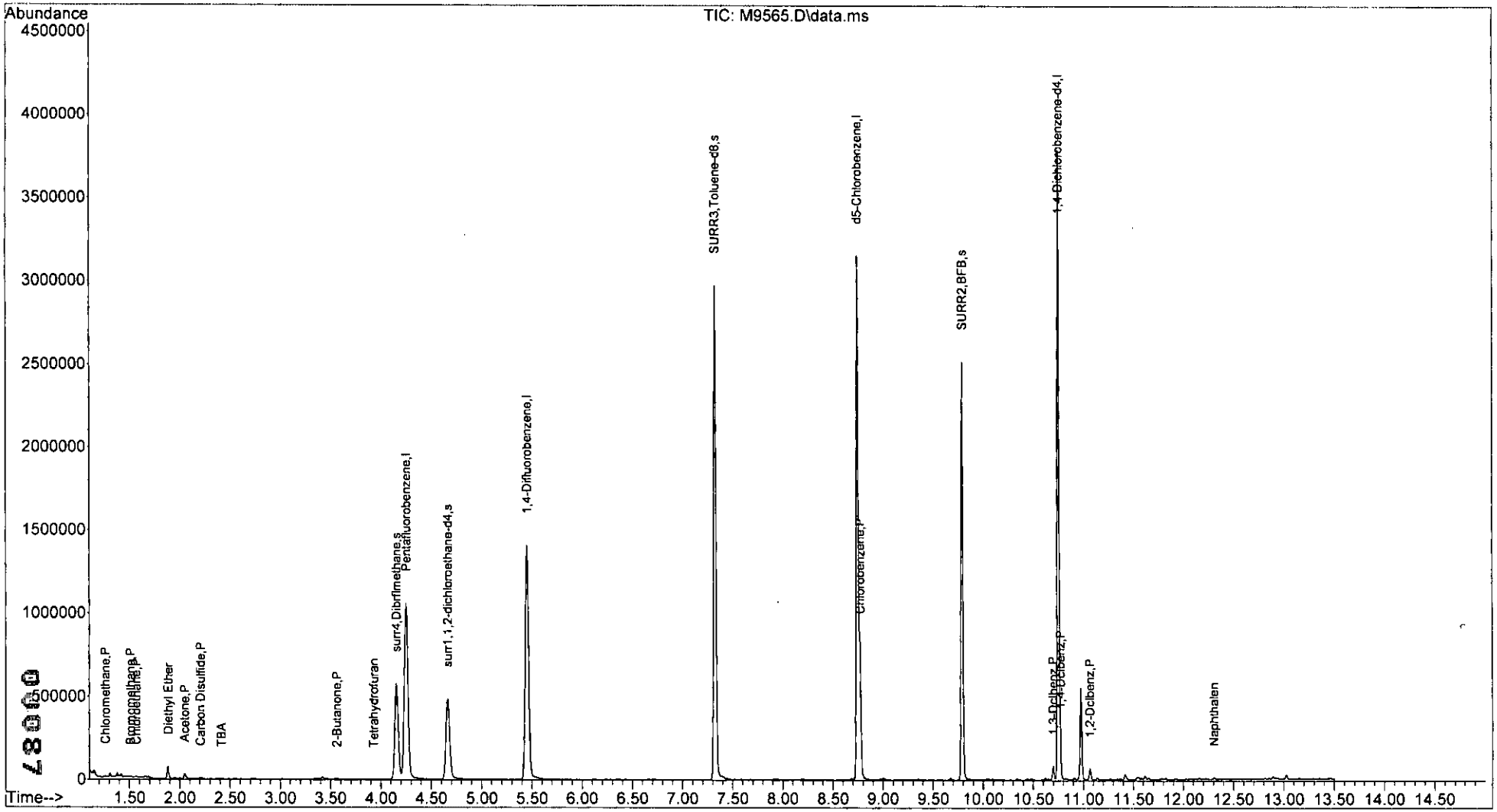
response 1409

Ion	Exp%	Act%
94.00	100	100
96.00	95.40	107.90
0.00	0.00	0.00
0.00	0.00	0.00

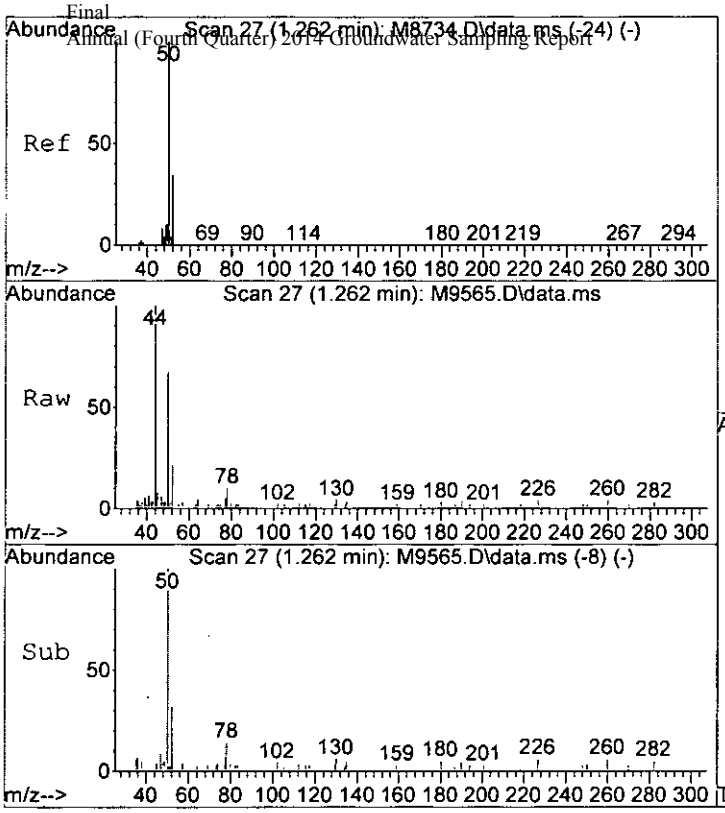
Quantitation Report (QT Reviewed)

Sample : R1407813-006|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9565.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 12:33 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:15:12 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



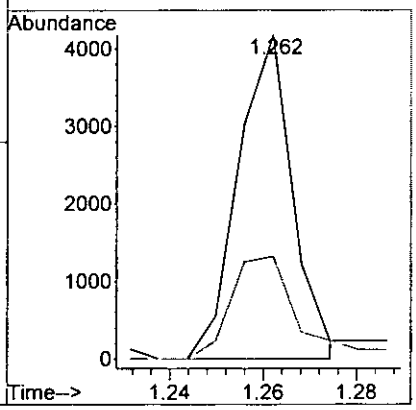
W090914.M Thu Oct 09 10:20:18 2014 Page: 2

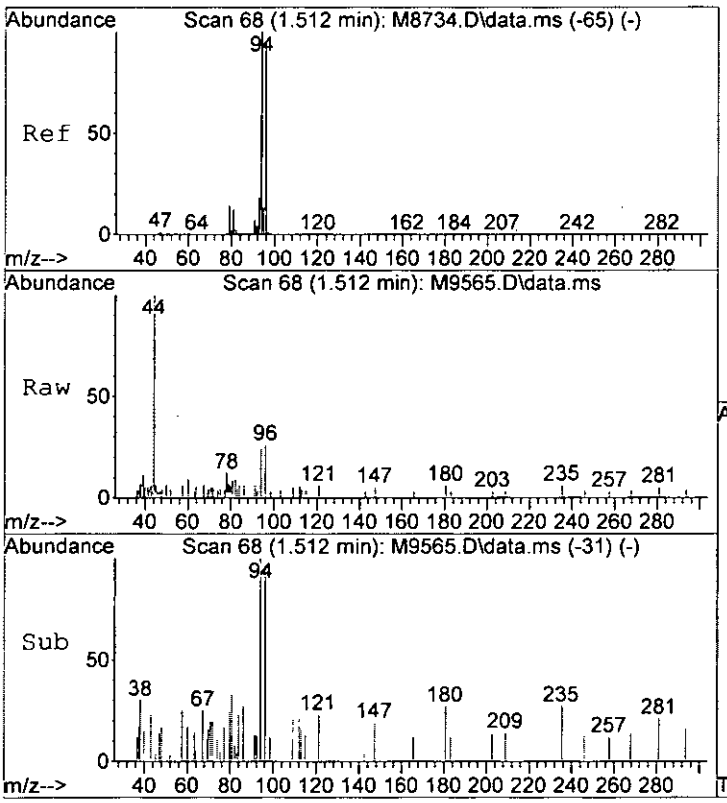


#3
Chloromethane
Concen: 0.32 ppb
RT: 1.262 min Scan# 27
Delta R.T. 0.000 min
Lab File: M9565.D
Acq: 9 Oct 2014 12:33 am

Tgt Ion: 50 Resp: 3362

Ion	Ratio	Lower	Upper
50	100		
52	31.6	12.4	52.4

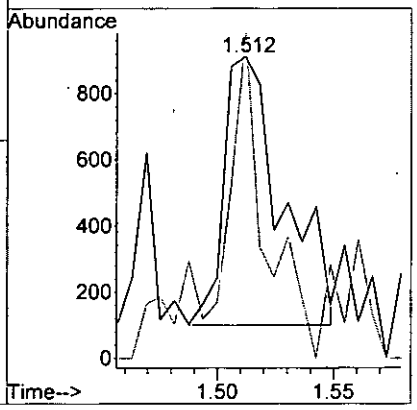




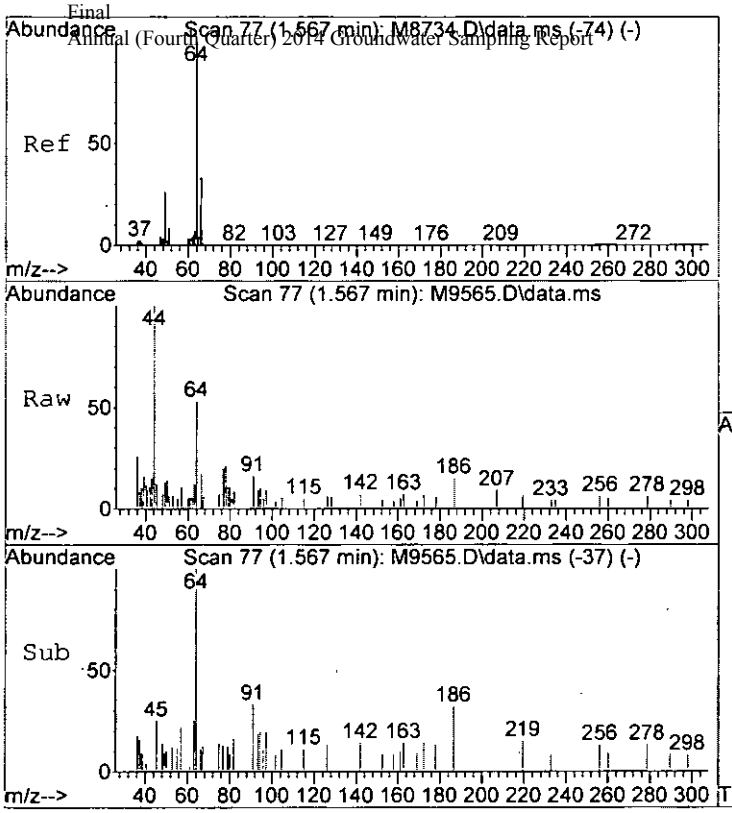
#5
Bromomethane
Concen: 0.22 ppb m
RT: 1.512 min Scan# 68
Delta R.T. 0.000 min
Lab File: M9565.D
Acq: 9 Oct 2014 12:33 am

Tgt Ion: 94 Resp: 1409

Ion	Ratio	Lower	Upper
94	100		
96	107.9	75.4	115.4



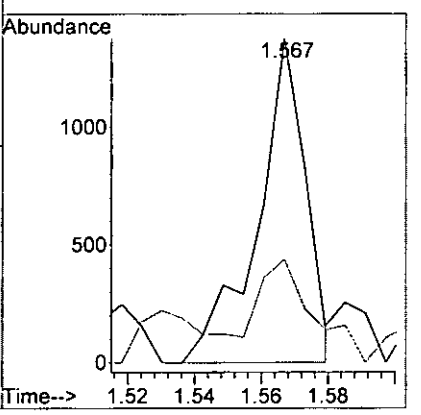
M9565.D W090914.M Thu Oct 09 10:20:19 2014 Page 3

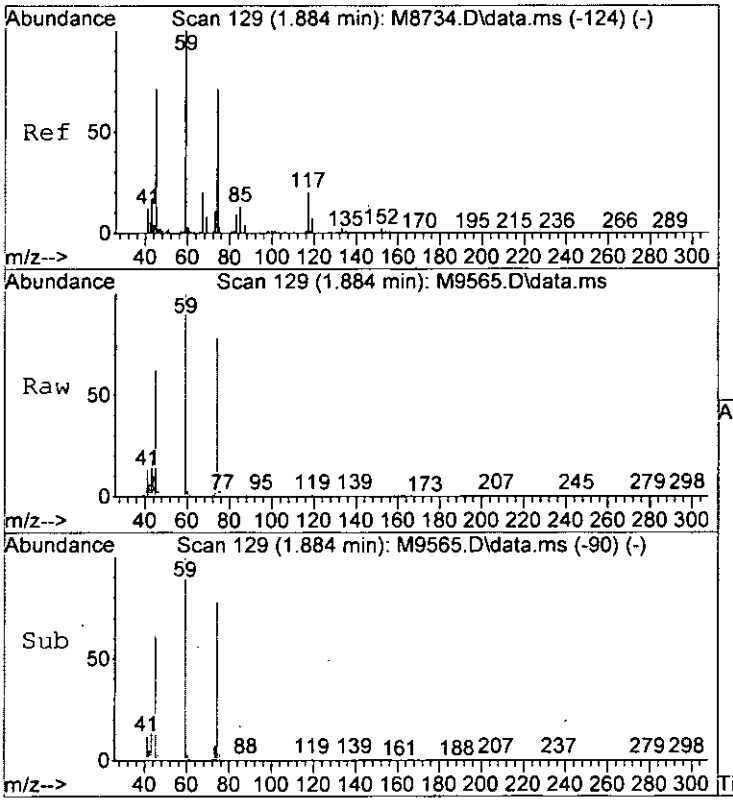


#6
Chloroethane
Concen: 0.22 ppb
RT: 1.567 min Scan# 77
Delta R.T. 0.000 min
Lab File: M9565.D
Acq: 9 Oct 2014 12:33 am

Tgt Ion: 64 Resp: 1374

Ion	Ratio	Lower	Upper
64	100		
66	31.9	12.7	52.7

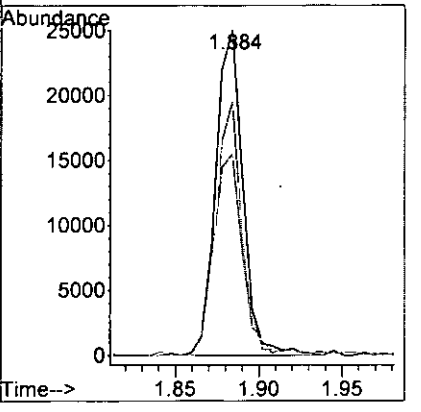


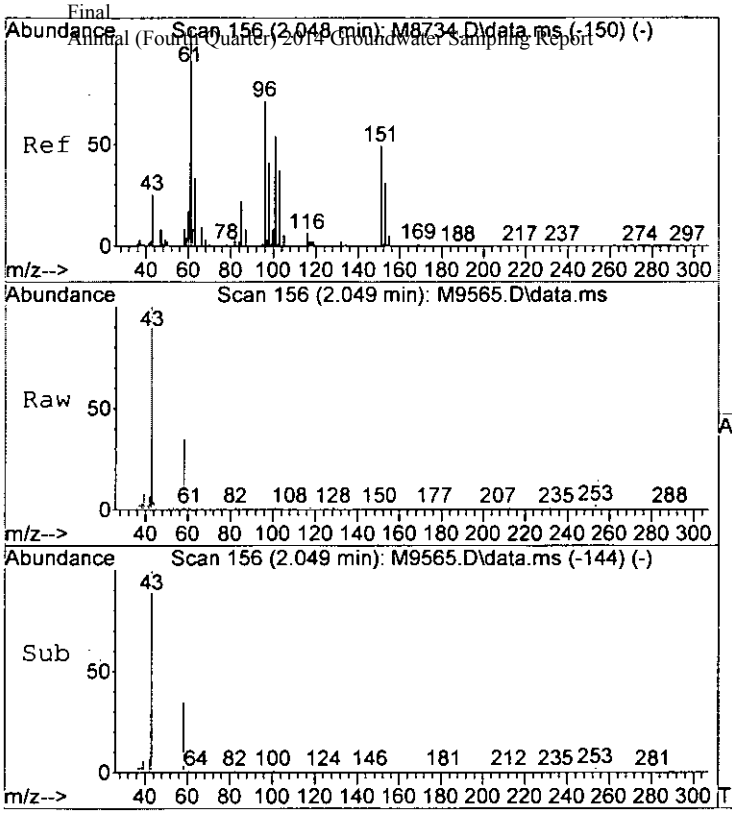


#9
Diethyl Ether
Concen: 4.41 ppb
RT: 1.884 min Scan# 129
Delta R.T. 0.006 min
Lab File: M9565.D
Acq: 9 Oct 2014 12:33 am

Tgt Ion: 59 Resp: 28125

Ion	Ratio	Lower	Upper
59	100		
45	61.9	53.9	93.9
74	78.0	57.4	97.4

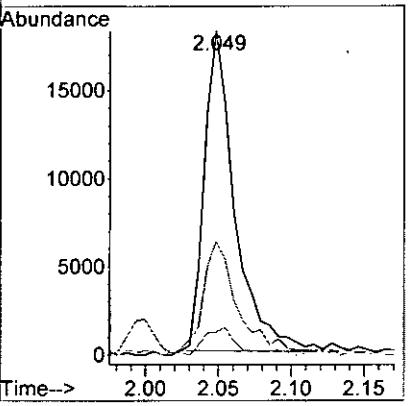


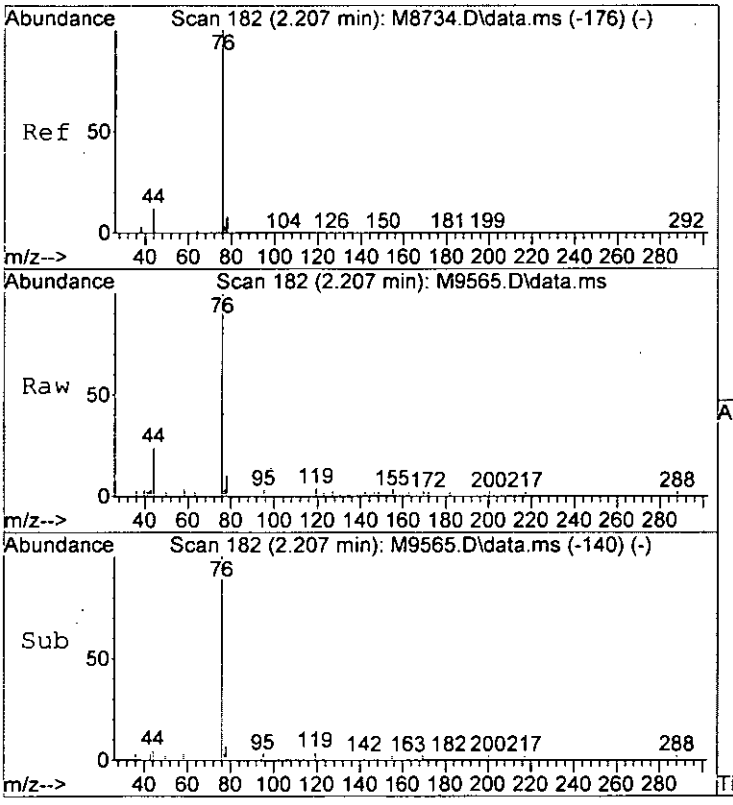


#15
Acetone
Concen: 13.04 ppb
RT: 2.049 min Scan# 156
Delta R.T. 0.000 min
Lab File: M9565.D
Acq: 9 Oct 2014 12:33 am

Tgt Ion: 43 Resp: 26394

Ion	Ratio	Lower	Upper
43	100		
58	34.9	10.3	50.3
42	7.0	0.0	27.1

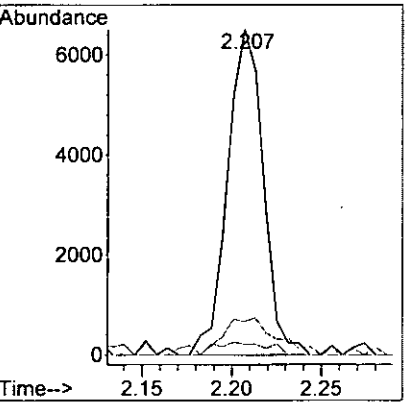


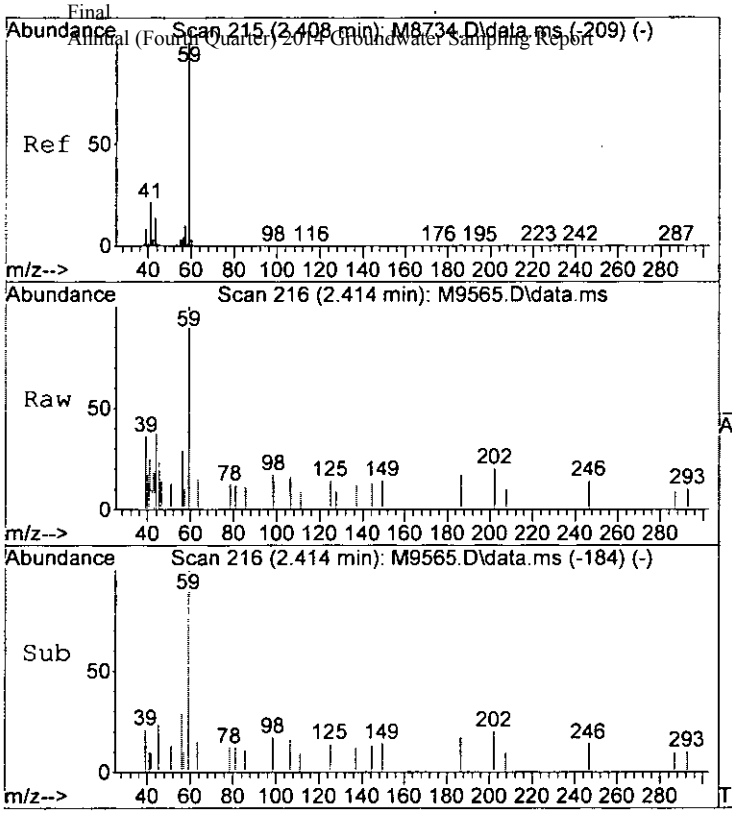


#18
Carbon Disulfide
Concen: 0.34 ppb
RT: 2.207 min Scan# 182
Delta R.T. 0.000 min
Lab File: M9565.D
Acq: 9 Oct 2014 12:33 am

Tgt Ion: 76 Resp: 9018

Ion	Ratio	Lower	Upper
76	100		
78	10.2	0.0	29.0
77	3.3	0.0	22.7

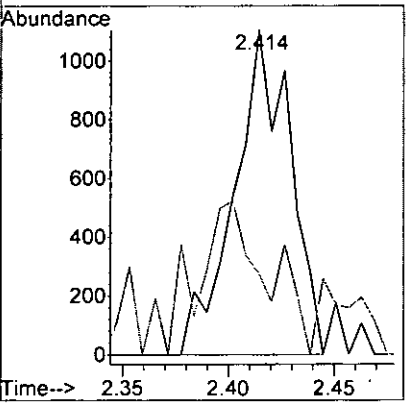


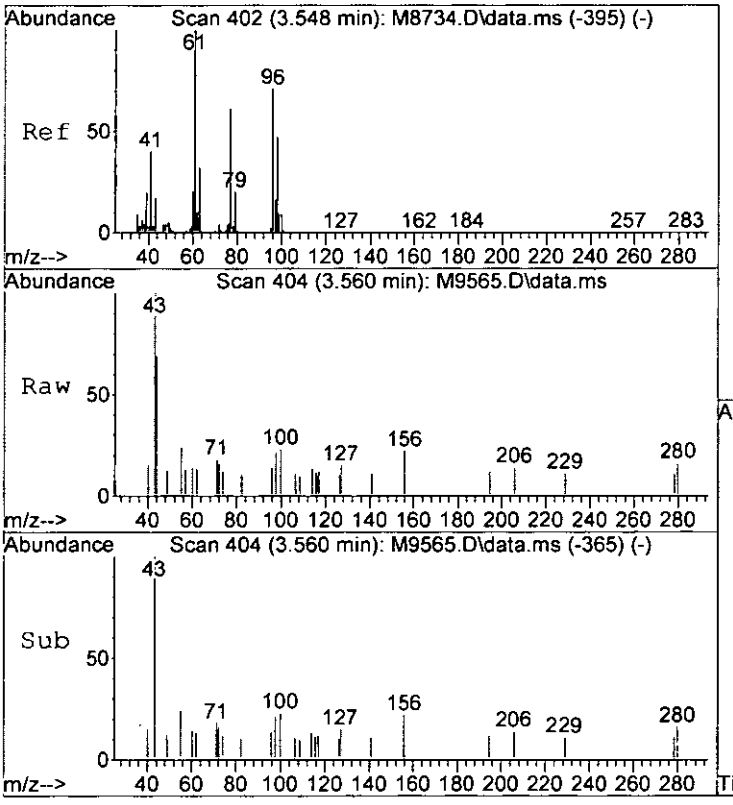


#23
TBA
Concen: 3.72 ppb
RT: 2.414 min Scan# 216
Delta R.T. 0.006 min
Lab File: M9565.D
Acq: 9 Oct 2014 12:33 am

Tgt Ion: 59 Resp: 2013

Ion	Ratio	Lower	Upper
59	100		
41	25.0	1.6	41.6

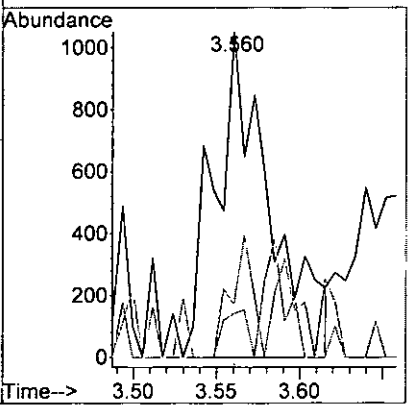


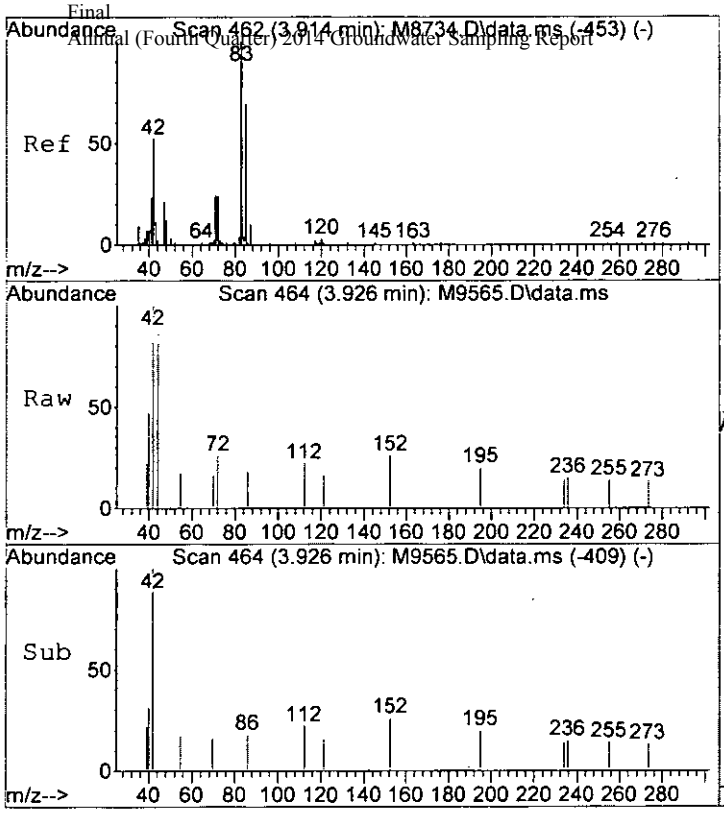


#35
2-Butanone
Concen: 0.92 ppb
RT: 3.560 min Scan# 404
Delta R.T. 0.012 min
Lab File: M9565.D
Acq: 9 Oct 2014 12:33 am

Tgt Ion: 43 Resp: 2425

Ion	Ratio	Lower	Upper
43	100		
57	13.3	0.0	27.1
72	16.1	7.7	47.7

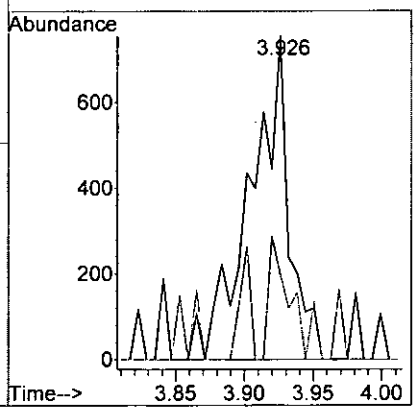


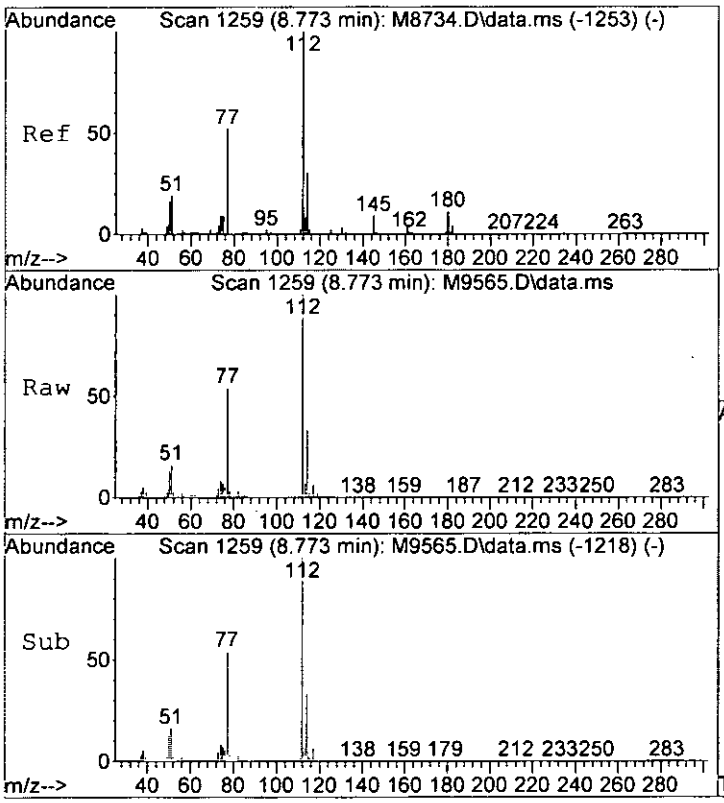


#39
Tetrahydrofuran
Concen: 0.90 ppb
RT: 3.926 min Scan# 464
Delta R.T. 0.018 min
Lab File: M9565.D
Acq: 9 Oct 2014 12:33 am

Tgt Ion: 42 Resp: 1484

Ion	Ratio	Lower	Upper
42	100		
72	26.3	18.9	58.9

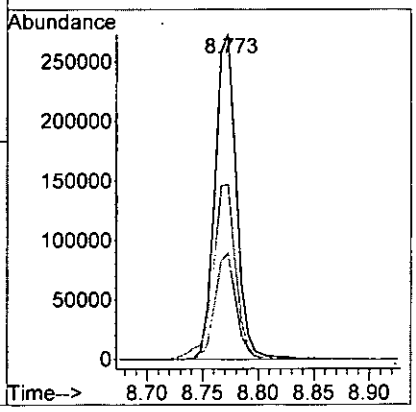


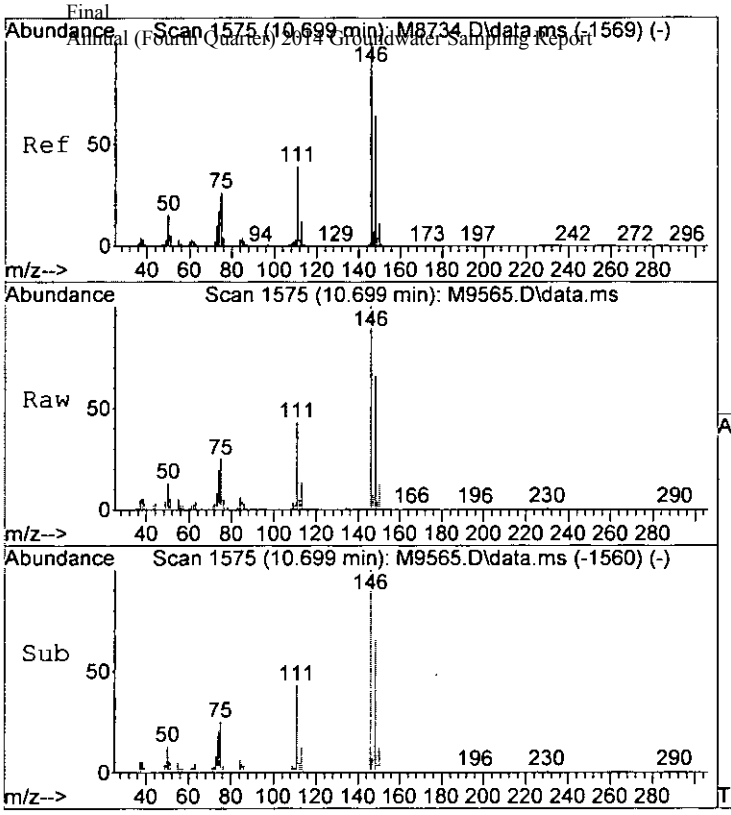


#78
Chlorobenzene
Concen: 14.21 ppb
RT: 8.773 min Scan# 1259
Delta R.T. 0.000 min
Lab File: M9565.D
Acq: 9 Oct 2014 12:33 am

Tgt Ion:112 Resp: 363753

Ion	Ratio	Lower	Upper
112	100		
114	32.7	13.3	53.3
77	53.8	37.1	77.1

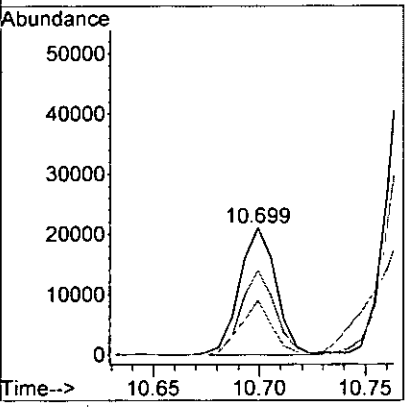


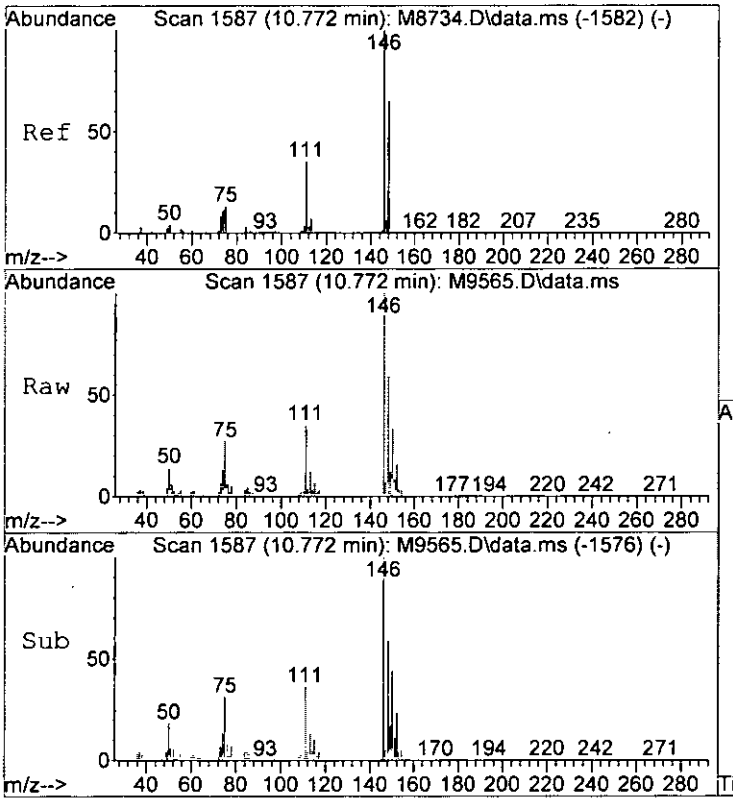


#105
1,3-Dclbenz
Concen: 1.33 ppb
RT: 10.699 min Scan# 1575
Delta R.T. 0.000 min
Lab File: M9565.D
Acq: 9 Oct 2014 12:33 am

Tgt Ion:146 Resp: 25083

Ion	Ratio	Lower	Upper
146	100		
148	66.5	44.9	84.9
111	42.8	19.4	59.4

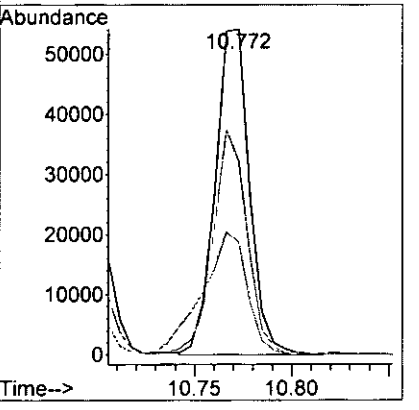


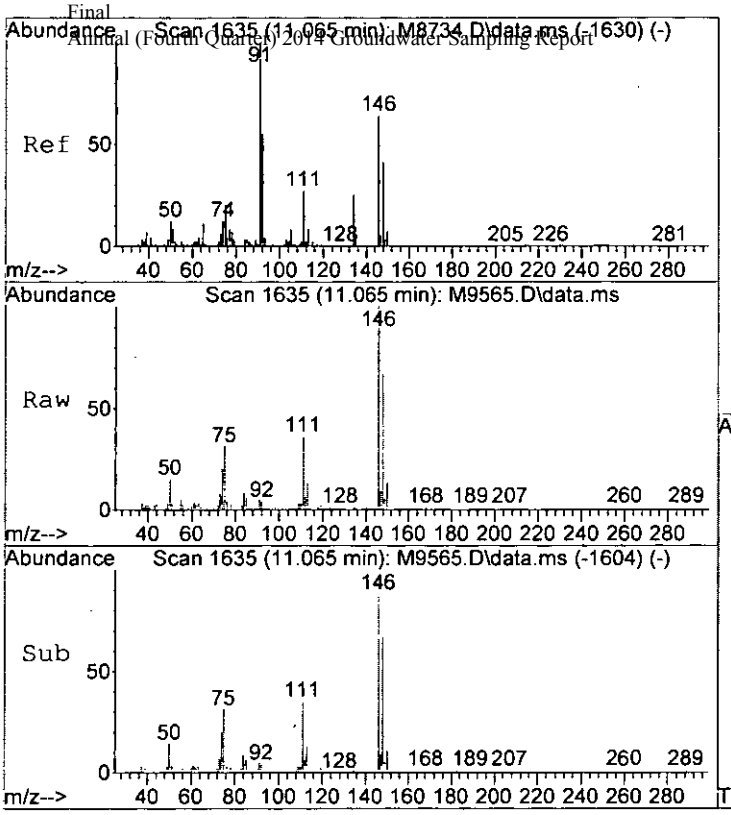


#106
1,4-Dclbenz
Concen: 3.39 ppb
RT: 10.772 min Scan# 1587
Delta R.T. 0.000 min
Lab File: M9565.D
Acq: 9 Oct 2014 12:33 am

Tgt Ion:146 Resp: 65944

Ion	Ratio	Lower	Upper
146	100		
148	59.4	44.7	84.7
111	34.7	15.1	55.1

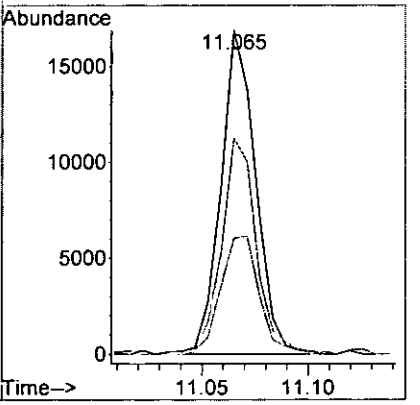


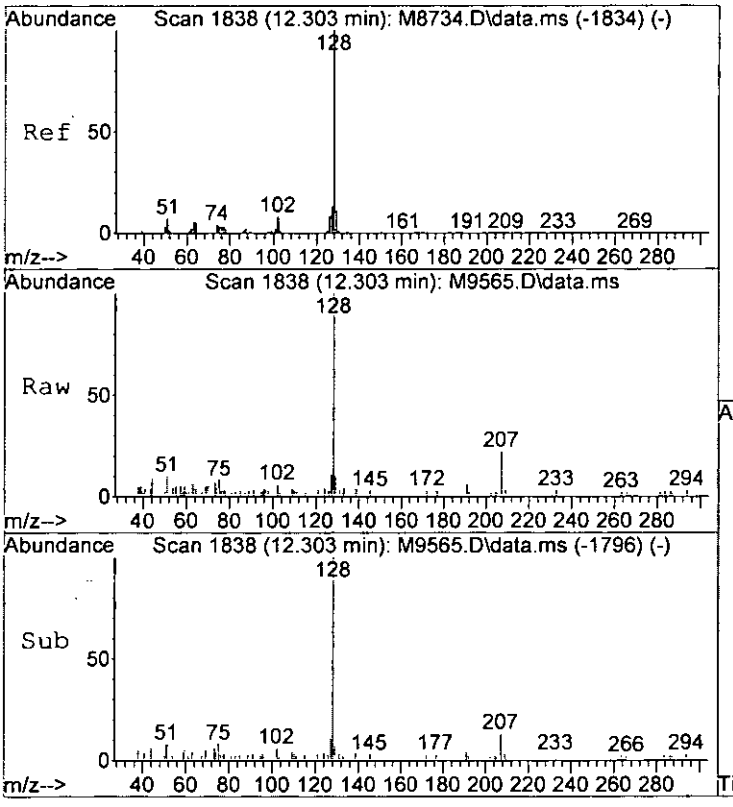


#110
1,2-Dclbenz
Concen: 1.06 ppb
RT: 11.065 min Scan# 1635
Delta R.T. -0.006 min
Lab File: M9565.D
Acq: 9 Oct 2014 12:33 am

Tgt Ion:146 Resp: 18991

Ion	Ratio	Lower	Upper
146	100		
148	66.6	43.1	83.1
111	35.8	21.2	61.2

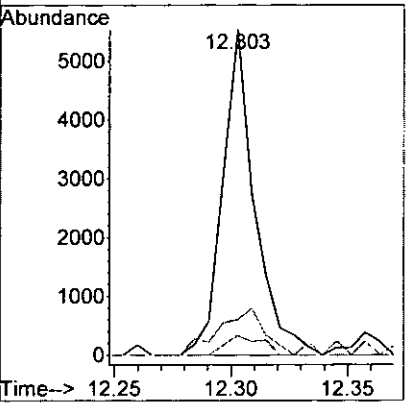




#117
Naphthalen
Concen: 0.24 ppb
RT: 12.303 min Scan# 1838
Delta R.T. 0.000 min
Lab File: M9565.D
Acq: 9 Oct 2014 12:33 am

Tgt Ion:128 Resp: 5262

Ion	Ratio	Lower	Upper
128	100		
127	10.7	0.0	32.5
102	5.9	0.0	28.0



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\100814\
Data File : M9565.D
Acq On : 9 Oct 2014 12:33 am
Operator : K.Ruest
Sample : R1407813-006|1.0
Misc : PARSONS 11603 T4
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: M9565.D\data.ms

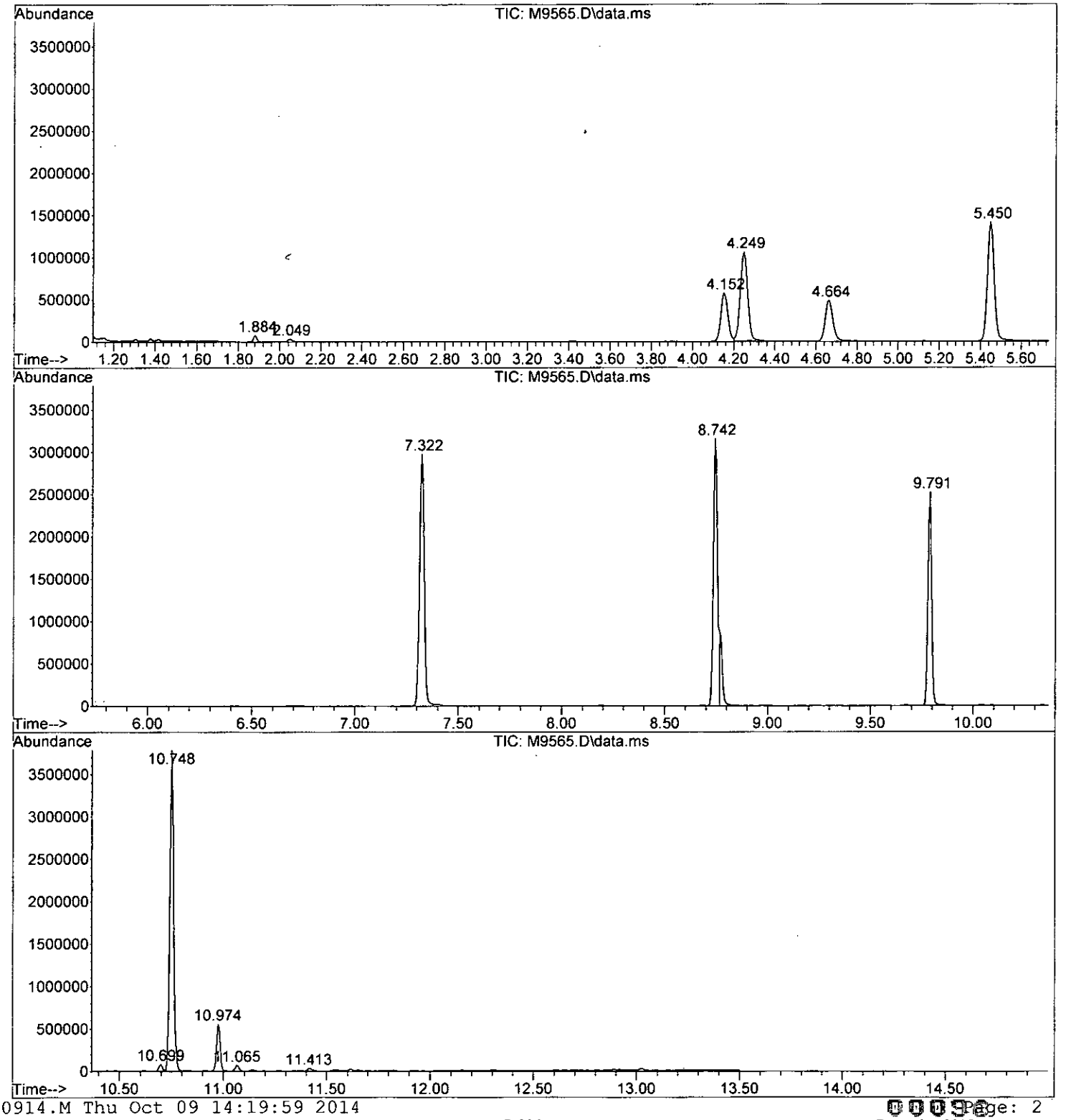
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.884	125	129	134	rBV	74735	83264	1.82%	0.318%
2	2.049	152	156	163	rBV	32443	47885	1.05%	0.183%
3	4.152	491	501	509	rBV2	574584	1362221	29.76%	5.200%
4	4.249	509	517	530	rVB2	1052462	2598470	56.77%	9.919%
5	4.664	574	585	600	rBV2	484077	1265687	27.65%	4.832%
6	5.450	703	714	727	rBV	1408543	3269559	71.43%	12.481%
7	7.322	1013	1021	1030	rBV	2973439	4554129	99.50%	17.385%
8	8.742	1249	1254	1258	rBV	3150776	4478436	97.84%	17.096%
9	9.791	1421	1426	1435	rBV	2516749	3059679	66.85%	11.680%
10	10.699	1570	1575	1578	rBV	81064	90865	1.99%	0.347%
11	10.748	1578	1583	1592	rVB	3778614	4577212	100.00%	17.473%
12	10.974	1613	1620	1629	rVV	551084	674247	14.73%	2.574%
13	11.065	1631	1635	1641	rVB	68301	87542	1.91%	0.334%
14	11.413	1689	1692	1700	rBV2	31468	47119	1.03%	0.180%

Sum of corrected areas: 26196315

Data Path : I:\ACQUDATA\msvoa12\Data\100814\
Data File : M9565.D
Acq On : 9 Oct 2014 12:33 am
Operator : K.Ruest
Sample : R1407813-006|1.0
Misc : PARSONS 11603 T4
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W090914.M Thu Oct 09 14:19:59 2014 Page: 2

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\100814\
Data File : M9565.D
Acq On : 9 Oct 2014 12:33 am
Operator : K.Ruest
Sample : R1407813-006|1.0
Misc : PARSONS 11603 T4
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

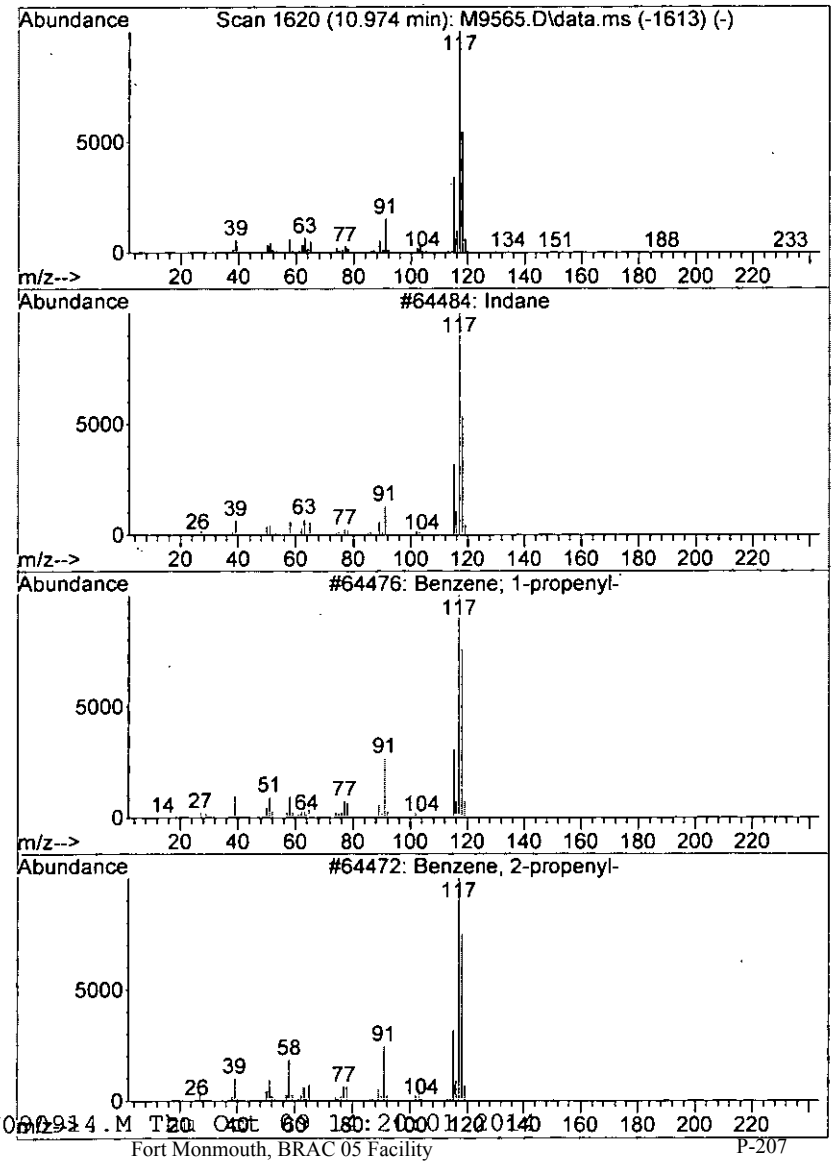
****

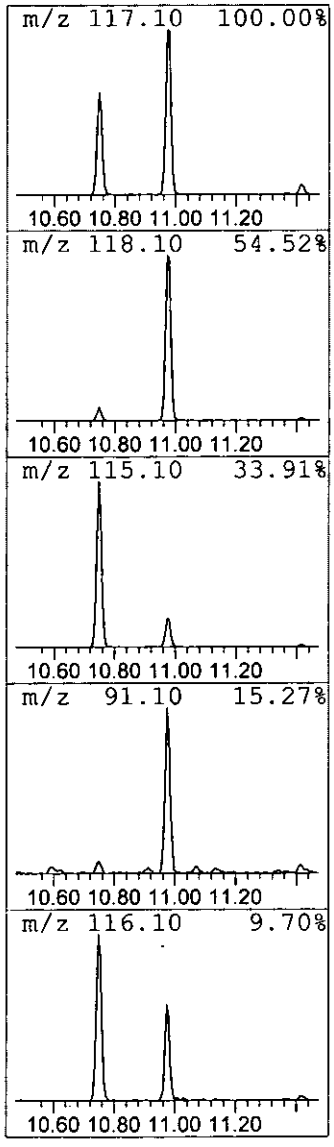
Peak Number 1 Indane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.974	7.37 ppb	674247	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indane	118	C9H10	000496-11-7	95
2	Benzene, 1-propenyl-	118	C9H10	000637-50-3	83
3	Benzene, 2-propenyl-	118	C9H10	000300-57-2	80
4	Benzene, 2-propenyl-	118	C9H10	000300-57-2	72
5	Benzene, 2-propenyl-	118	C9H10	000300-57-2	64

KR 10/9/14





Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1700
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 01:05
Sample Name:	FTMM-EB-100114-01	**Units:**	µg/L
Lab Code:	R1407813-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9566.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1700
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 01:05
Sample Name:	FTMM-EB-100114-01	**Units:**	µg/L
Lab Code:	R1407813-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9566.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1700
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 01:05
Sample Name:	FTMM-EB-100114-01	**Units:**	µg/L
Lab Code:	R1407813-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9566.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	75-120	10/9/14 01:05	
Dibromofluoromethane	100	85-115	10/9/14 01:05	
Toluene-d8	97	85-120	10/9/14 01:05	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/1/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 0105

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-EB-100114-01	**Units:**	µg/L
Lab Code:	R1407813-010	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407813-010|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9566.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 1:05 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:37:44 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	988988	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1600879	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1478815	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	754131	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	445796	49.99	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.98%			
48) surr1,1,2-dichloroetha...	4.664	65	438422	45.62	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 91.24%			
65) SURR3,Toluene-d8	7.322	98	1825954	48.52	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.04%			
70) SURR2,BFB	9.791	95	683253	50.71	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.42%			
Target Compounds						Qvalue
15) Acetone	2.048	43	1272	0.63	ppb	# 46
22) Methylene Chloride	2.353	84	2393	0.26	ppb	# 69

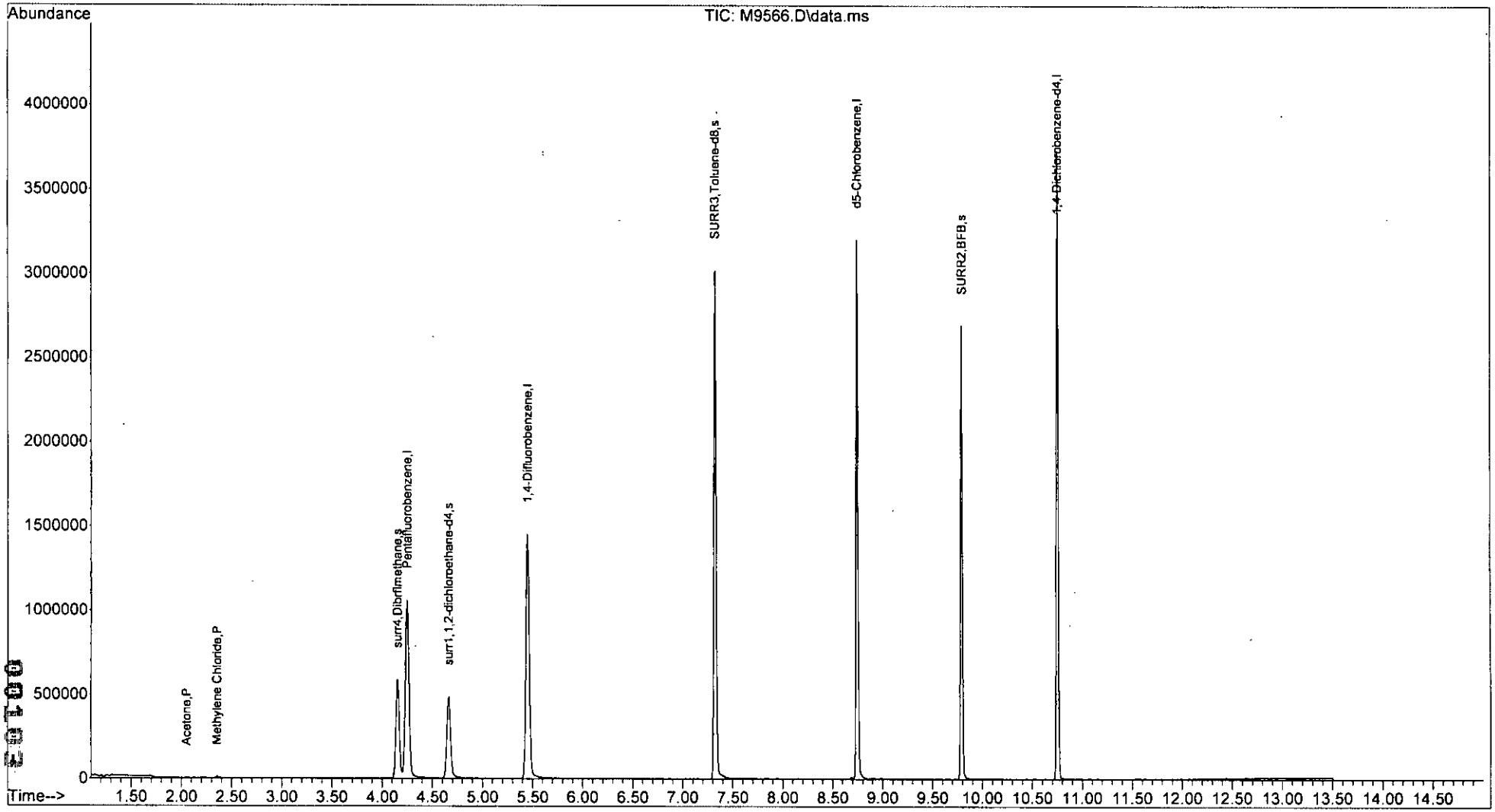
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR
10/9/14

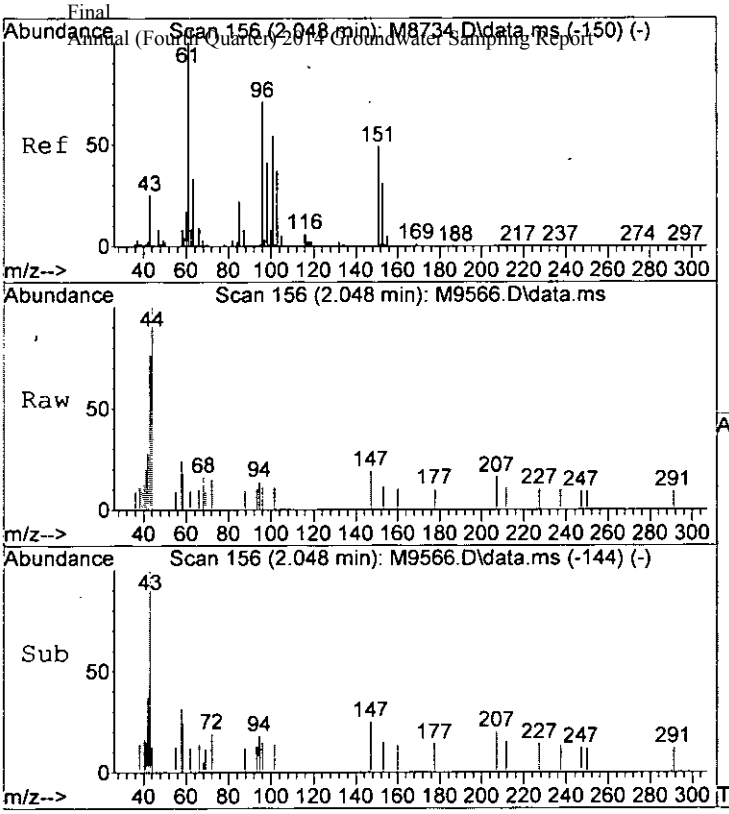
Quantitation Report (QT Reviewed)

Sample : R1407813-010|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9566.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 1:05 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:37:44 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



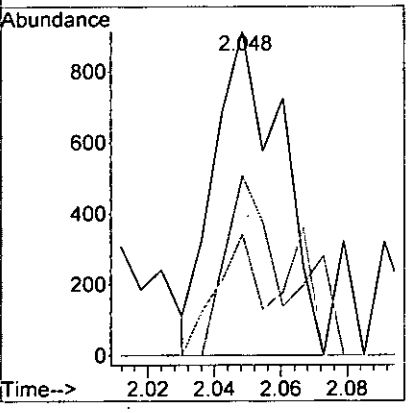
W090914.M Thu Oct 09 10:38:59 2014 Page: 2

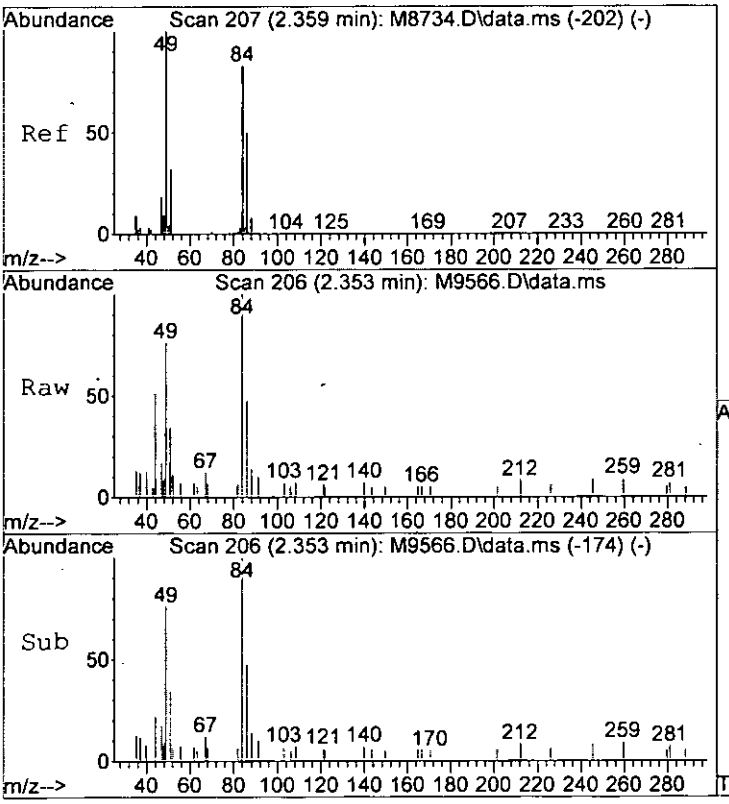


#15
Acetone
Concen: 0.63 ppb
RT: 2.048 min Scan# 156
Delta R.T. 0.000 min
Lab File: M9566.D
Acq: 9 Oct 2014 1:05 am

Tgt Ion: 43 Resp: 1272

Ion	Ratio	Lower	Upper
43	100		
58	55.4	10.3	50.3#
42	37.3	0.0	27.1#

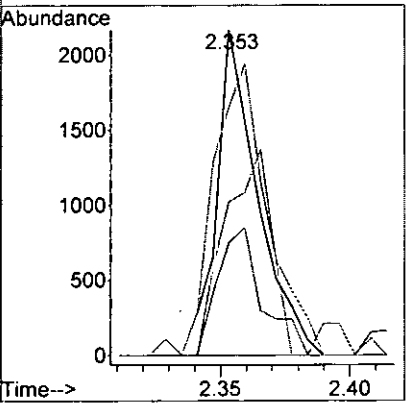




#22
Methylene Chloride
Concen: 0.26 ppb
RT: 2.353 min Scan# 206
Delta R.T. -0.006 min
Lab File: M9566.D
Acq: 9 Oct 2014 1:05 am

Tgt Ion: 84 Resp: 2393

Ion	Ratio	Lower	Upper
84	100		
86	47.2	44.2	84.2
49	76.2	105.8	145.8#
51	34.4	17.2	57.2



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\100814\
Data File : M9566.D
Acq On : 9 Oct 2014 1:05 am
Operator : K.Ruest
Sample : R1407813-010|1.0
Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: M9566.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	493	501	509	rBV	586420	1369347	29.54%	5.467%
2	4.249	509	517	536	rVB	1051966	2646966	57.10%	10.569%
3	4.664	574	585	599	rBV	484673	1254872	27.07%	5.010%
4	5.450	703	714	727	rBV	1450163	3396550	73.27%	13.561%
5	7.322	1015	1021	1045	rBV	3016154	4635429	100.00%	18.508%
6	8.742	1249	1254	1268	rBV	3200885	4185624	90.30%	16.712%
7	9.791	1421	1426	1439	rVB	2690078	3168997	68.36%	12.653%
8	10.748	1578	1583	1590	rBV	3727702	4387955	94.66%	17.520%

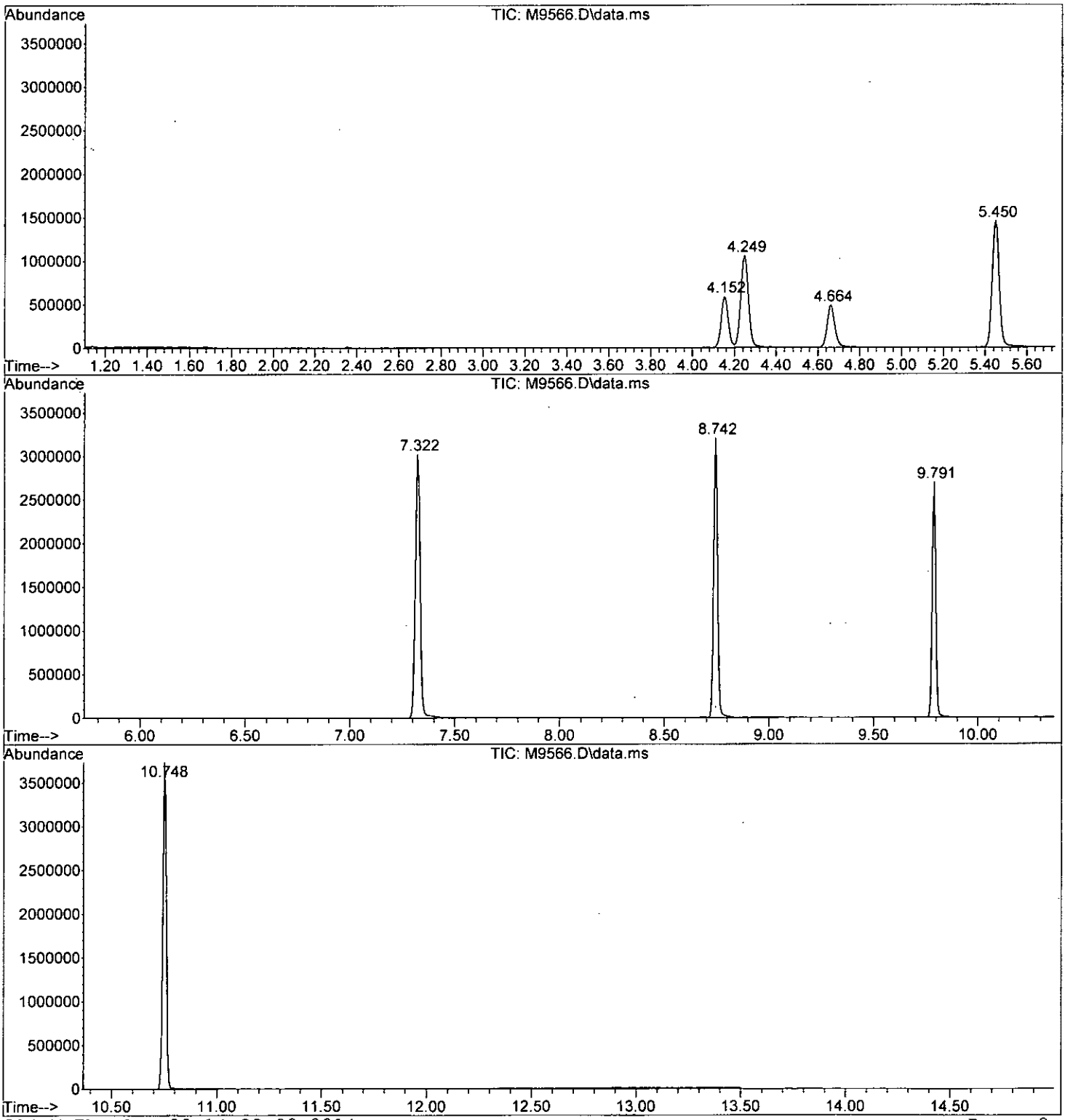
Sum of corrected areas: 25045740

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\100814\
Data File : M9566.D
Acq On : 9 Oct 2014 1:05 am
Operator : K.Ruest
Sample : R1407813-010|1.0
Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W090914.M Thu Oct 09 14:20:08 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\100814\\
Data File : M9566.D
Acq On : 9 Oct 2014 1:05 amm
Operator : K.Ruestt
Sample : R1407813-010|1.00
Misc : PARSONS 11603 T44
ALS Vial : 16 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1630
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 01:38
Sample Name:	FTMM-EB-100114-02	**Units:**	µg/L
Lab Code:	R1407813-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9567.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1630
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 01:38
Sample Name:	FTMM-EB-100114-02	**Units:**	µg/L
Lab Code:	R1407813-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9567.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1630
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 01:38
Sample Name:	FTMM-EB-100114-02	**Units:**	µg/L
Lab Code:	R1407813-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9567.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	10/9/14 01:38	
Dibromofluoromethane	100	85-115	10/9/14 01:38	
Toluene-d8	100	85-120	10/9/14 01:38	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/1/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 0138

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-EB-100114-02	**Units:**	µg/L
Lab Code:	R1407813-011	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407813-011|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9567.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 1:38 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:41:11 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	994924	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1596458	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1469215	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	753786	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	442523	49.77	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.54%				
48) surr1,1,2-dichloroetha...	4.664	65	429053	44.77	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 89.54%				
65) SURR3,Toluene-d8	7.322	98	1877594	50.03	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.06%				
70) SURR2,BFB	9.791	95	667308	49.66	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.32%				
Target Compounds							Qvalue
15) Acetone	2.048	43	1662	0.81	ppb		69
22) Methylene Chloride	2.359	84	2695	0.30	ppb	#	69

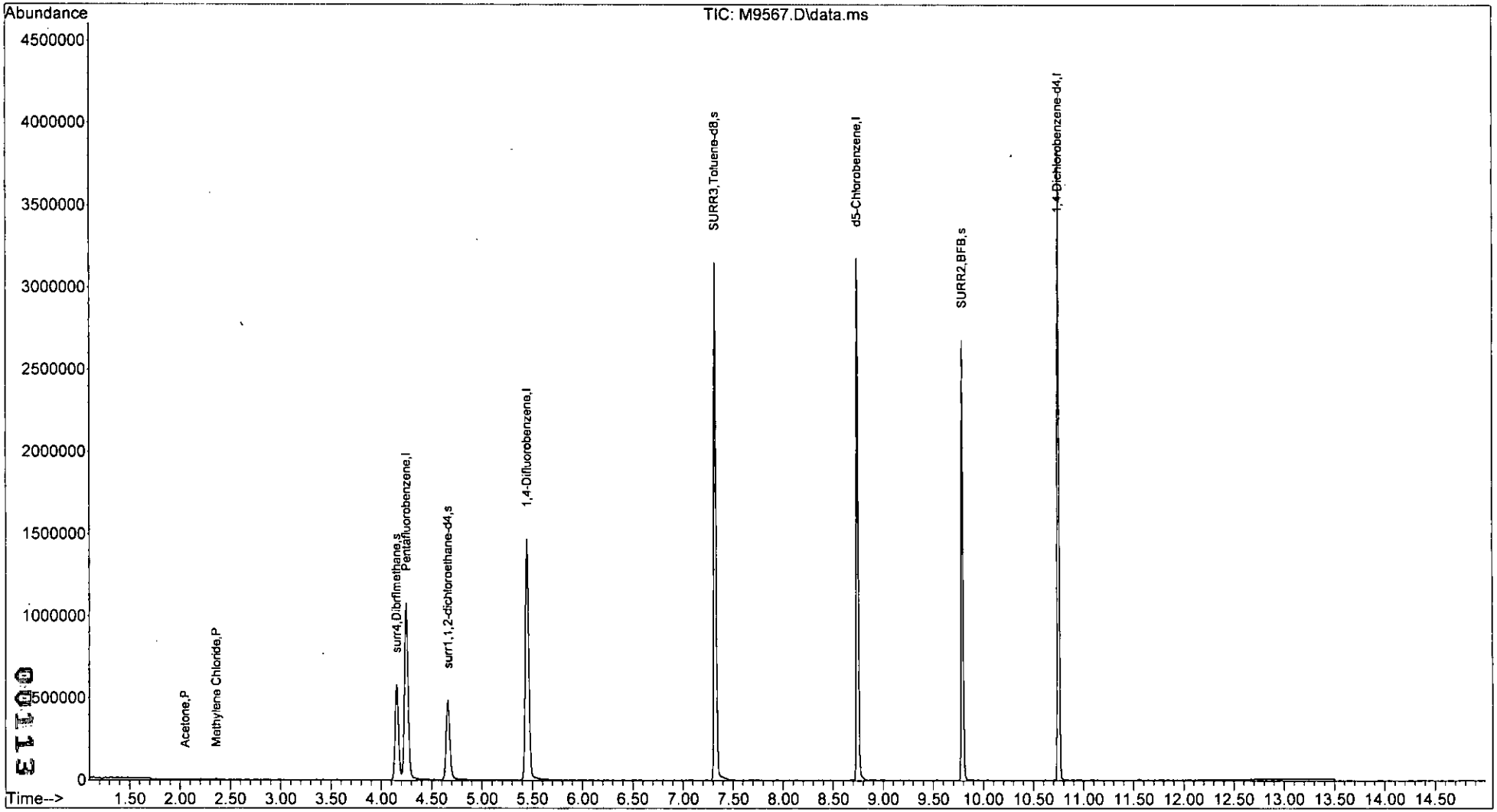
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KL 10/9/14

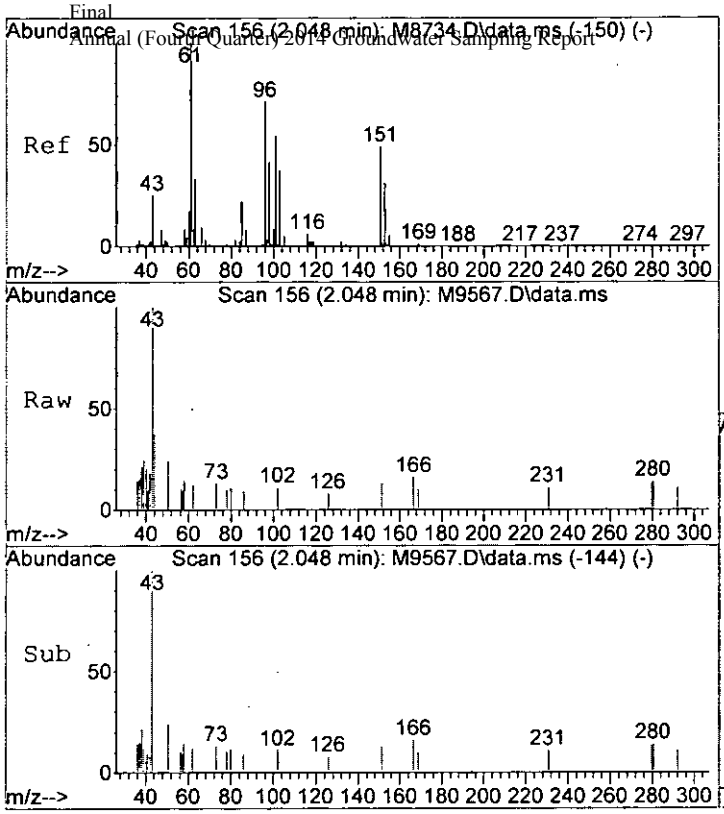
Quantitation Report (QT Reviewed)

Sample : R1407813-011|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9567.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 1:38 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:41:11 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



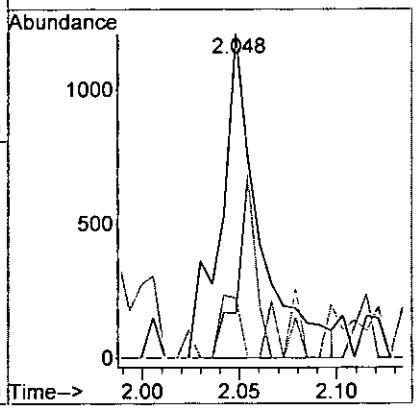
W090914.M Thu Oct 09 10:48:07 2014 Page: 2

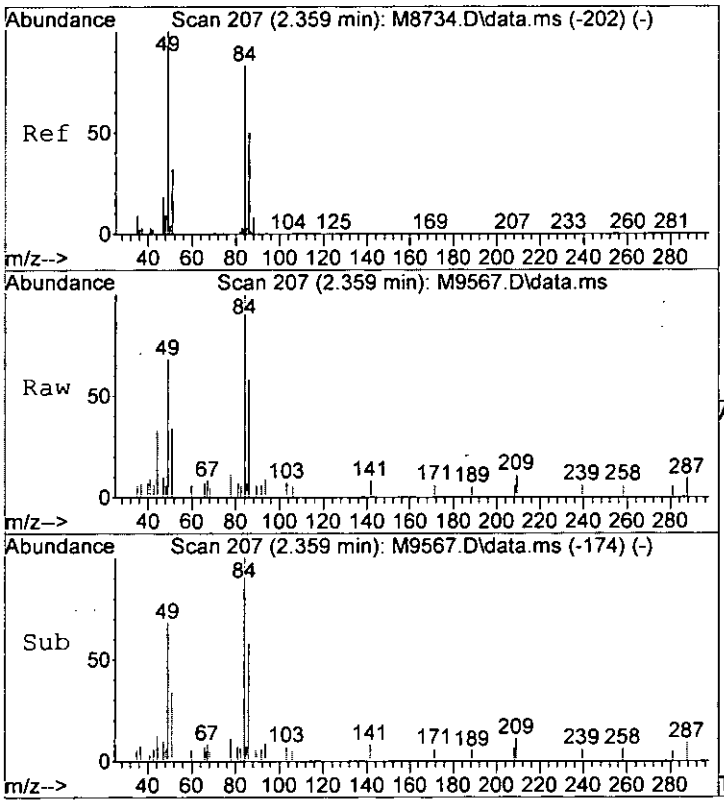


#15
Acetone
Concen: 0.81 ppb
RT: 2.048 min Scan# 156
Delta R.T. -0.000 min
Lab File: M9567.D
Acq: 9 Oct 2014 1:38 am

Tgt Ion: 43 Resp: 1662

Ion	Ratio	Lower	Upper
43	100		
58	13.7	10.3	50.3
42	18.3	0.0	27.1

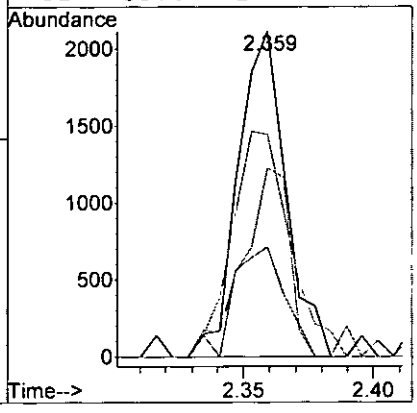




#22
Methylene Chloride
Concen: 0.30 ppb
RT: 2.359 min Scan# 207
Delta R.T. -0.000 min
Lab File: M9567.D
Acq: 9 Oct 2014 1:38 am

Tgt Ion: 84 Resp: 2695

Ion	Ratio	Lower	Upper
84	100		
86	58.0	44.2	84.2
49	68.2	105.8	145.8#
51	33.6	17.2	57.2



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\100814\
Data File : M9567.D
Acq On : 9 Oct 2014 1:38 am
Operator : K.Ruest
Sample : R1407813-011|1.0
Misc : PARSONS 11603 T4
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: M9567.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	492	501	509	rBV	580220	1360663	29.20%	5.450%
2	4.249	509	517	536	rVB	1073378	2654645	56.98%	10.634%
3	4.664	574	585	600	rBV	484422	1244246	26.70%	4.984%
4	5.450	702	714	727	rBV	1467230	3376515	72.47%	13.525%
5	7.322	1015	1021	1031	rBV	3149466	4659266	100.00%	18.664%
6	8.742	1249	1254	1271	rBV	3174454	4162983	89.35%	16.676%
7	9.791	1421	1426	1436	rBV	2679527	3127888	67.13%	12.530%
8	10.748	1578	1583	1594	rBV	3834932	4377869	93.96%	17.537%

Sum of corrected areas: 24964075

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa12\Data\100814\
Data File : M9567.D
Acq On    :  9 Oct 2014   1:38 am
Operator  : K.Ruest
Sample    : R1407813-011|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 17   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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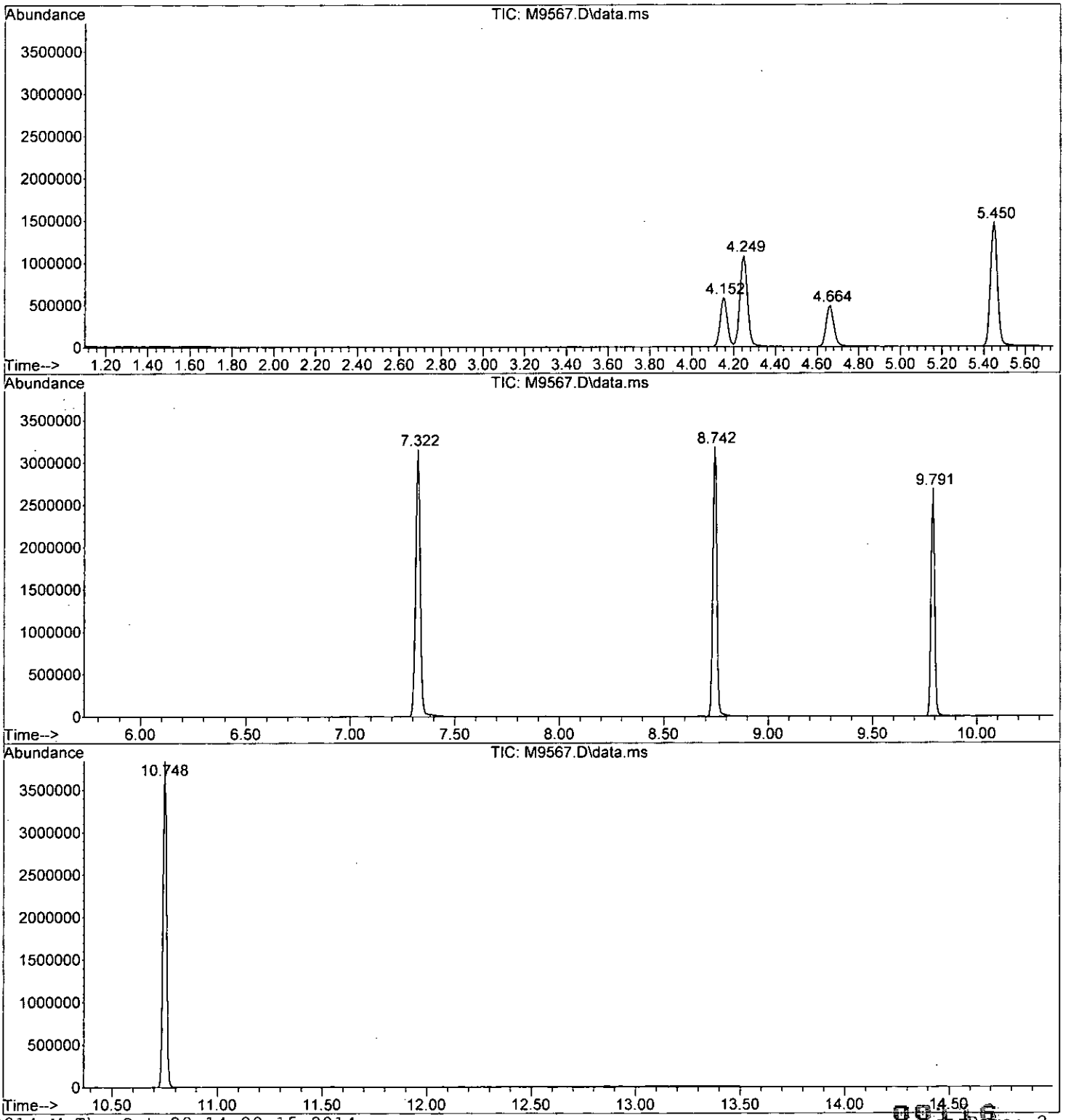


W090914.M Thu Oct 09 14:20:15 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\100814\\
Data File : M9567.D
Acq On : 9 Oct 2014 1:38 amm
Operator : K.Ruestt
Sample : R1407813-011|1.00
Misc : PARSONS 11603 T44
ALS Vial : 17 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1525
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 02:10
Sample Name:	FTMM-3-GW-M3MW07-13.85	**Units:**	µg/L
Lab Code:	R1407813-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9568.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.4**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1525
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 02:10
Sample Name:	FTMM-3-GW-M3MW07-13.85	**Units:**	µg/L
Lab Code:	R1407813-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9568.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	4.0	J	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	3.0	J	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1525
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 02:10
Sample Name:	FTMM-3-GW-M3MW07-13.85	**Units:**	µg/L
Lab Code:	R1407813-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9568.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	10/9/14 02:10	
Dibromofluoromethane	97	85-115	10/9/14 02:10	
Toluene-d8	102	85-120	10/9/14 02:10	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/2/14
Date Received: 10/3/14
Date Analyzed: 10/9/14 0210

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-3-GW-M3MW07-13.85
Lab Code: R1407813-013

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407813-013|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9568.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 2:10 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:49:24 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	1000507	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1595598	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1484054	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	762516	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	433082	48.73	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.46%				
48) surr1,1,2-dichloroetha...	4.664	65	427364	44.62	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 89.24%				
65) SURR3,Toluene-d8	7.322	98	1907208	50.85	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.70%				
70) SURR2,BFB	9.791	95	686458	51.11	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.22%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.323	62	45314	4.04	ppb		100
9) Diethyl Ether	1.884	59	2956	0.46	ppb	#	85
15) Acetone	2.048	43	4842	2.35	ppb		92
23) TBA	2.408	59	1804	3.28	ppb		88
34) cis-1,2-Dichloroethene	3.548	96	30141	3.02	ppb	#	80
39) Tetrahydrofuran	3.920	42	644	0.38	ppb		89

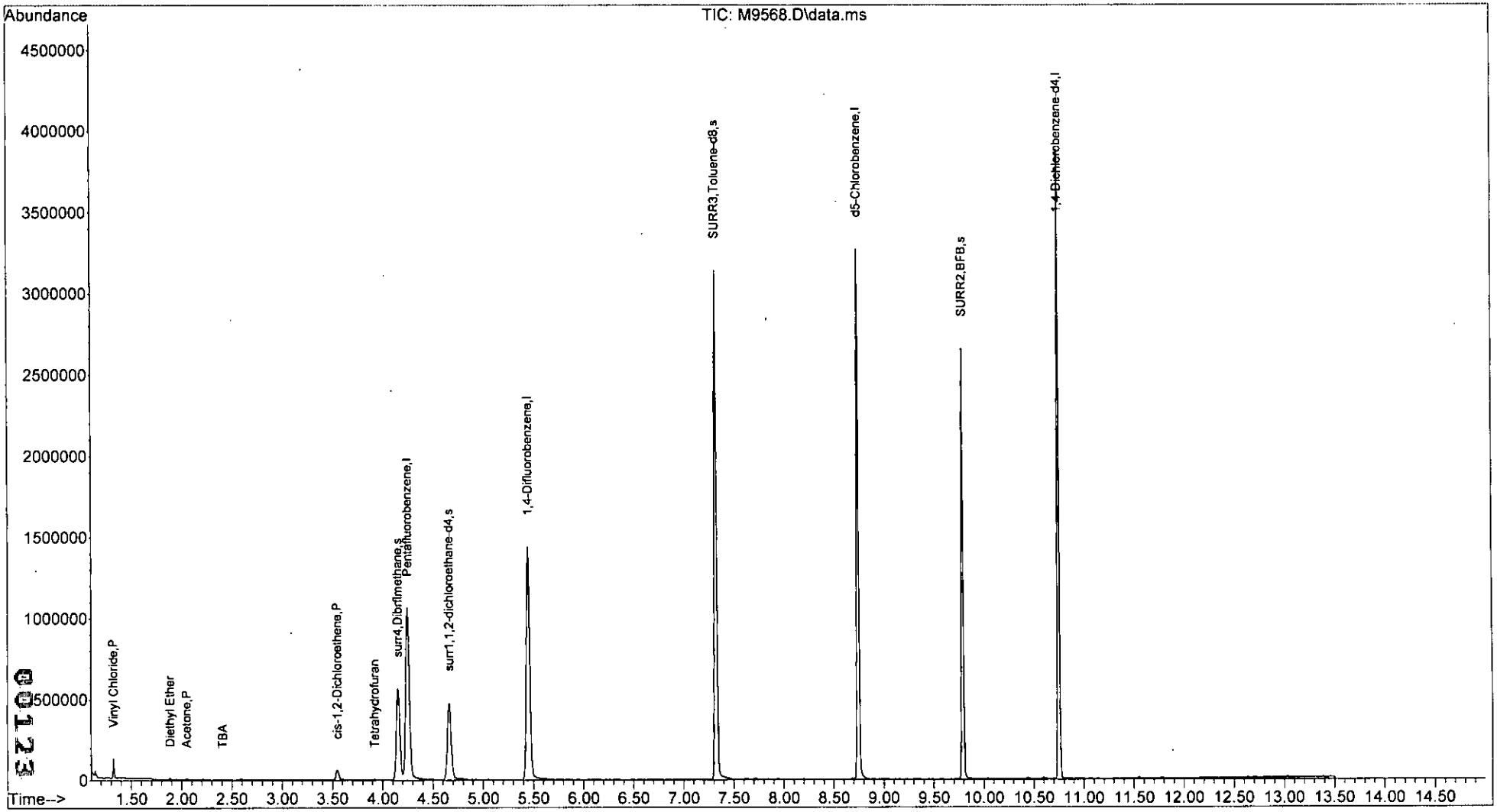
KR 10/9/14

(#) = qualifier out of range (m) = manual integration (+) = signals summed

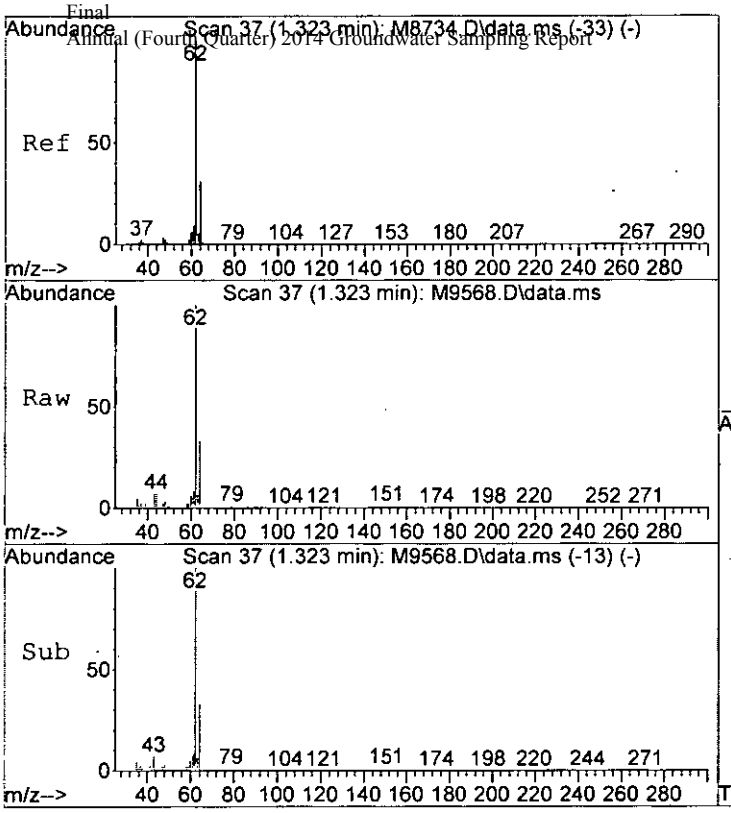
Quantitation Report (QT Reviewed)

Sample : R1407813-013|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9568.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 2:10 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:49:24 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



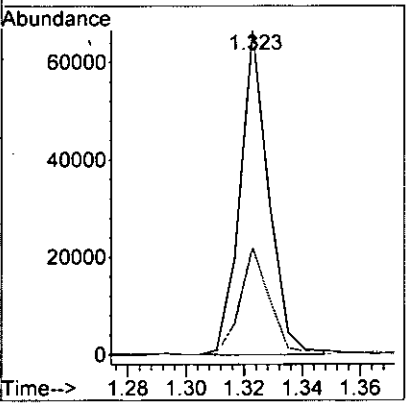
W090914.M Thu Oct 09 10:50:10 2014 Page: 2

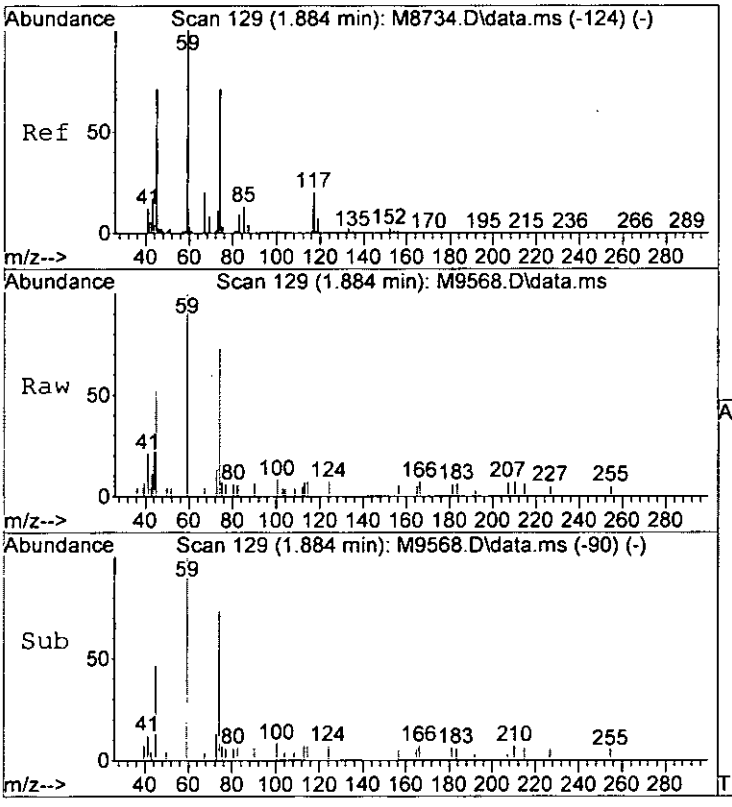


#4
Vinyl Chloride
Concen: 4.04 ppb
RT: 1.323 min Scan# 37
Delta R.T. -0.000 min
Lab File: M9568.D
Acq: 9 Oct 2014 2:10 am

Tgt Ion: 62 Resp: 45314

Ion	Ratio	Lower	Upper
62	100		
64	33.0	13.0	53.0

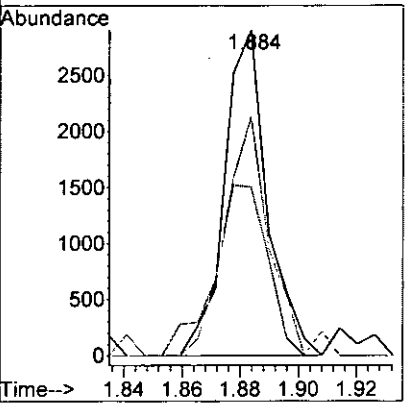


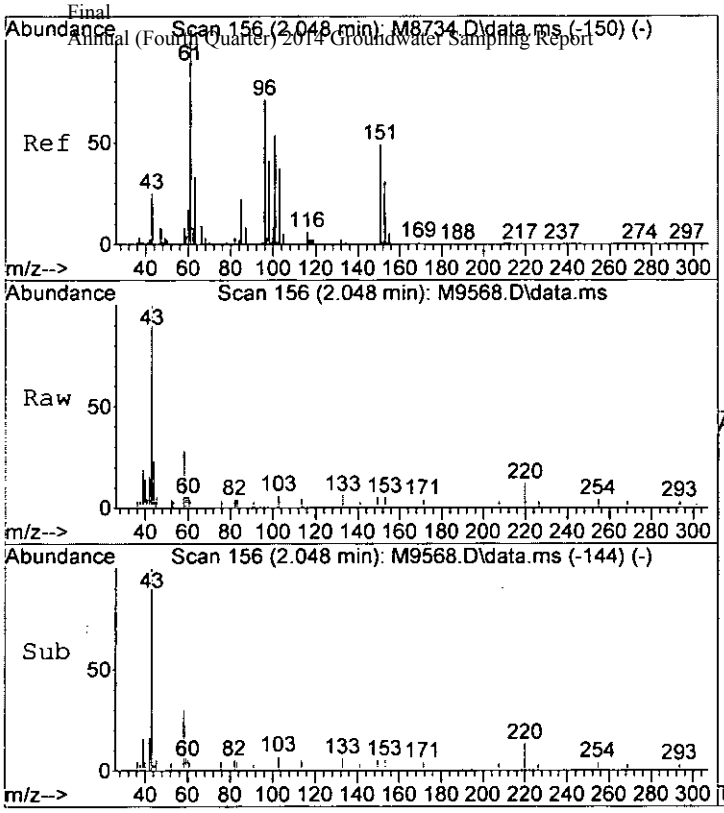


#9
Diethyl Ether
Concen: 0.46 ppb
RT: 1.884 min Scan# 129
Delta R.T. 0.006 min
Lab File: M9568.D
Acq: 9 Oct 2014 2:10 am

Tgt Ion: 59 Resp: 2956

Ion	Ratio	Lower	Upper
59	100		
45	51.8	53.9	93.9#
74	73.4	57.4	97.4

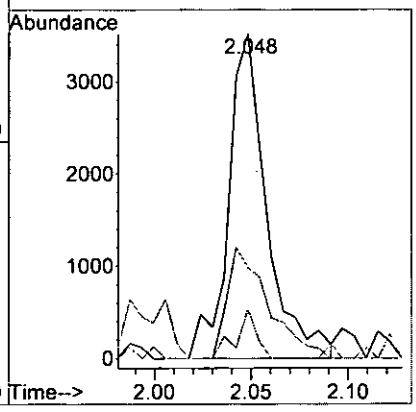


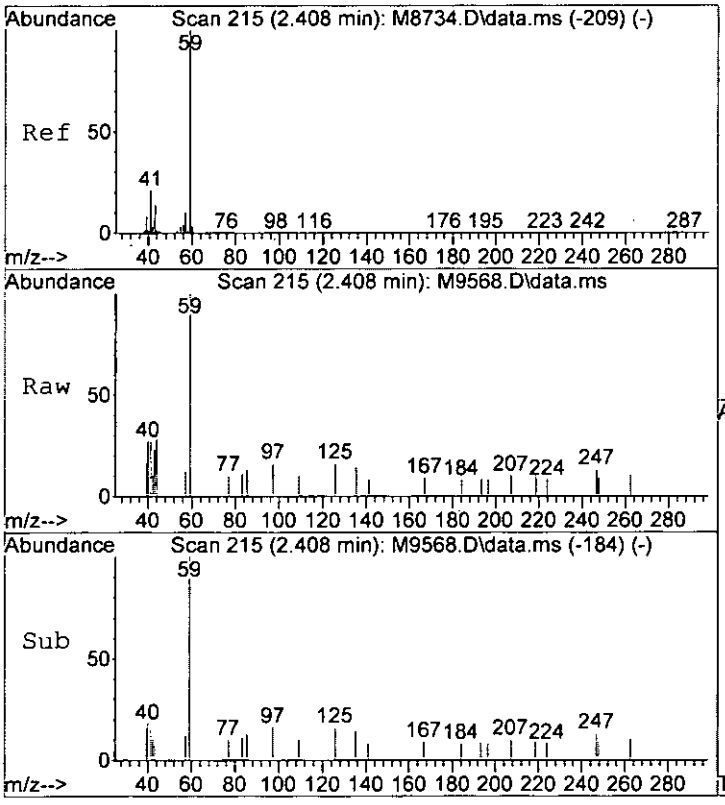


#15
Acetone
Concen: 2.35 ppb
RT: 2.048 min Scan# 156
Delta R.T. -0.000 min
Lab File: M9568.D
Acq: 9 Oct 2014 2:10 am

Tgt Ion: 43 Resp: 4842

Ion	Ratio	Lower	Upper
43	100		
58	28.0	10.3	50.3
42	15.3	0.0	27.1

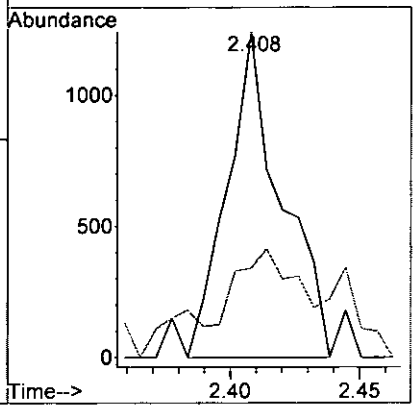


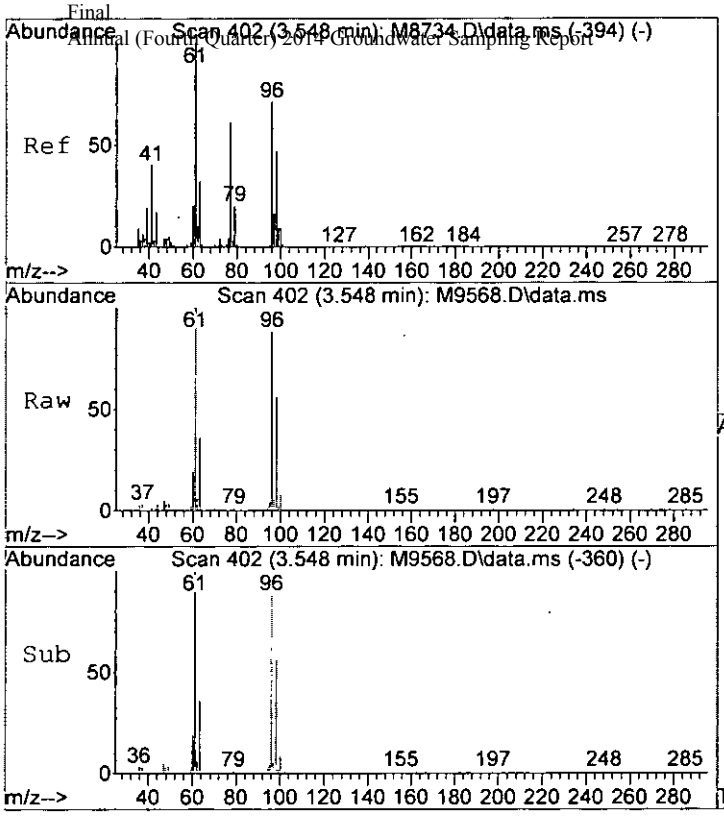


#23
TBA
Concen: 3.28 ppb
RT: 2.408 min Scan# 215
Delta R.T. -0.000 min
Lab File: M9568.D
Acq: 9 Oct 2014 2:10 am

Tgt Ion: 59 Resp: 1804

Ion	Ratio	Lower	Upper
59	100		
41	27.3	1.6	41.6

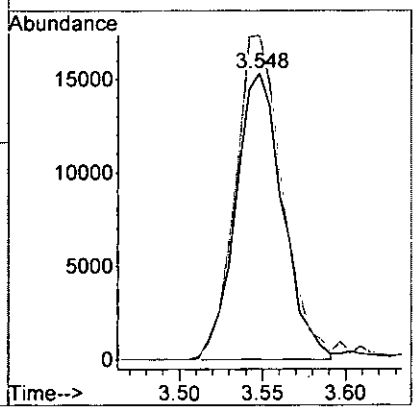


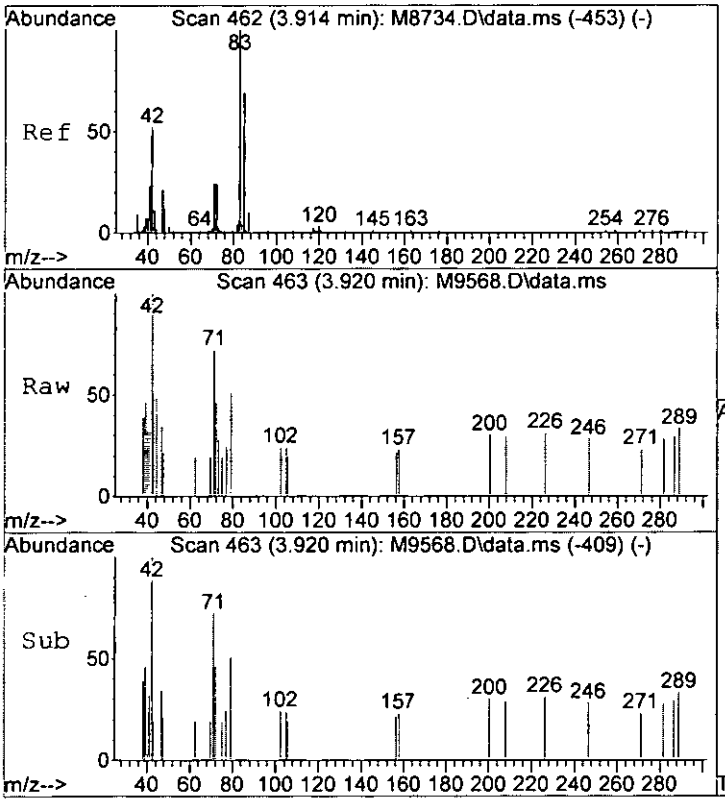


#34
cis-1,2-Dichloroethene
Concen: 3.02 ppb
RT: 3.548 min Scan# 402
Delta R.T. -0.000 min
Lab File: M9568.D
Acq: 9 Oct 2014 2:10 am

Tgt Ion: 96 Resp: 30141

Ion	Ratio	Lower	Upper
96	100		
61	113.2	117.4	157.4#

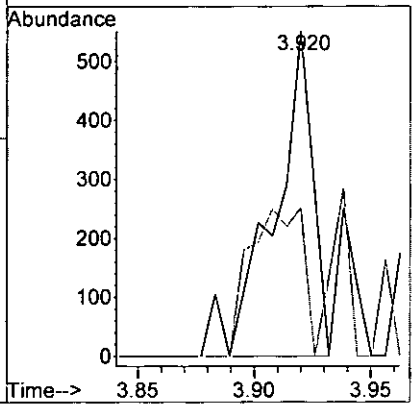




#39
Tetrahydrofuran
Concen: 0.38 ppb
RT: 3.920 min Scan# 463
Delta R.T. 0.012 min
Lab File: M9568.D
Acq: 9 Oct 2014 2:10 am

Tgt Ion: 42 Resp: 644

Ion	Ratio	Lower	Upper
42	100		
72	45.6	18.9	58.9



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\100814\
Data File : M9568.D
Acq On : 9 Oct 2014 2:10 am
Operator : K.Ruest
Sample : R1407813-013|1.0
Misc : PARSONS 11603 T4
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: M9568.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.140	5	7	15	rVB2	45268	50345	1.06%	0.198%
2	1.323	33	37	40	rBV	121704	88118	1.86%	0.346%
3	3.548	395	402	410	rBV2	59435	121590	2.56%	0.478%
4	4.152	490	501	509	rBV	562451	1356201	28.56%	5.332%
5	4.249	509	517	531	rVB	1051774	2617519	55.12%	10.290%
6	4.664	573	585	600	rBV2	475587	1256015	26.45%	4.938%
7	5.450	705	714	732	rBV	1437828	3398113	71.56%	13.359%
8	7.322	1010	1021	1031	rBV	3138103	4748836	100.00%	18.669%
9	8.742	1249	1254	1269	rBV	3269148	4201585	88.48%	16.518%
10	9.791	1421	1426	1435	rBV	2653382	3179397	66.95%	12.499%
11	10.748	1578	1583	1591	rBV	3878344	4419405	93.06%	17.374%

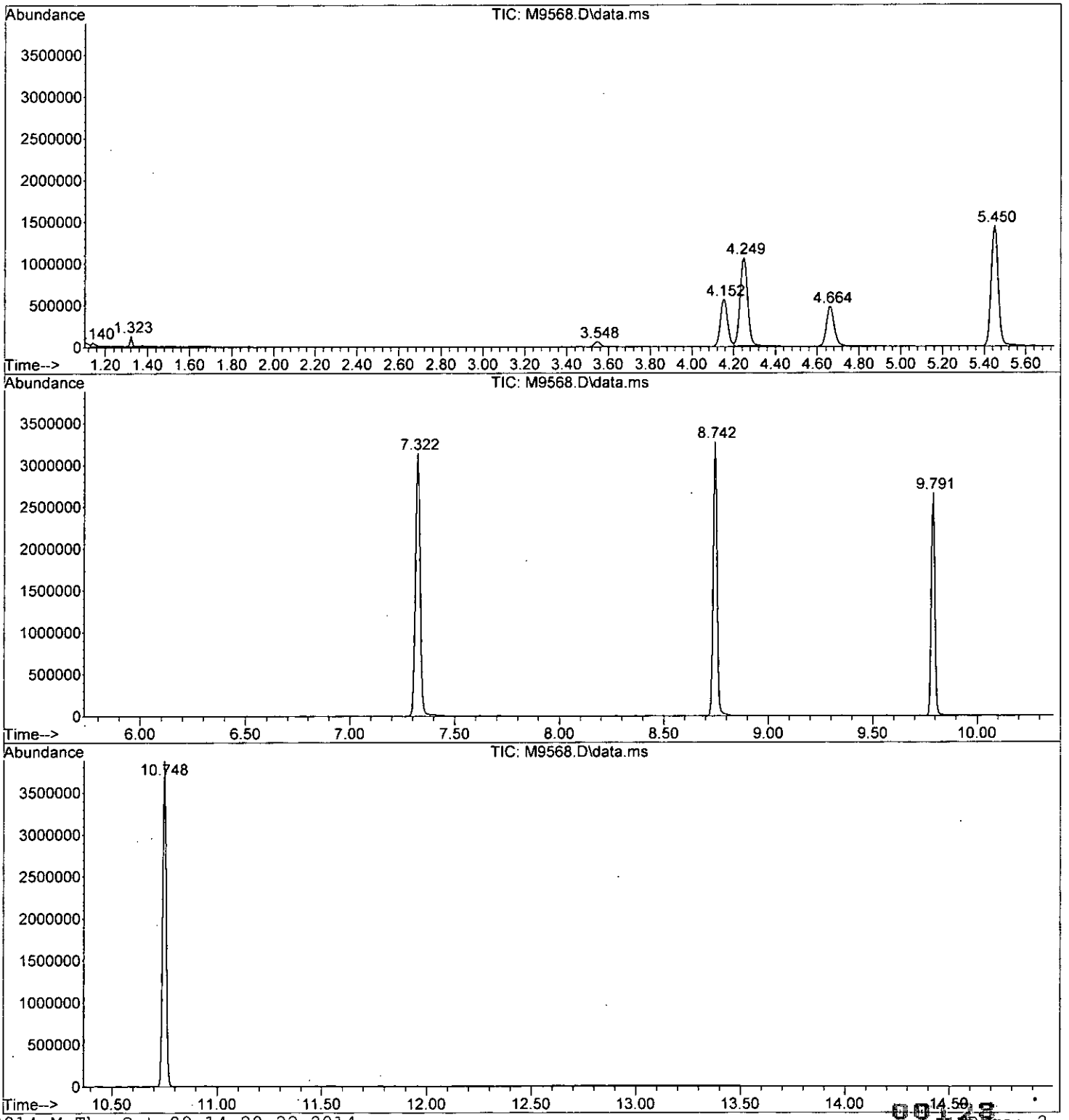
Sum of corrected areas: 25437124

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\100814\
Data File : M9568.D
Acq On : 9 Oct 2014 2:10 am
Operator : K.Ruest
Sample : R1407813-013|1.0
Misc : PARSONS 11603 T4
ALS Vial : 18 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W090914.M Thu Oct 09 14:20:22 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\100814\\
Data File : M9568.D
Acq On : 9 Oct 2014 2:10 amm
Operator : K.Ruestt
Sample : R1407813-013|1.00
Misc : PARSONS 11603 T44
ALS Vial : 18 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1345
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 13:57
Sample Name:	FTMM-64-GW-812MW04-5.53	**Units:**	µg/L
Lab Code:	R1407813-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9583.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**0.52**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**3.2**	J	5.0	5.0	1.3	
71-43-2	Benzene	**0.32**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/ 2/14 1345
Date Received: 10/ 3/14
Date Analyzed: 10/9/14 13:57

Sample Name: FTMM-64-GW-812MW04-5.53
Lab Code: R1407813-014

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100914\M9583.D\

Analysis Lot: 415409
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	**0.93**	J	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	**1.4**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**0.48**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.38**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.37**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**7.8**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**0.77**	J	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**1.1**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	**0.23**	J	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**0.65**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	**0.59**	J	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.23**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1345
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 13:57
Sample Name:	FTMM-64-GW-812MW04-5.53	**Units:**	µg/L
Lab Code:	R1407813-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9583.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	10/9/14 13:57	
Dibromofluoromethane	99	85-115	10/9/14 13:57	
Toluene-d8	96	85-120	10/9/14 13:57	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/2/14
Date Received: 10/3/14
Date Analyzed: 10/9/14 1357

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-64-GW-812MW04-5.53
Lab Code: R1407813-014

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407813-014f1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9583.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 1:57 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 16:43:25 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	939094	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1486199	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1393329	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	713284	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	411035	49.65	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.30%				
48) surr1,1,2-dichloroetha...	4.658	65	390487	43.77	ppb		-0.01
Spiked Amount 50.000	Range 78 - 122		Recovery = 87.54%				
65) SURR3,Toluene-d8	7.322	98	1671252	47.84	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 95.68%				
70) SURR2,BFB	9.791	95	640962	51.24	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.48%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.323	62	82204	7.82	ppb		98
6) Chloroethane	1.567	64	5440	0.93	ppb		93
15) Acetone	2.055	43	6185	3.20	ppb		79
23) TBA	2.408	59	1374m	2.66	ppb		
26) trans-1,2-Dichloroethene	2.585	96	2654	0.32	ppb		94
34) cis-1,2-Dichloroethene	3.548	96	7187	0.77	ppb	#	58
49) Benzene	4.798	78	10635m	0.32	ppb		
66) Toluene	7.395	91	13680	0.37	ppb		93
82) Ethylbenzene	8.889	106	18520	1.43	ppb	#	89
83) (m+p)Xylene	9.004	106	17727	1.13	ppb	#	87
84) o-Xylene	9.346	106	9091	0.59	ppb	#	74
89) Isopropylbenzene	9.675	105	17393	0.48	ppb		90
95) n-Propylbenzene	10.023	91	27869	0.65	ppb		97
100) tert-Butylbenzene	10.443	119	5675	0.23	ppb		80
101) 1,2,4-Trimethylbenzene	10.480	105	15544	0.52	ppb		93
103) sec-Butylbenzene	10.620	105	7523	0.21	ppb		88
109) n-Butylbenzene	11.071	91	6270	0.23	ppb		91
117) Naphthalen	12.303	128	7767	0.38	ppb		94

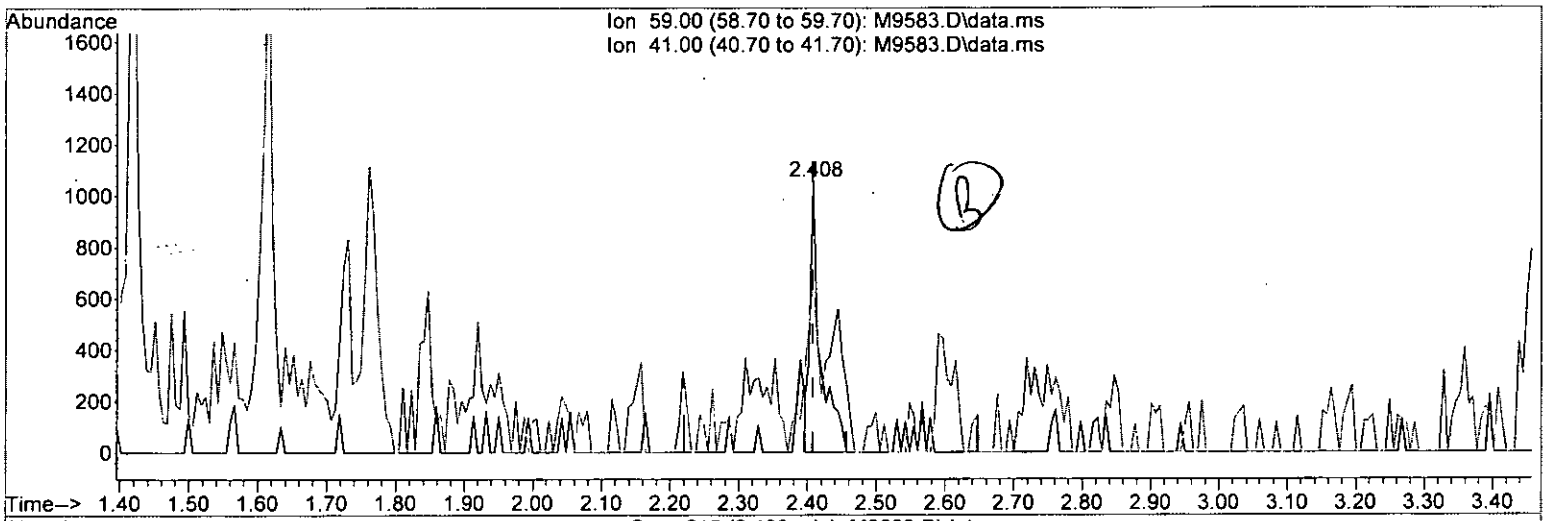
(#) = qualifier out of range (m) = manual integration (+) = signals summed

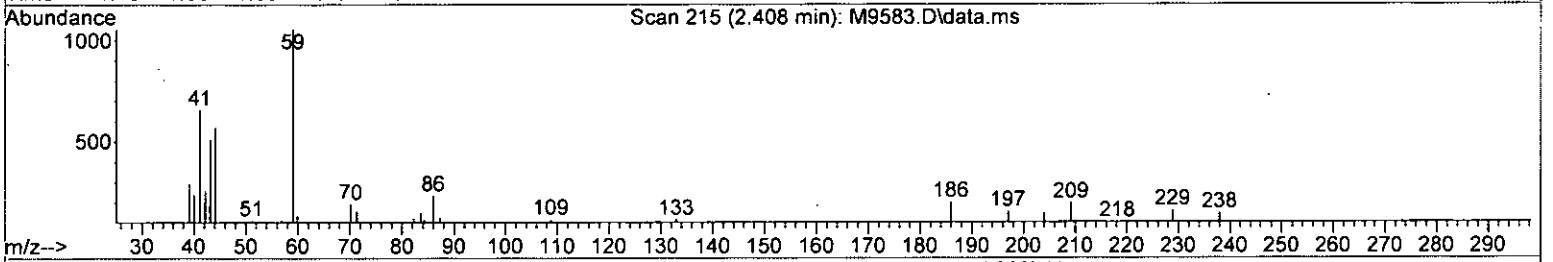
KB 10/9/14

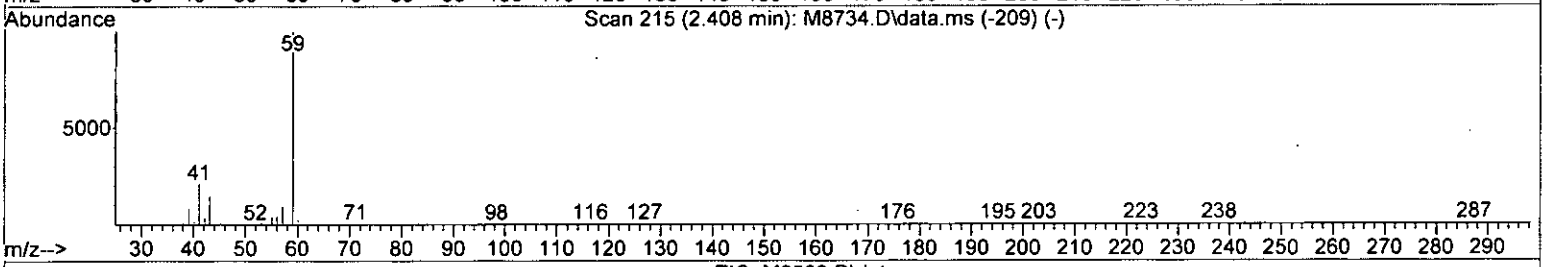
Quantitation Report (Qedit)

Sample : R1407813-014|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9583.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 1:57 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 14:11:44 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration







TIC: M9583.D\data.ms

(23) TBA

2.408min (+0.000) 2.15 ppb

response 1109

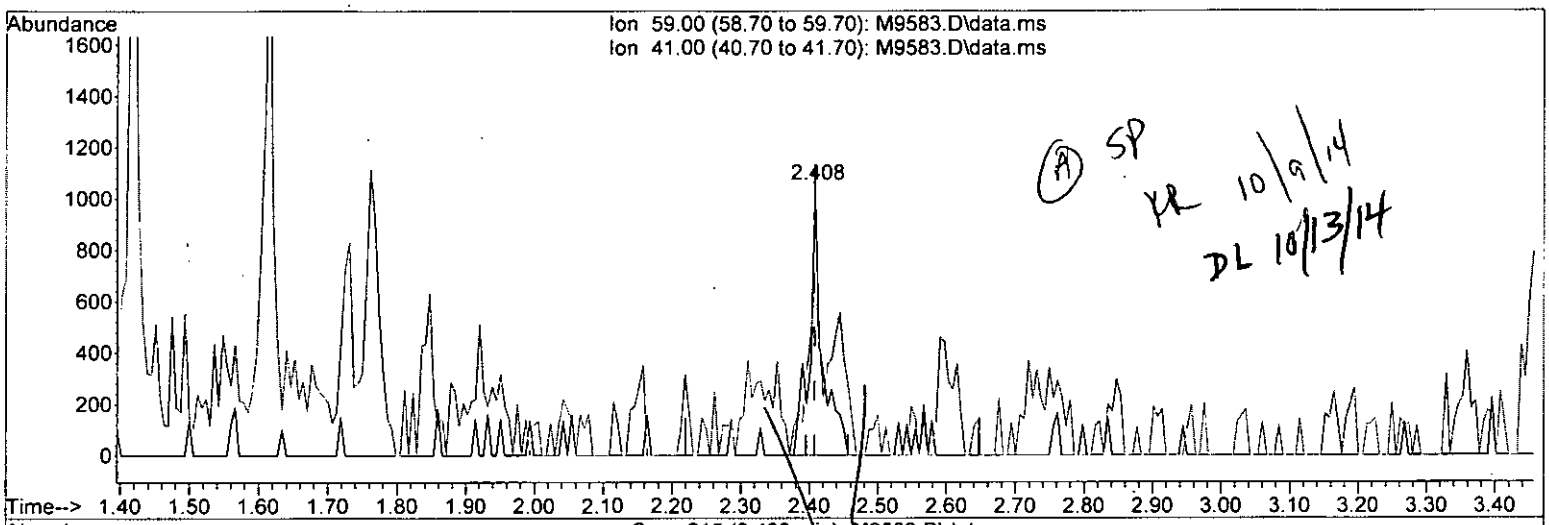
Ion	Exp%	Act%
59.00	100	100
41.00	21.60	62.24#
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Thu Oct 09 16:40:18 2014 0013 Page: 1

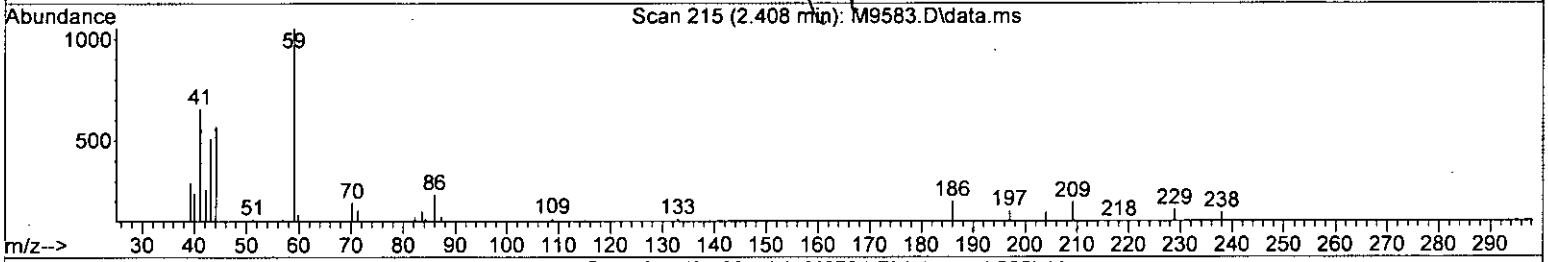
Quantitation Report (Qedit)

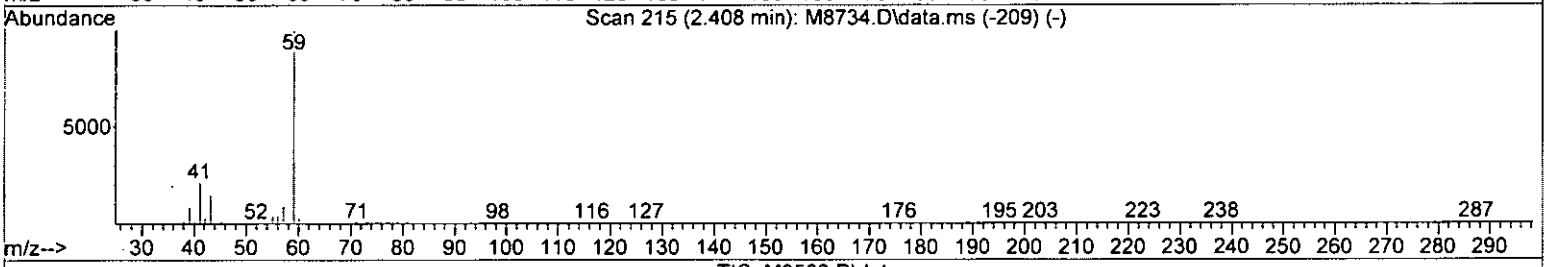
Sample : R1407813-014|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9583.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 1:57 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 14:11:44 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



(A) SP 10/9/14
KR 10/13/14
DL 10/13/14





TIC: M9583.D\data.ms

(23) TBA

2.408min (+0.000) 2.66 ppb m

response 1374

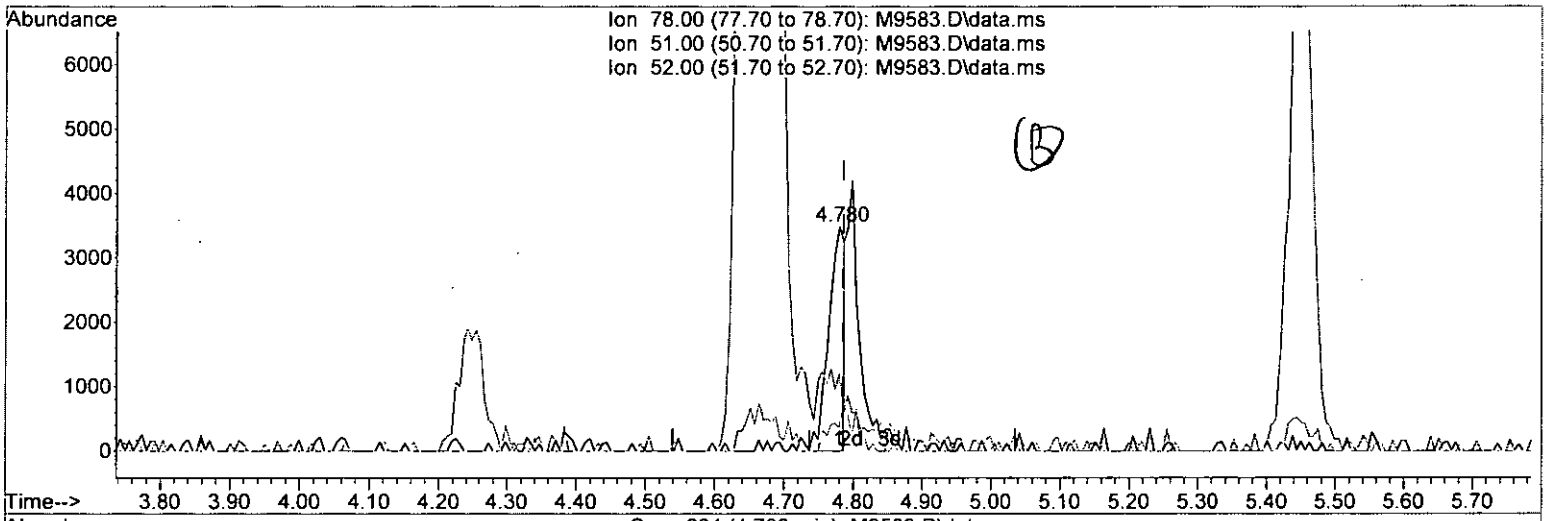
Ion	Exp%	Act%
59.00	100	100
41.00	21.60	62.24#
0.00	0.00	0.00
0.00	0.00	0.00

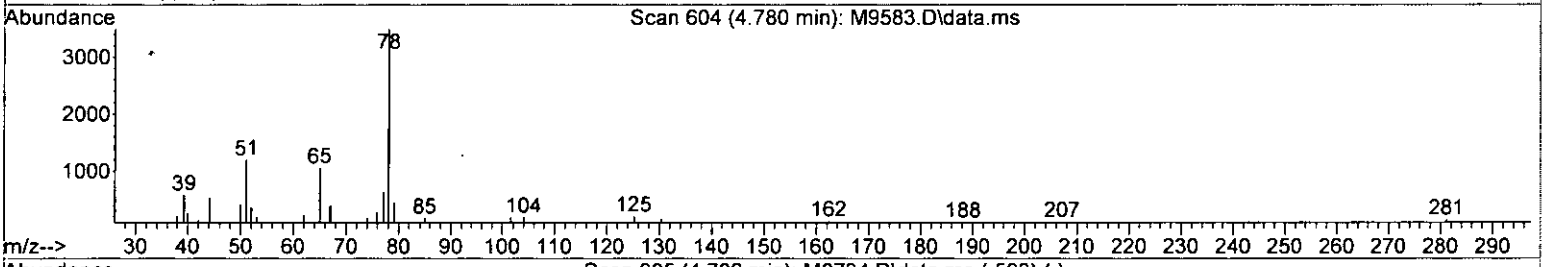
W090914.M Thu Oct 09 16:40:24 2014 Page: 1

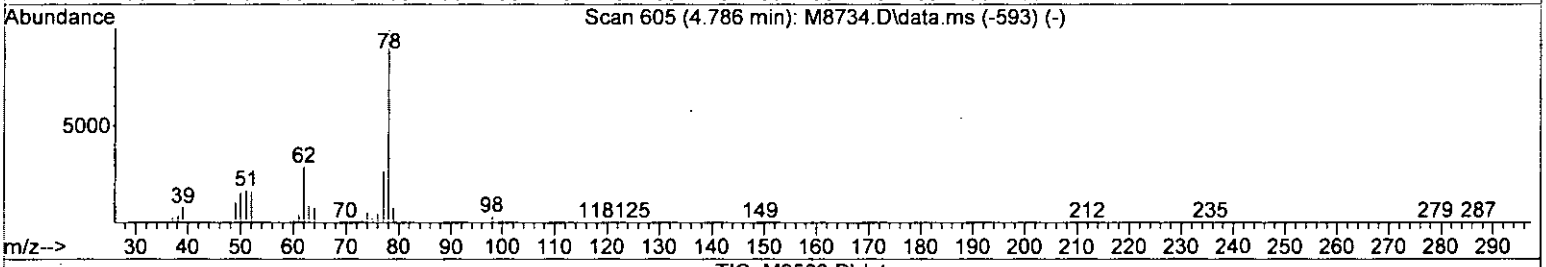
Quantitation Report (Qedit)

Sample : R1407813-014|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9583.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 1:57 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 14:11:44 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration







TIC: M9583.D\data.ms

(49) Benzene (P)

4.780min (-0.006) 0.16 ppb

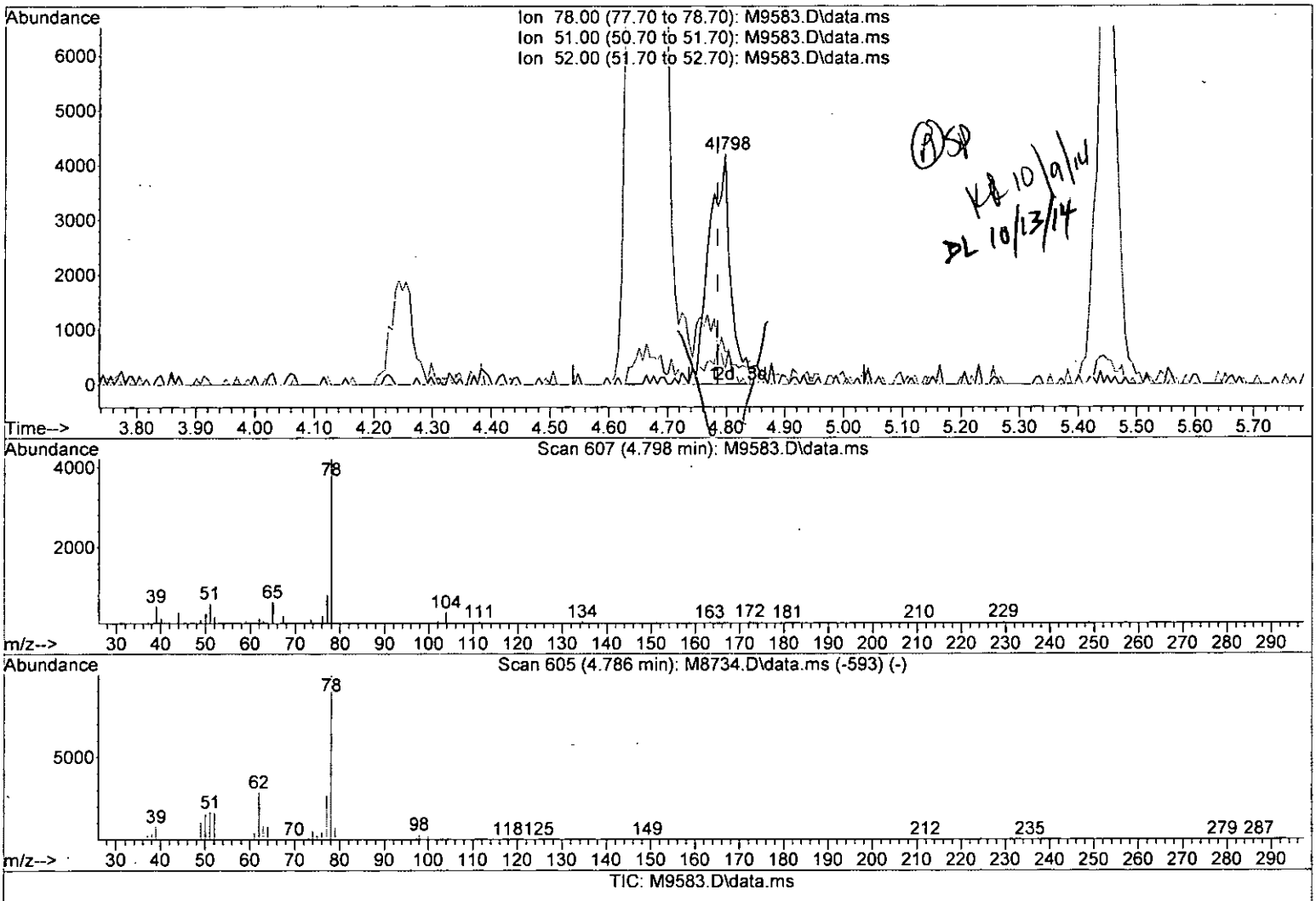
response 5531

Ion	Exp%	Act%
78.00	100	100
51.00	19.80	34.48
52.00	17.00	10.43
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : R1407813-014|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9583.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 1:57 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 14:11:44 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



TIC: M9583.D\data.ms

(49) Benzene (P)

4.798min (+0.012) 0.32 ppb m

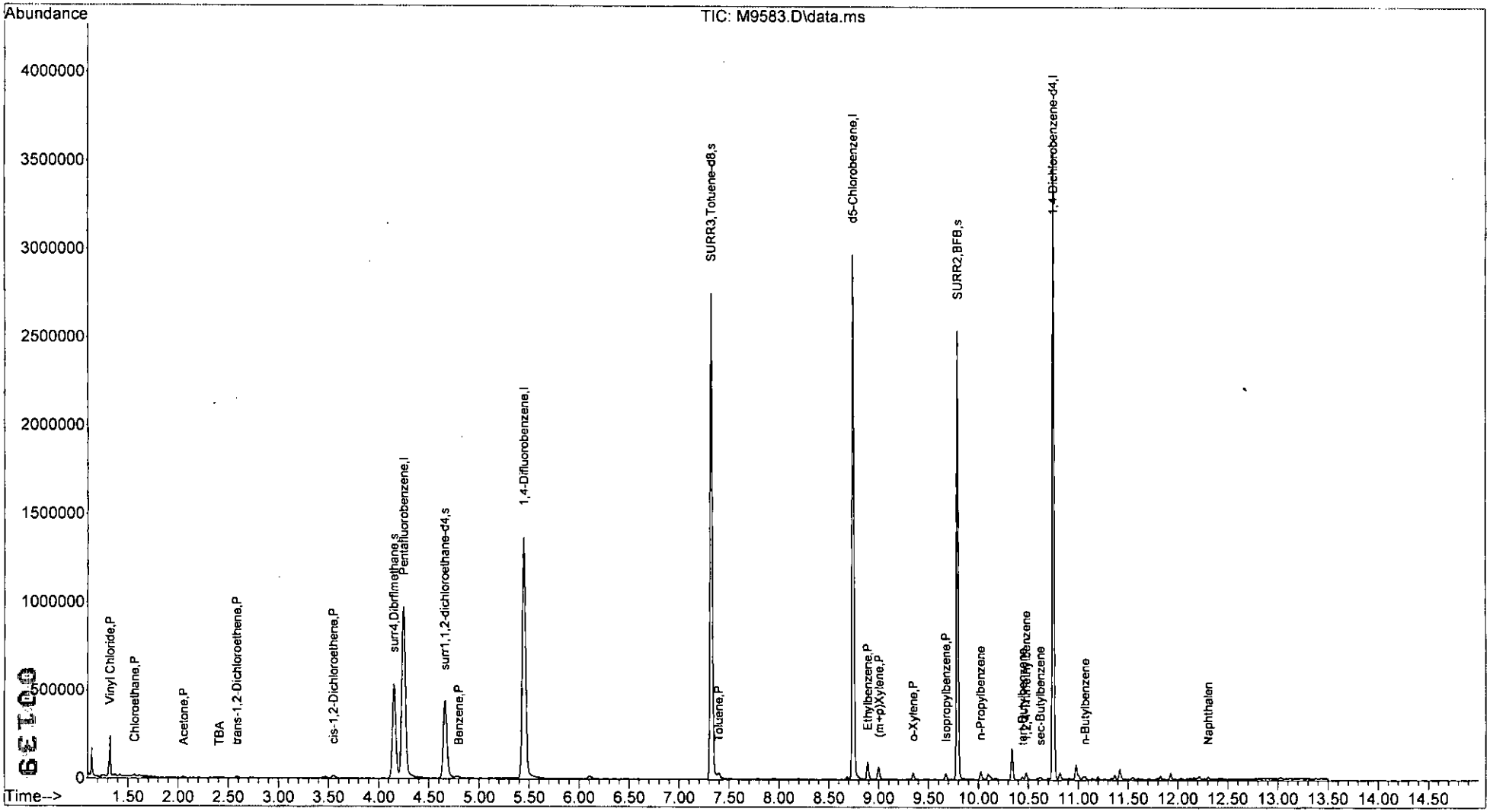
response 10635

Ion	Exp%	Act%
78.00	100	100
51.00	19.80	14.12
52.00	17.00	5.90
0.00	0.00	0.00

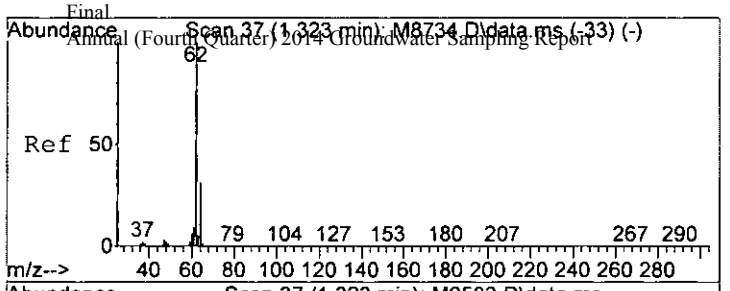
Quantitation Report (QT Reviewed)

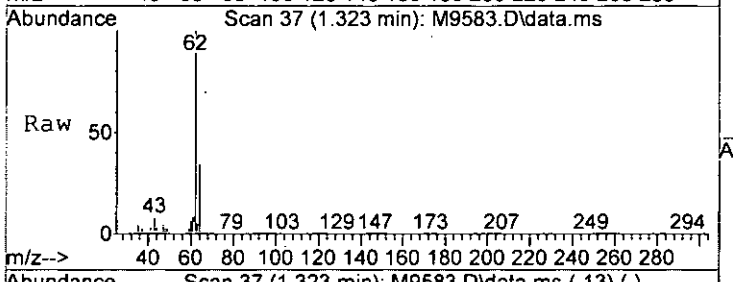
Sample : R1407813-014|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9583.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 1:57 pm
Operator : K.Ruest
InstName : MSVOA-12

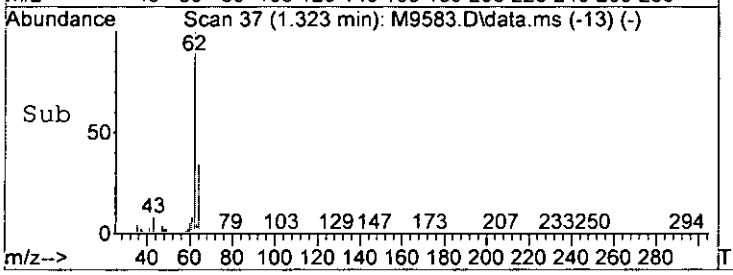
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 16:43:25 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



W090914.M Thu Oct 09 16:43:59 2014 Page: 2



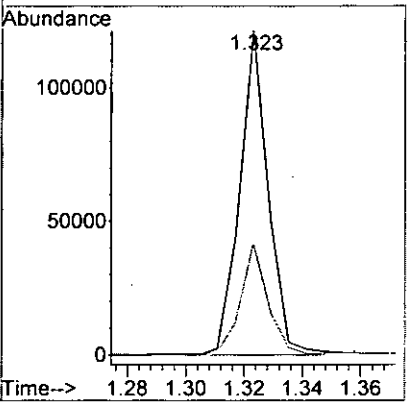


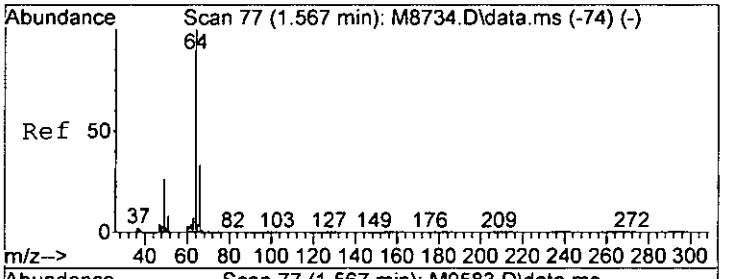


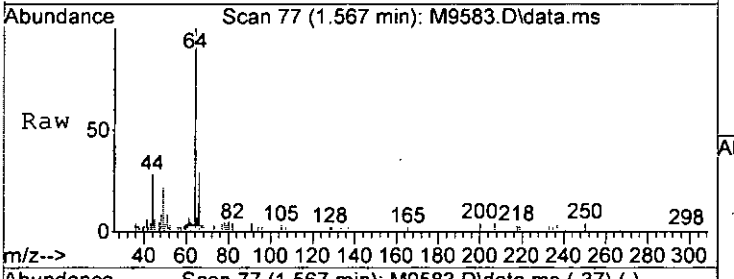
#4
Vinyl Chloride
Concen: 7.82 ppb
RT: 1.323 min Scan# 37
Delta R.T. 0.000 min
Lab File: M9583.D
Acq: 9 Oct 2014 1:57 pm

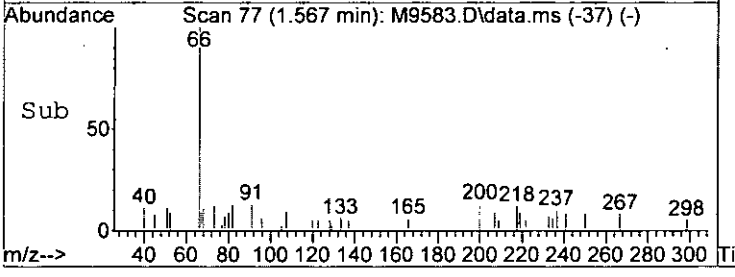
Tgt Ion: 62 Resp: 82204

Ion	Ratio	Lower	Upper
62	100		
64	34.2	13.0	53.0





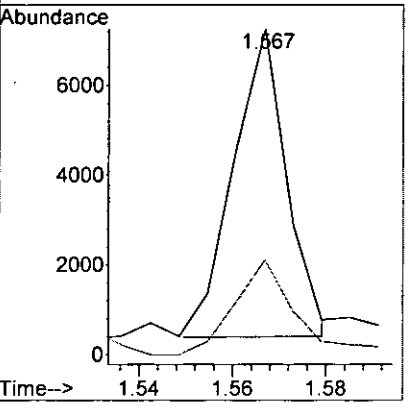


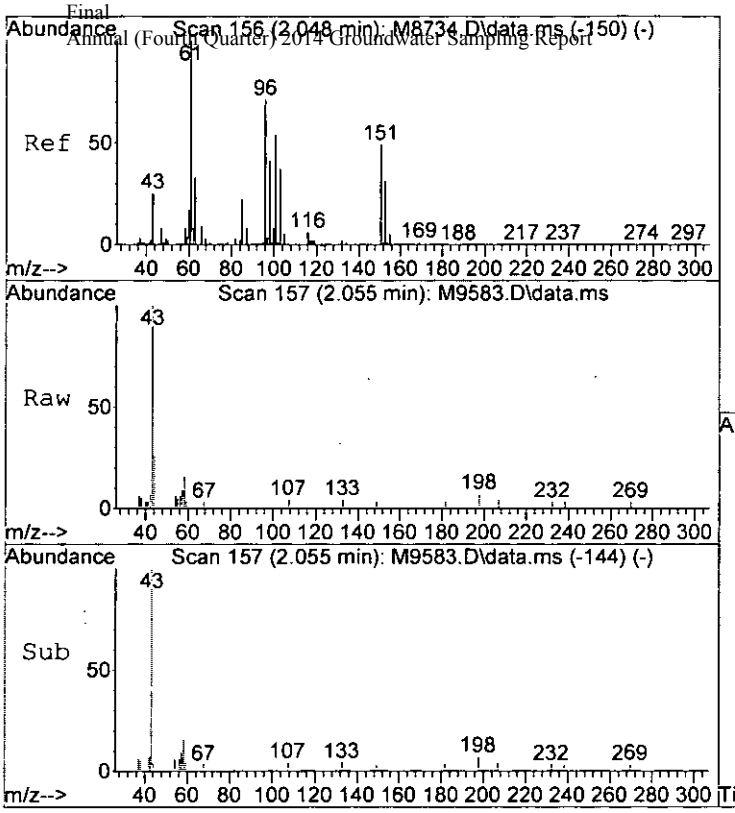


#6
Chloroethane
Concen: 0.93 ppb
RT: 1.567 min Scan# 77
Delta R.T. 0.000 min
Lab File: M9583.D
Acq: 9 Oct 2014 1:57 pm

Tgt Ion: 64 Resp: 5440

Ion	Ratio	Lower	Upper
64	100		
66	29.0	12.7	52.7

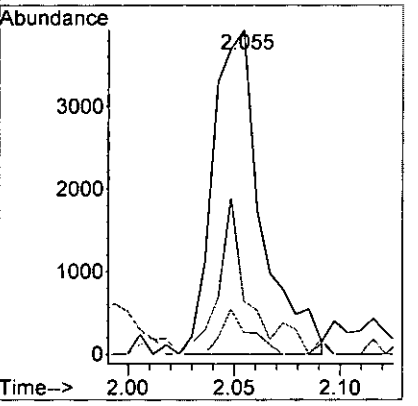


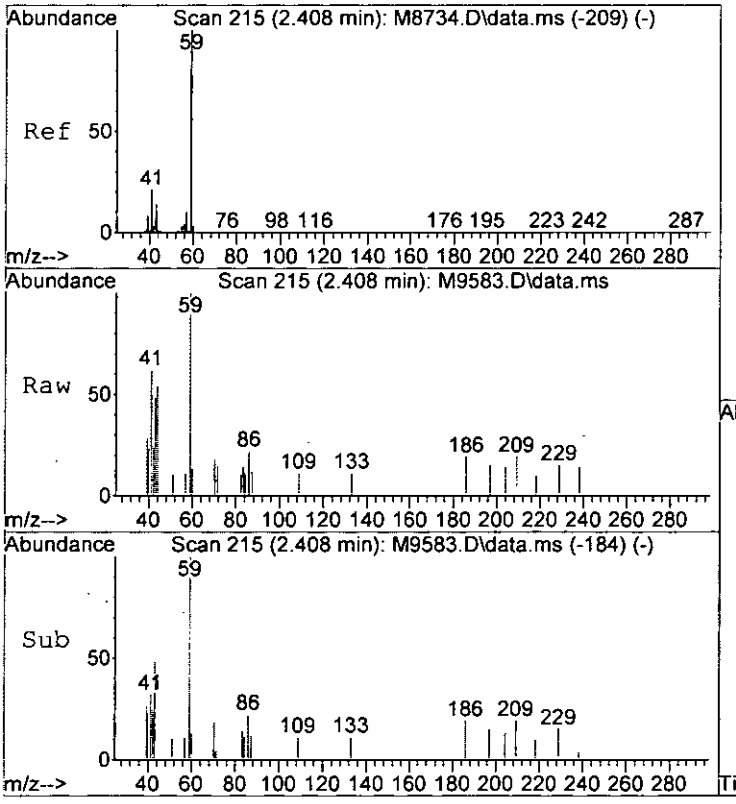


#15
Acetone
Concen: 3.20 ppb
RT: 2.055 min Scan# 157
Delta R.T. 0.006 min
Lab File: M9583.D
Acq: 9 Oct 2014 1:57 pm

Tgt Ion: 43 Resp: 6185

Ion	Ratio	Lower	Upper
43	100		
58	16.4	10.3	50.3
42	6.7	0.0	27.1

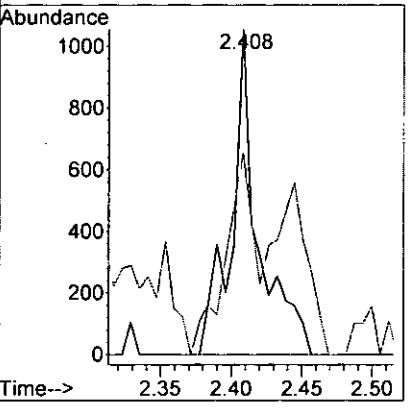


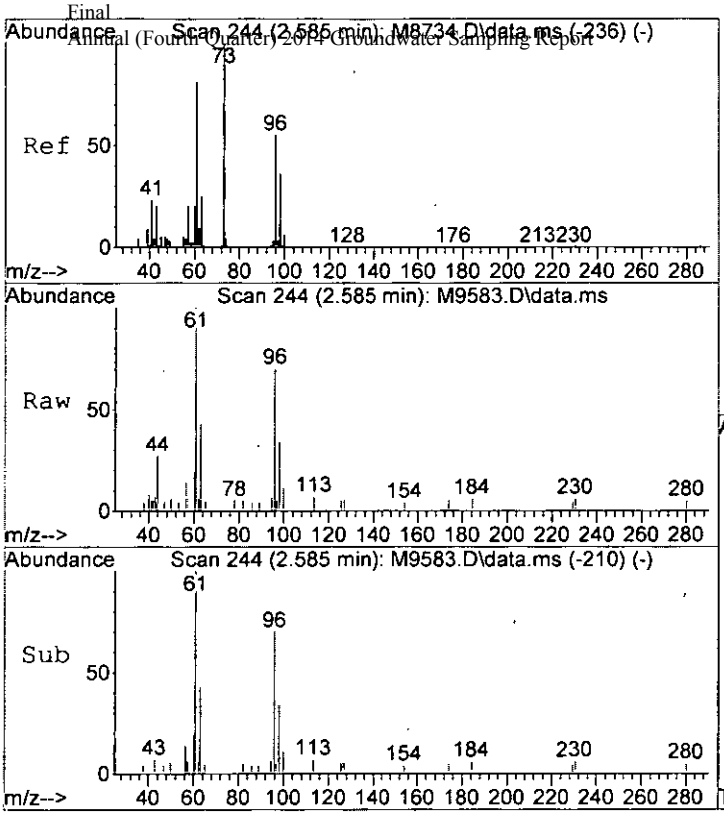


#23
TBA
Concen: 2.66 ppb m
RT: 2.408 min Scan# 215
Delta R.T. 0.000 min
Lab File: M9583.D
Acq: 9 Oct 2014 1:57 pm

Tgt Ion: 59 Resp: 1374

Ion	Ratio	Lower	Upper
59	100		
41	62.2	1.6	41.6#

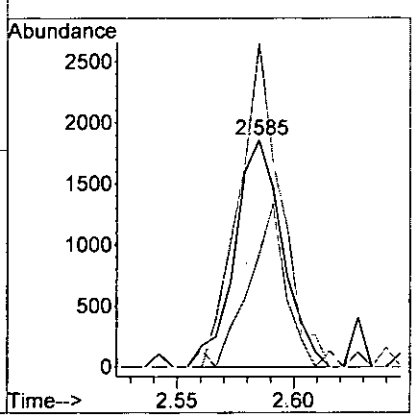


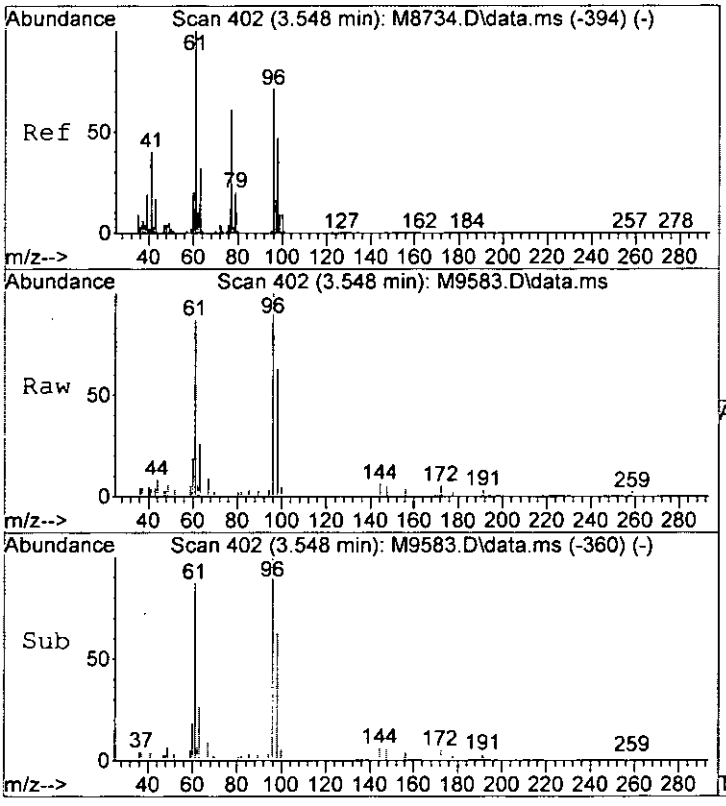


#26
trans-1,2-Dichloroethene
Concen: 0.32 ppb
RT: 2.585 min Scan# 244
Delta R.T. 0.000 min
Lab File: M9583.D
Acq: 9 Oct 2014 1:57 pm

Tgt Ion: 96 Resp: 2654

Ion	Ratio	Lower	Upper
96	100		
98	49.2	44.1	84.1
61	142.8	123.1	163.1

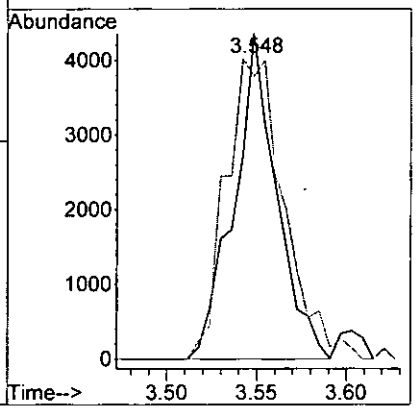


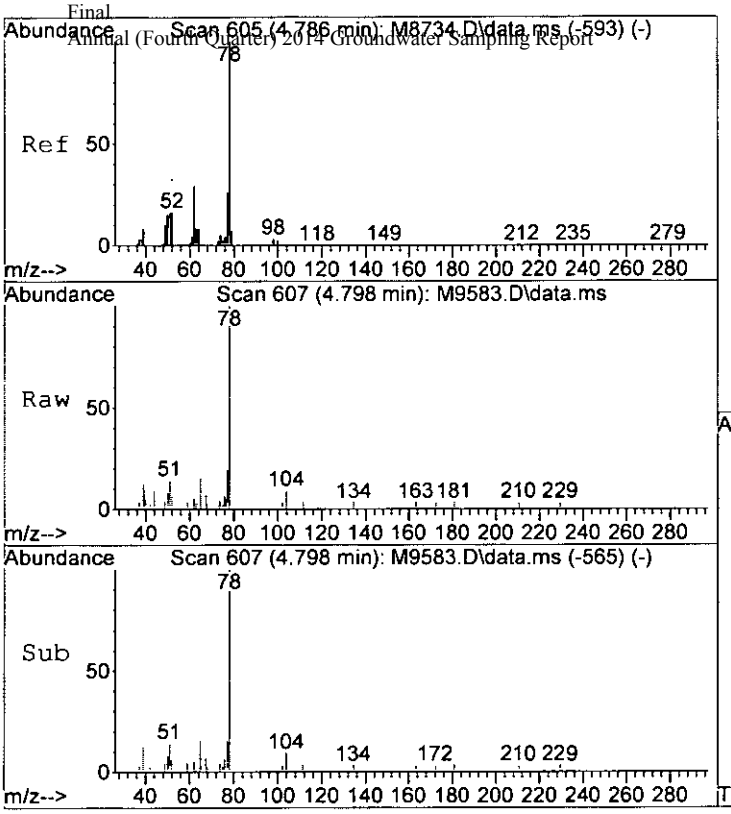


#34
cis-1,2-Dichloroethene
Concen: 0.77 ppb
RT: 3.548 min Scan# 402
Delta R.T. 0.000 min
Lab File: M9583.D
Acq: 9 Oct 2014 1:57 pm

Tgt Ion: 96 Resp: 7187

Ion	Ratio	Lower	Upper
96	100		
61	86.7	117.4	157.4#

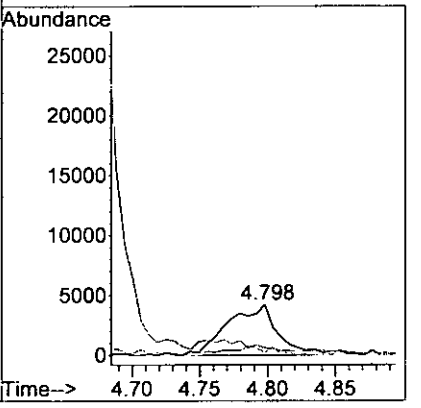


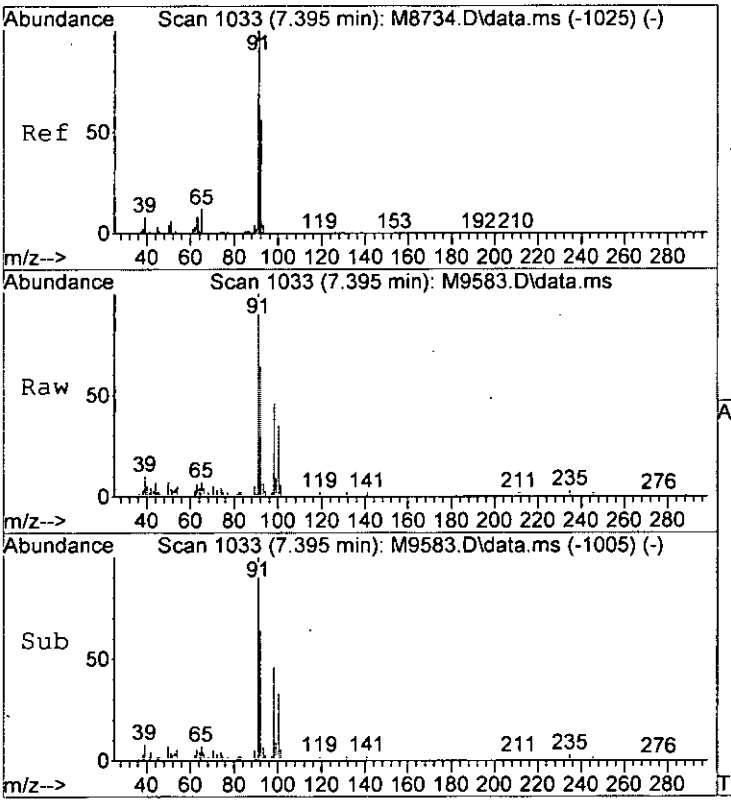


#49
Benzene
Concen: 0.32 ppb m
RT: 4.798 min Scan# 607
Delta R.T. 0.012 min
Lab File: M9583.D
Acq: 9 Oct 2014 1:57 pm

Tgt Ion: 78 Resp: 10635

Ion	Ratio	Lower	Upper
78	100		
51	14.1	0.0	39.8
52	5.9	0.0	37.0

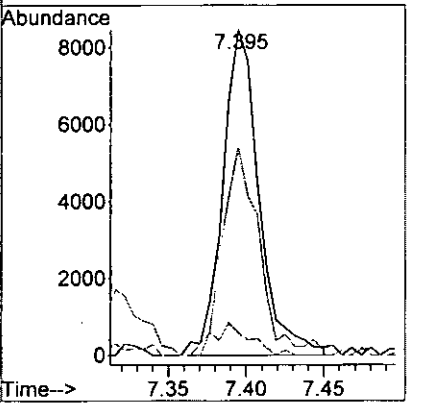


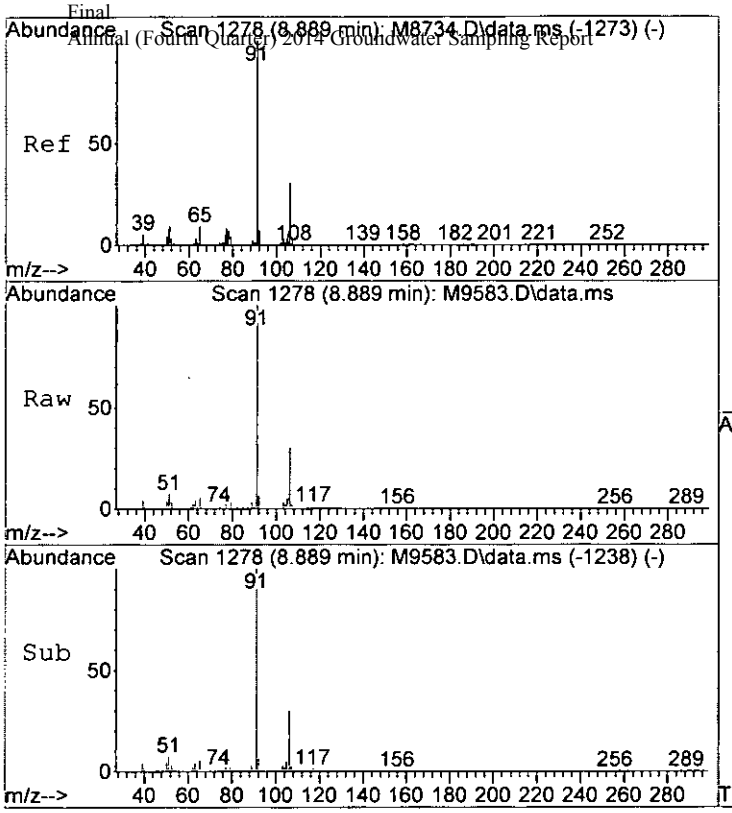


#66
Toluene
Concen: 0.37 ppb
RT: 7.395 min Scan# 1033
Delta R.T. 0.000 min
Lab File: M9583.D
Acq: 9 Oct 2014 1:57 pm

Tgt Ion: 91 Resp: 13680

Ion	Ratio	Lower	Upper
91	100		
92	63.8	38.8	78.8
65	6.9	0.0	30.9

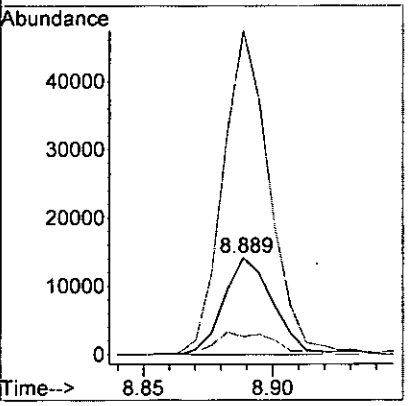


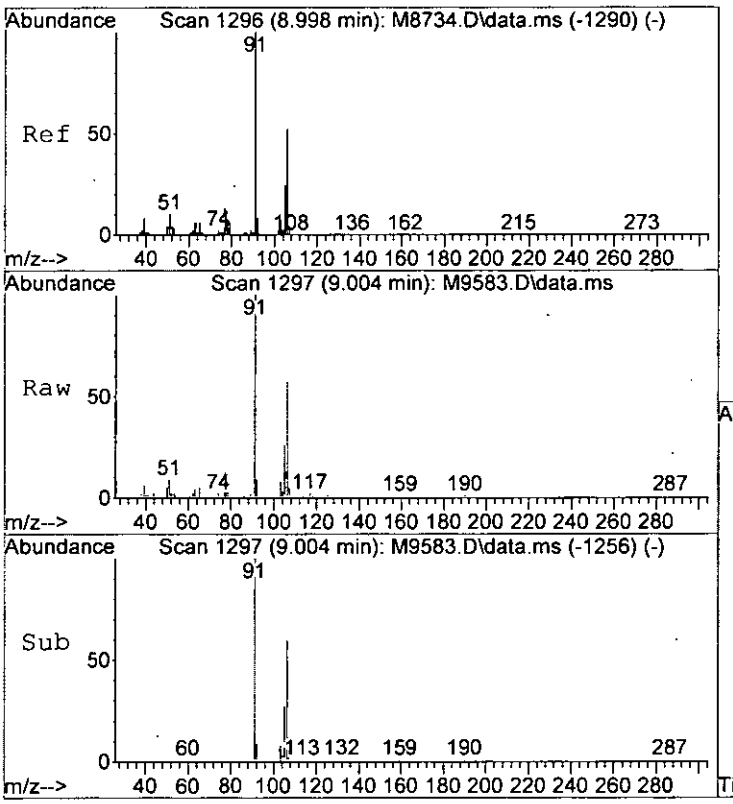


#82
Ethylbenzene
Concen: 1.43 ppb
RT: 8.889 min Scan# 1278
Delta R.T. -0.006 min
Lab File: M9583.D
Acq: 9 Oct 2014 1:57 pm

Tgt Ion:106 Resp: 18520

Ion	Ratio	Lower	Upper
106	100		
91	334.9	292.7	332.7#
65	18.1	6.7	46.7

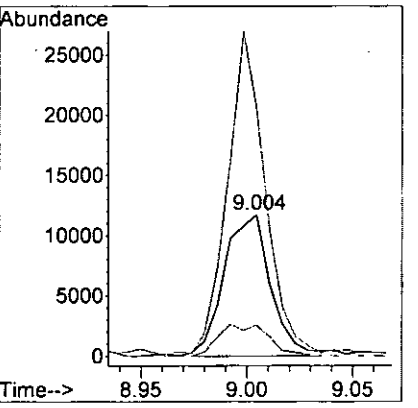


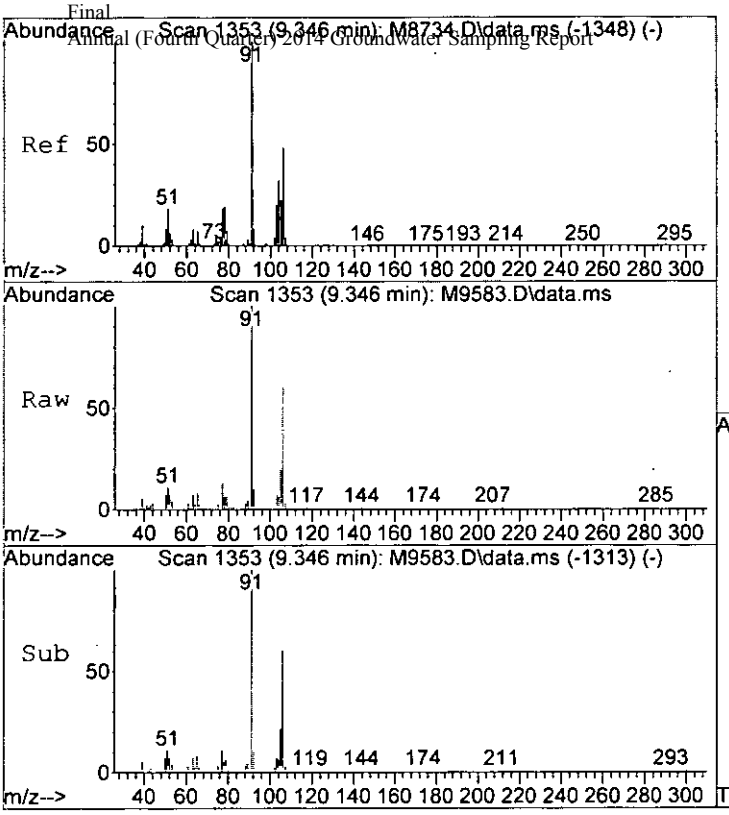


#83
(m+p)Xylene
Concen: 1.13 ppb
RT: 9.004 min Scan# 1297
Delta R.T. 0.000 min
Lab File: M9583.D
Acq: 9 Oct 2014 1:57 pm

Tgt Ion:106 Resp: 17727

Ion	Ratio	Lower	Upper
106	100		
91	174.2	175.3	215.3#
77	21.9	5.5	45.5

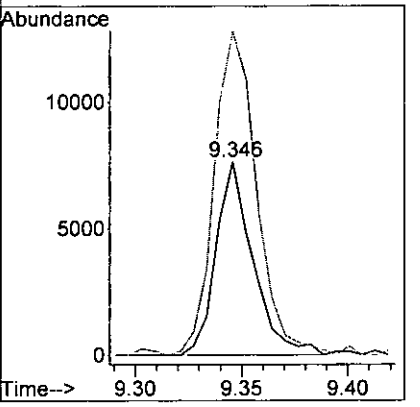


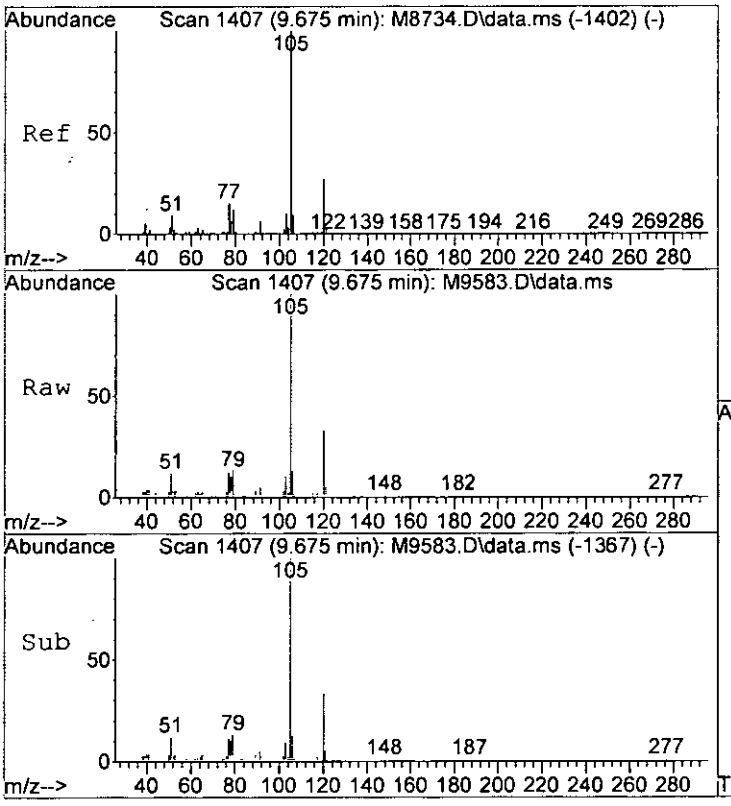


#84
o-Xylene
Concen: 0.59 ppb
RT: 9.346 min Scan# 1353
Delta R.T. -0.006 min
Lab File: M9583.D
Acq: 9 Oct 2014 1:57 pm

Tgt Ion:106 Resp: 9091

Ion	Ratio	Lower	Upper
106	100		
91	167.7	187.3	227.3#

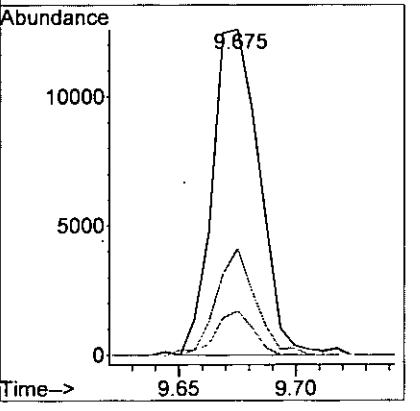


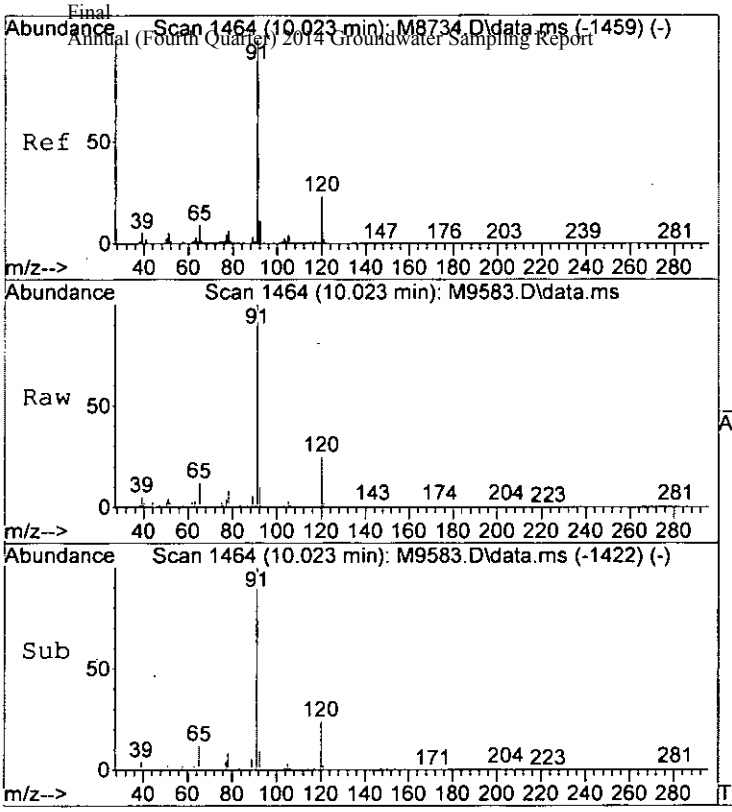


#89
Isopropylbenzene
Concen: 0.48 ppb
RT: 9.675 min Scan# 1407
Delta R.T. 0.000 min
Lab File: M9583.D
Acq: 9 Oct 2014 1:57 pm

Tgt Ion:105 Resp: 17393

Ion	Ratio	Lower	Upper
105	100		
120	32.5	7.6	47.6
106	13.4	0.0	28.7

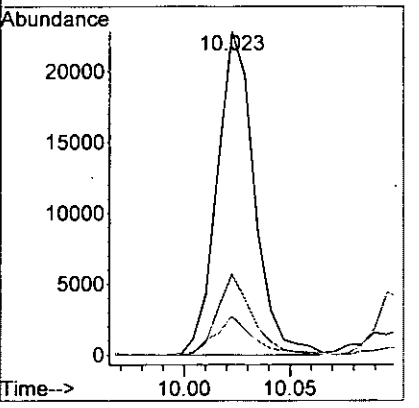


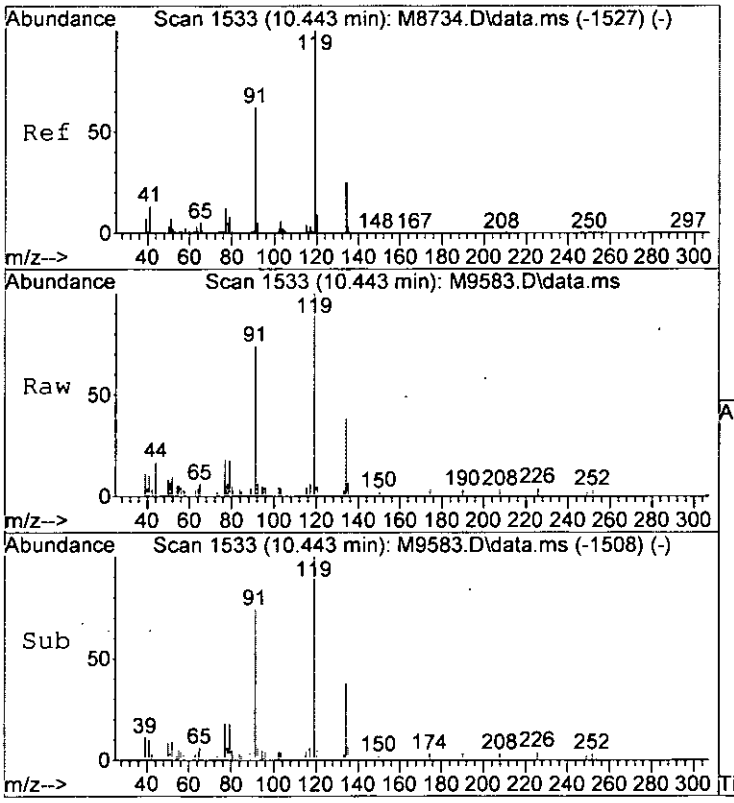


#95
n-Propylbenzene
Concen: 0.65 ppb
RT: 10.023 min Scan# 1464
Delta R.T. -0.006 min
Lab File: M9583.D
Acq: 9 Oct 2014 1:57 pm

Tgt Ion: 91 Resp: 27869

Ion	Ratio	Lower	Upper
91	100		
120	24.8	3.5	43.5
65	12.0	0.0	30.5

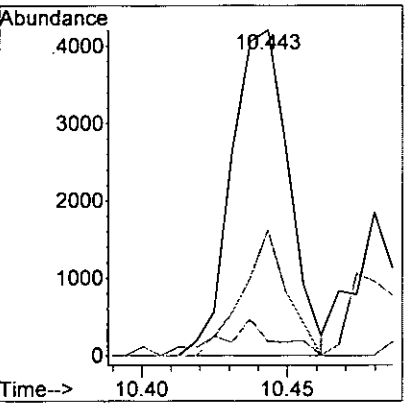


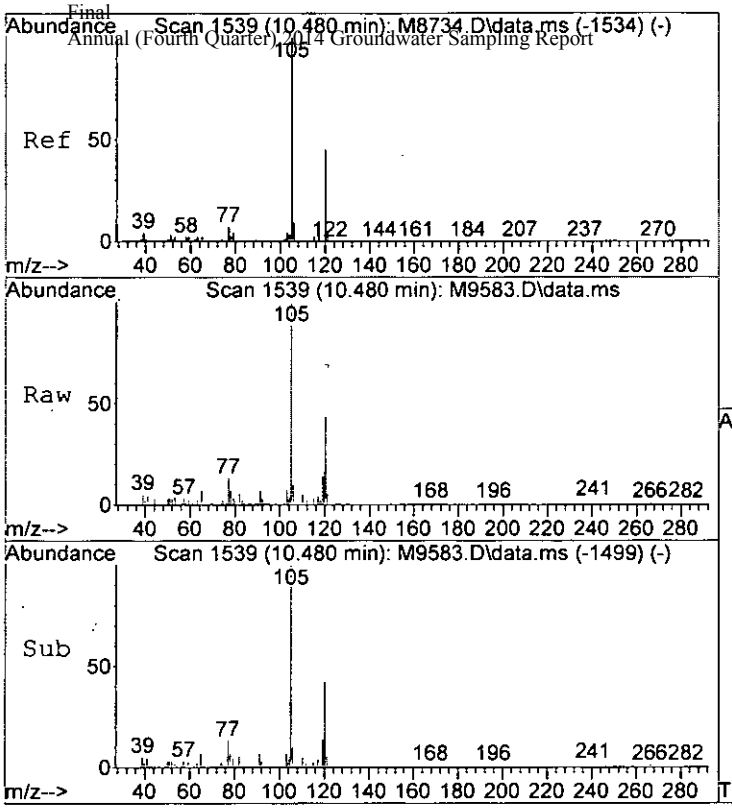


#100
tert-Butylbenzene
Concen: 0.23 ppb
RT: 10.443 min Scan# 1533
Delta R.T. 0.000 min
Lab File: M9583.D
Acq: 9 Oct 2014 1:57 pm

Tgt Ion:119 Resp: 5675

Ion	Ratio	Lower	Upper
119	100		
134	38.5	6.2	46.2
103	4.3	0.0	26.4

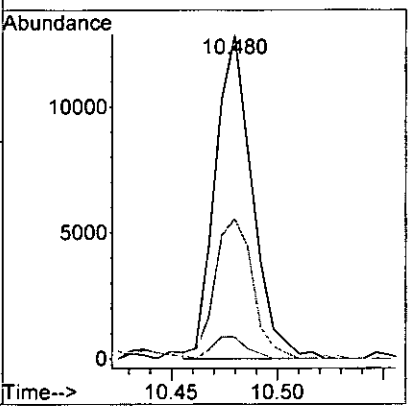


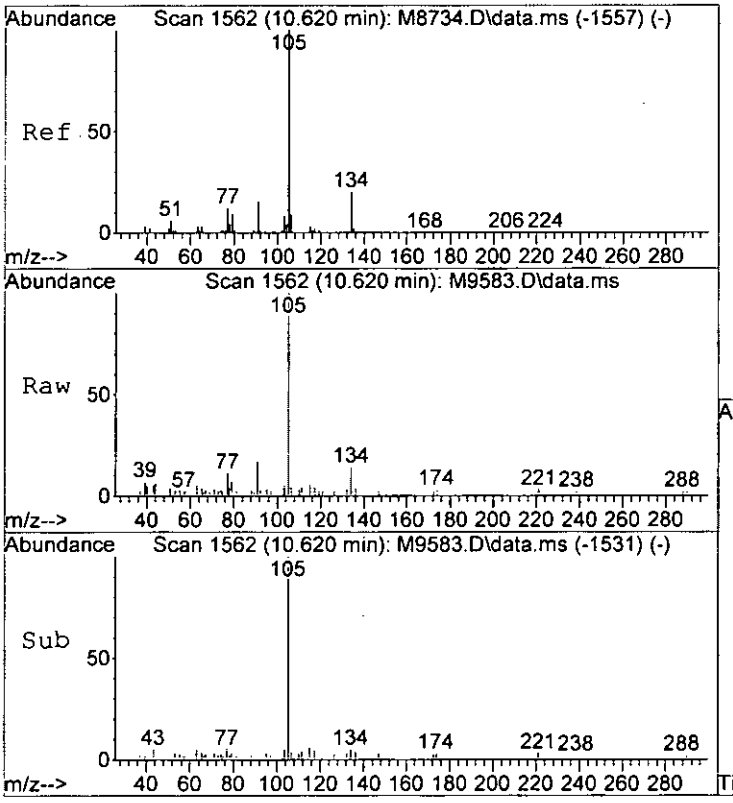


#101
1,2,4-Trimethylbenzene
Concen: 0.52 ppb
RT: 10.480 min Scan# 1539
Delta R.T. 0.000 min
Lab File: M9583.D
Acq: 9 Oct 2014 1:57 pm

Tgt Ion:105 Resp: 15544

Ion	Ratio	Lower	Upper
105	100		
120	43.2	27.9	67.9
65	6.7	0.0	24.3

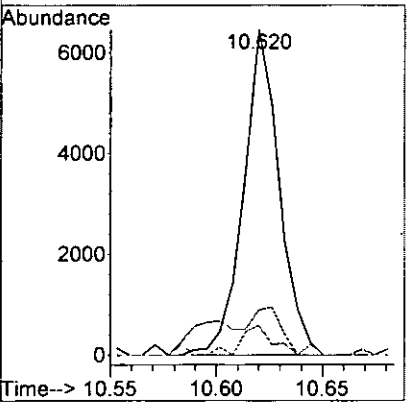


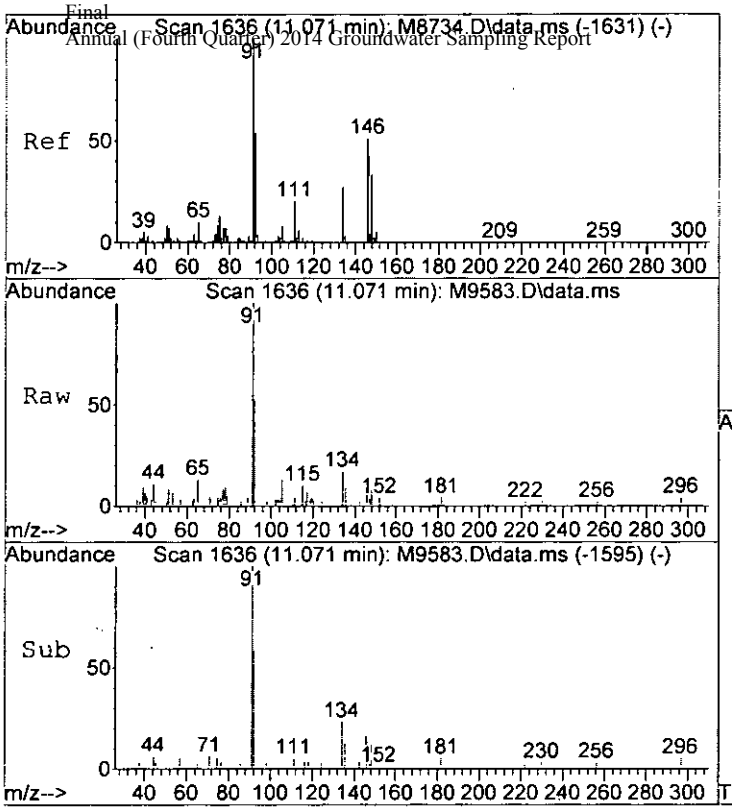


#103
sec-Butylbenzene
Concen: 0.21 ppb
RT: 10.620 min Scan# 1562
Delta R.T. -0.006 min
Lab File: M9583.D
Acq: 9 Oct 2014 1:57 pm

Tgt Ion:105 Resp: 7523

Ion	Ratio	Lower	Upper
105	100		
134	13.7	0.7	40.7
103	9.0	0.0	28.1

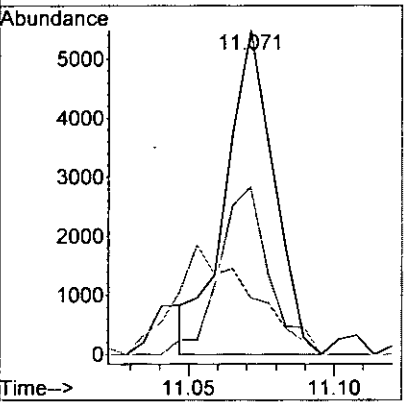


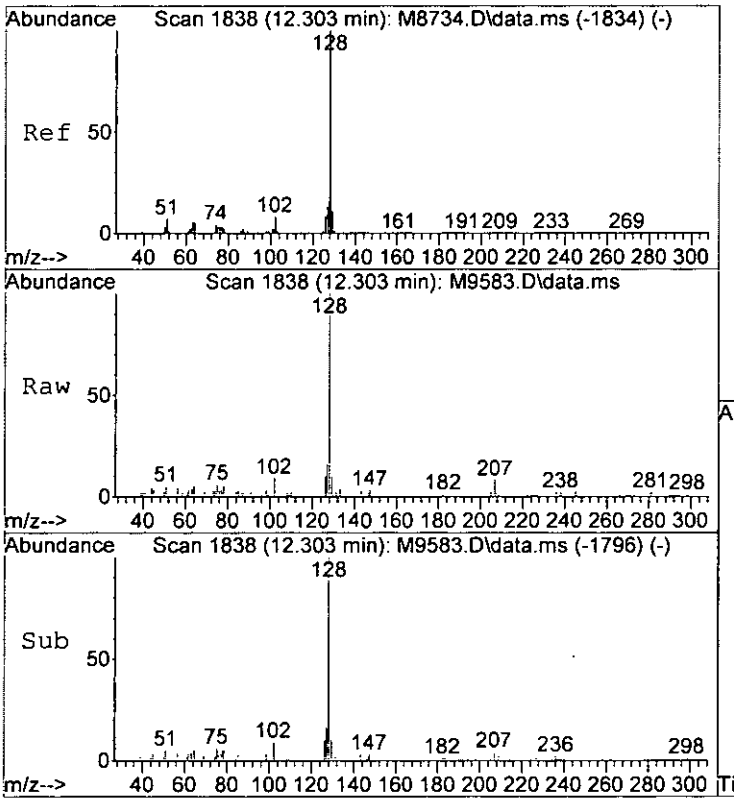


#109
n-Butylbenzene
Concen: 0.23 ppb
RT: 11.071 min Scan# 1636
Delta R.T. 0.000 min
Lab File: M9583.D
Acq: 9 Oct 2014 1:57 pm

Tgt Ion: 91 Resp: 6270

Ion	Ratio	Lower	Upper
91	100		
92	51.5	34.4	74.4
134	17.5	7.7	47.7

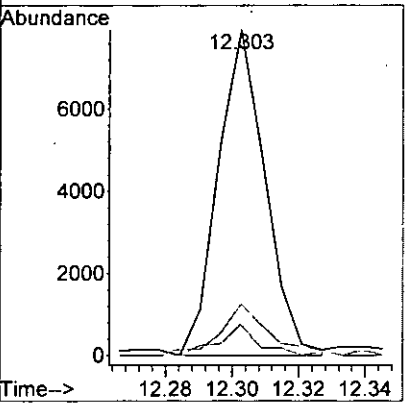




#117
Naphthalen
Concen: 0.38 ppb
RT: 12.303 min Scan# 1838
Delta R.T. 0.000 min
Lab File: M9583.D
Acq: 9 Oct 2014 1:57 pm

Tgt Ion:128 Resp: 7767

Ion	Ratio	Lower	Upper
128	100		
127	15.6	0.0	32.5
102	9.4	0.0	28.0



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9583.D
Acq On : 9 Oct 2014 1:57 pm
Operator : K.Ruest
Sample : R1407813-014|1.0
Misc : PARSONS 11603 T4
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: M9583.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.140	5	7	13	rVB2	161660	104918	2.53%	0.432%
2	1.323	32	37	40	rBV2	225955	194726	4.69%	0.801%
3	4.152	488	501	509	rBV2	535320	1264019	30.43%	5.202%
4	4.249	509	517	529	rVB	957096	2390038	57.53%	9.835%
5	4.664	575	585	598	rBV	441862	1134175	27.30%	4.667%
6	5.450	704	714	734	rBV	1362870	3137815	75.53%	12.913%
7	7.322	1014	1021	1030	rBV	2752585	4154291	100.00%	17.096%
8	7.395	1030	1033	1041	rVB2	27020	52231	1.26%	0.215%
9	8.742	1249	1254	1266	rBV	2971357	3875261	93.28%	15.947%
10	8.889	1274	1278	1287	rVB	97681	129552	3.12%	0.533%
11	8.998	1289	1296	1308	rVB	67351	103692	2.50%	0.427%
12	9.346	1348	1353	1359	rVB	39060	51802	1.25%	0.213%
13	9.675	1403	1407	1412	rBV2	32507	43962	1.06%	0.181%
14	9.791	1421	1426	1433	rBV	2541193	2946723	70.93%	12.126%
15	10.023	1460	1464	1472	rVB	46013	59740	1.44%	0.246%
16	10.096	1472	1476	1479	rBV	30784	43526	1.05%	0.179%
17	10.333	1511	1515	1523	rBV	175965	222379	5.35%	0.915%
18	10.480	1536	1539	1543	rVB	35978	42002	1.01%	0.173%
19	10.748	1578	1583	1591	rBV	3555213	4111255	98.96%	16.919%
20	10.821	1591	1595	1603	rVB	37382	52151	1.26%	0.215%
21	10.980	1616	1621	1624	rBV2	80382	104710	2.52%	0.431%
22	11.419	1688	1693	1699	rBV2	59683	81245	1.96%	0.334%

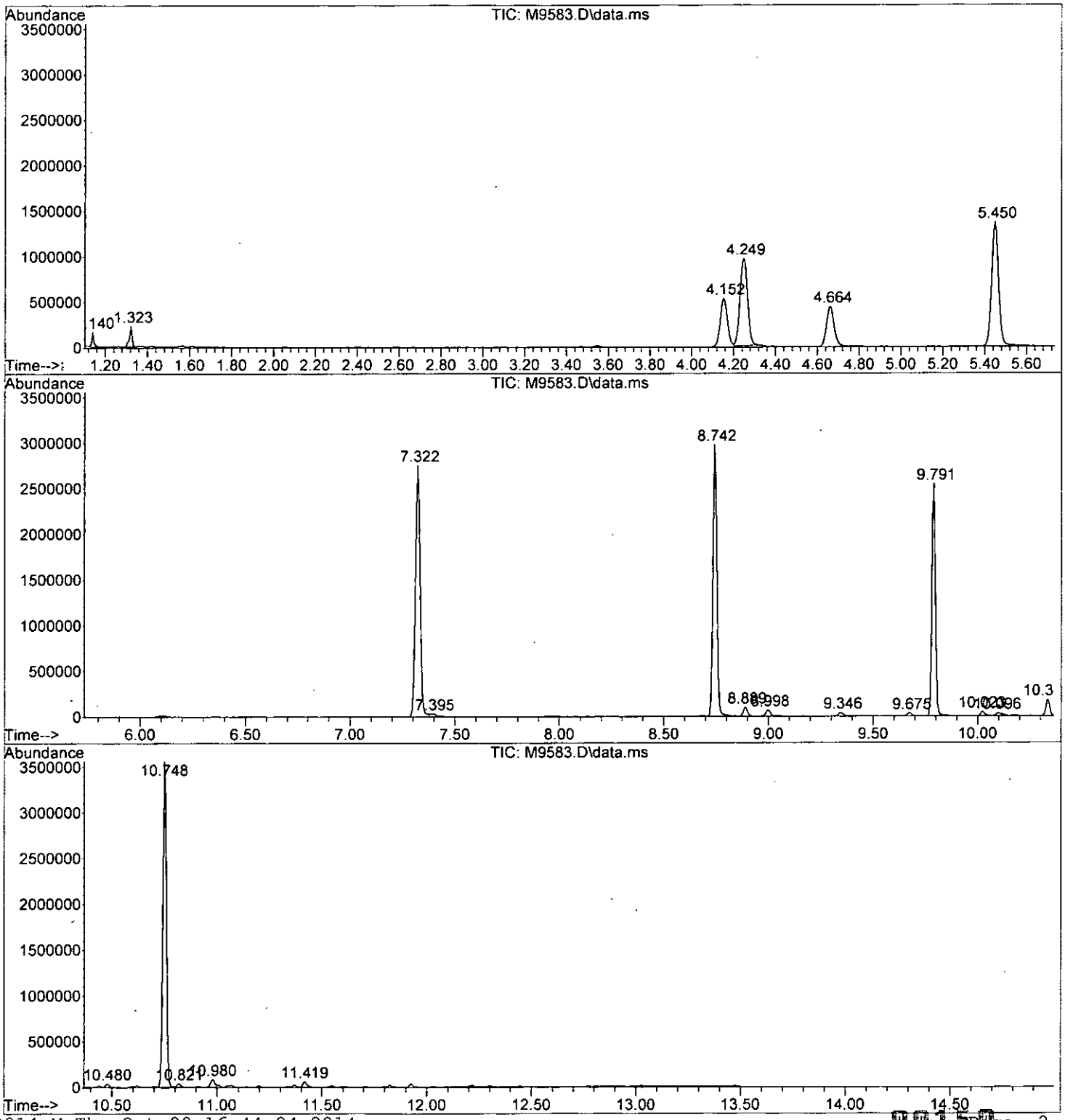
Sum of corrected areas: 24300213

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9583.D
Acq On : 9 Oct 2014 1:57 pm
Operator : K.Ruest
Sample : R1407813-014|1.0
Misc : PARSONS 11603 T4
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W090914.M Thu Oct 09 16:44:24 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\100914\\
Data File : M9583.D
Acq On : 9 Oct 2014 1:57 pmm
Operator : K.Ruestt
Sample : R1407813-014|1.00
Misc : PARSONS 11603 T44
ALS Vial : 4 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1135
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 14:29
Sample Name:	FTMM-61-GW-283MW02-13.26	**Units:**	µg/L
Lab Code:	R1407813-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9584.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1135
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 14:29
Sample Name:	FTMM-61-GW-283MW02-13.26	**Units:**	µg/L
Lab Code:	R1407813-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9584.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1135
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 14:29
Sample Name:	FTMM-61-GW-283MW02-13.26	**Units:**	µg/L
Lab Code:	R1407813-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9584.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	75-120	10/9/14 14:29	
Dibromofluoromethane	98	85-115	10/9/14 14:29	
Toluene-d8	101	85-120	10/9/14 14:29	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/2/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 1429

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-61-GW-283MW02-13.26	**Units:**	µg/L
Lab Code:	R1407813-015	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample : R1407813-015|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\100914\M9584.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 2:29 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 14:43:55 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	928319	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1495889	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1389555	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	698792	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	406778	48.82	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.64%			
48) surr1,1,2-dichloroetha...	4.664	65	389503	43.37	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 86.74%			
65) SURR3,Toluene-d8	7.322	98	1772451	50.40	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.80%			
70) SURR2,BFB	9.791	95	634654	50.41	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.82%			
Target Compounds						Qvalue
15) Acetone	2.055	43	1457	0.76	ppb	77
~~16) 2-Propanol~~	~~2.109~~	~~45~~	~~285~~	~~0.94~~	~~ppb~~	~~# 1~~
20) Allyl Chloride	2.207	76	1363	0.31	ppb	# 1
90) Cyclohexanone	9.736	55	235	0.28	ppb	# 5

(#) = qualifier out of range (m) = manual integration (+) = signals summed

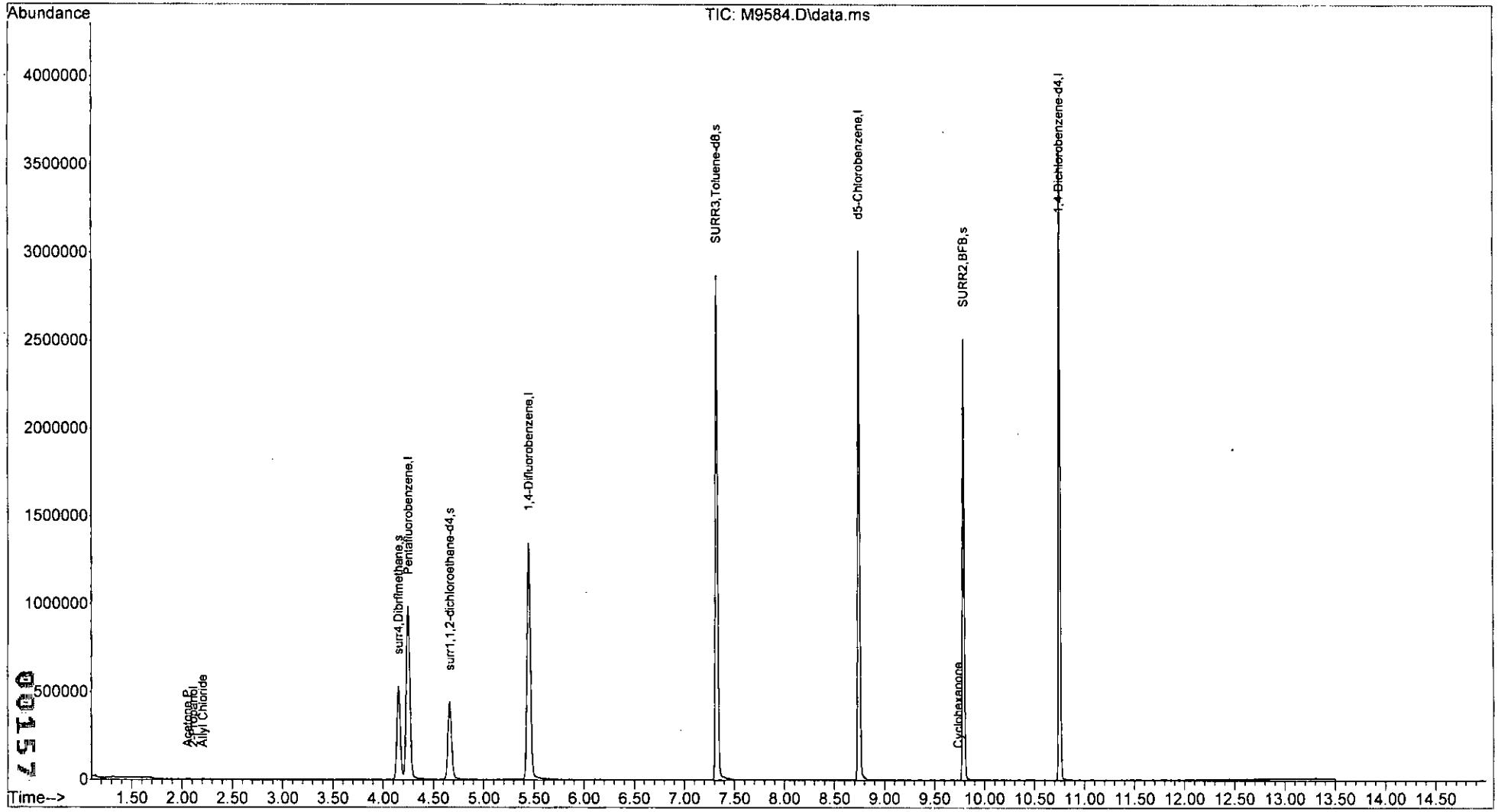
KR 10/9/14

W090914.M Thu Oct 09 14:44:00 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : R1407813-015|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\100914\M9584.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 2:29 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 14:43:55 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



W090914.M Thu Oct 09 14:44:03 2014 Page: 2

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9584.D
Acq On : 9 Oct 2014 2:29 pm
Operator : K.Ruest
Sample : R1407813-015|1.0
Misc : PARSONS 11603 T4
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: M9584.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	490	501	509	rBV2	529940	1252931	28.22%	5.398%
2	4.249	509	517	529	rVB	974320	2398516	54.02%	10.334%
3	4.664	574	585	598	rBV	438141	1119273	25.21%	4.823%
4	5.450	704	714	731	rBV	1343775	3160607	71.18%	13.618%
5	7.322	1014	1021	1036	rBV	2871737	4440282	100.00%	19.131%
6	8.742	1249	1254	1270	rBV	3005433	3854455	86.81%	16.607%
7	9.791	1420	1426	1434	rBV	2510088	2948541	66.40%	12.704%
8	10.748	1578	1583	1592	rBV	3582363	4034687	90.87%	17.384%

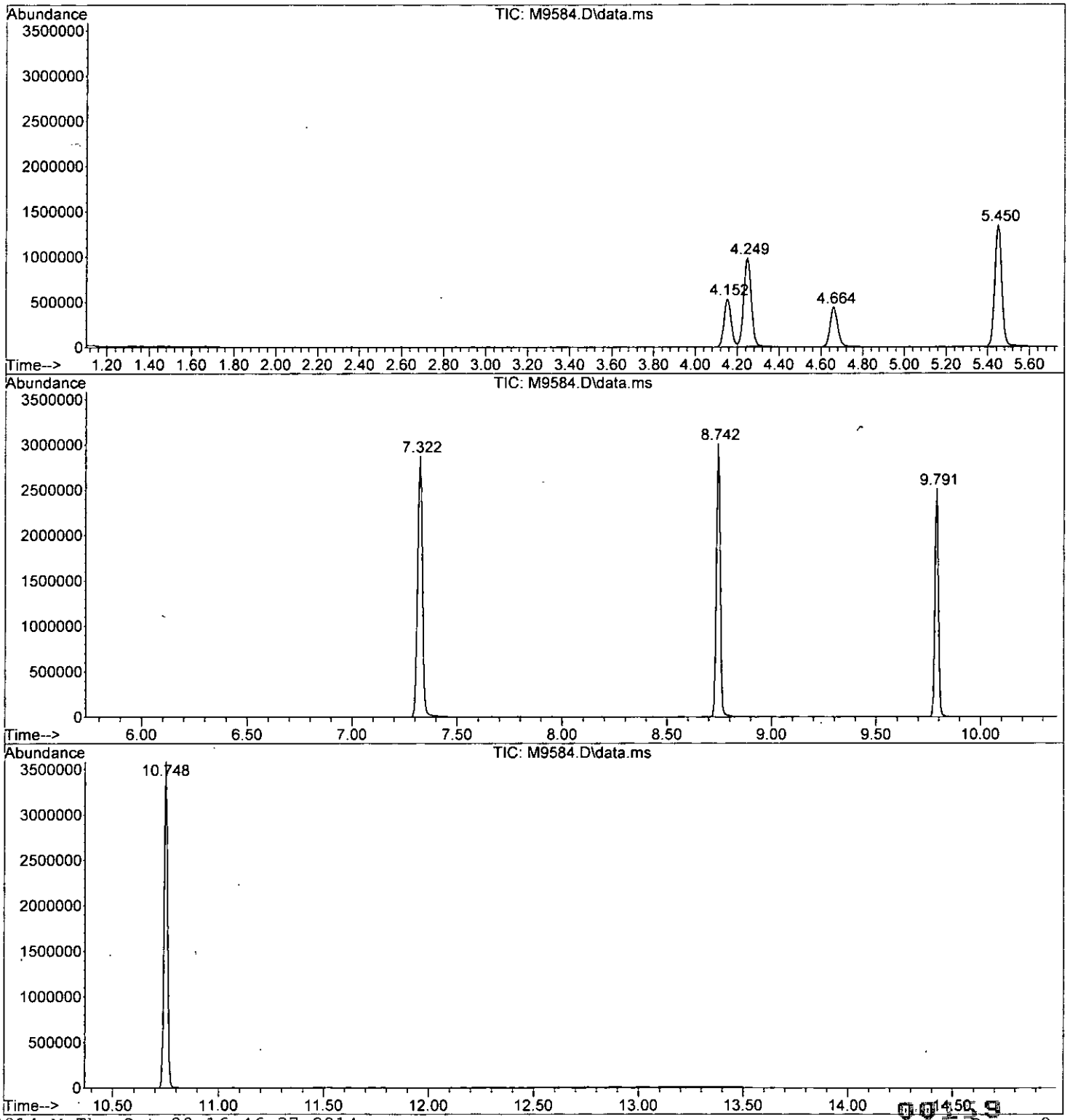
Sum of corrected areas: 23209292

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9584.D
Acq On    :  9 Oct 2014   2:29 pm
Operator  : K.Ruest
Sample    : R1407813-015|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 5   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```



W090914.M Thu Oct 09 16:46:37 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\100914\\
Data File : M9584.D
Acq On : 9 Oct 2014 2:29 pmm
Operator : K.Ruestt
Sample : R1407813-015|1.00
Misc : PARSONS 11603 T44
ALS Vial : 5 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

00160

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1135
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 15:02
Sample Name:	FTMM-8-GW-M8MW12-13.55	**Units:**	µg/L
Lab Code:	R1407813-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9585.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1135
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 15:02
Sample Name:	FTMM-8-GW-M8MW12-13.55	**Units:**	µg/L
Lab Code:	R1407813-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9585.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**4.7**	J	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**1.3**	J	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1135
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 15:02
Sample Name:	FTMM-8-GW-M8MW12-13.55	**Units:**	µg/L
Lab Code:	R1407813-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9585.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	10/9/14 15:02	
Dibromofluoromethane	100	85-115	10/9/14 15:02	
Toluene-d8	99	85-120	10/9/14 15:02	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/2/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 1502

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-8-GW-M8MW12-13.55	**Units:**	µg/L
Lab Code:	R1407813-018	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407813-018|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9585.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 3:02 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 16:47:11 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	940665	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1478824	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1384940	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	696949	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	411260	49.93	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.86%				
48) surr1,1,2-dichloroetha...	4.664	65	389238	43.85	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 87.70%				
65) SURR3,Toluene-d8	7.322	98	1716235	49.37	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.74%				
70) SURR2,BFB	9.791	95	633251	50.88	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.76%				
Target Compounds							Qvalue
40) Chloroform	3.938	83	70810	4.66	ppb		95
60) Bromodichloromethane	6.480	83	2879	0.28	ppb		84
72) Tetrachloroethene	7.968	164	9166	1.29	ppb	#	84

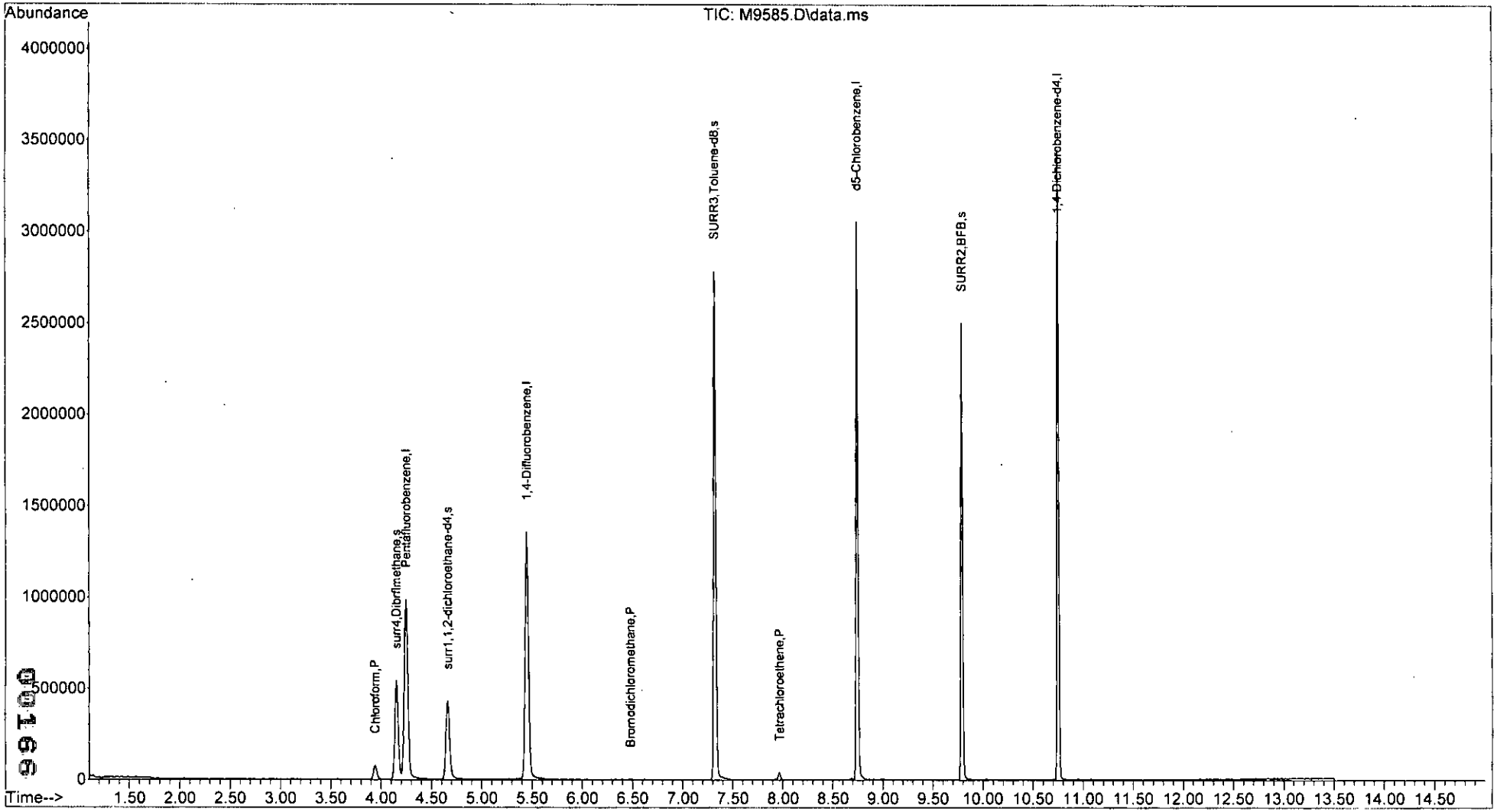
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR 10/9/14
DL 10/13/14

Quantitation Report (QT Reviewed)

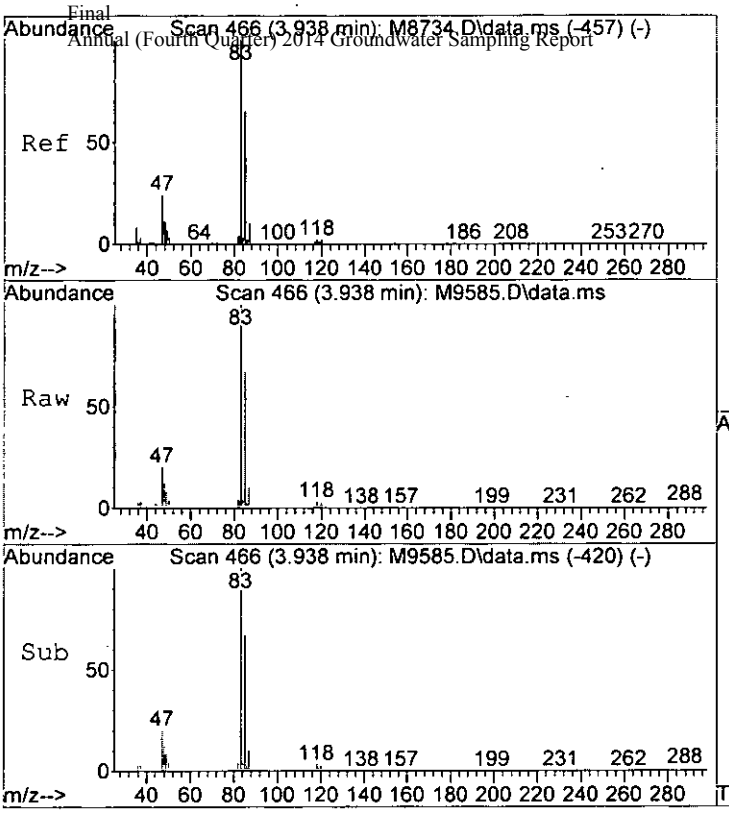
Sample : R1407813-018|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9585.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 3:02 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 16:47:11 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



9101

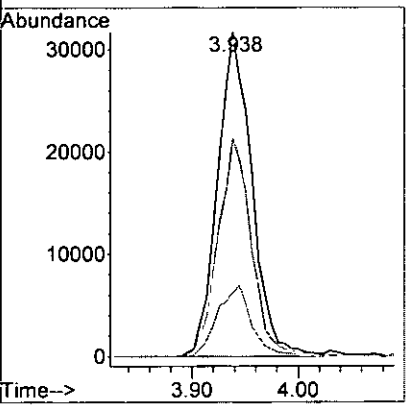
W090914.M Thu Oct 09 16:48:16 2014 Page: 2

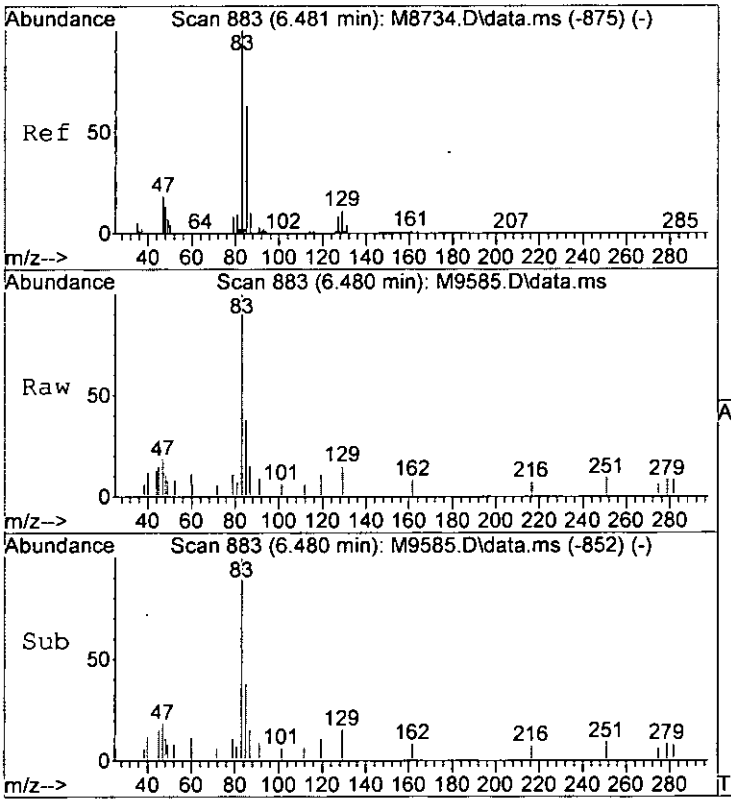


#40
Chloroform
Concen: 4.66 ppb
RT: 3.938 min Scan# 466
Delta R.T. -0.006 min
Lab File: M9585.D
Acq: 9 Oct 2014 3:02 pm

Tgt Ion: 83 Resp: 70810

Ion	Ratio	Lower	Upper
83	100		
85	67.4	45.3	85.3
47	19.7	4.4	44.4

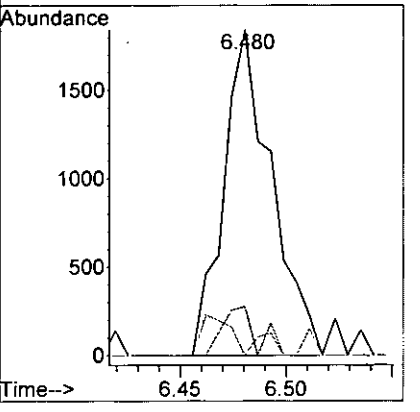


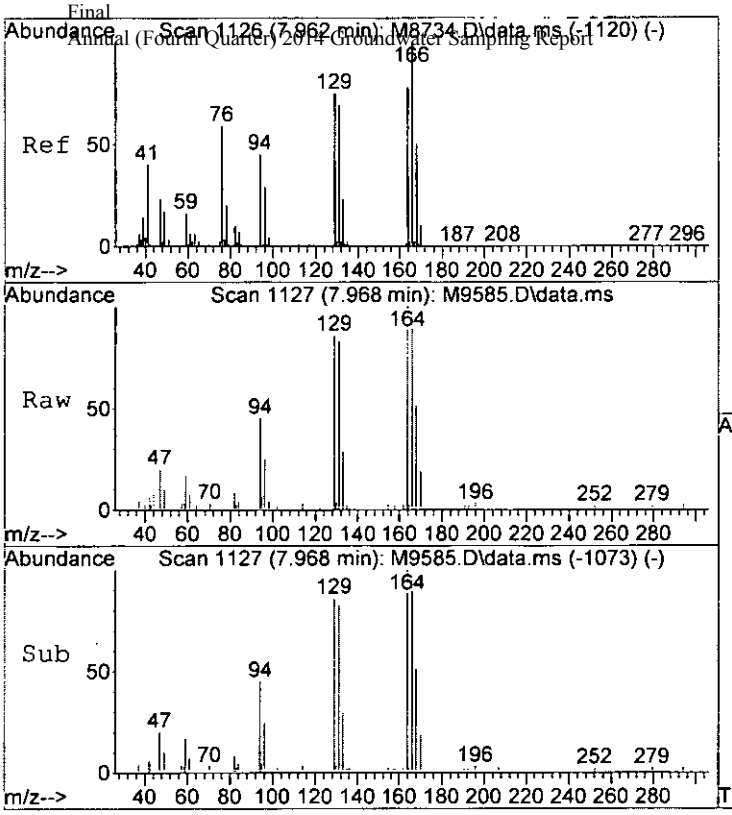


#60
Bromodichloromethane
Concen: 0.28 ppb
RT: 6.480 min Scan# 883
Delta R.T. -0.000 min
Lab File: M9585.D
Acq: 9 Oct 2014 3:02 pm

Tgt Ion: 83 Resp: 2879

Ion	Ratio	Lower	Upper
83	100		
129	15.0	0.0	31.4
127	0.0	0.0	28.7

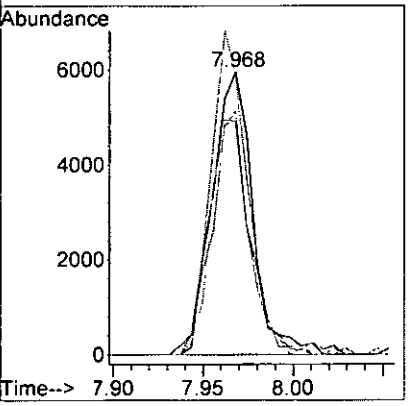




#72
Tetrachloroethene
Concen: 1.29 ppb
RT: 7.968 min Scan# 1127
Delta R.T. 0.000 min
Lab File: M9585.D
Acq: 9 Oct 2014 3:02 pm

Tgt Ion:164 Resp: 9166

Ion	Ratio	Lower	Upper
164	100		
166	97.8	108.1	148.1#
129	86.2	75.7	115.7
131	82.5	71.0	111.0



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9585.D
Acq On : 9 Oct 2014 3:02 pm
Operator : K.Ruest
Sample : R1407813-018|1.0
Misc : PARSONS 11603 T4
ALS Vial : 6 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: M9585.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.938	458	466	477	rBV2	78133	178465	4.19%	0.768%
2	4.152	492	501	509	rBV	541065	1253721	29.43%	5.396%
3	4.249	509	517	529	rVB2	976913	2421464	56.84%	10.422%
4	4.664	576	585	603	rBV	427689	1123540	26.37%	4.836%
5	5.450	704	714	730	rBV	1349970	3120792	73.26%	13.432%
6	7.322	1014	1021	1038	rBV	2782533	4259939	100.00%	18.335%
7	7.962	1119	1126	1132	rBV3	39071	59818	1.40%	0.257%
8	8.742	1249	1254	1268	rBV	3051140	3879419	91.07%	16.697%
9	9.791	1421	1426	1438	rBV	2498692	2925589	68.68%	12.592%
10	10.748	1578	1583	1597	rBV	3446313	4011675	94.17%	17.266%

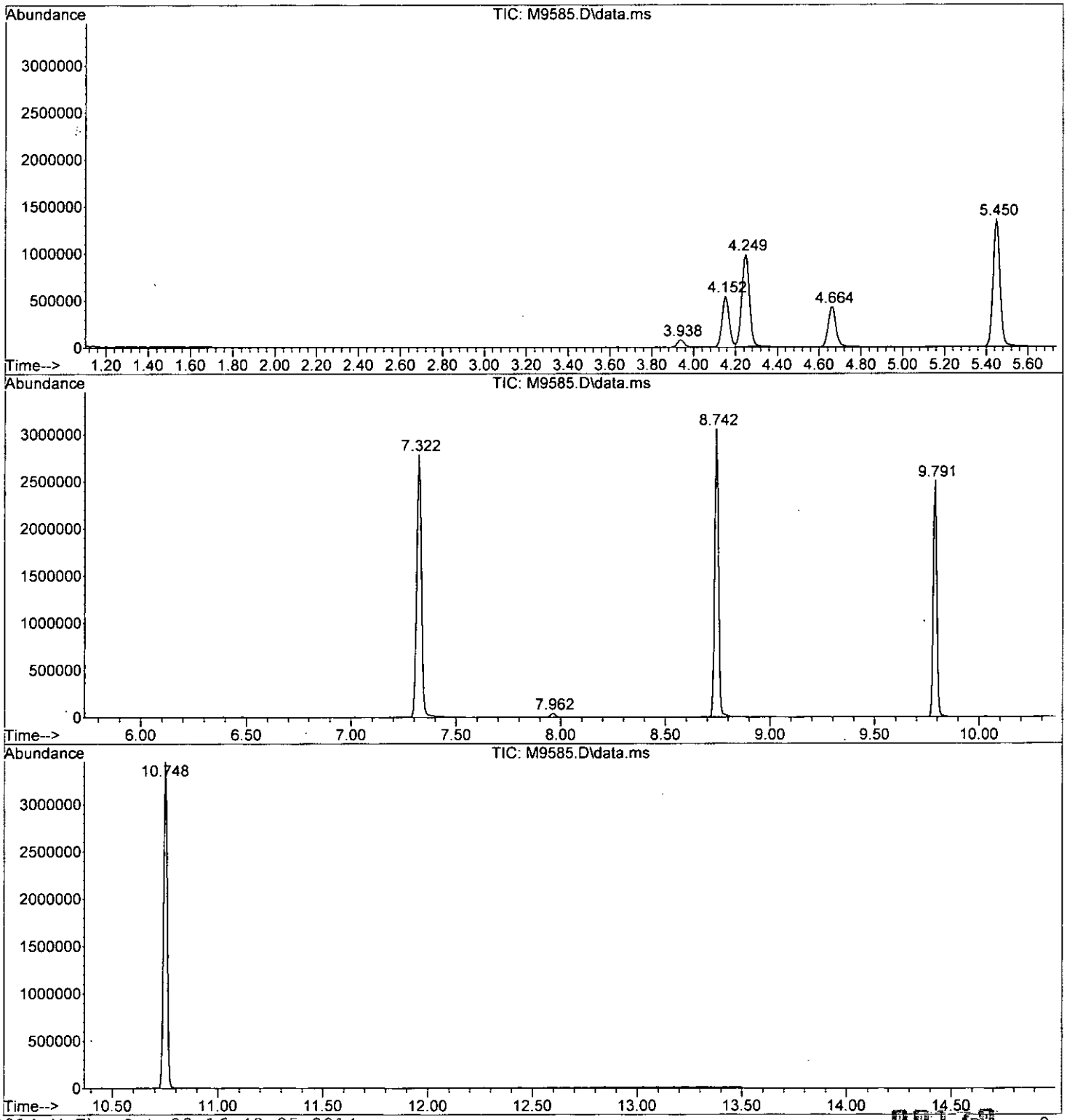
Sum of corrected areas: 23234422

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9585.D
Acq On : 9 Oct 2014 3:02 pm
Operator : K.Ruest
Sample : R1407813-018|1.0
Misc : PARSONS 11603 T4
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W090914.M Thu Oct 09 16:48:25 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\100914\\
Data File : M9585.D
Acq On : 9 Oct 2014 3:02 pmm
Operator : K.Ruestt
Sample : R1407813-018|1.00
Misc : PARSONS 11603 T44
ALS Vial : 6 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1410
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 15:34
Sample Name:	FTMM-59-GW-1122MW07-16.67	**Units:**	µg/L
Lab Code:	R1407813-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9586.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	2.7	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1410
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 15:34
Sample Name:	FTMM-59-GW-1122MW07-16.67	**Units:**	µg/L
Lab Code:	R1407813-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9586.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**0.83**	**J**	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.80**	**J**	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**0.33**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**0.43**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.37**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1410
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 15:34
Sample Name:	FTMM-59-GW-1122MW07-16.67	**Units:**	µg/L
Lab Code:	R1407813-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9586.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	10/9/14 15:34	
Dibromofluoromethane	96	85-115	10/9/14 15:34	
Toluene-d8	98	85-120	10/9/14 15:34	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/2/14
Date Received: 10/3/14
Date Analyzed: 10/9/14 1534

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-59-GW-1122MW07-16.67
Lab Code: R1407813-019

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
027133-93-3	2,3-Dihydro-1-methylindene	11.92	7.2	JN

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407813-019|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9586.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 3:34 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 16:49:45 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	928965	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1478385	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1375160	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	711986	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.158	113	396684	48.17	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 96.34%			
48) surr1,1,2-dichloroetha...	4.664	65	390431	43.99	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 87.98%			
65) SURR3,Toluene-d8	7.322	98	1694180	48.75	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.50%			
70) SURR2,BFB	9.791	95	633229	50.89	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.78%			
Target Compounds						Qvalue
15) Acetone	2.048	43	5200	2.72	ppb	91
89) Isopropylbenzene	9.675	105	30315	0.83	ppb	99
95) n-Propylbenzene	10.022	91	14136	0.33	ppb	94
100) tert-Butylbenzene	10.443	119	9005	0.37	ppb	92
103) sec-Butylbenzene	10.620	105	15427	0.43	ppb	88
117) Naphthalen	12.302	128	16205	0.80	ppb	99

KR 10/9/14

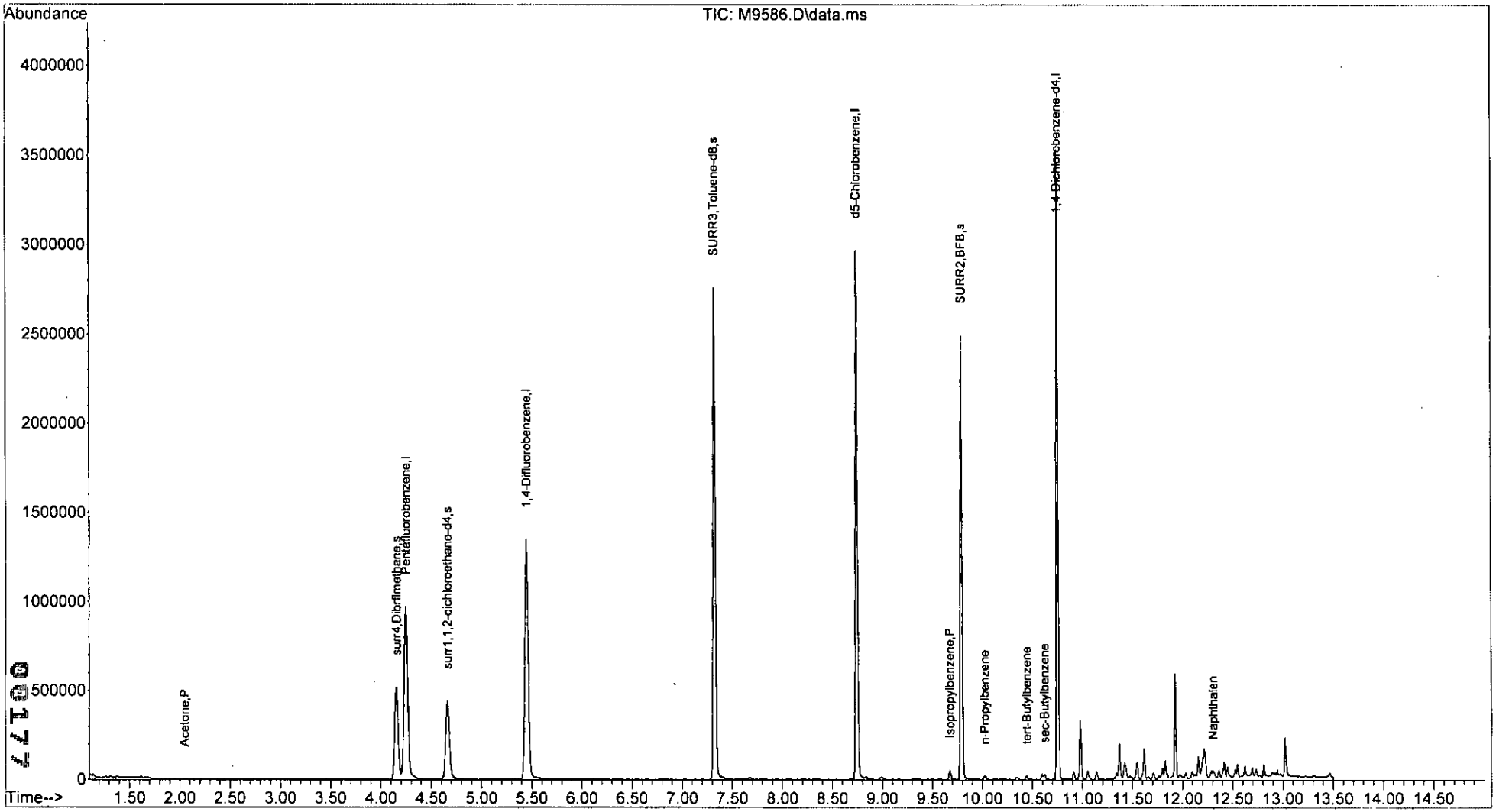
(#) = qualifier out of range (m) = manual integration (+) = signals summed

W090914.M Thu Oct 09 16:50:28 2014 Page: 1

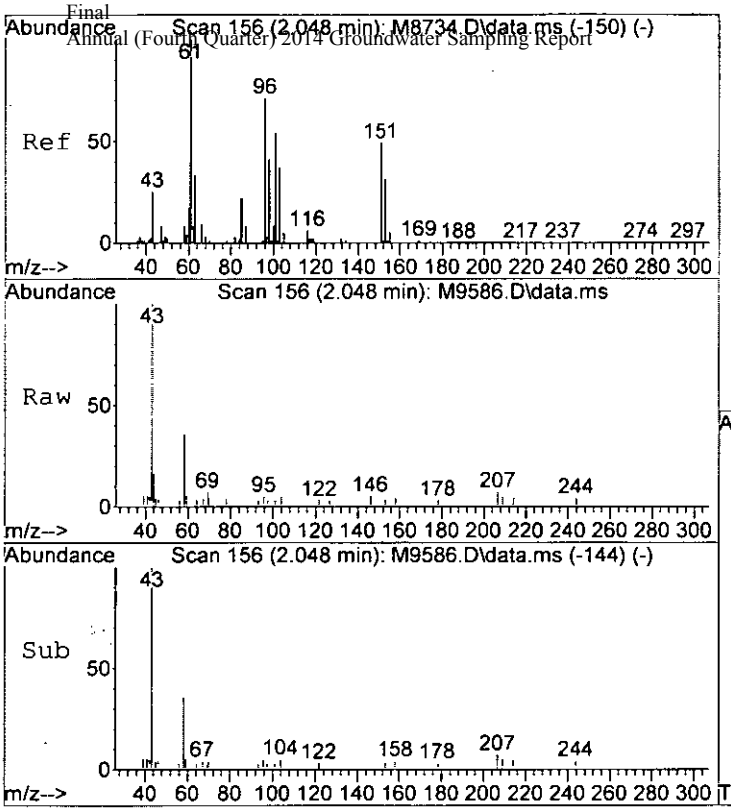
Quantitation Report (QT Reviewed)

Sample : R1407813-019|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9586.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 3:34 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 16:49:45 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



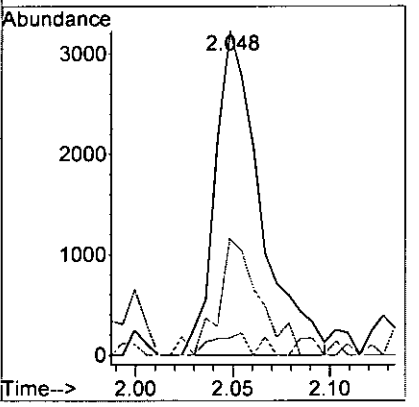
W090914.M Thu Oct 09 16:50:30 2014 Page: 2

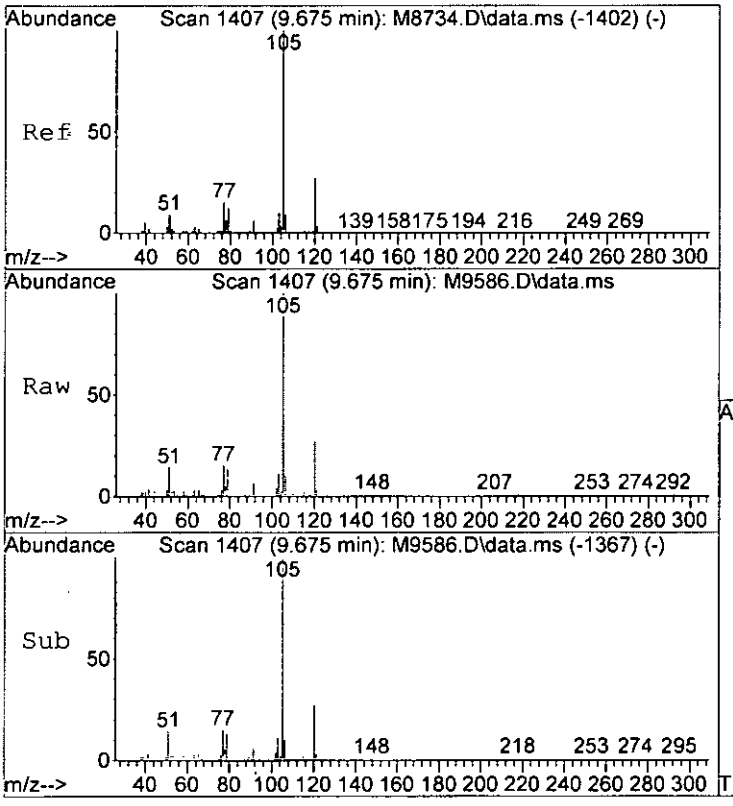


#15
Acetone
Concen: 2.72 ppb
RT: 2.048 min Scan# 156
Delta R.T. -0.000 min
Lab File: M9586.D
Acq: 9 Oct 2014 3:34 pm

Tgt Ion: 43 Resp: 5200

Ion	Ratio	Lower	Upper
43	100		
58	35.8	10.3	50.3
42	5.2	0.0	27.1

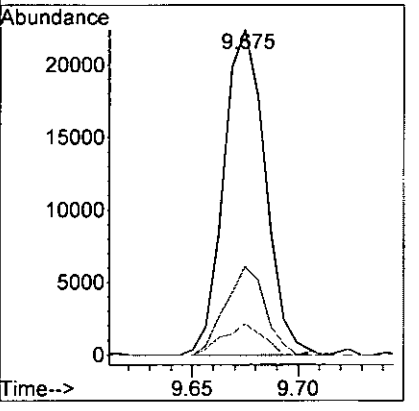


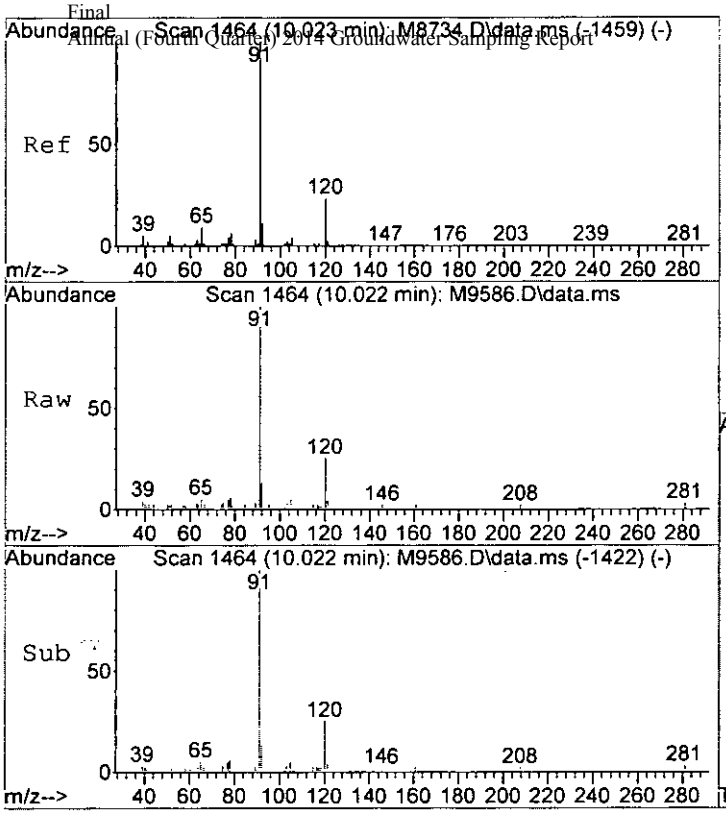


#89
Isopropylbenzene
Concen: 0.83 ppb
RT: 9.675 min Scan# 1407
Delta R.T. -0.000 min
Lab File: M9586.D
Acq: 9 Oct 2014 3:34 pm

Tgt Ion:105 Resp: 30315

Ion	Ratio	Lower	Upper
105	100		
120	27.1	7.6	47.6
106	9.6	0.0	28.7

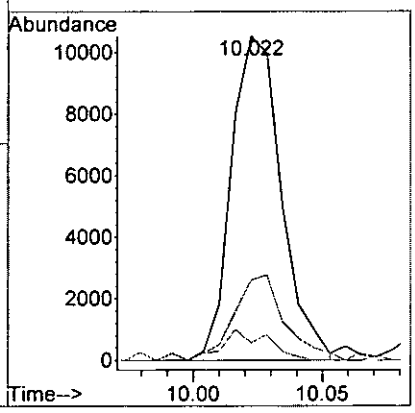


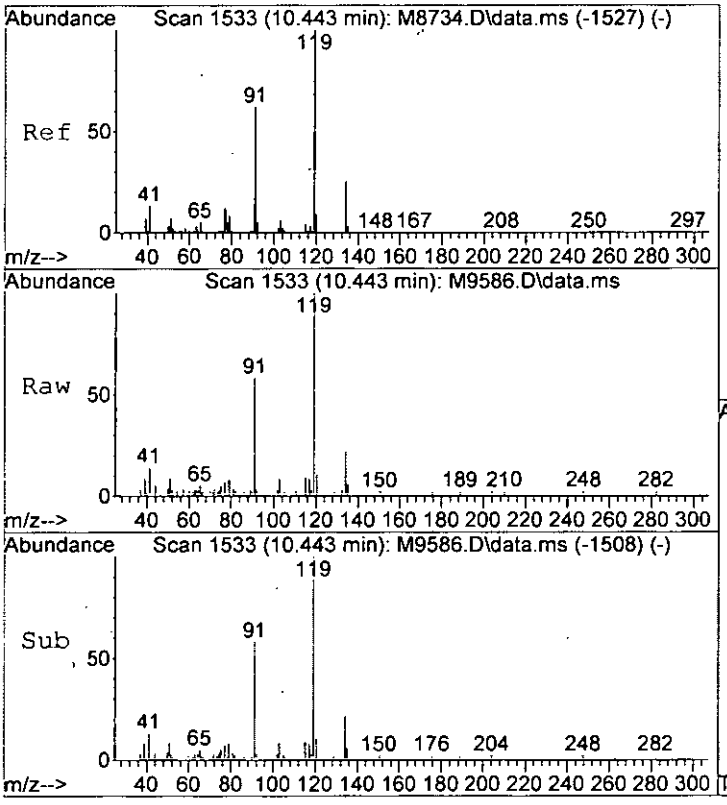


#95
n-Propylbenzene
Concen: 0.33 ppb
RT: 10.022 min Scan# 1464
Delta R.T. -0.006 min
Lab File: M9586.D
Acq: 9 Oct 2014 3:34 pm

Tgt Ion: 91 Resp: 14136

Ion	Ratio	Lower	Upper
91	100		
120	24.7	3.5	43.5
65	5.3	0.0	30.5

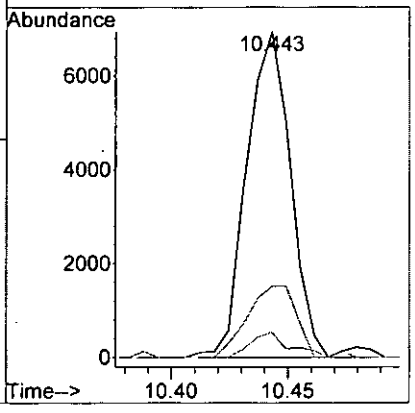


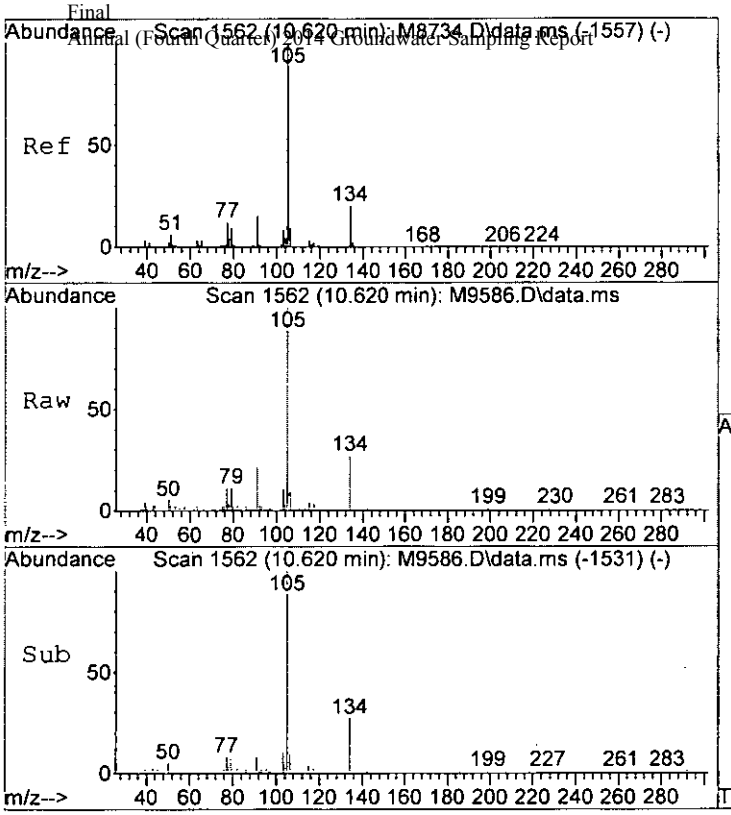


#100
tert-Butylbenzene
Concen: 0.37 ppb
RT: 10.443 min Scan# 1533
Delta R.T. -0.000 min
Lab File: M9586.D
Acq: 9 Oct 2014 3:34 pm

Tgt Ion:119 Resp: 9005

Ion	Ratio	Lower	Upper
119	100		
134	21.7	6.2	46.2
103	7.7	0.0	26.4

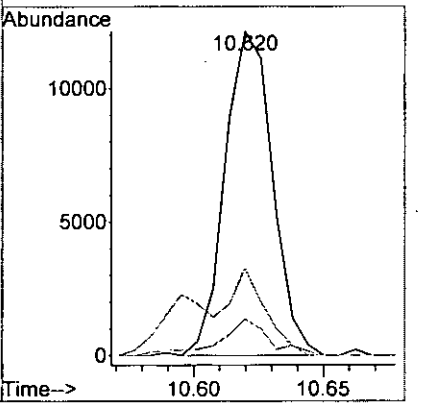


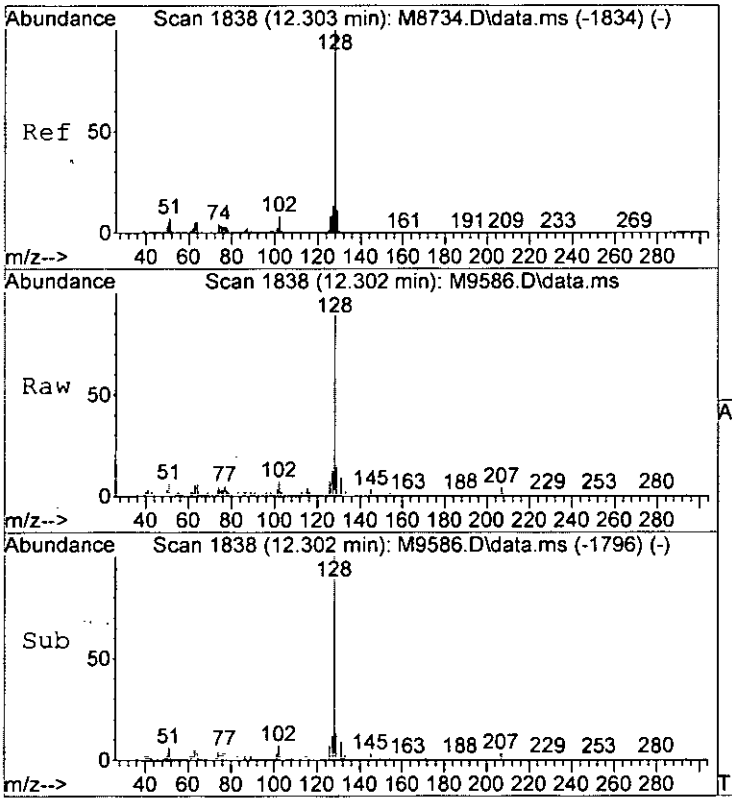


#103
sec-Butylbenzene
Concen: 0.43 ppb
RT: 10.620 min Scan# 1562
Delta R.T. -0.006 min
Lab File: M9586.D
Acq: 9 Oct 2014 3:34 pm

Tgt Ion:105 Resp: 15427

Ion	Ratio	Lower	Upper
105	100		
134	26.9	0.7	40.7
103	11.1	0.0	28.1

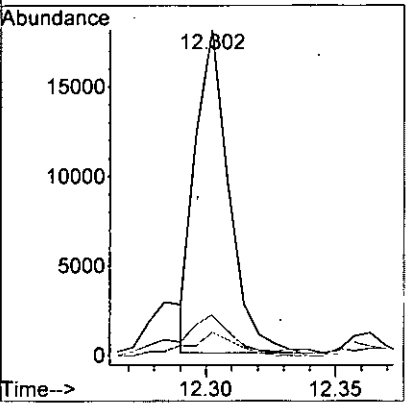




#117
Naphthalen
Concen: 0.80 ppb
RT: 12.302 min Scan# 1838
Delta R.T. -0.000 min
Lab File: M9586.D
Acq: 9 Oct 2014 3:34 pm

Tgt Ion:128 Resp: 16205

Ion	Ratio	Lower	Upper
128	100		
127	12.4	0.0	32.5
102	7.2	0.0	28.0



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9586.D
Acq On : 9 Oct 2014 3:34 pm
Operator : K.Ruest
Sample : R1407813-019|1.0
Misc : PARSONS 11603 T4
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: M9586.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.158	492	502	509	rBV	517701	1244096	29.54%	4.700%
2	4.249	509	517	528	rVB	957331	2372468	56.34%	8.964%
3	4.664	574	585	600	rBV	439167	1134810	26.95%	4.288%
4	5.450	703	714	734	rBV	1344793	3108339	73.81%	11.744%
5	7.322	1013	1021	1031	rBV	2756650	4211042	100.00%	15.910%
6	8.742	1249	1254	1266	rBV	2967486	3858311	91.62%	14.577%
7	9.675	1398	1407	1411	rBV	55996	73946	1.76%	0.279%
8	9.791	1421	1426	1433	rBV	2488774	2915853	69.24%	11.017%
9	10.595	1551	1558	1560	rBV	33152	45164	1.07%	0.171%
10	10.748	1578	1583	1591	rBV	3525512	4066759	96.57%	15.365%
11	10.912	1605	1610	1614	rBV	44647	52174	1.24%	0.197%
12	10.979	1616	1621	1629	rVB2	331580	396495	9.42%	1.498%
13	11.053	1629	1633	1641	rVB2	50244	74134	1.76%	0.280%
14	11.138	1643	1647	1653	rBV	48433	60805	1.44%	0.230%
15	11.370	1682	1685	1690	rVB	193076	208813	4.96%	0.789%
16	11.418	1690	1693	1699	rVB4	90231	146210	3.47%	0.552%
17	11.546	1708	1714	1718	rVB	96410	126313	3.00%	0.477%
18	11.614	1718	1725	1729	rBV	170957	199108	4.73%	0.752%
19	11.705	1737	1740	1745	rVB2	33694	42916	1.02%	0.162%
20	11.796	1752	1755	1757	rBV	49909	45677	1.08%	0.173%
21	11.827	1757	1760	1762	rVV	82478	70805	1.68%	0.268%
22	11.924	1773	1776	1781	rVB2	585409	586435	13.93%	2.216%
23	12.095	1800	1804	1806	rVV2	40697	45964	1.09%	0.174%
24	12.156	1810	1814	1817	rVV2	121625	144883	3.44%	0.547%
25	12.199	1817	1821	1822	rVV2	115404	138726	3.29%	0.524%
26	12.217	1822	1824	1831	rVB2	162488	211545	5.02%	0.799%
27	12.302	1836	1838	1843	rVB2	36994	52337	1.24%	0.198%
28	12.363	1844	1848	1851	rBV2	41132	43997	1.04%	0.166%
29	12.412	1851	1856	1859	rBV3	86515	102894	2.44%	0.389%
30	12.449	1859	1862	1868	rVB	60414	71454	1.70%	0.270%
31	12.522	1870	1874	1876	rBV	45094	48004	1.14%	0.181%
32	12.546	1876	1878	1882	rVB3	70625	58406	1.39%	0.221%
33	12.619	1886	1890	1894	rBV2	62179	73570	1.75%	0.278%
34	12.729	1905	1908	1911	rVB2	42112	43786	1.04%	0.165%
35	12.808	1918	1921	1924	rBV2	73838	73257	1.74%	0.277%

W090914.M Thu Oct 09 16:50:40 2014 Page: 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9586.D
Acq On : 9 Oct 2014 3:34 pm
Operator : K.Ruest
Sample : R1407813-019|1.0
Misc : PARSONS 11603 T4
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge

36	13.022	1952	1956	1961	rBV2	217331	239693	5.69%	0.906%
37	13.467	2026	2029	2035	rVB3	41521	78418	1.86%	0.296%

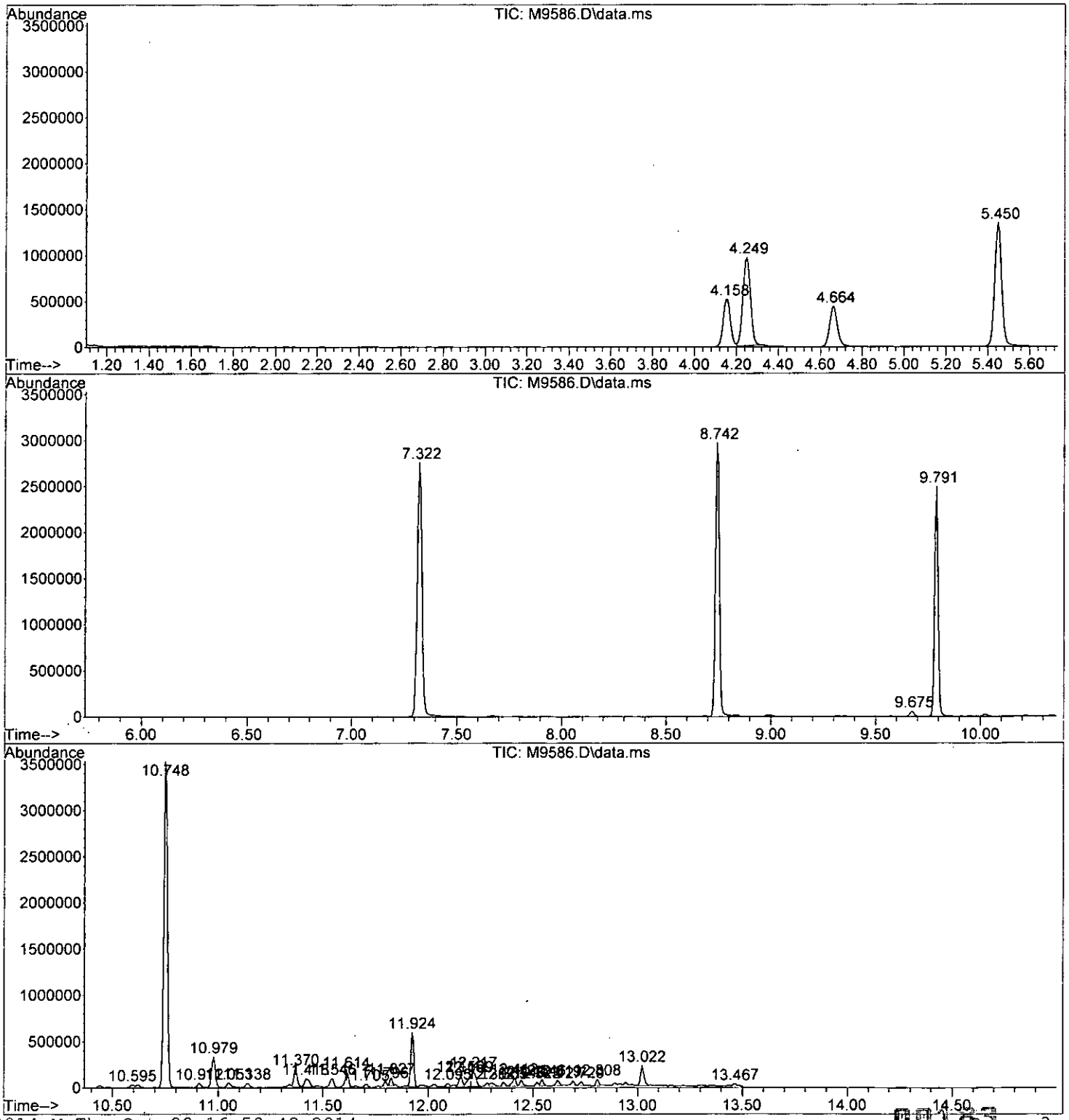
Sum of corrected areas: 26467607

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9586.D
Acq On : 9 Oct 2014 3:34 pm
Operator : K.Ruest
Sample : R1407813-019|1.0
Misc : PARSONS 11603 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W090914.M Thu Oct 09 16:50:42 2014 Page: 3

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9586.D
Acq On : 9 Oct 2014 3:34 pm
Operator : K.Ruest
Sample : R1407813-019|1.0
Misc : PARSONS 11603 T4
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

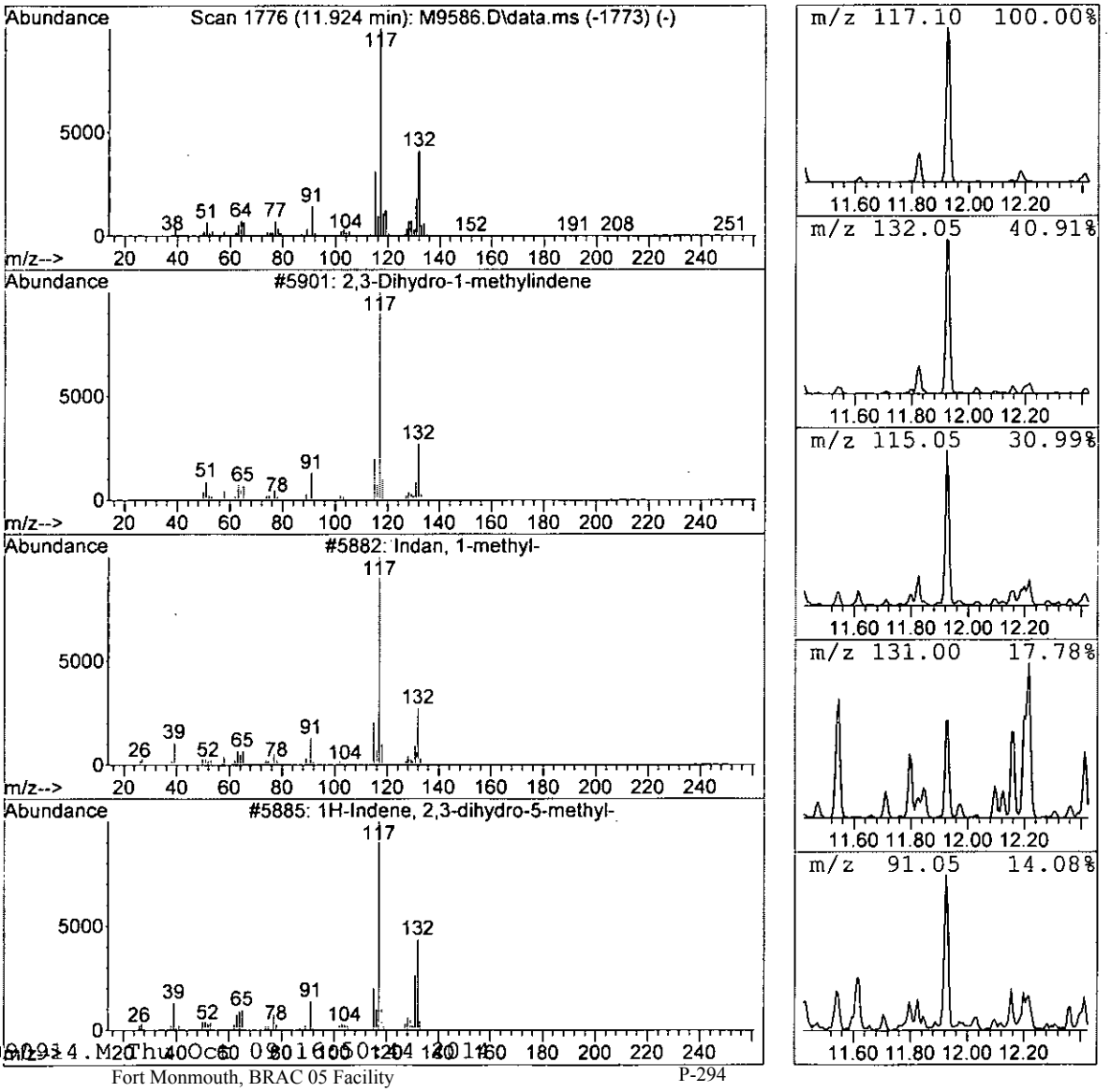
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****

Peak Number 1 2,3-Dihydro-1-methylindene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.924	7.21 ppb	586435	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	93
2	Indan, 1-methyl-	132	C10H12	000767-58-8	90
3	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	87
4	Benzene, (2-methyl-2-propenyl)-	132	C10H12	003290-53-7	87
5	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	87



W090914.M Thu Oct 09 15:01:04 2014 001 Page: 4

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 12:20
Sample Name:	FTMM-TB-100214	**Units:**	µg/L
Lab Code:	R1407813-023	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9580.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.24**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 12:20
Sample Name:	FTMM-TB-100214	**Units:**	µg/L
Lab Code:	R1407813-023	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9580.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.22**	**J**	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 12:20
Sample Name:	FTMM-TB-100214	**Units:**	µg/L
Lab Code:	R1407813-023	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9580.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	10/9/14 12:20	
Dibromofluoromethane	97	85-115	10/9/14 12:20	
Toluene-d8	101	85-120	10/9/14 12:20	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/2/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 1220

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-TB-100214	**Units:**	µg/L
Lab Code:	R1407813-023	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407813-023|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9580.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 12:20 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 14:00:30 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	917015	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1503988	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1381849	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	642077	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	406220	48.49	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 96.98%				
48) surr1,1,2-dichloroetha...	4.664	65	392468	43.47	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 86.94%				
65) SURR3,Toluene-d8	7.322	98	1784880	50.48	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.96%				
70) SURR2,BFB	9.791	95	622186	49.15	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.30%				
Target Compounds							Qvalue
15) Acetone	2.048	43	1370	0.73	ppb		91
115) 1,2,4-Tcbenzene	12.162	180	2118	0.24	ppb		87
116) Hexachlorobt	12.266	225	1699	0.48	ppb	#	73
117) Naphthalen	12.302	128	4072	0.22	ppb		94
118) 1,2,3-Tclbenzene	12.437	180	2641	0.34	ppb		98

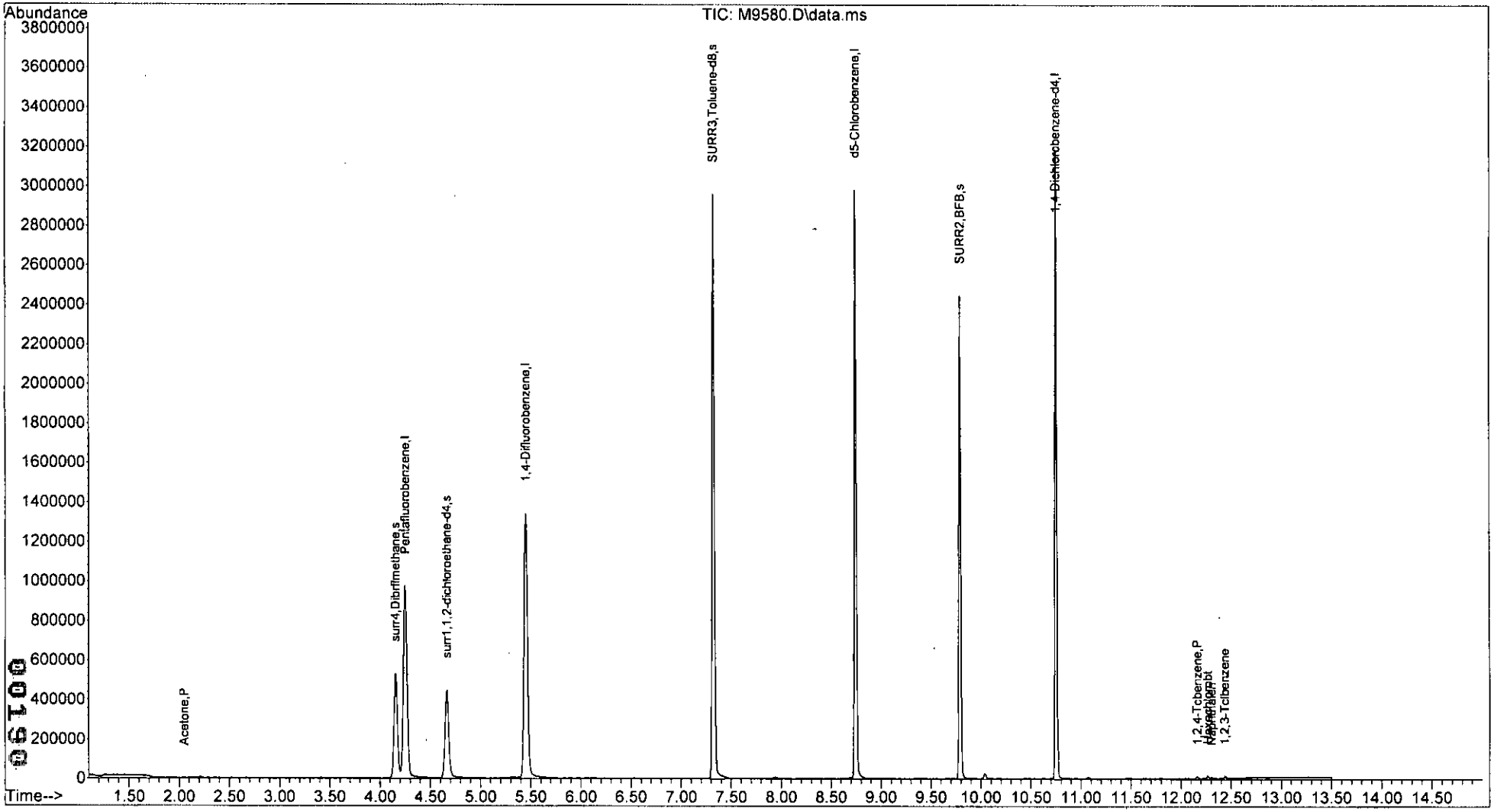
KR 10/9/14

(#) = qualifier out of range (m) = manual integration (+) = signals summed

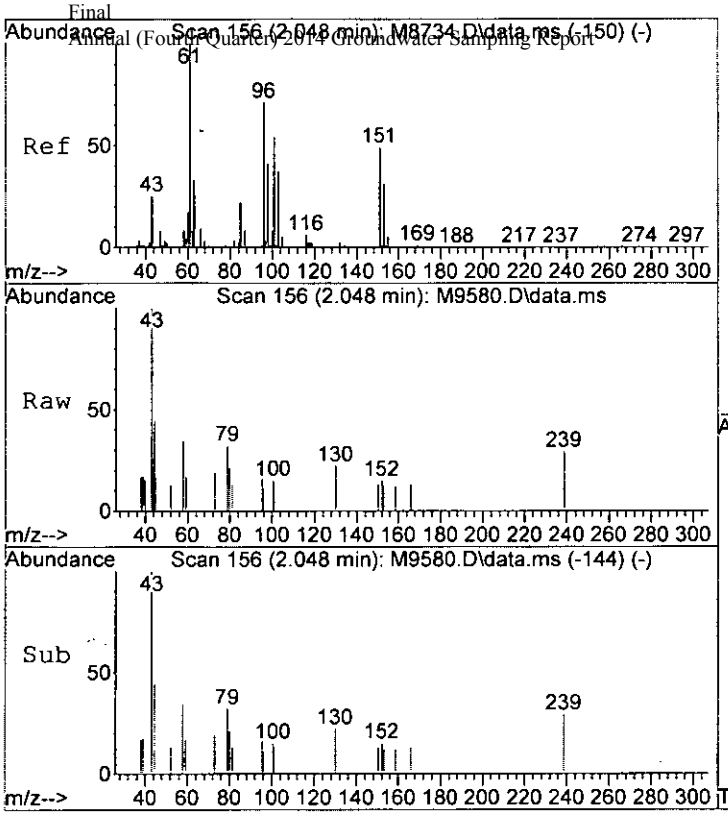
Quantitation Report (QT Reviewed)

Sample : R1407813-023|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9580.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 12:20 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 14:00:30 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



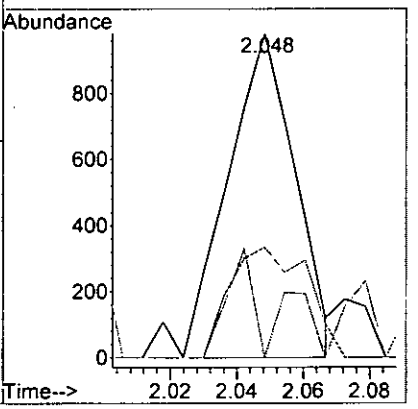
W090914.M Thu Oct 09 14:01:07 2014

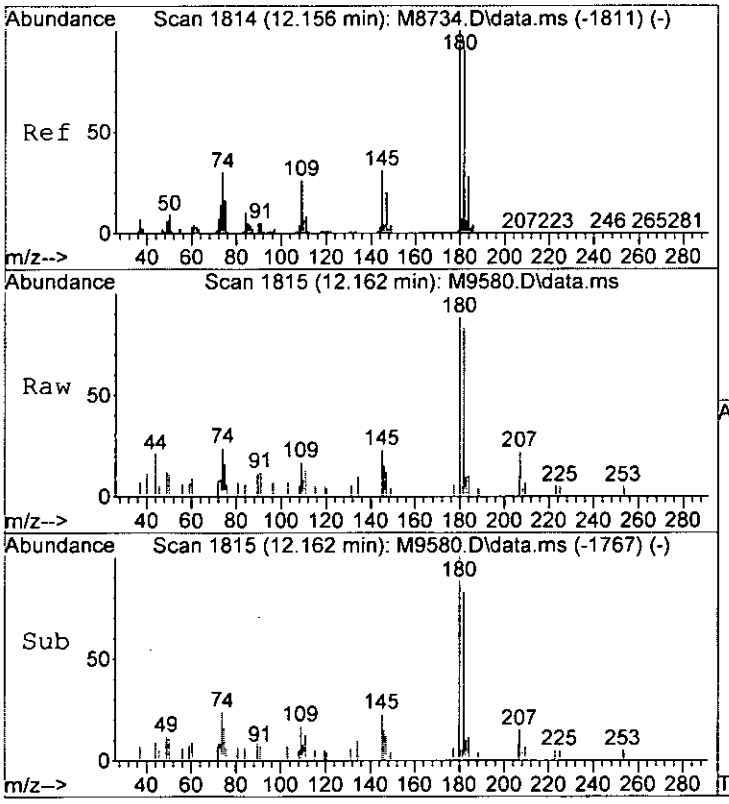


#15
Acetone
Concen: 0.73 ppb
RT: 2.048 min Scan# 156
Delta R.T. -0.000 min
Lab File: M9580.D
Acq: 9 Oct 2014 12:20 pm

Tgt Ion: 43 Resp: 1370

Ion	Ratio	Lower	Upper
43	100		
58	34.0	10.3	50.3
42	0.0	0.0	27.1

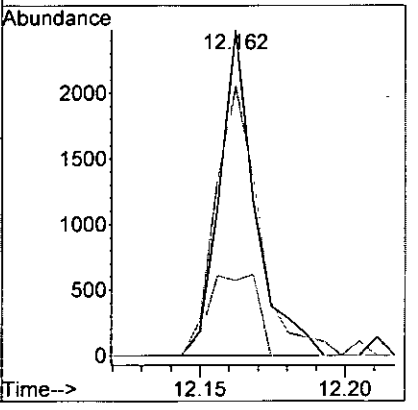


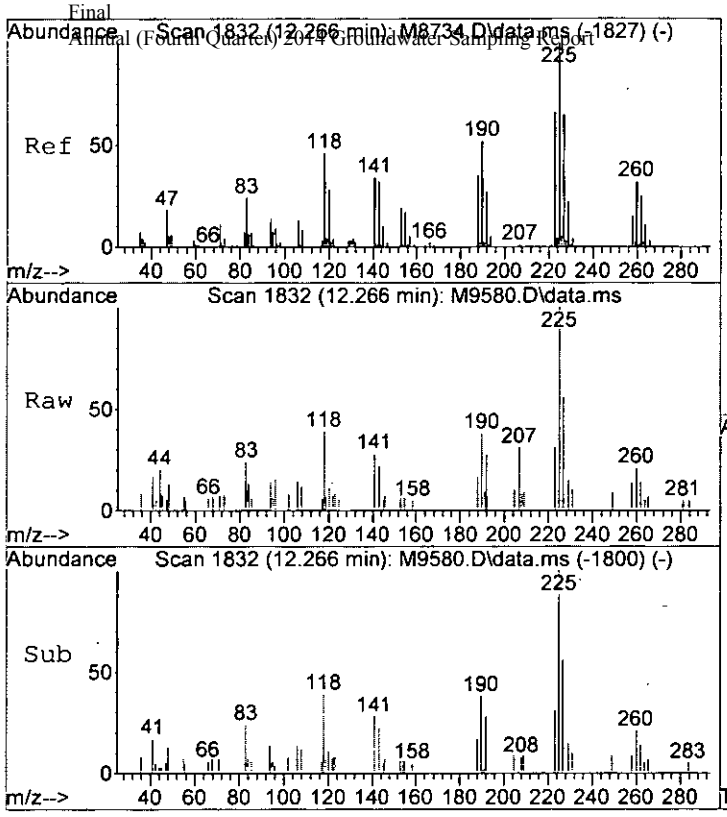


#115
1,2,4-Tcbenzene
Concen: 0.24 ppb
RT: 12.162 min Scan# 1815
Delta R.T. -0.000 min
Lab File: M9580.D
Acq: 9 Oct 2014 12:20 pm

Tgt Ion:180 Resp: 2118

Ion	Ratio	Lower	Upper
180	100		
182	82.7	76.6	116.6
145	23.0	8.1	48.1

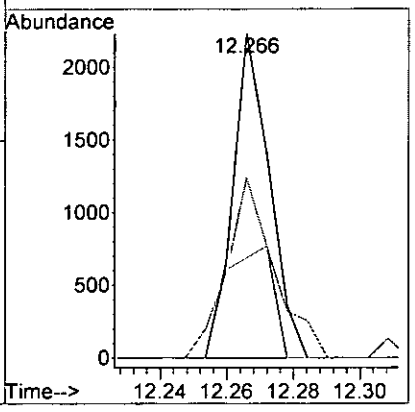


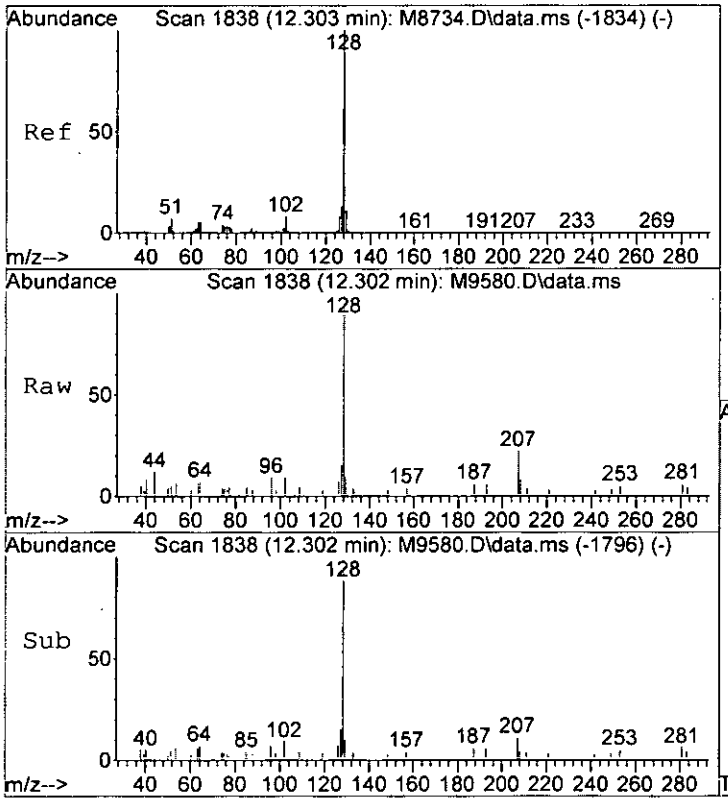


#116
Hexachlorobt
Concen: 0.48 ppb
RT: 12.266 min Scan# 1832
Delta R.T. -0.000 min
Lab File: M9580.D
Acq: 9 Oct 2014 12:20 pm

Tgt Ion:225 Resp: 1699

Ion	Ratio	Lower	Upper
225	100		
223	30.8	44.6	84.6#
227	55.6	44.2	84.2

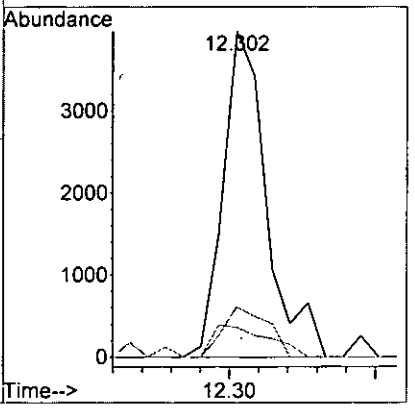


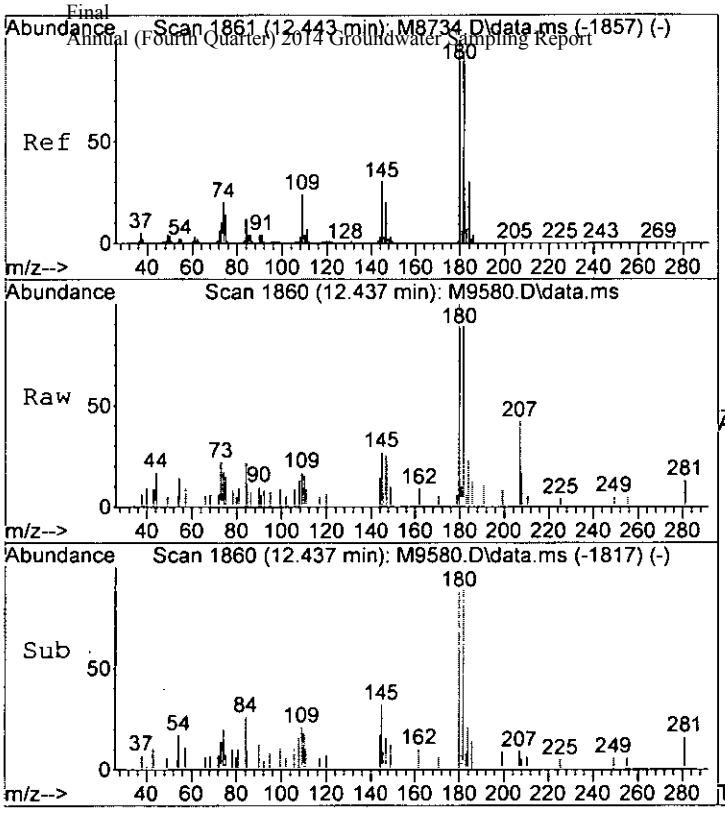


#117
Naphthalen
Concen: 0.22 ppb
RT: 12.302 min Scan# 1838
Delta R.T. -0.000 min
Lab File: M9580.D
Acq: 9 Oct 2014 12:20 pm

Tgt Ion:128 Resp: 4072

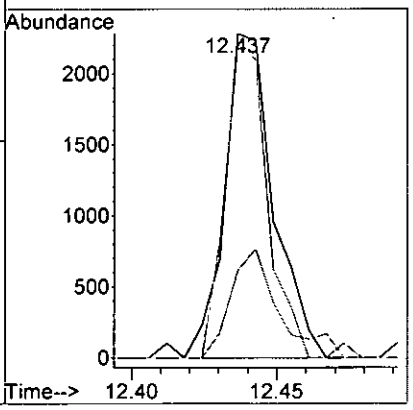
Ion	Ratio	Lower	Upper
128	100		
127	15.3	0.0	32.5
102	9.1	0.0	28.0






```
#118
1,2,3-Tclbenzene
Concen:    0.34 ppb
RT:  12.437 min  Scan# 1860
Delta R.T.  -0.006 min
Lab File:   M9580.D
Acq:  9 Oct 2014  12:20 pm

Tgt Ion:180 Resp:    2641
Ion  Ratio  Lower  Upper
180  100
182   95.7   74.8  114.8
145   26.7    9.6   49.6
```



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9580.D
Acq On : 9 Oct 2014 12:20 pm
Operator : K.Ruest
Sample : R1407813-023|1.0
Misc : PARSONS 11603 T4
ALS Vial : 1 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: M9580.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	491	501	509	rBV	532082	1264901	28.27%	5.524%
2	4.249	509	517	529	rVB	966202	2414795	53.98%	10.546%
3	4.664	572	585	599	rBV	446702	1141781	25.52%	4.986%
4	5.450	703	714	725	rBV	1337935	3149651	70.40%	13.755%
5	7.322	1015	1021	1048	rBV	2956954	4473798	100.00%	19.538%
6	8.742	1249	1254	1269	rBV	2980942	3885872	86.86%	16.971%
7	9.791	1421	1426	1435	rBV	2447544	2885550	64.50%	12.602%
8	10.748	1578	1583	1593	rBV	3182647	3681395	82.29%	16.078%

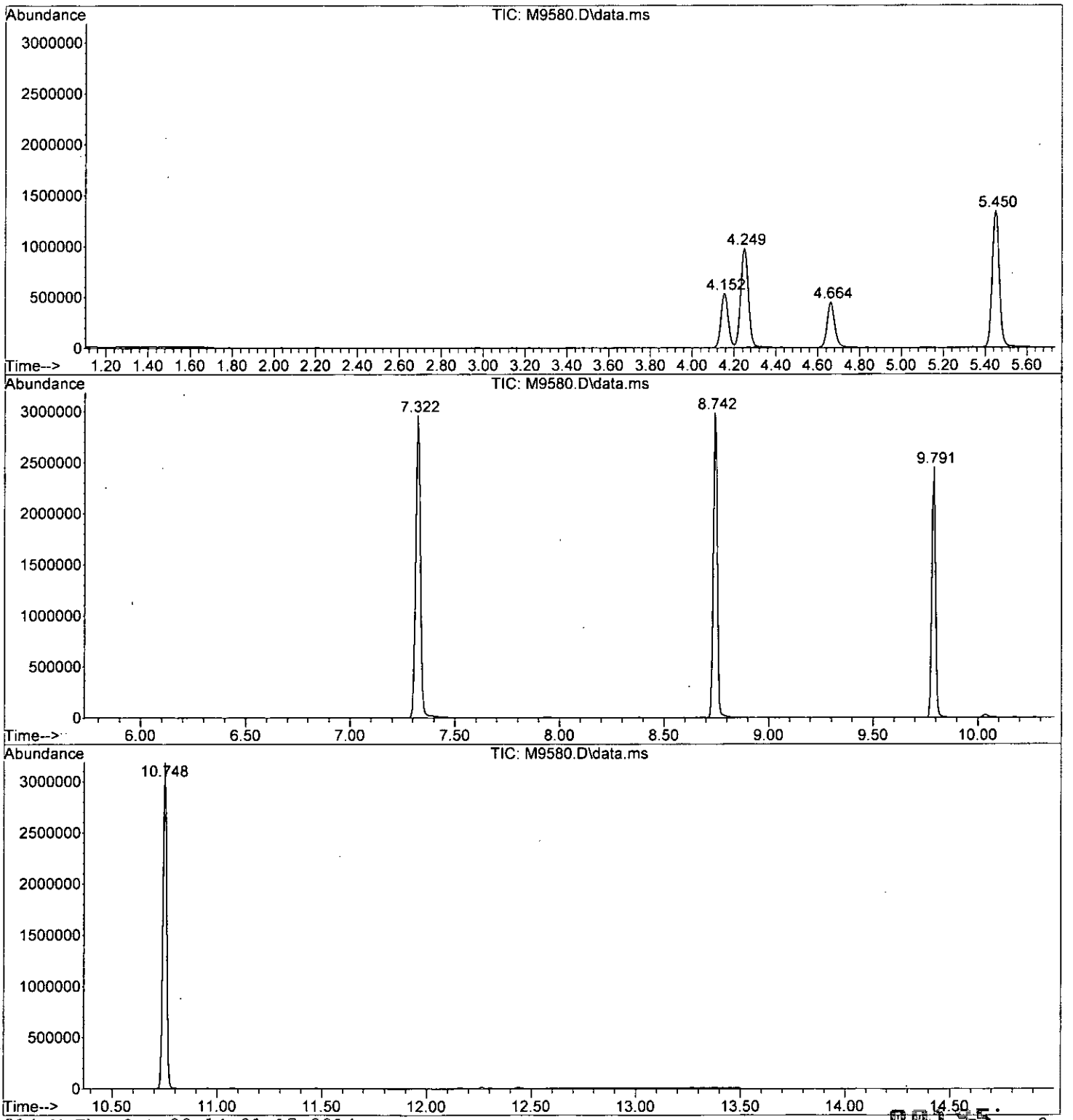
Sum of corrected areas: 22897743

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9580.D
Acq On    :  9 Oct 2014  12:20 pm
Operator  : K.Ruest
Sample    : R1407813-023|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 1   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```



W090914.M Thu Oct 09 14:01:17 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\100914\\
Data File : M9580.D
Acq On : 9 Oct 2014 12:20 pmm
Operator : K.Ruestt
Sample : R1407813-023|1.00
Misc : PARSONS 11603 T44
ALS Vial : 1 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	9/30/14 1430
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/8/14 22:23
Sample Name:	FTMM-EB-093014	**Units:**	µg/L
Lab Code:	R1407813-024	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9561.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.2**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 9/30/14 1430
Date Received: 10/ 3/14
Date Analyzed: 10/8/14 22:23

Sample Name: FTMM-EB-093014
Lab Code: R1407813-024

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100814\M9561.D\

Analysis Lot: 415258
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	9/30/14 1430
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/8/14 22:23
Sample Name:	FTMM-EB-093014	**Units:**	µg/L
Lab Code:	R1407813-024	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9561.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	10/8/14 22:23	
Dibromofluoromethane	97	85-115	10/8/14 22:23	
Toluene-d8	101	85-120	10/8/14 22:23	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	9/30/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/8/14 2223

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-EB-093014	**Units:**	µg/L
Lab Code:	R1407813-024	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407813-024|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9561.D
Misc : PARSONS 11603 T4
Acq On : 8 Oct 2014 10:23 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 09:49:49 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	1005082	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1627325	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1494552	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	756303	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	441573	48.72	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.44%				
48) surr1,1,2-dichloroetha...	4.664	65	445606	45.61	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 91.22%				
65) SURR3,Toluene-d8	7.322	98	1936096	50.61	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.22%				
70) SURR2,BFB	9.791	95	699873	51.10	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.20%				
Target Compounds							Qvalue
15) Acetone	2.055	43	4438m	2.15	ppb		
16) 2-Propanol	2.122	45	3481	10.57	ppb		84
22) Methylene Chloride	2.353	84	2314	0.25	ppb	#	74

(#) = qualifier out of range (m) = manual integration (+) = signals summed

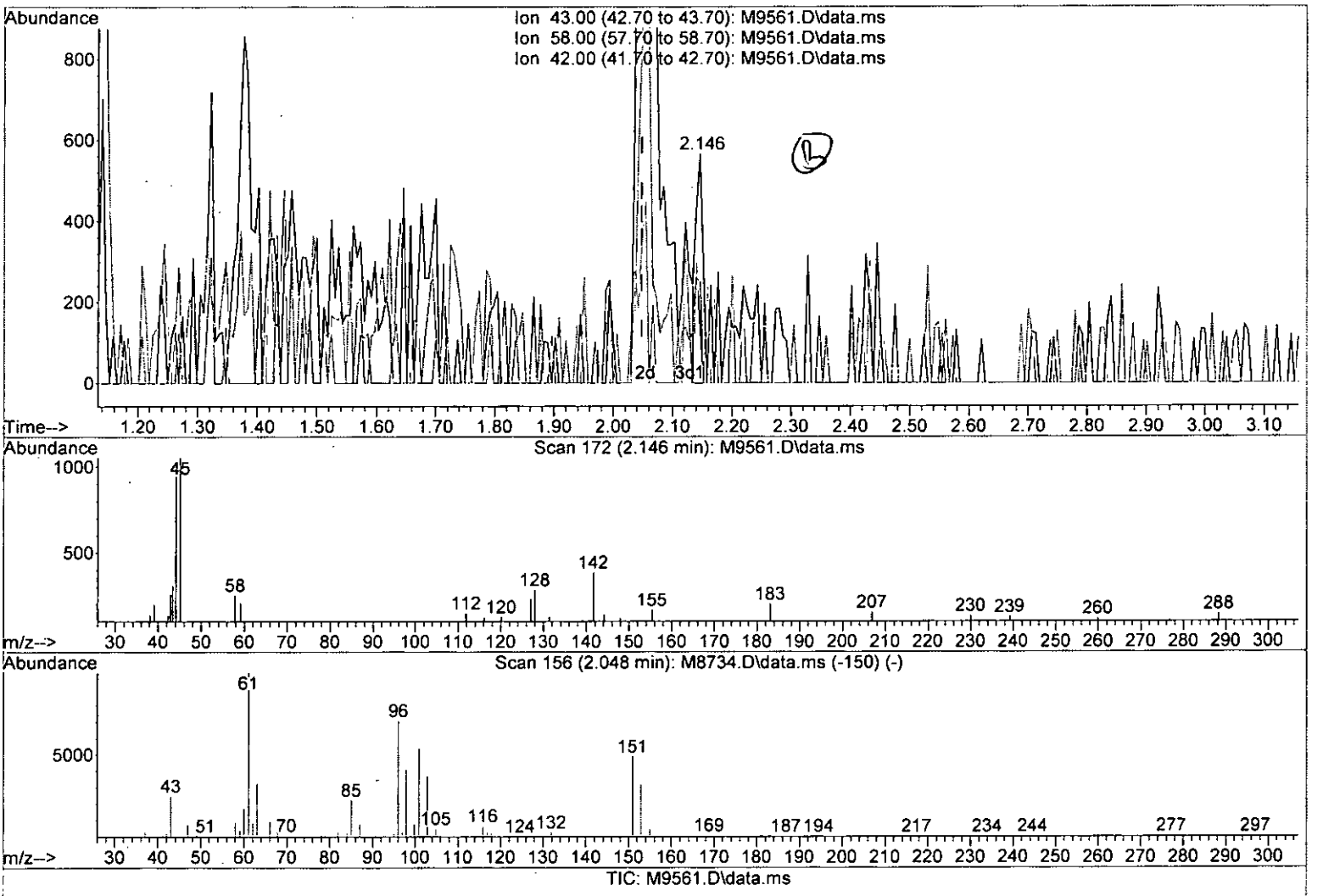
KR 10/9/14

W090914.M Thu Oct 09 09:50:58 2014 Page: 1

Quantitation Report (Qedit)

Sample : R1407813-024|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9561.D
Misc : PARSONS 11603 T4
Acq On : 8 Oct 2014 10:23 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 22:37:59 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



TIC: M9561.D\data.ms

(15) Acetone (P)

2.146min (+0.098) 0.22 ppb

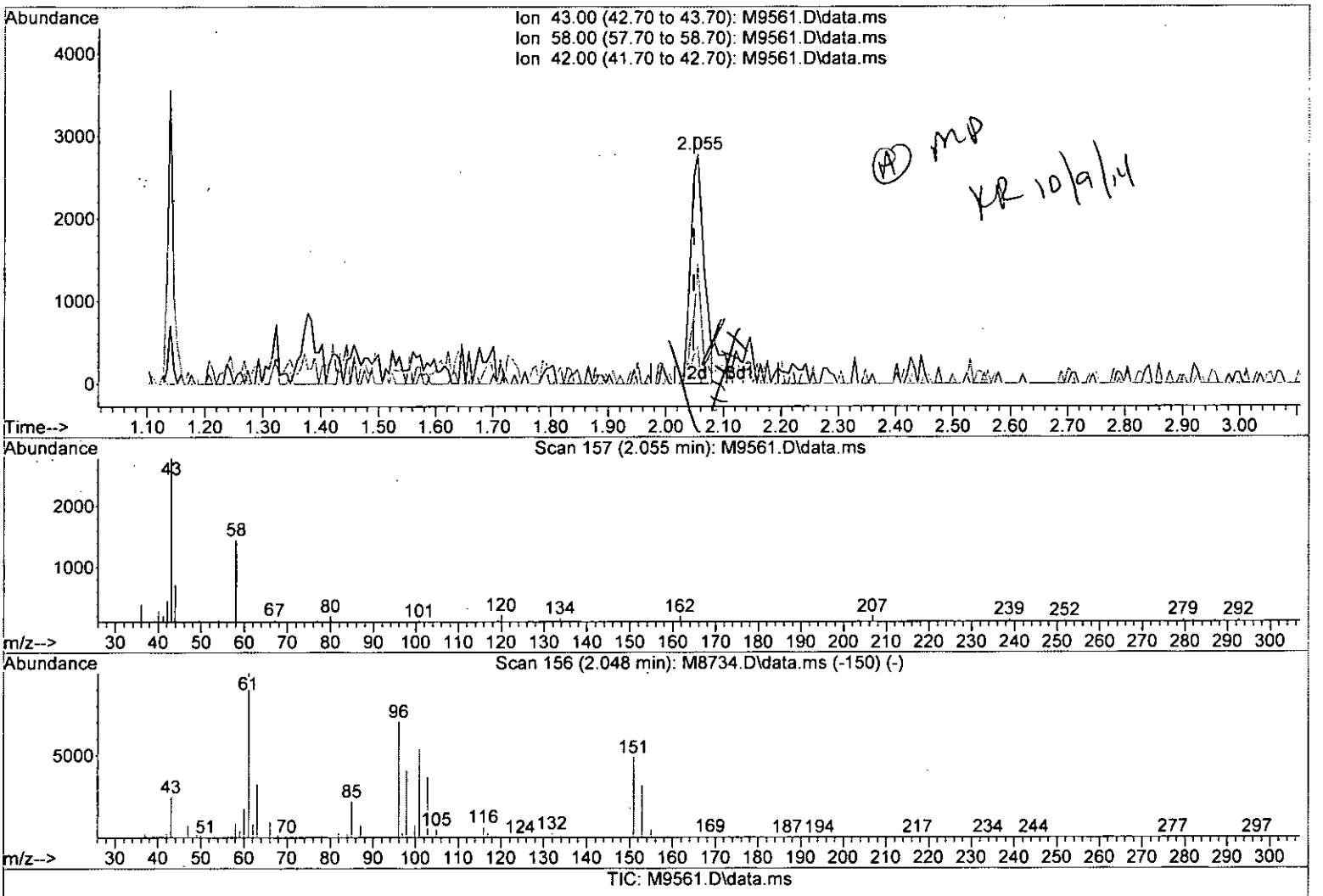
response 463

Ion	Exp%	Act%
43.00	100	100
58.00	30.30	44.52
42.00	7.10	23.67
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : R1407813-024|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9561.D
Misc : PARSONS 11603 T4
Acq On : 8 Oct 2014 10:23 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 22:37:59 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



TIC: M9561.D\data.ms

(15) Acetone (P)

2.055min (+0.006) 2.15 ppb m

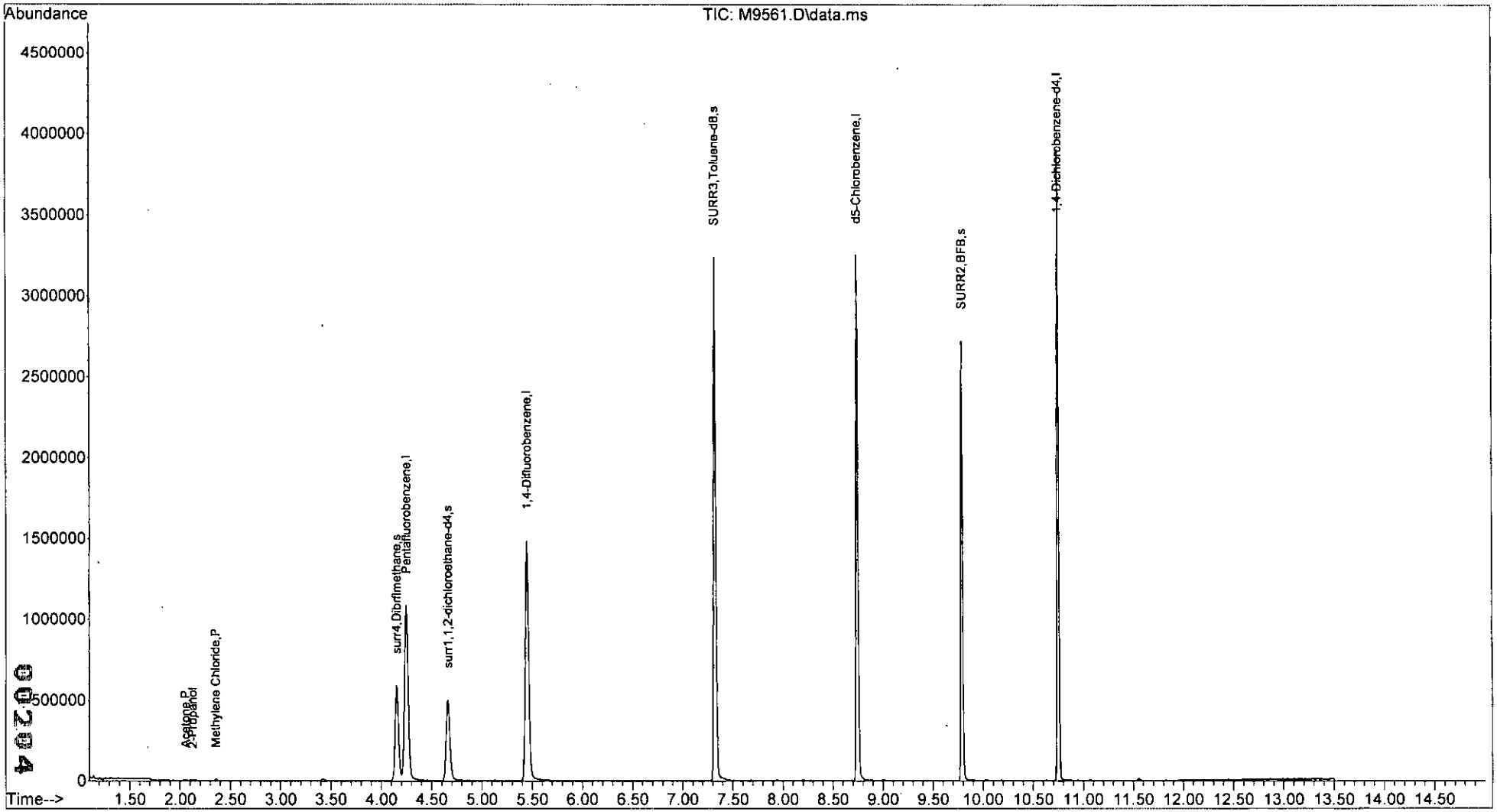
response 4438

Ion	Exp%	Act%
43.00	100	100
58.00	30.30	52.05#
42.00	7.10	16.07
0.00	0.00	0.00

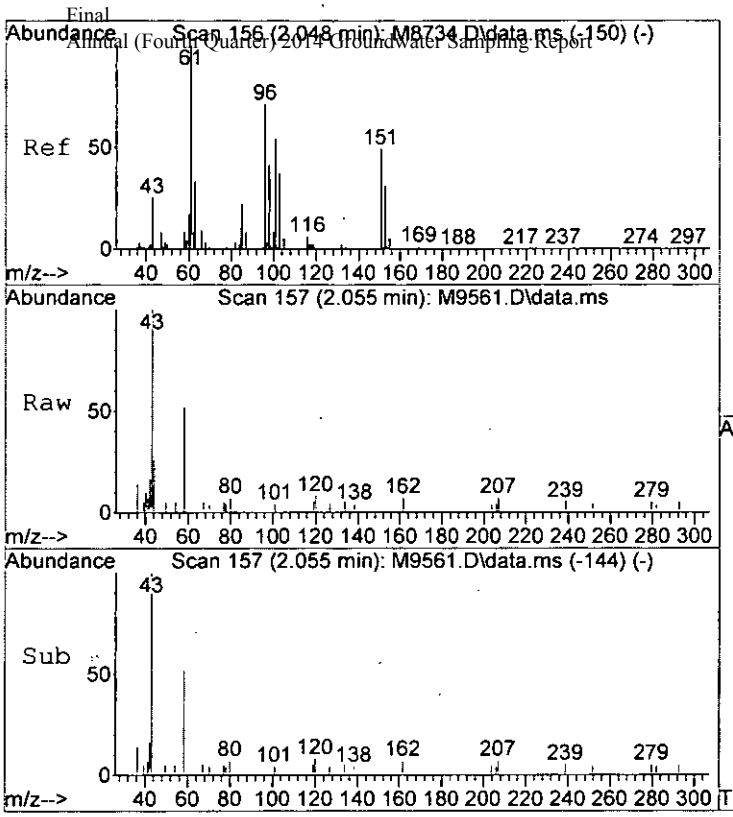
Quantitation Report (QT Reviewed)

Sample : R1407813-024|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9561.D
Misc : PARSONS 11603 T4
Acq On : 8 Oct 2014 10:23 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 09:49:49 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



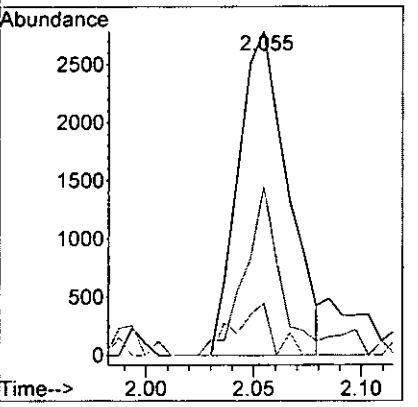
W090914.M Thu Oct 09 09:51:00 2014 Page: 2

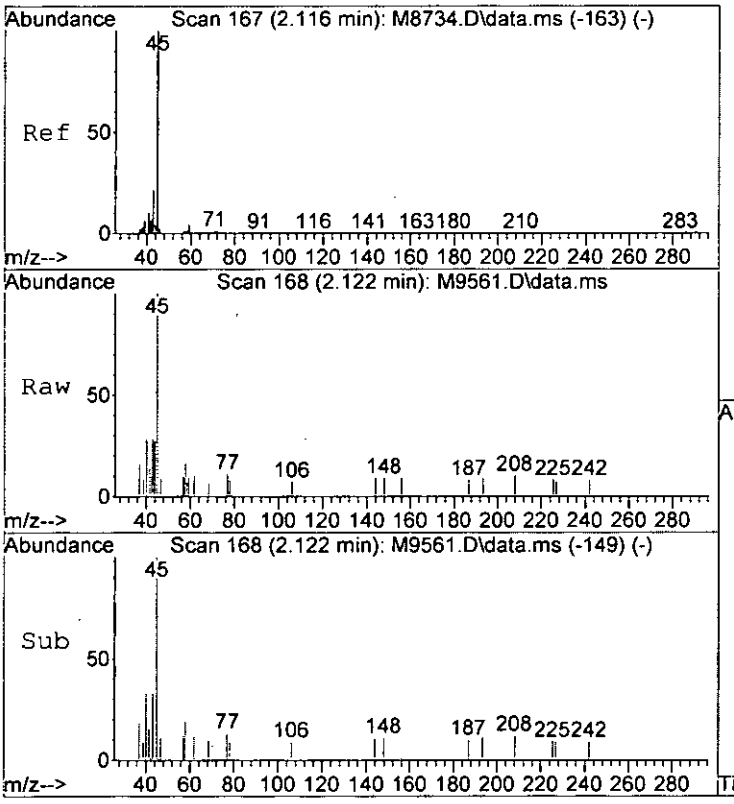


#15
Acetone
Concen: 2.15 ppb m
RT: 2.055 min Scan# 157
Delta R.T. 0.006 min
Lab File: M9561.D
Acq: 8 Oct 2014 10:23 pm

Tgt Ion: 43 Resp: 4438

Ion	Ratio	Lower	Upper
43	100		
58	52.0	10.3	50.3#
42	16.1	0.0	27.1

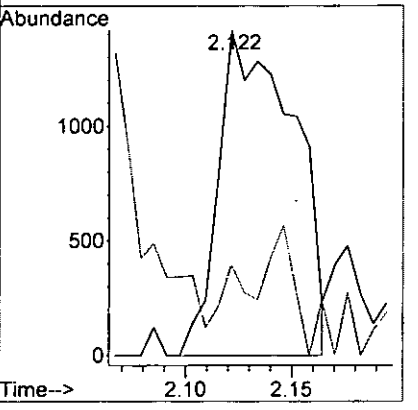


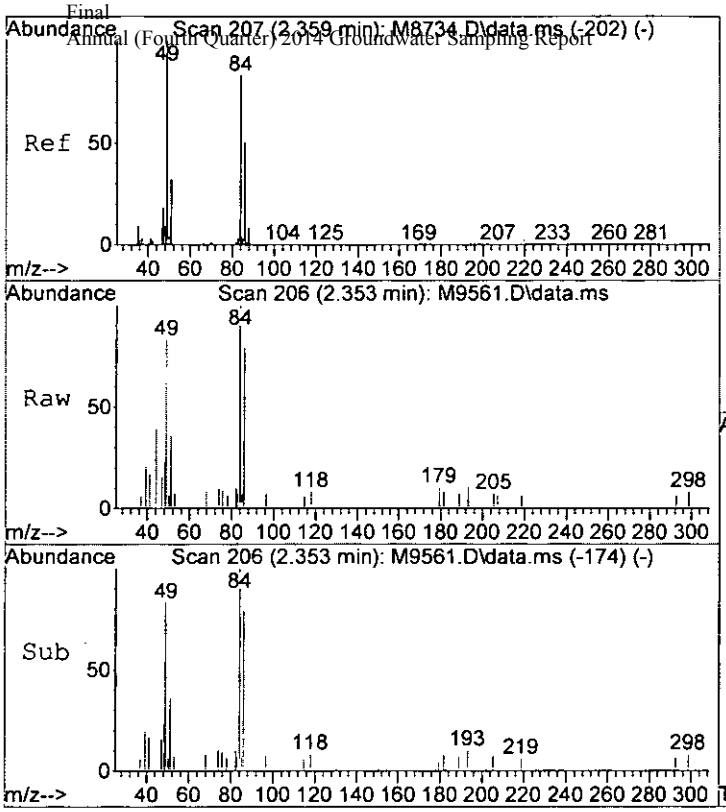


#16
2-Propanol
Concen: 10.57 ppb
RT: 2.122 min Scan# 168
Delta R.T. 0.006 min
Lab File: M9561.D
Acq: 8 Oct 2014 10:23 pm

Tgt Ion: 45 Resp: 3481

Ion	Ratio	Lower	Upper
45	100		
43	27.9	0.6	40.6

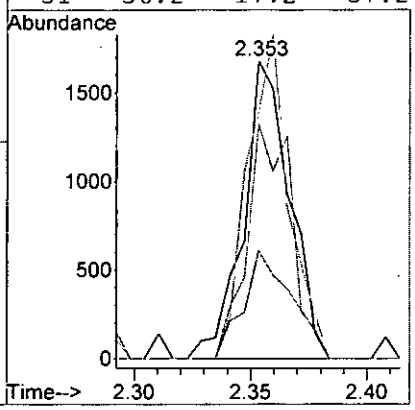




#22
Methylene Chloride
Concen: 0.25 ppb
RT: 2.353 min Scan# 206
Delta R.T. -0.006 min
Lab File: M9561.D
Acq: 8 Oct 2014 10:23 pm

Tgt Ion: 84 Resp: 2314

Ion	Ratio	Lower	Upper
84	100		
86	78.7	44.2	84.2
49	83.4	105.8	145.8#
51	36.2	17.2	57.2



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\100814\
Data File : M9561.D
Acq On : 8 Oct 2014 10:23 pm
Operator : K.Ruest
Sample : R1407813-024|1.0
Misc : PARSONS 11603 T4
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: M9561.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	492	501	509	rBV	586363	1378305	28.49%	5.402%
2	4.249	509	517	532	rVB	1074842	2659920	54.97%	10.426%
3	4.664	575	585	598	rBV	498784	1292432	26.71%	5.066%
4	5.450	705	714	733	rBV	1480851	3458907	71.49%	13.558%
5	7.322	1014	1021	1031	rBV	3237657	4838518	100.00%	18.965%
6	8.742	1249	1254	1271	rVB	3249109	4245691	87.75%	16.641%
7	9.791	1421	1426	1438	rBV	2721784	3229520	66.75%	12.658%
8	10.748	1578	1583	1591	rBV	3898238	4409409	91.13%	17.283%

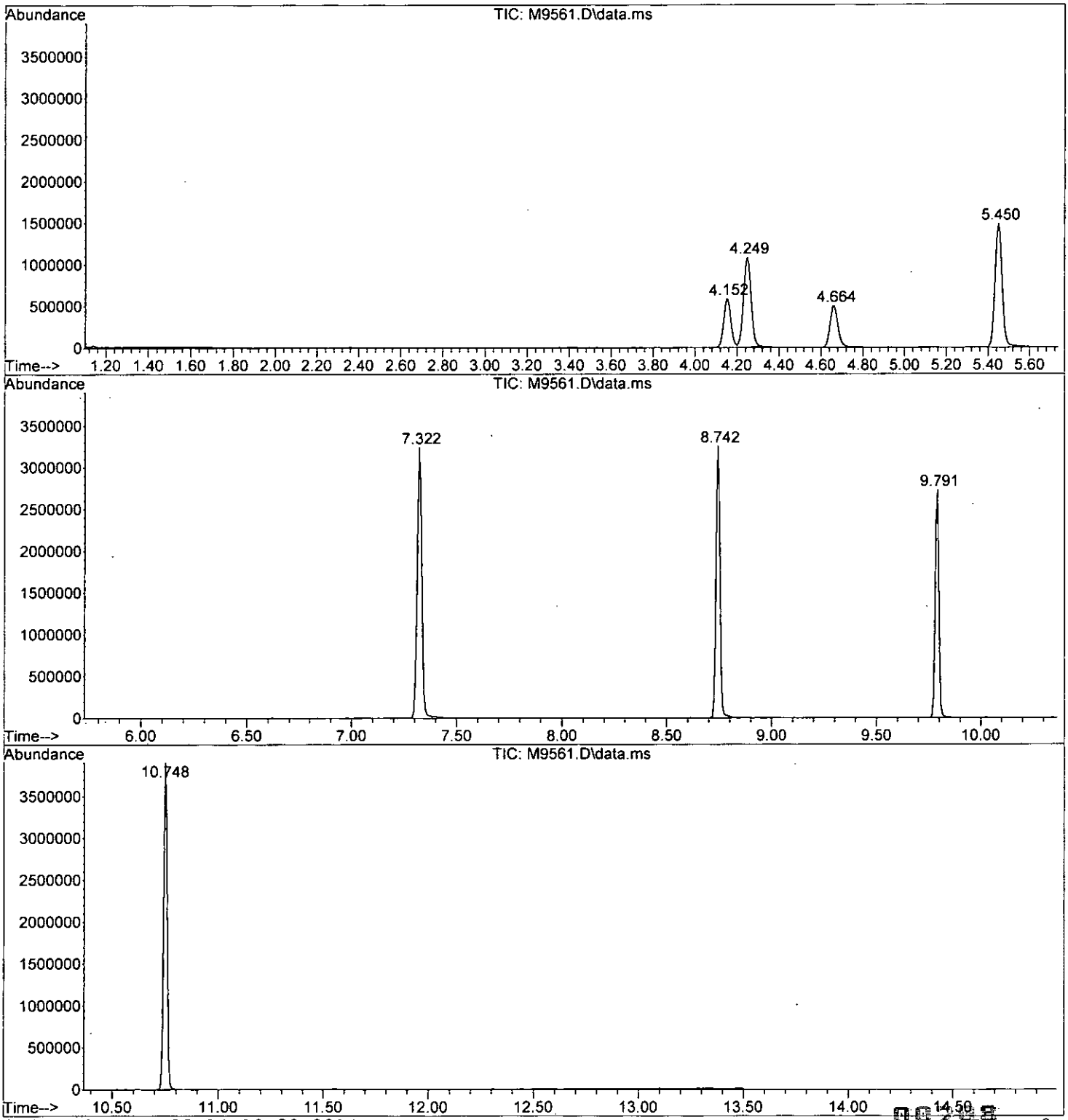
Sum of corrected areas: 25512702

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\100814\
Data File : M9561.D
Acq On : 8 Oct 2014 10:23 pm
Operator : K.Ruest
Sample : R1407813-024|1.0
Misc : PARSONS 11603 T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W090914.M Thu Oct 09 14:19:30 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\100814\\
Data File : M9561.D
Acq On : 8 Oct 2014 10:23 pmm
Operator : K.Ruestt
Sample : R1407813-024|1.00
Misc : PARSONS 11603 T44
ALS Vial : 11 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	9/30/14 0945
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/8/14 22:56
Sample Name:	FTMM-DI-093014	**Units:**	µg/L
Lab Code:	R1407813-025	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9562.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 9/30/14 0945
Date Received: 10/ 3/14
Date Analyzed: 10/8/14 22:56

Sample Name: FTMM-DI-093014
Lab Code: R1407813-025

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100814\M9562.D\

Analysis Lot: 415258
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	9/30/14 0945
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/8/14 22:56
Sample Name:	FTMM-DI-093014	**Units:**	µg/L
Lab Code:	R1407813-025	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9562.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	75-120	10/8/14 22:56	
Dibromofluoromethane	97	85-115	10/8/14 22:56	
Toluene-d8	99	85-120	10/8/14 22:56	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	9/30/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/8/14 2256

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-DI-093014	**Units:**	µg/L
Lab Code:	R1407813-025	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407813-025|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9562.D
Misc : PARSONS 11603 T4
Acq On : 8 Oct 2014 10:56 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:00:10 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	981102	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1609684	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1469480	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	755974	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.158	113	435932	48.62	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.24%				
48) surr1,1,2-dichloroetha...	4.664	65	443830	45.93	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 91.86%				
65) SURR3,Toluene-d8	7.322	98	1872161	49.48	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.96%				
70) SURR2,BFB	9.791	95	682121	50.35	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.70%				
Target Compounds							Qvalue
15) Acetone	2.048	43	1462	0.72	ppb		94
22) Methylene Chloride	2.359	84	2139	0.24	ppb	#	75

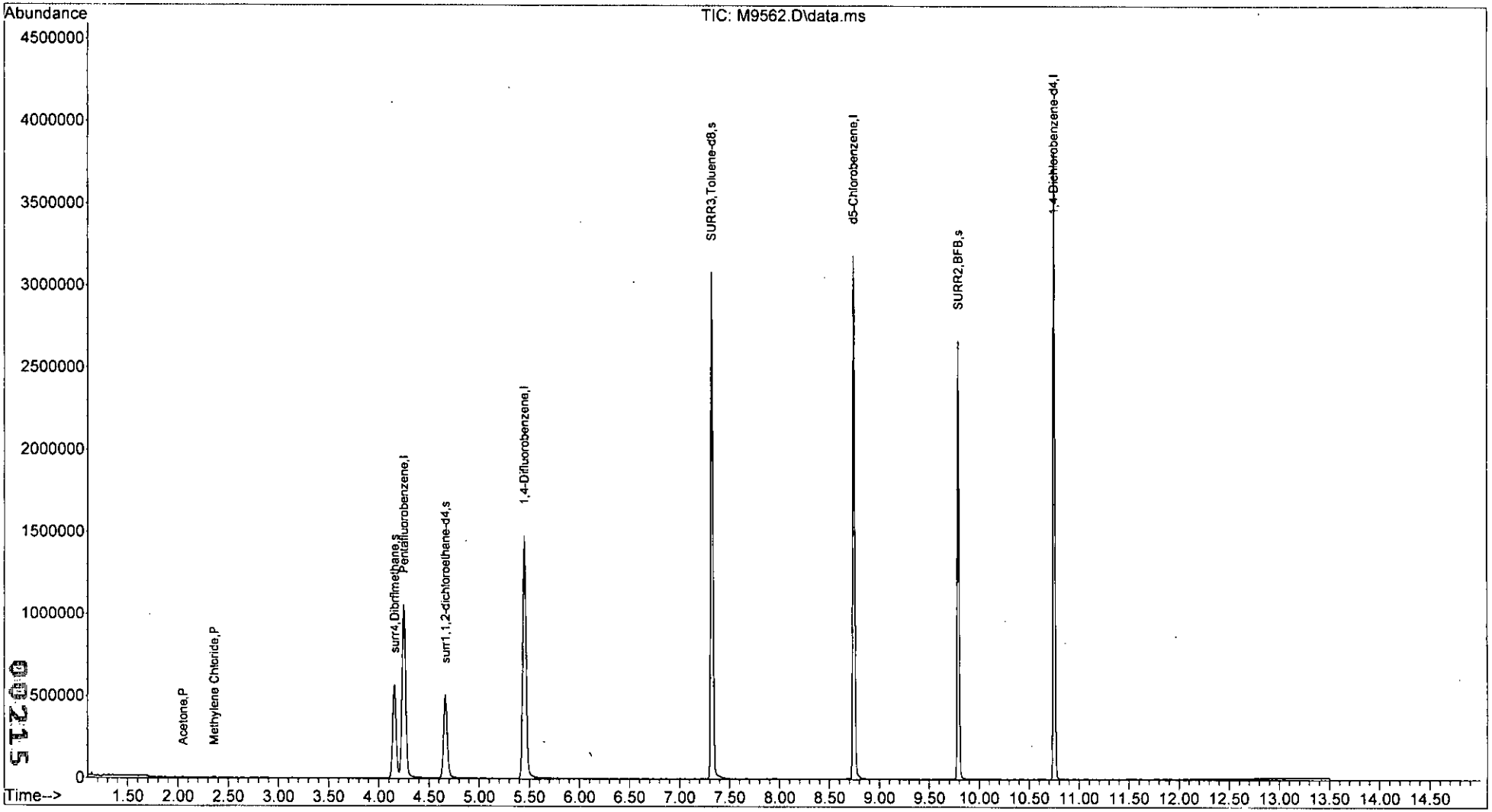
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR 10/9/14

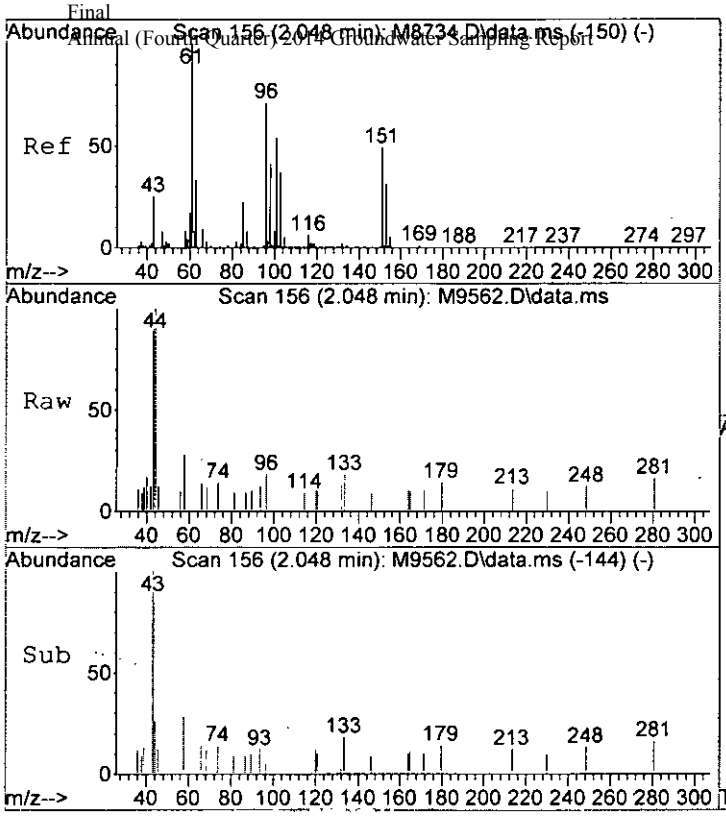
Quantitation Report (QT Reviewed)

Sample : R1407813-025|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9562.D
Misc : PARSONS 11603 T4
Acq On : 8 Oct 2014 10:56 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:00:10 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



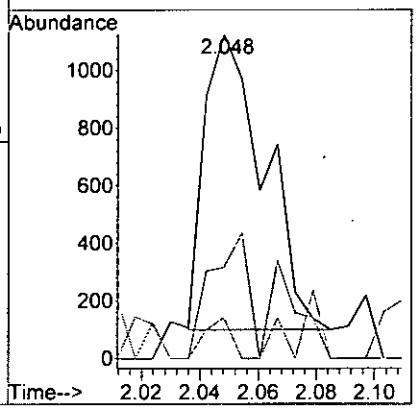
W090914.M Thu Oct 09 10:01:53 2014 Page: 2

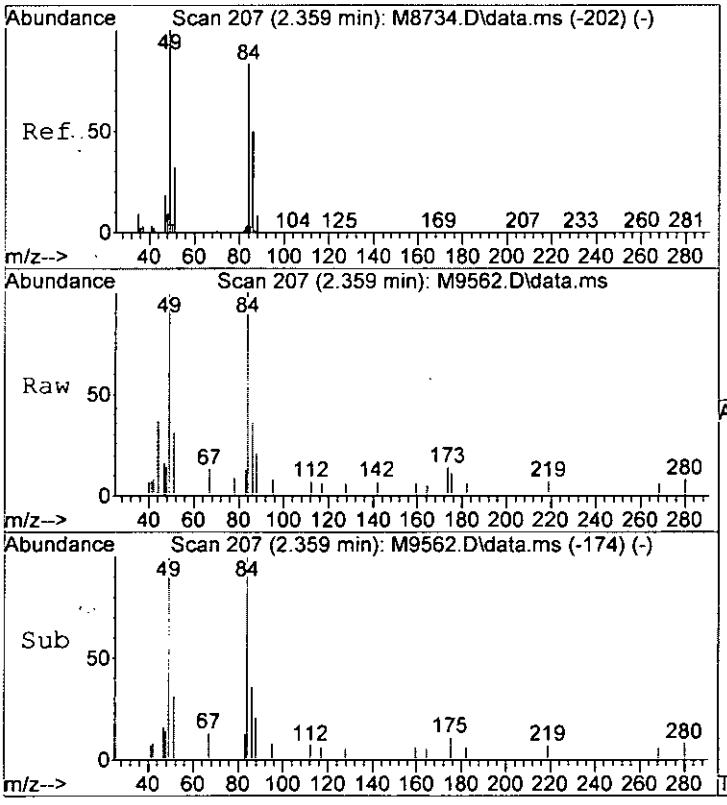


#15
Acetone
Concen: 0.72 ppb
RT: 2.048 min Scan# 156
Delta R.T. -0.000 min
Lab File: M9562.D
Acq: 8 Oct 2014 10:56 pm

Tgt Ion: 43 Resp: 1462

Ion	Ratio	Lower	Upper
43	100		
58	28.1	10.3	50.3
42	12.6	0.0	27.1

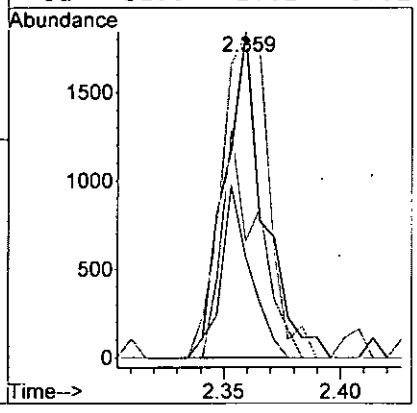




#22
Methylene Chloride
Concen: 0.24 ppb
RT: 2.359 min Scan# 207
Delta R.T. -0.000 min
Lab File: M9562.D
Acq: 8 Oct 2014 10:56 pm

Tgt Ion: 84 Resp: 2139

Ion	Ratio	Lower	Upper
84	100		
86	35.8	44.2	84.2#
49	99.3	105.8	145.8#
51	31.0	17.2	57.2



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\100814\
Data File : M9562.D
Acq On : 8 Oct 2014 10:56 pm
Operator : K.Ruest
Sample : R1407813-025|1.0
Misc : PARSONS 11603 T4
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: M9562.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.158	490	502	509	rBV	567199	1359256	28.74%	5.413%
2	4.249	509	517	530	rVB	1046007	2600881	55.00%	10.357%
3	4.664	574	585	604	rBV	505227	1282719	27.12%	5.108%
4	5.450	704	714	731	rBV	1473768	3407949	72.06%	13.571%
5	7.322	1014	1021	1038	rBV	3082443	4729054	100.00%	18.832%
6	8.742	1249	1254	1269	rBV	3185469	4171473	88.21%	16.612%
7	9.791	1421	1426	1438	rBV	2664048	3162543	66.87%	12.594%
8	10.748	1578	1583	1594	rBV	3821359	4397725	92.99%	17.513%

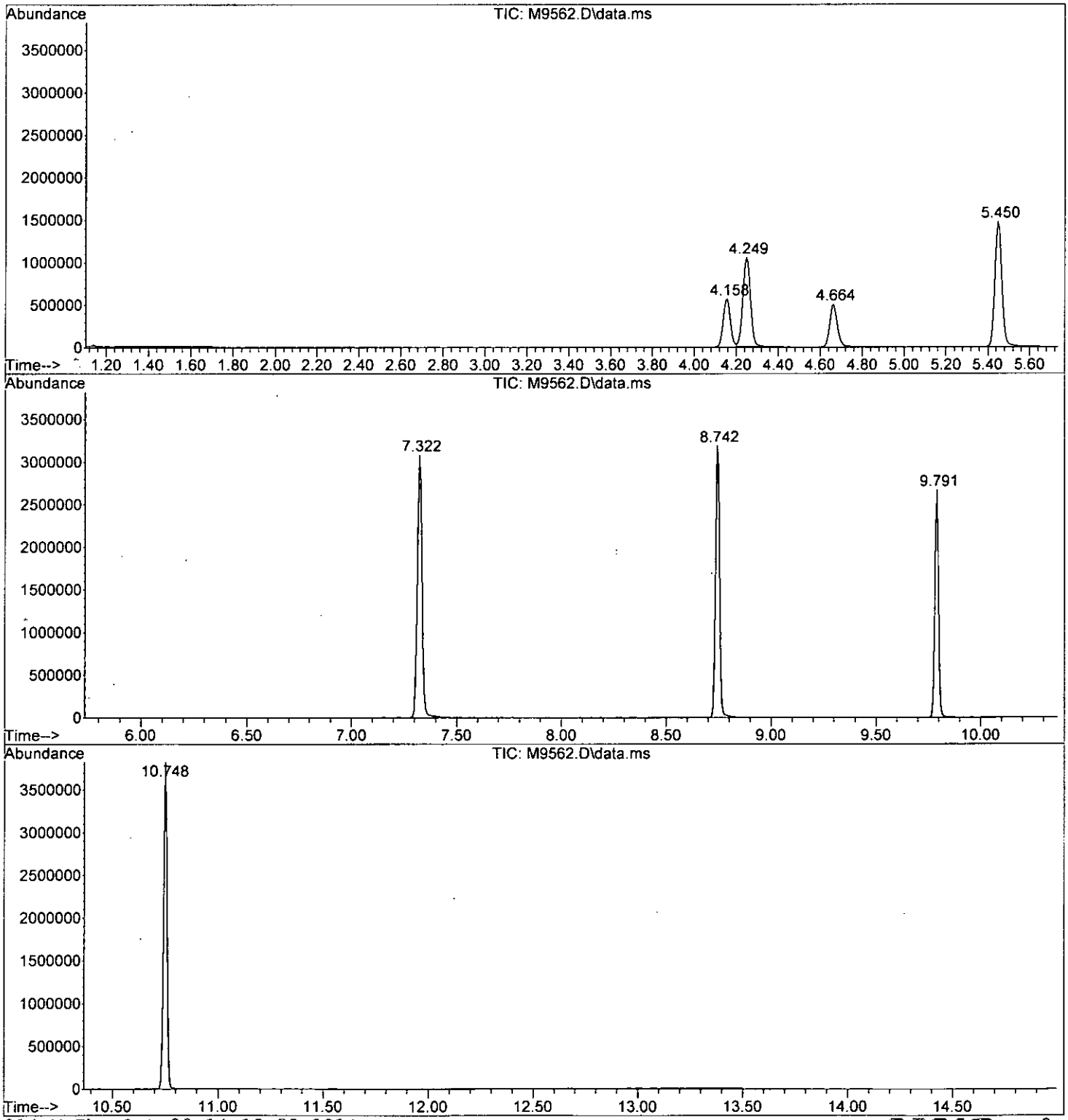
Sum of corrected areas: 25111600

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\100814\
Data File : M9562.D
Acq On : 8 Oct 2014 10:56 pm
Operator : K.Ruest
Sample : R1407813-025|1.0
Misc : PARSONS 11603 T4
ALS Vial : 12 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W090914.M Thu Oct 09 14:19:38 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\100814\\
Data File : M9562.D
Acq On : 8 Oct 2014 10:56 pmm
Operator : K.Ruestt
Sample : R1407813-025|1.00
Misc : PARSONS 11603 T44
ALS Vial : 12 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1530
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 12:53
Sample Name:	FTMM-EB-100214	**Units:**	µg/L
Lab Code:	R1407813-026	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9581.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1530
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 12:53
Sample Name:	FTMM-EB-100214	**Units:**	µg/L
Lab Code:	R1407813-026	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9581.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1530
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 12:53
Sample Name:	FTMM-EB-100214	**Units:**	µg/L
Lab Code:	R1407813-026	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9581.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	10/9/14 12:53	
Dibromofluoromethane	97	85-115	10/9/14 12:53	
Toluene-d8	101	85-120	10/9/14 12:53	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/2/14
Sample Matrix:	Water	**Date Received:**	10/3/14
		Date Analyzed:	10/9/14 1253

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-EB-100214	**Units:**	µg/L
Lab Code:	R1407813-026	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407813-026|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9581.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 12:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 14:01:43 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	931777	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1506401	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1406679	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	688192	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	405049	48.27	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 96.54%			
48) surr1,1,2-dichloroetha...	4.664	65	395002	43.68	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 87.36%			
65) SURR3,Toluene-d8	7.322	98	1781008	50.29	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.58%			
70) SURR2,BFB	9.791	95	634620	50.05	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.10%			
Target Compounds						Qvalue
15) Acetone	2.054	43	1217	0.64	ppb	# 51
22) Methylene Chloride	2.359	84	2143	0.25	ppb	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

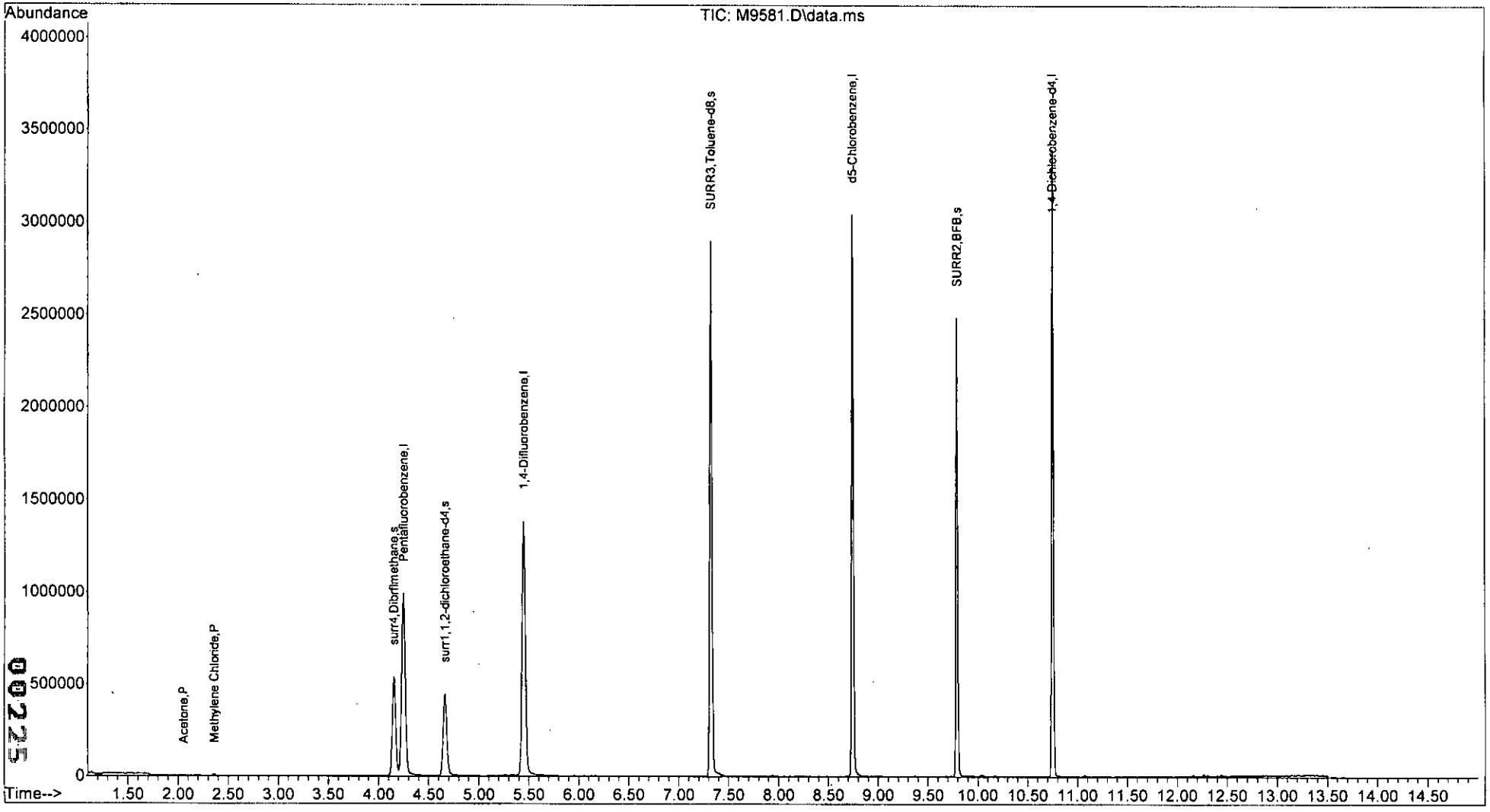
KP
10/9/14

W090914.M Thu Oct 09 14:02:52 2014 Page: 1

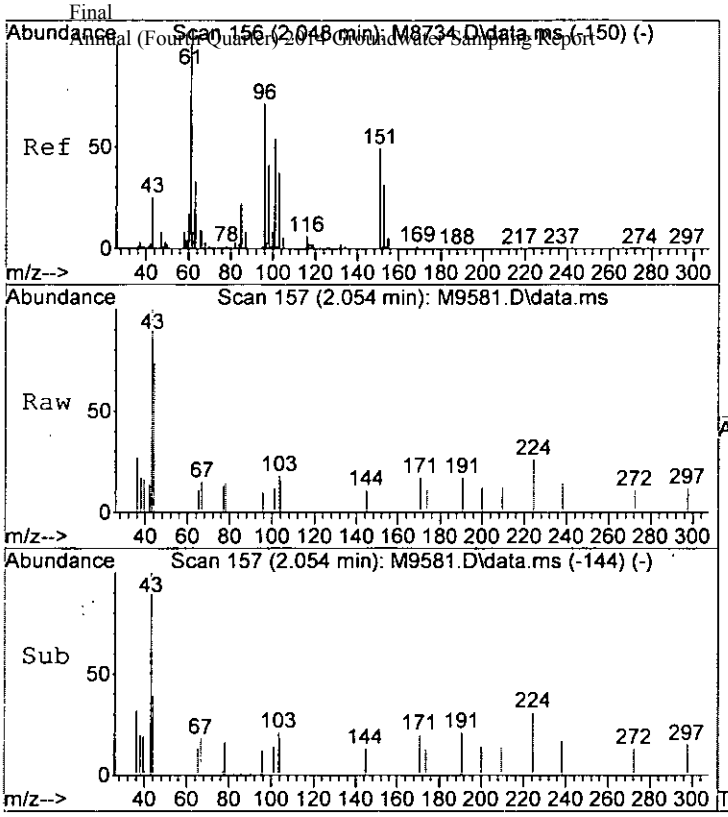
Quantitation Report (QT Reviewed)

Sample : R1407813-026|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9581.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 12:53 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 14:01:43 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



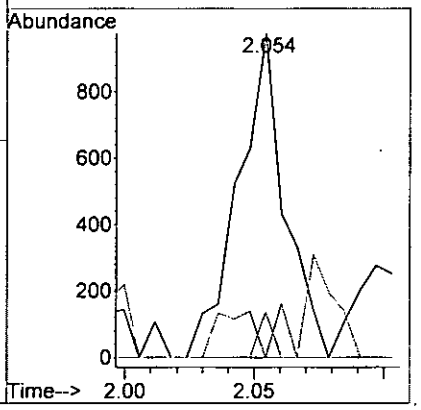
W090914.M Thu Oct 09 14:02:54 2014 Page: 2

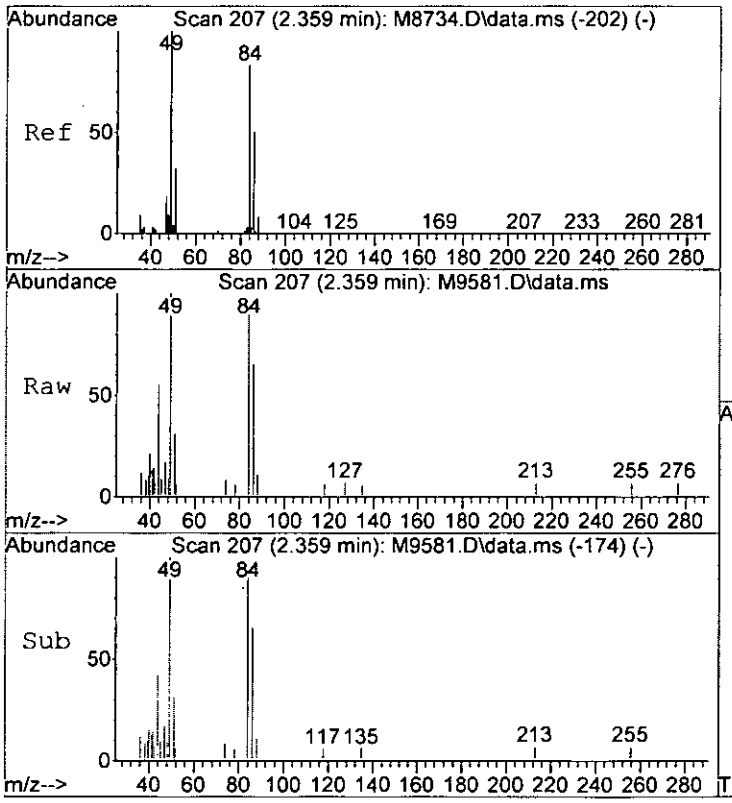


#15
Acetone
Concen: 0.64 ppb
RT: 2.054 min Scan# 157
Delta R.T. 0.006 min
Lab File: M9581.D
Acq: 9 Oct 2014 12:53 pm

Tgt Ion: 43 Resp: 1217

Ion	Ratio	Lower	Upper
43	100		
58	0.0	10.3	50.3#
42	13.9	0.0	27.1

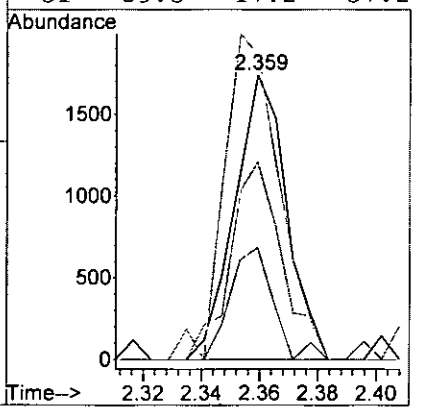




#22
Methylene Chloride
Concen: 0.25 ppb
RT: 2.359 min Scan# 207
Delta R.T. -0.000 min
Lab File: M9581.D
Acq: 9 Oct 2014 12:53 pm

Tgt Ion: 84 Resp: 2143

Ion	Ratio	Lower	Upper
84	100		
86	69.4	44.2	84.2
49	106.7	105.8	145.8
51	39.3	17.2	57.2



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9581.D
Acq On : 9 Oct 2014 12:53 pm
Operator : K.Ruest
Sample : R1407813-026|1.0
Misc : PARSONS 11603 T4
ALS Vial : 2 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: M9581.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	492	501	509	rBV	537864	1259745	28.21%	5.395%
2	4.249	509	517	532	rVB	984577	2458592	55.06%	10.530%
3	4.664	574	585	598	rBV	443393	1133998	25.39%	4.857%
4	5.450	704	714	738	rBV	1378068	3193213	71.51%	13.676%
5	7.322	1014	1021	1038	rBV	2899563	4465439	100.00%	19.124%
6	8.742	1249	1254	1270	rBV	3044731	3937525	88.18%	16.863%
7	9.791	1421	1426	1437	rBV	2485292	2942016	65.88%	12.600%
8	10.748	1578	1583	1593	rBV	3393867	3958967	88.66%	16.955%

Sum of corrected areas: 23349495

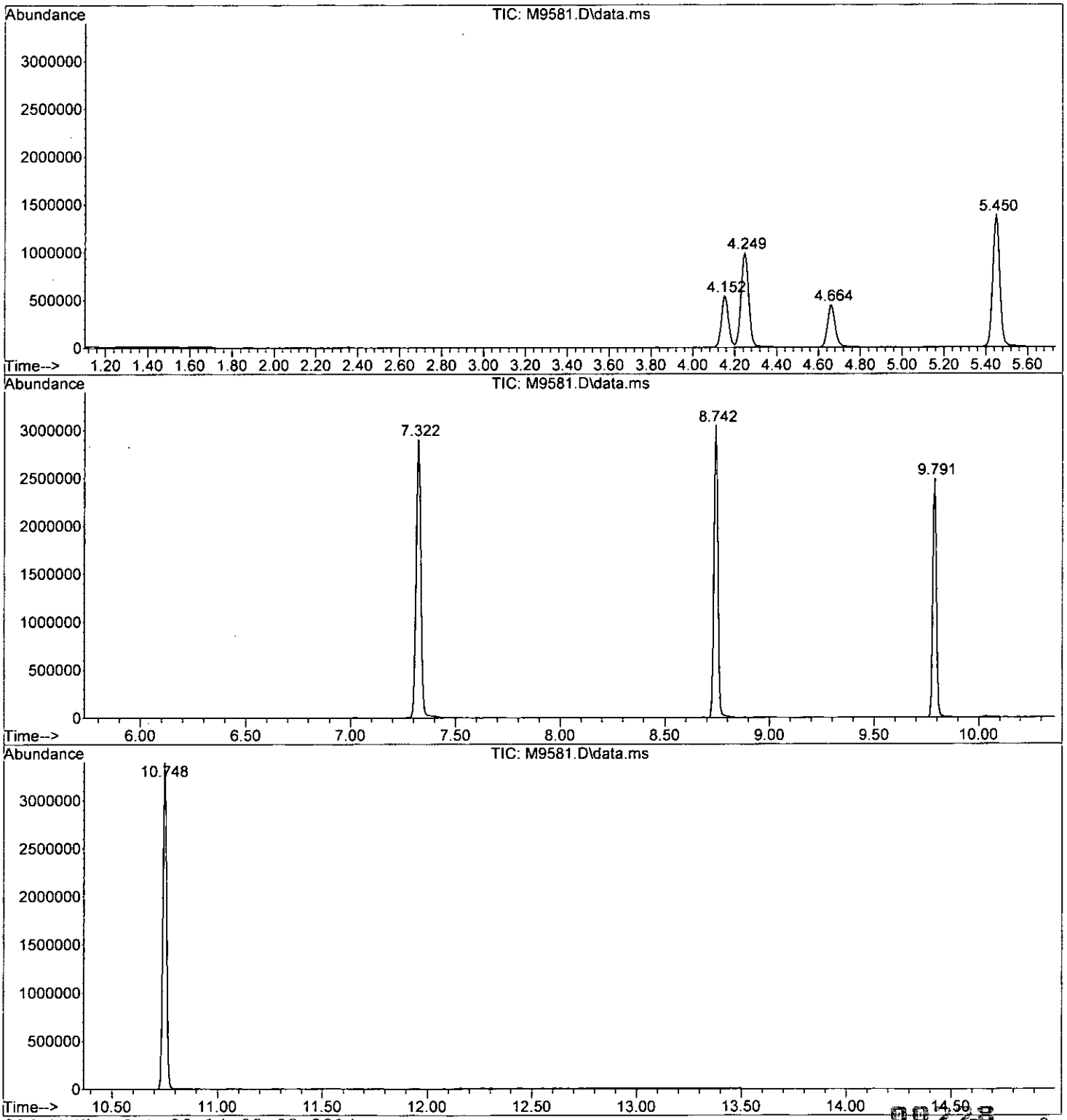
W090914.M Thu Oct 09 14:03:00 2014 Page: 1

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9581.D
Acq On : 9 Oct 2014 12:53 pm
Operator : K.Ruest
Sample : R1407813-026|1.0
Misc : PARSONS 11603 T4
ALS Vial : 2 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W090914.M Thu Oct 09 14:03:03 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\100914\\
Data File : M9581.D
Acq On : 9 Oct 2014 12:53 pmm
Operator : K.Ruestt
Sample : R1407813-026|1.00
Misc : PARSONS 11603 T44
ALS Vial : 2 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1230
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 16:06
Sample Name:	FTMM-59-GW-1122MW107-16.67	**Units:**	µg/L
Lab Code:	R1407813-027	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9587.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.6**	**J**	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1230
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 16:06
Sample Name:	FTMM-59-GW-1122MW107-16.67	**Units:**	µg/L
Lab Code:	R1407813-027	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9587.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**0.83**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**1.1**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**0.37**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**0.46**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.37**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 2/14 1230
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 16:06
Sample Name:	FTMM-59-GW-1122MW107-16.67	**Units:**	µg/L
Lab Code:	R1407813-027	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9587.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	75-120	10/9/14 16:06	
Dibromofluoromethane	100	85-115	10/9/14 16:06	
Toluene-d8	100	85-120	10/9/14 16:06	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/2/14
Date Received: 10/3/14
Date Analyzed: 10/9/14 1606

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-59-GW-1122MW107-16.67
Lab Code: R1407813-027

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
	unknown	10.98	5.4	J
000767-58-8	Indan, 1-methyl-	11.92	8.3	JN

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407813-027|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9587.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 4:06 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 16:52:29 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	919056	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1445274	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1370925	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	709825	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	402280	49.97	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.94%			
48) surr1,1,2-dichloroetha...	4.664	65	393651	45.37	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 90.74%			
65) SURR3,Toluene-d8	7.322	98	1696708	49.94	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.88%			
70) SURR2,BFB	9.791	95	638438	52.48	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 104.96%			
Target Compounds						Qvalue
15) Acetone	2.054	43	4835	2.56	ppb	98
89) Isopropylbenzene	9.675	105	30375	0.83	ppb	97
95) n-Propylbenzene	10.022	91	15902	0.37	ppb	94
100) tert-Butylbenzene	10.437	119	9121	0.37	ppb	97
103) sec-Butylbenzene	10.620	105	16206	0.46	ppb	91
117) Naphthalen	12.302	128	22545	1.12	ppb	97

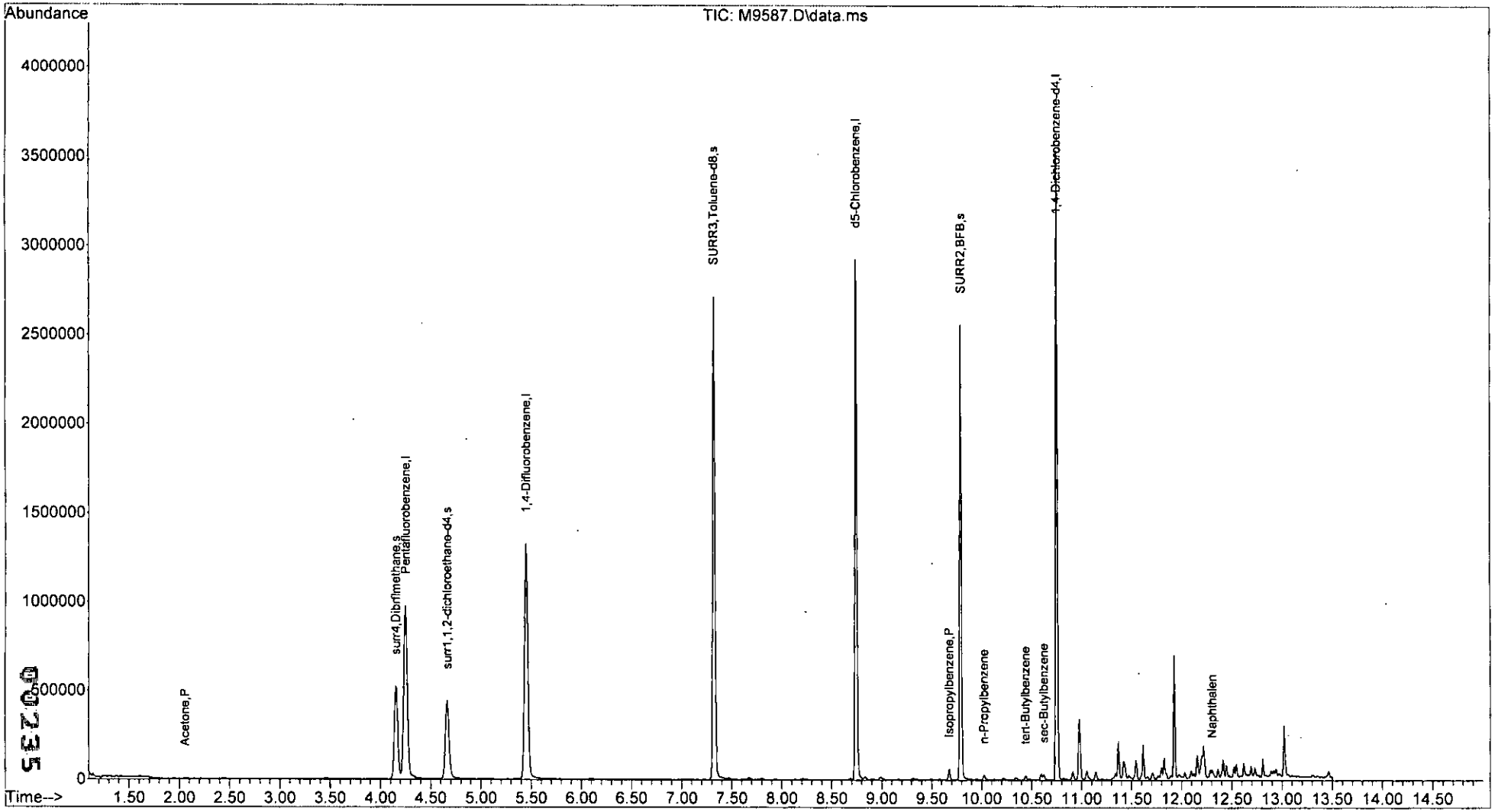
KR 10/9/14

(#) = qualifier out of range (m) = manual integration (+) = signals summed

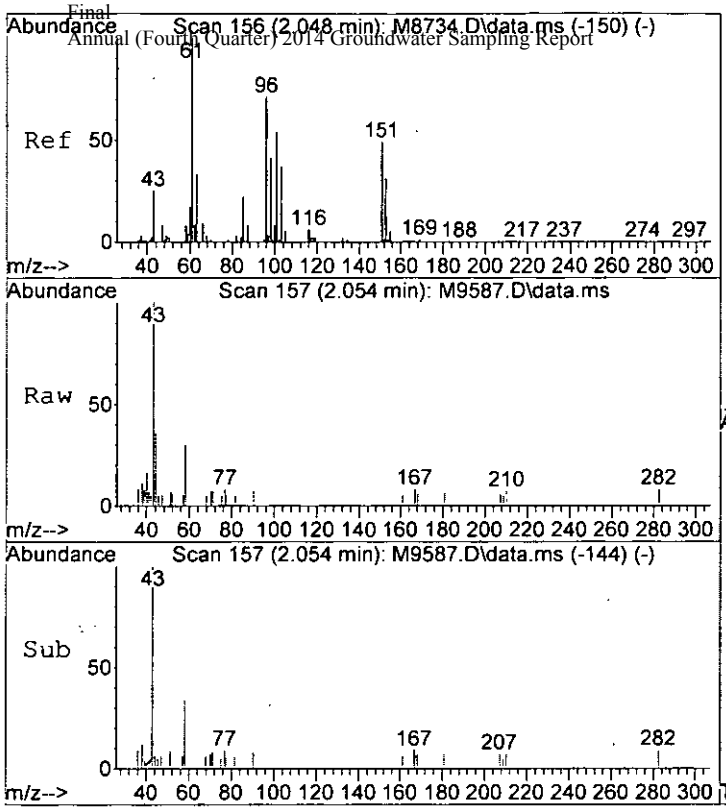
Quantitation Report (QT Reviewed)

Sample : R1407813-027|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9587.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 4:06 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 16:52:29 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



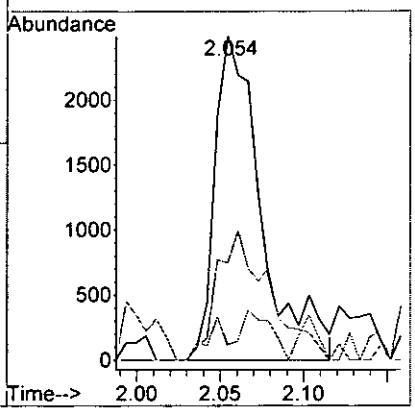
W090914.M Thu Oct 09 16:53:12 2014 Page: 2

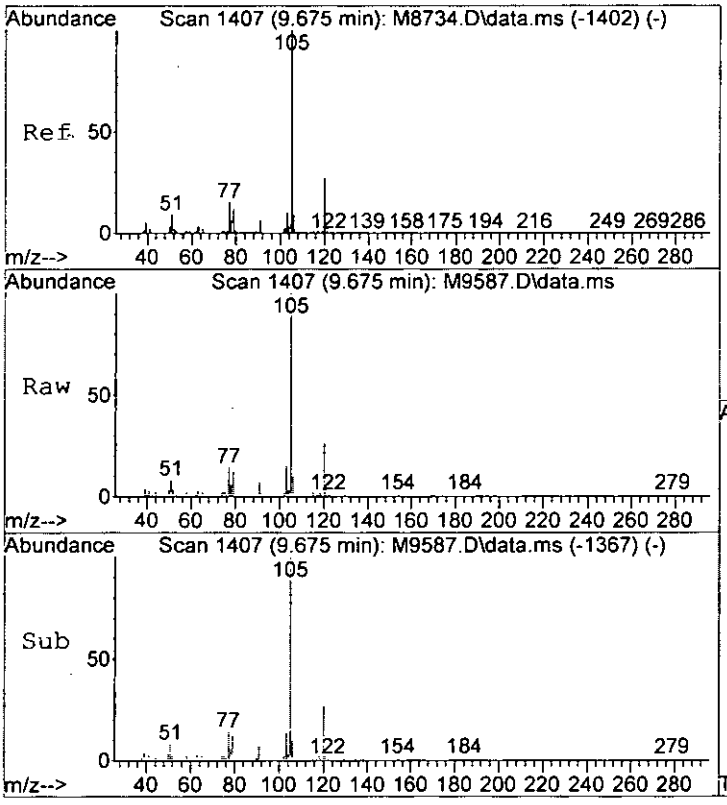


#15
Acetone
Concen: 2.56 ppb
RT: 2.054 min Scan# 157
Delta R.T. 0.006 min
Lab File: M9587.D
Acq: 9 Oct 2014 4:06 pm

Tgt Ion: 43 Resp: 4835

Ion	Ratio	Lower	Upper
43	100		
58	30.0	10.3	50.3
42	4.7	0.0	27.1

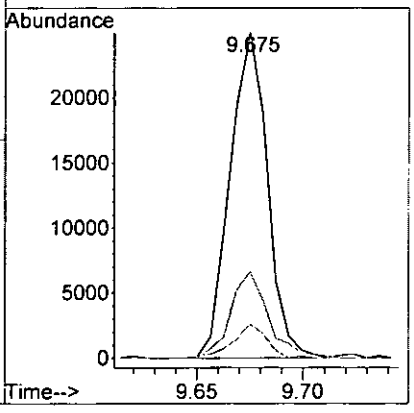


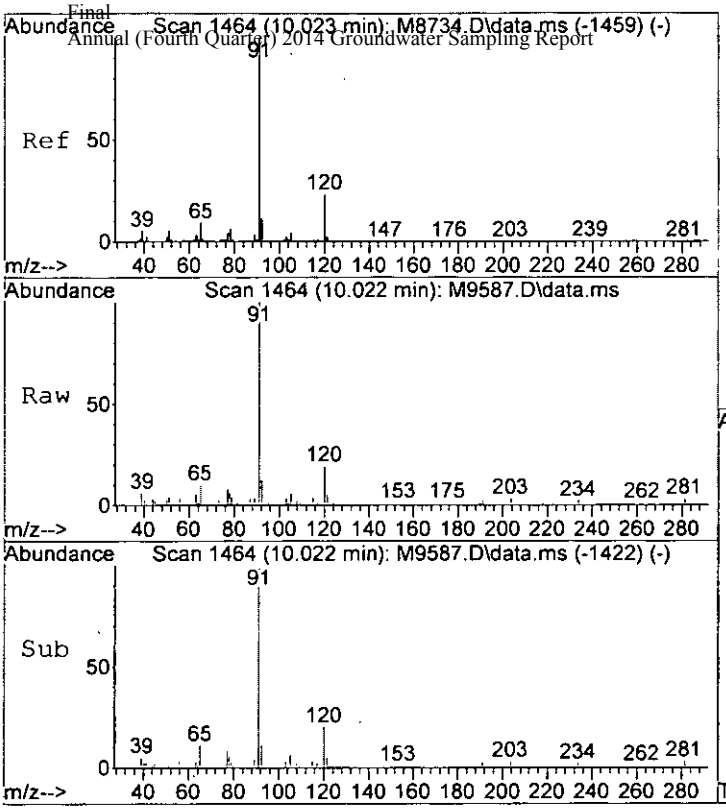


#89
Isopropylbenzene
Concen: 0.83 ppb
RT: 9.675 min Scan# 1407
Delta R.T. -0.000 min
Lab File: M9587.D
Acq: 9 Oct 2014 4:06 pm

Tgt Ion:105 Resp: 30375

Ion	Ratio	Lower	Upper
105	100		
120	26.4	7.6	47.6
106	10.4	0.0	28.7

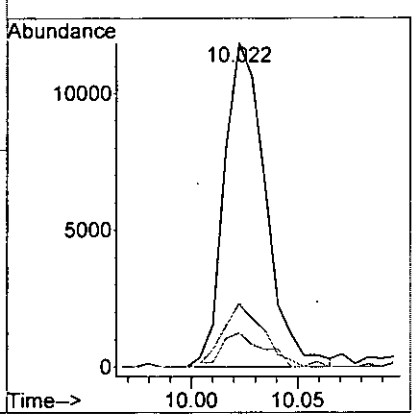


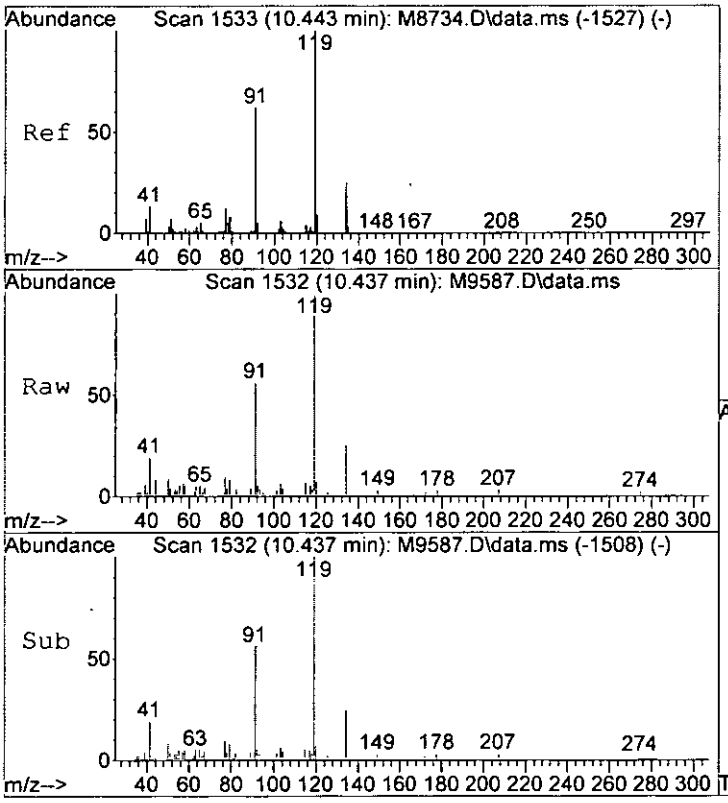


#95
n-Propylbenzene
Concen: 0.37 ppb
RT: 10.022 min Scan# 1464
Delta R.T. -0.006 min
Lab File: M9587.D
Acq: 9 Oct 2014 4:06 pm

Tgt Ion: 91 Resp: 15902

Ion	Ratio	Lower	Upper
91	100		
120	19.5	3.5	43.5
65	10.5	0.0	30.5

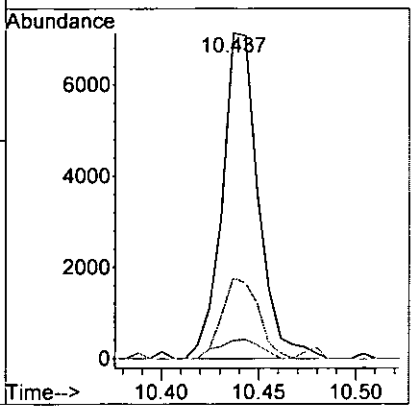


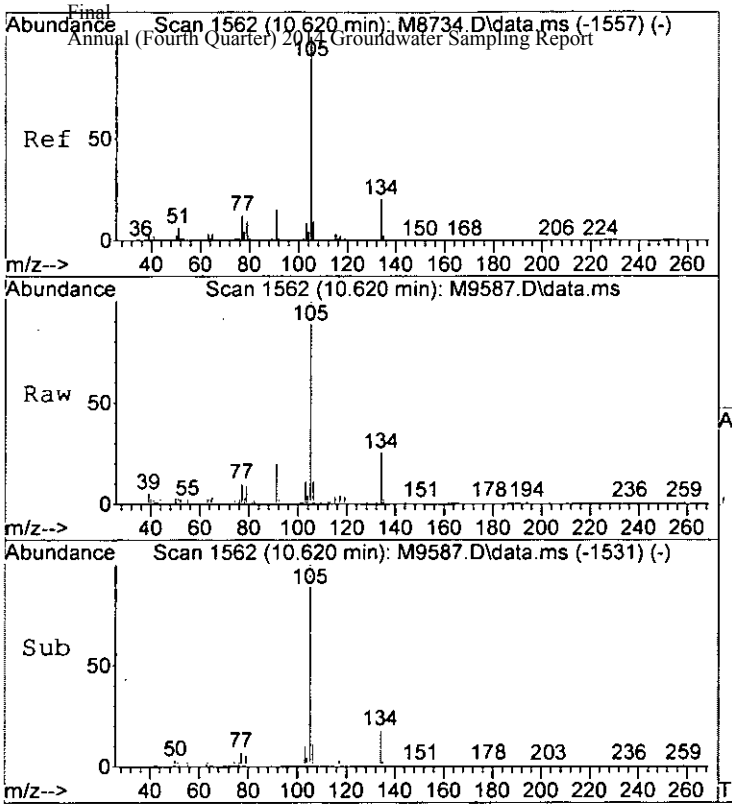


#100
tert-Butylbenzene
Concen: 0.37 ppb
RT: 10.437 min Scan# 1532
Delta R.T. -0.006 min
Lab File: M9587.D
Acq: 9 Oct 2014 4:06 pm

Tgt Ion:119 Resp: 9121

Ion	Ratio	Lower	Upper
119	100		
134	24.6	6.2	46.2
103	5.5	0.0	26.4

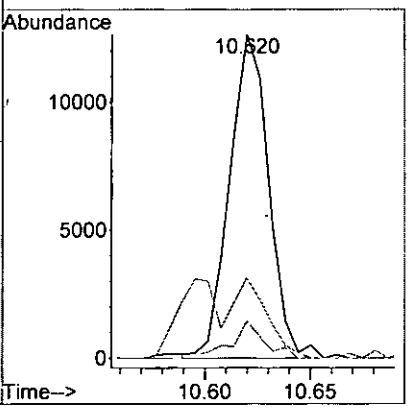


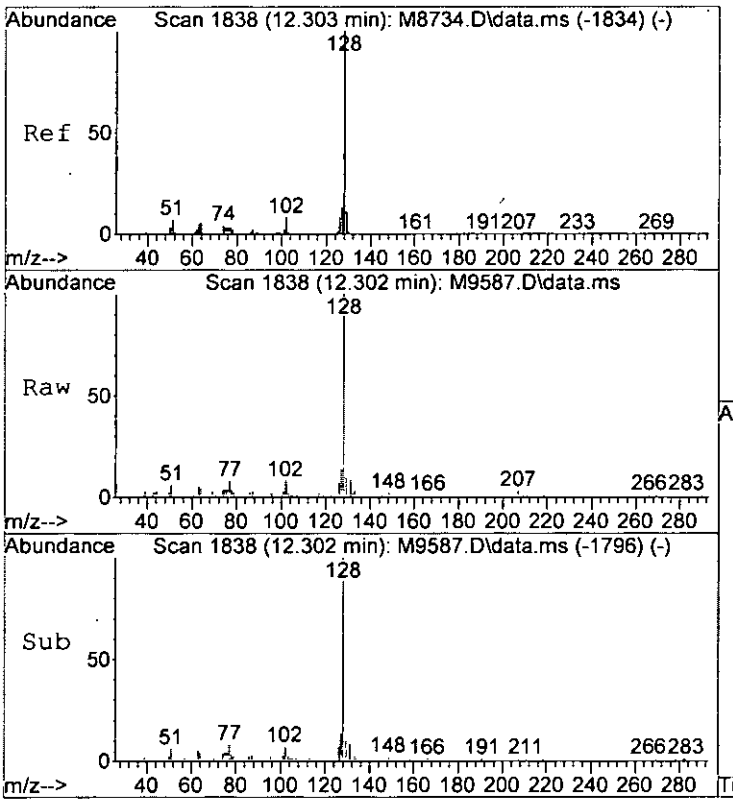


#103
sec-Butylbenzene
Concen: 0.46 ppb
RT: 10.620 min Scan# 1562
Delta R.T. -0.006 min
Lab File: M9587.D
Acq: 9 Oct 2014 4:06 pm

Tgt Ion:105 Resp: 16206

Ion	Ratio	Lower	Upper
105	100		
134	24.7	0.7	40.7
103	11.4	0.0	28.1

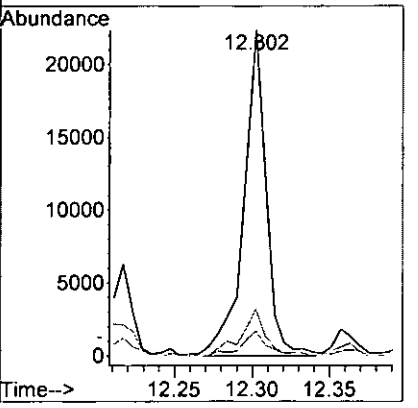




#117
Naphthalen
Concen: 1.12 ppb
RT: 12.302 min Scan# 1838
Delta R.T. -0.000 min
Lab File: M9587.D
Acq: 9 Oct 2014 4:06 pm

Tgt Ion:128 Resp: 22545

Ion	Ratio	Lower	Upper
128	100		
127	14.3	0.0	32.5
102	7.7	0.0	28.0



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9587.D
Acq On : 9 Oct 2014 4:06 pm
Operator : K.Ruest
Sample : R1407813-027|1.0
Misc : PARSONS 11603 T4
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: M9587.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	492	501	509	rBV	521553	1246550	29.46%	4.620%
2	4.249	509	517	536	rVB	971029	2450099	57.89%	9.081%
3	4.664	574	585	598	rBV2	439211	1128568	26.67%	4.183%
4	5.450	704	714	732	rBV	1321707	3075542	72.67%	11.400%
5	7.322	1013	1021	1031	rBV	2713689	4231986	100.00%	15.686%
6	8.742	1249	1254	1266	rBV	2922607	3822808	90.33%	14.169%
7	9.675	1402	1407	1412	rBV	60664	72855	1.72%	0.270%
8	9.791	1421	1426	1434	rBV	2555802	2928099	69.19%	10.853%
9	10.595	1553	1558	1560	rBV2	35107	45223	1.07%	0.168%
10	10.748	1578	1583	1591	rBV	3534144	4067952	96.12%	15.078%
11	10.912	1606	1610	1614	rBV	44680	54144	1.28%	0.201%
12	10.979	1616	1621	1628	rVV2	340976	435553	10.29%	1.614%
13	11.053	1628	1633	1641	rVB	49259	74694	1.76%	0.277%
14	11.144	1643	1648	1655	rVB	44221	61269	1.45%	0.227%
15	11.370	1681	1685	1689	rVB	205963	223014	5.27%	0.827%
16	11.418	1689	1693	1699	rVB4	96056	157639	3.72%	0.584%
17	11.546	1708	1714	1718	rVB	105435	136308	3.22%	0.505%
18	11.613	1718	1725	1729	rBV	193417	212958	5.03%	0.789%
19	11.711	1736	1741	1746	rBV3	36872	51193	1.21%	0.190%
20	11.796	1752	1755	1757	rBV2	56846	55595	1.31%	0.206%
21	11.827	1757	1760	1762	rVV	94553	83155	1.96%	0.308%
22	11.924	1772	1776	1781	rVB2	687208	678237	16.03%	2.514%
23	12.095	1797	1804	1806	rBV2	44582	56093	1.33%	0.208%
24	12.156	1810	1814	1817	rVV2	127785	161182	3.81%	0.597%
25	12.199	1817	1821	1822	rVV2	120134	150866	3.56%	0.559%
26	12.217	1822	1824	1830	rVB2	179147	228973	5.41%	0.849%
27	12.284	1830	1835	1836	rBV	43222	43975	1.04%	0.163%
28	12.302	1836	1838	1844	rVB2	46473	62901	1.49%	0.233%
29	12.363	1844	1848	1851	rBV2	48985	52371	1.24%	0.194%
30	12.412	1851	1856	1859	rBV3	98347	115123	2.72%	0.427%
31	12.443	1859	1861	1864	rBV	63351	64301	1.52%	0.238%
32	12.522	1871	1874	1876	rBV	56495	56439	1.33%	0.209%
33	12.546	1876	1878	1882	rVB	71591	63486	1.50%	0.235%
34	12.619	1887	1890	1894	rVV	75211	79852	1.89%	0.296%
35	12.693	1898	1902	1905	rVV	57058	54783	1.29%	0.203%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9587.D
Acq On : 9 Oct 2014 4:06 pm
Operator : K.Ruest
Sample : R1407813-027|1.0
Misc : PARSONS 11603 T4
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge

36	12.729	1905	1908	1911	rVV3	48866	48471	1.15%	0.180%
37	12.808	1917	1921	1925	rBV	101319	98021	2.32%	0.363%
38	13.022	1952	1956	1961	rBV2	284220	306249	7.24%	1.135%
39	13.467	2024	2029	2032	rVB	35850	42986	1.02%	0.159%

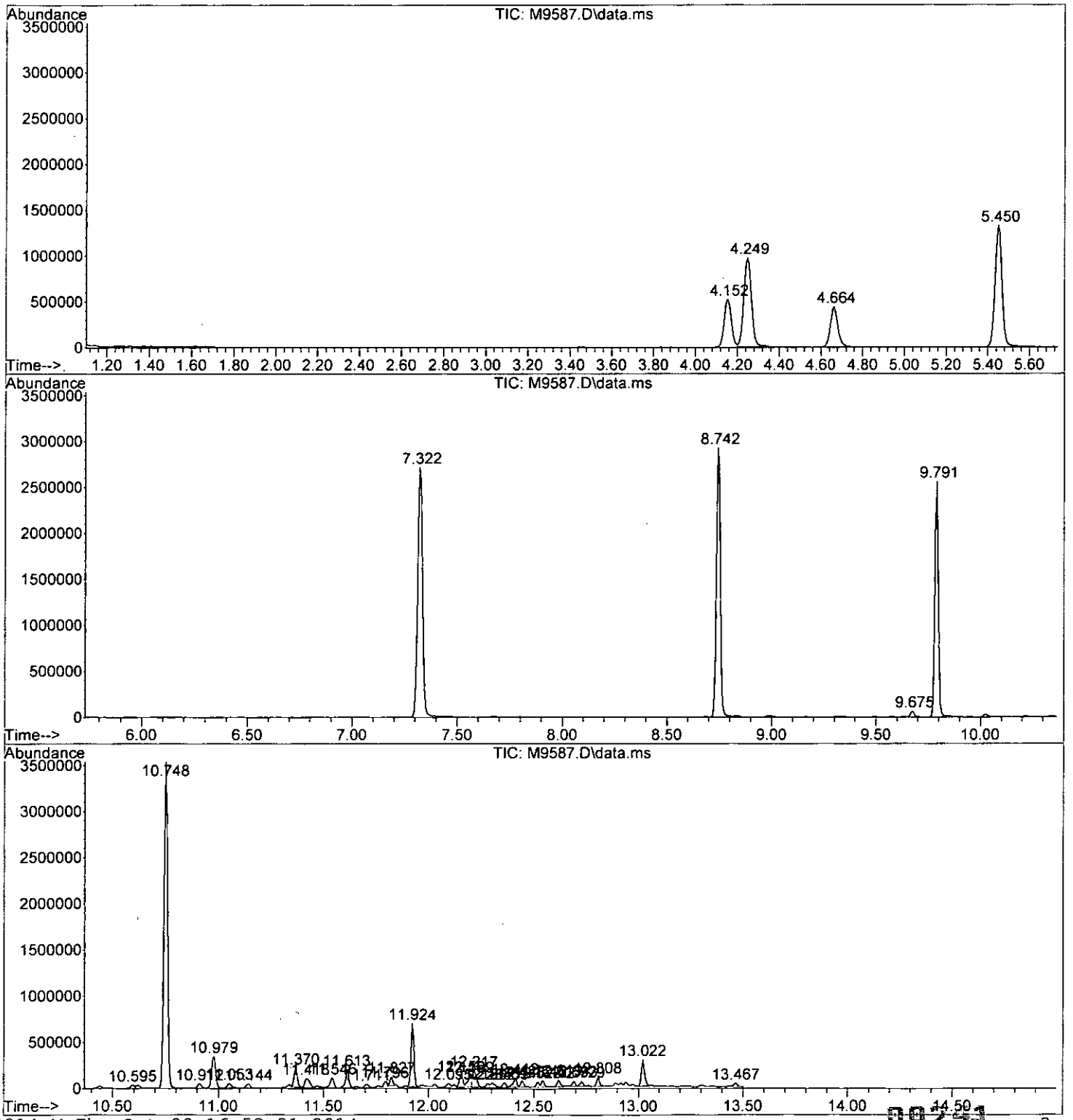
Sum of corrected areas: 26979513

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9587.D
Acq On : 9 Oct 2014 4:06 pm
Operator : K.Ruest
Sample : R1407813-027|1.0
Misc : PARSONS 11603 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W090914.M Thu Oct 09 16:53:31 2014 Page: 3

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9587.D
Acq On : 9 Oct 2014 4:06 pm
Operator : K.Ruest
Sample : R1407813-027|1.0
Misc : PARSONS 11603 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

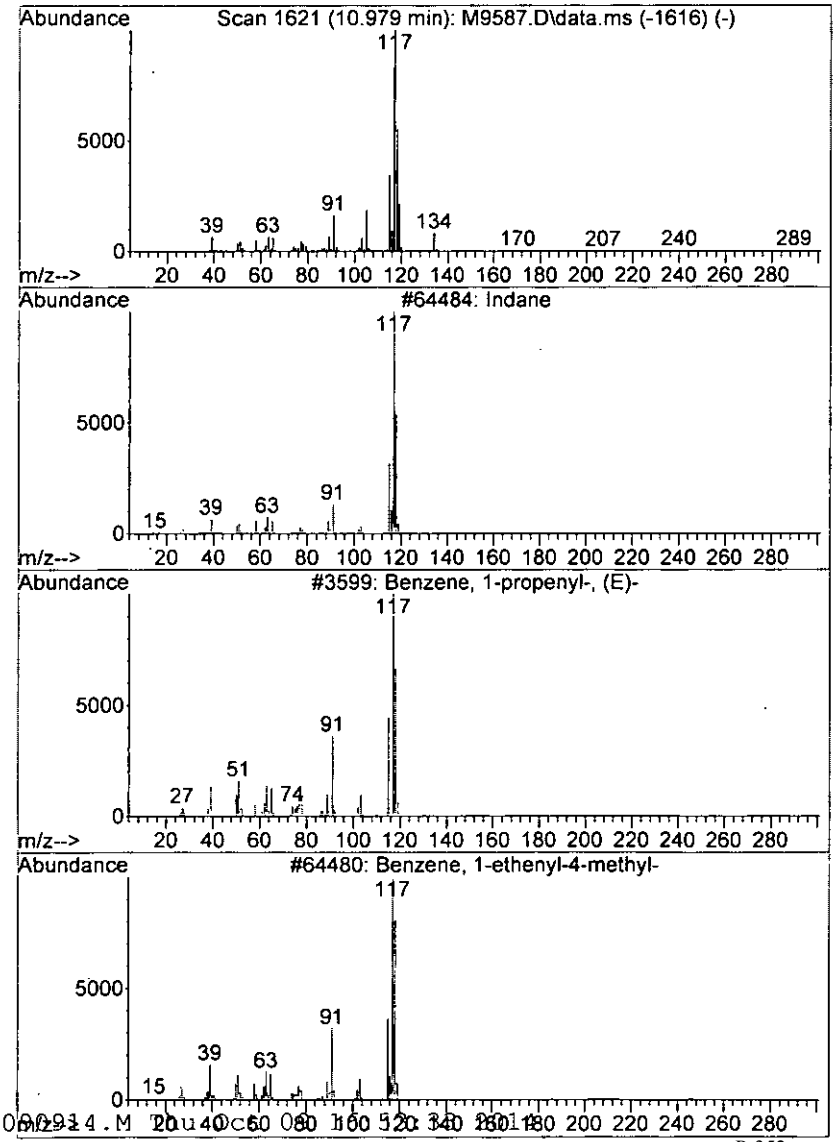
****

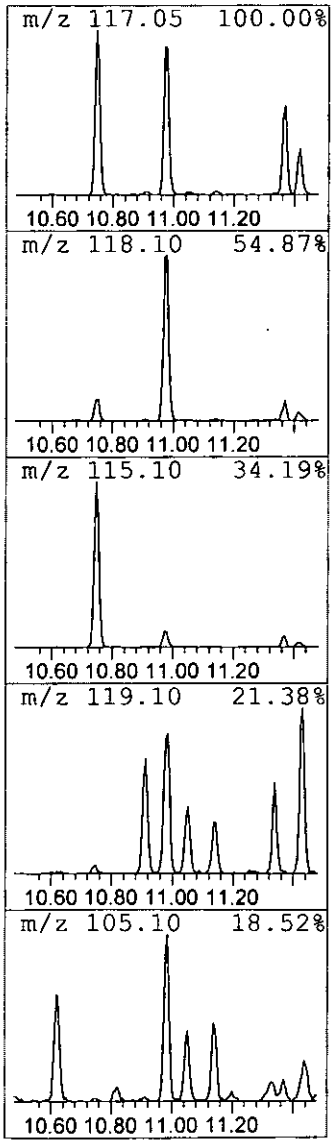
Peak Number 1 Indane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.980	5.35 ppb	435553	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indane	118	C9H10	000496-11-7	76
2	Benzene, 1-propenyl-, (E)-	118	C9H10	000873-66-5	70
3	Benzene, 1-ethenyl-4-methyl-	118	C9H10	000622-97-9	68
4	Benzene, cyclopropyl-	118	C9H10	000873-49-4	62
5	Benzene, 2-propenyl-	118	C9H10	000300-57-2	59

unknown





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9587.D
Acq On : 9 Oct 2014 4:06 pm
Operator : K.Ruest
Sample : R1407813-027|1.0
Misc : PARSONS 11603 T4
ALS Vial : 8 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

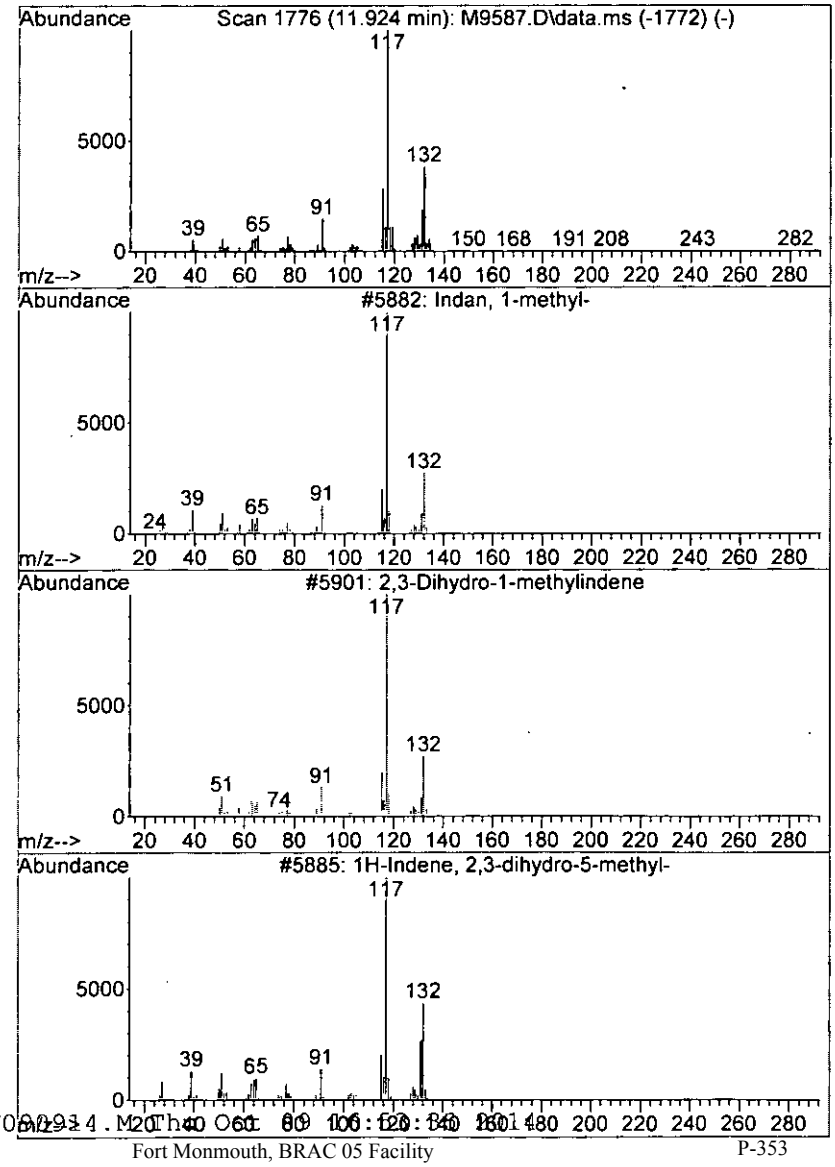
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

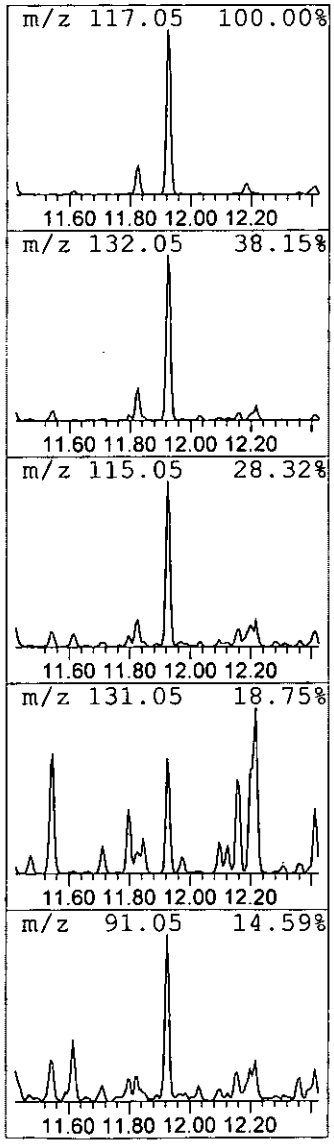
****

Peak Number 2 Indan, 1-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.924	8.34 ppb	678237	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indan, 1-methyl-	132	C10H12	000767-58-8	90
2	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	87
3	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	87
4	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	87
5	Benzene, (2-methyl-2-propenyl)-	132	C10H12	003290-53-7	78





ALS Environmental

VOLATILE ORGANICS STANDARDS DATA

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www.alsglobal.com

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00244

Initial Calibration - Summary Report

Calibration ID: RC1400080 **Instrument ID:** R-MS-12
8260 Waters W090914 **Column Name:** 1 KB 9/10/14

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
1,1,1,2-Tetrachloroethane	T	Average RF			0.3039	<=20	10.0
1,1,1-Trichloroethane (TCA)	T	Average RF		0.100	0.6687	<=20	6.4
1,1,2,2-Tetrachloroethane	T	Average RF		0.300	0.5147	<=20	6.9
1,1,2-Trichloroethane	T	Average RF		0.100	0.2081	<=20	8.4
1,1,2-Trichlorotrifluoroethane	T	Average RF		0.100	0.4146	<=20	5.3
1,1-Dichloroethane (1,1-DCA)	T	Average RF		0.200	0.7920	<=20	7.7
1,1-Dichloroethene (1,1-DCE)	T	Average RF		0.100	0.3563	<=20	7.3
1,1-Dichloropropene	T	Average RF			0.3631	<=20	9.1
1,2,3-Trichlorobenzene	T	Average RF			0.6007	<=20	7.3
1,2,3-Trichloropropane	T	Average RF			0.1493	<=20	3.5
1,2,4-Trichlorobenzene	T	Average RF		0.200	0.6933	<=20	9.7
1,2,4-Trimethylbenzene	T	Average RF			2.113	<=20	10.8
1,2-Dibromo-3-chloropropane (DBCP)	T	Average RF		0.050	0.09089	<=20	15.8
1,2-Dibromoethane	T	Average RF		0.100	0.2151	<=20	11.8
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	T	Average RF			0.5269	<=20	7.7
1,2-Dichlorobenzene	T	Average RF		0.400	1.187	<=20	8.1
1,2-Dichloroethane	T	Average RF		0.100	0.3376	<=20	8.1
1,2-Dichloropropane	T	Average RF		0.100	0.2860	<=20	10.8
1,3,5-Trichlorobenzene	T	Average RF			0.8472	<=20	5.6
1,3,5-Trimethylbenzene	T	Average RF			2.049	<=20	14.3
1,3-Dichlorobenzene	T	Average RF		0.600	1.243	<=20	7.5
1,3-Dichloropropane	T	Average RF			0.4258	<=20	7.5
1,4-Dichlorobenzene	T	Average RF		0.500	1.284	<=20	5.9
1,4-Dioxane	T	Average RF			0.002382	<=20	8.4
1-Butanol	T	Average RF			0.004330	<=20	19.4
1-Chloro-4-(trifluoromethyl)benzene	T	Average RF			0.4209	<=20	4.3
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	T	Average RF			0.5823	<=20	8.0
2,2-Dichloropropane	T	Average RF			0.6257	<=20	11.1
2,3,6-Trichlorotoluene	T	Average RF			0.4607	<=20	5.6
2,4,5-Trichlorotoluene	T	Average RF			0.4693	<=20	5.7
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	T	Average RF			0.9868	<=20	7.9
2,4-Dichlorobenzotrifluoride	T	Average RF			0.5002	<=20	6.8
2,5-Dichlorobenzotrifluoride	T	Average RF			0.5686	<=20	5.5
2-Bromo-2-chloro-1,1,1-trifluoroethane	T	Average RF				<=20	
2-Butanone (MEK)	T	Average RF		0.05	0.1345	<=20	8.4
2-Chloro-1,3-butadiene	T	Average RF			0.7706	<=20	5.9
2-Chlorobenzotrifluoride	T	Average RF			0.8115	<=20	5.9
2-Chloroethyl Vinyl Ether	T	Average RF			0.1287	<=20	14.6
2-Chlorotoluene	T	Average RF			1.818	<=20	8.0
2-Hexanone	T	Average RF		0.05	0.1403	<=20	10.7
2-Methyl-1-propanol	T	Average RF			0.007505	<=20	16.9
2-Methyl-2-propanol	T	Average RF			0.02749	<=20	16.5
2-Nitropropane	T	Average RF			0.03516	<=20	14.9
2-Propanol	T	Average RF			0.01638	<=20	18.6
3,4- and 2,3-Dichlorotoluene Coelution	T	Average RF			1.055	<=20	9.2
3,4-Dichlorobenzotrifluoride	T	Average RF			0.5776	<=20	8.1
3-Chloro-1-propene	T	Average RF			0.2402	<=20	9.4
3-Chlorobenzotrifluoride	T	Average RF			0.4381	<=20	10.8
3-Chlorotoluene	T	Average RF			1.951	<=20	5.9
4-Chlorotoluene	T	Average RF			2.114	<=20	10.0
4-Isopropyltoluene	T	Average RF			2.083	<=20	11.4
4-Methyl-2-pentanone	T	Average RF		0.05	0.1694	<=20	14.9

Initial Calibration - Summary Report

Calibration ID: RC1400080 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
Acetone	T	Average RF		0.05	0.1028	<=20	6.6
Acetonitrile	T	Average RF			0.01389	<=20	13.7
Acrolein	T	Average RF			0.03050	<=20	19.4
Acrylonitrile	T	Average RF			0.09800	<=20	13.1
Benzene	T	Average RF		0.500	1.135	<=20	8.0
Bromobenzene	T	Average RF			0.6582	<=20	7.8
Bromochloromethane	T	Average RF			0.2759	<=20	10.1
Bromodichloromethane	T	Average RF		0.200	0.3539	<=20	9.2
Bromoform	T	Average RF		0.100	0.2726	<=20	13.2
Bromomethane	T	Average RF		0.100	0.3254	<=20	5.4
Carbon Disulfide	T	Average RF		0.100	1.350	<=20	5.9
Carbon Tetrachloride	T	Average RF		0.05	0.1126	<=20	7.5
Chlorobenzene	T	Average RF		0.500	0.8864	<=20	9.1
Chloroethane	T	Average RF		0.100	0.3130	<=20	9.2
Chloroform	T	Average RF		0.200	0.8076	<=20	5.3
Chloromethane	T	Average RF		0.100	0.5292	<=20	9.3
Cyclohexane	T	Average RF		0.100	0.2586	<=20	6.5
Cyclohexanone	T	Average RF			0.05950	<=20	10.2
Dibromochloromethane	T	Average RF		0.100	0.2578	<=20	13.9
Dibromomethane	T	Average RF			0.1385	<=20	7.9
Dichlorodifluoromethane (CFC 12)	T	Average RF		0.100	0.4852	<=20	13.4
Dichlorofluoromethane (CFC 21)	T	Average RF			0.8280	<=20	5.9
Dichloromethane	T	Average RF		0.100	0.4580	<=20	6.9
Diethyl Ether	T	Average RF			0.3237	<=20	8.1
Diisopropyl Ether	T	Average RF			1.499	<=20	3.3
Ethyl Methacrylate	T	Average RF			0.2648	<=20	18.1
Ethyl tert-Butyl Ether	T	Average RF			1.322	<=20	4.3
Ethylbenzene	T	Average RF		0.100	0.4656	<=20	11.1
Hexachlorobutadiene	T	Average RF			0.2742	<=20	9.2
Iodomethane	T	Average RF			0.5364	<=20	16.1
Isopropylbenzene (Cumene)	T	Average RF		0.100	2.563	<=20	8.3
Methacrylonitrile	T	Average RF			0.1156	<=20	15.6
Methyl Acetate	T	Average RF		0.100	0.2095	<=20	10.3
Methyl Methacrylate	T	Average RF			0.1314	<=20	15.5
Methyl tert-Butyl Ether	T	Average RF		0.100	1.015	<=20	12.0
Methylcyclohexane	T	Average RF		0.100	0.3104	<=20	11.0
Naphthalene	T	Average RF			1.419	<=20	13.7
Propionitrile	T	Average RF			0.03625	<=20	14.2
Styrene	T	Average RF		0.300	0.8998	<=20	16.4
Tetrachloroethene (PCE)	T	Average RF		0.200	0.2561	<=20	5.3
Tetrahydrofuran (THF)	T	Average RF			0.08416	<=20	9.0
Toluene	T	Average RF		0.400	1.234	<=20	7.6
Trichloroethene (TCE)	T	Average RF		0.200	0.3020	<=20	7.2
Trichlorofluoromethane (CFC 11)	T	Average RF		0.100	0.6717	<=20	9.3
Vinyl Acetate	T	Average RF			0.06319	<=20	12.9
Vinyl Chloride	T	Average RF		0.100	0.5600	<=20	10.9
cis-1,2-Dichloroethene	T	Average RF		0.100	0.4990	<=20	8.1
cis-1,3-Dichloropropene	T	Average RF		0.200	0.4135	<=20	14.8
m,p-Xylenes	T	Average RF		0.100	0.5642	<=20	13.0
n-Butyl Acetate	T	Quadratic	1/X2		0.3007	>=0.99	0.9932
n-Butylbenzene	T	Average RF			1.890	<=20	10.9
n-Heptane	T	Average RF			0.2860	<=20	9.2

Initial Calibration - Summary Report

Calibration ID: RC1400080 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
n-Propylbenzene	T	Average RF			2.997	<=20	8.7
o-Xylene	T	Average RF		0.300	0.5489	<=20	14.6
sec-Butylbenzene	T	Average RF			2.497	<=20	8.2
tert-Amyl Methyl Ether	T	Average RF			1.130	<=20	7.5
tert-Butylbenzene	T	Average RF			1.718	<=20	10.3
trans-1,2-Dichloroethene	T	Average RF		0.100	0.4442	<=20	7.5
trans-1,3-Dichloropropene	T	Average RF		0.100	0.3368	<=20	19.2
trans-1,4-Dichloro-2-butene	T	Average RF			0.1275	<=20	12.0
1,2-Dichloroethane-d4	S	Average RF			0.3002	<=20	1.7
4-Bromofluorobenzene	S	Average RF			0.4208	<=20	2.9
Dibromofluoromethane	S	Average RF			0.2785	<=20	2.2
Toluene-d8	S	Average RF			1.175	<=20	3.4

Initial Calibration - Detailed Report

Calibration ID: RC1400080 **Instrument ID:** R-MS-12
8260 Waters WQ90914 **Signal ID:** 1 KBS 9/10/14

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1400080-01	0.5ppb	I:\ACQUDATA\msvoa12\Data\090914\M8730.D	9/9/14 15:42
02	RC1400080-02	1.0ppb	I:\ACQUDATA\msvoa12\Data\090914\M8731.D	9/9/14 16:36
03	RC1400080-03	2.0ppb	I:\ACQUDATA\msvoa12\Data\090914\M8732.D	9/9/14 17:09
04	RC1400080-04	5.0ppb	I:\ACQUDATA\msvoa12\Data\090914\M8733.D	9/9/14 17:41
05	RC1400080-05	20ppb	I:\ACQUDATA\msvoa12\Data\090914\M8734.D	9/9/14 18:13
06	RC1400080-06	50ppb	I:\ACQUDATA\msvoa12\Data\090914\M8735.D	9/9/14 18:45
07	RC1400080-07	100ppb	I:\ACQUDATA\msvoa12\Data\090914\M8736.D	9/9/14 19:18
08	RC1400080-08	200ppb	I:\ACQUDATA\msvoa12\Data\090914\M8737.D	9/9/14 19:50

Analyte **Curve Fit** **Weighting**

1,1,1,2-Tetrachloroethane Average RF RSD = 10.0 Average RF = 0.3039

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2903	02	1.000	0.2625	03	2.000	0.2766	04	5.000	0.2778
05	20.000	0.3241	06	50.000	0.3355	07	100.000	0.3239	08	200.000	0.3406

1,1,1-Trichloroethane (TCA) Average RF RSD = 6.4 Average RF = 0.6687

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6199	02	1.000	0.6497	03	2.000	0.6392	04	5.000	0.6115
05	20.000	0.7045	06	50.000	0.7102	07	100.000	0.7011	08	200.000	0.7139

1,1,2,2-Tetrachloroethane Average RF RSD = 6.9 Average RF = 0.5147

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5162	02	1.000	0.5022	03	2.000	0.4473	04	5.000	0.4851
05	20.000	0.5472	06	50.000	0.5365	07	100.000	0.5300	08	200.000	0.5526

1,1,2-Trichloroethane Average RF RSD = 8.4 Average RF = 0.2081

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1983	02	1.000	0.1997	03	2.000	0.1869	04	5.000	0.1862
05	20.000	0.2182	06	50.000	0.2262	07	100.000	0.2187	08	200.000	0.2308

1,1,2-Trichlorotrifluoroethane Average RF RSD = 5.3 Average RF = 0.4146

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4032	02	1.000	0.3911	03	2.000	0.4064	04	5.000	0.3819
05	20.000	0.4402	06	50.000	0.4368	07	100.000	0.4252	08	200.000	0.4319

1,1-Dichloroethane (1,1-DCA) Average RF RSD = 7.7 Average RF = 0.7920

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7508	02	1.000	0.6883	03	2.000	0.7410	04	5.000	0.7830
05	20.000	0.8523	06	50.000	0.8497	07	100.000	0.8276	08	200.000	0.8432

1,1-Dichloroethene (1,1-DCE) Average RF RSD = 7.3 Average RF = 0.3563

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3543	02	1.000	0.3393	03	2.000	0.3140	04	5.000	0.3319
05	20.000	0.3833	06	50.000	0.3754	07	100.000	0.3680	08	200.000	0.3846

1,1-Dichloropropene Average RF RSD = 9.1 Average RF = 0.3631

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3721	02	1.000	0.3002	03	2.000	0.3348	04	5.000	0.3472
05	20.000	0.3904	06	50.000	0.3941	07	100.000	0.3798	08	200.000	0.3863

Initial Calibration - Detailed Report

Calibration ID: RC1400080 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** Average RF **Weighting** Weighting

1,2,3-Trichlorobenzene Average RF RSD = 7.3 Average RF = 0.6007

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6222	02	1.000	0.5606	03	2.000	0.5356	04	5.000	0.5713
05	20.000	0.6536	06	50.000	0.6575	07	100.000	0.6127	08	200.000	0.5923

1,2,3-Trichloropropane Average RF RSD = 3.5 Average RF = 0.1493

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1455	02	1.000	0.1451	03	2.000	0.1413	04	5.000	0.1488
05	20.000	0.1570	06	50.000	0.1545	07	100.000	0.1495	08	200.000	0.1526

1,2,4-Trichlorobenzene Average RF RSD = 9.7 Average RF = 0.6933

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6290	02	1.000	0.6819	03	2.000	0.5990	04	5.000	0.6495
05	20.000	0.7911	06	50.000	0.7707	07	100.000	0.7264	08	200.000	0.6990

1,2,4-Trimethylbenzene Average RF RSD = 10.8 Average RF = 2.113

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.848	02	1.000	1.875	03	2.000	1.939	04	5.000	2.017
05	20.000	2.437	06	50.000	2.389	07	100.000	2.250	08	200.000	2.151

1,2-Dibromo-3-chloropropane (DBCP) Average RF RSD = 15.8 Average RF = 0.09089

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.08598	03	2.000	0.06491	04	5.000	0.08203	05	20.000	0.09489
06	50.000	0.1017	07	100.000	0.1014	08	200.000	0.1053			

1,2-Dibromoethane Average RF RSD = 11.8 Average RF = 0.2151

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2031	02	1.000	0.1811	03	2.000	0.1856	04	5.000	0.2003
05	20.000	0.2314	06	50.000	0.2434	07	100.000	0.2349	08	200.000	0.2413

1,2-Dichloro-1,1,2-trifluoroethane (CFC Average RF RSD = 7.7 Average RF = 0.5269

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5143	02	1.000	0.4925	03	2.000	0.4637	04	5.000	0.4949
05	20.000	0.5610	06	50.000	0.5675	07	100.000	0.5523	08	200.000	0.5689

1,2-Dichlorobenzene Average RF RSD = 8.1 Average RF = 1.187

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.164	02	1.000	1.097	03	2.000	1.041	04	5.000	1.118
05	20.000	1.304	06	50.000	1.265	07	100.000	1.241	08	200.000	1.270

1,2-Dichloroethane Average RF RSD = 8.1 Average RF = 0.3376

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3023	02	1.000	0.3268	03	2.000	0.3105	04	5.000	0.3142
05	20.000	0.3678	06	50.000	0.3644	07	100.000	0.3494	08	200.000	0.3652

1,2-Dichloroethane-d4 Average RF RSD = 1.7 Average RF = 0.3002

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.3084	03	60.000	0.3018	04	70.000	0.3024	05	100.000	0.2959
07	125.000	0.2958	08	150.000	0.2966						

1,2-Dichloropropane Average RF RSD = 10.8 Average RF = 0.2860

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2959	02	1.000	0.2342	03	2.000	0.2657	04	5.000	0.2533
05	20.000	0.3070	06	50.000	0.3155	07	100.000	0.3021	08	200.000	0.3141

Initial Calibration - Detailed Report

Calibration ID: RC1400080 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

1,3,5-Trichlorobenzene Average RF RSD = 5.6 Average RF = 0.8472

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9443	02	1.000	0.8056	03	2.000	0.8343	04	5.000	0.8163
05	20.000	0.8674	06	50.000	0.8584	07	100.000	0.8558	08	200.000	0.7952

1,3,5-Trimethylbenzene Average RF RSD = 14.3 Average RF = 2.049

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.594	02	1.000	1.829	03	2.000	1.773	04	5.000	2.026
05	20.000	2.411	06	50.000	2.325	07	100.000	2.244	08	200.000	2.188

1,3-Dichlorobenzene Average RF RSD = 7.5 Average RF = 1.243

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.154	02	1.000	1.221	03	2.000	1.116	04	5.000	1.183
05	20.000	1.392	06	50.000	1.338	07	100.000	1.263	08	200.000	1.276

1,3-Dichloropropane Average RF RSD = 7.5 Average RF = 0.4258

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4087	02	1.000	0.4183	03	2.000	0.3670	04	5.000	0.4053
05	20.000	0.4481	06	50.000	0.4552	07	100.000	0.4421	08	200.000	0.4618

1,4-Dichlorobenzene Average RF RSD = 5.9 Average RF = 1.284

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.306	02	1.000	1.160	03	2.000	1.227	04	5.000	1.233
05	20.000	1.397	06	50.000	1.356	07	100.000	1.297	08	200.000	1.300

1,4-Dioxane Average RF RSD = 8.4 Average RF = 0.002382

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	40.000	0.002758	04	100.000	0.002271	05	400.000	0.002221	06	1000.000	0.002290
07	2000.000	0.002297	08	4000.000	0.002455						

1-Butanol Average RF RSD = 19.4 Average RF = 0.004330

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	50.000	0.003561	03	100.000	0.003986	04	250.000	0.003444	05	1000.000	0.003770
06	2500.000	0.004782	07	5000.000	0.005366	08	10000.000	0.005399			

1-Chloro-4-(trifluoromethyl)benzene Average RF RSD = 4.3 Average RF = 0.4209

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4263	02	1.000	0.4141	03	2.000	0.3901	04	5.000	0.4092
05	20.000	0.4123	06	50.000	0.4307	07	100.000	0.4446	08	200.000	0.4397

2,2-Dichloro-1,1,1-trifluoroethane (CFC Average RF RSD = 8.0 Average RF = 0.5823

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5536	02	1.000	0.5627	03	2.000	0.5248	04	5.000	0.5252
05	20.000	0.5979	06	50.000	0.6327	07	100.000	0.6257	08	200.000	0.6358

2,2-Dichloropropane Average RF RSD = 11.1 Average RF = 0.6257

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5897	02	1.000	0.5404	03	2.000	0.5760	04	5.000	0.5450
05	20.000	0.6817	06	50.000	0.6911	07	100.000	0.6885	08	200.000	0.6936

2,3,6-Trichlorotoluene Average RF RSD = 5.6 Average RF = 0.4607

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.4864	03	2.000	0.4359	04	5.000	0.4338	05	20.000	0.4866
06	50.000	0.4812	07	100.000	0.4687	08	200.000	0.4323			

Initial Calibration - Detailed Report

Calibration ID: RC1400080 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

2,4,5-Trichlorotoluene Average RF RSD = 5.7 Average RF = 0.4693

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.4917	03	2.000	0.4450	04	5.000	0.4468	05	20.000	0.5027
06	50.000	0.4812	07	100.000	0.4828	08	200.000	0.4347			

2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut Average RF RSD = 7.9 Average RF = 0.9868

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.500	0.8824	02	3.000	0.9164	03	6.000	0.9128	04	15.000	0.9761
05	60.000	1.067	06	150.000	1.070	07	300.000	1.077	08	600.000	0.9932

2,4-Dichlorobenzotrifluoride Average RF RSD = 6.8 Average RF = 0.5002

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5531	02	1.000	0.4756	03	2.000	0.4544	04	5.000	0.4644
05	20.000	0.5118	06	50.000	0.5131	07	100.000	0.5332	08	200.000	0.4958

2,5-Dichlorobenzotrifluoride Average RF RSD = 5.5 Average RF = 0.5686

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6251	02	1.000	0.5241	03	2.000	0.5407	04	5.000	0.5596
05	20.000	0.5790	06	50.000	0.5861	07	100.000	0.5802	08	200.000	0.5537

2-Butanone (MEK) Average RF RSD = 8.4 Average RF = 0.1345

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1213	04	5.000	0.1302	05	20.000	0.1230	06	50.000	0.1413
07	100.000	0.1419	08	200.000	0.1491						

2-Chloro-1,3-butadiene Average RF RSD = 5.9 Average RF = 0.7706

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7058	02	1.000	0.8054	03	2.000	0.6998	04	5.000	0.7506
05	20.000	0.8092	06	50.000	0.7928	07	100.000	0.7977	08	200.000	0.8039

2-Chlorobenzotrifluoride Average RF RSD = 5.9 Average RF = 0.8115

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7572	02	1.000	0.7356	03	2.000	0.7781	04	5.000	0.8454
05	20.000	0.8533	06	50.000	0.8500	07	100.000	0.8525	08	200.000	0.8201

2-Chloroethyl Vinyl Ether Average RF RSD = 14.6 Average RF = 0.1287

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1036	03	2.000	0.1091	04	5.000	0.1152	05	20.000	0.1392
06	50.000	0.1424	07	100.000	0.1415	08	200.000	0.1500			

2-Chlorotoluene Average RF RSD = 8.0 Average RF = 1.818

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.606	02	1.000	1.812	03	2.000	1.644	04	5.000	1.816
05	20.000	2.049	06	50.000	1.953	07	100.000	1.852	08	200.000	1.815

2-Hexanone Average RF RSD = 10.7 Average RF = 0.1403

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1282	04	5.000	0.1187	05	20.000	0.1383	06	50.000	0.1464
07	100.000	0.1517	08	200.000	0.1587						

2-Methyl-1-propanol Average RF RSD = 16.9 Average RF = 0.007505

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.006713	03	40.000	0.006306	04	100.000	0.006074	05	400.000	0.007128
06	1000.000	0.008259	07	2000.000	0.008744	08	4000.000	0.009315			

Initial Calibration - Detailed Report

Calibration ID: RC1400080 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** Average RF **Weighting** Weighting

2-Methyl-2-propanol Average RF RSD = 16.5 Average RF = 0.02749

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	40.000	0.02222	04	100.000	0.02270	05	400.000	0.02648	06	1000.000	0.02890
07	2000.000	0.03131	08	4000.000	0.03334						

2-Nitropropane Average RF RSD = 14.9 Average RF = 0.03516

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.03411	03	4.000	0.03331	04	10.000	0.02714	05	40.000	0.03291
06	100.000	0.03608	07	200.000	0.03853	08	400.000	0.04401			

2-Propanol Average RF RSD = 18.6 Average RF = 0.01638

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	40.000	0.01367	04	100.000	0.01300	05	400.000	0.01452	06	1000.000	0.01775
07	2000.000	0.01900	08	4000.000	0.02033						

3,4- and 2,3-Dichlorotoluene Coelution Average RF RSD = 9.2 Average RF = 1.055

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.9304	02	2.000	0.9844	03	4.000	0.9466	04	10.000	1.062
05	40.000	1.142	06	100.000	1.167	07	200.000	1.167	08	400.000	1.037

3,4-Dichlorobenzotrifluoride Average RF RSD = 8.1 Average RF = 0.5776

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6837	02	1.000	0.5897	03	2.000	0.5263	04	5.000	0.5626
05	20.000	0.5585	06	50.000	0.5620	07	100.000	0.5831	08	200.000	0.5548

3-Chloro-1-propene Average RF RSD = 9.4 Average RF = 0.2402

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2050	02	1.000	0.2440	03	2.000	0.2141	04	5.000	0.2243
05	20.000	0.2628	06	50.000	0.2593	07	100.000	0.2571	08	200.000	0.2554

3-Chlorobenzotrifluoride Average RF RSD = 10.8 Average RF = 0.4381

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3555	02	1.000	0.3885	03	2.000	0.4120	04	5.000	0.4595
05	20.000	0.4535	06	50.000	0.4713	07	100.000	0.4837	08	200.000	0.4807

3-Chlorotoluene Average RF RSD = 5.9 Average RF = 1.951

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.865	02	1.000	1.848	03	2.000	1.785	04	5.000	1.981
05	20.000	2.047	06	50.000	2.070	07	100.000	2.095	08	200.000	1.915

4-Bromofluorobenzene Average RF RSD = 2.9 Average RF = 0.4208

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.4442	03	60.000	0.4193	04	70.000	0.4167	05	100.000	0.4092
07	125.000	0.4132	08	150.000	0.4224						

4-Chlorotoluene Average RF RSD = 10.0 Average RF = 2.114

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.862	02	1.000	2.002	03	2.000	1.913	04	5.000	1.948
05	20.000	2.441	06	50.000	2.308	07	100.000	2.233	08	200.000	2.201

4-Isopropyltoluene Average RF RSD = 11.4 Average RF = 2.083

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.782	02	1.000	1.906	03	2.000	1.863	04	5.000	2.012
05	20.000	2.451	06	50.000	2.336	07	100.000	2.214	08	200.000	2.097

Initial Calibration - Detailed Report

Calibration ID: RC1400080 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte	Curve Fit	Weighting									
4-Methyl-2-pentanone	Average RF			RSD = 14.9		Average RF = 0.1694					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1363	04	5.000	0.1425	05	20.000	0.1688	06	50.000	0.1819
07	100.000	0.1883	08	200.000	0.1985						
Acetone	Average RF			RSD = 6.6		Average RF = 0.1028					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1124	04	5.000	0.09299	05	20.000	0.09923	06	50.000	0.1009
07	100.000	0.1037	08	200.000	0.1078						
Acetonitrile	Average RF			RSD = 13.7		Average RF = 0.01389					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	10.000	0.01096	04	25.000	0.01297	05	100.000	0.01334	06	250.000	0.01517
07	500.000	0.01444	08	1000.000	0.01644						
Acrolein	Average RF			RSD = 19.4		Average RF = 0.03050					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.02613	03	10.000	0.02830	04	25.000	0.02421	05	100.000	0.02957
06	250.000	0.03458	07	500.000	0.04019						
Acrylonitrile	Average RF			RSD = 13.1		Average RF = 0.09800					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.07959	02	5.000	0.08923	03	10.000	0.08805	04	25.000	0.09120
05	100.000	0.1019	06	250.000	0.1086	07	500.000	0.1094	08	1000.000	0.1161
Benzene	Average RF			RSD = 8.0		Average RF = 1.135					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.032	02	1.000	1.056	03	2.000	1.034	04	5.000	1.096
05	20.000	1.246	06	50.000	1.232	07	100.000	1.174	08	200.000	1.209
Bromobenzene	Average RF			RSD = 7.8		Average RF = 0.6582					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6413	02	1.000	0.5758	03	2.000	0.6192	04	5.000	0.6257
05	20.000	0.7306	06	50.000	0.7041	07	100.000	0.6794	08	200.000	0.6892
Bromochloromethane	Average RF			RSD = 10.1		Average RF = 0.2759					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3306	02	1.000	0.2637	03	2.000	0.2538	04	5.000	0.2365
05	20.000	0.2903	06	50.000	0.2842	07	100.000	0.2752	08	200.000	0.2728
Bromodichloromethane	Average RF			RSD = 9.2		Average RF = 0.3539					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3168	02	1.000	0.3289	03	2.000	0.3247	04	5.000	0.3264
05	20.000	0.3816	06	50.000	0.3898	07	100.000	0.3738	08	200.000	0.3897
Bromoform	Average RF			RSD = 13.2		Average RF = 0.2726					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2273	02	1.000	0.2427	03	2.000	0.2421	04	5.000	0.2487
05	20.000	0.2892	06	50.000	0.3086	07	100.000	0.3052	08	200.000	0.3167
Bromomethane	Average RF			RSD = 5.4		Average RF = 0.3254					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3561	02	1.000	0.3386	03	2.000	0.3265	04	5.000	0.3023
05	20.000	0.3131	06	50.000	0.3144	07	100.000	0.3161	08	200.000	0.3361

Initial Calibration - Detailed Report

Calibration ID: RC1400080 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Carbon Disulfide Average RF RSD = 5.9 Average RF = 1.350

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.496	02	1.000	1.287	03	2.000	1.285	04	5.000	1.252
05	20.000	1.410	06	50.000	1.384	07	100.000	1.347	08	200.000	1.337

Carbon Tetrachloride Average RF RSD = 7.5 Average RF = 0.1126

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1065	02	1.000	0.1085	03	2.000	0.1086	04	5.000	0.09863
05	20.000	0.1189	06	50.000	0.1223	07	100.000	0.1154	08	200.000	0.1221

Chlorobenzene Average RF RSD = 9.1 Average RF = 0.8864

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9161	02	1.000	0.7755	03	2.000	0.7780	04	5.000	0.8282
05	20.000	0.9651	06	50.000	0.9713	07	100.000	0.9190	08	200.000	0.9377

Chloroethane Average RF RSD = 9.2 Average RF = 0.3130

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3205	02	1.000	0.2839	03	2.000	0.2796	04	5.000	0.2734
05	20.000	0.3354	06	50.000	0.3406	07	100.000	0.3346	08	200.000	0.3363

Chloroform Average RF RSD = 5.3 Average RF = 0.8076

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7679	02	1.000	0.7945	03	2.000	0.9040	04	5.000	0.7702
05	20.000	0.8076	06	50.000	0.8167	07	100.000	0.7929	08	200.000	0.8070

Chloromethane Average RF RSD = 9.3 Average RF = 0.5292

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4956	02	1.000	0.5188	03	2.000	0.4697	04	5.000	0.4618
05	20.000	0.5762	06	50.000	0.5767	07	100.000	0.5547	08	200.000	0.5802

Cyclohexane Average RF RSD = 6.5 Average RF = 0.2586

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2574	02	1.000	0.2504	03	2.000	0.2314	04	5.000	0.2407
05	20.000	0.2700	06	50.000	0.2782	07	100.000	0.2664	08	200.000	0.2742

Cyclohexanone Average RF RSD = 10.2 Average RF = 0.05950

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.05158	02	20.000	0.05565	03	40.000	0.05241	04	100.000	0.05663
05	400.000	0.06580	06	1000.000	0.06499	07	2000.000	0.06403	08	4000.000	0.06488

Dibromochloromethane Average RF RSD = 13.9 Average RF = 0.2578

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2284	02	1.000	0.2148	03	2.000	0.2372	04	5.000	0.2217
05	20.000	0.2764	06	50.000	0.2955	07	100.000	0.2858	08	200.000	0.3027

Dibromofluoromethane Average RF RSD = 2.2 Average RF = 0.2785

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.2848	03	60.000	0.2864	04	70.000	0.2801	05	100.000	0.2756
07	125.000	0.2721	08	150.000	0.2720						

Dibromomethane Average RF RSD = 7.9 Average RF = 0.1385

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1290	02	1.000	0.1269	03	2.000	0.1321	04	5.000	0.1261
05	20.000	0.1488	06	50.000	0.1479	07	100.000	0.1462	08	200.000	0.1512

Initial Calibration - Detailed Report

Calibration ID: RC1400080 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Dichlorodifluoromethane (CFC 12) Average RF RSD = 13.4 Average RF = 0.4852

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4296	02	1.000	0.4224	03	2.000	0.4141	04	5.000	0.4365
05	20.000	0.5631	06	50.000	0.5561	07	100.000	0.5313	08	200.000	0.5284

Dichlorofluoromethane (CFC 21) Average RF RSD = 5.9 Average RF = 0.8280

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7806	02	1.000	0.7924	03	2.000	0.7883	04	5.000	0.7713
05	20.000	0.8604	06	50.000	0.8881	07	100.000	0.8779	08	200.000	0.8646

Dichloromethane Average RF RSD = 6.9 Average RF = 0.4580

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4762	02	1.000	0.5201	03	2.000	0.4268	04	5.000	0.4166
05	20.000	0.4626	06	50.000	0.4592	07	100.000	0.4452	08	200.000	0.4575

Diethyl Ether Average RF RSD = 8.1 Average RF = 0.3237

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3243	02	1.000	0.3132	03	2.000	0.2803	04	5.000	0.2947
05	20.000	0.3353	06	50.000	0.3366	07	100.000	0.3480	08	200.000	0.3575

Diisopropyl Ether Average RF RSD = 3.3 Average RF = 1.499

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.563	02	1.000	1.450	03	2.000	1.478	04	5.000	1.457
05	20.000	1.452	06	50.000	1.490	07	100.000	1.571	08	200.000	1.535

Ethyl Methacrylate Average RF RSD = 18.1 Average RF = 0.2648

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2252	02	1.000	0.2244	03	2.000	0.2186	04	5.000	0.2208
05	20.000	0.2760	06	50.000	0.3077	07	100.000	0.3135	08	200.000	0.3323

Ethyl tert-Butyl Ether Average RF RSD = 4.3 Average RF = 1.322

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.306	02	1.000	1.272	03	2.000	1.260	04	5.000	1.304
05	20.000	1.290	06	50.000	1.326	07	100.000	1.413	08	200.000	1.405

Ethylbenzene Average RF RSD = 11.1 Average RF = 0.4656

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4136	02	1.000	0.4265	03	2.000	0.4039	04	5.000	0.4296
05	20.000	0.5111	06	50.000	0.5242	07	100.000	0.4992	08	200.000	0.5167

Hexachlorobutadiene Average RF RSD = 9.2 Average RF = 0.2742

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3128	02	1.000	0.2889	03	2.000	0.2548	04	5.000	0.2533
05	20.000	0.2972	06	50.000	0.2867	07	100.000	0.2560	08	200.000	0.2443

Iodomethane Average RF RSD = 16.1 Average RF = 0.5364

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.4118	04	5.000	0.4406	05	20.000	0.5870	06	50.000	0.6071
07	100.000	0.5956	08	200.000	0.5765						

Isopropylbenzene (Cumene) Average RF RSD = 8.3 Average RF = 2.563

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.368	02	1.000	2.464	03	2.000	2.318	04	5.000	2.476
05	20.000	2.930	06	50.000	2.805	07	100.000	2.642	08	200.000	2.499

Initial Calibration - Detailed Report

Calibration ID: RC1400080 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** Weighting

Methacrylonitrile Average RF RSD = 15.6 Average RF = 0.1156

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1017	03	2.000	0.09087	04	5.000	0.09934	05	20.000	0.1217
06	50.000	0.1291	07	100.000	0.1292	08	200.000	0.1373			

Methyl Acetate Average RF RSD = 10.3 Average RF = 0.2095

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.2025	03	2.000	0.1835	04	5.000	0.1829	05	20.000	0.2072
06	50.000	0.2255	07	100.000	0.2285	08	200.000	0.2364			

Methyl Methacrylate Average RF RSD = 15.5 Average RF = 0.1314

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1093	02	1.000	0.1311	03	2.000	0.1051	04	5.000	0.1116
05	20.000	0.1390	06	50.000	0.1499	07	100.000	0.1481	08	200.000	0.1569

Methyl tert-Butyl Ether Average RF RSD = 12.0 Average RF = 1.015

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8998	02	1.000	0.8790	03	2.000	0.9171	04	5.000	0.9187
05	20.000	1.088	06	50.000	1.110	07	100.000	1.134	08	200.000	1.173

Methylcyclohexane Average RF RSD = 11.0 Average RF = 0.3104

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2906	02	1.000	0.2772	03	2.000	0.2655	04	5.000	0.2851
05	20.000	0.3290	06	50.000	0.3445	07	100.000	0.3420	08	200.000	0.3494

Naphthalene Average RF RSD = 13.7 Average RF = 1.419

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.224	02	1.000	1.197	03	2.000	1.227	04	5.000	1.325
05	20.000	1.609	06	50.000	1.648	07	100.000	1.598	08	200.000	1.524

Propionitrile Average RF RSD = 14.2 Average RF = 0.03625

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.02973	02	5.000	0.03122	03	10.000	0.03446	04	25.000	0.03229
05	100.000	0.03730	06	250.000	0.04018	07	500.000	0.04066	08	1000.000	0.04415

Styrene Average RF RSD = 16.4 Average RF = 0.8998

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7026	02	1.000	0.7794	03	2.000	0.7484	04	5.000	0.8364
05	20.000	1.020	06	50.000	1.048	07	100.000	1.016	08	200.000	1.048

Tetrachloroethene (PCE) Average RF RSD = 5.3 Average RF = 0.2561

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2414	02	1.000	0.2548	03	2.000	0.2336	04	5.000	0.2530
05	20.000	0.2641	06	50.000	0.2743	07	100.000	0.2606	08	200.000	0.2670

Tetrahydrofuran (THF) Average RF RSD = 9.0 Average RF = 0.08416

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.08271	04	5.000	0.07236	05	20.000	0.07941	06	50.000	0.08912
07	100.000	0.08787	08	200.000	0.09346						

Toluene Average RF RSD = 7.6 Average RF = 1.234

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.131	02	1.000	1.186	03	2.000	1.131	04	5.000	1.153
05	20.000	1.356	06	50.000	1.343	07	100.000	1.281	08	200.000	1.291

Initial Calibration - Detailed Report

Calibration ID: RC1400080 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte	Curve Fit	Weighting									
Toluene-d8	Average RF			RSD = 3.4		Average RF = 1.175					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	1.243	03	60.000	1.197	04	70.000	1.177	05	100.000	1.151
07	125.000	1.140	08	150.000	1.145						
Trichloroethene (TCE)	Average RF			RSD = 7.2		Average RF = 0.3020					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2769	02	1.000	0.3043	03	2.000	0.2701	04	5.000	0.2876
05	20.000	0.3286	06	50.000	0.3217	07	100.000	0.3065	08	200.000	0.3200
Trichlorofluoromethane (CFC 11)	Average RF			RSD = 9.3		Average RF = 0.6717					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5496	02	1.000	0.6559	03	2.000	0.6427	04	5.000	0.6417
05	20.000	0.7406	06	50.000	0.7258	07	100.000	0.7051	08	200.000	0.7120
Vinyl Acetate	Average RF			RSD = 12.9		Average RF = 0.06319					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.05368	03	2.000	0.05781	04	5.000	0.05494	05	20.000	0.06622
06	50.000	0.06334	07	100.000	0.07219	08	200.000	0.07417			
Vinyl Chloride	Average RF			RSD = 10.9		Average RF = 0.5600					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4865	02	1.000	0.5222	03	2.000	0.4952	04	5.000	0.5137
05	20.000	0.6309	06	50.000	0.6156	07	100.000	0.6059	08	200.000	0.6098
cis-1,2-Dichloroethene	Average RF			RSD = 8.1		Average RF = 0.4990					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5433	02	1.000	0.4875	03	2.000	0.4232	04	5.000	0.4591
05	20.000	0.5313	06	50.000	0.5146	07	100.000	0.5080	08	200.000	0.5248
cis-1,3-Dichloropropene	Average RF			RSD = 14.8		Average RF = 0.4135					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3508	02	1.000	0.3521	03	2.000	0.3470	04	5.000	0.3815
05	20.000	0.4549	06	50.000	0.4725	07	100.000	0.4629	08	200.000	0.4862
m,p-Xylenes	Average RF			RSD = 13.0		Average RF = 0.5642					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.4850	02	2.000	0.4837	03	4.000	0.4841	04	10.000	0.5401
05	40.000	0.6328	06	100.000	0.6461	07	200.000	0.6161	08	400.000	0.6258
n-Butyl Acetate	Quadratic	1/X2		COD = 0.9932		Y = 0.02766 X² + 0.2852 X + -0.001128					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.2517	03	2.000	0.2265	04	5.000	0.2374	05	20.000	0.3017
06	50.000	0.3496	07	100.000	0.3630	08	200.000	0.3749			
n-Butylbenzene	Average RF			RSD = 10.9		Average RF = 1.890					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.875	02	1.000	1.618	03	2.000	1.630	04	5.000	1.767
05	20.000	2.146	06	50.000	2.126	07	100.000	2.014	08	200.000	1.948
n-Heptane	Average RF			RSD = 9.2		Average RF = 0.2860					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3000	02	1.000	0.2613	03	2.000	0.2509	04	5.000	0.2530
05	20.000	0.3143	06	50.000	0.3109	07	100.000	0.2965	08	200.000	0.3008

Initial Calibration - Detailed Report

Calibration ID: RC1400080 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte	Curve Fit	Weighting									
n-Propylbenzene	Average RF			RSD = 8.7		Average RF = 2.997					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.781	02	1.000	2.965	03	2.000	2.633	04	5.000	2.987
05	20.000	3.422	06	50.000	3.287	07	100.000	3.076	08	200.000	2.826
o-Xylene	Average RF			RSD = 14.6		Average RF = 0.5489					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4528	02	1.000	0.4802	03	2.000	0.4521	04	5.000	0.5243
05	20.000	0.6114	06	50.000	0.6274	07	100.000	0.6052	08	200.000	0.6378
sec-Butylbenzene	Average RF			RSD = 8.2		Average RF = 2.497					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.316	02	1.000	2.363	03	2.000	2.363	04	5.000	2.395
05	20.000	2.883	06	50.000	2.715	07	100.000	2.551	08	200.000	2.388
tert-Amyl Methyl Ether	Average RF			RSD = 7.5		Average RF = 1.130					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.199	02	1.000	1.009	03	2.000	1.060	04	5.000	1.089
05	20.000	1.075	06	50.000	1.143	07	100.000	1.227	08	200.000	1.241
tert-Butylbenzene	Average RF			RSD = 10.3		Average RF = 1.718					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.467	02	1.000	1.586	03	2.000	1.609	04	5.000	1.627
05	20.000	1.991	06	50.000	1.910	07	100.000	1.792	08	200.000	1.764
trans-1,2-Dichloroethene	Average RF			RSD = 7.5		Average RF = 0.4442					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4204	02	1.000	0.4631	03	2.000	0.3807	04	5.000	0.4213
05	20.000	0.4687	06	50.000	0.4661	07	100.000	0.4575	08	200.000	0.4759
trans-1,3-Dichloropropene	Average RF			RSD = 19.2		Average RF = 0.3368					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2467	02	1.000	0.2903	03	2.000	0.2799	04	5.000	0.2993
05	20.000	0.3748	06	50.000	0.3995	07	100.000	0.3887	08	200.000	0.4155
trans-1,4-Dichloro-2-butene	Average RF			RSD = 12.0		Average RF = 0.1275					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1176	02	1.000	0.1031	03	2.000	0.1156	04	5.000	0.1210
05	20.000	0.1365	06	50.000	0.1371	07	100.000	0.1438	08	200.000	0.1453

Initial Calibration - Detailed Report

Calibration ID:	RC1400080	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,1,1,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.5	02	1.000	0.86	-13.6	03	2.000	1.82	-9.0
04	5.000	4.57	-8.6	05	20.000	21.33	6.6	06	50.000	55.20	10.4
07	100.000	106.57	6.6	08	200.000	224.15	12.1				

1,1,1-Trichloroethane (TCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.3	02	1.000	0.97	-2.8	03	2.000	1.91	-4.4
04	5.000	4.57	-8.6	05	20.000	21.07	5.3	06	50.000	53.10	6.2
07	100.000	104.84	4.8	08	200.000	213.49	6.7				

1,1,2,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.3	02	1.000	0.98	-2.4	03	2.000	1.74	-13.1
04	5.000	4.71	-5.7	05	20.000	21.26	6.3	06	50.000	52.12	4.2
07	100.000	102.99	3.0	08	200.000	214.76	7.4				

1,1,2-Trichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.7	02	1.000	0.96	-4.1	03	2.000	1.80	-10.2
04	5.000	4.47	-10.5	05	20.000	20.97	4.9	06	50.000	54.33	8.7
07	100.000	105.09	5.1	08	200.000	221.77	10.9				

1,1,2-Trichlorotrifluoroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.7	02	1.000	0.94	-5.7	03	2.000	1.96	-2.0
04	5.000	4.61	-7.9	05	20.000	21.24	6.2	06	50.000	52.68	5.4
07	100.000	102.56	2.6	08	200.000	208.35	4.2				

1,1-Dichloroethane (1,1-DCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.2	02	1.000	0.87	-13.1	03	2.000	1.87	-6.4
04	5.000	4.94	-1.1	05	20.000	21.52	7.6	06	50.000	53.64	7.3
07	100.000	104.50	4.5	08	200.000	212.93	6.5				

1,1-Dichloroethene (1,1-DCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.6	02	1.000	0.95	-4.8	03	2.000	1.76	-11.9
04	5.000	4.66	-6.9	05	20.000	21.51	7.6	06	50.000	52.67	5.3
07	100.000	103.28	3.3	08	200.000	215.87	7.9				

1,1-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.5	02	1.000	0.83	-17.3	03	2.000	1.84	-7.8
04	5.000	4.78	-4.4	05	20.000	21.50	7.5	06	50.000	54.27	8.5
07	100.000	104.59	4.6	08	200.000	212.78	6.4				

Initial Calibration - Detailed Report

Calibration ID:	RC1400080	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,2,3-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.6	02	1.000	0.93	-6.7	03	2.000	1.78	-10.8
04	5.000	4.76	-4.9	05	20.000	21.76	8.8	06	50.000	54.72	9.4
07	100.000	102.00	2.0	08	200.000	197.20	-1.4				

1,2,3-Trichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.5	02	1.000	0.97	-2.8	03	2.000	1.89	-5.3
04	5.000	4.98	-0.4	05	20.000	21.03	5.2	06	50.000	51.75	3.5
07	100.000	100.14	0.1	08	200.000	204.49	2.2				

1,2,4-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.3	02	1.000	0.98	-1.7	03	2.000	1.73	-13.6
04	5.000	4.68	-6.3	05	20.000	22.82	14.1	06	50.000	55.58	11.2
07	100.000	104.78	4.8	08	200.000	201.64	0.8				

1,2,4-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-12.5	02	1.000	0.89	-11.3	03	2.000	1.84	-8.2
04	5.000	4.77	-4.5	05	20.000	23.06	15.3	06	50.000	56.53	13.1
07	100.000	106.46	6.5	08	200.000	203.54	1.8				

1,2-Dibromo-3-chloropropane (DBCP)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.95	-5.4	03	2.000	1.43	-28.6	04	5.000	4.51	-9.8
05	20.000	20.88	4.4	06	50.000	55.96	11.9	07	100.000	111.56	11.6
08	200.000	231.72	15.9								

1,2-Dibromoethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.6	02	1.000	0.84	-15.8	03	2.000	1.73	-13.7
04	5.000	4.66	-6.9	05	20.000	21.51	7.6	06	50.000	56.57	13.1
07	100.000	109.17	9.2	08	200.000	224.31	12.2				

1,2-Dichloro-1,1,2-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.4	02	1.000	0.93	-6.5	03	2.000	1.76	-12.0
04	5.000	4.70	-6.1	05	20.000	21.29	6.5	06	50.000	53.85	7.7
07	100.000	104.82	4.8	08	200.000	215.94	8.0				

1,2-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.0	02	1.000	0.92	-7.6	03	2.000	1.75	-12.3
04	5.000	4.71	-5.8	05	20.000	21.96	9.8	06	50.000	53.26	6.5
07	100.000	104.51	4.5	08	200.000	213.87	6.9				

Initial Calibration - Detailed Report

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		Signal ID:	1

Analyte

1,2-Dichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-10.5	02	1.000	0.97	-3.2	03	2.000	1.84	-8.0
04	5.000	4.65	-6.9	05	20.000	21.79	8.9	06	50.000	53.98	8.0
07	100.000	103.51	3.5	08	200.000	216.37	8.2				

1,2-Dichloroethane-d4

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	51.37	2.7	03	60.000	60.34	0.6	04	70.000	70.52	0.7
05	100.000	98.59	-1.4	07	125.000	123.19	-1.4	08	150.000	148.22	-1.2

1,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.5	02	1.000	0.82	-18.1	03	2.000	1.86	-7.1
04	5.000	4.43	-11.4	05	20.000	21.47	7.3	06	50.000	55.16	10.3
07	100.000	105.65	5.6	08	200.000	219.65	9.8				

1,3,5-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	11.5	02	1.000	0.95	-4.9	03	2.000	1.97	-1.5
04	5.000	4.82	-3.6	05	20.000	20.48	2.4	06	50.000	50.66	1.3
07	100.000	101.02	1.0	08	200.000	187.73	-6.1				

1,3,5-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.39	-22.2	02	1.000	0.89	-10.7	03	2.000	1.73	-13.5
04	5.000	4.94	-1.1	05	20.000	23.54	17.7	06	50.000	56.74	13.5
07	100.000	109.52	9.5	08	200.000	213.61	6.8				

1,3-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.1	02	1.000	0.98	-1.7	03	2.000	1.80	-10.2
04	5.000	4.76	-4.8	05	20.000	22.40	12.0	06	50.000	53.81	7.6
07	100.000	101.59	1.6	08	200.000	205.38	2.7				

1,3-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.0	02	1.000	0.98	-1.8	03	2.000	1.72	-13.8
04	5.000	4.76	-4.8	05	20.000	21.05	5.2	06	50.000	53.45	6.9
07	100.000	103.83	3.8	08	200.000	216.92	8.5				

1,4-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.7	02	1.000	0.90	-9.7	03	2.000	1.91	-4.5
04	5.000	4.80	-4.0	05	20.000	21.76	8.8	06	50.000	52.78	5.6
07	100.000	100.96	1.0	08	200.000	202.42	1.2				

Initial Calibration - Detailed Report

Calibration ID:	RC1400080	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

1,4-Dioxane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	40.000	46.31	15.8	04	100.000	95.33	-4.7	05	400.000	373.05	-6.7
06	1000.000	961.37	-3.9	07	2000.000	1,928.54	-3.6	08	4000.000	4,122.89	3.1

1-Butanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	50.000	41.13	-17.7	03	100.000	92.07	-7.9	04	250.000	198.83	-20.5
05	1000.000	870.81	-12.9	06	2500.000	2,761.19	10.4	07	5000.000	6,196.42	23.9
08	10000.000	12,468.79	24.7								

1-Chloro-4-(trifluoromethyl)benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.3	02	1.000	0.98	-1.6	03	2.000	1.85	-7.3
04	5.000	4.86	-2.8	05	20.000	19.59	-2.0	06	50.000	51.17	2.3
07	100.000	105.64	5.6	08	200.000	208.97	4.5				

2,2-Dichloro-1,1,1-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.9	02	1.000	0.97	-3.4	03	2.000	1.80	-9.9
04	5.000	4.51	-9.8	05	20.000	20.54	2.7	06	50.000	54.33	8.7
07	100.000	107.46	7.5	08	200.000	218.38	9.2				

2,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.8	02	1.000	0.86	-13.6	03	2.000	1.84	-7.9
04	5.000	4.35	-12.9	05	20.000	21.79	8.9	06	50.000	55.22	10.4
07	100.000	110.03	10.0	08	200.000	221.68	10.8				

2,3,6-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.06	5.6	03	2.000	1.89	-5.4	04	5.000	4.71	-5.8
05	20.000	21.12	5.6	06	50.000	52.22	4.4	07	100.000	101.73	1.7
08	200.000	187.67	-6.2								

2,4,5-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.05	4.8	03	2.000	1.90	-5.2	04	5.000	4.76	-4.8
05	20.000	21.43	7.1	06	50.000	51.28	2.6	07	100.000	102.88	2.9
08	200.000	185.27	-7.4								

2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.500	1.34	-10.6	02	3.000	2.79	-7.1	03	6.000	5.55	-7.5
04	15.000	14.84	-1.1	05	60.000	64.90	8.2	06	150.000	162.58	8.4
07	300.000	327.30	9.1	08	600.000	603.88	0.6				

Initial Calibration - Detailed Report

Calibration ID:	RC1400080	**Instrument ID:**	R-MS-12
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Analyte

2,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.6	02	1.000	0.95	-4.9	03	2.000	1.82	-9.2
04	5.000	4.64	-7.2	05	20.000	20.46	2.3	06	50.000	51.29	2.6
07	100.000	106.60	6.6	08	200.000	198.27	-0.9				

2,5-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.9	02	1.000	0.92	-7.8	03	2.000	1.90	-4.9
04	5.000	4.92	-1.6	05	20.000	20.37	1.8	06	50.000	51.55	3.1
07	100.000	102.05	2.0	08	200.000	194.78	-2.6				

2-Butanone (MEK)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.80	-9.8	04	5.000	4.84	-3.2	05	20.000	18.29	-8.5
06	50.000	52.55	5.1	07	100.000	105.56	5.6	08	200.000	221.74	10.9

2-Chloro-1,3-butadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-8.4	02	1.000	1.05	4.5	03	2.000	1.82	-9.2
04	5.000	4.87	-2.6	05	20.000	21.00	5.0	06	50.000	51.44	2.9
07	100.000	103.51	3.5	08	200.000	208.63	4.3				

2-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.7	02	1.000	0.91	-9.4	03	2.000	1.92	-4.1
04	5.000	5.21	4.2	05	20.000	21.03	5.1	06	50.000	52.37	4.7
07	100.000	105.05	5.0	08	200.000	202.12	1.1				

2-Chloroethyl Vinyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.80	-19.5	03	2.000	1.70	-15.2	04	5.000	4.47	-10.5
05	20.000	21.64	8.2	06	50.000	55.30	10.6	07	100.000	109.91	9.9
08	200.000	233.12	16.6								

2-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-11.7	02	1.000	1.00	-0.4	03	2.000	1.81	-9.6
04	5.000	4.99	-0.1	05	20.000	22.53	12.7	06	50.000	53.71	7.4
07	100.000	101.86	1.9	08	200.000	199.70	-0.2				

2-Hexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.83	-8.6	04	5.000	4.23	-15.4	05	20.000	19.71	-1.4
06	50.000	52.17	4.3	07	100.000	108.08	8.1	08	200.000	226.16	13.1

Initial Calibration - Detailed Report

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		Signal ID:	1

Analyte

2-Methyl-1-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	17.89	-10.6	03	40.000	33.61	-16.0	04	100.000	80.92	-19.1
05	400.000	379.88	-5.0	06	1000.000	1,100.35	10.0	07	2000.000	2,330.08	16.5
08	4000.000	4,964.36	24.1								

2-Methyl-2-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	40.000	32.33	-19.2	04	100.000	82.56	-17.4	05	400.000	385.34	-3.7
06	1000.000	1,051.20	5.1	07	2000.000	2,277.75	13.9	08	4000.000	4,851.10	21.3

2-Nitropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	2.000	1.94	-3.0	03	4.000	3.79	-5.3	04	10.000	7.72	-22.8
05	40.000	37.44	-6.4	06	100.000	102.63	2.6	07	200.000	219.21	9.6
08	400.000	500.73	25.2								

2-Propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	40.000	33.38	-16.5	04	100.000	79.37	-20.6	05	400.000	354.62	-11.3
06	1000.000	1,083.80	8.4	07	2000.000	2,320.05	16.0	08	4000.000	4,965.28	24.1

3,4- and 2,3-Dichlorotoluene Coelution

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	0.88	-11.8	02	2.000	1.87	-6.7	03	4.000	3.59	-10.2
04	10.000	10.07	0.7	05	40.000	43.30	8.3	06	100.000	110.69	10.7
07	200.000	221.40	10.7	08	400.000	393.25	-1.7				

3,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	18.4	02	1.000	1.02	2.1	03	2.000	1.82	-8.9
04	5.000	4.87	-2.6	05	20.000	19.34	-3.3	06	50.000	48.65	-2.7
07	100.000	100.95	1.0	08	200.000	192.11	-3.9				

3-Chloro-1-propene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.43	-14.7	02	1.000	1.02	1.6	03	2.000	1.78	-10.9
04	5.000	4.67	-6.6	05	20.000	21.88	9.4	06	50.000	53.96	7.9
07	100.000	107.00	7.0	08	200.000	212.65	6.3				

3-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.41	-18.8	02	1.000	0.89	-11.3	03	2.000	1.88	-6.0
04	5.000	5.24	4.9	05	20.000	20.70	3.5	06	50.000	53.80	7.6
07	100.000	110.41	10.4	08	200.000	219.44	9.7				

Initial Calibration - Detailed Report

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		Signal ID:	1

Analyte

3-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.4	02	1.000	0.95	-5.2	03	2.000	1.83	-8.5
04	5.000	5.08	1.5	05	20.000	20.98	4.9	06	50.000	53.07	6.1
07	100.000	107.38	7.4	08	200.000	196.36	-1.8				

4-Bromofluorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	52.78	5.6	03	60.000	59.78	-0.4	04	70.000	69.31	-1.0
05	100.000	97.23	-2.8	07	125.000	122.73	-1.8	08	150.000	150.55	0.4

4-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-11.9	02	1.000	0.95	-5.3	03	2.000	1.81	-9.5
04	5.000	4.61	-7.8	05	20.000	23.10	15.5	06	50.000	54.61	9.2
07	100.000	105.64	5.6	08	200.000	208.31	4.2				

4-Isopropyltoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.43	-14.4	02	1.000	0.92	-8.5	03	2.000	1.79	-10.6
04	5.000	4.83	-3.4	05	20.000	23.54	17.7	06	50.000	56.09	12.2
07	100.000	106.31	6.3	08	200.000	201.40	0.7				

4-Methyl-2-pentanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.61	-19.5	04	5.000	4.21	-15.8	05	20.000	19.93	-0.3
06	50.000	53.68	7.4	07	100.000	111.17	11.2	08	200.000	234.35	17.2

Acetone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	2.19	9.3	04	5.000	4.52	-9.6	05	20.000	19.30	-3.5
06	50.000	49.05	-1.9	07	100.000	100.83	0.8	08	200.000	209.72	4.9

Acetonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	10.000	7.89	-21.1	04	25.000	23.36	-6.6	05	100.000	96.05	-3.9
06	250.000	273.05	9.2	07	500.000	520.09	4.0	08	1000.000	1,183.80	18.4

Acrolein

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	5.000	4.28	-14.3	03	10.000	9.28	-7.2	04	25.000	19.85	-20.6
05	100.000	96.96	-3.0	06	250.000	283.47	13.4	07	500.000	658.95	31.8

Acrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.03	-18.8	02	5.000	4.55	-8.9	03	10.000	8.98	-10.2
04	25.000	23.27	-6.9	05	100.000	103.93	3.9	06	250.000	277.05	10.8
07	500.000	558.02	11.6	08	1000.000	1,184.65	18.5				

Initial Calibration - Detailed Report

Calibration ID: RC1400080 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

Benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.1	02	1.000	0.93	-7.0	03	2.000	1.82	-8.9
04	5.000	4.83	-3.4	05	20.000	21.95	9.8	06	50.000	54.30	8.6
07	100.000	103.48	3.5	08	200.000	213.01	6.5				

Bromobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.6	02	1.000	0.87	-12.5	03	2.000	1.88	-5.9
04	5.000	4.75	-4.9	05	20.000	22.20	11.0	06	50.000	53.49	7.0
07	100.000	103.23	3.2	08	200.000	209.43	4.7				

Bromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.60	19.8	02	1.000	0.96	-4.4	03	2.000	1.84	-8.0
04	5.000	4.29	-14.3	05	20.000	21.04	5.2	06	50.000	51.51	3.0
07	100.000	99.76	-0.2	08	200.000	197.77	-1.1				

Bromodichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-10.5	02	1.000	0.93	-7.1	03	2.000	1.83	-8.3
04	5.000	4.61	-7.8	05	20.000	21.56	7.8	06	50.000	55.06	10.1
07	100.000	105.60	5.6	08	200.000	220.20	10.1				

Bromoform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.42	-16.6	02	1.000	0.89	-10.9	03	2.000	1.78	-11.2
04	5.000	4.56	-8.7	05	20.000	21.22	6.1	06	50.000	56.60	13.2
07	100.000	111.98	12.0	08	200.000	232.41	16.2				

Bromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.4	02	1.000	1.04	4.1	03	2.000	2.01	0.3
04	5.000	4.64	-7.1	05	20.000	19.25	-3.8	06	50.000	48.32	-3.4
07	100.000	97.13	-2.9	08	200.000	206.59	3.3				

Carbon Disulfide

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.8	02	1.000	0.95	-4.7	03	2.000	1.90	-4.8
04	5.000	4.64	-7.2	05	20.000	20.89	4.5	06	50.000	51.29	2.6
07	100.000	99.78	-0.2	08	200.000	198.11	-0.9				

Carbon Tetrachloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.4	02	1.000	0.96	-3.7	03	2.000	1.93	-3.5
04	5.000	4.38	-12.4	05	20.000	21.12	5.6	06	50.000	54.28	8.6
07	100.000	102.50	2.5	08	200.000	216.75	8.4				

Initial Calibration - Detailed Report

Calibration ID:	RC1400080	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Chlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.4	02	1.000	0.87	-12.5	03	2.000	1.76	-12.2
04	5.000	4.67	-6.6	05	20.000	21.78	8.9	06	50.000	54.79	9.6
07	100.000	103.68	3.7	08	200.000	211.58	5.8				

Chloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.4	02	1.000	0.91	-9.3	03	2.000	1.79	-10.7
04	5.000	4.37	-12.7	05	20.000	21.43	7.1	06	50.000	54.40	8.8
07	100.000	106.89	6.9	08	200.000	214.85	7.4				

Chloroform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.9	02	1.000	0.98	-1.6	03	2.000	2.24	11.9
04	5.000	4.77	-4.6	05	20.000	20.00	0.0	06	50.000	50.56	1.1
07	100.000	98.18	-1.8	08	200.000	199.85	-0.1				

Chloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.4	02	1.000	0.98	-2.0	03	2.000	1.78	-11.2
04	5.000	4.36	-12.7	05	20.000	21.78	8.9	06	50.000	54.49	9.0
07	100.000	104.81	4.8	08	200.000	219.27	9.6				

Cyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.5	02	1.000	0.97	-3.2	03	2.000	1.79	-10.5
04	5.000	4.65	-6.9	05	20.000	20.88	4.4	06	50.000	53.80	7.6
07	100.000	103.02	3.0	08	200.000	212.06	6.0				

Cyclohexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	8.67	-13.3	02	20.000	18.71	-6.5	03	40.000	35.24	-11.9
04	100.000	95.18	-4.8	05	400.000	442.39	10.6	06	1000.000	1,092.38	9.2
07	2000.000	2,152.26	7.6	08	4000.000	4,361.85	9.0				

Dibromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-11.4	02	1.000	0.83	-16.7	03	2.000	1.84	-8.0
04	5.000	4.30	-14.0	05	20.000	21.44	7.2	06	50.000	57.31	14.6
07	100.000	110.86	10.9	08	200.000	234.84	17.4				

Dibromofluoromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	51.13	2.3	03	60.000	61.70	2.8	04	70.000	70.40	0.6
05	100.000	98.98	-1.0	07	125.000	122.12	-2.3	08	150.000	146.49	-2.3

Initial Calibration - Detailed Report

Calibration ID:	RC1400080	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Dibromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.9	02	1.000	0.92	-8.4	03	2.000	1.91	-4.6
04	5.000	4.55	-9.0	05	20.000	21.48	7.4	06	50.000	53.38	6.8
07	100.000	105.56	5.6	08	200.000	218.29	9.1				

Dichlorodifluoromethane (CFC 12)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-11.4	02	1.000	0.87	-12.9	03	2.000	1.71	-14.6
04	5.000	4.50	-10.0	05	20.000	23.21	16.1	06	50.000	57.31	14.6
07	100.000	109.50	9.5	08	200.000	217.81	8.9				

Dichlorofluoromethane (CFC 21)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.7	02	1.000	0.96	-4.3	03	2.000	1.90	-4.8
04	5.000	4.66	-6.8	05	20.000	20.78	3.9	06	50.000	53.63	7.3
07	100.000	106.04	6.0	08	200.000	208.85	4.4				

Dichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.0	02	1.000	1.14	13.5	03	2.000	1.86	-6.8
04	5.000	4.55	-9.0	05	20.000	20.20	1.0	06	50.000	50.13	0.3
07	100.000	97.21	-2.8	08	200.000	199.78	-0.1				

Diethyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.2	02	1.000	0.97	-3.3	03	2.000	1.73	-13.4
04	5.000	4.55	-9.0	05	20.000	20.72	3.6	06	50.000	51.99	4.0
07	100.000	107.49	7.5	08	200.000	220.85	10.4				

Diisopropyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.2	02	1.000	0.97	-3.3	03	2.000	1.97	-1.4
04	5.000	4.86	-2.8	05	20.000	19.36	-3.2	06	50.000	49.68	-0.6
07	100.000	104.78	4.8	08	200.000	204.78	2.4				

Ethyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.43	-15.0	02	1.000	0.85	-15.2	03	2.000	1.65	-17.5
04	5.000	4.17	-16.6	05	20.000	20.85	4.2	06	50.000	58.09	16.2
07	100.000	118.39	18.4	08	200.000	250.95	25.5				

Ethyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.2	02	1.000	0.96	-3.8	03	2.000	1.91	-4.7
04	5.000	4.93	-1.4	05	20.000	19.52	-2.4	06	50.000	50.17	0.3
07	100.000	106.86	6.9	08	200.000	212.52	6.3				

Initial Calibration - Detailed Report

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		Signal ID:	1

Analyte

Ethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-11.2	02	1.000	0.92	-8.4	03	2.000	1.73	-13.3
04	5.000	4.61	-7.7	05	20.000	21.95	9.8	06	50.000	56.29	12.6
07	100.000	107.23	7.2	08	200.000	221.95	11.0				

Hexachlorobutadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	14.1	02	1.000	1.05	5.3	03	2.000	1.86	-7.1
04	5.000	4.62	-7.6	05	20.000	21.68	8.4	06	50.000	52.27	4.5
07	100.000	93.33	-6.7	08	200.000	178.17	-10.9				

Iodomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.54	-23.2	04	5.000	4.11	-17.9	05	20.000	21.88	9.4
06	50.000	56.59	13.2	07	100.000	111.03	11.0	08	200.000	214.94	7.5

Isopropylbenzene (Cumene)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.6	02	1.000	0.96	-3.8	03	2.000	1.81	-9.6
04	5.000	4.83	-3.4	05	20.000	22.87	14.3	06	50.000	54.72	9.4
07	100.000	103.09	3.1	08	200.000	195.01	-2.5				

Methacrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.88	-12.0	03	2.000	1.57	-21.4	04	5.000	4.30	-14.1
05	20.000	21.05	5.3	06	50.000	55.85	11.7	07	100.000	111.75	11.7
08	200.000	237.52	18.8								

Methyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.97	-3.3	03	2.000	1.75	-12.4	04	5.000	4.37	-12.7
05	20.000	19.78	-1.1	06	50.000	53.82	7.6	07	100.000	109.06	9.1
08	200.000	225.68	12.8								

Methyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.42	-16.8	02	1.000	1.00	-0.2	03	2.000	1.60	-20.0
04	5.000	4.25	-15.0	05	20.000	21.16	5.8	06	50.000	57.04	14.1
07	100.000	112.73	12.7	08	200.000	238.87	19.4				

Methyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-11.4	02	1.000	0.87	-13.4	03	2.000	1.81	-9.7
04	5.000	4.53	-9.5	05	20.000	21.45	7.2	06	50.000	54.68	9.4
07	100.000	111.75	11.8	08	200.000	231.13	15.6				

Initial Calibration - Detailed Report

Calibration ID:	RC1400080	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Methylcyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.4	02	1.000	0.89	-10.7	03	2.000	1.71	-14.5
04	5.000	4.59	-8.2	05	20.000	21.20	6.0	06	50.000	55.49	11.0
07	100.000	110.17	10.2	08	200.000	225.10	12.6				

Naphthalene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.43	-13.7	02	1.000	0.84	-15.7	03	2.000	1.73	-13.5
04	5.000	4.67	-6.6	05	20.000	22.68	13.4	06	50.000	58.06	16.1
07	100.000	112.62	12.6	08	200.000	214.84	7.4				

Propionitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.05	-18.0	02	5.000	4.31	-13.9	03	10.000	9.51	-4.9
04	25.000	22.27	-10.9	05	100.000	102.91	2.9	06	250.000	277.10	10.8
07	500.000	560.87	12.2	08	1000.000	1,218.06	21.8				

Styrene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.39	-21.9	02	1.000	0.87	-13.4	03	2.000	1.66	-16.8
04	5.000	4.65	-7.0	05	20.000	22.67	13.3	06	50.000	58.25	16.5
07	100.000	112.94	12.9	08	200.000	232.83	16.4				

Tetrachloroethene (PCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.7	02	1.000	0.99	-0.5	03	2.000	1.82	-8.8
04	5.000	4.94	-1.2	05	20.000	20.62	3.1	06	50.000	53.55	7.1
07	100.000	101.74	1.7	08	200.000	208.54	4.3				

Tetrahydrofuran (THF)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.97	-1.7	04	5.000	4.30	-14.0	05	20.000	18.87	-5.6
06	50.000	52.95	5.9	07	100.000	104.42	4.4	08	200.000	222.12	11.1

Toluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-8.3	02	1.000	0.96	-3.9	03	2.000	1.83	-8.3
04	5.000	4.67	-6.6	05	20.000	21.97	9.9	06	50.000	54.44	8.9
07	100.000	103.79	3.8	08	200.000	209.28	4.6				

Toluene-d8

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	52.86	5.7	03	60.000	61.10	1.8	04	70.000	70.09	0.1
05	100.000	97.93	-2.1	07	125.000	121.19	-3.0	08	150.000	146.16	-2.6

Initial Calibration - Detailed Report

Calibration ID: RC1400080 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

Trichloroethene (TCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-8.3	02	1.000	1.01	0.8	03	2.000	1.79	-10.6
04	5.000	4.76	-4.7	05	20.000	21.77	8.8	06	50.000	53.27	6.5
07	100.000	101.51	1.5	08	200.000	211.91	6.0				

Trichlorofluoromethane (CFC 11)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.41	-18.2	02	1.000	0.98	-2.4	03	2.000	1.91	-4.3
04	5.000	4.78	-4.5	05	20.000	22.05	10.3	06	50.000	54.03	8.1
07	100.000	104.98	5.0	08	200.000	211.99	6.0				

Vinyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.85	-15.0	03	2.000	1.83	-8.5	04	5.000	4.35	-13.1
05	20.000	20.96	4.8	06	50.000	50.12	0.2	07	100.000	114.24	14.2
08	200.000	234.73	17.4								

Vinyl Chloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.43	-13.1	02	1.000	0.93	-6.7	03	2.000	1.77	-11.6
04	5.000	4.59	-8.3	05	20.000	22.53	12.7	06	50.000	54.96	9.9
07	100.000	108.21	8.2	08	200.000	217.81	8.9				

cis-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.9	02	1.000	0.98	-2.3	03	2.000	1.70	-15.2
04	5.000	4.60	-8.0	05	20.000	21.30	6.5	06	50.000	51.56	3.1
07	100.000	101.80	1.8	08	200.000	210.35	5.2				

cis-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.42	-15.2	02	1.000	0.85	-14.8	03	2.000	1.68	-16.1
04	5.000	4.61	-7.7	05	20.000	22.00	10.0	06	50.000	57.13	14.3
07	100.000	111.96	12.0	08	200.000	235.18	17.6				

m,p-Xylenes

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	0.86	-14.0	02	2.000	1.71	-14.3	03	4.000	3.43	-14.2
04	10.000	9.57	-4.3	05	40.000	44.86	12.2	06	100.000	114.51	14.5
07	200.000	218.39	9.2	08	400.000	443.66	10.9				

n-Butyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.08	7.8	03	2.000	1.78	-11.0	04	5.000	4.32	-13.5
05	20.000	20.54	2.7	06	50.000	55.51	11.0	07	100.000	105.78	5.8
08	200.000	191.78	-4.1								

Initial Calibration - Detailed Report

Calibration ID:	RC1400080	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

n-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.8	02	1.000	0.86	-14.4	03	2.000	1.72	-13.8
04	5.000	4.67	-6.5	05	20.000	22.70	13.5	06	50.000	56.23	12.5
07	100.000	106.55	6.6	08	200.000	206.11	3.1				

n-Heptane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.9	02	1.000	0.91	-8.6	03	2.000	1.75	-12.3
04	5.000	4.42	-11.5	05	20.000	21.98	9.9	06	50.000	54.35	8.7
07	100.000	103.70	3.7	08	200.000	210.39	5.2				

n-Propylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.2	02	1.000	0.99	-1.1	03	2.000	1.76	-12.2
04	5.000	4.98	-0.3	05	20.000	22.84	14.2	06	50.000	54.83	9.7
07	100.000	102.64	2.6	08	200.000	188.59	-5.7				

o-Xylene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.41	-17.5	02	1.000	0.87	-12.5	03	2.000	1.65	-17.6
04	5.000	4.78	-4.5	05	20.000	22.28	11.4	06	50.000	57.15	14.3
07	100.000	110.25	10.3	08	200.000	232.38	16.2				

sec-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.2	02	1.000	0.95	-5.4	03	2.000	1.89	-5.4
04	5.000	4.80	-4.1	05	20.000	23.09	15.5	06	50.000	54.38	8.8
07	100.000	102.18	2.2	08	200.000	191.32	-4.3				

tert-Amyl Methyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.1	02	1.000	0.89	-10.7	03	2.000	1.88	-6.2
04	5.000	4.82	-3.7	05	20.000	19.02	-4.9	06	50.000	50.56	1.1
07	100.000	108.57	8.6	08	200.000	219.56	9.8				

tert-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.43	-14.6	02	1.000	0.92	-7.7	03	2.000	1.87	-6.3
04	5.000	4.73	-5.3	05	20.000	23.18	15.9	06	50.000	55.58	11.2
07	100.000	104.30	4.3	08	200.000	205.26	2.6				

trans-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.4	02	1.000	1.04	4.3	03	2.000	1.71	-14.3
04	5.000	4.74	-5.2	05	20.000	21.10	5.5	06	50.000	52.46	4.9
07	100.000	103.00	3.0	08	200.000	214.25	7.1				

Initial Calibration - Detailed Report

Calibration ID:	RC1400080	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

trans-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.37	-26.8	02	1.000	0.86	-13.8	03	2.000	1.66	-16.9
04	5.000	4.44	-11.1	05	20.000	22.25	11.3	06	50.000	59.31	18.6
07	100.000	115.39	15.4	08	200.000	246.72	23.4				

trans-1,4-Dichloro-2-butene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.7	02	1.000	0.81	-19.1	03	2.000	1.81	-9.3
04	5.000	4.74	-5.1	05	20.000	21.41	7.1	06	50.000	53.75	7.5
07	100.000	112.82	12.8	08	200.000	227.92	14.0				

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

KR 9/10/14

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:00:50 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	814647	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1294523	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1149524	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	591769	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	363676	50.44	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.88%				
48) surr1,1,2-dichloroetha...	4.658	65	388759	50.03	ppb		-0.01
Spiked Amount 50.000	Range 78 - 122		Recovery = 100.06%				
65) SURR3,Toluene-d8	7.322	98	1547237	50.84	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.68%				
70) SURR2,BFB	9.791	95	546567	50.17	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.34%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	3500	0.44	ppb		84
3) Chloromethane	1.262	50	4037	0.47	ppb		79
4) Vinyl Chloride	1.323	62	3963m	0.43	ppb		
5) Bromomethane	1.512	94	2901	0.55	ppb		93
6) Chloroethane	1.567	64	2611	0.51	ppb		78
7) Freon 21	1.664	67	6359	0.47	ppb		90
8) Trichlorofluoromethane	1.719	101	4477	0.41	ppb	#	77
9) Diethyl Ether	1.884	59	2642	0.50	ppb		90
10) Freon 123a	1.865	67	4190	0.49	ppb		83
11) Freon 123	1.908	83	4510	0.48	ppb		90
12) Acrolein	1.951	56	976	1.96	ppb		94
13) 1,1-Diclethene	2.036	96	2886	0.50	ppb	#	81
14) Freon 113	2.036	101	3285	0.49	ppb		88
16) 2-Propanol	2.115	45	1658	6.21	ppb		97
17) Iodomethane	2.146	142	3355	0.38	ppb		90
18) Carbon Disulfide	2.207	76	12184	0.55	ppb		91
19) Acetonitrile	2.237	40	673	2.97	ppb	#	1
20) Allyl Chloride	2.274	76	1670	0.42	ppb	#	79
21) Methyl Acetate	2.274	43	1676	0.49	ppb		82
22) Methylene Chloride	2.359	84	3879	0.52	ppb		89
23) TBA	2.408	59	3648	8.15	ppb	#	40
24) Acrylonitrile	2.536	53	3242m	2.03	ppb		
25) Methyl-t-Butyl Ether	2.579	73	7330	0.44	ppb		90
26) trans-1,2-Dichloroethene	2.585	96	3425	0.47	ppb		83
28) 1,1-Diclethane	2.944	63	6116	0.47	ppb		80
29) Vinyl Acetate	2.993	86	636m	0.60	ppb		
30) DIPE	3.012	45	12730	0.52	ppb		94
31) 2-Chloro-1,3-Butadiene	3.042	53	5750	0.46	ppb		97
32) ETBE	3.408	59	10641	0.49	ppb		92
33) 2,2-Dichloropropane	3.566	77	4804m	0.47	ppb		
34) cis-1,2-Dichloroethene	3.548	96	4426m	0.55	ppb		
36) Propionitrile	3.615	54	1211m	2.05	ppb		
37) Bromochloromethane	3.841	130	2693m	0.60	ppb		
38) Methacrylonitrile	3.810	67	768	0.41	ppb	#	75
40) Chloroform	3.932	83	6256	0.48	ppb	#	78

W090914.M Wed Sep 10 09:01:52 2014

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:00:50 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41)	1,1,1-Trichloroethane	4.219	97	5050m	0.46	ppb		
42)	TAME	5.029	73	9765	0.53	ppb		88
44)	Cyclohexane	4.316	41	3332	0.49	ppb		91
46)	Carbontetrachloride	4.487	121	1379m	0.48	ppb		
47)	1,1-Dichloropropene	4.469	75	4817m	0.51	ppb		
49)	Benzene	4.792	78	13354m	0.45	ppb		
50)	1,2-Dichloroethane	4.798	62	3913m	0.45	ppb		
52)	n-Heptane	5.328	43	3883	0.52	ppb	#	77
54)	Trichloroethene	5.834	130	3585m	0.46	ppb		
55)	Methylcyclohexane	6.115	55	3762m	0.47	ppb		
56)	1,2-Diclpropane	6.115	63	3830	0.52	ppb		95
57)	Dibromomethane	6.261	93	1670	0.47	ppb		98
59)	Methyl Methacrylate	6.346	69	1415m	0.42	ppb		
60)	Bromodichloromethane	6.480	83	4101	0.45	ppb		89
62)	2-Chloroethylvinyl Ether	6.901	63	1220m	0.37	ppb		
63)	cis-1,3-Dichloropropene	7.029	75	4541	0.42	ppb		99
64)	4-Methyl-2-pentanone	7.218	43	1814	0.41	ppb		84
66)	Toluene	7.395	91	14642	0.46	ppb		98
67)	trans-1,3-Dichloropropene	7.639	75	3193m	0.37	ppb		
68)	Ethyl Methacrylate	7.779	69	2915m	0.42	ppb		
69)	1,1,2-Trichloroethane	7.809	97	2567	0.48	ppb		80
72)	Tetrachloroethene	7.962	164	2775	0.47	ppb	#	78
74)	1,3-Dichloropropane	7.980	76	4698	0.48	ppb		89
75)	Dibromochloromethane	8.193	129	2626	0.44	ppb		91
76)	N-Butyl Acetate	8.248	43	2151	0.31	ppb		73
77)	1,2-Dibromoethane	8.291	107	2335	0.47	ppb		89
78)	Chlorobenzene	8.767	112	10531	0.52	ppb		88
79)	3-CBTF	8.785	180	4087	0.41	ppb		95
80)	4-CBTF	8.840	180	4900	0.51	ppb		92
81)	1,1,1,2-Tetrachloroethane	8.852	131	3337	0.48	ppb		98
82)	Ethylbenzene	8.888	106	4755	0.44	ppb		97
83)	(m+p)Xylene	8.998	106	11151	0.86	ppb		99
84)	o-Xylene	9.346	106	5205	0.41	ppb		89
85)	Styrene	9.358	104	8076m	0.39	ppb		
87)	Bromoform	9.498	173	1345	0.42	ppb		80
88)	2-CBTF	9.577	180	4481	0.47	ppb	#	78
89)	Isopropylbenzene	9.669	105	14015	0.46	ppb		91
90)	Cyclohexanone	9.724	55	6105m	8.74	ppb		
91)	trans-1,4-Dichloro-2-B...	9.967	53	696	0.46	ppb	#	68
92)	1,1,2,2-Tetrachloroethane	9.907	83	3055	0.50	ppb	#	73
93)	Bromobenzene	9.913	156	3795	0.49	ppb		92
94)	1,2,3-Trichloropropane	9.943	110	861	0.49	ppb	#	83
95)	n-Propylbenzene	10.022	91	16457	0.46	ppb		93
96)	2-Chlorotoluene	10.083	91	9501	0.44	ppb		92
97)	3-Chlorotoluene	10.132	91	11036	0.47	ppb		96
98)	4-Chlorotoluene	10.175	91	11021	0.44	ppb		97
99)	1,3,5-Trimethylbenzene	10.169	105	9431	0.39	ppb		98
100)	tert-Butylbenzene	10.443	119	8683m	0.43	ppb		
101)	1,2,4-Trimethylbenzene	10.480	105	10936	0.44	ppb		98
102)	3,4-DCBTF	10.541	214	4046	0.59	ppb	#	71
103)	sec-Butylbenzene	10.620	105	13705	0.46	ppb		94
104)	p-Isopropyltoluene	10.742	119	10544	0.43	ppb	#	74

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

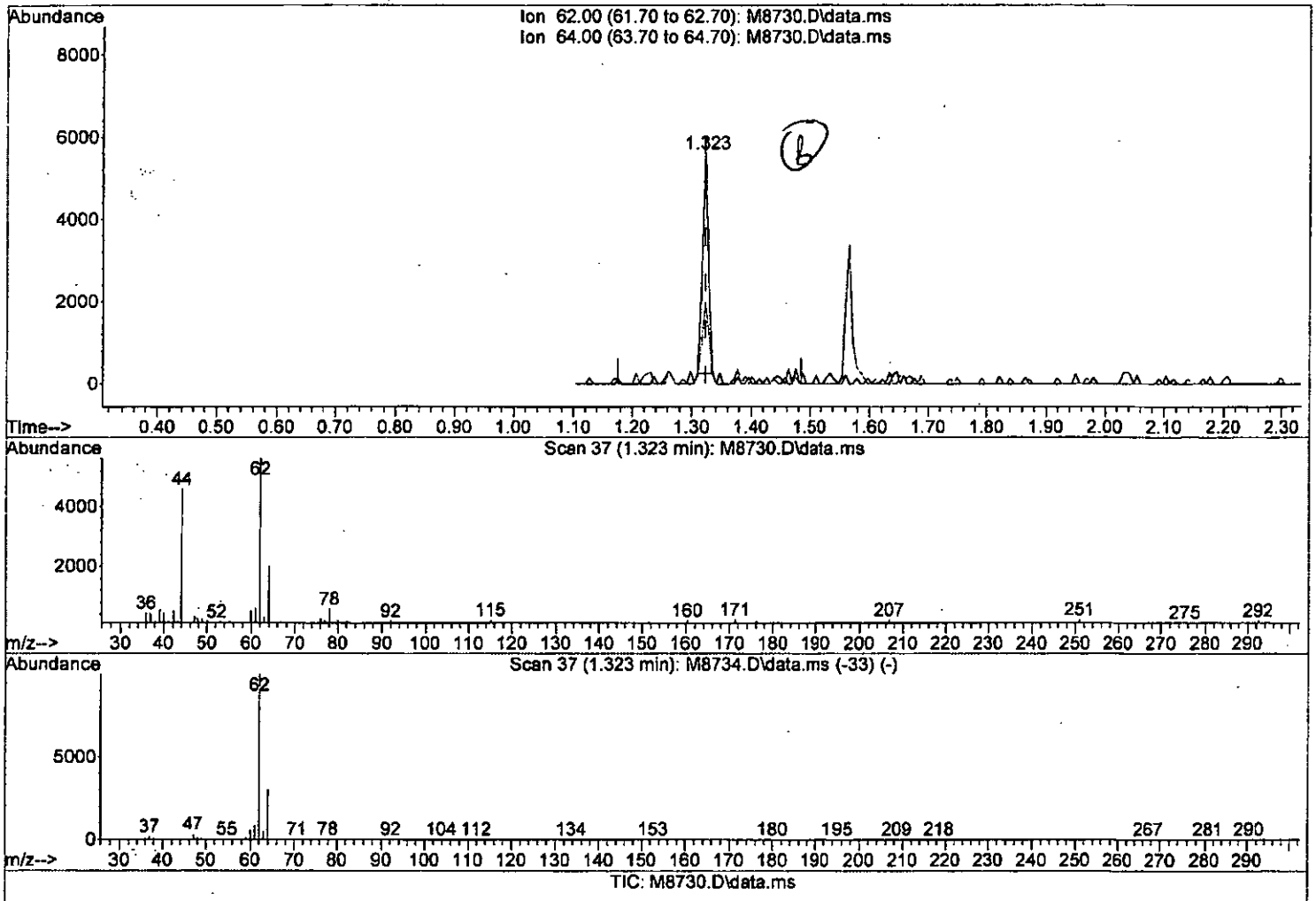
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:00:50 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
105) 1,3-Dclbenz	10.699	146	6829	0.46	ppb		97
106) 1,4-Dclbenz	10.766	146	7728	0.51	ppb		89
107) 2,4-DCBTF	10.821	214	3273m	0.55	ppb		
108) 2,5-DCBTF	10.864	214	3699m	0.55	ppb		
109) n-Butylbenzene	11.071	91	11097	0.50	ppb		86
110) 1,2-Dclbenz	11.065	146	6886	0.49	ppb	#	66
111) 1,2-Dibromo-3-chloropr...	11.632	157	747	0.69	ppb	#	48
112) Trielution Dichlorotol...	11.735	125	15665	1.34	ppb	#	93
113) 1,3,5 Trichlorobenzene	11.784	180	5588	0.56	ppb	#	73
114) Coelution Dichlorotoluene	11.998	125	11012	0.88	ppb	#	89
115) 1,2,4-Tcbenzene	12.162	180	3722	0.45	ppb		89
116) Hexachlorobt	12.272	225	1851	0.57	ppb	#	86
117) Naphthalen	12.302	128	7245	0.43	ppb		96
118) 1,2,3-Tclbenzene	12.443	180	3682	0.52	ppb		88
119) 2,4,5-Trichlorotolene	12.863	159	2561m	0.46	ppb		
120) 2,3,6-Trichlorotoluene	12.924	159	2283	0.42	ppb		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(4) Vinyl Chloride (P)

1.323min (-0.000) 0.38 ppb

response 3500

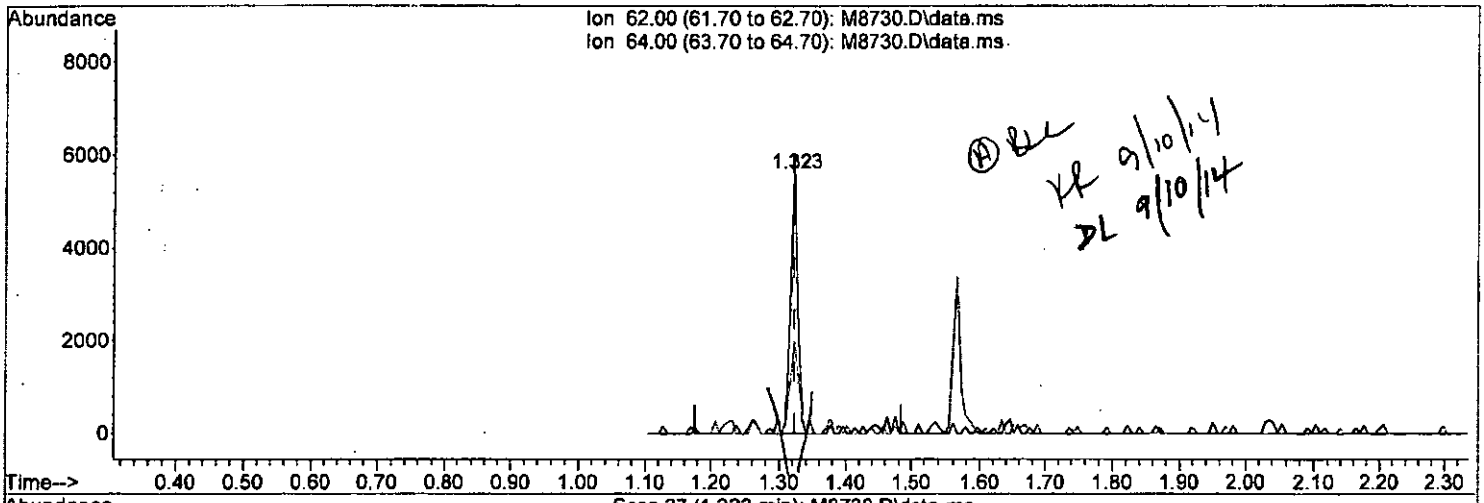
Ion	Exp%	Act%
62.00	100	100
64.00	30.60	35.22
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Wed Sep 10 08:50:21 2014 Page: 1

00277

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(4) Vinyl Chloride (P)

1.323min (-0.000) 0.43 ppb m

response 3963

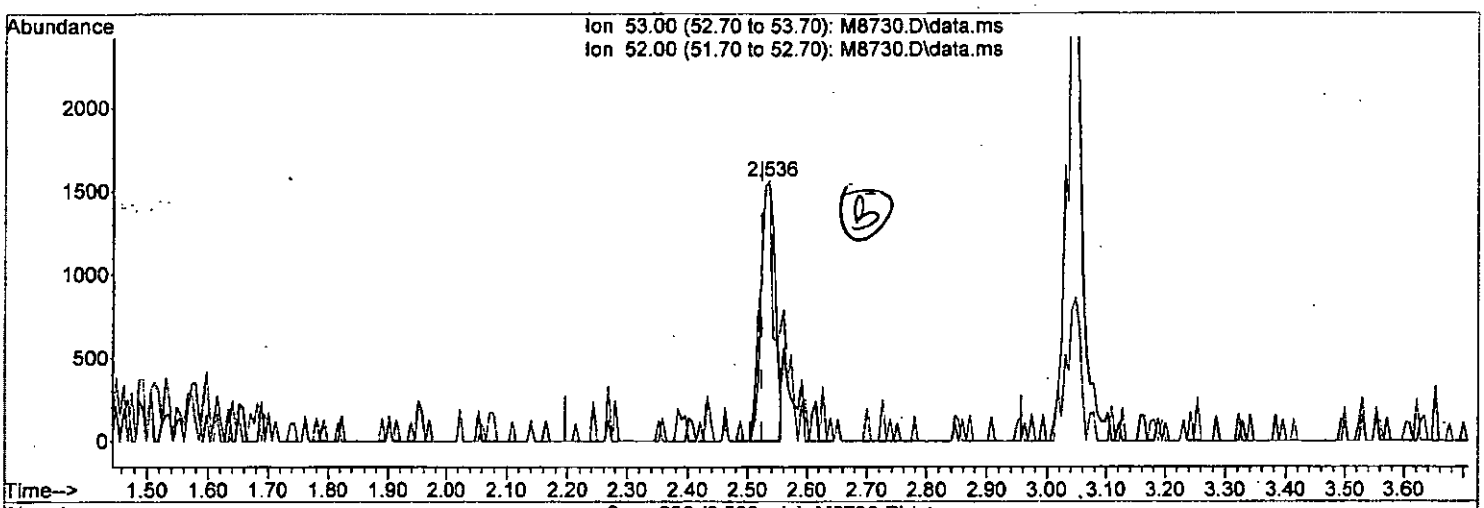
Ion	Exp%	Act%
62.00	100	100
64.00	30.60	35.22
0.00	0.00	0.00
0.00	0.00	0.00

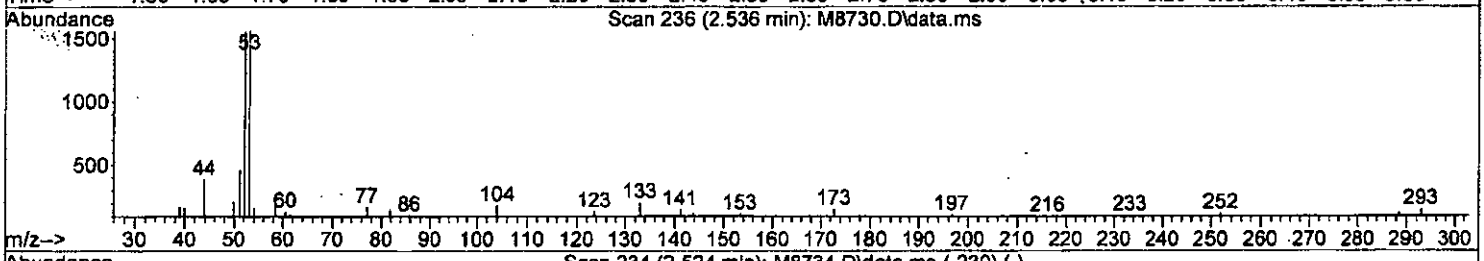
W090914.M Wed Sep 10 08:50:29 2014 Page: 1

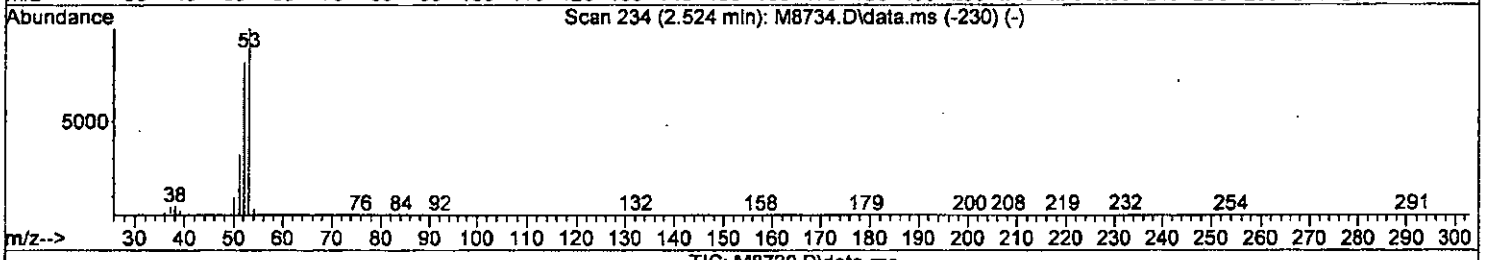
00278

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8730.D\data.ms

(24) Acrylonitrile

2.536min (+0.012) 1.59 ppb

response 2541

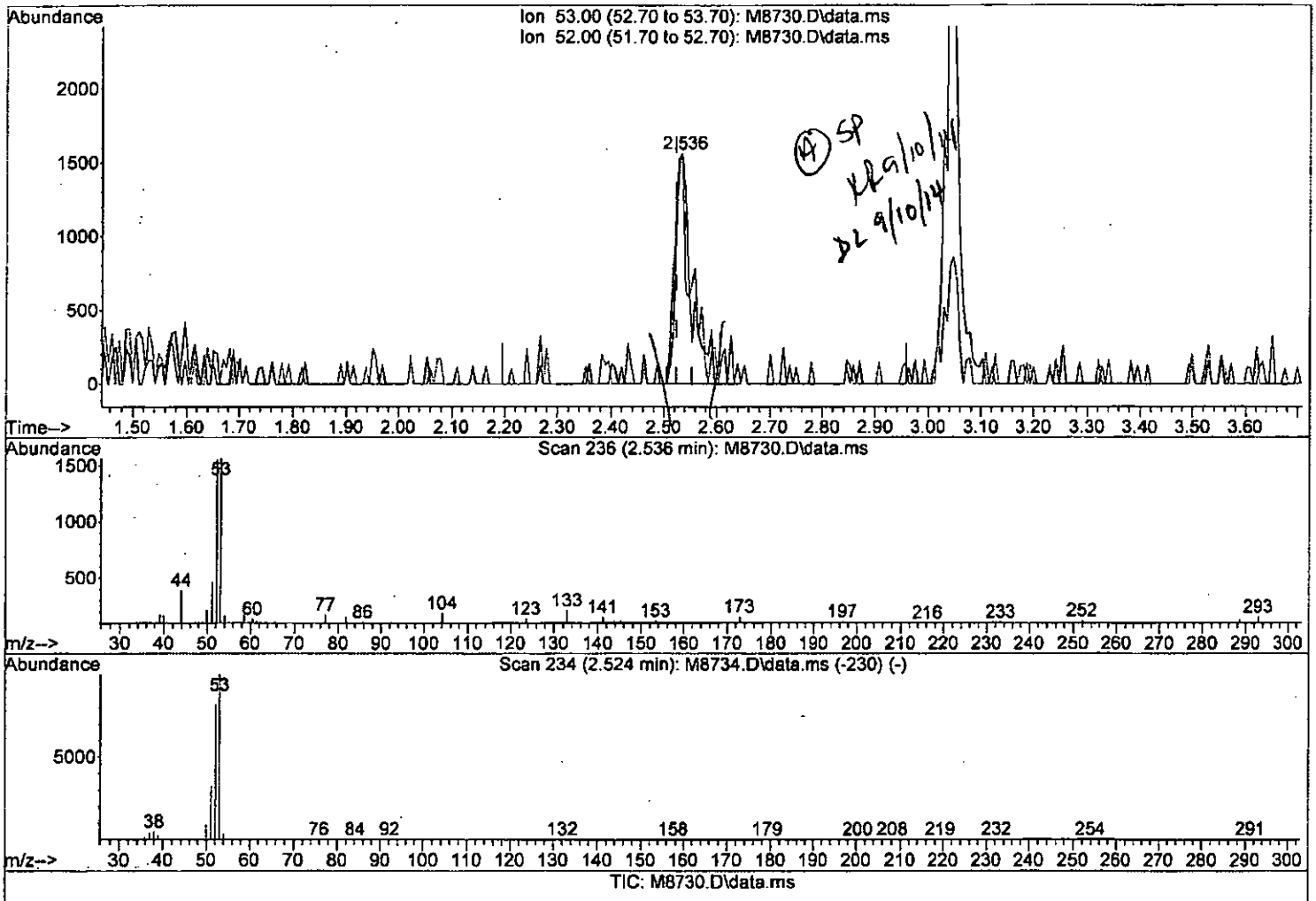
Ion	Exp%	Act%
53.00	100	100
52.00	81.60	99.55#
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Wed Sep 10 08:51:05 2014 Page: 1

00279

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(24) Acrylonitrile

2.536min (+0.012) 2.03 ppb m

response 3242

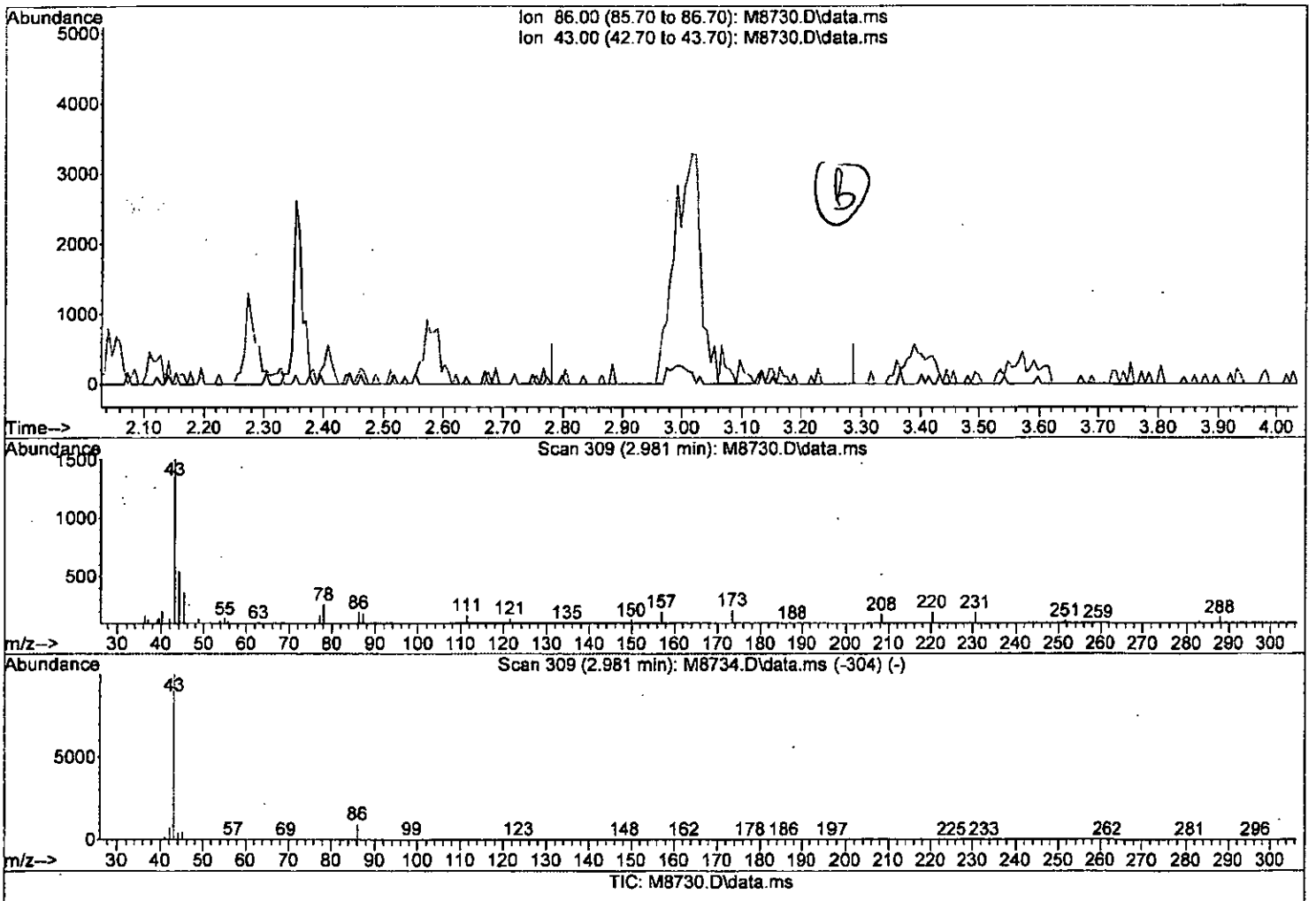
Ion	Exp%	Act%
53.00	100	100
52.00	81.60	99.55#
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Wed Sep 10 08:51:12 2014 Page: 1

00289

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(29) Vinyl Acetate

2.981min (-2.981) 0.00 ppb

response 0

Ion	Exp%	Act%
86.00	100	0.00
43.00	1037.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

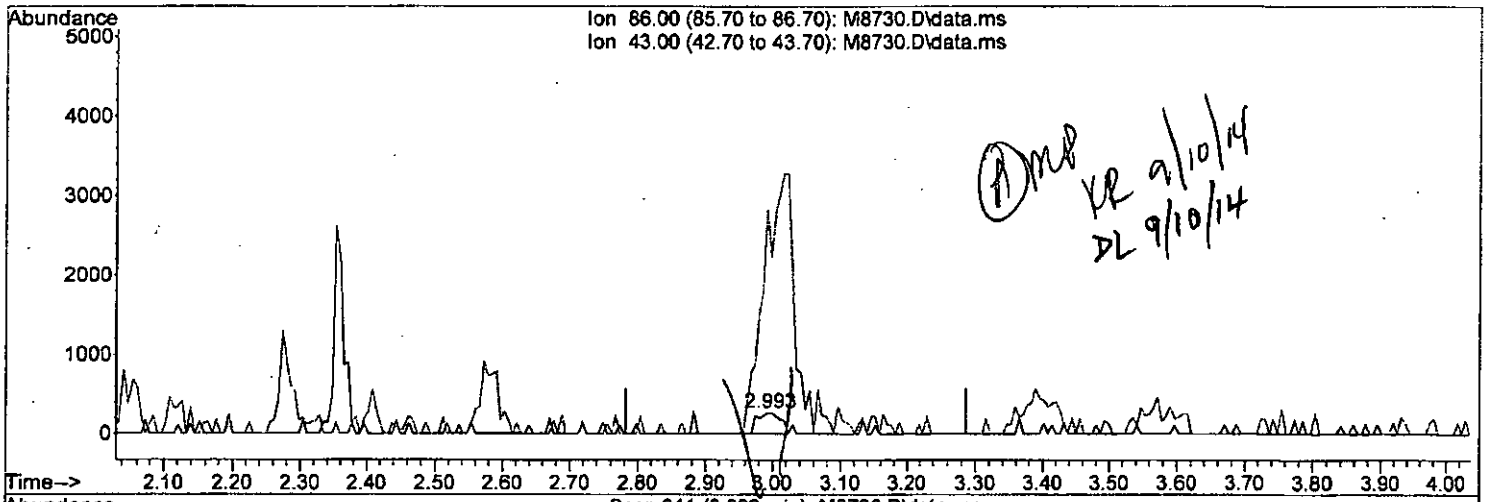
W090914.M Wed Sep 10 08:51:22 2014 Page: 1

00281

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(29) Vinyl Acetate

2.993min (+0.012) 0.60 ppb m

response 636

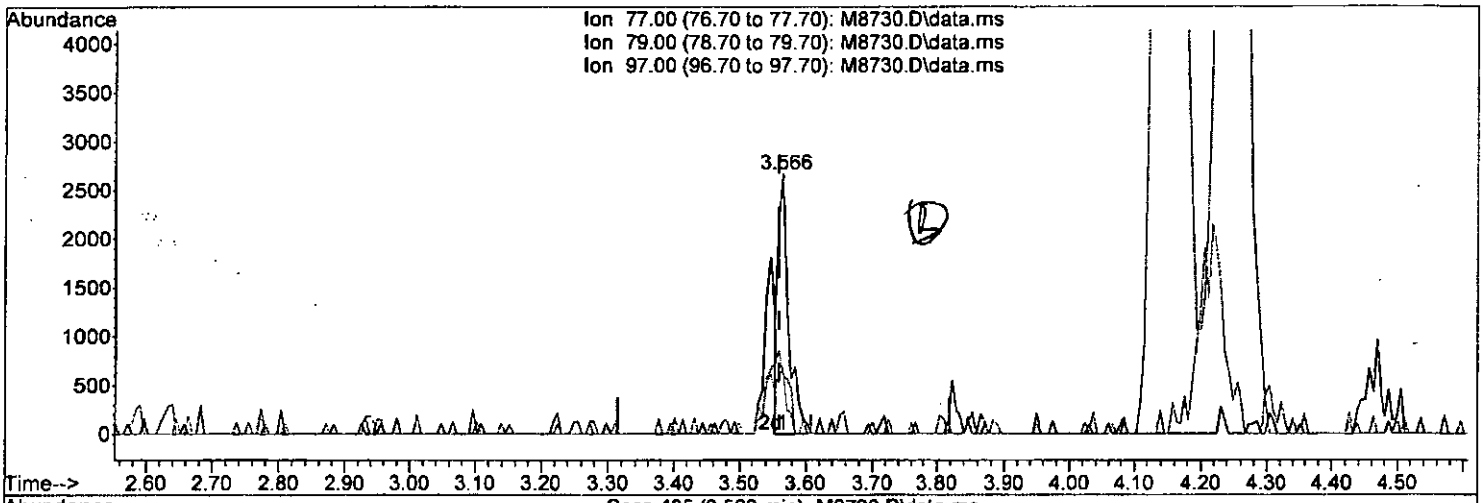
Ion	Exp%	Act%
86.00	100	100
43.00	1037.10	1062.41#
0.00	0.00	0.00
0.00	0.00	0.00

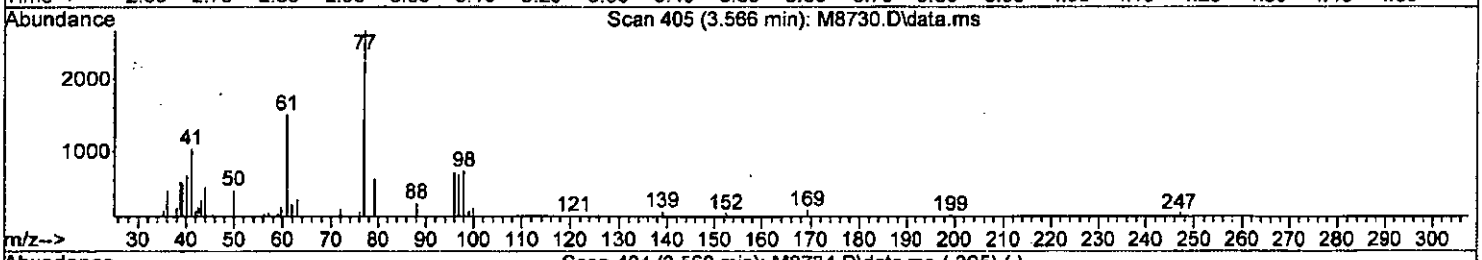
W090914.M Wed Sep 10 08:51:35 2014 Page: 1

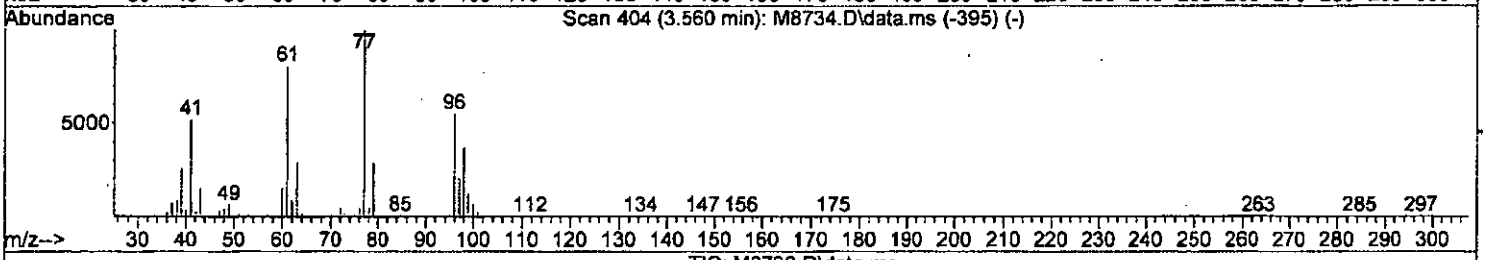
00282

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8730.D\data.ms

(33) 2,2-Dichloropropane

3.566min (+0.006) 0.28 ppb

response 2892

Ion	Exp%	Act%
77.00	100	100
79.00	28.40	22.96
97.00	20.50	25.40
0.00	0.00	0.00

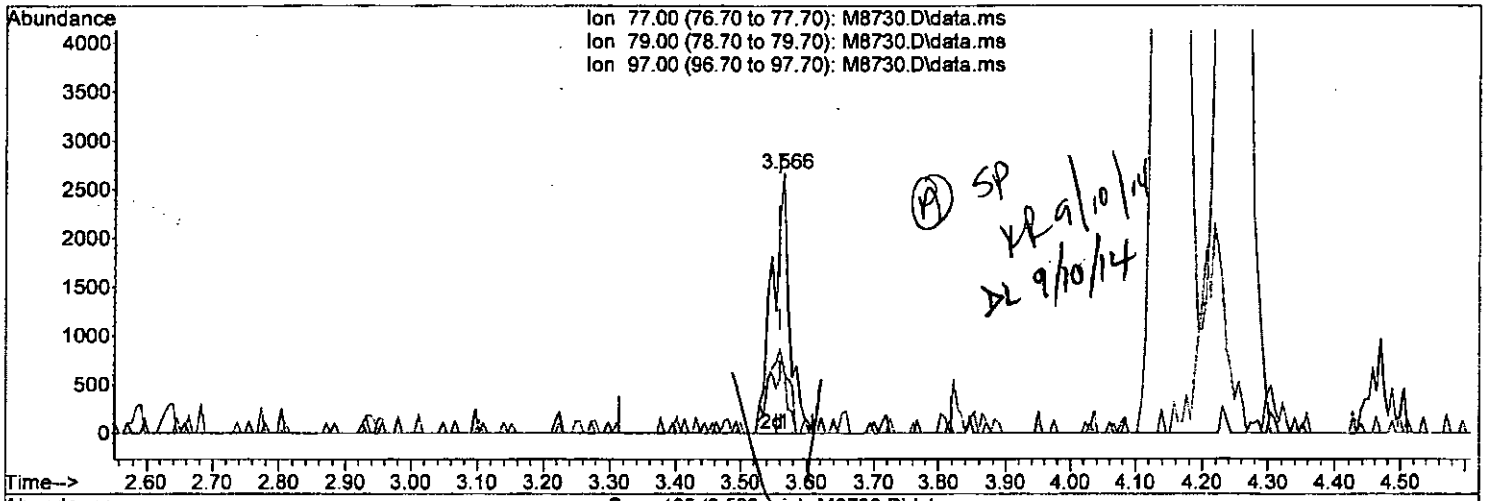
W090914.M Wed Sep 10 08:51:44 2014 Page: 1

00283

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(33) 2,2-Dichloropropane

3.566min (+0.006) 0.47 ppb m

response 4804

Ion	Exp%	Act%
77.00	100	100
79.00	28.40	22.96
97.00	20.50	25.40
0.00	0.00	0.00

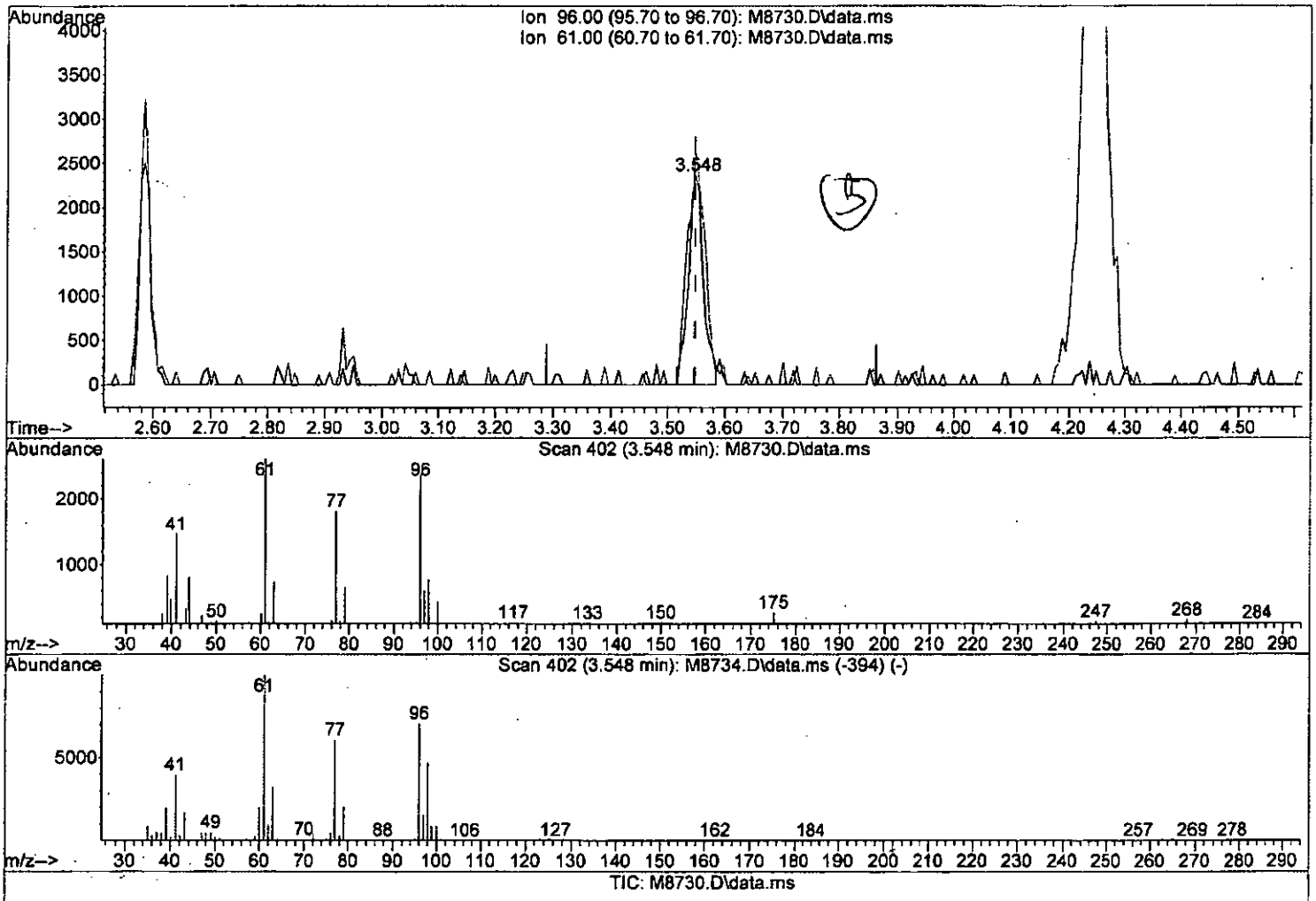
W090914.M Wed Sep 10 08:52:04 2014 Page: 1

00284

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(34) cis-1,2-Dichloroethene (P)

3.548min (-0.000) 0.53 ppb

response 4281

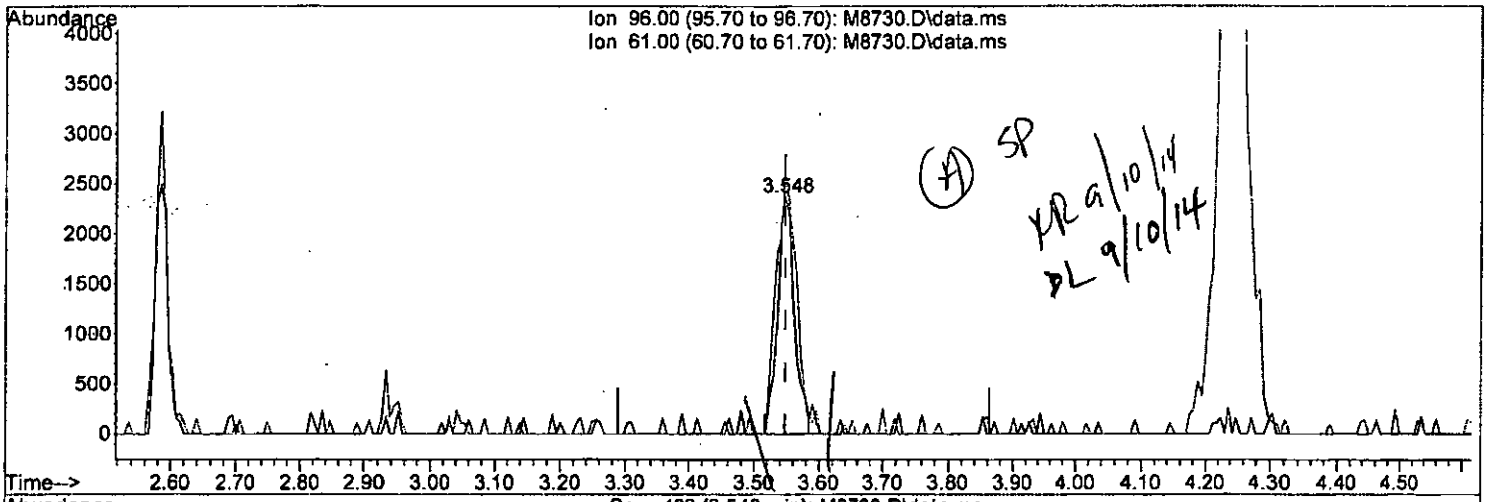
Ion	Exp%	Act%
96.00	100	100
61.00	141.20	109.98#
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Wed Sep 10 08:52:12 2014 Page: 1

00285

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(34) cis-1,2-Dichloroethene (P)

3.548min (-0.000) 0.55 ppb m

response 4426

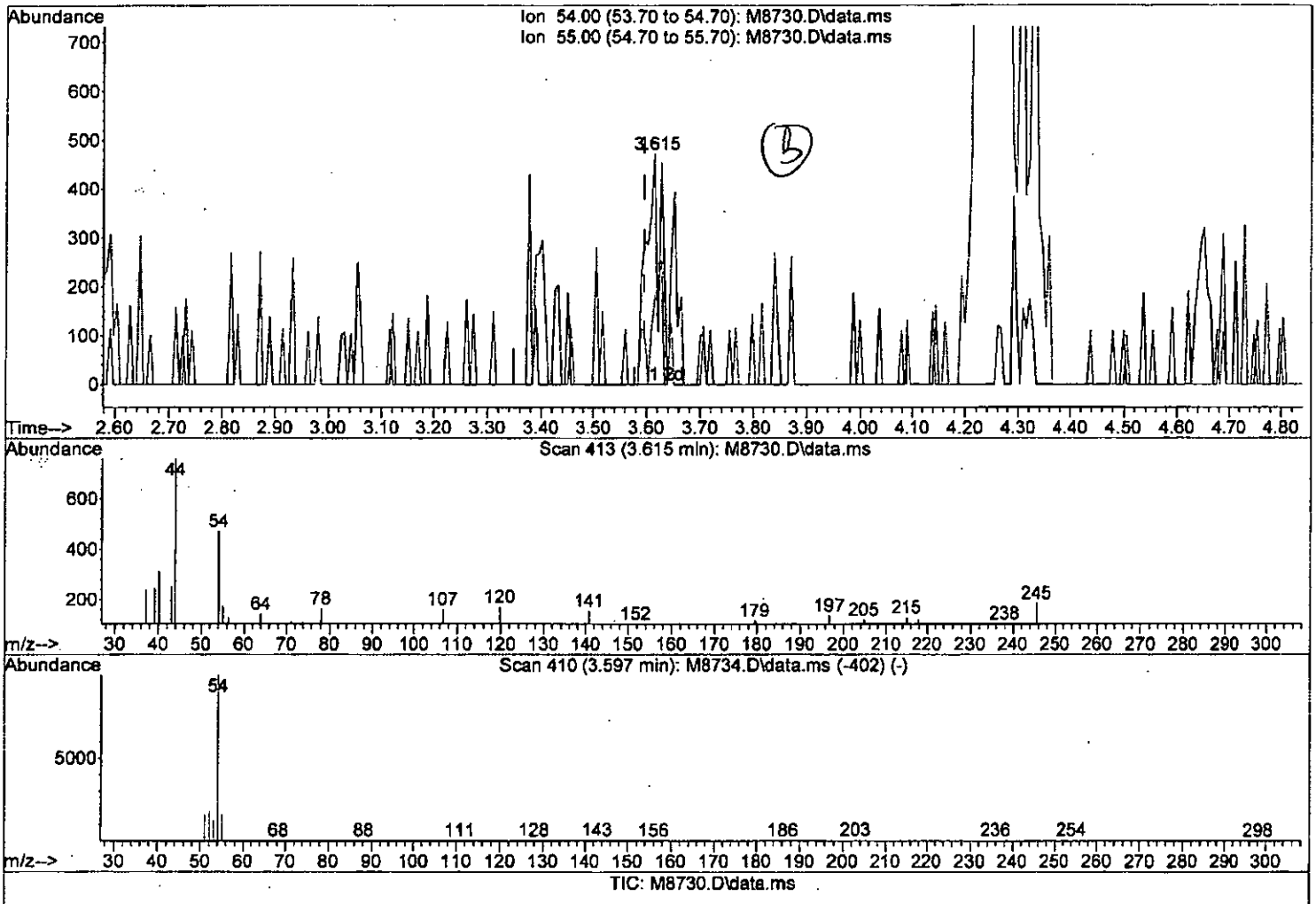
Ion	Exp%	Act%
96.00	100	100
61.00	141.20	109.98#
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Wed Sep 10 08:52:19 2014 Page: 1

00286

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



(36) Propionitrile

3.615min (+0.018) 1.47 ppb

response 868

Ion	Exp%	Act%
54.00	100	100
55.00	16.80	36.23
0.00	0.00	0.00
0.00	0.00	0.00

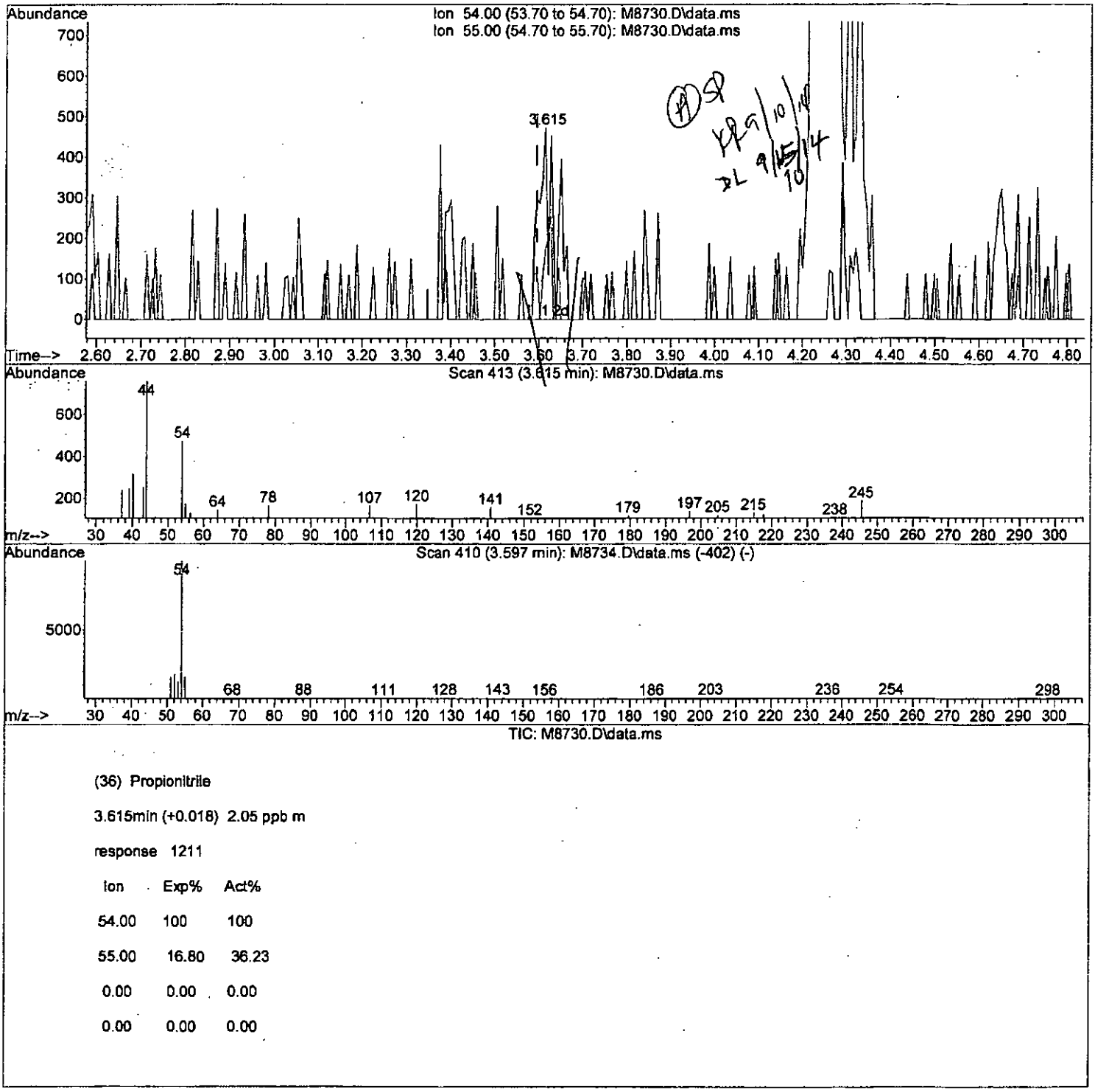
W090914.M Wed Sep 10 08:52:33 2014 Page: 1

00287

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(36) Propionitrile

3.615min (+0.018) 2.05 ppb m

response 1211

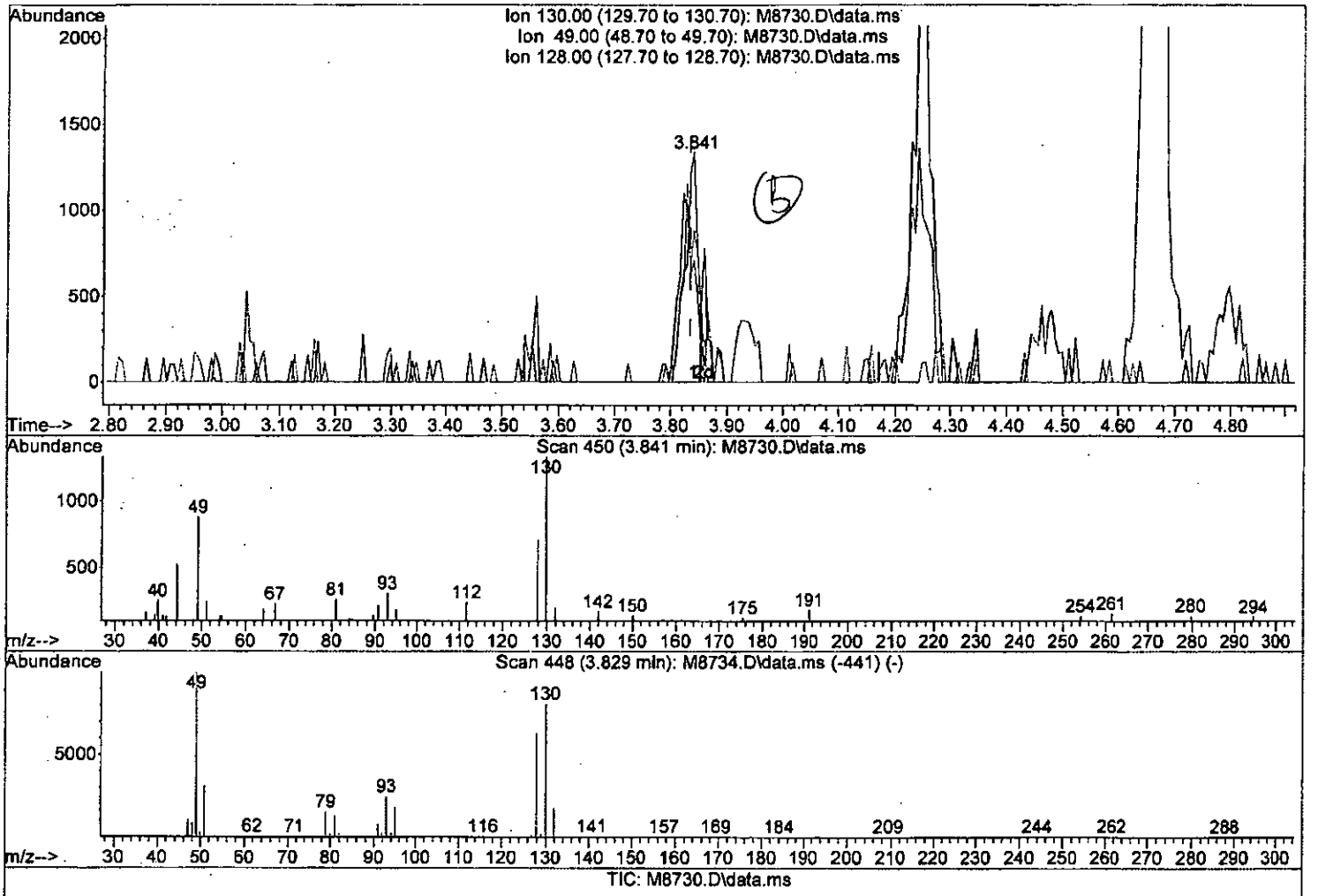
Ion	Exp%	Act%
54.00	100	100
55.00	16.80	36.23
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Wed Sep 10 08:52:39 2014 Page: 1

00288

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoal2\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



(37) Bromochloromethane

3.841min (+0.006) 0.47 ppb

response 2095

Ion	Exp%	Act%
130.00	100	100
49.00	124.00	65.84#
128.00	78.00	53.03#
0.00	0.00	0.00

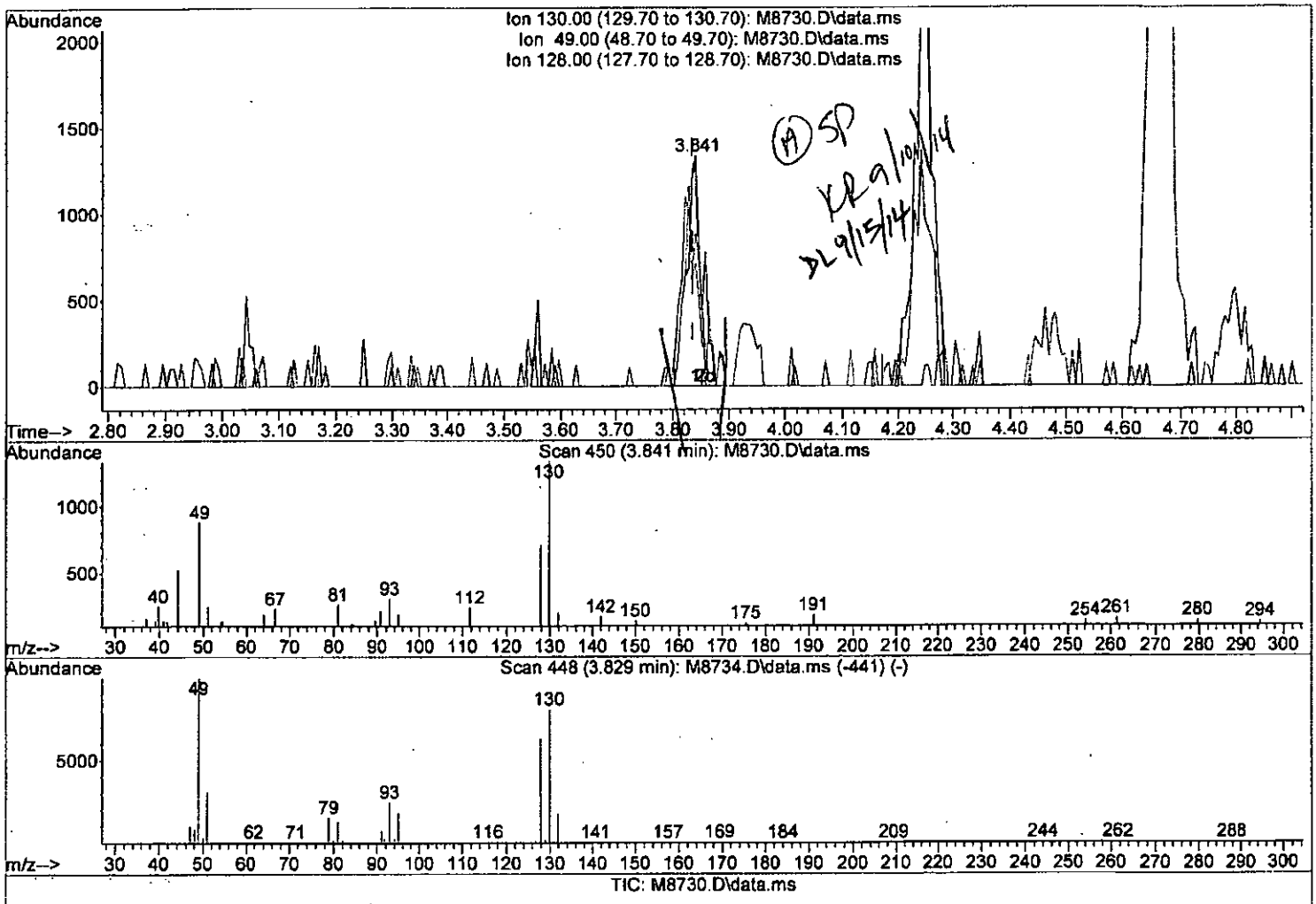
W090914.M Wed Sep 10 08:52:45 2014 Page: 1

00289

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(37) Bromochloromethane

3.841min (+0.006) 0.60 ppb m

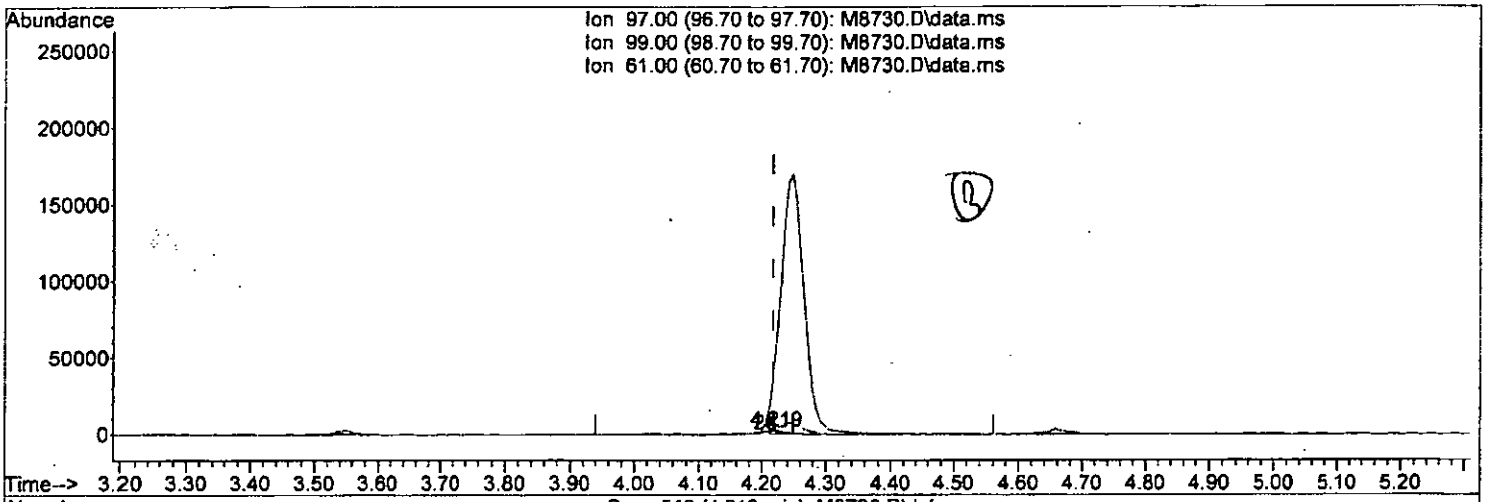
response 2693

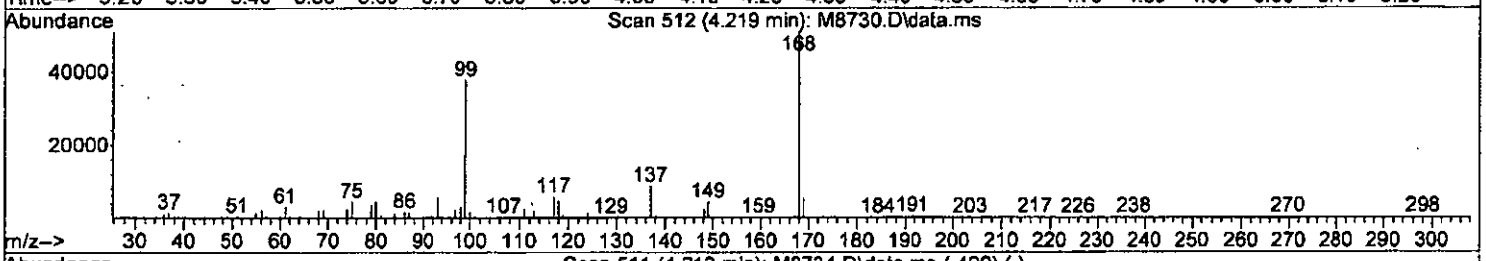
Ion	Exp%	Act%
130.00	100	100
49.00	124.00	65.84#
128.00	78.00	53.03#
0.00	0.00	0.00

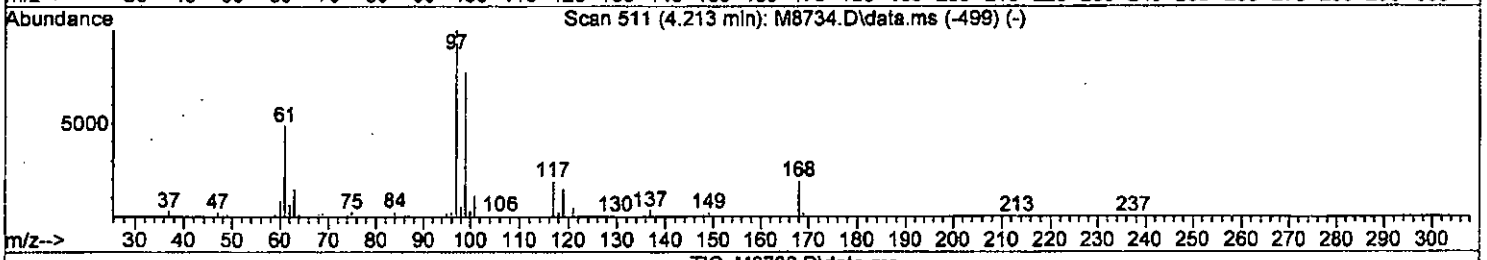
W090914.M Wed Sep 10 08:52:55 2014 Page: 1

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8730.D\data.ms

(41) 1,1,1-Trichloroethane (P)

4.219min (-0.000) 0.19 ppb

response 2078

Ion	Exp%	Act%
97.00	100	100
99.00	77.60	1753.50#
61.00	48.40	138.28#
0.00	0.00	0.00

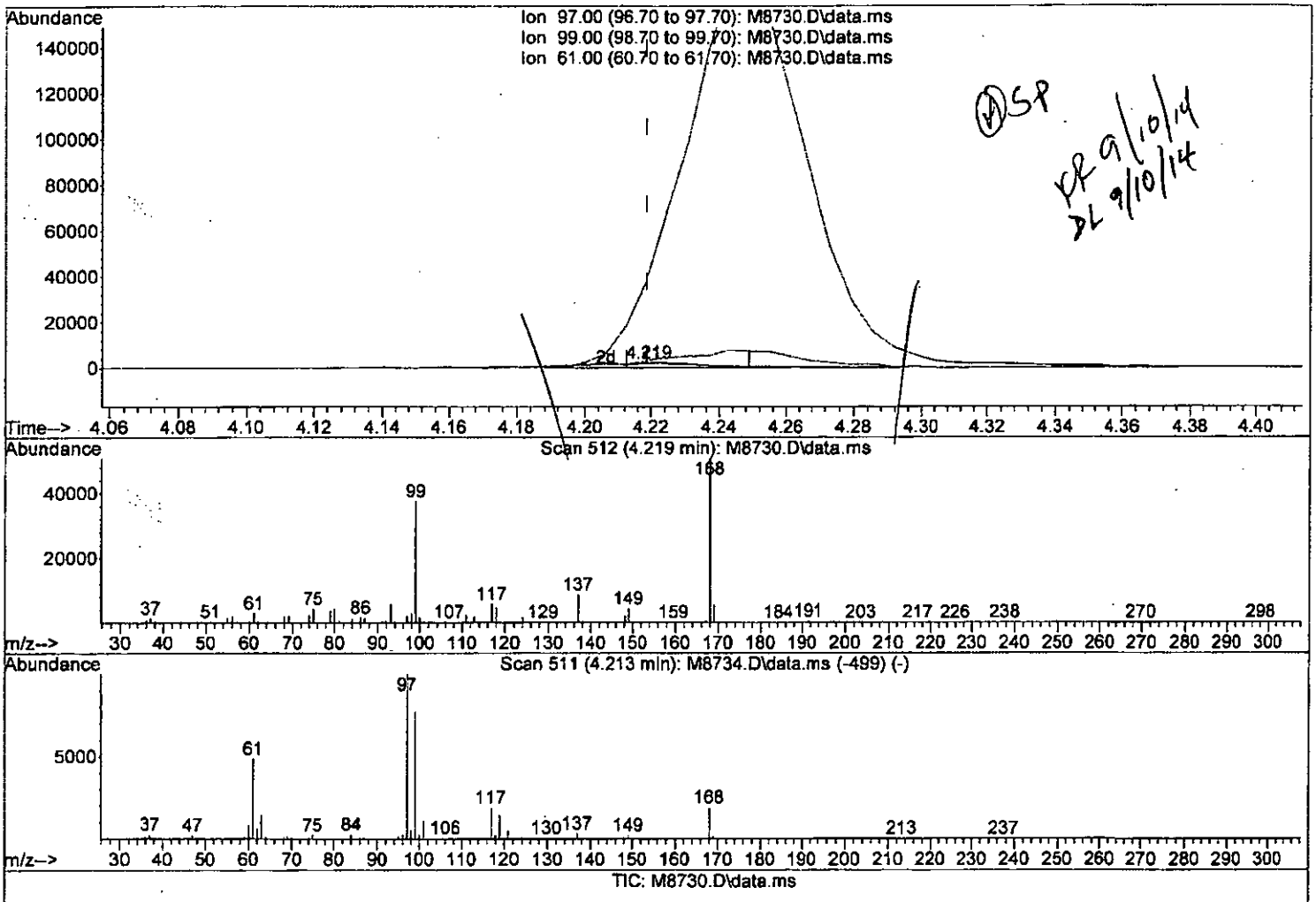
W090914.M Wed Sep 10 08:53:19 2014 Page: 1

00291

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(41) 1,1,1-Trichloroethane (P)

4.219min (-0.000) 0.46 ppb m

response 5050

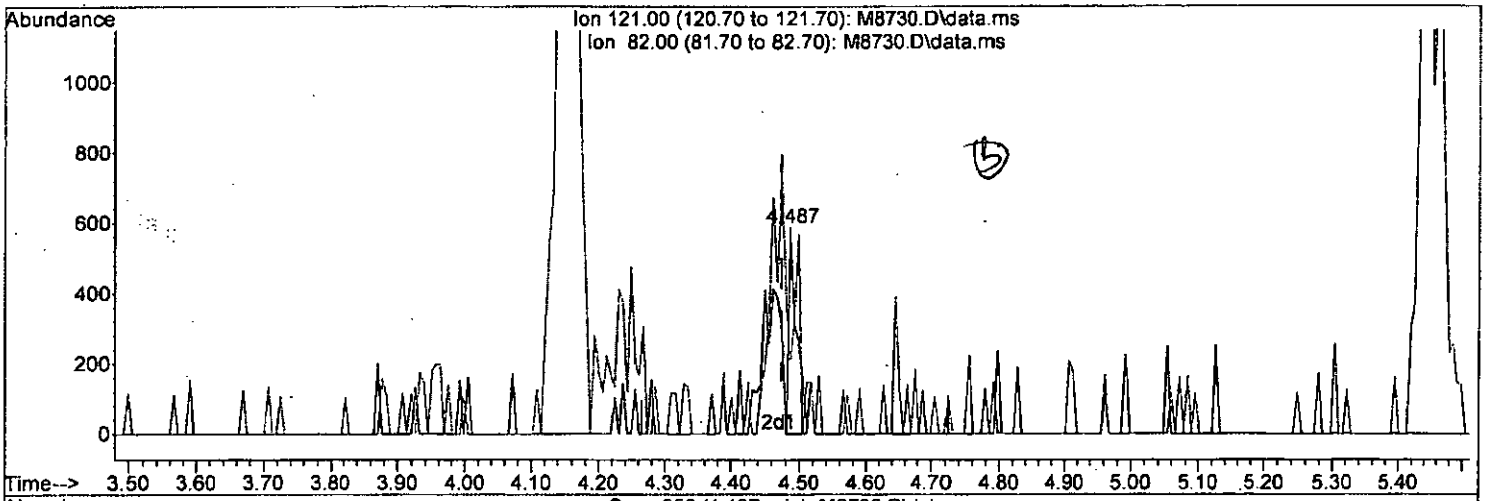
Ion	Exp%	Act%
97.00	100	100
99.00	77.60	1753.50#
61.00	48.40	138.28#
0.00	0.00	0.00

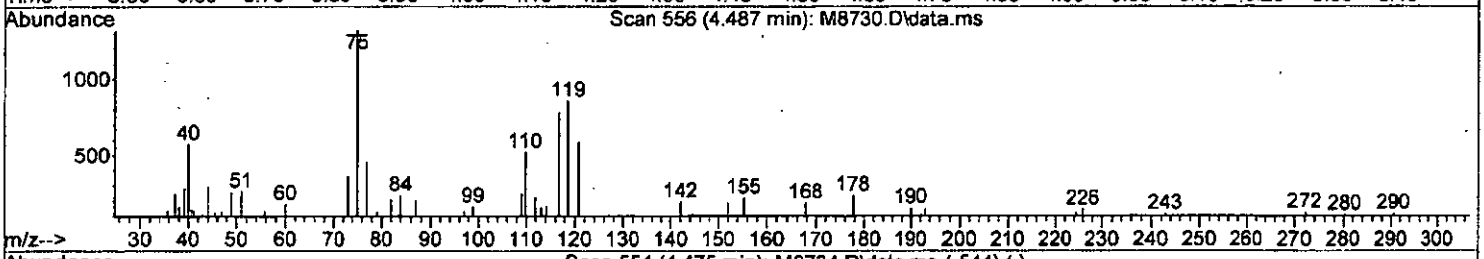
W090914.M Wed Sep 10 08:54:15 2014 Page: 1

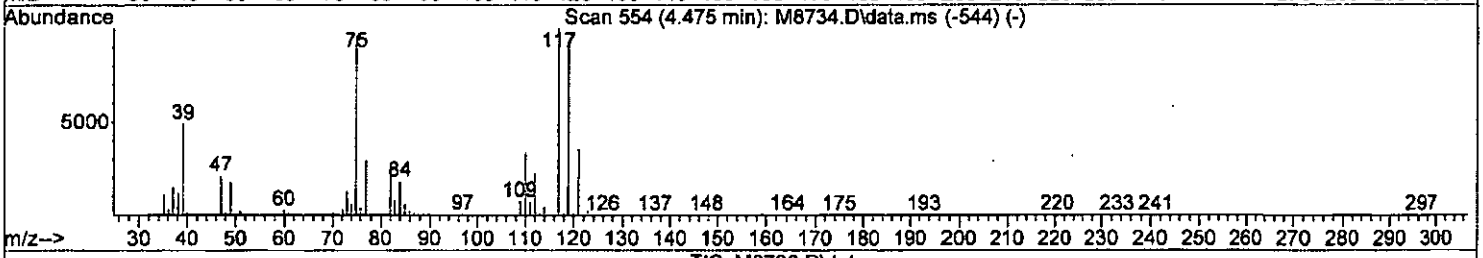
00292

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8730.D\data.ms

(46) Carbontetrachloride (P)

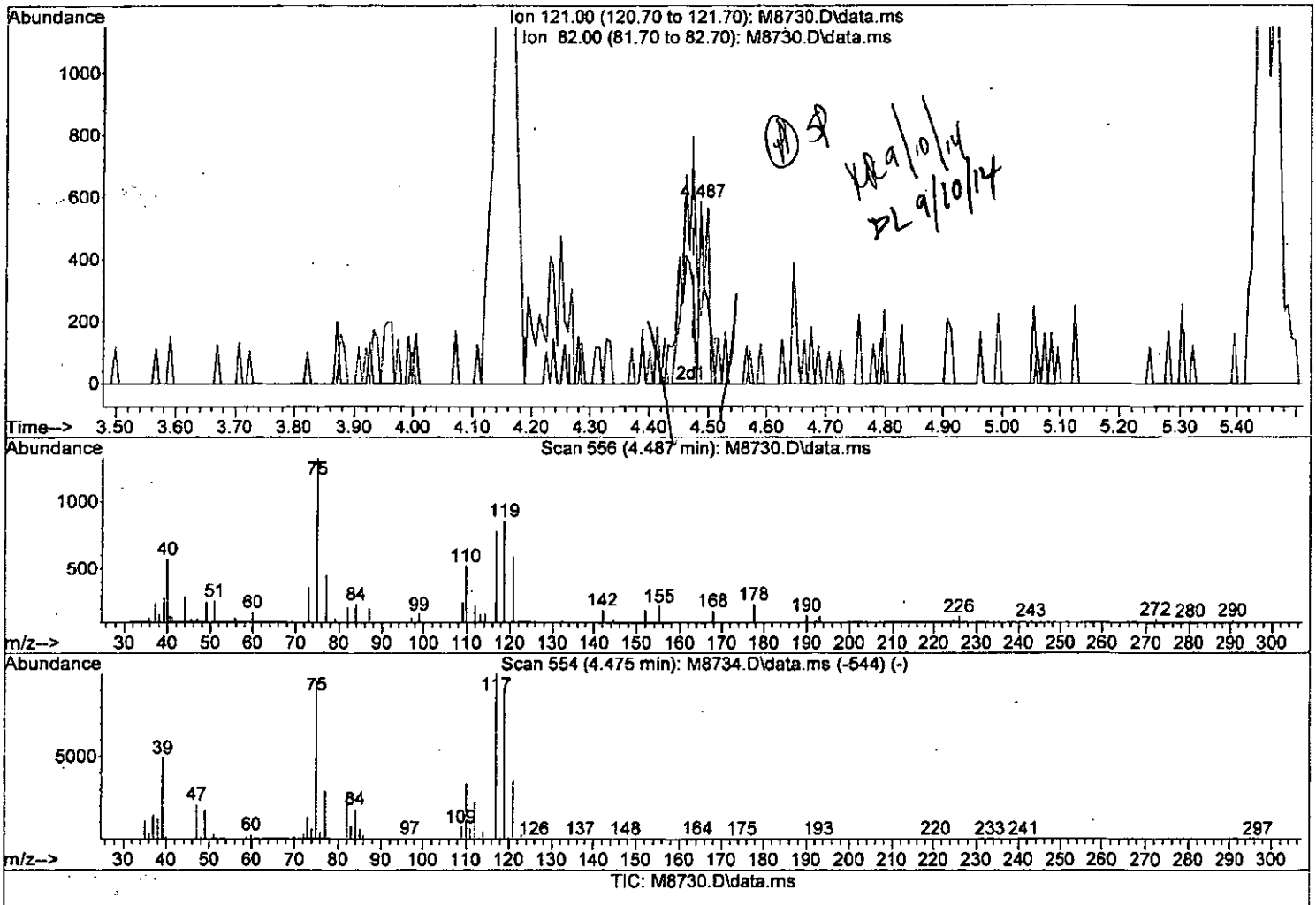
4.487min (+0.012) 0.17 ppb

response 480

Ion	Exp%	Act%
121.00	100	100
82.00	80.90	36.01#
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



(46) Carbontetrachloride (P)

4.487min (+0.012) 0.48 ppb m

response 1379

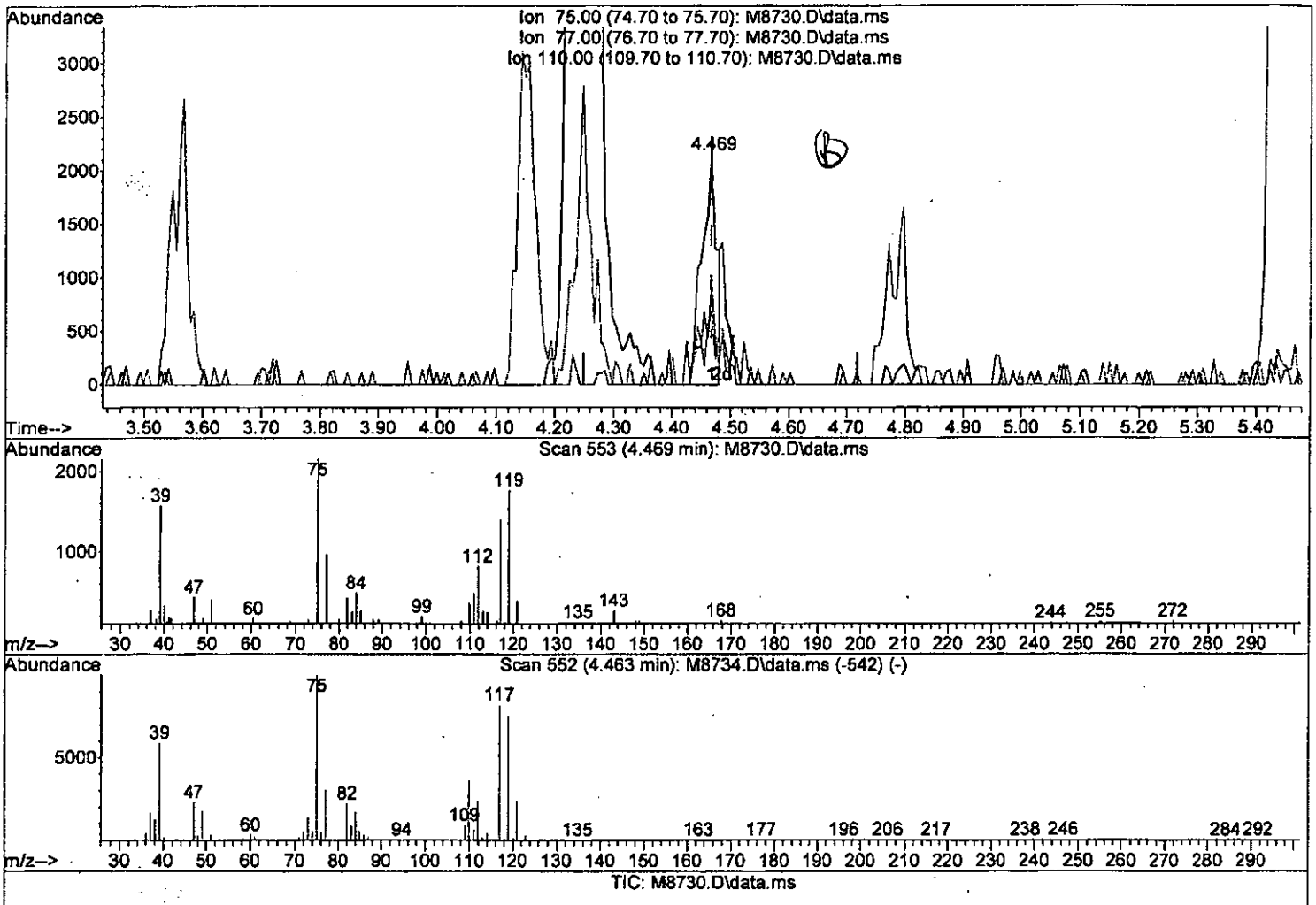
Ion	Exp%	Act%
121.00	100	100
82.00	80.90	36.01#
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Wed Sep 10 08:54:48 2014 Page: 1

00294

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



(47) 1,1-Dichloropropene

4.489min (-0.000) 0.40 ppb

response 3721

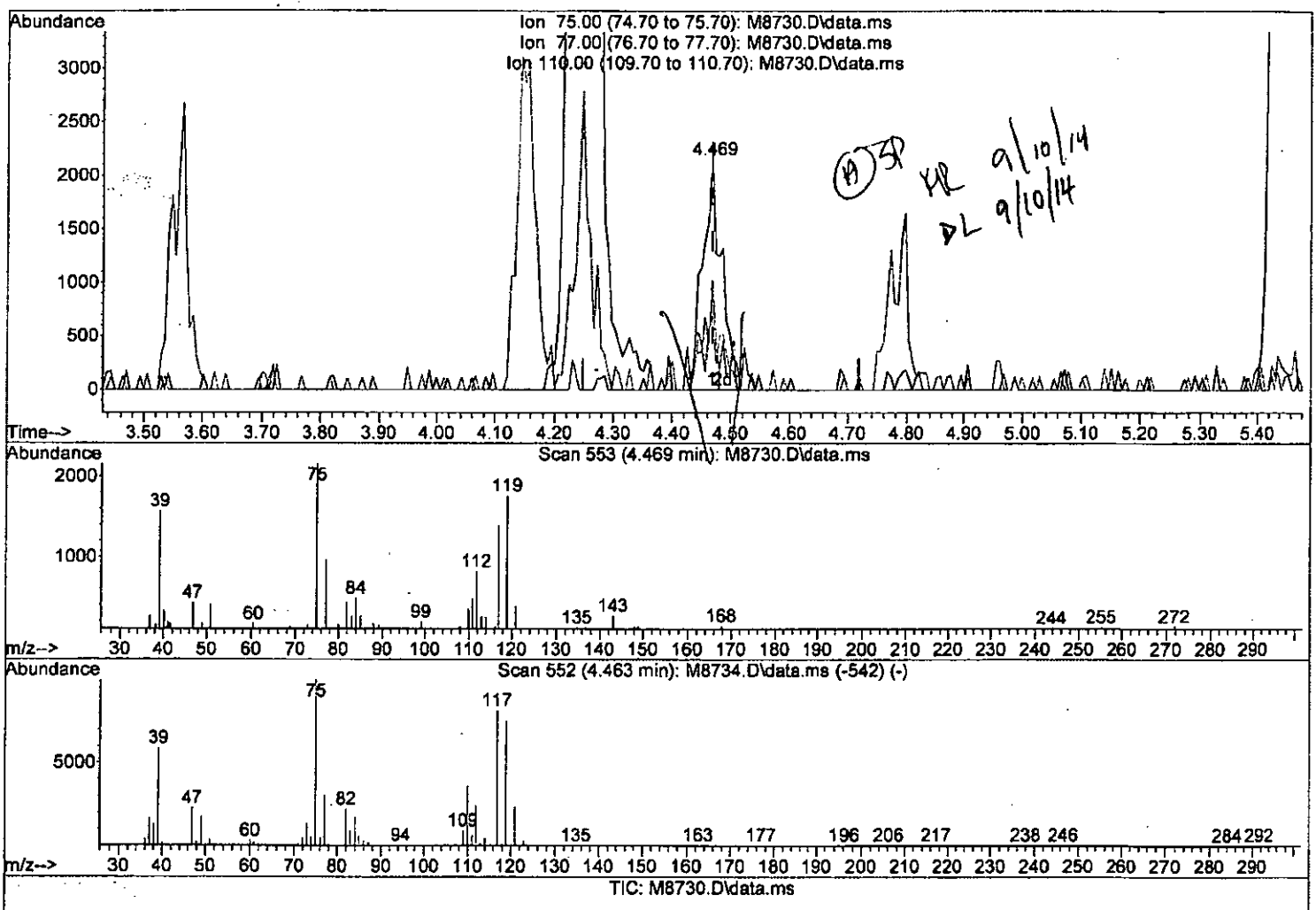
Ion	Exp%	Act%
75.00	100	100
77.00	30.80	44.65
110.00	36.40	31.77
0.00	0.00	0.00

W090914.M Wed Sep 10 08:54:53 2014 Page: 1

00295

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(47) 1,1-Dichloropropene

4.469min (-0.000) 0.51 ppb m

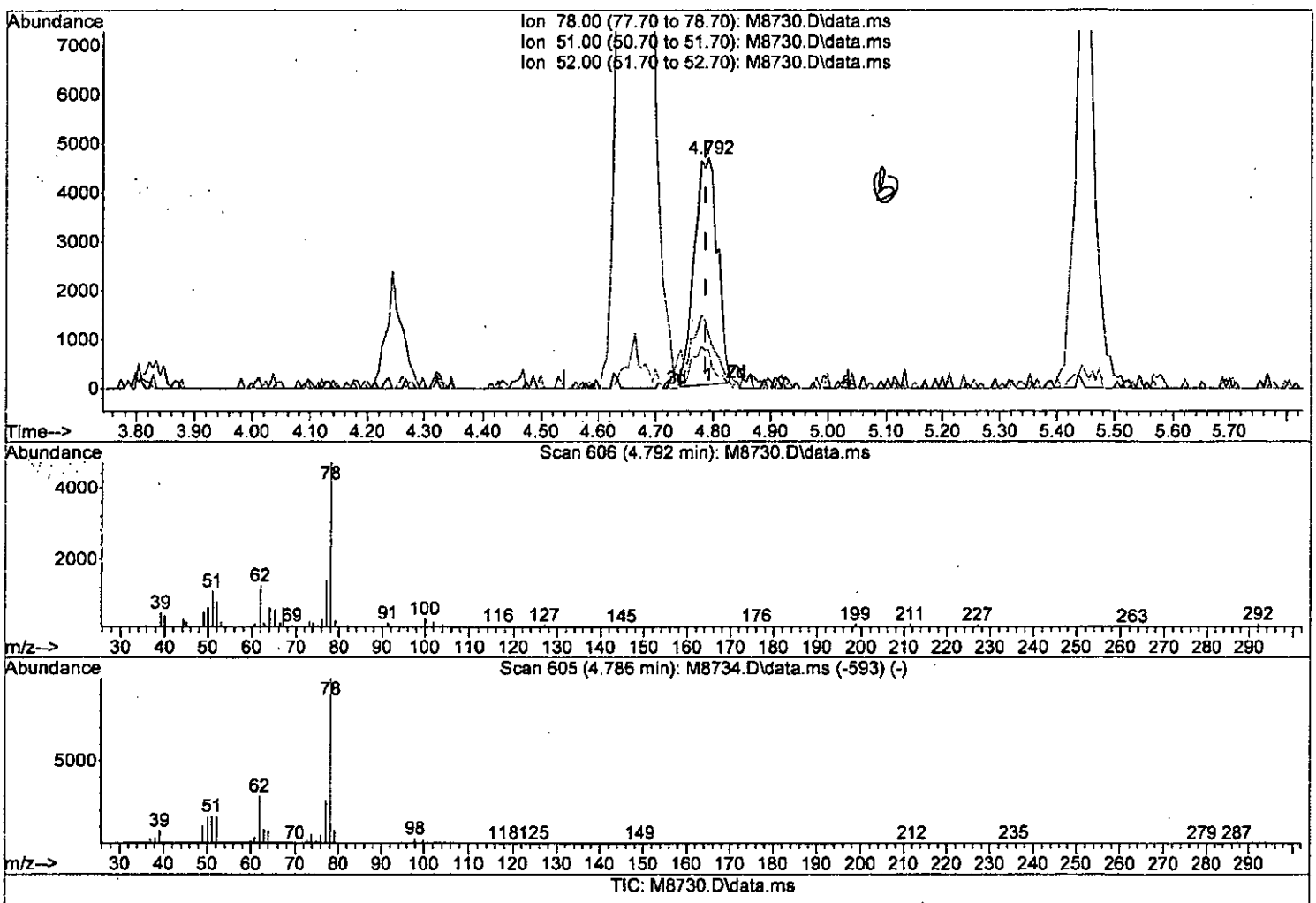
response 4817

Ion	Exp%	Act%
75.00	100	100
77.00	30.80	44.65
110.00	36.40	16.37#
0.00	0.00	0.00

W090914.M Wed Sep 10 08:55:00 2014 Page: 1

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



(49) Benzene (P)

4.792min (+0.006) 0.44 ppb

response 12874

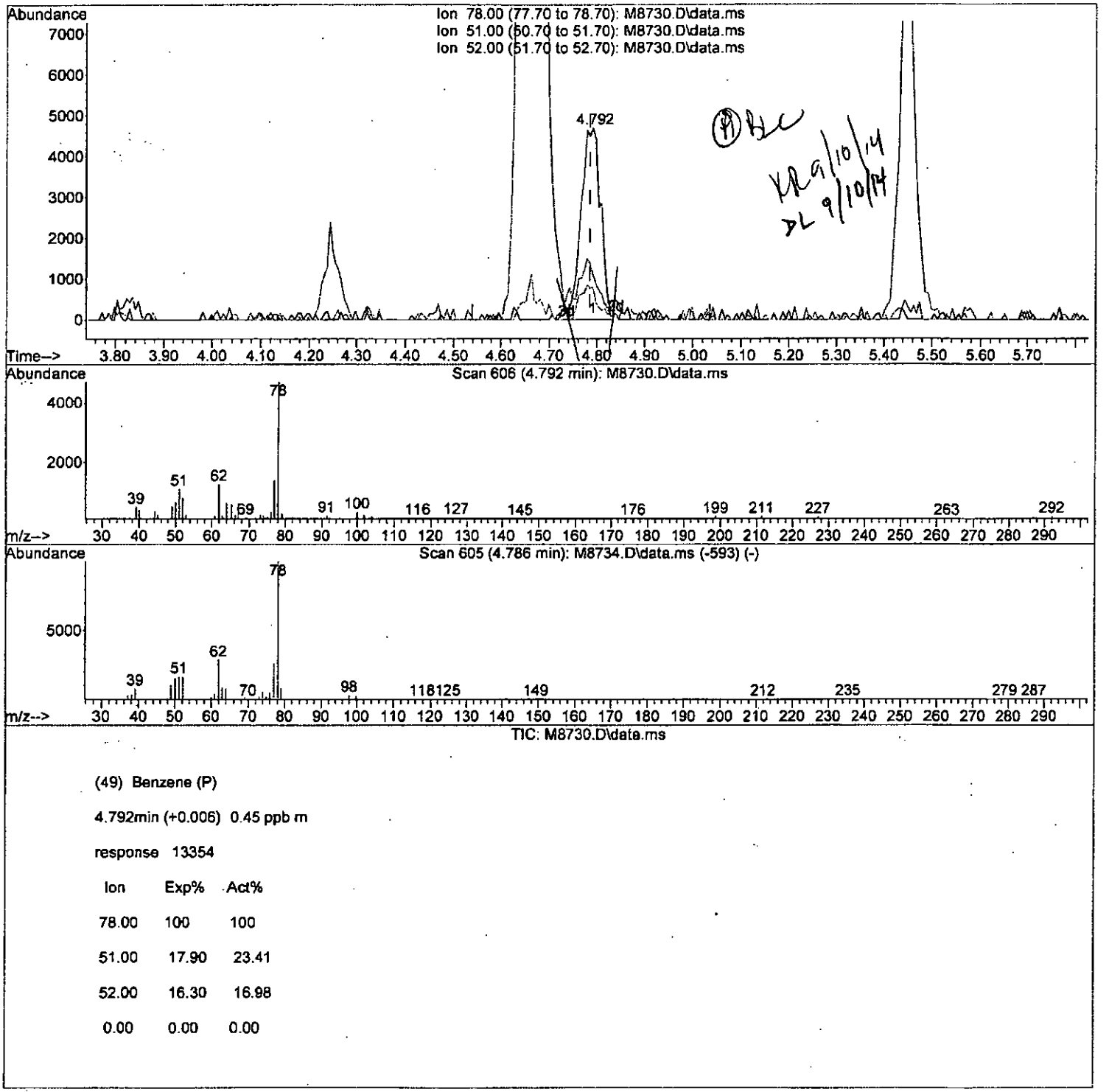
Ion	Exp%	Act%
78.00	100	100
51.00	17.90	23.41
52.00	16.30	16.98
0.00	0.00	0.00

W090914.M Wed Sep 10 08:55:13 2014 Page: 1

00297

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(49) Benzene (P)

4.792min (+0.006) 0.45 ppb m

response 13354

Ion	Exp%	Act%
78.00	100	100
51.00	17.90	23.41
52.00	16.30	16.98
0.00	0.00	0.00

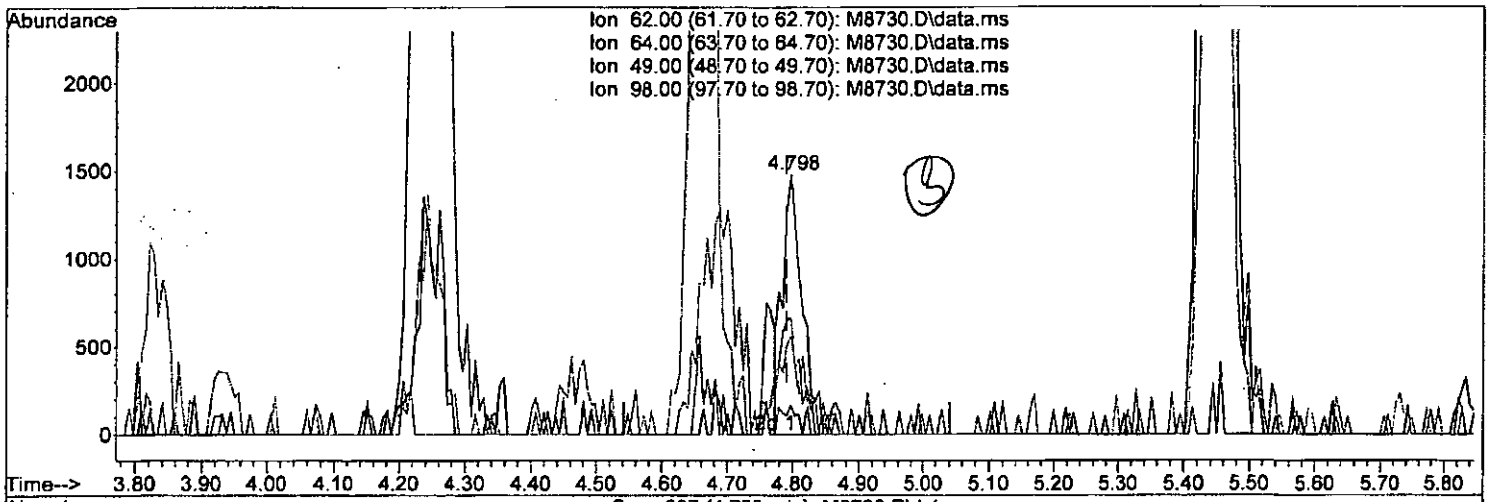
W090914.M Wed Sep 10 08:55:19 2014 Page: 1

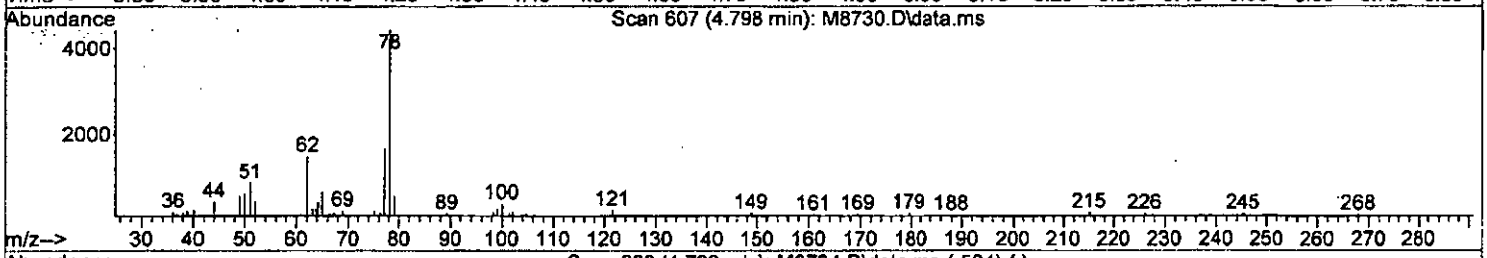
00298

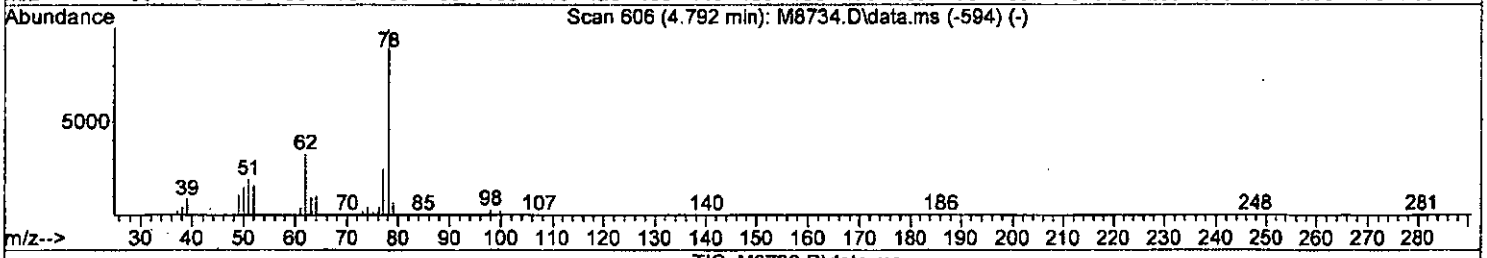
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8730.D\data.ms

(50) 1,2-Dichloroethane (P)

4.798min (+0.006) 0.35 ppb

response 3049

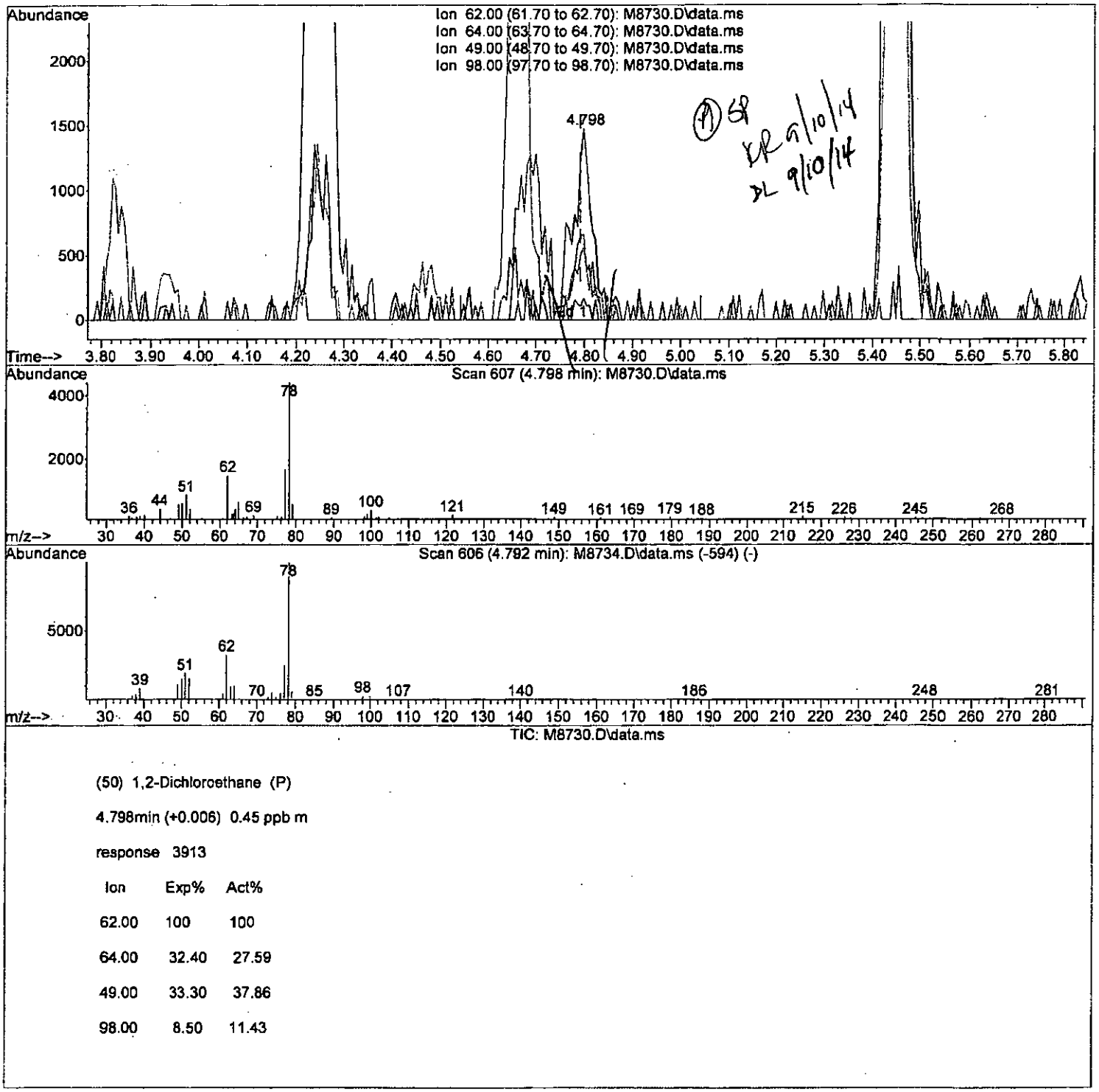
Ion	Exp%	Act%
62.00	100	100
64.00	32.40	45.03
49.00	33.30	37.86
98.00	8.50	11.43

W090914.M Wed Sep 10 08:55:24 2014 Page: 1

00299

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



(50) 1,2-Dichloroethane (P)

4.798min (+0.006) 0.45 ppb m

response 3913

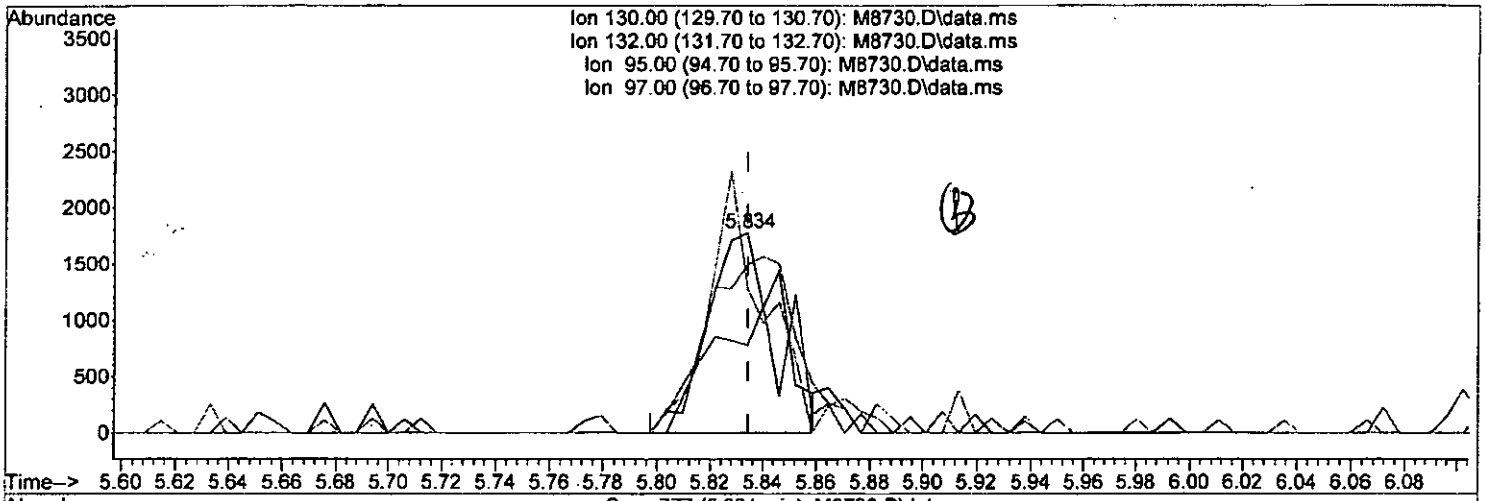
Ion	Exp%	Act%
62.00	100	100
64.00	32.40	27.59
49.00	33.30	37.86
98.00	8.50	11.43

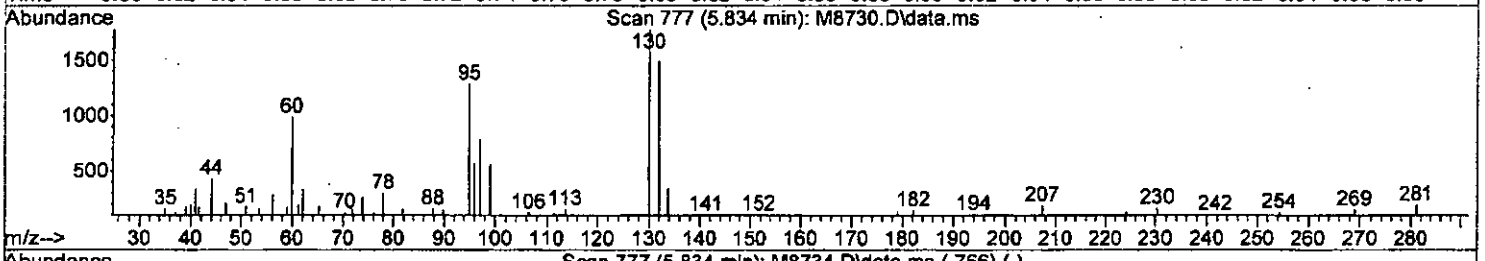
W090914.M Wed Sep 10 08:55:31 2014 Page: 1

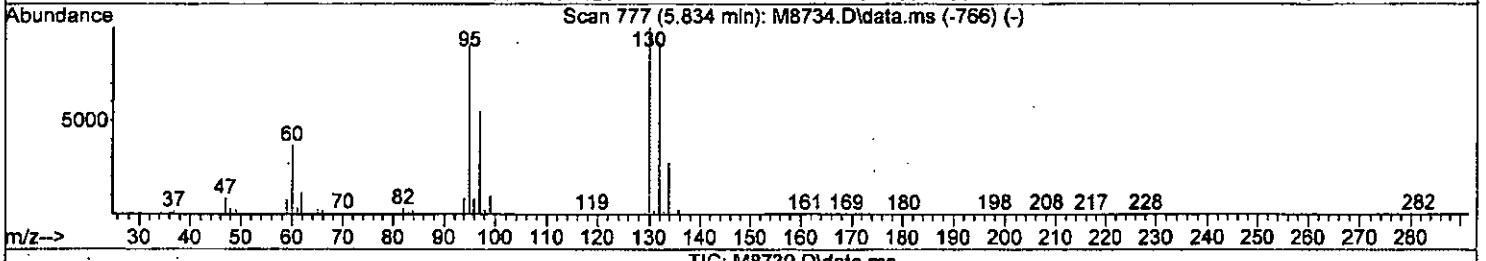
00309

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8730.D\data.ms

(54) Trichloroethene (P)

5.834min (-0.000) 0.43 ppb

response 3360

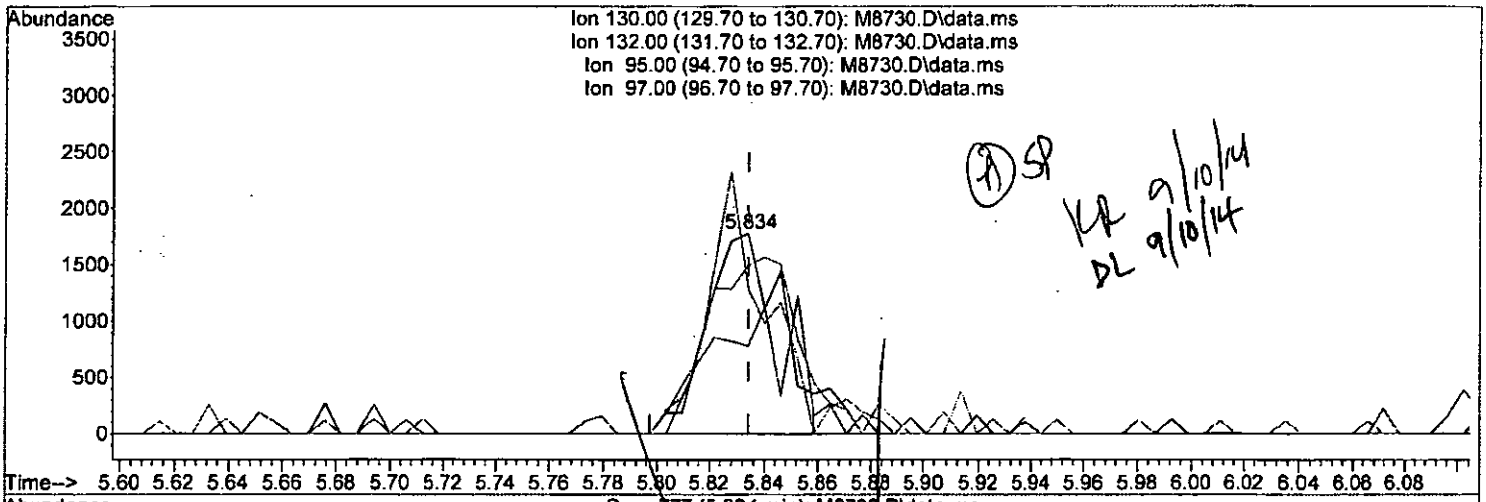
Ion	Exp%	Act%
130.00	100	100
132.00	92.70	83.95
95.00	91.00	72.24
97.00	55.00	43.81

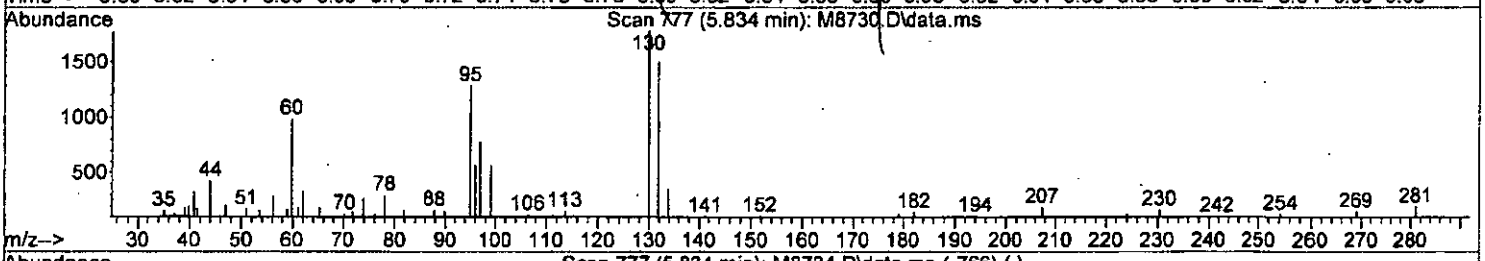
W090914.M Wed Sep 10 08:56:17 2014 Page: 1

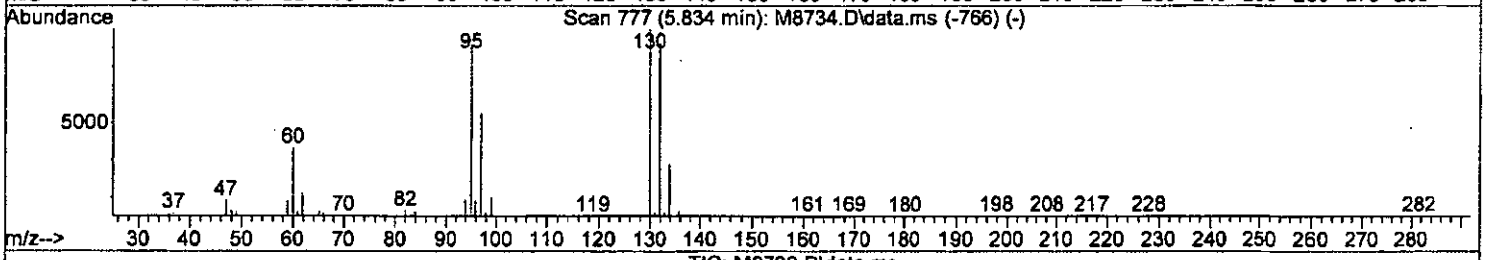
00301

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8730.D\data.ms

(54) Trichloroethene (P)

5.834min (-0.000) 0.46 ppb m

response 3585

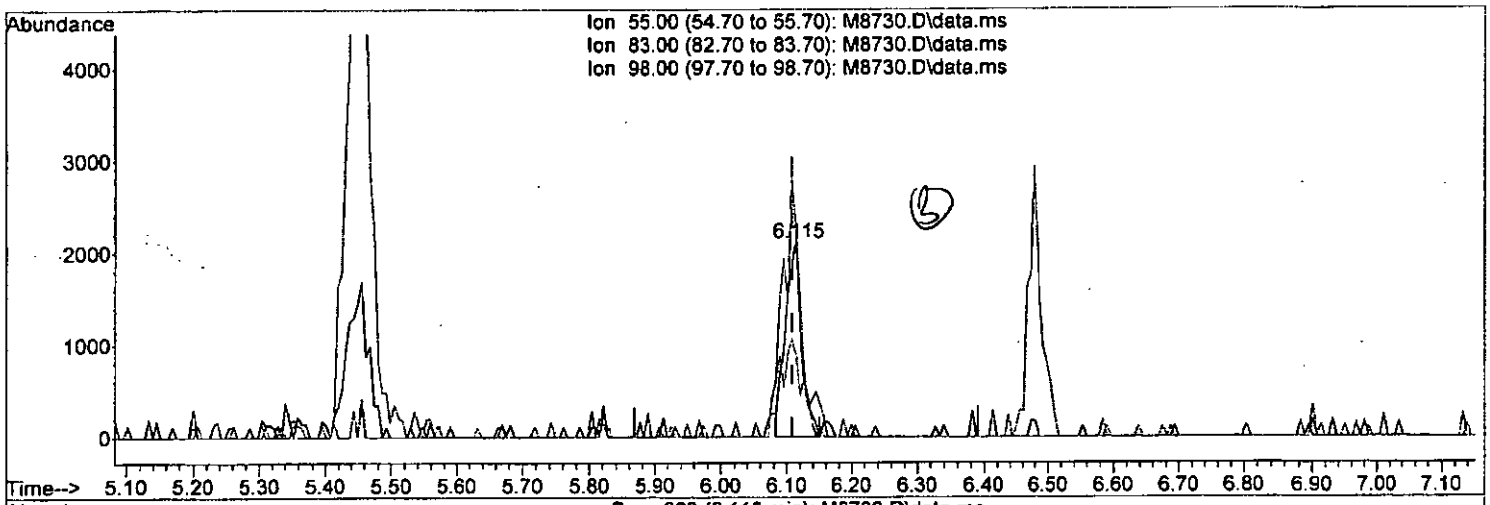
Ion	Exp%	Act%
130.00	100	100
132.00	92.70	83.95
95.00	91.00	72.24
97.00	55.00	43.81

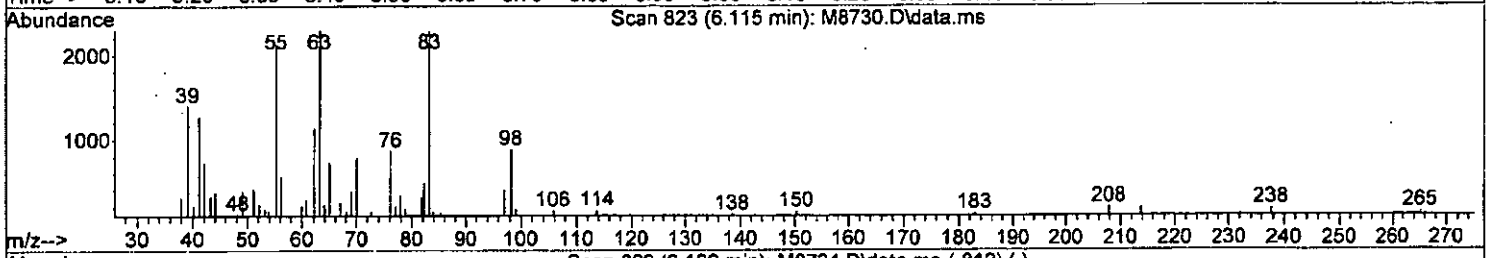
W090914.M Wed Sep 10 08:56:24 2014 Page: 1

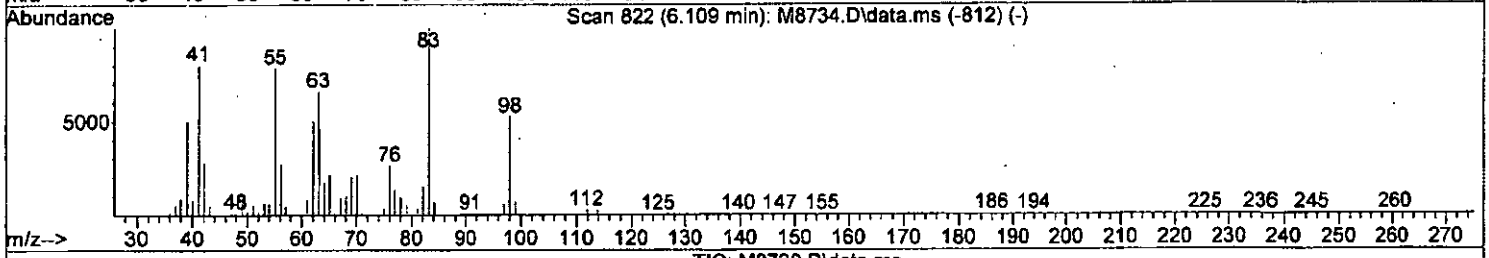
00302

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8730.D\data.ms

(55) Methylcyclohexane (P)

6.115min (+0.006) 0.44 ppb

response 3517

Ion	Exp%	Act%
55.00	100	100
83.00	127.40	107.89
98.00	67.00	41.85#
0.00	0.00	0.00

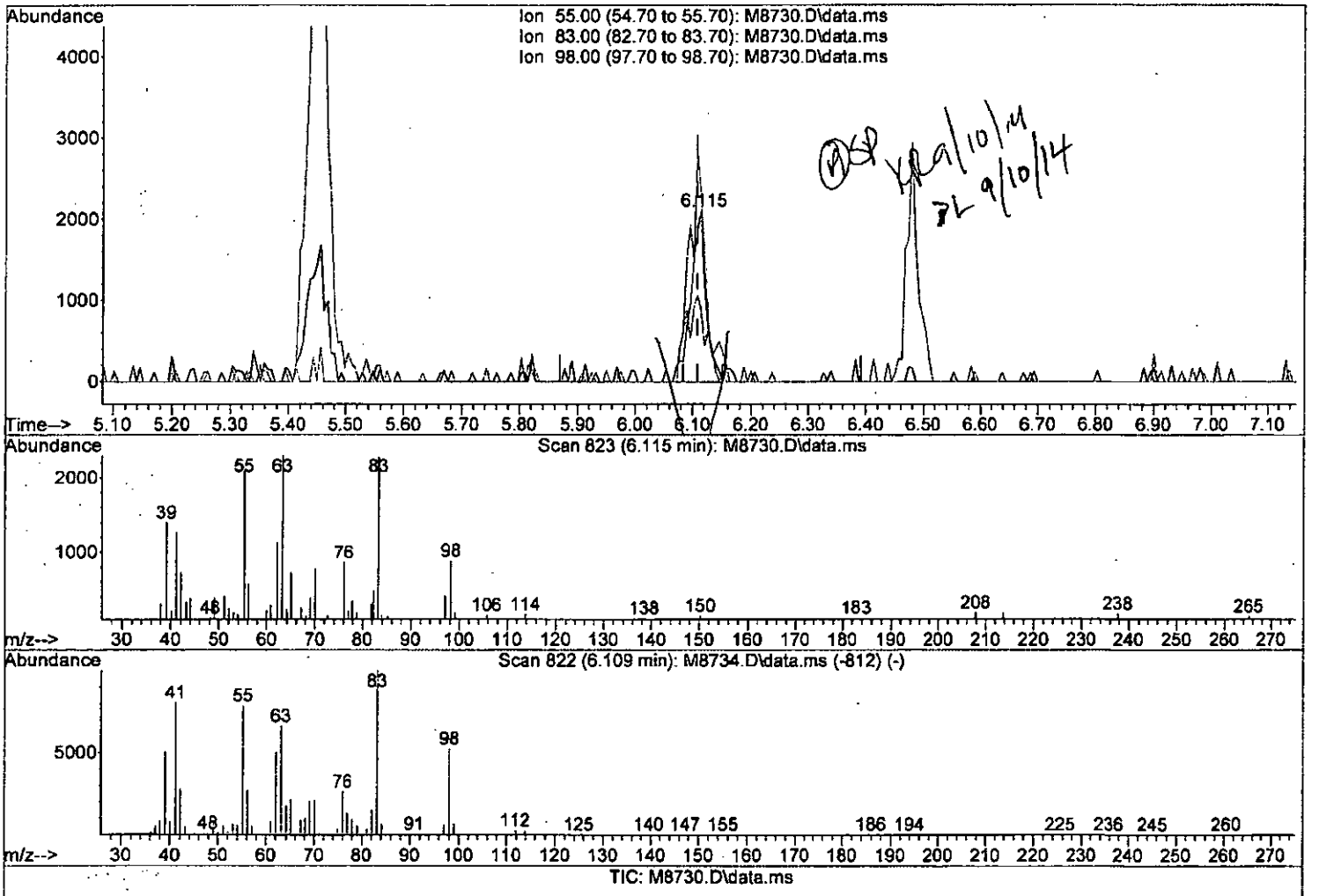
W090914.M Wed Sep 10 08:56:32 2014 Page: 1

00303

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



(55) Methylcyclohexane (P)

6.115min (+0.006) 0.47 ppb m

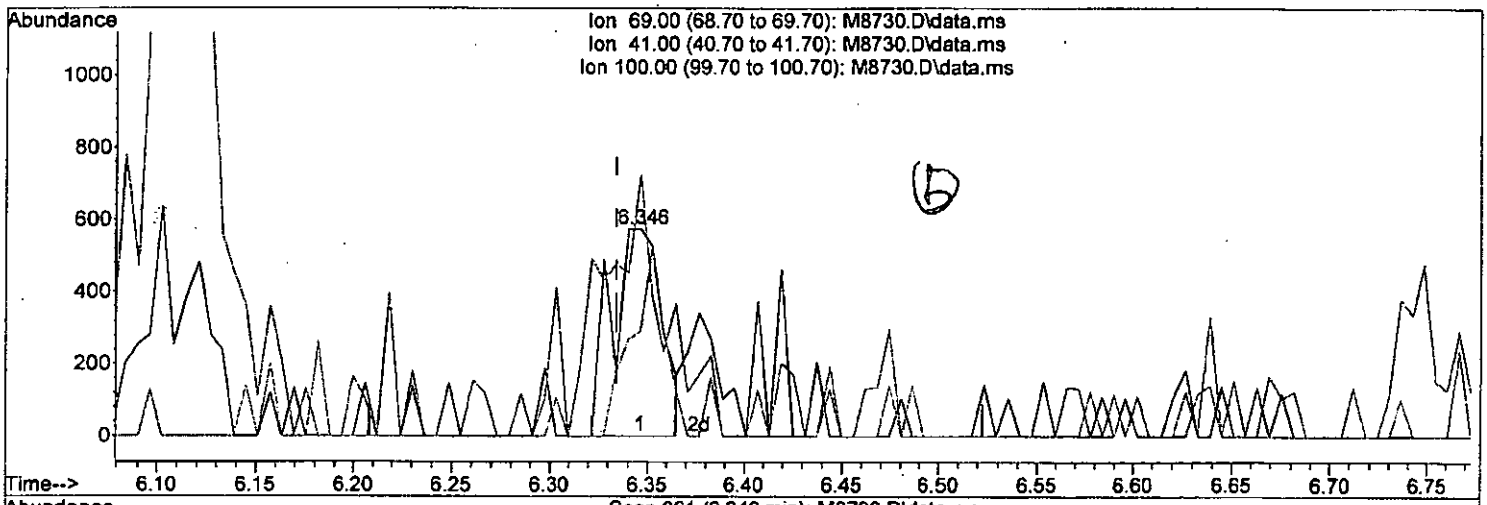
response 3762

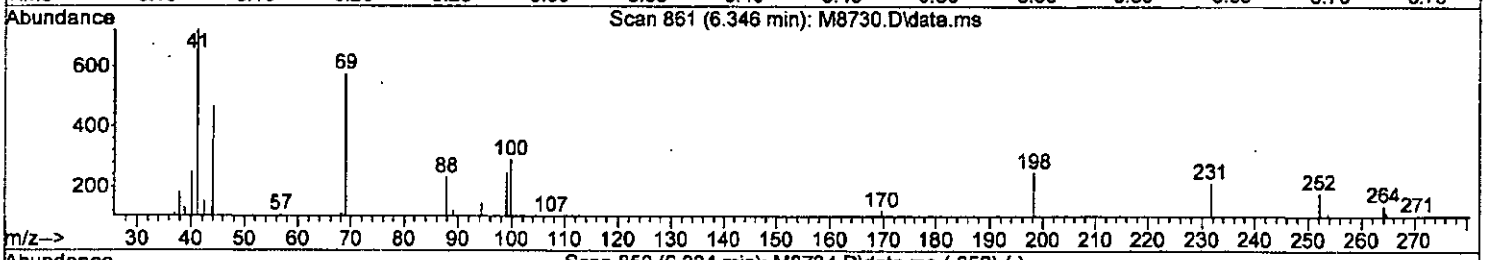
Ion	Exp%	Act%
55.00	100	100
83.00	127.40	107.89
98.00	67.00	41.85#
0.00	0.00	0.00

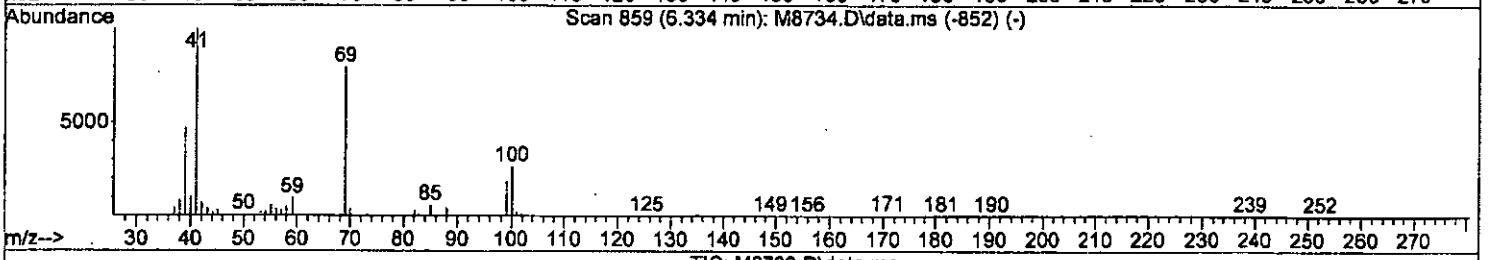
W090914.M Wed Sep 10 08:56:56 2014 Page: 1

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8730.D\data.ms

(59) Methyl Methacrylate

6.346min (+0.012) 0.30 ppb

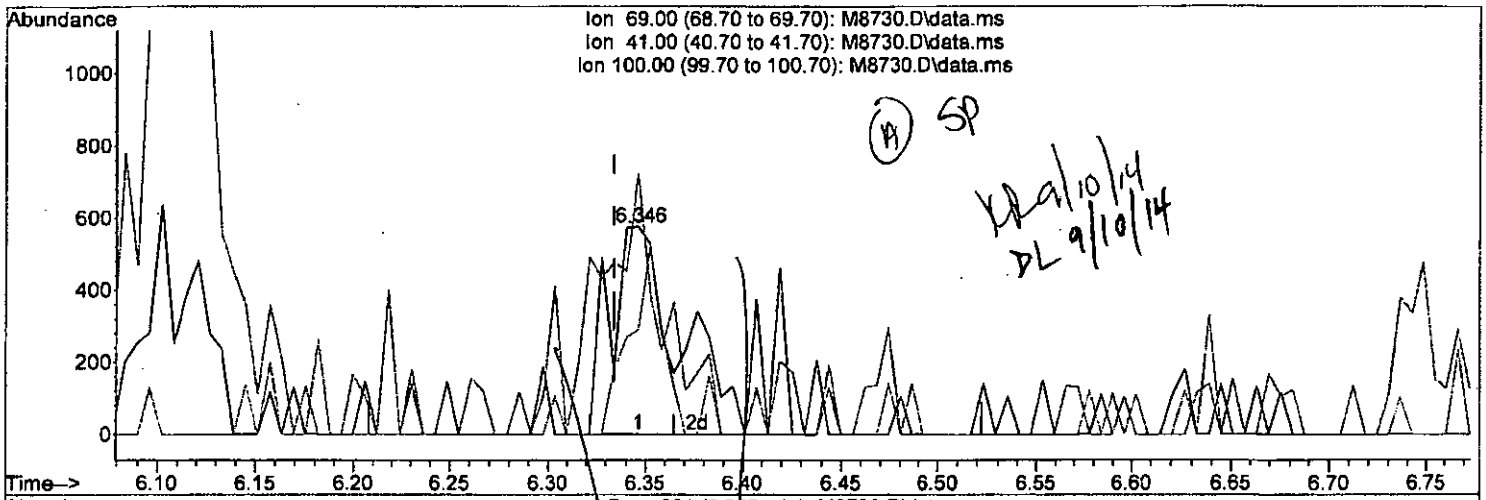
response 1021

Ion	Exp%	Act%
69.00	100	100
41.00	125.90	125.61
100.00	33.40	50.35
0.00	0.00	0.00

W090914.M Wed Sep 10 08:57:11 2014 Page: 1

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(59) Methyl Methacrylate

6.346min (+0.012) 0.42 ppb m

response 1415

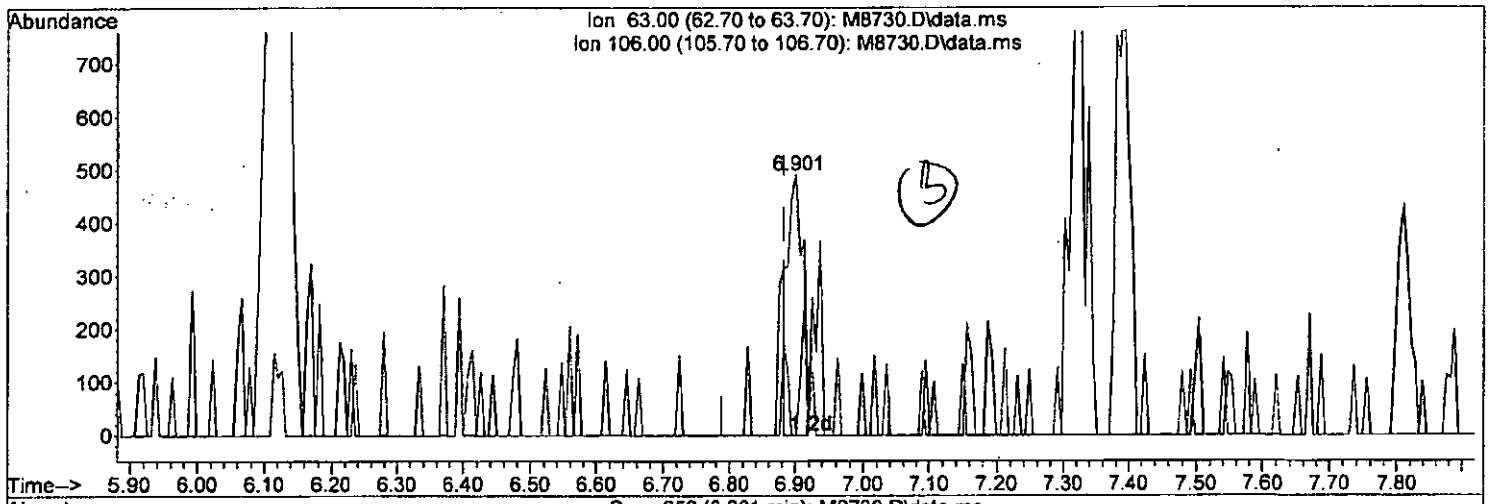
Ion	Exp%	Act%
69.00	100	100
41.00	125.90	125.61
100.00	33.40	50.35
0.00	0.00	0.00

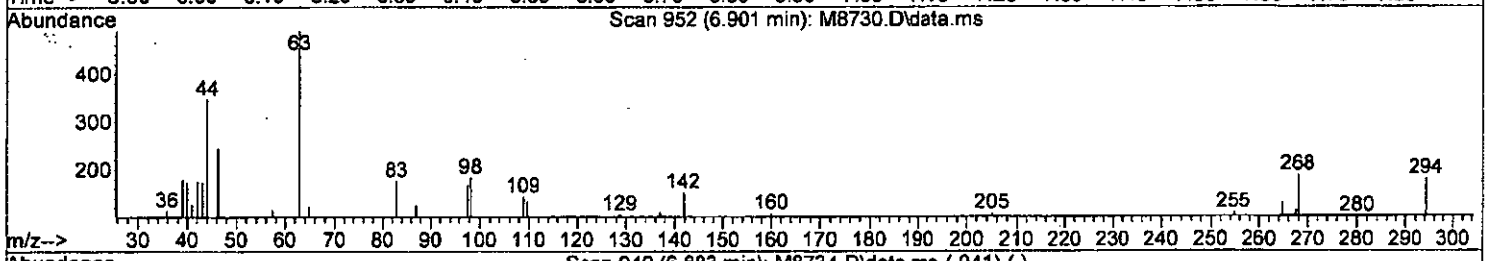
W090914.M Wed Sep 10 08:57:18 2014 Page: 1

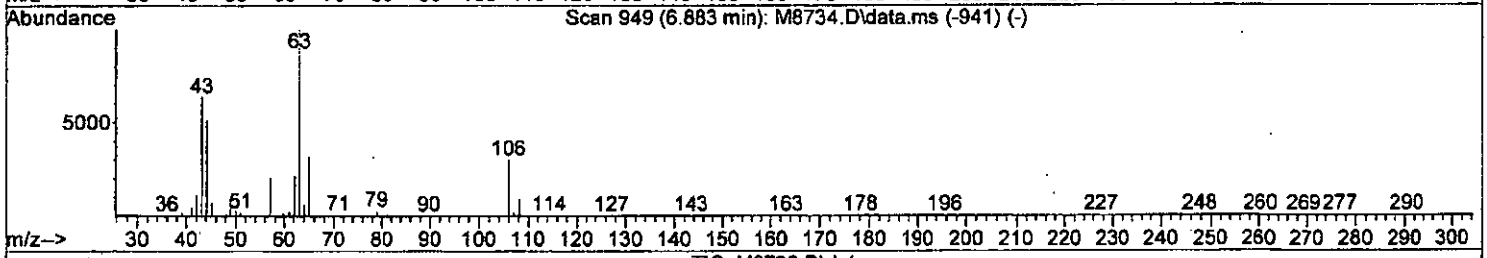
00306

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8730.D\data.ms

(62) 2-Chloroethylvinyl Ether

6.901min (+0.018) 0.21 ppb

response 716

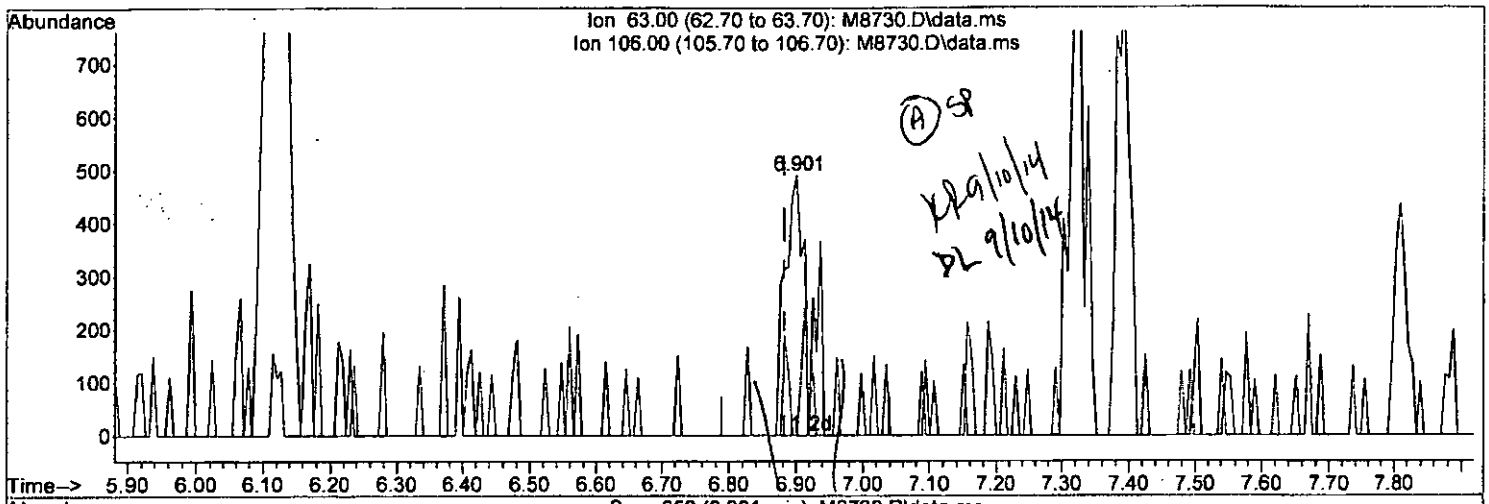
Ion	Exp%	Act%
63.00	100	100
106.00	30.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

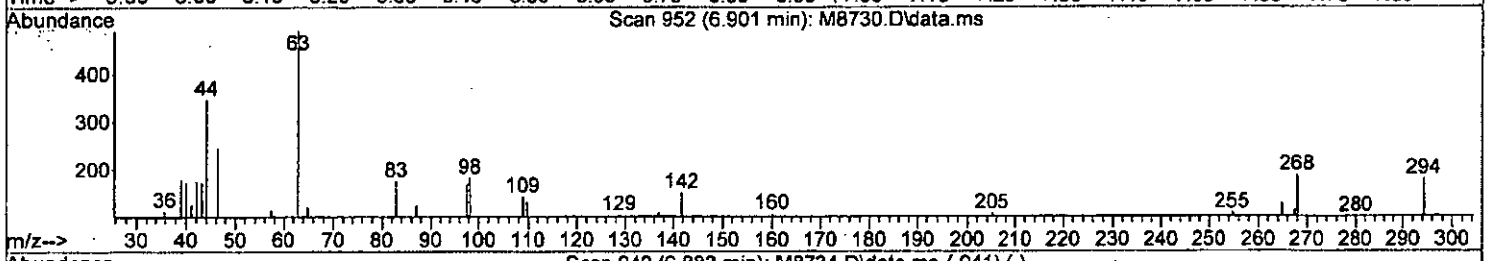
W090914.M Wed Sep 10 08:57:55 2014 Page: 1

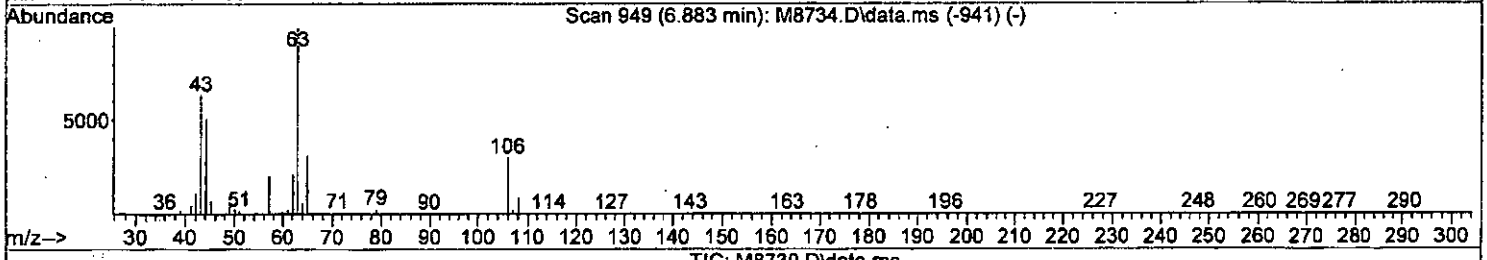
00307

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8730.D\data.ms

(62) 2-Chloroethylvinyl Ether

6.901min (+0.018) 0.37 ppb m

response 1220

Ion	Exp%	Act%
63.00	100	100
106.00	30.10	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

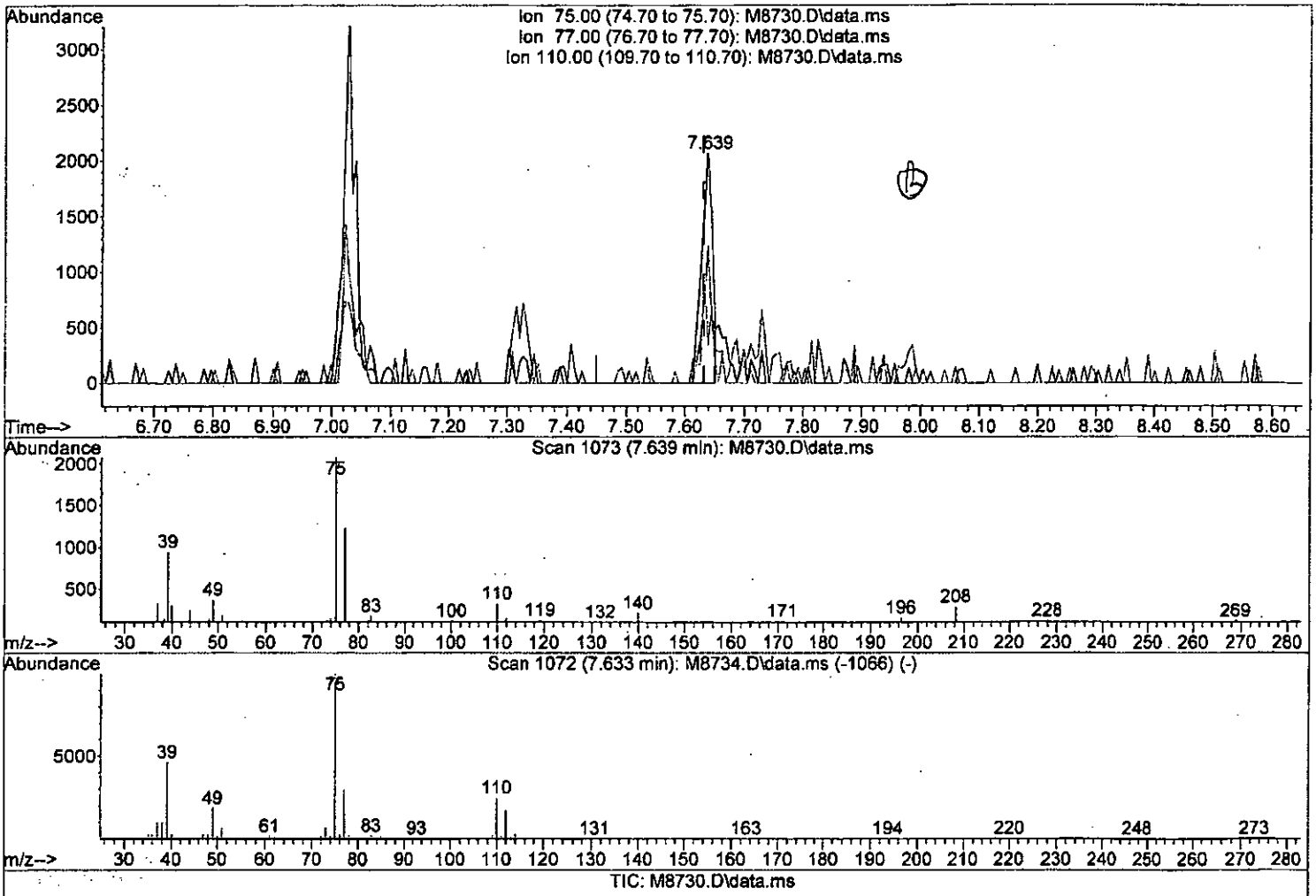
W090914.M Wed Sep 10 08:58:00 2014 Page: 1

00308

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(67) trans-1,3-Dichloropropene (P)

7.639min (+0.006) 0.30 ppb

response 2577

Ion	Exp%	Act%
75.00	100	100
77.00	29.70	59.57#
110.00	24.70	15.96
0.00	0.00	0.00

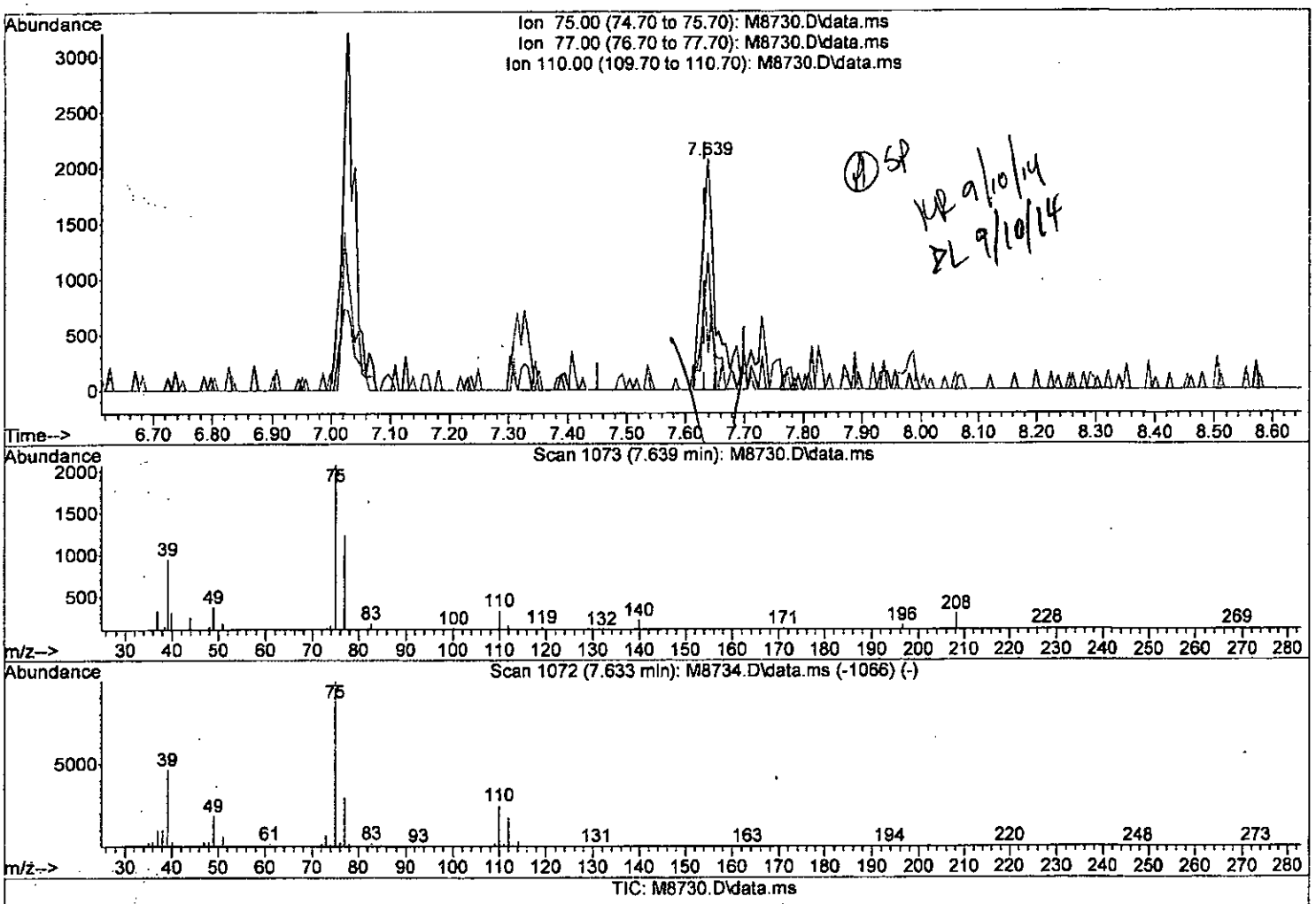
W090914.M Wed Sep 10 08:58:13 2014 Page: 1

00309

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



(67) trans-1,3-Dichloropropene (P)

7.639min (+0.006) 0.37 ppb m

response 3193

Ion	Exp%	Act%
75.00	100	100
77.00	29.70	59.57#
110.00	24.70	15.96
0.00	0.00	0.00

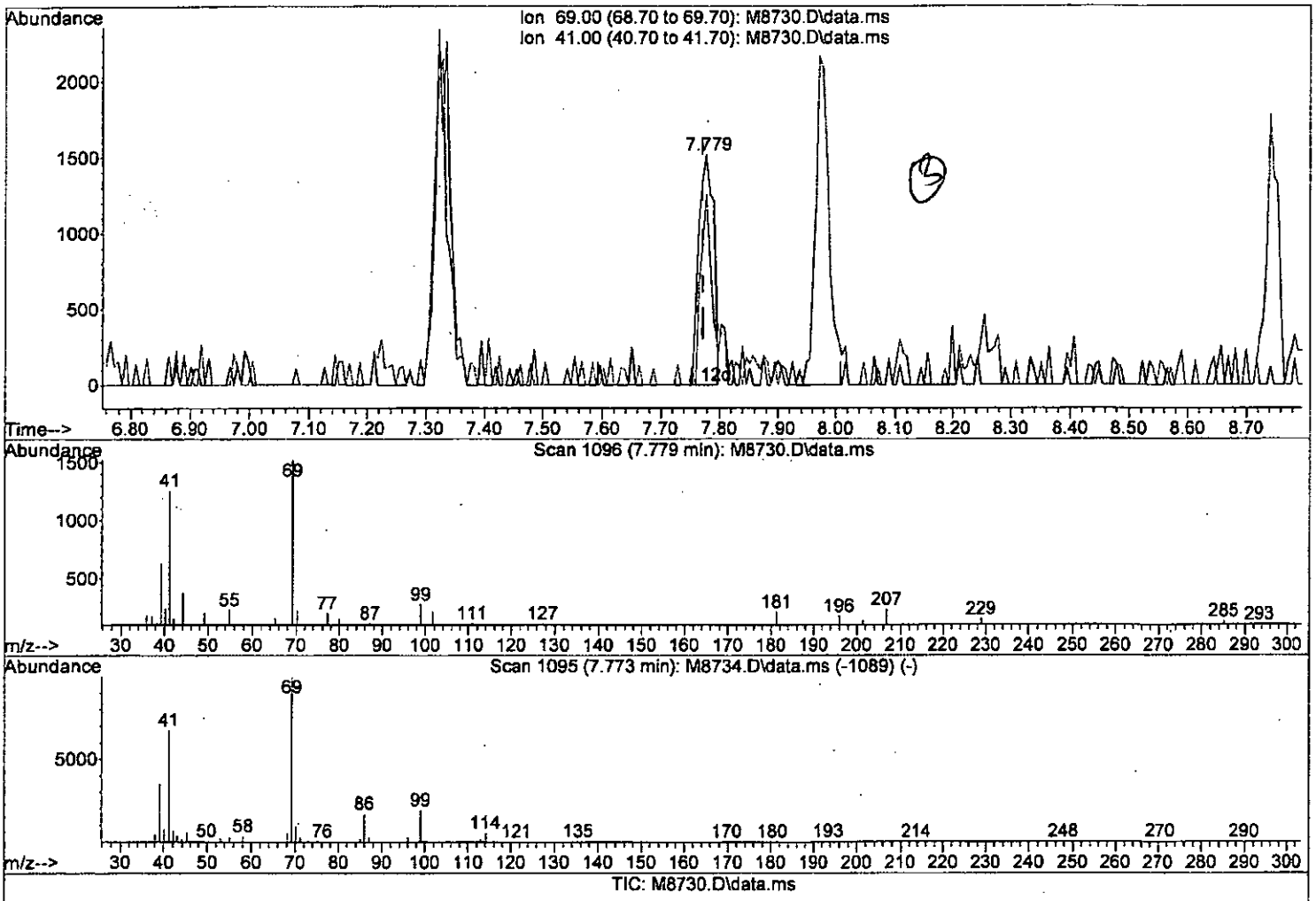
W090914.M Wed Sep 10 08:58:19 2014 Page: 1

00310

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(68) Ethyl Methacrylate

7.779min (+0.006) 0.38 ppb

response 2592

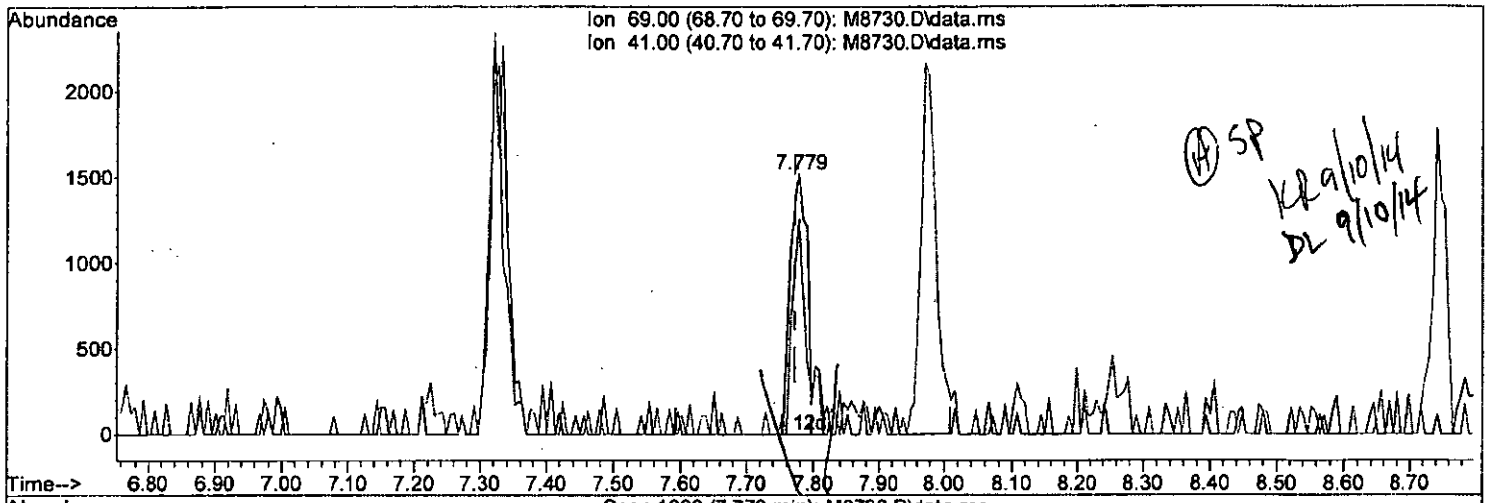
Ion	Exp%	Act%
69.00	100	100
41.00	87.80	82.67
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Wed Sep 10 08:58:28 2014 Page: 1

00311

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(68) Ethyl Methacrylate

7.779min (+0.006) 0.42 ppb m

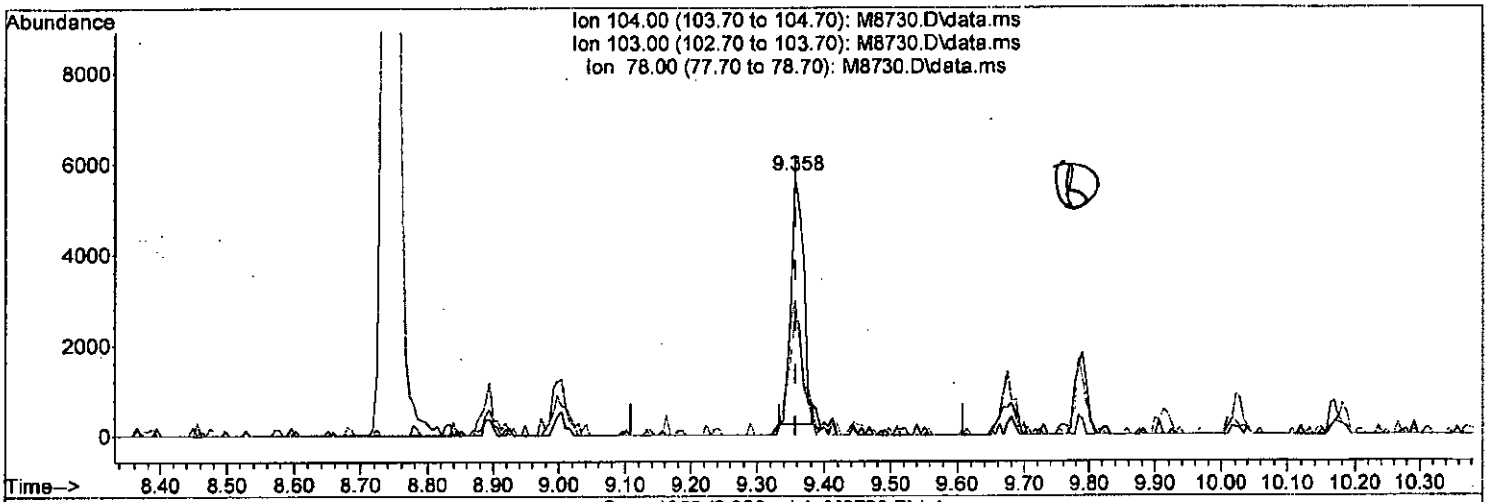
response 2915

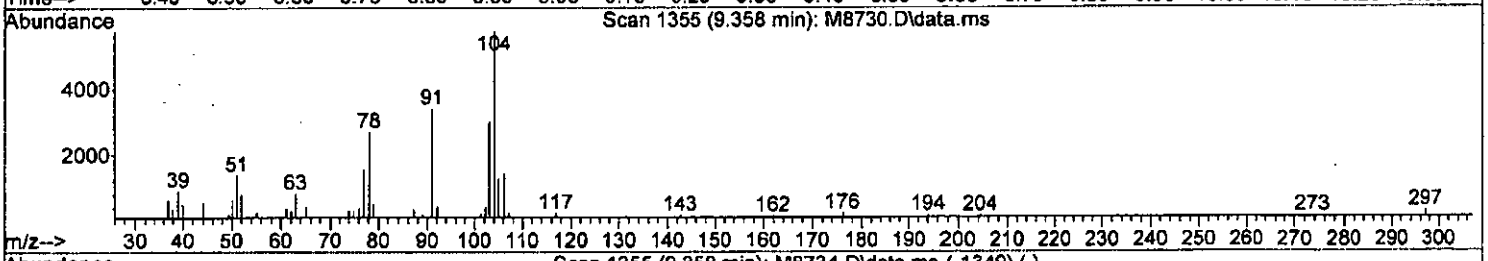
Ion	Exp%	Act%
69.00	100	100
41.00	67.80	82.67
0.00	0.00	0.00
0.00	0.00	0.00

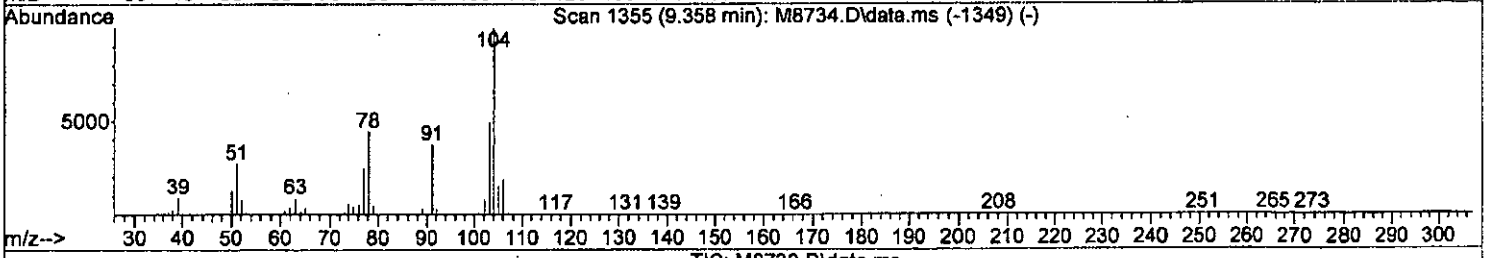
W090914.M Wed Sep 10 08:58:35 2014 Page: 1

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8730.D\data.ms

(85) Styrene (P)

9.358min (-0.000) 0.33 ppb

response 6912

Ion	Exp%	Act%
104.00	100	100
103.00	49.60	52.03
78.00	44.20	46.89
0.00	0.00	0.00

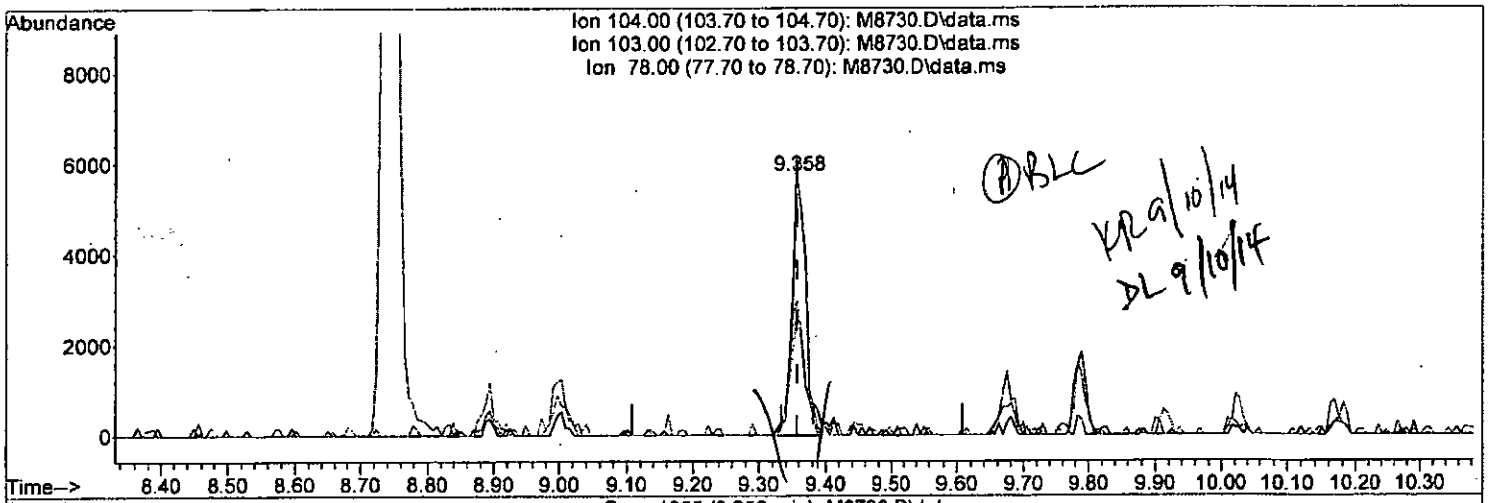
W090914.M Wed Sep 10 08:59:05 2014 Page: 1

00313

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(85) Styrene (P)

9.358min (-0.000) 0.39 ppb m

response 8076

Ion	Exp%	Act%
104.00	100	100
103.00	49.60	52.03
78.00	44.20	46.89
0.00	0.00	0.00

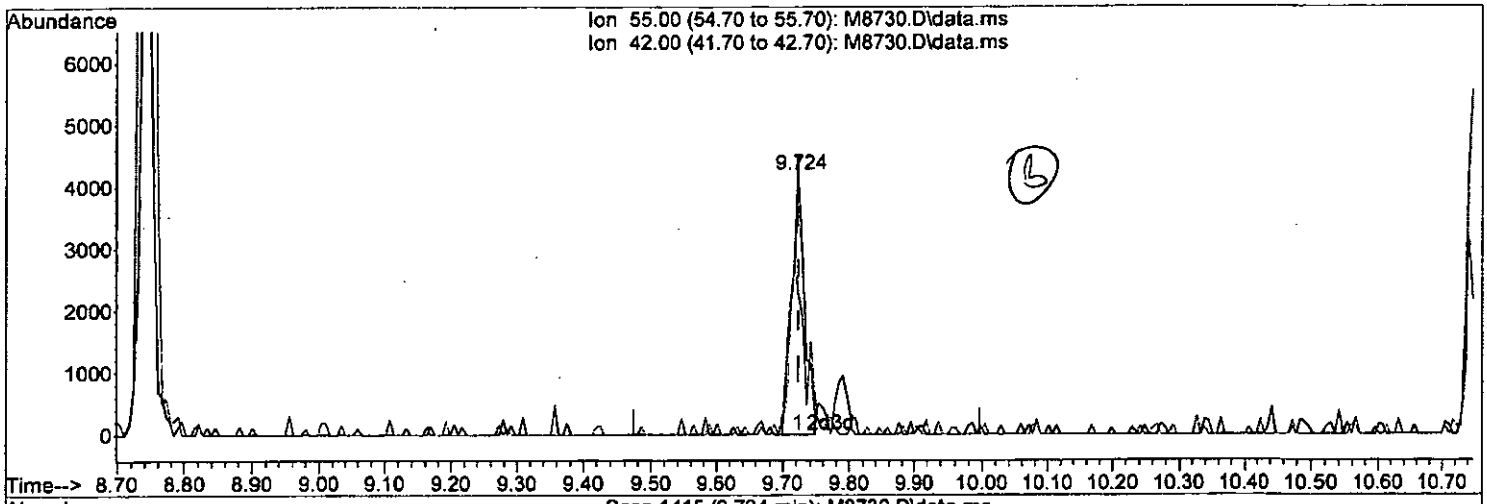
W090914.M Wed Sep 10 08:59:11 2014 Page: 1

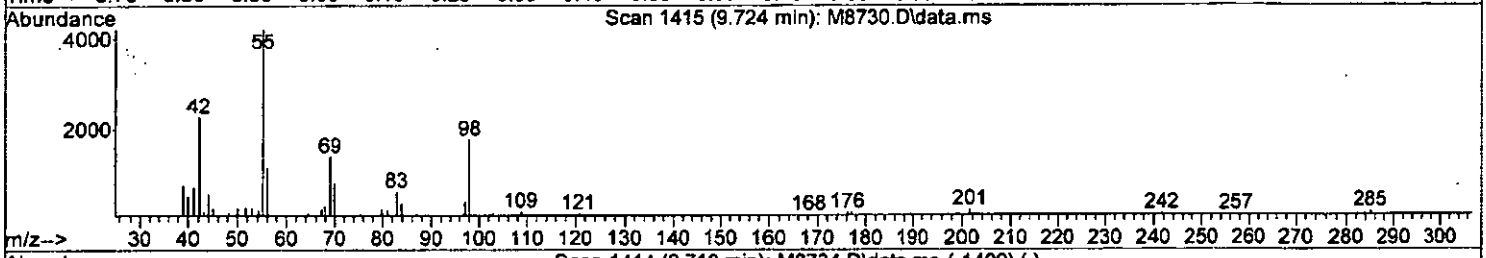
00314

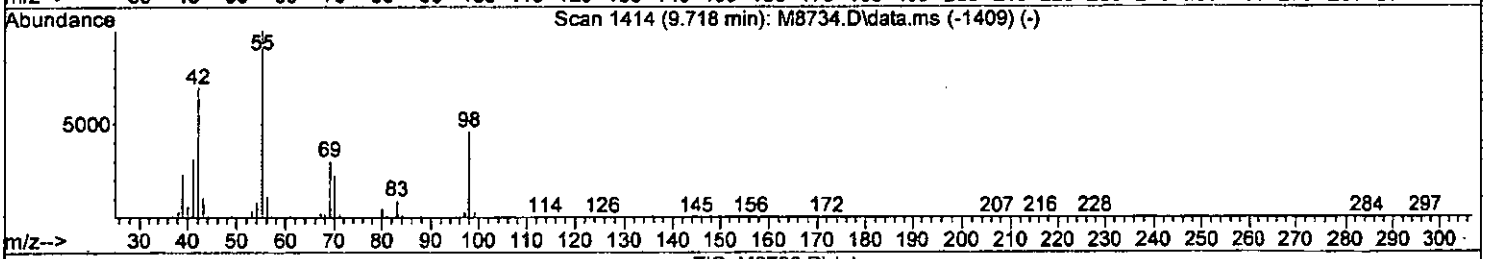
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8730.D\data.ms

(90) Cyclohexanone

9.724min (-0.000) 8.11 ppb

response 5669

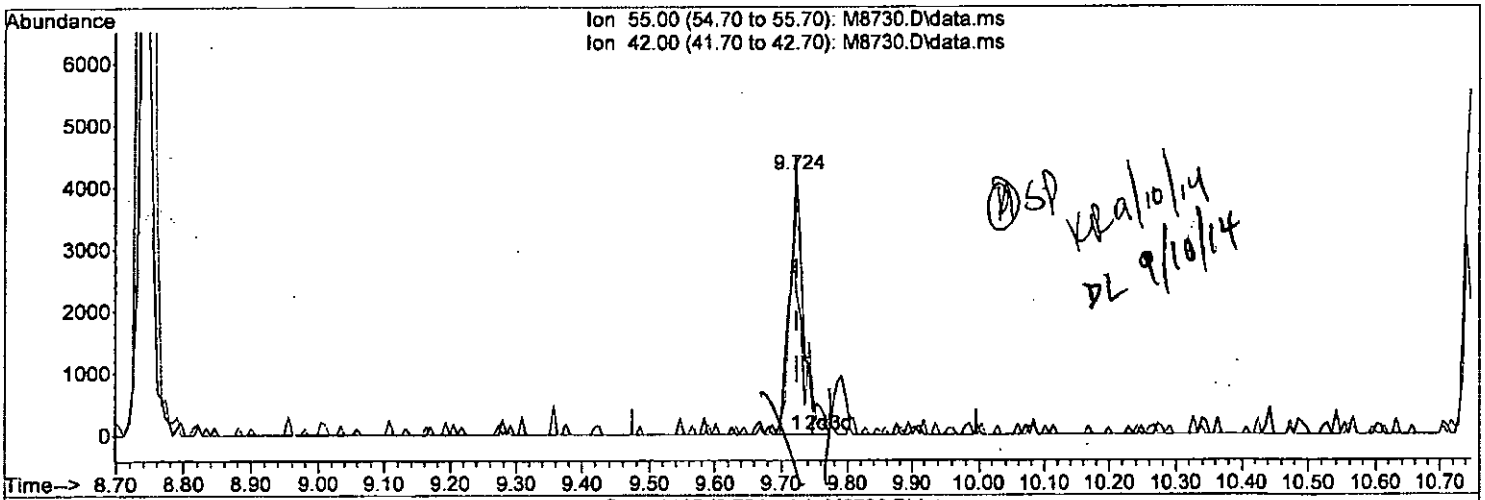
Ion	Exp%	Act%
55.00	100	100
42.00	69.50	53.85
0.00	0.00	0.00
0.00	0.00	0.00

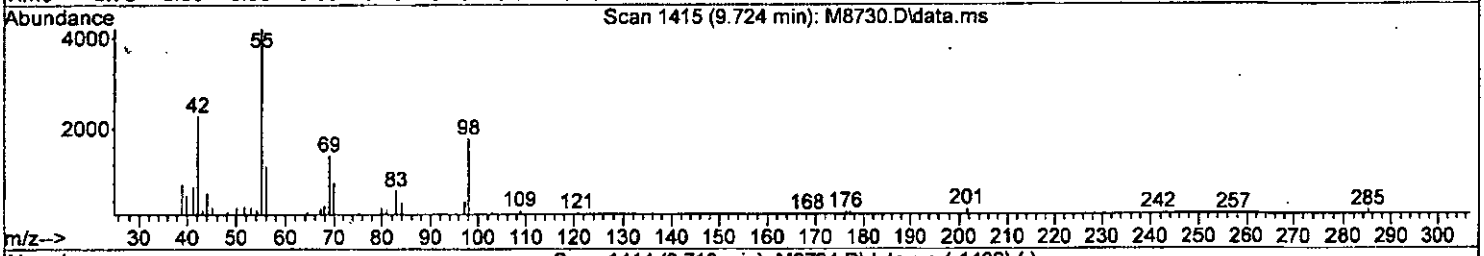
W090914.M Wed Sep 10 08:59:29 2014 Page: 1

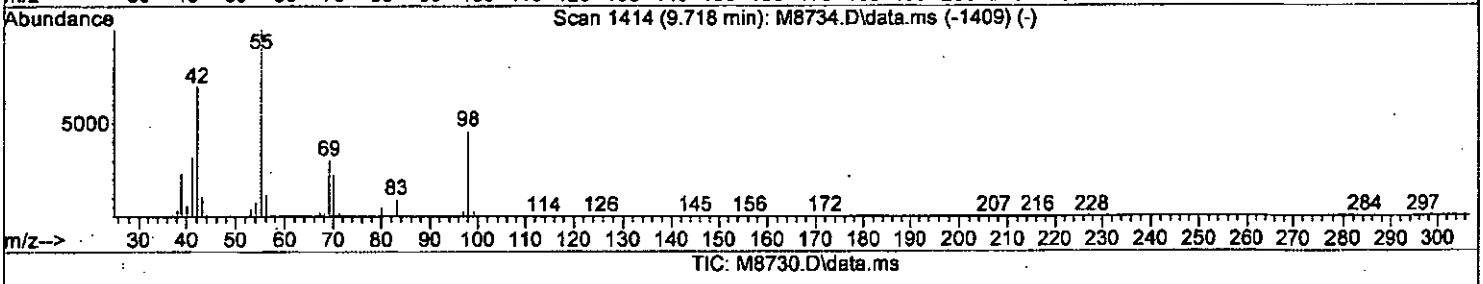
00315

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8730.D\data.ms

(90) Cyclohexanone

9.724min (-0.000) 8.74 ppb m

response 6105

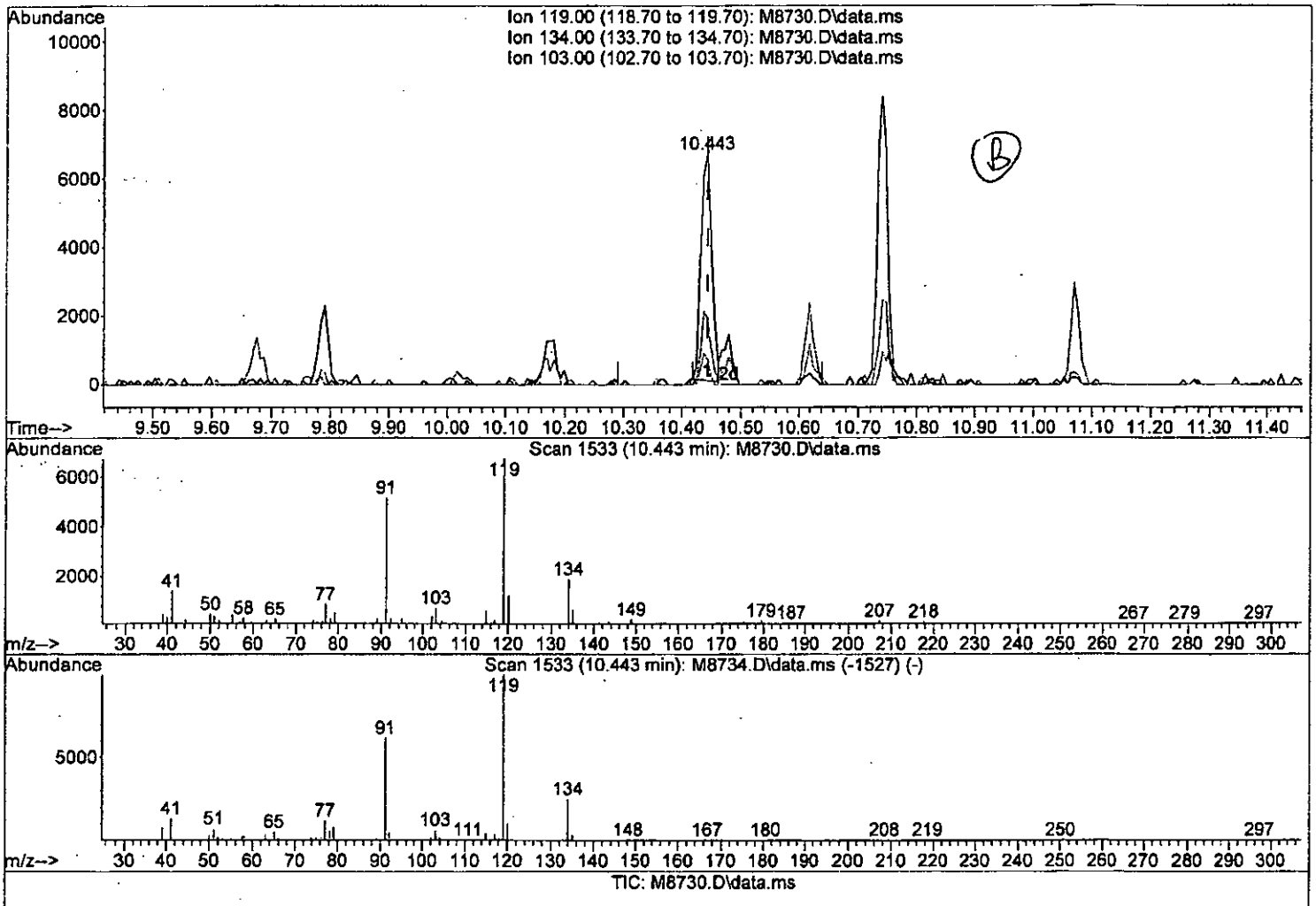
Ion	Exp%	Act%
55.00	100	100
42.00	69.50	53.85
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Wed Sep 10 08:59:35 2014 Page: 1

00316

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



(100) tert-Butylbenzene

10.443min (-0.000) 0.41 ppb

response 8320

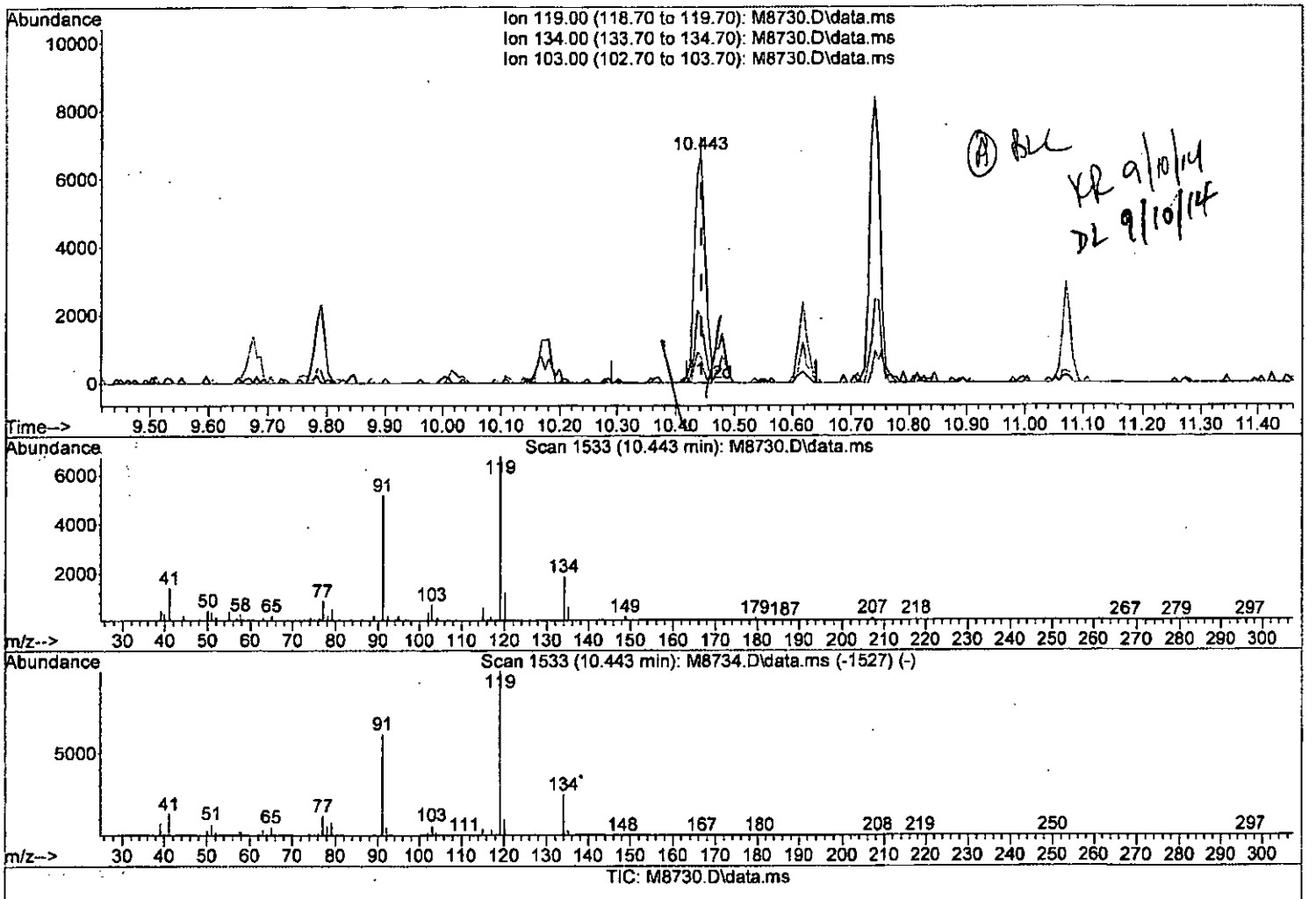
Ion	Exp%	Act%
119.00	100	100
134.00	24.80	27.90
103.00	6.00	10.80
0.00	0.00	0.00

W090914.M Wed Sep 10 09:00:02 2014 Page: 1

00317

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(100) tert-Butylbenzene

10.443min (-0.000) 0.43 ppb m

response 8683

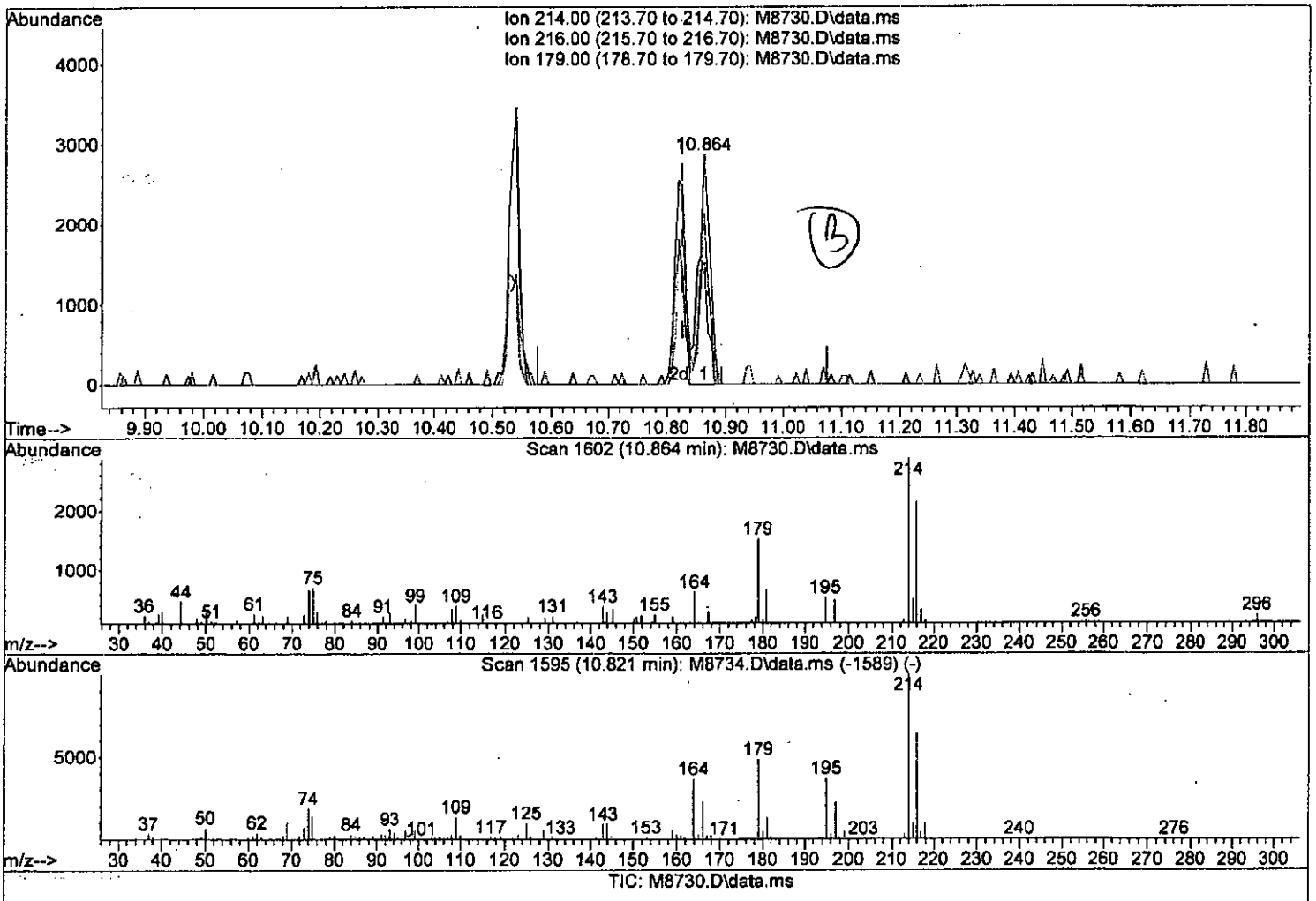
Ion	Exp%	Act%
119.00	100	100
134.00	24.80	27.90
103.00	6.00	10.80
0.00	0.00	0.00

W090914.M Wed Sep 10 09:00:08 2014 Page: 1

00318

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(107) 2,4-DCBTF

10.864min (+0.036) 0.62 ppb

response 3699

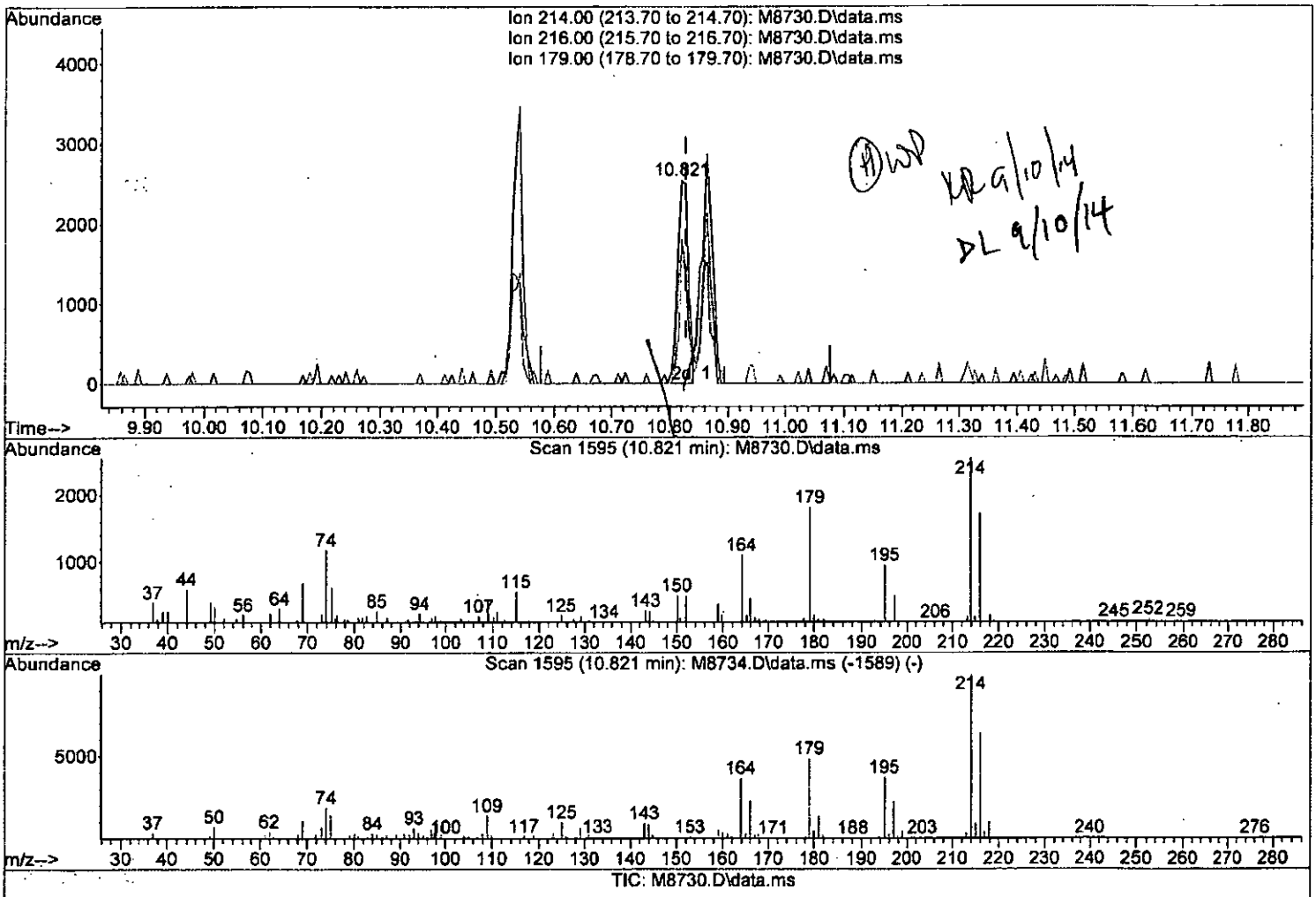
Ion	Exp%	Act%
214.00	100	100
216.00	63.60	74.22
179.00	48.30	52.95
0.00	0.00	0.00

W090914.M Wed Sep 10 09:00:17 2014 Page: 1

00319

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8730.D\data.ms

(107) 2,4-DCBTF

10.821min (-0.006) 0.55 ppb m

response 3273

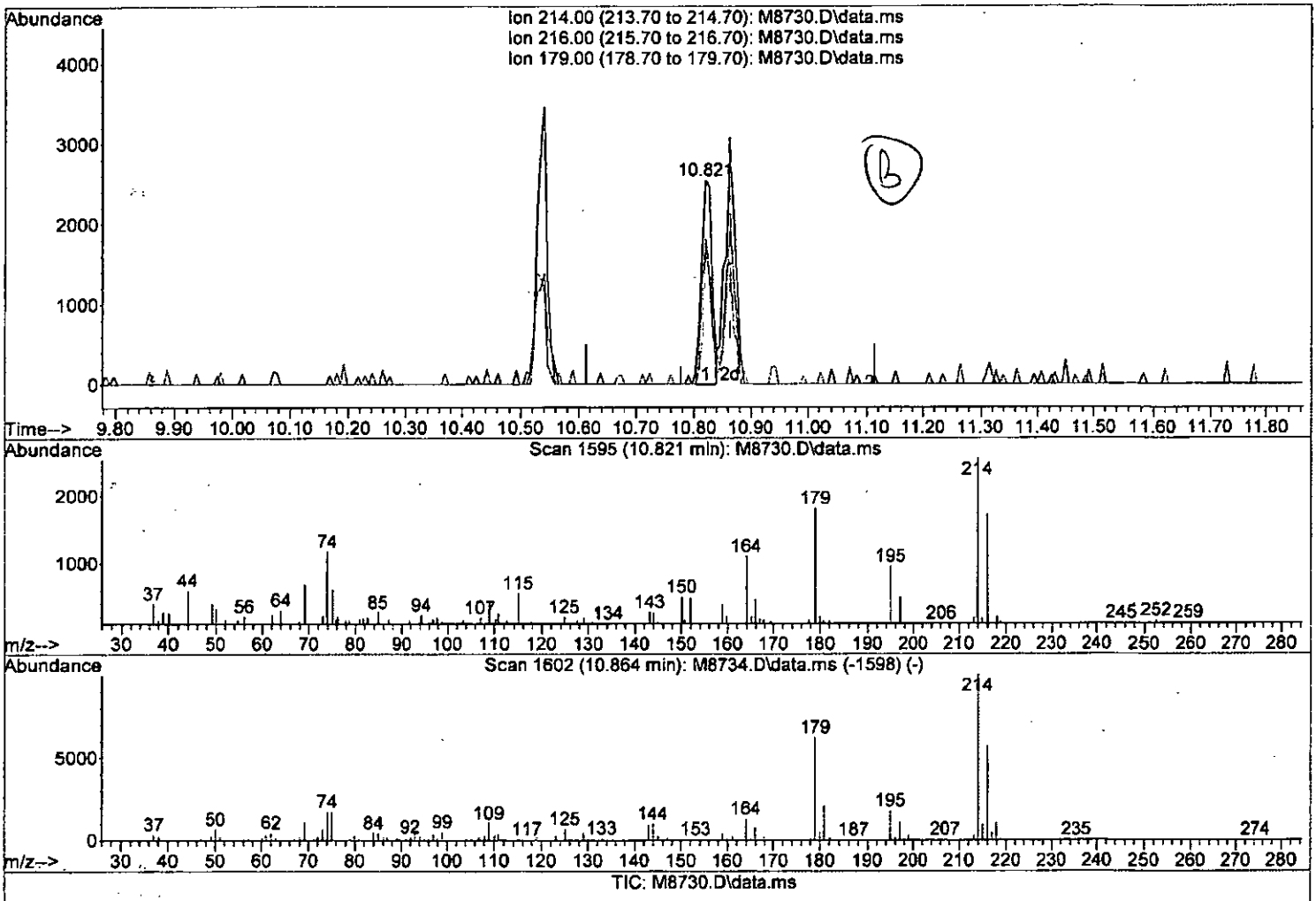
Ion	Exp%	Act%
214.00	100	100
216.00	63.60	67.47
179.00	48.30	70.96#
0.00	0.00	0.00

W090914.M Wed Sep 10 09:00:24 2014 Page: 1

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



(108) 2,5-DCBTF

10.821min (-0.043) 0.49 ppb

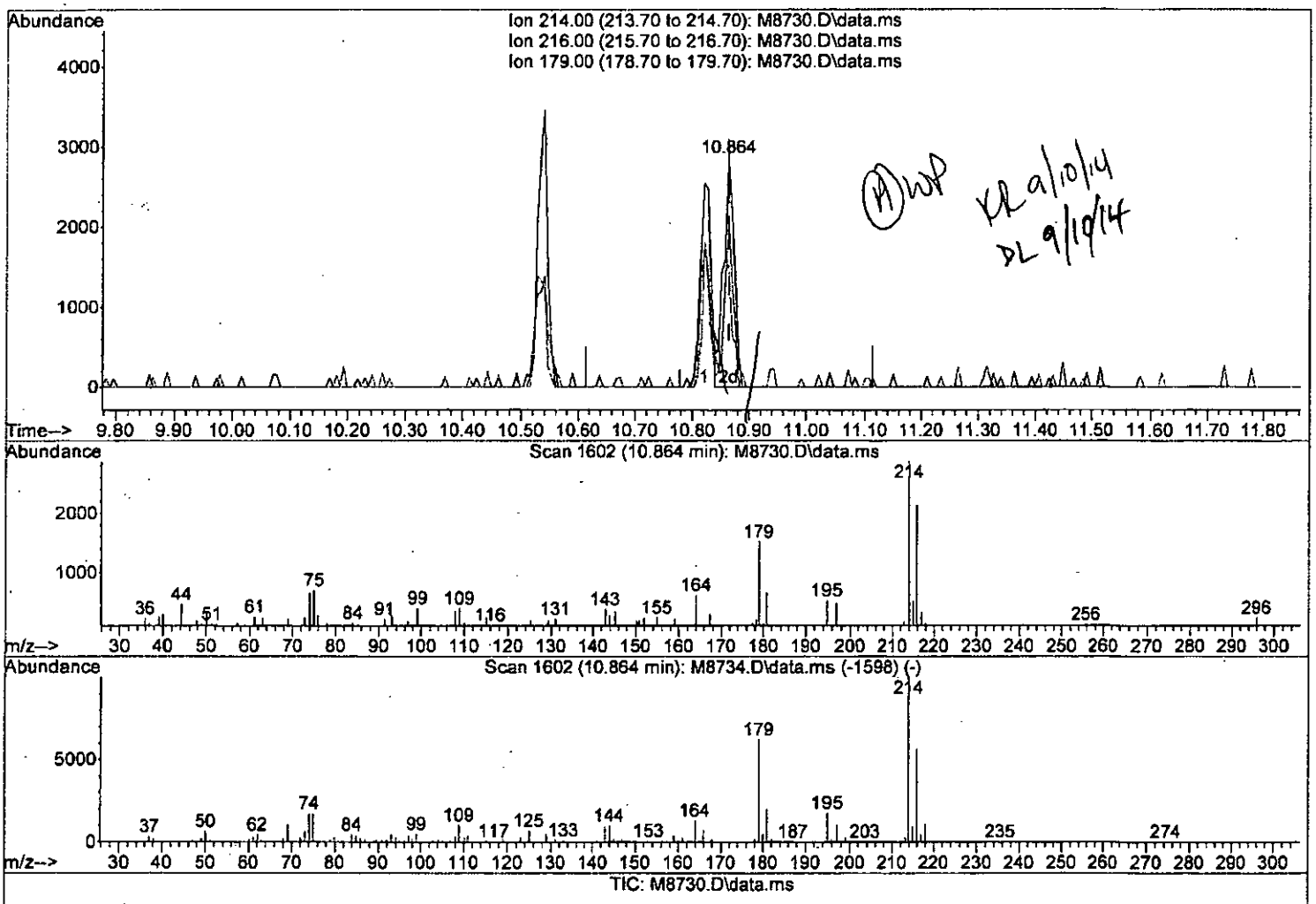
response 3314

Ion	Exp%	Act%
214.00	100	100
216.00	58.80	67.47
179.00	61.90	70.96
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



(108) 2,5-DCBTF

10.864min (-0.000) 0.55 ppb m

response 3699

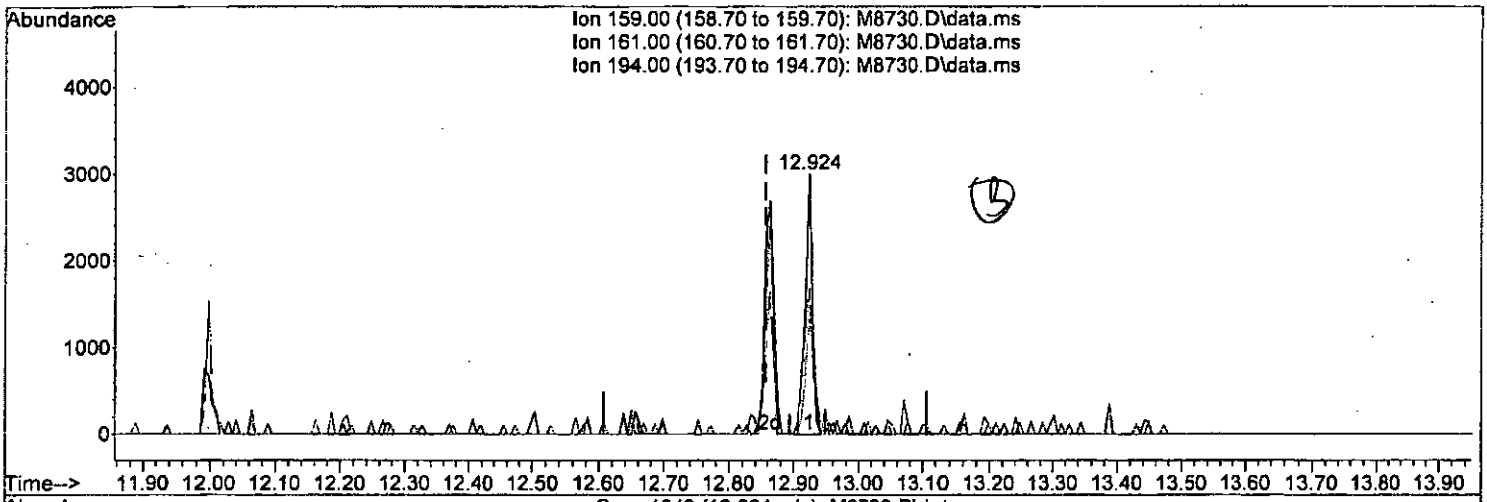
Ion	Exp%	Act%
214.00	100	100
216.00	58.80	74.22#
179.00	61.90	52.95
0.00	0.00	0.00

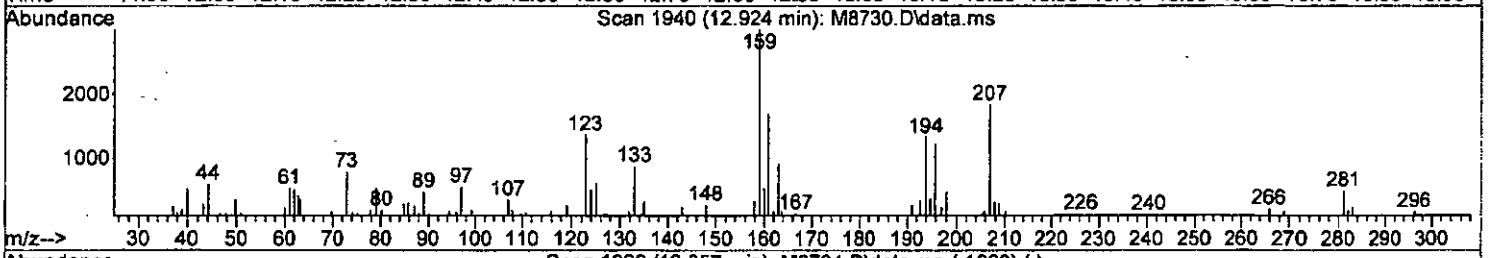
W090914.M Wed Sep 10 09:00:35 2014 Page: 1

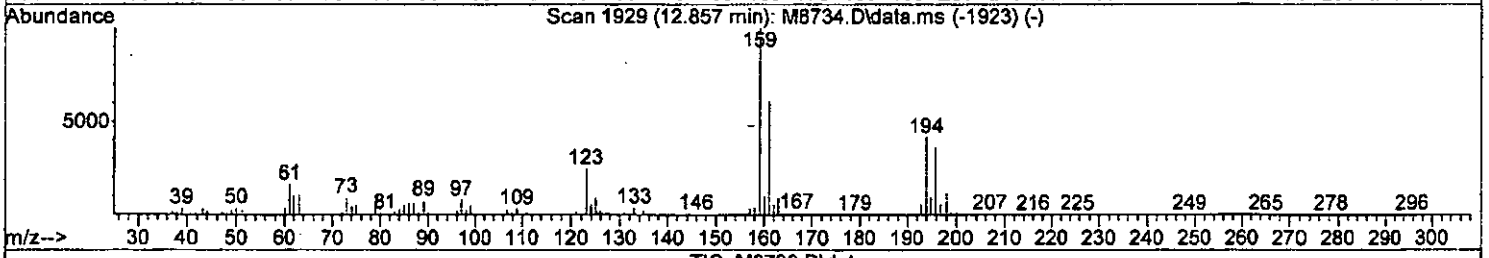
00322

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8730.D\data.ms

(119) 2,4,5-Trichlorotolene

12.924min (+0.067) 0.41 ppb

response 2283

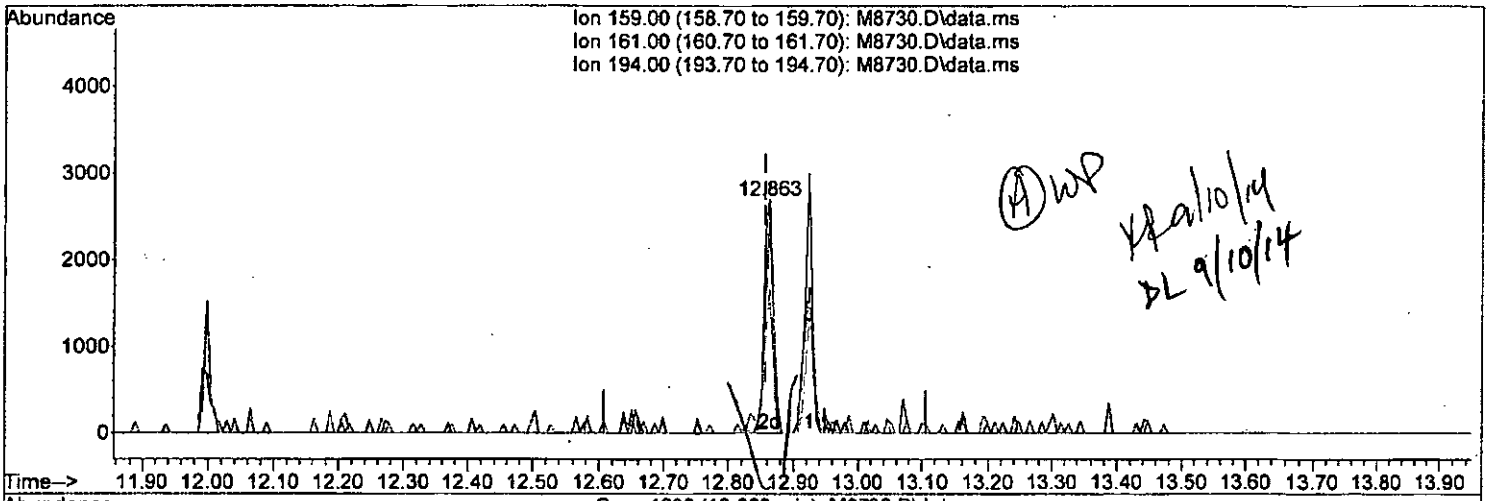
Ion	Exp%	Act%
159.00	100	100
161.00	60.30	55.90
194.00	41.20	44.13
0.00	0.00	0.00

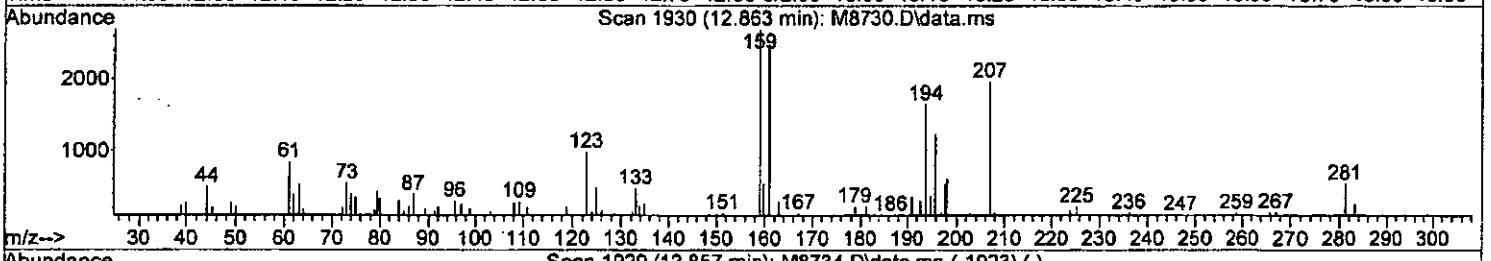
W090914.M Wed Sep 10 09:00:46 2014 Page: 1

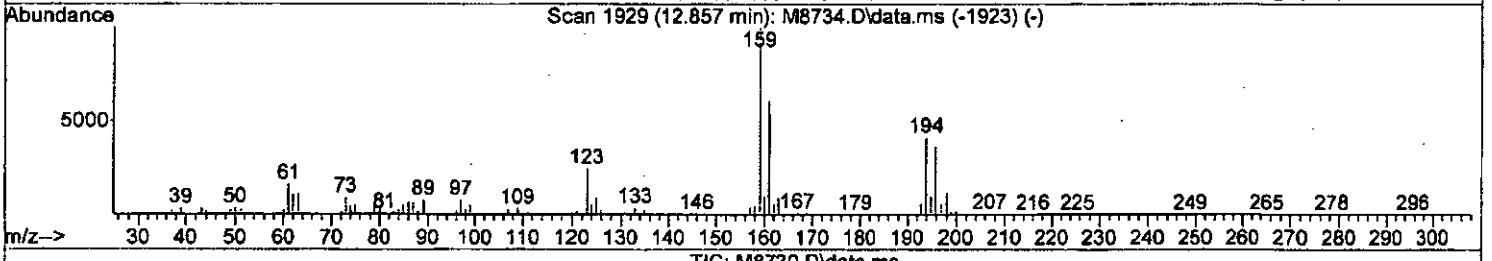
00323

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:21 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8730.D\data.ms

(119) 2,4,5-Trichlorotolene

12.863min (+0.006) 0.46 ppb m

response 2561

Ion	Exp%	Act%
159.00	100	100
161.00	60.30	92.18#
194.00	41.20	61.21#
0.00	0.00	0.00

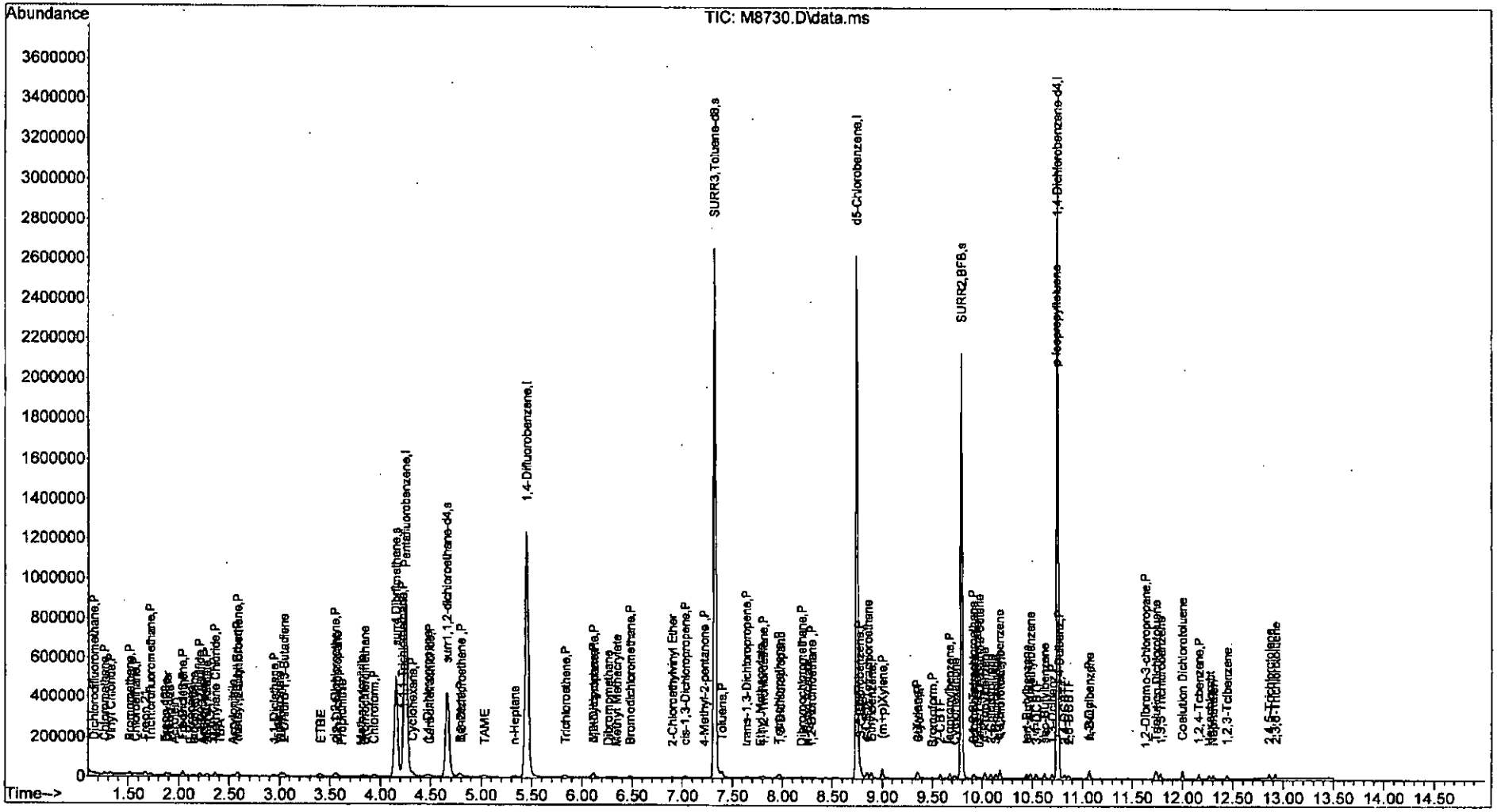
W090914.M Wed Sep 10 09:00:52 2014 Page: 1

00324

Quantitation Report (QT Reviewed)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8730.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 3:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:00:50 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



W090914.M Wed Sep 10 09:01:55 2014 Page: 4

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8731.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 4:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:11:53 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	805639	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1269995	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1150027	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	582081	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.151	113	363376	51.37	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.74%				
48) surr1,1,2-dichloroetha...	4.664	65	390503	51.22	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 102.44%				
65) SURR3,Toluene-d8	7.322	98	1562134	52.32	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 104.64%				
70) SURR2,BFB	9.791	95	542526	50.77	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.54%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	6806	0.87	ppb		86
3) Chloromethane	1.262	50	8360	0.98	ppb		89
4) Vinyl Chloride	1.323	62	8414	0.93	ppb		96
5) Bromomethane	1.512	94	5456	1.05	ppb		92
6) Chloroethane	1.567	64	4575	0.91	ppb		95
7) Freon 21	1.664	67	12768	0.96	ppb		98
8) Trichlorofluoromethane	1.719	101	10568	0.98	ppb		99
9) Diethyl Ether	1.877	59	5046	0.97	ppb	#	80
10) Freon 123a	1.871	67	7936	0.93	ppb		96
11) Freon 123	1.902	83	9066	0.97	ppb		87
12) Acrolein	1.951	56	2105	4.28	ppb	#	72
13) 1,1-Diclethene	2.042	96	5467	0.95	ppb	#	79
14) Freon 113	2.036	101	6302	0.94	ppb		100
15) Acetone	2.048	43	2242	1.35	ppb	#	67
16) 2-Propanol	2.115	45	3917	14.85	ppb		93
17) Iodomethane	2.146	142	6419	0.74	ppb		96
18) Carbon Disulfide	2.207	76	20734	0.95	ppb		98
19) Acetonitrile	2.237	40	1064	4.76	ppb	#	20
20) Allyl Chloride	2.274	76	3931	1.01	ppb	#	83
21) Methyl Acetate	2.280	43	3263	0.97	ppb		93
22) Methylene Chloride	2.359	84	8380	1.14	ppb		92
23) TBA	2.408	59	7051	15.92	ppb		81
24) Acrylonitrile	2.536	53	7189	4.55	ppb	#	74
25) Methyl-t-Butyl Ether	2.579	73	14163	0.87	ppb		89
26) trans-1,2-Dichloroethene	2.585	96	7462	1.04	ppb		88
28) 1,1-Diclethane	2.944	63	11091m	0.87	ppb		
29) Vinyl Acetate	2.999	86	865m	0.83	ppb		
30) DIPE	3.018	45	23368	0.97	ppb		98
31) 2-Chloro-1,3-Butadiene	3.042	53	12977	1.05	ppb		88
32) ETBE	3.396	59	20499	0.96	ppb		90
33) 2,2-Dichloropropane	3.554	77	8707m	0.86	ppb		
34) cis-1,2-Dichloroethene	3.548	96	7855	0.98	ppb		92
35) 2-Butanone	3.560	43	2182	1.01	ppb		75
36) Propionitrile	3.603	54	2515	4.31	ppb		98
37) Bromochloromethane	3.841	130	4249	0.96	ppb	#	66

KR 9/10/14

W090914.M Wed Sep 10 09:12:24 2014 Page: 1

00326

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8731.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 4:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:11:53 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.828	67	1639	0.88	ppb	#	30
39) Tetrahydrofuran	3.926	42	1218	0.90	ppb		90
40) Chloroform	3.938	83	12801	0.98	ppb		96
41) 1,1,1-Trichloroethane	4.200	97	10469	0.97	ppb		89
42) TAME	5.017	73	16263	0.89	ppb		93
44) Cyclohexane	4.316	41	6359	0.95	ppb		86
46) Carbontetrachloride	4.475	121	2756	0.97	ppb		88
47) 1,1-Dichloropropene	4.456	75	7625m	0.83	ppb		
49) Benzene	4.785	78	26814	0.93	ppb		96
50) 1,2-Dichloroethane	4.792	62	8301	0.97	ppb		93
51) Iso-Butyl Alcohol	4.651	43	3410	17.75	ppb	#	74
52) n-Heptane	5.334	43	6638	0.91	ppb	#	68
53) 1-Butanol	5.797	56	4523m	41.00	ppb		
54) Trichloroethene	5.828	130	7730	1.01	ppb		94
55) Methylcyclohexane	6.108	55	7042	0.89	ppb		95
56) 1,2-Diclpropane	6.114	63	5949	0.82	ppb		91
57) Dibromomethane	6.261	93	3224	0.92	ppb		92
59) Methyl Methacrylate	6.340	69	3330	1.00	ppb	#	76
60) Bromodichloromethane	6.486	83	8353	0.93	ppb		93
61) 2-Nitropropane	6.742	41	1733m	1.94	ppb		
62) 2-Chloroethylvinyl Ether	6.895	63	2631	0.80	ppb		93
63) cis-1,3-Dichloropropene	7.023	75	8944	0.85	ppb		84
64) 4-Methyl-2-pentanone	7.218	43	3740	0.87	ppb		83
66) Toluene	7.395	91	30121	0.96	ppb		97
67) trans-1,3-Dichloropropene	7.632	75	7373	0.86	ppb		94
68) Ethyl Methacrylate	7.779	69	5701	0.85	ppb		95
69) 1,1,2-Trichloroethane	7.809	97	5072	0.96	ppb		83
72) Tetrachloroethene	7.962	164	5860	0.99	ppb	#	83
73) 2-Hexanone	8.096	43	2572m	0.81	ppb		
74) 1,3-Dichloropropane	7.980	76	9622	0.98	ppb		87
75) Dibromochloromethane	8.193	129	4940	0.83	ppb	#	72
76) N-Butyl Acetate	8.242	43	5789m	0.84	ppb		
77) 1,2-Dibromoethane	8.291	107	4166	0.84	ppb		98
78) Chlorobenzene	8.773	112	17836	0.87	ppb		80
79) 3-CBTF	8.791	180	8935	0.89	ppb		96
80) 4-CBTF	8.840	180	9524	0.98	ppb		96
81) 1,1,1,2-Tetrachloroethane	8.852	131	6038	0.86	ppb		97
82) Ethylbenzene	8.888	106	9809	0.92	ppb	#	73
83) (m+p)Xylene	8.998	106	22250	1.71	ppb		98
84) o-Xylene	9.346	106	11046	0.87	ppb		99
85) Styrene	9.358	104	17926	0.87	ppb		92
87) Bromoform	9.498	173	2826	0.89	ppb		83
88) 2-CBTF	9.577	180	8563	0.91	ppb	#	92
89) Isopropylbenzene	9.675	105	28689	0.96	ppb		96
90) Cyclohexanone	9.717	55	12957	18.85	ppb		91
91) trans-1,4-Dichloro-2-B...	9.967	53	1200	0.81	ppb	#	84
92) 1,1,2,2-Tetrachloroethane	9.913	83	5847	0.98	ppb		86
93) Bromobenzene	9.913	156	6703	0.87	ppb	#	82
94) 1,2,3-Trichloropropane	9.943	110	1689	0.97	ppb	#	79
95) n-Propylbenzene	10.022	91	34520	0.99	ppb		98
96) 2-Chlorotoluene	10.083	91	21089	1.00	ppb		94
97) 3-Chlorotoluene	10.132	91	21518	0.92	ppb		93

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00327

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8731.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 4:36 pm
Operator : K.Ruest
InstName : MSVOA-12

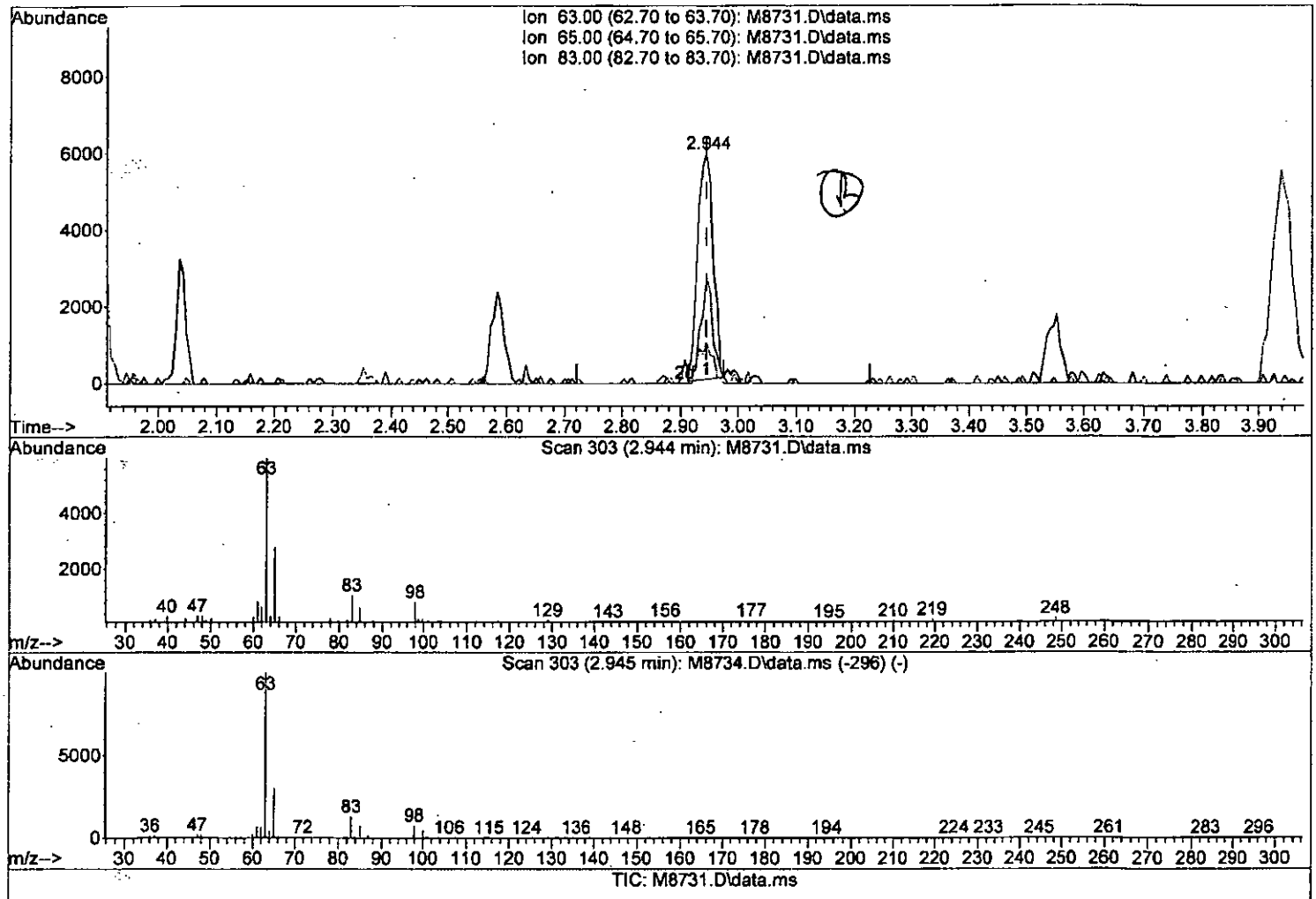
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:11:53 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
98)	4-Chlorotoluene	10.175	91	23308	0.95	ppb		86
99)	1,3,5-Trimethylbenzene	10.175	105	21298	0.89	ppb		91
100)	tert-Butylbenzene	10.443	119	18465	0.92	ppb		89
101)	1,2,4-Trimethylbenzene	10.479	105	21828	0.89	ppb		96
102)	3,4-DCBTF	10.534	214	6865	1.02	ppb	#	84
103)	sec-Butylbenzene	10.620	105	27505	0.95	ppb		96
104)	p-Isopropyltoluene	10.742	119	22184	0.92	ppb		92
105)	1,3-Dclbenz	10.699	146	14217	0.98	ppb		93
106)	1,4-Dclbenz	10.766	146	13500	0.90	ppb		88
107)	2,4-DCBTF	10.821	214	5537	0.95	ppb	#	80
108)	2,5-DCBTF	10.864	214	6101	0.92	ppb		98
109)	n-Butylbenzene	11.071	91	18831	0.86	ppb		95
110)	1,2-Dclbenz	11.071	146	12767	0.92	ppb		87
111)	1,2-Dibromo-3-chloropr...	11.626	157	1001	0.95	ppb	#	69
112)	Trielution Dichlorotol...	11.729	125	32005	2.79	ppb		97
113)	1,3,5 Trichlorobenzene	11.778	180	9379	0.95	ppb	#	92
114)	Coelution Dichlorotoluene	11.997	125	22920	1.87	ppb		95
115)	1,2,4-Tcbenzene	12.162	180	7938	0.98	ppb		92
116)	Hexachlorobt	12.266	225	3363	1.05	ppb		88
117)	Naphthalen	12.302	128	13932	0.84	ppb		87
118)	1,2,3-Tclbenzene	12.443	180	6526	0.93	ppb		95
119)	2,4,5-Trichlorotolene	12.857	159	5724	1.05	ppb		95
120)	2,3,6-Trichlorotoluene	12.918	159	5663	1.06	ppb		91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8731.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 4:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:24 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8731.D\data.ms

(28) 1,1-Dicletheane (P)

2.944min (-0.000) 0.84 ppb

response 10731

Ion	Exp%	Act%
63.00	100	100
65.00	30.30	46.09
83.00	13.00	17.42
0.00	0.00	0.00

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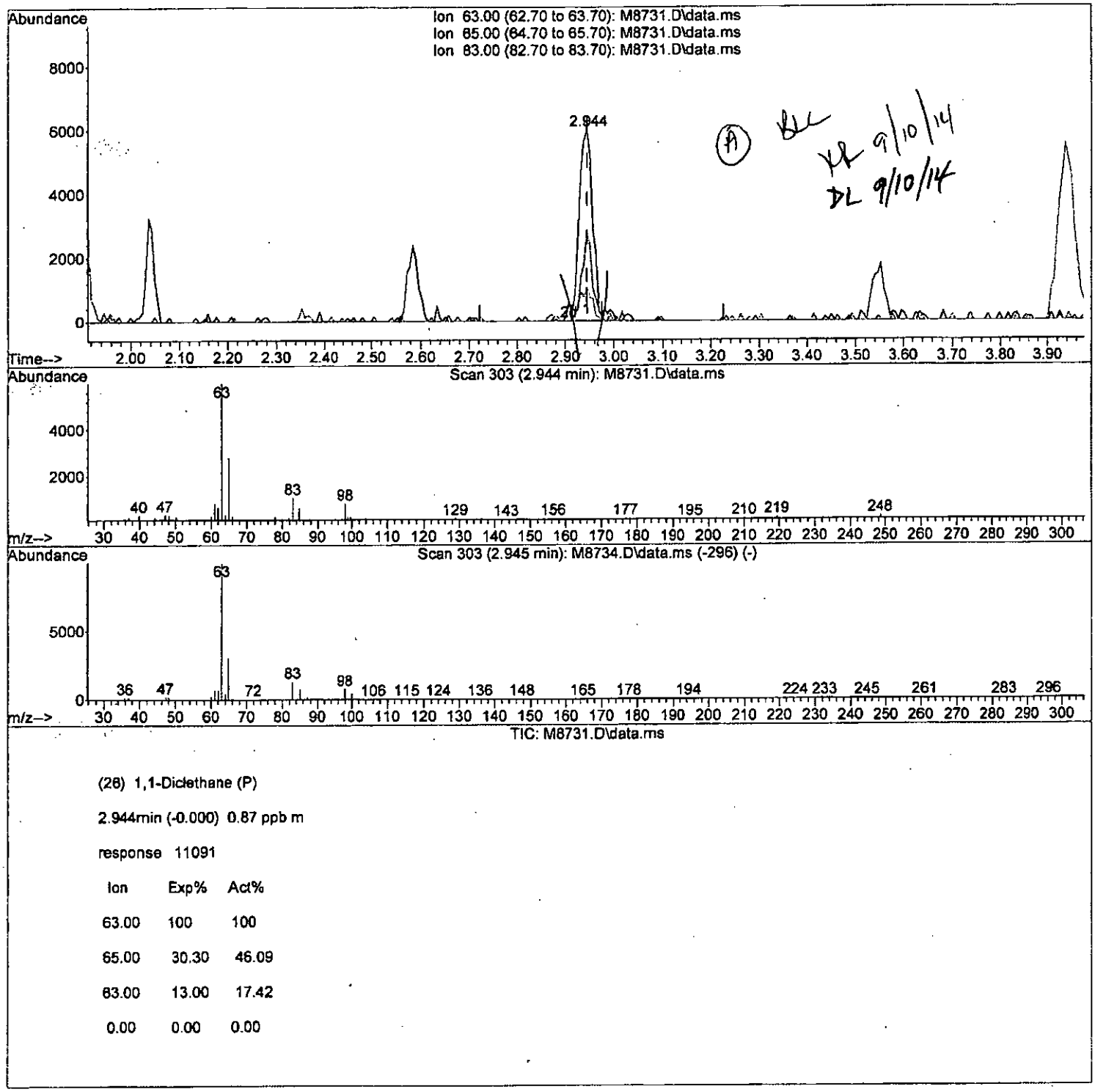
00329

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8731.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 4:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:24 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



(26) 1,1-Dichlethane (P)

2.944min (-0.000) 0.87 ppb m

response 11091

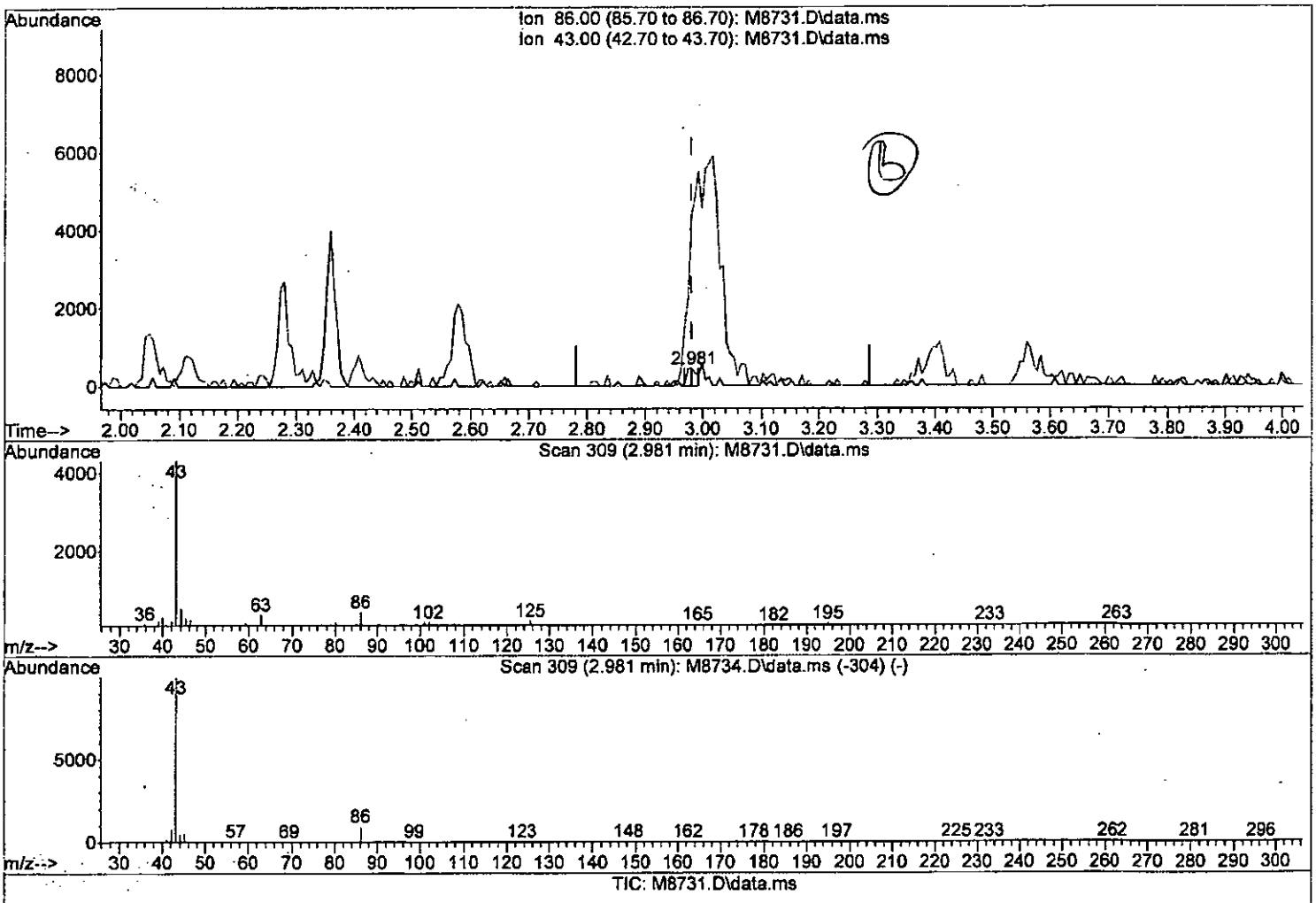
Ion	Exp%	Act%
63.00	100	100
65.00	30.30	46.09
63.00	13.00	17.42
0.00	0.00	0.00

W090914.M Wed Sep 10 09:07:59 2014 Page: 1

00330

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8731.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 4:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:24 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



(29) Vinyl Acetate

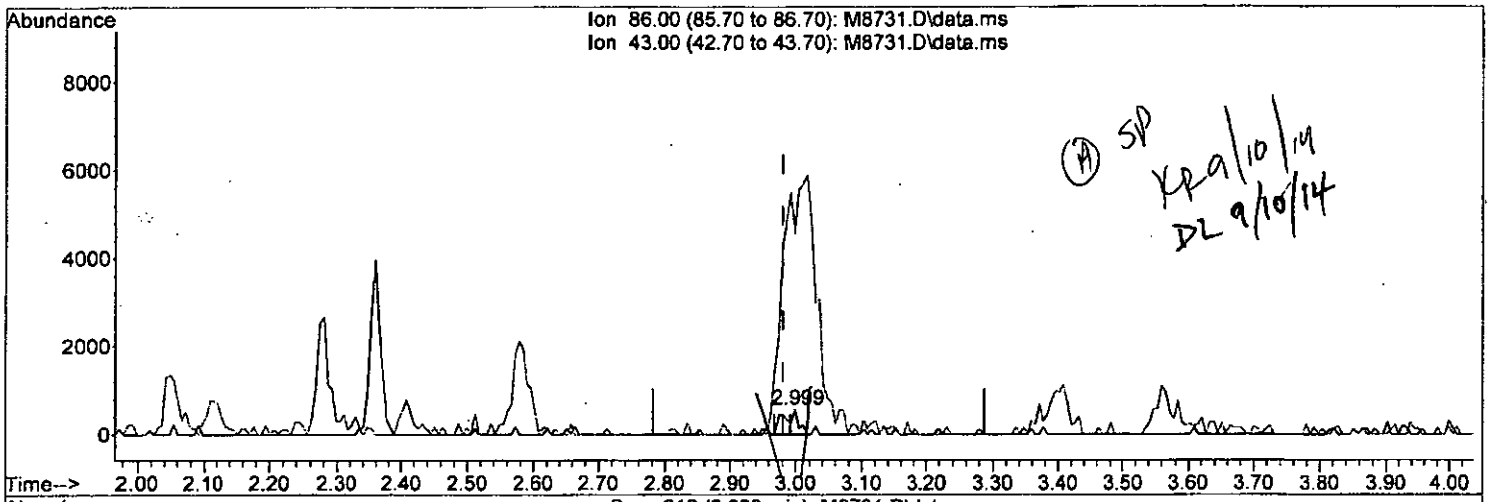
2.981min (-0.000) 0.50 ppb

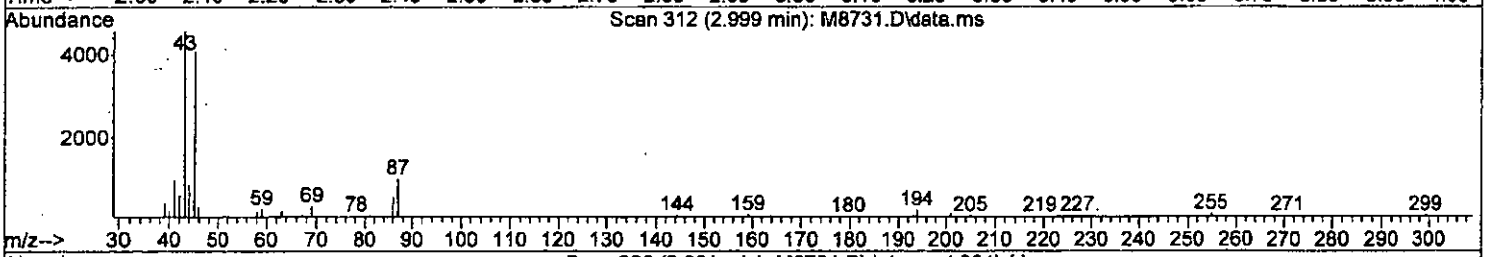
response 526

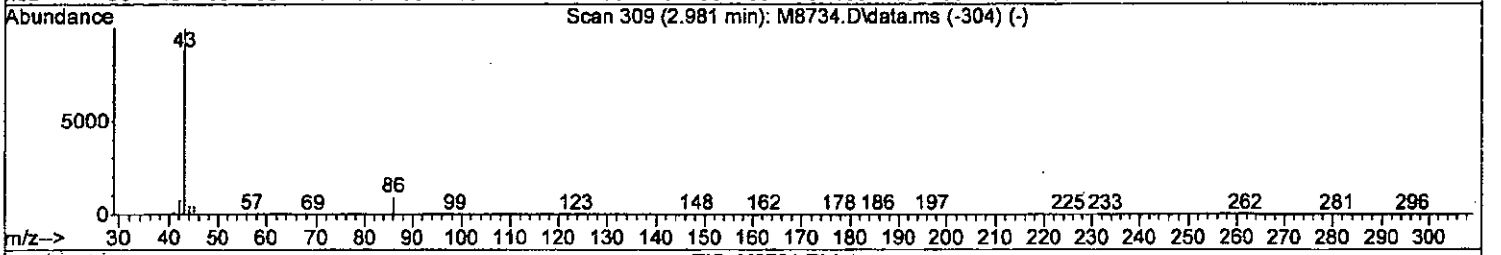
Ion	Exp%	Act%
86.00	100	100
43.00	1037.10	990.32#
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8731.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 4:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:24 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8731.D\data.ms

(29) Vinyl Acetate

2.999min (+0.018) 0.83 ppb m

response 865

Ion	Exp%	Act%
86.00	100	100
43.00	1037.10	809.04#
0.00	0.00	0.00
0.00	0.00	0.00

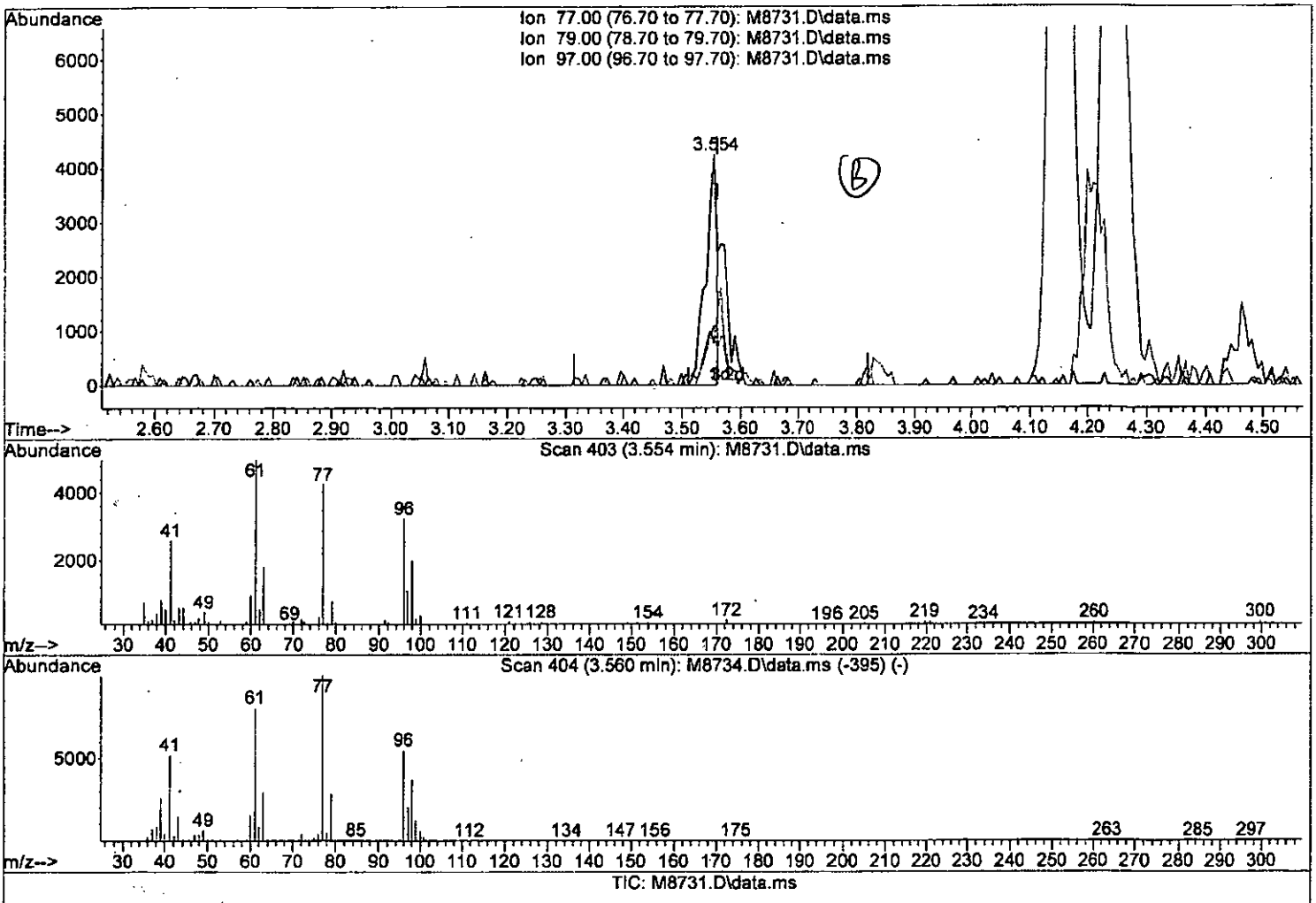
W090914.M Wed Sep 10 09:08:11 2014 Page: 1

00332

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8731.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 4:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:24 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



(33) 2,2-Dichloropropane

3.554min (-0.006) 0.55 ppb

response 5551

Ion	Exp%	Act%
77.00	100	100
79.00	28.40	17.95
97.00	20.50	25.52
0.00	0.00	0.00

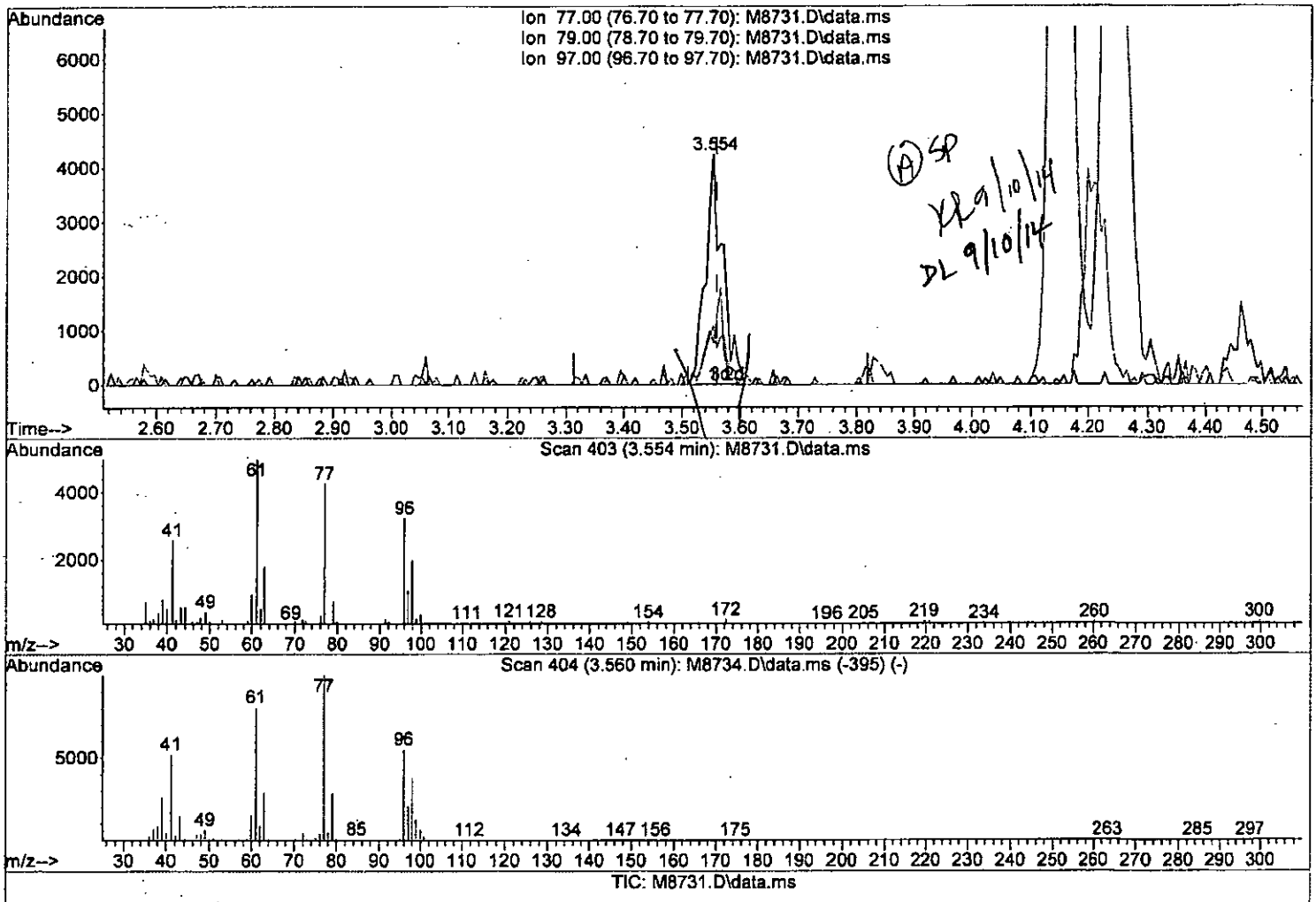
W090914.M Wed Sep 10 09:08:20 2014 Page: 1

00333

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8731.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 4:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:24 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8731.D\data.ms

(33) 2,2-Dichloropropane

3.554min (-0.006) 0.86 ppb m

response 8707

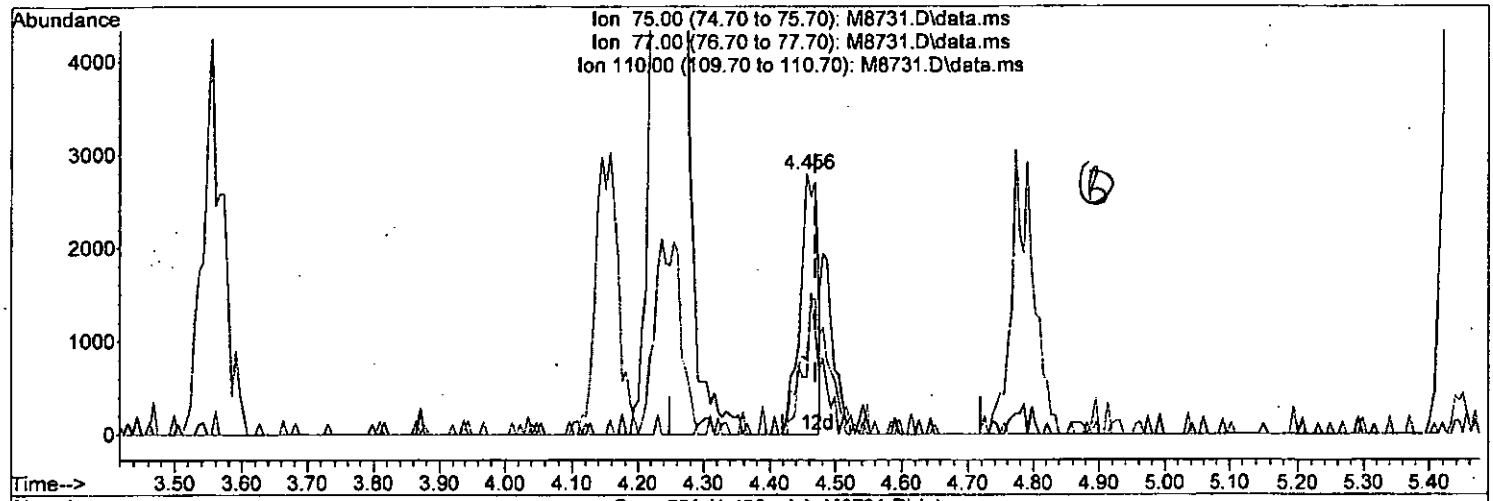
Ion	Exp%	Act%
77.00	100	100
79.00	28.40	17.95
97.00	20.50	25.52
0.00	0.00	0.00

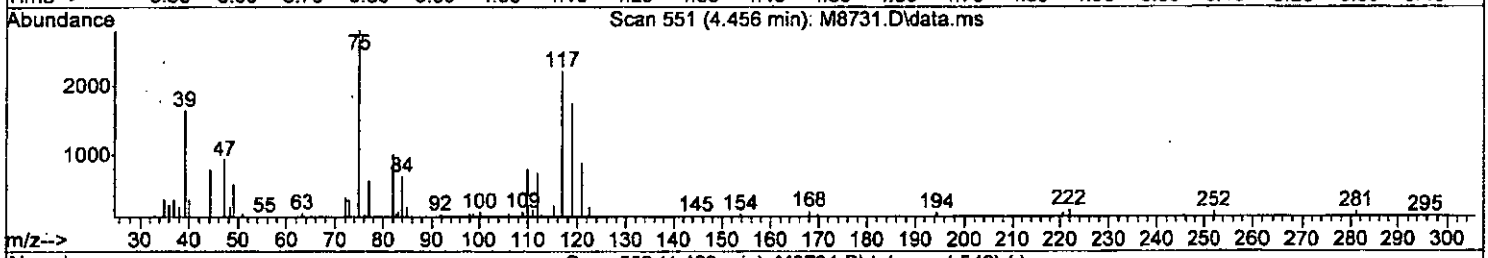
W090914.M Wed Sep 10 09:08:26 2014 Page: 1

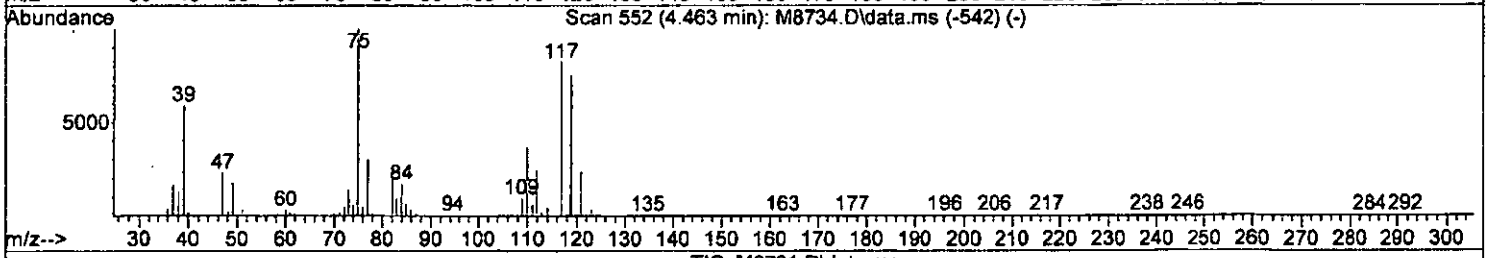
00334

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8731.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 4:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:24 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8731.D\data.ms

(47) 1,1-Dichloropropene

4.456min (-0.012) 0.55 ppb

response 5075

Ion	Exp%	Act%
75.00	100	100
77.00	30.80	21.99
110.00	36.40	28.12
0.00	0.00	0.00

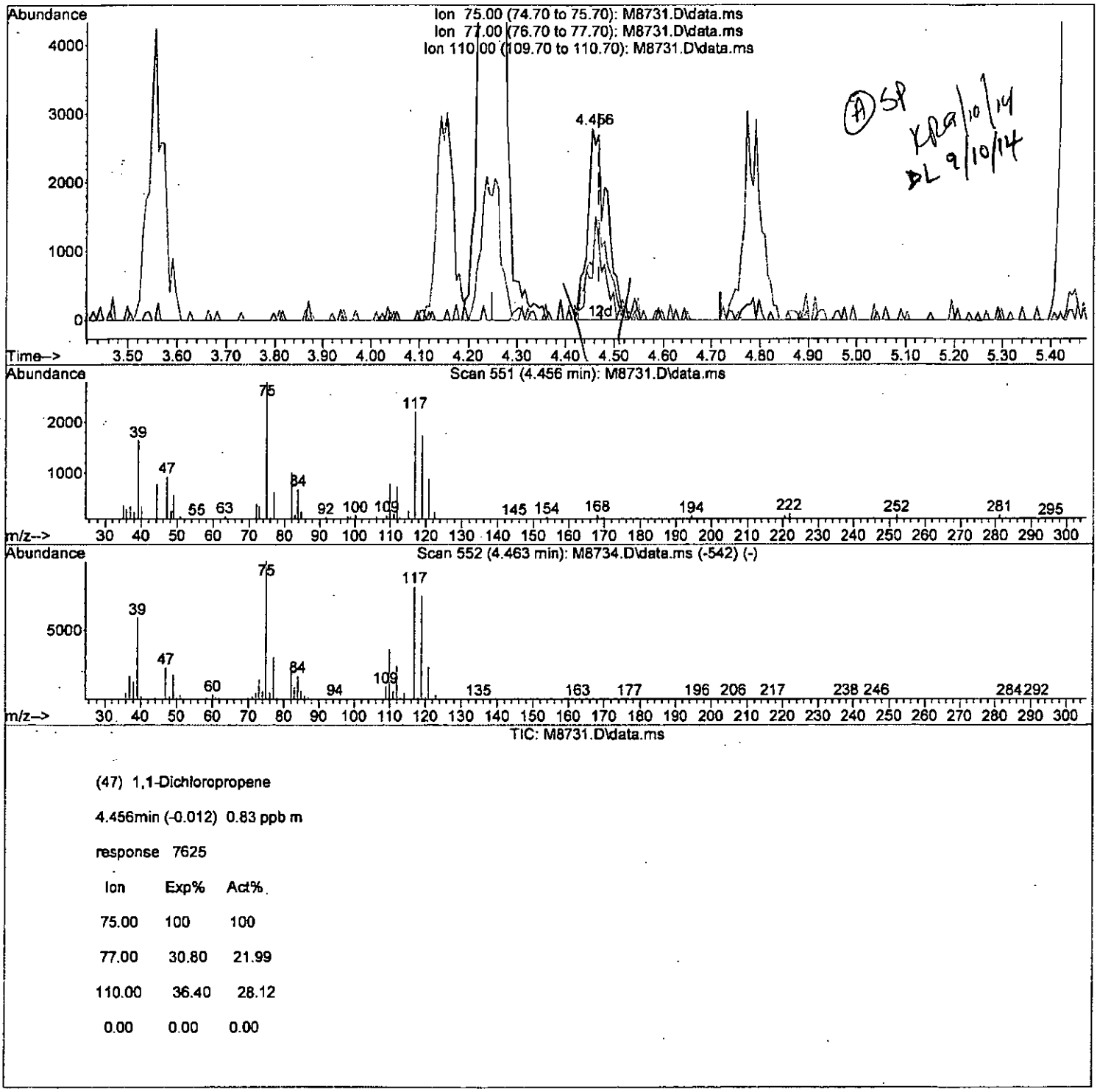
W090914.M Wed Sep 10 09:08:58 2014 Page: 1

00335

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8731.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 4:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:24 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



(47) 1,1-Dichloropropene

4.456min (-0.012) 0.83 ppb m

response 7625

Ion	Exp%	Act%
75.00	100	100
77.00	30.80	21.99
110.00	36.40	28.12
0.00	0.00	0.00

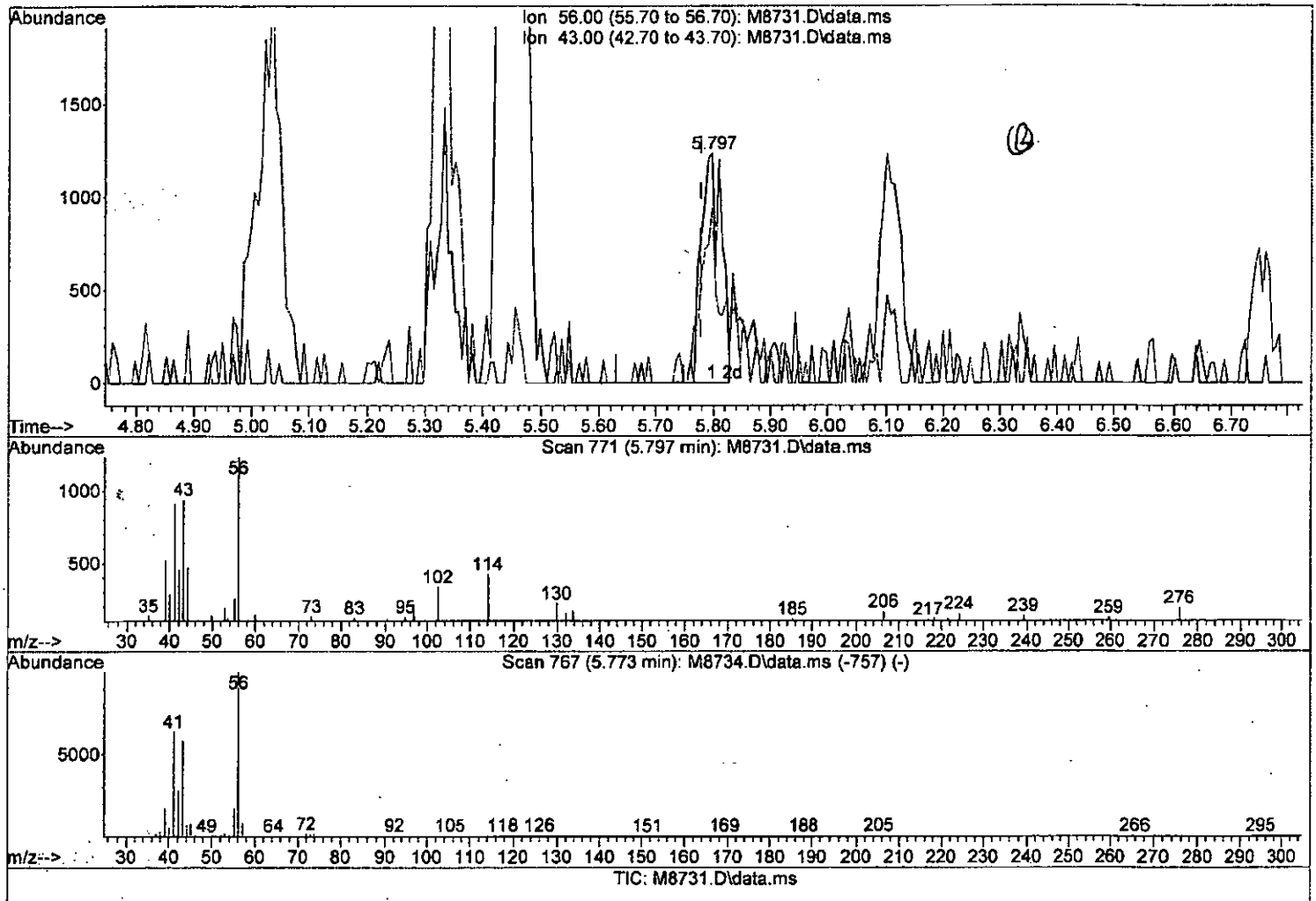
W090914.M Wed Sep 10 09:09:07 2014 Page: 1

00336

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8731.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 4:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:24 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



(53) 1-Butanol

5.797min (+0.018) 27.19 ppb

response 3000

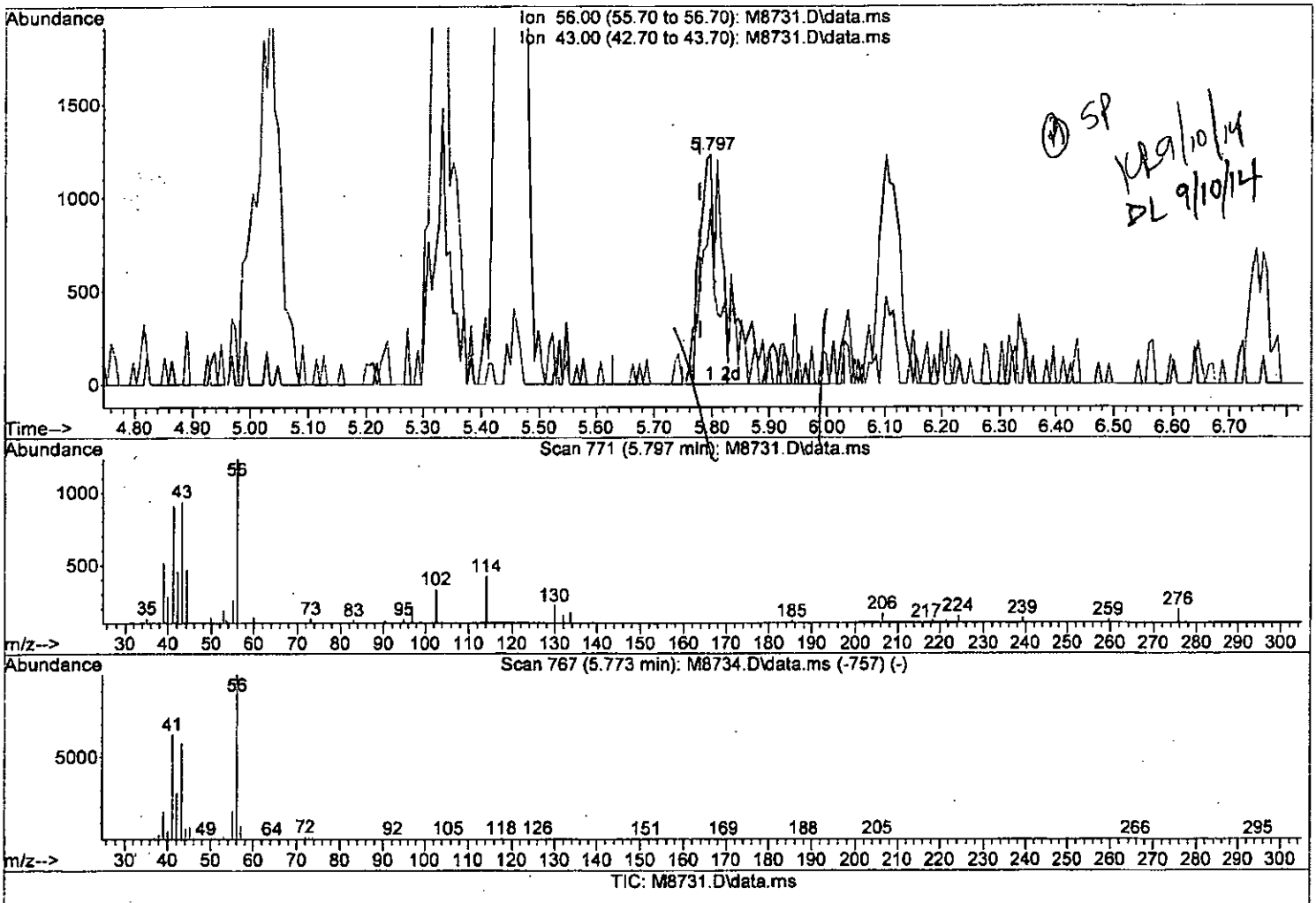
Ion	Exp%	Act%
56.00	100	100
43.00	57.60	87.10#
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Wed Sep 10 09:10:44 2014 Page: 1

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8731.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 4:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:24 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8731.D\data.ms

(53) 1-Butanol

5.797min (+0.018) 41.00 ppb m

response 4523

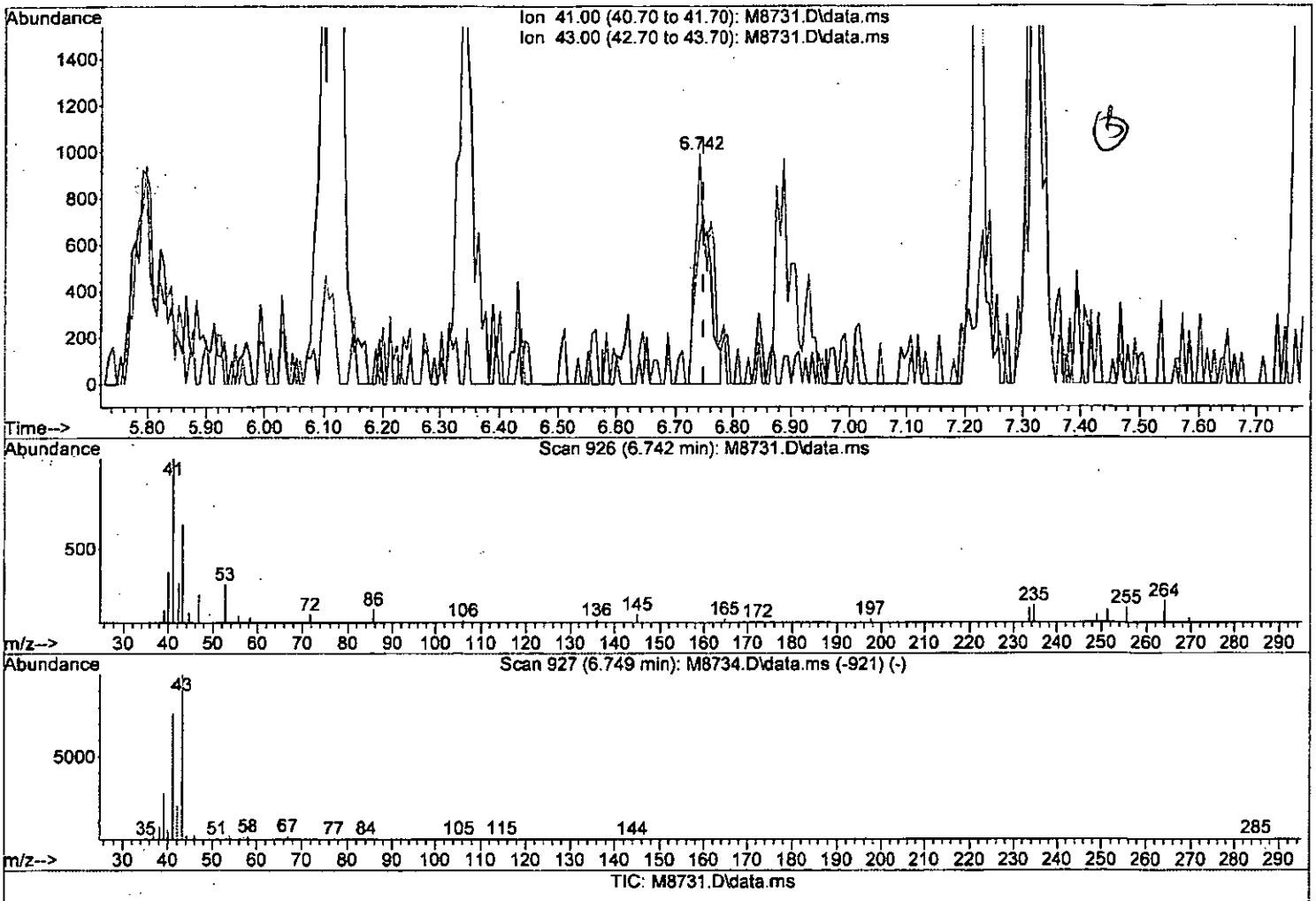
Ion	Exp%	Act%
56.00	100	100
43.00	57.60	57.77
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Wed Sep 10 09:10:50 2014 Page: 1

00338

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8731.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 4:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:24 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8731.D\data.ms

(61) 2-Nitropropane

6.742min (-0.006) 1.77 ppb

response 1581

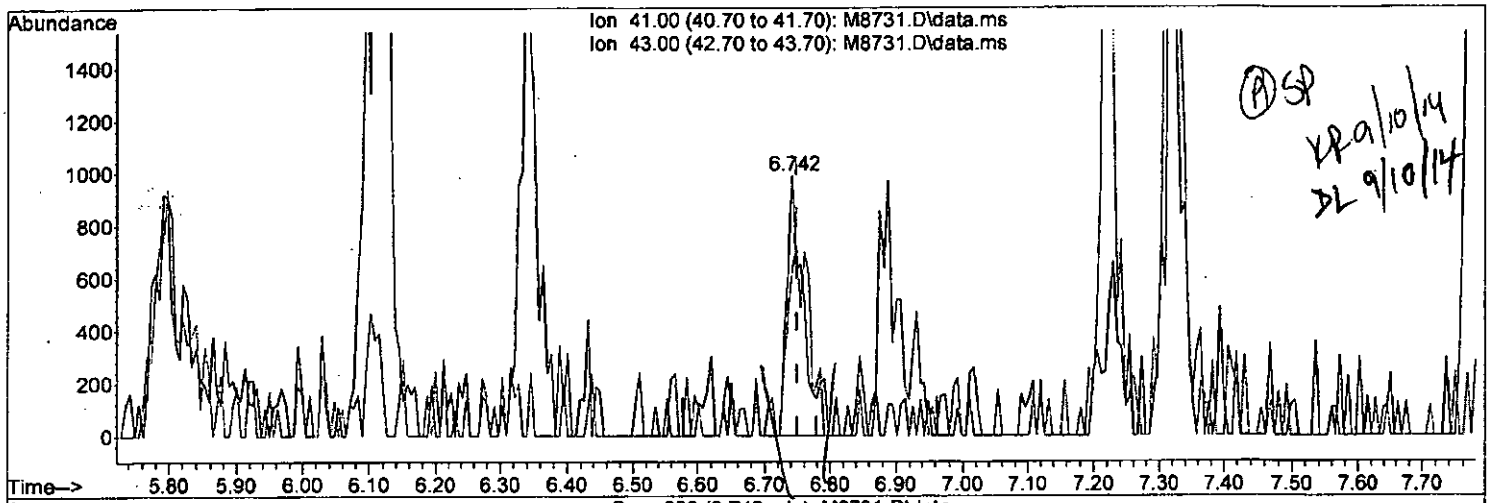
Ion	Exp%	Act%
41.00	100	100
43.00	130.50	64.04#
0.00	0.00	0.00
0.00	0.00	0.00

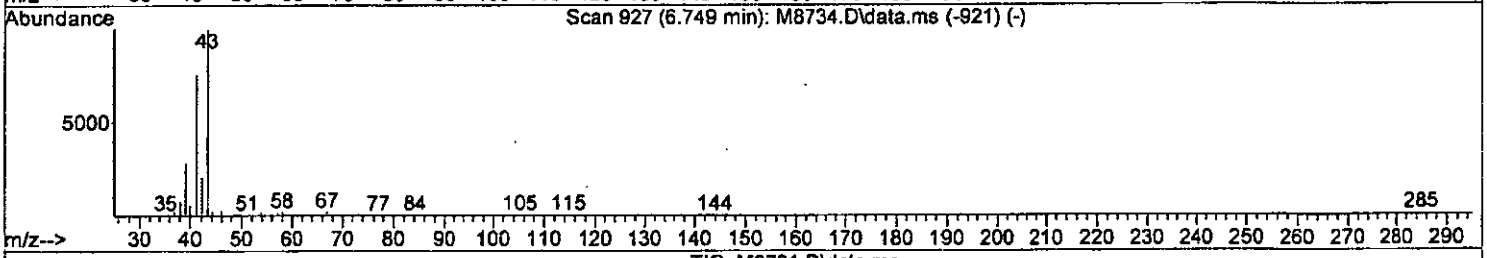
W090914.M Wed Sep 10 09:11:14 2014 Page: 1

00339

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8731.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 4:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:24 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration





TIC: M8731.D\data.ms

(61) 2-Nitropropane

6.742min (-0.006) 1.94 ppb m

response 1733

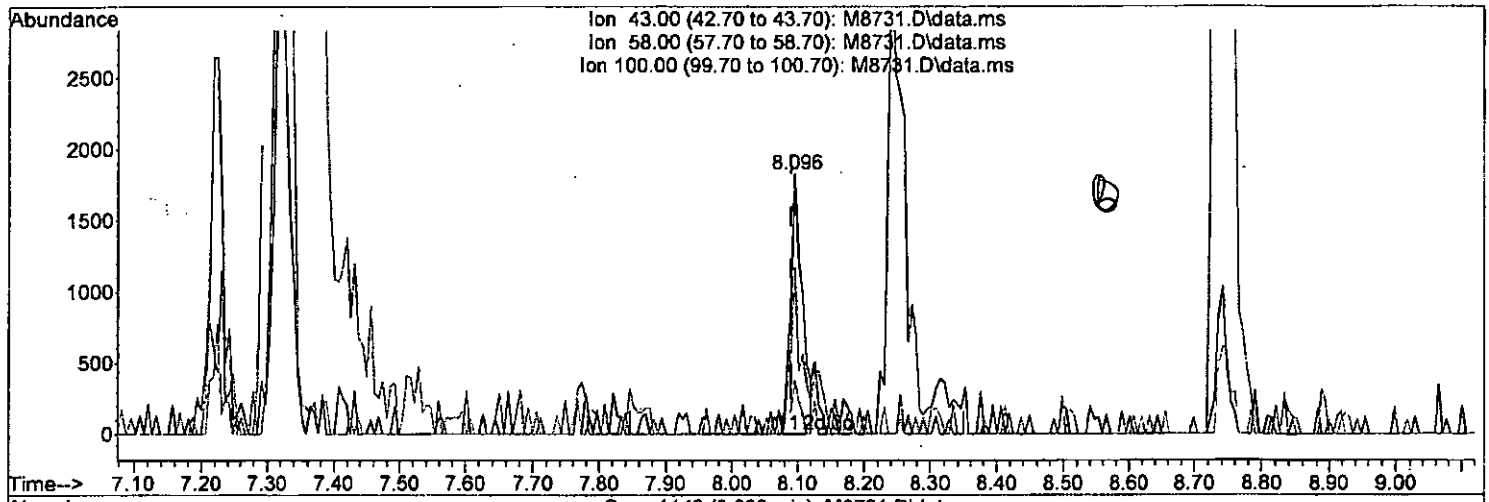
Ion	Exp%	Act%
41.00	100	100
43.00	130.50	64.04#
0.00	0.00	0.00
0.00	0.00	0.00

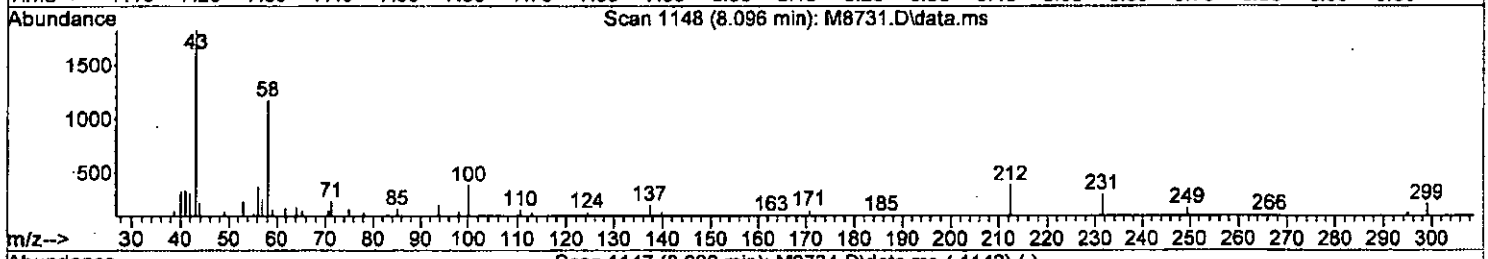
W090914.M Wed Sep 10 09:11:19 2014 Page: 1

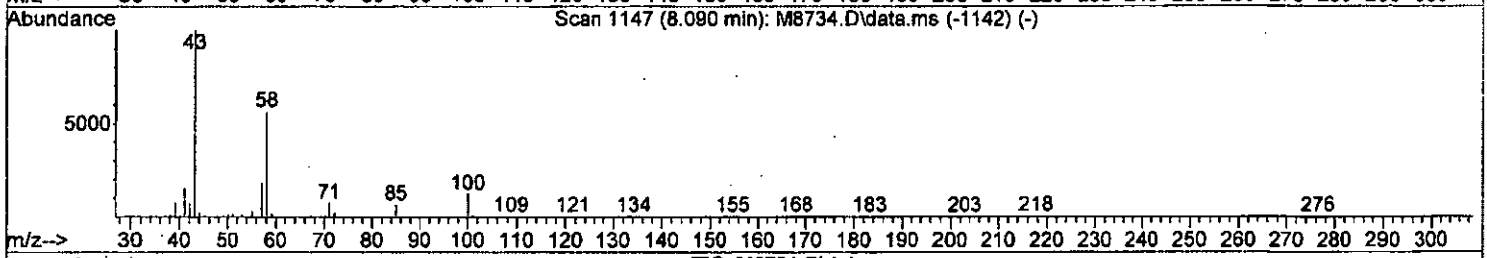
00340

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8731.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 4:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:24 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8731.D\data.ms

(73) 2-Hexanone (P)

8.096min (+0.006) 0.71 ppb

response 2258

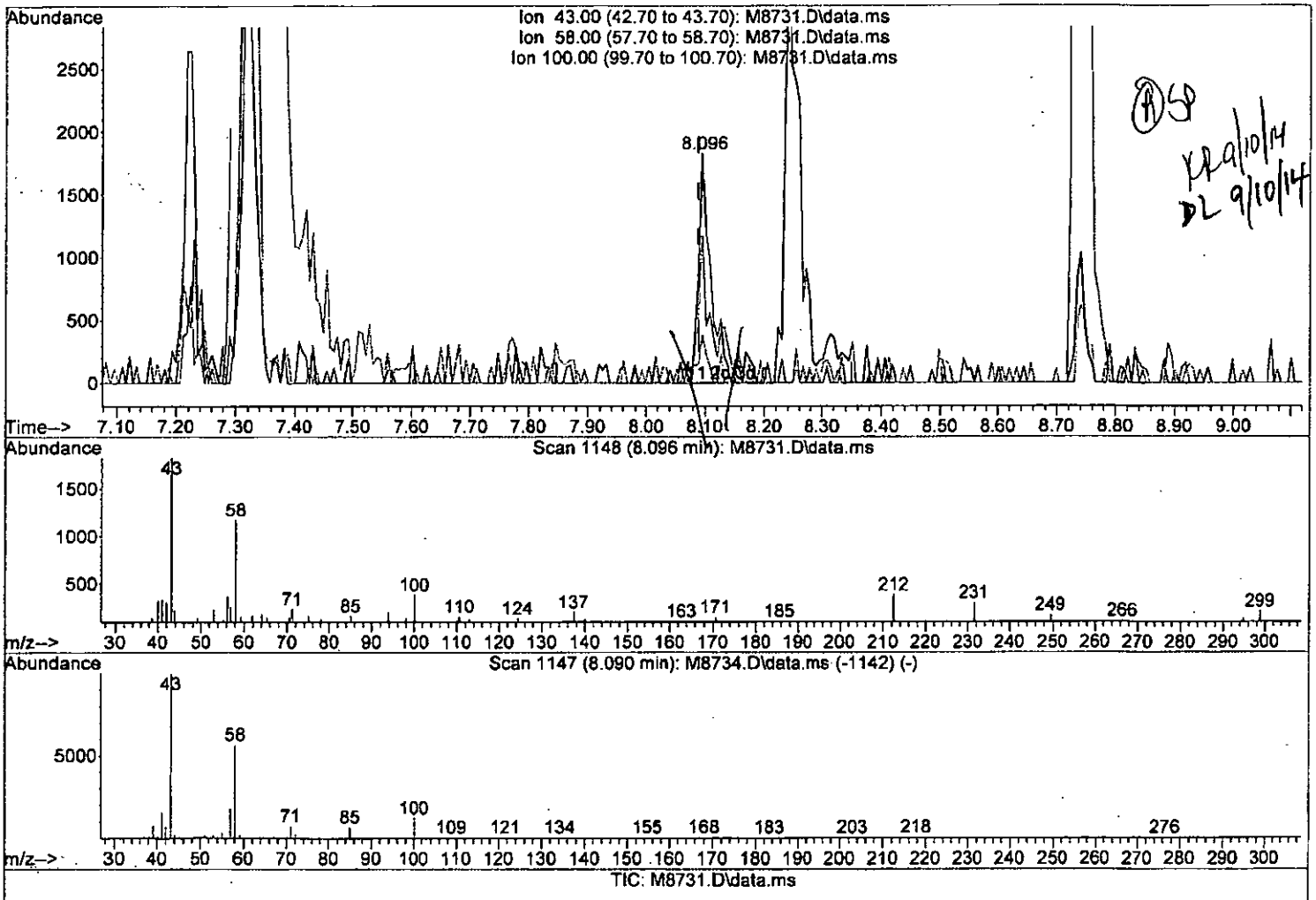
Ion	Exp%	Act%
43.00	100	100
58.00	56.80	64.06
100.00	12.10	20.90
0.00	0.00	0.00

W090914.M Wed Sep 10 09:11:36 2014 Page: 1

00341

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8731.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 4:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:24 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



(73) 2-Hexanone (P)

8.096min (+0.006) 0.81 ppb m

response 2572

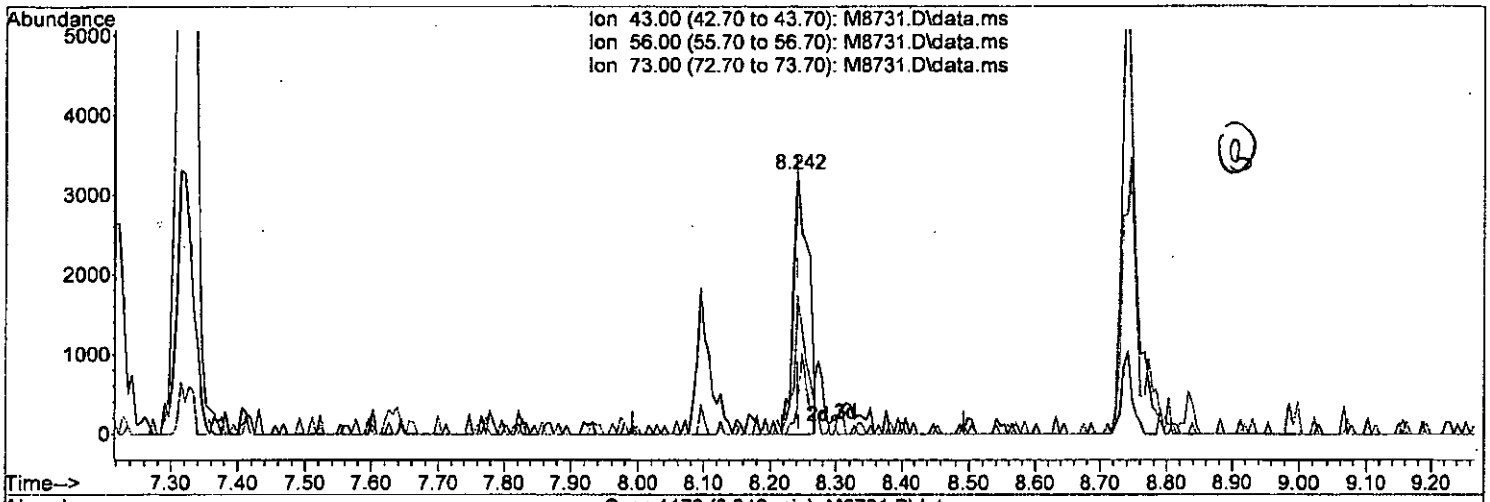
Ion	Exp%	Act%
43.00	100	100
58.00	56.80	64.06
100.00	12.10	20.80
0.00	0.00	0.00

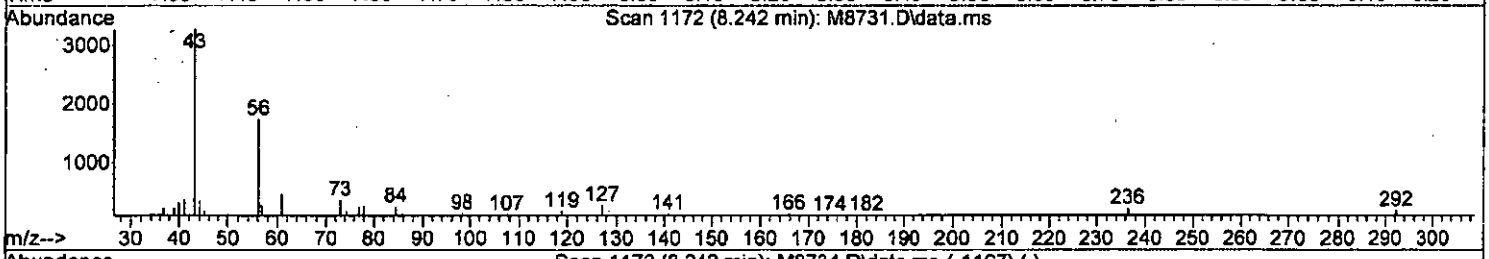
W090914.M Wed Sep 10 09:11:43 2014 Page: 1

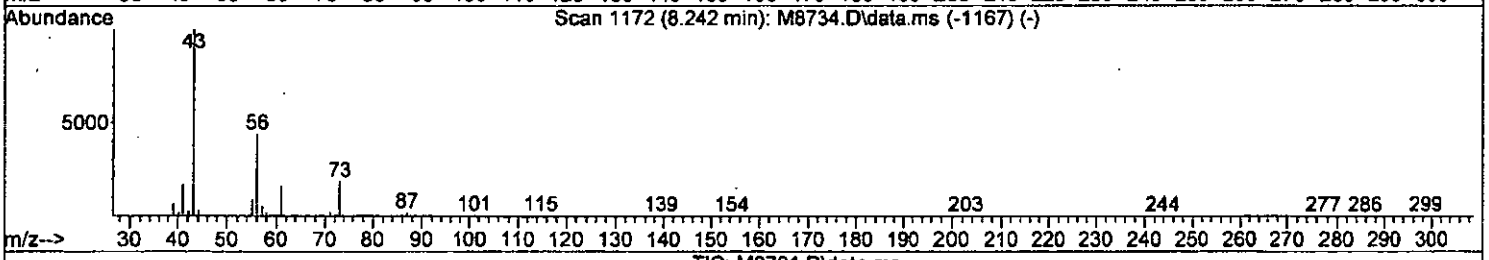
00342

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8731.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 4:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:24 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8731.D\data.ms

(76) N-Butyl Acetate

8.242min (-0.000) 0.74 ppb

response 5085

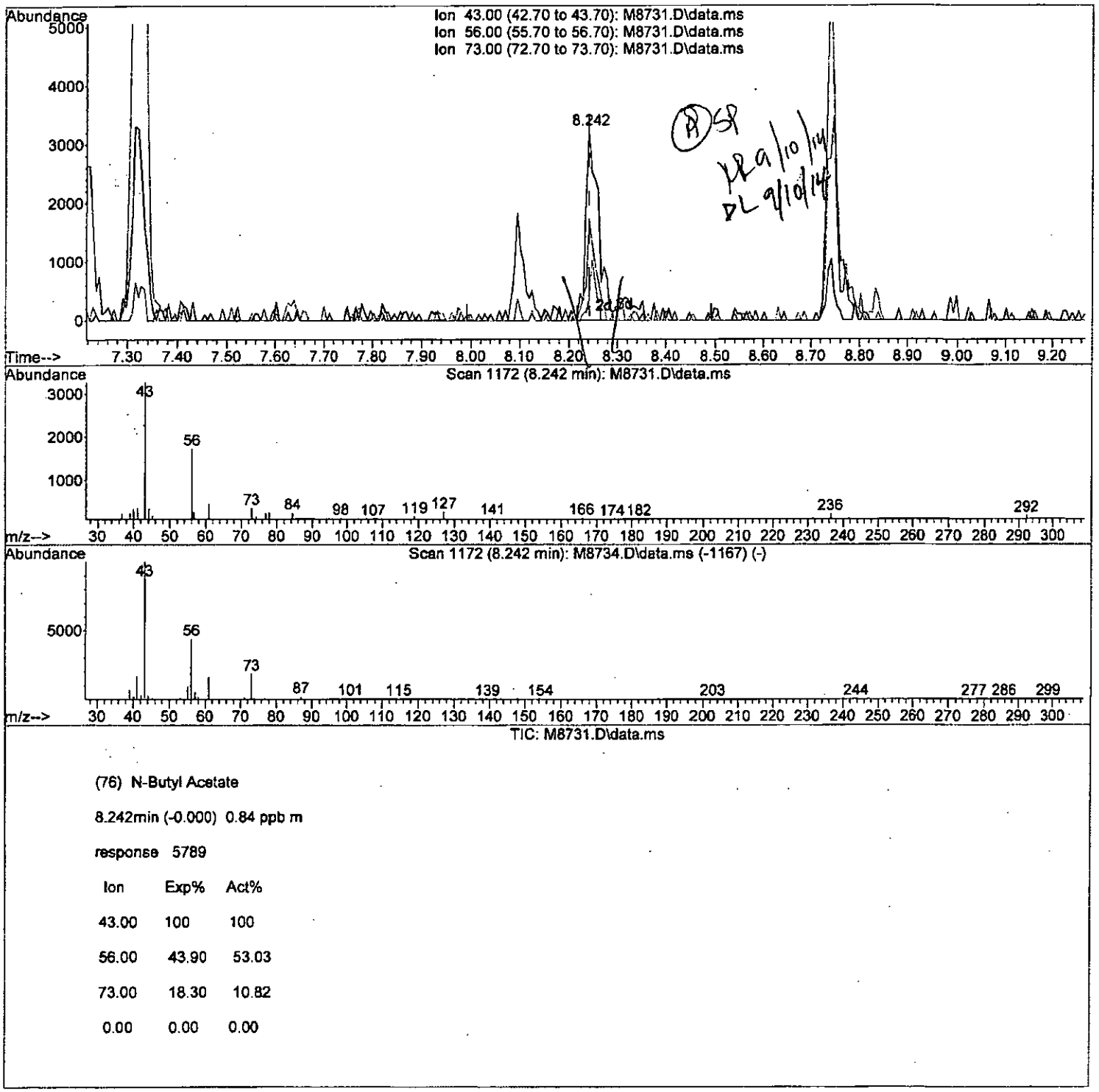
Ion	Exp%	Act%
43.00	100	100
56.00	43.90	61.07
73.00	18.30	10.82
0.00	0.00	0.00

W090914.M Wed Sep 10 09:11:50 2014 Page: 1

Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8731.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 4:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:24 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8731.D\data.ms

(76) N-Butyl Acetate

8.242min (-0.000) 0.84 ppb m

response 5789

Ion	Exp%	Act%
43.00	100	100
56.00	43.90	53.03
73.00	18.30	10.82
0.00	0.00	0.00

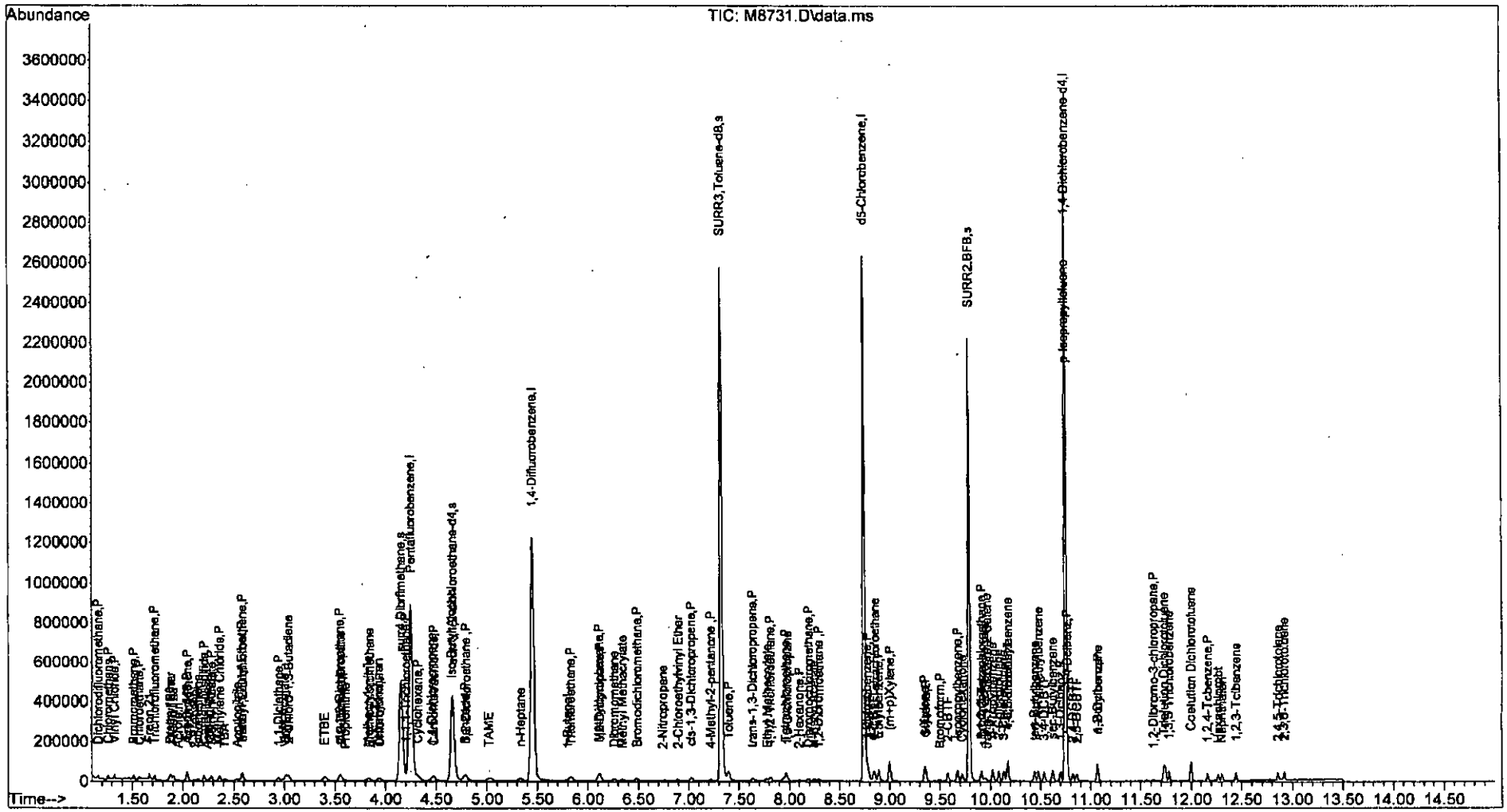
W090914.M Wed Sep 10 09:11:55 2014 Page: 1

00344

Quantitation Report (QT Reviewed)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8731.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 4:36 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:11:53 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



W090914.M Wed Sep 10 09:12:27 2014

Quantitation Report (QT Reviewed)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:18:31 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	793130	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1275954	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1150162	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	586961	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.158	113	438526	61.70	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 123.40%#				
48) surr1,1,2-dichloroetha...	4.664	65	462155	60.34	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 120.68%				
65) SURR3,Toluene-d8	7.322	98	1832631	61.10	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 122.20%#				
70) SURR2,BFB	9.791	95	642057	59.80	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 119.60%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	13138	1.71	ppb		97
3) Chloromethane	1.262	50	14901	1.78	ppb		89
4) Vinyl Chloride	1.323	62	15710	1.77	ppb		98
5) Bromomethane	1.512	94	10358m	2.03	ppb		
6) Chloroethane	1.567	64	8869	1.79	ppb		100
7) Freon 21	1.664	67	25008	1.90	ppb		89
8) Trichlorofluoromethane	1.719	101	20391	1.91	ppb		94
9) Diethyl Ether	1.884	59	8891	1.73	ppb	#	87
10) Freon 123a	1.872	67	14710	1.76	ppb		97
11) Freon 123	1.902	83	16649	1.80	ppb		96
12) Acrolein	1.957	56	4489	9.28	ppb	#	76
13) 1,1-Diclethene	2.042	96	9962	1.76	ppb		88
14) Freon 113	2.036	101	12894	1.96	ppb		99
15) Acetone	2.048	43	3565	2.19	ppb		79
16) 2-Propanol	2.122	45	8673	33.39	ppb		97
17) Iodomethane	2.146	142	13064	1.54	ppb		96
18) Carbon Disulfide	2.207	76	40754	1.90	ppb		99
19) Acetonitrile	2.231	40	1738	7.89	ppb	#	54
20) Allyl Chloride	2.274	76	6793	1.77	ppb		95
21) Methyl Acetate	2.280	43	5823	1.75	ppb		93
22) Methylene Chloride	2.359	84	13539	1.86	ppb		86
23) TBA	2.408	59	14096	32.33	ppb		87
24) Acrylonitrile	2.524	53	13967	8.98	ppb	#	80
25) Methyl-t-Butyl Ether	2.585	73	29095	1.81	ppb		97
26) trans-1,2-Dichloroethene	2.585	96	12079	1.71	ppb		98
28) 1,1-Diclethane	2.945	63	23507	1.87	ppb		90
29) Vinyl Acetate	2.981	86	1834m	1.78	ppb		
30) DIPE	3.018	45	46880	1.97	ppb		94
31) 2-Chloro-1,3-Butadiene	3.048	53	22200	1.82	ppb		94
32) ETBE	3.402	59	39972	1.91	ppb		93
33) 2,2-Dichloropropane	3.560	77	18274	1.84	ppb		86
34) cis-1,2-Dichloroethene	3.548	96	13425	1.70	ppb		99
35) 2-Butanone	3.566	43	3848	1.80	ppb		76
36) Propionitrile	3.609	54	5467	9.51	ppb		76
37) Bromochloromethane	3.835	130	8052	1.85	ppb	#	83

KR 9/10/14

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:18:31 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.804	67	2883	1.57	ppb		92
39) Tetrahydrofuran	3.914	42	2624	1.97	ppb		80
40) Chloroform	3.944	83	28679	2.24	ppb		95
41) 1,1,1-Trichloroethane	4.213	97	20279	1.90	ppb	#	5
42) TAME	5.017	73	33624	1.88	ppb		90
44) Cyclohexane	4.310	41	11812	1.76	ppb		89
46) Carbontetrachloride	4.475	121	5545m	1.95	ppb		
47) 1,1-Dichloropropene	4.456	75	17089	1.84	ppb		91
49) Benzene	4.786	78	52763	1.82	ppb		92
50) 1,2-Dichloroethane	4.792	62	15847	1.84	ppb		93
51) Iso-Butyl Alcohol	4.652	43	6437m	33.35	ppb		
52) n-Heptane	5.334	43	12807	1.75	ppb		87
53) 1-Butanol	5.779	56	10173m	91.78	ppb		
54) Trichloroethene	5.828	130	13783m	1.80	ppb		
55) Methylcyclohexane	6.102	55	13549	1.71	ppb	#	87
56) 1,2-Diclpropane	6.115	63	13563	1.86	ppb		100
57) Dibromomethane	6.261	93	6742	1.91	ppb		87
58) 1,4-Dioxane	6.322	88	2815m	47.65	ppb		
59) Methyl Methacrylate	6.334	69	5365	1.61	ppb	#	83
60) Bromodichloromethane	6.480	83	16573	1.83	ppb		93
61) 2-Nitropropane	6.755	41	3400m	3.79	ppb		
62) 2-Chloroethylvinyl Ether	6.889	63	5570m	1.70	ppb		
63) cis-1,3-Dichloropropene	7.029	75	17711	1.68	ppb		91
64) 4-Methyl-2-pentanone	7.224	43	6957	1.61	ppb		96
66) Toluene	7.395	91	57726	1.83	ppb		99
67) trans-1,3-Dichloropropene	7.633	75	14285	1.66	ppb		92
68) Ethyl Methacrylate	7.773	69	11156	1.65	ppb		77
69) 1,1,2-Trichloroethane	7.816	97	9541	1.80	ppb	#	82
72) Tetrachloroethene	7.968	164	10749	1.82	ppb	#	81
73) 2-Hexanone	8.096	43	5898m	1.85	ppb		
74) 1,3-Dichloropropane	7.974	76	16884	1.72	ppb		84
75) Dibromochloromethane	8.194	129	10912	1.84	ppb		98
76) N-Butyl Acetate	8.242	43	10419m	1.51	ppb		
77) 1,2-Dibromoethane	8.291	107	8539	1.73	ppb		95
78) Chlorobenzene	8.773	112	35794	1.76	ppb		92
79) 3-CBTF	8.785	180	18954	1.88	ppb	#	93
80) 4-CBTF	8.840	180	17945	1.85	ppb		90
81) 1,1,1,2-Tetrachloroethane	8.852	131	12726	1.82	ppb		93
82) Ethylbenzene	8.889	106	18581	1.73	ppb		91
83) (m+p)Xylene	8.998	106	44541	3.43	ppb		92
84) o-Xylene	9.346	106	20800	1.65	ppb	#	65
85) Styrene	9.358	104	34431	1.66	ppb		96
87) Bromoform	9.498	173	5683	1.78	ppb		95
88) 2-CBTF	9.577	180	18268	1.92	ppb		96
89) Isopropylbenzene	9.675	105	54413	1.81	ppb		95
90) Cyclohexanone	9.724	55	24612	35.51	ppb		97
91) trans-1,4-Dichloro-2-B...	9.961	53	2714	1.81	ppb	#	72
92) 1,1,2,2-Tetrachloroethane	9.913	83	10501	1.74	ppb		91
93) Bromobenzene	9.913	156	14537	1.88	ppb		95
94) 1,2,3-Trichloropropane	9.943	110	3318	1.89	ppb	#	80
95) n-Propylbenzene	10.022	91	61813	1.76	ppb		96
96) 2-Chlorotoluene	10.083	91	38595	1.81	ppb		94

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:18:31 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

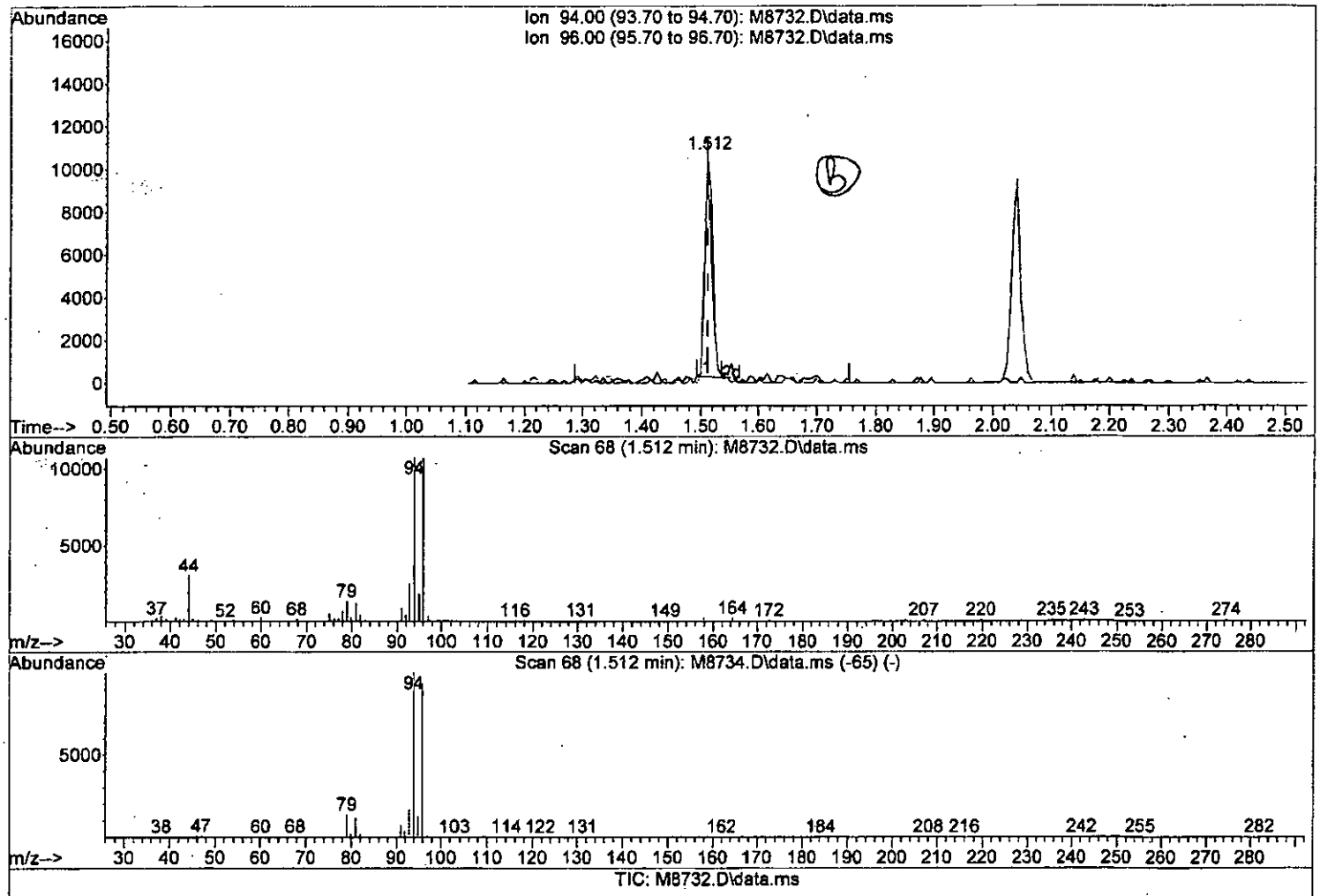
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
97)	3-Chlorotoluene	10.132	91	41910m	1.78	ppb		
98)	4-Chlorotoluene	10.175	91	44906	1.81	ppb		95
99)	1,3,5-Trimethylbenzene	10.175	105	41617	1.73	ppb		99
100)	tert-Butylbenzene	10.443	119	37785	1.87	ppb		89
101)	1,2,4-Trimethylbenzene	10.480	105	45526	1.84	ppb		87
102)	3,4-DCBTF	10.535	214	12357	1.82	ppb		97
103)	sec-Butylbenzene	10.620	105	55482	1.89	ppb		98
104)	p-Isopropyltoluene	10.742	119	43729	1.79	ppb		94
105)	1,3-Dclbenz	10.699	146	26196	1.80	ppb		95
106)	1,4-Dclbenz	10.772	146	28806	1.91	ppb		96
107)	2,4-DCBTF	10.821	214	10668	1.81	ppb		89
108)	2,5-DCBTF	10.864	214	12694	1.90	ppb		99
109)	n-Butylbenzene	11.071	91	38260	1.72	ppb		97
110)	1,2-Dclbenz	11.065	146	24440	1.75	ppb		97
111)	1,2-Dibromo-3-chloropr...	11.626	157	1524	1.43	ppb	#	32
112)	Trielution Dichlorotol...	11.729	125	64291	5.55	ppb		98
113)	1,3,5 Trichlorobenzene	11.778	180	19588	1.97	ppb		90
114)	Coelution Dichlorotoluene	11.998	125	44450	3.59	ppb		97
115)	1,2,4-Tcbenzene	12.162	180	14063	1.73	ppb		88
116)	Hexachlorobt	12.266	225	5982	1.86	ppb		96
117)	Naphthalen	12.302	128	28804	1.73	ppb		99
118)	1,2,3-Tclbenzene	12.443	180	12576	1.78	ppb	#	73
119)	2,4,5-Trichlorotolene	12.857	159	10448	1.90	ppb		94
120)	2,3,6-Trichlorotoluene	12.918	159	10235	1.89	ppb		93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8732.D\data.ms

(5) Bromomethane (P)

1.512min (-0.000) 1.86 ppb

response 9509

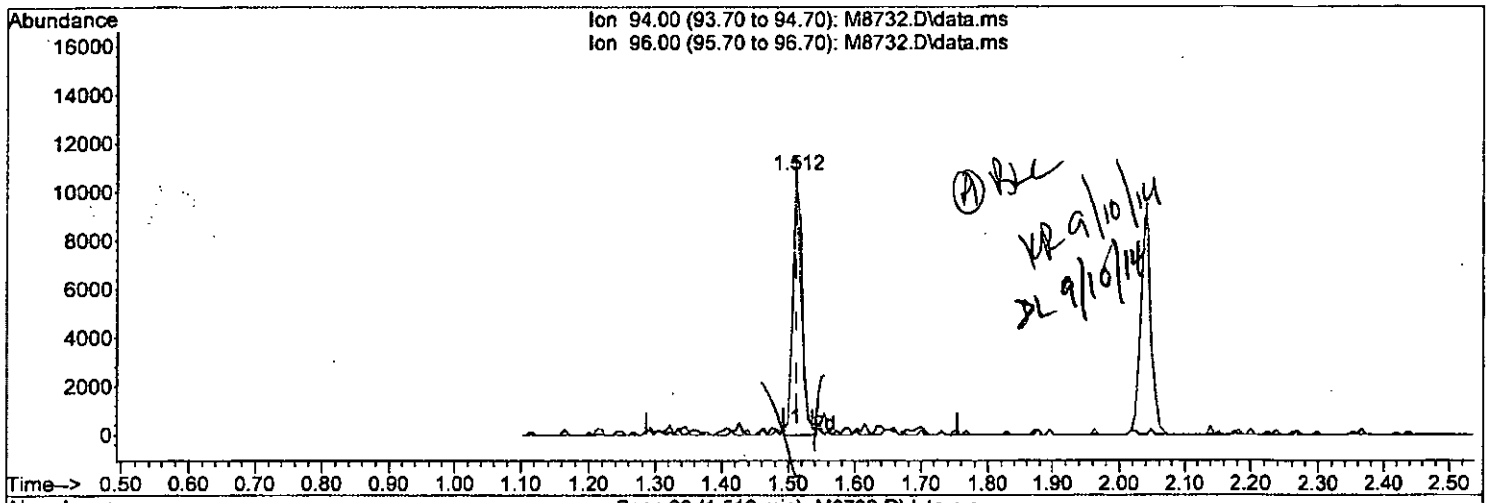
Ion	Exp%	Act%
94.00	100	100
96.00	93.50	99.68
0.00	0.00	0.00
0.00	0.00	0.00

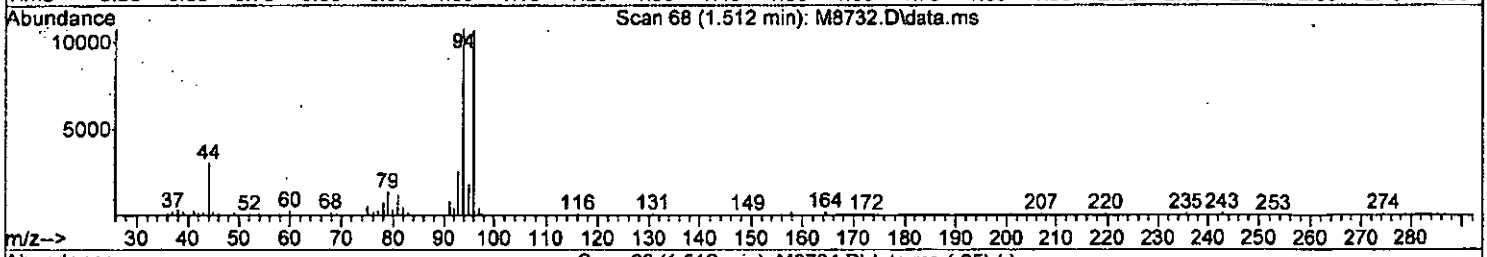
W090914.M Wed Sep 10 09:13:57 2014 Page: 1

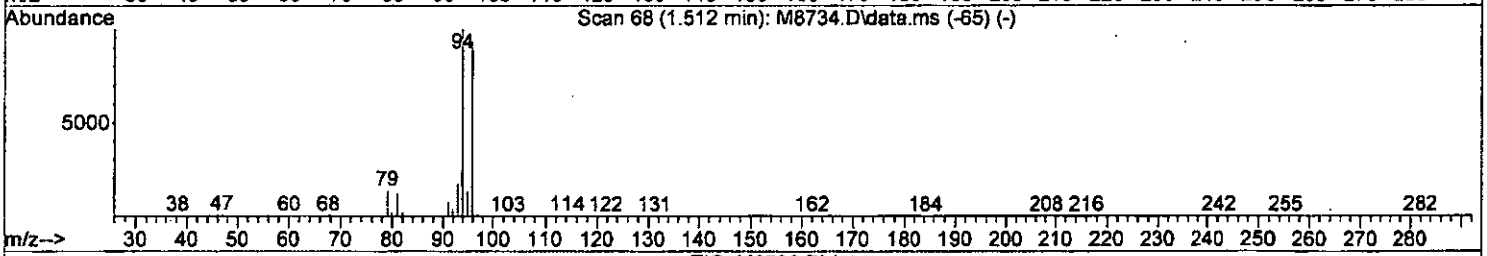
00349

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8732.D\data.ms

(5) Bromomethane (P)

1.512min (-0.000) 2.03 ppb m

response 10358

Ion	Exp%	Act%
94.00	100	100
96.00	93.50	99.68
0.00	0.00	0.00
0.00	0.00	0.00

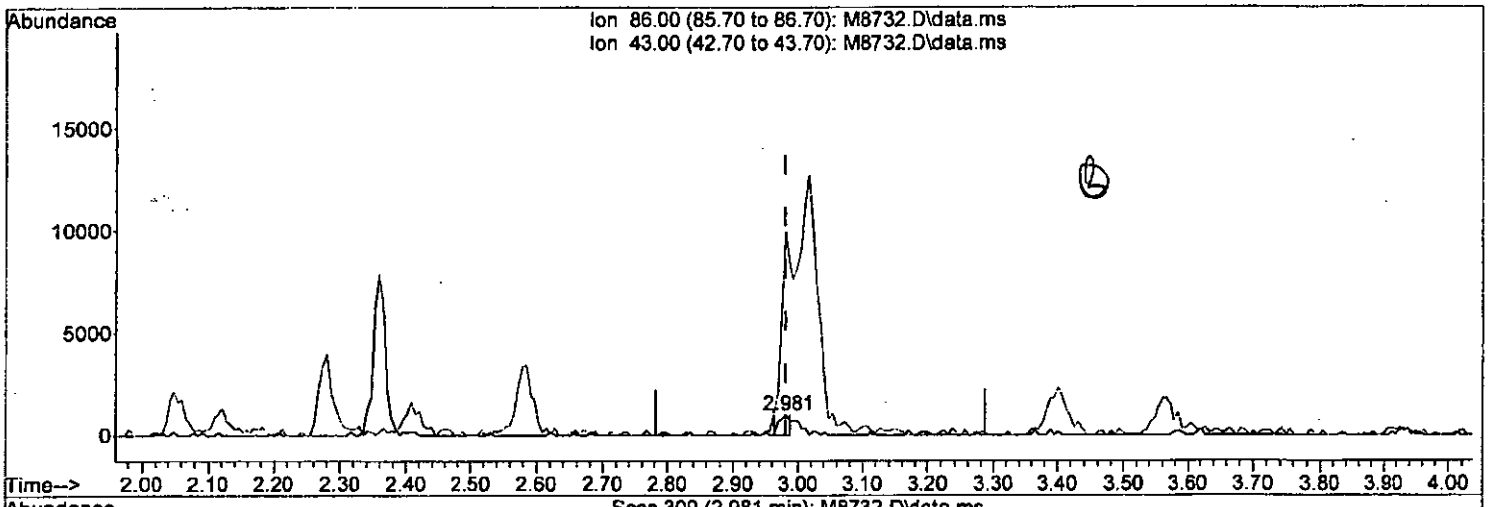
W090914.M Wed Sep 10 09:14:03 2014 Page: 1

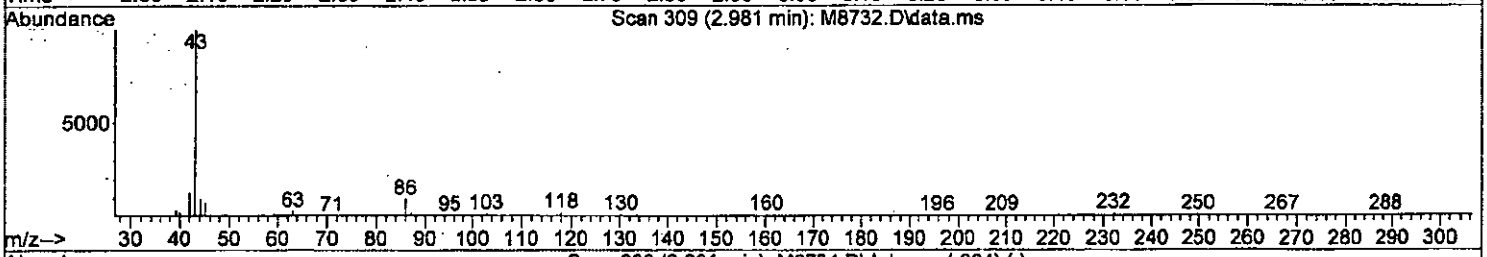
00350

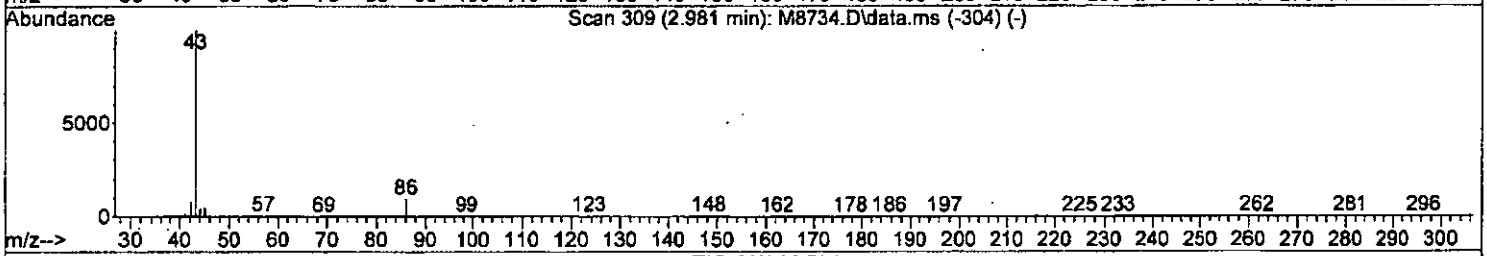
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8732.D\data.ms

(29) Vinyl Acetate

2.981min (-0.000) 1.08 ppb

response 1115

Ion	Exp%	Act%
86.00	100	100
43.00	1037.10	1008.23#
0.00	0.00	0.00
0.00	0.00	0.00

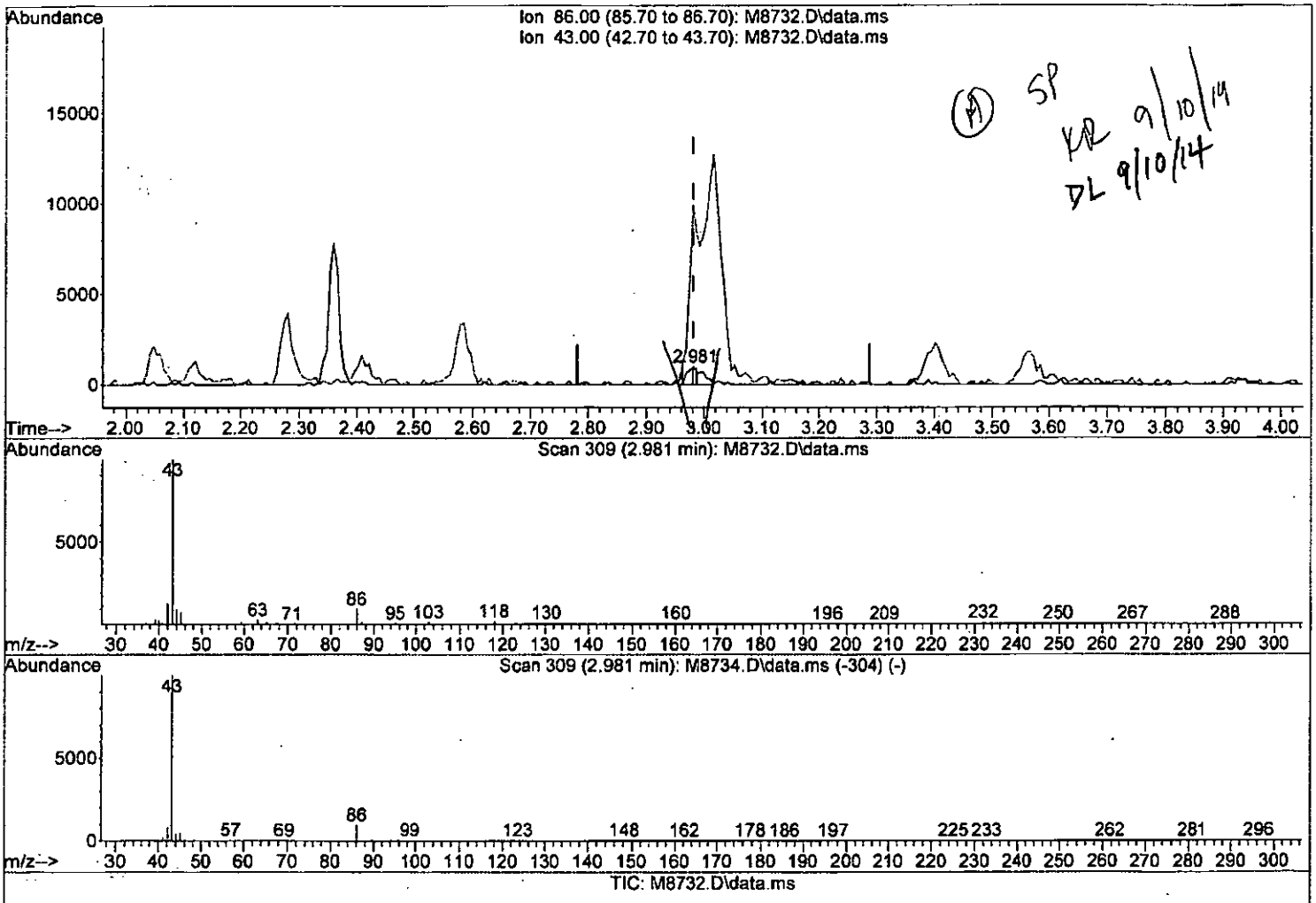
W090914.M Wed Sep 10 09:15:09 2014 Page: 1

00351

Quantitation Report (Qedit)

Sample' : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8732.D\data.ms

(29) Vinyl Acetate

2.981min (-0.000) 1.78 ppb m

response 1834

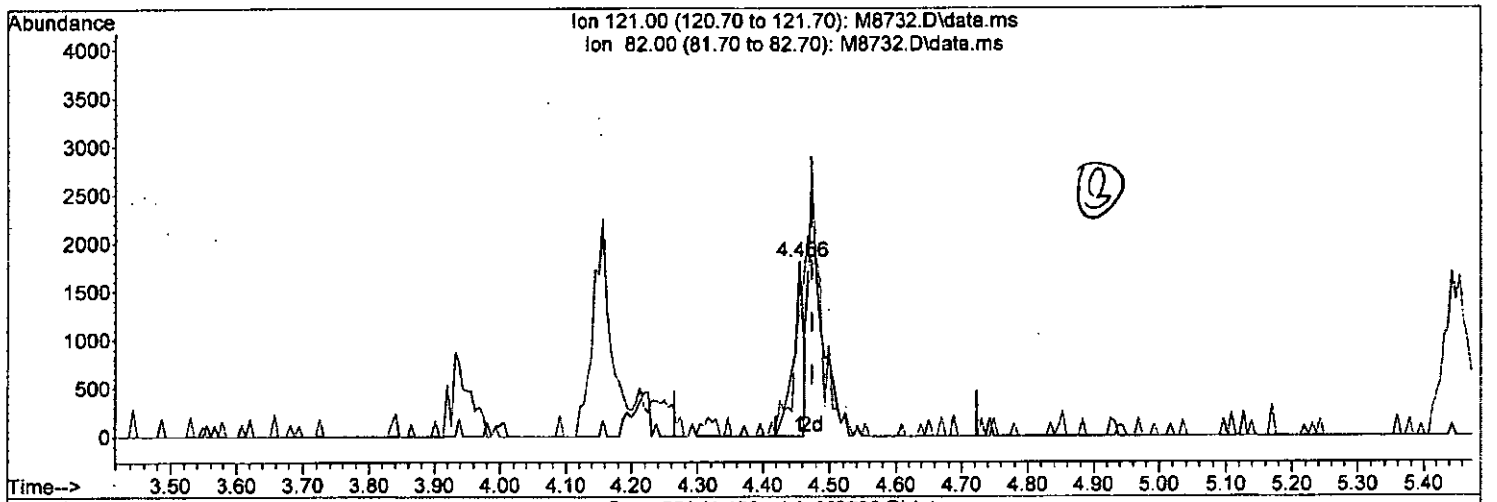
Ion	Exp%	Act%
86.00	100	100
43.00	1037.10	1008.23#
0.00	0.00	0.00
0.00	0.00	0.00

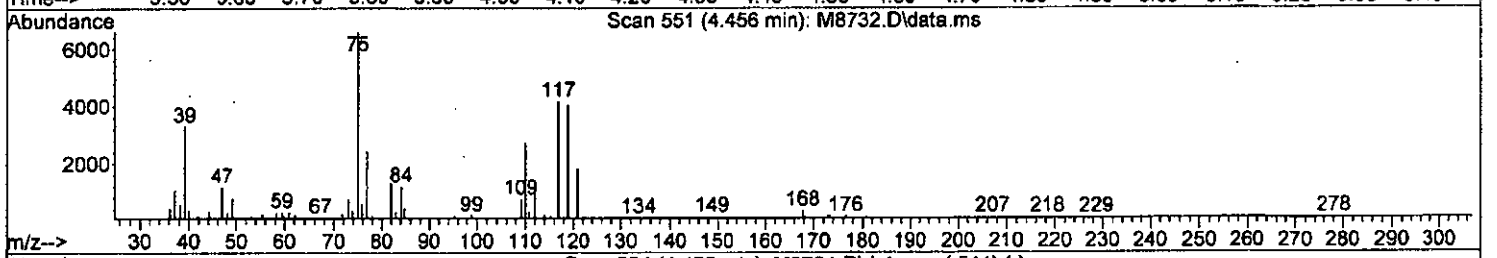
W090914.M Wed Sep 10 09:15:15 2014 Page: 1

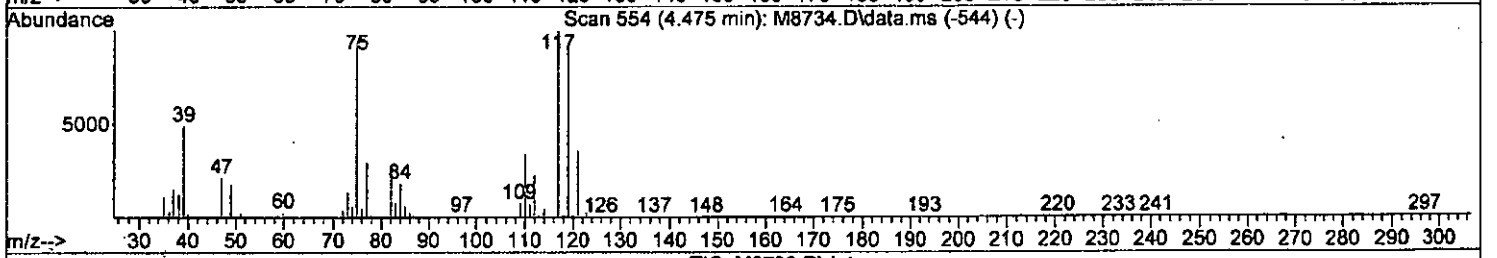
00352

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8732.D\data.ms

(46) Carbontetrachloride (P)

4.456min (-0.018) 0.67 ppb

response 1900

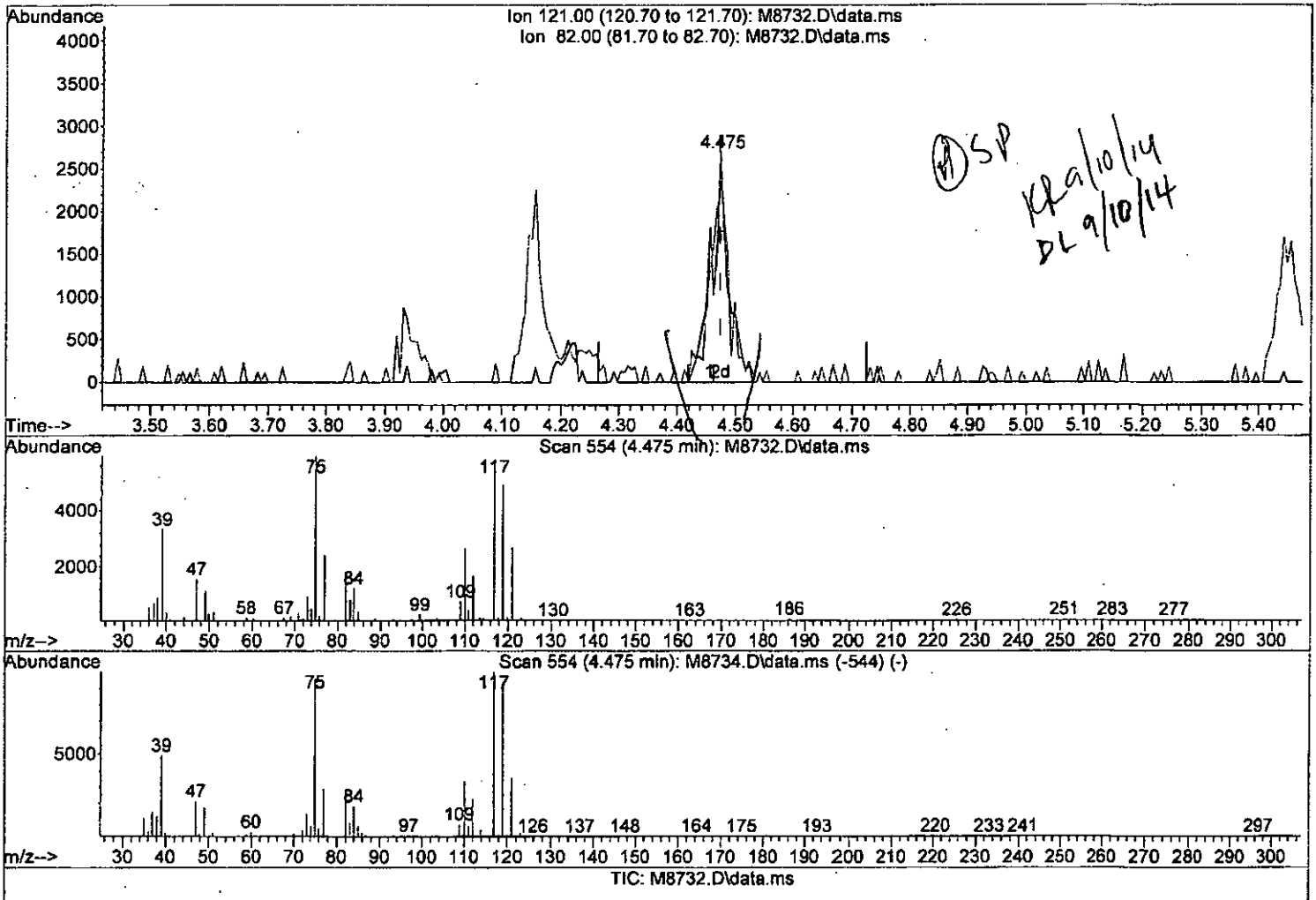
Ion	Exp%	Act%
121.00	100	100
82.00	80.90	72.91
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Wed Sep 10 09:15:42 2014 Page: 1

00353

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8732.D\data.ms

(46) Carbontetrachloride (P)

4.475min (-0.000) 1.95 ppb m

response 5545

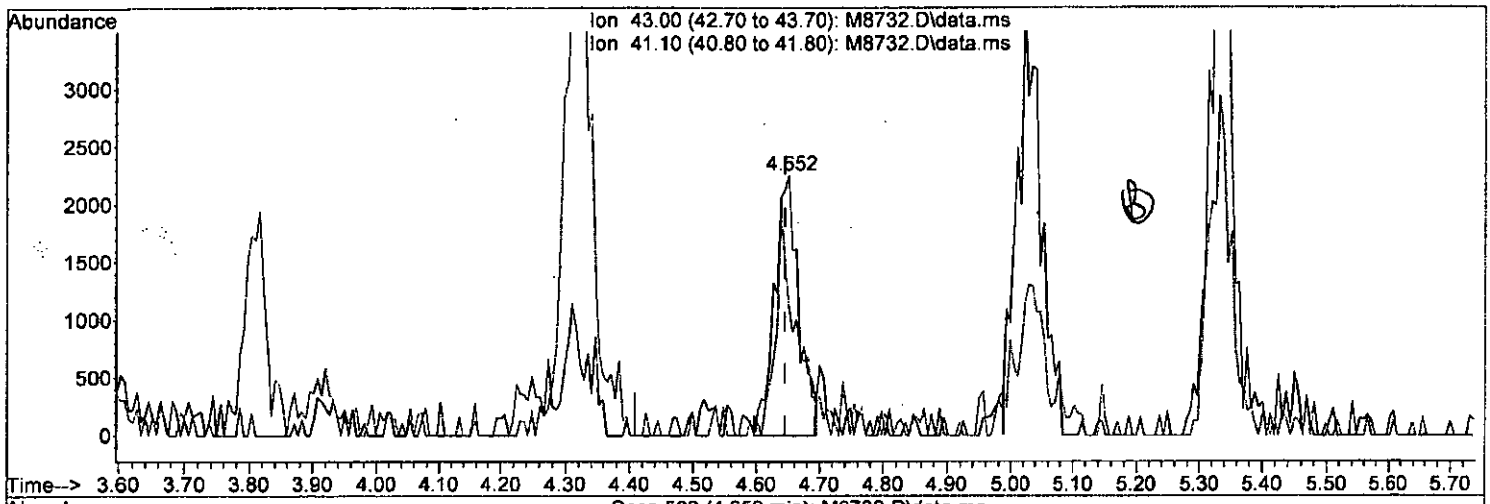
Ion	Exp%	Act%
121.00	100	100
82.00	80.90	60.36#
0.00	0.00	0.00
0.00	0.00	0.00

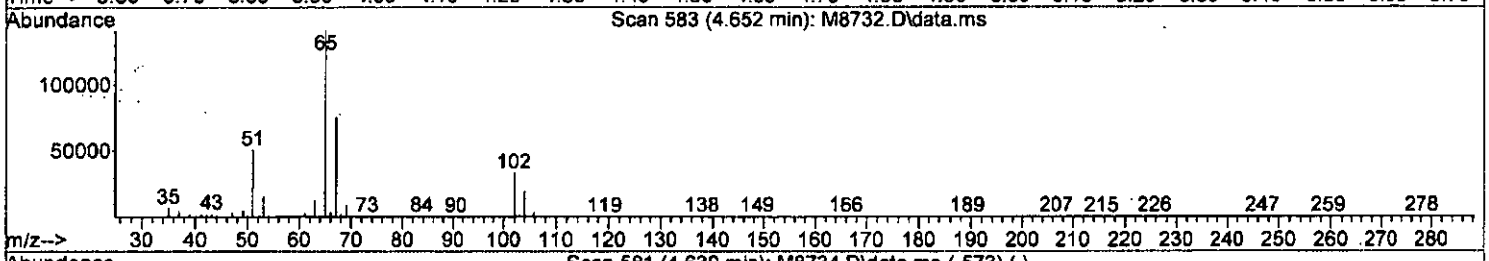
W090914.M Wed Sep 10 09:15:48 2014 Page: 1

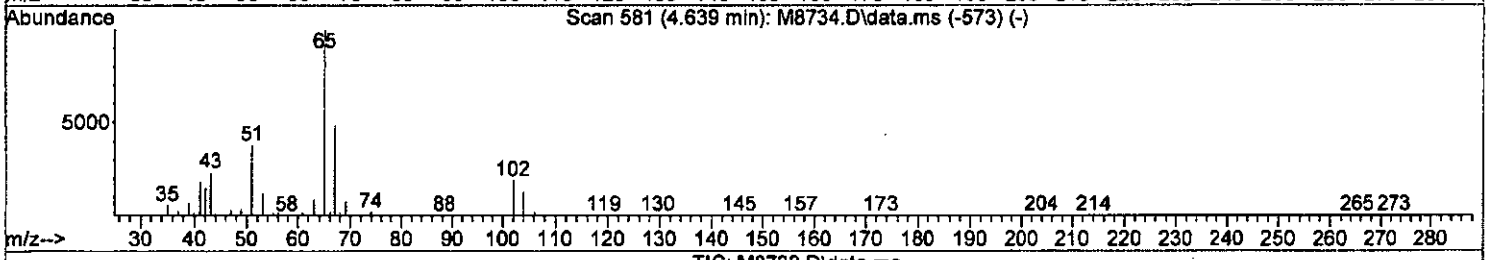
00354

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8732.D\data.ms

(51) Iso-Butyl Alcohol

4.652min (+0.006) 30.99 ppb

response 5980

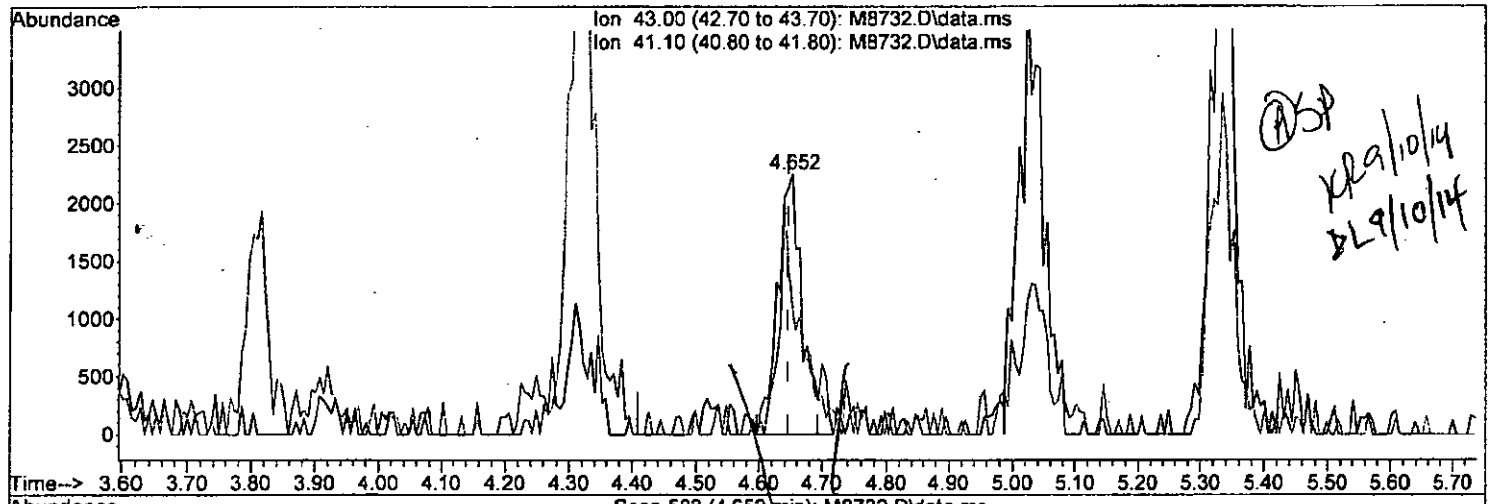
Ion	Exp%	Act%
43.00	100	100
41.10	77.80	49.84#
0.00	0.00	0.00
0.00	0.00	0.00

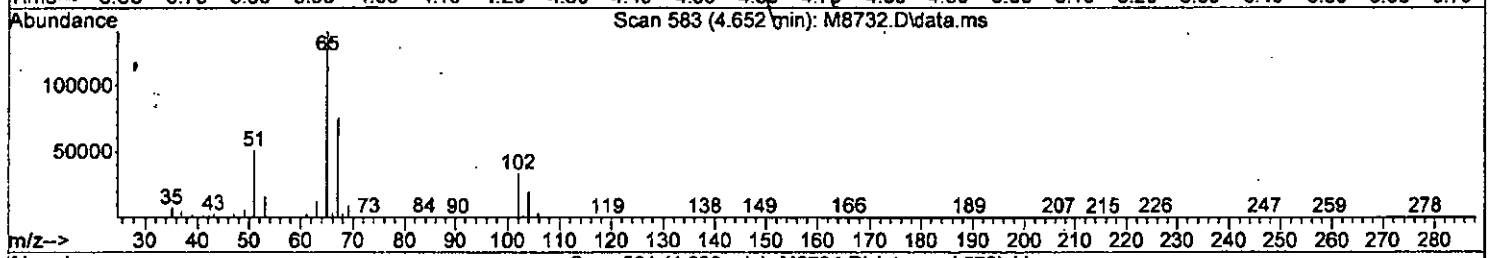
W090914.M Wed Sep 10 09:15:56 2014 Page: 1

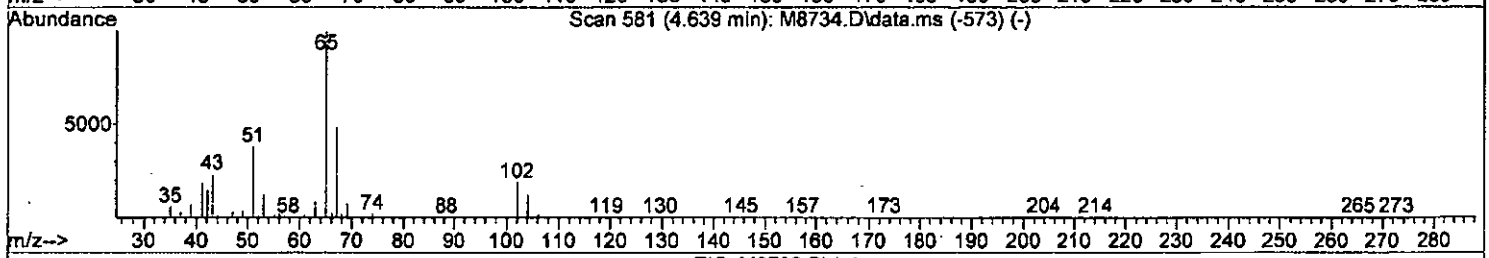
00355

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8732.D\data.ms

(51) Iso-Butyl Alcohol

4.652min (+0.006) 33.35 ppb m

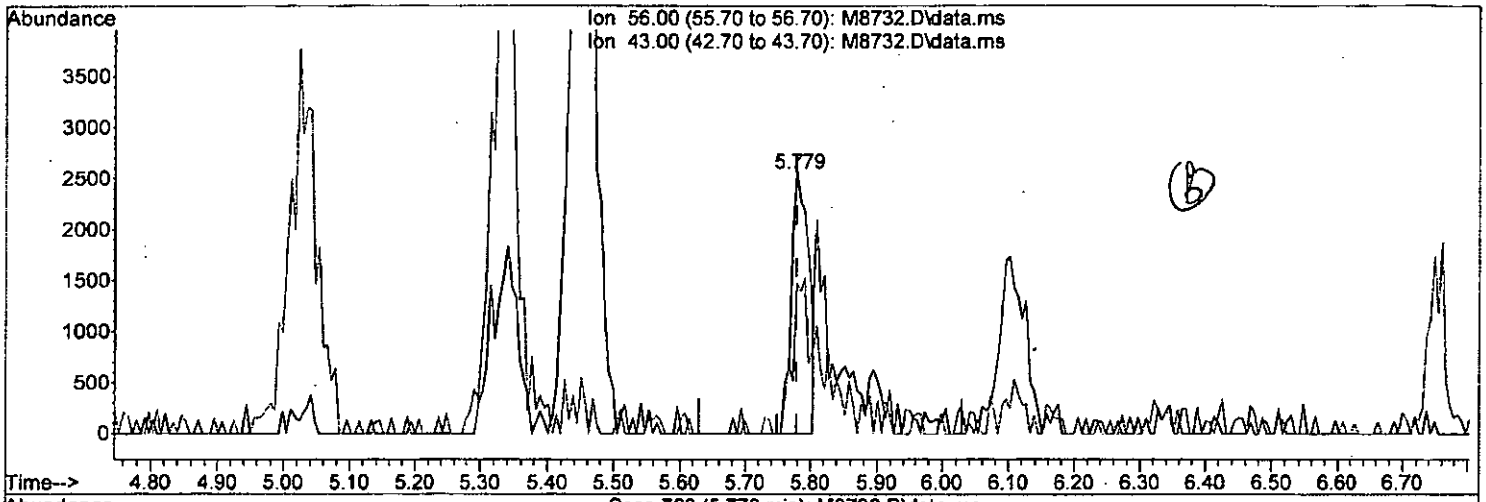
response 6437

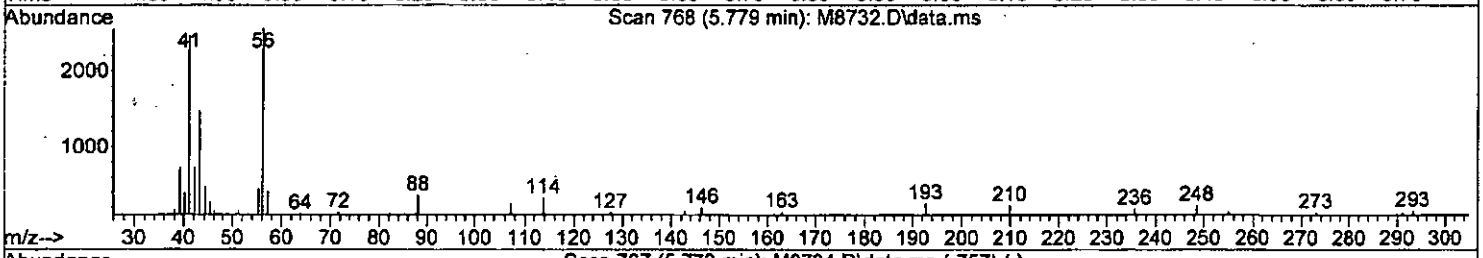
Ion	Exp%	Act%
43.00	100	100
41.10	77.80	49.84#
0.00	0.00	0.00
0.00	0.00	0.00

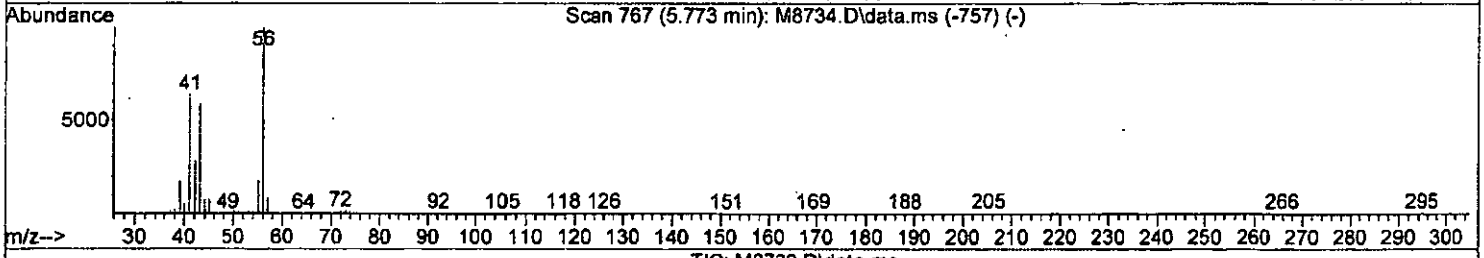
W090914.M Wed Sep 10 09:16:11 2014 Page: 1

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8732.D\data.ms

(53) 1-Butanol

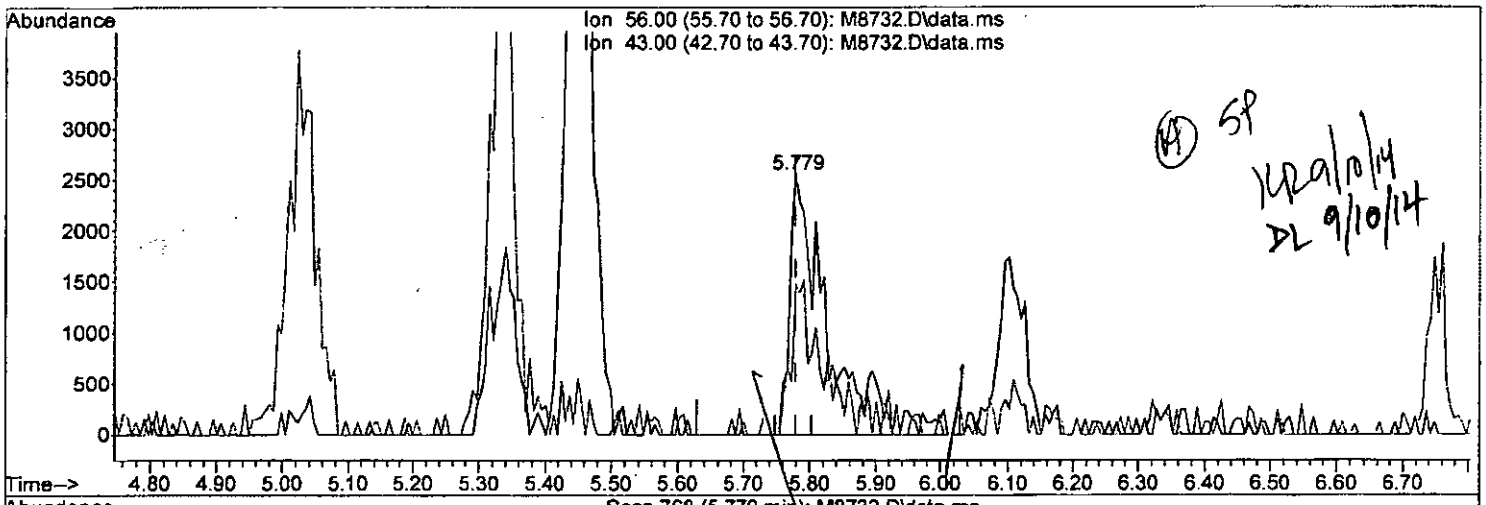
5.779min (-0.000) 43.09 ppb

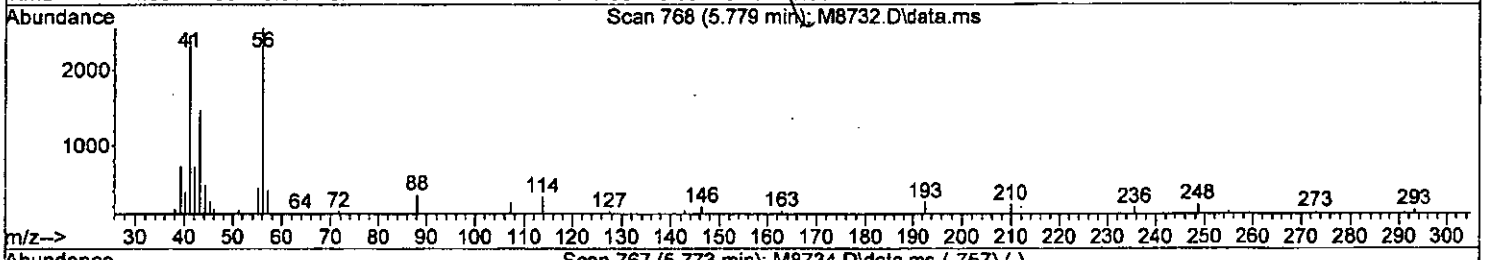
response 4776

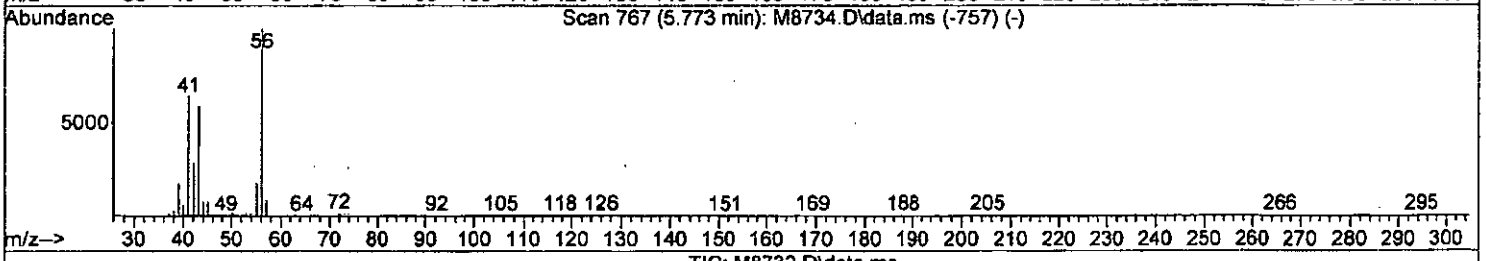
Ion	Exp%	Act%
56.00	100	100
43.00	57.60	72.68
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8732.D\data.ms

(53) 1-Butanol

5.779min (-0.000) 91.78 ppb m

response 10173

Ion	Exp%	Act%
56.00	100	100
43.00	57.60	34.12#
0.00	0.00	0.00
0.00	0.00	0.00

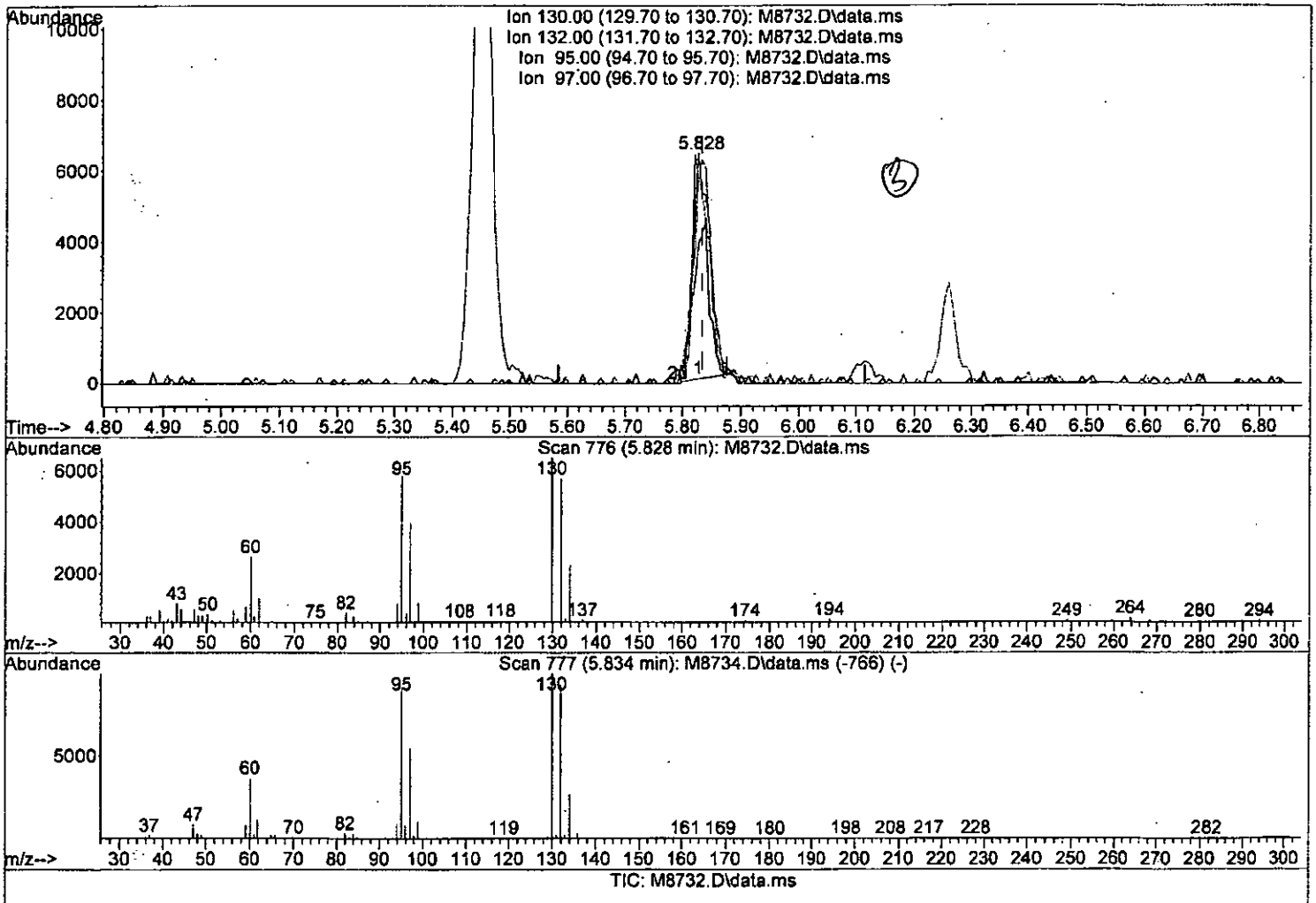
W090914.M Wed Sep 10 09:16:25 2014 Page: 1

00358

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8732.D\data.ms

(54) Trichloroethene (P)

5.828min (-0.006) 1.66 ppb

response 12725

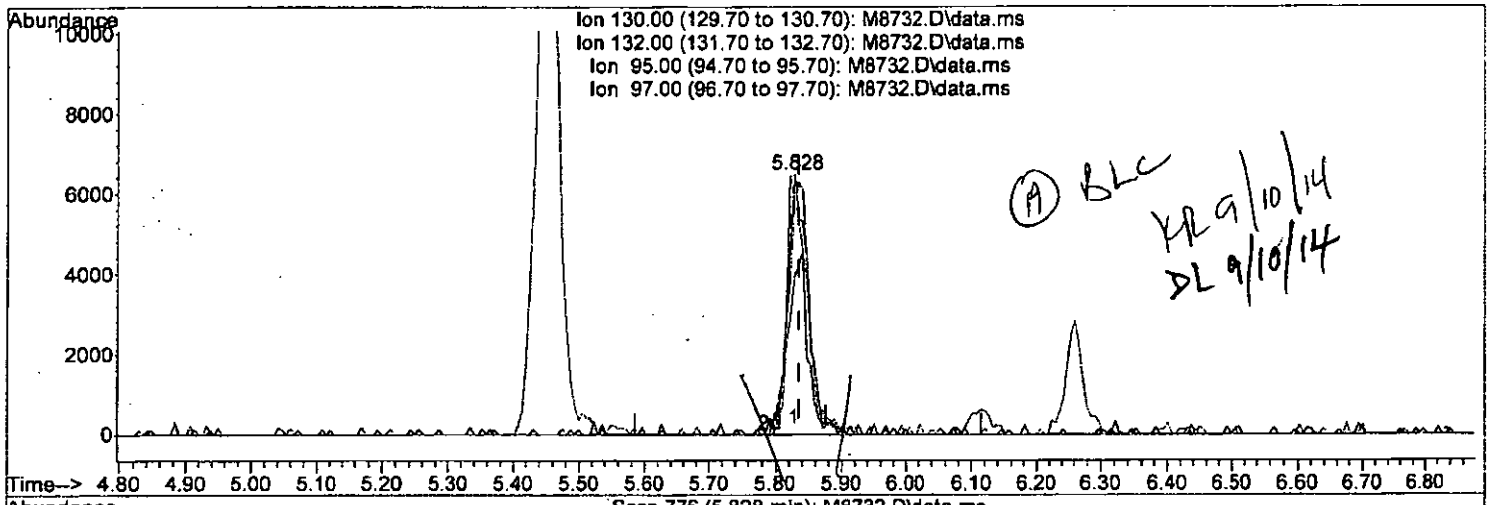
Ion	Exp%	Act%
130.00	100	100
132.00	92.70	87.50
95.00	91.00	89.21
97.00	55.00	60.54

W090914.M Wed Sep 10 09:16:38 2014 Page: 1

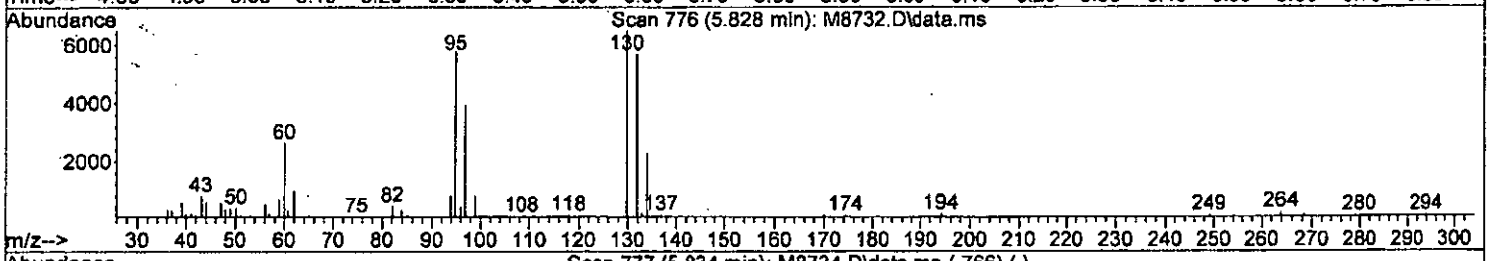
00359

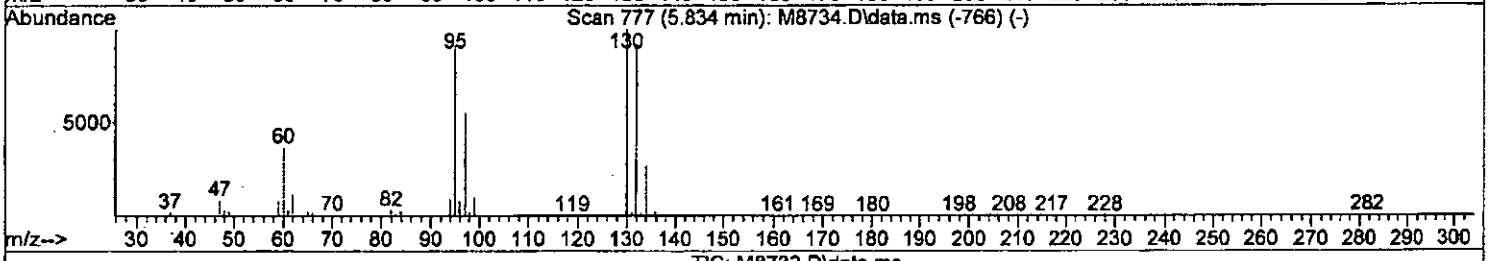
Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



(A) BLC KRG 9/10/14 DL 9/10/14





TIC: M8732.D\data.ms

(54) Trichloroethene (P)

5.828min (-0.006) 1.80 ppb m

response 13783

Ion	Exp%	Act%
130.00	100	100
132.00	92.70	87.50
95.00	91.00	89.21
97.00	55.00	60.54

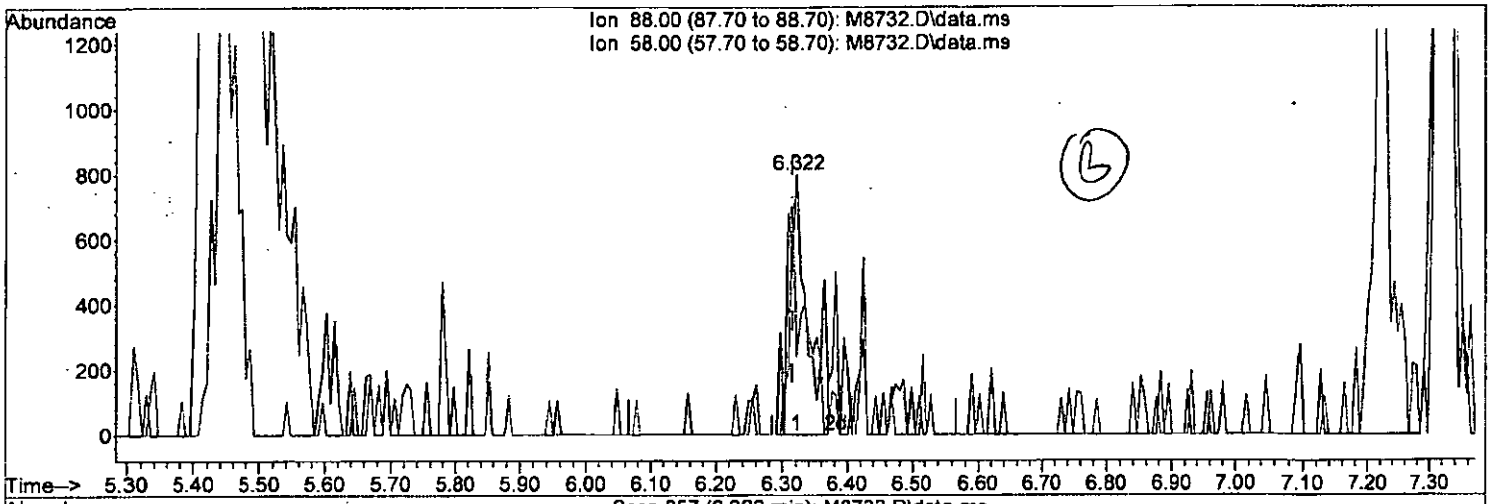
W090914.M Wed Sep 10 09:16:44 2014 Page: 1

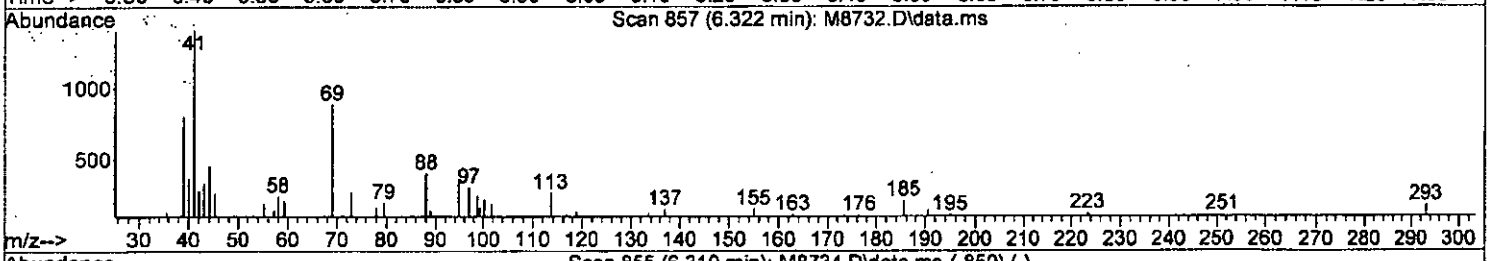
00369

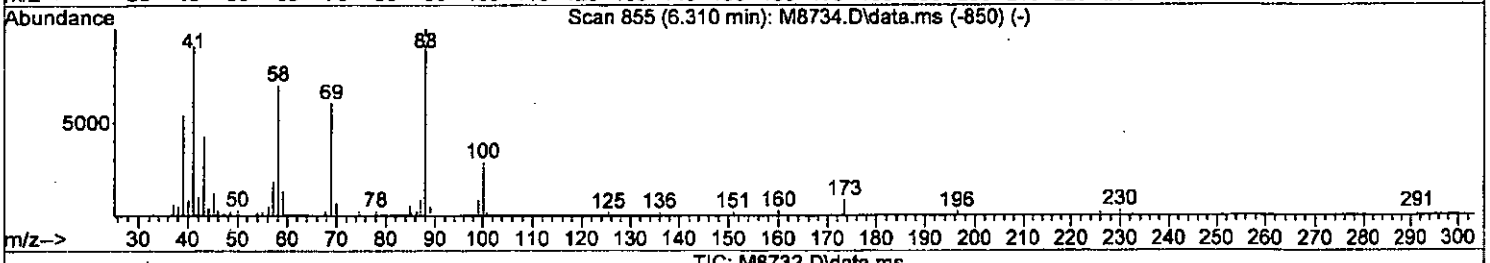
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8732.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.006) 29.20 ppb

response 1725

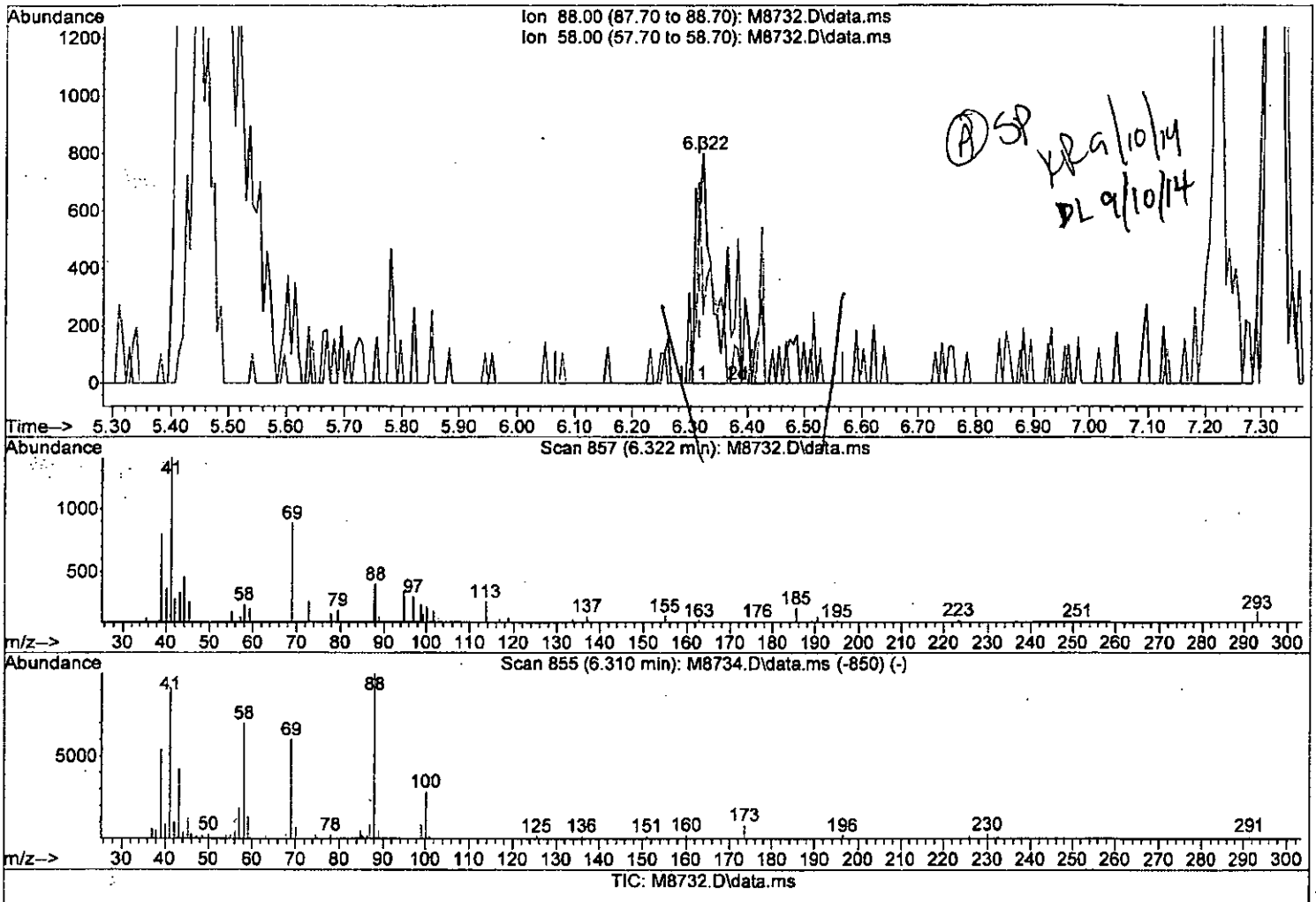
Ion	Exp%	Act%
88.00	100	100
58.00	69.80	30.04#
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Wed Sep 10 09:16:55 2014 Page: 1

00361

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8732.D\data.ms

(58) 1,4-Dioxane

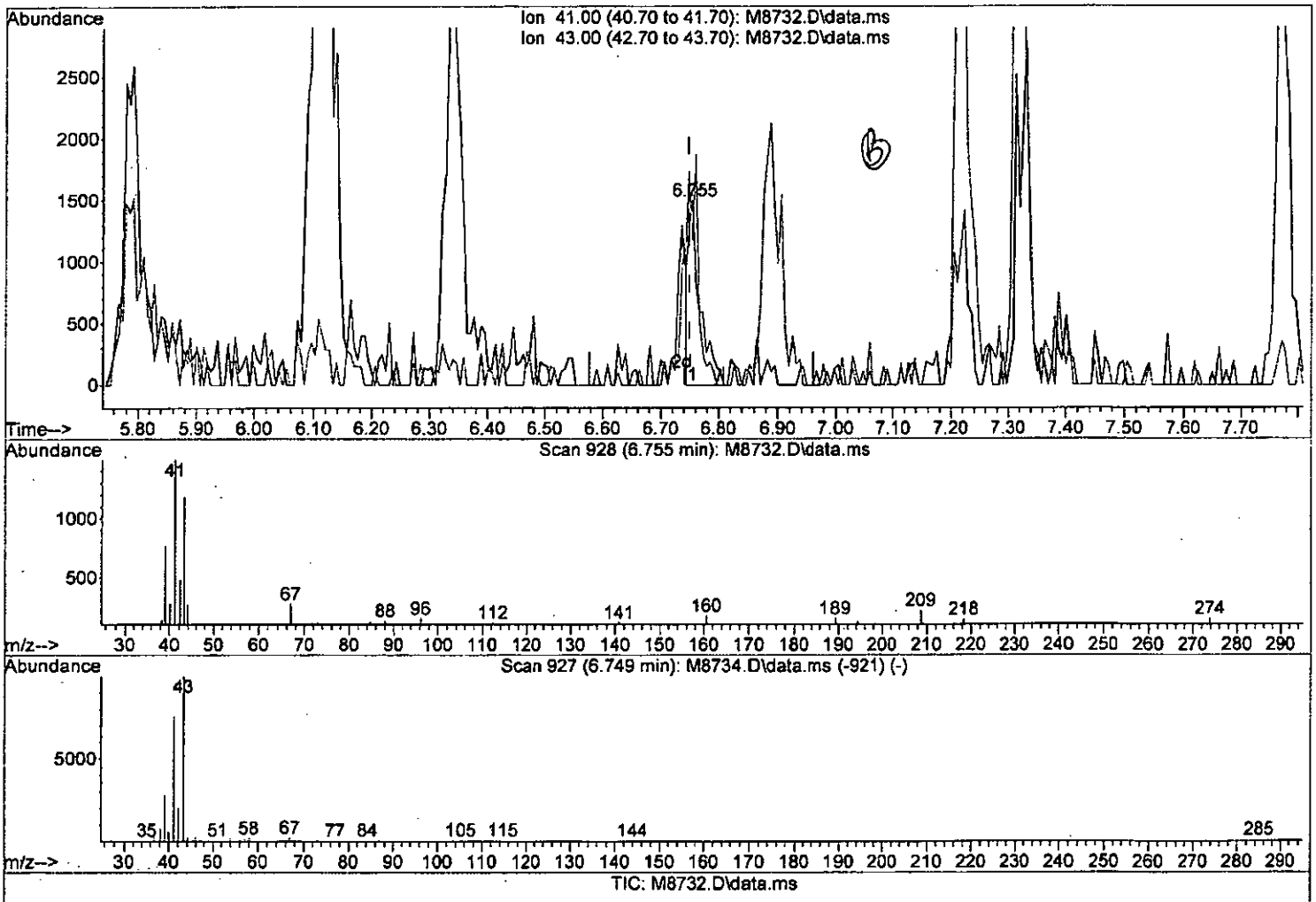
6.322min (+0.006) 47.65 ppb m

response 2815

Ion	Exp%	Act%
88.00	100	100
58.00	69.80	80.00
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8732.D\data.ms

(61) 2-Nitropropane

6.755min (+0.006) 2.39 ppb

response 2145

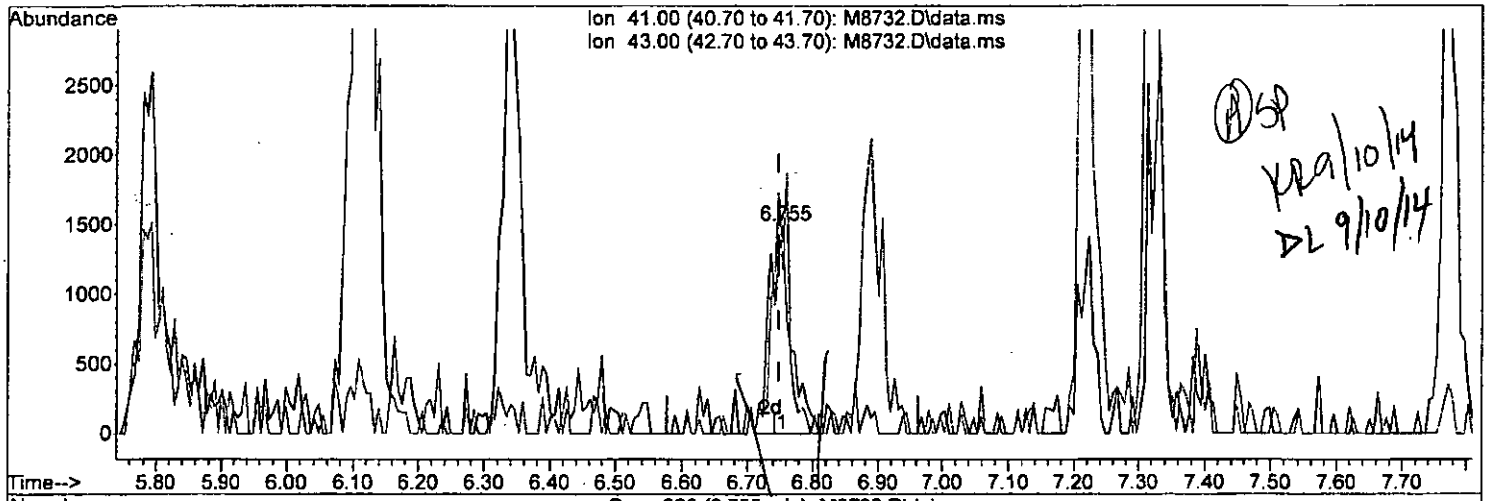
Ion	Exp%	Act%
41.00	100	100
43.00	130.50	78.73#
0.00	0.00	0.00
0.00	0.00	0.00

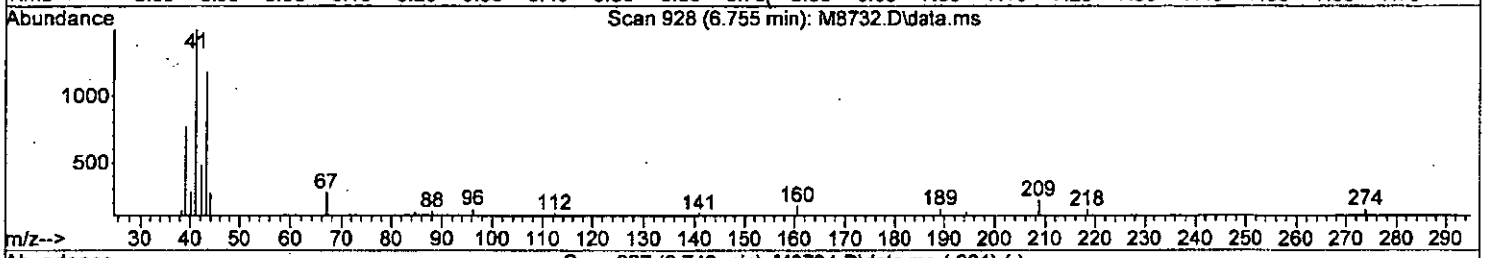
W090914.M Wed Sep 10 09:17:19 2014 Page: 1

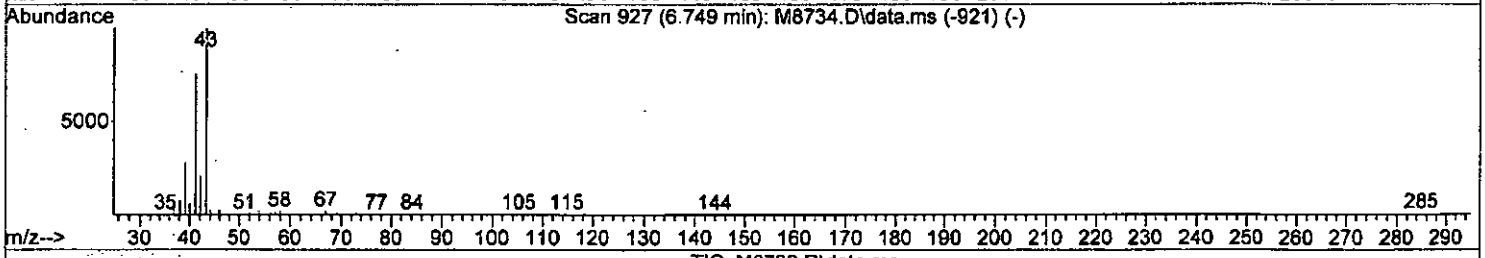
00363

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8732.D\data.ms

(61) 2-Nitropropane

6.755min (+0.006) 3.79 ppb m

response 3400

Ion	Exp%	Act%
41.00	100	100
43.00	130.50	78.73#
0.00	0.00	0.00
0.00	0.00	0.00

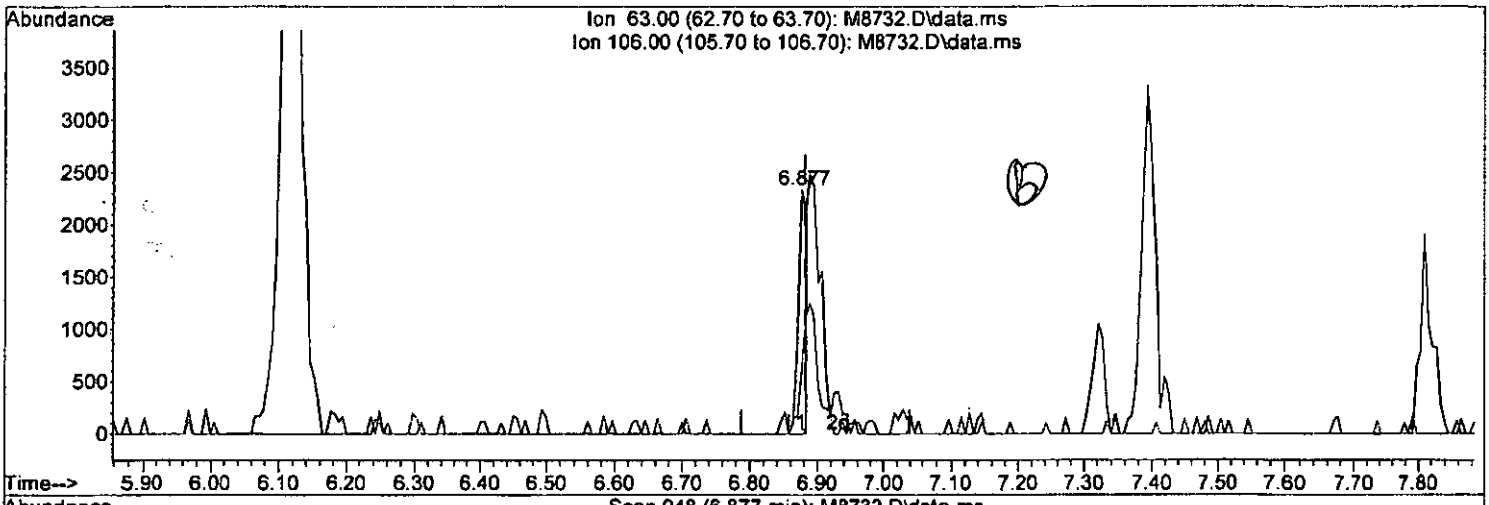
W090914.M Wed Sep 10 09:17:24 2014 Page: 1

00364

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8732.D\data.ms

(62) 2-Chloroethylvinyl Ether

6.877min (-0.006) 0.61 ppb

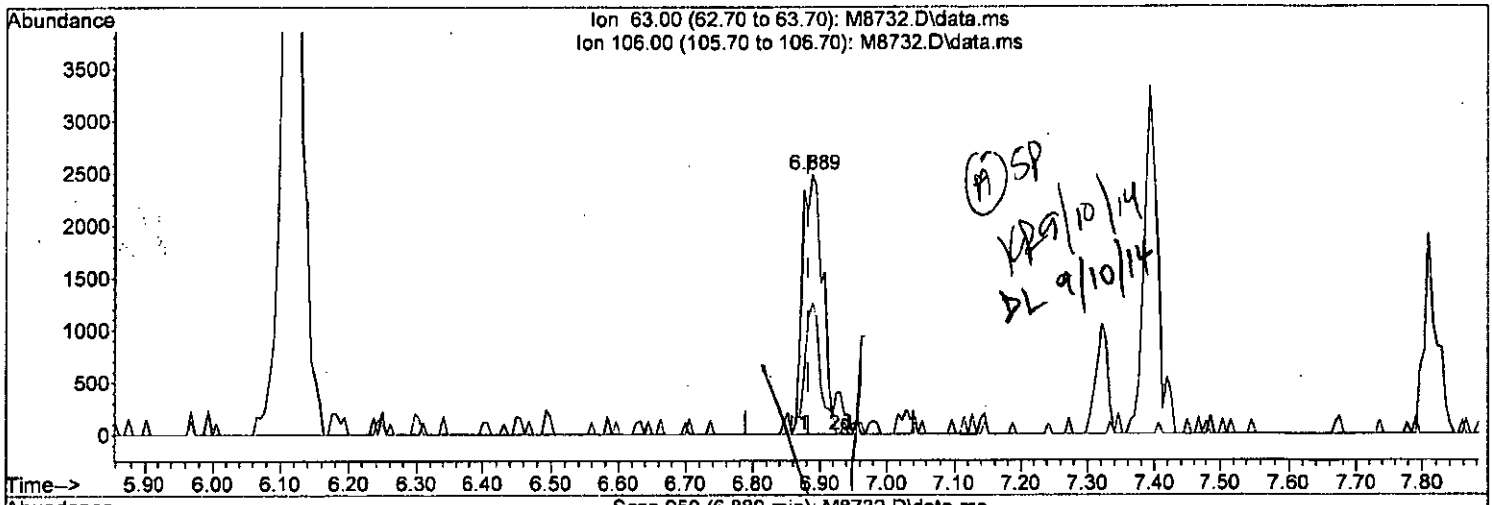
response 2006

Ion	Exp%	Act%
63.00	100	100
106.00	30.10	26.98
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Wed Sep 10 09:17:31 2014 Page: 1

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8732.D\data.ms

(62) 2-Chloroethylvinyl Ether

6.889min (+0.006) 1.70 ppb m

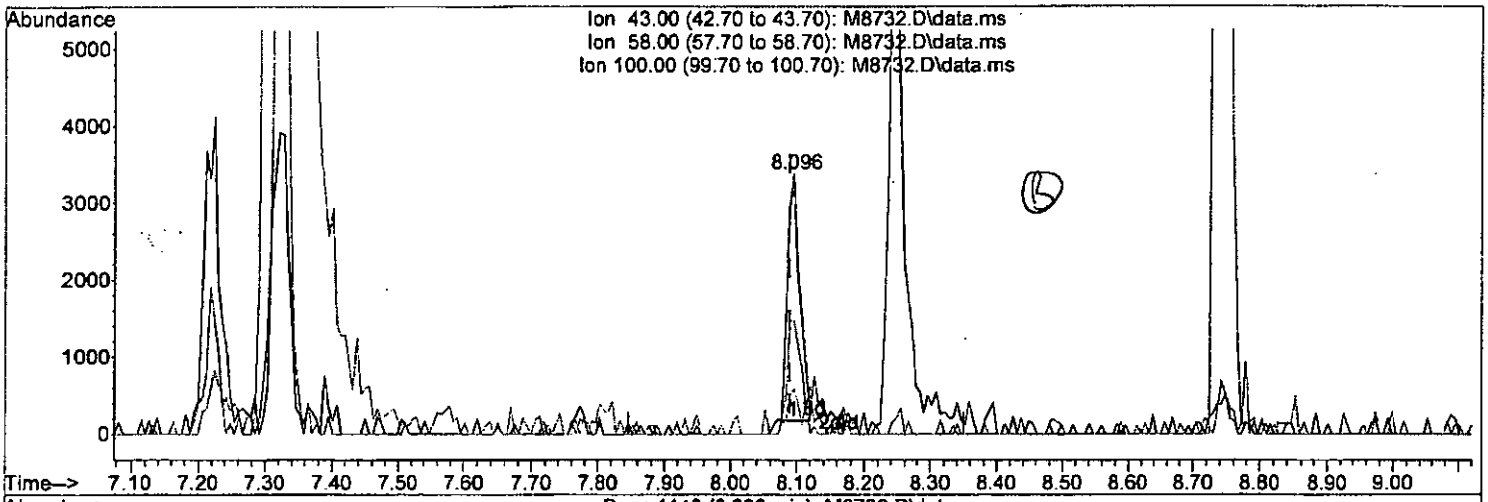
response 5570

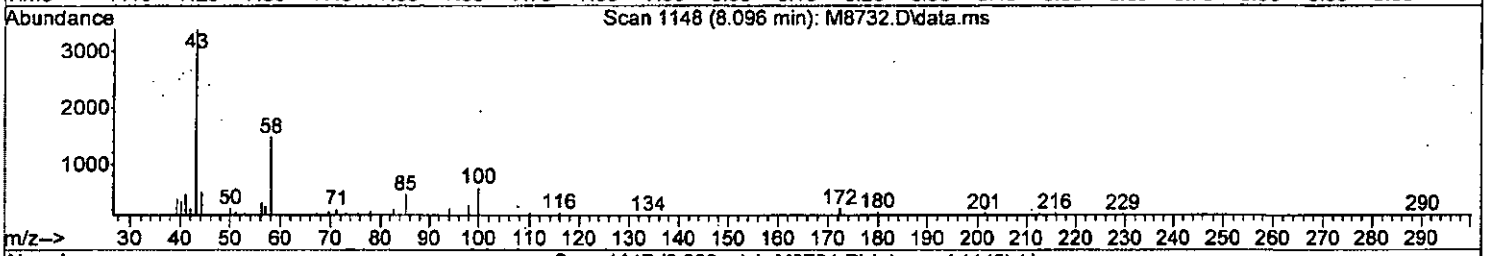
Ion	Exp%	Act%
63.00	100	100
106.00	30.10	50.38#
0.00	0.00	0.00
0.00	0.00	0.00

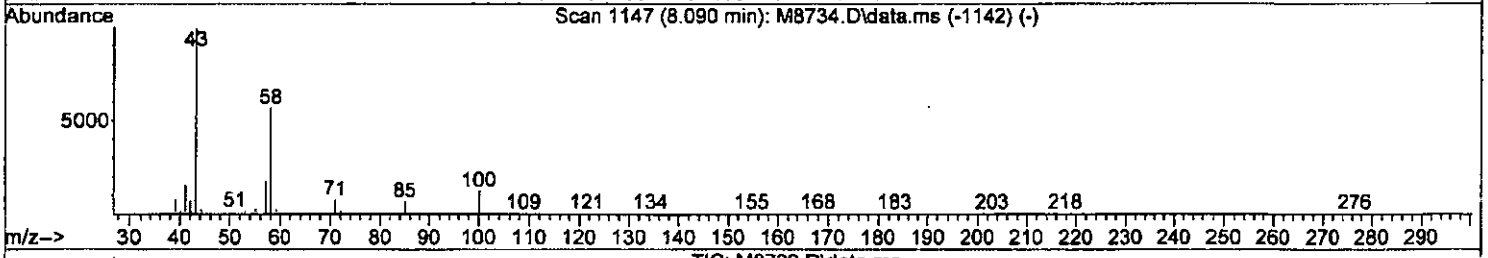
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8732.D\data.ms

(73) 2-Hexanone (P)

8.096min (+0.006) 1.30 ppb

response 4148

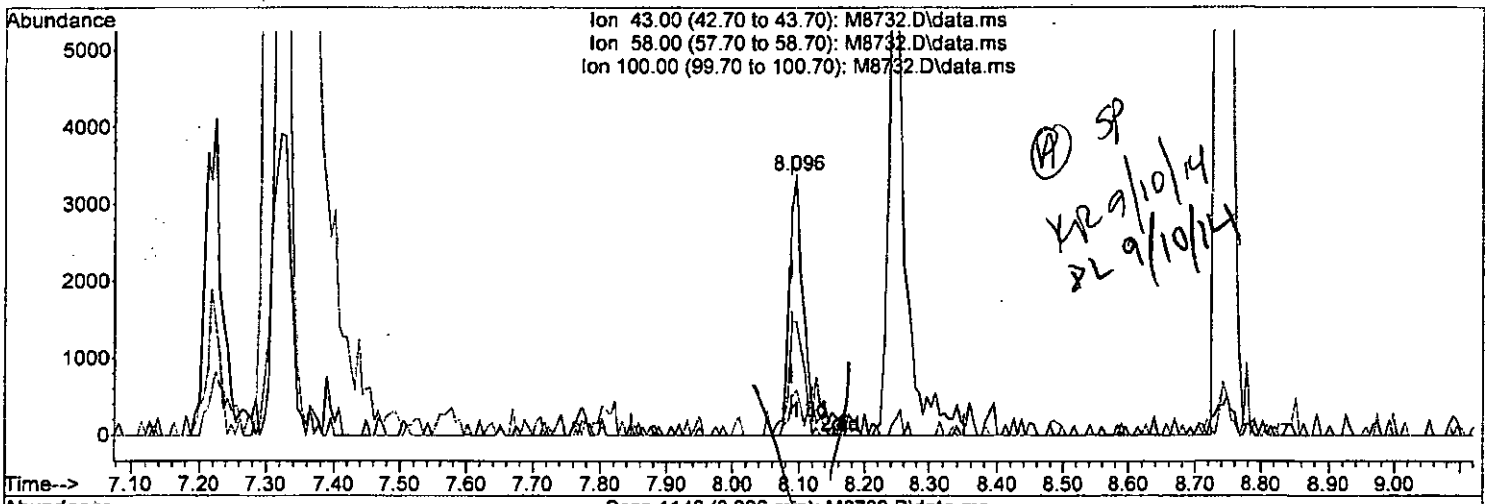
Ion	Exp%	Act%
43.00	100	100
58.00	56.80	43.56
100.00	12.10	17.22
0.00	0.00	0.00

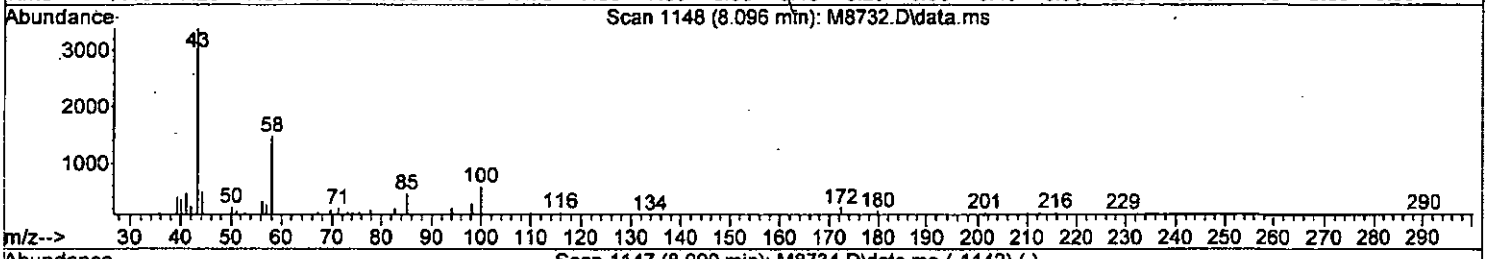
W090914.M Wed Sep 10 09:17:50 2014 Page: 1

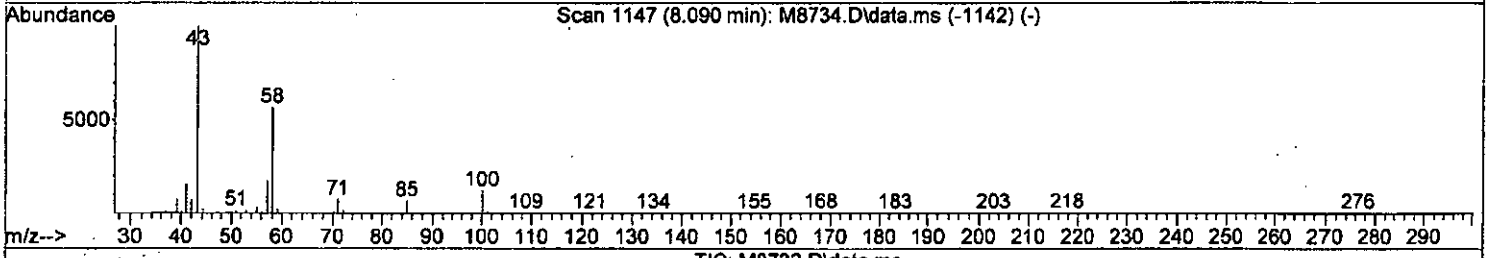
00367

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8732.D\data.ms

(73) 2-Hexanone (P)

8.096min (+0.006) 1.85 ppb m

response 5898

Ion	Exp%	Act%
43.00	100	100
58.00	56.80	43.56
100.00	12.10	17.22
0.00	0.00	0.00

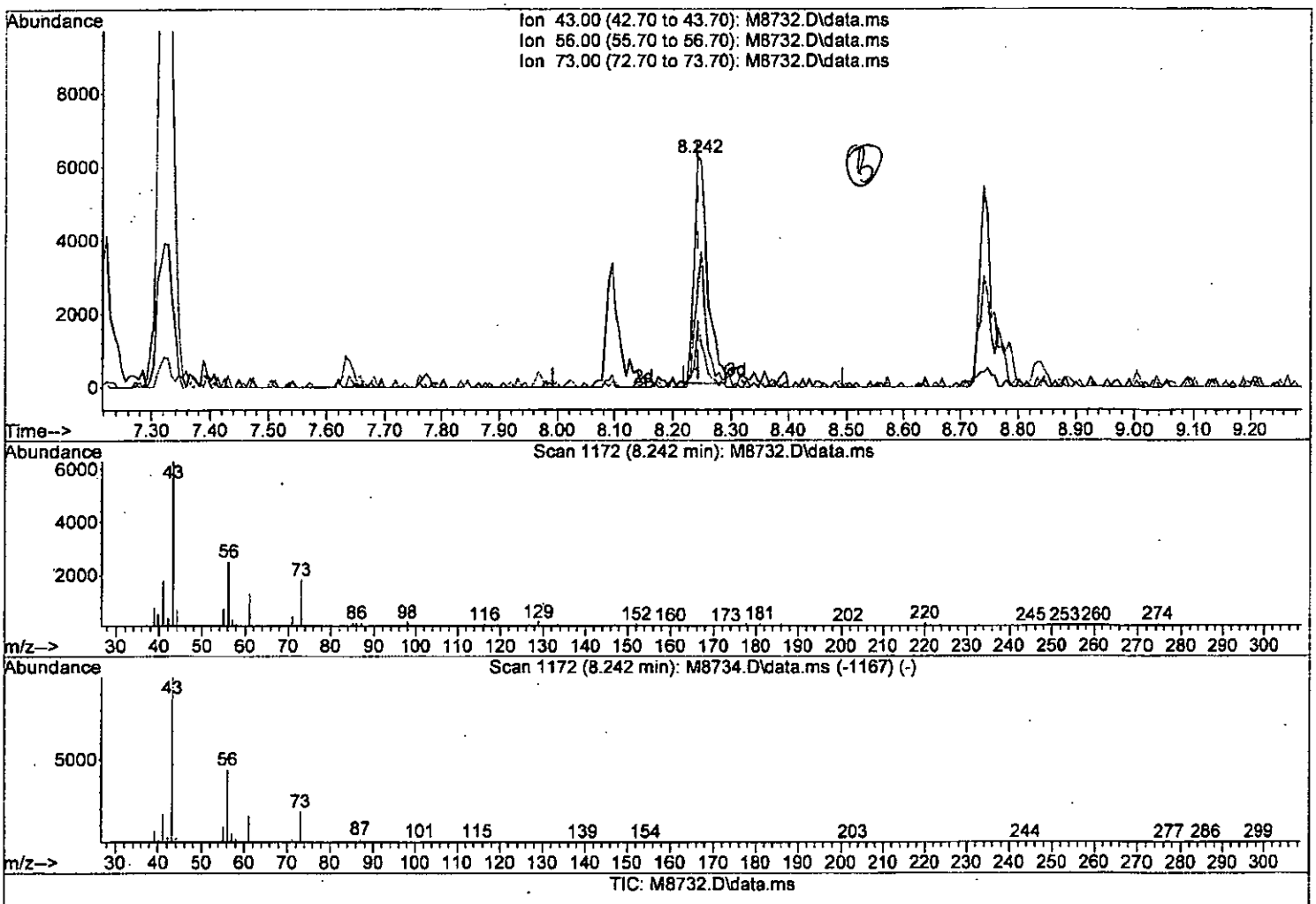
W090914.M Wed Sep 10 09:17:57 2014 Page: 1

00368

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8732.D\data.ms

(78) N-Butyl Acetate

8.242min (-0.000) 1.44 ppb

response 9928

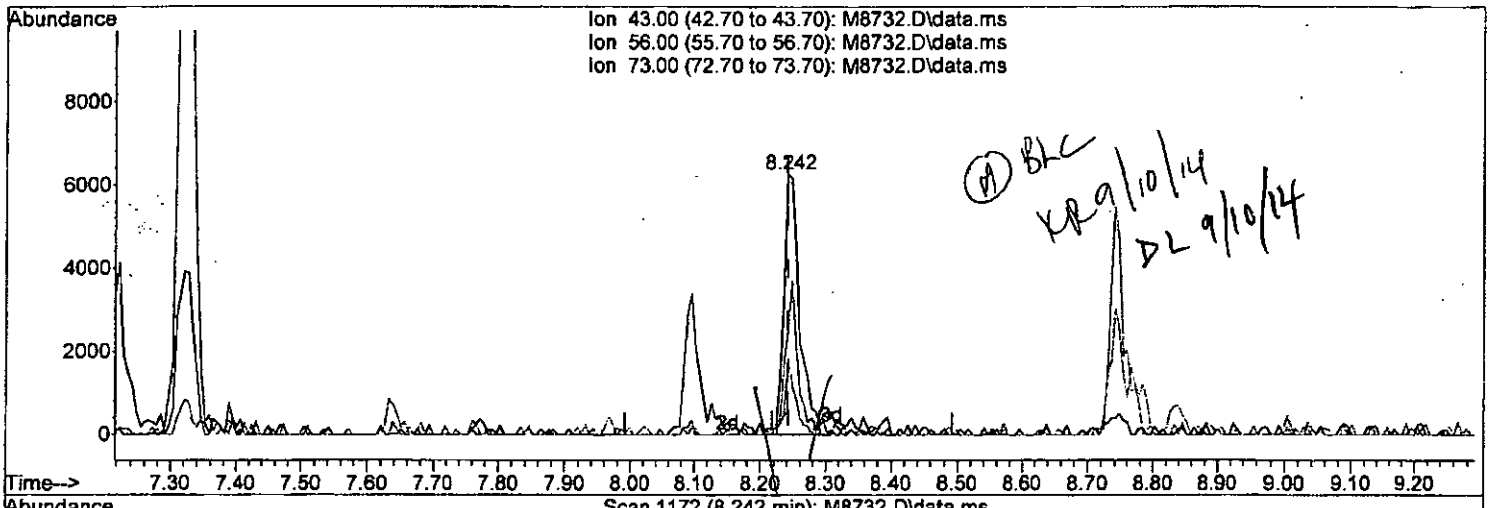
Ion	Exp%	Act%
43.00	100	100
56.00	43.90	40.04
73.00	18.30	29.04
0.00	0.00	0.00

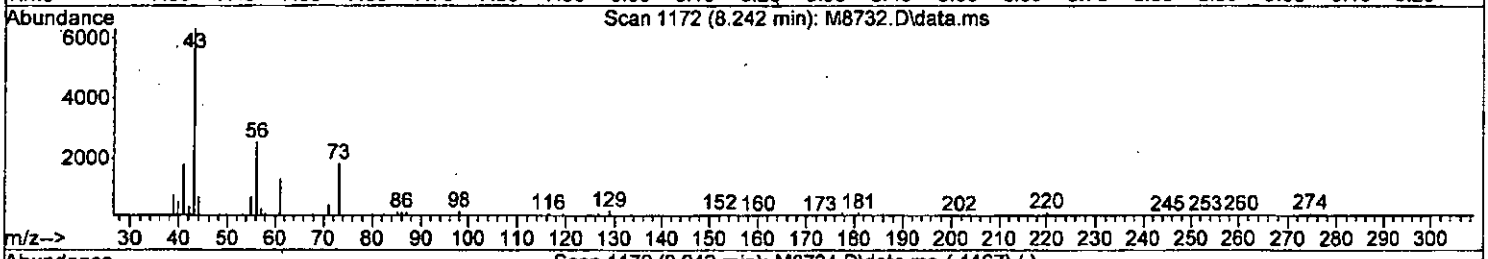
W090914.M Wed Sep 10 09:18:06 2014 Page: 1

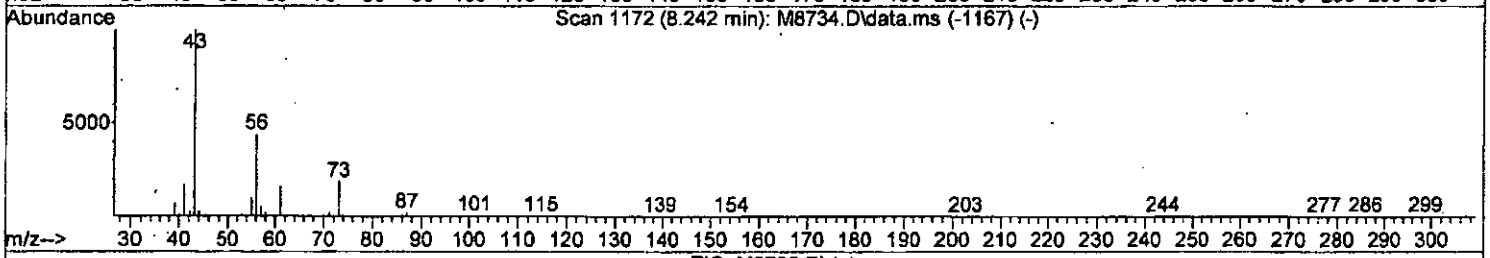
00369

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8732.D\data.ms

(76) N-Butyl Acetate

8.242min (-0.000) 1.51 ppb m

response 10419

Ion	Exp%	Act%
43.00	100	100
56.00	43.90	40.04
73.00	18.30	29.04
0.00	0.00	0.00

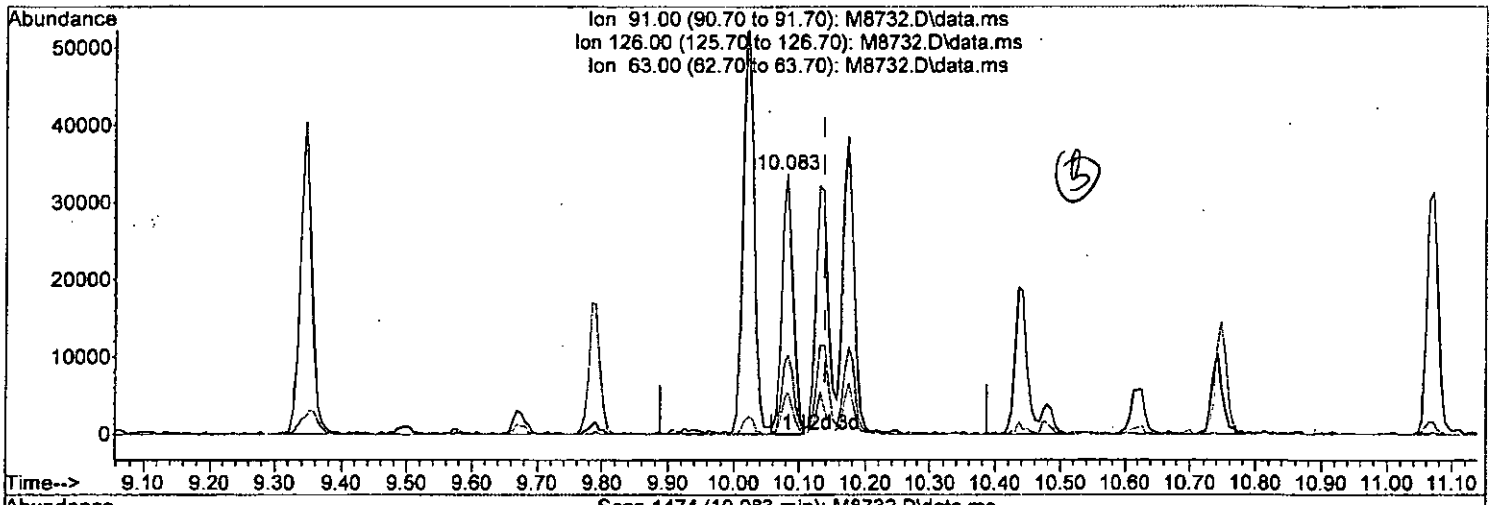
W090914.M Wed Sep 10 09:18:13 2014 Page: 1

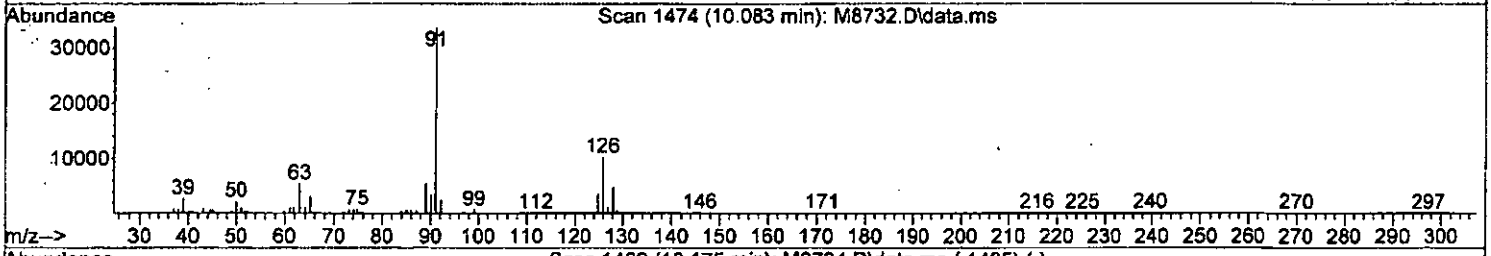
00370

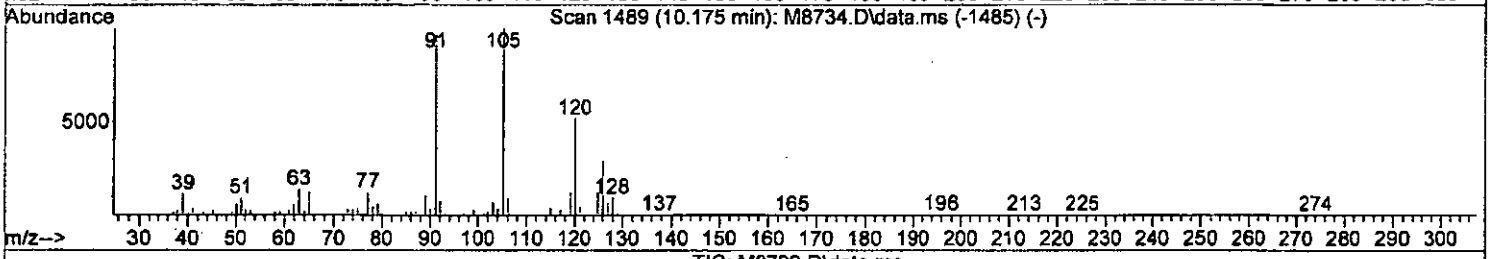
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8732.D\data.ms

(97) 3-Chlorotoluene

10.083min (-0.055) 1.71 ppb

response 40167

Ion	Exp%	Act%
91.00	100	100
126.00	31.10	30.32
63.00	13.70	16.02
0.00	0.00	0.00

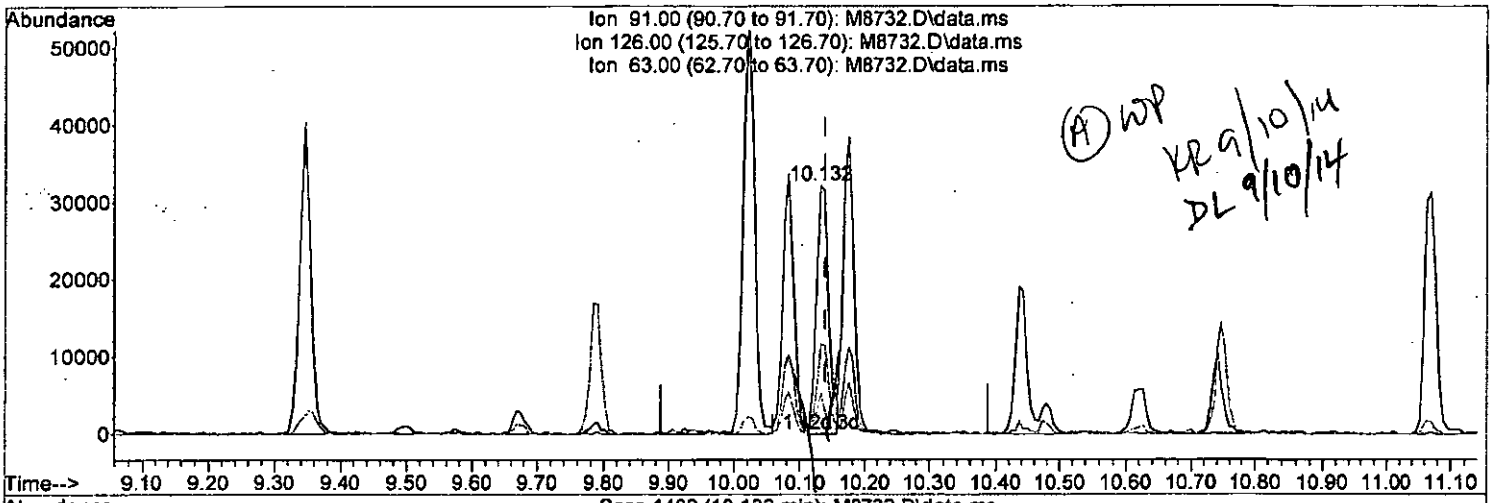
W090914.M Wed Sep 10 09:18:27 2014 Page: 1

00371

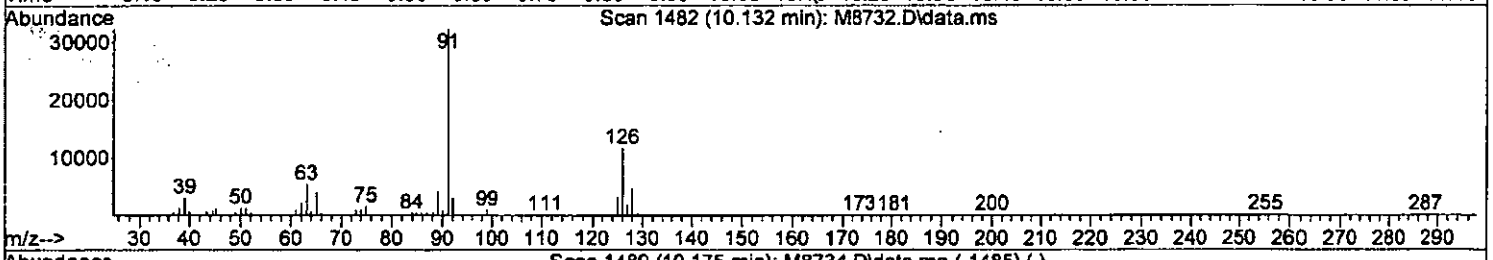
Quantitation Report (Qedit)

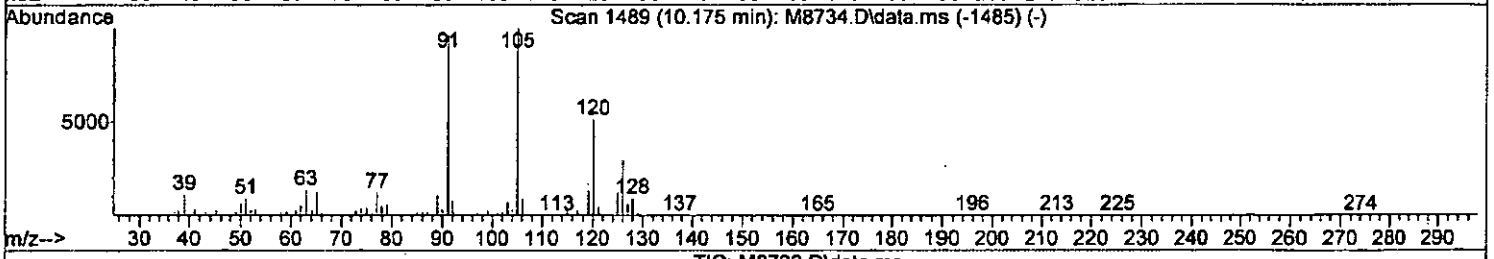
Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:29 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



(A) WP KRG 9/10/14 DL 9/10/14





TIC: M8732.D\data.ms

(97) 3-Chlorotoluene

10.132min (-0.006) 1.78 ppb m

response 41910

Ion	Exp%	Act%
91.00	100	100
126.00	31.10	36.19
63.00	13.70	16.84#
0.00	0.00	0.00

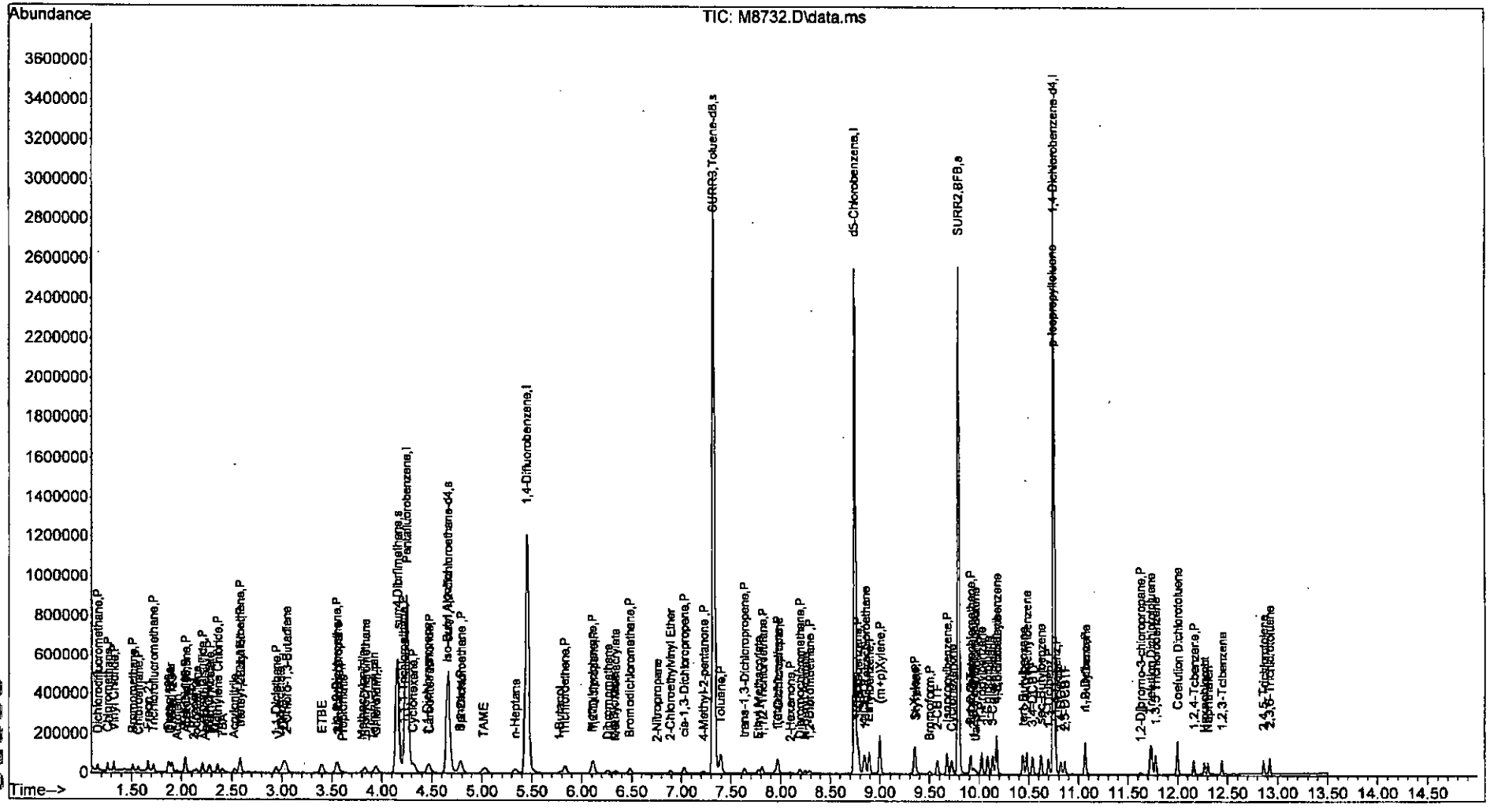
W090914.M Wed Sep 10 09:18:34 2014 Page: 1

00372

Quantitation Report (QT Reviewed)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8732.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:09 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:18:31 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



W090914.M Wed Sep 10 09:19:48 2014

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8733.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:41 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:23:34 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	807858	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1273235	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1143322	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	587615	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.158	113	499288	70.40	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 140.80%#				
48) surr1,1,2-dichloroetha...	4.664	65	539023	70.52	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 141.04%#				
65) SURR3,Toluene-d8	7.322	98	2097772	70.08	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 140.16%#				
70) SURR2,BFB	9.791	95	742787	69.33	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 138.66%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	35260	4.50	ppb		93
3) Chloromethane	1.262	50	37307	4.36	ppb		95
4) Vinyl Chloride	1.323	62	41498	4.59	ppb		92
5) Bromomethane	1.512	94	24420	4.69	ppb		98
6) Chloroethane	1.567	64	22089	4.37	ppb		94
7) Freon 21	1.664	67	62311	4.66	ppb		96
8) Trichlorofluoromethane	1.719	101	51842	4.78	ppb		96
9) Diethyl Ether	1.884	59	23805	4.55	ppb		93
10) Freon 123a	1.872	67	39979	4.70	ppb		96
11) Freon 123	1.902	83	42426	4.51	ppb		89
12) Acrolein	1.957	56	9778	19.85	ppb		92
13) 1,1-Diclethene	2.042	96	26812	4.66	ppb	#	86
14) Freon 113	2.036	101	30851	4.61	ppb		95
15) Acetone	2.042	43	7512	4.52	ppb		87
16) 2-Propanol	2.116	45	21003	79.38	ppb		97
17) Iodomethane	2.146	142	35591	4.11	ppb		94
18) Carbon Disulfide	2.207	76	101136	4.64	ppb		98
19) Acetonitrile	2.225	40	5240	23.36	ppb	#	69
20) Allyl Chloride	2.280	76	18120	4.62	ppb		95
21) Methyl Acetate	2.274	43	14779	4.37	ppb		97
22) Methylene Chloride	2.359	84	33658	4.55	ppb		93
23) TBA	2.414	59	36670	82.56	ppb		91
24) Acrylonitrile	2.524	53	36838	23.27	ppb		97
25) Methyl-t-Butyl Ether	2.585	73	74218	4.53	ppb		94
26) trans-1,2-Dichloroethene	2.585	96	34034	4.74	ppb		89
28) 1,1-Diclethane	2.945	63	63253	4.94	ppb		98
29) Vinyl Acetate	2.987	86	4438	4.23	ppb		97
30) DIPE	3.018	45	117692	4.86	ppb		96
31) 2-Chloro-1,3-Butadiene	3.042	53	60635	4.89	ppb		95
32) ETBE	3.402	59	105331	4.93	ppb		98
33) 2,2-Dichloropropane	3.560	77	44027	4.35	ppb		94
34) cis-1,2-Dichloroethene	3.548	96	37089	4.62	ppb		96
35) 2-Butanone	3.554	43	10515	4.84	ppb		87
36) Propionitrile	3.603	54	13041	22.27	ppb		89
37) Bromochloromethane	3.829	130	19109	4.32	ppb	#	88

KP 9/10/14

W090914.M Wed Sep 10 09:24:18 2014 Page: 1

00374

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8733.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:41 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:23:34 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.810	67	8025	4.30	ppb		95
39) Tetrahydrofuran	3.914	42	5846	4.30	ppb		85
40) Chloroform	3.938	83	62221	4.77	ppb		96
41) 1,1,1-Trichloroethane	4.207	97	49400	4.55	ppb		95
42) TAME	5.024	73	87937	4.82	ppb		98
44) Cyclohexane	4.316	41	30641	4.57	ppb		99
46) Carbontetrachloride	4.475	121	12558	4.42	ppb		86
47) 1,1-Dichloropropene	4.463	75	44205	4.78	ppb		87
49) Benzene	4.786	78	139573	4.83	ppb		98
50) 1,2-Dichloroethane	4.792	62	40005	4.65	ppb		96
51) Iso-Butyl Alcohol	4.652	43	15466	80.31	ppb		95
52) n-Heptane	5.334	43	32207	4.42	ppb		93
53) 1-Butanol	5.786	56	21922	198.20	ppb		85
54) Trichloroethene	5.828	130	36622	4.79	ppb		87
55) Methylcyclohexane	6.109	55	36294	4.59	ppb		94
56) 1,2-Diclpropane	6.115	63	32255	4.43	ppb		95
57) Dibromomethane	6.261	93	16052	4.55	ppb		91
58) 1,4-Dioxane	6.322	88	5782m	98.08	ppb		
59) Methyl Methacrylate	6.334	69	14213m	4.26	ppb		
60) Bromodichloromethane	6.481	83	41554	4.61	ppb		97
61) 2-Nitropropane	6.749	41	6911	7.72	ppb	#	55
62) 2-Chloroethylvinyl Ether	6.883	63	14663	4.47	ppb		92
63) cis-1,3-Dichloropropene	7.023	75	48578	4.61	ppb		96
64) 4-Methyl-2-pentanone	7.218	43	18149	4.21	ppb		89
66) Toluene	7.395	91	146756	4.67	ppb		98
67) trans-1,3-Dichloropropene	7.633	75	38111	4.44	ppb		99
68) Ethyl Methacrylate	7.773	69	28111	4.16	ppb		95
69) 1,1,2-Trichloroethane	7.810	97	23713	4.47	ppb		96
72) Tetrachloroethene	7.962	164	28930	4.94	ppb		94
73) 2-Hexanone	8.090	43	13570	4.28	ppb		94
74) 1,3-Dichloropropane	7.974	76	46342	4.76	ppb		95
75) Dibromochloromethane	8.194	129	25352	4.30	ppb		98
76) N-Butyl Acetate	8.242	43	27138	3.95	ppb		89
77) 1,2-Dibromoethane	8.291	107	22902	4.66	ppb		95
78) Chlorobenzene	8.773	112	94694	4.67	ppb		97
79) 3-CBTF	8.785	180	52537	5.24	ppb		95
80) 4-CBTF	8.840	180	46789	4.86	ppb		92
81) 1,1,1,2-Tetrachloroethane	8.852	131	31765	4.57	ppb		93
82) Ethylbenzene	8.889	106	49117	4.61	ppb	#	91
83) (m+p)Xylene	8.998	106	123512	9.57	ppb		99
84) o-Xylene	9.346	106	59946	4.78	ppb		100
85) Styrene	9.358	104	95631	4.64	ppb		99
87) Bromoform	9.492	173	14616	4.56	ppb		98
88) 2-CBTF	9.577	180	49678	5.21	ppb		98
89) Isopropylbenzene	9.675	105	145517	4.83	ppb		98
90) Cyclohexanone	9.718	55	66557	95.93	ppb		99
91) trans-1,4-Dichloro-2-B...	9.962	53	7109	4.74	ppb		85
92) 1,1,2,2-Tetrachloroethane	9.913	83	28508	4.71	ppb		86
93) Bromobenzene	9.913	156	36769	4.75	ppb		93
94) 1,2,3-Trichloropropane	9.943	110	8741	4.98	ppb	#	78
95) n-Propylbenzene	10.023	91	175543	4.98	ppb		99
96) 2-Chlorotoluene	10.083	91	106702	4.99	ppb		95

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8733.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:41 pm
Operator : K.Ruest
InstName : MSVOA-12

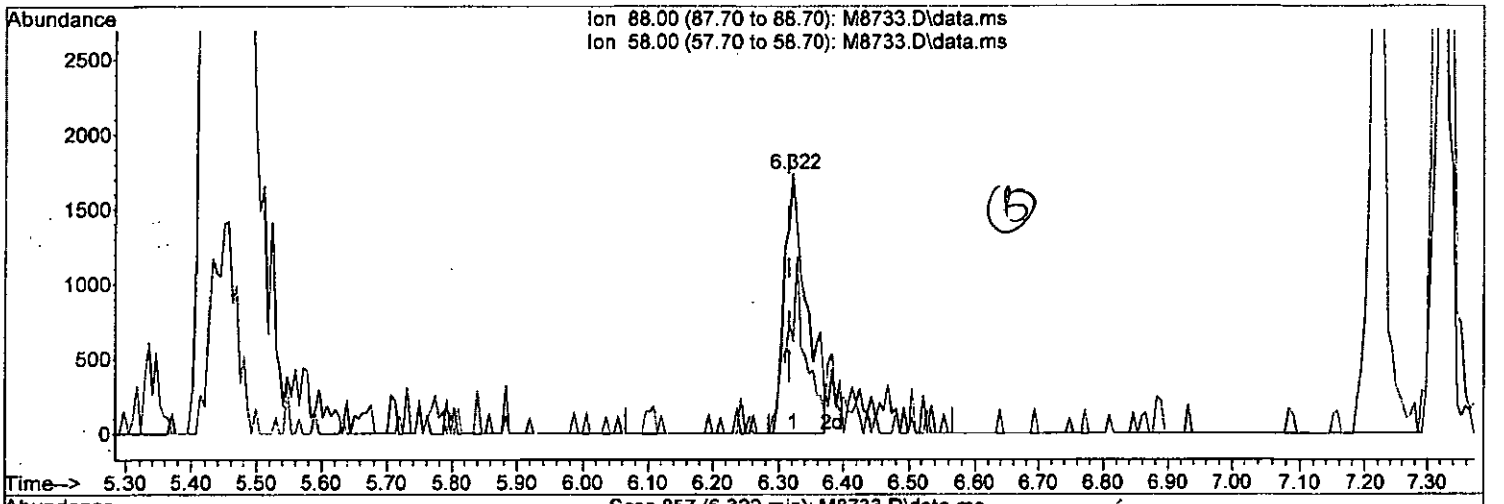
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:23:34 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

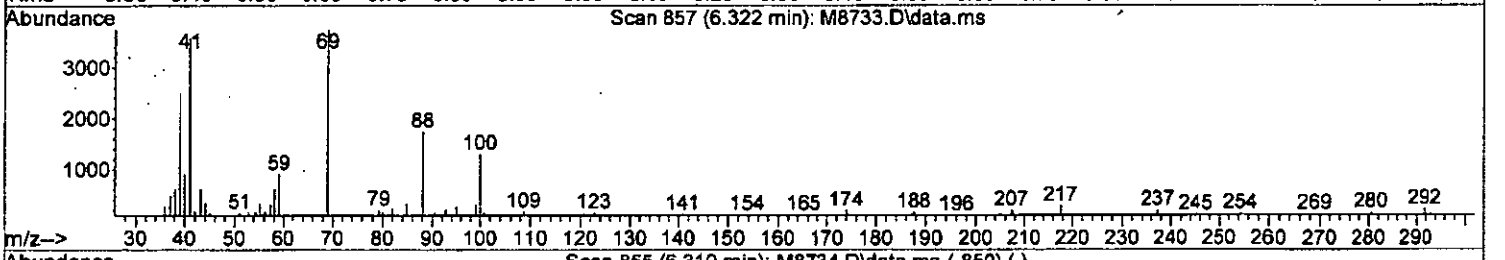
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
97)	3-Chlorotoluene	10.132	91	116386	4.94	ppb		92
98)	4-Chlorotoluene	10.175	91	114454	4.61	ppb		97
99)	1,3,5-Trimethylbenzene	10.175	105	119037	4.94	ppb		97
100)	tert-Butylbenzene	10.443	119	95582	4.73	ppb		96
101)	1,2,4-Trimethylbenzene	10.480	105	118544	4.77	ppb		99
102)	3,4-DCBTF	10.535	214	33060	4.87	ppb	#	86
103)	sec-Butylbenzene	10.620	105	140724	4.80	ppb		97
104)	p-Isopropyltoluene	10.742	119	118245	4.83	ppb		97
105)	1,3-Dclbenz	10.699	146	69524	4.76	ppb		96
106)	1,4-Dclbenz	10.766	146	72449	4.80	ppb		96
107)	2,4-DCBTF	10.821	214	27287	4.63	ppb		93
108)	2,5-DCBTF	10.864	214	32885	4.92	ppb		95
109)	n-Butylbenzene	11.071	91	103846	4.67	ppb		97
110)	1,2-Dclbenz	11.065	146	65699	4.71	ppb		96
111)	1,2-Dibromo-3-chloropr...	11.626	157	4820	4.51	ppb	#	84
112)	Trielution Dichlorotol...	11.730	125	172078	14.84	ppb		98
113)	1,3,5 Trichlorobenzene	11.778	180	47966	4.82	ppb		93
114)	Coelution Dichlorotoluene	11.998	125	124818	10.07	ppb		98
115)	1,2,4-Tcbenzene	12.156	180	38166	4.68	ppb		98
116)	Hexachlorobt	12.266	225	14887	4.62	ppb		94
117)	Naphthalen	12.303	128	77852	4.67	ppb		96
118)	1,2,3-Tclbenzene	12.443	180	33571	4.76	ppb		97
119)	2,4,5-Trichlorotolene	12.857	159	26252	4.76	ppb		96
120)	2,3,6-Trichlorotoluene	12.918	159	25491	4.71	ppb		88

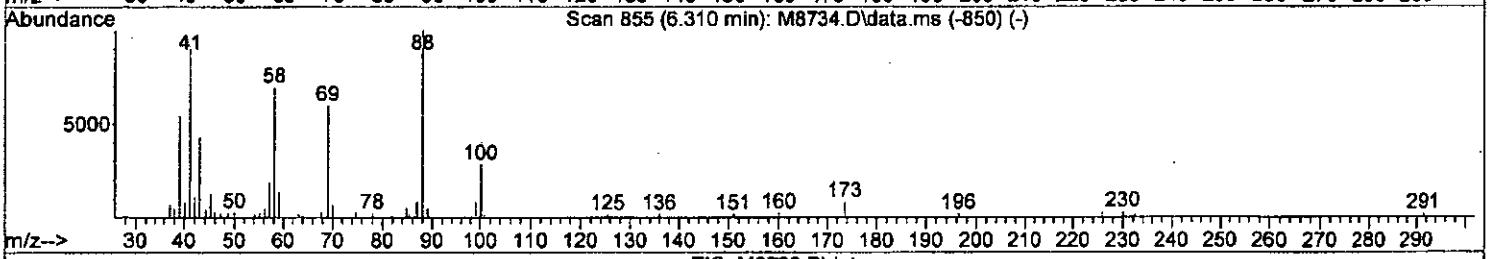
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8733.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:41 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:34 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8733.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.006) 70.11 ppb

response 4133

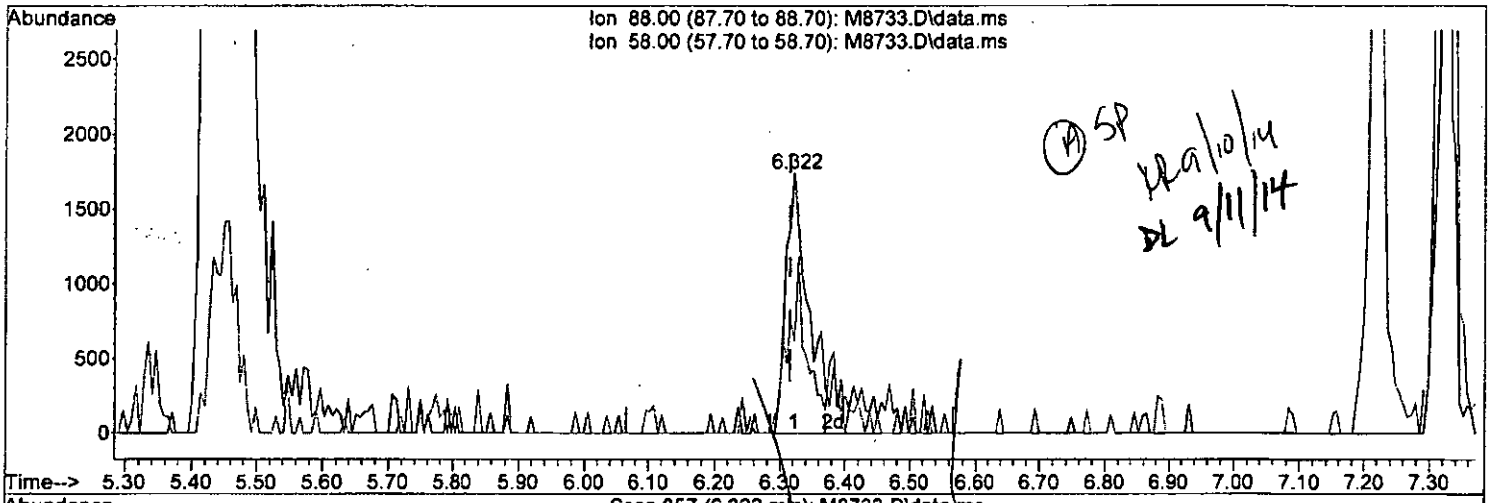
Ion	Exp%	Act%
88.00	100	100
58.00	69.80	35.35#
0.00	0.00	0.00
0.00	0.00	0.00

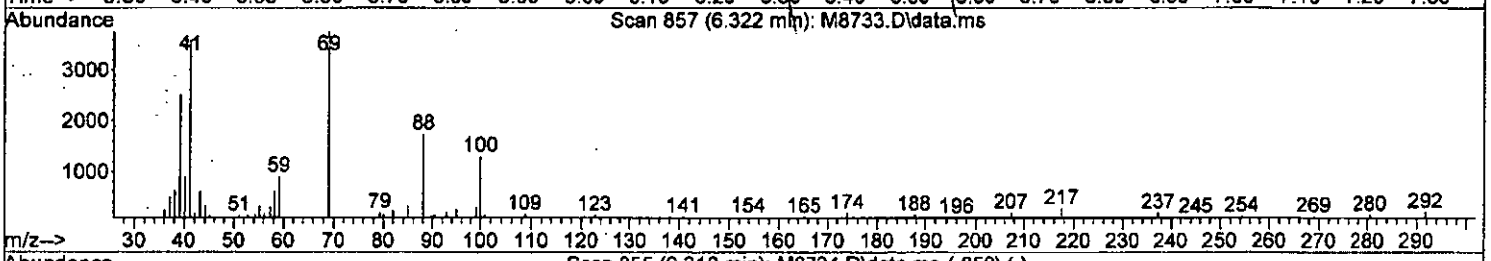
W090914.M Wed Sep 10 09:23:06 2014 Page: 1

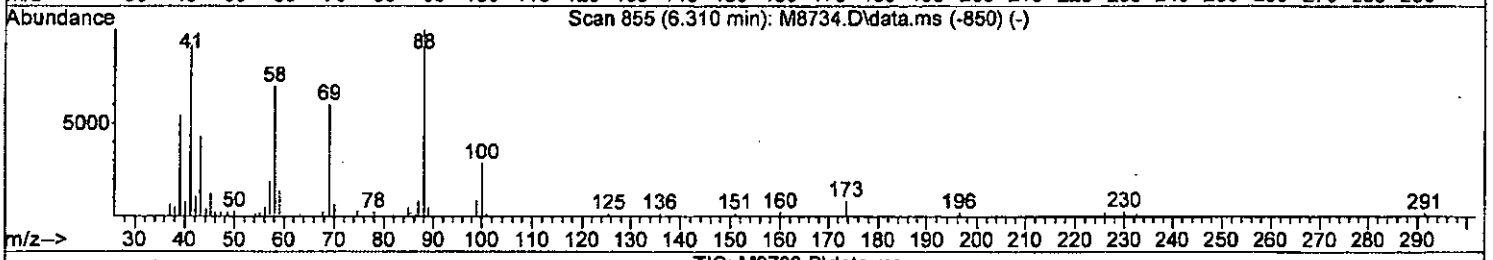
00377

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8733.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:41 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:34 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration







TIC: M8733.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.006) 98.08 ppb m

response 5782

Ion	Exp%	Act%
88.00	100	100
58.00	69.80	35.35#
0.00	0.00	0.00
0.00	0.00	0.00

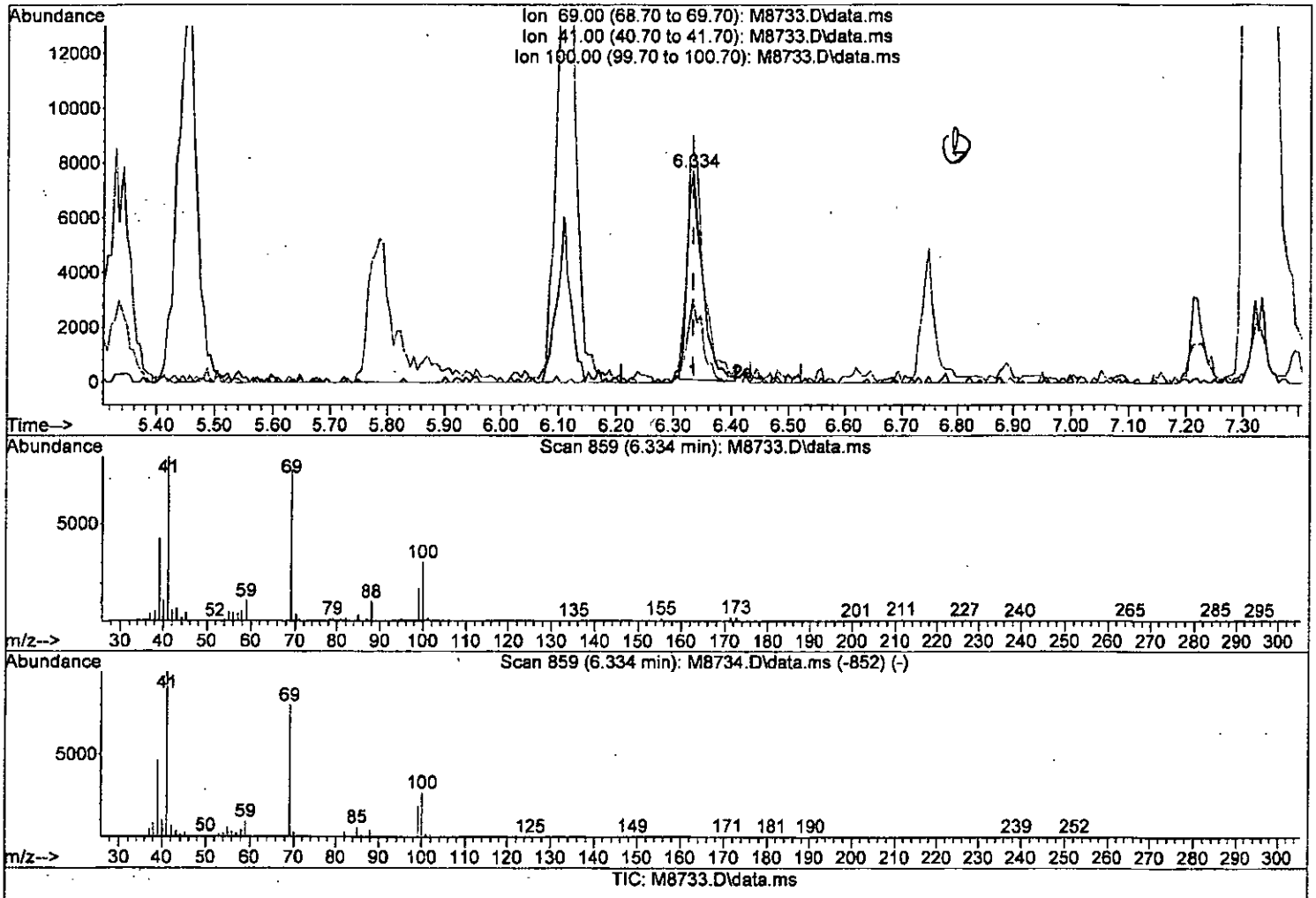
W090914.M Wed Sep 10 09:23:14 2014 Page: 1

00378

Quantitation Report (Qedit)

```
Sample     : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8733.D
Misc       : 8260 WATER ICAL
Acq On     :  9 Sep 2014   5:41 pm
Operator   : K.Ruest
InstName   : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:34 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration
```



TIC: M8733.D\data.ms

(59) Methyl Methacrylate

6.334min (+0.000) 4.12 ppb

response 13738

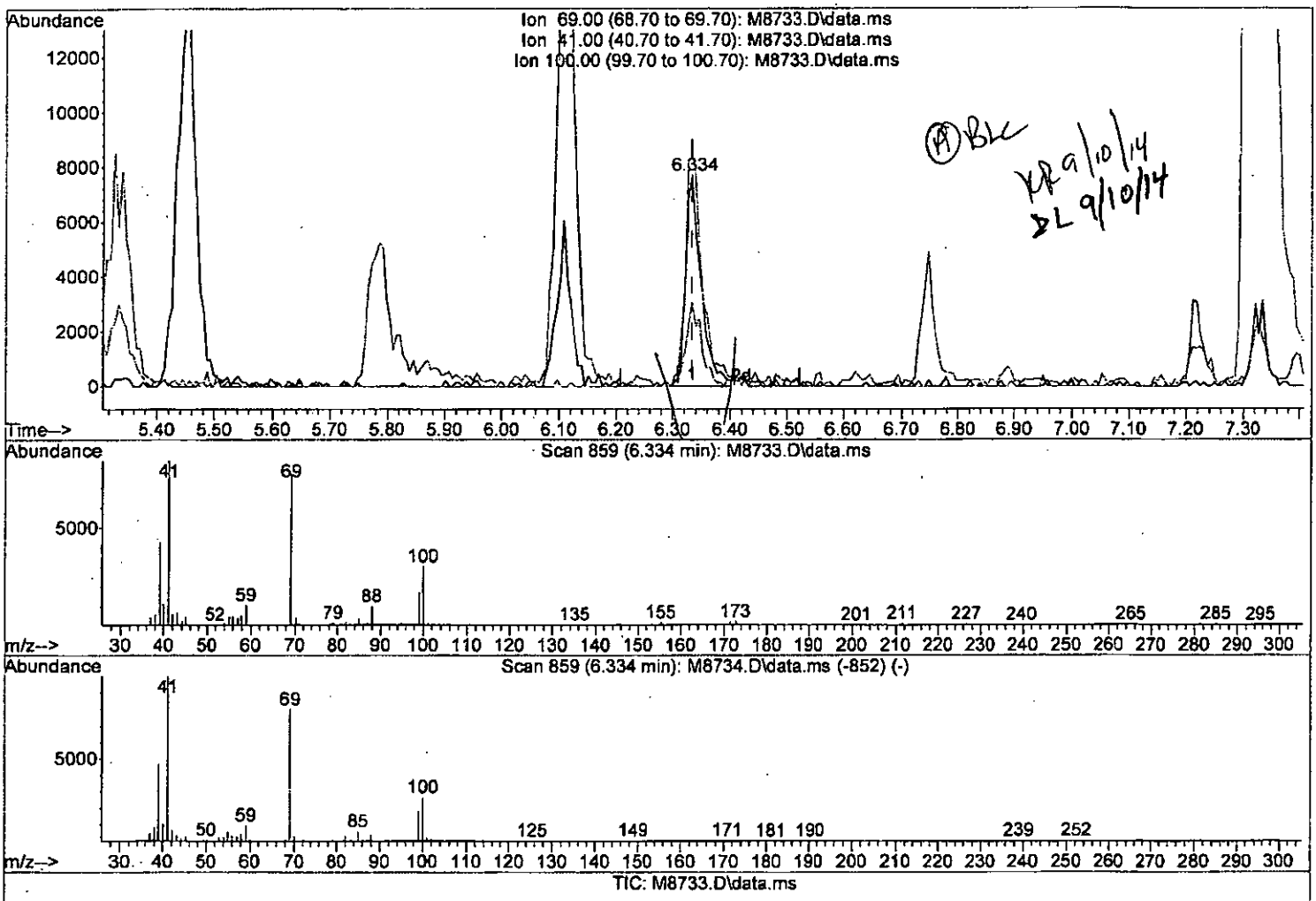
Ion	Exp%	Act%
69.00	100	100
41.00	125.90	108.93
100.00	33.40	39.62
0.00	0.00	0.00

W090914.M Wed Sep 10 09:23:30 2014 Page: 1

00379

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8733.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:41 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:34 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8733.D\data.ms

(59) Methyl Methacrylate

6.334min (+0.000) 4.26 ppb m

response 14213

Ion	Exp%	Act%
69.00	100	100
41.00	125.90	108.93
100.00	33.40	39.62
0.00	0.00	0.00

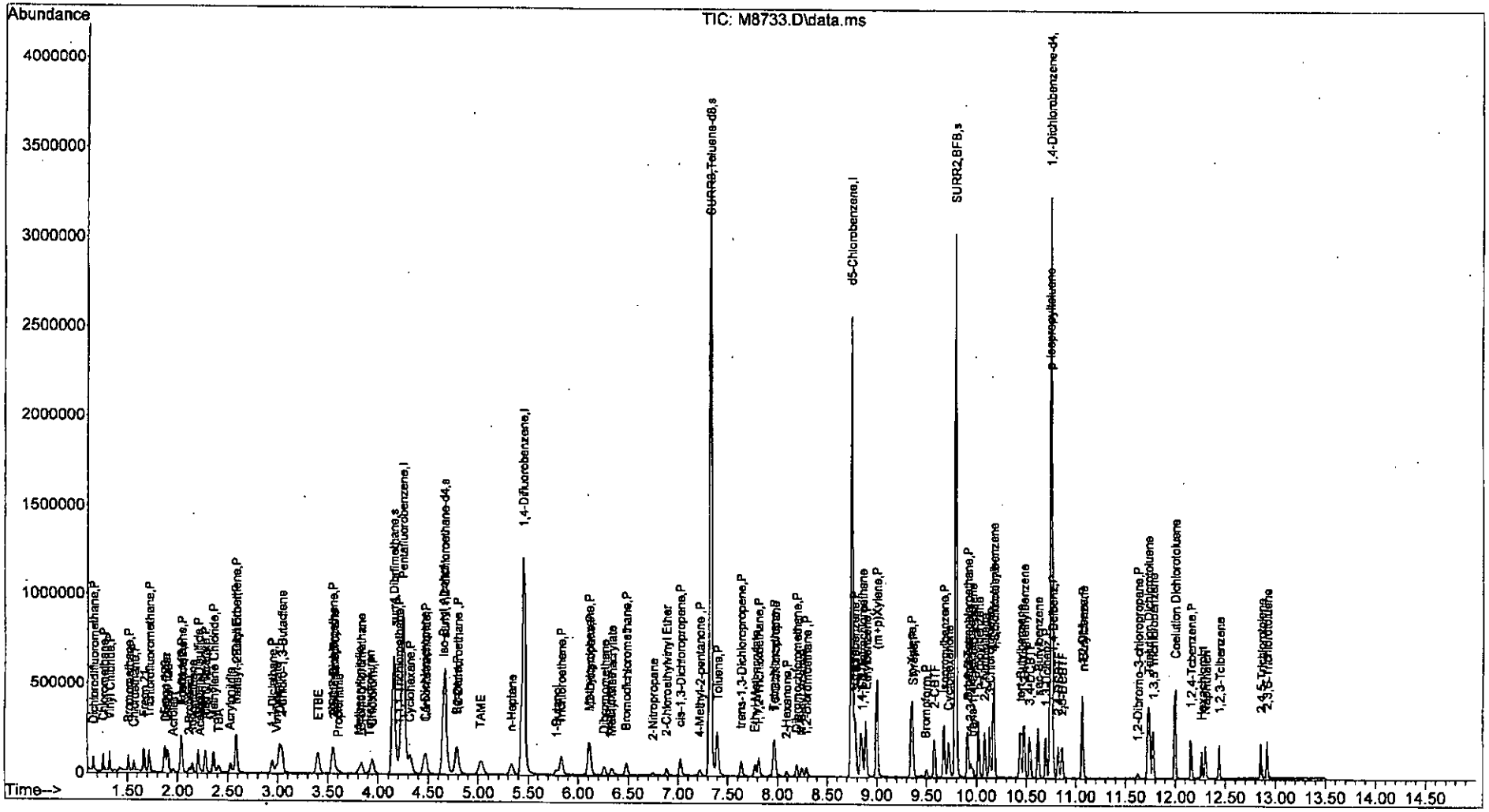
W090914.M Wed Sep 10 09:23:36 2014 Page: 1

00330

Quantitation Report (QT Reviewed)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8733.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 5:41 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:23:34 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



W090914.M Wed Sep 10 09:24:21 2014

Page: 4

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8734.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 6:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:36:09 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.255	168	814462	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1264925	50.00	ppb	0.00
71) d5-Chlorobenzene	8.748	117	1151996	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	594351	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	697348	98.98	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 197.96%#			
48) surr1,1,2-dichloroetha...	4.664	65	748650	98.59	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 197.18%#			
65) SURR3,Toluene-d8	7.322	98	2911911	97.92	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 195.84%#			
70) SURR2,BFB	9.791	95	1035148	97.25	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 194.50%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.164	85	183463	23.21	ppb	100
3) Chloromethane	1.262	50	187707	21.78	ppb	100
4) Vinyl Chloride	1.323	62	205540	22.53	ppb	100
5) Bromomethane	1.512	94	102018	19.43	ppb	100
6) Chloroethane	1.567	64	109259	21.43	ppb	100
7) Freon 21	1.664	67	280299	20.78	ppb	100
8) Trichlorofluoromethane	1.719	101	241284	22.05	ppb	100
9) Diethyl Ether	1.884	59	109241	20.72	ppb	100
10) Freon 123a	1.872	67	182764	21.29	ppb	100
11) Freon 123	1.902	83	194782	20.53	ppb	100
12) Acrolein	1.957	56	48165	96.96	ppb	100
13) 1,1-Diclethene	2.042	96	124880	21.51	ppb	100
14) Freon 113	2.036	101	143419	21.24	ppb	100
15) Acetone	2.048	43	32329	19.30	ppb	100
16) 2-Propanol	2.116	45	94608	354.67	ppb	100
17) Iodomethane	2.146	142	191224	21.88	ppb	100
18) Carbon Disulfide	2.207	76	459303	20.89	ppb	100
19) Acetonitrile	2.225	40	21725	96.05	ppb	100
20) Allyl Chloride	2.280	76	85615	21.66	ppb	100
21) Methyl Acetate	2.274	43	67510	19.78	ppb	100
22) Methylene Chloride	2.359	84	150713	20.20	ppb	100
23) TBA	2.408	59	172543	385.34	ppb	100
24) Acrylonitrile	2.524	53	165915	103.94	ppb	100
25) Methyl-t-Butyl Ether	2.579	73	354614	21.45	ppb	100
26) trans-1,2-Dichloroethene	2.585	96	152697	21.10	ppb	100
28) 1,1-Diclethane	2.945	63	277657	21.52	ppb	100
29) Vinyl Acetate	2.981	86	21575	20.41	ppb	100
30) DIPE	3.018	45	472950	19.36	ppb	100
31) 2-Chloro-1,3-Butadiene	3.042	53	263634	21.07	ppb	100
32) ETBE	3.402	59	420262	19.52	ppb	100
33) 2,2-Dichloropropane	3.560	77	222086	21.79	ppb	100
34) cis-1,2-Dichloroethene	3.548	96	173081	21.39	ppb	100
35) 2-Butanone	3.548	43	40062	18.29	ppb	100
36) Propionitrile	3.597	54	60766	102.91	ppb	100
37) Bromochloromethane	3.829	130	94560	21.20	ppb	100

KP 9/10/14

W090914.M Wed Sep 10 09:39:17 2014 Page: 1

00382

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8734.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 6:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:36:09 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.804	67	39638	21.06	ppb	100
39) Tetrahydrofuran	3.914	42	25869	18.87	ppb	100
40) Chloroform	3.938	83	263094	20.00	ppb	100
41) 1,1,1-Trichloroethane	4.213	97	229510	20.97	ppb	100
42) TAME	5.024	73	350209	19.02	ppb	100
44) Cyclohexane	4.322	41	136621	20.53	ppb	100
46) Carbontetrachloride	4.475	121	60159	21.32	ppb	100
47) 1,1-Dichloropropene	4.463	75	197506	21.50	ppb	100
49) Benzene	4.786	78	630264	21.94	ppb	100
50) 1,2-Dichloroethane	4.792	62	186088	21.79	ppb	100
51) Iso-Butyl Alcohol	4.639	43	72130	377.00	ppb	100
52) n-Heptane	5.334	43	159044	21.98	ppb	100
53) 1-Butanol	5.773	56	95386	868.06	ppb	100
54) Trichloroethene	5.834	130	166280	21.90	ppb	100
55) Methylcyclohexane	6.109	55	166483	21.20	ppb	100
56) 1,2-Diclpropane	6.121	63	155323	21.47	ppb	100
57) Dibromomethane	6.261	93	75292	21.48	ppb	100
58) 1,4-Dioxane	6.310	88	22480m	383.84	ppb	
59) Methyl Methacrylate	6.334	69	70333	21.24	ppb	100
60) Bromodichloromethane	6.481	83	193080	21.56	ppb	100
61) 2-Nitropropane	6.749	41	33301	37.44	ppb	100
62) 2-Chloroethylvinyl Ether	6.883	63	70456	21.64	ppb	100
63) cis-1,3-Dichloropropene	7.023	75	230157	22.00	ppb	100
64) 4-Methyl-2-pentanone	7.218	43	85404	19.92	ppb	100
66) Toluene	7.395	91	685935	21.97	ppb	100
67) trans-1,3-Dichloropropene	7.633	75	189629	22.25	ppb	100
68) Ethyl Methacrylate	7.773	69	139671	20.80	ppb	100
69) 1,1,2-Trichloroethane	7.810	97	110423	20.97	ppb	100
72) Tetrachloroethene	7.962	164	121689	20.62	ppb	100
73) 2-Hexanone	8.090	43	63738	19.97	ppb	100
74) 1,3-Dichloropropane	7.974	76	206492	21.05	ppb	100
75) Dibromochloromethane	8.194	129	127351	21.44	ppb	100
76) N-Butyl Acetate	8.242	43	139004	20.09	ppb	100
77) 1,2-Dibromoethane	8.285	107	106635	21.51	ppb	100
78) Chlorobenzene	8.773	112	444714	21.78	ppb	100
79) 3-CBTF	8.785	180	208972	20.70	ppb	100
80) 4-CBTF	8.840	180	189989	19.59	ppb	100
81) 1,1,1,2-Tetrachloroethane	8.852	131	149352	21.33	ppb	100
82) Ethylbenzene	8.889	106	235508	21.95	ppb	100
83) (m+p)Xylene	8.998	106	583155	44.86	ppb	100
84) o-Xylene	9.346	106	281752	22.28	ppb	100
85) Styrene	9.358	104	469922	22.64	ppb	100
87) Bromoform	9.498	173	68761	21.22	ppb	100
88) 2-CBTF	9.577	180	202862	21.03	ppb	100
89) Isopropylbenzene	9.675	105	696688	22.87	ppb	100
90) Cyclohexanone	9.718	55	312886	445.84	ppb	100
91) trans-1,4-Dichloro-2-B...	9.962	53	32449	21.41	ppb	100
92) 1,1,2,2-Tetrachloroethane	9.913	83	130084	21.26	ppb	100
93) Bromobenzene	9.913	156	173685	22.20	ppb	100
94) 1,2,3-Trichloropropane	9.943	110	37320	21.03	ppb	100
95) n-Propylbenzene	10.023	91	813660	22.84	ppb	100
96) 2-Chlorotoluene	10.083	91	487037	22.51	ppb	100

W090914.M Wed Sep 10 09:39:17 2014 Page: 2

00383

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8734.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 6:13 pm
Operator : K.Ruest
InstName : MSVOA-12

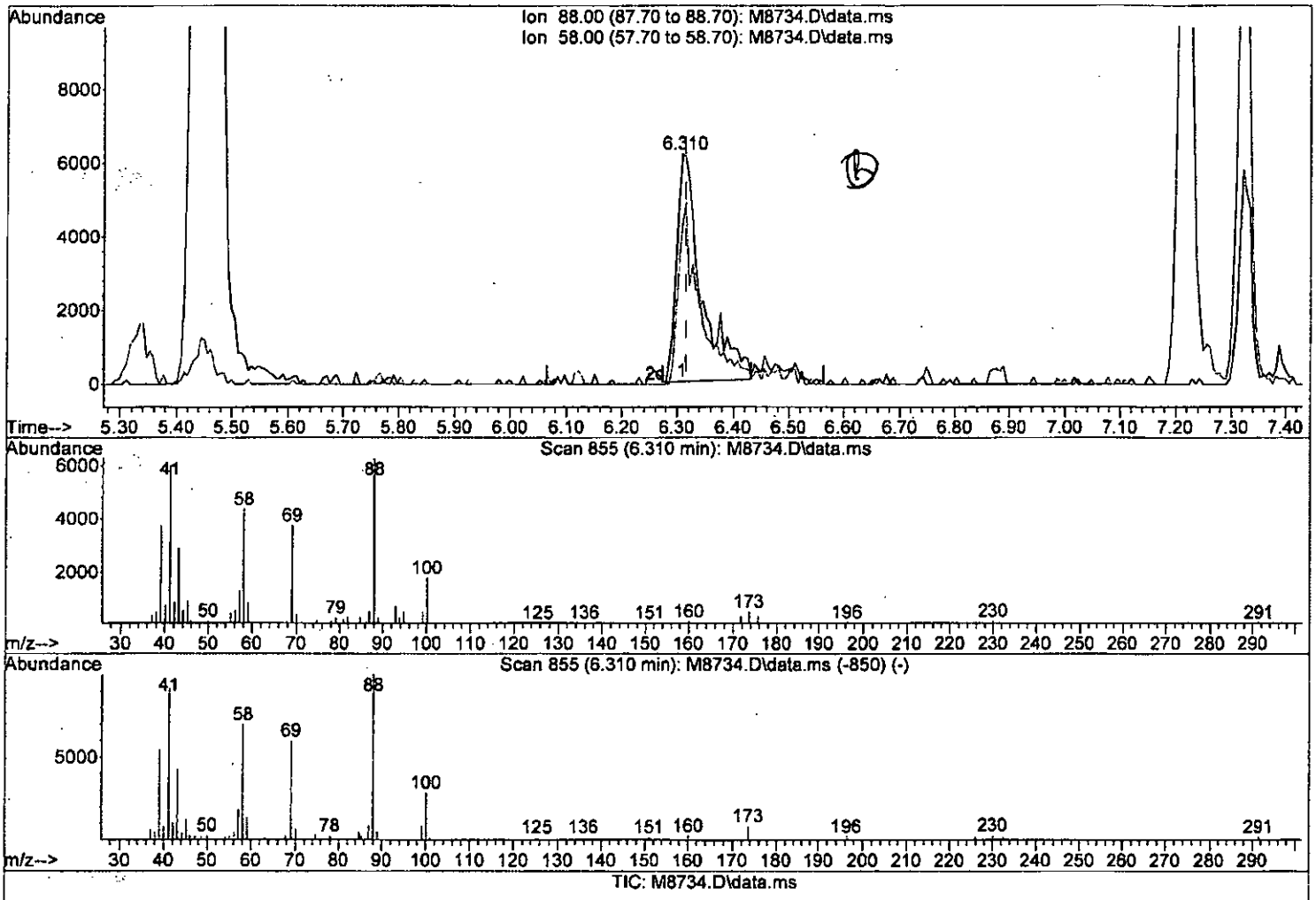
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:36:09 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	486577	20.43	ppb	93
98)	4-Chlorotoluene	10.175	91	580430	23.10	ppb	100
99)	1,3,5-Trimethylbenzene	10.175	105	573283	23.54	ppb	100
100)	tert-Butylbenzene	10.443	119	473438	23.18	ppb	100
101)	1,2,4-Trimethylbenzene	10.480	105	579258	23.06	ppb	100
102)	3,4-DCBTF	10.535	214	132770	19.34	ppb	100
103)	sec-Butylbenzene	10.620	105	685430	23.09	ppb	100
104)	p-Isopropyltoluene	10.742	119	582640	23.54	ppb	100
105)	1,3-Dclbenz	10.699	146	330971	22.40	ppb	100
106)	1,4-Dclbenz	10.772	146	332227	21.76	ppb	100
107)	2,4-DCBTF	10.821	214	121670	20.43	ppb	100
108)	2,5-DCBTF	10.864	214	137648	20.37	ppb	100
109)	n-Butylbenzene	11.071	91	510078	22.70	ppb	100
110)	1,2-Dclbenz	11.065	146	309928	21.96	ppb	100
111)	1,2-Dibromo-3-chloropr...	11.626	157	22559	20.88	ppb	100
112)	Trielution Dichlorotol...	11.730	125	761260	64.90	ppb	100
113)	1,3,5 Trichlorobenzene	11.778	180	206225	20.48	ppb	100
114)	Coelution Dichlorotoluene	11.998	125	542811	43.30	ppb	100
115)	1,2,4-Tcbenzene	12.156	180	188072	22.82	ppb	100
116)	Hexachlorobt	12.266	225	70661	21.68	ppb	100
117)	Naphthalen	12.303	128	382508	22.68	ppb	100
118)	1,2,3-Tclbenzene	12.443	180	155395	21.76	ppb	100
119)	2,4,5-Trichlorotolene	12.857	159	119519	21.43	ppb	100
120)	2,3,6-Trichlorotoluene	12.918	159	115676	21.12	ppb	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8734.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 6:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:39 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8734.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.006) 326.99 ppb

response 19150

Ion	Exp%	Act%
88.00	100	100
58.00	69.80	69.76
0.00	0.00	0.00
0.00	0.00	0.00

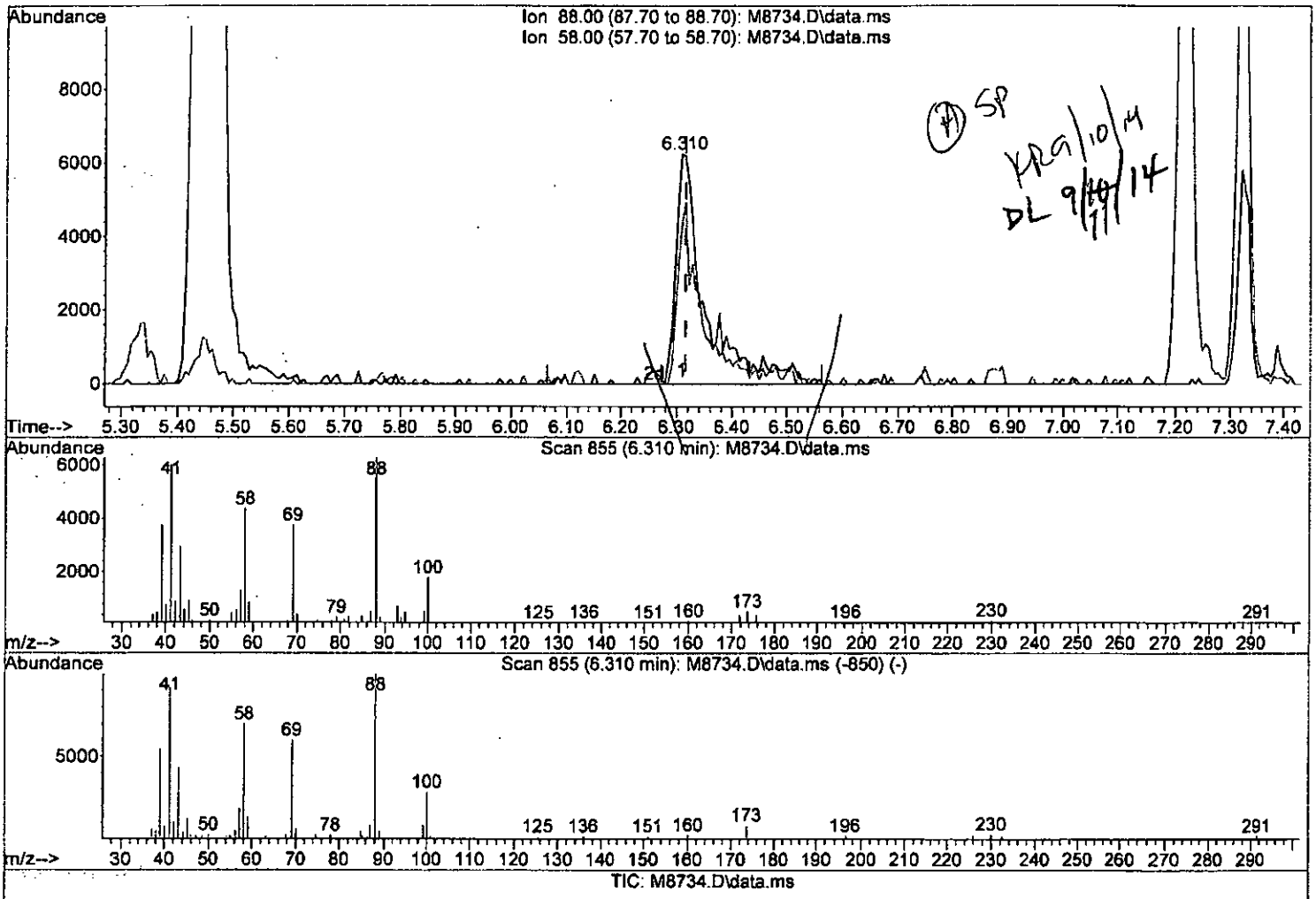
W090914.M Wed Sep 10 09:36:04 2014 Page: 1

00385

Quantitation Report (Qedit)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8734.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 6:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:39 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8734.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.006) 383.84 ppb m

response 22480

Ion	Exp%	Act%
88.00	100	100
58.00	69.80	69.76
0.00	0.00	0.00
0.00	0.00	0.00

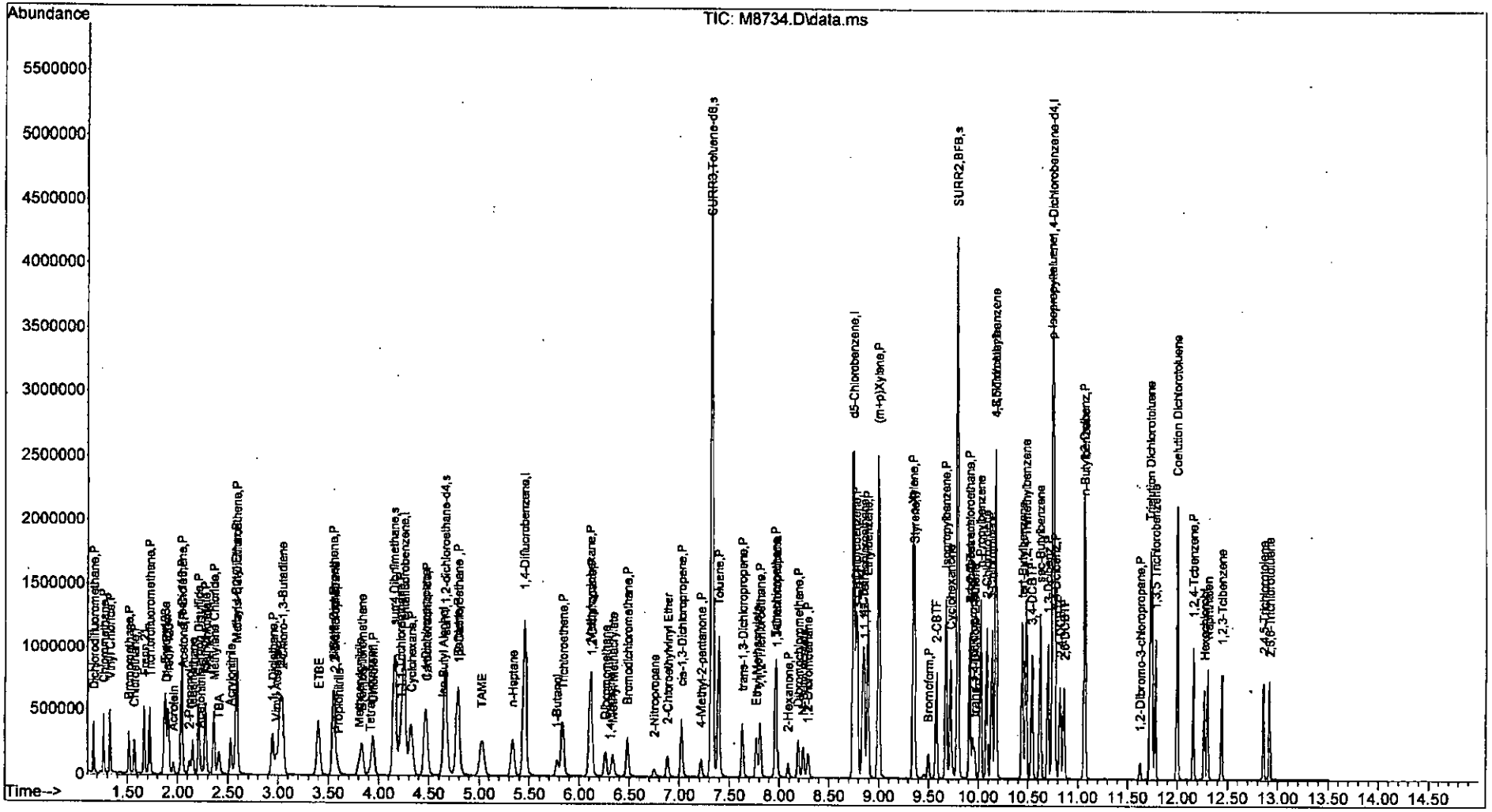
W090914.M Wed Sep 10 09:36:11 2014 Page: 1

00386

Quantitation Report (QT Reviewed)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8734.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 6:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:36:09 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



W090914.M Wed Sep 10 09:39:19 2014

Page: 4

Quantitation Report (QT Reviewed)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8735.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 6:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:40:41 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	818377	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1277051	50.00	ppb		0.00
71) d5-Chlorobenzene	8.748	117	1160256	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	633420	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.158	113	363675	51.13	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.26%				
48) surr1,1,2-dichloroetha...	4.664	65	393799	51.37	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 102.74%				
65) SURR3,Toluene-d8	7.322	98	1586916	52.86	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 105.72%				
70) SURR2,BFB	9.791	95	567314	52.79	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 105.58%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.165	85	455090	57.31	ppb		99
3) Chloromethane	1.262	50	471952	54.49	ppb		97
4) Vinyl Chloride	1.323	62	503755	54.96	ppb		96
5) Bromomethane	1.512	94	257337	48.77	ppb		98
6) Chloroethane	1.567	64	278751	54.40	ppb		100
7) Freon 21	1.664	67	726833	53.63	ppb		99
8) Trichlorofluoromethane	1.719	101	593983	54.03	ppb		96
9) Diethyl Ether	1.884	59	275439	51.99	ppb		95
10) Freon 123a	1.872	67	464423	53.85	ppb		96
11) Freon 123	1.902	83	517771	54.32	ppb		99
12) Acrolein	1.957	56	141488	283.47	ppb		96
13) 1,1-Diclethene	2.042	96	307178	52.67	ppb		98
14) Freon 113	2.036	101	357462	52.68	ppb		97
15) Acetone	2.048	43	82564	49.05	ppb		95
16) 2-Propanol	2.116	45	290530	1083.95	ppb		97
17) Iodomethane	2.146	142	496858	56.59	ppb		100
18) Carbon Disulfide	2.207	76	1132998	51.29	ppb		99
19) Acetonitrile	2.225	40	62055	273.05	ppb	#	83
20) Allyl Chloride	2.280	76	212183	53.43	ppb		98
21) Methyl Acetate	2.274	43	184559	53.82	ppb		98
22) Methylene Chloride	2.359	84	375787	50.13	ppb		96
23) TBA	2.408	59	472964	1051.20	ppb		98
24) Acrylonitrile	2.524	53	444389	277.06	ppb		100
25) Methyl-t-Butyl Ether	2.585	73	908501	54.68	ppb		100
26) trans-1,2-Dichloroethene	2.585	96	381441	52.46	ppb		97
28) 1,1-Diclethane	2.945	63	695356	53.64	ppb		99
29) Vinyl Acetate	2.981	86	51837	48.79	ppb	#	86
30) DIPE	3.018	45	1219111	49.68	ppb		96
31) 2-Chloro-1,3-Butadiene	3.042	53	648809	51.61	ppb		95
32) ETBE	3.396	59	1085531	50.17	ppb		97
33) 2,2-Dichloropropane	3.560	77	565569	55.22	ppb		94
34) cis-1,2-Dichloroethene	3.548	96	421108	51.79	ppb		97
35) 2-Butanone	3.548	43	115659	52.55	ppb		96
36) Propionitrile	3.591	54	164407	277.10	ppb		98
37) Bromochloromethane	3.835	130	232615	51.90	ppb		98

KR 9/10/14

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8735.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 6:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:40:41 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.804	67	105668	55.89	ppb	91
39) Tetrahydrofuran	3.908	42	72935	52.95	ppb	88
40) Chloroform	3.938	83	668361	50.56	ppb	99
41) 1,1,1-Trichloroethane	4.219	97	581174	52.84	ppb	98
42) TAME	5.024	73	935276	50.56	ppb	97
44) Cyclohexane	4.316	41	355336	52.89	ppb	99
46) Carbontetrachloride	4.475	121	156146	54.82	ppb	89
47) 1,1-Dichloropropene	4.469	75	503340	54.27	ppb	98
49) Benzene	4.786	78	1573713	54.25	ppb	97
50) 1,2-Dichloroethane	4.792	62	465385	53.98	ppb	98
51) Iso-Butyl Alcohol	4.639	43	210932	1092.01	ppb	86
52) n-Heptane	5.334	43	396982	54.35	ppb	94
53) 1-Butanol	5.773	56	305352	2752.47	ppb	98
54) Trichloroethene	5.834	130	410817	53.59	ppb	98
55) Methylcyclohexane	6.109	55	439966	55.49	ppb	95
56) 1,2-Diclpropane	6.115	63	402917	55.16	ppb	97
57) Dibromomethane	6.255	93	188852	53.38	ppb	89
58) 1;4-Dioxane	6.310	88	58487m	989.18	ppb	
59) Methyl Methacrylate	6.334	69	191401	57.25	ppb	94
60) Bromodichloromethane	6.481	83	497743	55.06	ppb	98
61) 2-Nitropropane	6.749	41	92158	102.63	ppb	89
62) 2-Chloroethylvinyl Ether	6.883	63	181790	55.30	ppb	98
63) cis-1,3-Dichloropropene	7.023	75	603367	57.13	ppb	97
64) 4-Methyl-2-pentanone	7.212	43	232241	53.67	ppb	96
66) Toluene	7.395	91	1715646	54.44	ppb	97
67) trans-1,3-Dichloropropene	7.633	75	510204	59.31	ppb	98
68) Ethyl Methacrylate	7.767	69	392932	57.97	ppb	98
69) 1,1,2-Trichloroethane	7.810	97	288829	54.33	ppb	98
72) Tetrachloroethene	7.962	164	318264	53.55	ppb	99
73) 2-Hexanone	8.090	43	169885	52.84	ppb	97
74) 1,3-Dichloropropane	7.974	76	528112	53.45	ppb	96
75) Dibromochloromethane	8.194	129	342863	57.31	ppb	92
76) N-Butyl Acetate	8.242	43	405611	58.19	ppb	98
77) 1,2-Dibromoethane	8.291	107	282439	56.57	ppb	98
78) Chlorobenzene	8.773	112	1126909	54.79	ppb	94
79) 3-CBTF	8.785	180	546884	53.80	ppb	97
80) 4-CBTF	8.840	180	499731	51.17	ppb	98
81) 1,1,1,2-Tetrachloroethane	8.852	131	389301	55.20	ppb	98
82) Ethylbenzene	8.889	106	608204	56.29	ppb	92
83) (m+p)Xylene	8.998	106	1499234	114.50	ppb	99
84) o-Xylene	9.346	106	727994	57.15	ppb	100
85) Styrene	9.358	104	1216192	58.17	ppb	98
87) Bromoform	9.498	173	195453	56.60	ppb	98
88) 2-CBTF	9.577	180	538433	52.37	ppb	97
89) Isopropylbenzene	9.675	105	1776795	54.72	ppb	100
90) Cyclohexanone	9.718	55	823382	1100.90	ppb	99
91) trans-1,4-Dichloro-2-B...	9.962	53	86817	53.75	ppb	93
92) 1,1,2,2-Tetrachloroethane	9.913	83	339807	52.12	ppb	98
93) Bromobenzene	9.913	156	446010	53.49	ppb	96
94) 1,2,3-Trichloropropane	9.943	110	97869	51.75	ppb	93
95) n-Propylbenzene	10.023	91	2081988	54.83	ppb	99
96) 2-Chlorotoluene	10.083	91	1237106	53.65	ppb	98

W090914.M Wed Sep 10 09:41:23 2014 Page: 2

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8735.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 6:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:40:41 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	1311410	51.67	ppb	94
98)	4-Chlorotoluene	10.175	91	1462126	54.61	ppb	99
99)	1,3,5-Trimethylbenzene	10.175	105	1472763	56.74	ppb	99
100)	tert-Butylbenzene	10.443	119	1209889	55.58	ppb	98
101)	1,2,4-Trimethylbenzene	10.480	105	1513373	56.53	ppb	99
102)	3,4-DCBTF	10.535	214	356012	48.65	ppb	95
103)	sec-Butylbenzene	10.620	105	1719950	54.38	ppb	99
104)	p-Isopropyltoluene	10.742	119	1479827	56.09	ppb	98
105)	1,3-Dclbenz	10.699	146	847255	53.81	ppb	99
106)	1,4-Dclbenz	10.772	146	858876	52.78	ppb	99
107)	2,4-DCBTF	10.821	214	324977	51.20	ppb	97
108)	2,5-DCBTF	10.864	214	371278	51.55	ppb	95
109)	n-Butylbenzene	11.071	91	1346770	56.23	ppb	99
110)	1,2-Dclbenz	11.065	146	801128	53.26	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.626	157	64442	55.96	ppb	92
112)	Trielution Dichlorotol...	11.730	125	2032476	162.58	ppb	100
113)	1,3,5 Trichlorobenzene	11.778	180	543731	50.66	ppb	98
114)	Coelution Dichlorotoluene	11.998	125	1478814	110.69	ppb	99
115)	1,2,4-Tcbenzene	12.162	180	488207	55.58	ppb	98
116)	Hexachlorobt	12.266	225	181585	52.27	ppb	99
117)	Naphthalen	12.303	128	1043713	58.06	ppb	99
118)	1,2,3-Tclbenzene	12.443	180	416468	54.72	ppb	100
119)	2,4,5-Trichlorotolene	12.857	159	304826	51.28	ppb	96
120)	2,3,6-Trichlorotoluene	12.918	159	304802	52.22	ppb	98

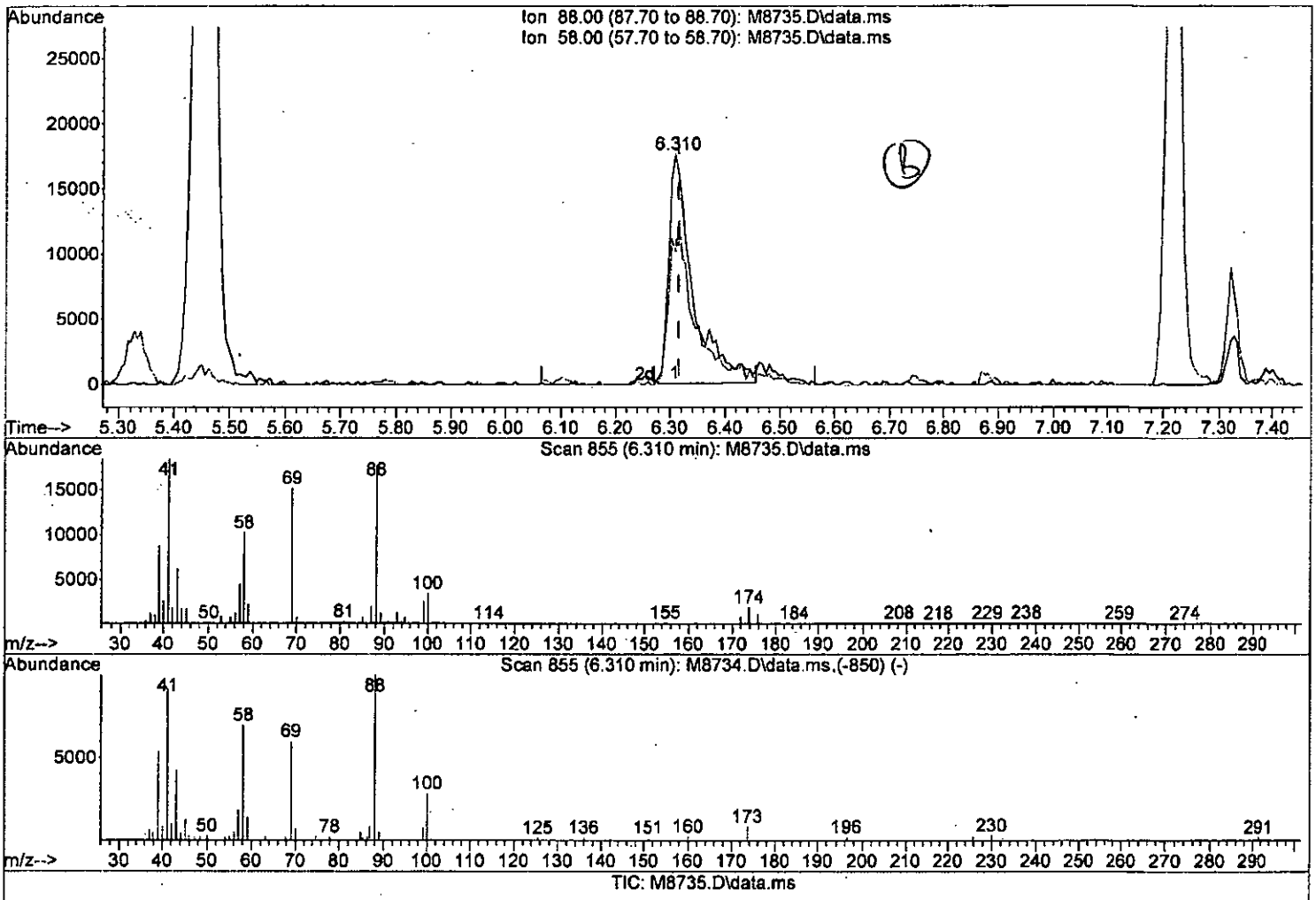
(#) = qualifier out of range (m) = manual integration (+) = signals summed

W090914.M Wed Sep 10 09:41:23 2014 Page: 3

00390

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8735.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 6:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:44 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8735.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.006) 902.23 ppb

response 53346

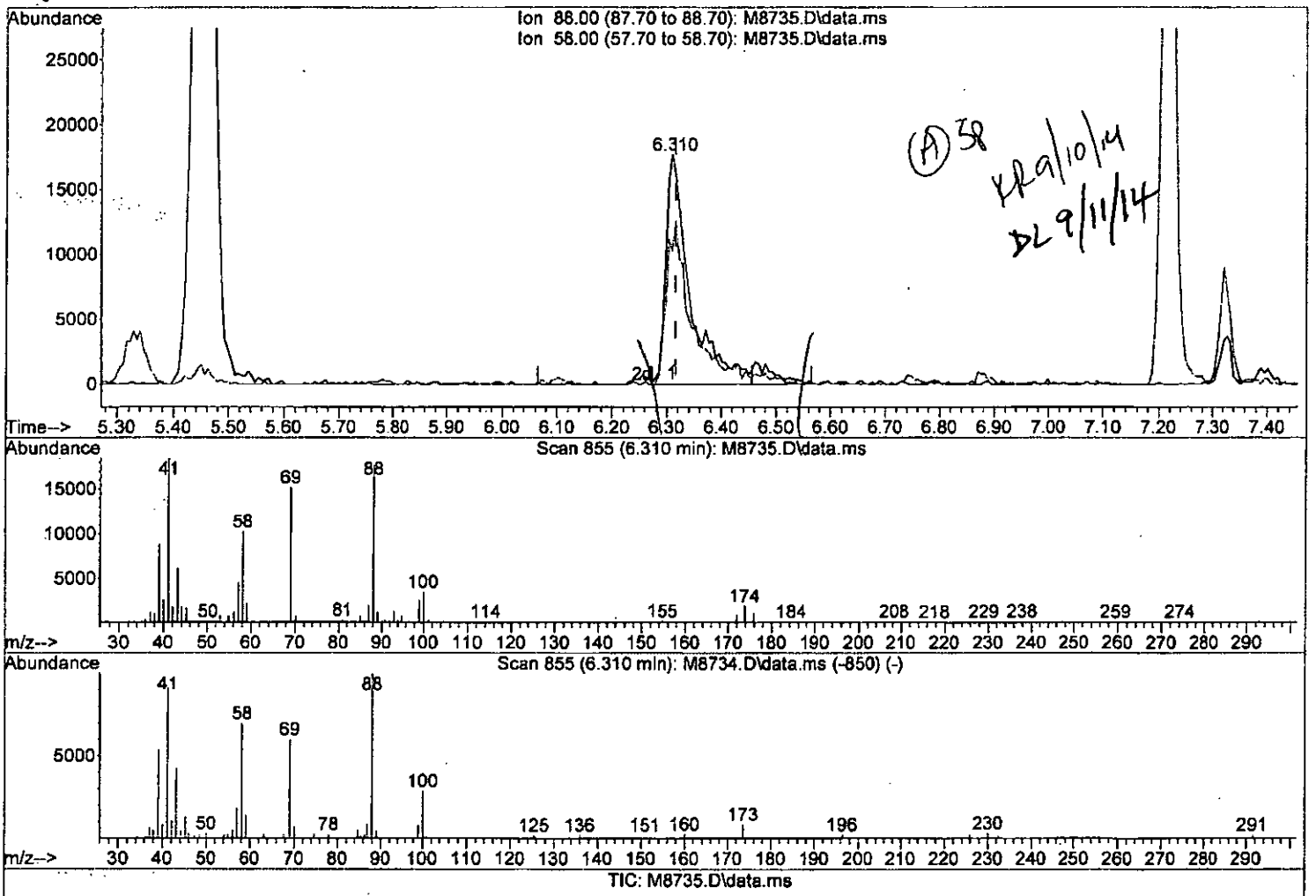
Ion	Exp%	Act%
88.00	100	100
58.00	69.80	57.91
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Wed Sep 10 09:40:38 2014 Page: 1

00391

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8735.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 6:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:44 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8735.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.006) 989.18 ppb m

response 58487

Ion	Exp%	Act%
88.00	100	100
58.00	69.80	57.91
0.00	0.00	0.00
0.00	0.00	0.00

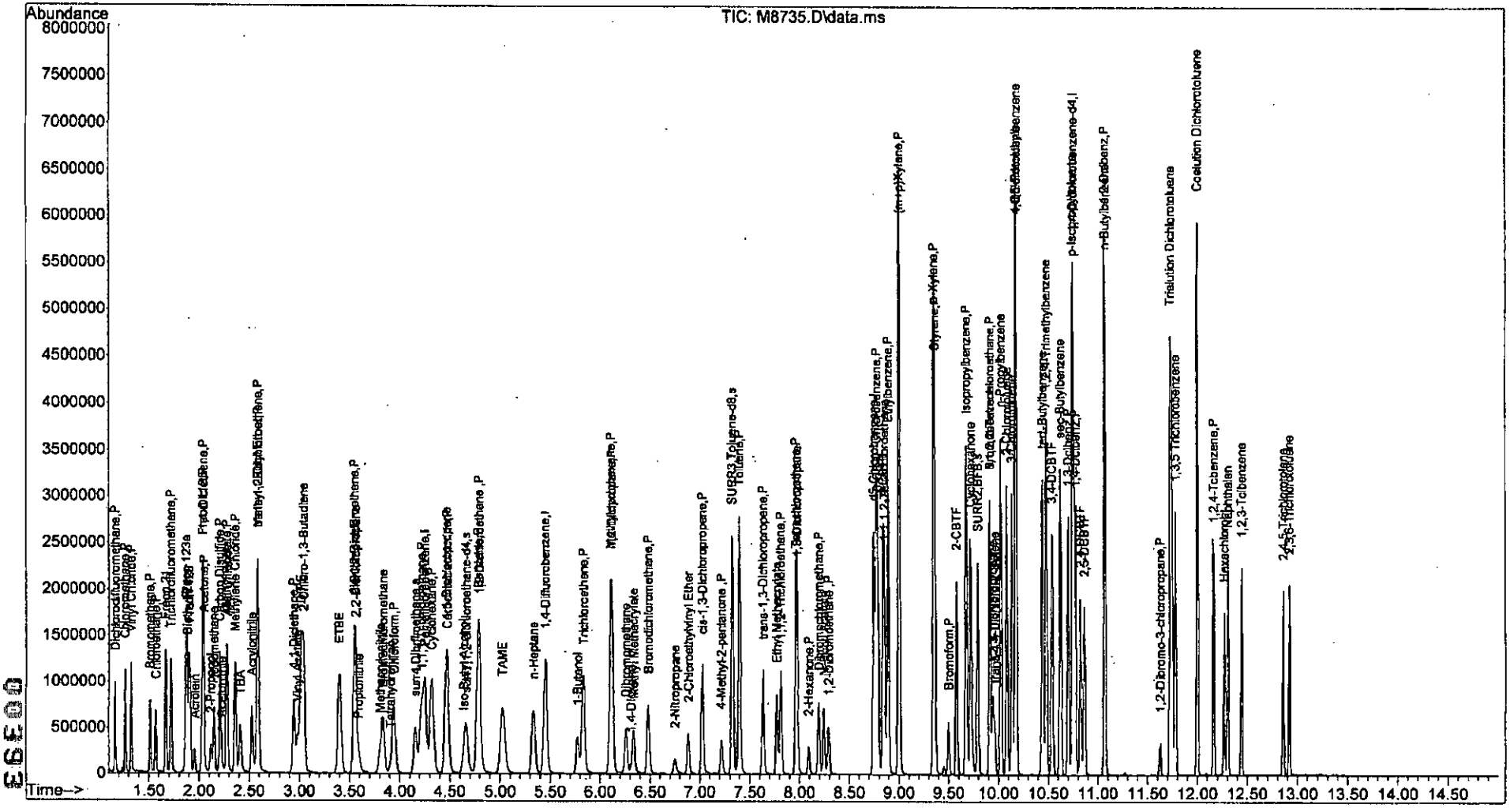
W090914.M Wed Sep 10 09:40:44 2014 Page: 1

00392

Quantitation Report (QT Reviewed)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8735.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 6:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:40:41 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



W090914.M Wed Sep 10 09:41:25 2014

Page: 4

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8736.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 7:18 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:42:16 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	813859	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1307863	50.00	ppb		0.00
71) d5-Chlorobenzene	8.748	117	1201172	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.754	152	658937	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.158	113	889639	122.12	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 244.24%#				
48) surr1,1,2-dichloroetha...	4.664	65	967197	123.19	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 246.38%#				
65) SURR3,Toluene-d8	7.328	98	3725933	121.18	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 242.36%#				
70) SURR2,BFB	9.791	95	1351040	122.76	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 245.52%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	864742	109.50	ppb		98
3) Chloromethane	1.262	50	902857	104.81	ppb		98
4) Vinyl Chloride	1.323	62	986256	108.21	ppb		96
5) Bromomethane	1.512	94	514470	98.03	ppb		99
6) Chloroethane	1.567	64	544646	106.89	ppb		99
7) Freon 21	1.664	67	1429040	106.03	ppb		98
8) Trichlorofluoromethane	1.719	101	1147712	104.98	ppb		97
9) Diethyl Ether	1.884	59	566382	107.49	ppb		96
10) Freon 123a	1.872	67	898992	104.82	ppb		100
11) Freon 123	1.902	83	1018540	107.44	ppb		97
12) Acrolein	1.957	56	327086	658.95	ppb		95
13) 1,1-Diclethene	2.042	96	599047	103.28	ppb		99
14) Freon 113	2.036	101	692102	102.56	ppb		99
15) Acetone	2.048	43	168770	100.83	ppb		97
16) 2-Propanol	2.115	45	618494	2320.37	ppb		95
17) Iodomethane	2.146	142	969394	111.03	ppb		99
18) Carbon Disulfide	2.207	76	2192012	99.78	ppb		98
19) Acetonitrile	2.225	40	117549	520.09	ppb	#	87
20) Allyl Chloride	2.280	76	418410	105.95	ppb		99
21) Methyl Acetate	2.274	43	371931	109.06	ppb		99
22) Methylene Chloride	2.359	84	724699	97.21	ppb		98
23) TBA	2.408	59	1019159	2277.75	ppb		98
24) Acrylonitrile	2.524	53	890141	558.04	ppb		96
25) Methyl-t-Butyl Ether	2.585	73	1846444	111.75	ppb		99
26) trans-1,2-Dichloroethene	2.585	96	744733	103.00	ppb		97
28) 1,1-Diclethane	2.945	63	1347141	104.50	ppb		97
29) Vinyl Acetate	2.981	86	117513	111.23	ppb	#	84
30) DIPE	3.018	45	2557188	104.78	ppb		97
31) 2-Chloro-1,3-Butadiene	3.042	53	1298452	103.86	ppb		91
32) ETBE	3.402	59	2299501	106.86	ppb		97
33) 2,2-Dichloropropane	3.560	77	1120630	110.03	ppb		96
34) cis-1,2-Dichloroethene	3.548	96	826818	102.26	ppb		98
35) 2-Butanone	3.548	43	231033	105.56	ppb		97
36) Propionitrile	3.591	54	330936	560.87	ppb		98
37) Bromochloromethane	3.835	130	448024	100.52	ppb		99

KP 9/10/14

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8736.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 7:18 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:42:16 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.804	67	210263	111.82	ppb		97
39) Tetrahydrofuran	3.908	42	143030	104.42	ppb		93
40) Chloroform	3.944	83	1290674	98.18	ppb		98
41) 1,1,1-Trichloroethane	4.219	97	1141244	104.34	ppb		91
42) TAME	5.030	73	1997342	108.57	ppb		97
44) Cyclohexane	4.322	41	696838	101.27	ppb		98
46) Carbontetrachloride	4.475	121	301936	103.51	ppb		86
47) 1,1-Dichloropropene	4.469	75	993373	104.59	ppb		99
49) Benzene	4.786	78	3071410	103.39	ppb		99
50) 1,2-Dichloroethane	4.792	62	914014	103.51	ppb		97
51) Iso-Butyl Alcohol	4.645	43	457441	2312.40	ppb		93
52) n-Heptane	5.334	43	775655	103.70	ppb		92
53) 1-Butanol	5.773	56	701777	6176.85	ppb		95
54) Trichloroethene	5.834	130	801807	102.13	ppb		96
55) Methylcyclohexane	6.109	55	894501	110.15	ppb		97
56) 1,2-Diclpropane	6.115	63	790284	105.65	ppb		97
57) Dibromomethane	6.255	93	382504	105.56	ppb		91
58) 1,4-Dioxane	6.310	88	120158m	1984.33	ppb		
59) Methyl Methacrylate	6.334	69	387427	113.16	ppb		98
60) Bromodichloromethane	6.481	83	977707	105.60	ppb		98
61) 2-Nitropropane	6.749	41	201586	219.21	ppb		92
62) 2-Chloroethylvinyl Ether	6.883	63	370046	109.91	ppb		96
63) cis-1,3-Dichloropropene	7.023	75	1210938	111.96	ppb		98
64) 4-Methyl-2-pentanone	7.218	43	492523	111.13	ppb		96
66) Toluene	7.395	91	3349944	103.79	ppb		97
67) trans-1,3-Dichloropropene	7.633	75	1016661	115.39	ppb		98
68) Ethyl Methacrylate	7.773	69	820102	118.14	ppb		97
69) 1,1,2-Trichloroethane	7.809	97	572143	105.09	ppb		98
72) Tetrachloroethene	7.962	164	625980	101.74	ppb		99
73) 2-Hexanone	8.090	43	364380	109.48	ppb		98
74) 1,3-Dichloropropane	7.974	76	1062117	103.83	ppb		100
75) Dibromochloromethane	8.194	129	686610	110.86	ppb		96
76) N-Butyl Acetate	8.242	43	871988	120.84	ppb		98
77) 1,2-Dibromoethane	8.291	107	564279	109.17	ppb		95
78) Chlorobenzene	8.773	112	2207769	103.68	ppb		95
79) 3-CBTF	8.785	180	1161986	110.41	ppb		96
80) 4-CBTF	8.840	180	1068053	105.64	ppb		96
81) 1,1,1,2-Tetrachloroethane	8.852	131	778122	106.57	ppb		98
82) Ethylbenzene	8.889	106	1199362	107.23	ppb	#	89
83) (m+p)Xylene	8.998	106	2960156	218.38	ppb		97
84) o-Xylene	9.346	106	1453926	110.25	ppb		97
85) Styrene	9.358	104	2441353	112.80	ppb		99
87) Bromoform	9.498	173	402246	111.98	ppb		99
88) 2-CBTF	9.577	180	1123441	105.05	ppb		94
89) Isopropylbenzene	9.675	105	3481901	103.09	ppb		99
90) Cyclohexanone	9.724	55	1687619	2169.05	ppb		99
91) trans-1,4-Dichloro-2-B...	9.962	53	189559	112.82	ppb		94
92) 1,1,2,2-Tetrachloroethane	9.913	83	698535	102.99	ppb		97
93) Bromobenzene	9.913	156	895406	103.23	ppb		97
94) 1,2,3-Trichloropropane	9.943	110	197001	100.14	ppb		98
95) n-Propylbenzene	10.022	91	4054271	102.64	ppb		98
96) 2-Chlorotoluene	10.083	91	2440652	101.74	ppb		99

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8736.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 7:18 pm
Operator : K.Ruest
InstName : MSVOA-12

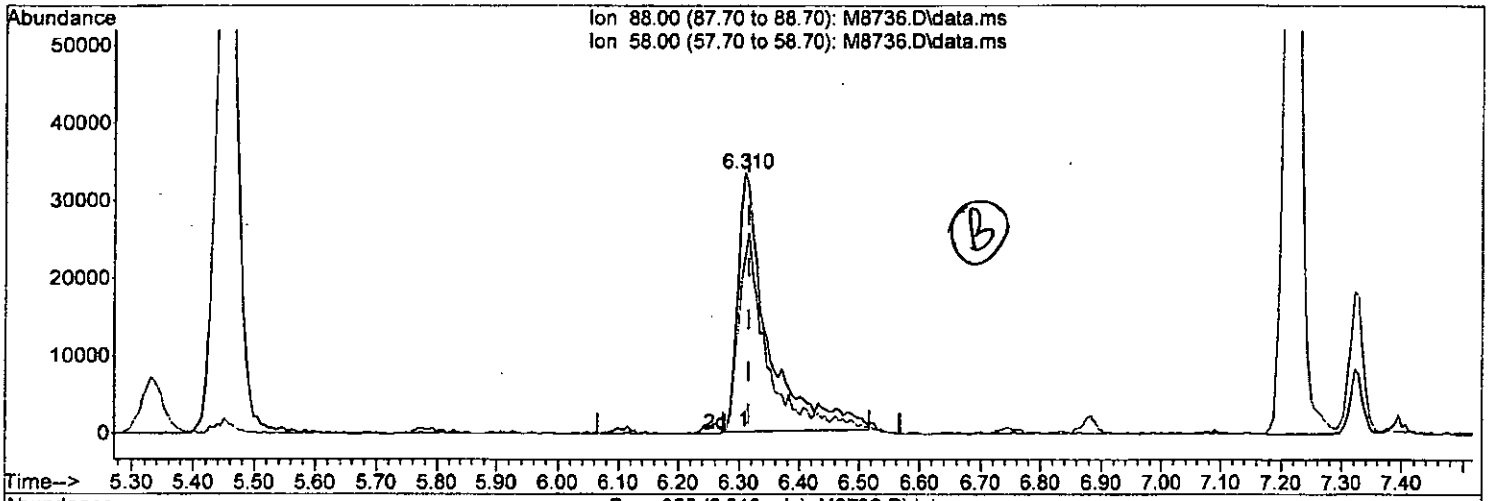
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:42:16 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	2760680	104.57	ppb	94
98)	4-Chlorotoluene	10.175	91	2942497	105.64	ppb	99
99)	1,3,5-Trimethylbenzene	10.175	105	2956949	109.52	ppb	99
100)	tert-Butylbenzene	10.443	119	2361923	104.30	ppb	97
101)	1,2,4-Trimethylbenzene	10.480	105	2964810	106.46	ppb	100
102)	3,4-DCBTF	10.541	214	768460	100.95	ppb	93
103)	sec-Butylbenzene	10.620	105	3362068	102.18	ppb	99
104)	p-Isopropyltoluene	10.742	119	2917849	106.31	ppb	98
105)	1,3-Dclbenz	10.699	146	1663890	101.59	ppb	99
106)	1,4-Dclbenz	10.772	146	1708880	100.96	ppb	100
107)	2,4-DCBTF	10.821	214	702637	106.41	ppb	98
108)	2,5-DCBTF	10.864	214	764623	102.05	ppb	97
109)	n-Butylbenzene	11.071	91	2654720	106.55	ppb	97
110)	1,2-Dclbenz	11.065	146	1635158	104.51	ppb	99
111)	1,2-Dibromo-3-chloropr...	11.626	157	133641	111.56	ppb	92
112)	Trielution Dichlorotol...	11.729	125	4256459	327.30	ppb	99
113)	1,3,5 Trichlorobenzene	11.778	180	1127895	101.02	ppb	98
114)	Coelution Dichlorotoluene	11.998	125	3077064	221.40	ppb	98
115)	1,2,4-Tcbenzene	12.162	180	957353	104.78	ppb	99
116)	Hexachlorobt	12.266	225	337327	93.33	ppb	98
117)	Naphthalen	12.303	128	2105968	112.62	ppb	99
118)	1,2,3-Tclbenzene	12.443	180	807522	102.00	ppb	97
119)	2,4,5-Trichlorotolene	12.857	159	636246	102.88	ppb	98
120)	2,3,6-Trichlorotoluene	12.918	159	617664	101.73	ppb	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8736.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 7:18 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:49 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8736.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.006) 1881.18 ppb

response 113912

Ion	Exp%	Act%
88.00	100	100
58.00	69.80	67.79
0.00	0.00	0.00
0.00	0.00	0.00

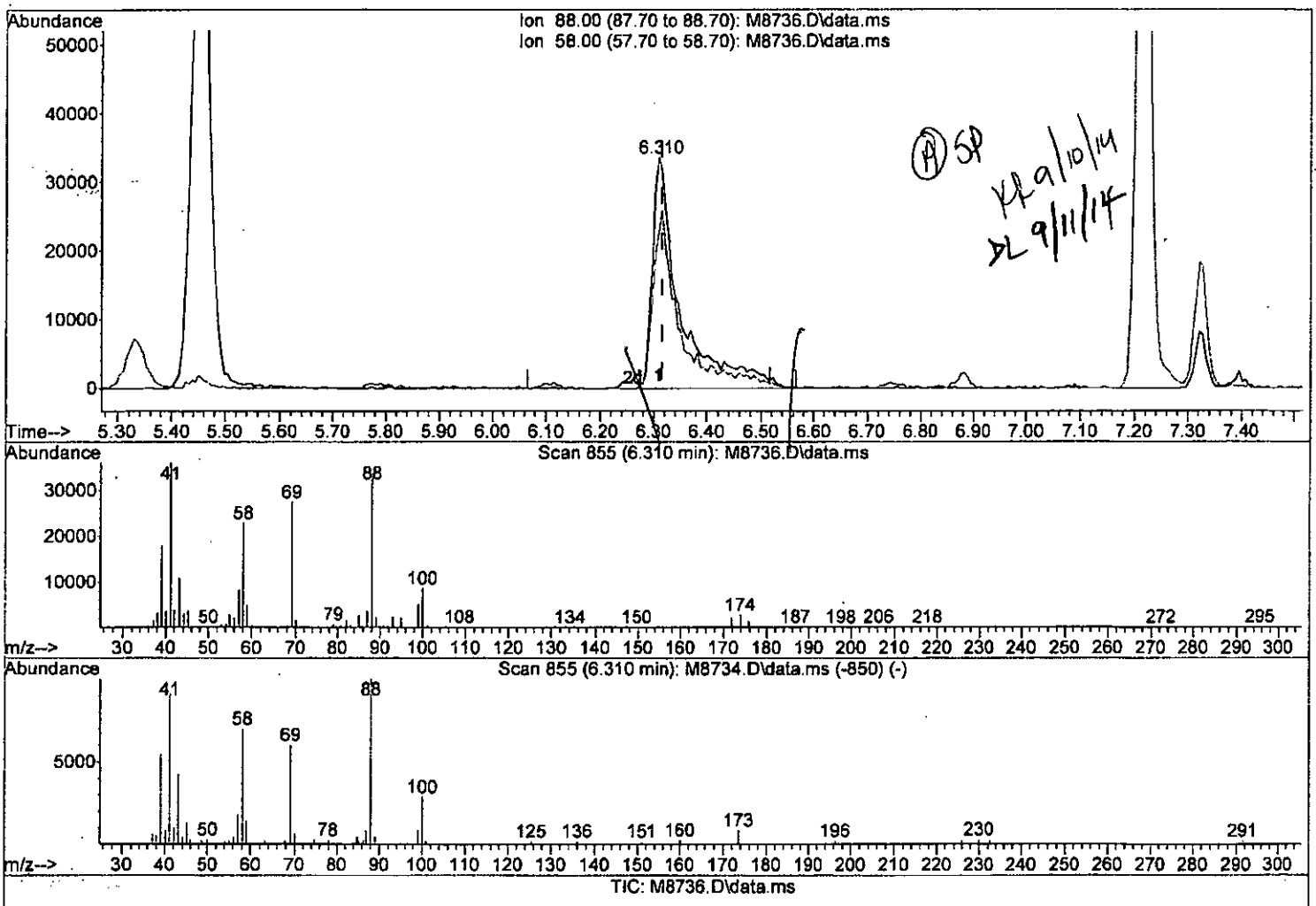
W090914.M Wed Sep 10 09:42:11 2014 Page: 1

00397

Quantitation Report (Qedit)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8736.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 7:18 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 08:46:49 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



TIC: M8736.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.006) 1984.33 ppb m

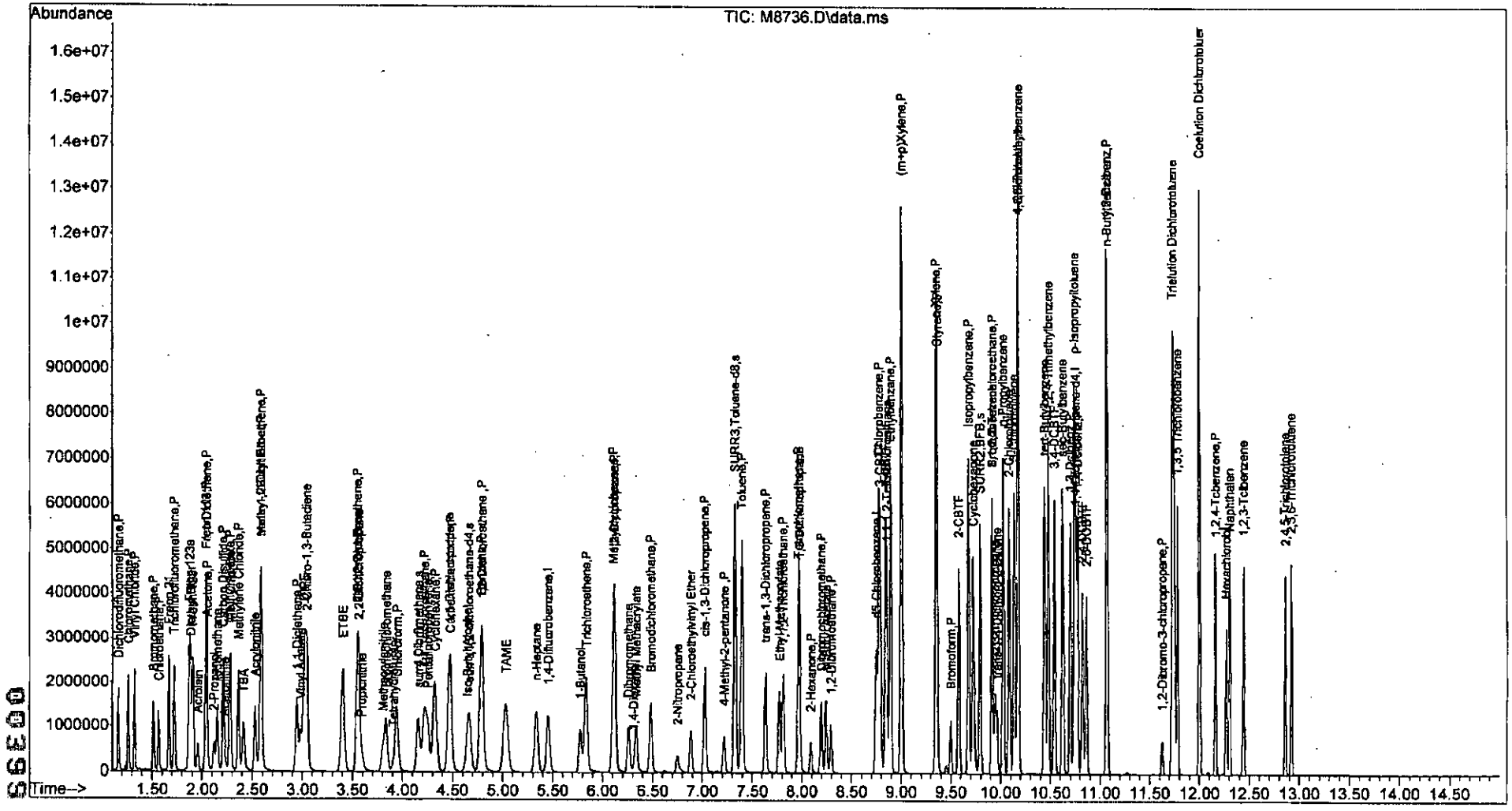
response 120158

Ion	Exp%	Act%
88.00	100	100
58.00	69.80	67.79
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8736.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 7:18 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:42:16 2014
QLast Update : Wed Sep 10 08:41:49 2014
Response via : Initial Calibration



W090914.M Wed Sep 10 09:43:04 2014 Page: 4

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8737.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 7:50 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:46:57 2014
QLast Update : Wed Sep 10 09:45:44 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	853409	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1357501	50.00	ppb	0.00
71) d5-Chlorobenzene	8.748	117	1268084	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.754	152	713250	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrf1methane	4.158	113	1107609	146.49	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 292.98%#			
48) surr1,1,2-dichloroetha...	4.670	65	1207918	148.22	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 296.44%#			
65) SURR3,Toluene-d8	7.328	98	4664107	146.16	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 292.32%#			
70) SURR2,BFB	9.791	95	1720172	150.57	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 301.14%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.164	85	1803741	217.81	ppb	99
3) Chloromethane	1.262	50	1980518	219.27	ppb	97
4) Vinyl Chloride	1.323	62	2081737	217.81	ppb	100
5) Bromomethane	1.512	94	1147408	206.59	ppb	98
6) Chloroethane	1.567	64	1147912	214.85	ppb	99
7) Freon 21	1.664	67	2951378	208.85	ppb	97
8) Trichlorofluoromethane	1.719	101	2430347	211.99	ppb	100
9) Diethyl Ether	1.878	59	1220233	220.85	ppb	97
10) Freon 123a	1.872	67	1941927	215.94	ppb	97
11) Freon 123	1.902	83	2170372	218.37	ppb	97
12) Acrolein	1.951	56	776161	1491.19	ppb	99
13) 1,1-Diclethene	2.042	96	1312994	215.87	ppb	96
14) Freon 113	2.036	101	1474403	208.35	ppb	99
15) Acetone	2.048	43	368101	209.72	ppb	96
16) 2-Propanol	2.115	45	1388003	4965.28	ppb	97
17) Iodomethane	2.146	142	1967864	214.94	ppb	98
18) Carbon Disulfide	2.207	76	4563589	198.11	ppb	98
19) Acetonitrile	2.225	40	280559	1183.80	ppb	98
20) Allyl Chloride	2.280	76	871964	212.54	ppb	98
21) Methyl Acetate	2.274	43	807072	225.68	ppb	100
22) Methylene Chloride	2.359	84	1561810	199.78	ppb	96
23) TBA	2.408	59	2276064	4851.10	ppb	98
24) Acrylonitrile	2.524	53	1981546	1184.65	ppb	99
25) Methyl-t-Butyl Ether	2.585	73	4004538	231.13	ppb	98
26) trans-1,2-Dichloroethene	2.585	96	1624445	214.25	ppb	96
28) 1,1-Diclethane	2.945	63	2878240	212.93	ppb	97
29) Vinyl Acetate	2.981	86	253175	234.73	ppb	99
30) DIPE	3.018	45	5240631	204.78	ppb	98
31) 2-Chloro-1,3-Butadiene	3.042	53	2744295	208.63	ppb	99
32) ETBE	3.402	59	4795409	212.52	ppb	100
33) 2,2-Dichloropropane	3.560	77	2367570	221.68	ppb	98
34) cis-1,2-Dichloroethene	3.548	96	1791440	210.35	ppb	100
35) 2-Butanone	3.548	43	508882	221.74	ppb	94
36) Propionitrile	3.597	54	753634	1218.06	ppb	99
37) Bromochloromethane	3.835	130	931329	197.77	ppb	97

W090914.M Wed Sep 10 09:47:38 2014 Page: 1

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8737.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 7:50 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:46:57 2014
QLast Update : Wed Sep 10 09:45:44 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.804	67	468646	237.52	ppb		95
39) Tetrahydrofuran	3.908	42	319044	222.12	ppb		93
40) Chloroform	3.944	83	2754769	199.85	ppb		99
41) 1,1,1-Trichloroethane	4.219	97	2436871	213.49	ppb		92
42) TAME	5.030	73	4235532	219.56	ppb		99
44) Cyclohexane	4.322	41	1488783	212.06	ppb		99
46) Carbontetrachloride	4.475	121	662734	216.75	ppb		93
47) 1,1-Dichloropropene	4.469	75	2097741	212.78	ppb		98
49) Benzene	4.786	78	6562400	213.01	ppb		97
50) 1,2-Dichloroethane	4.792	62	1983133	216.37	ppb		99
51) Iso-Butyl Alcohol	4.645	43	1011590	4964.36	ppb		95
52) n-Heptane	5.334	43	1633431	210.39	ppb		96
53) 1-Butanol	5.779	56	1465753	12468.79	ppb		99
54) Trichloroethene	5.834	130	1737363	211.91	ppb		98
55) Methylcyclohexane	6.109	55	1897088	225.10	ppb		98
56) 1,2-Diclpropane	6.121	63	1705459	219.65	ppb		100
57) Dibromomethane	6.261	93	821011	218.29	ppb		94
58) 1,4-Dioxane	6.316	88	266627m	4124.16	ppb		
59) Methyl Methacrylate	6.334	69	852049	238.87	ppb		94
60) Bromodichloromethane	6.480	83	2115996	220.20	ppb		99
61) 2-Nitropropane	6.749	41	477951	500.74	ppb		94
62) 2-Chloroethylvinyl Ether	6.883	63	814639	233.12	ppb		96
63) cis-1,3-Dichloropropene	7.023	75	2640250	235.18	ppb		99
64) 4-Methyl-2-pentanone	7.218	43	1077704	234.35	ppb		98
66) Toluene	7.395	91	7011397	209.28	ppb		96
67) trans-1,3-Dichloropropene	7.633	75	2256201	246.72	ppb		98
68) Ethyl Methacrylate	7.773	69	1804273	250.95	ppb		100
69) 1,1,2-Trichloroethane	7.809	97	1253212	221.77	ppb		96
72) Tetrachloroethene	7.968	164	1354559	208.54	ppb		98
73) 2-Hexanone	8.090	43	804903	226.16	ppb		96
74) 1,3-Dichloropropane	7.974	76	2342610	216.92	ppb		97
75) Dibromochloromethane	8.194	129	1535569	234.84	ppb		97
76) N-Butyl Acetate	8.242	43	1901542	249.37	ppb		99
77) 1,2-Dibromoethane	8.291	107	1223962	224.31	ppb		100
78) Chlorobenzene	8.773	112	4756115	211.58	ppb		98
79) 3-CBTF	8.791	180	2438106	219.44	ppb		98
80) 4-CBTF	8.840	180	2230521	208.97	ppb		97
81) 1,1,1,2-Tetrachloroethane	8.852	131	1727754	224.15	ppb		97
82) Ethylbenzene	8.895	106	2620865	221.95	ppb	#	80
83) (m+p)Xylene	9.004	106	6348529	443.67	ppb	#	75
84) o-Xylene	9.352	106	3235149	232.38	ppb		88
85) Styrene	9.358	104	5313402	232.83	ppb		94
87) Bromoform	9.498	173	903684	232.41	ppb		99
88) 2-CBTF	9.584	180	2339788	202.12	ppb		99
89) Isopropylbenzene	9.675	105	7129381	195.01	ppb		95
90) Cyclohexanone	9.724	55	3702101	4361.85	ppb		99
91) trans-1,4-Dichloro-2-B...	9.961	53	414507	227.92	ppb		96
92) 1,1,2,2-Tetrachloroethane	9.913	83	1576631	214.76	ppb		97
93) Bromobenzene	9.913	156	1966257	209.43	ppb		93
94) 1,2,3-Trichloropropane	9.943	110	435458	204.49	ppb		98
95) n-Propylbenzene	10.029	91	8063421	188.59	ppb		91
96) 2-Chlorotoluene	10.083	91	5179598	199.70	ppb		99

W090914.M Wed Sep 10 09:47:38 2014

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8737.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 7:50 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:46:57 2014
QLast Update : Wed Sep 10 09:45:44 2014
Response via : Initial Calibration

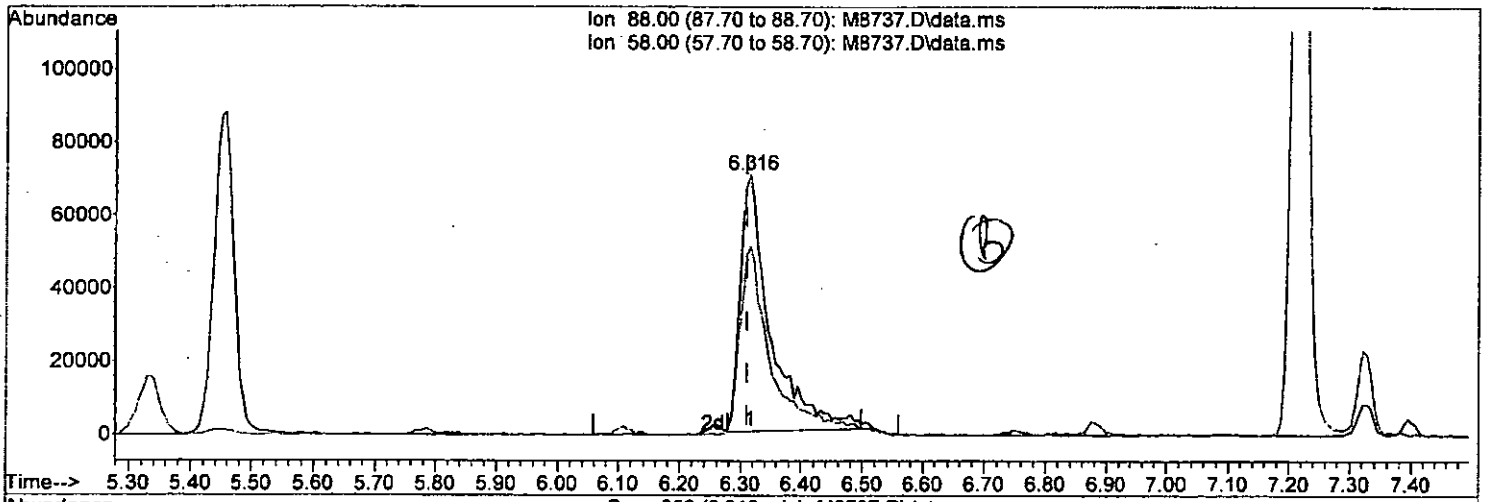
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
97)	3-Chlorotoluene	10.138	91	5464223	196.36	ppb		94
98)	4-Chlorotoluene	10.175	91	6280533	208.30	ppb		94
99)	1,3,5-Trimethylbenzene	10.175	105	6242929	213.61	ppb		93
100)	tert-Butylbenzene	10.443	119	5031404	205.26	ppb		98
101)	1,2,4-Trimethylbenzene	10.480	105	6135686	203.54	ppb		95
102)	3,4-DCBTF	10.541	214	1582833	192.11	ppb		98
103)	sec-Butylbenzene	10.626	105	6814239	191.32	ppb		94
104)	p-Isopropyltoluene	10.742	119	5983233	201.40	ppb		95
105)	1,3-Dclbenz	10.699	146	3641236	205.38	ppb		98
106)	1,4-Dclbenz	10.772	146	3708795	202.42	ppb		97
107)	2,4-DCBTF	10.827	214	1414641	198.27	ppb		96
108)	2,5-DCBTF	10.864	214	1579808	194.78	ppb		96
109)	n-Butylbenzene	11.071	91	5558206	206.11	ppb		93
110)	1,2-Dclbenz	11.071	146	3622110	213.87	ppb		97
111)	1,2-Dibromo-3-chloropr...	11.626	157	300448	231.72	ppb		93
112)	Trielution Dichlorotol...	11.736	125	8500626	603.88	ppb		91
113)	1,3,5 Trichlorobenzene	11.784	180	2268751	187.73	ppb		98
114)	Coelution Dichlorotoluene	11.998	125	5915950	393.25	ppb	#	90
115)	1,2,4-Tcbenzene	12.162	180	1994288	201.64	ppb		99
116)	Hexachlorobt	12.266	225	697008	178.17	ppb		99
117)	Naphthalen	12.303	128	4348671	214.84	ppb		98
118)	1,2,3-Tclbenzene	12.443	180	1689948	197.20	ppb		98
119)	2,4,5-Trichlorotolene	12.857	159	1240219	185.27	ppb		98
120)	2,3,6-Trichlorotoluene	12.912	159	1233328	187.67	ppb		95

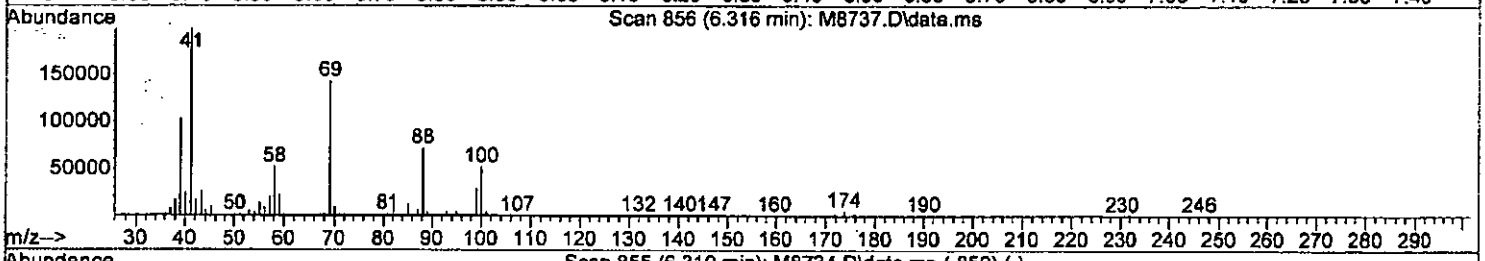
(#) = qualifier out of range (m) = manual integration (+) = signals summed

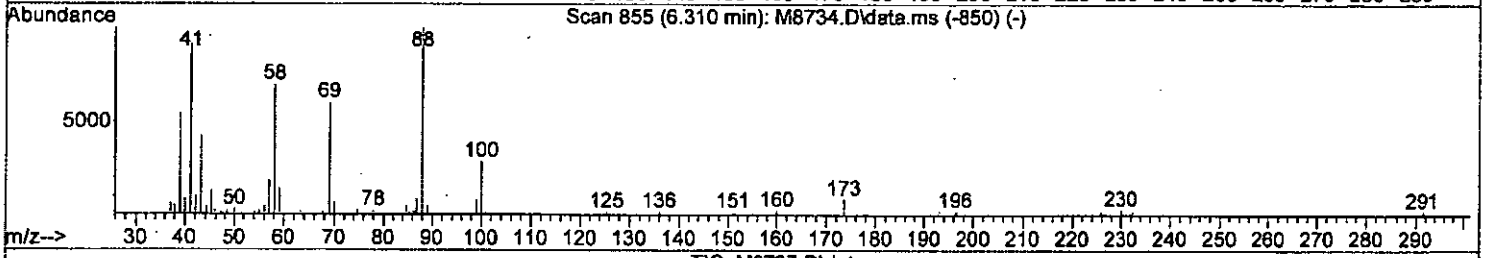
Quantitation Report (Qedit)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8737.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 7:50 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:46:04 2014
QLast Update : Wed Sep 10 09:45:44 2014
Response via : Initial Calibration







TIC: M8737.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.006) 3798.30 ppb

response 245560

Ion	Exp%	Act%
88.00	100	100
58.00	57.90	72.14
0.00	0.00	0.00
0.00	0.00	0.00

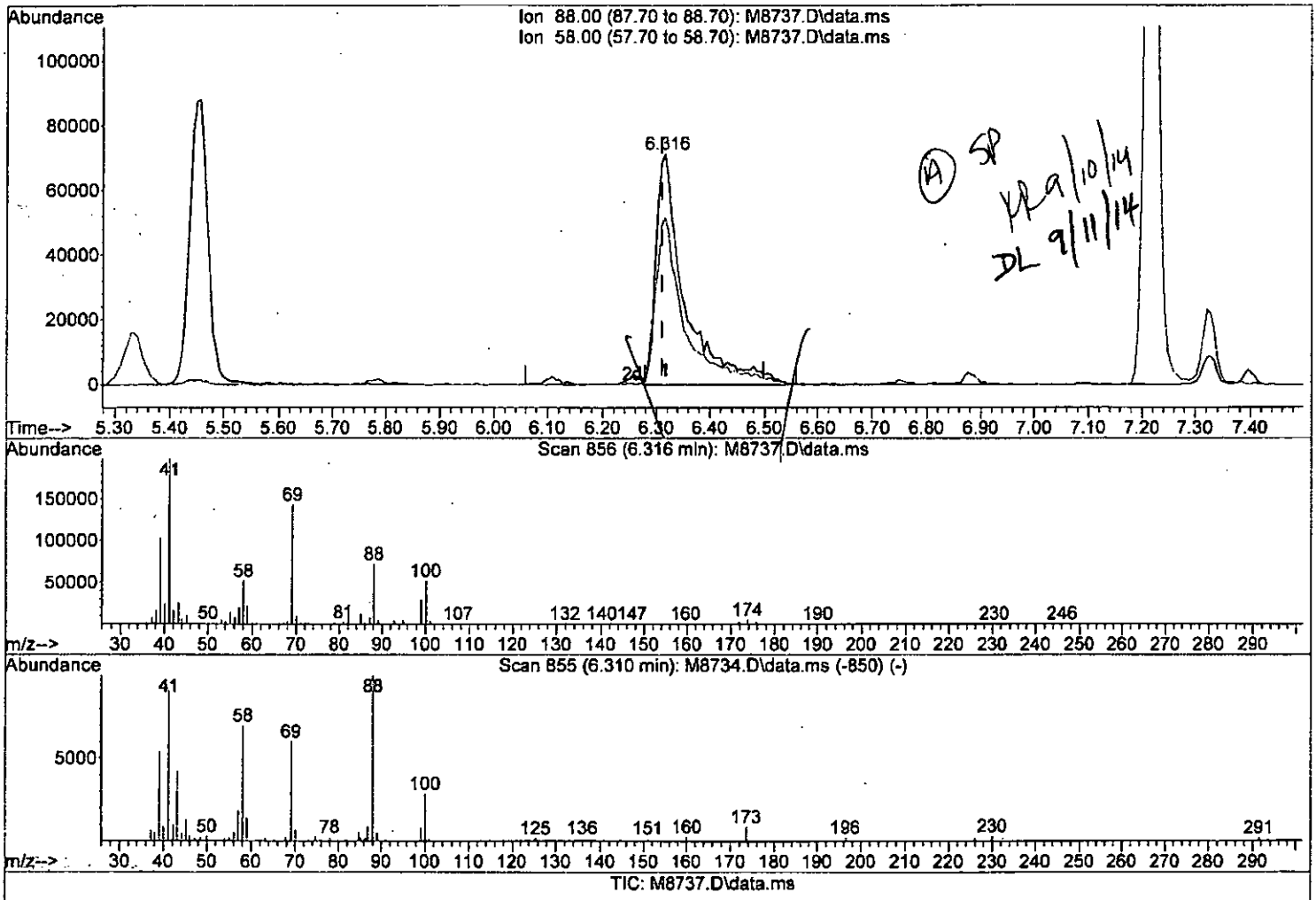
W090914.M Wed Sep 10 09:46:53 2014

Page: 1

00403

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8737.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 7:50 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:46:04 2014
QLast Update : Wed Sep 10 09:45:44 2014
Response via : Initial Calibration



TIC: M8737.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.006) 4124.16 ppb m

response 266627

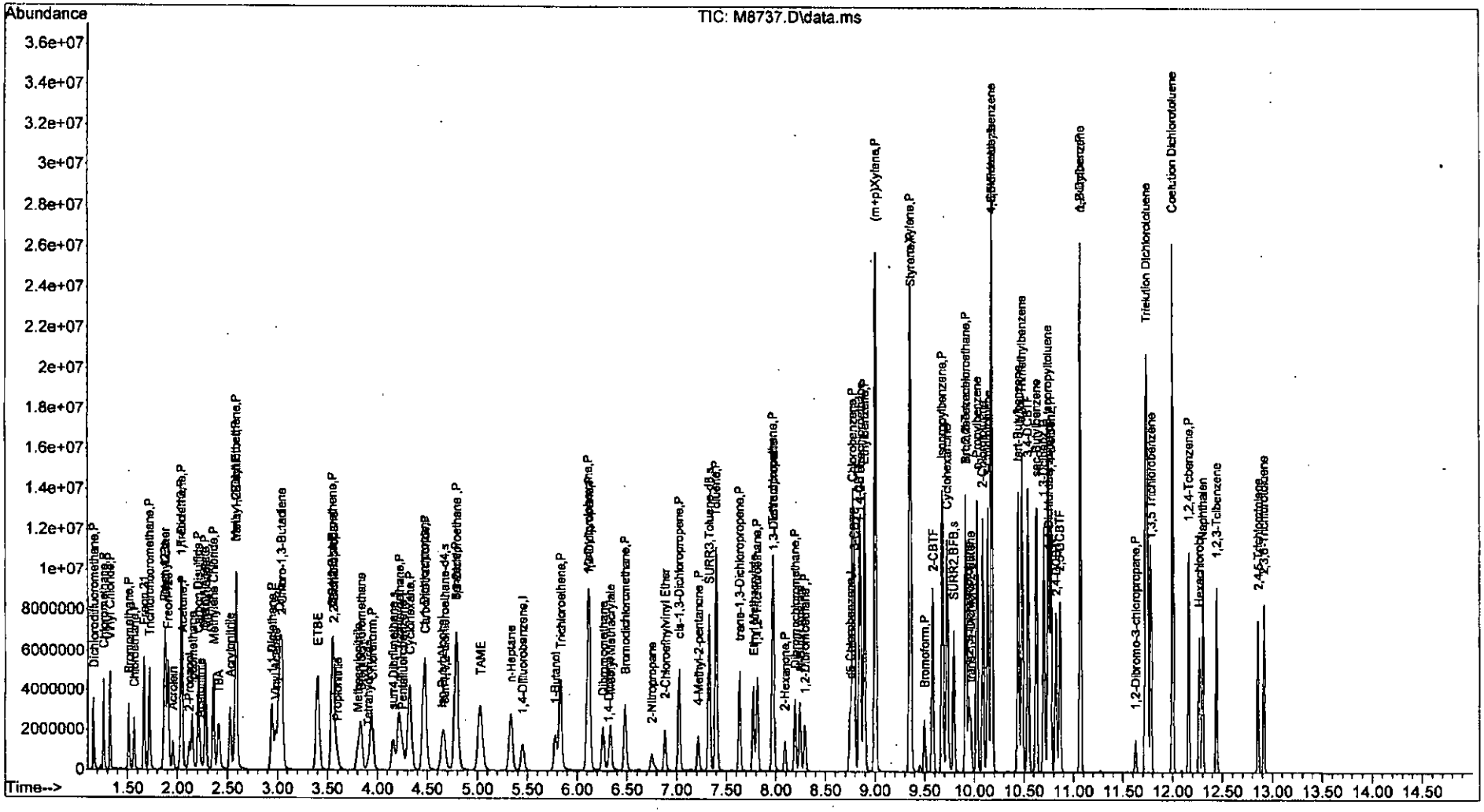
Ion	Exp%	Act%
88.00	100	100
58.00	57.90	72.14
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Wed Sep 10 09:47:00 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8737.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 7:50 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 09:46:57 2014
QLast Update : Wed Sep 10 09:45:44 2014
Response via : Initial Calibration



W090914.M Wed Sep 10 09:47:40 2014 Page: 4

Initial Calibration Verification Summary Report

Calibration ID: RC1400080 **Instrument ID:** R-MS-12
W0910914 8260 Water **Column Name:** 1 XR 9/10/14

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
1,1,1,2-Tetrachloroethane	RC1400080-09	T	Average RF	50	53.78	ppm	7.6	<=30
1,1,1-Trichloroethane (TCA)	RC1400080-09	T	Average RF	50	54.69	ppm	9.4	<=30
1,1,2,2-Tetrachloroethane	RC1400080-09	T	Average RF	50	54.53	ppm	9.1	<=30
1,1,2-Trichloroethane	RC1400080-09	T	Average RF	50	54.19	ppm	8.4	<=30
1,1,2-Trichlorotrifluoroethane	RC1400080-09	T	Average RF	50	51.51	ppm	3.0	<=30
1,1-Dichloroethane (1,1-DCA)	RC1400080-09	T	Average RF	50	54.87	ppm	9.7	<=30
1,1-Dichloroethene (1,1-DCE)	RC1400080-09	T	Average RF	50	59.69	ppm	19.4	<=30
1,1-Dichloropropene	RC1400080-09	T	Average RF	50	55.13	ppm	10.3	<=30
1,2,3-Trichlorobenzene	RC1400080-09	T	Average RF	50	53.47	ppm	6.9	<=30
1,2,3-Trichloropropane	RC1400080-09	T	Average RF	50	54.57	ppm	9.1	<=30
1,2,4-Trichlorobenzene	RC1400080-09	T	Average RF	50	54.91	ppm	9.8	<=30
1,2,4-Trimethylbenzene	RC1400080-09	T	Average RF	50	54.69	ppm	9.4	<=30
1,2-Dibromo-3-chloropropane (DBCP)	RC1400080-09	T	Average RF	50	56.26	ppm	12.5	<=30
1,2-Dibromoethane	RC1400080-09	T	Average RF	50	56.77	ppm	13.5	<=30
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	RC1400080-09	T	Average RF	50	57.62	ppm	15.2	<=30
1,2-Dichlorobenzene	RC1400080-09	T	Average RF	50	53.28	ppm	6.6	<=30
1,2-Dichloroethane	RC1400080-09	T	Average RF	50	54.79	ppm	9.6	<=30
1,2-Dichloropropane	RC1400080-09	T	Average RF	50	55.97	ppm	11.9	<=30
1,3,5-Trichlorobenzene	RC1400080-09	T	Average RF	50	47.31	ppm	-5.4	<=30
1,3,5-Trimethylbenzene	RC1400080-09	T	Average RF	50	55.86	ppm	11.7	<=30
1,3-Dichlorobenzene	RC1400080-09	T	Average RF	50	53.10	ppm	6.2	<=30
1,3-Dichloropropane	RC1400080-09	T	Average RF	50	53.91	ppm	7.8	<=30
1,4-Dichlorobenzene	RC1400080-09	T	Average RF	50	52.40	ppm	4.8	<=30
1,4-Dioxane	RC1400080-09	T	Average RF	1000	992.9	ppm	-0.7	<=30
1-Butanol	RC1400080-09	T	Average RF	2500	2911	ppm	16.4	<=30
1-Chloro-4-(trifluoromethyl)benzene	RC1400080-09	T	Average RF	50	47.23	ppm	-5.5	<=30
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	RC1400080-09	T	Average RF	50	57.44	ppm	14.9	<=30
2,2-Dichloropropane	RC1400080-09	T	Average RF	50	51.09	ppm	2.2	<=30
2,3,6-Trichlorotoluene	RC1400080-09	T	Average RF	50	49.16	ppm	-1.7	<=30
2,4,5-Trichlorotoluene	RC1400080-09	T	Average RF	50	48.20	ppm	-3.6	<=30
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	RC1400080-09	T	Average RF	150	152.5	ppm	1.7	<=30
2,4-Dichlorobenzotrifluoride	RC1400080-09	T	Average RF	50	46.80	ppm	-6.4	<=30
2,5-Dichlorobenzotrifluoride	RC1400080-09	T	Average RF	50	47.14	ppm	-5.7	<=30
2-Butanone (MEK)	RC1400080-09	T	Average RF	50	51.60	ppm	3.2	<=30
2-Chloro-1,3-butadiene	RC1400080-09	T	Average RF	50	50.18	ppm	0.4	<=30
2-Chlorobenzotrifluoride	RC1400080-09	T	Average RF	50	49.28	ppm	-1.4	<=30
2-Chloroethyl Vinyl Ether	RC1400080-09	T	Average RF	50	61.54	ppm	23.1	<=30
2-Chlorotoluene	RC1400080-09	T	Average RF	50	52.70	ppm	5.4	<=30
2-Hexanone	RC1400080-09	T	Average RF	50	53.35	ppm	6.7	<=30
2-Methyl-1-propanol	RC1400080-09	T	Average RF	1000	1114	ppm	11.4	<=30
2-Methyl-2-propanol	RC1400080-09	T	Average RF	1000	1182	ppm	18.2	<=30
2-Nitropropane	RC1400080-09	T	Average RF	100	120.4	ppm	20.4	<=30
2-Propanol	RC1400080-09	T	Average RF	1000	1273	ppm	27.3	<=30
3,4- and 2,3-Dichlorotoluene Coelution	RC1400080-09	T	Average RF	100	104.7	ppm	4.7	<=30
3,4-Dichlorobenzotrifluoride	RC1400080-09	T	Average RF	50	45.37	ppm	-9.3	<=30
3-Chloro-1-propene	RC1400080-09	T	Average RF	50	54.69	ppm	9.4	<=30
3-Chlorobenzotrifluoride	RC1400080-09	T	Average RF	50	50.96	ppm	1.9	<=30
3-Chlorotoluene	RC1400080-09	T	Average RF	50	51.07	ppm	2.1	<=30
4-Chlorotoluene	RC1400080-09	T	Average RF	50	53.48	ppm	7.0	<=30
4-Isopropyltoluene	RC1400080-09	T	Average RF	50	55.92	ppm	11.8	<=30
4-Methyl-2-pentanone	RC1400080-09	T	Average RF	50	58.26	ppm	16.5	<=30

Initial Calibration Verification Summary Report

Calibration ID: RC1400080 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Acetone	RC1400080-09	T	Average RF	50	45.48	ppm	-9.0	<=30
Acetonitrile	RC1400080-09	T	Average RF	250	270.9	ppm	8.3	<=30
Acrolein	RC1400080-09	T	Average RF	100	133.0	ppm	33.0	<=30
Acrylonitrile	RC1400080-09	T	Average RF	250	293.8	ppm	17.5	<=30
Benzene	RC1400080-09	T	Average RF	50	54.44	ppm	8.9	<=30
Bromobenzene	RC1400080-09	T	Average RF	50	52.86	ppm	5.7	<=30
Bromochloromethane	RC1400080-09	T	Average RF	50	52.23	ppm	4.5	<=30
Bromodichloromethane	RC1400080-09	T	Average RF	50	55.21	ppm	10.4	<=30
Bromoform	RC1400080-09	T	Average RF	50	56.17	ppm	12.3	<=30
Bromomethane	RC1400080-09	T	Average RF	50	51.61	ppm	3.2	<=30
Carbon Disulfide	RC1400080-09	T	Average RF	50	53.76	ppm	7.5	<=30
Carbon Tetrachloride	RC1400080-09	T	Average RF	50	52.81	ppm	5.6	<=30
Chlorobenzene	RC1400080-09	T	Average RF	50	53.92	ppm	7.8	<=30
Chloroethane	RC1400080-09	T	Average RF	50	55.32	ppm	10.6	<=30
Chloroform	RC1400080-09	T	Average RF	50	51.00	ppm	2.0	<=30
Chloromethane	RC1400080-09	T	Average RF	50	56.39	ppm	12.8	<=30
Cyclohexane	RC1400080-09	T	Average RF	50	51.76	ppm	3.5	<=30
Cyclohexanone	RC1400080-09	T	Average RF	1000	769.0	ppm	-23.1	<=30
Dibromochloromethane	RC1400080-09	T	Average RF	50	56.55	ppm	13.1	<=30
Dibromomethane	RC1400080-09	T	Average RF	50	54.01	ppm	8.0	<=30
Dichlorodifluoromethane (CFC 12)	RC1400080-09	T	Average RF	50	61.24	ppm	22.5	<=30
Dichlorofluoromethane (CFC 21)	RC1400080-09	T	Average RF	50	58.66	ppm	17.3	<=30
Dichloromethane	RC1400080-09	T	Average RF	50	52.33	ppm	4.7	<=30
Diethyl Ether	RC1400080-09	T	Average RF	50	58.03	ppm	16.1	<=30
Diisopropyl Ether	RC1400080-09	T	Average RF	50	45.11	ppm	-9.8	<=30
Ethyl Methacrylate	RC1400080-09	T	Average RF	50	61.68	ppm	23.4	<=30
Ethyl tert-Butyl Ether	RC1400080-09	T	Average RF	50	45.05	ppm	-9.9	<=30
Ethylbenzene	RC1400080-09	T	Average RF	50	50.66	ppm	1.3	<=30
Hexachlorobutadiene	RC1400080-09	T	Average RF	50	47.92	ppm	-4.2	<=30
Iodomethane	RC1400080-09	T	Average RF	50	54.75	ppm	9.5	<=30
Isopropylbenzene (Cumene)	RC1400080-09	T	Average RF	50	54.30	ppm	8.6	<=30
Methacrylonitrile	RC1400080-09	T	Average RF	50	60.81	ppm	21.6	<=30
Methyl Acetate	RC1400080-09	T	Average RF	50	53.79	ppm	7.6	<=30
Methyl Methacrylate	RC1400080-09	T	Average RF	50	59.93	ppm	19.9	<=30
Methyl tert-Butyl Ether	RC1400080-09	T	Average RF	50	60.10	ppm	20.2	<=30
Methylcyclohexane	RC1400080-09	T	Average RF	50	55.29	ppm	10.6	<=30
Naphthalene	RC1400080-09	T	Average RF	50	60.00	ppm	20.0	<=30
Propionitrile	RC1400080-09	T	Average RF	250	297.1	ppm	18.8	<=30
Styrene	RC1400080-09	T	Average RF	50	57.83	ppm	15.7	<=30
Tetrachloroethene (PCE)	RC1400080-09	T	Average RF	50	52.36	ppm	4.7	<=30
Tetrahydrofuran (THF)	RC1400080-09	T	Average RF	50	55.20	ppm	10.4	<=30
Toluene	RC1400080-09	T	Average RF	50	54.59	ppm	9.2	<=30
Trichloroethene (TCE)	RC1400080-09	T	Average RF	50	53.22	ppm	6.4	<=30
Trichlorofluoromethane (CFC 11)	RC1400080-09	T	Average RF	50	53.96	ppm	7.9	<=30
Vinyl Acetate	RC1400080-09	T	Average RF	50	63.91	ppm	27.8	<=30
Vinyl Chloride	RC1400080-09	T	Average RF	50	55.18	ppm	10.4	<=30
cis-1,2-Dichloroethene	RC1400080-09	T	Average RF	50	52.03	ppm	4.1	<=30
cis-1,3-Dichloropropene	RC1400080-09	T	Average RF	50	56.92	ppm	13.8	<=30
m,p-Xylenes	RC1400080-09	T	Average RF	100	111.1	ppm	11.1	<=30
n-Butyl Acetate	RC1400080-09	T	Quadratic	50	61.54	ppm	23.1	<=30
n-Butylbenzene	RC1400080-09	T	Average RF	50	54.34	ppm	8.7	<=30

Initial Calibration Verification Summary Report

Calibration ID: RC1400080 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
n-Heptane	RC1400080-09	T	Average RF	50	49.88	ppm	-0.2	<=30
n-Propylbenzene	RC1400080-09	T	Average RF	50	53.83	ppm	7.7	<=30
o-Xylene	RC1400080-09	T	Average RF	50	55.90	ppm	11.8	<=30
sec-Butylbenzene	RC1400080-09	T	Average RF	50	52.80	ppm	5.6	<=30
tert-Amyl Methyl Ether	RC1400080-09	T	Average RF	50	47.51	ppm	-5.0	<=30
tert-Butylbenzene	RC1400080-09	T	Average RF	50	55.21	ppm	10.4	<=30
trans-1,2-Dichloroethene	RC1400080-09	T	Average RF	50	55.67	ppm	11.3	<=30
trans-1,3-Dichloropropene	RC1400080-09	T	Average RF	50	61.77	ppm	23.5	<=30
trans-1,4-Dichloro-2-butene	RC1400080-09	T	Average RF	50	50.22	ppm	0.4	<=30
1,2-Dichloroethane-d4	RC1400080-09	S	Average RF	50	51.72	ppm	3.4	<=30
4-Bromofluorobenzene	RC1400080-09	S	Average RF	50	52.97	ppm	5.9	<=30
Dibromofluoromethane	RC1400080-09	S	Average RF	50	52.49	ppm	5.0	<=30
Toluene-d8	RC1400080-09	S	Average RF	50	52.10	ppm	4.2	<=30

Exceptions

QAP	Method
CRA-OXY	8260C

Compound	Type	Criteria	Result
Acrolein	Percent Difference	<= 30	33.00

Sample : ICV
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8741.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 10:00 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 10:42:57 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

KK 9/10/14

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.255	168	855617	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1365377	50.00	ppb		0.00
71) d5-Chlorobenzene	8.748	117	1240060	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	665703	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.158	113	399200	52.49	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 104.98%				
48) surr1,1,2-dichloroetha...	4.670	65	423919	51.72	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 103.44%				
65) SURR3,Toluene-d8	7.328	98	1672203	52.10	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 104.20%				
70) SURR2,BFB	9.791	95	608686	52.97	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 105.94%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	508470	61.24	ppb		99
3) Chloromethane	1.262	50	510628	56.39	ppb		99
4) Vinyl Chloride	1.323	62	528758	55.18	ppb		99
5) Bromomethane	1.512	94	287409	51.61	ppb		99
6) Chloroethane	1.567	64	296329	55.32	ppb		98
7) Freon 21	1.670	67	831132	58.66	ppb		99
8) Trichlorofluoromethane	1.719	101	620252	53.96	ppb		98
9) Diethyl Ether	1.884	59	321470	58.03	ppb		97
10) Freon 123a	1.872	67	519515	57.62	ppb		96
11) Freon 123	1.908	83	572357	57.44	ppb		99
12) Acrolein	1.957	56	69403	133.00	ppb		93
13) 1,1-Diclethene	2.042	96	363985	59.69	ppb		98
14) Freon 113	2.036	101	365476	51.51	ppb		96
15) Acetone	2.048	43	80040	45.48	ppb		95
16) 2-Propanol	2.115	45	356642	1272.52	ppb		96
17) Iodomethane	2.146	142	502524	54.75	ppb		97
18) Carbon Disulfide	2.207	76	1241518	53.76	ppb		100
19) Acetonitrile	2.225	40	64359	270.86	ppb		96
20) Allyl Chloride	2.280	76	224857	54.69	ppb		91
21) Methyl Acetate	2.274	43	192866	53.79	ppb		99
22) Methylene Chloride	2.359	84	410158	52.33	ppb		97
23) TBA	2.408	59	556145	1182.28	ppb		98
24) Acrylonitrile	2.524	53	492775	293.84	ppb		98
25) Methyl-t-Butyl Ether	2.585	73	1043970	60.10	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	423191	55.67	ppb		95
28) 1,1-Diclethane	2.945	63	743663	54.87	ppb		96
29) Vinyl Acetate	2.981	86	69116	63.91	ppb	#	86
30) DIPE	3.018	45	1157365	45.11	ppb		98
31) 2-Chloro-1,3-Butadiene	3.042	53	661771	50.18	ppb		99
32) ETBE	3.402	59	1019072	45.05	ppb		99
33) 2,2-Dichloropropane	3.560	77	547072	51.09	ppb		97
34) cis-1,2-Dichloroethene	3.548	96	444223	52.03	ppb		97
35) 2-Butanone	3.548	43	118736	51.60	ppb		97
36) Propionitrile	3.597	54	184284	297.08	ppb		97
37) Bromochloromethane	3.835	130	246575	52.23	ppb		97

W090914.M Wed Sep 10 10:43:08 2014 Page: 1

00409

Sample : ICV
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8741.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 10:00 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 10:42:57 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Methacrylonitrile	3.804	67	120290	60.81 ppb	94
39) Tetrahydrofuran	3.908	42	79494	55.20 ppb	85
40) Chloroform	3.944	83	704879	51.00 ppb	96
41) 1,1,1-Trichloroethane	4.219	97	625840	54.69 ppb	95
42) TAME	5.036	73	918921	47.51 ppb	98
44) Cyclohexane	4.316	41	365523	51.76 ppb	97
46) Carbontetrachloride	4.475	121	162411	52.81 ppb	96
47) 1,1-Dichloropropene	4.469	75	546633	55.13 ppb	99
49) Benzene	4.786	78	1686903	54.44 ppb	98
50) 1,2-Dichloroethane	4.792	62	505121	54.79 ppb	97
51) Iso-Butyl Alcohol	4.652	43	228295	1113.89 ppb	97
52) n-Heptane	5.334	43	389497	49.88 ppb	99
53) 1-Butanol	5.779	56	344211	2911.23 ppb	100
54) Trichloroethene	5.834	130	438819	53.22 ppb	96
55) Methylcyclohexane	6.109	55	468654	55.29 ppb	96
56) 1,2-Diclpropane	6.115	63	437119	55.97 ppb	95
57) Dibromomethane	6.261	93	204331	54.01 ppb	92
58) 1,4-Dioxane	6.316	88	64585m	992.92 ppb	
59) Methyl Methacrylate	6.334	69	214997	59.93 ppb	97
60) Bromodichloromethane	6.480	83	533634	55.21 ppb	99
61) 2-Nitropropane	6.749	41	115544	120.35 ppb	90
62) 2-Chloroethylvinyl Ether	6.883	63	216314	61.54 ppb	99
63) cis-1,3-Dichloropropene	7.023	75	642685	56.92 ppb	98
64) 4-Methyl-2-pentanone	7.212	43	269492	58.26 ppb	96
66) Toluene	7.395	91	1839456	54.59 ppb	99
67) trans-1,3-Dichloropropene	7.633	75	568163	61.77 ppb	100
68) Ethyl Methacrylate	7.767	69	446044	61.68 ppb	98
69) 1,1,2-Trichloroethane	7.809	97	308006	54.19 ppb	98
72) Tetrachloroethene	7.962	164	332550	52.36 ppb	97
73) 2-Hexanone	8.090	43	185681	53.35 ppb	94
74) 1,3-Dichloropropane	7.974	76	569324	53.91 ppb	95
75) Dibromochloromethane	8.194	129	361611	56.55 ppb	95
76) N-Butyl Acetate	8.242	43	485773	61.54 ppb	98
77) 1,2-Dibromoethane	8.291	107	302944	56.77 ppb	95
78) Chlorobenzene	8.773	112	1185239	53.92 ppb	98
79) 3-CBTF	8.785	180	553726	50.96 ppb	99
80) 4-CBTF	8.840	180	493025	47.23 ppb	98
81) 1,1,1,2-Tetrachloroethane	8.852	131	405355	53.78 ppb	100
82) Ethylbenzene	8.889	106	585046	50.66 ppb	95
83) (m+p)Xylene	8.998	106	1554791	111.11 ppb	99
84) o-Xylene	9.346	106	761014	55.90 ppb	100
85) Styrene	9.358	104	1290638	57.83 ppb	98
87) Bromoform	9.498	173	203828	56.17 ppb	97
88) 2-CBTF	9.577	180	532460	49.28 ppb	97
89) Isopropylbenzene	9.675	105	1852698	54.30 ppb	100
90) Cyclohexanone	9.718	55	609183	769.01 ppb	98
91) trans-1,4-Dichloro-2-B...	9.961	53	85239	50.22 ppb	95
92) 1,1,2,2-Tetrachloroethane	9.913	83	373648	54.53 ppb	98
93) Bromobenzene	9.913	156	463164	52.86 ppb	98
94) 1,2,3-Trichloropropane	9.943	110	108465	54.57 ppb	92
95) n-Propylbenzene	10.022	91	2148238	53.83 ppb	99
96) 2-Chlorotoluene	10.083	91	1275695	52.70 ppb	100

W090914.M Wed Sep 10 10:43:08 2014 Page: 2

Sample : ICV
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8741.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 10:00 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 10:42:57 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

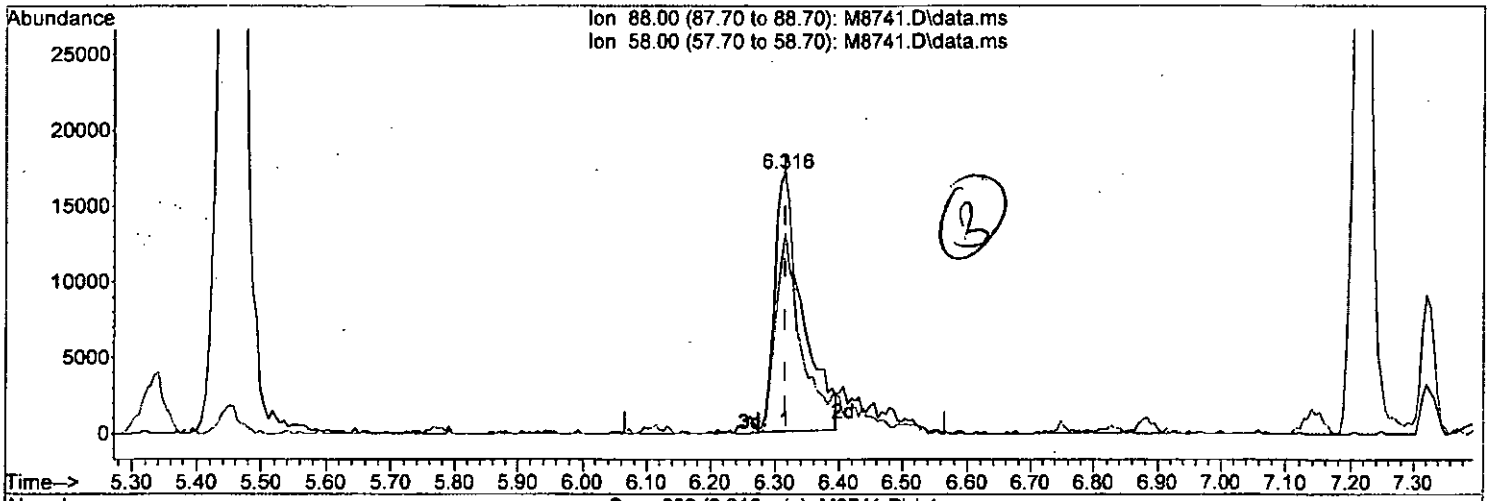
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	1326526	51.07	ppb	99
98)	4-Chlorotoluene	10.175	91	1504918	53.48	ppb	98
99)	1,3,5-Trimethylbenzene	10.175	105	1523739	55.86	ppb	99
100)	tert-Butylbenzene	10.443	119	1263009	55.21	ppb	100
101)	1,2,4-Trimethylbenzene	10.480	105	1538655	54.69	ppb	99
102)	3,4-DCBTF	10.535	214	348908	45.37	ppb	97
103)	sec-Butylbenzene	10.620	105	1755338	52.80	ppb	100
104)	p-Isopropyltoluene	10.742	119	1550591	55.92	ppb	99
105)	1,3-Dclbenz	10.699	146	878637	53.10	ppb	100
106)	1,4-Dclbenz	10.772	146	896152	52.40	ppb	99
107)	2,4-DCBTF	10.821	214	311653	46.80	ppb	95
108)	2,5-DCBTF	10.864	214	356836	47.14	ppb	96
109)	n-Butylbenzene	11.071	91	1367813	54.34	ppb	100
110)	1,2-Dclbenz	11.065	146	842274	53.28	ppb	100
111)	1,2-Dibromo-3-chloropr...	11.626	157	68079	56.26	ppb	91
112)	Trielution Dichlorotol...	11.729	125	2004008	152.53	ppb	99
113)	1,3,5 Trichlorobenzene	11.778	180	533669	47.31	ppb	98
114)	Coelution Dichlorotoluene	11.998	125	1470536	104.73	ppb	100
115)	1,2,4-Tcbenzene	12.162	180	506857	54.91	ppb	99
116)	Hexachlorobt	12.266	225	174986	47.92	ppb	96
117)	Naphthalen	12.303	128	1133445	60.00	ppb	99
118)	1,2,3-Tclbenzene	12.443	180	427658	53.47	ppb	99
119)	2,4,5-Trichlorotolene	12.857	159	301147	48.20	ppb	97
120)	2,3,6-Trichlorotoluene	12.918	159	301514	49.16	ppb	99

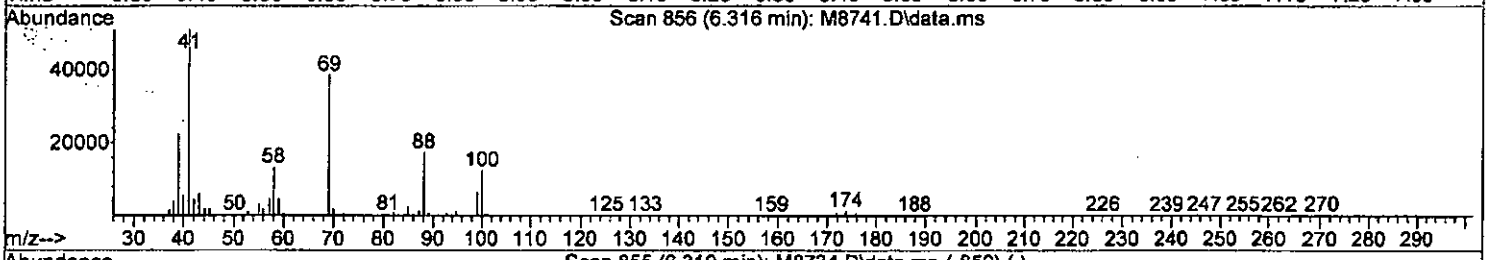
(#) = qualifier out of range (m) = manual integration (+) = signals summed

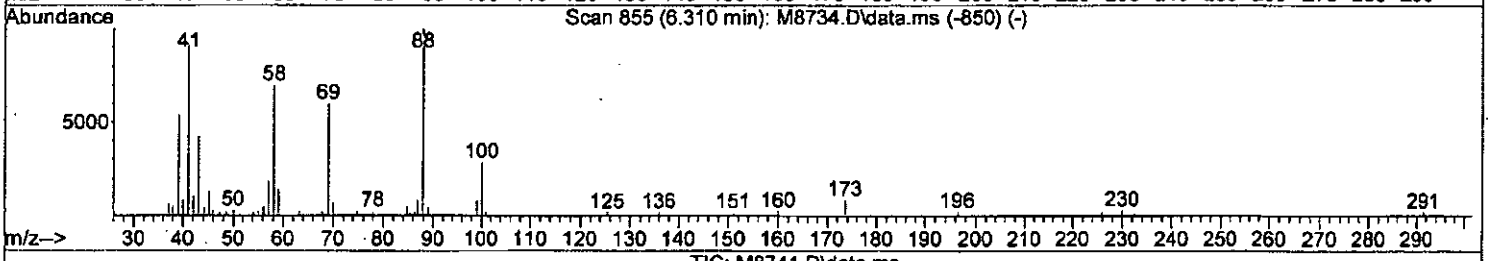
Quantitation Report (Qedit)

Sample : ICV
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8741.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 10:00 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 10:41:38 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration







TIC: M8741.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.000) 783.50 ppb

response 50963

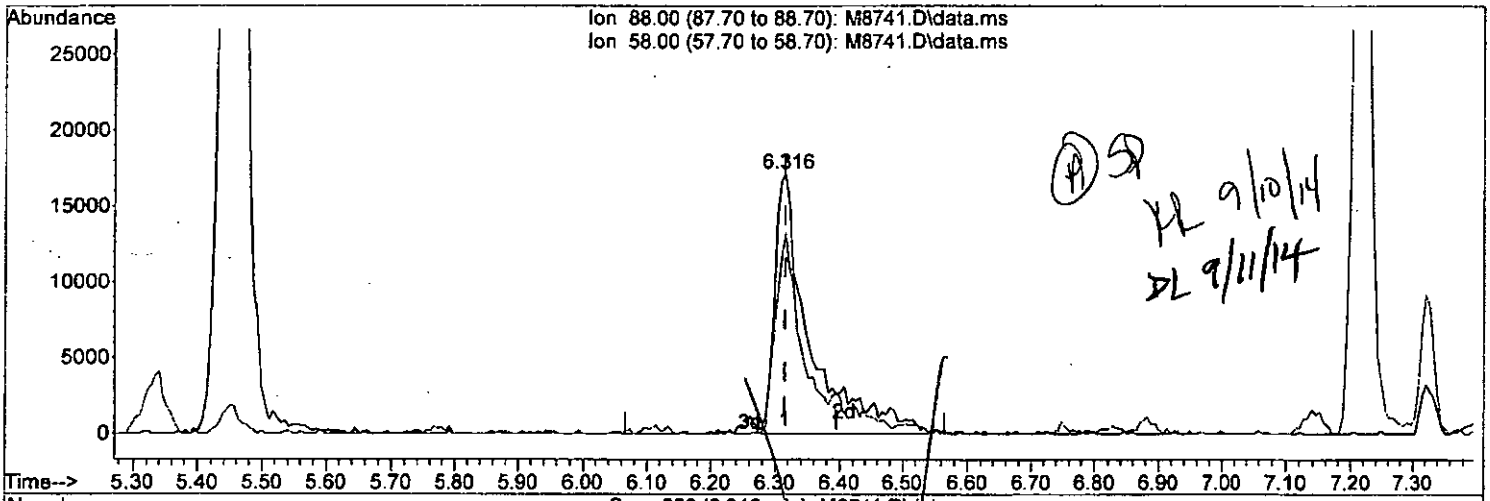
Ion	Exp%	Act%
88.00	100	100
58.00	57.90	76.96
0.00	0.00	0.00
0.00	0.00	0.00

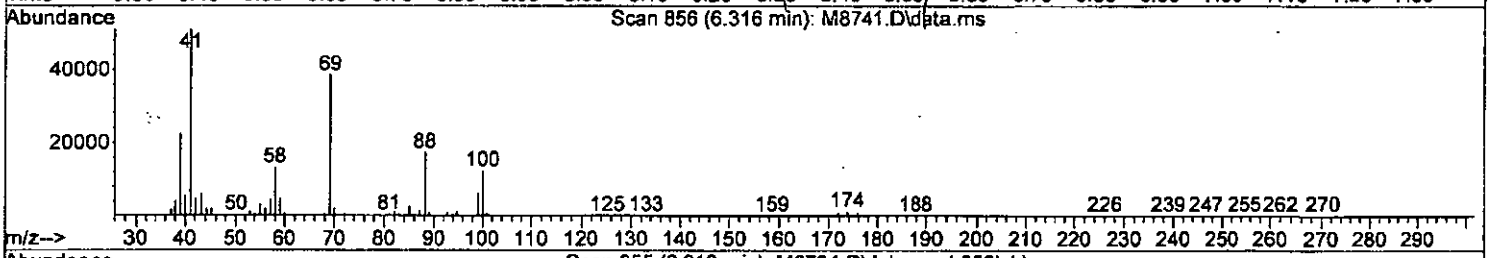
W090914.M Wed Sep 10 10:42:53 2014 Page: 1

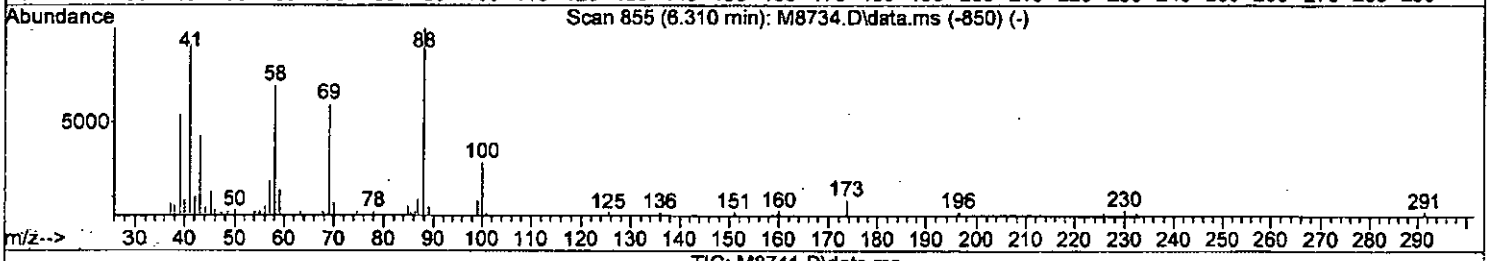
00412

Sample : ICV
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8741.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 10:00 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 10:41:38 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration







TIC: M8741.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.000) 992.92 ppb m

response 64585

Ion	Exp%	Act%
88.00	100	100
58.00	57.90	76.96
0.00	0.00	0.00
0.00	0.00	0.00

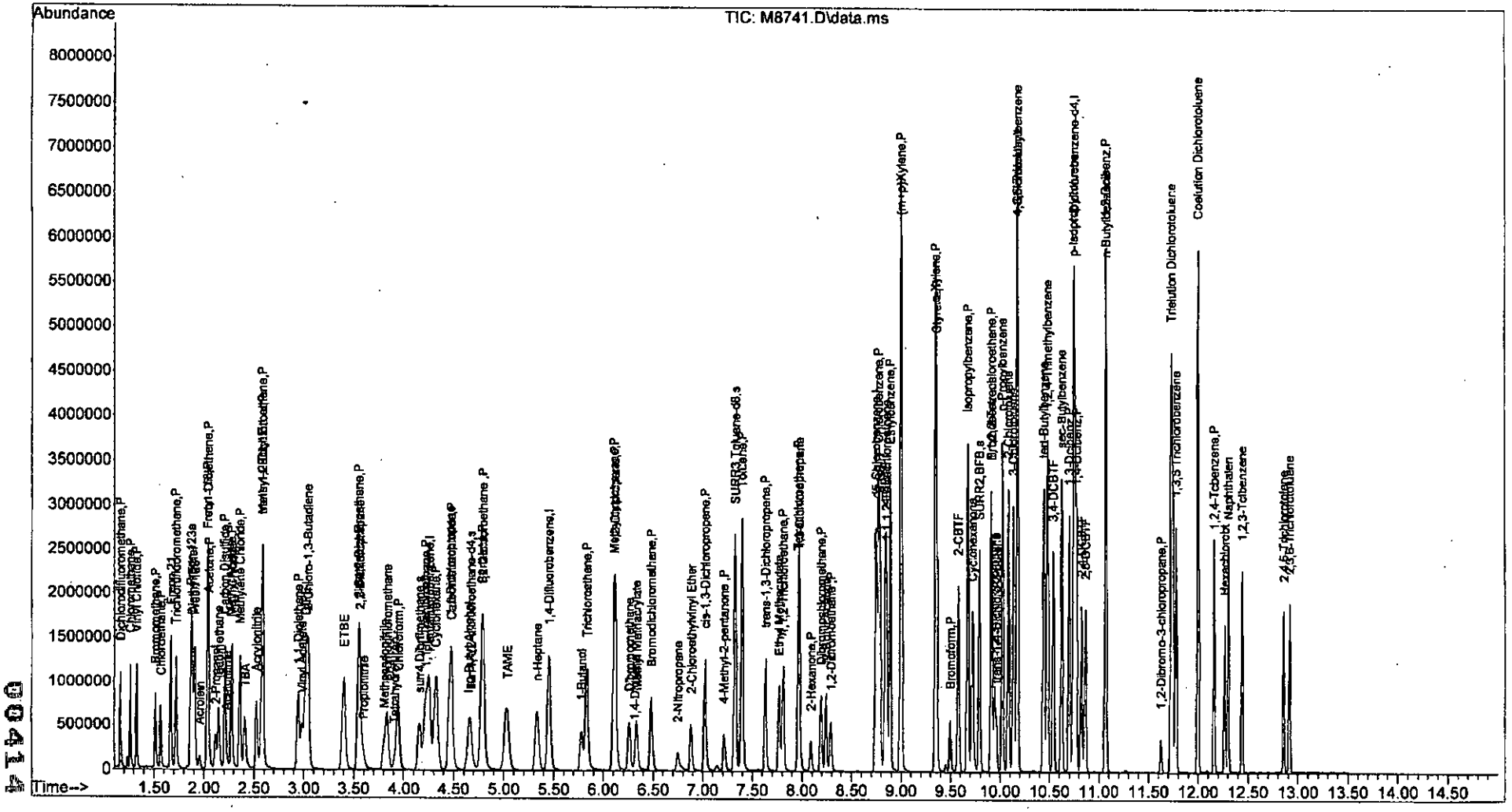
W090914.M Wed Sep 10 10:42:59 2014 Page: 1

00413

Quantitation Report (QT Reviewed)

Sample : ICV
Data File: I:\ACQUDATA\msvoa12\Data\090914\M8741.D
Misc : 8260 WATER ICAL
Acq On : 9 Sep 2014 10:00 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Sep 10 10:42:57 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



W090914.M Wed Sep 10 10:43:10 2014

Page: 4

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000

Service Request: R1407813
Date Analyzed: 10/ 8/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\MSVOA12\DATA\100814\M9551.D\

Calibration Date: 9/9/14
Calibration ID: RC1400080
Analysis Lot: 415258
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	49.1	0.3039	0.2985	-1.8	NA	± 20 %	Average RF
1,1,1-Trichloroethane (TCA)	50.0	50.5	0.6687	0.6750	0.9	NA	± 20 %	Average RF
1,1,2,2-Tetrachloroethane	50.0	54.2	0.5147	0.5582	8.5	NA	± 20 %	Average RF
1,1,2-Trichloroethane	50.0	57.0	0.2081	0.2373	14.0	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	53.8	0.7920	0.8516	7.5	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	58.8	0.3563	0.4193	17.7	NA	± 20 %	Average RF
1,1-Dichloropropene	50.0	50.6	0.3631	0.3674	1.2	NA	± 20 %	Average RF
1,2,3-Trichlorobenzene	50.0	51.8	0.6007	0.6224	3.6	NA	± 20 %	Average RF
1,2,3-Trichloropropane	50.0	52.6	0.1493	0.1570	5.2	NA	± 20 %	Average RF
1,2,4-Trichlorobenzene	50.0	52.8	0.6933	0.7316	5.5	NA	± 20 %	Average RF
1,2,4-Trimethylbenzene	50.0	55.1	2.113	2.328	10.2	NA	± 20 %	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	55.1	0.09089	0.1002	10.2	NA	± 20 %	Average RF
1,2-Dibromoethane	50.0	56.0	0.2151	0.2408	11.9	NA	± 20 %	Average RF
1,2-Dichlorobenzene	50.0	52.9	1.187	1.256	5.8	NA	± 20 %	Average RF
1,2-Dichloroethane	50.0	47.2	0.3376	0.3188	-5.6	NA	± 20 %	Average RF
1,2-Dichloropropane	50.0	52.9	0.2860	0.3028	5.9	NA	± 20 %	Average RF
1,3,5-Trimethylbenzene	50.0	55.8	2.049	2.284	11.5	NA	± 20 %	Average RF
1,3-Dichlorobenzene	50.0	52.6	1.243	1.307	5.2	NA	± 20 %	Average RF
1,3-Dichloropropane	50.0	51.9	0.4258	0.4420	3.8	NA	± 20 %	Average RF
1,4-Dichlorobenzene	50.0	52.0	1.284	1.336	4.0	NA	± 20 %	Average RF
2,2-Dichloropropane	50.0	53.4	0.6257	0.6684	6.8	NA	± 20 %	Average RF
2-Butanone (MEK)	50.0	50.7	0.1345	0.1363	1.4	NA	± 20 %	Average RF
2-Chlorotoluene	50.0	52.6	1.818	1.913	5.2	NA	± 20 %	Average RF
2-Hexanone	50.0	47.9	0.1403	0.1345	-4.2	NA	± 20 %	Average RF
tert-Butyl Alcohol	1000	1150	0.02749	0.03172	15.4	NA	± 20 %	Average RF
4-Chlorotoluene	50.0	52.7	2.114	2.229	5.5	NA	± 20 %	Average RF
p-Isopropyltoluene	50.0	56.3	2.083	2.345	12.6	NA	± 20 %	Average RF
4-Methyl-2-pentanone	50.0	54.5	0.1694	0.1845	8.9	NA	± 20 %	Average RF
Acetone	50.0	47.7	0.1028	0.09806	-4.6	NA	± 20 %	Average RF
Benzene	50.0	54.5	1.135	1.237	9.0	NA	± 20 %	Average RF
Bromobenzene	50.0	52.5	0.6582	0.6909	5.0	NA	± 20 %	Average RF
Bromochloromethane	50.0	54.4	0.2759	0.3001	8.8	NA	± 20 %	Average RF
Bromodichloromethane	50.0	50.4	0.3539	0.3568	0.8	NA	± 20 %	Average RF
Bromoform	50.0	53.3	0.2726	0.2906	6.6	NA	± 20 %	Average RF
Bromomethane	50.0	41.9	0.3254	0.2729	-16.1	NA	± 20 %	Average RF
Carbon Tetrachloride	50.0	47.5	0.1126	0.1070	-5.0	NA	± 20 %	Average RF
Chlorobenzene	50.0	52.7	0.8864	0.9350	5.5	NA	± 20 %	Average RF
Chloroethane	50.0	56.1	0.3130	0.3512	12.2	NA	± 20 %	Average RF
Chloroform	50.0	50.2	0.8076	0.8107	0.4	NA	± 20 %	Average RF
Chloromethane	50.0	51.8	0.5292	0.5478	3.5	NA	± 20 %	Average RF
Dibromochloromethane	50.0	54.6	0.2578	0.2813	9.1	NA	± 20 %	Average RF

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000

Service Request: R1407813
Date Analyzed: 10/ 8/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\MSVOA12\DATA\100814\M9551.D\

Calibration Date: 9/9/14
Calibration ID: RC1400080
Analysis Lot: 415258
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane (CFC 12)	50.0	51.9	0.4852	0.5039	3.8	NA	± 20 %	Average RF
Methylene Chloride	50.0	54.7	0.4580	0.5013	9.4	NA	± 20 %	Average RF
Ethylbenzene	50.0	55.2	0.4656	0.5137	10.3	NA	± 20 %	Average RF
Hexachlorobutadiene	50.0	50.1	0.2742	0.2747	0.2	NA	± 20 %	Average RF
Isopropylbenzene (Cumene)	50.0	53.2	2.563	2.728	6.4	NA	± 20 %	Average RF
Methyl tert-Butyl Ether	50.0	58.3	1.015	1.182	16.5	NA	± 20 %	Average RF
Naphthalene	50.0	58.3	1.419	1.654	16.6	NA	± 20 %	Average RF
Styrene	50.0	58.0	0.8998	1.044	16.1	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	51.5	0.2561	0.2640	3.1	NA	± 20 %	Average RF
Toluene	50.0	54.6	1.234	1.347	9.1	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	53.4	0.3020	0.3222	6.7	NA	± 20 %	Average RF
Trichlorofluoromethane (CFC 11)	50.0	55.4	0.6717	0.7447	10.9	NA	± 20 %	Average RF
Vinyl Chloride	50.0	54.4	0.5600	0.6090	8.7	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	55.8	0.4990	0.5570	11.6	NA	± 20 %	Average RF
cis-1,3-Dichloropropene	50.0	55.5	0.4135	0.4593	11.1	NA	± 20 %	Average RF
m,p-Xylenes	100	112	0.5642	0.6313	11.9	NA	± 20 %	Average RF
n-Butylbenzene	50.0	55.9	1.890	2.113	11.8	NA	± 20 %	Average RF
n-Propylbenzene	50.0	54.0	2.997	3.240	8.1	NA	± 20 %	Average RF
o-Xylene	50.0	55.9	0.5489	0.6139	11.8	NA	± 20 %	Average RF
sec-Butylbenzene	50.0	55.5	2.497	2.771	11.0	NA	± 20 %	Average RF
tert-Butylbenzene	50.0	55.5	1.718	1.906	10.9	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	57.0	0.4442	0.5067	14.1	NA	± 20 %	Average RF
trans-1,3-Dichloropropene	50.0	55.6	0.3368	0.3746	11.2	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	53.1	0.4208	0.4471	6.2	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	49.2	0.2785	0.2742	-1.5	NA	± 20 %	Average RF
Toluene-d8	50.0	52.6	1.175	1.236	5.2	NA	± 20 %	Average RF

Evaluate Continuing Calibration Report

Sample CCV
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9551.D
Misc :
Acq On : 8 Oct 2014 5:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 17:19:50 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

MR 10/8/14

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.0000	1.0000	0.0	122	0.00
2	P	Dichlorodifluoromethane	0.4852	0.5039	-3.9	111	0.00
3	P	Chloromethane	0.5292	0.5478	-3.5	116	0.00
4	P	Vinyl Chloride	0.5600	0.6090	-8.7	121	0.00
5	P	Bromomethane	0.3254	0.2729	16.1	106	0.00
6	P	Chloroethane	0.3130	0.3512	-12.2	126	0.00
7		Freon 21	0.8280	0.8915	-7.7	123	0.00
8	P	Trichlorofluoromethane	0.6717	0.7447	-10.9	125	0.00
9		Diethyl Ether	0.3237	0.3592	-11.0	130	0.00
10		Freon 123a	0.5269	0.5870	-11.4	126	0.00
11		Freon 123	0.5823	0.6838	-17.4	132	0.00
12		Acrolein	0.0305	0.0278	8.9	98	0.00
13	P	1,1-Diclethene	0.3563	0.4193	-17.7	136	0.00
14	P	Freon 113	0.4146	0.4660	-12.4	130	0.00
15	P	Acetone	0.1028	0.0981	4.6	119	0.00
16		2-Propanol	0.0164	0.0185	-12.8	127	0.00
17		Iodomethane	0.5364	0.5220	2.7	105	0.00
18	P	Carbon Disulfide	1.3496	1.5894	-17.8	140	0.00
19		Acetonitrile	0.0139	0.0146	-5.0	118	0.00
20		Allyl Chloride	0.2402	0.2862	-19.2	135	0.00
21	P	Methyl Acetate	0.2095	0.2101	-0.3	114	0.00
22	P	Methylene Chloride	0.4580	0.5013	-9.5	133	0.00
23		TBA	0.0275	0.0317	-15.3	134	0.00
24		Acrylonitrile	0.0980	0.1130	-15.3	127	0.00
25	P	Methyl-t-Butyl Ether	1.0151	1.1825	-16.5	130	0.00
26	P	trans-1,2-Dichloroethene	0.4442	0.5067	-14.1	133	0.00
27		Halothane	0.0000	0.0000	0.0	0#	-3.01#
28	P	1,1-Diclethane	0.7920	0.8516	-7.5	122	0.00
29		Vinyl Acetate	0.0632	0.0904	-43.0#	174	0.00
30		DIPE	1.4994	1.4684	2.1	120	0.00
31		2-Chloro-1,3-Butadiene	0.7706	0.7706	0.0	119	0.00
32		ETBE	1.3220	1.3599	-2.9	125	0.00
33		2,2-Dichloropropane	0.6257	0.6684	-6.8	118	0.00
34	P	cis-1,2-Dichloroethene	0.4990	0.5570	-11.6	132	0.00
35	P	2-Butanone	0.1345	0.1363	-1.3	118	0.00
36		Propionitrile	0.0362	0.0461	-27.3#	140	0.00
37		Bromochloromethane	0.2759	0.3001	-8.8	129	0.00
38		Methacrylonitrile	0.1156	0.1400	-21.1#	132	0.00
39		Tetrahydrofuran	0.0842	0.0885	-5.1	121	0.00
40	P	Chloroform	0.8076	0.8107	-0.4	121	0.00
41	P	1,1,1-Trichloroethane	0.6687	0.6750	-0.9	116	0.00
42		TAME	1.1303	1.2053	-6.6	129	0.00
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	130	0.00
44	P	Cyclohexane	0.2586	0.2554	1.2	119	0.00
45	s	surr4,Dibrflmethane	0.2785	0.2742	1.5	125	0.00
46	P	Carbontetrachloride	0.1126	0.1070	5.0	114	0.00
47		1,1-Dichloropropene	0.3631	0.3674	-1.2	121	0.00

W090914.M Wed Oct 08 17:20:21 2014 Page: 1

Evaluate Continuing Calibration Report

Sample
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9551.D
Misc :
Acq On : 8 Oct 2014 5:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 17:19:50 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
48	s	surr1,1,2-dichloroethane-d4	0.3002	0.2676	10.9	113	0.00
49	P	Benzene	1.1347	1.2373	-9.0	131	0.00
50	P	1,2-Dichloroethane	0.3376	0.3188	5.6	114	0.00
51		Iso-Butyl Alcohol	0.0075	0.0085	-13.3	133	0.00
52		n-Heptane	0.2860	0.3137	-9.7	131	0.00
53		1-Butanol	0.0043	0.0058	-34.9#	157	0.00
54	P	Trichloroethene	0.3020	0.3222	-6.7	130	0.00
55	P	Methylcyclohexane	0.3104	0.3581	-15.4	135	0.00
56	P	1,2-Diclpropane	0.2860	0.3028	-5.9	125	0.00
57		Dibromomethane	0.1385	0.1446	-4.4	127	0.00
58		1,4-Dioxane	0.0024	0.0025	-4.2	145	0.00
59		Methyl Methacrylate	0.1314	0.1528	-16.3	133	0.00
60	P	Bromodichloromethane	0.3539	0.3568	-0.8	119	0.00
61		2-Nitropropane	0.0352	0.0359	-2.0	129	0.00
62		2-Chloroethylvinyl Ether	0.1287	0.1174	8.8	107	0.00
63	P	cis-1,3-Dichloropropene	0.4135	0.4593	-11.1	126	0.00
64	P	4-Methyl-2-pentanone	0.1694	0.1845	-8.9	132	0.00
65	s	SURR3,Toluene-d8	1.1754	1.2359	-5.1	129	0.00
66	P	Toluene	1.2340	1.3465	-9.1	130	0.00
67	P	trans-1,3-Dichloropropene	0.3368	0.3746	-11.2	122	0.00
68		Ethyl Methacrylate	0.2648	0.3197	-20.7#	135	0.00
69	P	1,1,2-Trichloroethane	0.2081	0.2373	-14.0	137	0.00
70	s	SURR2,BFB	0.4208	0.4471	-6.2	131	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000	0.0	132	0.00
72	P	Tetrachloroethene	0.2561	0.2640	-3.1	127	0.00
73	P	2-Hexanone	0.1403	0.1345	4.1	121	0.00
74		1,3-Dichloropropane	0.4258	0.4420	-3.8	128	0.00
75	P	Dibromochloromethane	0.2578	0.2813	-9.1	126	0.00
76		N-Butyl Acetate	0.3007	0.3316	~~-10.3~~	125	0.00
77	P	1,2-Dibromoethane	0.2151	0.2408	-11.9	131	0.00
78	P	Chlorobenzene	0.8864	0.9350	-5.5	127	0.00
~~79~~		~~3-CBTF~~	~~0.4381~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~8.79#~~
~~80~~		~~4-CBTF~~	~~0.4209~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~8.84#~~
81		1,1,1,2-Tetrachloroethane	0.3039	0.2985	1.8	118	0.00
82	P	Ethylbenzene	0.4656	0.5137	-10.3	130	0.00
83	P	(m+p)Xylene	0.5642	0.6313	-11.9	129	0.00
84	P	o-Xylene	0.5489	0.6139	-11.8	129	0.00
85	P	Styrene	0.8998	1.0443	-16.1	132	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	132	0.00
87	P	Bromoform	0.2726	0.2906	-6.6	124	0.00
~~88~~		~~2-CBTF~~	~~0.8115~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~9.58#~~
89	P	Isopropylbenzene	2.5629	2.7279	-6.4	128	0.00
90		Cyclohexanone	0.0595	0.0277	53.4#	56	0.00
91		trans-1,4-Dichloro-2-Butene	0.1275	0.1350	-5.9	130	0.00
92	P	1,1,2,2-Tetrachloroethane	0.5147	0.5582	-8.5	137	0.00
93		Bromobenzene	0.6582	0.6909	-5.0	129	0.00

W090914.M Wed Oct 08 17:20:21 2014 Page: 2

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9551.D
Misc :
Acq On : 8 Oct 2014 5:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 17:19:50 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
94		1,2,3-Trichloropropane	0.1493	0.1570	-5.2	134	0.00
95		n-Propylbenzene	2.9973	3.2397	-8.1	130	0.00
96		2-Chlorotoluene	1.8182	1.9135	-5.2	129	0.00
~~97~~		~~3-Chlorotoluene~~	~~1.9508~~	~~0.0000~~	~~-100.0#~~	~~0#~~	~~-10.14#~~
98		4-Chlorotoluene	2.1136	2.2288	-5.5	127	0.00
99		1,3,5-Trimethylbenzene	2.0487	2.2843	-11.5	130	0.00
100		tert-Butylbenzene	1.7183	1.9065	-11.0	132	0.00
101		1,2,4-Trimethylbenzene	2.1132	2.3284	-10.2	128	0.00
~~102~~		~~3,4-DCBTF~~	~~0.5776~~	~~0.0000~~	~~-100.0#~~	~~0#~~	~~-10.54#~~
103		sec-Butylbenzene	2.4968	2.7710	-11.0	135	0.00
104		p-Isopropyltoluene	2.0825	2.3450	-12.6	132	0.00
105	P	1,3-Dclbenz	1.2428	1.3073	-5.2	129	0.00
106	P	1,4-Dclbenz	1.2844	1.3358	-4.0	130	0.00
~~107~~		~~2,4-DCBTF~~	~~0.5002~~	~~0.0000~~	~~-100.0#~~	~~0#~~	~~-10.83#~~
~~108~~		~~2,5-DCBTF~~	~~0.5686~~	~~0.0000~~	~~-100.0#~~	~~0#~~	~~-10.86#~~
109		n-Butylbenzene	1.8905	2.1127	-11.8	131	0.00
110	P	1,2-Dclbenz	1.1873	1.2560	-5.8	131	0.00
111	P	1,2-Dibromo-3-chloropropane	0.0909	0.1002	-10.2	130	0.00
~~112~~		~~Trielution Dichlorotoluene~~	~~0.9868~~	~~0.0002~~	~~-100.0#~~	~~0#~~	~~0.00~~
~~113~~		~~1,3,5-Trichlorobenzene~~	~~0.8472~~	~~0.0000~~	~~-100.0#~~	~~0#~~	~~-11.78#~~
~~114~~		~~Coelution Dichlorotoluene~~	~~1.0546~~	~~0.0002~~	~~-100.0#~~	~~0#~~	~~0.00~~
115	P	1,2,4-Tcbenzene	0.6933	0.7316	-5.5	125	0.00
116		Hexachlorobt	0.2742	0.2747	-0.2	126	0.00
117		Naphthalen	1.4190	1.6538	-16.5	132	0.00
118		1,2,3-Tclbenzene	0.6007	0.6224	-3.6	125	0.00
~~119~~		~~2,4,5-Trichlorotolene~~	~~0.4693~~	~~0.0000~~	~~-100.0#~~	~~0#~~	~~-12.86#~~
~~120~~		~~2,3,6-Trichlorotoluene~~	~~0.4607~~	~~0.0000~~	~~-100.0#~~	~~0#~~	~~-12.91#~~

(#) = Out of Range SPCC's out = 0 CCC's out = 0

W090914.M Wed Oct 08 17:20:21 2014 Page: 3

Quantitation Report (QT Reviewed)

Sample CCV
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9551.D
Misc :
Acq On : 8 Oct 2014 5:01 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ 1412142 - 02, 05

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 17:19:50 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	999698	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1661684	50.00	ppb		0.00
71) d5-Chlorobenzene	8.748	117	1534797	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	835110	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.158	113	455618	49.23	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.46%				
48) surr1,1,2-dichloroetha...	4.664	65	444685	44.58	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 89.16%				
65) SURR3,Toluene-d8	7.322	98	2053687	52.58	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 105.16%				
70) SURR2,BFB	9.791	95	742925	53.12	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 106.24%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	503714	51.92	ppb		100
3) Chloromethane	1.262	50	547619	51.76	ppb		98
4) Vinyl Chloride	1.323	62	608768	54.37	ppb		99
5) Bromomethane	1.512	94	272785	41.93	ppb		98
6) Chloroethane	1.567	64	351072	56.09	ppb		98
7) Freon 21	1.664	67	891227	53.84	ppb		99
8) Trichlorofluoromethane	1.719	101	744510	55.44	ppb		98
9) Diethyl Ether	1.884	59	359072	55.48	ppb		96
10) Freon 123a	1.872	67	586835	55.71	ppb		98
11) Freon 123	1.902	83	683608	58.72	ppb		97
12) Acrolein	1.951	56	139138	228.20	ppb		99
13) 1,1-Dichethene	2.042	96	419157	58.83	ppb		90
14) Freon 113	2.036	101	465907	56.20	ppb		100
15) Acetone	2.048	43	98035	47.68	ppb		95
16) 2-Propanol	2.115	45	369218	1127.52	ppb		99
17) Iodomethane	2.146	142	521876	48.66	ppb		95
18) Carbon Disulfide	2.207	76	1588872	58.88	ppb		100
19) Acetonitrile	2.225	40	73073	263.21	ppb	#	84
20) Allyl Chloride	2.280	76	286118	59.57	ppb	#	81
21) Methyl Acetate	2.274	43	210000	50.13	ppb		93
22) Methylene Chloride	2.359	84	501151	54.72	ppb		92
23) TBA	2.408	59	634184	1153.88	ppb		98
24) Acrylonitrile	2.524	53	564703m	288.20	ppb		
25) Methyl-t-Butyl Ether	2.585	73	1182133	58.25	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	506562	57.03	ppb		91
28) 1,1-Diclethane	2.944	63	851385	53.77	ppb		98
29) Vinyl Acetate	2.981	86	90360	71.52	ppb	#	84
30) DIPE	3.018	45	1467981	48.97	ppb		97
31) 2-Chloro-1,3-Butadiene	3.042	53	770375	50.00	ppb		92
32) ETBE	3.402	59	1359536	51.43	ppb		97
33) 2,2-Dichloropropane	3.560	77	668225	53.41	ppb		98
34) cis-1,2-Dichloroethene	3.548	96	556842	55.82	ppb		92
35) 2-Butanone	3.548	43	136271	50.69	ppb		93
36) Propionitrile	3.597	54	230653	318.24	ppb		95
37) Bromochloromethane	3.835	130	300046	54.39	ppb		96

MR 10/6/14

W090914.M Wed Oct 08 17:20:11 2014 Page: 1

Sample
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9551.D
Misc :
Acq On : 8 Oct 2014 5:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 17:19:50 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Methacrylonitrile	3.804	67	139951	60.55	ppb	#	82
39)	Tetrahydrofuran	3.908	42	88427	52.55	ppb		86
40)	Chloroform	3.938	83	810489	50.19	ppb		97
41)	1,1,1-Trichloroethane	4.219	97	674754	50.46	ppb		97
42)	TAME	5.029	73	1204891	53.32	ppb		98
44)	Cyclohexane	4.316	41	424423	49.39	ppb		98
46)	Carbontetrachloride	4.469	121	177819	47.51	ppb		98
47)	1,1-Dichloropropene	4.469	75	610524	50.59	ppb		97
49)	Benzene	4.786	78	2055995	54.52	ppb		96
50)	1,2-Dichloroethane	4.792	62	529781	47.22	ppb		98
51)	Iso-Butyl Alcohol	4.645	43	280845	1125.94	ppb		98
52)	n-Heptane	5.334	43	521190	54.84	ppb		91
53)	1-Butanol	5.773	56	478542	3325.64	ppb		93
54)	Trichloroethene	5.834	130	535370	53.35	ppb		97
55)	Methylcyclohexane	6.109	55	595050	57.68	ppb		95
56)	1,2-Diclpropane	6.115	63	503162	52.94	ppb		100
57)	Dibromomethane	6.255	93	240233	52.18	ppb		97
58)	1,4-Dioxane	6.310	88	84693m	1069.88	ppb		
59)	Methyl Methacrylate	6.334	69	253917	58.15	ppb		90
60)	Bromodichloromethane	6.480	83	592828	50.40	ppb		98
61)	2-Nitropropane	6.749	41	119238	102.05	ppb		96
62)	2-Chloroethylvinyl Ether	6.883	63	195153	45.62	ppb		99
63)	cis-1,3-Dichloropropene	7.023	75	763169	55.54	ppb		97
64)	4-Methyl-2-pentanone	7.212	43	306511	54.45	ppb		96
66)	Toluene	7.395	91	2237526	54.56	ppb		99
67)	trans-1,3-Dichloropropene	7.633	75	622521	55.61	ppb		98
68)	Ethyl Methacrylate	7.767	69	531250	60.36	ppb		94
69)	1,1,2-Trichloroethane	7.809	97	394368	57.01	ppb		99
72)	Tetrachloroethene	7.962	164	405181	51.54	ppb		99
73)	2-Hexanone	8.084	43	206362	47.91	ppb		99
74)	1,3-Dichloropropane	7.974	76	678304	51.89	ppb		96
75)	Dibromochloromethane	8.193	129	431804	54.56	ppb		99
76)	N-Butyl Acetate	8.242	43	508919	52.91	ppb		93
77)	1,2-Dibromoethane	8.291	107	369560	55.96	ppb		98
78)	Chlorobenzene	8.773	112	1435011	52.74	ppb		95
81)	1,1,1,2-Tetrachloroethane	8.852	131	458175	49.11	ppb		98
82)	Ethylbenzene	8.888	106	788469	55.17	ppb		94
83)	(m+p)Xylene	8.998	106	1937773	111.89	ppb		96
84)	o-Xylene	9.346	106	942224	55.92	ppb		95
85)	Styrene	9.358	104	1602739	58.03	ppb		97
87)	Bromoform	9.498	173	242669	53.30	ppb		98
89)	Isopropylbenzene	9.675	105	2278100	53.22	ppb		98
90)	Cyclohexanone	9.718	55	462274	465.18	ppb		96
91)	trans-1,4-Dichloro-2-B...	9.961	53	112750	52.95	ppb		90
92)	1,1,2,2-Tetrachloroethane	9.913	83	466128	54.23	ppb		98
93)	Bromobenzene	9.913	156	577012	52.49	ppb		96
94)	1,2,3-Trichloropropane	9.943	110	131144	52.60	ppb		94
95)	n-Propylbenzene	10.022	91	2705545	54.04	ppb		98
96)	2-Chlorotoluene	10.083	91	1597951	52.62	ppb		98
98)	4-Chlorotoluene	10.175	91	1861312	52.73	ppb		98
99)	1,3,5-Trimethylbenzene	10.175	105	1907673	55.75	ppb		99
100)	tert-Butylbenzene	10.443	119	1592118	55.47	ppb		98

Quantitation Report (QT Reviewed)

Sample CCV
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9551.D
Misc :
Acq On : 8 Oct 2014 5:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 17:19:50 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

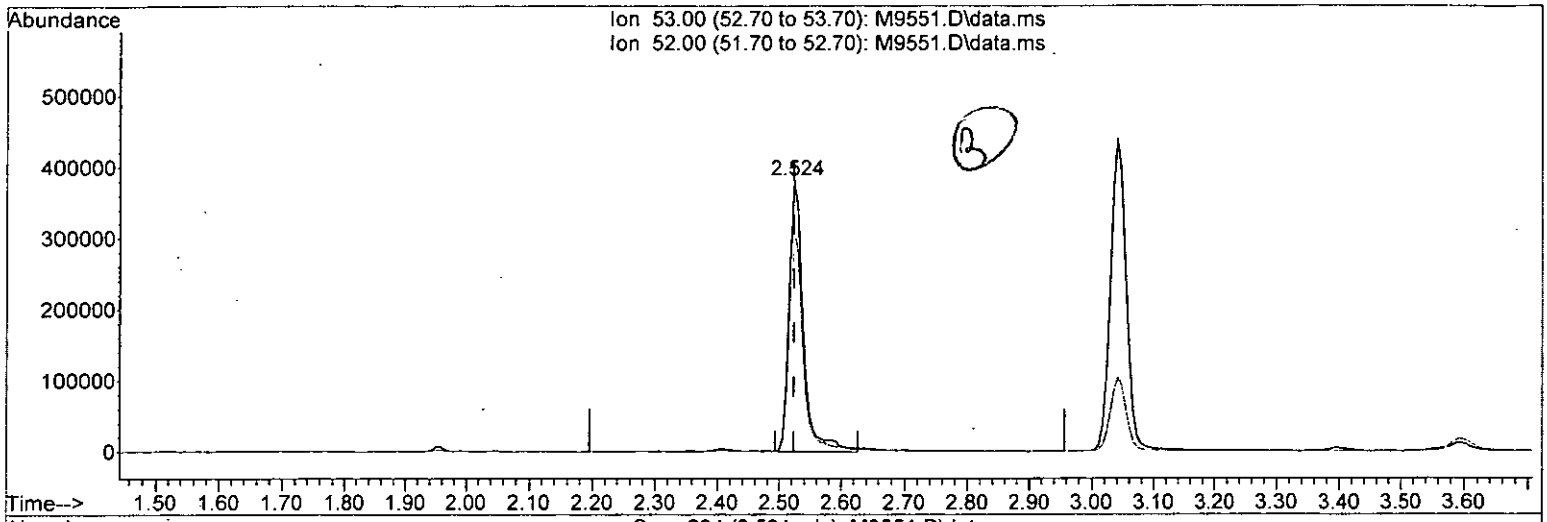
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 1,2,4-Trimethylbenzene	10.480	105	1944486	55.09	ppb	98
103) sec-Butylbenzene	10.620	105	2314117	55.49	ppb	99
104) p-Isopropyltoluene	10.742	119	1958305	56.30	ppb	98
105) 1,3-Dclbenz	10.699	146	1091762	52.59	ppb	98
106) 1,4-Dclbenz	10.766	146	1115562	52.00	ppb	96
109) n-Butylbenzene	11.071	91	1764332	55.88	ppb	97
110) 1,2-Dclbenz	11.065	146	1048863	52.89	ppb	99
111) 1,2-Dibromo-3-chloropr...	11.626	157	83674	55.12	ppb	96
115) 1,2,4-Tcbenzene	12.162	180	610930	52.76	ppb	100
116) Hexachlorobt	12.266	225	229432	50.09	ppb	96
117) Naphthalen	12.302	128	1381123	58.28	ppb	98
118) 1,2,3-Tclbenzene	12.443	180	519747	51.80	ppb	100

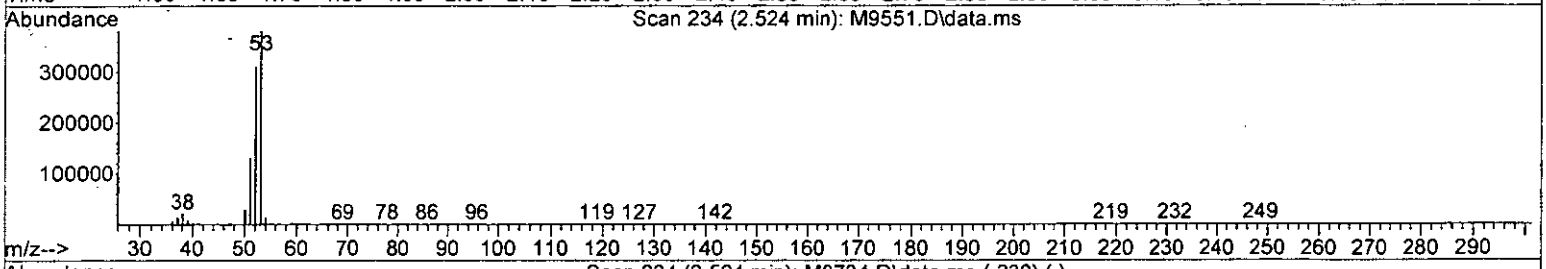
(#) = qualifier out of range (m) = manual integration (+) = signals summed

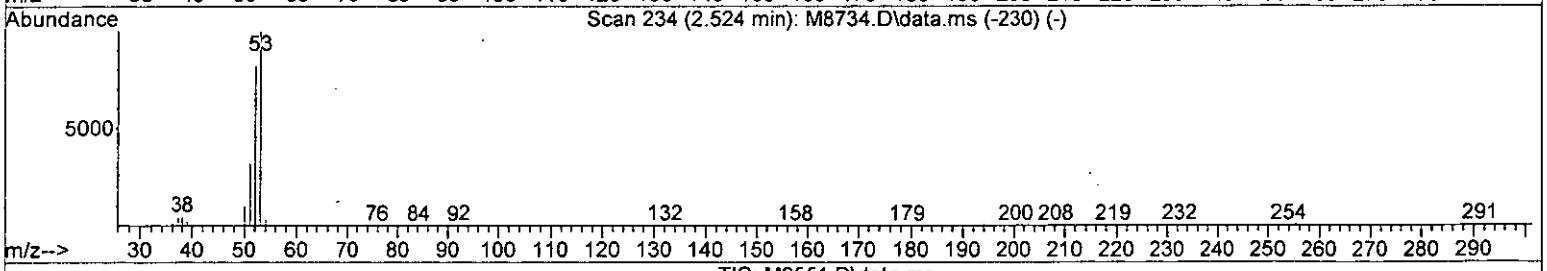
Quantitation Report (Qedit)

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9551.D
Misc :
Acq On : 8 Oct 2014 5:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 17:15:18 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration







TIC: M9551.D\data.ms

(24) Acrylonitrile

2.524min (-0.000) 305.70 ppb

response 598988

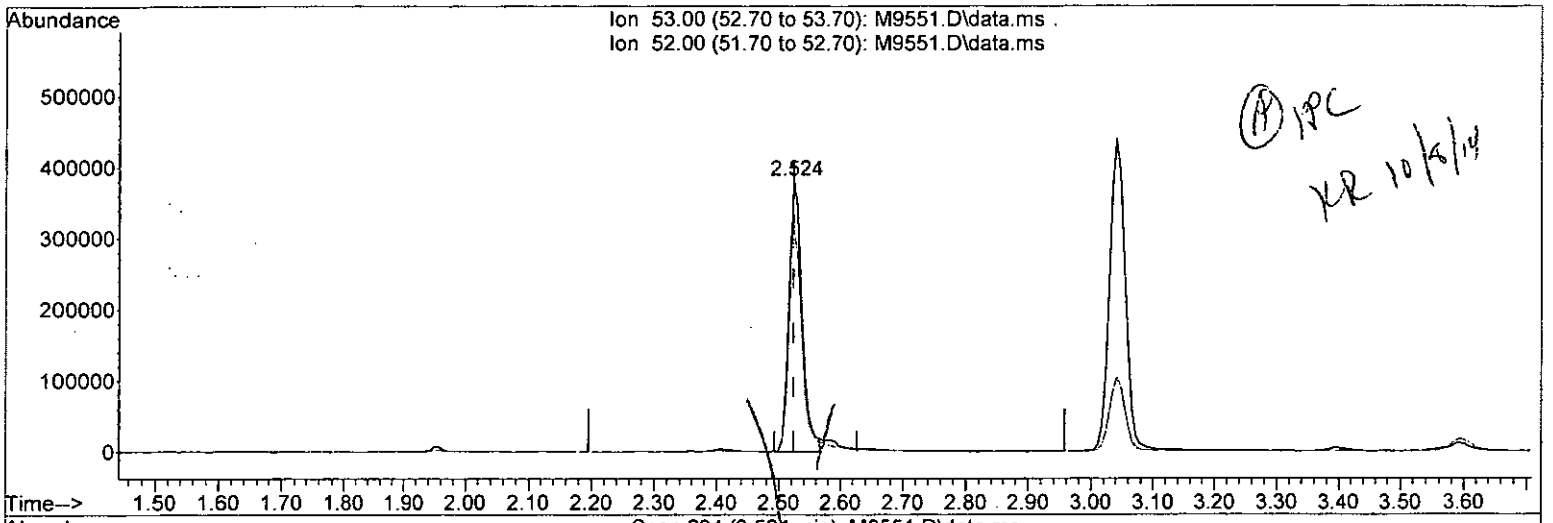
Ion	Exp%	Act%
53.00	100	100
52.00	81.60	81.22
0.00	0.00	0.00
0.00	0.00	0.00

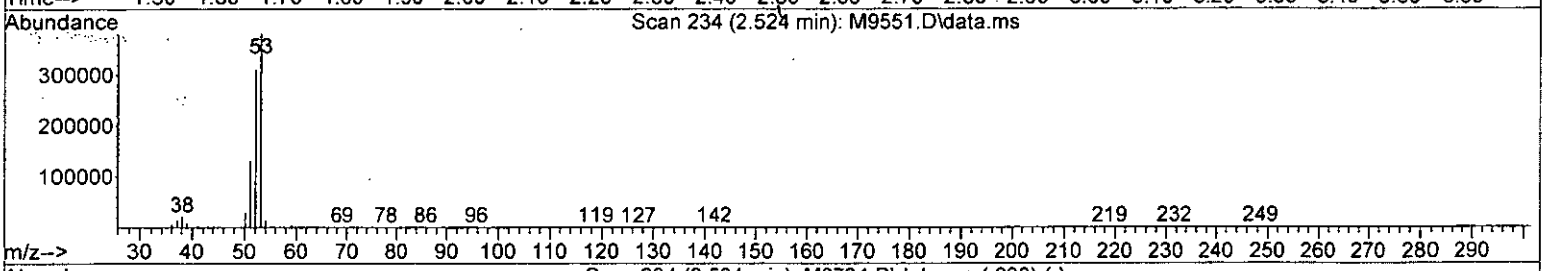
W090914.M Wed Oct 08 17:18:55 2014 Page: 1

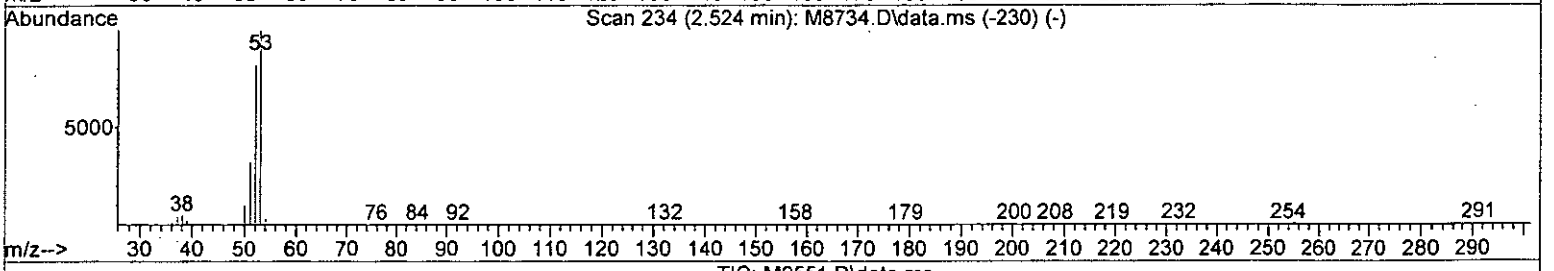
Quantitation Report (Qedit)

Sample
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9551.D
Misc :
Acq On : 8 Oct 2014 5:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 17:15:18 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration







TIC: M9551.D\data.ms

(24) Acrylonitrile

2.524min (-0.000) 288.20 ppb m

response 564703

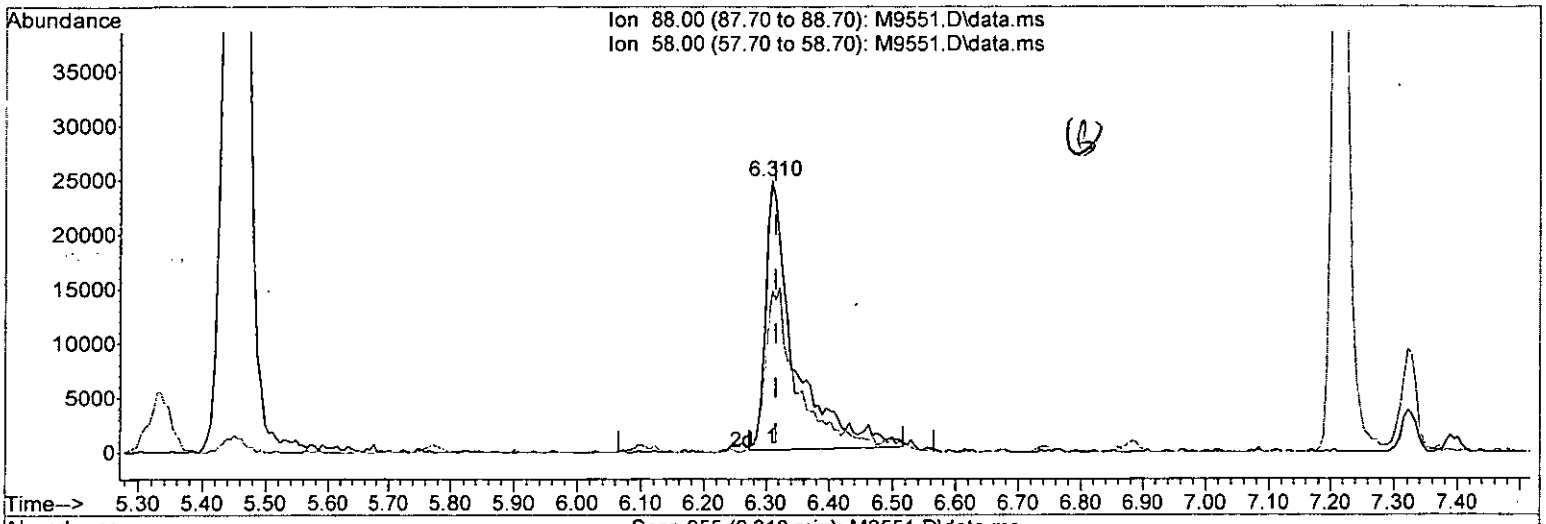
Ion	Exp%	Act%
53.00	100	100
52.00	81.60	81.22
0.00	0.00	0.00
0.00	0.00	0.00

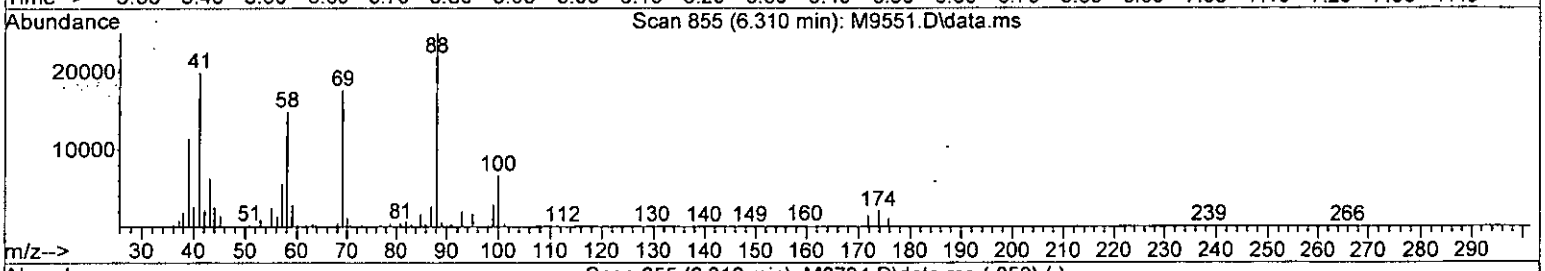
W090914.M Wed Oct 08 17:19:01 2014 Page: 1

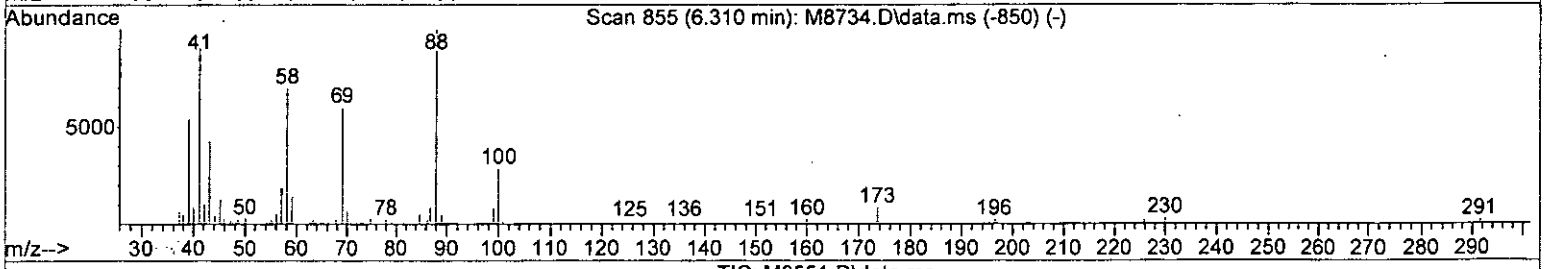
Quantitation Report (Qedit)

Sample GCV
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9551.D
Misc :
Acq On : 8 Oct 2014 5:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 17:15:18 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration







TIC: M9551.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.006) 1001.88 ppb

response 79310

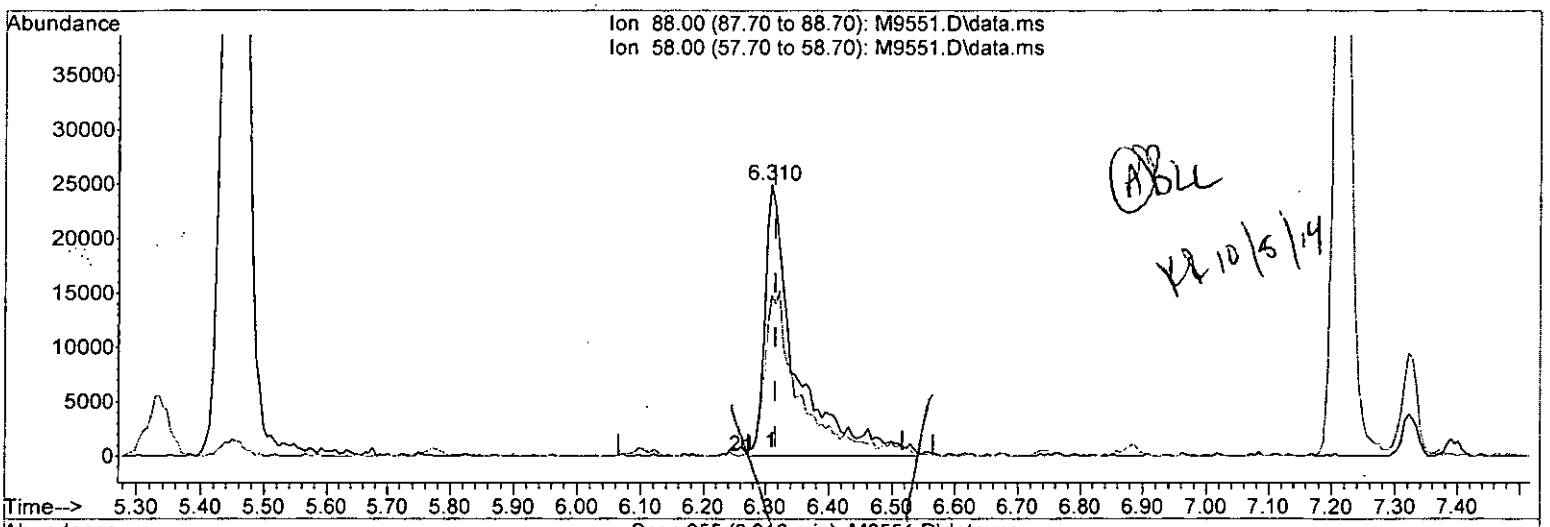
Ion	Exp%	Act%
88.00	100	100
58.00	57.90	59.42
0.00	0.00	0.00
0.00	0.00	0.00

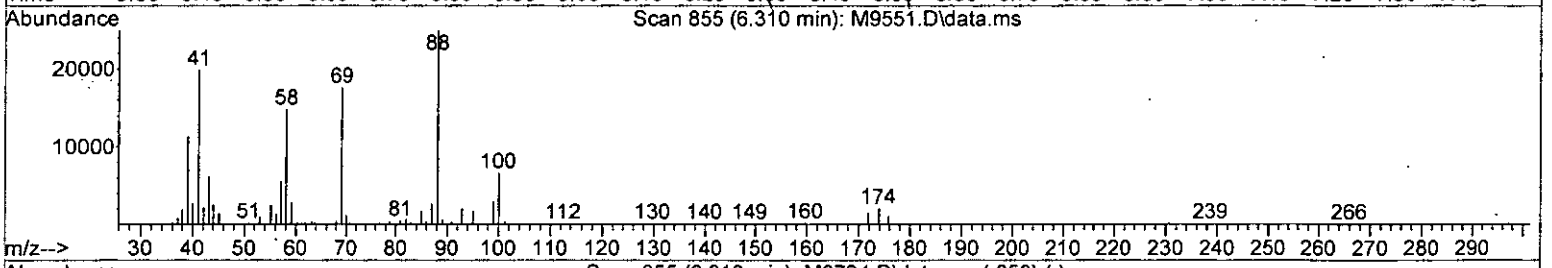
W090914.M Wed Oct 08 17:19:24 2014 Page: 1

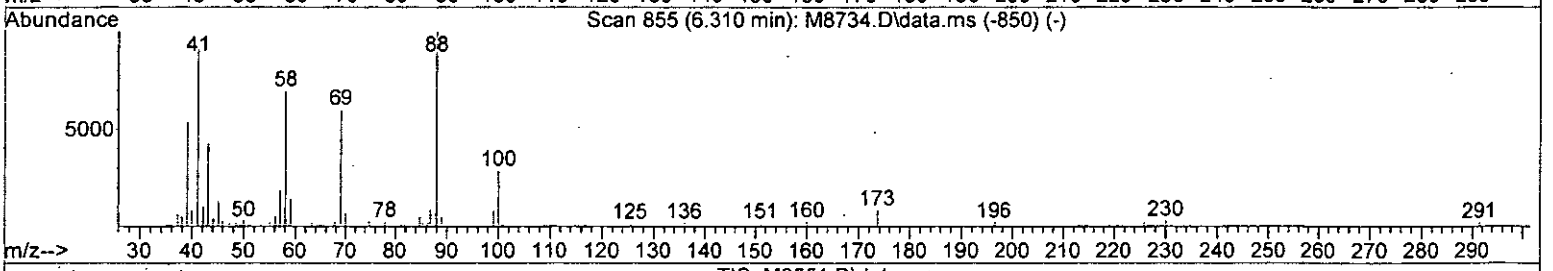
Quantitation Report (Qedit)

Sample GCV
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9551.D
Misc :
Acq On : 8 Oct 2014 5:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 17:15:18 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration







TIC: M9551.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.006) 1069.88 ppb m

response 84693

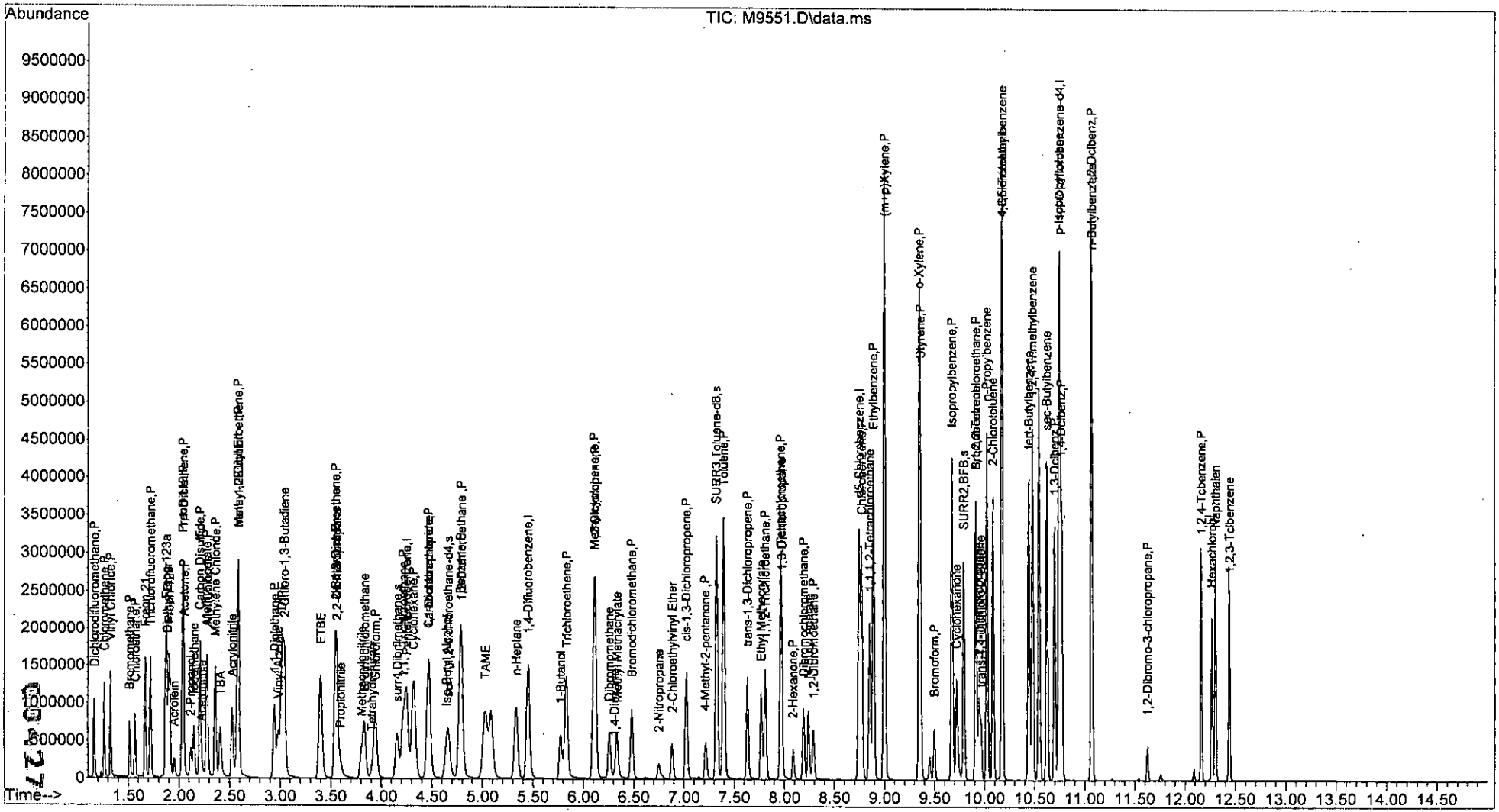
Ion	Exp%	Act%
88.00	100	100
58.00	57.90	59.42
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Wed Oct 08 17:19:31 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9551.D
Misc :
Acq On : 8 Oct 2014 5:01 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 17:19:50 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



W090914.M Wed Oct 08 17:20:14 2014 Page: 4

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000

Service Request: R1407813
Date Analyzed: 10/ 9/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\MSVOA12\DATA\100914\M9576.D\

Calibration Date: 9/9/14
Calibration ID: RC1400080
Analysis Lot: 415409
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	48.1	0.3039	0.2926	-3.7	NA	± 20 %	Average RF
1,1,1-Trichloroethane (TCA)	50.0	48.2	0.6687	0.6444	-3.6	NA	± 20 %	Average RF
1,1,2,2-Tetrachloroethane	50.0	53.7	0.5147	0.5528	7.4	NA	± 20 %	Average RF
1,1,2-Trichloroethane	50.0	55.7	0.2081	0.2319	11.4	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	49.2	0.7920	0.7795	-1.6	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	54.5	0.3563	0.3887	9.1	NA	± 20 %	Average RF
1,1-Dichloropropene	50.0	48.7	0.3631	0.3538	-2.6	NA	± 20 %	Average RF
1,2,3-Trichlorobenzene	50.0	51.4	0.6007	0.6179	2.9	NA	± 20 %	Average RF
1,2,3-Trichloropropane	50.0	50.7	0.1493	0.1515	1.5	NA	± 20 %	Average RF
1,2,4-Trichlorobenzene	50.0	51.6	0.6933	0.7160	3.3	NA	± 20 %	Average RF
1,2,4-Trimethylbenzene	50.0	53.6	2.113	2.264	7.1	NA	± 20 %	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	54.6	0.09089	0.09925	9.2	NA	± 20 %	Average RF
1,2-Dibromoethane	50.0	54.4	0.2151	0.2342	8.9	NA	± 20 %	Average RF
1,2-Dichlorobenzene	50.0	52.6	1.187	1.249	5.2	NA	± 20 %	Average RF
1,2-Dichloroethane	50.0	46.5	0.3376	0.3140	-7.0	NA	± 20 %	Average RF
1,2-Dichloropropane	50.0	50.5	0.2860	0.2890	1.1	NA	± 20 %	Average RF
1,3,5-Trimethylbenzene	50.0	53.8	2.049	2.203	7.5	NA	± 20 %	Average RF
1,3-Dichlorobenzene	50.0	52.7	1.243	1.309	5.3	NA	± 20 %	Average RF
1,3-Dichloropropane	50.0	49.1	0.4258	0.4184	-1.7	NA	± 20 %	Average RF
1,4-Dichlorobenzene	50.0	52.1	1.284	1.338	4.2	NA	± 20 %	Average RF
2,2-Dichloropropane	50.0	50.5	0.6257	0.6325	1.1	NA	± 20 %	Average RF
2-Butanone (MEK)	50.0	45.4	0.1345	0.1222	-9.1	NA	± 20 %	Average RF
2-Chlorotoluene	50.0	50.8	1.818	1.849	1.7	NA	± 20 %	Average RF
2-Hexanone	50.0	43.0	0.1403	0.1208	-13.9	NA	± 20 %	Average RF
tert-Butyl Alcohol	1000	1030	0.02749	0.02834	3.1	NA	± 20 %	Average RF
4-Chlorotoluene	50.0	51.3	2.114	2.170	2.7	NA	± 20 %	Average RF
p-Isopropyltoluene	50.0	55.1	2.083	2.295	10.2	NA	± 20 %	Average RF
4-Methyl-2-pentanone	50.0	48.3	0.1694	0.1636	-3.4	NA	± 20 %	Average RF
Acetone	50.0	44.1	0.1028	0.09076	-11.7	NA	± 20 %	Average RF
Benzene	50.0	53.7	1.135	1.219	7.4	NA	± 20 %	Average RF
Bromobenzene	50.0	52.7	0.6582	0.6940	5.4	NA	± 20 %	Average RF
Bromochloromethane	50.0	53.4	0.2759	0.2945	6.8	NA	± 20 %	Average RF
Bromodichloromethane	50.0	49.8	0.3539	0.3524	-0.4	NA	± 20 %	Average RF
Bromoform	50.0	52.2	0.2726	0.2847	4.4	NA	± 20 %	Average RF
Bromomethane	50.0	42.0	0.3254	0.2732	-16.1	NA	± 20 %	Average RF
Carbon Tetrachloride	50.0	46.4	0.1126	0.1046	-7.2	NA	± 20 %	Average RF
Chlorobenzene	50.0	50.9	0.8864	0.9019	1.8	NA	± 20 %	Average RF
Chloroethane	50.0	49.4	0.3130	0.3095	-1.1	NA	± 20 %	Average RF
Chloroform	50.0	48.6	0.8076	0.7847	-2.8	NA	± 20 %	Average RF
Chloromethane	50.0	45.9	0.5292	0.4862	-8.1	NA	± 20 %	Average RF
Dibromochloromethane	50.0	53.0	0.2578	0.2731	5.9	NA	± 20 %	Average RF

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000

Service Request: R1407813
Date Analyzed: 10/ 9/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\MSVOA12\DATA\100914\M9576.D\

Calibration Date: 9/9/14
Calibration ID: RC1400080
Analysis Lot: 415409
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane (CFC 12)	50.0	48.3	0.4852	0.4685	-3.4	NA	± 20 %	Average RF
Methylene Chloride	50.0	51.4	0.4580	0.4706	2.7	NA	± 20 %	Average RF
Ethylbenzene	50.0	52.8	0.4656	0.4921	5.7	NA	± 20 %	Average RF
Hexachlorobutadiene	50.0	50.0	0.2742	0.2744	0.1	NA	± 20 %	Average RF
Isopropylbenzene (Cumene)	50.0	52.3	2.563	2.683	4.7	NA	± 20 %	Average RF
Methyl tert-Butyl Ether	50.0	53.8	1.015	1.091	7.5	NA	± 20 %	Average RF
Naphthalene	50.0	57.4	1.419	1.629	14.8	NA	± 20 %	Average RF
Styrene	50.0	56.0	0.8998	1.008	12.1	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	49.8	0.2561	0.2553	-0.3	NA	± 20 %	Average RF
Toluene	50.0	53.8	1.234	1.328	7.6	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	53.0	0.3020	0.3202	6.0	NA	± 20 %	Average RF
Trichlorofluoromethane (CFC 11)	50.0	52.3	0.6717	0.7028	4.6	NA	± 20 %	Average RF
Vinyl Chloride	50.0	49.8	0.5600	0.5581	-0.3	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	53.9	0.4990	0.5374	7.7	NA	± 20 %	Average RF
cis-1,3-Dichloropropene	50.0	54.0	0.4135	0.4462	7.9	NA	± 20 %	Average RF
m,p-Xylenes	100	107	0.5642	0.6058	7.4	NA	± 20 %	Average RF
n-Butylbenzene	50.0	53.8	1.890	2.034	7.6	NA	± 20 %	Average RF
n-Propylbenzene	50.0	52.6	2.997	3.152	5.2	NA	± 20 %	Average RF
o-Xylene	50.0	54.0	0.5489	0.5930	8.0	NA	± 20 %	Average RF
sec-Butylbenzene	50.0	54.0	2.497	2.694	7.9	NA	± 20 %	Average RF
tert-Butylbenzene	50.0	53.3	1.718	1.833	6.7	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	54.4	0.4442	0.4832	8.8	NA	± 20 %	Average RF
trans-1,3-Dichloropropene	50.0	53.8	0.3368	0.3626	7.6	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	52.4	0.4208	0.4413	4.9	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	48.7	0.2785	0.2710	-2.7	NA	± 20 %	Average RF
Toluene-d8	50.0	51.6	1.175	1.212	3.1	NA	± 20 %	Average RF

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9576.D
Misc :
Acq On : 9 Oct 2014 10:13 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:31:00 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.0000	1.0000	0.0	115	0.00
2	P	Dichlorodifluoromethane	0.4852	0.4685	3.4	97	0.00
3	P	Chloromethane	0.5292	0.4862	8.1	97	0.00
4	P	Vinyl Chloride	0.5600	0.5581	0.3	105	0.00
5	P	Bromomethane	0.3254	0.2732	16.0	100	0.00
6	P	Chloroethane	0.3130	0.3095	1.1	105	0.00
7		Freon 21	0.8280	0.8145	1.6	106	0.00
8	P	Trichlorofluoromethane	0.6717	0.7028	-4.6	112	0.00
9		Diethyl Ether	0.3237	0.3335	-3.0	114	0.00
10		Freon 123a	0.5269	0.5187	1.6	105	0.00
11		Freon 123	0.5823	0.6207	-6.6	113	0.00
12		Acrolein	0.0305	0.0406	-33.1#	136	0.00
13	P	1,1-Diclethene	0.3563	0.3887	-9.1	119	0.00
14	P	Freon 113	0.4146	0.4348	-4.9	115	0.00
15	P	Acetone	0.1028	0.0908	11.7	104	0.00
16		2-Propanol	0.0164	0.0158	3.7	103	0.00
17		Iodomethane	0.5364	0.5183	3.4	98	0.00
18	P	Carbon Disulfide	1.3496	1.4517	-7.6	121	0.00
19		Acetonitrile	0.0139	0.0137	1.4	104	0.00
20		Allyl Chloride	0.2402	0.2644	-10.1	118	0.00
21	P	Methyl Acetate	0.2095	0.1885	10.0	96	0.00
22	P	Methylene Chloride	0.4580	0.4706	-2.8	118	0.00
23		TBA	0.0275	0.0283	-2.9	113	0.00
24		Acrylonitrile	0.0980	0.1091	-11.3	116	0.00
25	P	Methyl-t-Butyl Ether	1.0151	1.0914	-7.5	113	0.00
26	P	trans-1,2-Dichloroethene	0.4442	0.4832	-8.8	120	0.00
27		Halothane	0.0000	0.0000	0.0	0#	-3.01#
28	P	1,1-Diclethane	0.7920	0.7795	1.6	106	0.00
29		Vinyl Acetate	0.0632	0.0824	-30.4#	150	0.00
30		DIPE	1.4994	1.3357	10.9	103	0.00
31		2-Chloro-1,3-Butadiene	0.7706	0.6900	10.5	100	0.00
32		ETBE	1.3220	1.2660	4.2	110	0.00
33		2,2-Dichloropropane	0.6257	0.6325	-1.1	106	0.00
34	P	cis-1,2-Dichloroethene	0.4990	0.5374	-7.7	120	0.00
35	P	2-Butanone	0.1345	0.1222	9.1	100	0.00
36		Propionitrile	0.0362	0.0406	-12.2	117	0.00
37		Bromochloromethane	0.2759	0.2945	-6.7	120	0.00
38		Methacrylonitrile	0.1156	0.1274	-10.2	114	0.00
39		Tetrahydrofuran	0.0842	0.0767	8.9	99	0.00
40	P	Chloroform	0.8076	0.7847	2.8	111	0.00
41	P	1,1,1-Trichloroethane	0.6687	0.6444	3.6	105	0.00
42		TAME	1.1303	1.1310	-0.1	114	0.00
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	118	0.00
44	P	Cyclohexane	0.2586	0.2357	8.9	100	0.00
45	s	surr4,Dibrflmethane	0.2785	0.2710	2.7	113	0.00
46	P	Carbontetrachloride	0.1126	0.1046	7.1	101	0.00
47		1,1-Dichloropropene	0.3631	0.3538	2.6	106	0.00

KB 10/9/14

W090914.M Thu Oct 09 10:31:18 2014 Page: 1

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9576.D
Misc :
Acq On : 9 Oct 2014 10:13 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:31:00 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
48	s	surr1,1,2-dichloroethane-d4	0.3002	0.2617	12.8	100	0.00
49	P	Benzene	1.1347	1.2192	-7.4	117	0.00
50	P	1,2-Dichloroethane	0.3376	0.3140	7.0	102	0.00
51		Iso-Butyl Alcohol	0.0075	0.0076	-1.3	108	0.00
52		n-Heptane	0.2860	0.2969	-3.8	113	0.00
53		1-Butanol	0.0043	0.0049	-14.0	122	0.00
54	P	Trichloroethene	0.3020	0.3202	-6.0	118	0.00
55	P	Methylcyclohexane	0.3104	0.3353	-8.0	115	0.00
56	P	1,2-Diclpropane	0.2860	0.2890	-1.0	108	0.00
57		Dibromomethane	0.1385	0.1462	-5.6	117	0.00
58		1,4-Dioxane	0.0024	0.0023	4.2	118	0.00
59		Methyl Methacrylate	0.1314	0.1469	-11.8	116	0.00
60	P	Bromodichloromethane	0.3539	0.3524	0.4	107	0.00
61		2-Nitropropane	0.0352	0.0339	3.7	111	0.00
62		2-Chloroethylvinyl Ether	0.1287	0.0982	23.7#	82	0.00
63	P	cis-1,3-Dichloropropene	0.4135	0.4462	-7.9	112	0.00
64	P	4-Methyl-2-pentanone	0.1694	0.1636	3.4	106	0.00
65	s	SURR3,Toluene-d8	1.1754	1.2120	-3.1	115	0.00
66	P	Toluene	1.2340	1.3282	-7.6	117	0.00
67	P	trans-1,3-Dichloropropene	0.3368	0.3626	-7.7	107	0.00
68		Ethyl Methacrylate	0.2648	0.3041	-14.8	117	0.00
69	P	1,1,2-Trichloroethane	0.2081	0.2319	-11.4	121	0.00
70	s	SURR2,BFB	0.4208	0.4413	-4.9	117	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000	0.0	123	0.00
72	P	Tetrachloroethene	0.2561	0.2553	0.3	114	0.00
73	P	2-Hexanone	0.1403	0.1208	13.9	101	0.00
74		1,3-Dichloropropane	0.4258	0.4184	1.7	113	0.00
75	P	Dibromochloromethane	0.2578	0.2731	-5.9	113	0.00
76		N-Butyl Acetate	0.3007	0.2928	5.6 ~~2.6~~	103	0.00
77	P	1,2-Dibromoethane	0.2151	0.2342	-8.9	118	0.00
78	P	Chlorobenzene	0.8864	0.9019	-1.7	114	0.00
~~79~~		~~3-CBTF~~	~~0.4381~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~8.79#~~
~~80~~		~~4-CBTF~~	~~0.4209~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~8.84#~~
81		1,1,1,2-Tetrachloroethane	0.3039	0.2926	3.7	107	0.00
82	P	Ethylbenzene	0.4656	0.4921	-5.7	115	0.00
83	P	(m+p)Xylene	0.5642	0.6058	-7.4	115	0.00
84	P	o-Xylene	0.5489	0.5930	-8.0	116	0.00
85	P	Styrene	0.8998	1.0084	-12.1	118	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	120	0.00
87	P	Bromoform	0.2726	0.2847	-4.4	111	0.00
~~88~~		~~2-CBTF~~	~~0.8115~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~9.58#~~
89	P	Isopropylbenzene	2.5629	2.6829	-4.7	115	0.00
90		Cyclohexanone	0.0595	0.0565	5.0	105	0.00
91		trans-1,4-Dichloro-2-Butene	0.1275	0.1079	15.4	95	0.00
92	P	1,1,2,2-Tetrachloroethane	0.5147	0.5528	-7.4	124	0.00
93		Bromobenzene	0.6582	0.6940	-5.4	119	0.00

W090914.M Thu Oct 09 10:31:18 2014 Page: 2

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9576.D
Misc :
Acq On : 9 Oct 2014 10:13 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:31:00 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
94		1,2,3-Trichloropropane	0.1493	0.1515	-1.5	118	0.00
95		n-Propylbenzene	2.9973	3.1522	-5.2	115	0.00
96		2-Chlorotoluene	1.8182	1.8485	-1.7	114	0.00
~~97~~		~~3-Chlorotoluene~~	~~1.9508~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~10.14#~~
98		4-Chlorotoluene	2.1136	2.1697	-2.7	113	0.00
99		1,3,5-Trimethylbenzene	2.0487	2.2030	-7.5	114	0.00
100		tert-Butylbenzene	1.7183	1.8332	-6.7	115	0.00
101		1,2,4-Trimethylbenzene	2.1132	2.2639	-7.1	114	0.00
~~102~~		~~3,4-DCBTF~~	~~0.5776~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~10.54#~~
103		sec-Butylbenzene	2.4968	2.6939	-7.9	119	0.00
104		p-Isopropyltoluene	2.0825	2.2953	-10.2	118	0.00
105	P	1,3-Dclbenz	1.2428	1.3091	-5.3	118	0.00
106	P	1,4-Dclbenz	1.2844	1.3382	-4.2	119	0.00
~~107~~		~~2,4-DCBTF~~	~~0.5002~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~10.83#~~
~~108~~		~~2,5-DCBTF~~	~~0.5686~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~10.86#~~
109		n-Butylbenzene	1.8905	2.0344	-7.6	115	0.00
110	P	1,2-Dclbenz	1.1873	1.2486	-5.2	119	0.00
111	P	1,2-Dibromo-3-chloropropane	0.0909	0.0993	-9.2	117	0.00
~~112~~		~~Trielution Dichlorotoluene~~	~~0.9868~~	~~0.0003~~	~~100.0#~~	~~0#~~	~~0.00~~
~~113~~		~~1,3,5-Trichlorobenzene~~	~~0.8472~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~11.78#~~
~~114~~		~~Coelution Dichlorotoluene~~	~~1.0546~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~12.00#~~
115	P	1,2,4-Tcbenzene	0.6933	0.7160	-3.3	112	0.00
116		Hexachlorobt	0.2742	0.2744	-0.1	115	0.00
117		Naphthalen	1.4190	1.6288	-14.8	119	0.00
118		1,2,3-Tclbenzene	0.6007	0.6179	-2.9	113	0.00
~~119~~		~~2,4,5-Trichlorotolene~~	~~0.4693~~	~~0.0003~~	~~99.9#~~	~~0#~~	~~0.00~~
~~120~~		~~2,3,6-Trichlorotoluene~~	~~0.4607~~	~~0.0003~~	~~99.9#~~	~~0#~~	~~0.06~~

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\100914\M9576.D
Misc :
Acq On : 9 Oct 2014 10:13 am
Operator : K.Ruest
InstName : MSVOA-12 RQ1412180-02

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:27:09 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	944084	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1510223	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1424786	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	761972	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	409204	48.65	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.30%				
48) surr1,1,2-dichloroetha...	4.664	65	395181	43.59	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 87.18%				
65) SURR3,Toluene-d8	7.322	98	1830331	51.56	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 103.12%				
70) SURR2,BFB	9.791	95	666527	52.44	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 104.88%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	442343	48.28	ppb		98
3) Chloromethane	1.262	50	459016	45.94	ppb		97
4) Vinyl Chloride	1.323	62	526857	49.83	ppb		100
5) Bromomethane	1.512	94	257896	41.97	ppb		98
6) Chloroethane	1.567	64	292190	49.43	ppb		100
7) Freon 21	1.664	67	768988	49.19	ppb		100
8) Trichlorofluoromethane	1.719	101	663544	52.32	ppb		98
9) Diethyl Ether	1.878	59	314838	51.51	ppb		96
10) Freon 123a	1.866	67	489679	49.22	ppb		98
11) Freon 123	1.902	83	585948	53.29	ppb		97
12) Acrolein	1.951	56	191868	333.22	ppb		99
13) 1,1-Diclethene	2.036	96	366949	54.54	ppb		93
14) Freon 113	2.036	101	410450	52.43	ppb		100
15) Acetone	2.042	43	85683	44.13	ppb		96
16) 2-Propanol	2.116	45	298047	963.80	ppb		99
17) Iodomethane	2.146	142	489357	48.32	ppb		94
18) Carbon Disulfide	2.207	76	1370500	53.78	ppb		100
19) Acetonitrile	2.225	40	64789	247.12	ppb		97
20) Allyl Chloride	2.274	76	249580	55.02	ppb	#	86
21) Methyl Acetate	2.274	43	177916	44.97	ppb		93
22) Methylene Chloride	2.359	84	444262	51.37	ppb	#	88
23) TBA	2.408	59	535150	1031.04	ppb		100
24) Acrylonitrile	2.524	53	515060	278.35	ppb		97
25) Methyl-t-Butyl Ether	2.579	73	1030394	53.76	ppb		99
26) trans-1,2-Dichloroethene	2.585	96	456156	54.38	ppb	#	87
28) 1,1-Diclethane	2.945	63	735877	49.21	ppb		98
29) Vinyl Acetate	2.975	86	77784	65.19	ppb	#	63
30) DIPE	3.018	45	1261049	44.54	ppb		95
31) 2-Chloro-1,3-Butadiene	3.042	53	651374	44.76	ppb		87
32) ETBE	3.396	59	1195197	47.88	ppb		97
33) 2,2-Dichloropropane	3.554	77	597134	50.54	ppb		97
34) cis-1,2-Dichloroethene	3.548	96	507341	53.85	ppb		86
35) 2-Butanone	3.548	43	115328	45.43	ppb		88
36) Propionitrile	3.591	54	191672	280.04	ppb		94
37) Bromochloromethane	3.829	130	278053	53.38	ppb		92

KR 10/9/14

W090914.M Thu Oct 09 10:27:12 2014

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\100914\M9576.D
Misc :
Acq On : 9 Oct 2014 10:13 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:27:09 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.798	67	120297	55.11	ppb		88
39) Tetrahydrofuran	3.908	42	72378	45.55	ppb		85
40) Chloroform	3.938	83	740833	48.58	ppb		97
41) 1,1,1-Trichloroethane	4.219	97	608357	48.18	ppb		98
42) TAME	5.030	73	1067736	50.03	ppb		97
44) Cyclohexane	4.316	41	355925	45.57	ppb		99
46) Carbontetrachloride	4.469	121	157894	46.42	ppb		97
47) 1,1-Dichloropropene	4.463	75	534292	48.72	ppb		97
49) Benzene	4.786	78	1841200	53.72	ppb		93
50) 1,2-Dichloroethane	4.786	62	474249	46.51	ppb		98
51) Iso-Butyl Alcohol	4.639	43	228370	1007.39	ppb		93
52) n-Heptane	5.328	43	448321	51.90	ppb		91
53) 1-Butanol	5.773	56	373148	2853.28	ppb		92
54) Trichloroethene	5.828	130	483564	53.02	ppb		97
55) Methylcyclohexane	6.109	55	506363	54.01	ppb		88
56) 1,2-Diclpropane	6.115	63	436450	50.53	ppb		98
57) Dibromomethane	6.255	93	220824	52.78	ppb		92
58) 1,4-Dioxane	6.316	88	68738	955.42	ppb		90
59) Methyl Methacrylate	6.328	69	221890	55.91	ppb		90
60) Bromodichloromethane	6.481	83	532135	49.78	ppb		98
61) 2-Nitropropane	6.743	41	102302	96.34	ppb		98
62) 2-Chloroethylvinyl Ether	6.883	63	148373	38.17	ppb		99
63) cis-1,3-Dichloropropene	7.023	75	673890	53.96	ppb		97
64) 4-Methyl-2-pentanone	7.212	43	247030	48.29	ppb		97
66) Toluene	7.395	91	2005918	53.82	ppb		99
67) trans-1,3-Dichloropropene	7.633	75	547582	53.82	ppb		96
68) Ethyl Methacrylate	7.767	69	459194	57.41	ppb		93
69) 1,1,2-Trichloroethane	7.810	97	350191	55.70	ppb		99
72) Tetrachloroethene	7.962	164	363712	49.84	ppb		99
73) 2-Hexanone	8.084	43	172052	43.03	ppb		90
74) 1,3-Dichloropropane	7.974	76	596171	49.13	ppb		97
75) Dibromochloromethane	8.188	129	389082	52.96	ppb		98
76) N-Butyl Acetate	8.242	43	417171	47.21	ppb		91
77) 1,2-Dibromoethane	8.285	107	333720	54.43	ppb		97
78) Chlorobenzene	8.773	112	1284986	50.88	ppb		97
81) 1,1,1,2-Tetrachloroethane	8.852	131	416958	48.14	ppb		96
82) Ethylbenzene	8.889	106	701089	52.84	ppb		99
83) (m+p)Xylene	8.998	106	1726333	107.38	ppb		95
84) o-Xylene	9.346	106	844870	54.01	ppb		96
85) Styrene	9.358	104	1436807	56.04	ppb		95
87) Bromoform	9.498	173	216913	52.22	ppb		98
89) Isopropylbenzene	9.675	105	2044304	52.34	ppb		100
90) Cyclohexanone	9.718	55	860668	949.21	ppb		92
91) trans-1,4-Dichloro-2-B...	9.962	53	82188	42.30	ppb		91
92) 1,1,2,2-Tetrachloroethane	9.913	83	421241	53.71	ppb		95
93) Bromobenzene	9.913	156	528805	52.72	ppb		93
94) 1,2,3-Trichloropropane	9.943	110	115430	50.74	ppb	#	84
95) n-Propylbenzene	10.023	91	2401886	52.58	ppb		97
96) 2-Chlorotoluene	10.084	91	1408536	50.83	ppb		98
~~97) 3-Chlorotoluene~~	~~10.175~~	~~91~~	~~1658415~~	~~55.79~~	~~ppb~~		~~97~~
98) 4-Chlorotoluene	10.175	91	1653261	51.33	ppb		97
99) 1,3,5-Trimethylbenzene	10.175	105	1678608	53.76	ppb		99

W090914.M Thu Oct 09 10:27:12 2014 Page: 2

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\100914\M9576.D
Misc :
Acq On : 9 Oct 2014 10:13 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:27:09 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) tert-Butylbenzene	10.437	119	1396850	53.34	ppb	100
101) 1,2,4-Trimethylbenzene	10.480	105	1725023	53.57	ppb	99
103) sec-Butylbenzene	10.620	105	2052640	53.95	ppb	99
104) p-Isopropyltoluene	10.742	119	1748988	55.11	ppb	97
105) 1,3-Dclbenz	10.699	146	997497	52.67	ppb	98
106) 1,4-Dclbenz	10.766	146	1019642	52.09	ppb	97
109) n-Butylbenzene	11.071	91	1550182	53.81	ppb	99
110) 1,2-Dclbenz	11.065	146	951380	52.58	ppb	98
111) 1,2-Dibromo-3-chloropr...	11.626	157	75628	54.60	ppb	93
115) 1,2,4-Tcbenzene	12.162	180	545559	51.63	ppb	99
116) Hexachlorobt	12.266	225	209077	50.03	ppb	95
117) Naphthalen	12.303	128	1241126	57.40	ppb	99
118) 1,2,3-Tclbenzene	12.437	180	470822	51.43	ppb	95

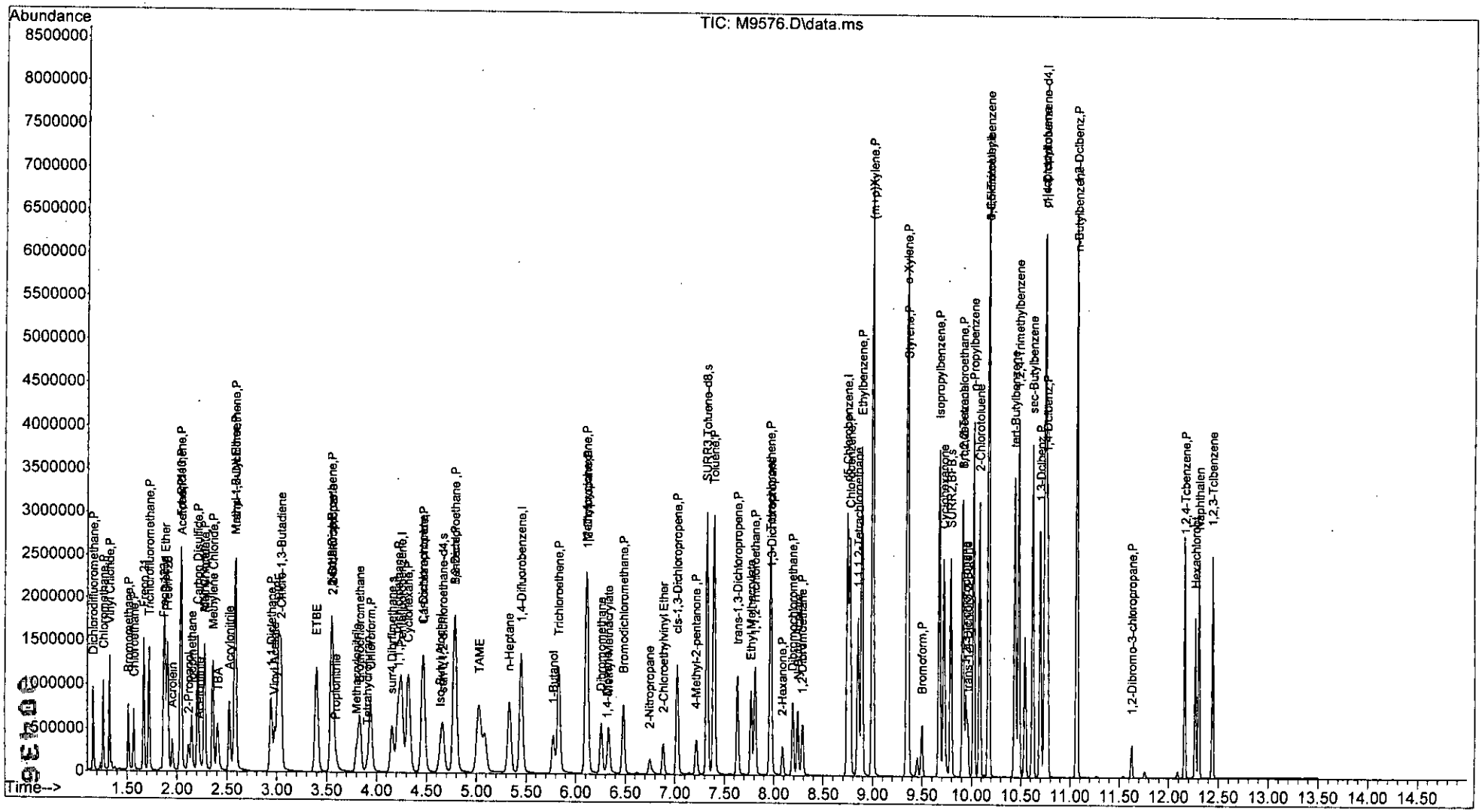
(#) = qualifier out of range (m) = manual integration (+) = signals summed

W090914.M Thu Oct 09 10:27:12 2014

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\100914\M9576.D
Misc :
Acq On : 9 Oct 2014 10:13 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:27:09 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



W090914.M Thu Oct 09 10:27:16 2014 Page: 4

ALS Environmental

VOLATILE ORGANICS
RAW QC DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

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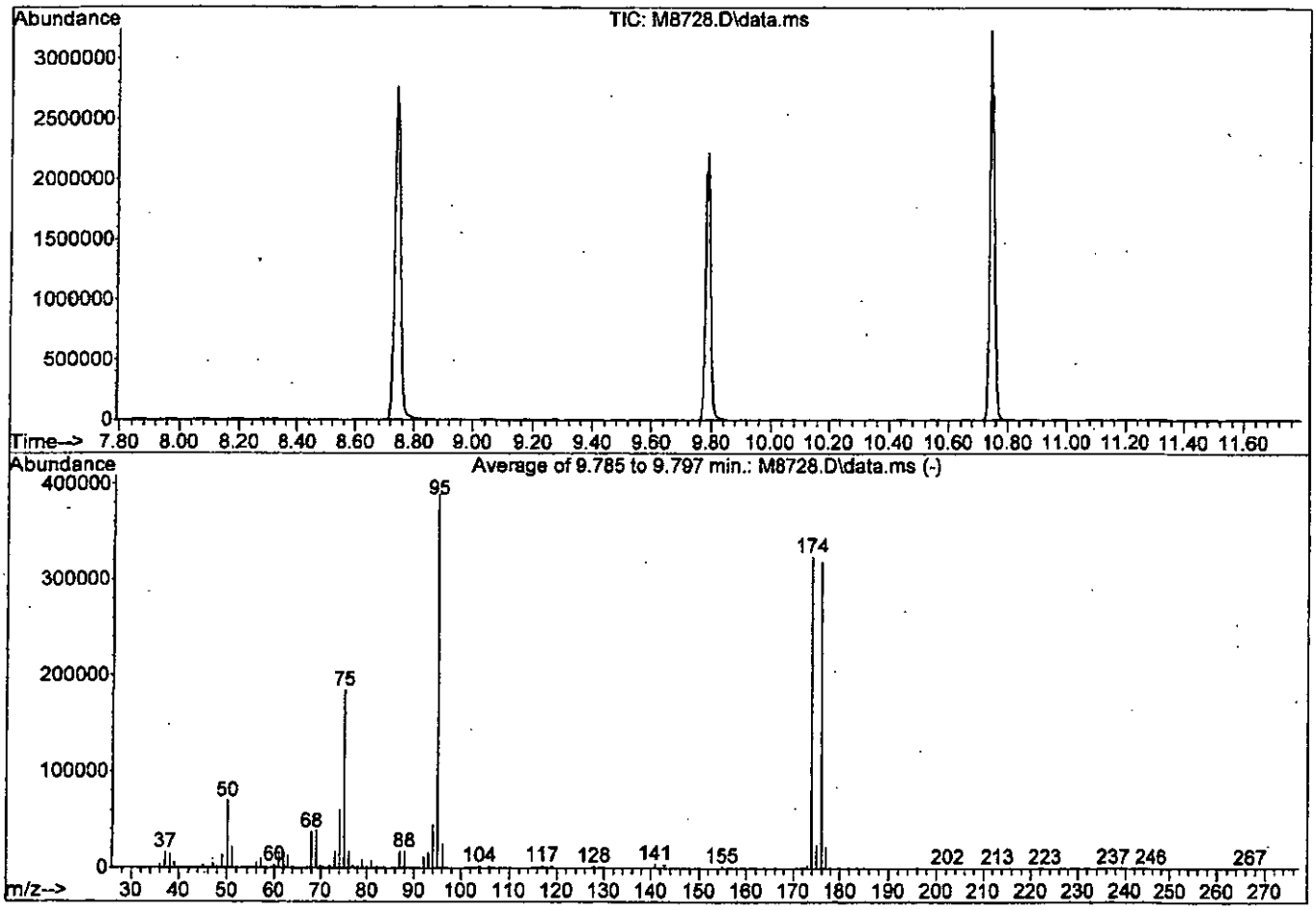
00437

Data Path : I:\ACQUDATA\msvoa12\Data\090914\
Data File : M8728.D
Acq On : 9 Sep 2014 2:37 pm
Operator : K.Ruest
Sample : TUNE
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Fri Sep 05 08:48:55 2014



AutoFind: Scans 1425, 1426, 1427; Background Corrected with Scan 1420

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.8	69235	PASS
75	95	30	60	47.5	184157	PASS
95	95	100	100	100.0	388011	PASS
96	95	5	9	6.3	24410	PASS
173	174	0.00	2	0.8	2686	PASS
174	95	50	120	83.4	323669	PASS
175	174	5	9	7.1	23053	PASS
176	174	95	101	98.3	318059	PASS
177	176	5	9	6.6	20833	PASS

W090914.M Tue Sep 09 14:53:14 2014 Page: 1

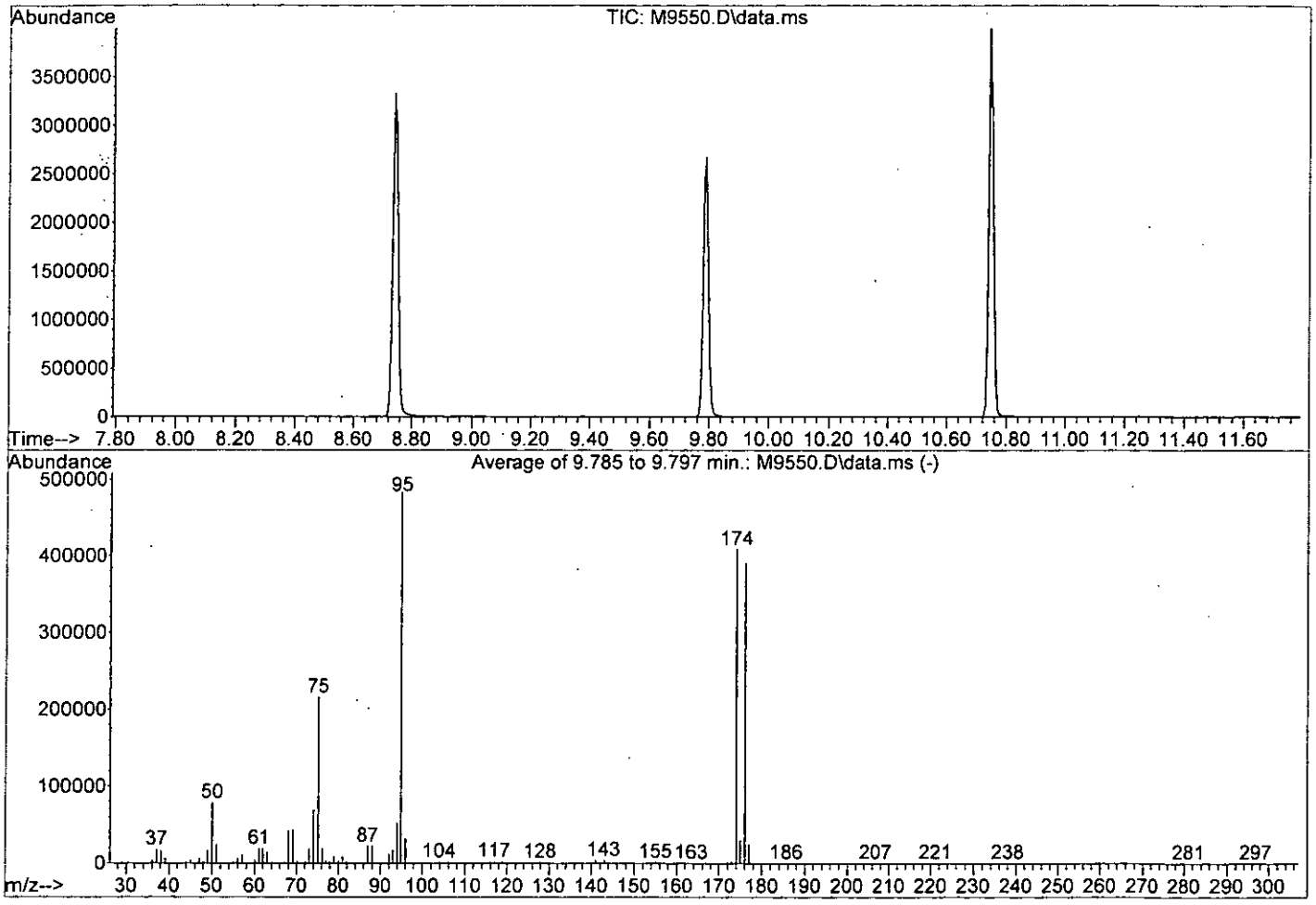
00438

Data Path : I:\ACQUDATA\MSVOA12\DATA\100814\
Data File : M9550.D
Acq On : 8 Oct 2014 4:29 pm
Operator : K.Ruest
Sample : TUNE RQ1412147 - 01, 07
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: INTP60.P

KR 10/5/14

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Wed Sep 10 10:41:23 2014



AutoFind: Scans 1425, 1426, 1427; Background Corrected with Scan 1420

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.2	78261	PASS
75	95	30	60	44.6	215659	PASS
95	95	100	100	100.0	483627	PASS
96	95	5	9	6.6	31808	PASS
173	174	0.00	2	0.6	2490	PASS
174	95	50	120	84.5	408491	PASS
175	174	5	9	7.2	29437	PASS
176	174	95	101	95.5	390080	PASS
177	176	5	9	6.2	24264	PASS

W090914.M Wed Oct 08 17:18:06 2014

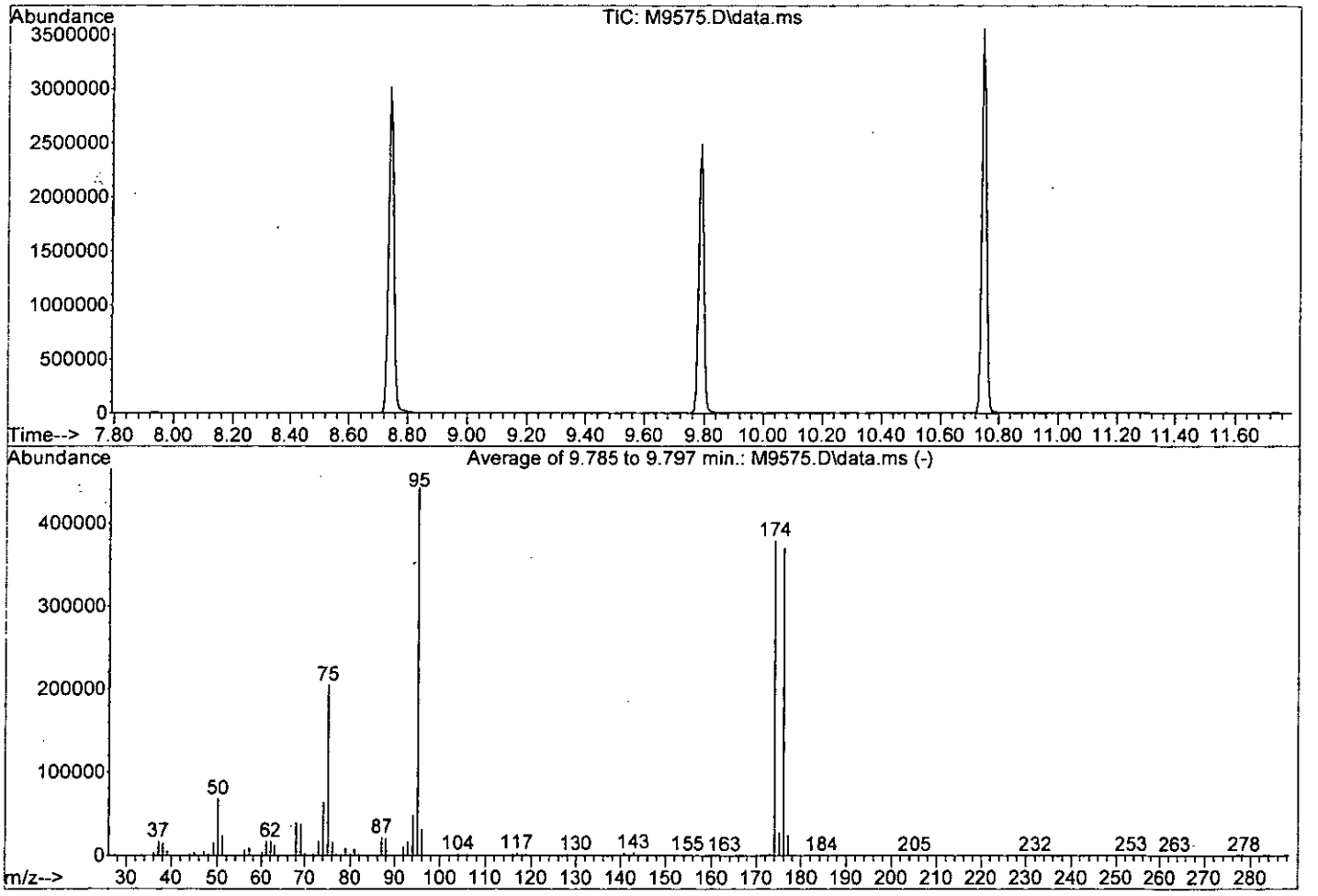
00439

Data Path : I:\ACQUDATA\MSVOA12\DATA\100914\
Data File : M9575.D
Acq On : 9 Oct 2014 9:42 am
Operator : K.Ruest
Sample : TUNE RQ1412F80-01
Misc :
ALS Vial : 2 Sample Multiplier: 1

KR 10/9/14

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Wed Sep 10 10:41:23 2014



AutoFind: Scans 1425, 1426, 1427; Background Corrected with Scan 1420

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.4	68077	PASS
75	95	30	60	46.2	204629	PASS
95	95	100	100	100.0	442923	PASS
96	95	5	9	7.0	30803	PASS
173	174	0.00	2	0.7	2546	PASS
174	95	50	120	85.5	378688	PASS
175	174	5	9	7.1	27072	PASS
176	174	95	101	97.6	369621	PASS
177	176	5	9	6.4	23835	PASS

W090914.M Thu Oct 09 10:08:17 2014 0040 Page: 1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/8/14 18:37
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412142-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9554.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.31**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.29**	J	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: NA
Date Received: NA
Date Analyzed: 10/8/14 18:37

Sample Name: Method Blank
Lab Code: RQ1412142-04

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100814\M9554.D\

Analysis Lot: 415258
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**0.62**	J	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.26**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/8/14 18:37
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412142-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9554.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	75-120	10/8/14 18:37	
Dibromofluoromethane	98	85-115	10/8/14 18:37	
Toluene-d8	102	85-120	10/8/14 18:37	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: NA
Date Received: NA
Date Analyzed: 10/8/14 1837

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1412142-04

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9554.D
Misc :
Acq On : 8 Oct 2014 6:37 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ1412142-04, 10

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 09:32:57 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	1017846	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1673290	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1500242	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	772537	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	455583	48.88	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.76%				
48) surr1,1,2-dichloroetha...	4.664	65	449123	44.71	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 89.42%				
65) SURR3,Toluene-d8	7.322	98	2009624	51.09	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.18%				
70) SURR2,BFB	9.791	95	712406	50.58	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.16%				
Target Compounds							Qvalue
5) Bromomethane	1.518	94	1923m	0.29	ppb		
90) Cyclohexanone	9.724	55	1244	1.35	ppb	#	74
115) 1,2,4-Tcbenzene	12.162	180	3351	0.31	ppb	#	59
116) Hexachlorobt	12.266	225	2611	0.62	ppb	#	74
117) Naphthalen	12.303	128	5751	0.26	ppb		87
118) 1,2,3-Tclbenzene	12.443	180	3635	0.39	ppb		90

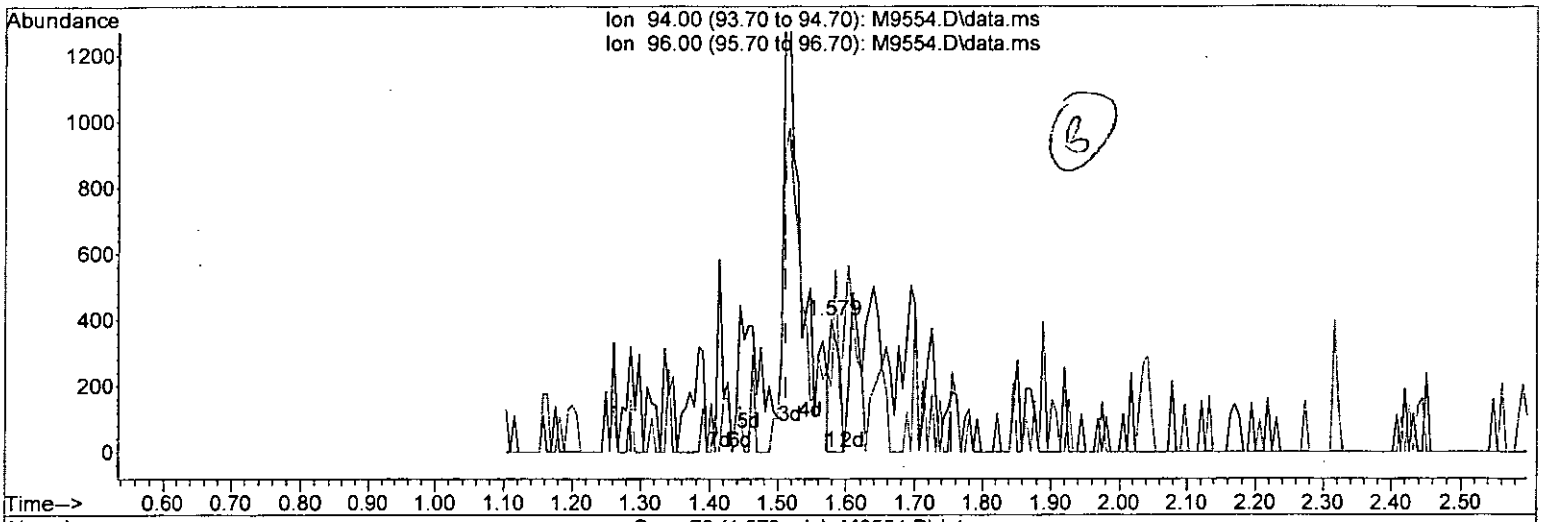
(#) = qualifier out of range (m) = manual integration (+) = signals summed

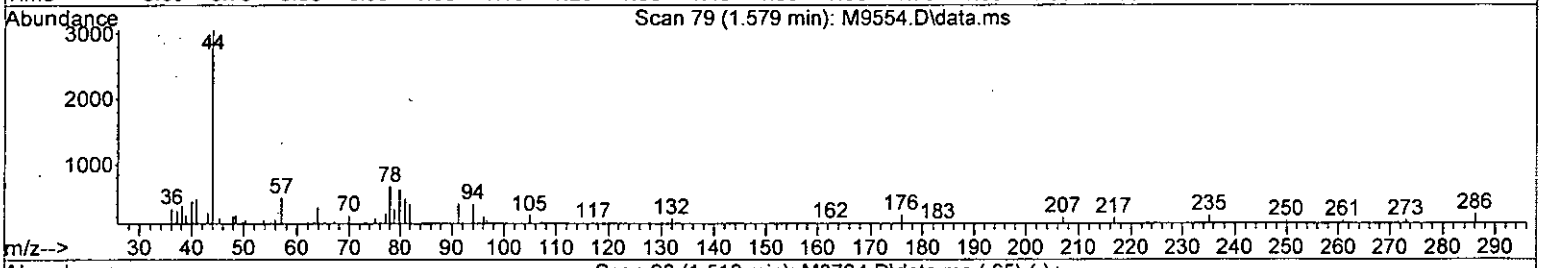
KR 10/9/14

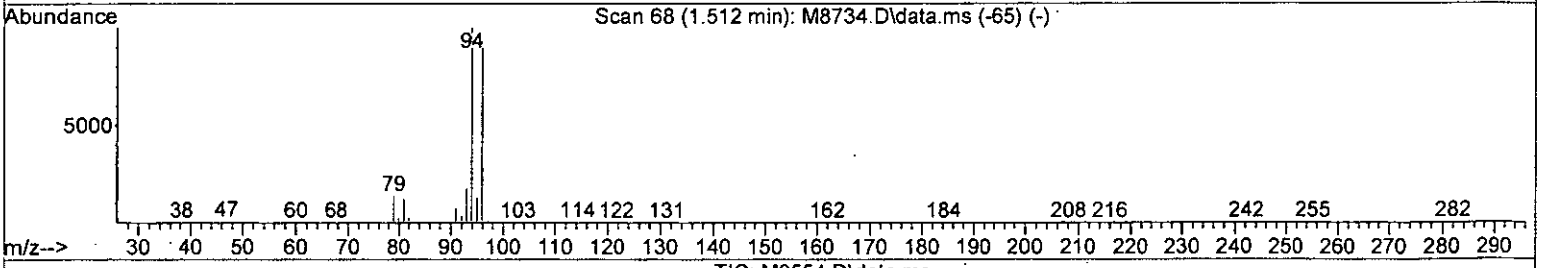
Quantitation Report (Qedit)

Sample VBLK
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9554.D
Misc :
Acq On : 8 Oct 2014 6:37 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 18:51:10 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration







TIC: M9554.D\data.ms

(5) Bromomethane (P)

1.579min (+0.067) 0.06 ppb

response 367

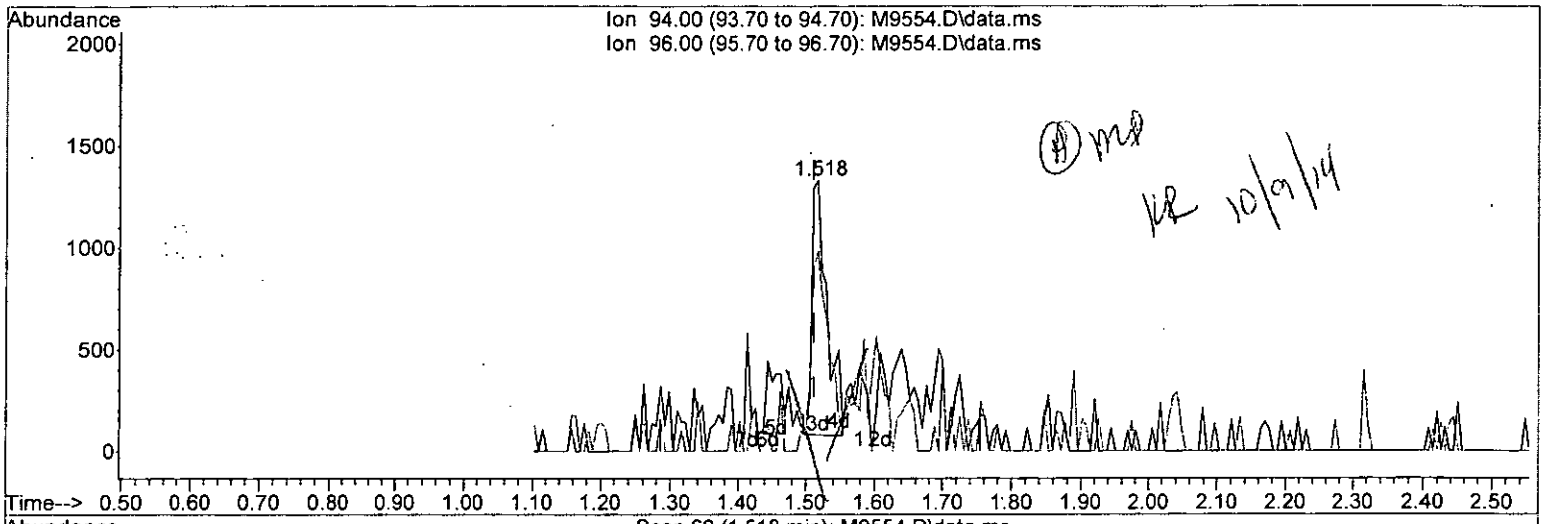
Ion	Exp%	Act%
94.00	100	100
96.00	95.40	86.18
0.00	0.00	0.00
0.00	0.00	0.00

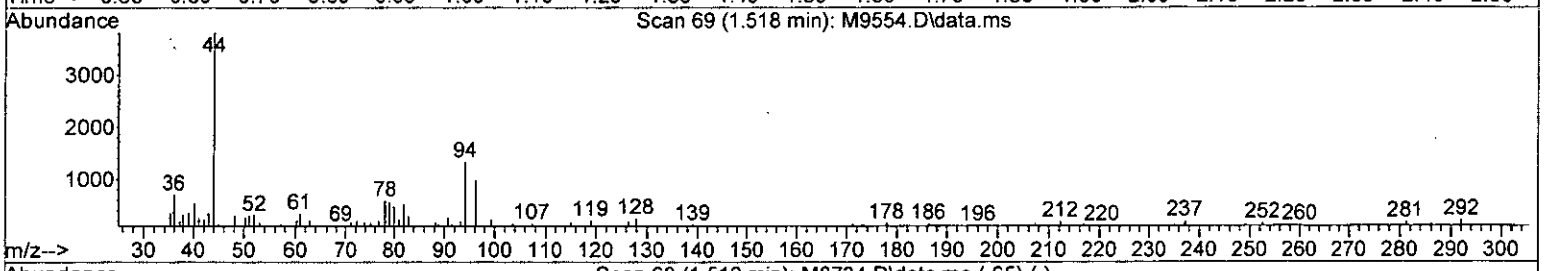
W090914.M Thu Oct 09 09:32:03 2014 Page: 1

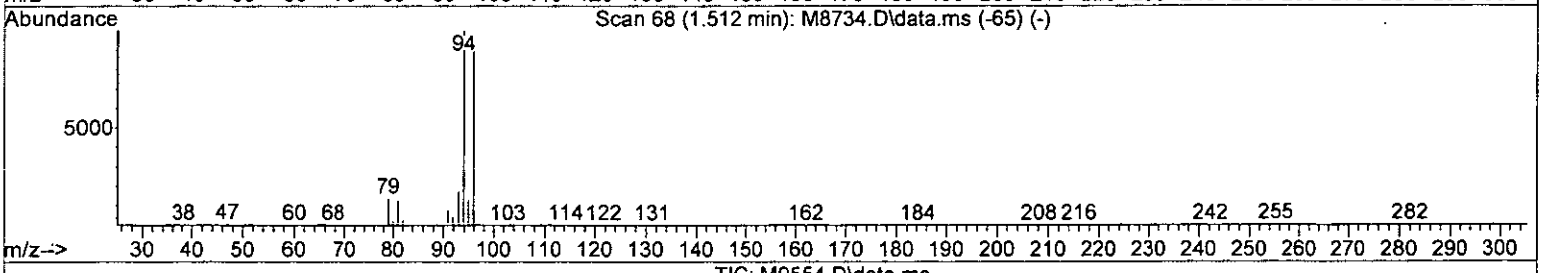
Quantitation Report (Qedit)

Sample VBLK
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9554.D
Misc :
Acq On : 8 Oct 2014 6:37 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 18:51:10 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration







TIC: M9554.D\data.ms

(5) Bromomethane (P)

1.518min (+0.006) 0.29 ppb m

response 1923

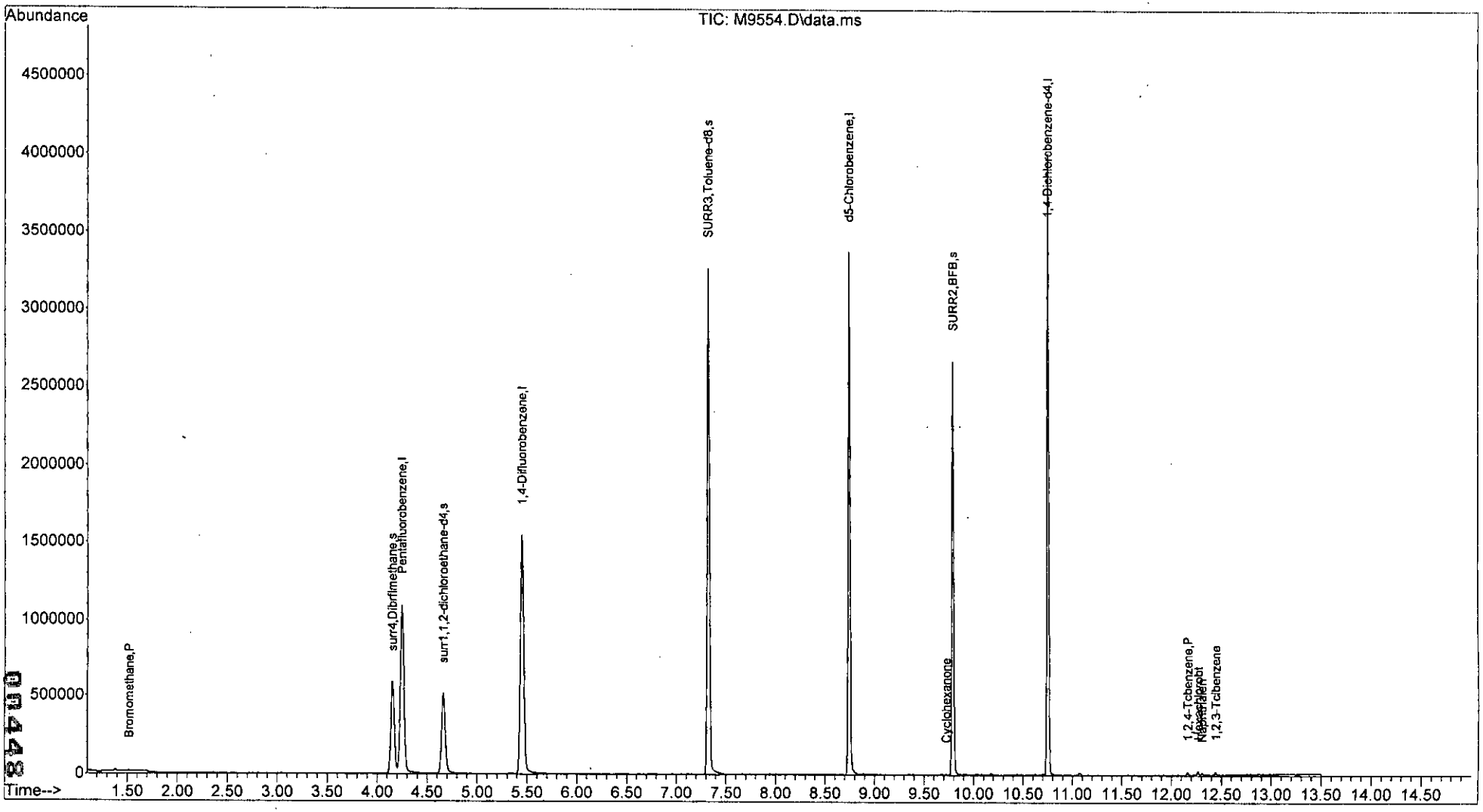
Ion	Exp%	Act%
94.00	100	100
96.00	95.40	73.66#
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Thu Oct 09 09:32:11 2014 Page: 1

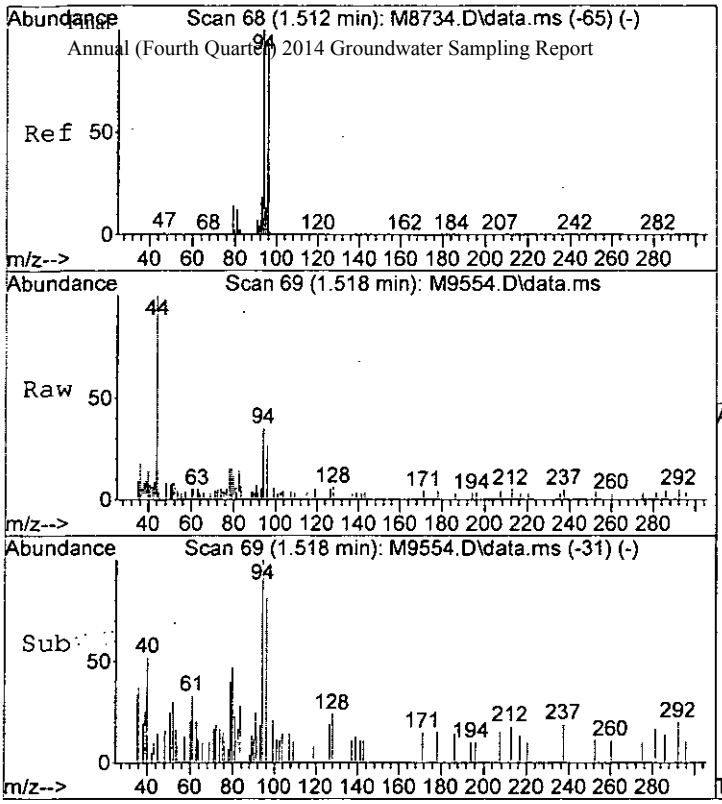
Quantitation Report (QT Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9554.D
Misc :
Acq On : 8 Oct 2014 6:37 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 09:32:57 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



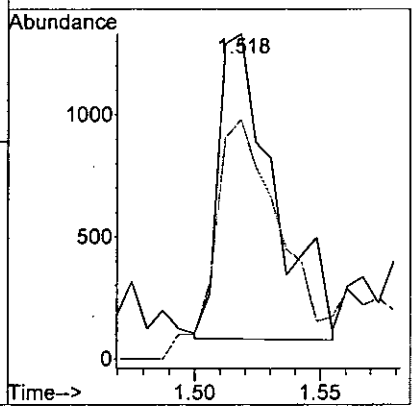
W090914.M Thu Oct 09 09:33:43 2014

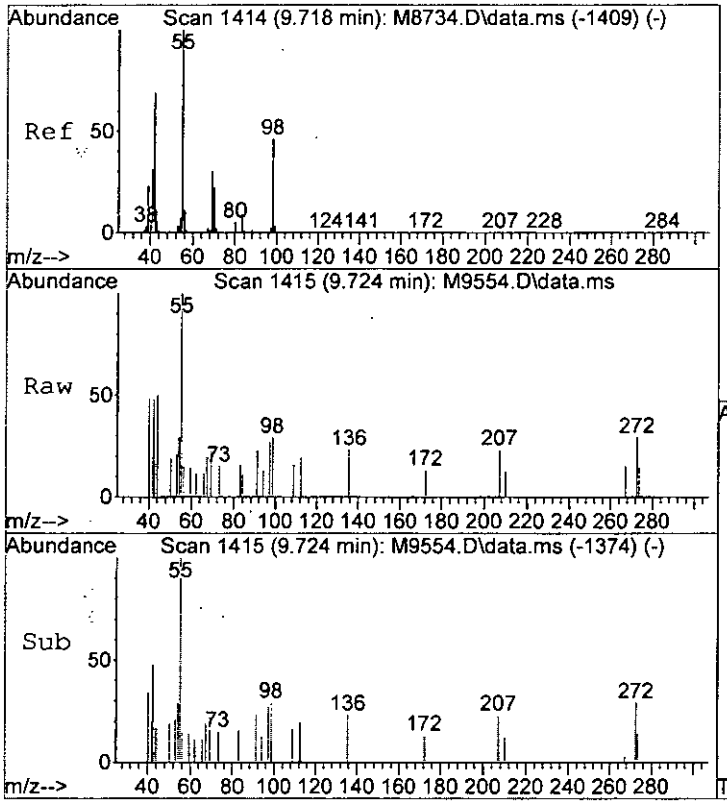


#5
Bromomethane
Concen: 0.29 ppb m
RT: 1.518 min Scan# 69
Delta R.T. 0.006 min
Lab File: M9554.D
Acq: 8 Oct 2014 6:37 pm

Tgt Ion: 94 Resp: 1923

Ion	Ratio	Lower	Upper
94	100		
96	73.7	75.4	115.4#

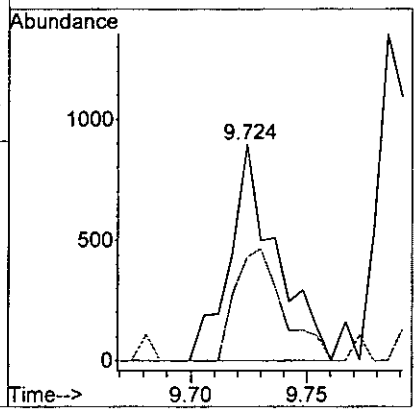


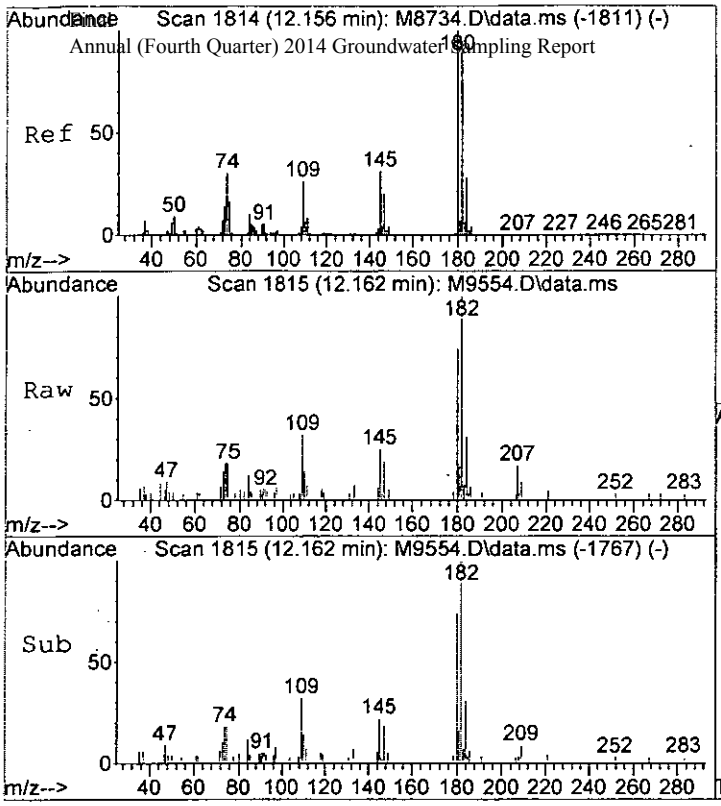


#90
Cyclohexanone
Concen: 1.35 ppb
RT: 9.724 min Scan# 1415
Delta R.T. 0.000 min
Lab File: M9554.D
Acq: 8 Oct 2014 6:37 pm

Tgt Ion: 55 Resp: 1244

Ion	Ratio	Lower	Upper
55	100		
42	47.9	48.9	88.9#

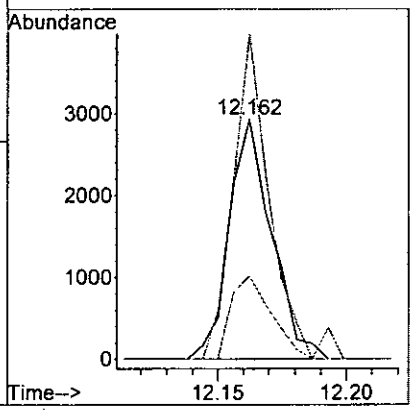


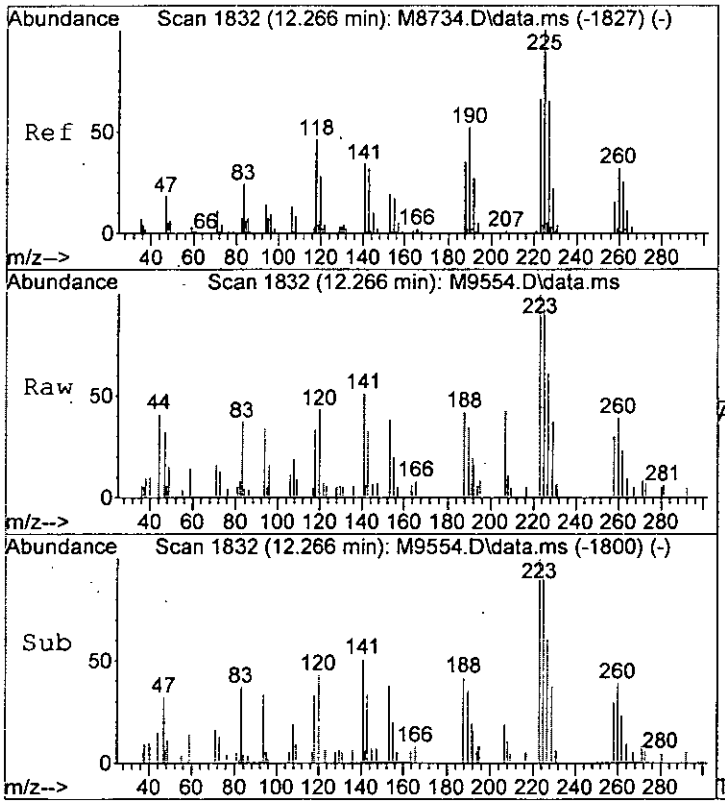


#115
1,2,4-Tcbenzene
Concen: 0.31 ppb
RT: 12.162 min Scan# 1815
Delta R.T. 0.000 min
Lab File: M9554.D
Acq: 8 Oct 2014 6:37 pm

Tgt Ion:180 Resp: 3351

Ion	Ratio	Lower	Upper
180	100		
182	145.5	76.6	116.6#
145	34.5	8.1	48.1

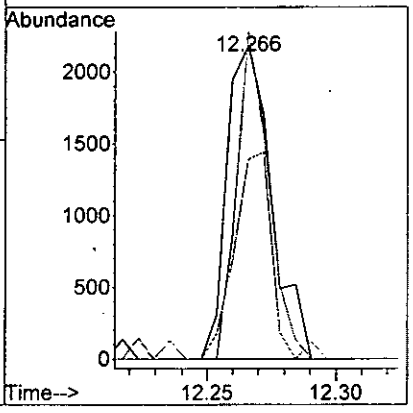




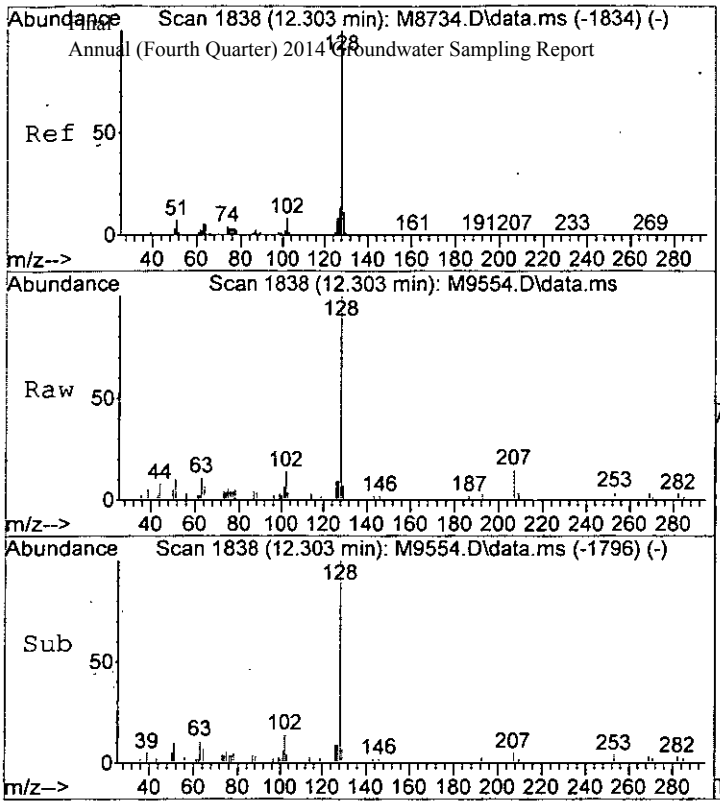
#116
Hexachlorobt
Concen: 0.62 ppb
RT: 12.266 min Scan# 1832
Delta R.T. 0.000 min
Lab File: M9554.D
Acq: 8 Oct 2014 6:37 pm

Tgt Ion:225 Resp: 2611

Ion	Ratio	Lower	Upper
225	100		
223	104.4	44.6	84.6#
227	63.6	44.2	84.2



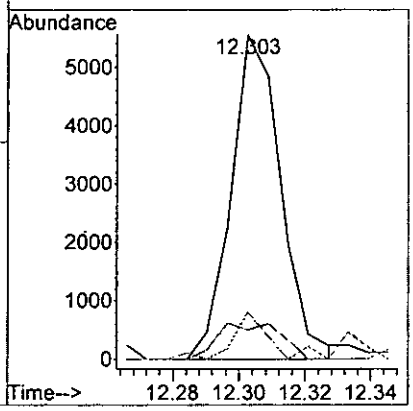
M9554.D W090914.M Thu Oct 09 09:33:46 2014 Page 4

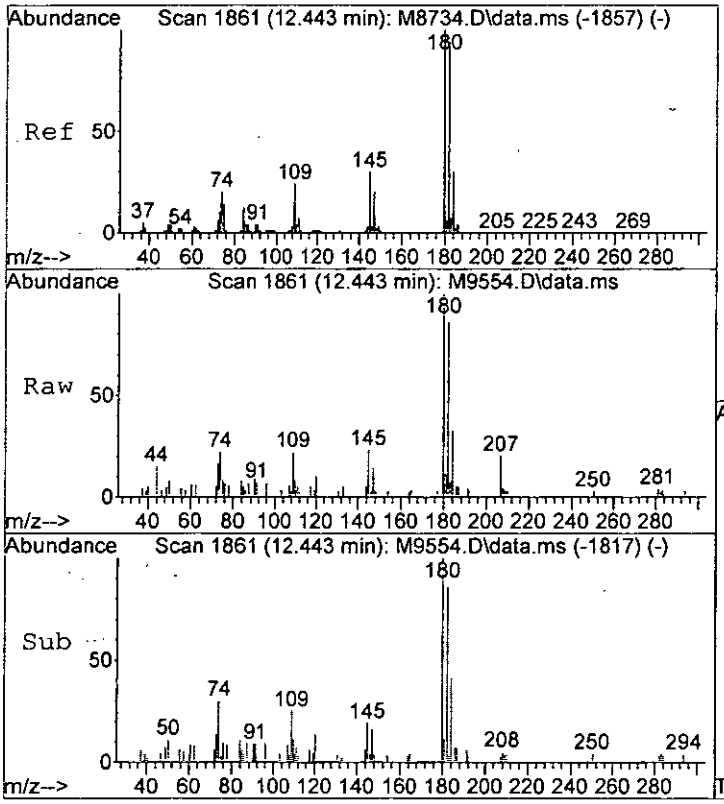


#117
Naphthalen
Concen: 0.26 ppb
RT: 12.303 min Scan# 1838
Delta R.T. 0.000 min
Lab File: M9554.D
Acq: 8 Oct 2014 6:37 pm

Tgt Ion:128 Resp: 5751

Ion	Ratio	Lower	Upper
128	100		
127	8.9	0.0	32.5
102	14.5	0.0	28.0

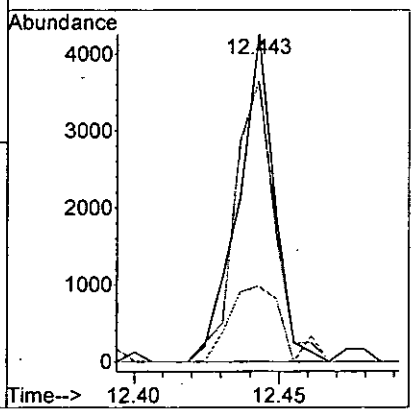




#118
1,2,3-Tclbenzene
Concen: 0.39 ppb
RT: 12.443 min Scan# 1861
Delta R.T. 0.000 min
Lab File: M9554.D
Acq: 8 Oct 2014 6:37 pm

Tgt Ion:180 Resp: 3635

Ion	Ratio	Lower	Upper
180	100		
182	86.0	74.8	114.8
145	23.0	9.6	49.6



M9554.D W090914.M Thu Oct 09 09:33:47 2014

LSC Area Percent Report

Data Path : I:\ACQUDATA\MSVOA12\Data\100814\
Data File : M9554.D
Acq On : 8 Oct 2014 6:37 pm
Operator : K.Ruest
Sample : VBLK
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: M9554.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	491	501	509	rBV	592649	1408442	27.82%	5.368%
2	4.249	509	517	533	rVB	1083285	2717066	53.67%	10.356%
3	4.664	571	585	598	rBV2	512363	1316618	26.01%	5.018%
4	5.450	704	714	735	rBV	1540469	3571969	70.56%	13.615%
5	7.322	1015	1021	1039	rBV	3262654	5062174	100.00%	19.295%
6	8.742	1249	1254	1269	rBV	3371409	4320444	85.35%	16.468%
7	9.791	1421	1426	1435	rBV	2664411	3288162	64.96%	12.533%
8	10.748	1578	1583	1592	rBV	4006034	4550806	89.90%	17.346%

Sum of corrected areas: 26235681

```
Data Path : I:\ACQUDATA\msvoa12\Data\100814\
Data File : M9554.D
Acq On    :  8 Oct 2014    6:37 pm
Operator  : K.Ruest
Sample    : VBLK
Misc      :
ALS Vial  : 4   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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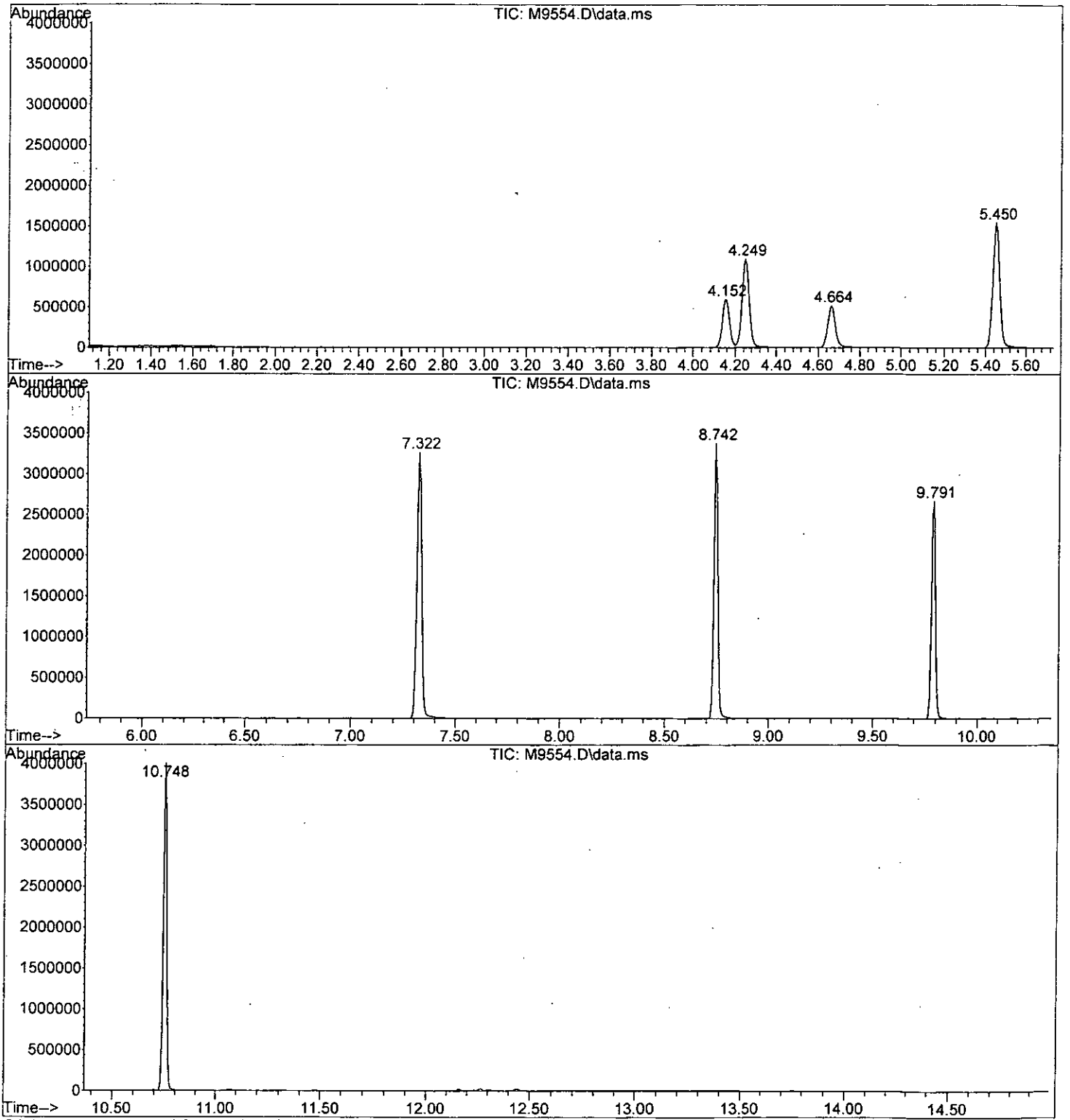



```
W090914.M Thu Oct 09 14:11:06 2014                    Page:  2
```

Tentatively Identified Compound (LSC) Summary

Data Path : I:\ACQUDATA\msvoa12\Data\100814\\
Data File : M9554.D
Acq On : 8 Oct 2014 6:37 pmm
Operator : K.Ruestt
Sample : VBLKK
Misc :
ALS Vial : 4 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/9/14 11:50
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412180-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9579.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.35**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.29**	J	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/9/14 11:50
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412180-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9579.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	0.25	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/9/14 11:50
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412180-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9579.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	10/9/14 11:50	
Dibromofluoromethane	96	85-115	10/9/14 11:50	
Toluene-d8	103	85-120	10/9/14 11:50	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/9/14 1150

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412180-04	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Sample : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9579.D
Misc :
Acq On : 9 Oct 2014 11:50 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 13:56:49 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	923379	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1471091	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1379215	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	696304	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	394988	48.20	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 96.40%				
48) surr1,1,2-dichloroetha...	4.664	65	390955	44.27	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 88.54%				
65) SURR3,Toluene-d8	7.322	98	1778779	51.44	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.88%				
70) SURR2,BFB	9.791	95	633237	51.14	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.28%				
Target Compounds							Qvalue
5) Bromomethane	1.518	94	1721m	0.29	ppb		
17) Iodomethane	2.158	142	7251m	0.73	ppb		
90) Cyclohexanone	9.724	55	1039	1.25	ppb		82
115) 1,2,4-Tcbenzene	12.162	180	3374	0.35	ppb		99
116) Hexachlorobt	12.266	225	2220	0.58	ppb	#	80
117) Naphthalen	12.303	128	5034	0.25	ppb		70
118) 1,2,3-Tclbenzene	12.443	180	3423	0.41	ppb	#	64

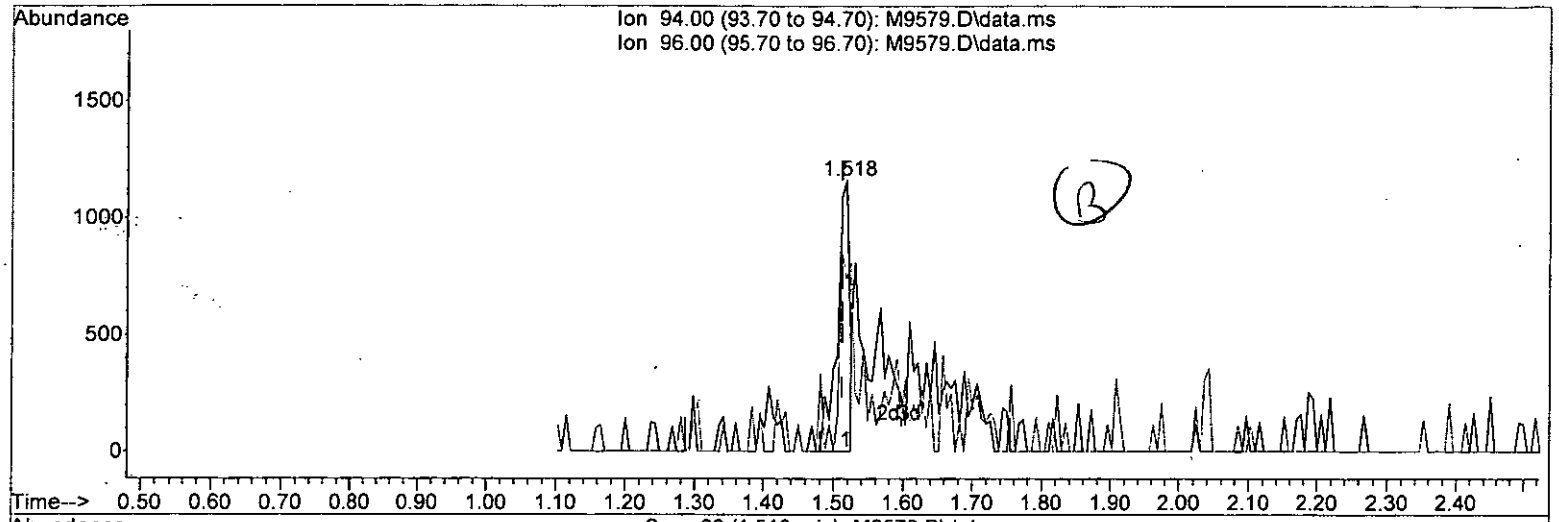
KR 10/9/14

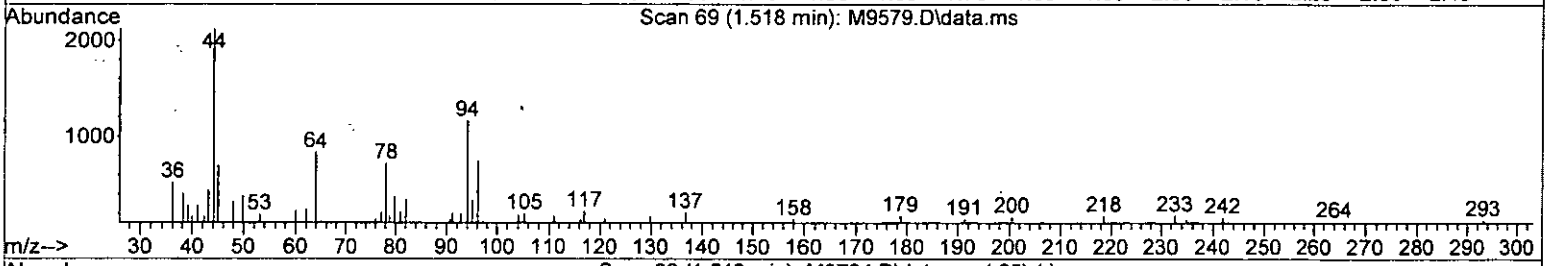
(#) = qualifier out of range (m) = manual integration (+) = signals summed

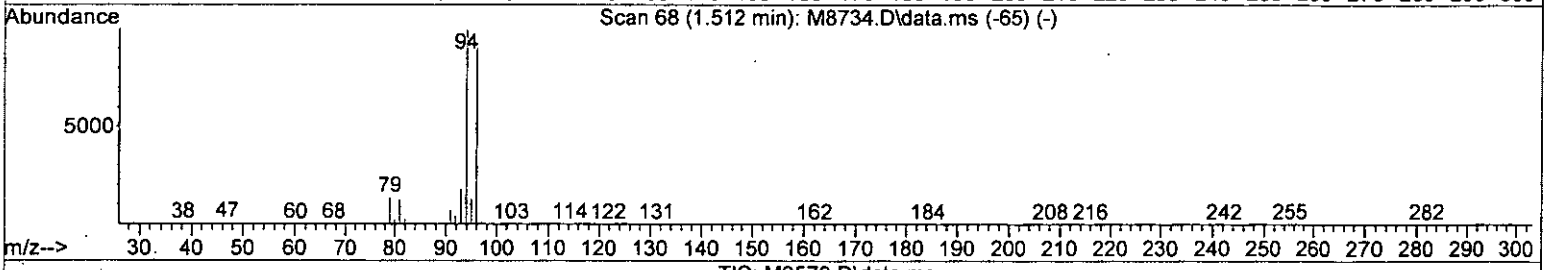
W090914.M Thu Oct 09 13:58:14 2014 Page: 1

```
Sample    : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9579.D
Misc      :
Acq On    :  9 Oct 2014  11:50 am
Operator  : K.Ruest
InstName  : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 12:04:21 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration
```







TIC: M9579.D\data.ms

(5) Bromomethane (P)

1.518min (+0.006) 0.24 ppb

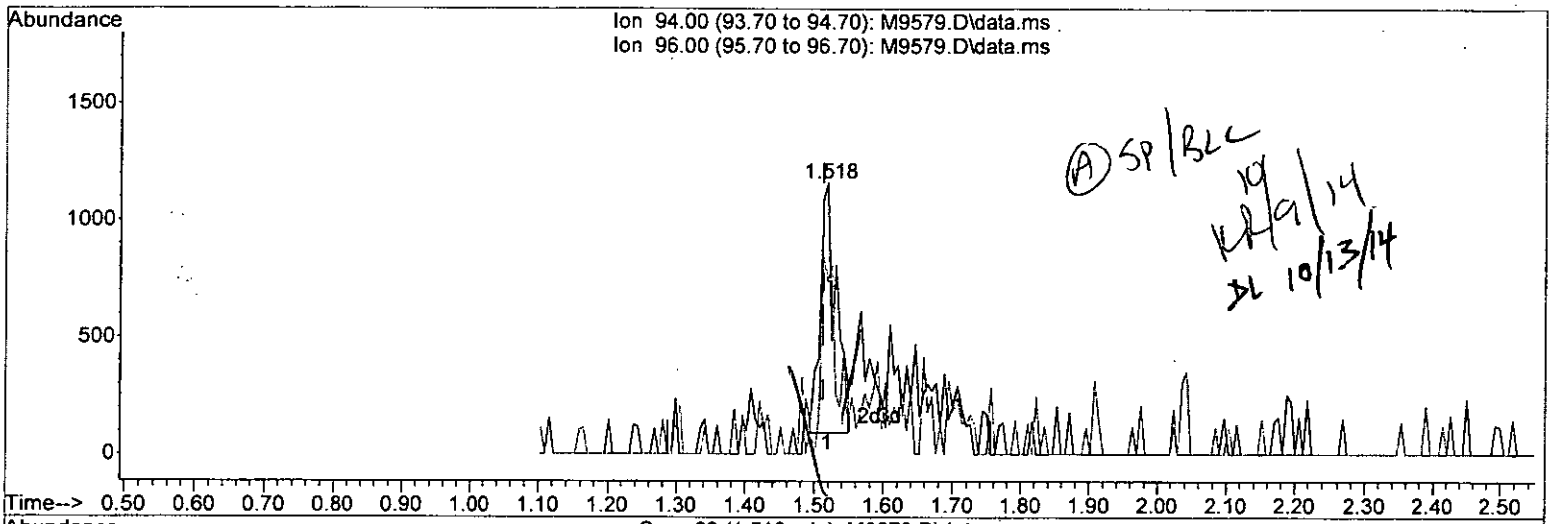
response 1418

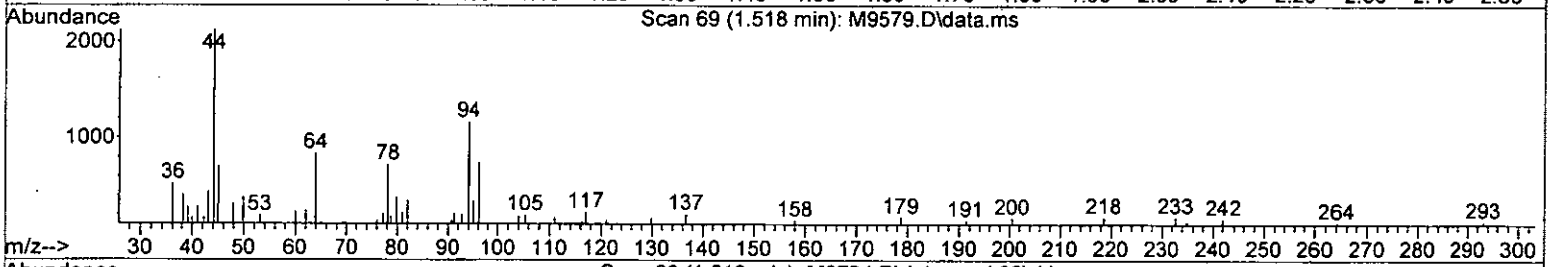
Ion	Exp%	Act%
94.00	100	100
96.00	95.40	63.76#
0.00	0.00	0.00
0.00	0.00	0.00

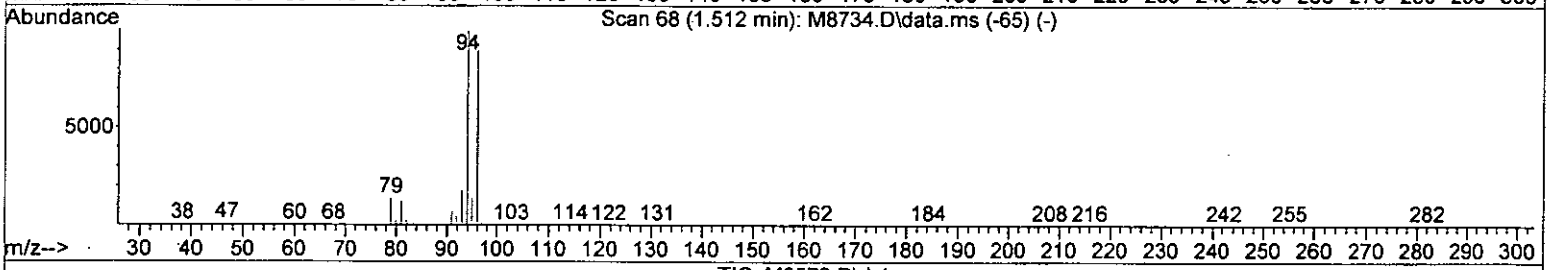
W090914.M Thu Oct 09 13:55:18 2014 Page: 1

```
Sample   : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9579.D
Misc     :
Acq On   :  9 Oct 2014  11:50 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 12:04:21 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration
```







TIC: M9579.D\data.ms

(5) Bromomethane (P)

1.518min (+0.006) 0.29 ppb m

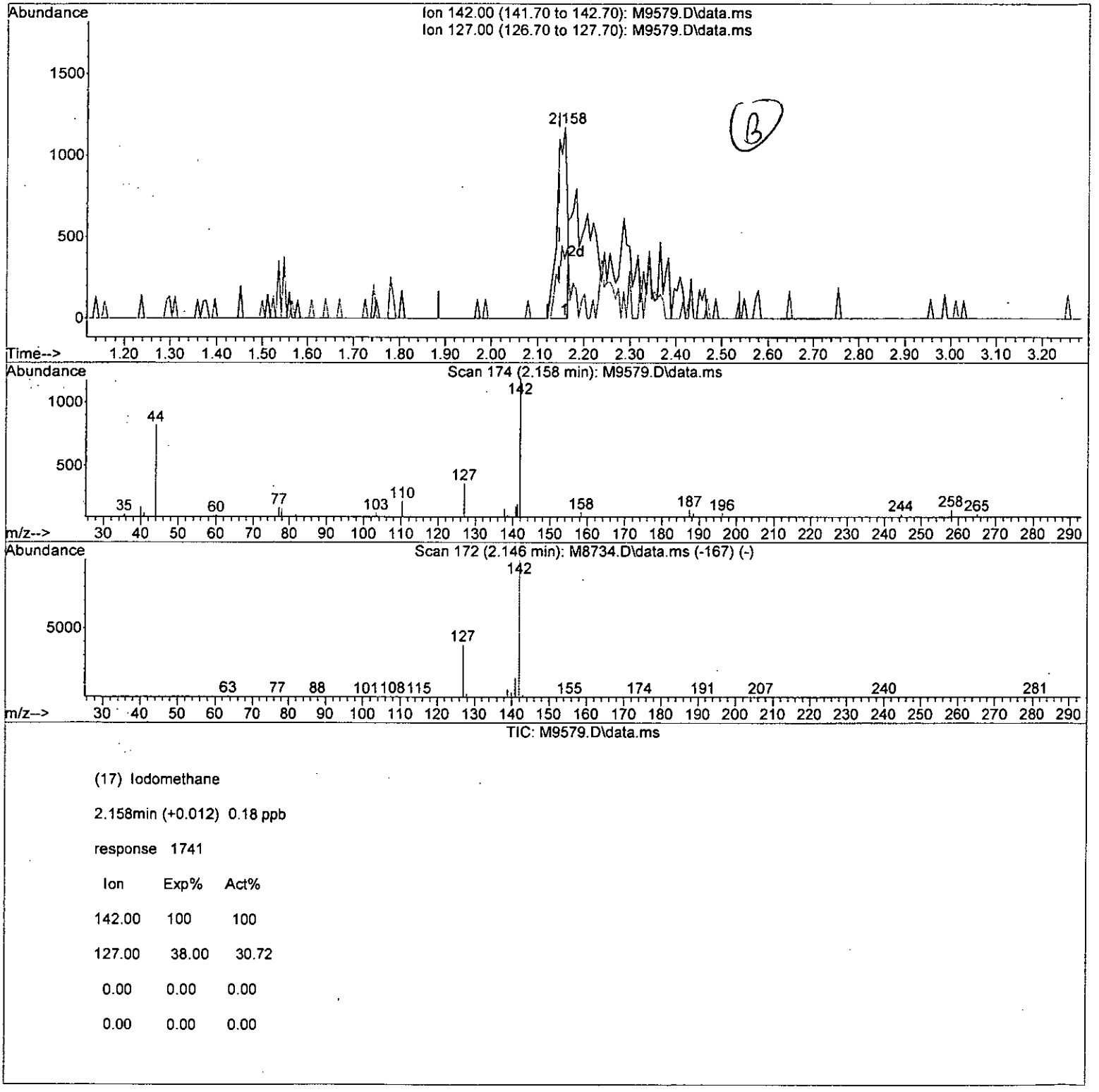
response 1721

Ion	Exp%	Act%
94.00	100	100
96.00	95.40	63.76#
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Thu Oct 09 13:55:32 2014 Page: 1

```
Sample    : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9579.D
Misc      :
Acq On    :  9 Oct 2014  11:50 am
Operator  : K.Ruest
InstName  : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 12:04:21 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration
```



TIC: M9579.D\data.ms

(17) Iodomethane

2.158min (+0.012) 0.18 ppb

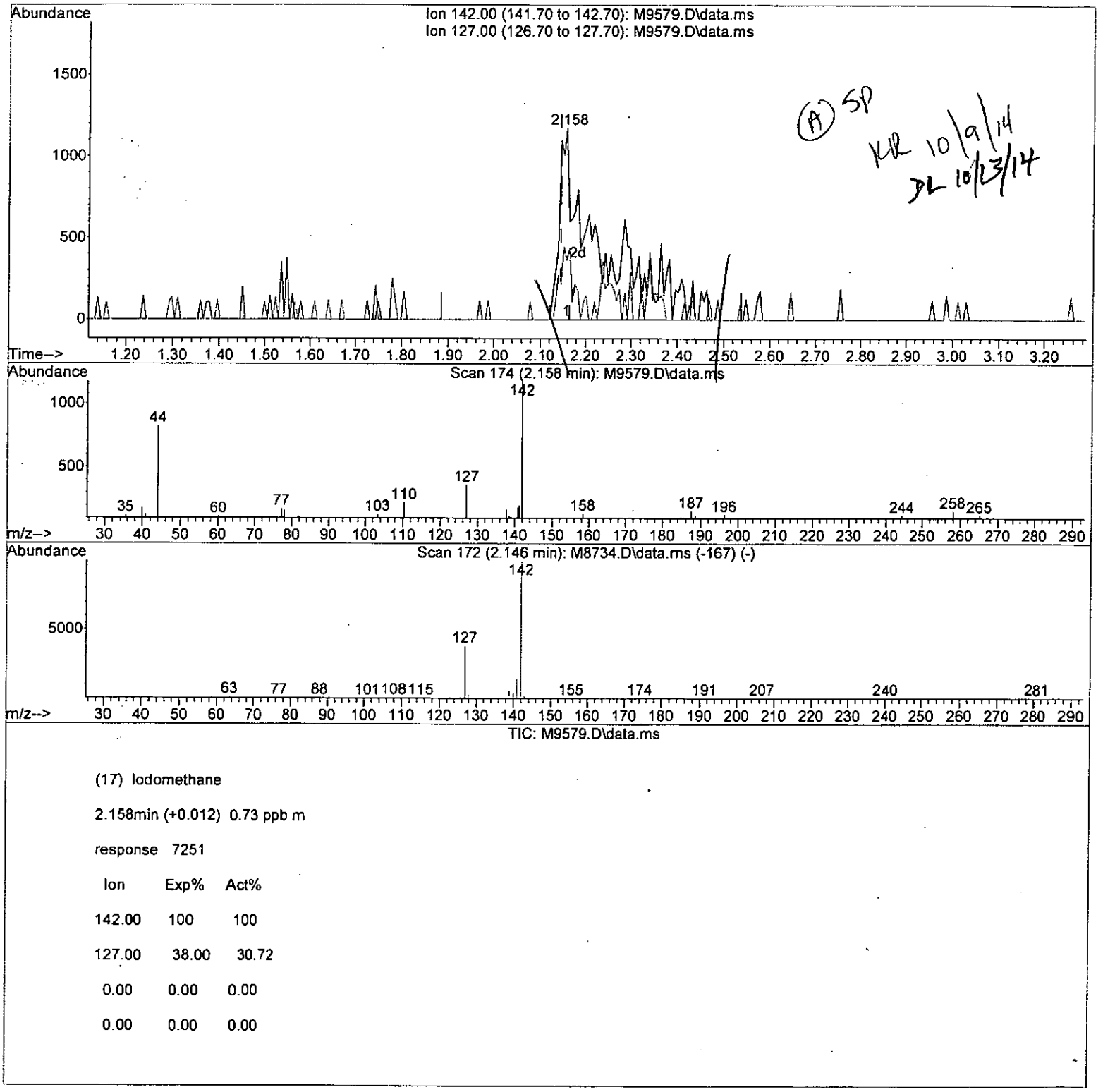
response 1741

Ion	Exp%	Act%
142.00	100	100
127.00	38.00	30.72
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Thu Oct 09 13:56:42 2014 Page: 1

Sample : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9579.D
Misc :
Acq On : 9 Oct 2014 11:50 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 12:04:21 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



(17) Iodomethane

2.158min (+0.012) 0.73 ppb m

response 7251

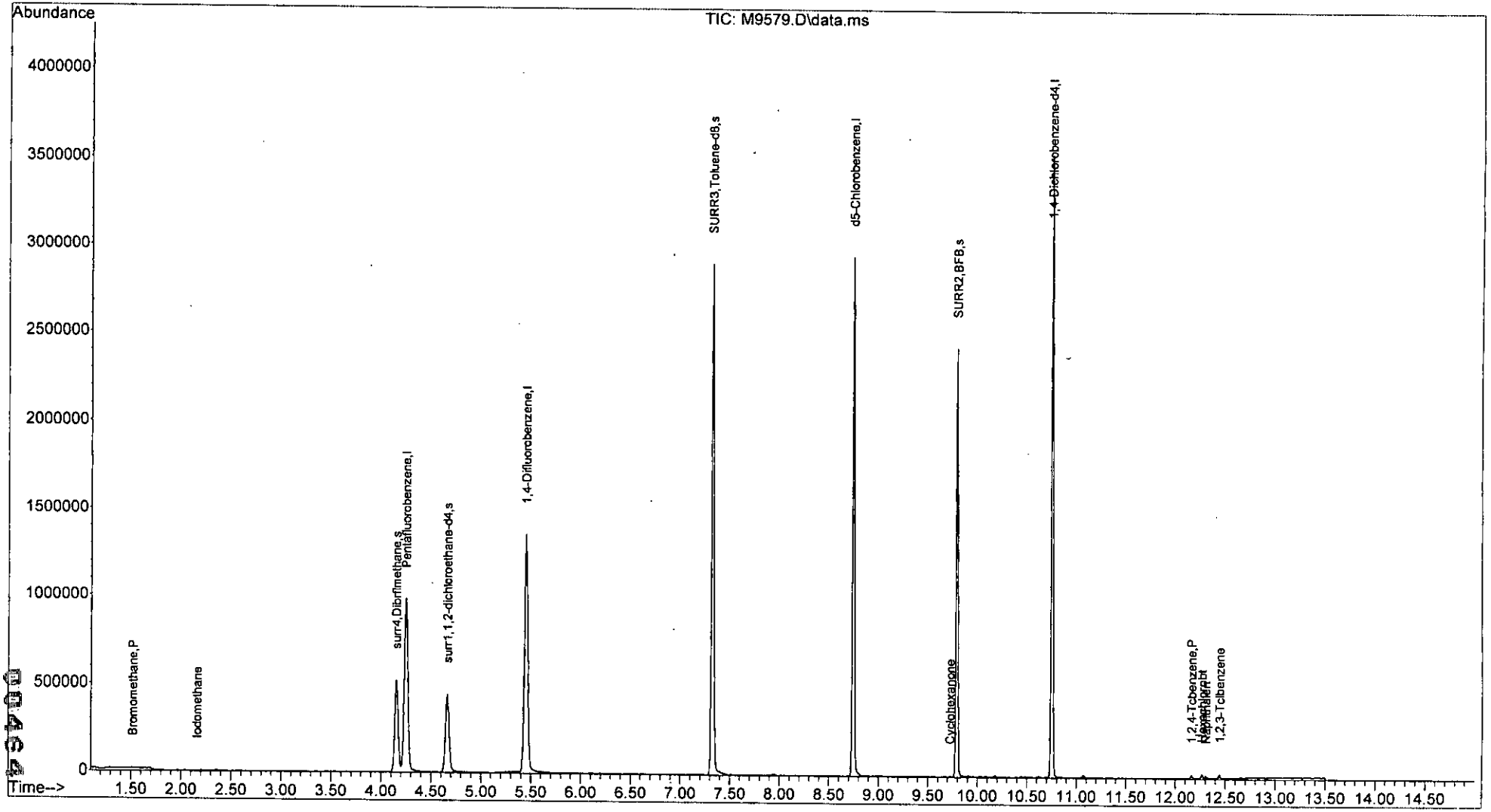
Ion	Exp%	Act%
142.00	100	100
127.00	38.00	30.72
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Thu Oct 09 13:56:57 2014 Page: 1

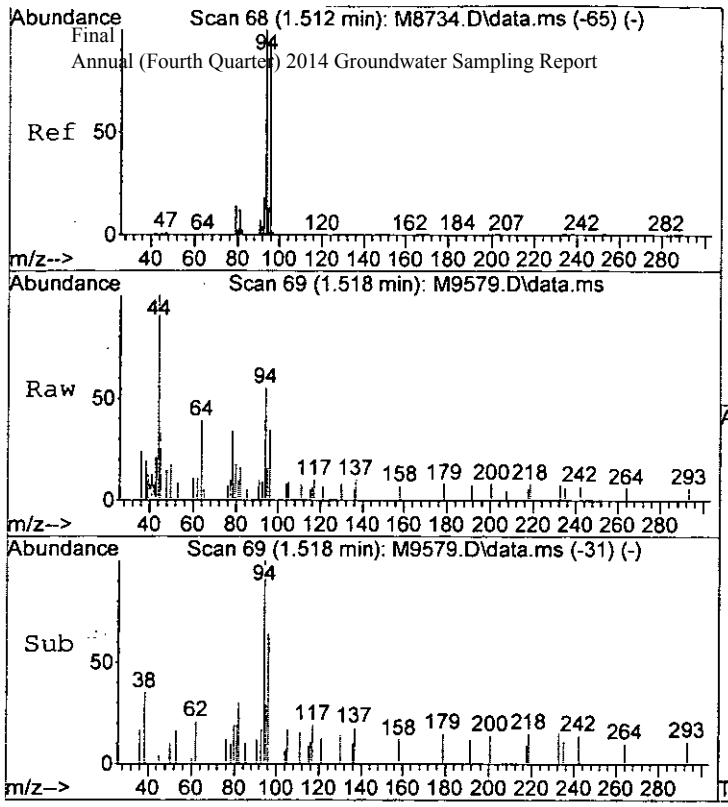
Quantitation Report (QT Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9579.D
Misc :
Acq On : 9 Oct 2014 11:50 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 13:56:49 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



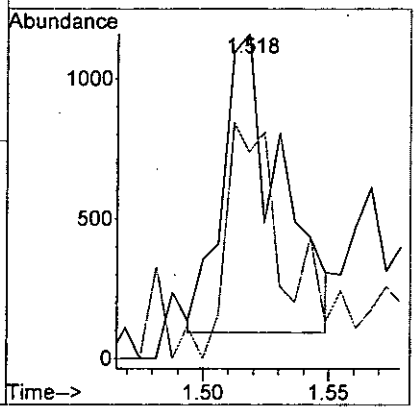
W090914.M Thu Oct 09 13:58:16 2014 Page: 2

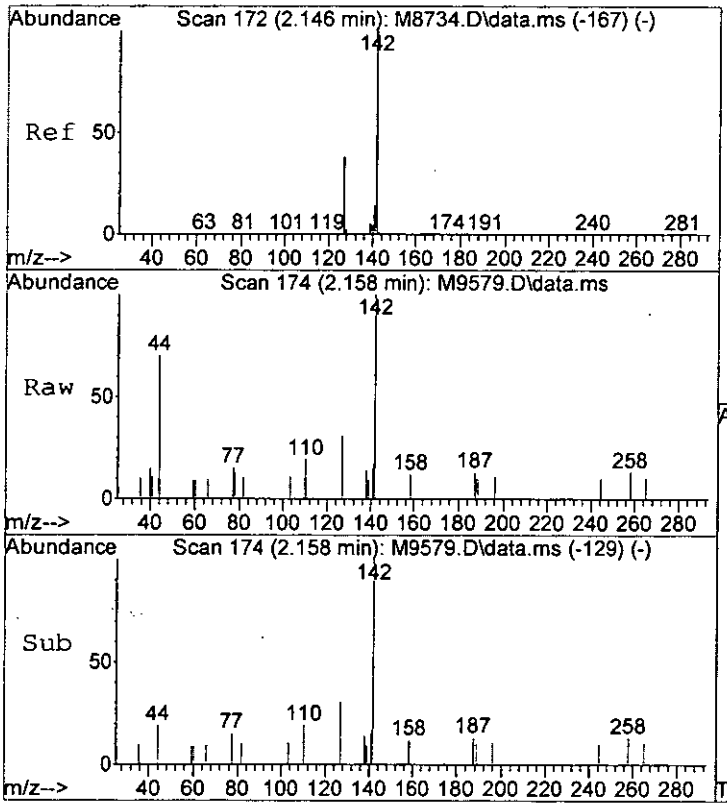


#5
Bromomethane
Concen: 0.29 ppb m
RT: 1.518 min Scan# 69
Delta R.T. 0.006 min
Lab File: M9579.D
Acq: 9 Oct 2014 11:50 am

Tgt Ion: 94 Resp: 1721

Ion	Ratio	Lower	Upper
94	100		
96	63.8	75.4	115.4#

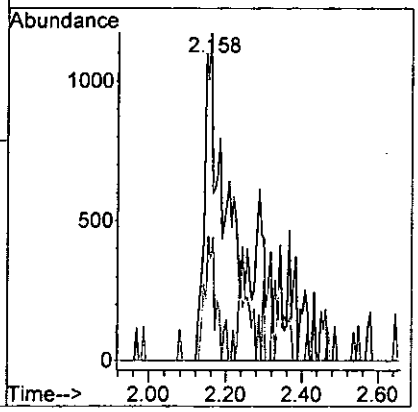


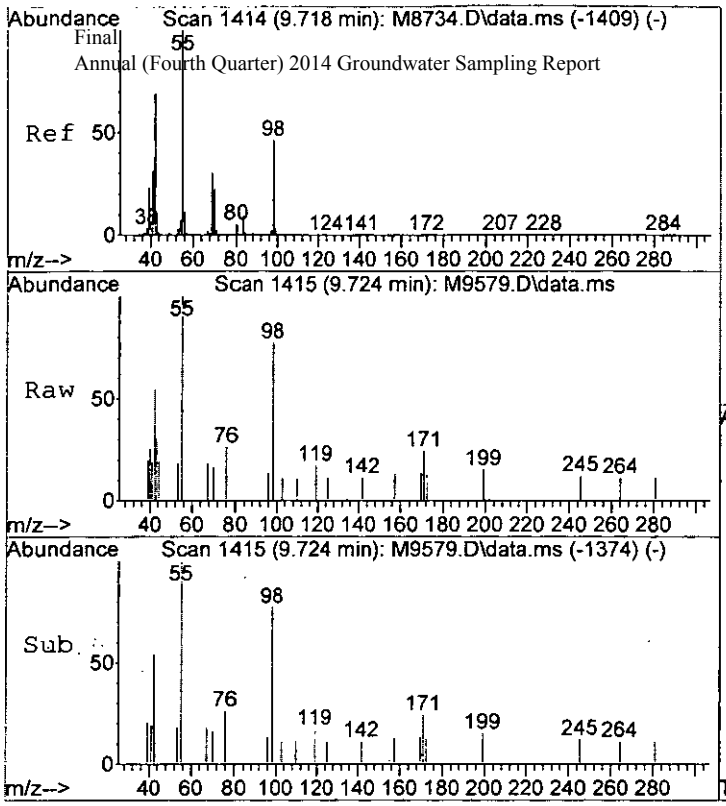


#17
Iodomethane
Concen: 0.73 ppb m
RT: 2.158 min Scan# 174
Delta R.T. 0.012 min
Lab File: M9579.D
Acq: 9 Oct 2014 11:50 am

Tgt Ion:142 Resp: 7251

Ion	Ratio	Lower	Upper
142	100		
127	30.7	18.0	58.0

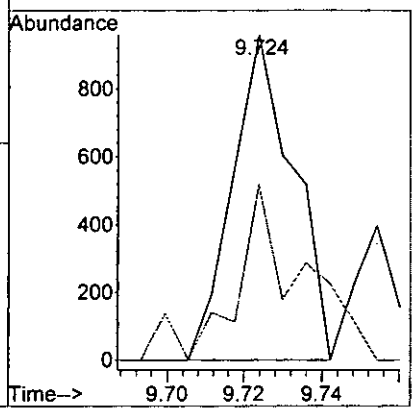


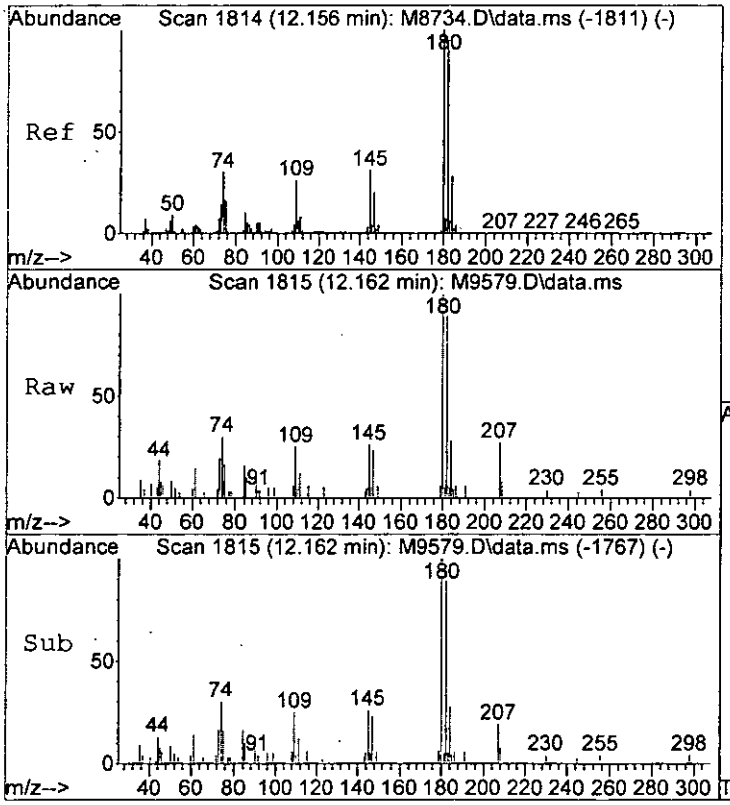


#90
Cyclohexanone
Concen: 1.25 ppb
RT: 9.724 min Scan# 1415
Delta R.T. 0.000 min
Lab File: M9579.D
Acq: 9 Oct 2014 11:50 am

Tgt Ion: 55 Resp: 1039

Ion	Ratio	Lower	Upper
55	100		
42	53.9	48.9	88.9

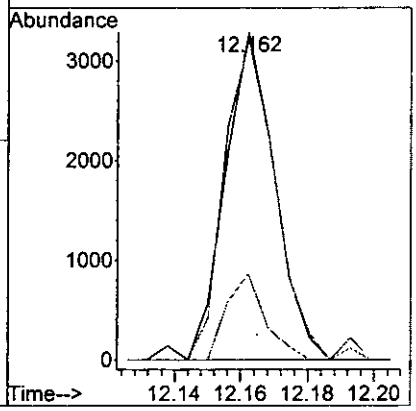


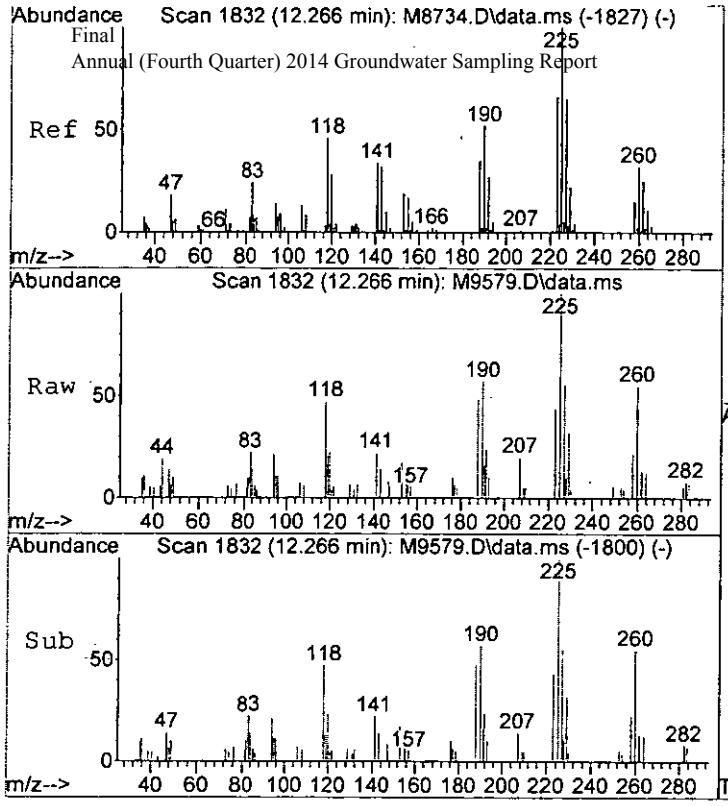


#115
1,2,4-Tcbenzene
Concen: 0.35 ppb
RT: 12.162 min Scan# 1815
Delta R.T. 0.000 min
Lab File: M9579.D
Acq: 9 Oct 2014 11:50 am

Tgt Ion:180 Resp: 3374

Ion	Ratio	Lower	Upper
180	100		
182	97.3	76.6	116.6
145	26.1	8.1	48.1

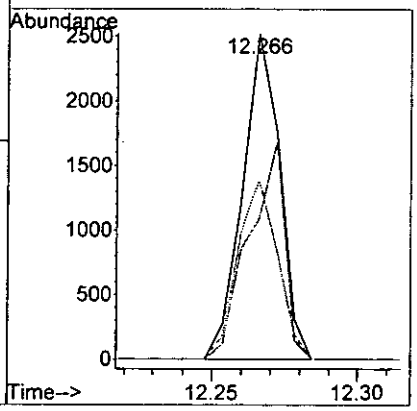


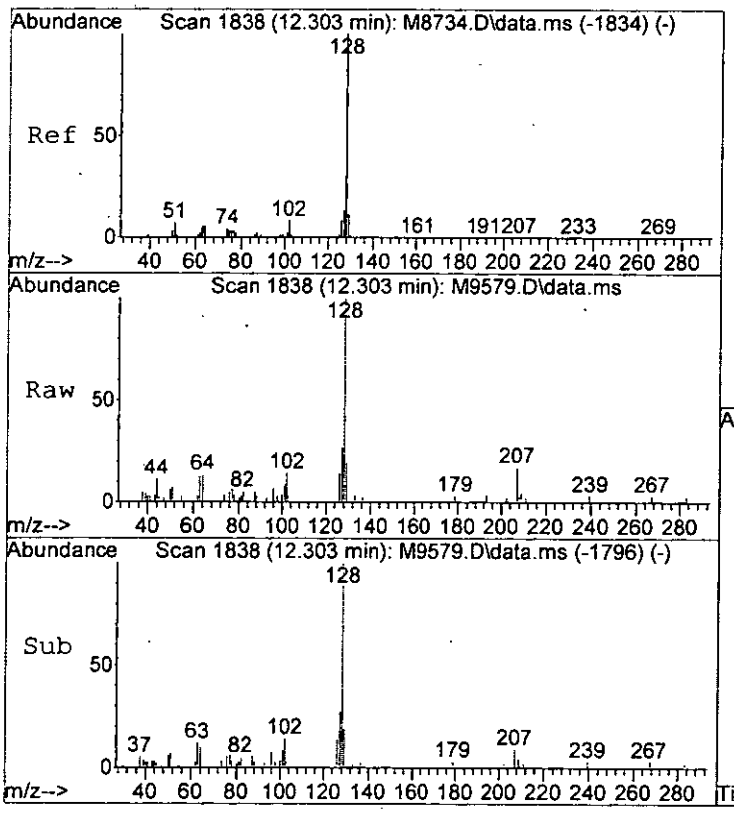


#116
Hexachlorobt
Concen: 0.58 ppb
RT: 12.266 min Scan# 1832
Delta R.T. 0.000 min
Lab File: M9579.D
Acq: 9 Oct 2014 11:50 am

Tgt Ion:225 Resp: 2220

Ion	Ratio	Lower	Upper
225	100		
223	42.8	44.6	84.6#
227	55.1	44.2	84.2

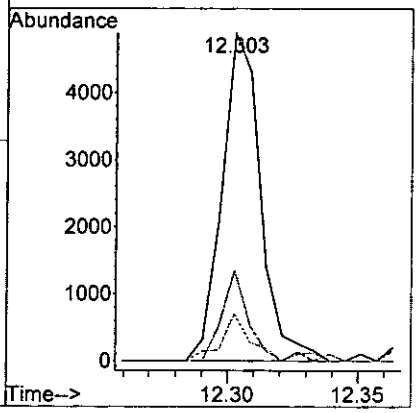


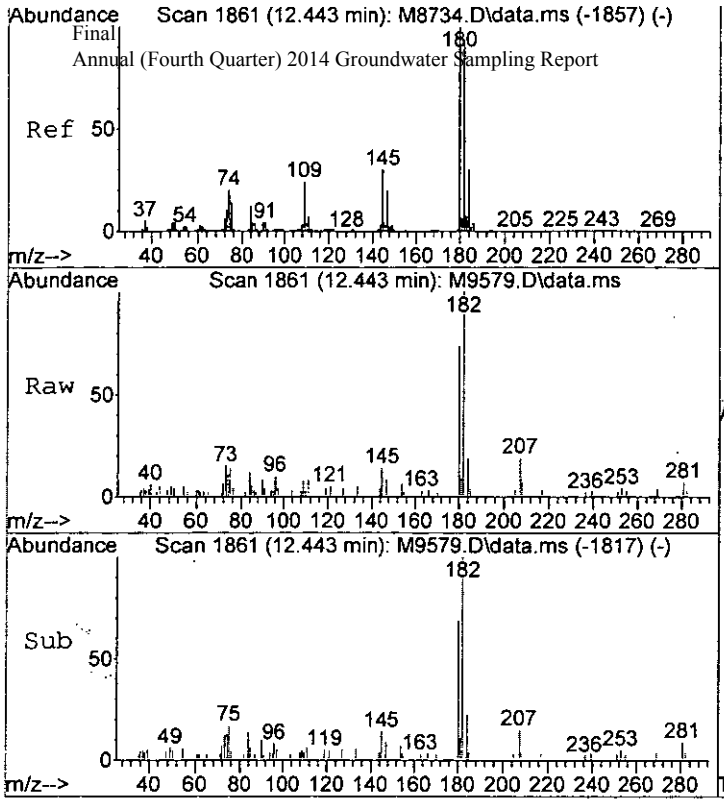


#117
Naphthalen
Concen: 0.25 ppb
RT: 12.303 min Scan# 1838
Delta R.T. 0.000 min
Lab File: M9579.D
Acq: 9 Oct 2014 11:50 am

Tgt Ion:128 Resp: 5034

Ion	Ratio	Lower	Upper
128	100		
127	27.4	0.0	32.5
102	14.2	0.0	28.0

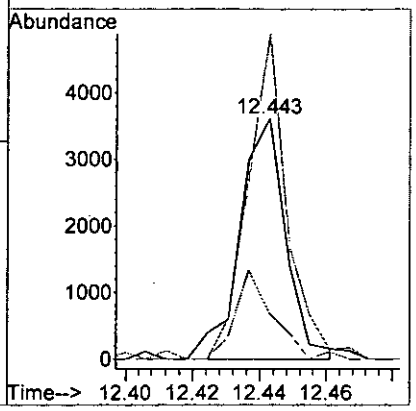




#118
1,2,3-Tclbenzene
Concen: 0.41 ppb
RT: 12.443 min Scan# 1861
Delta R.T. 0.000 min
Lab File: M9579.D
Acq: 9 Oct 2014 11:50 am

Tgt Ion:180 Resp: 3423

Ion	Ratio	Lower	Upper
180	100		
182	135.0	74.8	114.8#
145	19.2	9.6	49.6



```
Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9579.D
Acq On    :  9 Oct 2014  11:50 am
Operator  : K.Ruest
Sample    : VBLK
Misc      :
ALS Vial  : 6   Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF                          Filtering: 5
Sampling  : 1                             Min Area: 1 % of largest Peak
Start Thrs: 0.2                          Max Peaks: 100
Stop Thrs : 0                       Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method    : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Title     : MS#12 - 8260B WATERS 10mL Purge

Signal    : TIC: M9579.D\data.ms
```

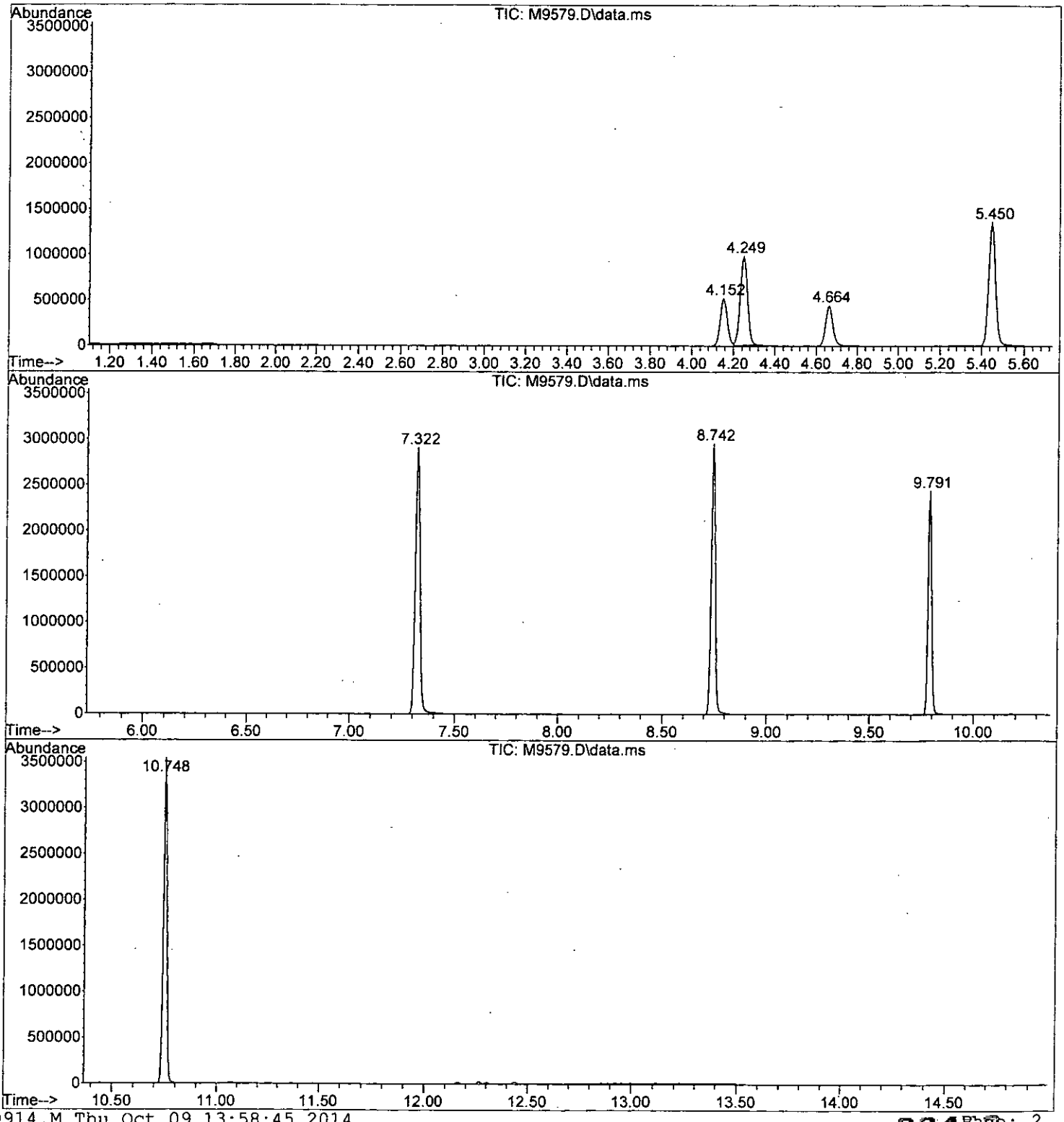
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.152	491	501	509	rBV	521290	1234001	27.97%	5.349%
2	4.249	509	517	528	rVB	972304	2381127	53.96%	10.321%
3	4.664	575	585	599	rBV	442954	1130834	25.63%	4.902%
4	5.450	705	714	732	rBV	1353008	3105243	70.37%	13.459%
5	7.322	1014	1021	1032	rBV	2903185	4412647	100.00%	19.126%
6	8.742	1249	1254	1268	rBV	2950788	3868472	87.67%	16.768%
7	9.791	1421	1426	1433	rBV	2431662	2899440	65.71%	12.567%
8	10.748	1578	1583	1593	rBV	3536958	4039409	91.54%	17.508%

Sum of corrected areas: 23071173

```
Data Path : I:\ACQUDATA\msvoa12\Data\100914\
Data File : M9579.D
Acq On    :  9 Oct 2014  11:50 am
Operator  : K.Ruest
Sample    : VBLK
Misc      :
ALS Vial  : 6   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```



W090914.M Thu Oct 09 13:58:45 2014 Page: 2

```
Data Path : I:\ACQUDATA\msvoa12\Data\100914\\
Data File : M9579.D
Acq On    :  9 Oct 2014  11:50 amm
Operator  : K.Ruestt
Sample    : VBLKK
Misc      :
ALS Vial  : 6   Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.MM
Quant Title  : MS#12 - 8260B WATERS 10mL Purgee

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

                                                        |--Internal Standard---|
TIC Top Hit name      RT  EstConc Units Response        |#    RT     Resp  Conc|
-------------------------------------------------------------------------------


No Library Search Compounds Detected
********************************************************************************
```

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/8/14 17:33
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1412142-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9552.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**19.0**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**19.2**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**22.5**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**22.2**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**20.4**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**24.1**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**20.7**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**22.1**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**22.0**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**21.8**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**22.0**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**21.6**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**22.0**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**21.5**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**18.6**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**21.3**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**22.4**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**21.5**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**20.4**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**21.3**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**20.4**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**17.8**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**21.2**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**17.3**		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	**410**		100	20	11	
106-43-4	4-Chlorotoluene	**21.7**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**22.8**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**19.7**		5.0	1.0	0.67	
67-64-1	Acetone	**17.3**		5.0	5.0	1.3	
71-43-2	Benzene	**21.9**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**21.3**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**21.9**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**21.0**		5.0	1.0	0.32	
75-25-2	Bromoform	**21.0**		5.0	1.0	0.42	
74-83-9	Bromomethane	**17.2**		5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/8/14 17:33
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1412142-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9552.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**18.5**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**21.3**		5.0	1.0	0.29	
75-00-3	Chloroethane	**21.9**		5.0	1.0	0.24	
67-66-3	Chloroform	**20.2**		5.0	1.0	0.25	
74-87-3	Chloromethane	**20.4**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**21.4**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**21.0**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**21.8**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**20.0**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**20.8**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**22.0**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**22.8**		5.0	1.0	0.29	
91-20-3	Naphthalene	**23.7**		5.0	1.0	0.20	
100-42-5	Styrene	**22.1**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**20.3**		5.0	1.0	0.30	
108-88-3	Toluene	**21.8**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**21.0**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**19.5**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**21.4**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**21.4**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**21.7**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**43.7**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**22.2**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**22.0**		5.0	1.0	0.20	
95-47-6	o-Xylene	**22.1**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**22.2**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**22.1**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**22.2**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**22.2**		5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/8/14 17:33
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1412142-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415258
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100814\M9552.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	75-120	10/8/14 17:33	
Dibromofluoromethane	99	85-115	10/8/14 17:33	
Toluene-d8	105	85-120	10/8/14 17:33	

Quantitation Report (QT Reviewed)

Sample LCS
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9552.D
Misc :
Acq On : 8 Oct 2014 5:33 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ1412142-03

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 18:05:20 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	1022149	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1656546	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1536287	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	802946	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	455471	49.36	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.72%				
48) surr1,1,2-dichloroetha...	4.664	65	441022	44.35	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 88.70%				
65) SURR3,Toluene-d8	7.322	98	2041810	52.43	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 104.86%				
70) SURR2,BFB	9.791	95	734419	52.67	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 105.34%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	208026	20.97	ppb		99
3) Chloromethane	1.262	50	220344	20.37	ppb		96
4) Vinyl Chloride	1.323	62	244742	21.38	ppb		99
5) Bromomethane	1.512	94	114128	17.16	ppb		99
6) Chloroethane	1.567	64	139931	21.87	ppb		99
7) Freon 21	1.664	67	390101	23.05	ppb		98
8) Trichlorofluoromethane	1.719	101	268196	19.53	ppb		99
9) Diethyl Ether	1.884	59	150561	22.75	ppb		94
10) Freon 123a	1.872	67	248770	23.10	ppb		93
11) Freon 123	1.902	83	286395	24.06	ppb		97
12) Acrolein	1.957	56	18882	30.29	ppb		96
13) 1,1-Diclethene	2.042	96	175553	24.10	ppb		89
14) Freon 113	2.036	101	173031	20.42	ppb		93
15) Acetone	2.048	43	36369	17.30	ppb		91
16) 2-Propanol	2.115	45	142014	424.16	ppb		98
17) Iodomethane	2.146	142	192776	17.58	ppb		96
18) Carbon Disulfide	2.207	76	610793	22.14	ppb		99
19) Acetonitrile	2.225	40	27193	95.80	ppb		96
20) Allyl Chloride	2.280	76	106224	21.63	ppb	#	84
21) Methyl Acetate	2.274	43	83422	19.48	ppb		99
22) Methylene Chloride	2.359	84	203909	21.78	ppb		90
23) TBA	2.408	59	230292	409.81	ppb		97
24) Acrylonitrile	2.524	53	221574	110.60	ppb		96
25) Methyl-t-Butyl Ether	2.585	73	474050	22.84	ppb		100
26) trans-1,2-Dichloroethene	2.585	96	201214	22.16	ppb		91
28) 1,1-Diclethane	2.945	63	330722	20.43	ppb		99
29) Vinyl Acetate	2.981	86	30960	23.97	ppb	#	82
30) DIPE	3.018	45	555786	18.13	ppb		97
31) 2-Chloro-1,3-Butadiene	3.042	53	288540	18.31	ppb		88
32) ETBE	3.396	59	505363	18.70	ppb		99
33) 2,2-Dichloropropane	3.560	77	260992	20.40	ppb		96
34) cis-1,2-Dichloroethene	3.548	96	218565	21.43	ppb		94
35) 2-Butanone	3.548	43	48848	17.77	ppb		79
36) Propionitrile	3.597	54	85472	115.34	ppb		93
37) Bromochloromethane	3.835	130	123295	21.86	ppb		93

KL 10/14/14 (KL)

W090914.M Wed Oct 08 18:05:43 2014 Page: 1

00475

Quantitation Report (QT Reviewed)

Sample
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9552.D
Misc :
Acq On : 8 Oct 2014 5:33 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 18:05:20 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Methacrylonitrile	3.798	67	54686	23.14	ppb		88
39)	Tetrahydrofuran	3.908	42	34187	19.87	ppb		87
40)	Chloroform	3.938	83	332846	20.16	ppb		97
41)	1,1,1-Trichloroethane	4.219	97	262535	19.20	ppb	#	81
42)	TAME	5.030	73	466071	20.17	ppb		98
44)	Cyclohexane	4.316	41	161588	18.86	ppb		97
46)	Carbontetrachloride	4.475	121	68981	18.49	ppb		98
47)	1,1-Dichloropropene	4.469	75	248414	20.65	ppb		95
49)	Benzene	4.786	78	823738	21.91	ppb		93
50)	1,2-Dichloroethane	4.792	62	208309	18.63	ppb		96
51)	Iso-Butyl Alcohol	4.633	43	98467	395.99	ppb		97
52)	n-Heptane	5.334	43	189123	19.96	ppb		92
53)	1-Butanol	5.773	56	170381	1187.74	ppb		100
54)	Trichloroethene	5.834	130	210005	20.99	ppb		98
55)	Methylcyclohexane	6.109	55	221366	21.52	ppb		92
56)	1,2-Diclpropane	6.115	63	201909	21.31	ppb		100
57)	Dibromomethane	6.255	93	95841	20.88	ppb		95
58)	1,4-Dioxane	6.316	88	33910m	429.70	ppb		
59)	Methyl Methacrylate	6.328	69	95151	21.86	ppb		91
60)	Bromodichloromethane	6.481	83	246080	20.98	ppb		98
61)	2-Nitropropane	6.743	41	44481	38.19	ppb		100
62)	2-Chloroethylvinyl Ether	6.883	63	79041	18.54	ppb		95
63)	cis-1,3-Dichloropropene	7.023	75	297821	21.74	ppb		99
64)	4-Methyl-2-pentanone	7.218	43	110454	19.68	ppb		95
66)	Toluene	7.395	91	892305	21.83	ppb		98
67)	trans-1,3-Dichloropropene	7.633	75	247595	22.19	ppb		96
68)	Ethyl Methacrylate	7.767	69	194451	22.16	ppb		97
69)	1,1,2-Trichloroethane	7.809	97	153333	22.24	ppb		95
72)	Tetrachloroethene	7.962	164	159665	20.29	ppb		98
73)	2-Hexanone	8.090	43	74747	17.34	ppb		90
74)	1,3-Dichloropropane	7.974	76	266324	20.36	ppb		96
75)	Dibromochloromethane	8.194	129	169593	21.41	ppb		97
76)	N-Butyl Acetate	8.242	43	195308	21.58	ppb		95
77)	1,2-Dibromoethane	8.291	107	145712	22.04	ppb		98
78)	Chlorobenzene	8.773	112	578636	21.25	ppb		97
81)	1,1,1,2-Tetrachloroethane	8.852	131	176949	18.95	ppb		95
82)	Ethylbenzene	8.889	106	286390	20.02	ppb		96
83)	(m+p)Xylene	8.998	106	756650	43.65	ppb		97
84)	o-Xylene	9.346	106	371950	22.05	ppb		99
85)	Styrene	9.358	104	611665	22.12	ppb		96
87)	Bromoform	9.498	173	91855	20.98	ppb		96
89)	Isopropylbenzene	9.675	105	905932	22.01	ppb		99
90)	Cyclohexanone	9.718	55	135999	142.34	ppb		93
91)	trans-1,4-Dichloro-2-B...	9.962	53	40056	19.56	ppb		98
92)	1,1,2,2-Tetrachloroethane	9.913	83	185710	22.47	ppb		98
93)	Bromobenzene	9.913	156	224948	21.28	ppb		97
94)	1,2,3-Trichloropropane	9.943	110	52702	21.98	ppb	#	88
95)	n-Propylbenzene	10.022	91	1057882	21.98	ppb		97
96)	2-Chlorotoluene	10.083	91	619312	21.21	ppb		97
98)	4-Chlorotoluene	10.175	91	735438	21.67	ppb		100
99)	1,3,5-Trimethylbenzene	10.175	105	735461	22.35	ppb		99
100)	tert-Butylbenzene	10.443	119	608424	22.05	ppb		99

W090914.M Wed Oct 08 18:05:43 2014 Page: 2

Quantitation Report (QT Reviewed)

Sample
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9552.D
Misc :
Acq On : 8 Oct 2014 5:33 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 18:05:20 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

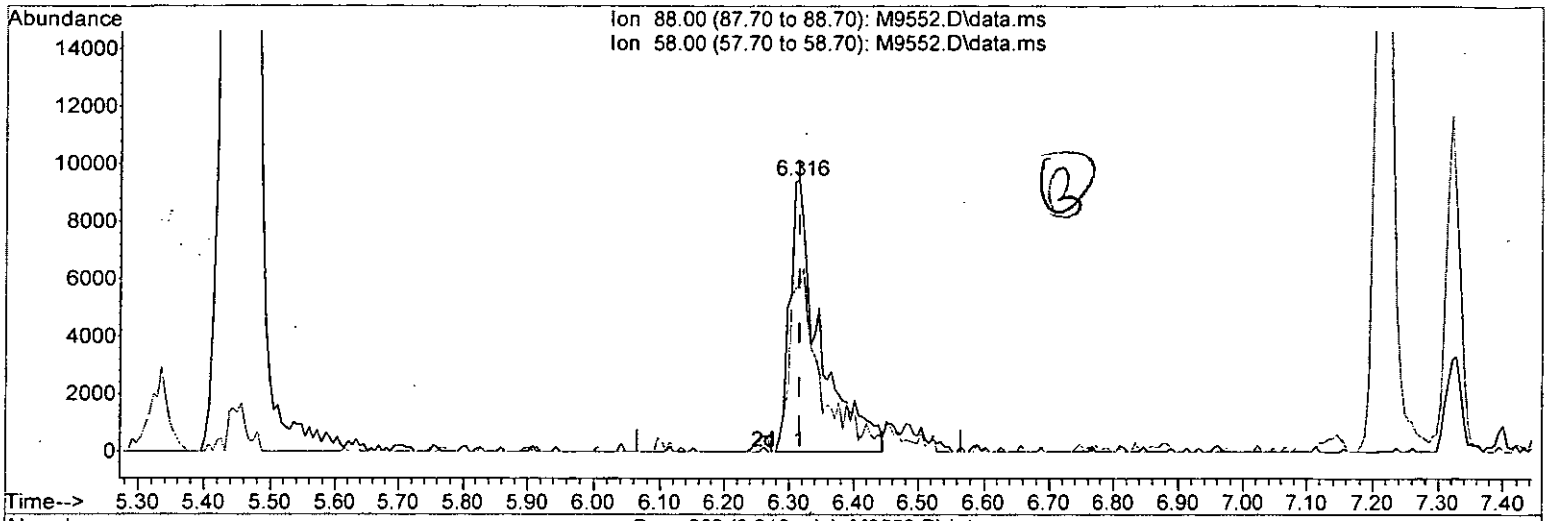
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 1,2,4-Trimethylbenzene	10.480	105	746888	22.01	ppb	98
103) sec-Butylbenzene	10.620	105	888225	22.15	ppb	99
104) p-Isopropyltoluene	10.742	119	763815	22.84	ppb	98
105) 1,3-Dclbenz	10.699	146	428052	21.45	ppb	98
106) 1,4-Dclbenz	10.766	146	439009	21.28	ppb	97
109) n-Butylbenzene	11.065	91	675055	22.24	ppb	98
110) 1,2-Dclbenz	11.065	146	410025	21.51	ppb	99
111) 1,2-Dibromo-3-chloropr...	11.626	157	31576	21.63	ppb	94
115) 1,2,4-Tcbenzene	12.162	180	243169	21.84	ppb	99
116) Hexachlorobt	12.266	225	91419	20.76	ppb	97
117) Naphthalen	12.303	128	540467	23.72	ppb	99
118) 1,2,3-Tclbenzene	12.437	180	212866	22.06	ppb	98

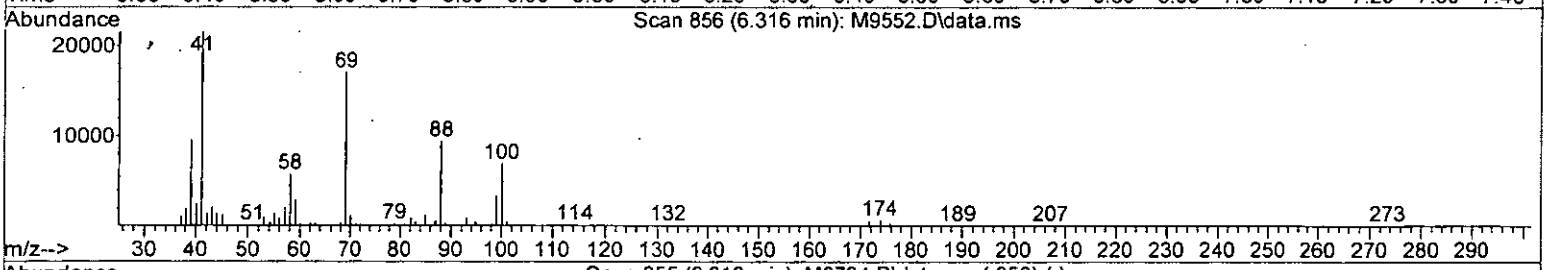
(#) = qualifier out of range (m) = manual integration (+) = signals summed

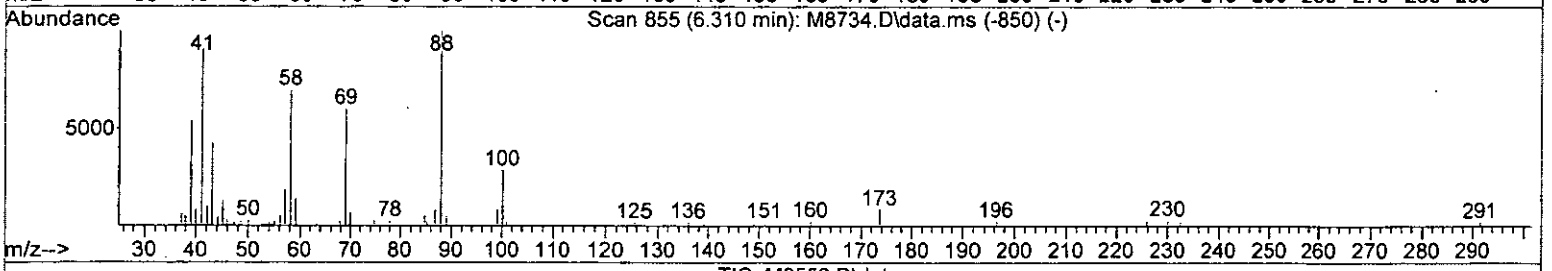
Quantitation Report (Qedit)

Sample
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9552.D
Misc :
Acq On : 8 Oct 2014 5:33 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 17:47:51 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration







TIC: M9552.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.000) 383.43 ppb

response 30259

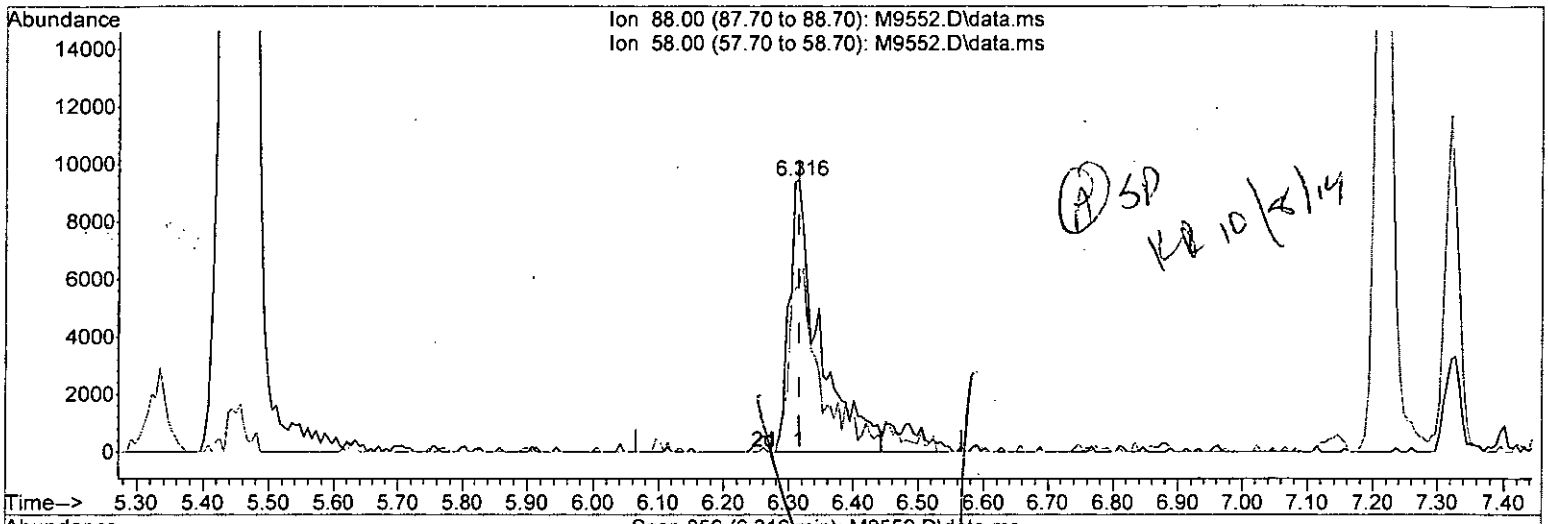
Ion	Exp%	Act%
88.00	100	100
58.00	57.90	60.94
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Wed Oct 08 18:04:57 2014 Page: 1

Quantitation Report (Qedit)

Sample LCS
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9552.D
Misc :
Acq On : 8 Oct 2014 5:33 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 17:47:51 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



TIC: M9552.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.000) 429.70 ppb m

response 33910

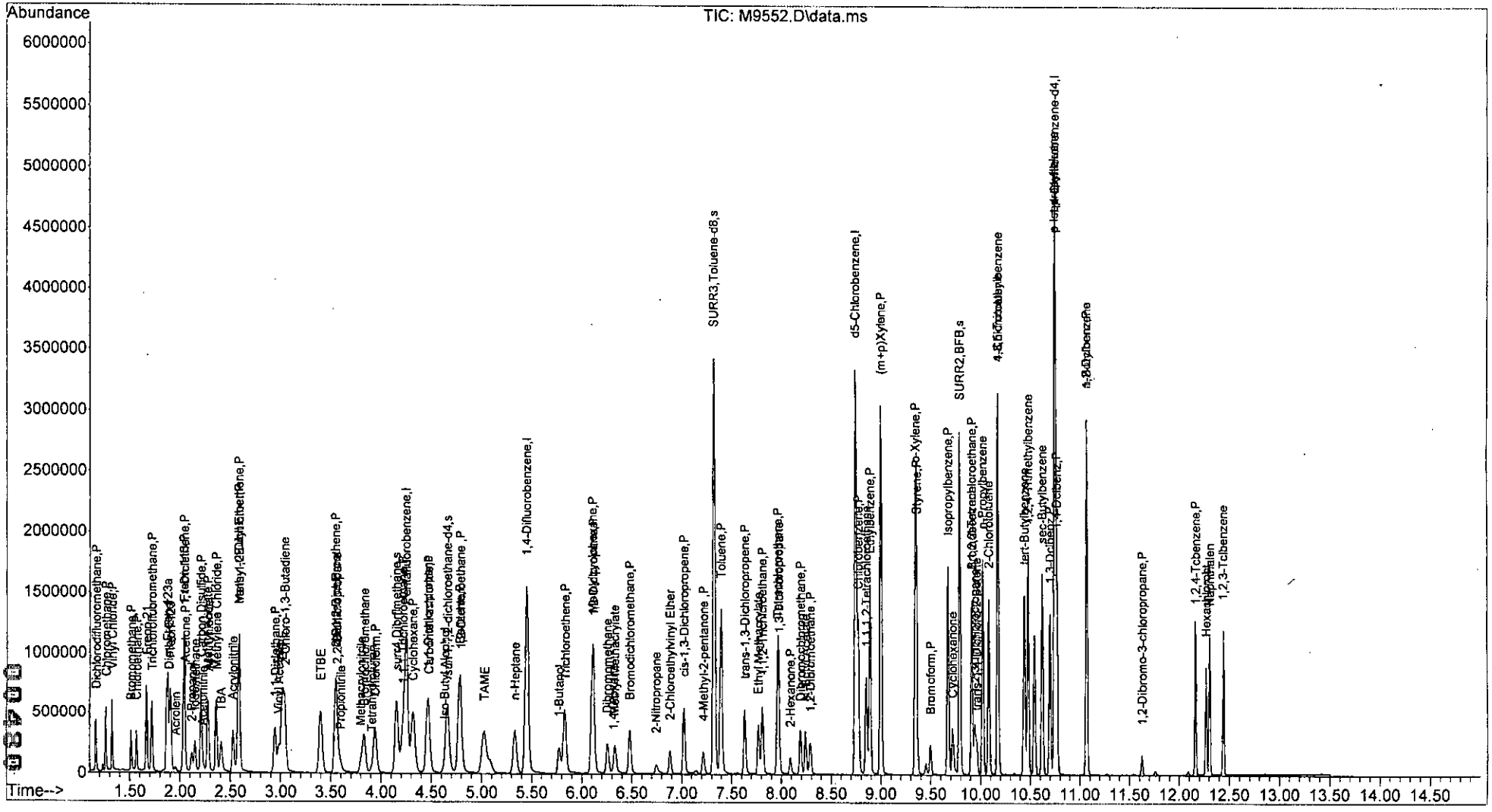
Ion	Exp%	Act%
88.00	100	100
58.00	57.90	60.94
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Wed Oct 08 18:05:02 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\100814\M9552.D
Misc :
Acq On : 8 Oct 2014 5:33 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 08 18:05:20 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration


Abundance
TIC: M9552.D\data.ms
6000000
5500000
5000000
4500000
4000000
3500000
3000000
2500000
2000000
1500000
1000000
500000
0
Time-->
1.50 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 6.00 6.50 7.00 7.50 8.00 8.50 9.00 9.50 10.00 10.50 11.00 11.50 12.00 12.50 13.00 13.50 14.00 14.50
Dichlorodifluoromethane,P
Vinyl Chloride,P
Bromomethane,P
Chloroethane,P
Trichlorofluoromethane,P
Acrolein
Acetone,P
2-Propanol
Acrylonitrile
Methylene Chloride,P
TBA
Acetonitrile
Methyl-t-Butyl Ether,P
trans-1,2-Dichloroethene,P
1,1-Dichloroethane,P
2,2-Dichloropropane,P
2-Butanone,P
Propionitrile
cis-1,2-Dichloroethene,P
Methacrylonitrile
Methyl Acrylate
Tetrahydrofuran,P
Chloroform,P
1,1,1-Trichloroethane,P
Cyclohexane,P
Carbon Tetrachloride,P
1,1-Dichloropropene,P
Isobutyl Alcohol
Benzene,P
1,2-Dichloroethane,P
Trichloroethene,P
1,2-Dichloropropane,P
Dibromomethane,P
1,4-Dioxane,P
Bromodichloromethane,P
2-Nitropropane
cis-1,3-Dichloropropene,P
4-Methyl-2-pentanone,P
Toluene,P
trans-1,3-Dichloropropene,P
Ethyl Methacrylate
1,1,2-Trichloroethane,P
Tetrachloroethene,P
1,3-Dichloropropane,P
2-Hexanone,P
Dibromochloromethane,P
1,2-Dibromoethane,P
Chlorobenzene,P
1,1,1,2-Tetrachloroethane,P
Ethylbenzene,P
(m+p)Xylene,P
o-Xylene,P
Styrene,P
Bromoform,P
Isopropylbenzene,P
Cyclohexanone
Bromobenzene,P
n-Propylbenzene
2-Chlorotoluene
4-Chlorotoluene
tert-Butylbenzene
sec-Butylbenzene
1,3-Dichlorobenzene,P
1,4-Dichlorobenzene,P
n-Butylbenzene
1,2-Dichlorobenzene,P
1,2-Dibromo-3-chloropropane,P
1,2,4-Trichlorobenzene,P
Hexachlorobutadiene,P
Naphthalene,P
1,2,3-Trichlorobenzene
SURR3,Toluene-d8,s
SURR2,BFB,s
d5-Chlorobenzene,I
1,4-Difluorobenzene,I
Chlorobenzene-d5,I
1,4-Dichlorobutane,S
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Toluene-d8,S
4-Bromofluorobenzene,S
Dibromofluoromethane,I
1,4-Dichlorobutane,I
Chlorobenzene-d5,I
1,4-Difluorobenzene

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/9/14 10:45
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1412180-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9577.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**19.0**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**19.6**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**22.1**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**22.4**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**19.9**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**24.5**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**19.5**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**22.8**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**20.8**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**21.9**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**21.6**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**22.0**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**22.9**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**21.3**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**18.9**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**20.6**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**21.6**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**21.2**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**20.1**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**21.4**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**20.3**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**18.0**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**20.4**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**17.7**		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	**445**		100	20	11	
106-43-4	4-Chlorotoluene	**21.1**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**22.2**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**20.5**		5.0	1.0	0.67	
67-64-1	Acetone	**18.1**		5.0	5.0	1.3	
71-43-2	Benzene	**21.4**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**21.1**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**21.6**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**20.4**		5.0	1.0	0.32	
75-25-2	Bromoform	**20.4**		5.0	1.0	0.42	
74-83-9	Bromomethane	**17.0**		5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/9/14 10:45
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1412180-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9577.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**18.5**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**20.9**		5.0	1.0	0.29	
75-00-3	Chloroethane	**20.6**		5.0	1.0	0.24	
67-66-3	Chloroform	**19.7**		5.0	1.0	0.25	
74-87-3	Chloromethane	**19.4**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**20.7**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**20.4**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**21.2**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**19.9**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**20.9**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**21.0**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**22.7**		5.0	1.0	0.29	
91-20-3	Naphthalene	**24.6**		5.0	1.0	0.20	
100-42-5	Styrene	**22.1**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**19.8**		5.0	1.0	0.30	
108-88-3	Toluene	**21.6**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**21.1**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**18.8**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**20.2**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**20.9**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**21.8**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**42.9**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**21.5**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**21.1**		5.0	1.0	0.20	
95-47-6	o-Xylene	**21.8**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**21.8**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**21.9**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**22.4**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**22.1**		5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/9/14 10:45
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1412180-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9577.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	75-120	10/9/14 10:45	
Dibromofluoromethane	98	85-115	10/9/14 10:45	
Toluene-d8	104	85-120	10/9/14 10:45	

Sample Final: LCS
Data File : I:\ACQUDATA\MSVOA12\DATA\100914\M9577.D
Misc :
Acq On : 9 Oct 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12 LQ1412180-03

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:59:14 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	932030	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1506017	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1406284	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	748822	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.158	113	412533	49.18	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.36%				
48) surr1,1,2-dichloroetha...	4.664	65	397299	43.95	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 87.90%				
65) SURR3,Toluene-d8	7.322	98	1836608	51.88	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 103.76%				
70) SURR2,BFB	9.791	95	667699	52.67	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 105.34%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	184517	20.40	ppb		99
3) Chloromethane	1.262	50	190954	19.36	ppb		99
4) Vinyl Chloride	1.323	62	210675	20.18	ppb		99
5) Bromomethane	1.512	94	103330	17.03	ppb		99
6) Chloroethane	1.567	64	120028	20.57	ppb		99
7) Freon 21	1.664	67	338063	21.90	ppb		99
8) Trichlorofluoromethane	1.719	101	235259	18.79	ppb		99
9) Diethyl Ether	1.884	59	129389	21.44	ppb		96
10) Freon 123a	1.872	67	226030	23.01	ppb		91
11) Freon 123	1.902	83	246080	22.67	ppb		98
12) Acrolein	1.957	56	25961	45.67	ppb		93
13) 1,1-Dicletheńe	2.042	96	162431	24.45	ppb	#	84
14) Freon 113	2.036	101	153335	19.84	ppb		95
15) Acetone	2.042	43	34760	18.13	ppb		98
16) 2-Propanol	2.115	45	127732	418.39	ppb		97
17) Iodomethane	2.146	142	201924	20.19	ppb		96
18) Carbon Disulfide	2.207	76	564402	22.43	ppb		100
19) Acetonitrile	2.225	40	23367	90.28	ppb		90
20) Allyl Chloride	2.280	76	90790	20.27	ppb	#	77
21) Methyl Acetate	2.274	43	73728	18.88	ppb		90
22) Methylene Chloride	2.359	84	181311	21.24	ppb		92
23) TBA	2.408	59	228167	445.28	ppb		99
24) Acrylonitrile	2.524	53	210494	115.23	ppb		99
25) Methyl-t-Butyl Ether	2.579	73	428616	22.65	ppb		99
26) trans-1,2-Dichloroethene	2.585	96	185499	22.40	ppb		89
28) 1,1-Diclethane	2.945	63	293876	19.91	ppb		97
29) Vinyl Acetate	2.981	86	31609	26.83	ppb	#	52
30) DIPE	3.018	45	457715	16.38	ppb		95
31) 2-Chloro-1,3-Butadiene	3.042	53	269494	18.76	ppb		86
32) ETBE	3.396	59	428231	17.38	ppb		97
33) 2,2-Dichloropropane	3.560	77	236787	20.30	ppb		98
34) cis-1,2-Dichloroethene	3.548	96	194377	20.90	ppb		99
35) 2-Butanone	3.548	43	45117	18.00	ppb		89
36) Propionitrile	3.591	54	82479	122.06	ppb		96
37) Bromochloromethane	3.829	130	111112	21.60	ppb		94

KR 10/9/14

W090914.M Thu Oct 09 10:59:19 2014

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\100914\M9577.D
Misc :
Acq On : 9 Oct 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:59:14 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.804	67	49815	23.12	ppb		86
39) Tetrahydrofuran	3.914	42	32290	20.58	ppb		87
40) Chloroform	3.938	83	295784	19.65	ppb		98
41) 1,1,1-Trichloroethane	4.219	97	244133	19.58	ppb	#	80
42) TAME	5.030	73	396143	18.80	ppb		97
44) Cyclohexane	4.316	41	141882	18.22	ppb		97
46) Carbontetrachloride	4.475	121	62869	18.53	ppb		83
47) 1,1-Dichloropropene	4.463	75	213438	19.52	ppb		97
49) Benzene	4.786	78	730524	21.37	ppb		95
50) 1,2-Dichloroethane	4.786	62	192476	18.93	ppb		96
51) Iso-Butyl Alcohol	4.639	43	92087	407.35	ppb		99
52) n-Heptane	5.328	43	180460	20.95	ppb		95
53) 1-Butanol	5.773	56	148082	1135.47	ppb		88
54) Trichloroethene	5.828	130	191756	21.08	ppb		98
55) Methylcyclohexane	6.109	55	202140	21.62	ppb		88
56) 1,2-Diclpropane	6.115	63	177028	20.55	ppb		98
57) Dibromomethane	6.261	93	89731	21.51	ppb		94
58) 1,4-Dioxane	6.316	88	~~3149912731~~	~~380.71~~	ppb	439.04	100
59) Methyl Methacrylate	6.334	69	90661	22.91	ppb		85
60) Bromodichloromethane	6.481	83	217513	20.40	ppb		100
61) 2-Nitropropane	6.749	41	42979	40.59	ppb		99
62) 2-Chloroethylvinyl Ether	6.883	63	72989	18.83	ppb		94
63) cis-1,3-Dichloropropene	7.023	75	271897	21.83	ppb		94
64) 4-Methyl-2-pentanone	7.212	43	104747	20.53	ppb		97
66) Toluene	7.395	91	801314	21.56	ppb		98
67) trans-1,3-Dichloropropene	7.633	75	223700	22.05	ppb		98
68) Ethyl Methacrylate	7.767	69	178143	22.33	ppb		93
69) 1,1,2-Trichloroethane	7.810	97	140601	22.43	ppb		95
72) Tetrachloroethene	7.962	164	142721	19.81	ppb		97
73) 2-Hexanone	8.084	43	69880	17.70	ppb		94
74) 1,3-Dichloropropane	7.974	76	240744	20.10	ppb		96
75) Dibromochloromethane	8.194	129	150294	20.73	ppb		97
76) N-Butyl Acetate	8.242	43	180255	21.75	ppb		92
77) 1,2-Dibromoethane	8.291	107	138658	22.91	ppb		98
78) Chlorobenzene	8.773	112	521135	20.90	ppb		95
81) 1,1,1,2-Tetrachloroethane	8.852	131	162498	19.01	ppb		96
82) Ethylbenzene	8.889	106	260667	19.91	ppb		93
83) (m+p)Xylene	8.998	106	681192	42.93	ppb		99
84) o-Xylene	9.346	106	336472	21.79	ppb		94
85) Styrene	9.358	104	559246	22.10	ppb		95
87) Bromoform	9.498	173	83186	20.38	ppb		96
89) Isopropylbenzene	9.675	105	805784	20.99	ppb		99
90) Cyclohexanone	9.718	55	255029	286.20	ppb		94
91) trans-1,4-Dichloro-2-B...	9.962	53	28526	14.94	ppb		93
92) 1,1,2,2-Tetrachloroethane	9.913	83	170623	22.14	ppb		97
93) Bromobenzene	9.913	156	207929	21.09	ppb		98
94) 1,2,3-Trichloropropane	9.943	110	46522	20.81	ppb	#	89
95) n-Propylbenzene	10.023	91	947745	21.11	ppb		99
96) 2-Chlorotoluene	10.083	91	554294	20.36	ppb		98
~~97) 3-Chlorotoluene~~	~~10.175~~	~~91~~	~~671466~~	~~22.98~~	~~ppb~~		~~96~~
98) 4-Chlorotoluene	10.175	91	666732	21.06	ppb		97
99) 1,3,5-Trimethylbenzene	10.175	105	662560	21.59	ppb		98

W090914.M Thu Oct 09 10:59:19 2014 Page: 2

00485

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\100914\M9577.D
Misc :
Acq On : 9 Oct 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:59:14 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) tert-Butylbenzene	10.443	119	562820	21.87	ppb	99
101) 1,2,4-Trimethylbenzene	10.480	105	683581	21.60	ppb	98
103) sec-Butylbenzene	10.620	105	815888	21.82	ppb	99
104) p-Isopropyltoluene	10.742	119	690846	22.15	ppb	97
105) 1,3-Dclbenz	10.699	146	394722	21.21	ppb	98
106) 1,4-Dclbenz	10.766	146	412464	21.44	ppb	98
109) n-Butylbenzene	11.065	91	608614	21.50	ppb	97
110) 1,2-Dclbenz	11.065	146	379485	21.34	ppb	99
111) 1,2-Dibromo-3-chloropr...	11.626	157	29897	21.96	ppb	95
115) 1,2,4-Tcbenzene	12.162	180	227452	21.91	ppb	96
116) Hexachlorobt	12.266	225	85805	20.89	ppb	96
117) Naphthalen	12.303	128	522241	24.57	ppb	98
118) 1,2,3-Tclbenzene	12.437	180	205106	22.80	ppb	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

```
Sample      : LCS
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9577.D
Misc        :
Acq On      :  9 Oct 2014  10:45 am
Operator    : K.Ruest
InstName    : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:59:14 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration
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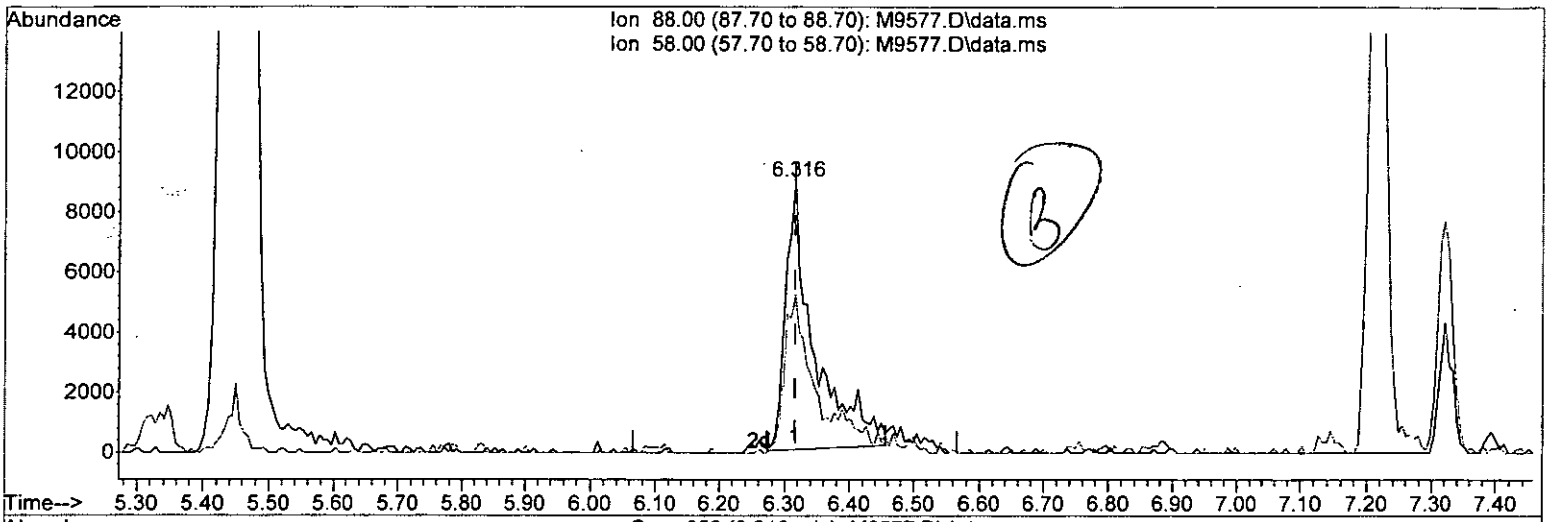
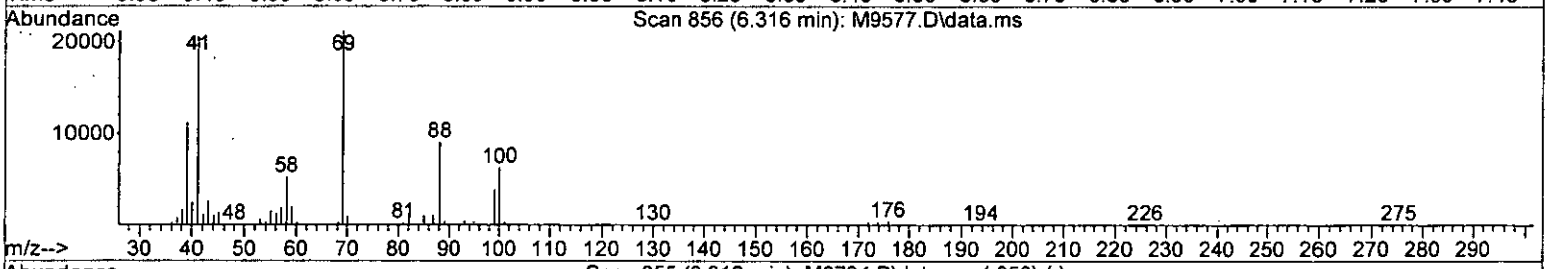
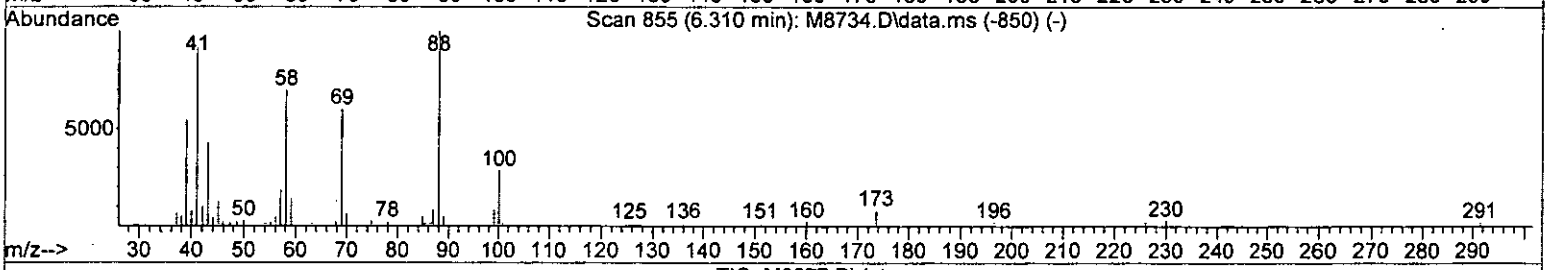






TIC: M9577.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.000) 380.71 ppb

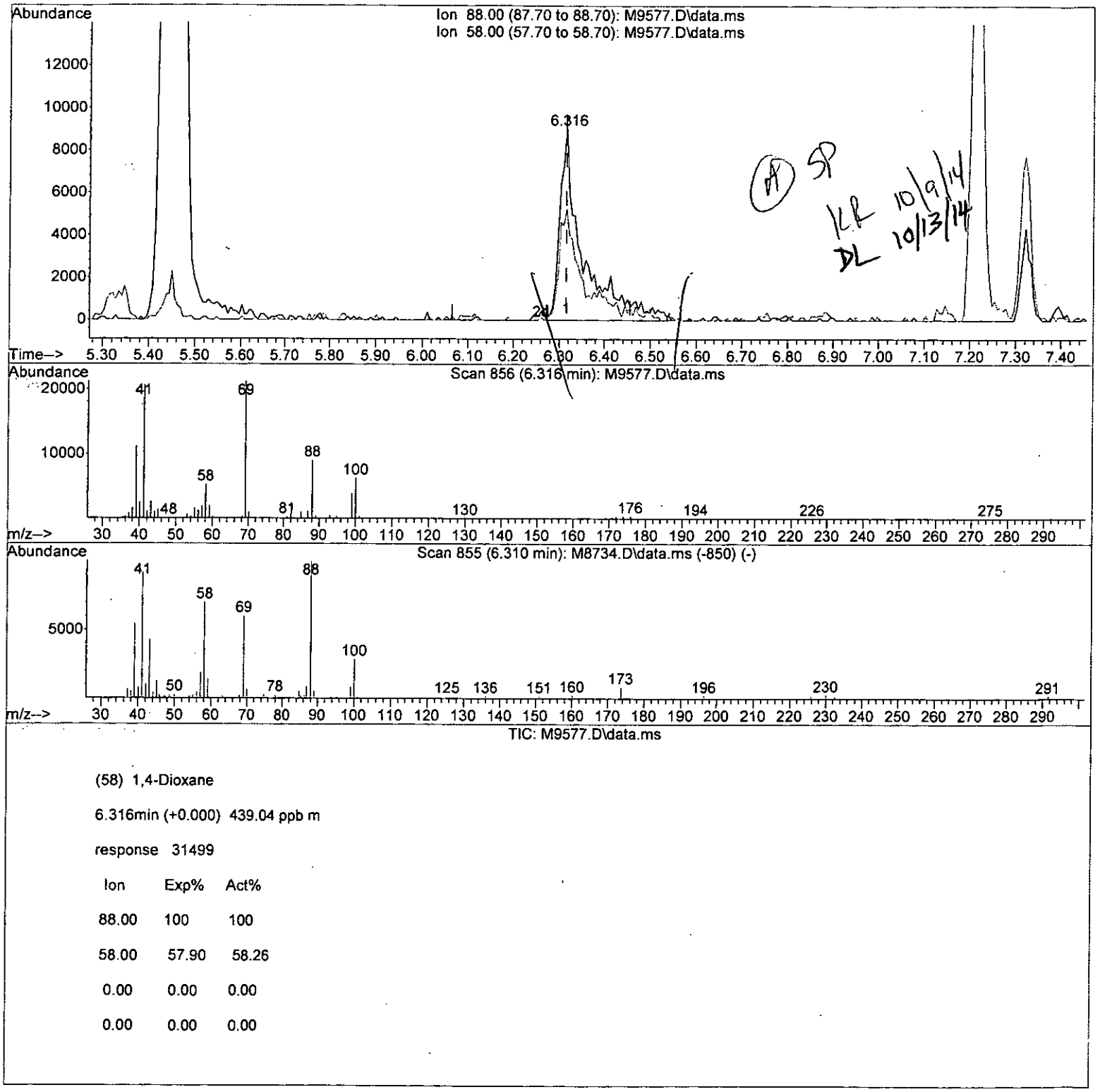
response 27314

Ion	Exp%	Act%
88.00	100	100
58.00	57.90	58.26
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Thu Oct 09 11:12:09 2014 Page: 1

```
Sample  : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\100914\M9577.D
Misc    :
Acq On  :  9 Oct 2014  10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:59:14 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration
```



(58) 1,4-Dioxane

6.316min (+0.000) 439.04 ppb m

response 31499

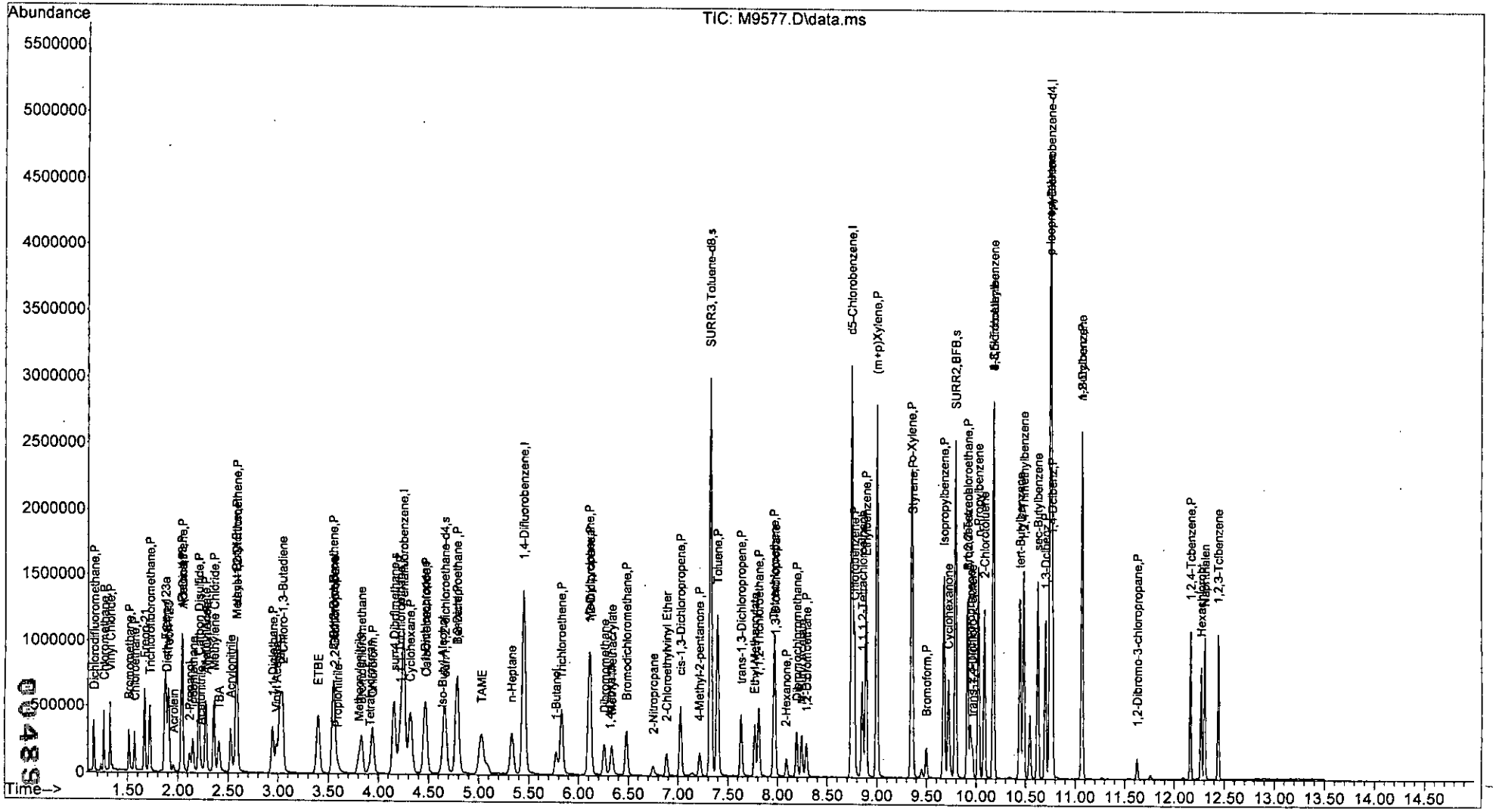
Ion	Exp%	Act%
88.00	100	100
58.00	57.90	58.26
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Thu Oct 09 11:12:16 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\100914\M9577.D
Misc :
Acq On : 9 Oct 2014 10:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 10:59:14 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



W090914.M Thu Oct 09 10:59:23 2014 Page: 4

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1105
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 20:57
Sample Name:	FTMM-8-GW-697MW01-16.45	**Units:**	µg/L
Lab Code:	RQ1412180-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9596.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**47.2**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**48.1**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**53.8**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**56.2**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**47.2**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**54.2**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**46.8**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**49.3**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**53.1**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**49.9**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**15.0**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**54.6**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**55.7**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**51.5**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**46.0**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**49.8**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**15.9**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**51.2**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**48.5**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**51.2**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**44.8**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**48.0**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**48.2**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**44.4**		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	**1170**		100	20	11	
106-43-4	4-Chlorotoluene	**43.9**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**39.4**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**51.8**		5.0	1.0	0.67	
67-64-1	Acetone	**41.8**		5.0	5.0	1.3	
71-43-2	Benzene	**53.8**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**50.9**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**52.4**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**48.0**		5.0	1.0	0.32	
75-25-2	Bromoform	**41.4**		5.0	1.0	0.42	
74-83-9	Bromomethane	**35.0**		5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1105
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 20:57
Sample Name:	FTMM-8-GW-697MW01-16.45	**Units:**	µg/L
Lab Code:	RQ1412180-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9596.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**44.0**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**53.2**		5.0	1.0	0.29	
75-00-3	Chloroethane	**49.6**		5.0	1.0	0.24	
67-66-3	Chloroform	**49.9**		5.0	1.0	0.25	
74-87-3	Chloromethane	**44.2**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**47.2**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**49.9**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**50.8**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**43.0**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**44.0**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**46.8**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**54.1**		5.0	1.0	0.29	
91-20-3	Naphthalene	**56.1**		5.0	1.0	0.20	
100-42-5	Styrene	**7.28**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**53.0**		5.0	1.0	0.30	
108-88-3	Toluene	**47.0**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**54.2**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**47.7**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**46.4**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**53.8**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**51.2**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**67.5**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**44.8**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**45.1**		5.0	1.0	0.20	
95-47-6	o-Xylene	**36.5**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**46.8**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**52.1**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**51.1**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**49.6**		5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1105
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 20:57
Sample Name:	FTMM-8-GW-697MW01-16.45	**Units:**	µg/L
Lab Code:	RQ1412180-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9596.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	75-120	10/9/14 20:57	
Dibromofluoromethane	100	85-115	10/9/14 20:57	
Toluene-d8	96	85-120	10/9/14 20:57	

Quantitation Report (Not Reviewed)

Sample : R1407813-001MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\100914\M9596.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 8:57 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ1412RSD-05

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 21:11:54 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	935680	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1464007	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1389614	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	753103	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.158	113	406882	49.90	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.80%				
48) surr1,1,2-dichloroetha...	4.664	65	396782	45.15	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 90.30%				
65) SURR3,Toluene-d8	7.322	98	1654102	48.06	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.12%				
70) SURR2,BFB	9.791	95	654350	53.10	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 106.20%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	452903	49.88	ppb		98
3) Chloromethane	1.262	50	438125	44.24	ppb		96
4) Vinyl Chloride	1.323	62	486679	46.44	ppb		99
5) Bromomethane	1.512	94	213159	35.00	ppb		97
6) Chloroethane	1.567	64	290477	49.59	ppb		100
7) Freon 21	1.664	67	799995	51.63	ppb		100
8) Trichlorofluoromethane	1.719	101	599120	47.66	ppb		98
9) Diethyl Ether	1.884	59	305700	50.46	ppb		92
10) Freon 123a	1.871	67	512740	52.00	ppb		87
11) Freon 123	1.902	83	622618	57.14	ppb		97
12) Acrolein	1.957	56	52574	92.13	ppb		95
13) 1,1-Diclethene	2.042	96	361419	54.20	ppb	#	88
14) Freon 113	2.036	101	377732	48.69	ppb		97
15) Acetone	2.054	43	80479	41.82	ppb		96
16) 2-Propanol	2.152	45	353680	1153.97	ppb		99
17) Iodomethane	2.146	142	464663	46.29	ppb		95
18) Carbon Disulfide	2.207	76	936427	37.08	ppb		99
19) Acetonitrile	2.243	40	45392	174.69	ppb		94
20) Allyl Chloride	2.274	76	168146	37.40	ppb		90
21) Methyl Acetate	2.274	43	164499	41.95	ppb		92
22) Methylene Chloride	2.359	84	435367	50.79	ppb	#	87
23) TBA	2.426	59	601678	1169.63	ppb		96
24) Acrylonitrile	2.530	53	477027	260.11	ppb		96
25) Methyl-t-Butyl Ether	2.579	73	1027729	54.10	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	424385	51.05	ppb	#	87
28) 1,1-Diclethane	2.944	63	698948	47.16	ppb		97
29) Vinyl Acetate	2.981	86	60905	51.50	ppb	#	57
30) DIPE	3.018	45	1117990	39.84	ppb		96
31) 2-Chloro-1,3-Butadiene	3.042	53	168040	11.65	ppb		85
32) ETBE	3.396	59	1077767	43.56	ppb		98
33) 2,2-Dichloropropane	3.560	77	524945	44.83	ppb		98
34) cis-1,2-Dichloroethene	3.548	96	502627	53.83	ppb		88
35) 2-Butanone	3.554	43	120708	47.97	ppb		92
36) Propionitrile	3.603	54	186460	274.87	ppb		97
37) Bromochloromethane	3.828	130	270523	52.40	ppb		90

KB 10/10/14

Quantitation Report (Not Reviewed)

Sample : R1407813-001MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\100914\M9596.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 8:57 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 21:11:54 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Methacrylonitrile	3.804	67	109428	50.59	ppb	#	76
39)	Tetrahydrofuran	3.908	42	72842	46.25	ppb		83
40)	Chloroform	3.938	83	754303	49.91	ppb		97
41)	1,1,1-Trichloroethane	4.213	97	602159	48.12	ppb		91
42)	TAME	5.023	73	1017139	48.09	ppb		95
44)	Cyclohexane	4.316	41	329742	43.55	ppb		98
46)	Carbontetrachloride	4.469	121	144925	43.95	ppb		97
47)	1,1-Dichloropropene	4.462	75	497968	46.84	ppb		93
49)	Benzene	4.786	78	1787558	53.80	ppb		93
50)	1,2-Dichloroethane	4.786	62	454700	46.00	ppb		97
51)	Iso-Butyl Alcohol	4.670	43	239263	1088.76	ppb		90
52)	n-Heptane	5.334	43	350988	41.92	ppb		88
53)	1-Butanol	5.798	56	462360	3647.04	ppb		90
54)	Trichloroethene	5.828	130	479261	54.20	ppb		99
55)	Methylcyclohexane	6.108	55	466640	51.34	ppb		88
56)	1,2-Diclpropane	6.115	63	416645	49.76	ppb		100
57)	Dibromomethane	6.255	93	214406	52.86	ppb		90
58)	1,4-Dioxane	6.346	88	~~574394~~ M	~~1066.68~~	ppb	1087.61	95
59)	Methyl Methacrylate	6.334	69	158880	41.30	ppb		88
60)	Bromodichloromethane	6.480	83	497706	48.02	ppb		99
61)	2-Nitropropane	6.749	41	101806	98.90	ppb		96
63)	cis-1,3-Dichloropropene	7.023	75	619642	51.18	ppb		97
64)	4-Methyl-2-pentanone	7.218	43	256638	51.75	ppb		93
66)	Toluene	7.395	91	1699686	47.04	ppb		99
67)	trans-1,3-Dichloropropene	7.633	75	488737	49.56	ppb		95
68)	Ethyl Methacrylate	7.773	69	318929	41.13	ppb		89
69)	1,1,2-Trichloroethane	7.809	97	342260	56.16	ppb		99
72)	Tetrachloroethene	7.962	164	377462	53.03	ppb		99
73)	2-Hexanone	8.090	43	173113	44.39	ppb		87
74)	1,3-Dichloropropane	7.974	76	573697	48.48	ppb		95
75)	Dibromochloromethane	8.193	129	338161	47.19	ppb		96
76)	N-Butyl Acetate	8.242	43	407065	47.23	ppb		92
77)	1,2-Dibromoethane	8.291	107	333116	55.71	ppb		99
78)	Chlorobenzene	8.773	112	1310750	53.21	ppb		96
81)	1,1,1,2-Tetrachloroethane	8.852	131	398342	47.16	ppb		96
82)	Ethylbenzene	8.888	106	556227	42.98	ppb		95
83)	(m+p)Xylene	8.998	106	1057820	67.46	ppb		93
84)	o-Xylene	9.346	106	557283	36.53	ppb		96
85)	Styrene	9.358	104	182095	7.28	ppb		94
87)	Bromoform	9.498	173	170117	41.44	ppb		100
89)	Isopropylbenzene	9.675	105	1805396	46.77	ppb		99
90)	Cyclohexanone	9.724	55	189160	211.08	ppb		88
91)	trans-1,4-Dichloro-2-B...	9.961	53	49884	25.98	ppb		94
92)	1,1,2,2-Tetrachloroethane	9.913	83	417165	53.82	ppb		98
93)	Bromobenzene	9.913	156	504326	50.87	ppb		93
94)	1,2,3-Trichloropropane	9.943	110	119397	53.10	ppb	#	89
95)	n-Propylbenzene	10.022	91	2037259	45.13	ppb		97
96)	2-Chlorotoluene	10.083	91	1320548	48.22	ppb		98
~~97)~~	~~3-Chlorotoluene~~	~~10.175~~	~~91~~	~~1400229~~	~~47.66~~	~~ppb~~		~~98~~
98)	4-Chlorotoluene	10.175	91	1397452	43.90	ppb		94
99)	1,3,5-Trimethylbenzene	10.175	105	492034	15.94	ppb		99
100)	tert-Butylbenzene	10.443	119	1348727	52.11	ppb		99

W090914.M Thu Oct 09 21:11:40 2014 Page: 2

Quantitation Report (Not Reviewed)

Sample : R1407813-001MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\100914\M9596.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 8:57 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 21:11:54 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

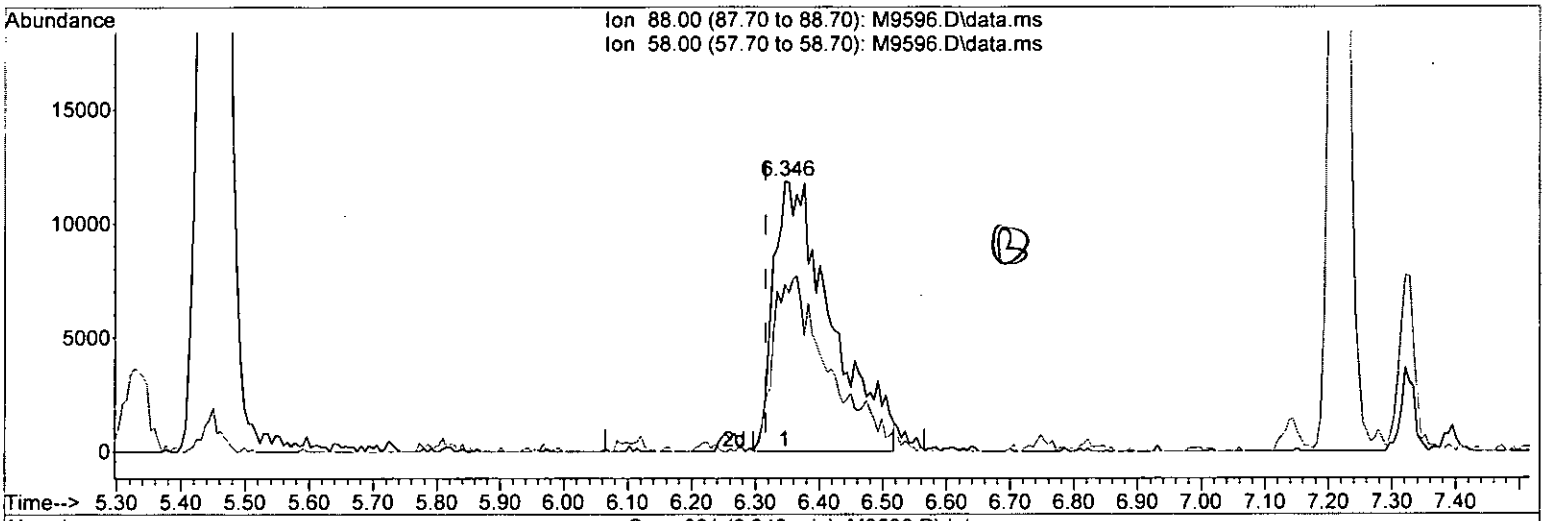
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 1,2,4-Trimethylbenzene	10.480	105	478071	15.02	ppb	98
103) sec-Butylbenzene	10.620	105	1759072	46.77	ppb	99
104) p-Isopropyltoluene	10.742	119	1236509	39.42	ppb	98
105) 1,3-Dclbenz	10.699	146	957993	51.18	ppb	98
106) 1,4-Dclbenz	10.772	146	989987	51.17	ppb	99
109) n-Butylbenzene	11.071	91	1275365	44.79	ppb	98
110) 1,2-Dclbenz	11.065	146	921194	51.51	ppb	98
111) 1,2-Dibromo-3-chloropr...	11.626	157	74746	54.60	ppb	93
115) 1,2,4-Tcbenzene	12.162	180	521157	49.91	ppb	99
116) Hexachlorobt	12.266	225	181600	43.96	ppb	100
117) Naphthalen	12.302	128	1199644	56.13	ppb	99
118) 1,2,3-Tclbenzene	12.443	180	446428	49.34	ppb	97

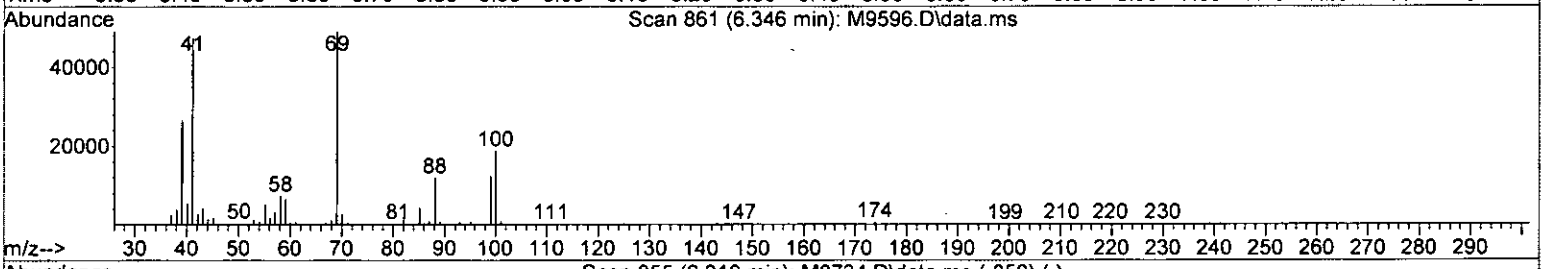
(#) = qualifier out of range (m) = manual integration (+) = signals summed

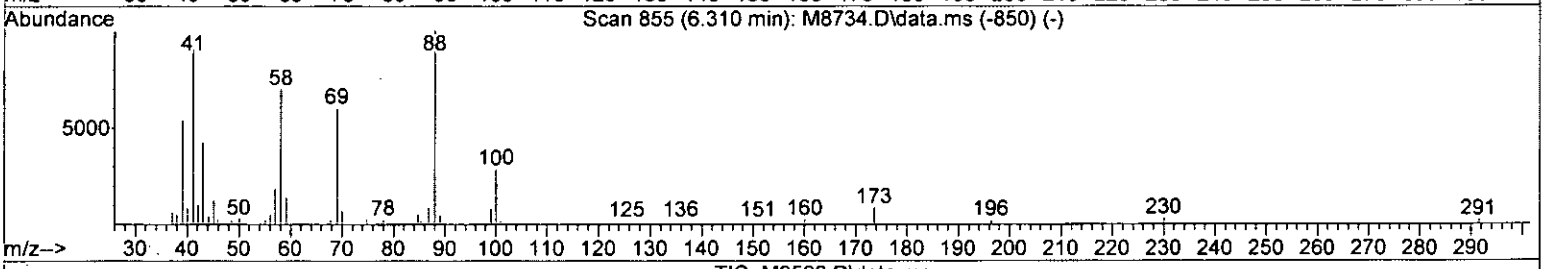
Quantitation Report (Qedit)

Sample : R1407813-001MS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9596.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 8:57 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 21:11:54 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration







TIC: M9596.D\data.ms

(58) 1,4-Dioxane

6.346min (+0.030) 1066.68 ppb

response 74394

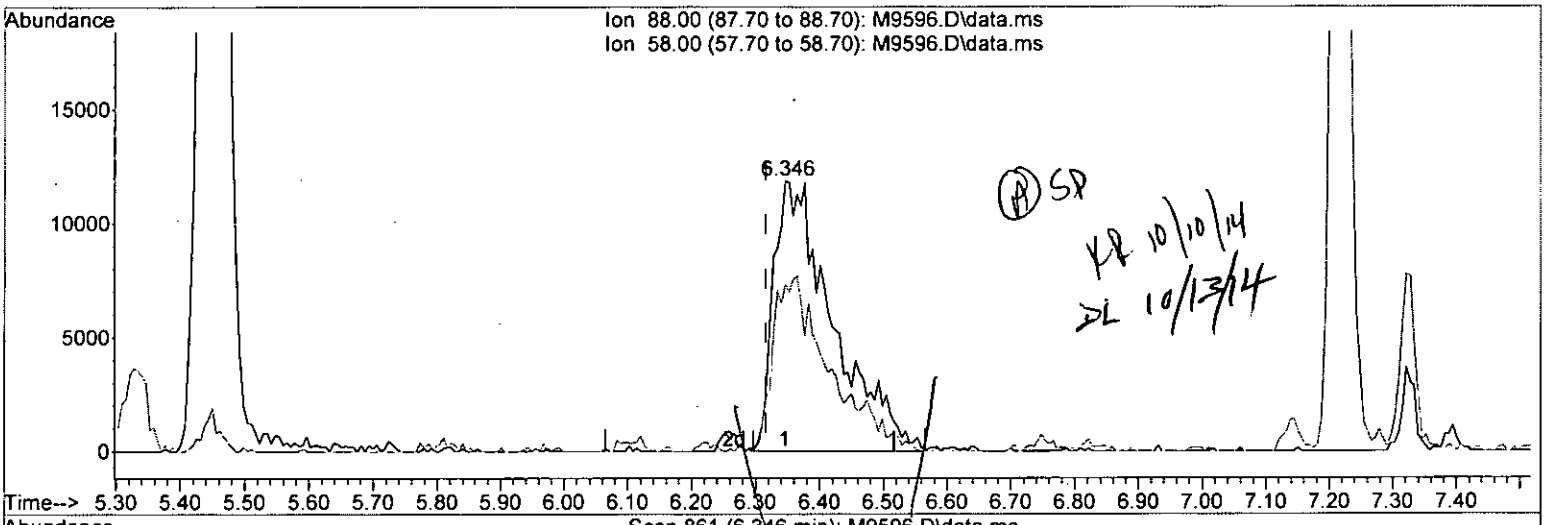
Ion	Exp%	Act%
88.00	100	100
58.00	57.90	61.76
0.00	0.00	0.00
0.00	0.00	0.00

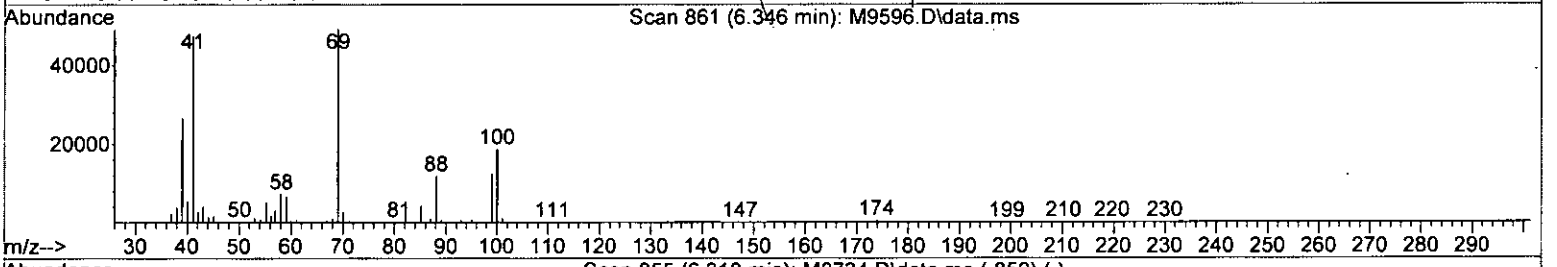
W090914.M Fri Oct 10 12:02:41 2014 Page: 1

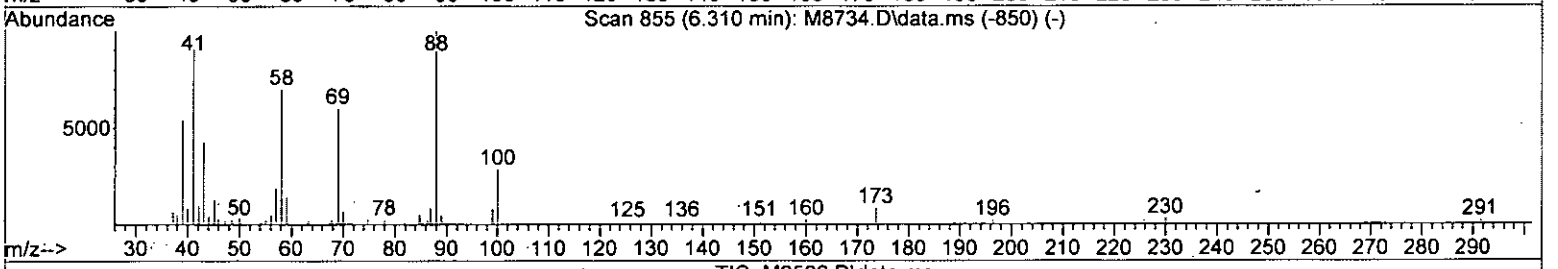
Quantitation Report (Qedit)

Sample : R1407813-001MS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9596.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 8:57 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 21:11:54 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration







TIC: M9596.D\data.ms

(58) 1,4-Dioxane

6.346min (+0.030) 1087.61 ppb m

response 75854

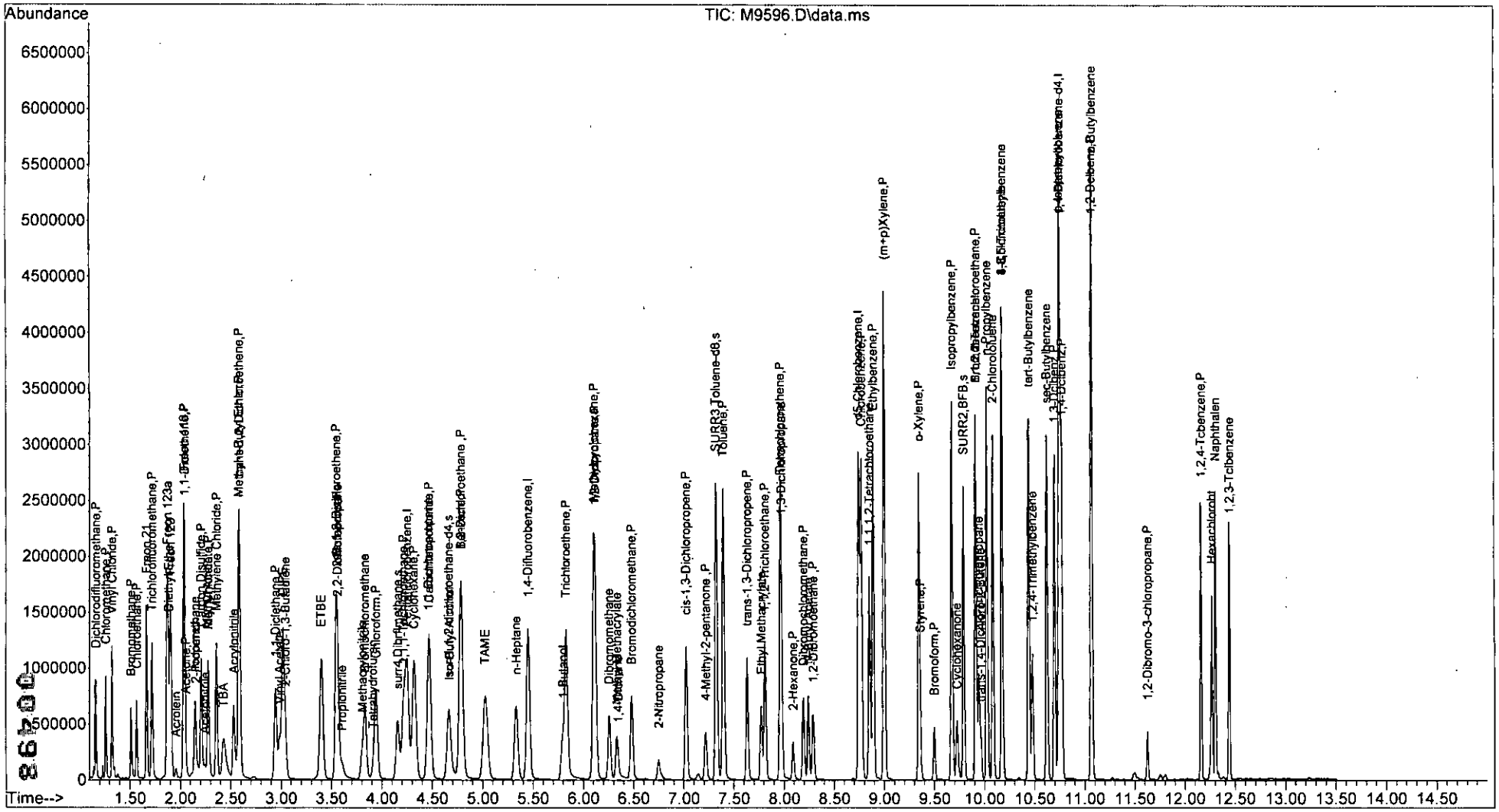
Ion	Exp%	Act%
88.00	100	100
58.00	57.90	61.76
0.00	0.00	0.00
0.00	0.00	0.00

W090914.M Fri Oct 10 12:02:48 2014 Page: 1

Quantitation Report (Not Reviewed)

Sample : R1407813-001MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\100914\M9596.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 8:57 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 21:11:54 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



W090914.M Thu Oct 09 21:11:43 2014 Page: 4

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/ 1/14 1105
Date Received: 10/ 3/14
Date Analyzed: 10/9/14 21:29

Sample Name: FTMM-8-GW-697MW01-16.45
Lab Code: RQ1412180-06
Run Type: Duplicate Matrix Spike

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\100914\M9597.D\

Analysis Lot: 415409
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**48.3**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**49.5**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**53.5**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**55.1**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**48.6**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**56.5**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**48.7**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**51.5**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**52.9**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**52.6**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**15.5**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**54.7**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**55.4**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**53.5**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**45.4**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**50.9**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**17.1**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**53.9**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**48.5**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**54.0**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**45.2**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**42.3**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**50.8**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**41.5**		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	**1100**		100	20	11	
106-43-4	4-Chlorotoluene	**46.2**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**42.1**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**48.0**		5.0	1.0	0.67	
67-64-1	Acetone	**38.6**		5.0	5.0	1.3	
71-43-2	Benzene	**55.3**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**53.4**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**53.9**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**49.4**		5.0	1.0	0.32	
75-25-2	Bromoform	**41.7**		5.0	1.0	0.42	
74-83-9	Bromomethane	**43.3**		5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1105
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 21:29
Sample Name:	FTMM-8-GW-697MW01-16.45	**Units:**	µg/L
Lab Code:	RQ1412180-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9597.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**45.9**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**54.7**		5.0	1.0	0.29	
75-00-3	Chloroethane	**51.7**		5.0	1.0	0.24	
67-66-3	Chloroform	**50.6**		5.0	1.0	0.25	
74-87-3	Chloromethane	**47.4**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**47.7**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**51.9**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**53.3**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**44.6**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**48.0**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**48.6**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**54.6**		5.0	1.0	0.29	
91-20-3	Naphthalene	**56.8**		5.0	1.0	0.20	
100-42-5	Styrene	**7.54**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**54.6**		5.0	1.0	0.30	
108-88-3	Toluene	**49.1**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**55.9**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**49.0**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**48.6**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**55.7**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**52.3**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**70.0**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**47.3**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**47.7**		5.0	1.0	0.20	
95-47-6	o-Xylene	**37.9**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**49.6**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**54.6**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**52.6**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**49.2**		5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1105
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Analyzed:	10/9/14 21:29
Sample Name:	FTMM-8-GW-697MW01-16.45	**Units:**	µg/L
Lab Code:	RQ1412180-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	415409
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\100914\M9597.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	75-120	10/9/14 21:29	
Dibromofluoromethane	98	85-115	10/9/14 21:29	
Toluene-d8	97	85-120	10/9/14 21:29	

Quantitation Report (Not Reviewed)

Sample : R1407813-001DMS[1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\100914\M9597.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 9:29 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ1412180 -06

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 21:44:14 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	942129	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1483492	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1413321	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.754	152	753639	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	404652	48.97	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.94%				
48) surr1,1,2-dichloroetha...	4.664	65	389008	43.68	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 87.36%				
65) SURR3,Toluene-d8	7.322	98	1683326	48.27	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 96.54%				
70) SURR2,BFB	9.791	95	663087	53.11	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 106.22%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	474780	51.93	ppb		97
3) Chloromethane	1.262	50	472364	47.37	ppb		98
4) Vinyl Chloride	1.323	62	512959	48.62	ppb		100
5) Bromomethane	1.512	94	265375	43.28	ppb		98
6) Chloroethane	1.567	64	305001	51.71	ppb		97
7) Freon 21	1.664	67	831348	53.29	ppb		100
8) Trichlorofluoromethane	1.719	101	620604	49.04	ppb		97
9) Diethyl Ether	1.878	59	314098	51.50	ppb		95
10) Freon 123a	1.865	67	526980	53.08	ppb		100
11) Freon 123	1.902	83	627945	57.23	ppb		98
12) Acrolein	1.957	56	48890	85.08	ppb		93
13) 1,1-Diclethene	2.036	96	379496	56.52	ppb		91
14) Freon 113	2.036	101	392029	50.18	ppb		99
15) Acetone	2.054	43	74697	38.55	ppb		92
16) 2-Propanol	2.146	45	325452	1054.60	ppb		95
17) Iodomethane	2.146	142	535885	53.02	ppb		94
18) Carbon Disulfide	2.207	76	960682	37.78	ppb		99
19) Acetonitrile	2.237	40	50001	191.11	ppb		98
20) Allyl Chloride	2.274	76	174132	38.47	ppb		92
21) Methyl Acetate	2.274	43	155544	39.40	ppb		90
22) Methylene Chloride	2.359	84	459610	53.26	ppb	#	87
23) TBA	2.426	59	568963	1098.47	ppb		100
24) Acrylonitrile	2.524	53	469453	254.23	ppb		97
25) Methyl-t-Butyl Ether	2.579	73	1043276	54.55	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	440147	52.58	ppb	#	88
28) 1,1-Diclethane	2.944	63	725759	48.63	ppb		97
29) Vinyl Acetate	2.981	86	58479	49.11	ppb	#	55
30) DIPE	3.018	45	1131722	40.06	ppb		96
31) 2-Chloro-1,3-Butadiene	3.042	53	170882	11.77	ppb		78
32) ETBE	3.396	59	1082476	43.46	ppb		98
33) 2,2-Dichloropropane	3.560	77	532490	45.16	ppb		97
34) cis-1,2-Dichloroethene	3.548	96	523321	55.66	ppb		89
35) 2-Butanone	3.554	43	107281	42.34	ppb		97
36) Propionitrile	3.603	54	186476	273.01	ppb		99
37) Bromochloromethane	3.828	130	280279	53.91	ppb		87

KR 10/10/14

Quantitation Report (Not Reviewed)

Sample : R1407813-001DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\100914\M9597.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 9:29 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 21:44:14 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Methacrylonitrile	3.804	67	109435	50.24	ppb	#	73
39)	Tetrahydrofuran	3.908	42	70347	44.36	ppb		75
40)	Chloroform	3.938	83	770420	50.63	ppb		95
41)	1,1,1-Trichloroethane	4.213	97	623903	49.51	ppb		94
42)	TAME	5.023	73	1012071	47.52	ppb		97
44)	Cyclohexane	4.316	41	341483	44.51	ppb		96
46)	Carbontetrachloride	4.475	121	153397	45.91	ppb		88
47)	1,1-Dichloropropene	4.462	75	524521	48.69	ppb		96
49)	Benzene	4.786	78	1860887	55.27	ppb		94
50)	1,2-Dichloroethane	4.786	62	455107	45.44	ppb		97
51)	Iso-Butyl Alcohol	4.664	43	232859	1045.70	ppb		94
52)	n-Heptane	5.328	43	371537	43.79	ppb		90
53)	1-Butanol	5.798	56	425447	3311.80	ppb		91
54)	Trichloroethene	5.828	130	501116	55.93	ppb		99
55)	Methylcyclohexane	6.108	55	484623	52.62	ppb		89
56)	1,2-Diclpropane	6.115	63	431985	50.91	ppb		99
57)	Dibromomethane	6.255	93	218271	53.11	ppb		92
58)	1,4-Dioxane	6.358	88	10261 62365 M (12)	~~882.46~~ 994.18	ppb		84
59)	Methyl Methacrylate	6.334	69	156365	40.11	ppb		88
60)	Bromodichloromethane	6.480	83	518645	49.39	ppb		100
61)	2-Nitropropane	6.749	41	99760	95.64	ppb		97
63)	cis-1,3-Dichloropropene	7.023	75	641024	52.25	ppb		95
64)	4-Methyl-2-pentanone	7.212	43	240949	47.95	ppb		97
66)	Toluene	7.395	91	1797004	49.08	ppb		99
67)	trans-1,3-Dichloropropene	7.633	75	491925	49.22	ppb		94
68)	Ethyl Methacrylate	7.767	69	322241	41.01	ppb		87
69)	1,1,2-Trichloroethane	7.809	97	340515	55.14	ppb		98
72)	Tetrachloroethene	7.962	164	395559	54.64	ppb		97
73)	2-Hexanone	8.090	43	164644	41.51	ppb		88
74)	1,3-Dichloropropane	7.974	76	583520	48.48	ppb		94
75)	Dibromochloromethane	8.193	129	347798	47.72	ppb		98
76)	N-Butyl Acetate	8.242	43	390931	44.80	ppb		92
77)	1,2-Dibromoethane	8.291	107	336743	55.37	ppb		98
78)	Chlorobenzene	8.773	112	1369093	54.65	ppb		95
81)	1,1,1,2-Tetrachloroethane	8.852	131	414730	48.28	ppb		96
82)	Ethylbenzene	8.888	106	586636	44.57	ppb		95
83)	(m+p)Xylene	8.998	106	1115748	69.96	ppb		94
84)	o-Xylene	9.346	106	587628	37.87	ppb		100
85)	Styrene	9.358	104	191676	7.54	ppb		92
87)	Bromoform	9.498	173	171119	41.65	ppb		96
89)	Isopropylbenzene	9.675	105	1876680	48.58	ppb		99
90)	Cyclohexanone	9.724	55	178043	198.53	ppb		93
91)	trans-1,4-Dichloro-2-B...	9.961	53	48244	25.11	ppb		88
92)	1,1,2,2-Tetrachloroethane	9.913	83	414633	53.45	ppb		96
93)	Bromobenzene	9.913	156	529685	53.39	ppb		94
94)	1,2,3-Trichloropropane	9.943	110	118940	52.86	ppb	#	89
95)	n-Propylbenzene	10.022	91	2156454	47.73	ppb		98
96)	2-Chlorotoluene	10.083	91	1391530	50.77	ppb		99
~~97)~~	~~3-Chlorotoluene~~	~~10.175~~	~~91~~	~~1475113~~	~~50.17~~	~~ppb~~		~~98~~
98)	4-Chlorotoluene	10.175	91	1472526	46.22	ppb		93
99)	1,3,5-Trimethylbenzene	10.175	105	526712	17.06	ppb		99
100)	tert-Butylbenzene	10.443	119	1414034	54.60	ppb		98

Quantitation Report (Not Reviewed)

Sample : R1407813-001DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\100914\M9597.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 9:29 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 21:44:14 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration

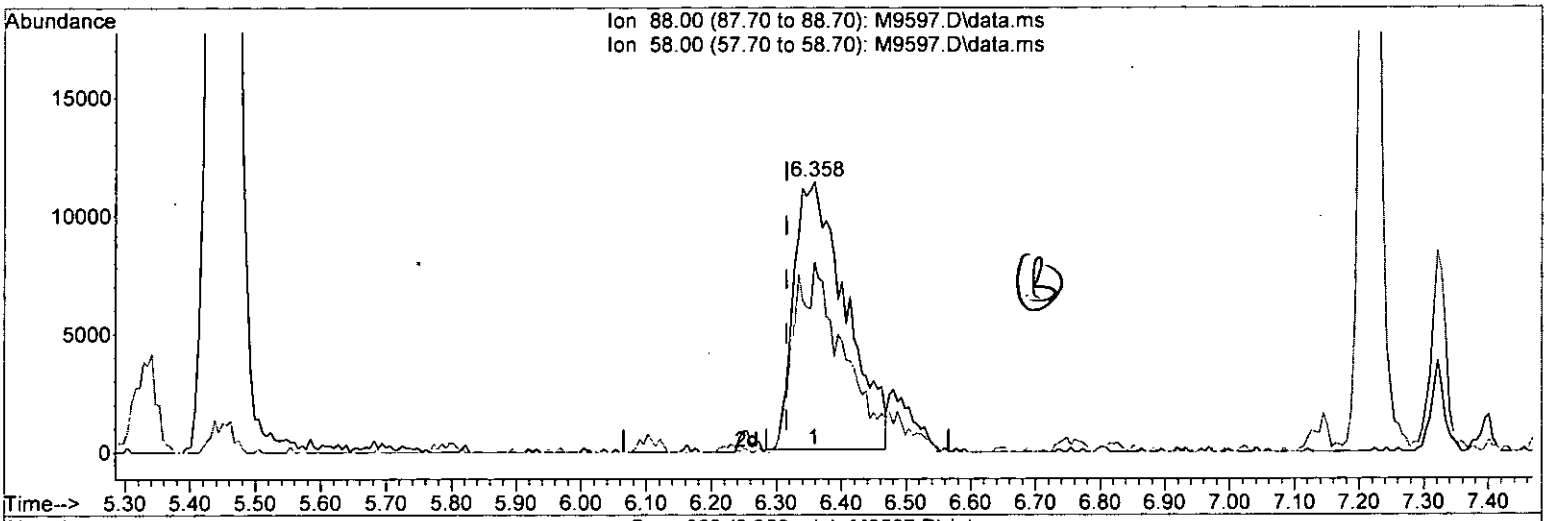
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 1,2,4-Trimethylbenzene	10.480	105	493165	15.48	ppb	96
103) sec-Butylbenzene	10.620	105	1867926	49.63	ppb	99
104) p-Isopropyltoluene	10.742	119	1321913	42.11	ppb	97
105) 1,3-Dclbenz	10.699	146	1009861	53.91	ppb	98
106) 1,4-Dclbenz	10.772	146	1044843	53.97	ppb	97
109) n-Butylbenzene	11.071	91	1346993	47.27	ppb	97
110) 1,2-Dclbenz	11.065	146	956906	53.47	ppb	99
111) 1,2-Dibromo-3-chloropr...	11.626	157	74963	54.72	ppb	92
115) 1,2,4-Tcbenzene	12.162	180	549270	52.56	ppb	99
116) Hexachlorobt	12.266	225	198209	47.95	ppb	98
117) Naphthalen	12.302	128	1214978	56.81	ppb	98
118) 1,2,3-Tclbenzene	12.443	180	466548	51.52	ppb	98

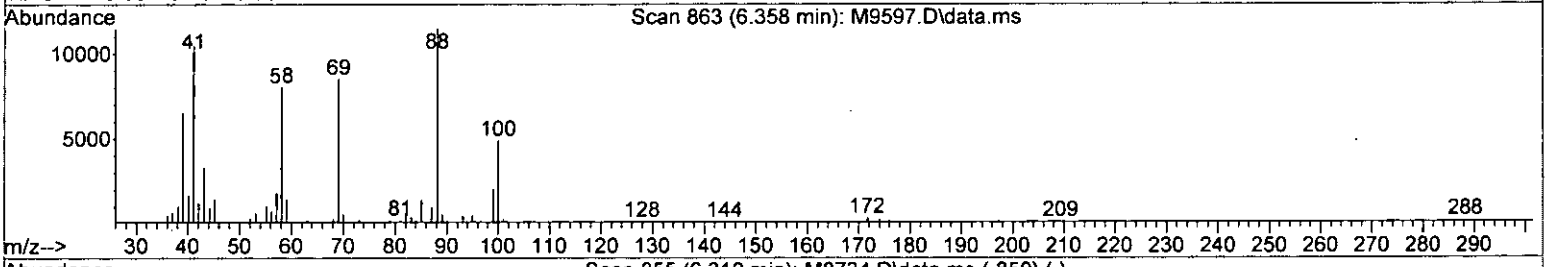
(#) = qualifier out of range (m) = manual integration (+) = signals summed

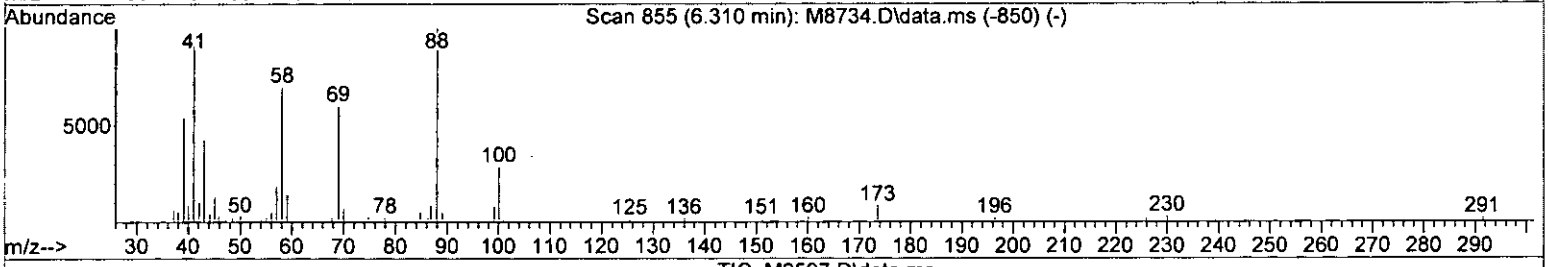
Quantitation Report (Qedit)

Sample : R1407813-001DMS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9597.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 9:29 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 21:44:14 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration







TIC: M9597.D\data.ms

(58) 1,4-Dioxane

6.358min (+0.043) 882.46 ppb

response 62365

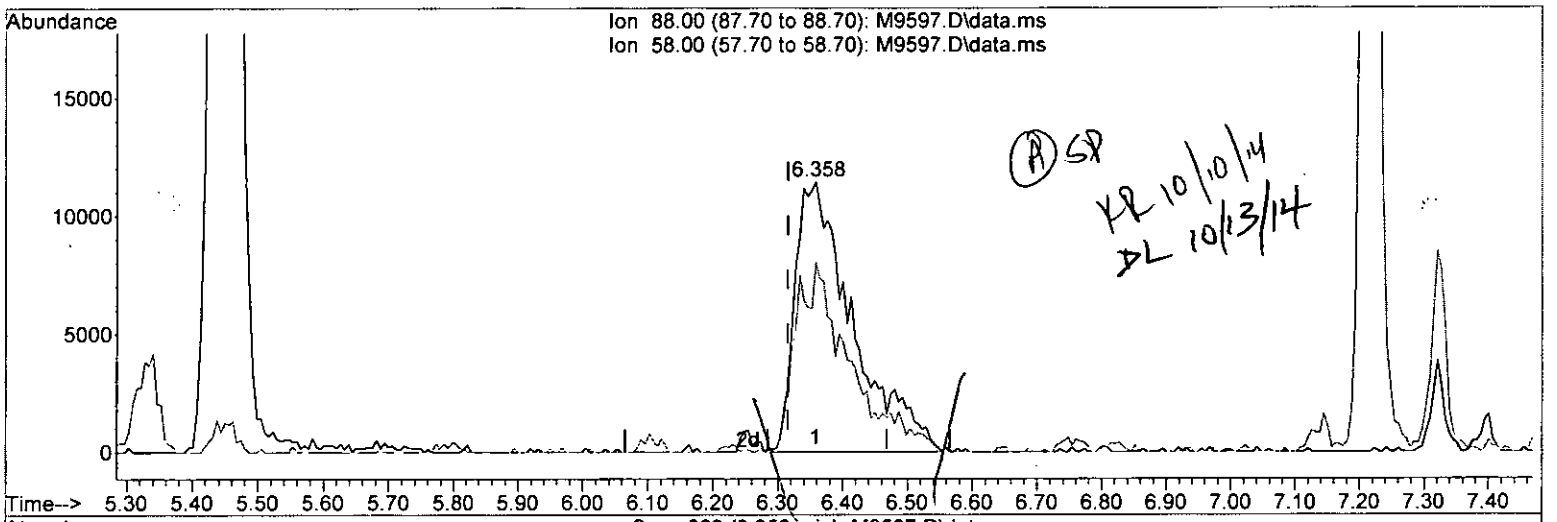
Ion	Exp%	Act%
88.00	100	100
58.00	57.90	70.03
0.00	0.00	0.00
0.00	0.00	0.00

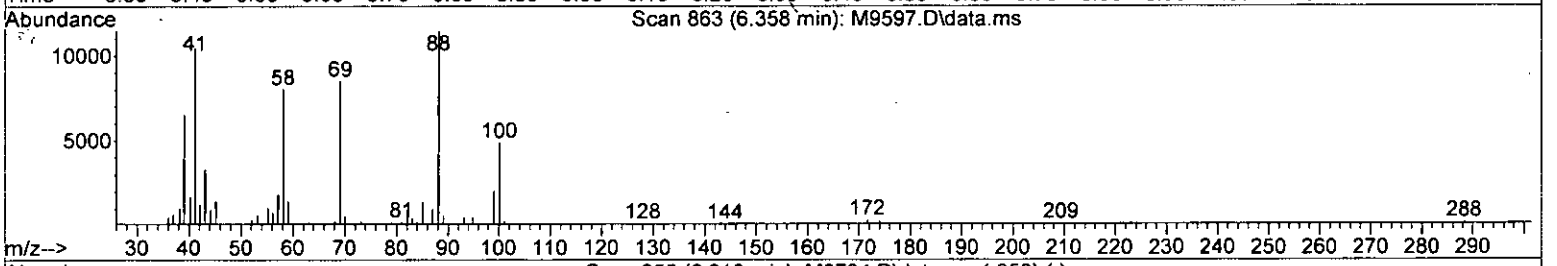
00505

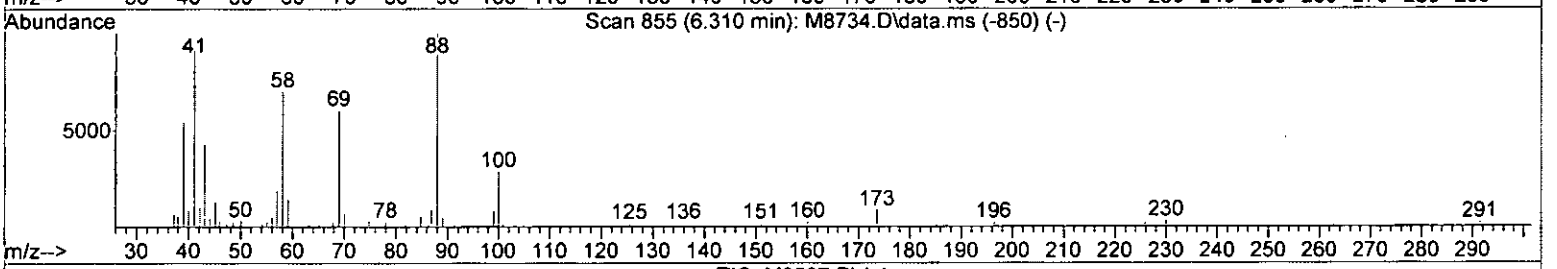
Quantitation Report (Qedit)

Sample : R1407813-001DMS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\100914\M9597.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 9:29 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 21:44:14 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration







TIC: M9597.D\data.ms

(58) 1,4-Dioxane

6.358min (+0.043) 994.18 ppb m

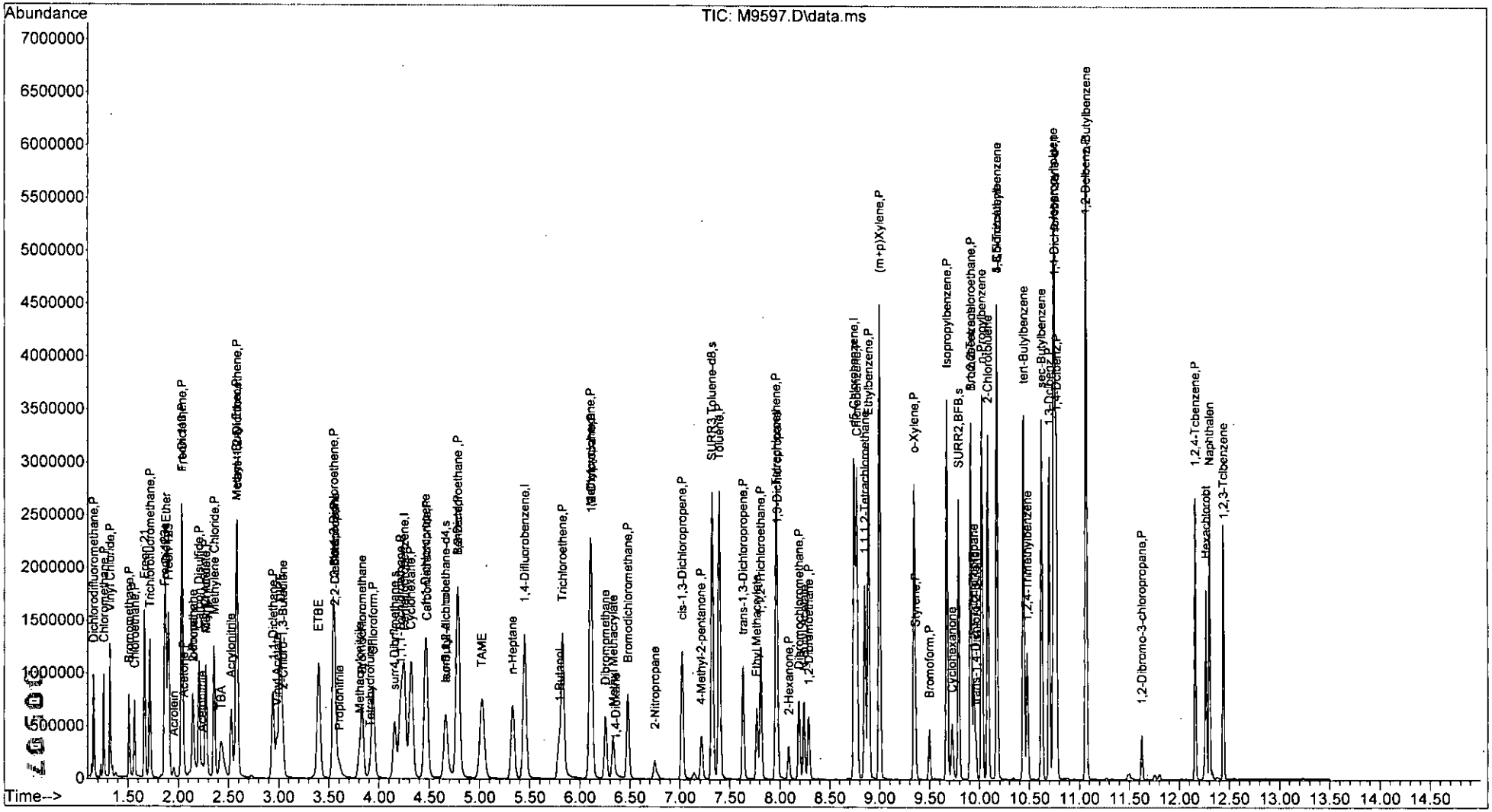
response 70261

Ion	Exp%	Act%
88.00	100	100
58.00	57.90	70.03
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Sample : R1407813-001DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\100914\M9597.D
Misc : PARSONS 11603 T4
Acq On : 9 Oct 2014 9:29 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W090914.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 09 21:44:14 2014
QLast Update : Wed Sep 10 10:41:23 2014
Response via : Initial Calibration



W090914.M Thu Oct 09 21:44:04 2014 Page: 4

Analysis: 8260 waters | Analyst: K. Ernest | Tune Method: W090914
Date: 9/9/14 | Data Path: j:\acqudata\msvoa2\090914 | Run Method: ↓
Instr. 2 | LIMS Run#: 1CAL

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								MS722		mixture - (autotune) filament (2)
2	↓								MS723		(no tune pass.)
3	↓								MS724		↓
1	BLK								MS725		filament 1 - mixture
2	BLK								MS726		~~failed #26~~ not ok
3	TUNE								MS727	YT	W090914
(1)	~~1BLK~~ TUNE								MS728	YT	(auto) 14:37
2	1BLK	5ppm	50ppm 5mlSOD FV						MS729	YB	
3	0.5 ppb	5ml	- - 50mls						MS730	Y	
4	1.0	10ml	- -						MS731	Y	
5	2.0	20ml	- 1ml						MS732	Y	
6	5.0	50ml	- 2ml						MS733	Y	
7	20	-	2ml 5ml						MS734	Y	
8	50	-	5ml -						MS735	Y	
9	100	-	10ml 7.5ml						MS736	Y	
10	200	-	20ml 10ml						MS737	Y	
11	BLK								MS738	-	
12	↓								MS739	-	
13	↓								MS740	-	
14	ICV								MS741	YQ	
15	BLK								MS742	-	

EOD
KR 9/9/14

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

500 SOD
Primary HBD : 73132
Primary ACC : 74202
Primary FH : 74200 10ml → 1.0ml MeOH
Primary HQ : 74156 = 5 ppm
Primary TG : 74199

200 Secondary FH : 74576 - 12.5ml
SOD Secondary HBD : 74576
Secondary ACC : 74203 5ml
Secondary HQ : 74577
Secondary TG : 73925
50mls = ICV

Combined IS/Surr SOD : 74649
Surrogate SOD : 74208
Internal Std :

Runlog-MSVOA2 9/20/13
Page 77

Analysis: 8260 Waters | Analyst: K. Ruest | Tune Method: W090914

Date: 10/8/14 | Data Path: j:\acqudata\msvoa2\100814 | Run Method: ↓

Instr. 2 | LIMS Run#: 415141

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								MA538		
2	↓								MA539		
3	TUNE (carbon is/sw)		RQ1412104 - 01	-07 (TCLP)					MA540	YT	(auto) 10:05
4	CCV		02	-06					MA541	YC	Bromomt trans 1,3DCP↑
5	LCS		03	-09					MA542	YB	cis/trans 1,3DCP↑
6	VBLK		—	—					MA543	(N)	not to
7	↓		04	-10					MA544	YB	MeCl2 = J 124TCB = J
8	R1407856-003	1.0		[redacted]	11763	2	1	5	MA545	Y	ump
9	002	1.0					1	7	MA546	Y	
10	↓ 001	1.0					1	5	MA547	Y	↓
11	R1407859-001	1.0			↓	↓	1	.	MA548	—	- filament 1 pop!
12	R1407865-001	1.0		[redacted]	9443	2	1		MA549		YP 10/8/14
13	002	1.0					1		MA550		
14	003	1.0					1		MA551		
15	004	1.0					1		MA552		Switch to filament #2
16	↓ 005	1.0			↓	↓	1		MA553		
17	R1407813-024	1.0		[redacted]	11603	4	1		MA554		
18	025	1.0					1		MA555		
1	BLK - filament #2	—	mixture						MA549		
2	TUNE (carbon is/sw)		RQ1412142-01	-07 (TCLP)					MA550	YT	(auto) 16:29 Run# 415255
1	CCV 1		02	-06					MA551	YC	
2	LCS 1		03	-09					MA552	YB	
3	VBLK		—	—					MA553	(N)	not c/o
4	↓ 1		↓ 04	-10					MA554	YB	124TCB = J
5	R1407856-001	1.0		[redacted]	11763	2	2	(7)	MA555	Y	(ump)
6	R1407865-001	1.0		[redacted]	9443	2	1	12	MA556	Y	
7	002	1.0					1	12	MA557	Y	
8	003	1.0					1	12	MA558	Y	
9	004	1.0					1	12	MA559	Y	
10	↓ 005	1.0			↓	↓	1	12	MA560	Y	
11	R1407813-024	1.0		[redacted]	11603	4	1	12	MA561	Y	
12	↓ 025	1.0			↓	↓	1	12	MA562	Y	

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged — cont'd next page

500 Primary HBD : 75032
Primary Fr+ : 75277 5ml → 50mls
Primary HSL : 75338 = CCV
Primary TG- : 75337
Primary

200 Secondary Fr+ : 75142 -5ml - 10.6ml
50 Secondary HBD : 74908
Secondary TG- : 75033 2ml → 50mls = LCS
Secondary HSL : 75084
Secondary

Combined IS/Surr 500 : 75171
Surrogate :
Internal Std :

4.2ml
4ml vial = MSD

Runlog-MSVOAr2 9/20/13

Analysis: 8260 Waters | Analyst: K. Rivest | Tune Method: W090914
Date: 10/6/14 - Run#2 | Data Path: j:\acqudata\msvoa12 100814 | Run Method: ↓
Instr. 12 | -cont'd from previous- | LIMS Run#: 415258

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
13	R1407613-004	1.0		Parsons	11603	4	1	12	m9903	Y	
14	005	1.0		↓	↓	↓	1	12	m9904	Y	
15	006	1.0					1	12	m9905	Y	
16	010	1.0					1	12	m9906	Y	
17	011	1.0					1	12	m9907	Y	
18	↓ 013	1.0		↓	↓	↓	1	12	m9908	Y	
19	RQ1412051-01	1.0		[redacted]	60480	2	1	(5)	m9969	Y	TCLP BLK 10/7/14
20	R1407431-001	10	5/5mls	↓	↓	↓	1	(6)	m9570	Y	TCLP
21	R1407655-002	1.0	ms RQ1412142-05	[redacted]	11753	2	2	(7)	m9571	YQ	
22	↓ 002	1.0	msD 06	↓	↓	↓	3	(7)	m9572	YQ	4:20 ✓
23	BLK							—	m9573	—	

LD
KR 10/8/14

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

Primary :
Primary :
Primary :
Primary :
Primary :

(See previous page 115)

Secondary :
Secondary :
Secondary :
Secondary :
Secondary :

Combined IS/Surr :
Surrogate :
Internal Std :

00510

Analysis: 8260D waters | Analyst: KRuest | Tune Method: W090914
Date: 10/9/14 | Data Path: j:\acqudata\msvoa12\100914 | Run Method: ↓
Instr. 12 | LIMS Run#: 415409

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								M9574		
2	TUNE (carbon 15/5ml)		RQ1412180-01						M9575	YT	(auto) 9:42
3	CCV		02						M9576	YC	
4	LCS		03						M9577	YB	
5	VBLK		—						M9578	(N)	wpt c/o
6	↓		↓ 04						M9579	YB	
7	R1407813-023	1.0		[redacted]	11603	4	1	CL	M9580	Y	
8	026	1.0					1	CL	M9581	Y	
9	001	1.0					1	CL	M9582	Y	
10	014	1.0					1	CL	M9583	Y	
11	015	1.0					1	CL	M9584	Y	
12	018	1.0					1	CL	M9585	Y	
13	019	1.0					1	CL	M9586	Y	
14	027	1.0					1	CL	M9587	Y	
9	R1407780-017	1.0		[redacted]	66613	4	1	CL	M9588	Y	
10	020	1.0					1	CL	M9589	Y	
11	021	1.0					1	CL	M9590	Y	
12	022	1.0					1	CL	M9591	Y	
13	023	1.0					1	CL	M9592	(Y)	wpt 3rd surr ↓ (Y) w/ RA (KR)
14	024	1.0					1	CL	M9593	Y	
15	025	1.0					1	CL	M9594	(Y)	wpt 3rd surr ↓ (Y) w/ RA (KR)
16	026	1.0					1	CL	M9595	Y	
17	R1407813-001	1.0	MS RQ1412180-05	Parsons	11603	4	2	CL	M9596	YB	
18	↓ 001	1.0	MSD ↓ 06	↓	↓	↓	3	CL	M9597	YB	21:29
19	HIGH GASES							—	M9598	—	
											EOD KR 10/9/14

(KR) EE

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

200 Primary HBO : 75032
Primary Fr+ : 75277 — 5ml → 50mls = ccv
Primary TG : 75337
Primary HSL : 75338
Primary
↓ 500

200 Secondary Fr+ : 75142 - 5ml
500 Secondary HBO : 74905
Secondary TG : 75033 — 2ml
Secondary HSL : 75081
Secondary
↓ 50mls = LCS

- 10.6ml
4.2ml
43ml vial = MS/D

Combined IS/Surr 500 : 75171
Surrogate :
Internal Std :

Q051

ALS Environmental

PESTICIDES
QC SUMMARY

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Phone (585) 288-5380 Fax (585) 288-8475
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00512

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Collected: 10/1/14
Date Received: 10/3/14
Date Analyzed: 10/ 8/14

Matrix Spike Summary
Organochlorine Pesticides by Gas Chromatography

Sample Name: FTMM-8-GW-697MW01-16.45
Lab Code: R1407813-001

Units: µg/L
Basis: NA

Analytical Method: 8081B
Prep Method: EPA 3510C

		FTMM-8-GW-697MW01-16.45 MS Matrix Spike RQ1412023-04				FTMM-8-GW-697MW01-16.45 DMS Duplicate Matrix Spike RQ1412023-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**		**% Rec Limits**	**RPD**	**RPD Limit**
4,4'-DDD	0.83	1.06	0.200	118	#	1.16	0.200	166	#	25 - 150	9	30
4,4'-DDE	ND	0.206	0.200	103		0.215	0.200	107		35 - 140	4	30
4,4'-DDT	0.042	0.184	0.200	71		0.185	0.200	71		45 - 140	<1	30
Aldrin	ND	0.150	0.200	75		0.160	0.200	80		25 - 140	7	30
Dieldrin	ND	0.178	0.200	89		0.191	0.200	96		60 - 130	7	30
Endosulfan I	ND	0.183	0.200	91		0.209	0.200	104		50 - 110	13	30
Endosulfan II	ND	0.180	0.200	90		0.190	0.200	95		30 - 130	6	30
Endosulfan Sulfate	ND	0.172	0.200	86		0.179	0.200	90		55 - 135	4	30
Endrin	ND	0.197	0.200	99		0.210	0.200	105		55 - 135	6	30
Endrin Aldehyde	ND	0.0339	0.200	17	*	0.0309	0.200	15	*	55 - 135	9	30
Endrin Ketone	ND	0.164	0.200	82		0.175	0.200	88		75 - 125	7	30
Heptachlor	ND	0.164	0.200	82		0.176	0.200	88		40 - 130	7	30
Heptachlor Epoxide	ND	0.217	0.200	108		0.229	0.200	114		60 - 130	5	30
Methoxychlor	ND	0.194	0.200	97		0.140	0.200	70		55 - 150	32	* 30
alpha-BHC	ND	0.167	0.200	83		0.173	0.200	86		60 - 130	4	30
alpha-Chlordane	0.24	0.425	0.200	91		0.458	0.200	108		65 - 125	8	30
beta-BHC	ND	0.167	0.200	84		0.176	0.200	88		65 - 125	5	30
delta-BHC	ND	0.163	0.200	81		0.170	0.200	85		45 - 135	4	30
gamma-BHC (Lindane)	ND	0.166	0.200	83		0.177	0.200	88		25 - 135	6	30
gamma-Chlordane	0.23	0.412	0.200	92		0.449	0.200	111		60 - 125	9	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4QGW/748810-03000
Sample Matrix: Water

Service Request: R1407813
Date Analyzed: 10/ 8/14

Lab Control Sample Summary
Organochlorine Pesticides by Gas Chromatography

Analytical Method: 8081B
Prep Method: EPA 3510C

Units: µg/L
Basis: NA

Extraction Lot: 219959

Analyte Name	Lab Control Sample RQ1412023-02 Result	Spike Amount	% Rec		Duplicate Lab Control Sample RQ1412023-03 Result	Spike Amount	% Rec		% Rec Limits	RPD	RPD Limit
4,4'-DDD	0.186	0.200	93		0.180	0.200	90		25 - 150	3	30
4,4'-DDE	0.180	0.200	90		0.174	0.200	87		35 - 140	3	30
4,4'-DDT	0.151	0.200	76		0.150	0.200	75		45 - 140	<1	30
Aldrin	0.164	0.200	82		0.137	0.200	69		25 - 140	17	30
Dieldrin	0.184	0.200	92		0.178	0.200	89		60 - 130	3	30
Endosulfan I	0.187	0.200	94		0.182	0.200	91		50 - 110	3	30
Endosulfan II	0.187	0.200	94		0.182	0.200	91		30 - 130	3	30
Endosulfan Sulfate	0.183	0.200	91		0.176	0.200	88		55 - 135	4	30
Endrin	0.205	0.200	102		0.200	0.200	100		55 - 135	2	30
Endrin Aldehyde	0.0270	0.200	14	*	0.0323	0.200	16	*	55 - 135	18	30
Endrin Ketone	0.176	0.200	88		0.172	0.200	86		75 - 125	2	30
Heptachlor	0.179	0.200	89		0.175	0.200	88		40 - 130	2	30
Heptachlor Epoxide	0.187	0.200	94		0.182	0.200	91		60 - 130	3	30
Methoxychlor	0.157	0.200	78		0.155	0.200	77		55 - 150	1	30
alpha-BHC	0.176	0.200	88		0.173	0.200	86		60 - 130	2	30
alpha-Chlordane	0.182	0.200	91		0.176	0.200	88		65 - 125	3	30
beta-BHC	0.184	0.200	92		0.181	0.200	90		65 - 125	2	30
delta-BHC	0.159	0.200	80		0.154	0.200	77		45 - 135	3	30
gamma-BHC (Lindane)	0.183	0.200	91		0.178	0.200	89		25 - 135	3	30
gamma-Chlordane	0.180	0.200	90		0.175	0.200	87		60 - 125	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Method Blank Summary

Lab Name:	**ALS Environmental**	*Contract:*	PARSONS
Lab Code:	**10145** *Case.No.:* R1407813	*SAS No.:*	*SDG No.:* FTMM-8-GW-6
Lab Sample ID	RQ1412023-01|1.	*Lab File ID:*	FR665.D
Matrix:	WATER	*Level: (low/med)*	
Date extracted:	219959 1	*Extraction: (Sepf/Cont/Sonc)*	Sepf
Date analyzed:	*(1)* 10/8/2014	*Date analyzed:*	*(2)* 10/8/2014
Time analyzed:	*(1)* 14:51	*Time analyzed:*	*(2)* 14:51
Instrument ID:	*(1)* 6890D	*Instrument ID:*	*(2)* 6890D
GC Column(1)	*(1)* STx-CLP	*GC Column(2)*	*(2)* STx-CLPI1

This Method Blank Applies to the Following Sample, MS, and MSD:

EPA Sample No.	*Lab Sample No.*	*Date Analyzed 1*	*Date Analyzed 2*
PBLK1MS	RQ1412023-02|1.0	10/8/2014	10/8/2014
PBLK1MSD	RQ1412023-03|1.0	10/8/2014	10/8/2014
FTMM-8-GW-697MW01-16.45	R1407813-001|1.0	10/8/2014	10/8/2014
FTMM-8-GW-697MW01-16.45 MS	RQ1412023-04|1.0	10/8/2014	10/8/2014
FTMM-8-GW-697MW01-16.45 MS	RQ1412023-05|1.0	10/8/2014	10/8/2014
FTMM-56-GW-80MW05-7.14	R1407813-007|1.0	10/8/2014	10/8/2014
FTMM-EB-100114-01	R1407813-010|1.0	10/8/2014	10/8/2014
FTMM-56-GW-80MW105-7.14	R1407813-012|1.0	10/8/2014	10/8/2014

ALS Environmental

PESTICIDES
SAMPLE DATA

ALS Environmental - Rochester, NY
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00516

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1105
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 17:43
Sample Name:	FTMM-8-GW-697MW01-16.45	**Units:**	µg/L
Lab Code:	R1407813-001	**Basis:**	NA

Organochlorine Pesticides by Gas Chromatography

Analytical Method:	8081B	**Analysis Lot:**	415375
Prep Method:	EPA 3510C	**Extraction Lot:**	219959
Data File Name:	I:\ACQUDATA\6890D\DATA\100814\FR670.D\	**Instrument Name:**	R-GC-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
72-54-8	4,4'-DDD	**0.83**		0.050	0.025	0.025	
72-55-9	4,4'-DDE	ND	U	0.050	0.025	0.025	
50-29-3	4,4'-DDT	**0.042**	J	0.050	0.025	0.025	
309-00-2	Aldrin	ND	U	0.050	0.025	0.025	
60-57-1	Dieldrin	ND	U	0.050	0.025	0.025	
959-98-8	Endosulfan I	ND	U	0.050	0.025	0.025	
33213-65-9	Endosulfan II	ND	U	0.050	0.025	0.025	
1031-07-8	Endosulfan Sulfate	ND	U	0.050	0.025	0.025	
72-20-8	Endrin	ND	U	0.050	0.025	0.025	
7421-93-4	Endrin Aldehyde	ND	U	0.050	0.025	0.025	
53494-70-5	Endrin Ketone	ND	U	0.050	0.035	0.035	
76-44-8	Heptachlor	ND	U	0.050	0.025	0.025	
1024-57-3	Heptachlor Epoxide	ND	U	0.050	0.025	0.025	
72-43-5	Methoxychlor	ND	U	0.50	0.025	0.025	
8001-35-2	Toxaphene	ND	U	1.0	0.50	0.27	
319-84-6	alpha-BHC	ND	U	0.050	0.025	0.025	
5103-71-9	alpha-Chlordane	**0.24**		0.050	0.025	0.025	
319-85-7	beta-BHC	ND	U	0.050	0.028	0.028	
319-86-8	delta-BHC	ND	U	0.050	0.025	0.025	
58-89-9	gamma-BHC (Lindane)	ND	U	0.050	0.025	0.025	
5566-34-7	gamma-Chlordane	**0.23**		0.050	0.045	0.045	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	37	30-135	10/8/14 17:43	
Tetrachloro-m-xylene	74	25-140	10/8/14 17:43	

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR670.D
Acq On : 08 Oct 2014 5:43 pm
Operator : m.pedro
Sample : R1407813-001|1.0 Inst : 6890D
Misc : 219959 100 8081
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 09 09:15:04 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l	
	System Monitoring Compounds							
1)	S SURR1,Tetrac	9.46	9.51	4842.8E6	728.0E6	73.517	79.003	
	Spiked Amount 100.000	Range 30 - 150		Recovery =		73.52%	79.00%	
29)	S SURR2,Decachloro	17.76	18.35	1555.8E6	296.7E6	39.937	37.216	
	Spiked Amount 100.000	Range 30 - 150		Recovery =		39.94%	37.22%	
	Target Compounds							
2)	TC HEXACHLOROBENZEN	10.16	10.35	241.9E6	26259319	3.376	2.700	
5)	tcm Heptachlor	11.75	11.86	163.5E6	17263917	2.071	1.482	#
11)	tc gamma-Chlord	13.32	13.49	1740.3E6	221.9E6	28.366	22.735	
12)	tc alpha-Chlord	13.52	13.70	1728.6E6	224.9E6	30.219	24.197	
18)	tc 4,4'-DDD	14.51	14.80	3809.8E6	590.2E6	88.054	82.862	
19)	tcm 4,4'-DDT	14.93	15.27	335.2E6	32669453	7.526	4.209	#
	Sum Toxaphene			0	0	N.D.	N.D.	
	Average Toxaphene					0.000	0.000	
	Sum Chlordane			0	0	N.D.	N.D.	
	Average Chlordane					0.000	0.000	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

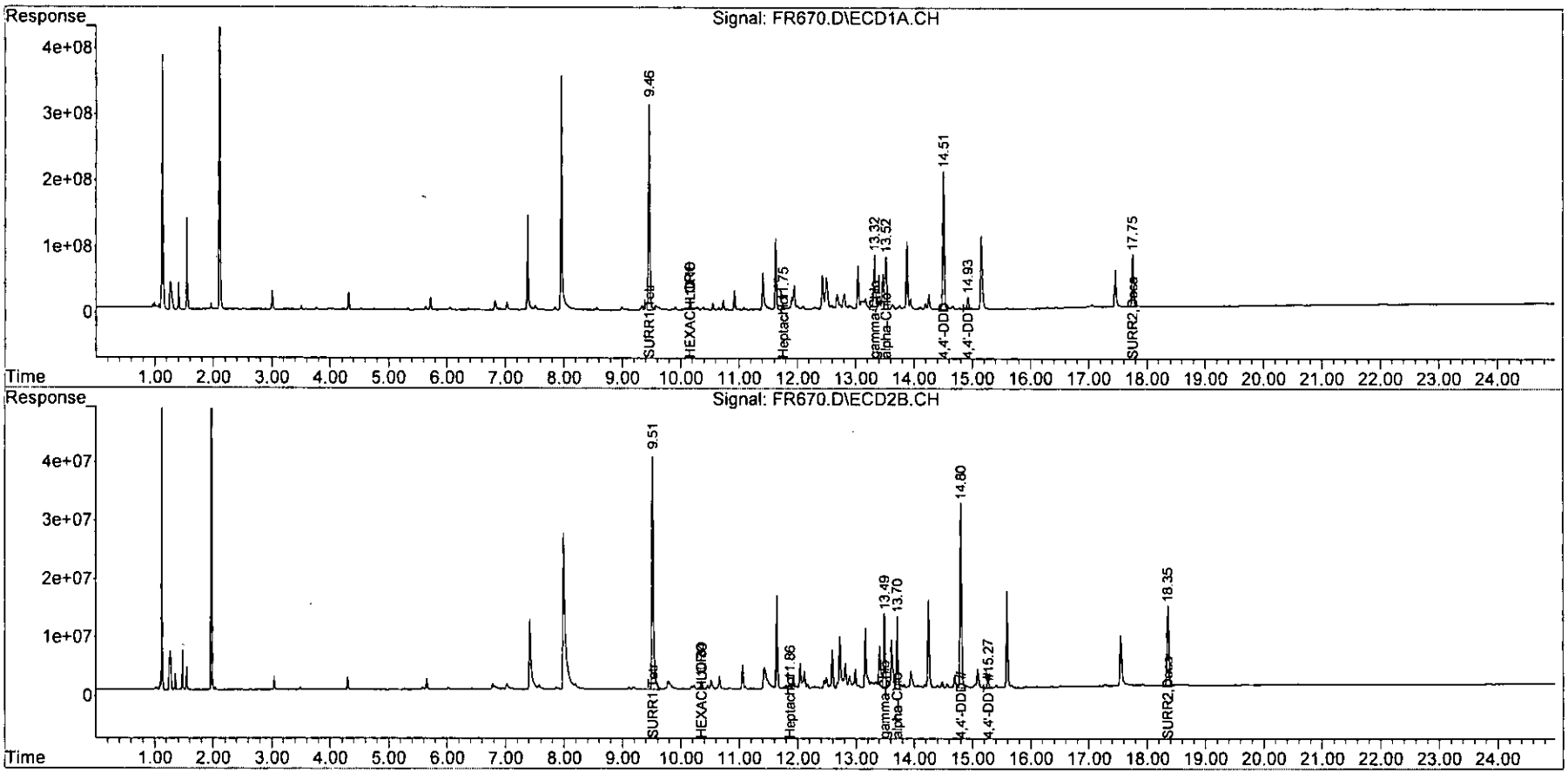
8081E072514.M Thu Oct 09 10:22:20 2014 Page 2

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR670.D
Acq On : 08 Oct 2014 5:43 pm
Operator : m.pedro
Sample : R1407813-001|1.0 Inst : 6890D
Misc : 219959 100 8081
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 09 09:15:04 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



GT5040

8081E072514.M Thu Oct 09 10:22:21 2014 Page: 2

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1620
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 19:25
Sample Name:	FTMM-56-GW-80MW05-7.14	**Units:**	µg/L
Lab Code:	R1407813-007	**Basis:**	NA

Organochlorine Pesticides by Gas Chromatography

Analytical Method:	8081B	**Analysis Lot:**	415375
Prep Method:	EPA 3510C	**Extraction Lot:**	219959
Data File Name:	I:\ACQUDATA\6890D\DATA\100814\FR673.D\	**Instrument Name:**	R-GC-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
72-54-8	4,4'-DDD	ND	U	0.050	0.025	0.025	
72-55-9	4,4'-DDE	ND	U	0.050	0.025	0.025	
50-29-3	4,4'-DDT	ND	U	0.050	0.025	0.025	
309-00-2	Aldrin	ND	U	0.050	0.025	0.025	
60-57-1	Dieldrin	ND	U	0.050	0.025	0.025	
959-98-8	Endosulfan I	ND	U	0.050	0.025	0.025	
33213-65-9	Endosulfan II	ND	U	0.050	0.025	0.025	
1031-07-8	Endosulfan Sulfate	ND	U	0.050	0.025	0.025	
72-20-8	Endrin	ND	U	0.050	0.025	0.025	
7421-93-4	Endrin Aldehyde	ND	U	0.050	0.025	0.025	
53494-70-5	Endrin Ketone	ND	U	0.050	0.035	0.035	
76-44-8	Heptachlor	ND	U	0.050	0.025	0.025	
1024-57-3	Heptachlor Epoxide	ND	U	0.050	0.025	0.025	
72-43-5	Methoxychlor	ND	U	0.50	0.025	0.025	
8001-35-2	Toxaphene	ND	U	1.0	0.50	0.27	
319-84-6	alpha-BHC	ND	U	0.050	0.025	0.025	
5103-71-9	alpha-Chlordane	ND	U	0.050	0.025	0.025	
319-85-7	beta-BHC	ND	U	0.050	0.028	0.028	
319-86-8	delta-BHC	ND	U	0.050	0.025	0.025	
58-89-9	gamma-BHC (Lindane)	ND	U	0.050	0.025	0.025	
5566-34-7	gamma-Chlordane	ND	U	0.050	0.045	0.045	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	36	30-135	10/8/14 19:25	
Tetrachloro-m-xylene	57	25-140	10/8/14 19:25	

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR673.D
Acq On : 08 Oct 2014 7:25 pm
Operator : m.pedro
Sample : R1407813-007|1.0 Inst : 6890D
Misc : 219959 100 8081
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 09 09:17:52 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	System Monitoring Compounds						
1) S	SURR1,Tetrac	9.46	9.51	3817.5E6	523.4E6	57.953	56.805
	Spiked Amount 100.000	Range 30 - 150		Recovery =		57.95%	56.80%
29) S	SURR2,Decachloro	17.76	18.35	1509.6E6	290.1E6	38.751	36.390
	Spiked Amount 100.000	Range 30 - 150		Recovery =		38.75%	36.39%
	Target Compounds						
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

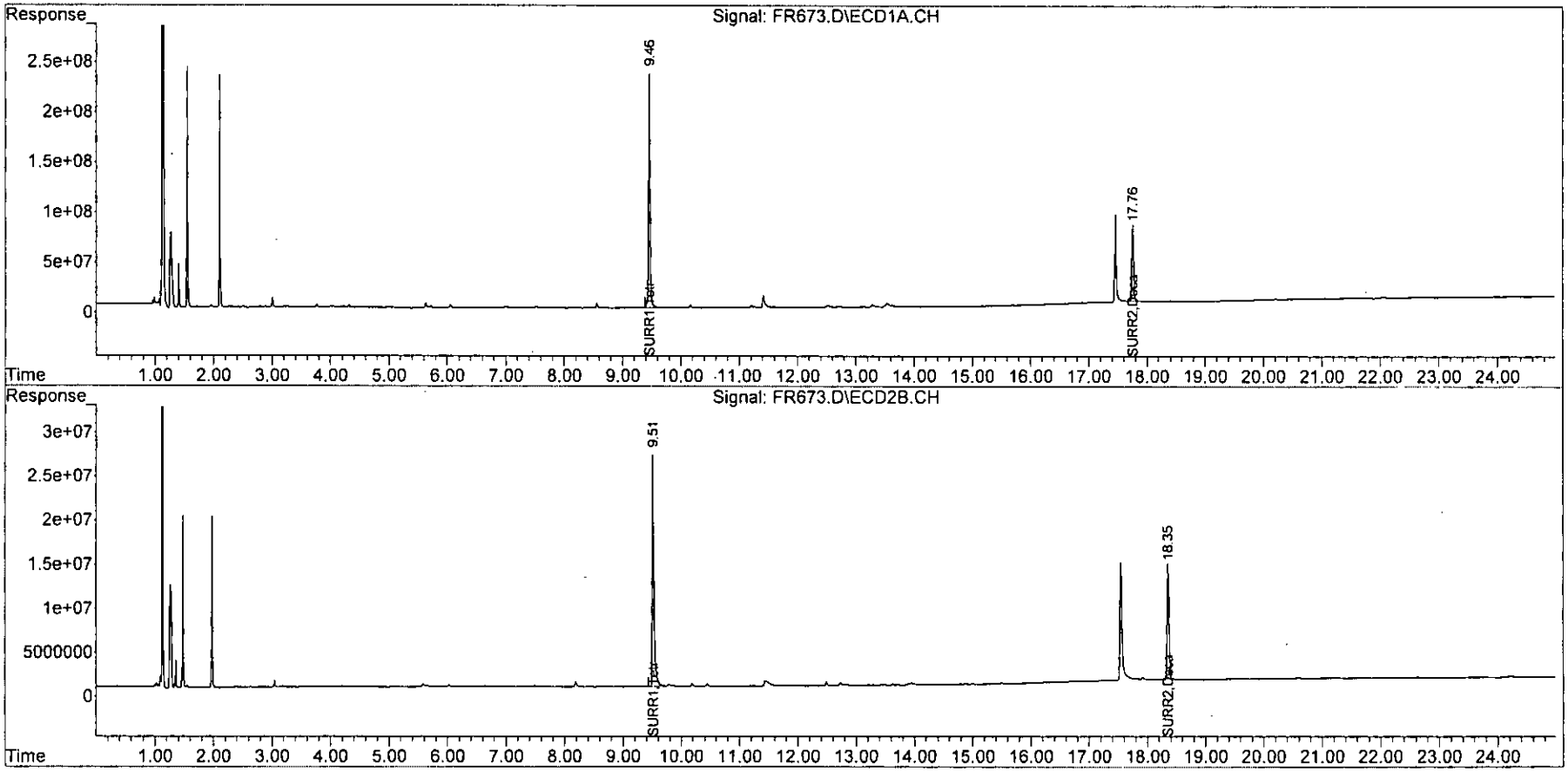
8081E072514.M Thu Oct 09 10:09:01 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR673.D
Acq On : 08 Oct 2014 7:25 pm
Operator : m.pedro
Sample : R1407813-007|1.0 Inst : 6890D
Misc : 219959 100 8081
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 09 09:17:52 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



27508

8081E072514.M Thu Oct 09 10:09:02 2014 Page: 2

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1700
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 19:59
Sample Name:	FTMM-EB-100114-01	**Units:**	µg/L
Lab Code:	R1407813-010	**Basis:**	NA

Organochlorine Pesticides by Gas Chromatography

Analytical Method:	8081B	**Analysis Lot:**	415375
Prep Method:	EPA 3510C	**Extraction Lot:**	219959
Data File Name:	I:\ACQUDATA\6890D\DATA\100814\FR674.D\	**Instrument Name:**	R-GC-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
72-54-8	4,4'-DDD	ND	U	0.050	0.025	0.025	
72-55-9	4,4'-DDE	ND	U	0.050	0.025	0.025	
50-29-3	4,4'-DDT	ND	U	0.050	0.025	0.025	
309-00-2	Aldrin	ND	U	0.050	0.025	0.025	
60-57-1	Dieldrin	ND	U	0.050	0.025	0.025	
959-98-8	Endosulfan I	ND	U	0.050	0.025	0.025	
33213-65-9	Endosulfan II	ND	U	0.050	0.025	0.025	
1031-07-8	Endosulfan Sulfate	ND	U	0.050	0.025	0.025	
72-20-8	Endrin	ND	U	0.050	0.025	0.025	
7421-93-4	Endrin Aldehyde	ND	U	0.050	0.025	0.025	
53494-70-5	Endrin Ketone	ND	U	0.050	0.035	0.035	
76-44-8	Heptachlor	ND	U	0.050	0.025	0.025	
1024-57-3	Heptachlor Epoxide	ND	U	0.050	0.025	0.025	
72-43-5	Methoxychlor	ND	U	0.50	0.025	0.025	
8001-35-2	Toxaphene	ND	U	1.0	0.50	0.27	
319-84-6	alpha-BHC	ND	U	0.050	0.025	0.025	
5103-71-9	alpha-Chlordane	ND	U	0.050	0.025	0.025	
319-85-7	beta-BHC	ND	U	0.050	0.028	0.028	
319-86-8	delta-BHC	ND	U	0.050	0.025	0.025	
58-89-9	gamma-BHC (Lindane)	ND	U	0.050	0.025	0.025	
5566-34-7	gamma-Chlordane	ND	U	0.050	0.045	0.045	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	45	30-135	10/8/14 19:59	
Tetrachloro-m-xylene	77	25-140	10/8/14 19:59	

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR674.D
Acq On : 08 Oct 2014 7:59 pm
Operator : m.pedro
Sample : R1407813-010|1.0 Inst : 6890D
Misc : 219959 106 8081
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 09 09:18:48 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l	
	System Monitoring Compounds							
1)	S SURR1,Tetrac	9.46	9.51	5054.2E6	715.8E6	76.727	77.678	
	Spiked Amount 100.000	Range 30 - 150		Recovery =		76.73%	77.68%	
29)	S SURR2,Decachloro	17.76	18.35	1870.3E6	355.4E6	48.011m	44.590	
	Spiked Amount 100.000	Range 30 - 150		Recovery =		48.01%	44.59%	
	Target Compounds							
2)	TC HEXACHLOROBENZEN	10.16	10.35	228.2E6	21243654	3.186	2.184	#
	Sum Toxaphene			0	0	N.D.	N.D.	
Average	Toxaphene					0.000	0.000	
	Sum Chlordane			0	0	N.D.	N.D.	
Average	Chlordane					0.000	0.000	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

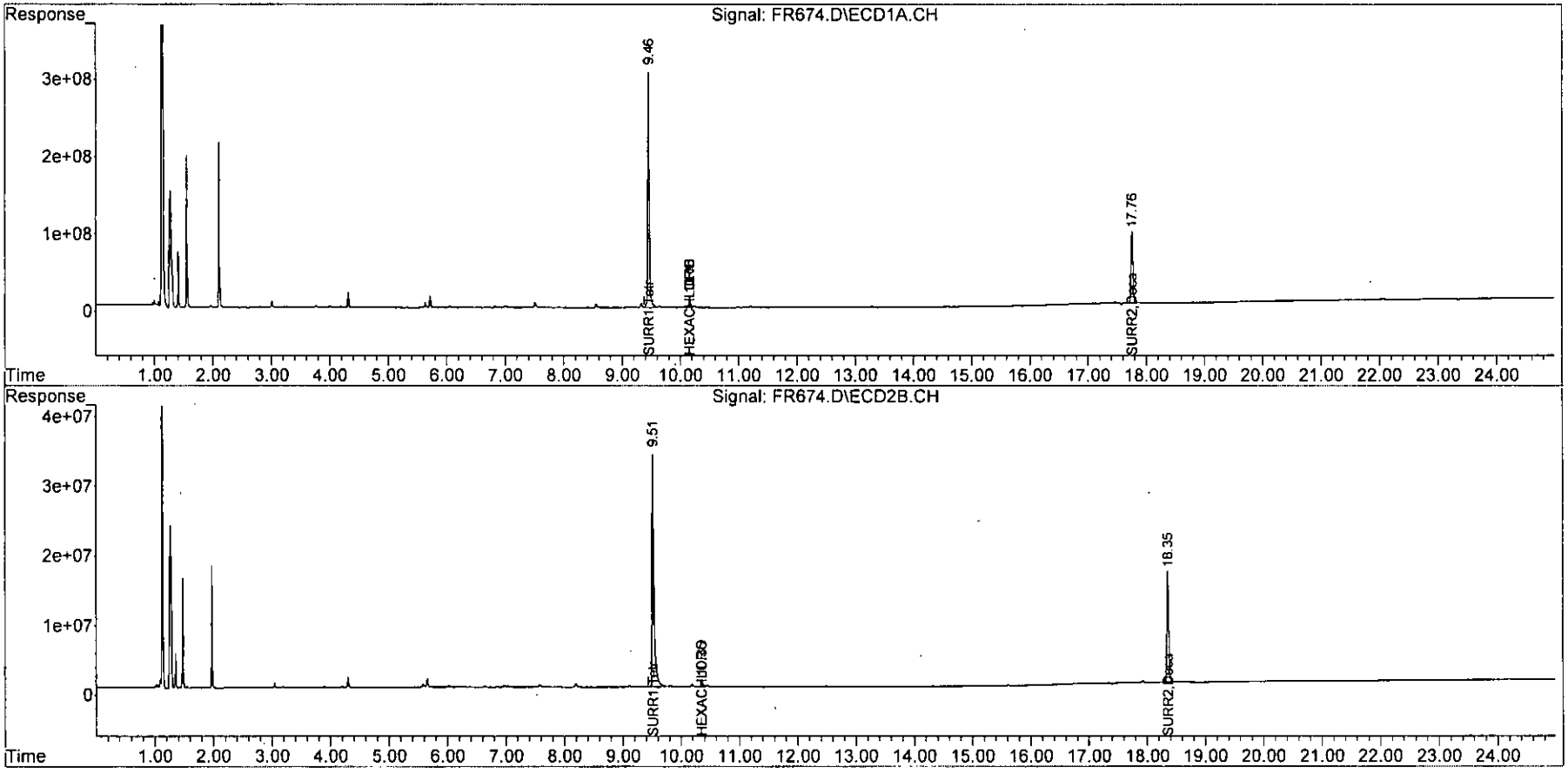
8081E072514.M Thu Oct 09 10:09:04 2014 Page 24

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR674.D
Acq On : 08 Oct 2014 7:59 pm
Operator : m.pedro
Sample : R1407813-010|1.0 Inst : 6890D
Misc : 219959 106 8081
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 09 09:18:48 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



5250

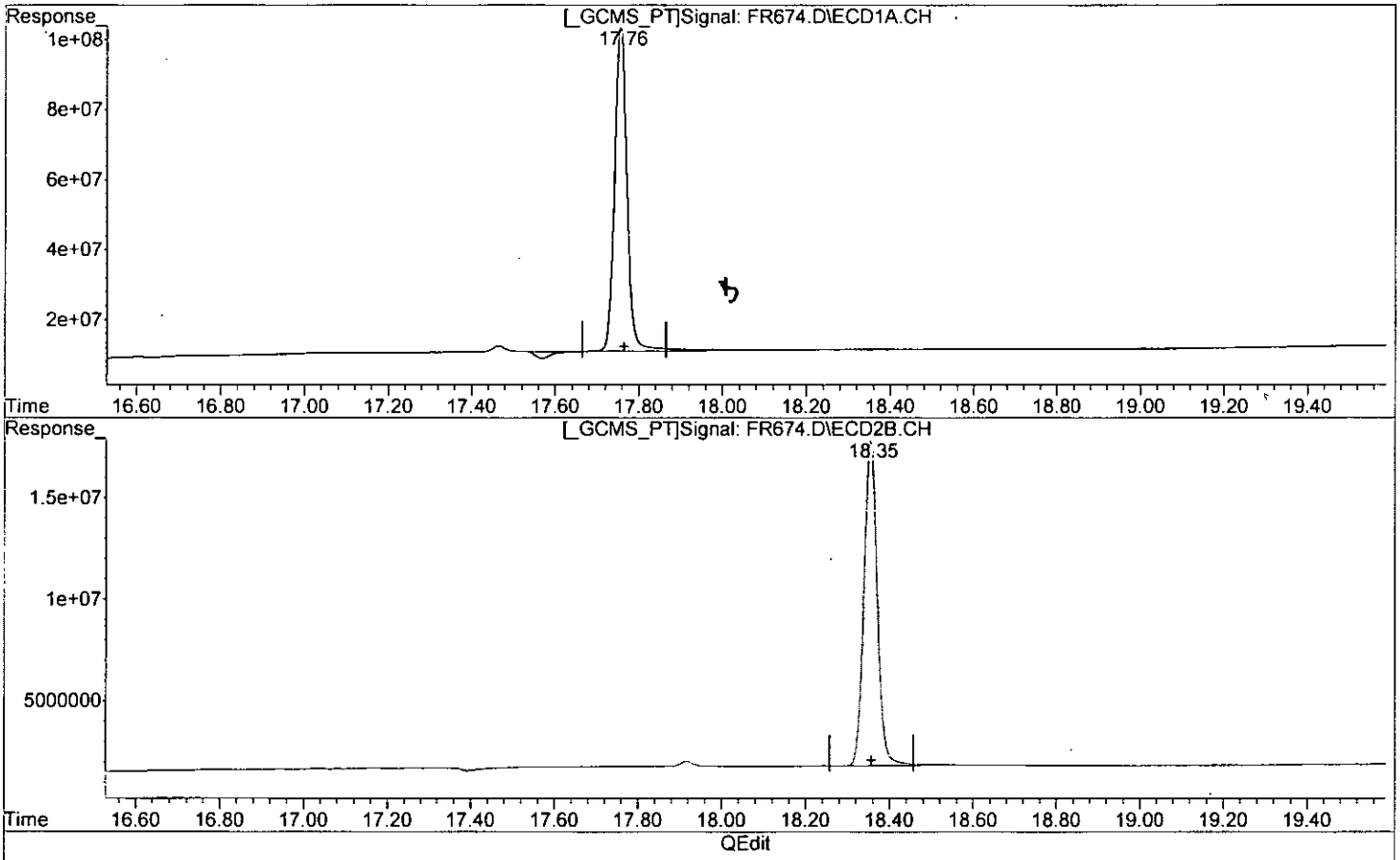
8081E072514.M Thu Oct 09 10:09:05 2014 Page: 2

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR674.D
Acq On : 08 Oct 2014 7:59 pm
Operator : m.pedro
Sample : R1407813-010|1.0 Inst : 6890D
Misc : 219959 106 8081
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 09 08:46:23 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



(29) SURR2,Decachlorobiphenyl (S)

17.76min 48.207ug/l

response 1877922931

(29) SURR2,Decachlorobiphenyl #2 (S)

18.35min 44.590ug/l

response 355438344

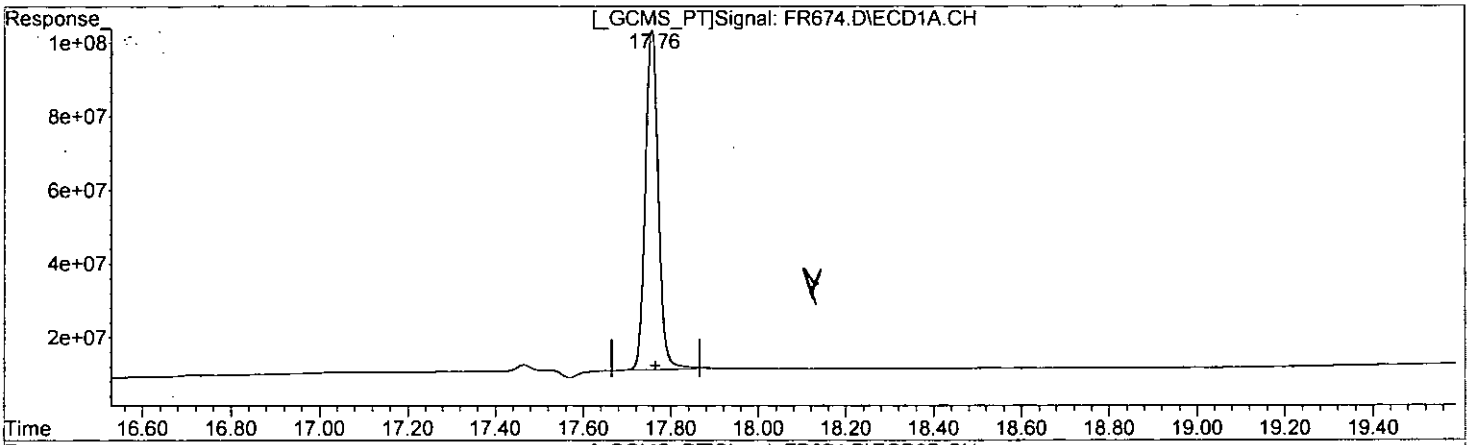
(+) = Expected Retention Time
8081E072514.M Thu Oct 09 09:18:11 2014 Page: 1

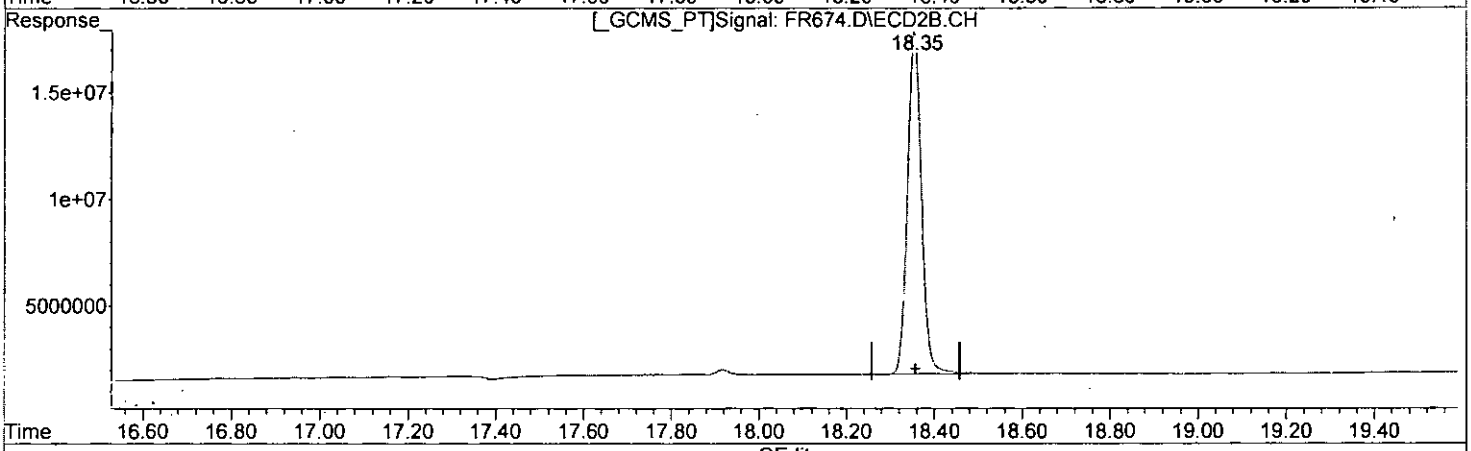
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR674.D
Acq On : 08 Oct 2014 7:59 pm
Operator : m.pedro
Sample : R1407813-010|1.0 Inst : 6890D
Misc : 219959 106 8081
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 09 08:46:23 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(29) SURR2,Decachlorobiphenyl (S)

17.76min 48.011ug/l m

response 1870286355

(29) SURR2,Decachlorobiphenyl #2 (S)

18.35min 44.590ug/l

response 355438344

(+) = Expected Retention Time
8081E072514.M Thu Oct 09 09:18:18 2014 Page 1

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1400
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 21:08
Sample Name:	FTMM-56-GW-80MW105-7.14	**Units:**	µg/L
Lab Code:	R1407813-012	**Basis:**	NA

Organochlorine Pesticides by Gas Chromatography

Analytical Method:	8081B	**Analysis Lot:**	415375
Prep Method:	EPA 3510C	**Extraction Lot:**	219959
Data File Name:	I:\ACQUDATA\6890D\DATA\100814\FR676.D\	**Instrument Name:**	R-GC-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
72-54-8	4,4'-DDD	ND	U	0.050	0.025	0.025	
72-55-9	4,4'-DDE	ND	U	0.050	0.025	0.025	
50-29-3	4,4'-DDT	ND	U	0.050	0.025	0.025	
309-00-2	Aldrin	ND	U	0.050	0.025	0.025	
60-57-1	Dieldrin	ND	U	0.050	0.025	0.025	
959-98-8	Endosulfan I	ND	U	0.050	0.025	0.025	
33213-65-9	Endosulfan II	ND	U	0.050	0.025	0.025	
1031-07-8	Endosulfan Sulfate	ND	U	0.050	0.025	0.025	
72-20-8	Endrin	ND	U	0.050	0.025	0.025	
7421-93-4	Endrin Aldehyde	ND	U	0.050	0.025	0.025	
53494-70-5	Endrin Ketone	ND	U	0.050	0.035	0.035	
76-44-8	Heptachlor	ND	U	0.050	0.025	0.025	
1024-57-3	Heptachlor Epoxide	ND	U	0.050	0.025	0.025	
72-43-5	Methoxychlor	ND	U	0.50	0.025	0.025	
8001-35-2	Toxaphene	ND	U	1.0	0.50	0.27	
319-84-6	alpha-BHC	ND	U	0.050	0.025	0.025	
5103-71-9	alpha-Chlordane	ND	U	0.050	0.025	0.025	
319-85-7	beta-BHC	ND	U	0.050	0.028	0.028	
319-86-8	delta-BHC	ND	U	0.050	0.025	0.025	
58-89-9	gamma-BHC (Lindane)	ND	U	0.050	0.025	0.025	
5566-34-7	gamma-Chlordane	ND	U	0.050	0.045	0.045	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	41	30-135	10/8/14 21:08	
Tetrachloro-m-xylene	60	25-140	10/8/14 21:08	

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR676.D
Acq On : 08 Oct 2014 9:08 pm
Operator : m.pedro
Sample : R1407813-012|1.0 Inst : 6890D
Misc : 219959 100 8081
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 09 09:20:17 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l	
	System Monitoring Compounds							
1)	S SURR1,Tetrac	9.46	9.51	3996.4E6	553.9E6	60.668	60.118	
	Spiked Amount 100.000	Range 30 - 150		Recovery =		60.67%	60.12%	
29)	S SURR2,Decachloro	17.75	18.35	1739.7E6	326.1E6	44.660	40.905	
	Spiked Amount 100.000	Range 30 - 150		Recovery =		44.66%	40.91%	
	Target Compounds							
2)	TC HEXACHLOROBENZEN	10.16	10.35	124.8E6	9198762	1.742	0.946	#
3)	tc alpha-BHC	10.46	10.61	138.8E6	11556212	1.445	0.882	#
4)	tcm gamma-BHC (L	10.99	11.19	64190723	6768928	0.763m	0.574	
	Sum Toxaphene			0	0	N.D.	N.D.	
	Average Toxaphene					0.000	0.000	
	Sum Chlordane			0	0	N.D.	N.D.	
	Average Chlordane					0.000	0.000	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

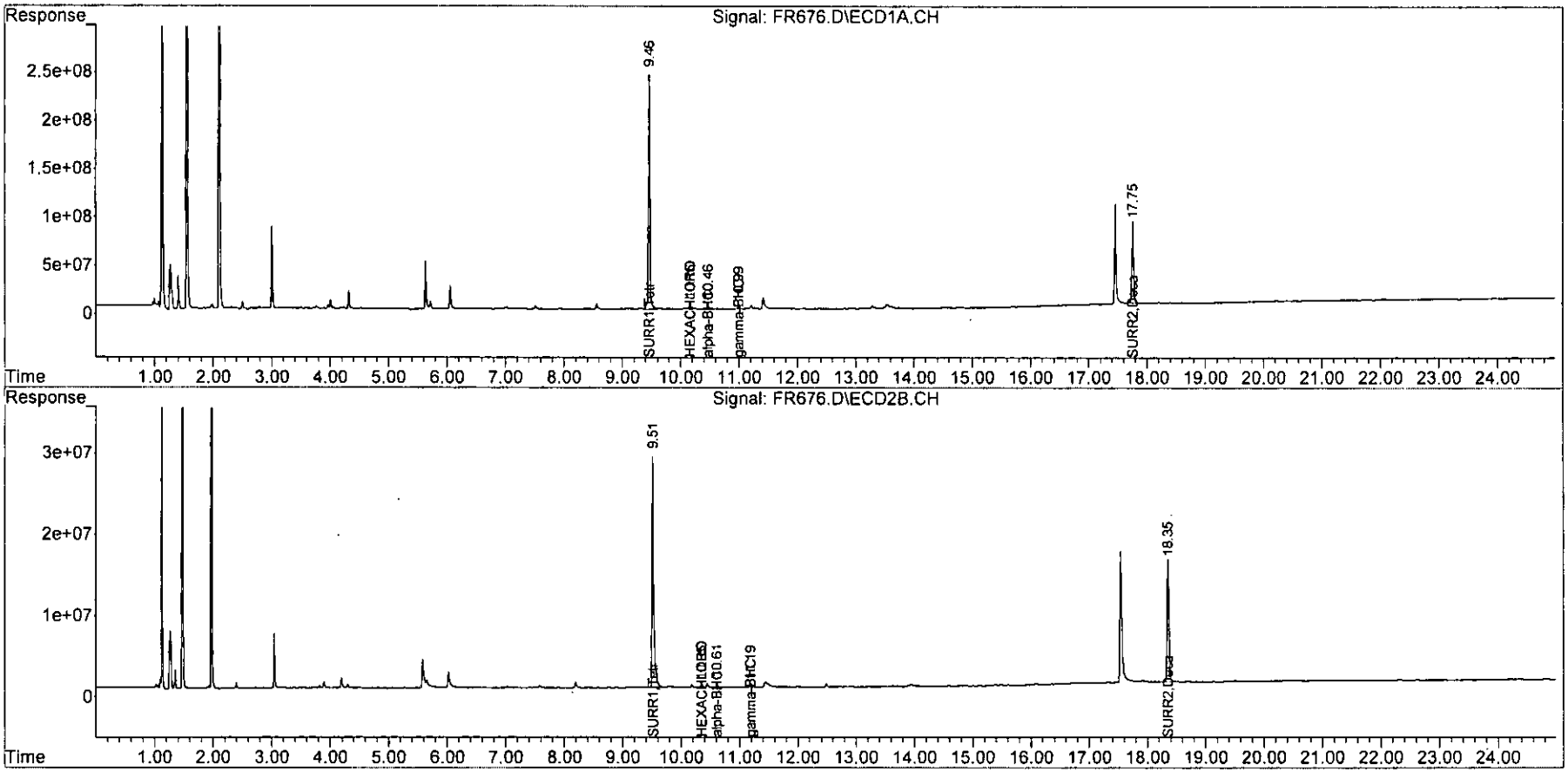
8081E072514.M Thu Oct 09 10:09:11 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR676.D
Acq On : 08 Oct 2014 9:08 pm
Operator : m.pedro
Sample : R1407813-012|1.0 Inst : 6890D
Misc : 219959 100 8081
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 09 09:20:17 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



0509

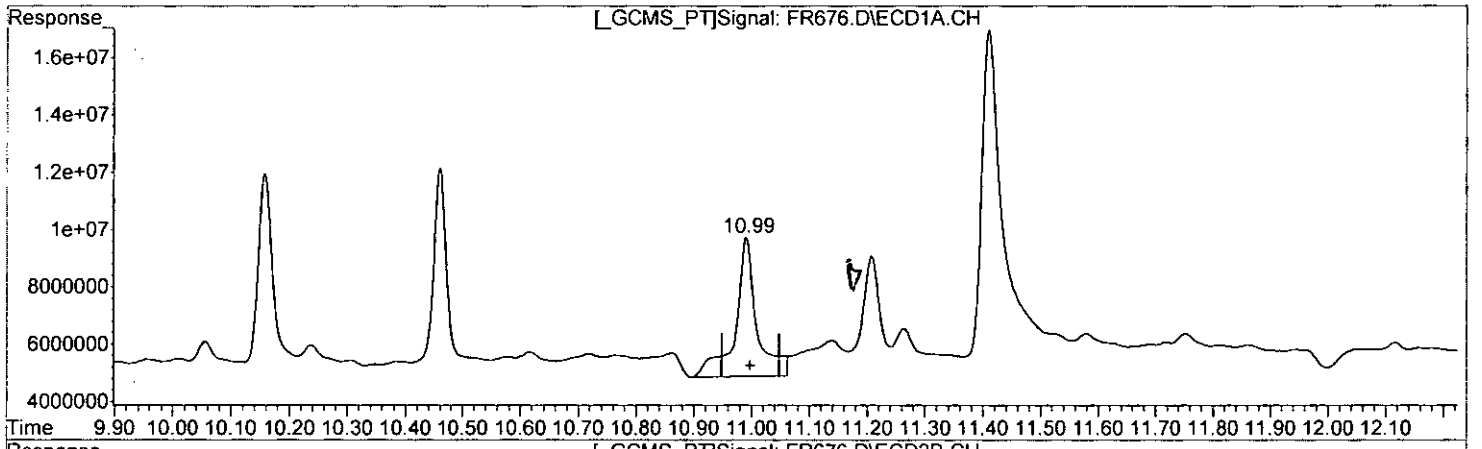
8081E072514.M Thu Oct 09 10:09:11 2014 Page: 2

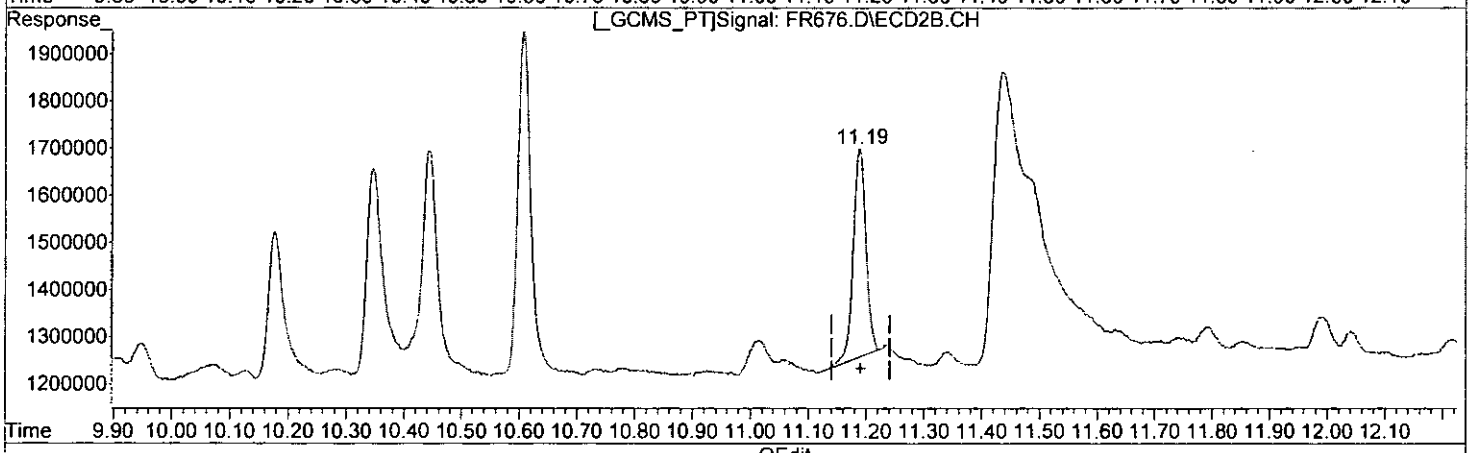
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR676.D
Acq On : 08 Oct 2014 9:08 pm
Operator : m.pedro
Sample : R1407813-012|1.0 Inst : 6890D
Misc : 219959 100 8081
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 09 08:46:27 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(4) gamma-BHC (L (tcm)

10.99min 1.494ug/l

response 125735363

(4) gamma-BHC (L #2 (tcm)

11.19min 0.574ug/l

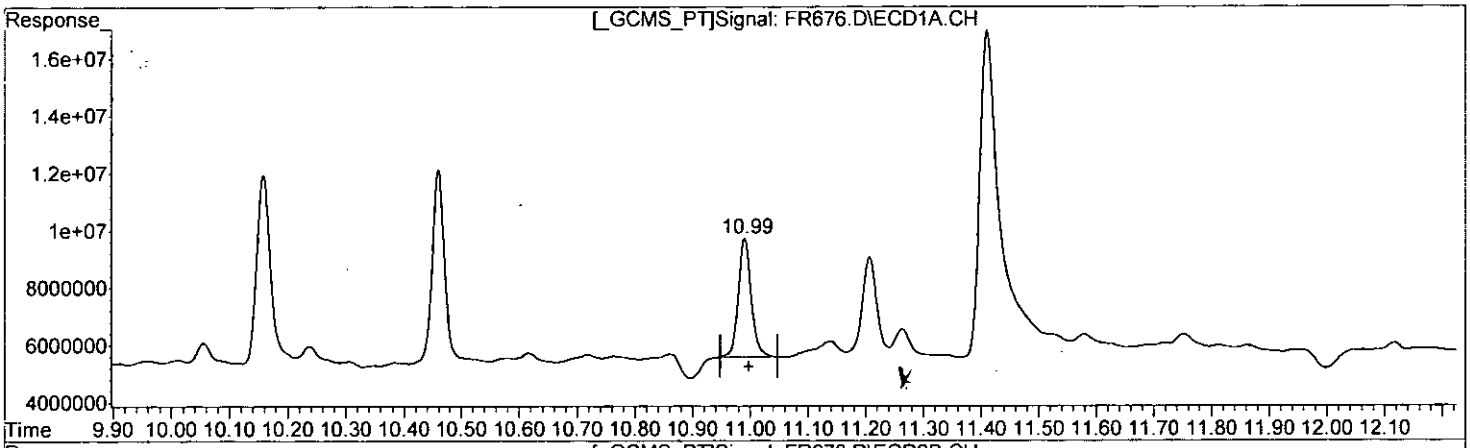
response 6768928

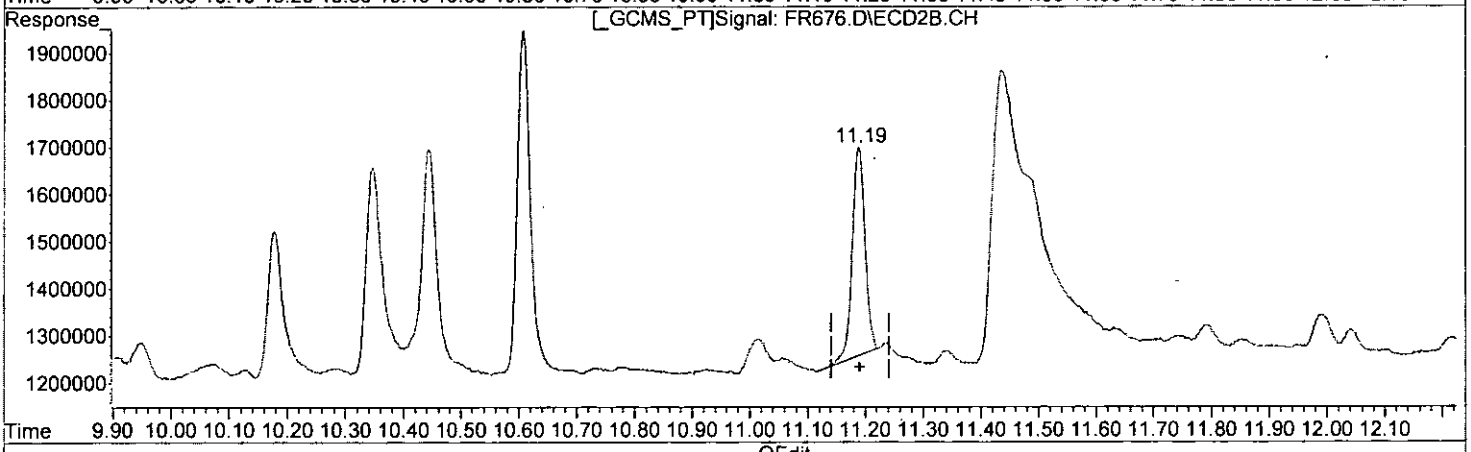
(+) = Expected Retention Time
8081E072514.M Thu Oct 09 09:19:47 2014

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR676.D
Acq On : 08 Oct 2014 9:08 pm
Operator : m.pedro
Sample : R1407813-012|1.0 Inst : 6890D
Misc : 219959 100 8081
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 09 08:46:27 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(4) gamma-BHC (L (tcm)

10.99min 0.763ug/l m

response 64190723

(4) gamma-BHC (L #2 (tcm)

11.19min 0.574ug/l

response 6768928

(+) = Expected Retention Time
8081E072514.M Thu Oct 09 09:19:53 2014

ALS Environmental

PESTICIDES
STANDARDS DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

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00533

6F

Pesticide Initial Calibration of Multicomponent Analytes

Lab Name: **ALS Environmental** *Client:* PARSONS

Lab Code: 10145 *Case.No.:* R1407813 *SAS No.:* _____ *SDG No.:* FTMM-8-GW-697

Instrument ID: 6890D *Date Anlyzed:* 7/25/2014

GC Column(1) STx-CLP *(ID):* 0.32mm 30 | *GC Column(2)* STx-CLPII *(ID):* 0.32mm 30

		RT Window			*RT Window*	
Compound	*RT*	*From*	*To*	*RT*	*From*	*To*
SURR1,Tetrac	9.48	9.43	9.53	9.53	9.48	9.58
HEXACHLOROBEN	10.18	10.11	10.25	10.36	10.29	10.43
alpha-BHC	10.48	10.43	10.53	10.63	10.58	10.68
gamma-BHC (L	11.02	10.97	11.07	11.21	11.16	11.26
Heptachlor	11.78	11.73	11.83	11.89	11.84	11.94
Aldrin	12.24	12.19	12.29	12.37	12.32	12.42
beta-BHC	11.17	11.12	11.22	11.36	11.31	11.41
delta-BHC	11.45	11.40	11.50	11.81	11.76	11.86
Heptachlor E	13.16	13.09	13.23	13.23	13.16	13.30
alpha-Endosu	13.75	13.68	13.82	13.81	13.74	13.88
gamma-Chlord	13.35	13.28	13.42	13.51	13.44	13.58
alpha-Chlord	13.55	13.48	13.62	13.73	13.66	13.80
4,4'-DDE	13.65	13.58	13.72	13.97	13.90	14.04
Dieldrin	14.11	14.04	14.18	14.22	14.15	14.29
Endrin	14.47	14.40	14.54	14.68	14.61	14.75
KEPONE	14.54	14.47	14.61	14.86	14.79	14.93
beta-Endosul	14.81	14.74	14.88	15.00	14.93	15.07
4,4'-DDD	14.53	14.46	14.60	14.82	14.75	14.89
4,4'-DDT	14.96	14.89	15.03	15.29	15.22	15.36
Endrin Aldeh	15.44	15.37	15.51	15.51	15.44	15.58
Endosulfan S	16.06	15.99	16.13	15.90	15.83	15.97
Methoxychlor	15.64	15.57	15.71	16.23	16.16	16.30
FAMPHUR	16.32	16.25	16.39	15.98	15.91	16.05
Endrin Keton	16.45	16.38	16.52	16.63	16.56	16.70
Mirex	15.93	15.86	16.00	16.59	16.52	16.66
2,4'-DDE	12.93	12.86	13.00	12.97	12.90	13.04
2,4'-DDD	13.68	13.61	13.75	13.64	13.57	13.71
2,4'-DDT	14.01	13.94	14.08	14.08	14.01	14.15

Form VI Pest-3

00534

6F

Pesticide Initial Calibration of Multicomponent Analytes

Lab Name: **ALS Environmental** *Client:* PARSONS

Lab Code: **10145** *Case.No.:* R1407813 *SAS No.:* _____ *SDG No.:* FTMM-8-GW-697

Instrument ID: 6890D *Date Anlyzed:* 7/25/2014

GC Column(1) STx-CLP *(ID):* 0.32mm 30				*GC Column(2)* STx-CLPII *(ID):* 0.32mm 30			
		RT Window			*RT Window*		
Compound	*RT*	*From*	*To*	*RT*	*From*	*To*	
SURR2,Decachlorobip	17.79	17.69	17.89	18.38	18.28	18.48	
Toxaphene	14.59	14.52	14.66	15.12	15.05	15.19	
Toxaphene	14.98	14.91	15.05	15.51	15.44	15.58	
Toxaphene	15.58	15.51	15.65	15.88	15.81	15.95	
Toxaphene	16.42	16.35	16.49	16.75	16.68	16.82	
Toxaphene	16.61	16.54	16.68	16.99	16.92	17.06	
Chlordane	11.65	11.58	11.72	11.66	11.59	11.73	
Chlordane	11.78	11.71	11.85	11.89	11.82	11.96	
Chlordane	12.45	12.38	12.52	12.61	12.54	12.68	
Chlordane	14.50	14.43	14.57	14.80	14.73	14.87	
Chlordane	14.70	14.63	14.77	15.08	15.01	15.15	

Form VI Pest-3

Response Factor Report 6890D

Method Path : I:\ACQUDATA\6890D\METHODS\
Method File : 8081E072514.M
Title : 608/8081B PESTICIDES
Last Update : Mon Jul 28 08:38:23 2014
Response Via : Initial Calibration

Calibration Files
1 =FR499.D 2 =FR500.D 3 =FR501.D
4 =FR502.D 5 =FR503.D 6 =FR497.D

	Compound	1	2	3	4	5	6	Avg		%RSD
1) S	SURR1,Tetrac	6.491	6.922	6.778	6.605	6.446	6.281	6.587	E7	3.54
2) TC	HEXACHLOROBENZEN	7.614	7.539	7.270	7.003	6.839	6.715	7.163	E7	5.18
3) tc	alpha-BHC	0.869	0.927	0.960	1.015	1.006	0.985	0.960	E8	5.76
4) tcm	gamma-BHC (L	7.747	8.305	8.449	8.802	8.686	8.509	8.416	E7	4.42
5) tcm	Heptachlor	8.005	8.083	8.086	8.093	7.767	7.340	7.896	E7	3.79
6) tcm	Aldrin	6.836	6.865	7.033	7.320	7.173	6.924	7.025	E7	2.71
7) tc	beta-BHC	3.785	3.636	3.687	3.580	3.520	3.477	3.614	E7	3.12
8) TC	delta-BHC	7.454	7.966	8.226	8.660	8.574	8.405	8.214	E7	5.46
9) tc	Heptachlor E	6.101	6.037	6.028	6.105	5.958	5.768	5.999	E7	2.10
10) tc	alpha-Endosu	5.289	5.293	5.284	5.355	5.257	5.151	5.271	E7	1.27
11) tc	gamma-Chlord	6.149	6.023	6.003	6.248	6.217	6.169	6.135	E7	1.64
12) tc	alpha-Chlord	5.689	5.628	5.640	5.824	5.794	5.747	5.720	E7	1.42
13) tc	4,4'-DDE	5.306	5.330	5.407	5.731	5.722	5.669	5.527	E7	3.64
14) tcm	Dieldrin	5.276	5.359	5.413	5.744	5.718	5.655	5.528	E7	3.66
15) tcm	Endrin	4.124	3.875	3.860	4.240	4.277	4.252	4.105	E7	4.66
16) tc	KEPONE	2.454	2.367	2.324	2.235	2.184		2.313	E7	4.62
17) tc	beta-Endosul	4.295	4.353	4.410	4.598	4.582	4.598	4.473	E7	3.05
18) tc	4,4'-DDD	4.254	4.128	4.207	4.426	4.454	4.491	4.327	E7	3.46
19) tcm	4,4'-DDT	4.005	4.103	4.315	4.717	4.751	4.835	4.455	E7	8.07
20) tc	Endrin Aldeh	3.182	3.316	3.421	3.631	3.679	3.748	3.496	E7	6.42
21) tc	Endosulfan S	3.567	3.626	3.640	3.755	3.780	3.851	3.703	E7	2.94
22) tc	Methoxychlor	2.111	2.123	2.140	2.187	2.178	2.201	2.157	E7	1.71
23) tc	FAMPHUR	3.141	3.261	3.262	3.214	3.160		3.208	E7	1.75
24) tc	Endrin Keton	5.046	4.716	4.760	4.686	4.679	4.728	4.769	E7	2.91
25) tc	Mirex	3.189	3.235	3.169	3.047	3.003	3.016	3.110	E7	3.21
26) tc	2,4'-DDE							0.000		-1.00
27) tc	2,4'-DDD	4.560						4.560	E7	0.00
28) tc	2,4'-DDT							0.000		-1.00
29) S	SURR2,Decachloro	4.116	4.038	3.953	3.833	3.731	3.703	3.896	E7	4.30
30) L8C	Toxaphene	6.415	5.111	4.578	4.526	4.738	4.730	5.016	E5	14.25
31) L8C	Toxaphene{2}	5.452	5.443	6.003	6.665	7.175	7.310	6.341	E5	13.10
32) L8C	Toxaphene{3}	1.331	1.426	1.433	1.492	1.821	1.600	1.517	E6	11.40
33) L8C	Toxaphene{4}	1.635	1.626	1.581	1.639	1.745	1.707	1.656	E6	3.61
34) L8C	Toxaphene{5}	1.465	1.343	1.387	1.417	1.492	1.513	1.436	E6	4.55
35) L9C	Chlordane	3.018	2.833	2.784	2.762	2.574		2.794	E6	5.69
36) L9C	Chlordane{2}	4.019	3.893	3.890	3.961	3.704		3.893	E6	3.05
37) L9C	Chlordane{3}	3.151	3.105	2.813	2.875	2.639		2.917	E6	7.28
38) L9C	Chlordane{4}	1.320	1.360	1.594	1.545	1.447		1.453	E6	8.06
39) L9C	Chlordane{5}	2.002	2.086	2.023	2.049	1.930		2.018	E6	2.89

Signal #2 Calibration Files
1 =FR499.D 2 =FR500.D 3 =FR501.D
4 =FR502.D 5 =FR503.D 6 =FR497.D

	Compound	1	2	3	4	5	6	Avg		%RSD
1) S	SURR1,Tetrac	8.837	8.717	8.921	9.507	9.621	9.683	9.214	E6	4.72
2) TC	HEXACHLOROBENZEN	1.016	0.974	0.963	0.960	0.959	0.964	0.973	E7	2.27
3) tc	alpha-BHC	1.042	1.123	1.221	1.455	1.499	1.524	1.311	E7	15.89
4) tcm	gamma-BHC (L	0.989	1.039	1.107	1.284	1.319	1.340	1.180	E7	13.01
5) tcm	Heptachlor	1.065	1.086	1.125	1.237	1.243	1.235	1.165	E7	7.09
6) tcm	Aldrin	0.880	0.915	0.967	1.115	1.145	1.157	1.030	E7	12.01
7) tc	beta-BHC	5.174	5.160	5.156	5.331	5.391	5.513	5.288	E6	2.80
8) tc	delta-BHC	0.923	0.983	1.061	1.263	1.310	1.335	1.146	E7	15.59
9) tc	Heptachlor E	0.897	0.900	0.915	0.988	1.002	1.006	0.951	E7	5.51

8081E072514.M Mon Jul 28 09:23:45 2014 Page: 1

Response Factor Report 6890D

Method Path : L:\ACQUDATA\6890D\METHODS\
Method File : 8081E072514.M
Title : 608/8081B PESTICIDES
Last Update : Mon Jul 28 08:38:23 2014
Response Via : Initial Calibration

Calibration Files
1 =FR499.D 2 =FR500.D 3 =FR501.D
4 =FR502.D 5 =FR503.D 6 =FR497.D

	Compound	1	2	3	4	5	6	Avg		%RSD
10) tc	alpha-Endosu	7.988	8.053	8.144	8.795	8.950	9.082	8.502	E6	5.80
11) tc	gamma-Chlord	0.887	0.892	0.917	1.023	1.056	1.080	0.976	E7	8.91
12) tc	alpha-Chlord	0.867	0.868	0.884	0.961	0.986	1.011	0.930	E7	6.91
13) tc	4,4'-DDE	7.545	7.734	8.054	9.274	9.676	9.955	8.706	E6	12.09
14) tcm	Dieldrin	0.805	0.815	0.846	0.963	0.998	1.022	0.908	E7	10.71
15) tcm	Endrin	6.532	6.024	6.022	7.008	7.344	7.572	6.750	E6	9.83
16) tc	KEPONE	4.904	4.837	4.699	4.542	4.491		4.694	E6	3.83
17) tc	beta-Endosul	7.330	7.345	7.450	8.024	8.232	8.491	7.812	E6	6.43
18) tc	4,4'-DDD	6.346	6.383	6.577	7.487	7.817	8.125	7.122	E6	11.00
19) tcm	4,4'-DDT	6.928	6.831	7.107	8.171	8.568	8.961	7.761	E6	11.88
20) tc	Endrin Aldeh	6.040	6.016	6.149	6.511	6.716	6.982	6.402	E6	6.22
21) tc	Endosulfan S	6.843	6.710	6.802	7.191	7.392	7.622	7.093	E6	5.17
22) tc	Methoxychlor	4.081	3.851	3.878	3.866	3.917	4.002	3.932	E6	2.31
23) tc	FAMPHUR	6.248	6.502	6.469	6.425	6.641		6.457	E6	2.20
24) tc	Endrin Keton	8.241	8.145	8.189	8.727	8.927	9.217	8.574	E6	5.23
25) tc	Mirex	7.840	6.361	5.963	5.522	5.478	5.586	6.125	E6	14.77
26) tc	2,4'-DDE				5.135			5.135	E4	0.00
27) tc	2,4'-DDD				2.321			2.321	E4	0.00
28) tc	2,4'-DDT							0.000		-1.00
29) S	SURR2,Decachloro	9.004	8.371	8.096	7.600	7.370	7.386	7.971	E6	8.10
30) L8C	Toxaphene	2.654	2.239	2.389	2.423	2.478	2.525	2.451	E5	5.69
31) L8C	Toxaphene{2}	2.381	2.473	2.672	2.628	2.736	2.762	2.608	E5	5.80
32) L8C	Toxaphene{3}	1.643	1.766	1.841	1.917	2.005	2.048	1.870	E5	8.12
33) L8C	Toxaphene{4}	2.690	2.593	2.567	2.578	2.673	2.722	2.637	E5	2.49
34) L8C	Toxaphene{5}	2.403	2.505	2.649	2.736	2.911	2.984	2.698	E5	8.38
35) L9C	Chlordane	3.784	3.830	3.838	3.940	3.740		3.827	E5	1.95
36) L9C	Chlordane{2}	4.934	5.068	5.251	5.604	5.401		5.252	E5	5.05
37) L9C	Chlordane{3}	4.198	4.305	4.138	4.070	3.706		4.083	E5	5.58
38) L9C	Chlordane{4}	1.893	2.050	2.032	2.058	1.929		1.992	E5	3.83
39) L9C	Chlordane{5}	3.150	3.428	3.323	3.483	3.317		3.340	E5	3.82

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR478.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 10:50 am
Operator : m.pedro
Sample : pest 2ppb Inst : 6890D
Misc : initial cal
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:39:19 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:36:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/1	ug/1
	System Monitoring Compounds						
1)	S SURR1,Tetrac	9.48	9.53	129.8E6	17674533	2.229m	1.912
	Spiked Amount 100.000	Range 30 - 150		Recovery =		2.23%#	1.91%#
29)	S SURR2,Decachloro	17.80	18.39	82318051	18007851	2.308m	2.299m
	Spiked Amount 100.000	Range 30 - 150		Recovery =		2.31%#	2.30%#
	Target Compounds						
2)	TC HEXACHLOROBENZEN	10.18	10.36	152.3E6	20325548	2.400	2.089
3)	tc alpha-BHC	10.49	10.63	173.7E6	20842493	2.047	1.587
4)	tcm gamma-BHC (L	11.02	11.21	154.9E6	19775805	2.079m	1.675
5)	tcm Heptachlor	11.78	11.89	160.1E6	21296769	2.329	1.847
6)	tcm Aldrin	12.25	12.37	136.7E6	17590703	2.228	1.725
7)	tc beta-BHC	11.17	11.36	75699059	10348294	2.371	1.949
8)	tc delta-BHC	11.45	11.81	149.1E6	18454127	2.062	1.612
9)	tc Heptachlor E	13.17	13.24	122.0E6	17932559	2.312	1.895
10)	tc alpha-Endosu	13.76	13.81	105.8E6	15975105	2.293	1.878
11)	tc gamma-Chlord	13.35	13.51	123.0E6	17740728	2.293	1.828
12)	tc alpha-Chlord	13.55	13.73	113.8E6	17339523	2.270	1.873
13)	tc 4,4'-DDE	13.66	13.97	106.1E6	15089536	2.188	1.742
14)	tcm Dieldrin	14.12	14.22	105.5E6	16102024	2.173	1.787
15)	tcm Endrin	14.47	14.68	82479360	13063107	2.304	1.977
17)	tc beta-Endosul	14.81	15.00	85893772	14659877	2.162	1.887
18)	tc 4,4'-DDD	14.54	14.82	85077057	12691772	2.227	1.791
19)	tcm 4,4'-DDT	14.96	15.29	80101616	13855025	2.047	1.816
20)	tc Endrin Aldeh	15.45	15.51	63646389	12080984	2.046	1.912
21)	tc Endosulfan S	16.07	15.90	71338160	13686165	2.130	1.936
22)	tc Methoxychlor	15.65	16.23	42225533	8161209	2.240	2.125
24)	tc Endrin Keton	16.46	16.63	100.9E6	16482893	2.397m	1.948
25)	tc Mirex	15.94	16.59	63787389	15679379	2.282	2.618
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

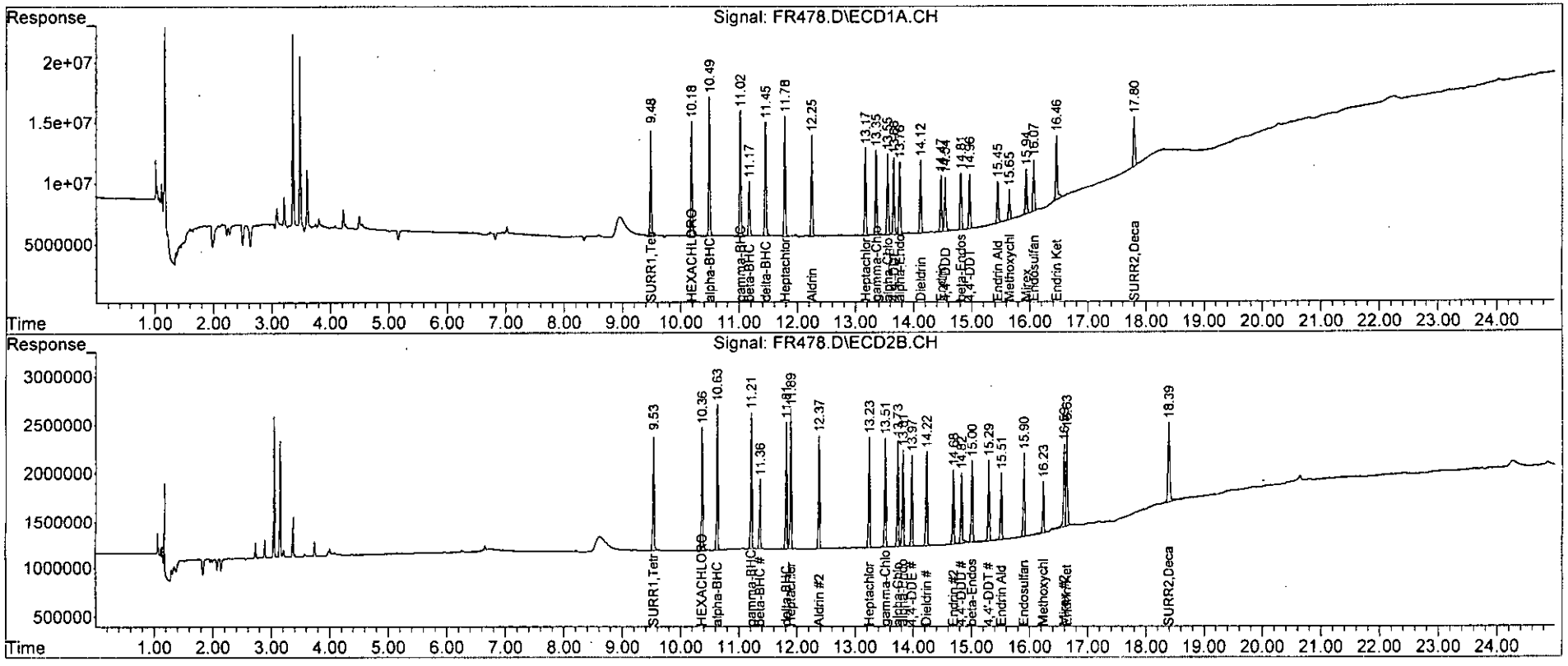
8081E072514.M Mon Jul 28 08:41:04 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR478.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 10:50 am
Operator : m.pedro
Sample : pest 2ppb Inst : 6890D
Misc : initial cal
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:39:19 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:36:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



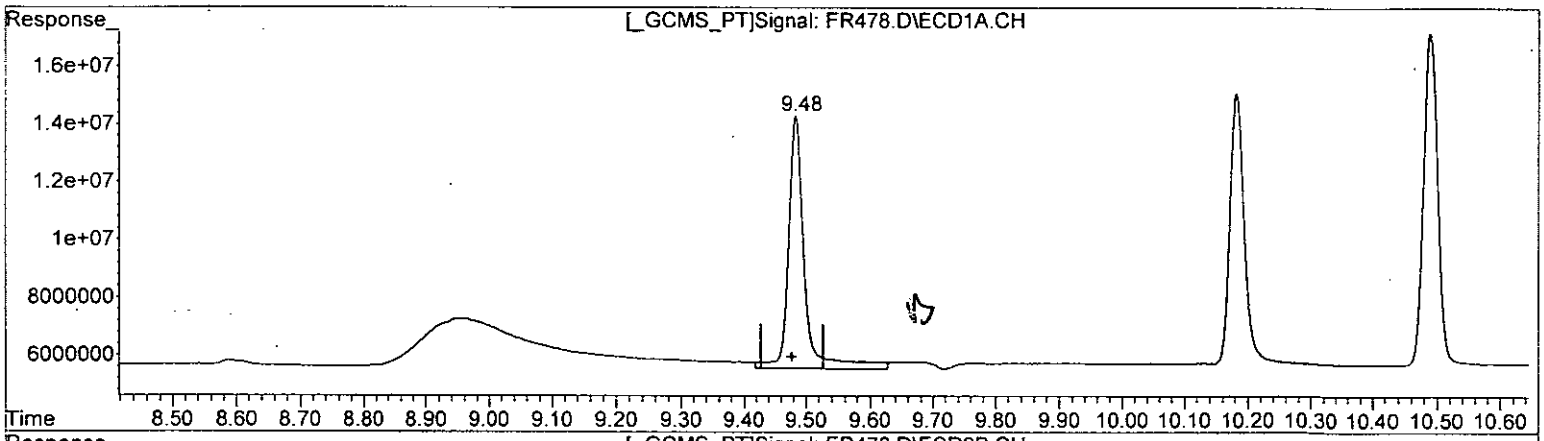
8081E072514.M Mon Jul 28 08:41:08 2014 Page: 2

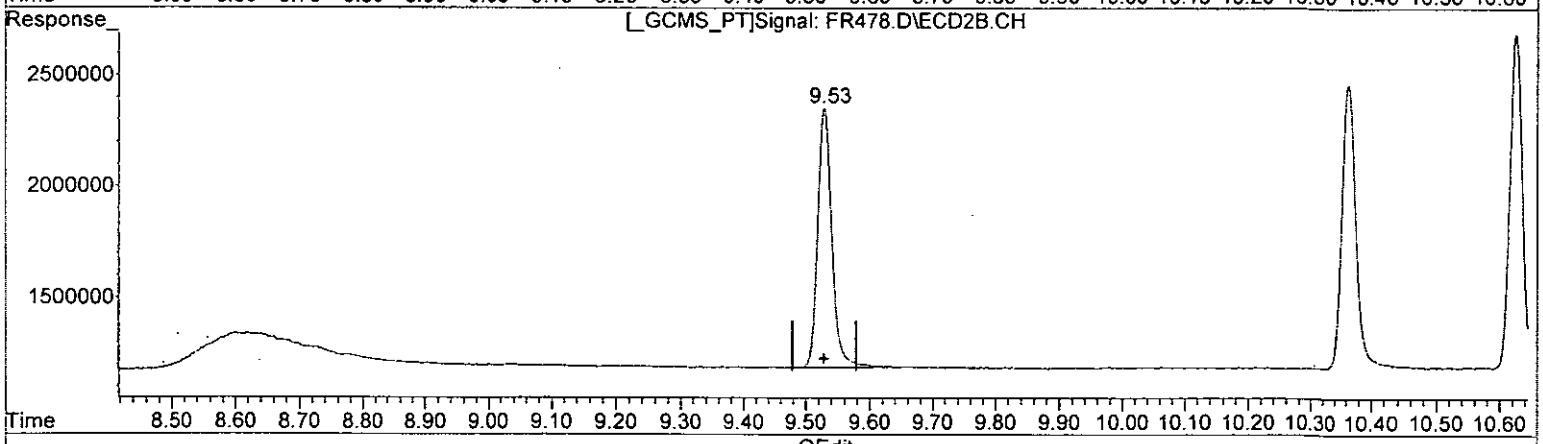
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR478.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 10:50 am
Operator : m.pedro
Sample : pest 2ppb Inst : 6890D
Misc : initial cal
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:36:33 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:36:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(1) SURR1,Tetrac (S)

9.48min 2.713ug/l

response 158002100

(1) SURR1,Tetrac #2 (S)

9.53min 1.912ug/l

response 17674533

(+) = Expected Retention Time

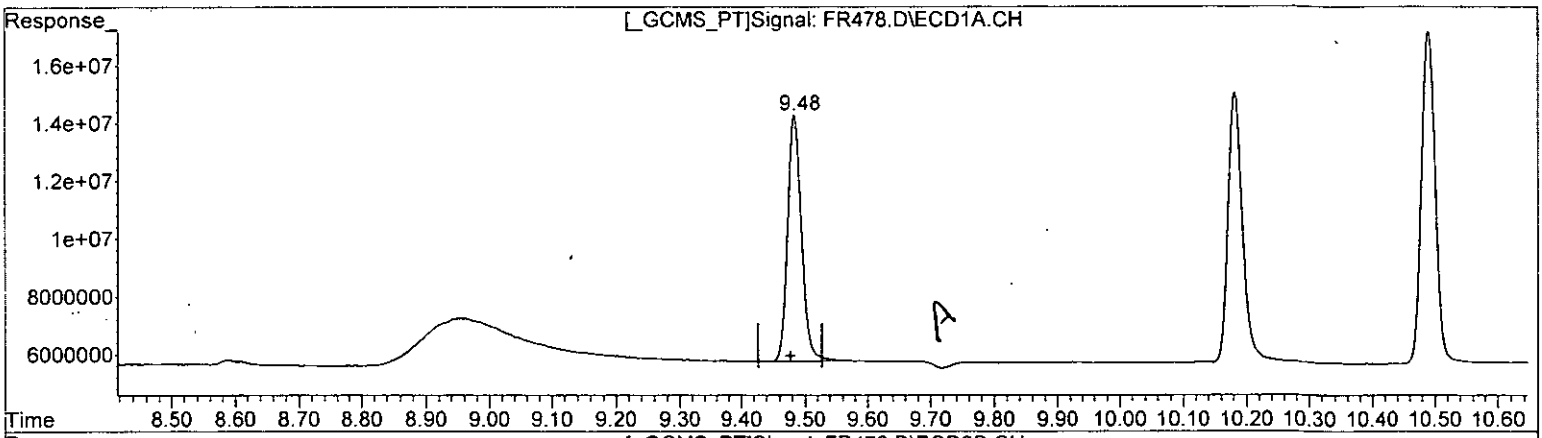
8081E072514.M Mon Jul 28 07:37:08 2014 Page: 1

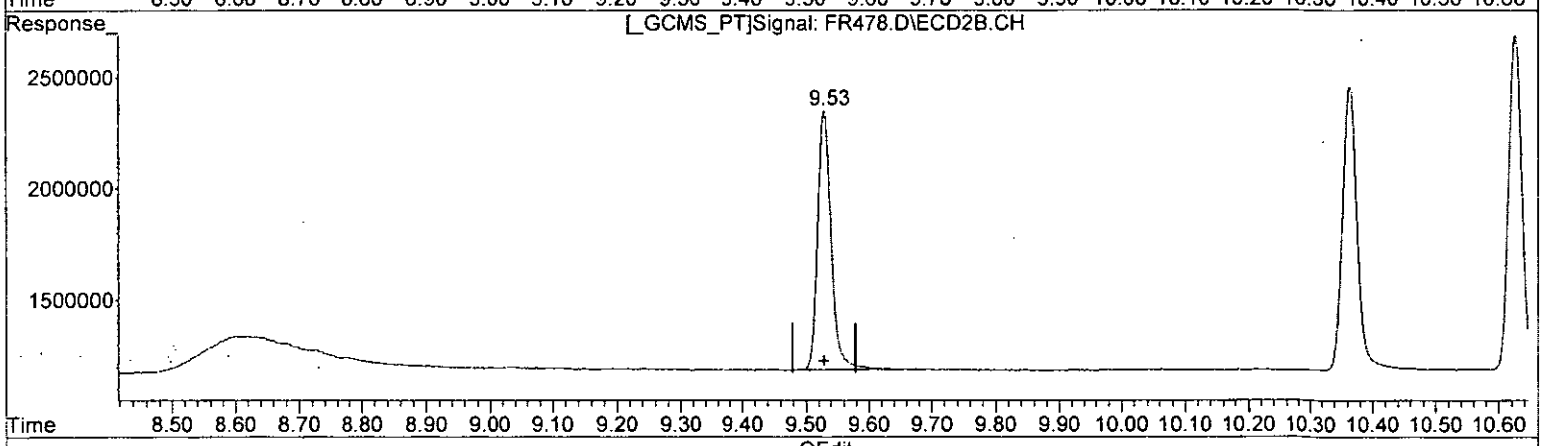
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR478.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 10:50 am
Operator : m.pedro
Sample : pest 2ppb Inst : 6890D
Misc : initial cal
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:36:33 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:36:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(1) SURR1,Tetrac (S)
9.48min 2.229ug/l m
response 129822896

(1) SURR1,Tetrac #2 (S)
9.53min 1.912ug/l
response 17674533

(+) = Expected Retention Time
8081E072514.M Mon Jul 28 07:37:20 2014 Page: 1

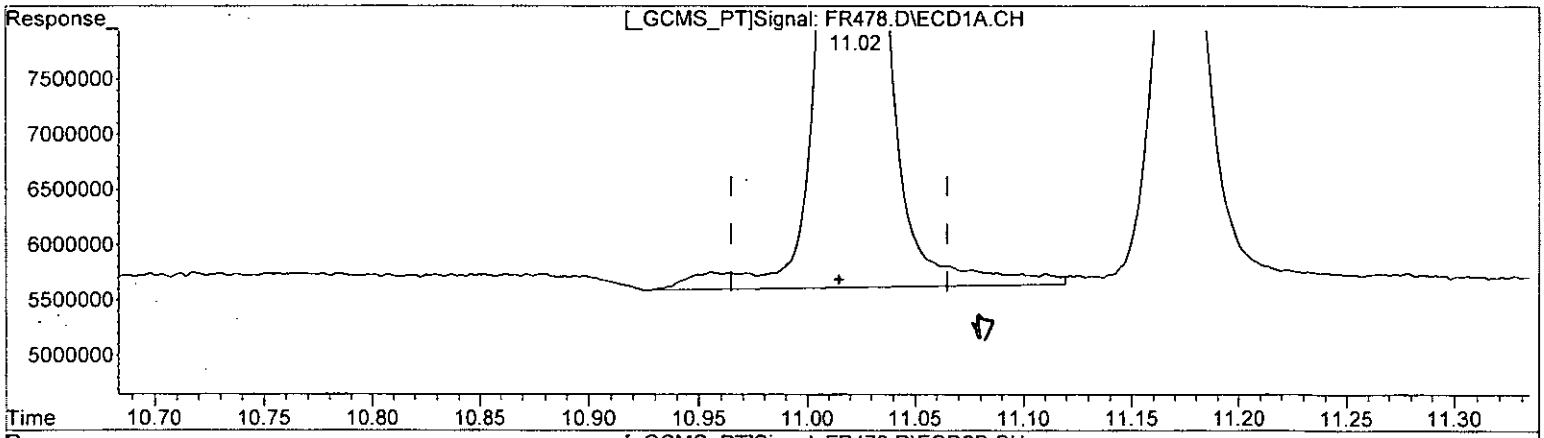
00541

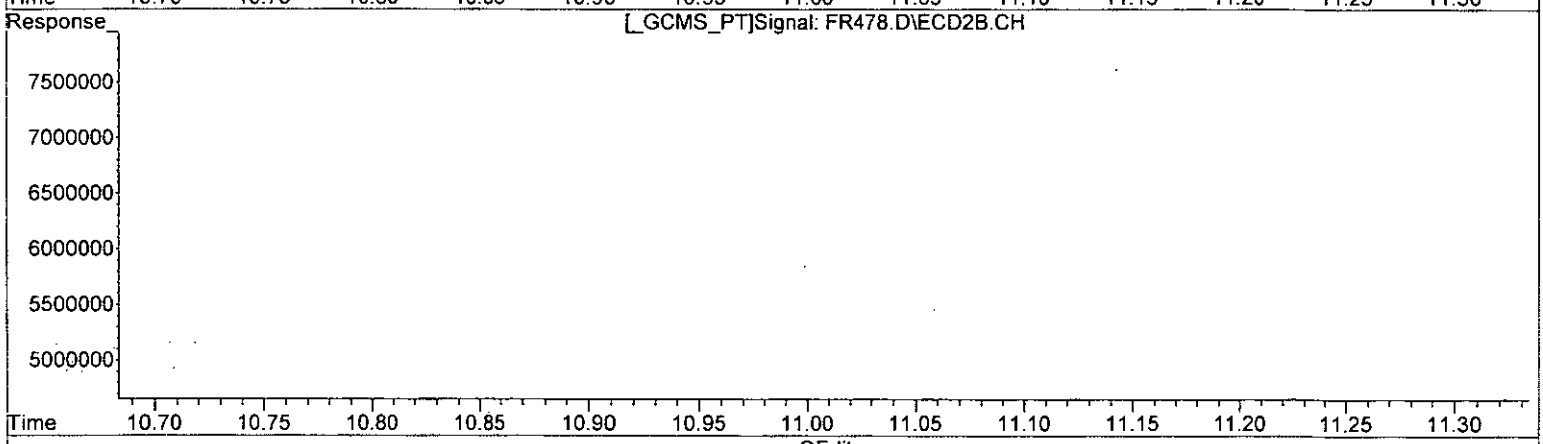
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR478.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 10:50 am
Operator : m.pedro
Sample : pest 2ppb Inst : 6890D
Misc : initial cal
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:36:33 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:36:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(4) gamma-BHC (L (tcm)

11.02min 2.225ug/l

response 165806775

(4) gamma-BHC (L #2 (tcm)

11.21min 1.675ug/l

response 19775805

(+) = Expected Retention Time

8081E072514.M Mon Jul 28 07:37:32 2014 Page: 1

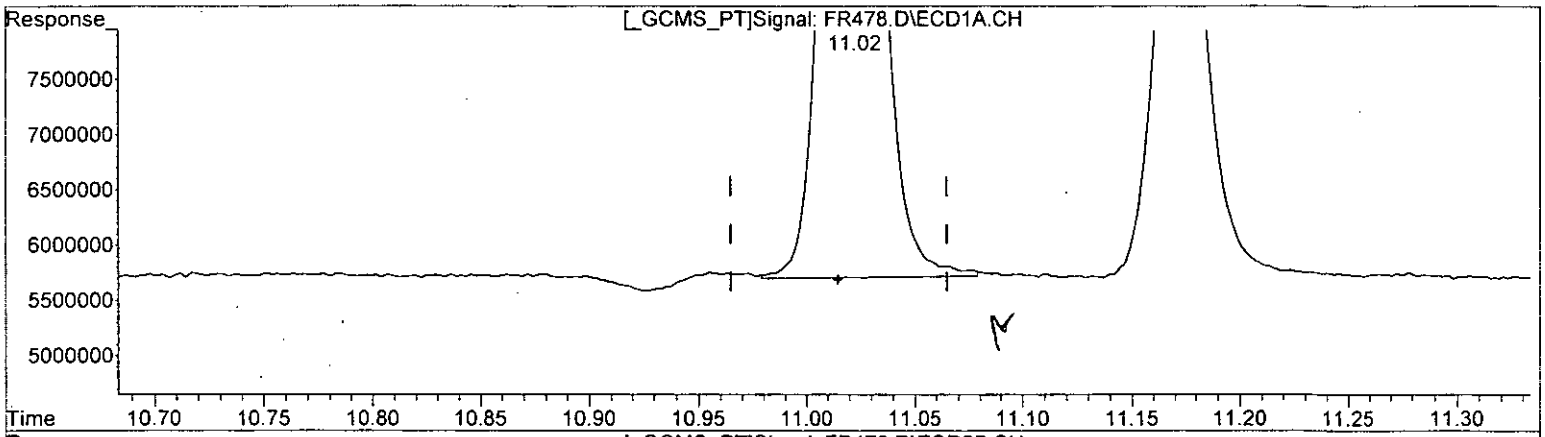
00542

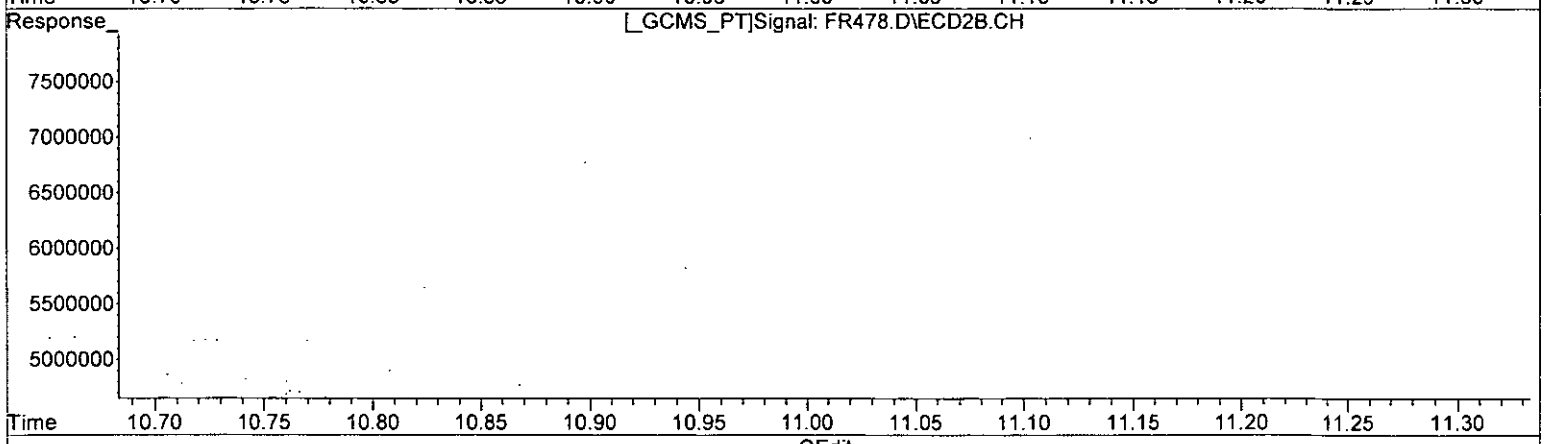
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR478.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 10:50 am
Operator : m.pedro
Sample : pest 2ppb Inst : 6890D
Misc : initial cal
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:36:33 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:36:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(4) gamma-BHC (L (tcm)

11.02min 2.079ug/l m

response 154945873

(4) gamma-BHC (L #2 (tcm)

11.21min 1.675ug/l

response 19775805

(+) = Expected Retention Time

8081E072514.M Mon Jul 28 07:37:41 2014 Page: 1

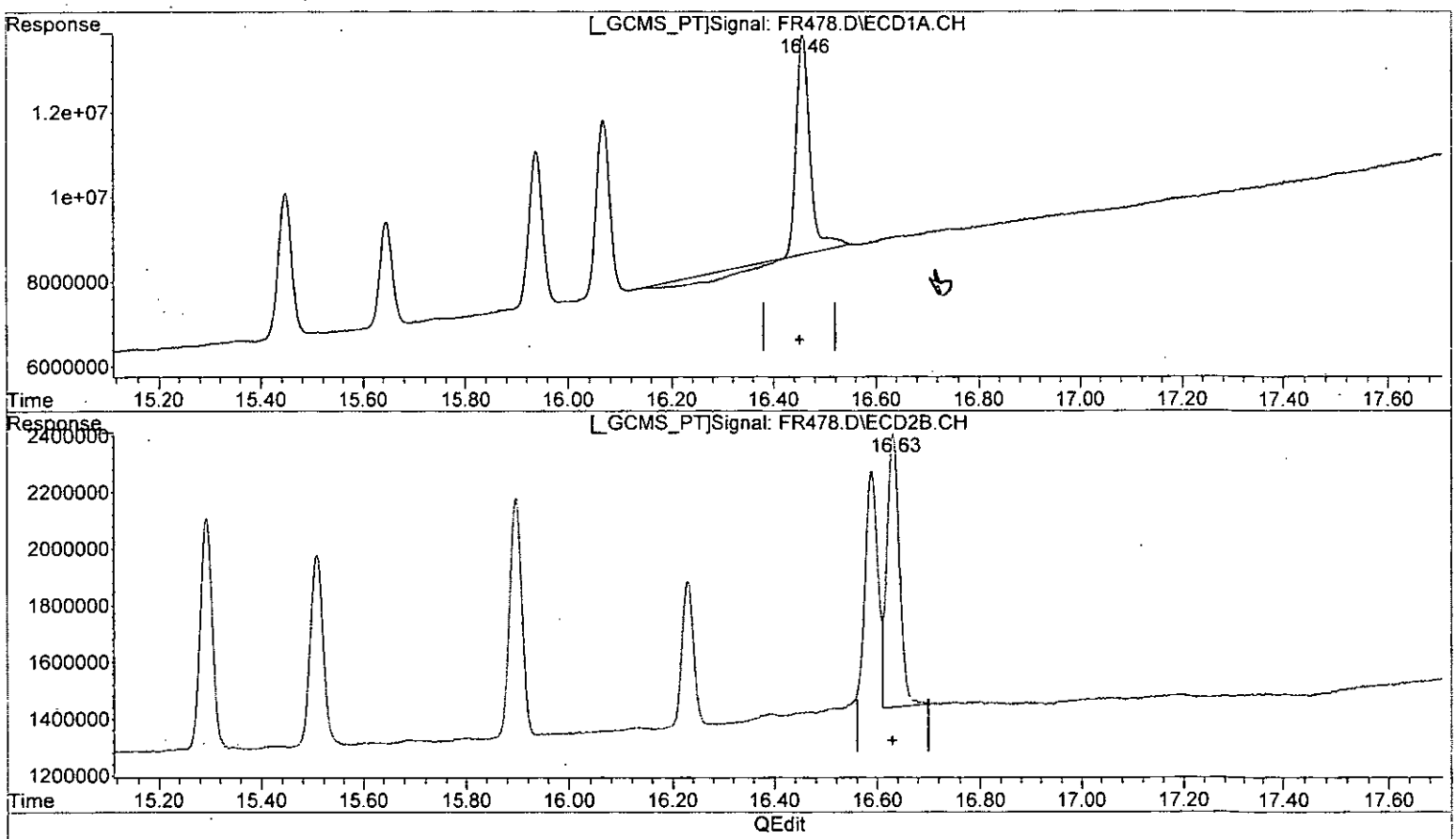
00543

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR478.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 10:50 am
Operator : m.pedro
Sample : pest 2ppb Inst : 6890D
Misc : initial cal
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:36:33 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:36:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



(24) Endrin Keton (tc)

16.46min 1.864ug/l

response 78495212

(24) Endrin Keton #2 (tc)

16.63min 1.948ug/l

response 16482893

(+) = Expected Retention Time

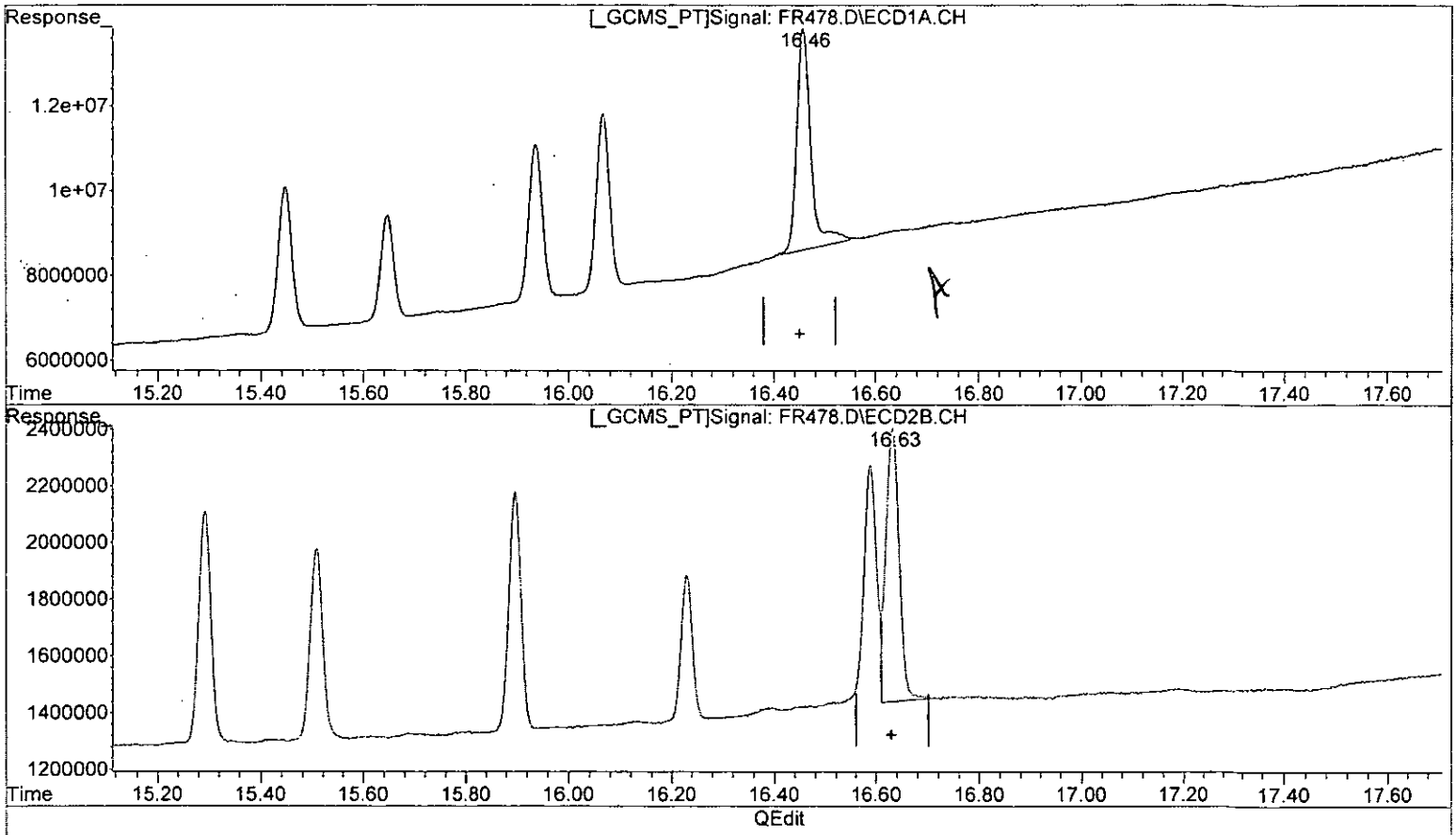
8081E072514.M Mon Jul 28 07:38:22 2014 Page: 1

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR478.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 10:50 am
Operator : m.pedro
Sample : pest 2ppb Inst : 6890D
Misc : initial cal
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:36:33 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:36:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



(24) Endrin Keton (tc)

16.46min 2.397ug/l m

response 100916160

(24) Endrin Keton #2 (tc)

16.63min 1.948ug/l

response 16482893

(+) = Expected Retention Time

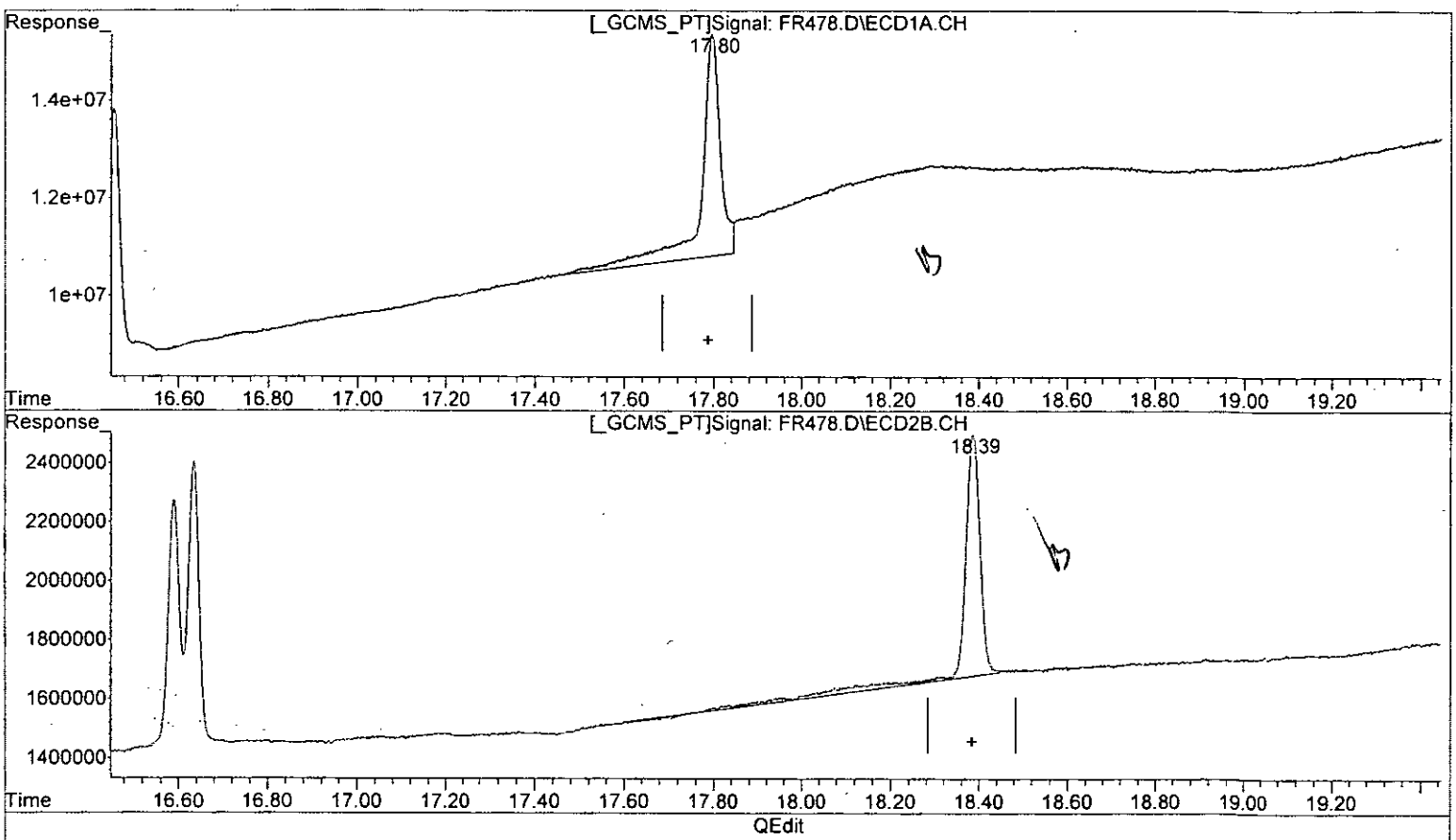
8081E072514.M Mon Jul 28 07:38:34 2014 Page: 1

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR478.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 10:50 am
Operator : m.pedro
Sample : pest 2ppb Inst : 6890D
Misc : initial cal
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:36:33 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:36:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



(29) SURR2,Decachlorobiphenyl (S)

17.80min 3.886ug/l

response 138582233

(29) SURR2,Decachlorobiphenyl #2 (S)

18.39min 2.673ug/l

response 20931755

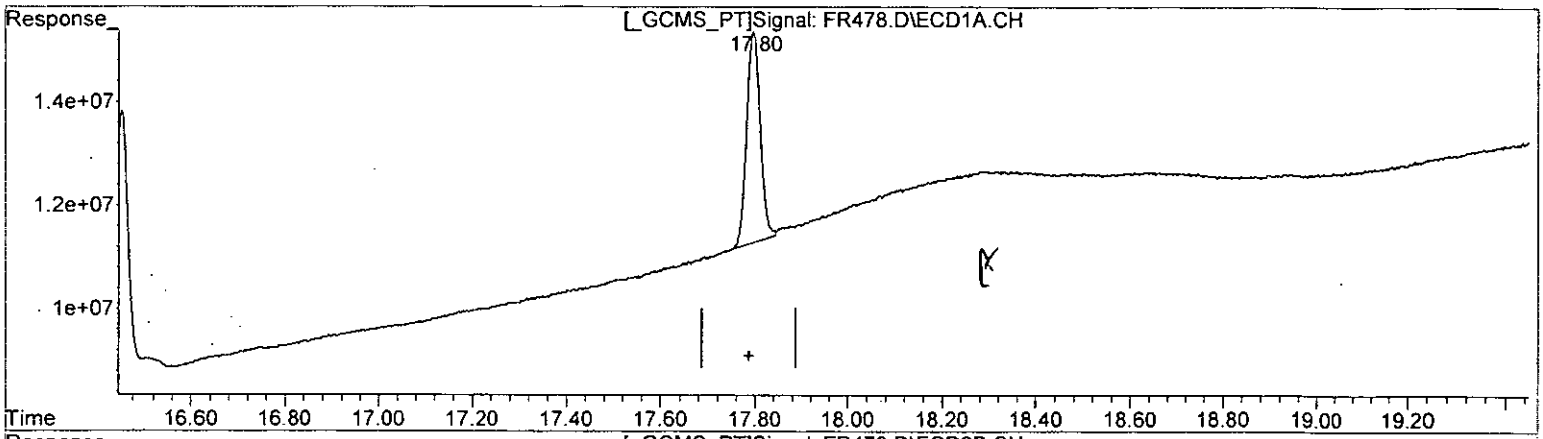
(+) = Expected Retention Time
8081E072514.M Mon Jul 28 07:38:47 2014 Page: 1

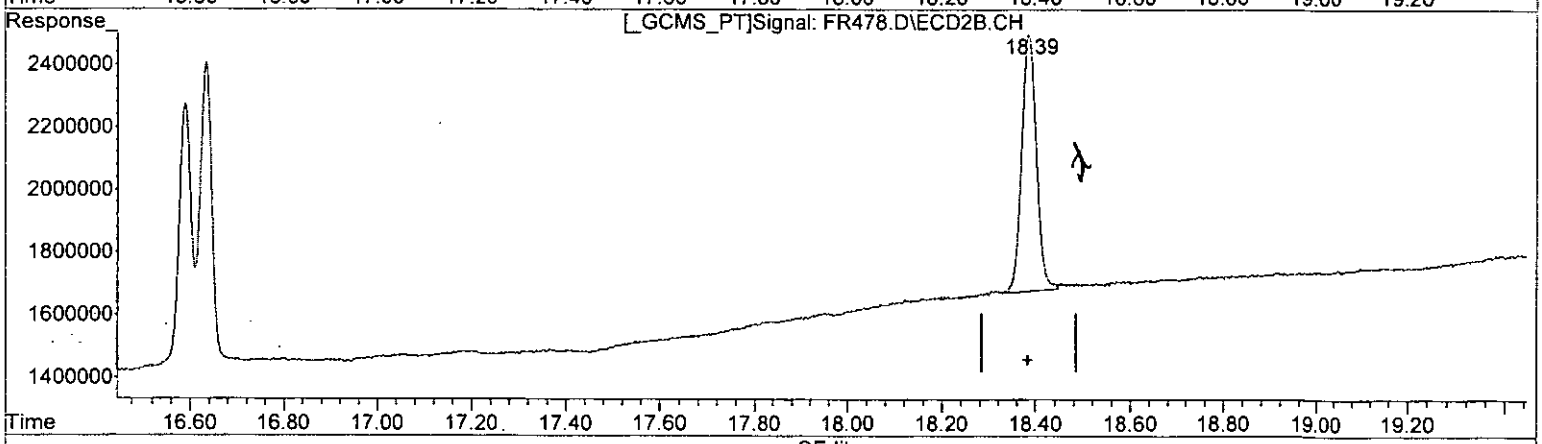
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR478.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 10:50 am
Operator : m.pedro
Sample : pest 2ppb Inst : 6890D
Misc : initial cal
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:36:33 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:36:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(29) SURR2,Decachlorobiphenyl (S)

17.80min 2.308ug/l m

response 82318051

(29) SURR2,Decachlorobiphenyl #2 (S)

18.39min 2.299ug/l m

response 18007851

(+) = Expected Retention Time

8081E072514.M Mon Jul 28 07:39:30 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR479.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 11:24 am
Operator : m.pedro
Sample : pest 5ppb Inst : 6890D
Misc : initial cal
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:48:29 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:43:37 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/1	ug/1
	System Monitoring Compounds						
1) S	SURR1,Tetrac	9.48	9.53	346.1E6	43583230	5.795	4.726
	Spiked Amount 100.000	Range 30 - 150		Recovery =		5.79%#	4.73%#
29) S	SURR2,Decachloro	17.79	18.38	201.9E6	41853570	5.542m	5.296m
	Spiked Amount 100.000	Range 30 - 150		Recovery =		5.54%#	5.30%#
	Target Compounds						
2) TC	HEXACHLOROBENZEN	10.18	10.36	377.0E6	48692967	5.774	5.013
3) tc	alpha-BHC	10.49	10.63	463.5E6	56166216	5.326	4.284
4) tcm	gamma-BHC (L	11.02	11.21	415.2E6	51935567	5.456	4.412
5) tcm	Heptachlor	11.78	11.89	404.2E6	54302200	5.677	4.708
6) tcm	Aldrin	12.24	12.37	343.3E6	45754830	5.399m	4.490
7) tc	beta-BHC	11.17	11.36	181.8E6	25801252	5.523m	4.889
8) tc	delta-BHC	11.45	11.81	398.3E6	49159550	5.364	4.313
9) tc	Heptachlor E	13.16	13.24	301.9E6	44997058	5.542	4.765
10) tc	alpha-Endosu	13.76	13.82	264.6E6	40267394	5.552	4.770
11) tc	gamma-Chlord	13.35	13.51	301.2E6	44584371	5.440	4.595
12) tc	alpha-Chlord	13.55	13.73	281.4E6	43414015	5.439	4.702
13) tc	4,4'-DDE	13.65	13.97	266.5E6	38671840	5.331	4.477
14) tcm	Dieldrin	14.11	14.22	268.0E6	40747796	5.359	4.526
15) tcm	Endrin	14.47	14.68	193.7E6	30120787	5.246	4.562
17) tc	beta-Endosul	14.81	15.00	217.6E6	36726938	5.341	4.734
18) tc	4,4'-DDD	14.54	14.82	206.4E6	31913910	5.254	4.497
19) tcm	4,4'-DDT	14.96	15.29	205.2E6	34153857	5.108	4.468
20) tc	Endrin Aldeh	15.44	15.51	165.8E6	30078984	5.151m	4.686
21) tc	Endosulfan S	16.06	15.90	181.3E6	33549175	5.342	4.747
22) tc	Methoxychlor	15.64	16.23	106.2E6	19253666	5.452	4.978
24) tc	Endrin Keton	16.45	16.63	235.8E6	40722575	5.375	4.774
25) tc	Mirex	15.93	16.59	161.8E6	31805269	5.682	5.235
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

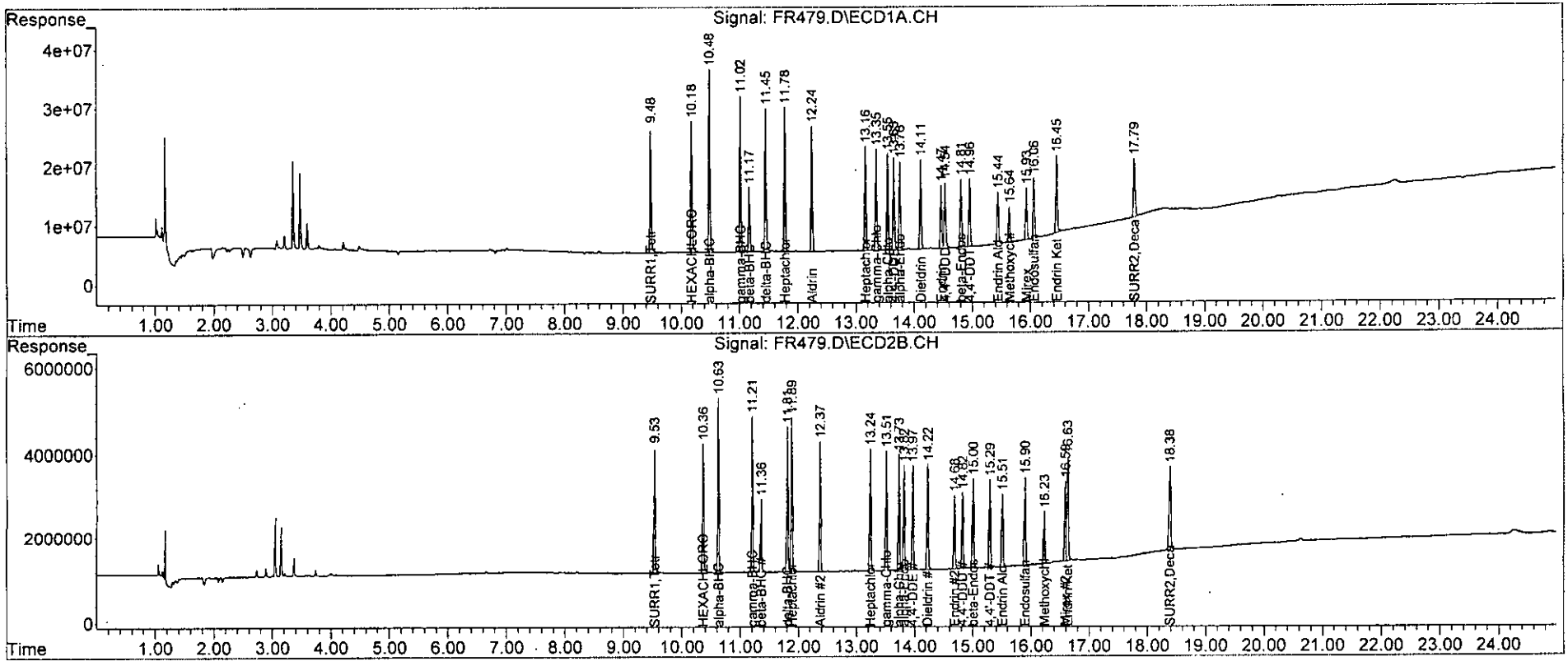
8081E072514.M Mon Jul 28 08:41:14 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR479.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 11:24 am
Operator : m.pedro
Sample : pest 5ppb Inst : 6890D
Misc : initial cal
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:48:29 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:43:37 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

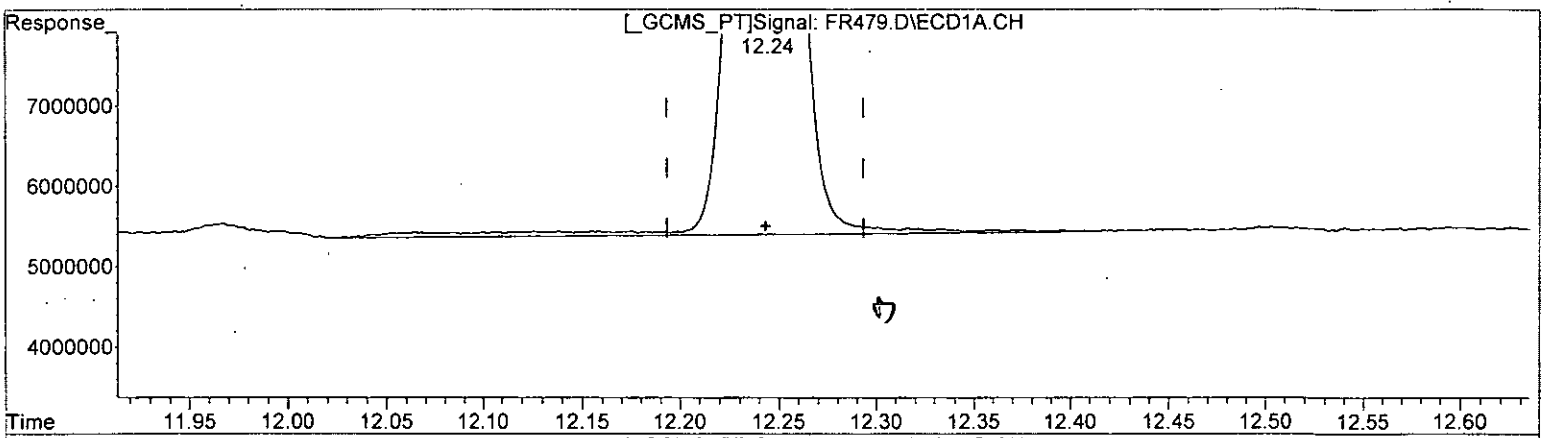


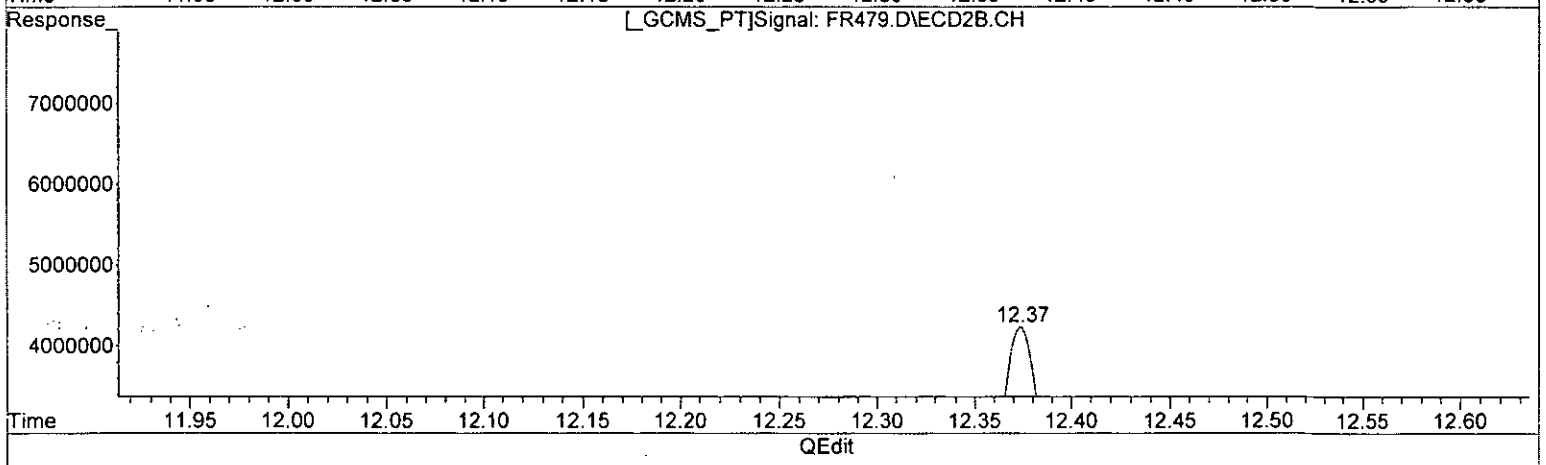
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR479.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 11:24 am
Operator : m.pedro
Sample : pest 5ppb Inst : 6890D
Misc : initial cal
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:43:53 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:43:37 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(6) Aldrin (tcm)

12.24min 5.519ug/l

response 350855509

(6) Aldrin #2 (tcm)

12.37min 4.490ug/l

response 45754830

(+) = Expected Retention Time

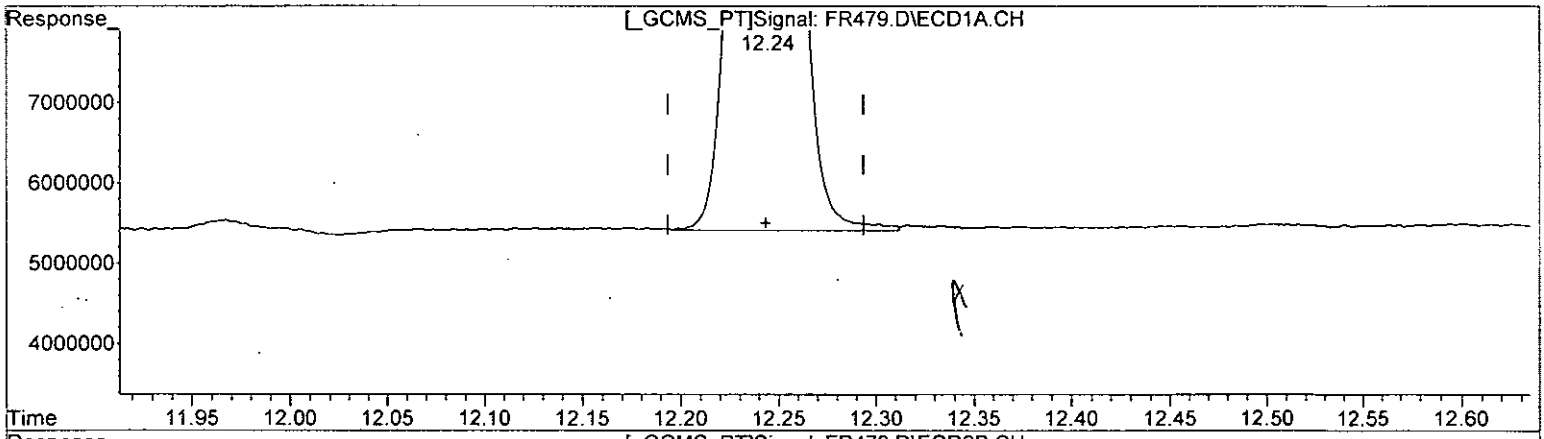
8081E072514.M Mon Jul 28 07:45:41 2014 Page: 1

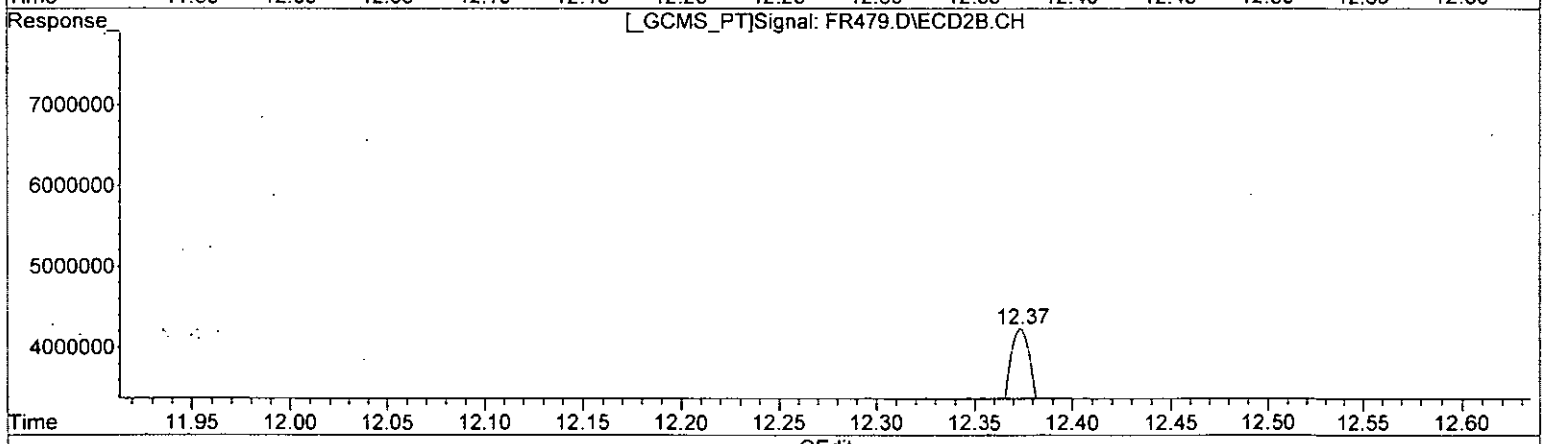
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR479.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 11:24 am
Operator : m.pedro
Sample : pest 5ppb Inst : 6890D
Misc : initial cal
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:43:53 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:43:37 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(6) Aldrin (tcm)

12.24min 5.399ug/l m

response 343255018

(6) Aldrin #2 (tcm)

12.37min 4.490ug/l

response 45754830

(+) = Expected Retention Time

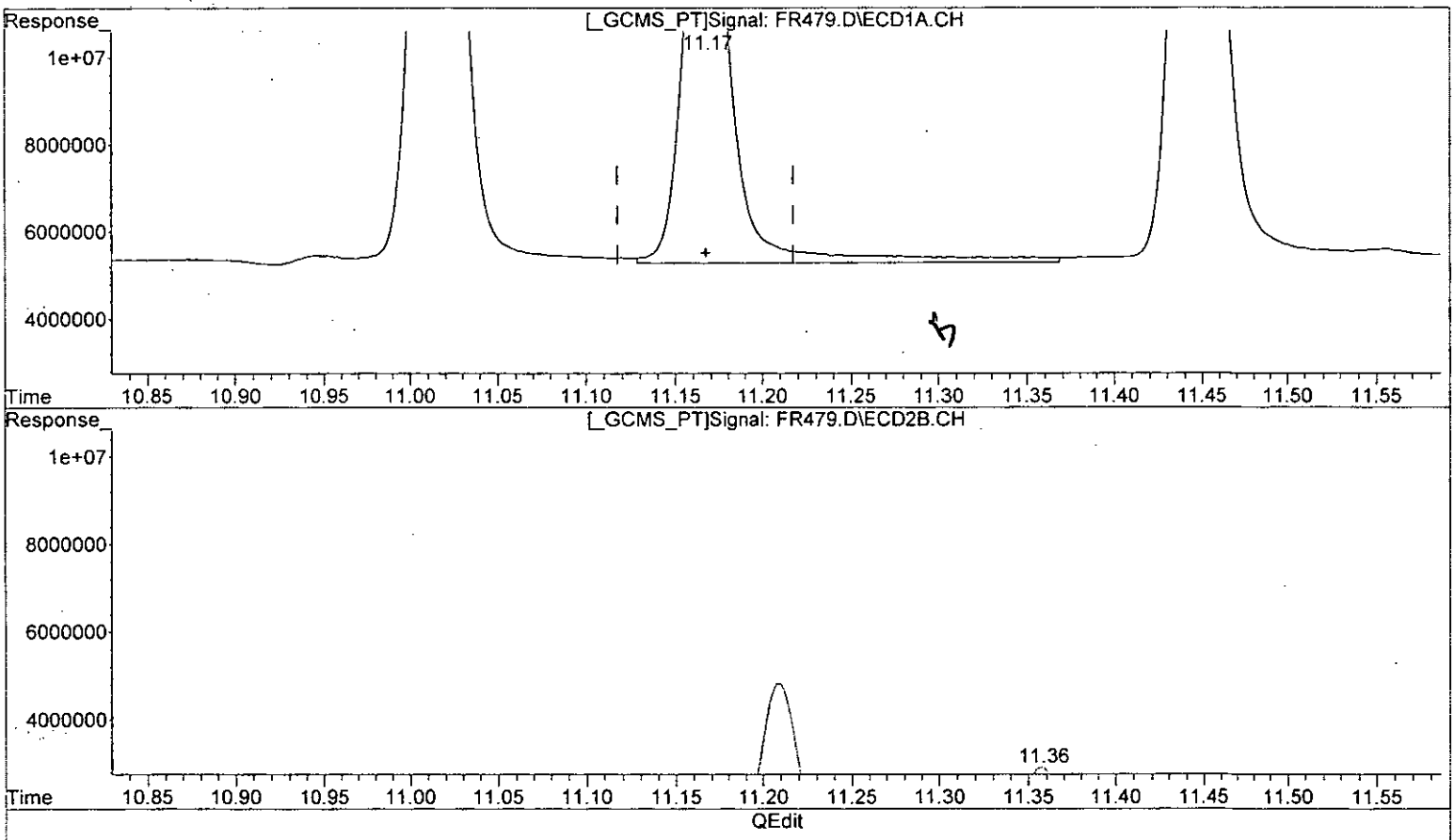
8081E072514.M Mon Jul 28 07:45:51 2014 Page: 1

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR479.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 11:24 am
Operator : m.pedro
Sample : pest 5ppb Inst : 6890D
Misc : initial cal
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:43:53 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:43:37 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



(7) beta-BHC (tc)

11.17min 5.939ug/l

response 195451092

(7) beta-BHC #2 (tc)

11.36min 4.889ug/l

response 25801252

(+) = Expected Retention Time

8081E072514.M Mon Jul 28 07:46:17 2014 Page: 1

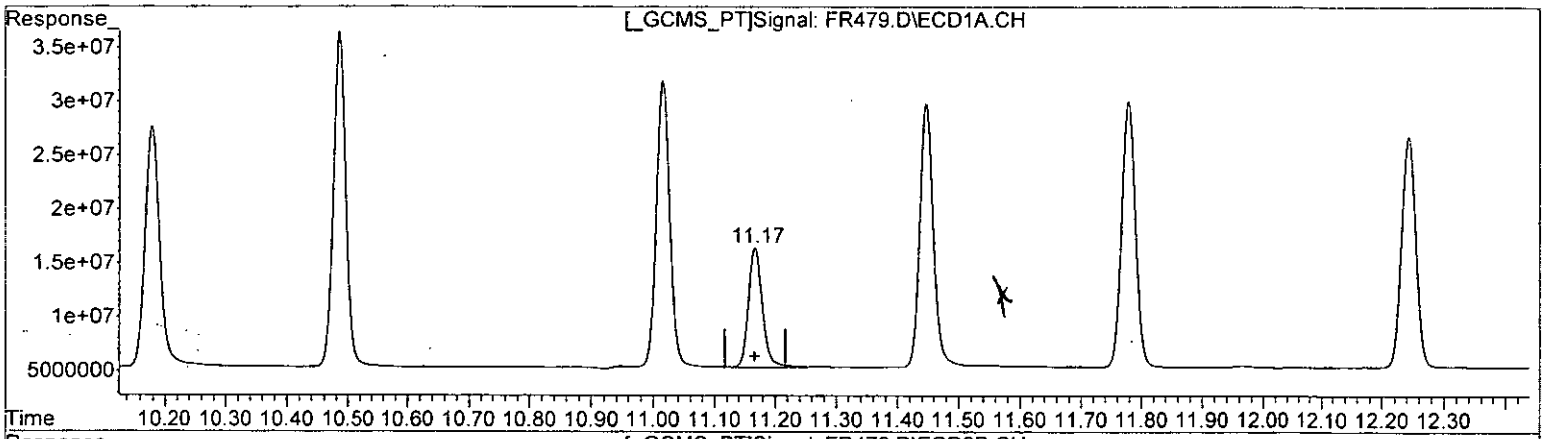
00552

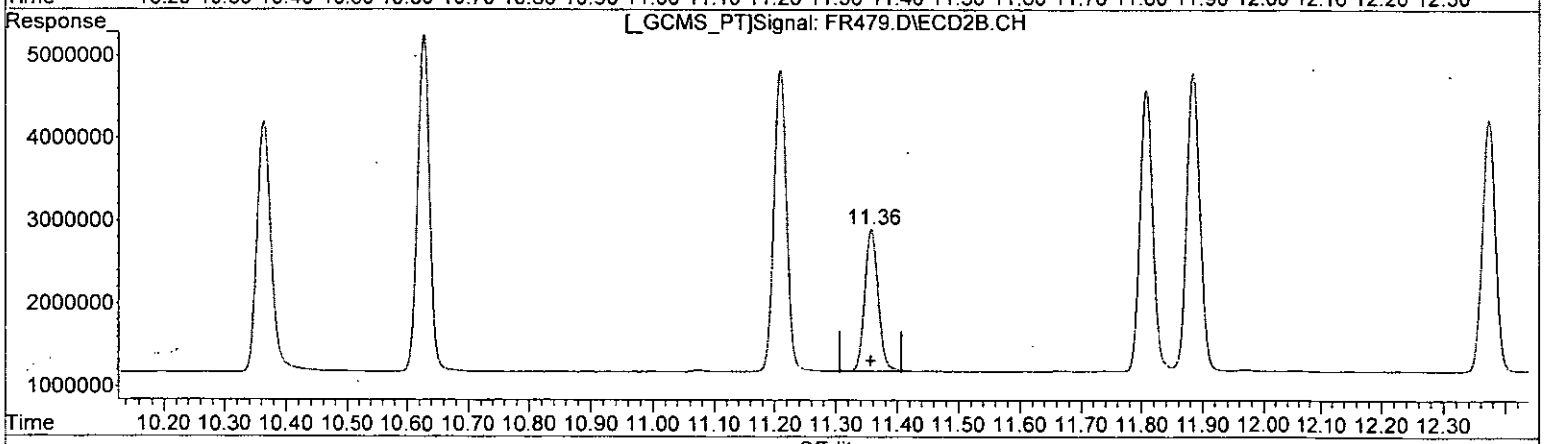
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR479.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 11:24 am
Operator : m.pedro
Sample : pest 5ppb Inst : 6890D
Misc : initial cal
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:43:53 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:43:37 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(7) beta-BHC (tc)

11.17min 5.523ug/l m

response 181776097

(7) beta-BHC #2 (tc)

11.36min 4.889ug/l

response 25801252

(+) = Expected Retention Time

8081E072514.M Mon Jul 28 07:46:26 2014 Page: 1

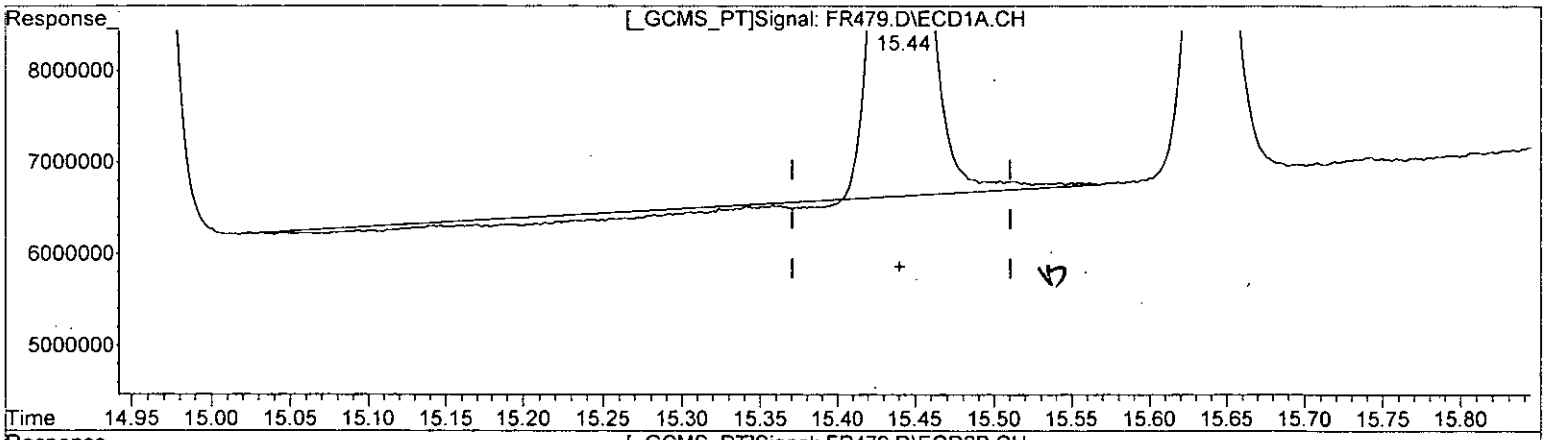
00553

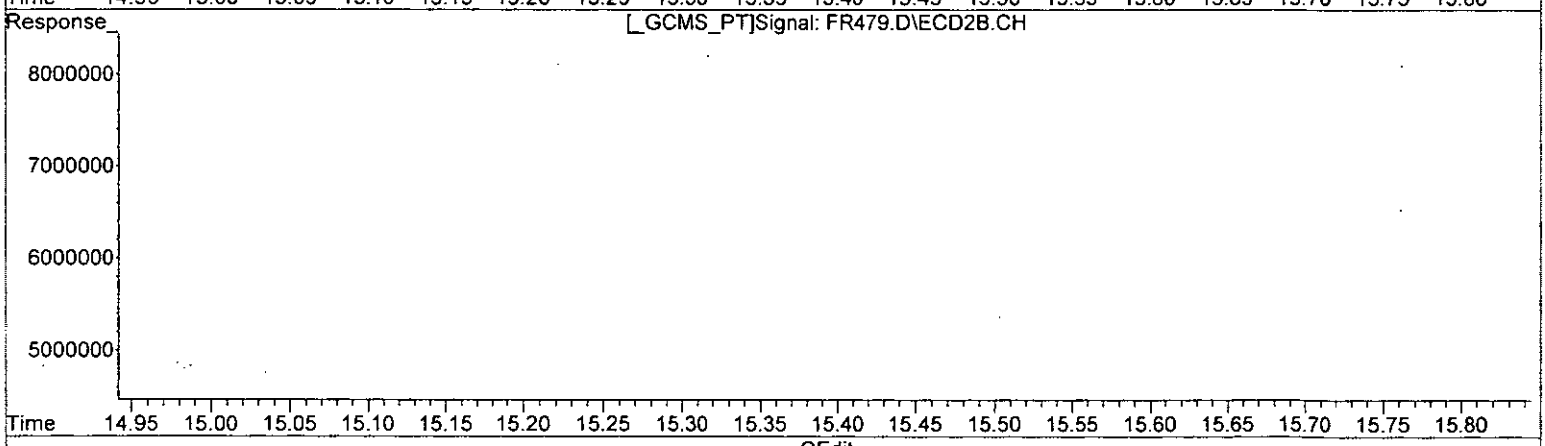
```
                    Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR479.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 25 Jul 2014  11:24 am
Operator  : m.pedro
Sample    : pest 5ppb                              Inst    : 6890D
Misc      : initial cal
ALS Vial  : 4   Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:43:53 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title  : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:43:37 2014
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.      : 1uL
Signal #1 Phase : STx-CLP          Signal #2 Phase: STx-CLPII
Signal #1 Info  : 0.32mm  30m      Signal #2 Info : 0.32mm  30m
```





QEdit

(20) Endrin Aldeh (tc)

15.44min 4.794ug/l

response 154289608

(20) Endrin Aldeh #2 (tc)

15.51min 4.686ug/l

response 30078984

(+) = Expected Retention Time

8081E072514.M Mon Jul 28 07:47:46 2014 Page: 1

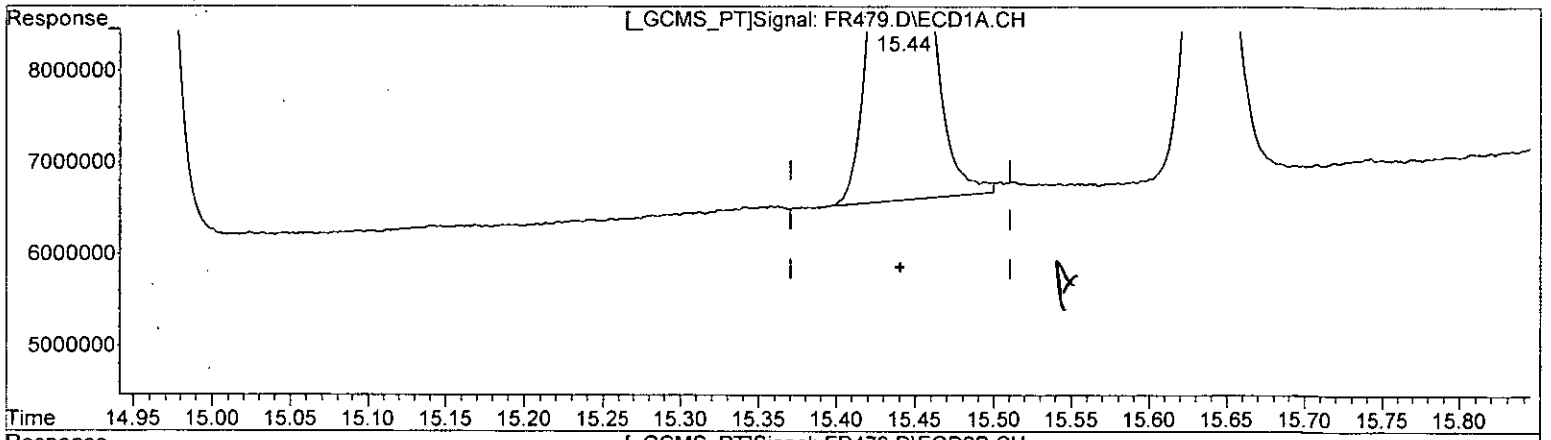
00554

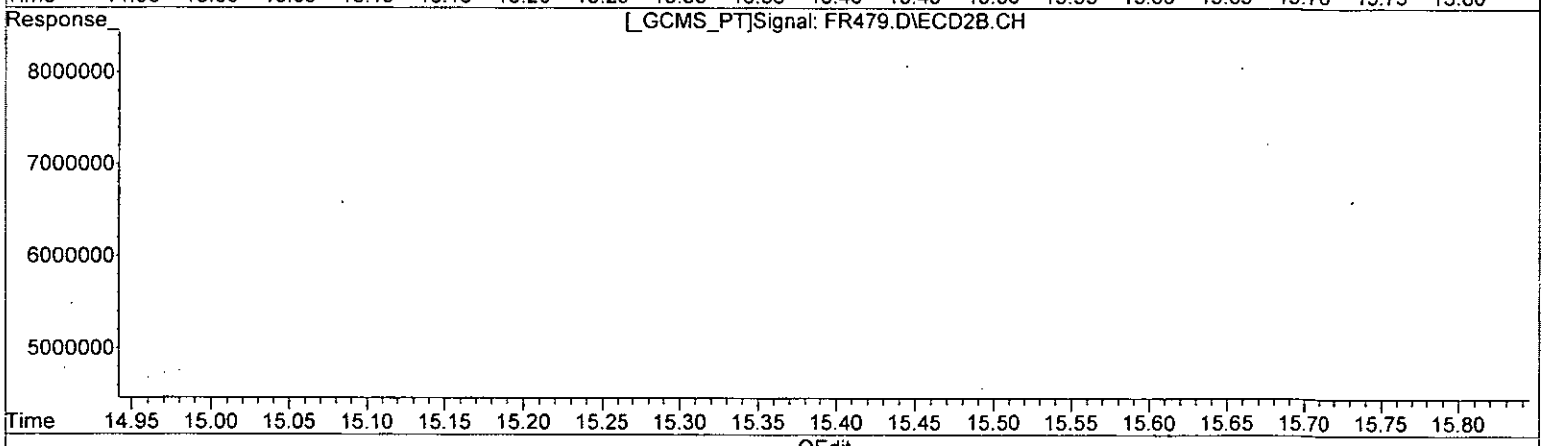
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR479.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 11:24 am
Operator : m.pedro
Sample : pest 5ppb Inst : 6890D
Misc : initial cal
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:43:53 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:43:37 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(20) Endrin Aldeh (tc)

15.44min 5.151ug/l m

response 165780526

(20) Endrin Aldeh #2 (tc)

15.51min 4.686ug/l

response 30078984

(+) = Expected Retention Time

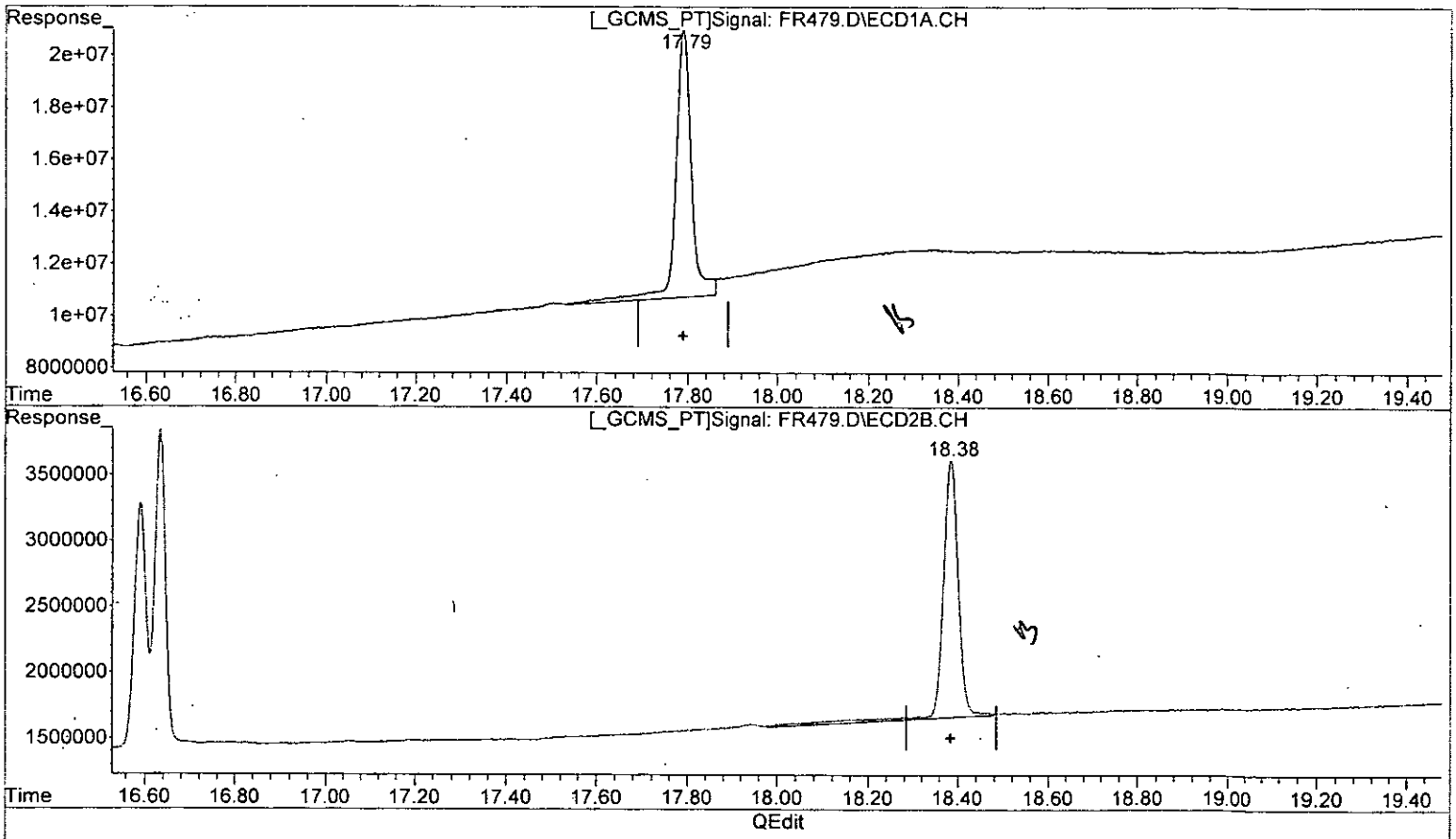
8081E072514.M Mon Jul 28 07:48:03 2014 Page: 1

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR479.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 11:24 am
Operator : m.pedro
Sample : pest 5ppb Inst : 6890D
Misc : initial cal
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:43:53 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:43:37 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



QEdit

(29) SURR2,Decachlorobiphenyl (S)

17.79min 6.885ug/l

response 250818698

(29) SURR2,Decachlorobiphenyl #2 (S)

18.39min 5.839ug/l

response 46148048

(+) = Expected Retention Time
8081E072514.M Mon Jul 28 07:48:20 2014

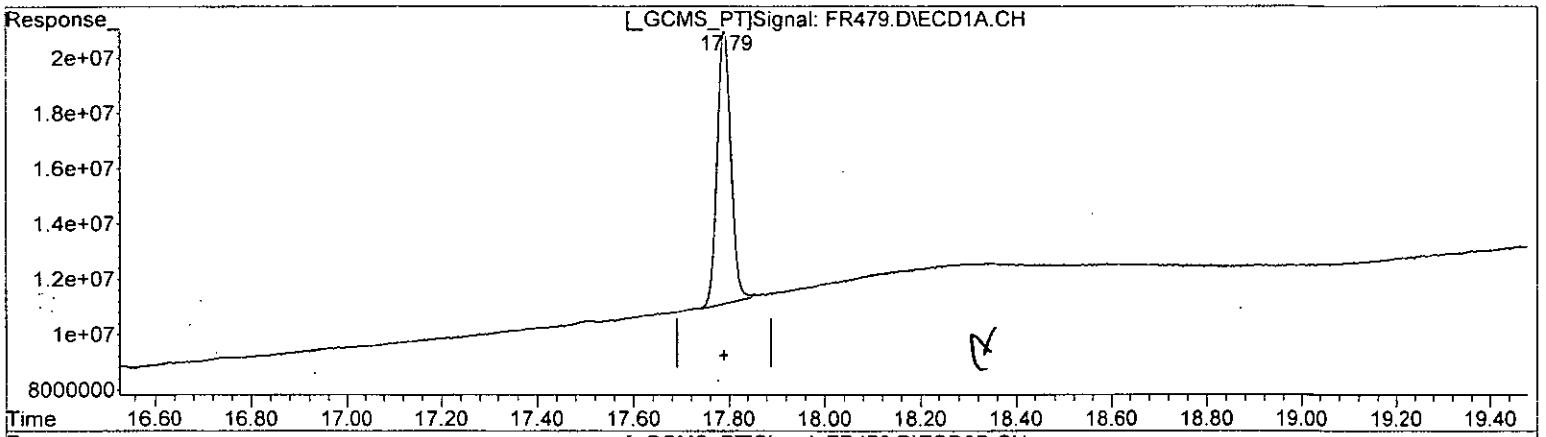
00556

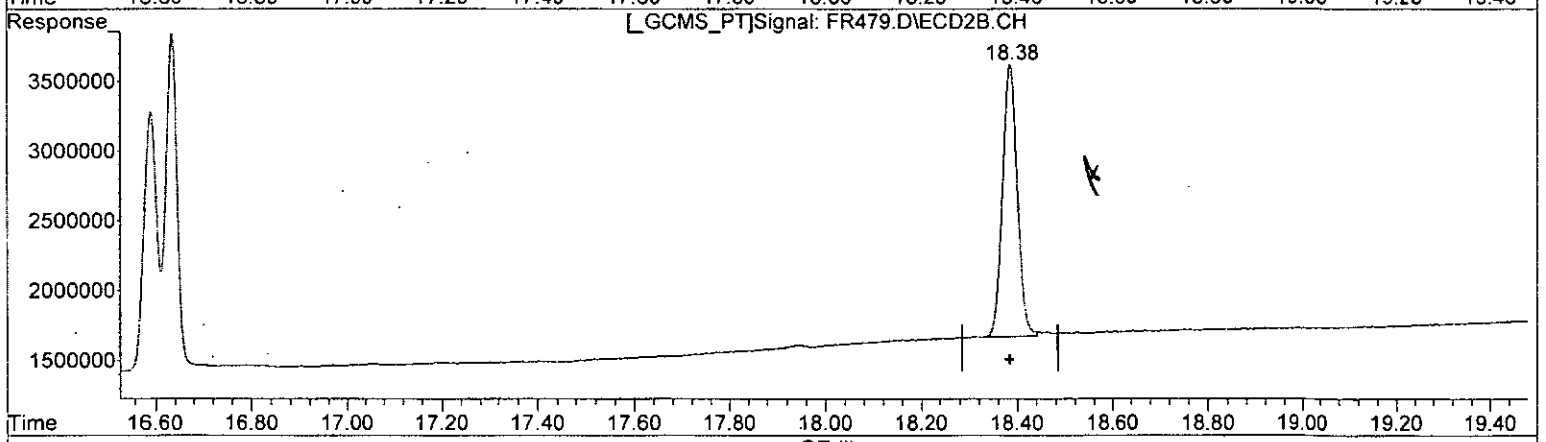
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR479.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 11:24 am
Operator : m.pedro
Sample : pest 5ppb Inst : 6890D
Misc : initial cal
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:43:53 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:43:37 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(29) SURR2,Decachlorobiphenyl (S)
17.79min 5.542ug/l m
response 201899787

(29) SURR2,Decachlorobiphenyl #2 (S)
18.38min 5.296ug/l m
response 41853570

(+) = Expected Retention Time
8081E072514.M Mon Jul 28 07:48:36 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR480.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 11:58 am
Operator : m.pedro
Sample : pest 10ppb Inst : 6890D
Misc : initial cal
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:50:08 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:43:37 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	System Monitoring Compounds						
1)	S SURR1,Tetrac	9.48	9.53	677.8E6	89212216	11.348	9.673
	Spiked Amount 100.000	Range 30 - 150		Recovery =		11.35%#	9.67%#
29)	S SURR2,Decachloro	17.79	18.38	395.3E6	80960726	10.851m	10.244m
	Spiked Amount 100.000	Range 30 - 150		Recovery =		10.85%#	10.24%#
	Target Compounds						
2)	TC HEXACHLOROBENZEN	10.18	10.36	727.0E6	96265367	11.137	9.911
3)	tc alpha-BHC	10.48	10.63	960.3E6	122.1E6	11.035	9.316
4)	tcm gamma-BHC (L	11.02	11.21	844.9E6	110.7E6	11.103	9.408
5)	tcm Heptachlor	11.78	11.89	808.6E6	112.5E6	11.357	9.753
6)	tcm Aldrin	12.24	12.37	703.3E6	96697430	11.062	9.489
7)	tc beta-BHC	11.17	11.36	368.7E6	51563772	11.203	9.770
8)	tc delta-BHC	11.45	11.81	822.6E6	106.1E6	11.078	9.307
9)	tc Heptachlor E	13.16	13.23	602.8E6	91545964	11.067	9.695
10)	tc alpha-Endosu	13.75	13.81	528.4E6	81439412	11.087	9.648
11)	tc gamma-Chlord	13.35	13.51	600.3E6	91741728	10.842	9.455
12)	tc alpha-Chlord	13.55	13.73	564.0E6	88366132	10.901	9.571
13)	tc 4,4'-DDE	13.65	13.97	540.7E6	80538968	10.815	9.324
14)	tcm Dieldrin	14.11	14.22	541.3E6	84641056	10.824	9.401
15)	tcm Endrin	14.47	14.68	386.0E6	60219590	10.451	9.121
17)	tc beta-Endosul	14.81	15.00	441.0E6	74502067	10.823	9.604
18)	tc 4,4'-DDD	14.53	14.82	420.7E6	65768638	10.709	9.268
19)	tcm 4,4'-DDT	14.96	15.29	431.5E6	71068187	10.743	9.298
20)	tc Endrin Aldeh	15.44	15.51	342.1E6	61485487	10.628	9.579
21)	tc Endosulfan S	16.06	15.90	364.0E6	68023892	10.725	9.626
22)	tc Methoxychlor	15.64	16.23	214.0E6	38777808	10.990	10.026
24)	tc Endrin Keton	16.45	16.63	476.0E6	81886380	10.851	9.600
25)	tc Mirex	15.93	16.59	316.9E6	59631340	11.132	9.815
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

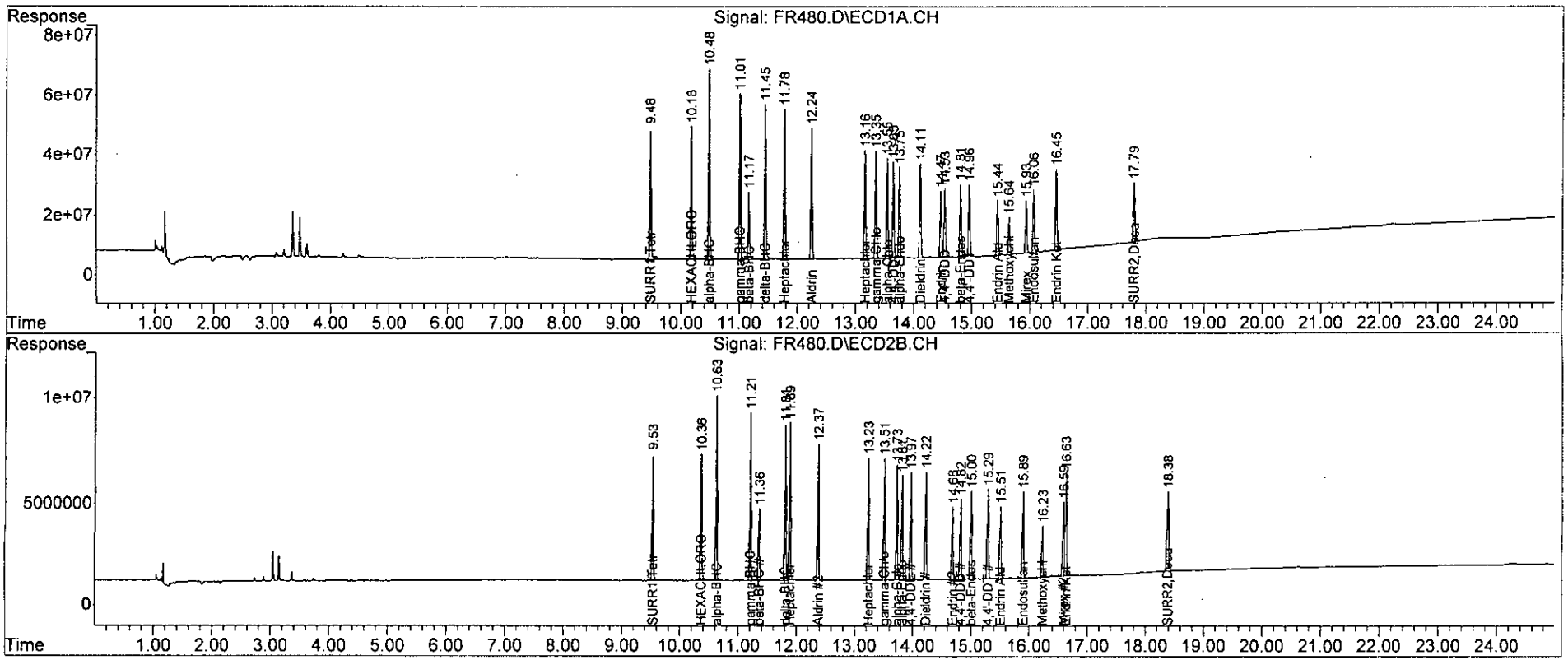
8081E072514.M Mon Jul 28 08:41:24 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR480.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 11:58 am
Operator : m.pedro
Sample : pest 10ppb Inst : 6890D
Misc : initial cal
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:50:08 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:43:37 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



65500

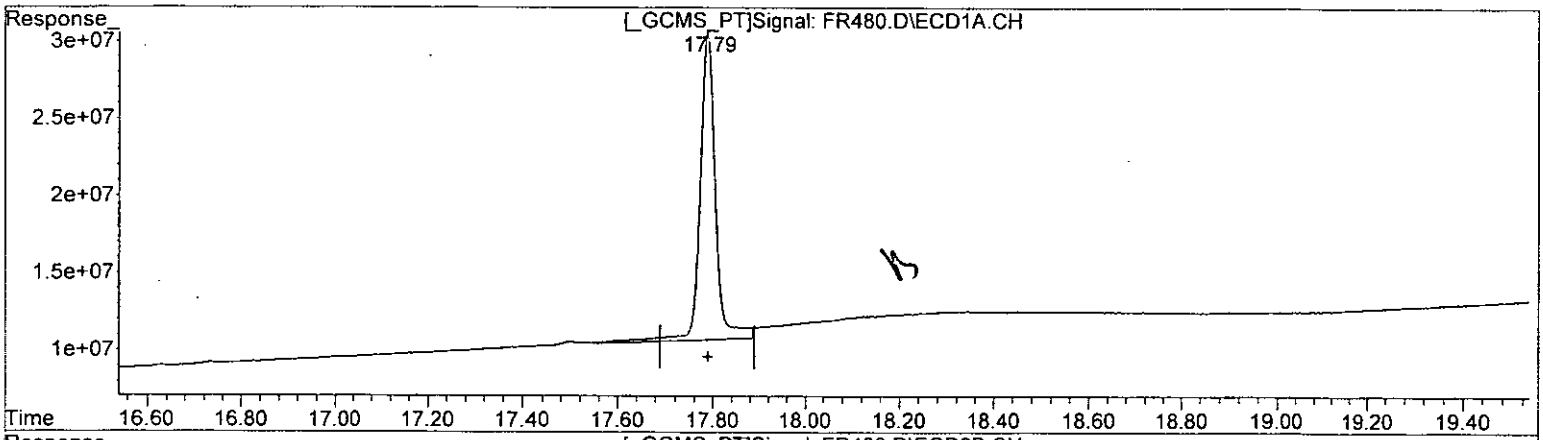
8081E072514.M Mon Jul 28 08:41:28 2014 Page: 2

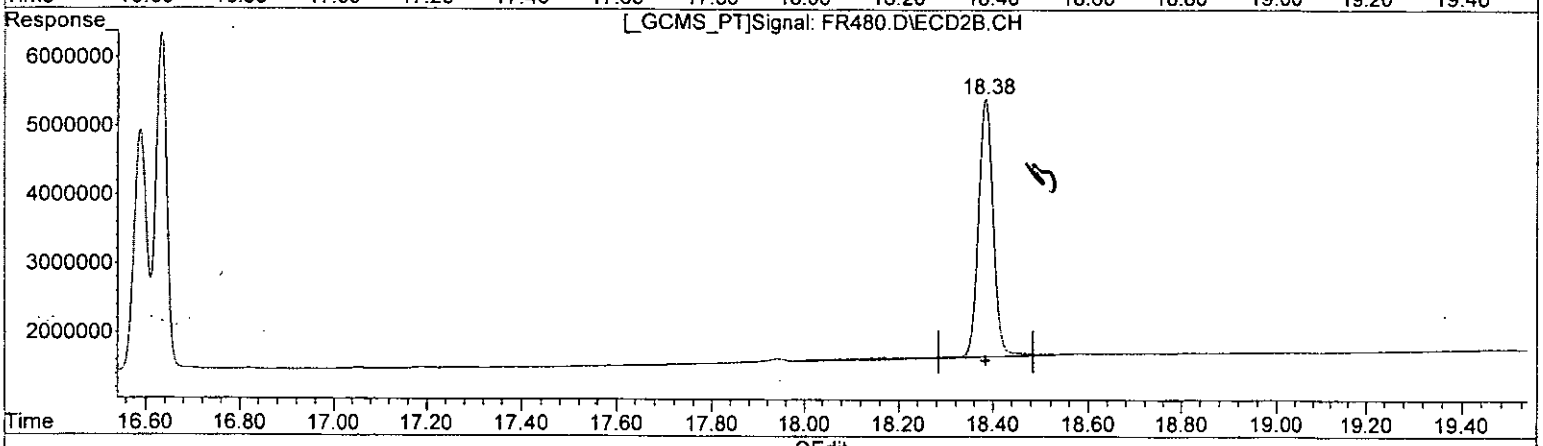
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR480.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 11:58 am
Operator : m.pedro
Sample : pest 10ppb Inst : 6890D
Misc : initial cal
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:49:05 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:43:37 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(29) SURR2,Decachlorobiphenyl (S)

17.79min 12.598ug/l

response 458942154

(29) SURR2,Decachlorobiphenyl #2 (S)

18.39min 10.897ug/l

response 86119503

(+) = Expected Retention Time

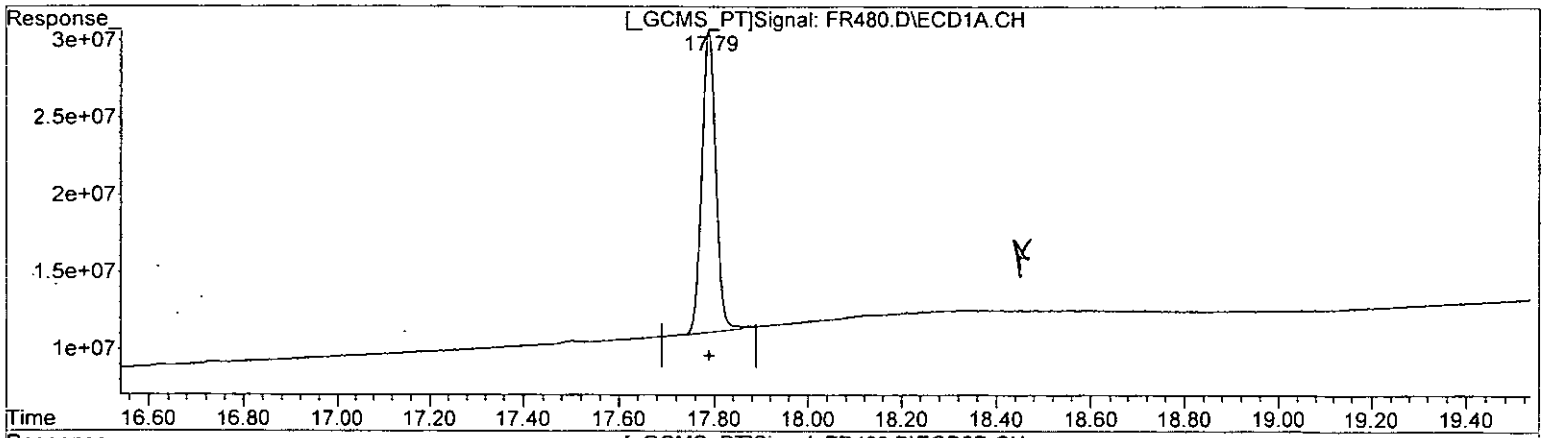
8081E072514.M Mon Jul 28 07:49:59 2014 Page: 1

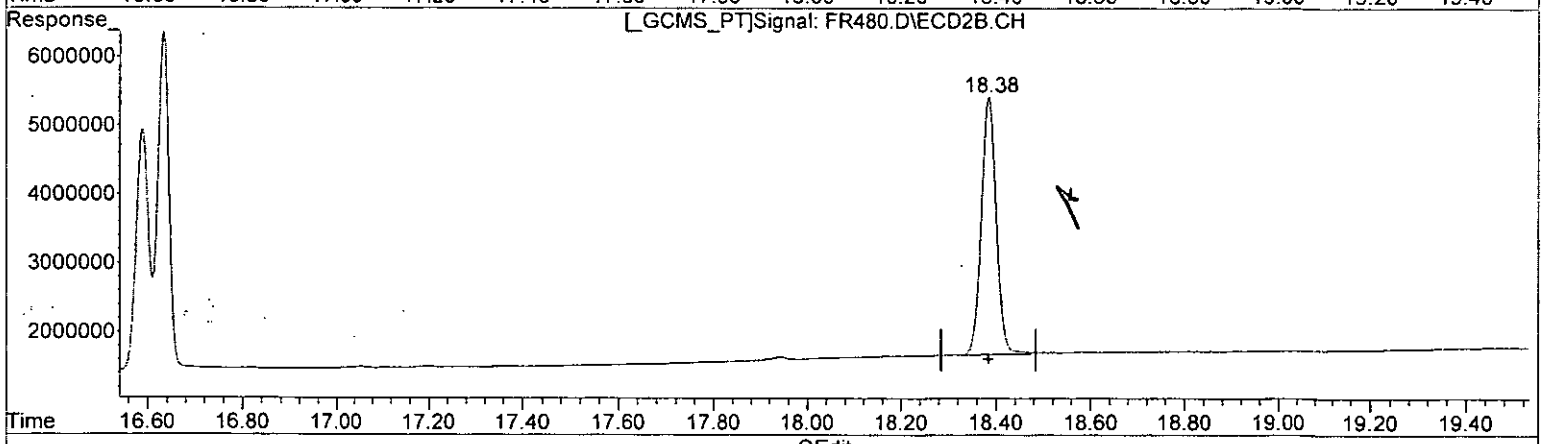
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR480.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 11:58 am
Operator : m.pedro
Sample : pest 10ppb Inst : 6890D
Misc : initial cal
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:49:05 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:43:37 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(29) SURR2,Decachlorobiphenyl (S)

17.79min 10.851ug/l m

response 395301389

(29) SURR2,Decachlorobiphenyl #2 (S)

18.38min 10.244ug/l m

response 80960726

(+) = Expected Retention Time

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00561

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR481.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 12:33 pm
Operator : m.pedro
Sample : pest 50ppb Inst : 6890D
Misc : initial cal
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:36:04 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Jul 24 09:36:28 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	System Monitoring Compounds						
1)	S SURR1,Tetrac	9.48	9.53	3302.7E6	475.4E6	58.128	51.464
	Spiked Amount 100.000	Range 30 - 150		Recovery =		58.13%	51.46%
29)	S SURR2,Decachloro	17.79	18.38	1916.4E6	380.0E6	54.156	48.620
	Spiked Amount 100.000	Range 30 - 150		Recovery =		54.16%	48.62%
	Target Compounds						
2)	TC HEXACHLOROBENZEN	10.18	10.36	3501.6E6	479.8E6	56.596	49.329
3)	tc alpha-BHC	10.48	10.63	5077.1E6	727.6E6	61.521	55.404
4)	tcm gamma-BHC (L	11.01	11.21	4401.1E6	642.0E6	60.778	54.466
5)	tcm Heptachlor	11.78	11.89	4046.7E6	618.6E6	60.661	53.784
6)	tcm Aldrin	12.24	12.37	3660.2E6	557.6E6	61.504	54.898
7)	tc beta-BHC	11.17	11.36	1790.1E6	266.6E6	57.615	50.263
8)	tc delta-BHC	11.45	11.81	4329.8E6	631.3E6	61.702	55.210
9)	tc Heptachlor E	13.16	13.23	3052.3E6	493.9E6	59.424	52.319
10)	tc alpha-Endosu	13.75	13.81	2677.3E6	439.7E6	59.695	51.791
11)	tc gamma-Chlord	13.35	13.51	3123.8E6	511.6E6	59.976	52.814
12)	tc alpha-Chlord	13.55	13.73	2911.9E6	480.5E6	59.812	52.020
13)	tc 4,4'-DDE	13.65	13.97	2865.5E6	463.7E6	60.864	53.661
14)	tcm Dieldrin	14.11	14.22	2872.2E6	481.5E6	60.874	53.561
15)	tcm Endrin	14.46	14.68	2120.1E6	350.4E6	61.253	53.464
17)	tc beta-Endosul	14.81	15.00	2298.8E6	401.2E6	59.440	51.750
18)	tc 4,4'-DDD	14.53	14.82	2212.9E6	374.3E6	59.538	52.867
19)	tcm 4,4'-DDT	14.96	15.29	2358.6E6	408.6E6	62.208	53.836
20)	tc Endrin Aldeh	15.44	15.51	1815.7E6	325.6E6	59.880	51.576
21)	tc Endosulfan S	16.06	15.90	1877.4E6	359.6E6	57.419	50.957
22)	tc Methoxychlor	15.64	16.23	1093.3E6	193.3E6	59.641	50.618
24)	tc Endrin Keton	16.45	16.63	2343.2E6	436.4E6	56.793	51.584
25)	tc Mirex	15.93	16.59	1523.5E6	276.1E6	55.802	46.194
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

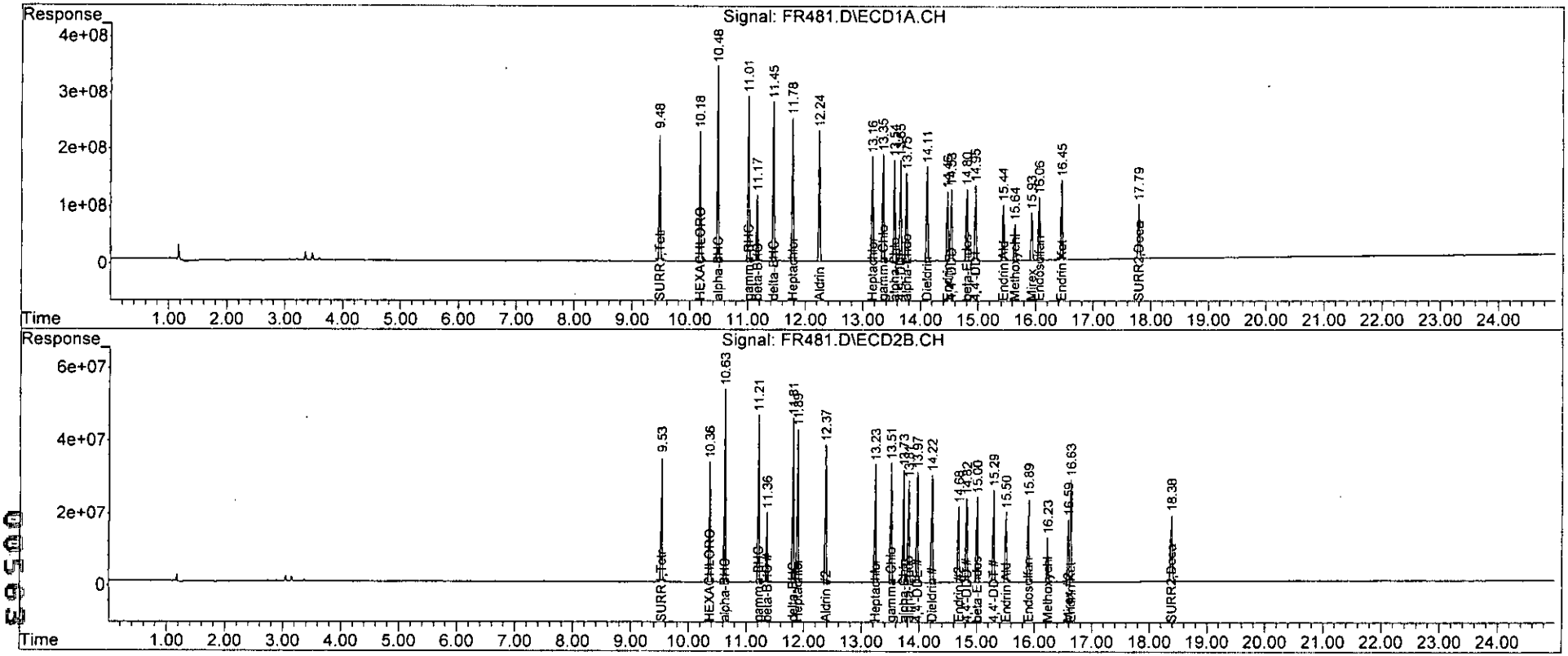
8081E072514.M Mon Jul 28 08:41:34 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR481.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 12:33 pm
Operator : m.pedro
Sample : pest 50ppb Inst : 6890D
Misc : initial cal
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:36:04 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Jul 24 09:36:28 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



8081E072514.M Mon Jul 28 08:41:38 2014 Page: 2

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR482.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 1:07 pm
Operator : m.pedro
Sample : pest 100ppb Inst : 6890D
Misc : initial cal
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:52:22 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:51:45 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	System Monitoring Compounds						
1) S	SURR1,Tetrac	9.48	9.53	6446.4E6	962.1E6	101.983	104.805
	Spiked Amount 100.000	Range 30 - 150		Recovery =		101.98%	104.81%
29) S	SURR2,Decachloro	17.79	18.38	3731.0E6	737.0E6	98.589	92.722
	Spiked Amount 100.000	Range 30 - 150		Recovery =		98.59%	92.72%
	Target Compounds						
2) TC	HEXACHLOROBENZEN	10.18	10.36	6839.3E6	958.9E6	99.656	98.980
3) tc	alpha-BHC	10.48	10.63	10064.0E6	1498.7E6	109.978	114.851
4) tcm	gamma-BHC (L	11.01	11.21	8685.9E6	1319.4E6	108.091	112.510
5) tcm	Heptachlor	11.78	11.89	7766.6E6	1243.5E6	102.643	107.535
6) tcm	Aldrin	12.24	12.37	7173.2E6	1145.1E6	106.827	112.086
7) tc	beta-BHC	11.16	11.36	3520.2E6	539.1E6	101.847	102.515
8) tc	delta-BHC	11.44	11.81	8574.4E6	1309.5E6	109.445	115.079
9) tc	Heptachlor E	13.16	13.23	5958.2E6	1001.7E6	103.518	106.058
10) tc	alpha-Endosu	13.75	13.81	5256.6E6	895.0E6	104.100	106.070
11) tc	gamma-Chlord	13.35	13.51	6217.5E6	1056.2E6	106.193	108.954
12) tc	alpha-Chlord	13.55	13.73	5793.8E6	986.2E6	106.071	106.827
13) tc	4,4'-DDE	13.65	13.97	5722.4E6	967.6E6	108.436	111.965
14) tcm	Dieldrin	14.11	14.22	5717.8E6	998.4E6	108.183	110.772
15) tcm	Endrin	14.46	14.68	4277.4E6	734.4E6	111.252	112.417
17) tc	beta-Endosul	14.80	15.00	4582.0E6	823.2E6	107.055	106.100
18) tc	4,4'-DDD	14.53	14.82	4453.8E6	781.7E6	107.651	110.336
19) tcm	4,4'-DDT	14.95	15.29	4751.4E6	856.8E6	112.336	111.721
20) tc	Endrin Aldeh	15.44	15.50	3679.3E6	671.6E6	109.248	104.738
21) tc	Endosulfan S	16.06	15.89	3780.2E6	739.2E6	106.683	104.824
22) tc	Methoxychlor	15.64	16.23	2177.6E6	391.7E6	105.581	100.510
24) tc	Endrin Keton	16.45	16.63	4678.6E6	892.7E6	101.268	103.902
25) tc	Mirex	15.93	16.59	3002.5E6	547.8E6	100.480	89.881
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

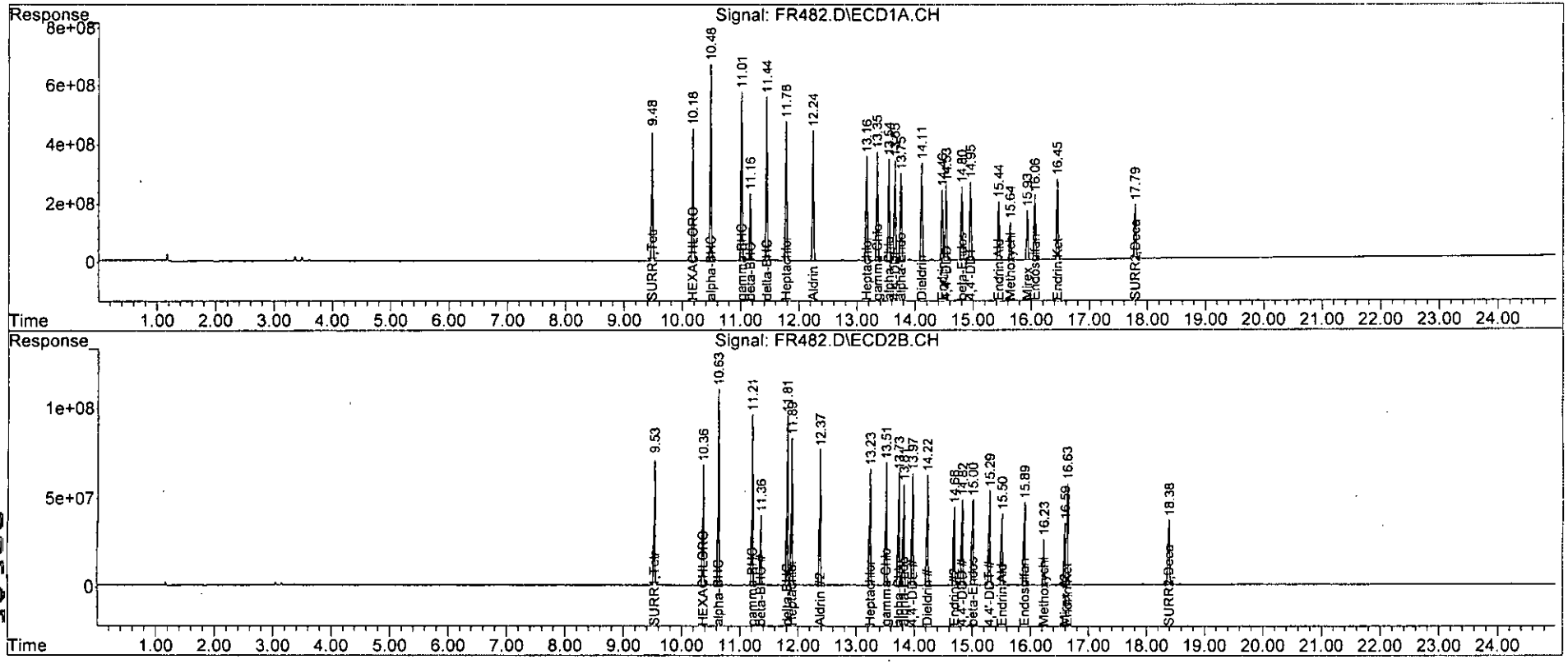
8081E072514.M Mon Jul 28 08:41:44 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR482.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 1:07 pm
Operator : m.pedro
Sample : pest 100ppb Inst : 6890D
Misc : initial cal
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:52:22 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:51:45 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



59580

8081E072514.M Mon Jul 28 08:41:48 2014 Page: 2

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR483.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 1:41 pm
Operator : m.pedro
Sample : pest 200ppb Inst : 6890D
Misc : initial cal
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:53:33 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:52:55 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	System Monitoring Compounds						
1)	S SURR1,Tetrac	9.48	9.53	12561.6E6	1936.5E6	194.351	210.500
	Spiked Amount 100.000	Range 30 - 150		Recovery =		194.35%#	210.50%#
29)	S SURR2,Decachloro	17.79	18.38	7405.1E6	1477.3E6	193.075	185.737
	Spiked Amount 100.000	Range 30 - 150		Recovery =		193.07%#	185.74%#
	Target Compounds						
2)	TC HEXACHLOROBENZEN	10.18	10.36	13429.5E6	1928.1E6	191.247	198.544
3)	tc alpha-BHC	10.48	10.63	19696.1E6	3047.1E6	209.725	232.924
4)	tcm gamma-BHC (L	11.01	11.21	17018.6E6	2680.2E6	206.520	227.768
5)	tcm Heptachlor	11.78	11.89	14679.9E6	2469.7E6	189.493	212.774
6)	tcm Aldrin	12.24	12.37	13848.7E6	2314.7E6	201.129	225.541
7)	tc beta-BHC	11.16	11.36	6953.8E6	1102.5E6	196.373	209.038
8)	tc delta-BHC	11.45	11.81	16809.5E6	2669.4E6	209.037	233.650
9)	tc Heptachlor E	13.16	13.23	11535.2E6	2011.4E6	195.875	212.122
10)	tc alpha-Endosu	13.75	13.81	10302.4E6	1816.4E6	199.333	214.410
11)	tc gamma-Chlord	13.35	13.51	12338.6E6	2159.1E6	205.466	221.742
12)	tc alpha-Chlord	13.55	13.73	11493.8E6	2022.0E6	205.210	218.078
13)	tc 4,4'-DDE	13.65	13.97	11337.5E6	1991.0E6	209.441	229.320
14)	tcm Dieldrin	14.11	14.22	11309.6E6	2044.7E6	208.853	225.867
15)	tcm Endrin	14.46	14.68	8503.6E6	1514.5E6	213.889	228.346
17)	tc beta-Endosul	14.80	15.00	9195.6E6	1698.1E6	209.947	218.114
18)	tc 4,4'-DDD	14.53	14.82	8982.0E6	1624.9E6	211.991	228.634
19)	tcm 4,4'-DDT	14.95	15.29	9670.1E6	1792.2E6	222.693	232.271
20)	tc Endrin Aldeh	15.44	15.50	7495.3E6	1396.5E6	218.197	217.914
21)	tc Endosulfan S	16.06	15.89	7702.9E6	1524.3E6	212.590	215.382
22)	tc Methoxychlor	15.64	16.23	4402.9E6	800.5E6	208.614	204.359
24)	tc Endrin Keton	16.45	16.63	9455.7E6	1843.4E6	201.281	214.664
25)	tc Mirex	15.93	16.59	6031.3E6	1117.3E6	197.702	182.782
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

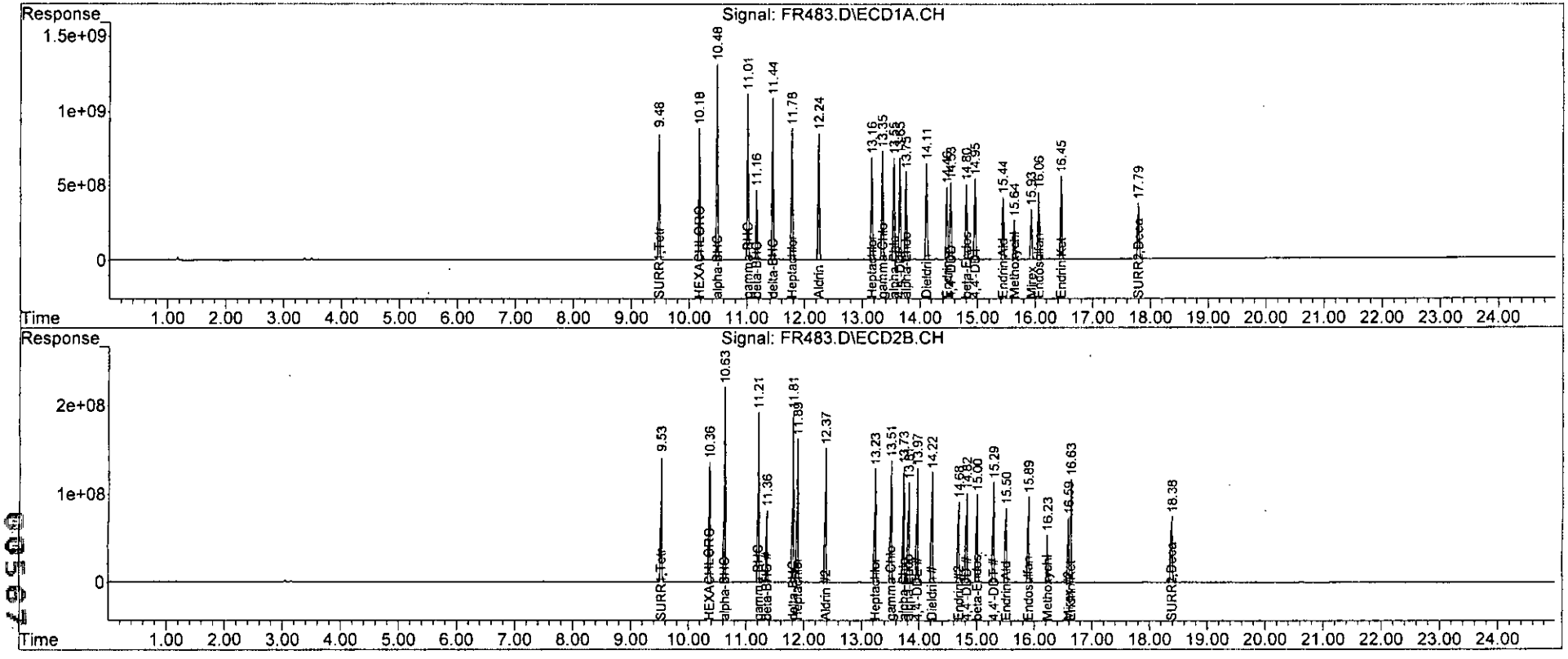
8081E072514.M Mon Jul 28 08:41:53 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR483.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 1:41 pm
Operator : m.pedro
Sample : pest 200ppb Inst : 6890D
Misc : initial cal
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:53:33 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:52:55 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



8081E072514.M Mon Jul 28 08:41:57 2014 Page: 2

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR484.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 2:15 pm
Operator : m.pedro
Sample : pest icv Inst : 6890D
Misc : initial cal
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:54:55 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:54:02 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
2 TC	HEXACHLOROBENZENE	71.634	74.949 E6	-4.6	103	0.00
3 tc	alpha-BHC	96.042	98.420 E6	-2.5	102	0.00
4 tcm	gamma-BHC (L	84.164	84.995 E6	-1.0	101	0.00
5 tcm	Heptachlor	78.956	84.277 E6	-6.7	104	0.00
6 tcm	Aldrin	70.252	75.262 E6	-7.1	107	0.00
7 tc	beta-BHC	36.141	36.601 E6	-1.3	99	0.00
8 TC	delta-BHC	82.141	84.656 E6	-3.1	103	0.00
9 tc	Heptachlor E	59.994	62.873 E6	-4.8	104	0.00
10 tc	alpha-Endosu	52.713	54.635 E6	-3.6	103	0.00
11 tc	gamma-Chlord	61.350	62.857 E6	-2.5	105	0.00
12 tc	alpha-Chlord	57.201	58.245 E6	-1.8	103	0.00
13 tc	4,4'-DDE	55.275	56.066 E6	-1.4	104	0.00
14 tcm	Dieldrin	55.275	56.274 E6	-1.8	104	0.00
15 tcm	Endrin	41.046	37.439 E6	8.8	97	0.00
17 tc	beta-Endosul	44.725	45.042 E6	-0.7	102	0.00
18 tc	4,4'-DDD	43.266	43.529 E6	-0.6	103	0.00
19 tcm	4,4'-DDT	44.545	43.517 E6	2.3	101	0.00
20 tc	Endrin Aldeh	34.962	36.197 E6	-3.5	106	0.00
21 tc	Endosulfan S	37.033	38.143 E6	-3.0	105	0.00
22 tc	Methoxychlor	21.567	21.910 E6	-1.6	102	0.00
24 tc	Endrin Keton	47.690	48.294 E6	-1.3	101	0.00
Signal #2						
2 TC	HEXACHLOROBENZENE	9.725	10.070 E6	-3.5	105	0.00
3 tc	alpha-BHC	13.107	12.588 E6	4.0	103	0.00
4 tcm	gamma-BHC (L	11.797	11.511 E6	2.4	104	0.00
5 tcm	Heptachlor	11.652	11.644 E6	0.1	104	0.00
6 tcm	Aldrin	10.299	10.225 E6	0.7	106	0.00
7 tc	beta-BHC	5.288	5.308 E6	-0.4	103	0.00
8 tc	delta-BHC	11.456	10.937 E6	4.5	103	0.00
9 tc	Heptachlor E	9.512	9.500 E6	0.1	104	0.00
10 tc	alpha-Endosu	8.502	8.462 E6	0.5	104	0.00
11 tc	gamma-Chlord	9.758	9.443 E6	3.2	103	0.00
12 tc	alpha-Chlord	9.295	9.143 E6	1.6	103	0.00
13 tc	4,4'-DDE	8.706	8.346 E6	4.1	104	0.00
14 tcm	Dieldrin	9.084	8.639 E6	4.9	102	0.00
15 tcm	Endrin	6.750	5.739 E6	15.0	95	0.00
17 tc	beta-Endosul	7.812	7.574 E6	3.0	102	0.00

8081E072514.M Mon Jul 28 07:55:22 2014 Page: 1

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR484.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 2:15 pm
Operator : m.pedro
Sample : pest icv Inst : 6890D
Misc : initial cal
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:54:55 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:54:02 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
18	tc	4,4'-DDD	7.122	6.726 E6	5.6	102	0.00
19	tcm	4,4'-DDT	7.761	7.306 E6	5.9	103	0.00
20	tc	Endrin Aldeh	6.402	6.723 E6	-5.0	109	0.00
21	tc	Endosulfan S	7.093	7.101 E6	-0.1	104	0.00
22	tc	Methoxychlor	3.932	3.965 E6	-0.8	102	0.00
24	tc	Endrin Keton	8.574	8.612 E6	-0.4	105	0.00

Evaluate Continuing Calibration Report - Not Founds

1	S	SURR1,Tetrac	65.873	0.000 E6	100.0#	0#	-9.48#
16	tc	KEPONE	20.219	0.000 E6	100.0#	0#	-14.54#
23	tc	FAMPHUR	28.092	0.000 E6	100.0#	0#	-16.33#
25	tc	Mirex	31.098	0.000 E6	100.0#	0#	-15.93#
26	tc	2,4'-DDE	0.000	0.000	0.0	0#	-12.93#
27	tc	2,4'-DDD	45.596	0.000 E6	100.0#	0#	-13.68#
28	tc	2,4'-DDT	0.000	0.000	0.0	0#	-14.01#
29	S	SURR2,Decachlorobiphenyl	38.956	0.000 E6	100.0#	0#	-17.79#
30	L8C	Toxaphene	441.845	0.000 E3	100.0#	0#	-14.60#
31	L8C	Toxaphene{2}	540.008	0.000 E3	100.0#	0#	-14.99#
32	L8C	Toxaphene{3}	1.246	0.000 E6	100.0#	0#	-15.59#
33	L8C	Toxaphene{4}	1.504	0.000 E6	100.0#	0#	-16.42#
34	L8C	Toxaphene{5}	1.269	0.000 E6	100.0#	0#	-16.61#
35	L9C	Chlordane	2.456	0.000 E6	100.0#	0#	-11.66#
36	L9C	Chlordane{2}	3.452	0.000 E6	100.0#	0#	-11.78#
37	L9C	Chlordane{3}	2.617	0.000 E6	100.0#	0#	-12.46#
38	L9C	Chlordane{4}	1.330	0.000 E6	100.0#	0#	-14.51#
39	L9C	Chlordane{5}	1.790	0.000 E6	100.0#	0#	-14.71#

Signal #2

1	S	SURR1,Tetrac	9.214	0.000 E6	100.0#	0#	-9.53#
16	tc	KEPONE	4.535	0.000 E6	100.0#	0#	-14.87#
23	tc	FAMPHUR	6.390	0.000 E6	100.0#	0#	-15.99#
25	tc	Mirex	6.125	0.000 E6	100.0#	0#	-16.59#
26	tc	2,4'-DDE	51.350	0.000 E3	100.0#	0#	-12.97#
27	tc	2,4'-DDD	23.206	0.000 E3	100.0#	0#	-13.64#
28	tc	2,4'-DDT	0.000	0.000	0.0	0#	-14.08#
29	S	SURR2,Decachlorobiphenyl	7.971	0.000 E6	100.0#	0#	-18.38#
30	L8C	Toxaphene	230.214	0.000 E3	100.0#	0#	-15.13#

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR484.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 2:15 pm
Operator : m.pedro
Sample : pest icv Inst : 6890D
Misc : initial cal
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:54:55 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:54:02 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	System Monitoring Compounds						
	Target Compounds						
2)	TC HEXACHLOROBENZEN	10.18	10.36	749.5E6	100.7E6	10.463	10.355
3)	tc alpha-BHC	10.48	10.63	984.2E6	125.9E6	10.248	9.604
4)	tcm gamma-BHC (L	11.01	11.21	850.0E6	115.1E6	10.099	9.757
5)	tcm Heptachlor	11.78	11.89	842.8E6	116.4E6	10.674	9.992
6)	tcm Aldrin	12.24	12.37	752.6E6	102.3E6	10.713	9.929
7)	tc beta-BHC	11.17	11.36	366.0E6	53078672	10.127	10.038
8)	tc delta-BHC	11.45	11.81	846.6E6	109.4E6	10.306	9.547
9)	tc Heptachlor E	13.16	13.23	628.7E6	94996463	10.480	9.987
10)	tc alpha-Endosu	13.75	13.81	546.3E6	84622970	10.365	9.953
11)	tc gamma-Chlord	13.35	13.51	628.6E6	94427140	10.246	9.677
12)	tc alpha-Chlord	13.55	13.73	582.4E6	91432654	10.182	9.836
13)	tc 4,4'-DDE	13.65	13.97	560.7E6	83464396	10.143	9.587
14)	tcm Dieldrin	14.11	14.22	562.7E6	86388754	10.181	9.510
15)	tcm Endrin	14.46	14.68	374.4E6	57387985	9.121	8.502
17)	tc beta-Endosul	14.81	15.00	450.4E6	75737860	10.071	9.695
18)	tc 4,4'-DDD	14.53	14.82	435.3E6	67262361	10.061	9.444
19)	tcm 4,4'-DDT	14.96	15.29	435.2E6	73058099	9.769	9.414
20)	tc Endrin Aldeh	15.44	15.51	362.0E6	67227076	10.353	10.500
21)	tc Endosulfan S	16.06	15.90	381.4E6	71014249	10.300	10.011
22)	tc Methoxychlor	15.64	16.23	219.1E6	39646480	10.159	10.082
24)	tc Endrin Keton	16.45	16.63	482.9E6	86123196	10.127	10.044
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000

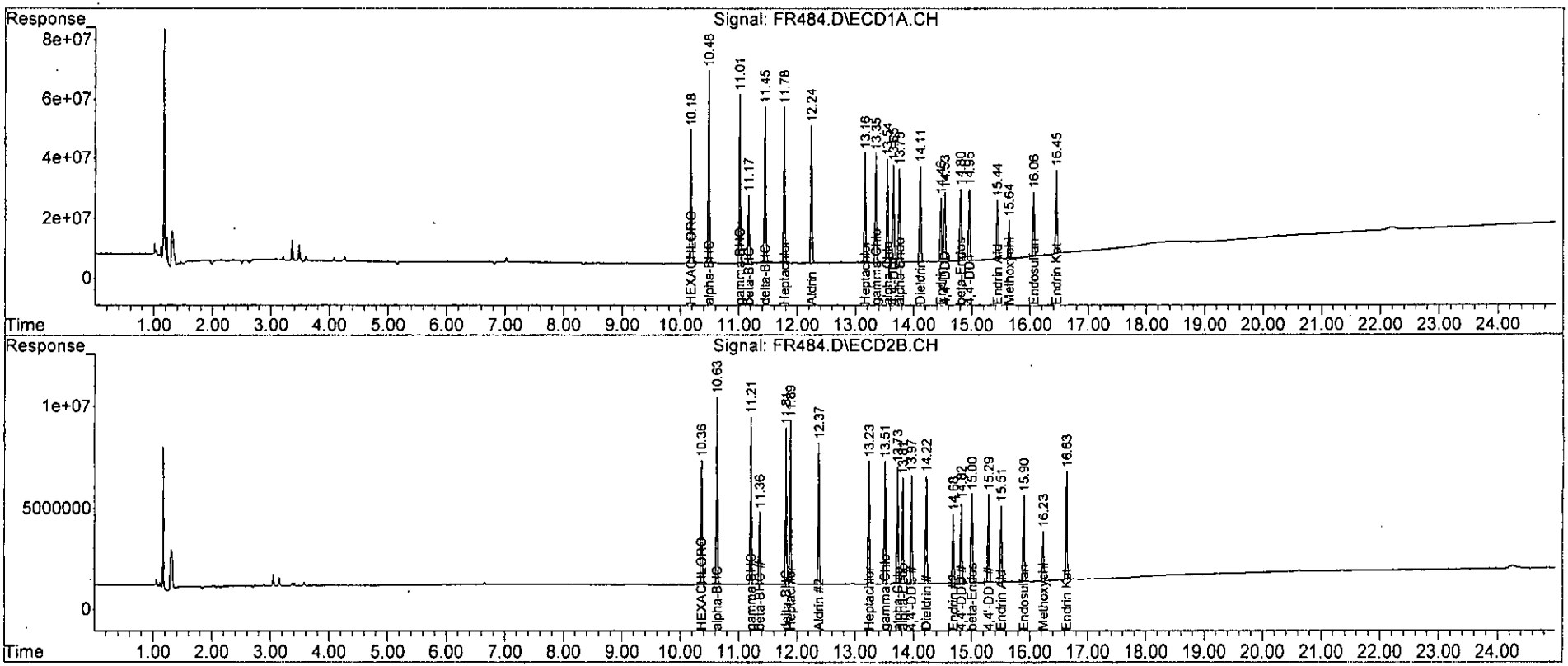
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR484.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 2:15 pm
Operator : m.pedro
Sample : pest icv Inst : 6890D
Misc : initial cal
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 07:54:55 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:54:02 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



8081E072514.M Mon Jul 28 08:42:07 2014 Page: 2

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR485.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 2:49 pm
Operator : m.pedro
Sample : k/f low Inst : 6890D
Misc : initial cal
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:04:25 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:54:02 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
System Monitoring Compounds						
Target Compounds						
16) tc KEPONE	14.54	14.86	12268.5E6	2452.1E6	606.796	540.693
23) tc FAMPHUR	16.32	15.98	3140.8E6	624.8E6	111.802m	97.776
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

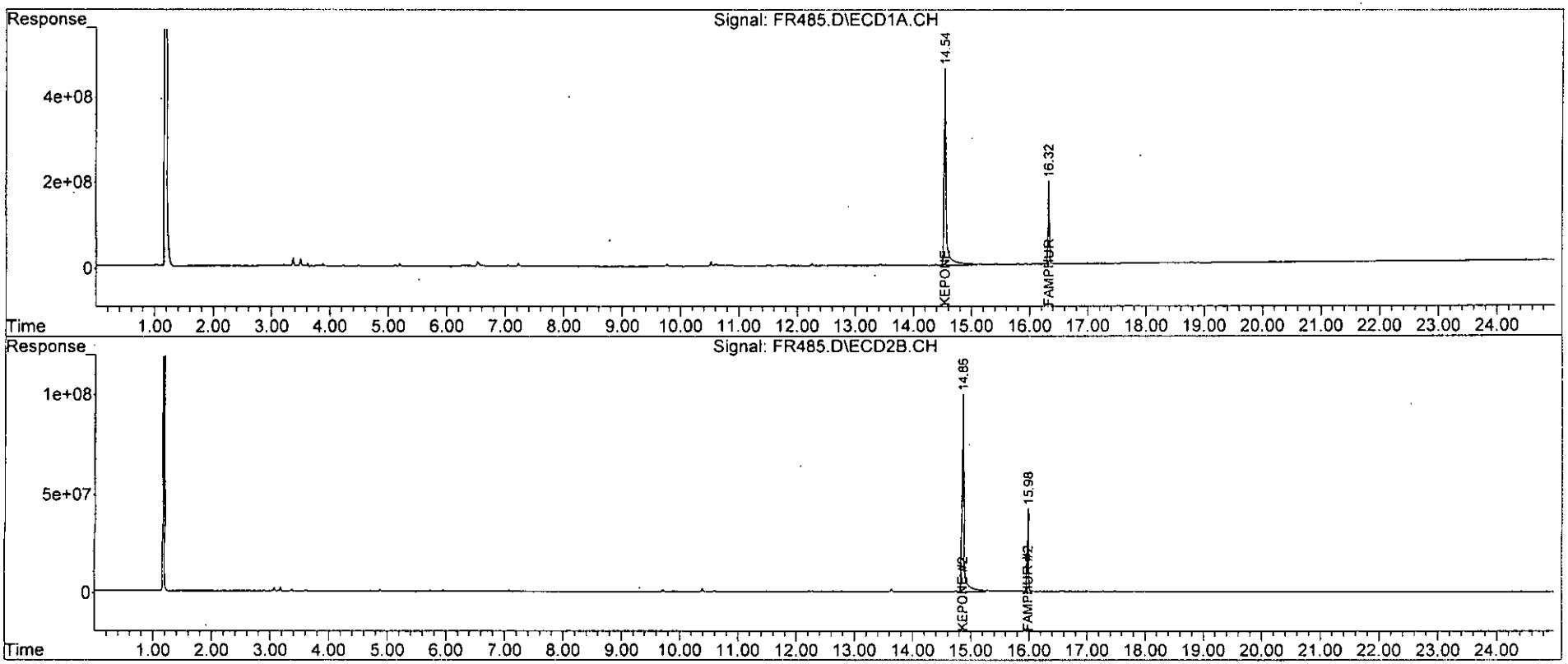
8081E072514.M Mon Jul 28 08:42:12 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR485.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 2:49 pm
Operator : m.pedro
Sample : k/f low Inst : 6890D
Misc : initial cal
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:04:25 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:54:02 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



E2500 0572

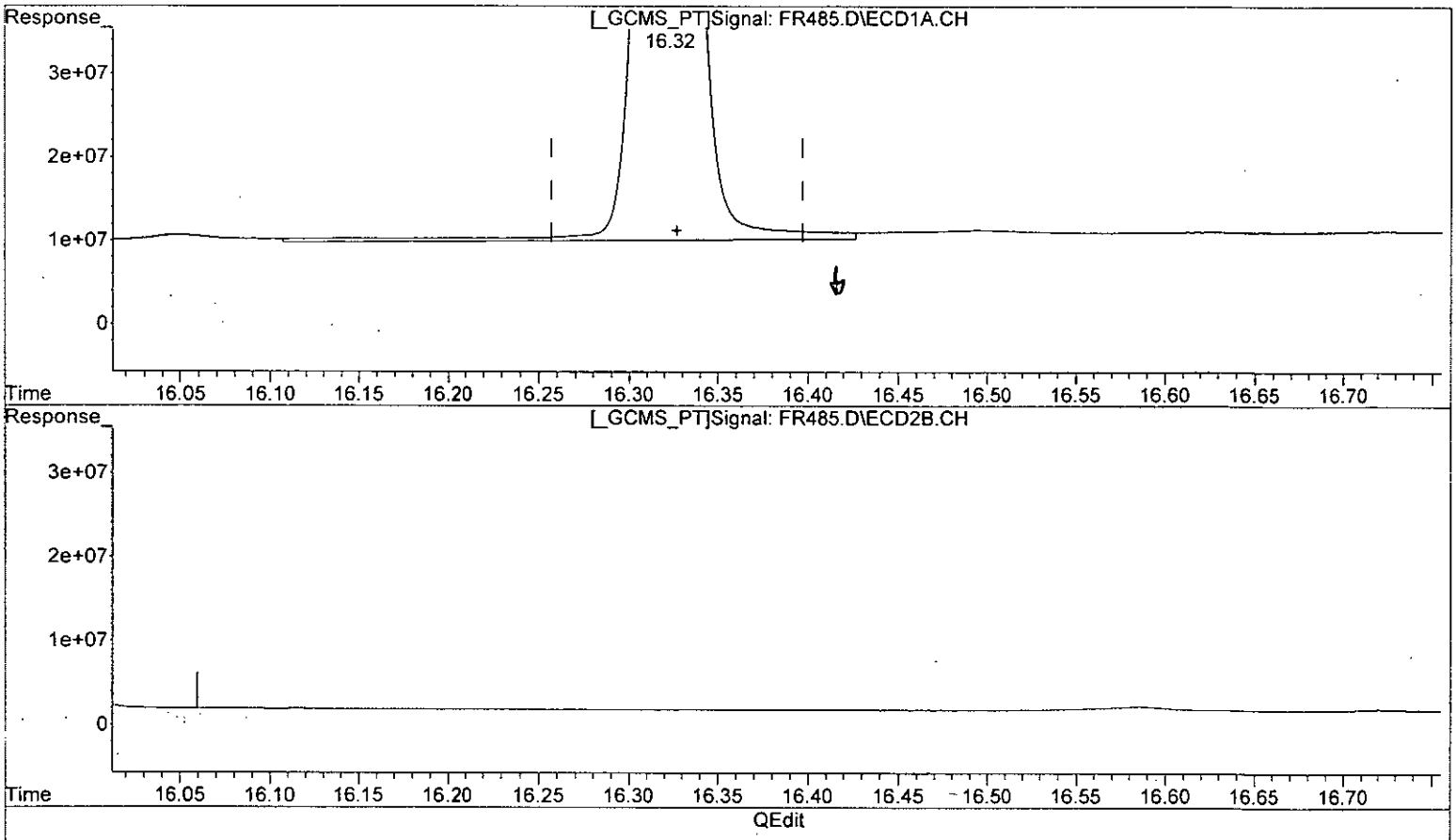
8081E072514.M Mon Jul 28 08:42:15 2014 Page: 2

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR485.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 2:49 pm
Operator : m.pedro
Sample : k/f low Inst : 6890D
Misc : initial cal
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:02:01 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:54:02 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



(23) FAMPHUR (tc)
16.32min 114.825ug/l
response 3225704068

(23) FAMPHUR #2 (tc)
15.98min 97.776ug/l
response 624806317

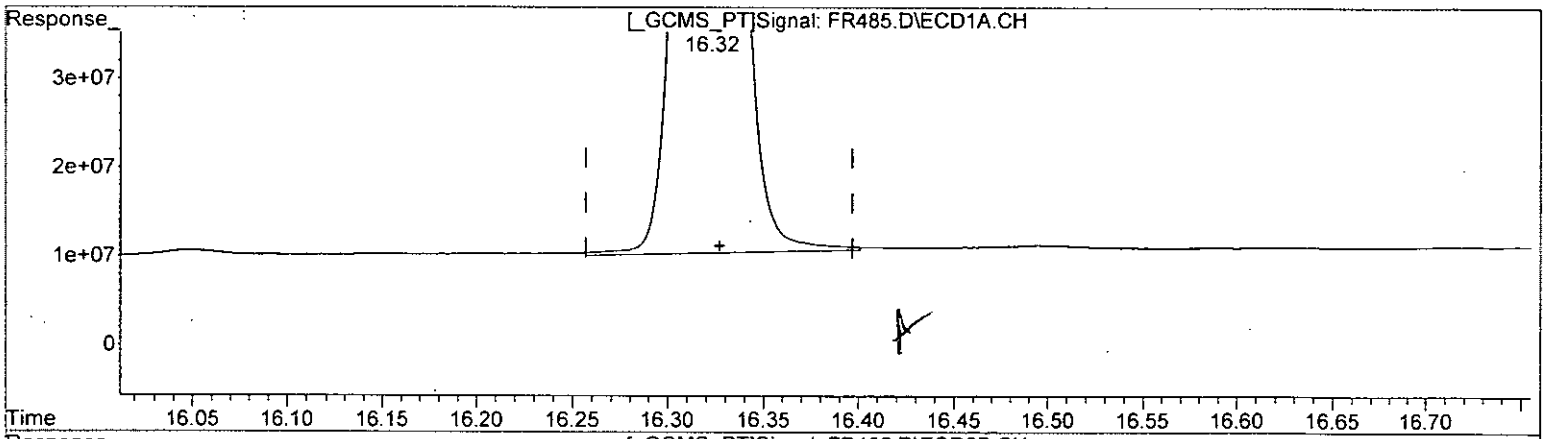
(+) = Expected Retention Time
8081E072514.M Mon Jul 28 08:04:22 2014 Page: 1

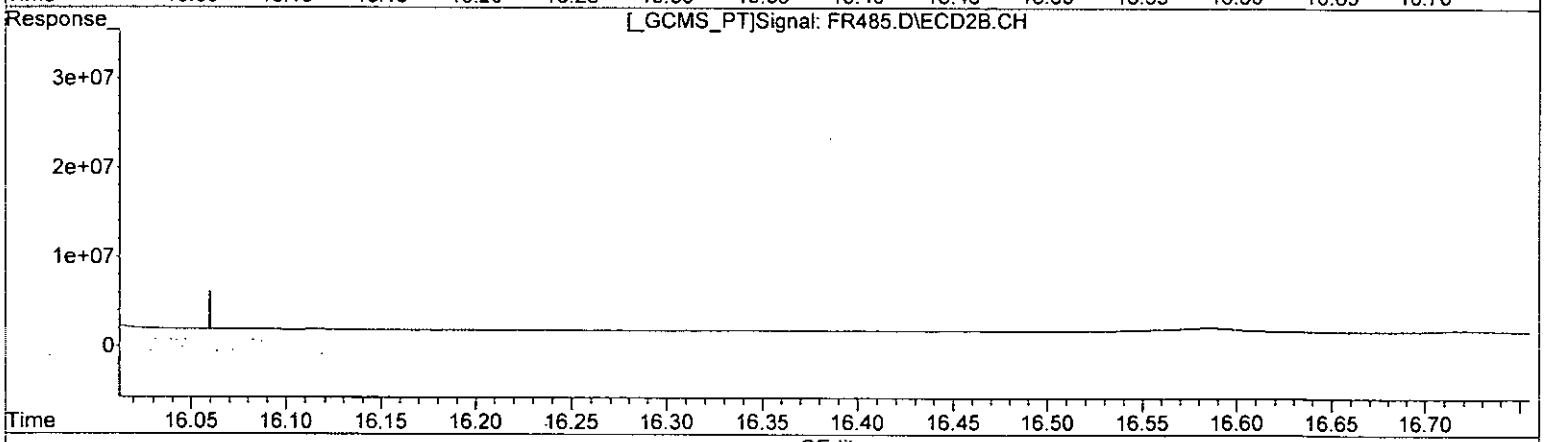
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR485.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 2:49 pm
Operator : m.pedro
Sample : k/f low Inst : 6890D
Misc : initial cal
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:02:01 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 07:54:02 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(23) FAMPHUR (tc)
16.32min 111.802ug/l m
response 3140769769

(23) FAMPHUR #2 (tc)
15.98min 97.776ug/l
response 624806317

(+) = Expected Retention Time
8081E072514.M Mon Jul 28 08:04:30 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR486.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 3:24 pm
Operator : m.pedro
Sample : k/f ml Inst : 6890D
Misc : initial cal
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:05:20 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:04:43 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	System Monitoring Compounds						
	Target Compounds						
16)	tc KEPONE	14.54	14.86	23671.1E6	4837.3E6	1128.437	1055.892
23)	tc FAMPHUR	16.32	15.98	6522.5E6	1300.4E6	226.008	202.976
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

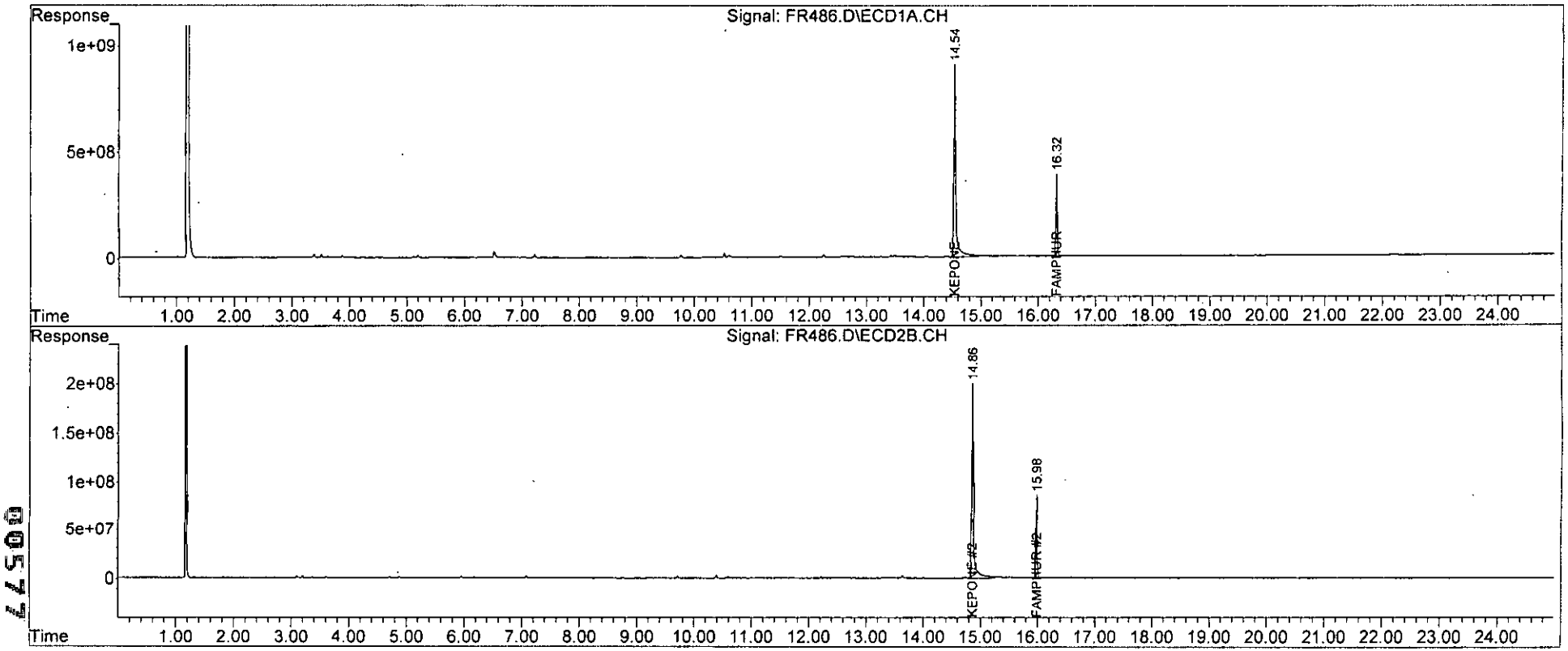
8081E072514.M Mon Jul 28 08:42:21 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR486.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 3:24 pm
Operator : m.pedro
Sample : k/f ml Inst : 6890D
Misc : initial cal
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:05:20 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:04:43 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



8081E072514.M Mon Jul 28 08:42:25 2014 Page: 2

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR487.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 3:58 pm
Operator : m.pedro
Sample : k/f m Inst : 6890D
Misc : initial cal
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:06:12 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:05:37 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	System Monitoring Compounds						
	Target Compounds						
16)	tc KEPONE	14.54	14.86	34853.4E6	7047.8E6	1619.949	1529.477
23)	tc FAMPHUR	16.32	15.98	9787.0E6	1940.6E6	329.314	302.075
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000

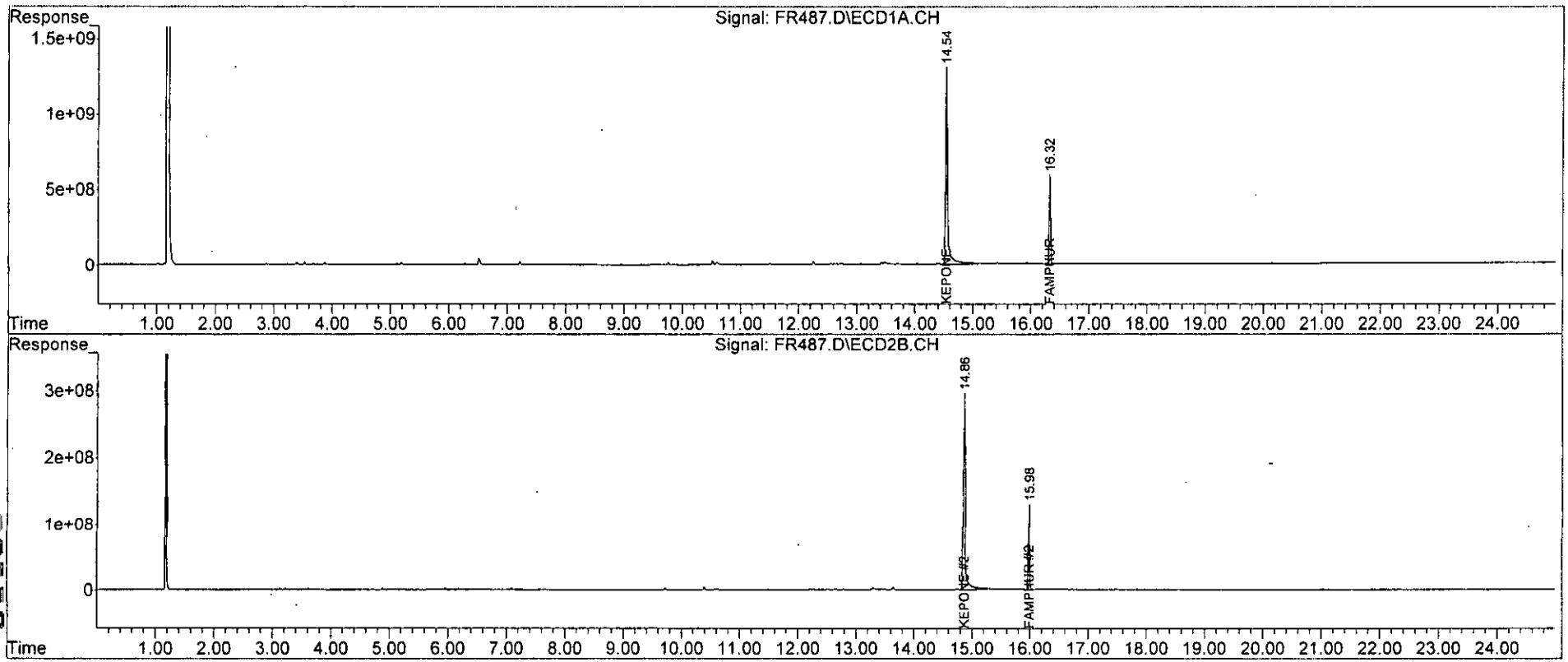
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR487.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 3:58 pm
Operator : m.pedro
Sample : k/f m Inst : 6890D
Misc : initial cal
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:06:12 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:05:37 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



8081E072514.M Mon Jul 28 08:42:33 2014 Page: 2

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR488.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 4:32 pm
Operator : m.pedro
Sample : k/f mh Inst : 6890D
Misc : initial cal
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:07:02 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:06:28 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	System Monitoring Compounds						
	Target Compounds						
16)	tc KEPONE	14.54	14.86	44703.8E6	9083.4E6	2019.743	1953.638
23)	tc FAMPHUR	16.32	15.98	12855.9E6	2570.0E6	420.213	398.044
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000

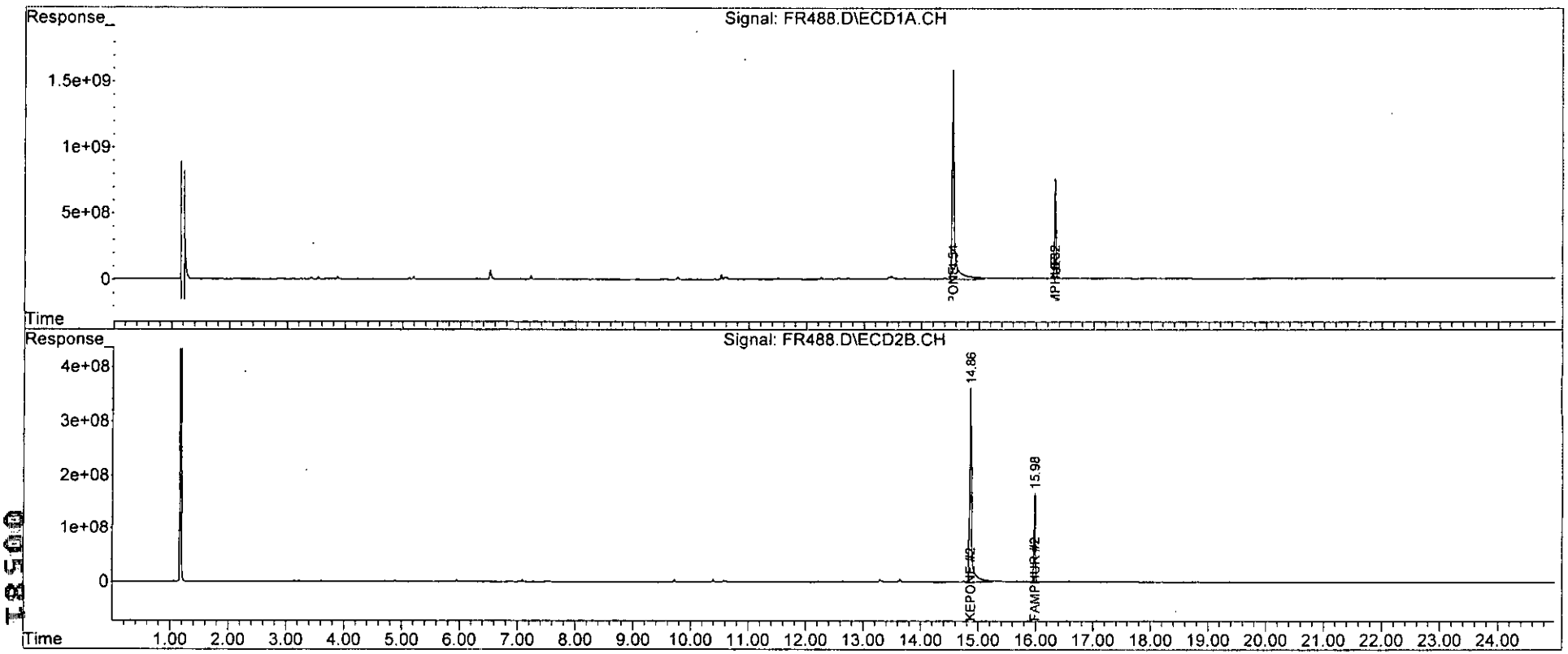
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR488.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 4:32 pm
Operator : m.pedro
Sample : k/f mh Inst : 6890D
Misc : initial cal
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:07:02 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:06:28 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



8081E072514.M Mon Jul 28 08:42:43 2014 Page: 2

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR489.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 5:06 pm
Operator : m.pedro
Sample : k/f h Inst : 6890D
Misc : initial cal
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:07:55 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:07:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	System Monitoring Compounds						
	Target Compounds						
16)	tc KEPONE	14.54	14.86	54590.3E6	11226.4E6	2410.197	2402.944
23)	tc FAMPHUR	16.32	15.98	15801.7E6	3320.5E6	503.536	516.234
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

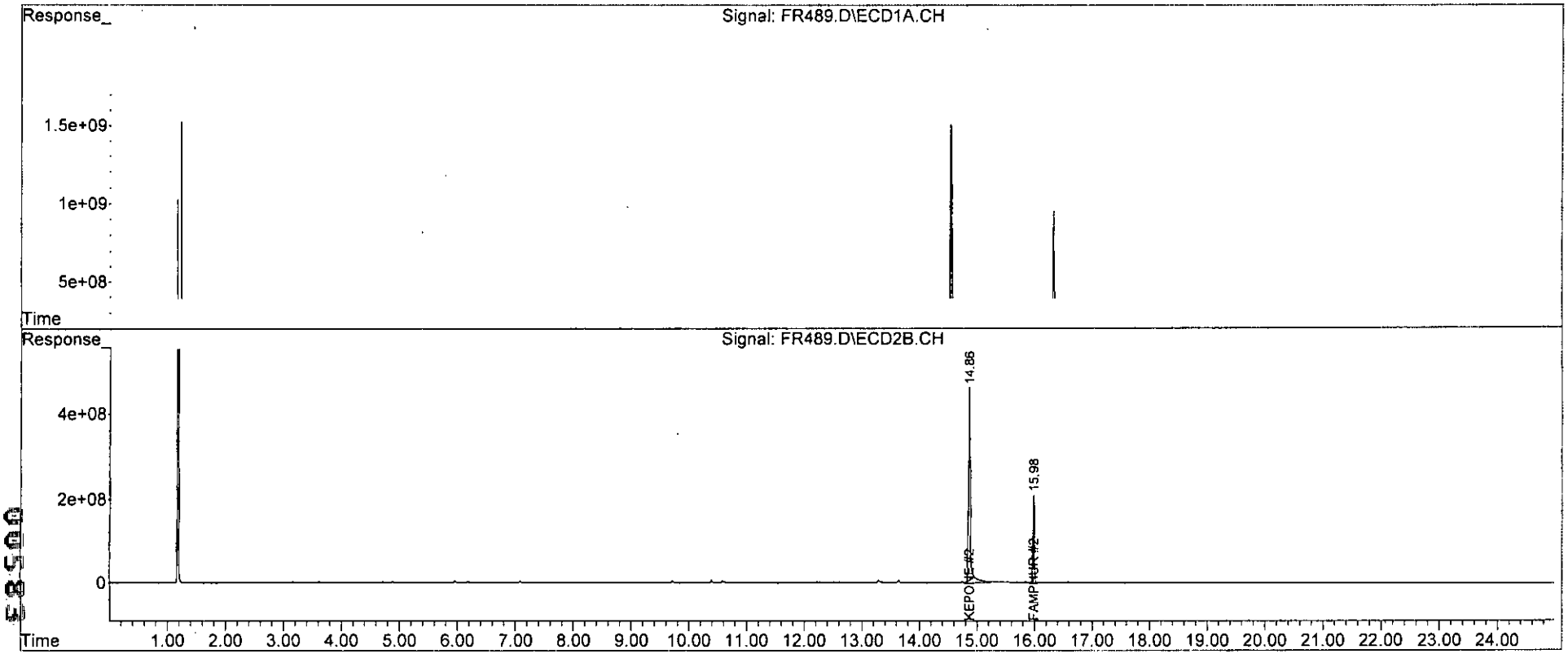
8081E072514.M Mon Jul 28 08:42:48 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR489.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 5:06 pm
Operator : m.pedro
Sample : k/f h Inst : 6890D
Misc : initial cal
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:07:55 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:07:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



8081E072514.M Mon Jul 28 08:42:51 2014 Page: 2

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR490.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 5:40 pm
Operator : m.pedro
Sample : k/f icv Inst : 6890D
Misc : initial cal
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:18:29 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:08:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
16 tc	KEPONE	23.126	23.310 E6	-0.8	100	0.00
23 tc	FAMPHUR	32.077	32.496 E6	-1.3	100	0.00
Signal #2						
16 tc	KEPONE	4.694	4.556 E6	2.9	97	0.00
23 tc	FAMPHUR	6.457	6.445 E6	0.2	100	0.00

Evaluate Continuing Calibration Report - Not Founds

1	S	SURR1,Tetrac	65.873	0.000 E6	100.0#	0# -9.48#
2	TC	HEXACHLOROBENZENE	71.634	0.000 E6	100.0#	0# -10.18#
3	tc	alpha-BHC	96.042	0.000 E6	100.0#	0# -10.48#
4	tcm	gamma-BHC (L	84.164	0.000 E6	100.0#	0# -11.02#
5	tcm	Heptachlor	78.956	0.000 E6	100.0#	0# -11.78#
6	tcm	Aldrin	70.252	0.000 E6	100.0#	0# -12.24#
7	tc	beta-BHC	36.141	0.000 E6	100.0#	0# -11.17#
8	TC	delta-BHC	82.141	0.000 E6	100.0#	0# -11.45#
9	tc	Heptachlor E	59.994	0.000 E6	100.0#	0# -13.16#
10	tc	alpha-Endosu	52.713	0.000 E6	100.0#	0# -13.75#
11	tc	gamma-Chlord	61.350	0.000 E6	100.0#	0# -13.35#
12	tc	alpha-Chlord	57.201	0.000 E6	100.0#	0# -13.55#
13	tc	4,4'-DDE	55.275	0.000 E6	100.0#	0# -13.65#
14	tcm	Dieldrin	55.275	0.000 E6	100.0#	0# -14.11#
15	tcm	Endrin	41.046	0.000 E6	100.0#	0# -14.47#
17	tc	beta-Endosul	44.725	0.000 E6	100.0#	0# -14.81#
18	tc	4,4'-DDD	43.266	0.000 E6	100.0#	0# -14.53#
19	tcm	4,4'-DDT	44.545	0.000 E6	100.0#	0# -14.96#
20	tc	Endrin Aldeh	34.962	0.000 E6	100.0#	0# -15.44#
21	tc	Endosulfan S	37.033	0.000 E6	100.0#	0# -16.06#
22	tc	Methoxychlor	21.567	0.000 E6	100.0#	0# -15.64#
24	tc	Endrin Keton	47.690	0.000 E6	100.0#	0# -16.45#
25	tc	Mirex	31.098	0.000 E6	100.0#	0# -15.93#
26	tc	2,4'-DDE	0.000	0.000	0.0	0# -12.93#
27	tc	2,4'-DDD	45.596	0.000 E6	100.0#	0# -13.68#
28	tc	2,4'-DDT	0.000	0.000	0.0	0# -14.01#
29	S	SURR2,Decachlorobipheny1	38.956	0.000 E6	100.0#	0# -17.79#
30	L8C	Toxaphene	441.845	0.000 E3	100.0#	0# -14.60#
31	L8C	Toxaphene(2)	540.008	0.000 E3	100.0#	0# -14.99#

8081E072514.M Mon Jul 28 08:18:52 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR490.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 5:40 pm
Operator : m.pedro
Sample : k/f icv Inst : 6890D
Misc : initial cal
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:18:29 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:08:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	System Monitoring Compounds						
	Target Compounds						
16)	tc KEPONE	14.54	14.86	34964.5E6	6833.6E6	1511.891	1455.689
23)	tc FAMPHUR	16.32	15.98	9748.9E6	1933.6E6	303.919	299.462
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000

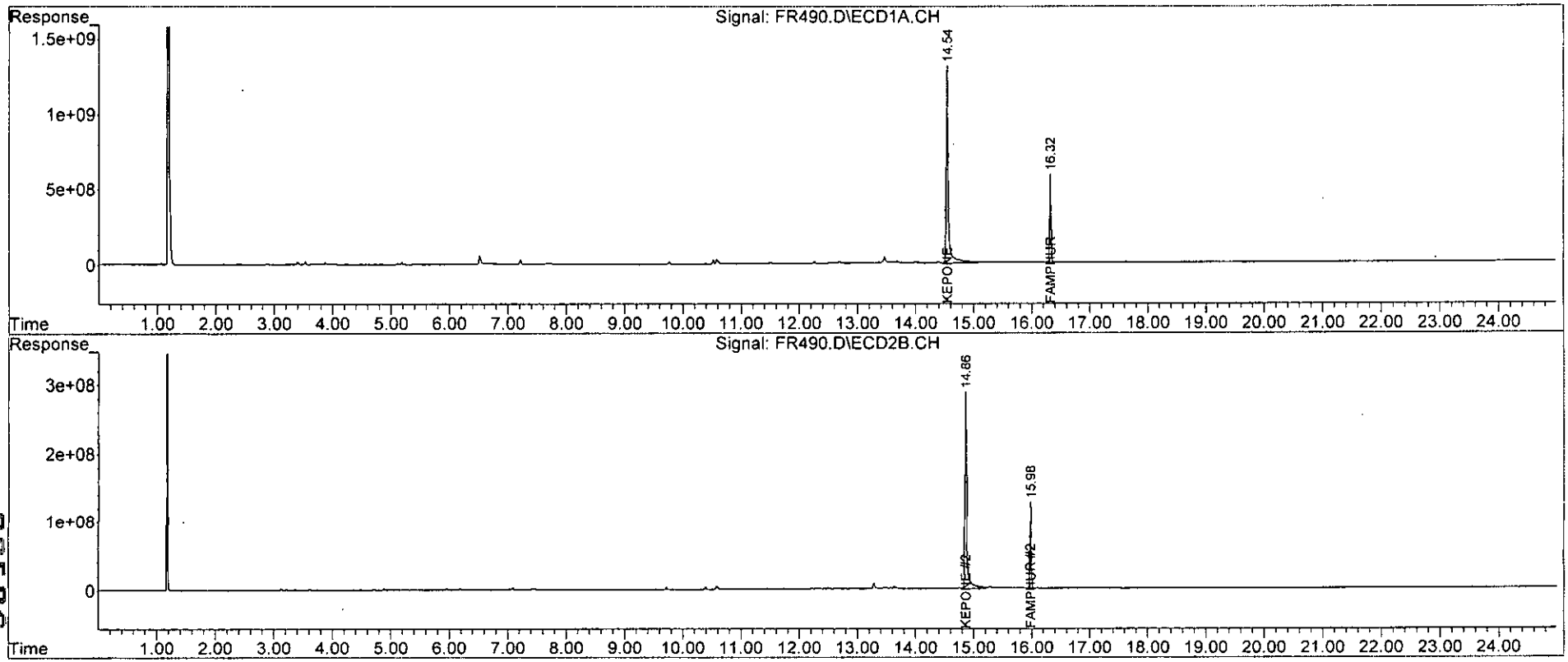
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR490.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 5:40 pm
Operator : m.pedro
Sample : k/f icv Inst : 6890D
Misc : initial cal
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:18:29 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:08:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



8081E072514.M Mon Jul 28 08:43:00 2014 Page: 2

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR491.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 6:14 pm
Operator : m.pedro
Sample : mirex icv Inst : 6890D
Misc : initial cal
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:19:33 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:08:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
25 tc	Mirex	31.098	31.086 E6	0.0	102	0.00
Signal #2						
16 tc	KEPONE	~~4.694~~	~~0.004 E6~~	~~99.9#~~	~~0#~~	~~0.00~~
25 tc	Mirex	6.125	5.616 E6	8.3	102	0.00

mp 7/28

Evaluate Continuing Calibration Report - Not Founds

1	S	SURR1,Tetrac	65.873	0.000 E6	100.0#	0# -9.48#
2	TC	HEXACHLOROBENZENE	71.634	0.000 E6	100.0#	0# -10.18#
3	tc	alpha-BHC	96.042	0.000 E6	100.0#	0# -10.48#
4	tcm	gamma-BHC (L	84.164	0.000 E6	100.0#	0# -11.02#
5	tcm	Heptachlor	78.956	0.000 E6	100.0#	0# -11.78#
6	tcm	Aldrin	70.252	0.000 E6	100.0#	0# -12.24#
7	tc	beta-BHC	36.141	0.000 E6	100.0#	0# -11.17#
8	TC	delta-BHC	82.141	0.000 E6	100.0#	0# -11.45#
9	tc	Heptachlor E	59.994	0.000 E6	100.0#	0# -13.16#
10	tc	alpha-Endosu	52.713	0.000 E6	100.0#	0# -13.75#
11	tc	gamma-Chlord	61.350	0.000 E6	100.0#	0# -13.35#
12	tc	alpha-Chlord	57.201	0.000 E6	100.0#	0# -13.55#
13	tc	4,4'-DDE	55.275	0.000 E6	100.0#	0# -13.65#
14	tcm	Dieldrin	55.275	0.000 E6	100.0#	0# -14.11#
15	tcm	Endrin	41.046	0.000 E6	100.0#	0# -14.47#
16	tc	KEPONE	23.126	0.000 E6	100.0#	0# -14.54#
17	tc	beta-Endosul	44.725	0.000 E6	100.0#	0# -14.81#
18	tc	4,4'-DDD	43.266	0.000 E6	100.0#	0# -14.53#
19	tcm	4,4'-DDT	44.545	0.000 E6	100.0#	0# -14.96#
20	tc	Endrin Aldeh	34.962	0.000 E6	100.0#	0# -15.44#
21	tc	Endosulfan S	37.033	0.000 E6	100.0#	0# -16.06#
22	tc	Methoxychlor	21.567	0.000 E6	100.0#	0# -15.64#
23	tc	FAMPHUR	32.077	0.000 E6	100.0#	0# -16.32#
24	tc	Endrin Keton	47.690	0.000 E6	100.0#	0# -16.45#
26	tc	2,4'-DDE	0.000	0.000	0.0	0# -12.93#
27	tc	2,4'-DDD	45.596	0.000 E6	100.0#	0# -13.68#
28	tc	2,4'-DDT	0.000	0.000	0.0	0# -14.01#
29	S	SURR2,Decachlorobiphenyl	38.956	0.000 E6	100.0#	0# -17.79#
30	L8C	Toxaphene	441.845	0.000 E3	100.0#	0# -14.60#
31	L8C	Toxaphene{2}	540.008	0.000 E3	100.0#	0# -14.99#

8081E072514.M Mon Jul 28 08:19:53 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR491.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 6:14 pm
Operator : m.pedro
Sample : mirex icv Inst : 6890D
Misc : initial cal
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:19:33 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:08:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
System Monitoring Compounds						
Target Compounds						
~~16) tc KEPONE~~	~~0.00~~	~~14.87~~	~~0~~	~~7161632~~	~~N.D.~~	~~1.526 #~~
25) tc Mirex	15.93	16.59	1554.3E6	280.8E6	49.981m	45.848m
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

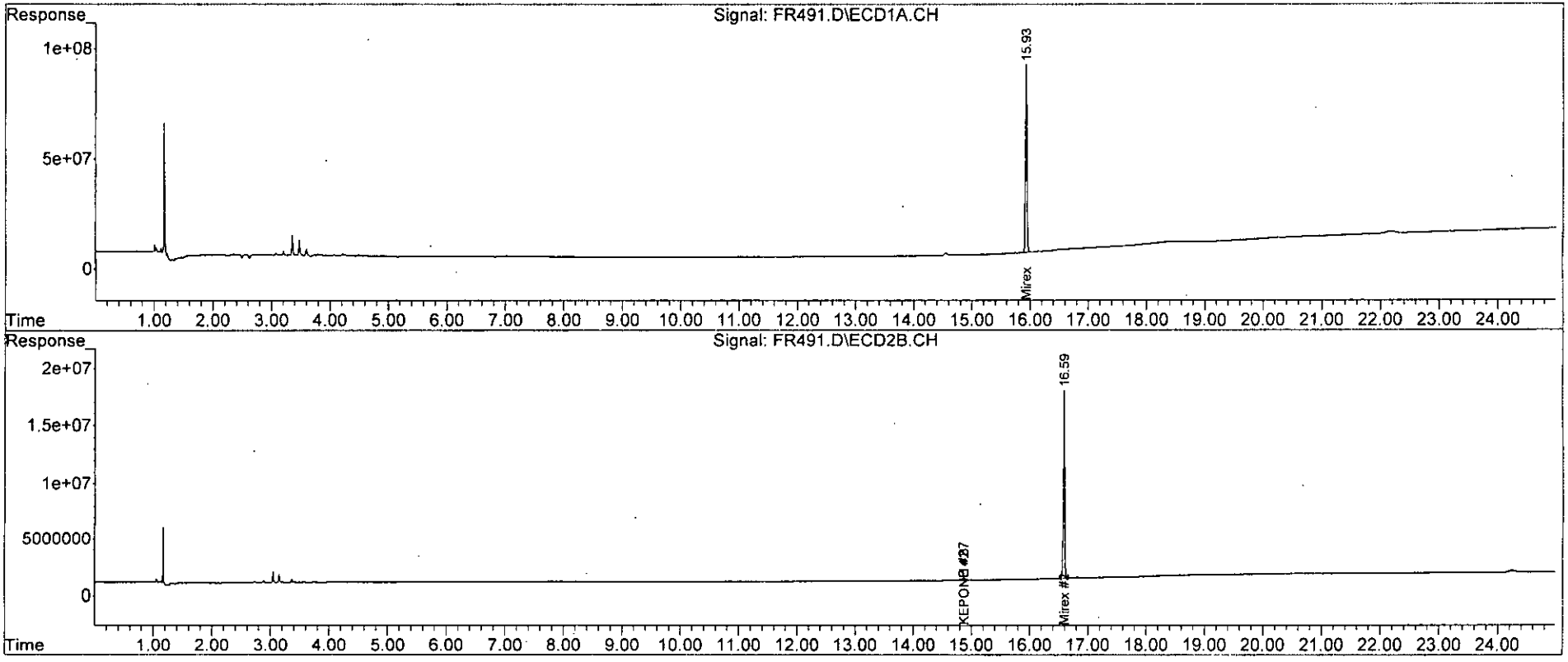
8081E072514.M Mon Jul 28 08:43:06 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR491.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 6:14 pm
Operator : m.pedro
Sample : mirex icv Inst : 6890D
Misc : initial cal
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:19:33 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:08:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



68590

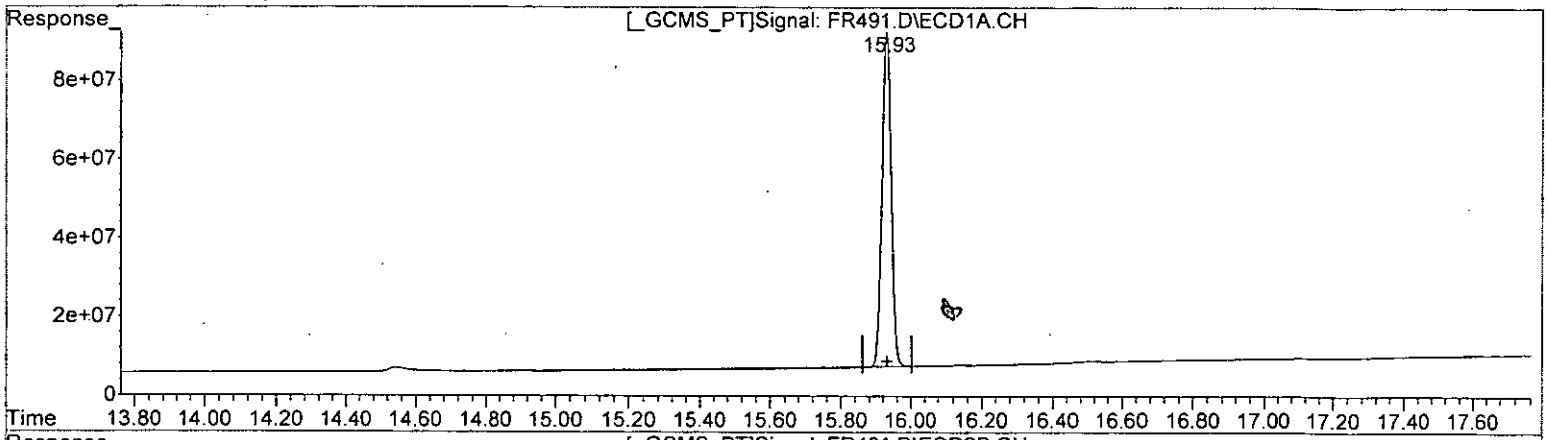
8081E072514.M Mon Jul 28 08:43:09 2014 Page: 2

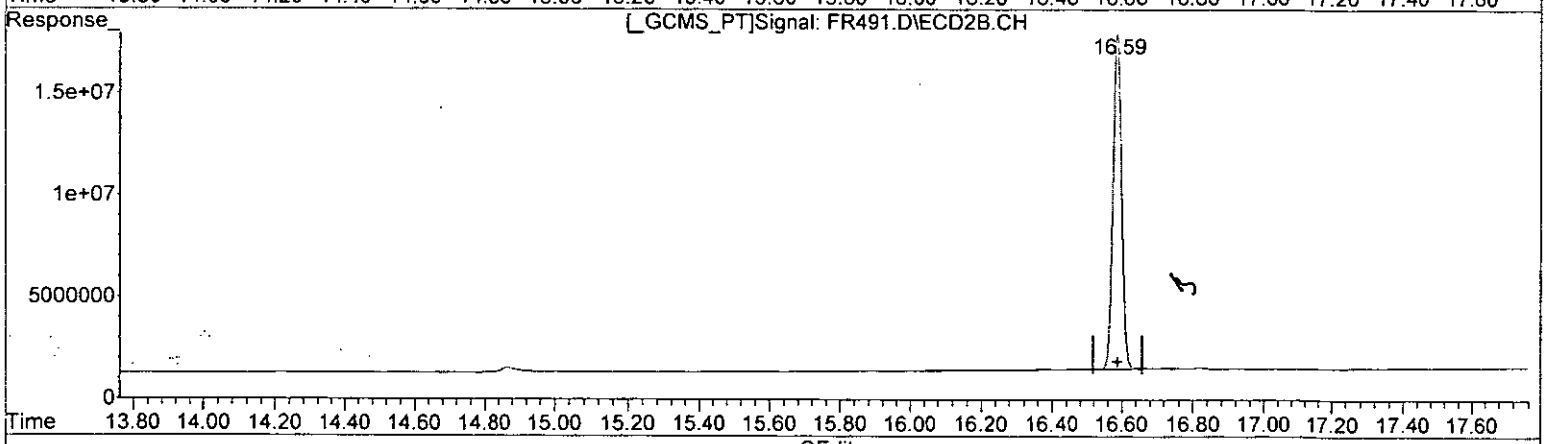
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR491.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 6:14 pm
Operator : m.pedro
Sample : mirex icv Inst : 6890D
Misc : initial cal
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:08:43 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:08:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(25) Mirex (tc)

15.93min 45.256ug/l

response 1407344296

(25) Mirex #2 (tc)

16.59min 45.187ug/l

response 276772120

(+) = Expected Retention Time
8081E072514.M Mon Jul 28 08:19:13 2014

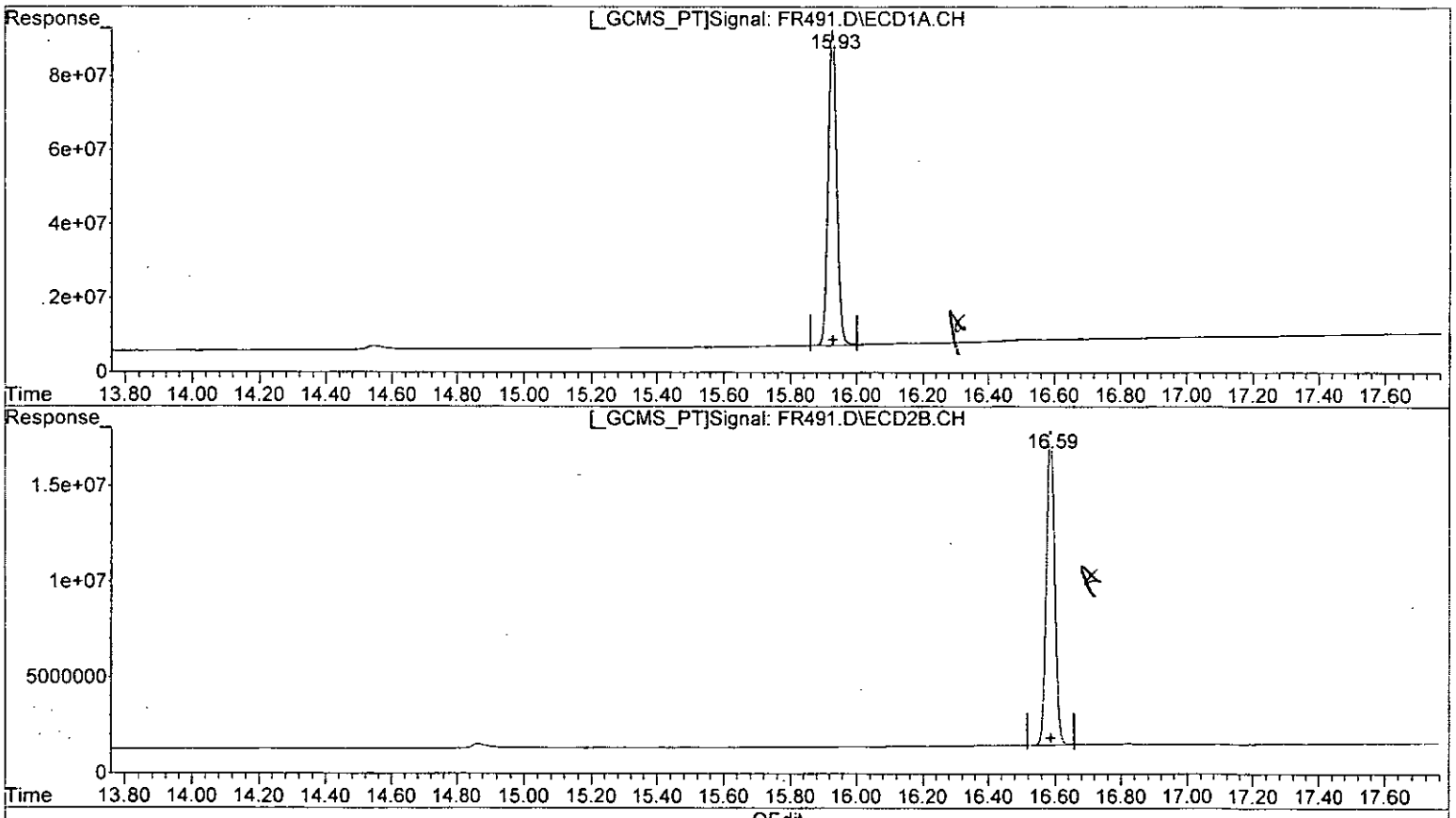
00590

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR491.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 6:14 pm
Operator : m.pedro
Sample : mirex icv Inst : 6890D
Misc : initial cal
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:08:43 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:08:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



QEdit

(25) Mirex (tc)

15.93min 49.981ug/l m

response 1554287330

(25) Mirex #2 (tc)

16.59min 45.848ug/l m

response 280818808

(+) = Expected Retention Time

8081E072514.M Mon Jul 28 08:19:29 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR492.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 6:49 pm
Operator : m.pedro
Sample : tox ll Inst : 6890D
Misc : initial cal
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 09:32:17 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:08:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
System Monitoring Compounds						
Target Compounds						
30) L8C Toxaphene	14.59	15.12	32072826	11245793	72.588	48.849m#
31) L8C Toxaphene{2}	14.98	15.51	27259853	11902699	50.480	47.869
32) L8C Toxaphene{3}	15.58	15.88	62345208	8216130	50.047m	45.458
33) L8C Toxaphene{4}	16.42	16.75	81766457	13448128	54.364m	53.296
34) L8C Toxaphene{5}	16.61	16.99	73252430	12014289	57.724	46.886
Sum Toxaphene			276.7E6	56827038	285.204	242.358
Average Toxaphene					57.041	48.472
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

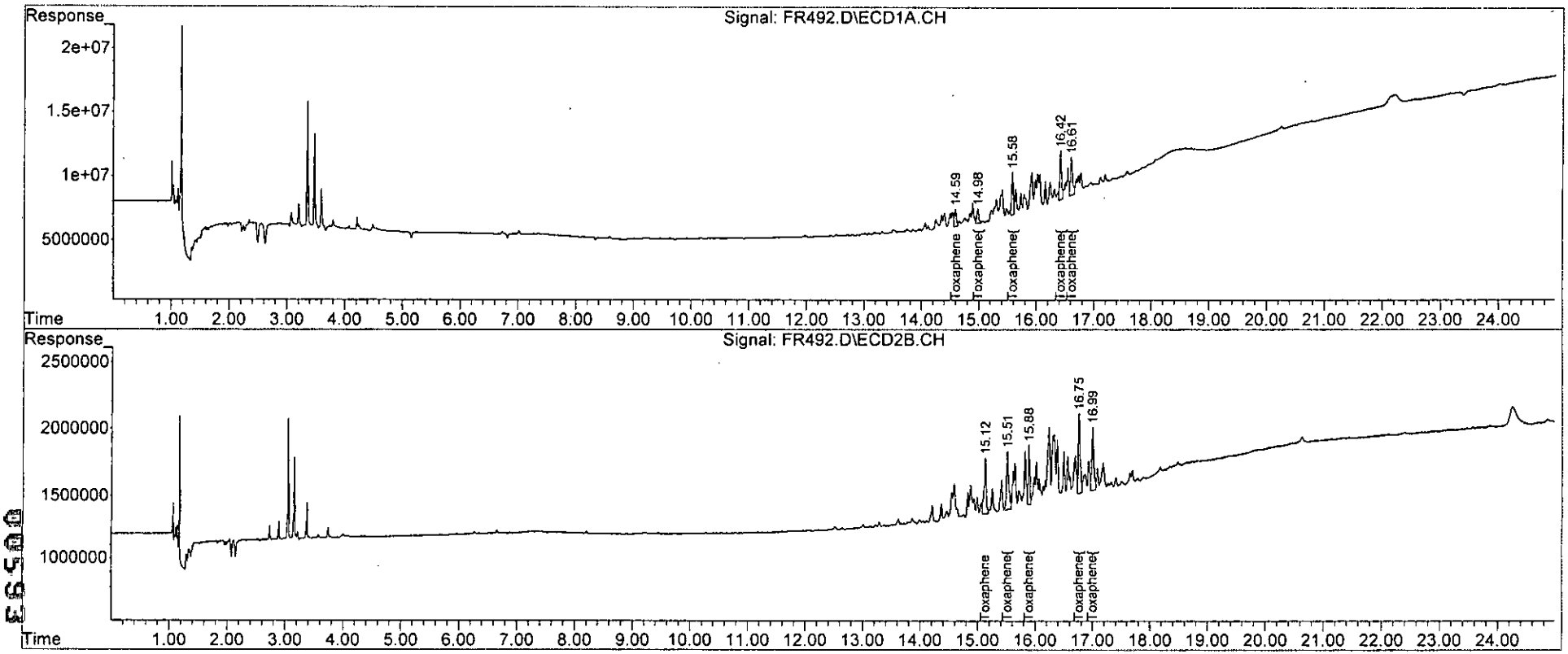
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR492.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 6:49 pm
Operator : m.pedro
Sample : tox ll Inst : 6890D
Misc : initial cal
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 09:32:17 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:08:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



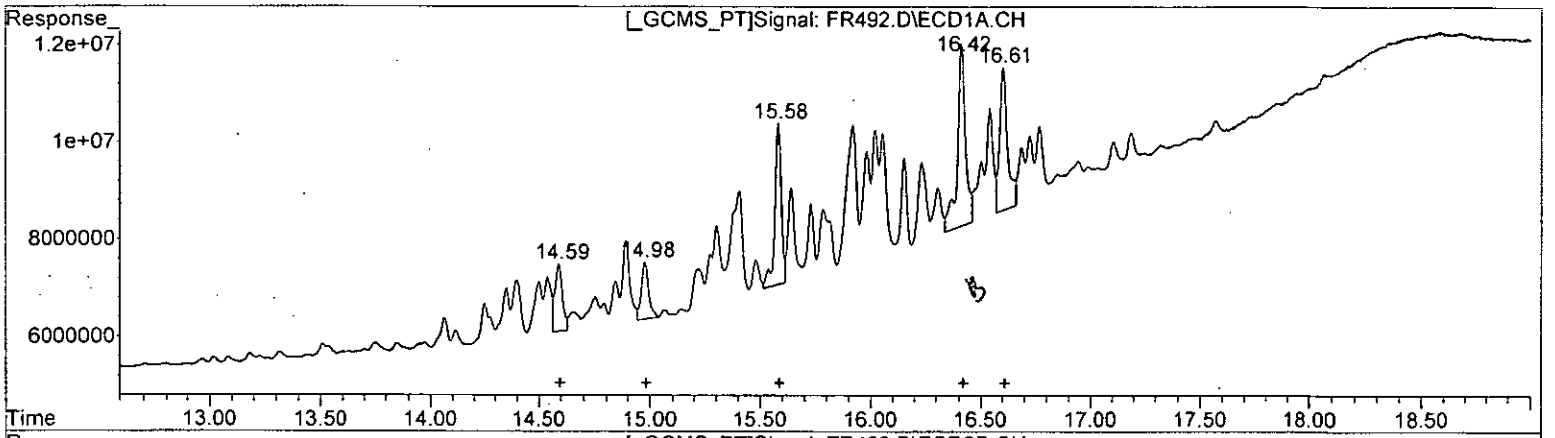
8081E072514.M Mon Jul 28 09:38:15 2014 Page: 2

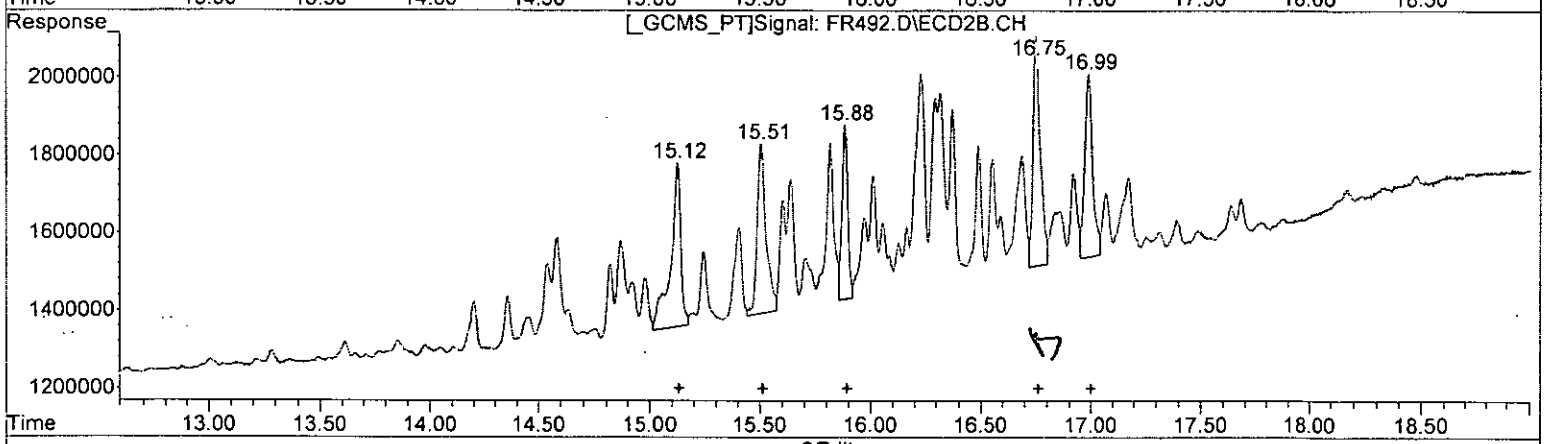
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR492.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 6:49 pm
Operator : m.pedro
Sample : tox ll Inst : 6890D
Misc : initial cal
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:20:31 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:08:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(30) Toxaphene (L8C)

R.T.	Response	Conc
14.59	32072826	72.59
14.98	27259853	50.48
15.58	66547212	53.42
16.42	93970200	62.48
16.61	73252430	57.72

(30) Toxaphene #2 (L8C)

R.T.	Response	Conc
15.12	13271897	57.65
15.51	11902699	47.87
15.88	8216130	45.46
16.75	13448128	53.30
16.99	12014289	46.89

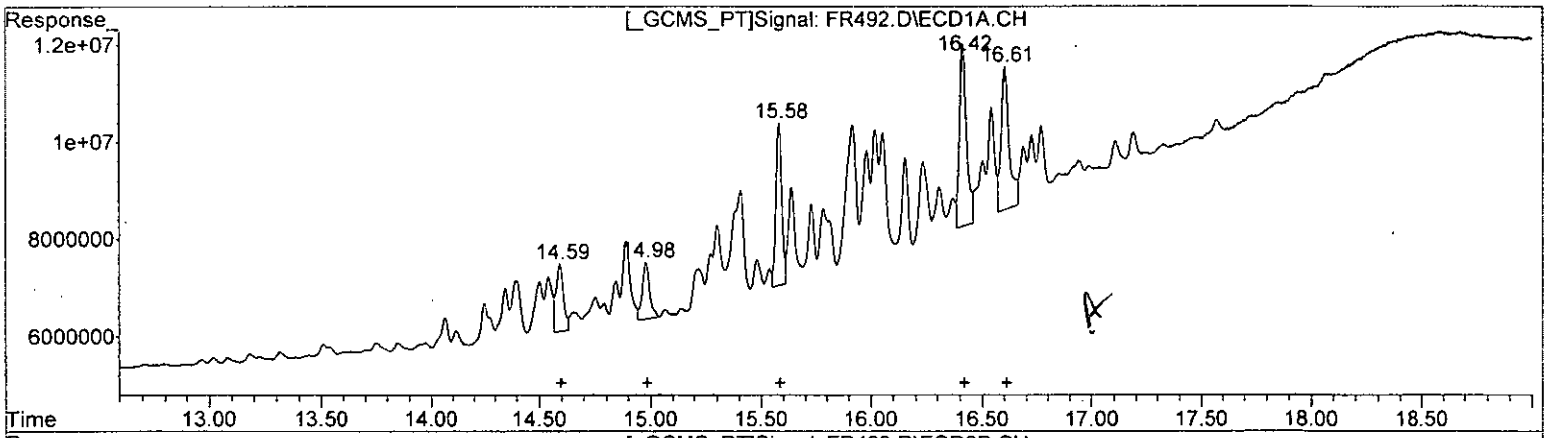
(+) = Expected Retention Time
8081E072514.M Mon Jul 28 08:20:56 2014 Page: 1

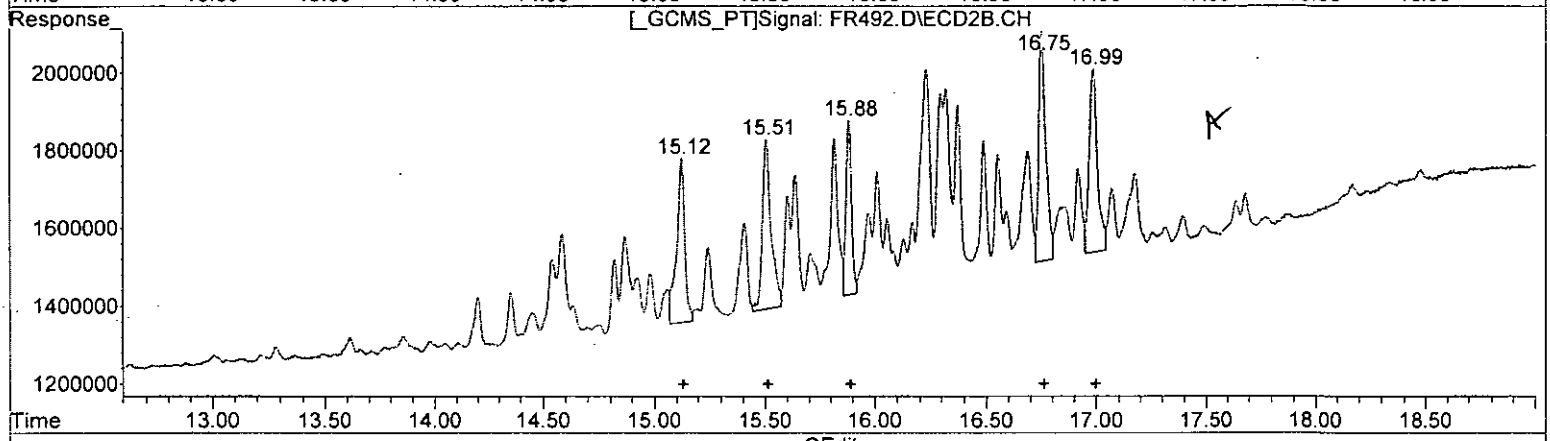
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR492.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 6:49 pm
Operator : m.pedro
Sample : tox ll Inst : 6890D
Misc : initial cal
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:21:23 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:08:14 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(30) Toxaphene (L8C)

R.T.	Response	Conc
14.59	32072826	72.59
14.98	27259853	50.48
15.58	62345208	50.05
16.42	81766457	54.36
16.61	73252430	57.72

(30) Toxaphene #2 (L8C)

R.T.	Response	Conc
15.12	11245793	48.85
15.51	11902699	47.87
15.88	8216130	45.46
16.75	13448128	53.30
16.99	12014289	46.89

BC 7/28

(+) = Expected Retention Time
8081E072514.M Mon Jul 28 09:32:11 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR493.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 7:23 pm
Operator : m.pedro
Sample : tox 1 Inst : 6890D
Misc : initial cal
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 09:32:54 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:22:11 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
System Monitoring Compounds						
Target Compounds						
30) L8C Toxaphene	14.59	15.12	51108896	22389287	112.860	93.617m
31) L8C Toxaphene{2}	14.98	15.51	54426779	24725532	98.811	98.385
32) L8C Toxaphene{3}	15.58	15.88	130.5E6	17657681	101.389m	97.361
33) L8C Toxaphene{4}	16.42	16.75	162.6E6	25931108	105.404m	101.643
34) L8C Toxaphene{5}	16.61	16.99	134.3E6	25049266	103.172	96.578
Sum Toxaphene			533.0E6	115.8E6	521.636	487.584
Average Toxaphene					104.327	97.517
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

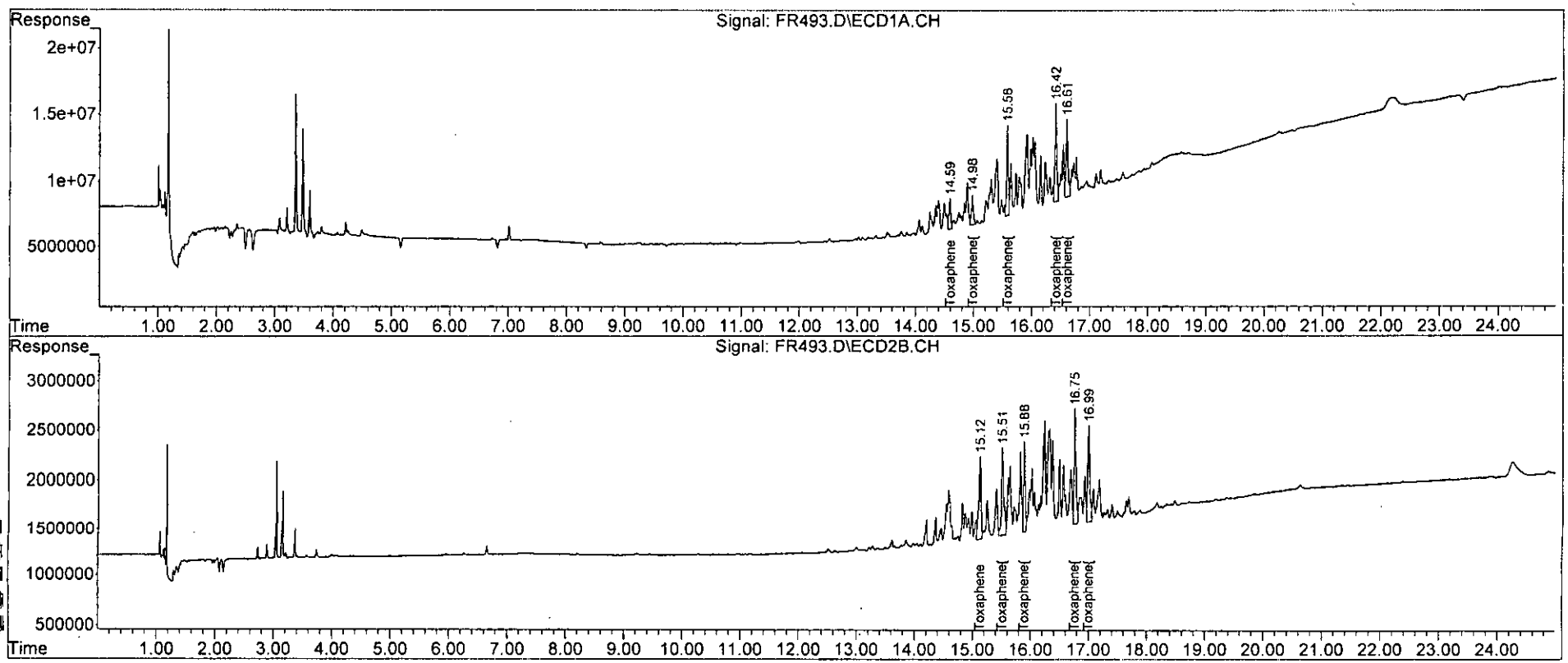
8081E072514.M Mon Jul 28 09:38:20 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR493.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 7:23 pm
Operator : m.pedro
Sample : tox 1 Inst : 6890D
Misc : initial cal
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 09:32:54 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:22:11 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



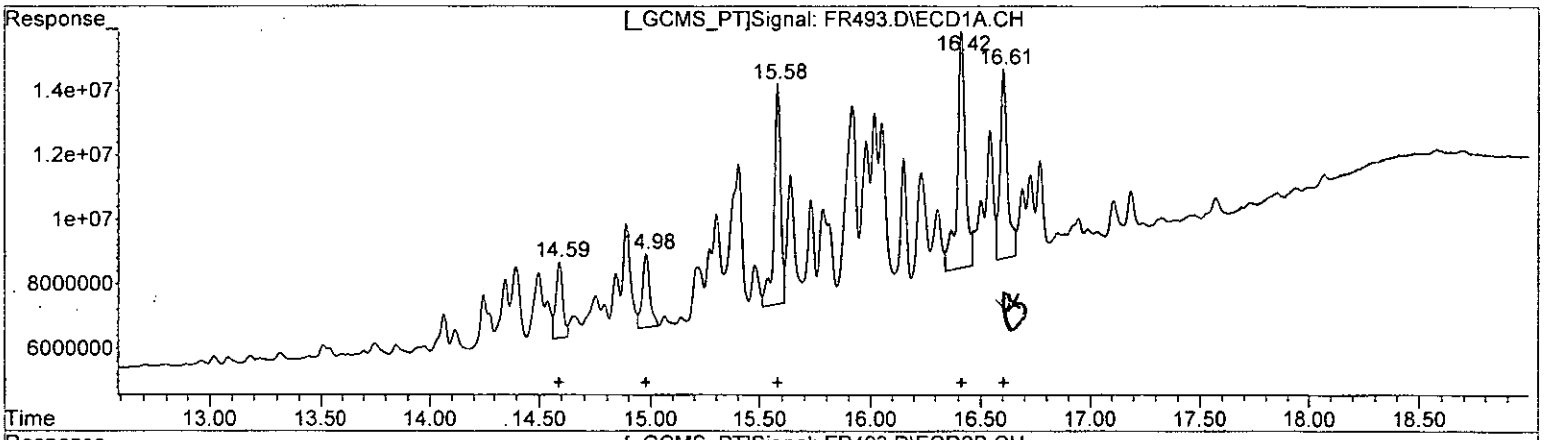
8081E072514.M Mon Jul 28 09:38:24 2014 Page: 2

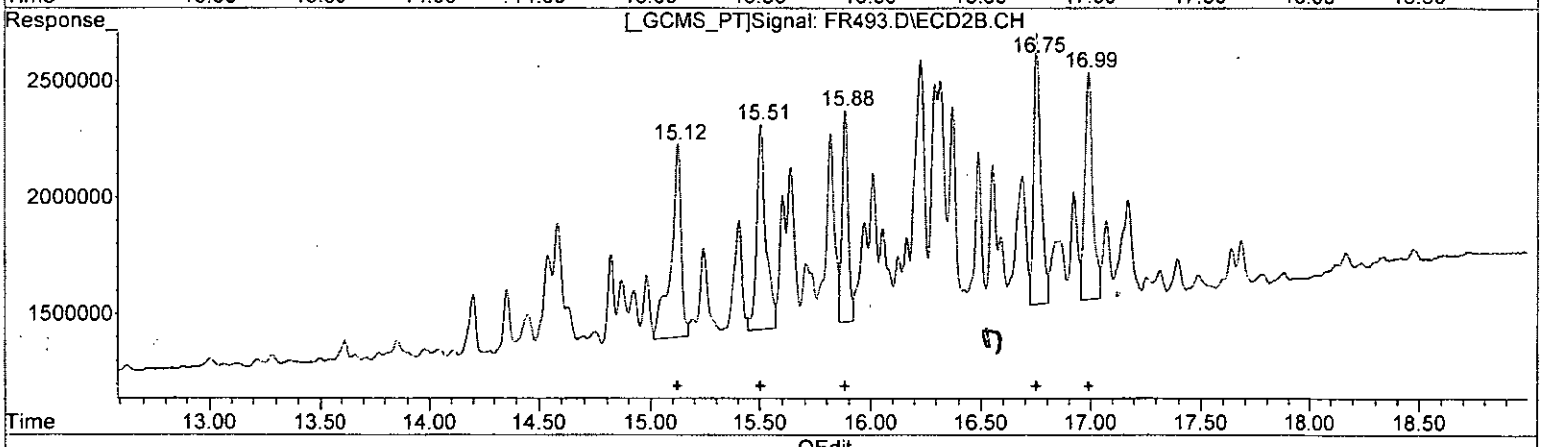
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR493.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 7:23 pm
Operator : m.pedro
Sample : tox 1 Inst : 6890D
Misc : initial cal
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:22:48 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:22:11 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(30) Toxaphene (L8C)

R.T.	Response	Conc
14.59	51108896	112.86
14.98	54426779	98.81
15.58	142601612	110.80
16.42	180676108	117.09
16.61	134296918	103.17

(30) Toxaphene #2 (L8C)

R.T.	Response	Conc
15.12	26823949	112.16
15.51	24725532	98.38
15.88	17657681	97.36
16.75	25931108	101.64
16.99	25049266	96.58

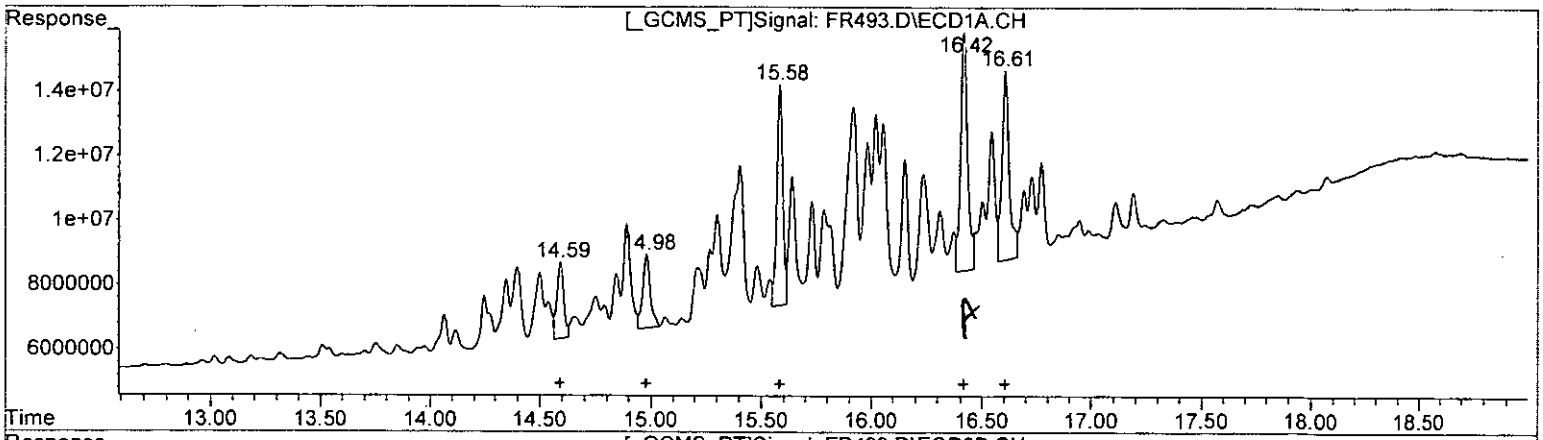
(+) = Expected Retention Time
8081E072514.M Mon Jul 28 08:23:24 2014 Page: 1

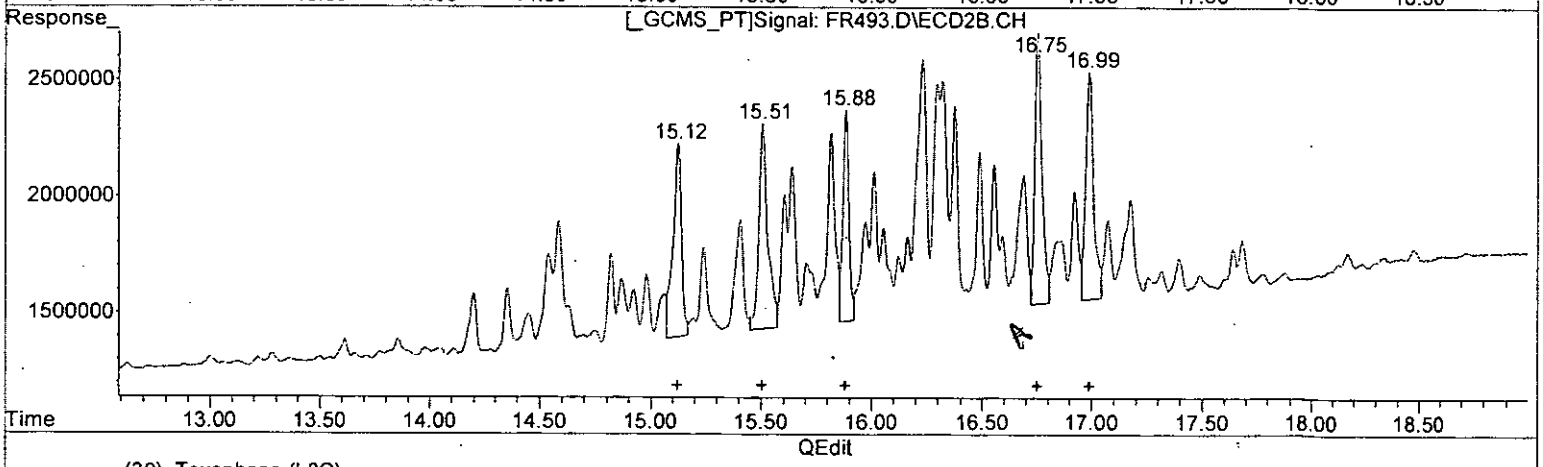
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR493.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 7:23 pm
Operator : m.pedro
Sample : tox 1 Inst : 6890D
Misc : initial cal
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:24:04 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:22:11 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(30) Toxaphene (L8C)

R.T.	Response	Conc
14.59	51108896	112.86
14.98	54426779	98.81
15.58	130488679	101.39
16.42	162646972	105.40
16.61	134296918	103.17

(30) Toxaphene #2 (L8C)

R.T.	Response	Conc
15.12	22389287	93.62
15.51	24725532	98.38
15.88	17657681	97.36
16.75	25931108	101.64
16.99	25049266	96.58

(+) = Expected Retention Time
8081E072514.M Mon Jul 28 09:32:48 2014 Page: 1

00599

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR494.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 7:57 pm
Operator : m.pedro
Sample : tox ml Inst : 6890D
Misc : initial cal
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:26:31 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:24:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
System Monitoring Compounds						
Target Compounds						
30) L8C Toxaphene	14.59	15.12	114.4E6	59730664	248.766	247.045m
31) L8C Toxaphene{2}	14.98	15.51	150.1E6	66809487	266.867	263.389
32) L8C Toxaphene{3}	15.58	15.88	358.3E6	46034075	267.979m	251.225
33) L8C Toxaphene{4}	16.42	16.75	395.3E6	64185110	250.081m	248.520
34) L8C Toxaphene{5}	16.61	16.99	346.8E6	66213380	261.466	252.405
Sum Toxaphene			1364.9E6	303.0E6	1295.160	1262.583
Average Toxaphene					259.032	252.517
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

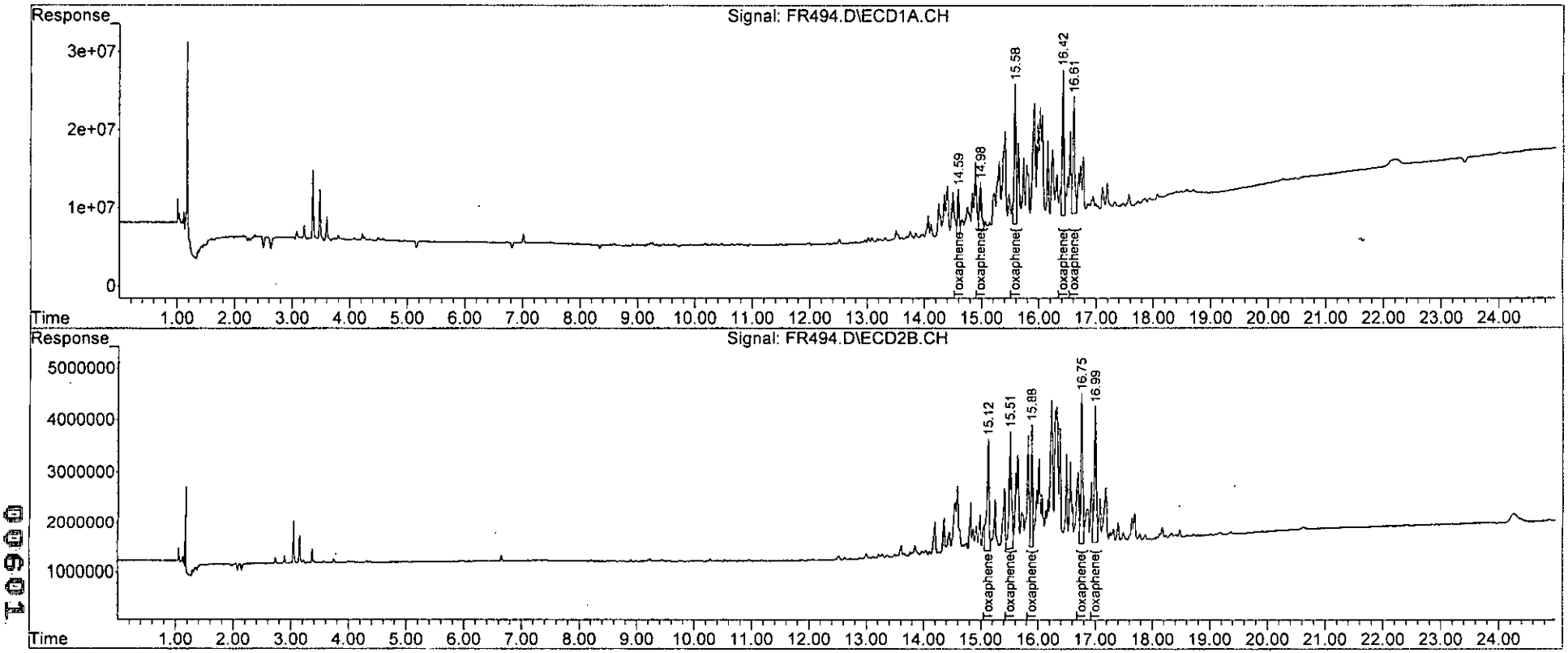
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR494.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 7:57 pm
Operator : m.pedro
Sample : tox ml Inst : 6890D
Misc : initial cal
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:26:31 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:24:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



8081E072514.M Mon Jul 28 09:38:33 2014 Page: 2

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR495.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 8:31 pm
Operator : m.pedro
Sample : tox m Inst : 6890D
Misc : initial cal
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:27:34 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:26:33 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
System Monitoring Compounds						
Target Compounds						
30) L8C Toxaphene	14.59	15.12	226.3E6	121.1E6	482.108	497.404
31) L8C Toxaphene{2}	14.98	15.51	333.2E6	131.4E6	573.360	510.676
32) L8C Toxaphene{3}	15.58	15.88	745.9E6	95851609	540.865	520.233
33) L8C Toxaphene{4}	16.42	16.75	819.4E6	128.9E6	508.463	495.056
34) L8C Toxaphene{5}	16.61	16.99	708.7E6	136.8E6	523.246	516.497
Sum Toxaphene			2833.5E6	614.1E6	2628.042	2539.865
Average Toxaphene					525.608	507.973
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

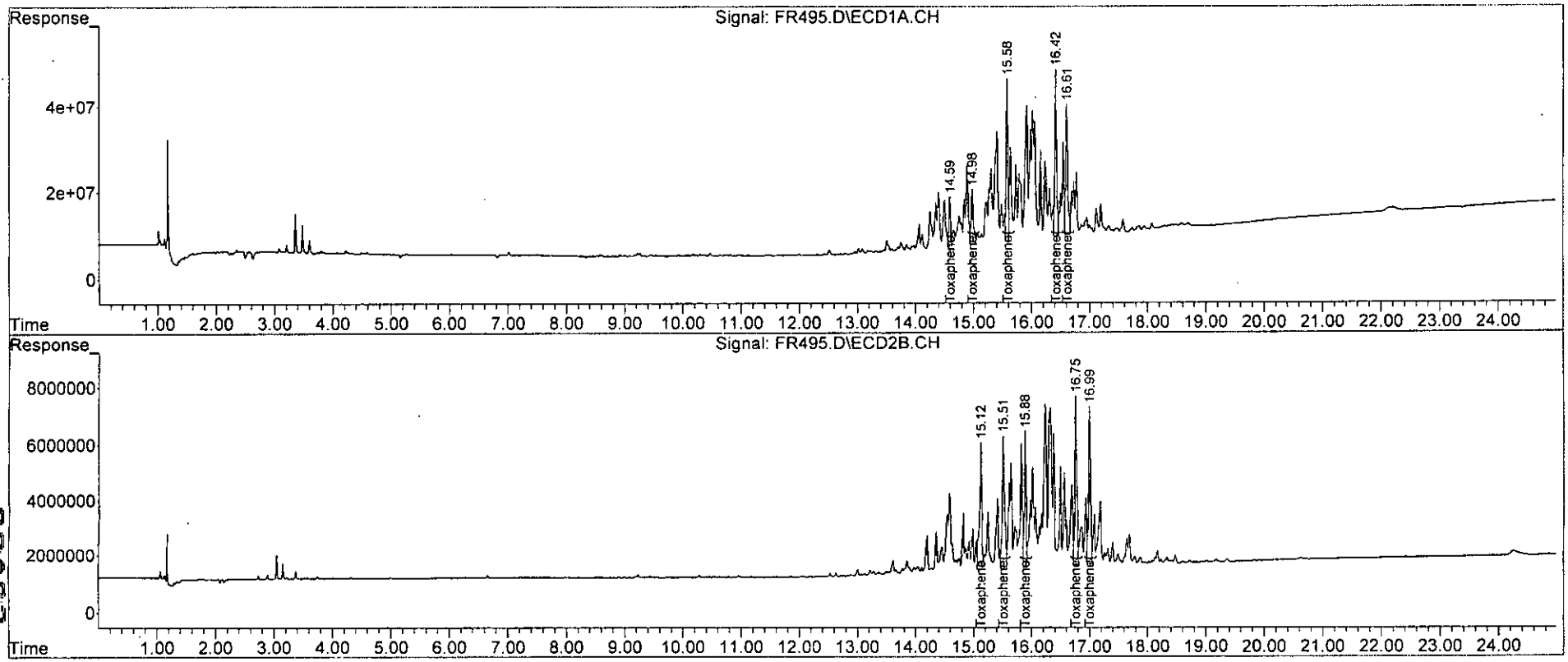
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR495.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 8:31 pm
Operator : m.pedro
Sample : tox m Inst : 6890D
Misc : initial cal
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:27:34 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:26:33 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



8081E072514.M Mon Jul 28 09:38:42 2014 Page: 2

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR496.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 9:06 pm
Operator : m.pedro
Sample : tox mh Inst : 6890D
Misc : initial cal
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 09:34:19 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:27:25 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
System Monitoring Compounds						
Target Compounds						
30) L8C Toxaphene	14.59	15.12	355.3E6	185.9E6	740.798	757.345m
31) L8C Toxaphene{2}	14.98	15.51	538.1E6	205.2E6	897.202	792.755
32) L8C Toxaphene{3}	15.58	15.88	1173.7E6	150.4E6	830.820m	811.033
33) L8C Toxaphene{4}	16.41	16.75	1309.1E6	200.5E6	804.951m	766.012
34) L8C Toxaphene{5}	16.61	16.99	1119.3E6	218.3E6	809.938	818.977
Sum Toxaphene			4495.7E6	960.2E6	4083.710	3946.122
Average Toxaphene					816.742	789.224
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

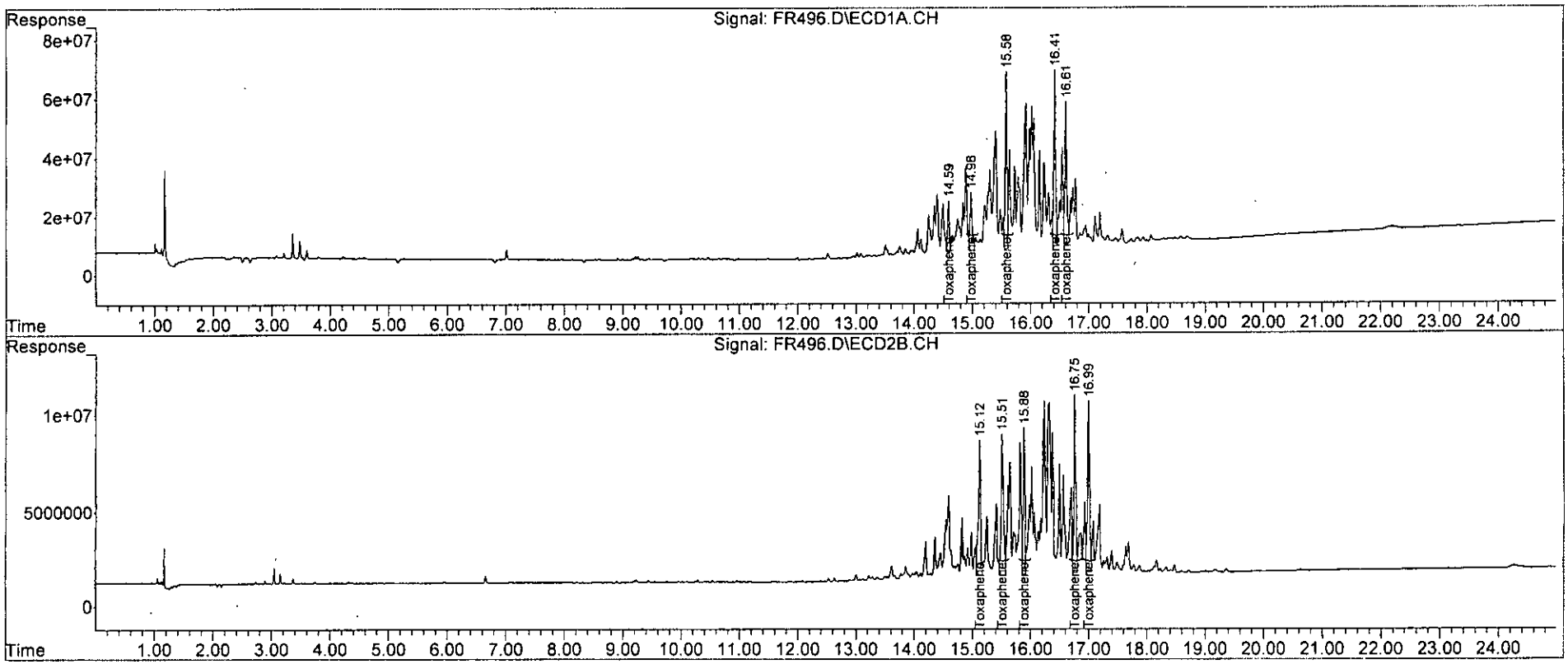
8081E072514.M Mon Jul 28 09:38:48 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR496.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 9:06 pm
Operator : m.pedro
Sample : tox mh Inst : 6890D
Misc : initial cal
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 09:34:19 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:27:25 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



5900

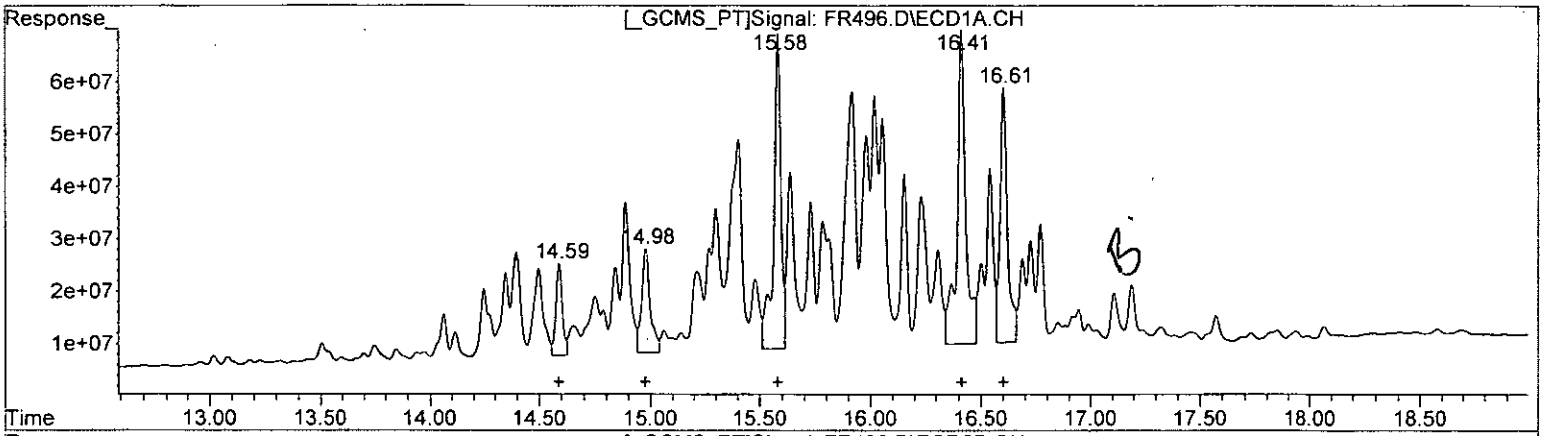
8081E072514.M Mon Jul 28 09:38:51 2014 Page: 2

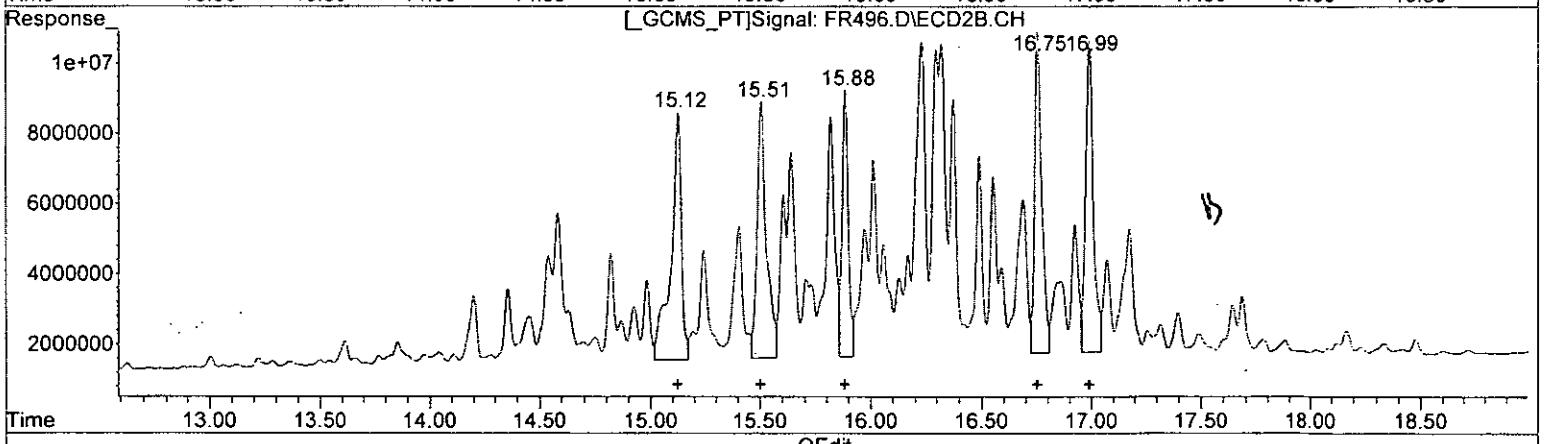
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR496.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 9:06 pm
Operator : m.pedro
Sample : tox mh Inst : 6890D
Misc : initial cal
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:27:59 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:27:25 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(30) Toxaphene (L8C)

R.T.	Response	Conc
14.59	355346498	740.80
14.98	538133004	897.20
15.58	1365414387	966.51
16.41	1606347767	987.71
16.61	1119324213	809.94

(30) Toxaphene #2 (L8C)

R.T.	Response	Conc
15.12	228527623	931.23
15.51	205195497	792.75
15.88	150381909	811.03
16.75	200494036	766.01
16.99	218319609	818.98

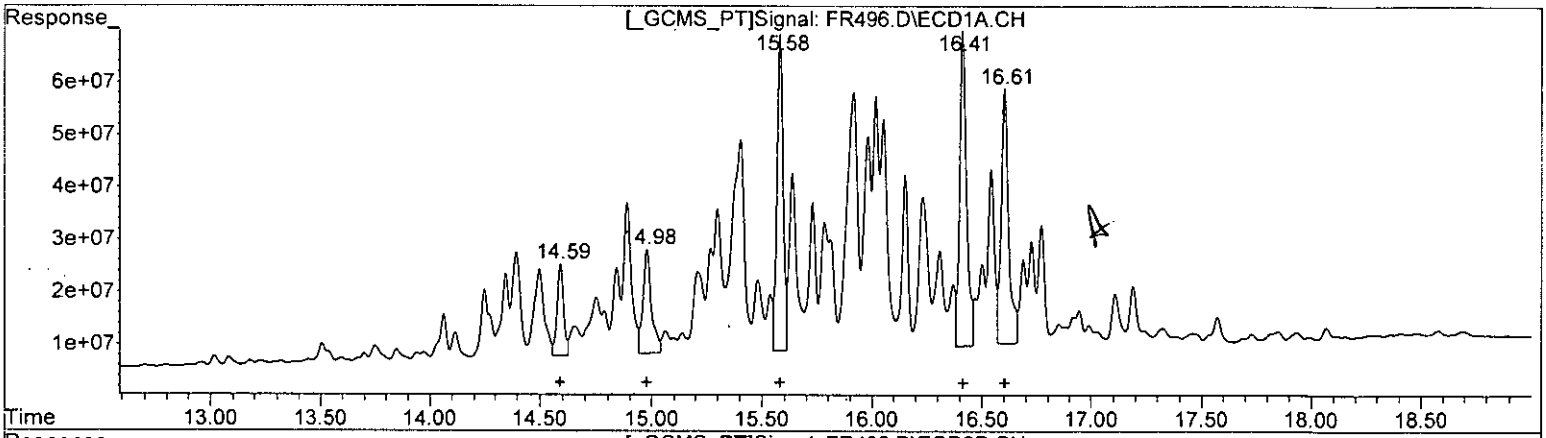
(+) = Expected Retention Time
8081E072514.M Mon Jul 28 08:28:15 2014 Page: 1

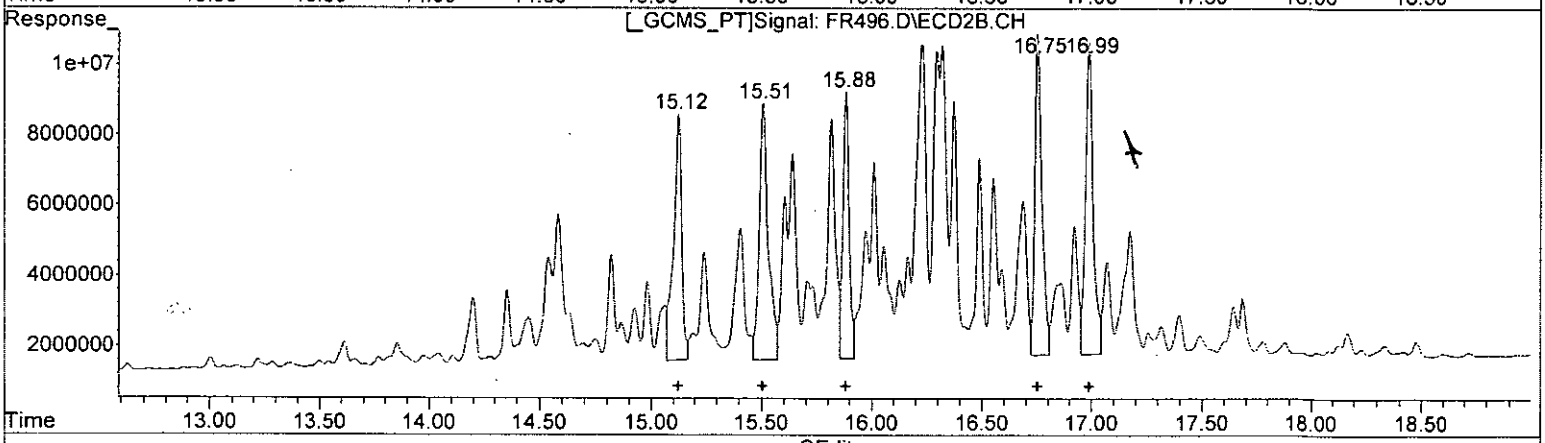
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR496.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 9:06 pm
Operator : m.pedro
Sample : tox mh Inst : 6890D
Misc : initial cal
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:28:52 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:27:25 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(30) Toxaphene (L8C)

R.T.	Response	Conc
14.59	355346498	740.80
14.98	538133004	897.20
15.58	1173725822	830.82
16.41	1309121918	804.95
16.61	1119324213	809.94

(30) Toxaphene #2 (L8C)

R.T.	Response	Conc
15.12	185855482	757.34
15.51	205195497	792.75
15.88	150381909	811.03
16.75	200494036	766.01
16.99	218319609	818.98

(+) = Expected Retention Time
8081E072514.M Mon Jul 28 09:34:12 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR497.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 9:40 pm
Operator : m.pedro
Sample : tox h Inst : 6890D
Misc : initial cal
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:30:12 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:28:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
System Monitoring Compounds						
Target Compounds						
30) L8C Toxaphene	14.59	15.12	473.0E6	252.5E6	962.733	1027.363m
31) L8C Toxaphene{2}	14.98	15.51	731.0E6	276.2E6	1182.167	1062.026
32) L8C Toxaphene{3}	15.58	15.88	1600.4E6	204.8E6	1076.064	1099.419
33) L8C Toxaphene{4}	16.41	16.75	1706.9E6	272.2E6	1035.962	1035.654
34) L8C Toxaphene{5}	16.60	16.99	1513.0E6	298.4E6	1072.237	1111.422
Sum Toxaphene			6024.2E6	1304.1E6	5329.164	5335.884
Average Toxaphene					1065.833	1067.177
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

MP 7/28

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

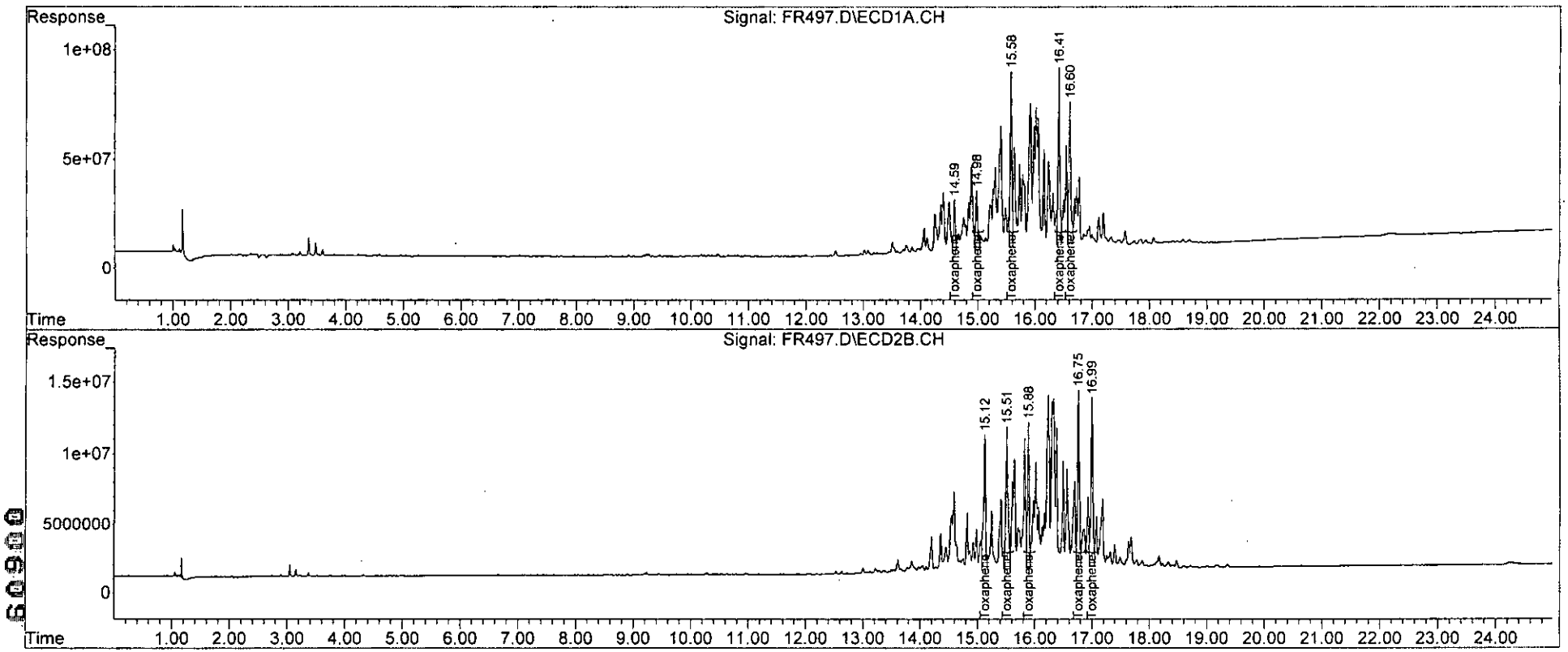
8081E072514.M Mon Jul 28 09:38:56 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR497.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 9:40 pm
Operator : m.pedro
Sample : tox h Inst : 6890D
Misc : initial cal
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:30:12 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:28:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



6890D

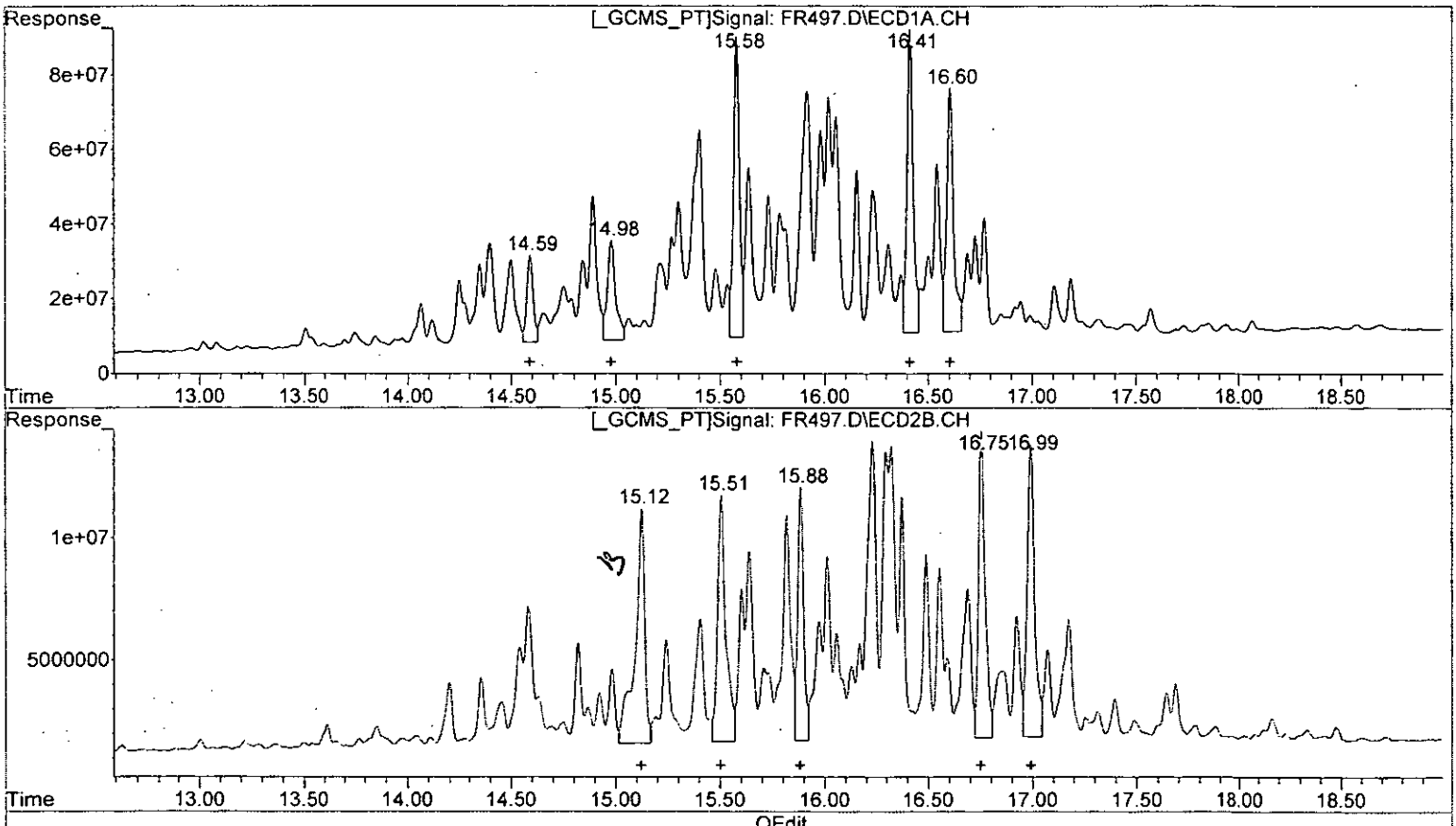
8081E072514.M Mon Jul 28 09:39:00 2014 Page: 2

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR497.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 9:40 pm
Operator : m.pedro
Sample : tox h Inst : 6890D
Misc : initial cal
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:29:21 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:28:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



(30) Toxaphene (L8C)

R.T.	Response	Conc
14.59	472951024	962.73
14.98	730993317	1182.17
15.58	1600376669	1076.06
16.41	1706912806	1035.96
16.60	1512954193	1072.24

(30) Toxaphene #2 (L8C)

R.T.	Response	Conc
15.12	308277797	1254.39
15.51	276162751	1062.03
15.88	204829368	1099.42
16.75	272212582	1035.65
16.99	298424715	1111.42

(+) = Expected Retention Time
8081E072514.M Mon Jul 28 08:29:19 2014

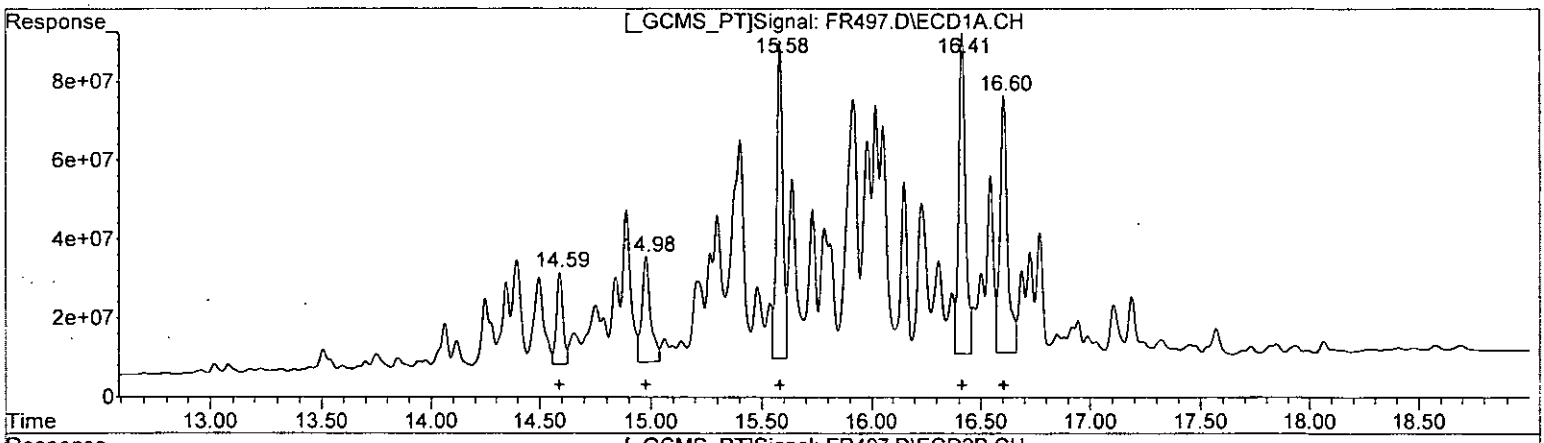
00610

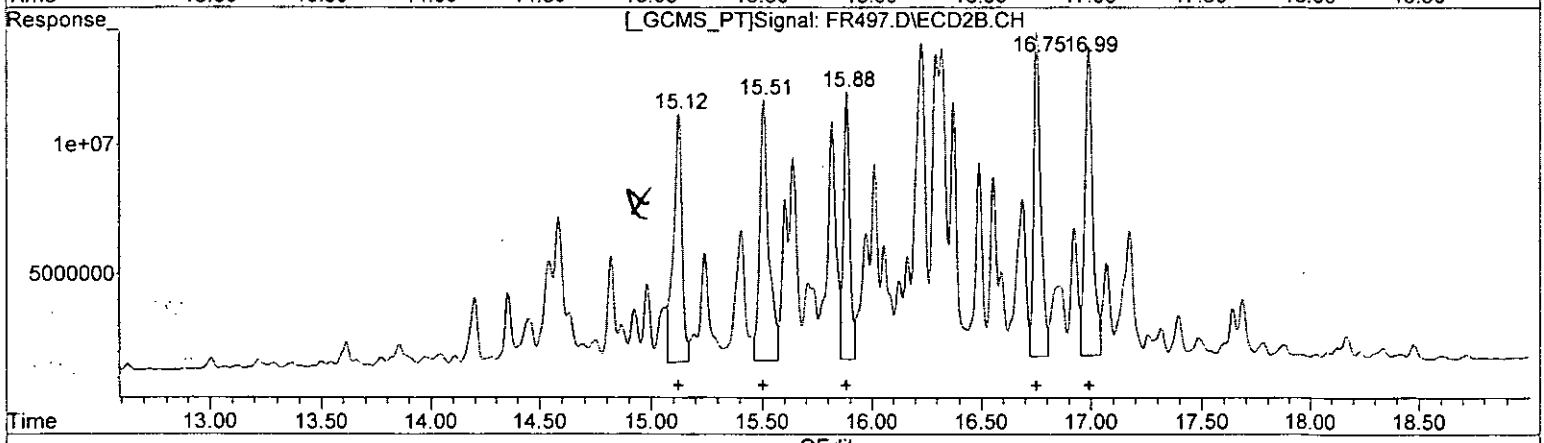
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR497.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 9:40 pm
Operator : m.pedro
Sample : tox h Inst : 6890D
Misc : initial cal
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:29:21 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:28:48 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(30) Toxaphene #2 (L8C)

R.T.	Response	Conc
14.59	472951024	962.73
14.98	730993317	1182.17
15.58	1600376669	1076.06
16.41	1706912806	1035.96
16.60	1512954193	1072.24

(30) Toxaphene #2 (L8C)

R.T.	Response	Conc
15.12	252482938	1027.36
15.51	276162751	1062.03
15.88	204829368	1099.42
16.75	272212582	1035.65
16.99	298424715	1111.42

(+) = Expected Retention Time
8081E072514.M Mon Jul 28 08:29:35 2014 Page: 1

00611

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR498.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 10:14 pm
Operator : m.pedro
Sample : tox icv Inst : 6890D
Misc : initial cal
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 09:37:38 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 09:36:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
30	L8C Toxaphene	501.618	456.631 E3	9.0	101	0.00
31	L8C Toxaphene{2}	634.125	682.631 E3	-7.6	102	0.00
32	L8C Toxaphene{3}	1.440	1.532 E6	-6.4	103	0.00
33	L8C Toxaphene{4}	1.656	1.679 E6	-1.4	102	0.00
34	L8C Toxaphene{5}	1.436	1.477 E6	-2.9	104	0.00

MP 7/28

Signal #2

30	L8C Toxaphene	238.387	241.101 E3	-1.1	100	0.00
31	L8C Toxaphene{2}	260.846	269.087 E3	-3.2	102	0.00
32	L8C Toxaphene{3}	187.013	196.901 E3	-5.3	103	0.00
33	L8C Toxaphene{4}	263.732	264.777 E3	-0.4	103	0.00
34	L8C Toxaphene{5}	269.793	282.768 E3	-4.8	103	0.00

Evaluate Continuing Calibration Report - Not Founds

1	S SURR1,Tetrac	65.873	0.000 E6	100.0#	0#	-9.48#
2	TC HEXACHLOROBENZENE	71.634	0.000 E6	100.0#	0#	-10.18#
3	tc alpha-BHC	96.042	0.000 E6	100.0#	0#	-10.48#
4	tcm gamma-BHC (L	84.164	0.000 E6	100.0#	0#	-11.02#
5	tcm Heptachlor	78.956	0.000 E6	100.0#	0#	-11.78#
6	tcm Aldrin	70.252	0.000 E6	100.0#	0#	-12.24#
7	tc beta-BHC	36.141	0.000 E6	100.0#	0#	-11.17#
8	TC delta-BHC	82.141	0.000 E6	100.0#	0#	-11.45#
9	tc Heptachlor E	59.994	0.000 E6	100.0#	0#	-13.16#
10	tc alpha-Endosu	52.713	0.000 E6	100.0#	0#	-13.75#
11	tc gamma-Chlord	61.350	0.000 E6	100.0#	0#	-13.35#
12	tc alpha-Chlord	57.201	0.000 E6	100.0#	0#	-13.55#
13	tc 4,4'-DDE	55.275	0.000 E6	100.0#	0#	-13.65#
14	tcm Dieldrin	55.275	0.000 E6	100.0#	0#	-14.11#
15	tcm Endrin	41.046	0.000 E6	100.0#	0#	-14.47#
16	tc KEPONE	23.126	0.000 E6	100.0#	0#	-14.54#
17	tc beta-Endosul	44.725	0.000 E6	100.0#	0#	-14.81#
18	tc 4,4'-DDD	43.266	0.000 E6	100.0#	0#	-14.53#
19	tcm 4,4'-DDT	44.545	0.000 E6	100.0#	0#	-14.96#
20	tc Endrin Aldeh	34.962	0.000 E6	100.0#	0#	-15.44#
21	tc Endosulfan S	37.033	0.000 E6	100.0#	0#	-16.06#
22	tc Methoxychlor	21.567	0.000 E6	100.0#	0#	-15.64#
23	tc FAMPHUR	32.077	0.000 E6	100.0#	0#	-16.32#

00612

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR498.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 10:14 pm
Operator : m.pedro
Sample : tox icv Inst : 6890D
Misc : initial cal
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 09:37:38 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 09:36:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
System Monitoring Compounds						
Target Compounds						
30) L8C Toxaphene	14.59	15.12	228.3E6	120.6E6	455.158	505.692m
31) L8C Toxaphene{2}	14.98	15.51	341.3E6	134.5E6	538.246	515.797
32) L8C Toxaphene{3}	15.58	15.88	766.1E6	98450559	531.905	526.437
33) L8C Toxaphene{4}	16.42	16.75	839.3E6	132.4E6	506.909	501.981
34) L8C Toxaphene{5}	16.61	16.99	738.4E6	141.4E6	514.061	524.046
Sum Toxaphene			2913.4E6	627.3E6	2546.279	2573.952
Average Toxaphene					509.256	514.790
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

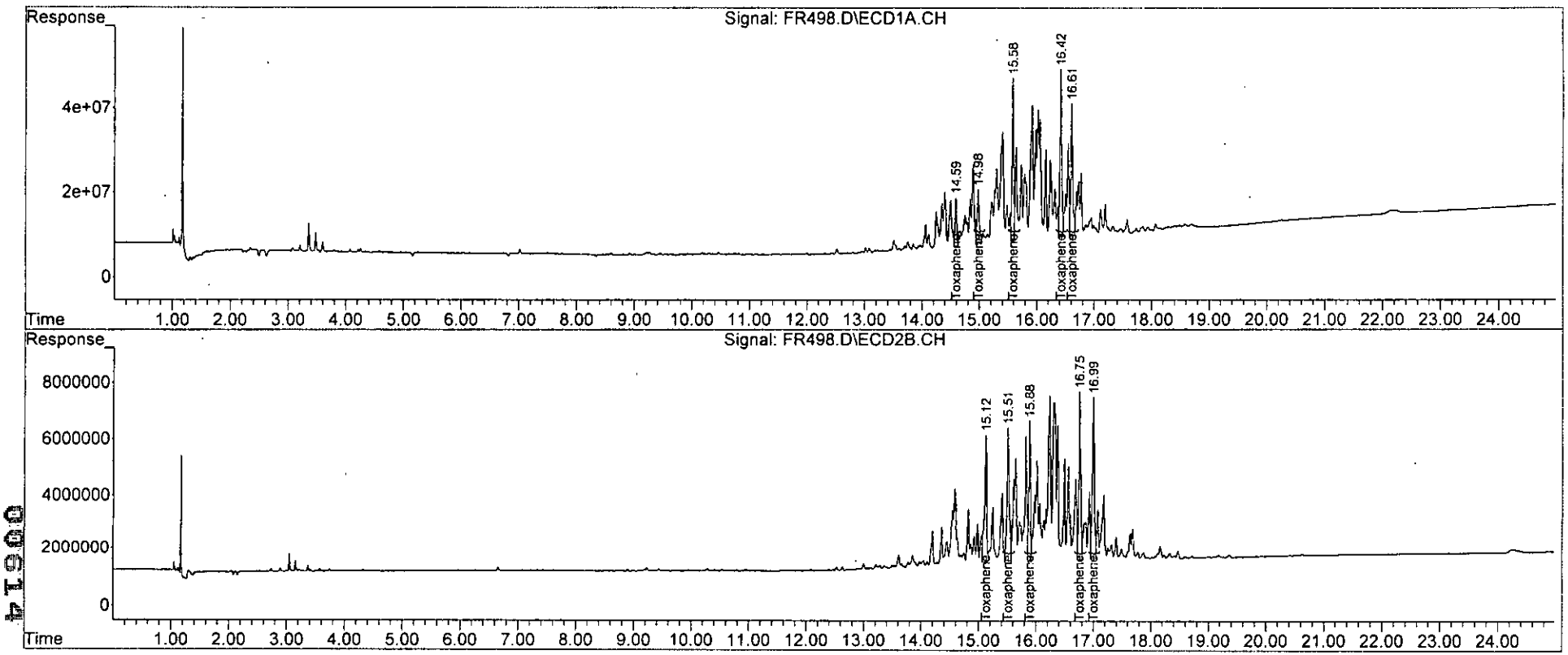
8081E072514.M Mon Jul 28 09:39:05 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR498.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 10:14 pm
Operator : m.pedro
Sample : tox icv Inst : 6890D
Misc : initial cal
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 09:37:38 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 09:36:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



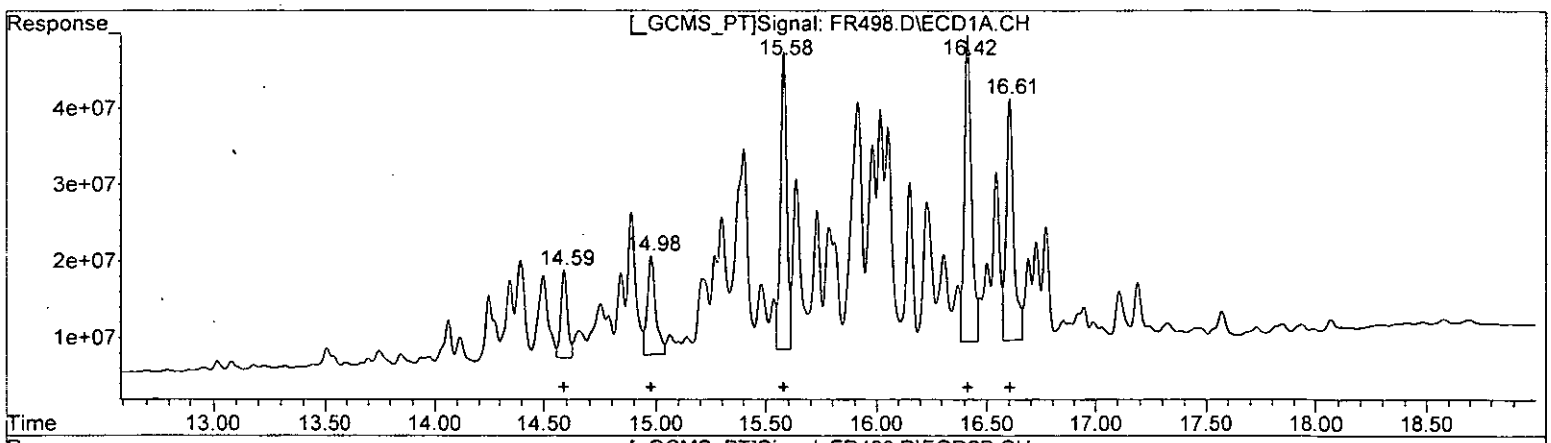
8081E072514.M Mon Jul 28 09:39:09 2014 Page: 2

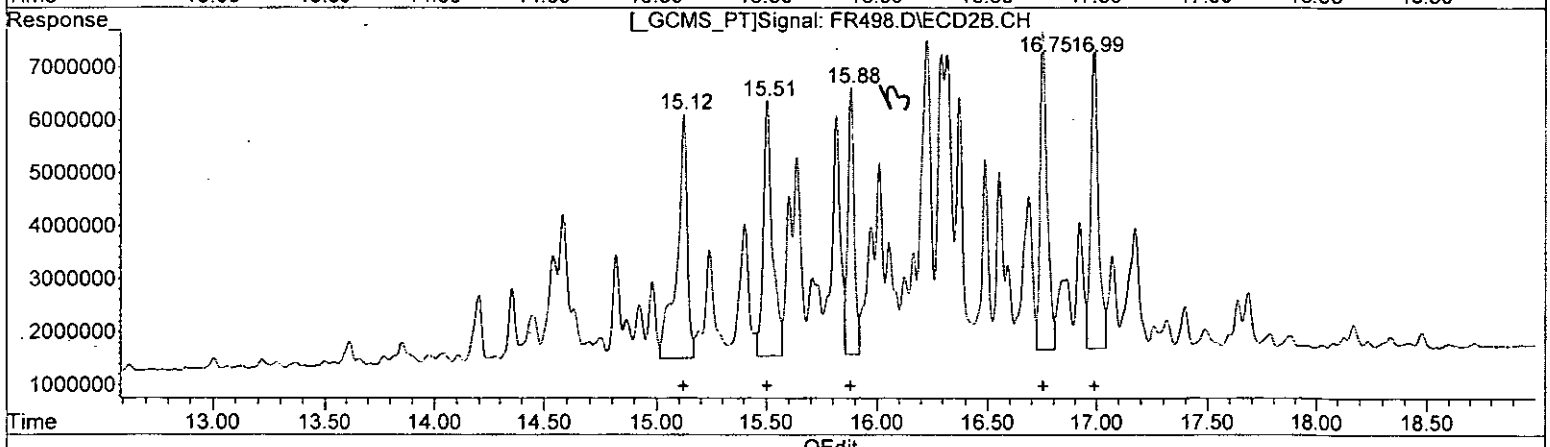
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR498.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 10:14 pm
Operator : m.pedro
Sample : tox icv Inst : 6890D
Misc : initial cal
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 09:37:03 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 09:36:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(30) Toxaphene (L8C)

R.T.	Response	Conc
14.59	228315526	455.16
14.98	341315316	538.25
15.58	766141798	531.91
16.42	839271345	506.91
16.61	738363131	514.06

(30) Toxaphene #2 (L8C)

R.T.	Response	Conc
15.12	149456838	626.95
15.51	134543406	515.80
15.88	98450559	526.44
16.75	132388516	501.98
16.99	141383871	524.05

(+) = Expected Retention Time
8081E072514.M Mon Jul 28 09:37:19 2014

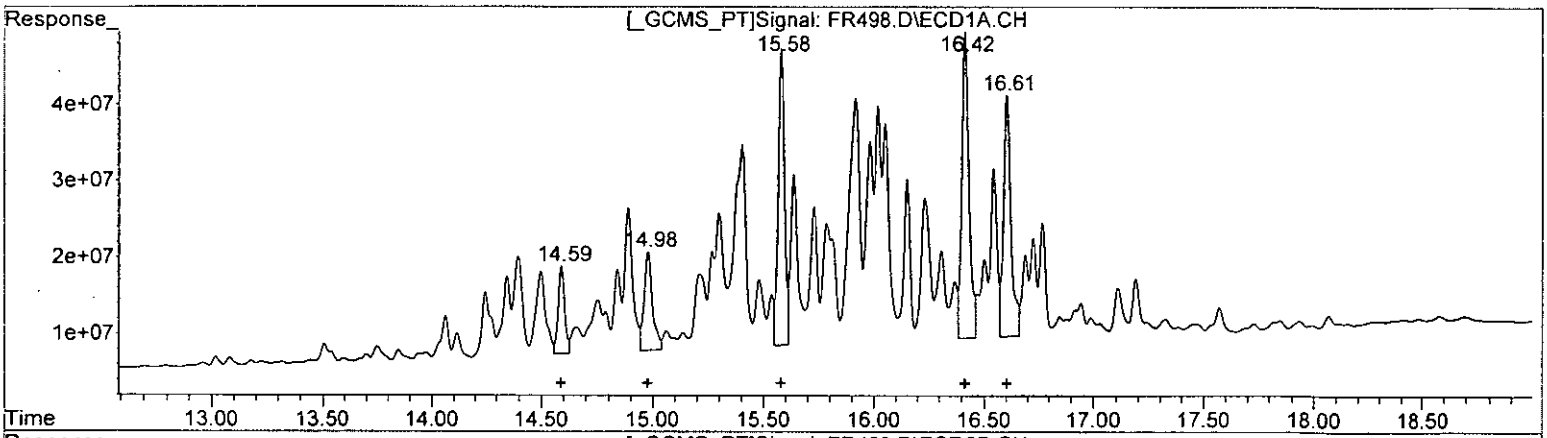
00615

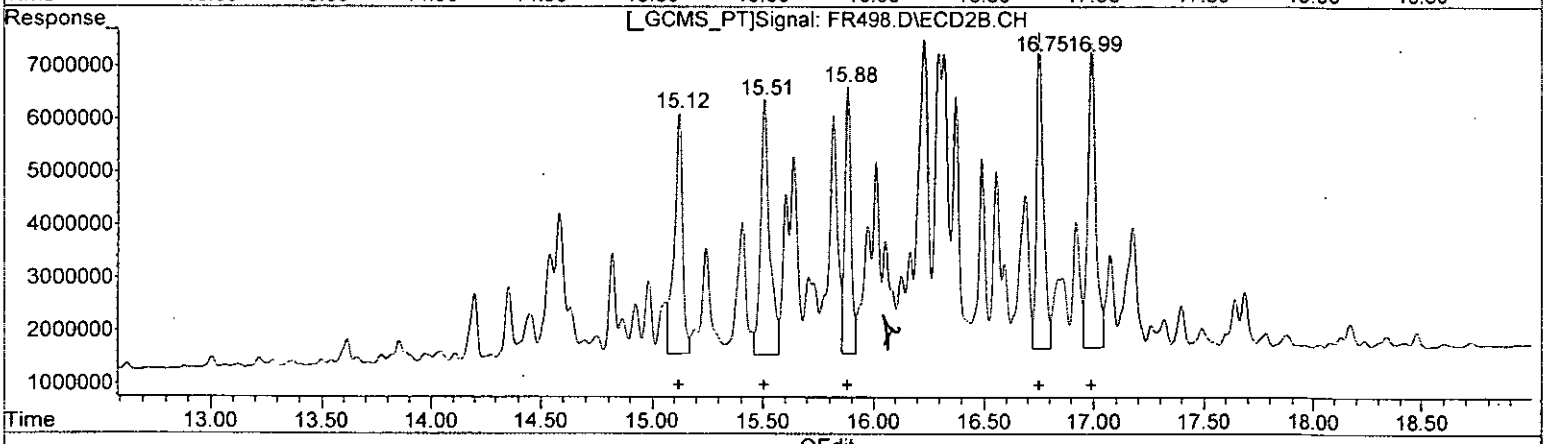
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR498.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 10:14 pm
Operator : m.pedro
Sample : tox icv Inst : 6890D
Misc : initial cal
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 09:37:03 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 09:36:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(30) Toxaphene #2 (L8C)

R.T.	Response	Conc
14.59	228315526	455.16
14.98	341315316	538.25
15.58	766141798	531.91
16.42	839271345	506.91
16.61	738363131	514.06

(30) Toxaphene #2 (L8C)

R.T.	Response	Conc
15.12	120550291	505.69
15.51	134543406	515.80
15.88	98450559	526.44
16.75	132388516	501.98
16.99	141383871	524.05

(+) = Expected Retention Time
8081E072514.M Mon Jul 28 09:37:28 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR499.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 10:48 pm
Operator : m.pedro
Sample : chlor low Inst : 6890D
Misc : initial cal
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:33:39 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:30:35 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
System Monitoring Compounds						
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
35) L9C Chlordane	11.65	11.66	75449664	9460139	30.723	24.794
36) L9C Chlordane{2}	11.78	11.89	100.5E6	12334920	29.106	23.635
37) L9C Chlordane{3}	12.45	12.61	78774450	10494566	30.098	25.889
38) L9C Chlordane{4}	14.50	14.80	33005984	4731775	24.814m	23.858
39) L9C Chlordane{5}	14.70	15.07	50061449	7875224	27.971	23.757
Sum Chlordane			337.8E6	44896623	142.711	121.934
Average Chlordane					28.542	24.387

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

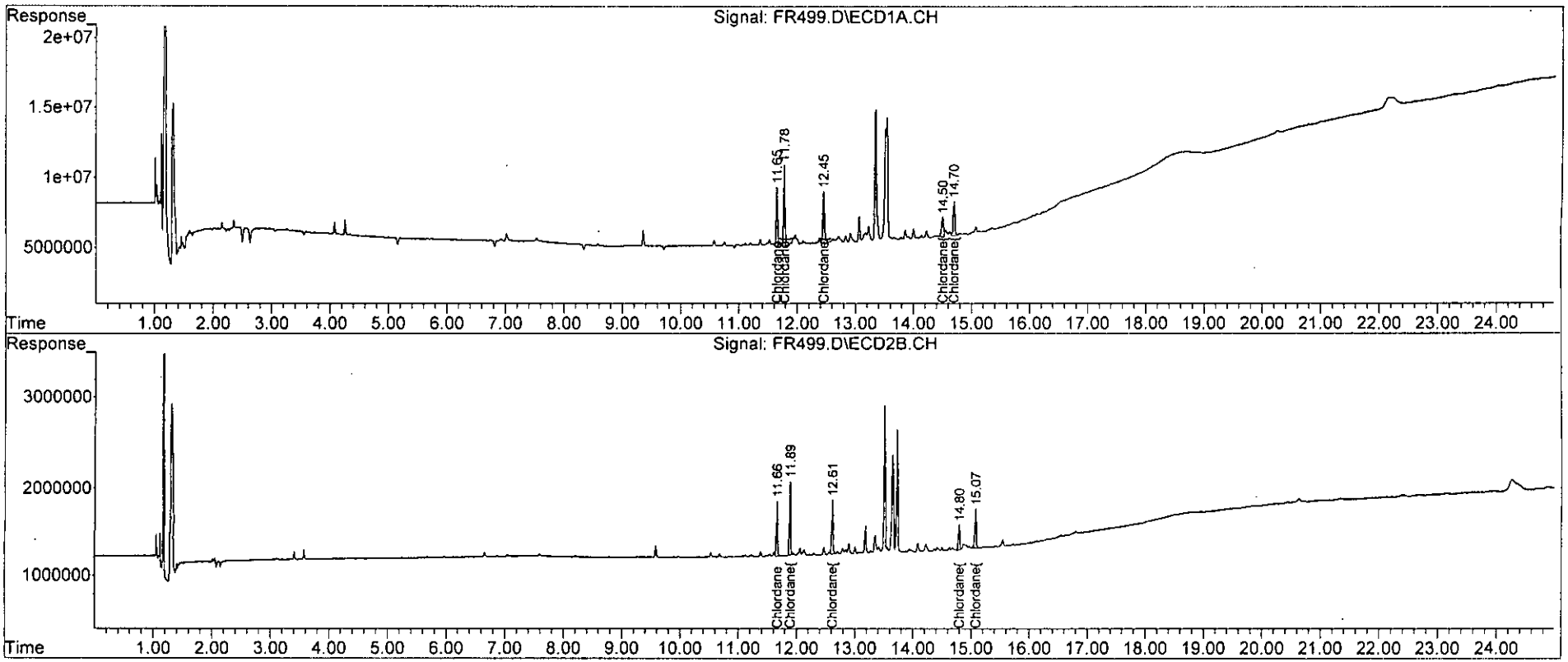
8081E072514.M Mon Jul 28 08:44:18 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR499.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 10:48 pm
Operator : m.pedro
Sample : chlor low Inst : 6890D
Misc : initial cal
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:33:39 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:30:35 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



21900

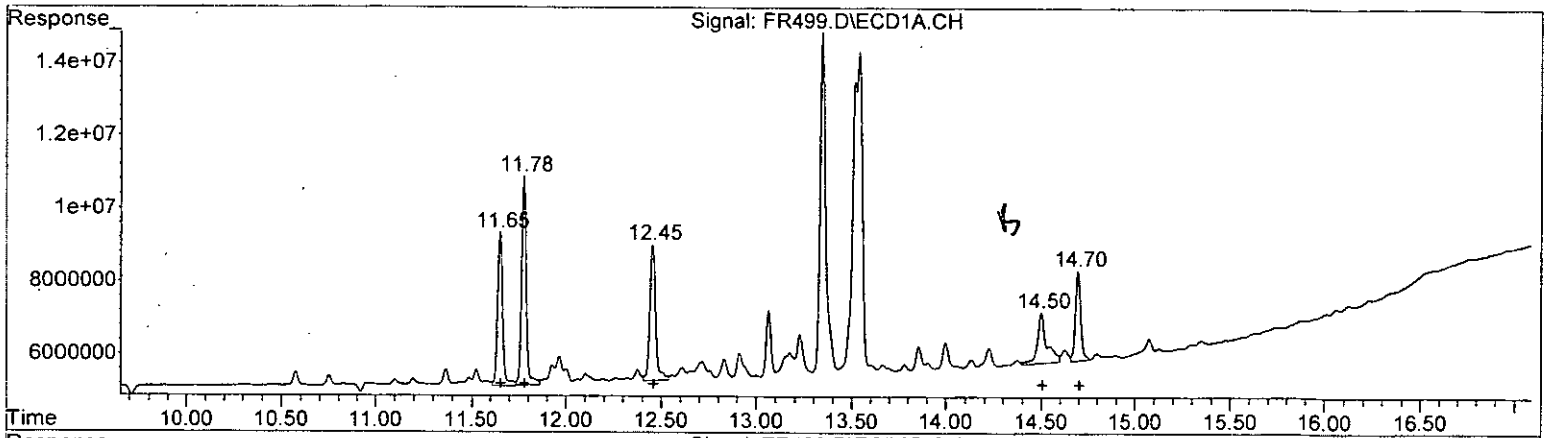
8081E072514.M Mon Jul 28 08:44:21 2014 Page: 2

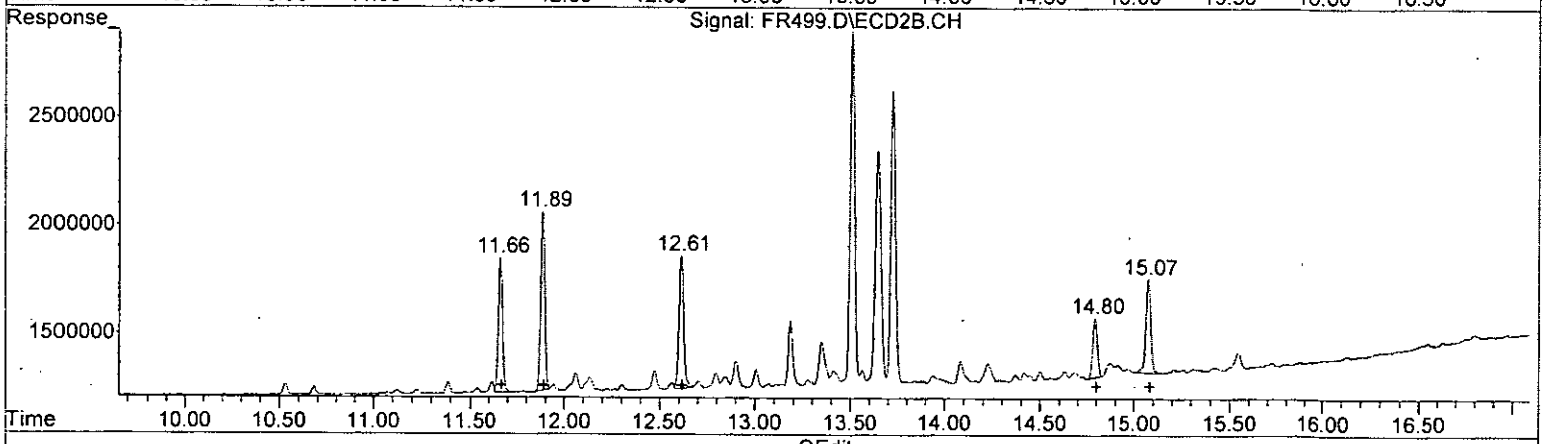
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR499.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 10:48 pm
Operator : m.pedro
Sample : chlor low Inst : 6890D
Misc : initial cal
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:33:02 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:30:35 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(35) Chlordane (L9C)

R.T.	Response	Conc
11.65	75449664	30.72
11.78	100486490	29.11
12.45	78774450	30.10
14.50	48390933	36.38
14.70	50061449	27.97

(35) Chlordane #2 (L9C)

R.T.	Response	Conc
11.66	9460139	24.79
11.89	12334920	23.63
12.61	10494566	25.89
14.80	4731775	23.86
15.07	7875224	23.76

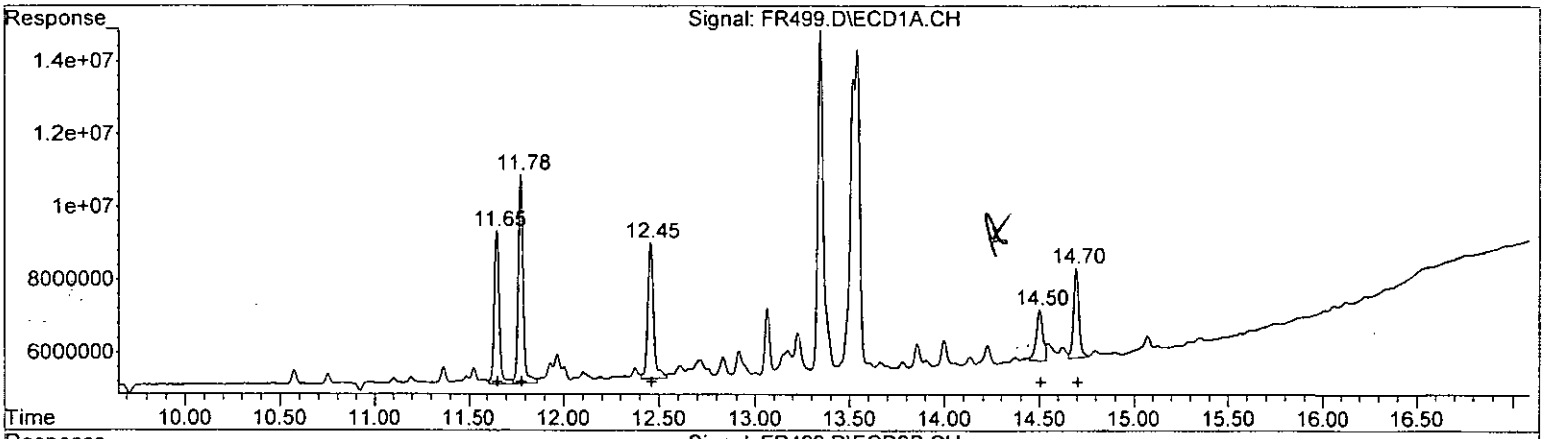
(+) = Expected Retention Time
8081E072514.M Mon Jul 28 08:33:10 2014 Page: 1

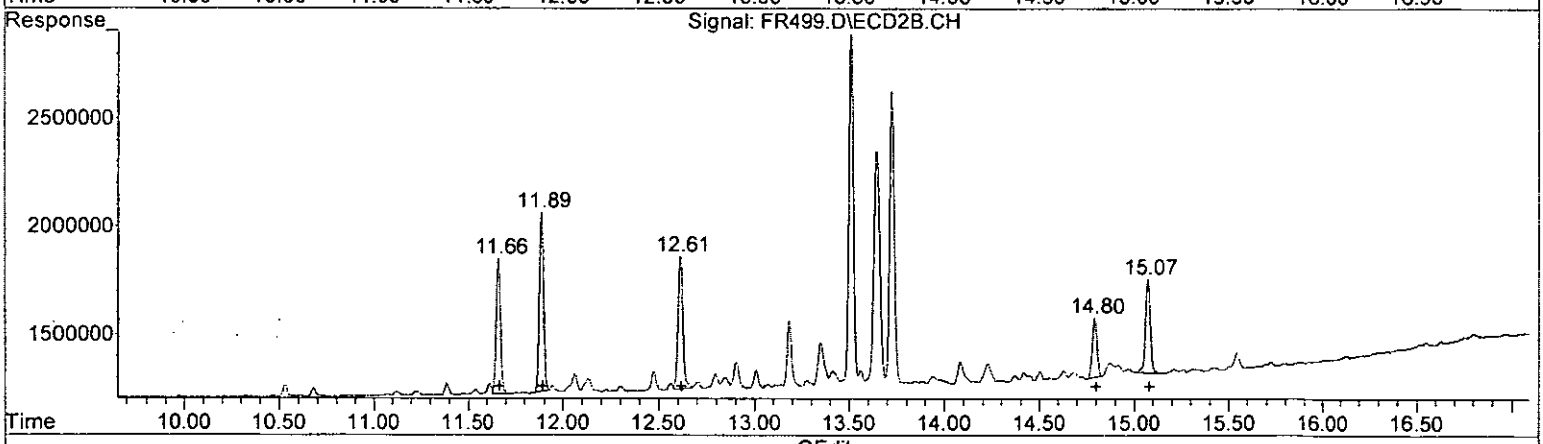
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR499.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 10:48 pm
Operator : m.pedro
Sample : chlor low Inst : 6890D
Misc : initial cal
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:33:02 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:30:35 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(35) Chlordane #2 (L9C)

R.T.	Response	Conc
11.65	75449664	30.72
11.78	100486490	29.11
12.45	78774450	30.10
14.50	33005984	24.81
14.70	50061449	27.97

(35) Chlordane #2 (L9C)

R.T.	Response	Conc
11.66	9460139	24.79
11.89	12334920	23.63
12.61	10494566	25.89
14.80	4731775	23.86
15.07	7875224	23.76

(+) = Expected Retention Time
8081E072514.M Mon Jul 28 08:33:22 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR500.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 11:23 pm
Operator : m.pedro
Sample : chlor ml Inst : 6890D
Misc : initial cal
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:35:12 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:33:40 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
System Monitoring Compounds						
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
35) L9C Chlordane	11.65	11.66	141.7E6	19152152	55.313	50.103
36) L9C Chlordane{2}	11.78	11.89	194.7E6	25342043	54.298	48.178
37) L9C Chlordane{3}	12.45	12.61	155.3E6	21523078	57.599	52.839
38) L9C Chlordane{4}	14.50	14.80	67978445	10249638	49.003m	51.889
39) L9C Chlordane{5}	14.70	15.08	104.3E6	17141655	56.531	51.509
Sum Chlordane			663.9E6	93408566	272.745	254.518
Average Chlordane					54.549	50.904

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

MP 7/28

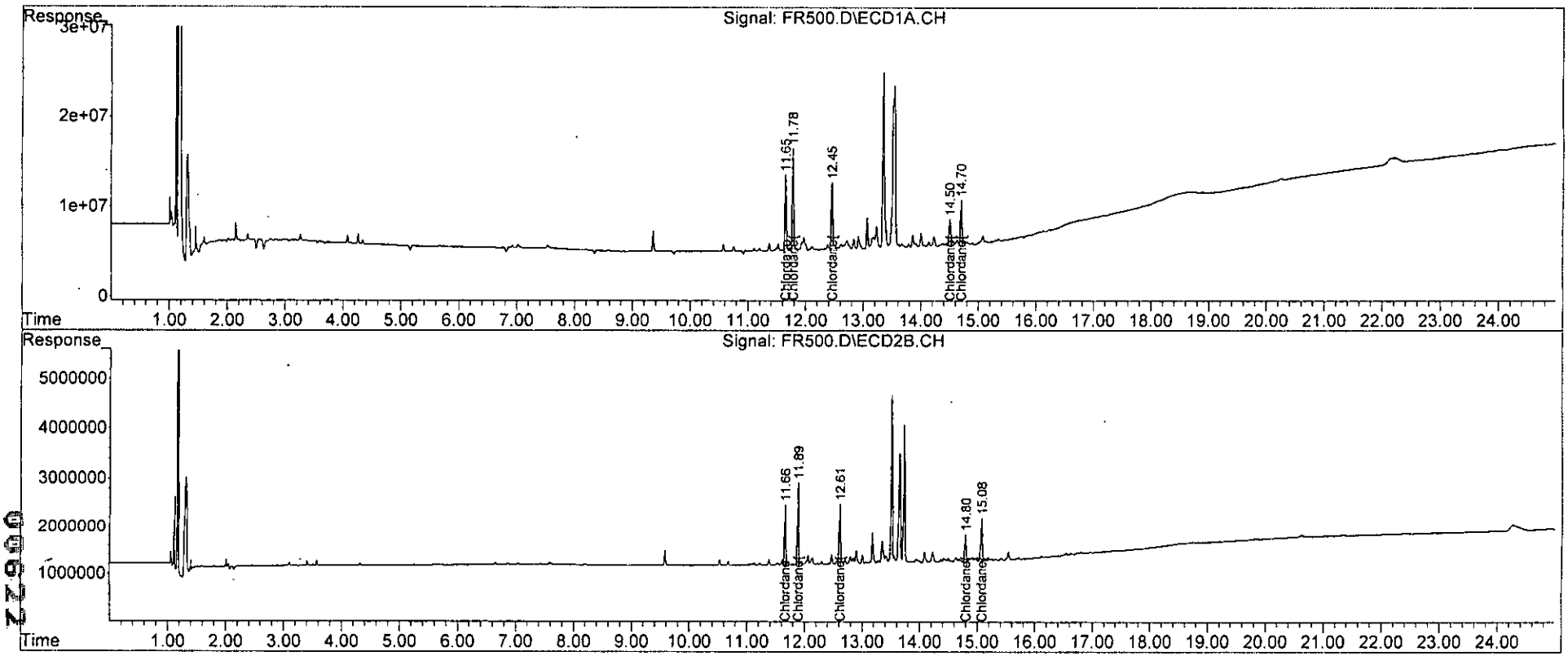
8081E072514.M Mon Jul 28 08:44:27 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR500.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 11:23 pm
Operator : m.pedro
Sample : chlor ml Inst : 6890D
Misc : initial cal
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:35:12 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:33:40 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



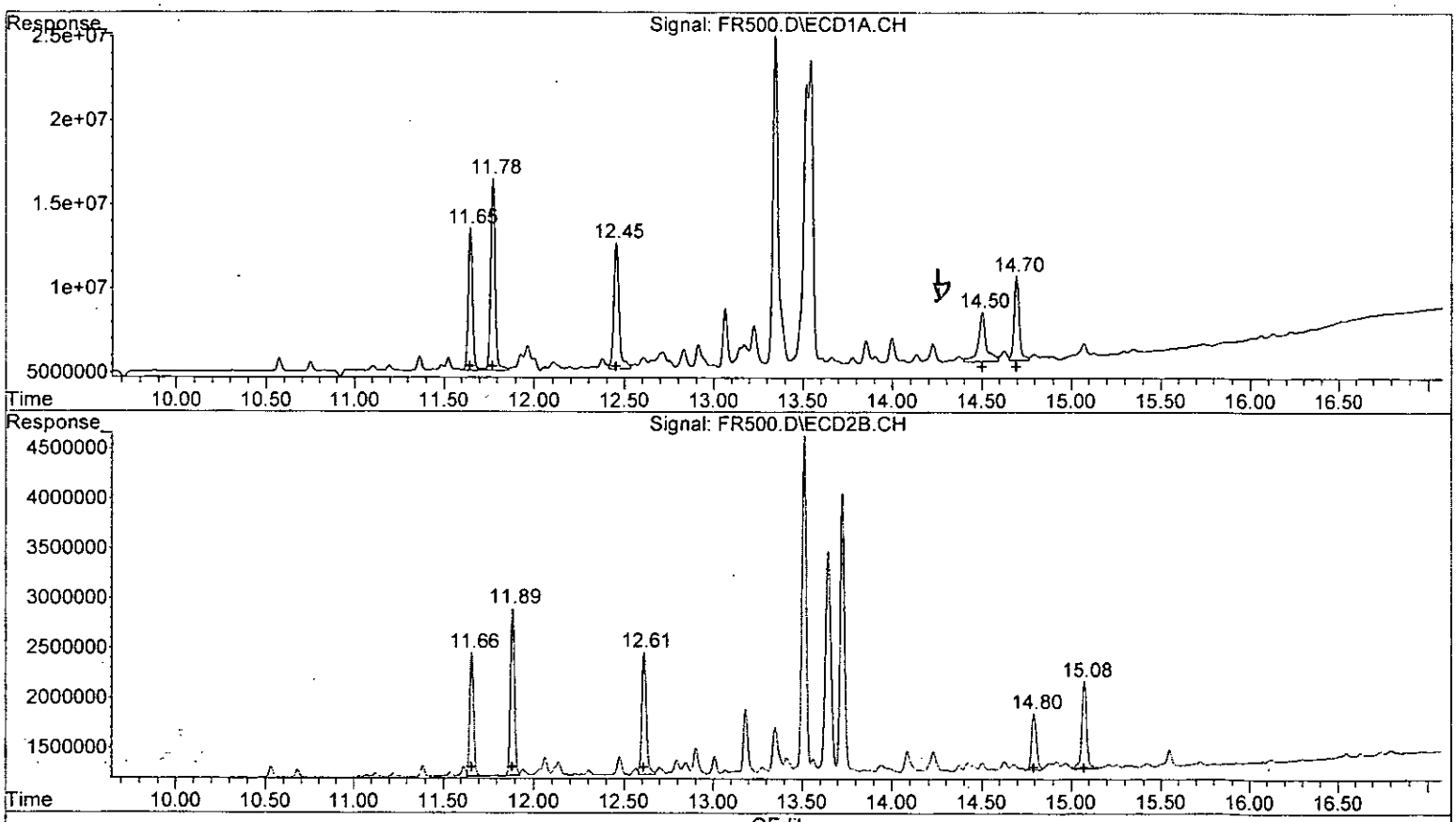
8081E072514.M Mon Jul 28 08:44:31 2014 Page: 2

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR500.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 11:23 pm
Operator : m.pedro
Sample : chlor ml Inst : 6890D
Misc : initial cal
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:34:15 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:33:40 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



QEdit

(35) Chlordane (L9C)

R.T.	Response	Conc
11.65	141670224	55.31
11.78	194655842	54.30
12.45	155269295	57.60
14.50	88829945	64.03
14.70	104302540	56.53

(35) Chlordane #2 (L9C)

R.T.	Response	Conc
11.66	19152152	50.10
11.89	25342043	48.18
12.61	21523078	52.84
14.80	10249638	51.89
15.08	17141655	51.51

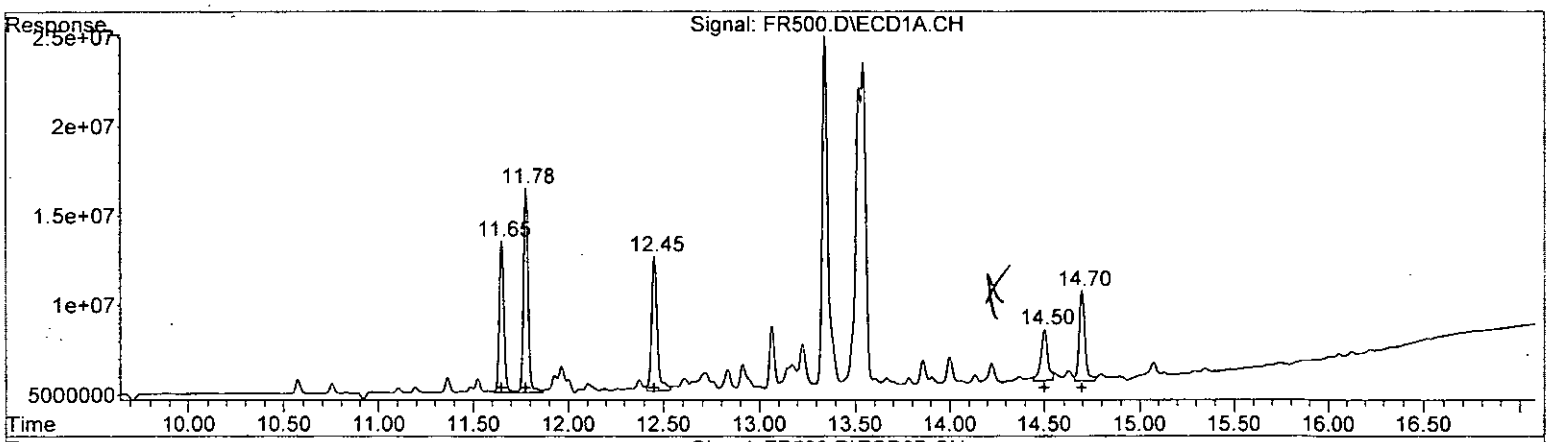
(+) = Expected Retention Time
8081E072514.M Mon Jul 28 08:34:17 2014 Page: 1

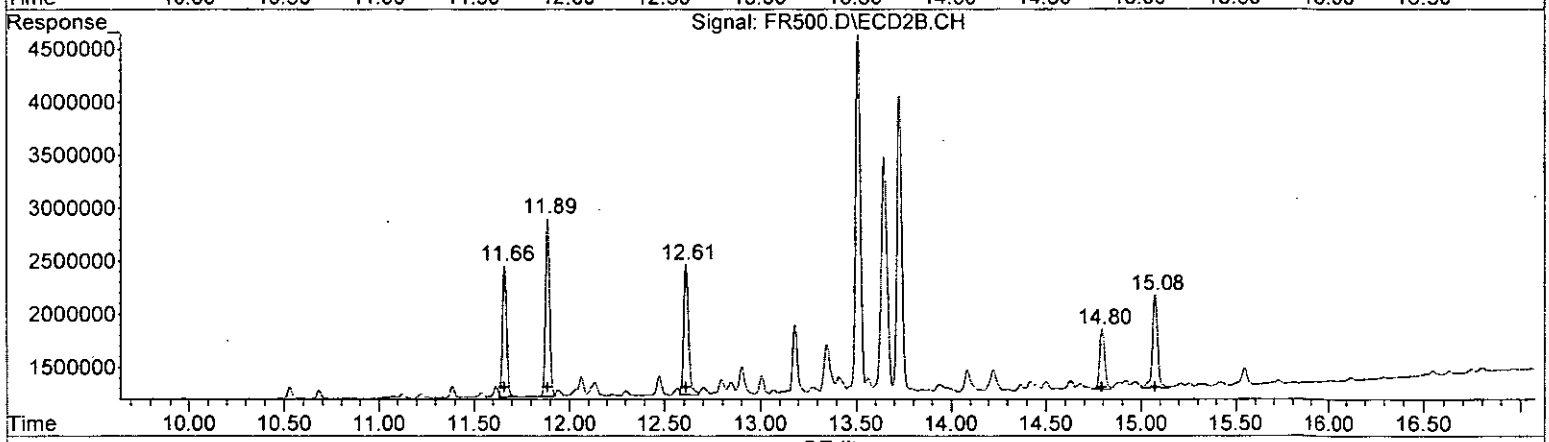
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR500.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 11:23 pm
Operator : m.pedro
Sample : chlor ml Inst : 6890D
Misc : initial cal
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:34:15 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:33:40 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(35) Chlordane #2 (L9C)

R.T.	Response	Conc
11.65	141670224	55.31
11.78	194655842	54.30
12.45	155269295	57.60
14.50	67978445	49.00
14.70	104302540	56.53

(35) Chlordane #2 (L9C)

R.T.	Response	Conc
11.66	19152152	50.10
11.89	25342043	48.18
12.61	21523078	52.84
14.80	10249638	51.89
15.08	17141655	51.51

(+) = Expected Retention Time
8081E072514.M Mon Jul 28 08:34:37 2014 Page: 1

00624

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR501.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 11:57 pm
Operator : m.pedro
Sample : chlor m Inst : 6890D
Misc : initial cal
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:36:25 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:35:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
System Monitoring Compounds						
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
35) L9C Chlordane	11.65	11.66	278.4E6	38384119	105.994	100.251
36) L9C Chlordane{2}	11.77	11.89	389.0E6	52509556	106.063	99.799
37) L9C Chlordane{3}	12.45	12.61	281.3E6	41375023	101.583	101.347
38) L9C Chlordane{4}	14.50	14.80	159.4E6	20322623	118.280	102.310
39) L9C Chlordane{5}	14.69	15.08	202.3E6	33234752	106.905	99.220
Sum Chlordane			1310.4E6	185.8E6	538.825	502.927
Average Chlordane					107.765	100.585

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

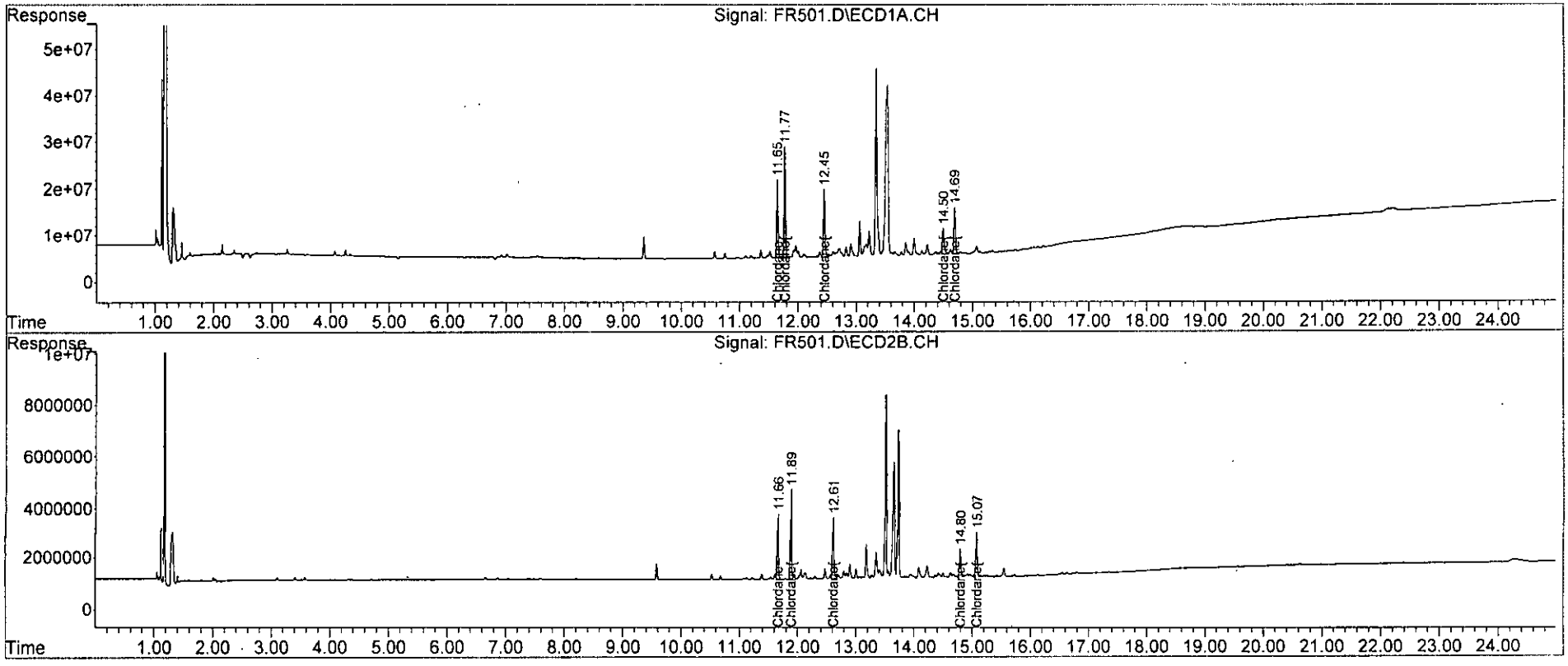
8081E072514.M Mon Jul 28 08:44:36 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR501.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 11:57 pm
Operator : m.pedro
Sample : chlor m Inst : 6890D
Misc : initial cal
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:36:25 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:35:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



9290

8081E072514.M Mon Jul 28 08:44:40 2014 Page: 2

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR502.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 26 Jul 2014 12:31 am
Operator : m.pedro
Sample : chlor mh Inst : 6890D
Misc : initial cal
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:37:17 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:36:20 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
System Monitoring Compounds						
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
35) L9C Chlordane	11.65	11.66	690.5E6	98504953	256.414	256.849
36) L9C Chlordane{2}	11.77	11.89	990.3E6	140.1E6	263.945	266.309
37) L9C Chlordane{3}	12.45	12.61	718.7E6	101.7E6	256.282	249.131
38) L9C Chlordane{4}	14.50	14.80	386.3E6	51461213	277.804	258.937
39) L9C Chlordane{5}	14.69	15.08	512.2E6	87067342	264.262	260.957
Sum Chlordane			3298.0E6	478.9E6	1318.708	1292.184
Average Chlordane					263.742	258.437

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

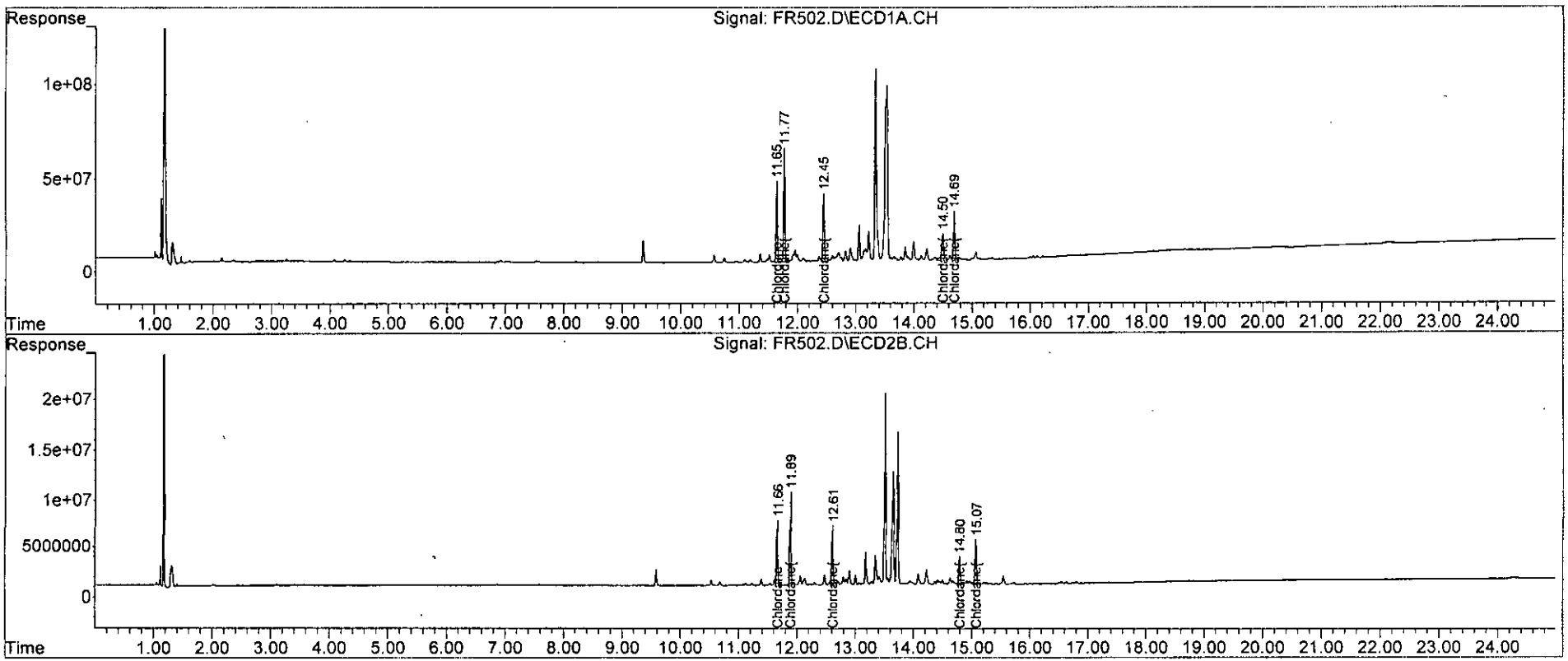
8081E072514.M Mon Jul 28 08:44:45 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR502.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 26 Jul 2014 12:31 am
Operator : m.pedro
Sample : chlor mh Inst : 6890D
Misc : initial cal
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:37:17 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:36:20 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



8290

8081E072514.M Mon Jul 28 08:44:49 2014 Page: 2

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR503.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 26 Jul 2014 1:05 am
Operator : m.pedro
Sample : chlor h Inst : 6890D
Misc : initial cal
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:38:16 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:37:31 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
System Monitoring Compounds						
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
35) L9C Chlordane	11.65	11.66	1287.1E6	187.0E6	469.094	488.649
36) L9C Chlordane{2}	11.77	11.89	1851.9E6	270.1E6	484.345	514.411
37) L9C Chlordane{3}	12.45	12.61	1319.4E6	185.3E6	461.383	454.076
38) L9C Chlordane{4}	14.50	14.80	723.3E6	96426065	509.174	484.858
39) L9C Chlordane{5}	14.69	15.08	965.0E6	165.9E6	487.826	497.018
Sum Chlordane			6146.7E6	904.7E6	2411.822	2439.012
Average Chlordane					482.364	487.802

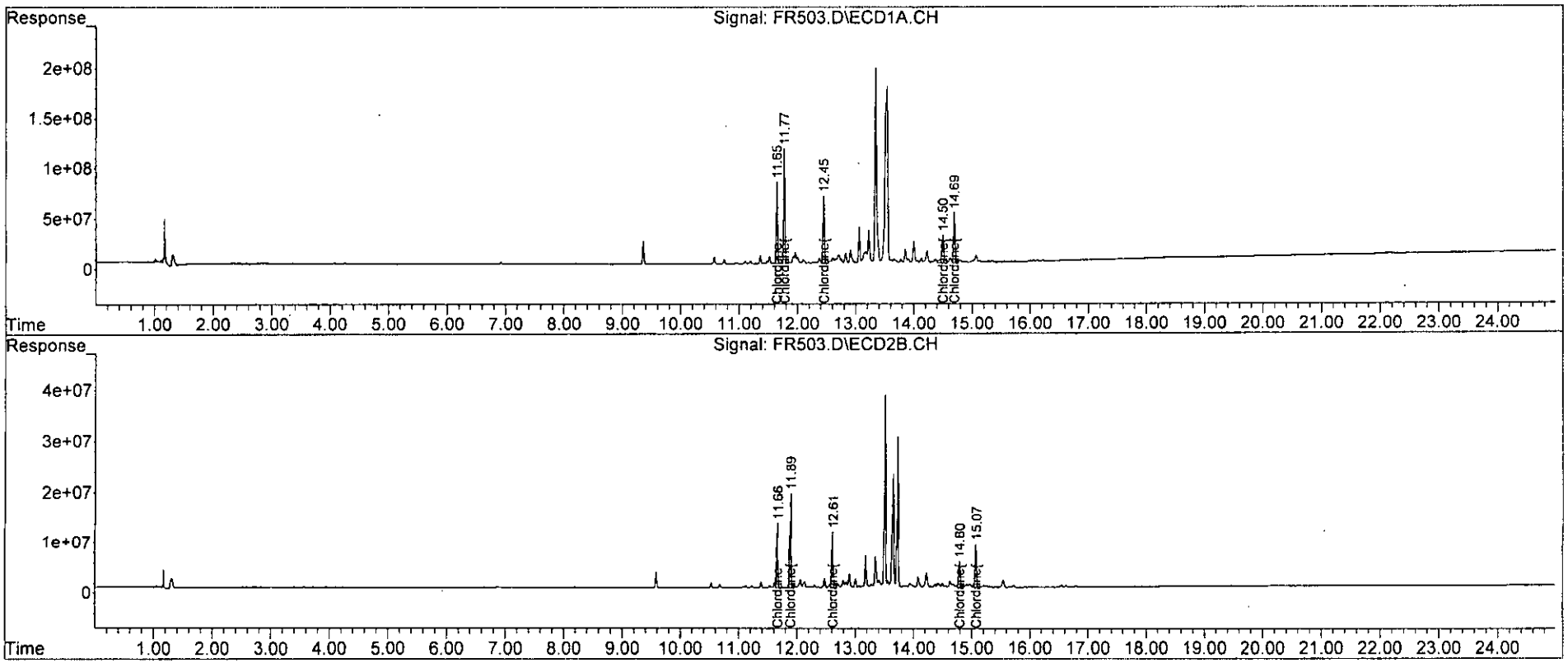
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR503.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 26 Jul 2014 1:05 am
Operator : m.pedro
Sample : chlor h Inst : 6890D
Misc : initial cal
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:38:16 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:37:31 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



0590

8081E072514.M Mon Jul 28 08:44:57 2014 Page: 2

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR504.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 26 Jul 2014 1:39 am
Operator : m.pedro
Sample : chlor icv Inst : 6890D
Misc : initial cal
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:39:09 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:38:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
35	L9C Chlordane	2.794	2.525 E6	9.6	91	0.00
36	L9C Chlordane{2}	3.893	3.617 E6	7.1	93	0.00
37	L9C Chlordane{3}	2.917	2.697 E6	7.5	96	0.00
38	L9C Chlordane{4}	1.453	1.437 E6	1.1	90	0.00
39	L9C Chlordane{5}	2.018	1.837 E6	9.0	91	0.00
	Signal #2					
35	L9C Chlordane	382.667	354.720 E3	7.3	92	0.00
36	L9C Chlordane{2}	525.181	491.541 E3	6.4	94	0.00
37	L9C Chlordane{3}	408.316	382.703 E3	6.3	92	0.00
38	L9C Chlordane{4}	199.237	187.101 E3	6.1	92	0.00
39	L9C Chlordane{5}	334.032	310.690 E3	7.0	93	0.00

DF 7/28

Evaluate Continuing Calibration Report - Not Founds

1	S SURR1,Tetrac	65.873	0.000 E6	100.0#	0#	-9.48#
2	TC HEXACHLOROBENZENE	71.634	0.000 E6	100.0#	0#	-10.18#
3	tc alpha-BHC	96.042	0.000 E6	100.0#	0#	-10.48#
4	tcm gamma-BHC (L	84.164	0.000 E6	100.0#	0#	-11.02#
5	tcm Heptachlor	78.956	0.000 E6	100.0#	0#	-11.78#
6	tcm Aldrin	70.252	0.000 E6	100.0#	0#	-12.24#
7	tc beta-BHC	36.141	0.000 E6	100.0#	0#	-11.17#
8	TC delta-BHC	82.141	0.000 E6	100.0#	0#	-11.45#
9	tc Heptachlor E	59.994	0.000 E6	100.0#	0#	-13.16#
10	tc alpha-Endosu	52.713	0.000 E6	100.0#	0#	-13.75#
11	tc gamma-Chlord	61.350	0.000 E6	100.0#	0#	-13.35#
12	tc alpha-Chlord	57.201	0.000 E6	100.0#	0#	-13.55#
13	tc 4,4'-DDE	55.275	0.000 E6	100.0#	0#	-13.65#
14	tcm Dieldrin	55.275	0.000 E6	100.0#	0#	-14.11#
15	tcm Endrin	41.046	0.000 E6	100.0#	0#	-14.47#
16	tc KEPONE	23.126	0.000 E6	100.0#	0#	-14.54#
17	tc beta-Endosul	44.725	0.000 E6	100.0#	0#	-14.81#
18	tc 4,4'-DDD	43.266	0.000 E6	100.0#	0#	-14.53#
19	tcm 4,4'-DDT	44.545	0.000 E6	100.0#	0#	-14.96#
20	tc Endrin Aldeh	34.962	0.000 E6	100.0#	0#	-15.44#
21	tc Endosulfan S	37.033	0.000 E6	100.0#	0#	-16.06#
22	tc Methoxychlor	21.567	0.000 E6	100.0#	0#	-15.64#
23	tc FAMPHUR	32.077	0.000 E6	100.0#	0#	-16.32#

8081E072514.M Mon Jul 28 08:39:43 2014 Page: 1

00631

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR504.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 26 Jul 2014 1:39 am
Operator : m.pedro
Sample : chlor icv Inst : 6890D
Misc : initial cal
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:39:09 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:38:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
System Monitoring Compounds						
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
35) L9C Chlordane	11.65	11.66	252.5E6	35472014	90.378	92.697
36) L9C Chlordane{2}	11.77	11.89	361.7E6	49154079	92.897	93.594
37) L9C Chlordane{3}	12.45	12.61	269.7E6	38270258	92.462	93.727
38) L9C Chlordane{4}	14.50	14.80	143.7E6	18710108	98.894	93.909
39) L9C Chlordane{5}	14.69	15.08	183.7E6	31068953	91.012	93.012
Sum Chlordane			1211.3E6	172.7E6	465.643	466.939
Average Chlordane					93.129	93.388

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

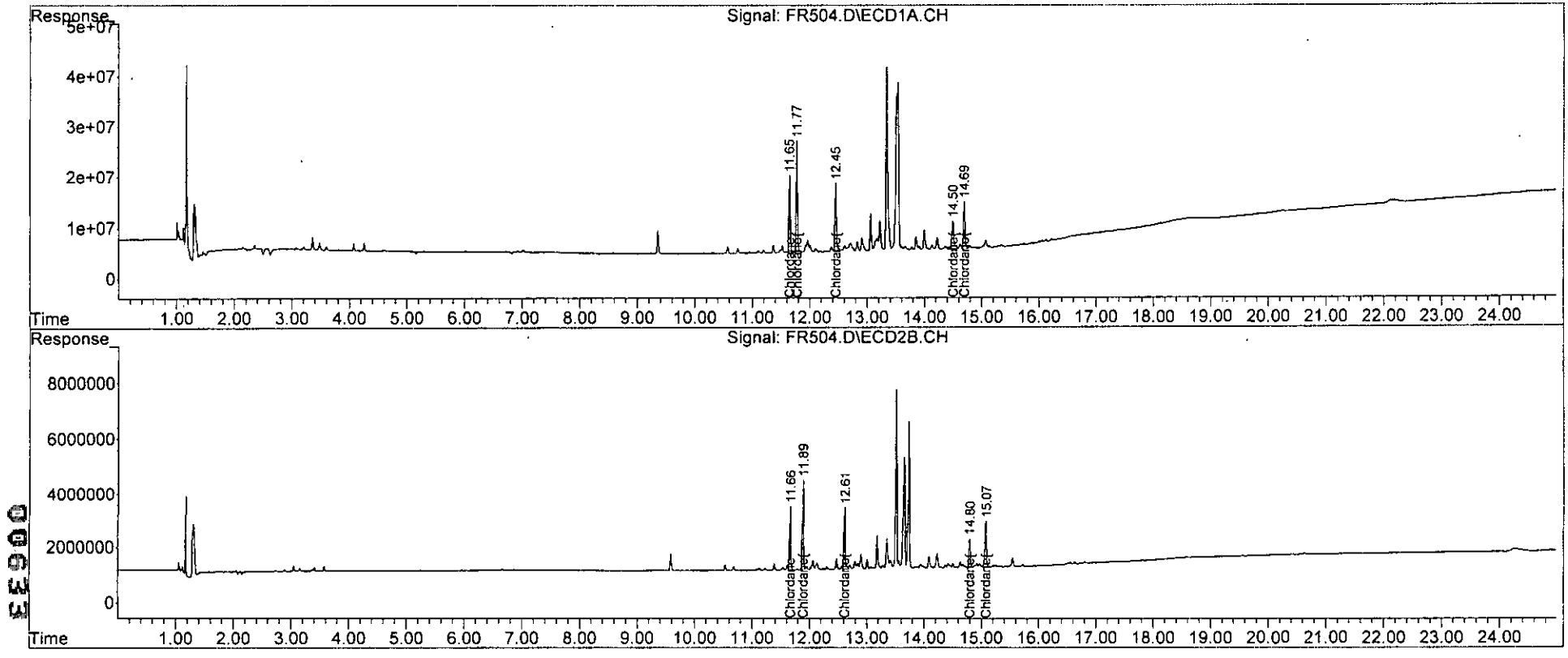
8081E072514.M Mon Jul 28 08:45:03 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR504.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 26 Jul 2014 1:39 am
Operator : m.pedro
Sample : chlor icv Inst : 6890D
Misc : initial cal
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 08:39:09 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 08:38:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



8081E072514.M Mon Jul 28 08:45:07 2014 Page: 2

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR475.D
Acq On : 25 Jul 2014 7:33 am
Operator : m.pedro
Sample : piblk Inst : 6890D
Misc : inst. blk
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 10:26:57 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 09:36:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	System Monitoring Compounds						
1) S	SURR1,Tetrac	9.48	9.53	1316.0E6	172.8E6	19.977	18.751
	Spiked Amount 100.000	Range 30 - 150		Recovery =		19.98%#	18.75%#
29) S	SURR2,Decachloro	17.80	18.39	733.8E6	145.3E6	18.836m	18.234m
	Spiked Amount 100.000	Range 30 - 150		Recovery =		18.84%#	18.23%#
	Target Compounds						
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

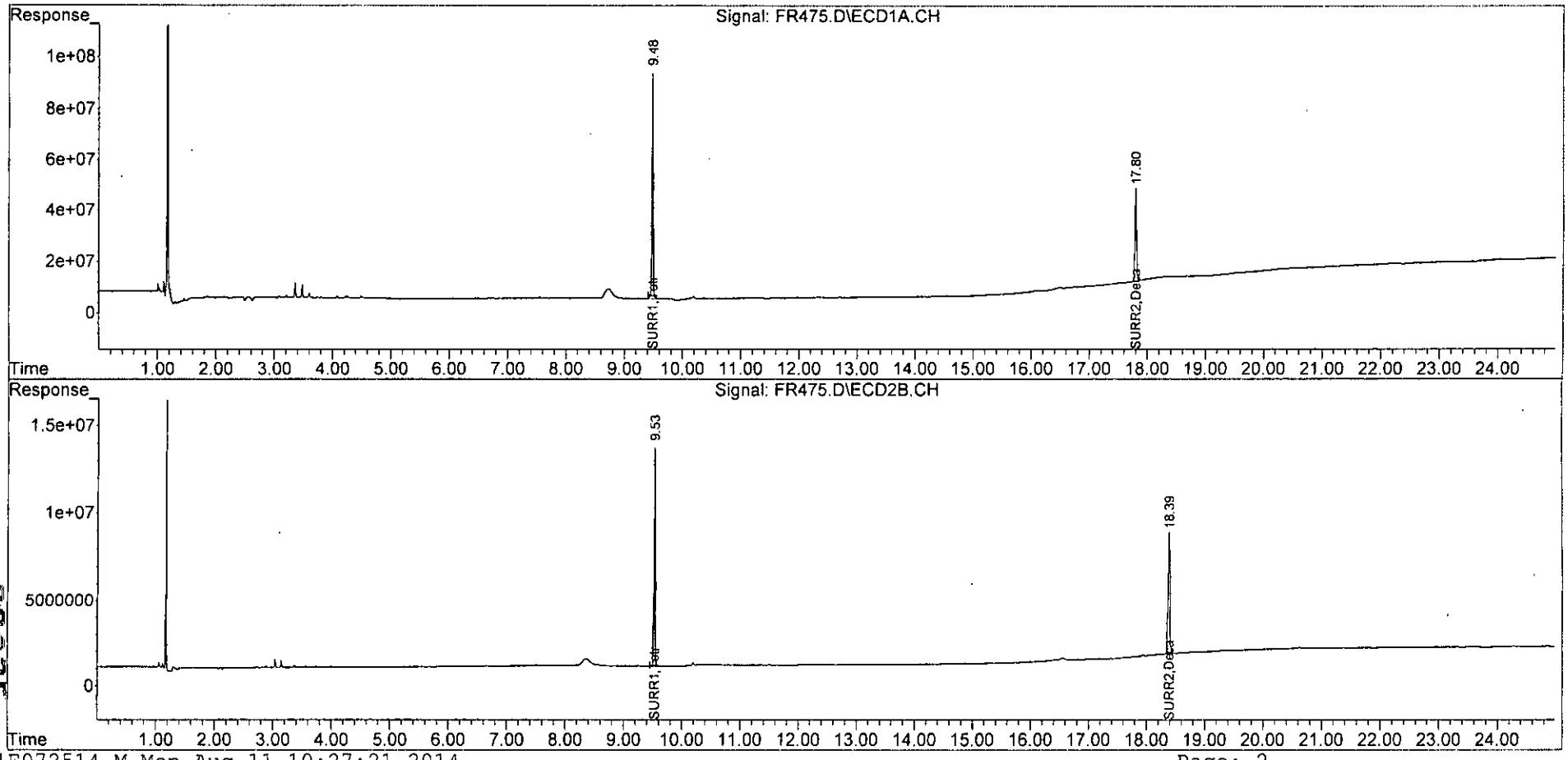
8081E072514.M Mon Aug 11 10:27:17 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR475.D
Acq On : 25 Jul 2014 7:33 am
Operator : m.pedro
Sample : piblk Inst : 6890D
Misc : inst. blk
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 10:26:57 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 09:36:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



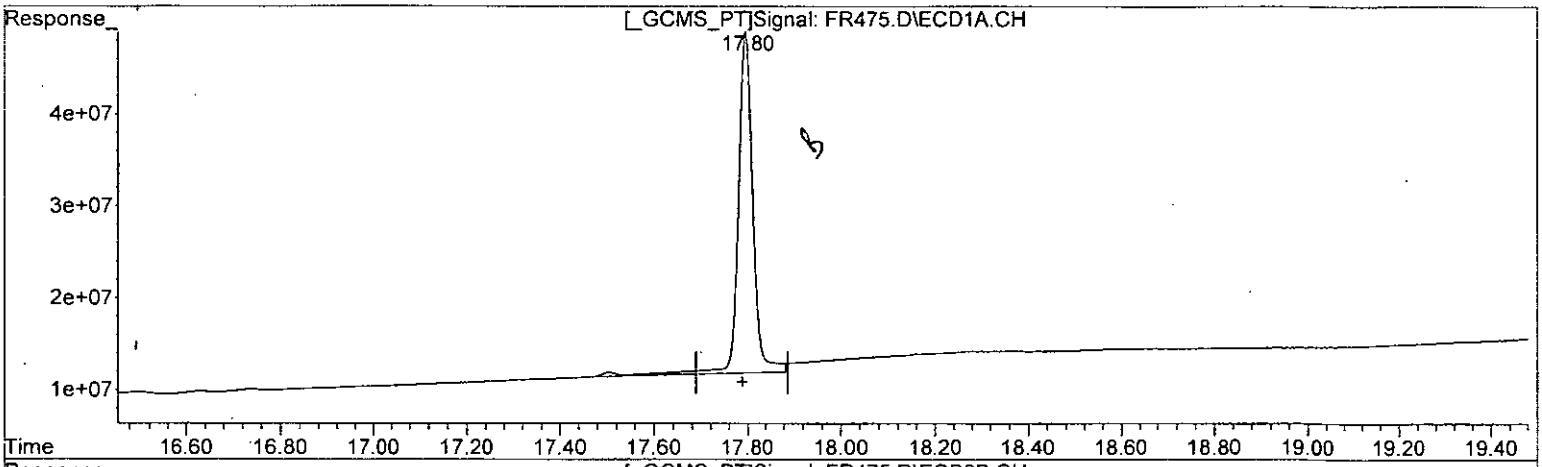
8081E072514.M Mon Aug 11 10:27:21 2014 Page: 2

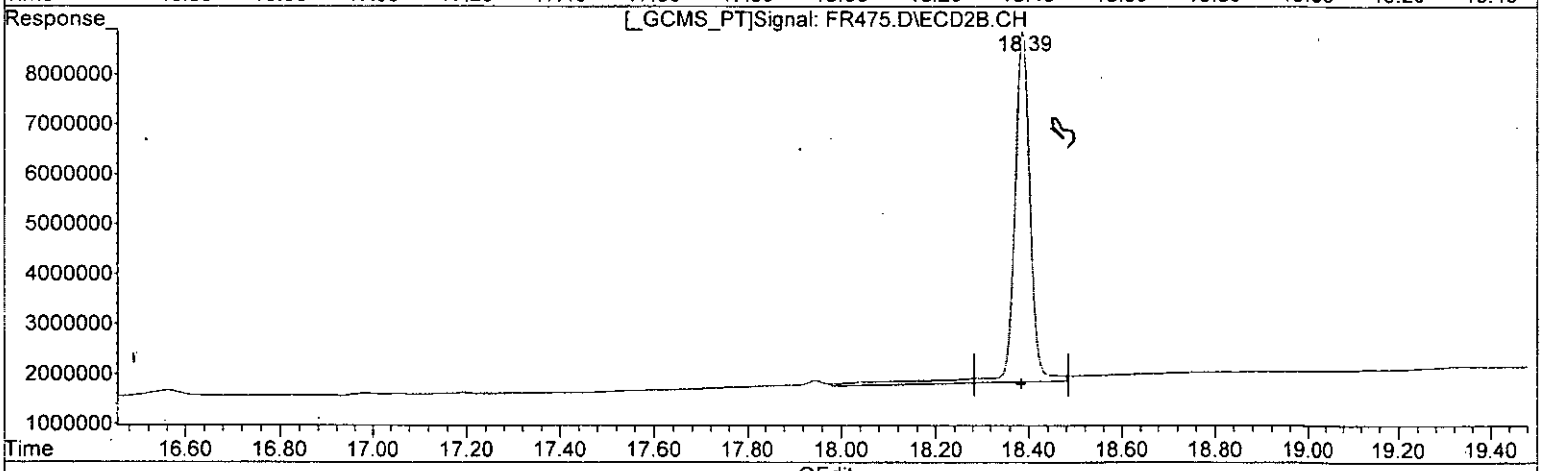
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR475.D
Acq On : 25 Jul 2014 7:33 am
Operator : m.pedro
Sample : piblk Inst : 6890D
Misc : inst. blk
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 28 09:40:00 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 09:36:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(29) SURR2,Decachlorobiphenyl (S)

17.80min 21.411ug/l

response 834062979

(29) SURR2,Decachlorobiphenyl #2 (S)

18.39min 21.057ug/l

response 167852191

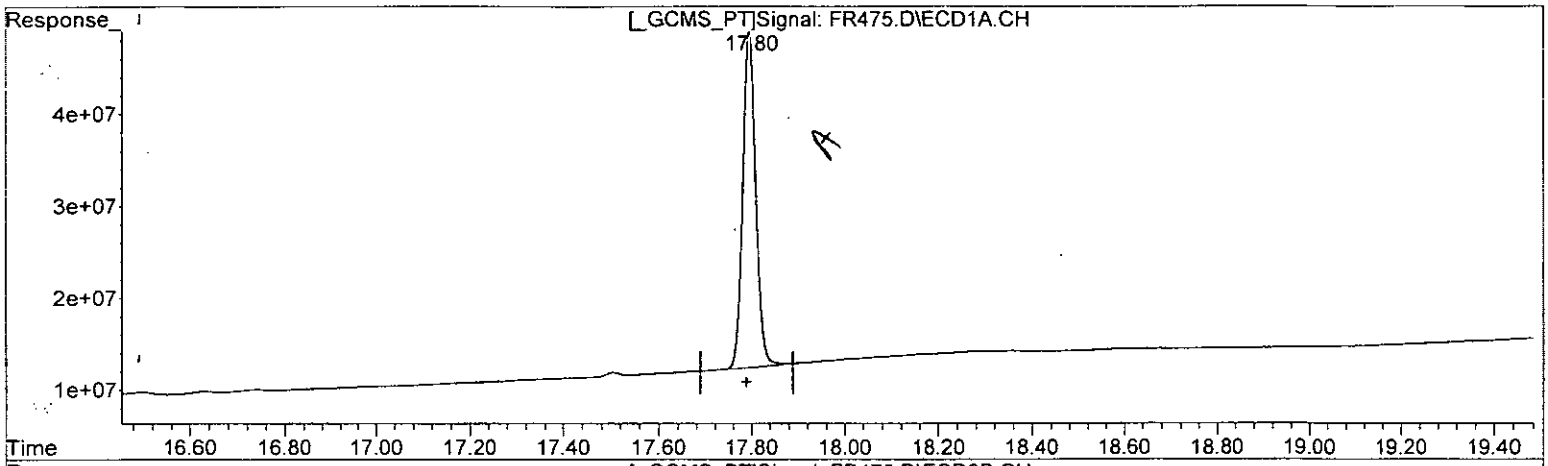
(+) = Expected Retention Time
8081E072514.M Mon Aug 11 10:26:45 2014 Page: 1

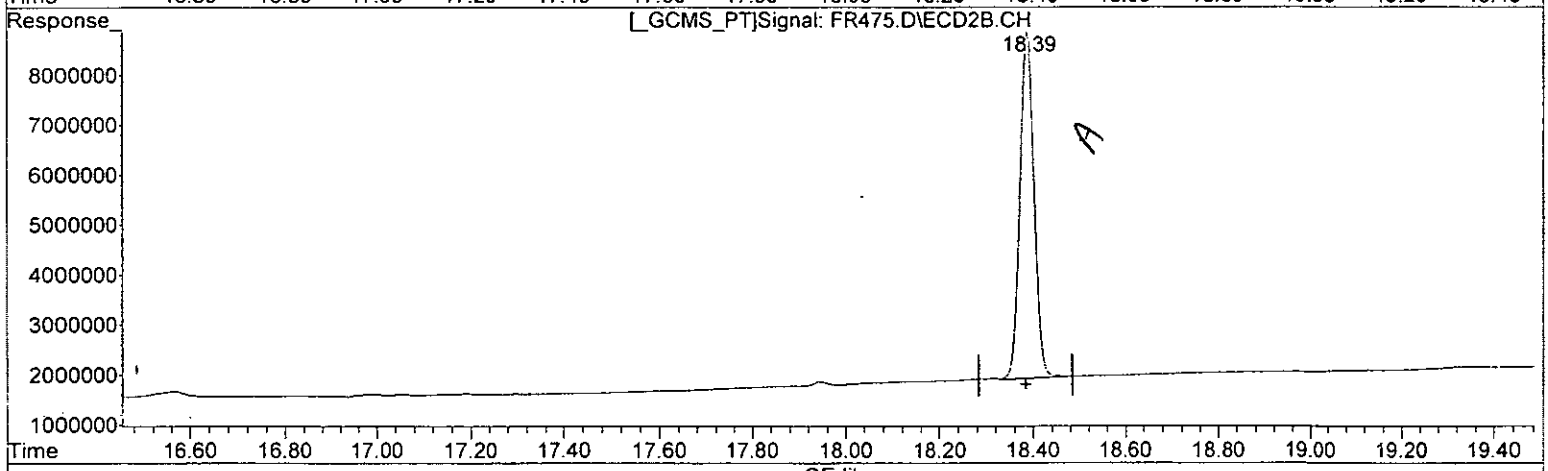
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR475.D
Acq On : 25 Jul 2014 7:33 am
Operator : m.pedro
Sample : piblk Inst : 6890D
Misc : inst. blk
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 28 09:40:00 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 09:36:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(29) SURR2,Decachlorobiphenyl (S)

17.80min 18.836ug/l m

response 733767172

BLC OM 8/11/14

(29) SURR2,Decachlorobiphenyl #2 (S)

18.39min 18.234ug/l m

response 145346442

(+) = Expected Retention Time
8081E072514.M Mon Aug 11 10:27:00 2014 Page: 1

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name:	ALS Environmental		Contract:		
Lab Code:	10145	Case No.:	SAS No.:	SDG No.:	
GC Column (1):	STX-CLP	ID: 0.32 (mm)	Initial Calibration Date(s):	07/25/2014	
EPA Sample No. (PEM):	PEM		Date Analyzed:	07/25/2014	
LAB Sample ID. (PEM):	PEM		Time Analyzed:	8:07	
4,4'-DDT % Breakdown (1):	1.1%		Endrin % Breakdown (1):	7.7%	
Combined % Breakdown (1):	8.7%				

QC LIMITS:

%D of amounts in PEM must be less than or equal to 25.0%
4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%
Combined breakdown must be less than or equal to 30.0%

FORM VII PEST-1

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name:	ALS Environmental		Contract:		
Lab Code:	10145	Case No.:	SAS No.:	SDG No.:	
GC Column (2):	STX-CLPI	ID: 0.32 (mm)	Initial Calibration Date(s):	07/25/2014	
EPA Sample No. (PEM):	PEM		Date Analyzed:	07/25/2014	
LAB Sample ID. (PEM):	PEM		Time Analyzed:	8:07	
4,4'-DDT % Breakdown (1):	0.6%		Endrin % Breakdown (1):	7.1%	
Combined % Breakdown (1):	7.8%				

QC LIMITS:

%D of amounts in PEM must be less than or equal to 25.0%
4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%
Combined breakdown must be less than or equal to 30.0%

FORM VII PEST-1

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR476.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 8:07 am
Operator : m.pedro
Sample : pem Inst : 6890D
Misc : pest performance check
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 09:41:02 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 09:36:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	System Monitoring Compounds						
1) S	SURR1,Tetrac	9.48	9.53	1281.5E6	178.1E6	19.455	19.331
	Spiked Amount 100.000	Range 30 - 150		Recovery =		19.45%#	19.33%#
29) S	SURR2,Decachloro	17.79	18.39	824.6E6	174.6E6	21.167	21.904
	Spiked Amount 100.000	Range 30 - 150		Recovery =		21.17%#	21.90%#
	Target Compounds						
3) tc	alpha-BHC	10.49	10.63	908.9E6	118.4E6	9.464	9.030
4) tcm	gamma-BHC (L	11.02	11.21	802.0E6	107.4E6	9.529	9.106
7) tc	beta-BHC	11.17	11.36	336.9E6	49536872	9.321	9.369
13) tc	4,4'-DDE	13.65	13.97	11696482	2157468	0.212	0.248
15) tcm	Endrin	14.47	14.68	2187.6E6	367.2E6	53.295	54.402
18) tc	4,4'-DDD	14.54	14.82	35860680	3022324	0.829	0.424 #
19) tcm	4,4'-DDT	14.96	15.29	4441.9E6	797.1E6	99.717	102.702
20) tc	Endrin Aldeh	15.44	15.51	64585891	12144316	1.847	1.897
22) tc	Methoxychlor	15.64	16.23	5209.7E6	947.9E6	241.560	241.063
24) tc	Endrin Keton	16.45	16.63	116.7E6	16123194	2.447	1.880
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000

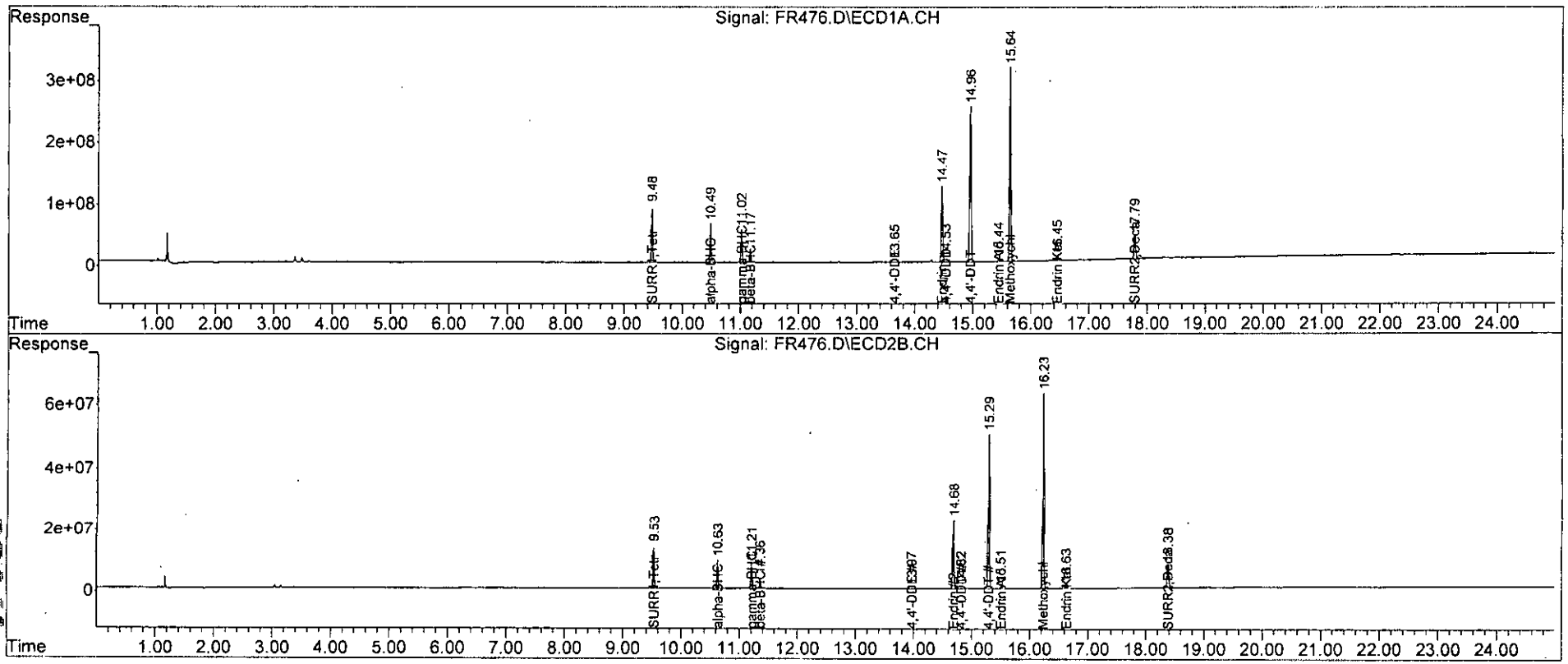
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\072514\
Data File : FR476.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jul 2014 8:07 am
Operator : m.pedro
Sample : pem Inst : 6890D
Misc : pest performance check
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 28 09:41:02 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 09:36:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



8081E072514.M Mon Jul 28 09:40:59 2014

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name:	ALS Environmental		Contract:		
Lab Code:	10145	Case No.:	SAS No.:	SDG No.:	
GC Column (1):	STX-CLP	ID: 0.32 (mm)	Initial Calibration Date(s):	07/25/2014	
EPA Sample No. (PEM):	PEM		Date Analyzed:	10/8/2014	
LAB Sample ID. (PEM):	PEM		Time Analyzed:	11:40	
4,4'-DDT % Breakdown (1):	2.5%		Endrin % Breakdown (1):	3.9%	
Combined % Breakdown (1):	6.4%				

QC LIMITS:

%D of amounts in PEM must be less than or equal to 25.0%
4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%
Combined breakdown must be less than or equal to 30.0%

FORM VII PEST-1

00642

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name:	ALS Environmental		Contract:		
Lab Code:	10145	Case No.:	SAS No.:	SDG No.:	
GC Column (2):	STX-CLPI	ID: 0.32 (mm)		Initial Calibration Date(s):	07/25/2014
EPA Sample No. (PEM):	PEM			Date Analyzed:	10/8/2014
LAB Sample ID. (PEM):	PEM			Time Analyzed:	11:40
4,4'-DDT % Breakdown (1):	3.9%			Endrin % Breakdown (1):	13.6%
Combined % Breakdown (1):	17.5%				

QC LIMITS:

%D of amounts in PEM must be less than or equal to 25.0%
4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%
Combined breakdown must be less than or equal to 30.0%

FORM VII PEST-1

00643

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR663.D
Acq On : 08 Oct 2014 11:40 am
Operator : m.pedro
Sample : pem Inst : 6890D
Misc : pest perform check
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 09 09:08:23 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	System Monitoring Compounds						
1)	S SURR1,Tetrac	9.46	9.52	1417.9E6	180.1E6	21.525	19.544
	Spiked Amount 100.000	Range 30 - 150		Recovery =		21.52%#	19.54%#
29)	S SURR2,Decachloro	17.76	18.35	774.9E6	149.0E6	19.892	18.692
	Spiked Amount 100.000	Range 30 - 150		Recovery =		19.89%#	18.69%#
	Target Compounds						
3)	tc alpha-BHC	10.46	10.61	1033.7E6	113.7E6	10.763	8.676
4)	tcm gamma-BHC (L	10.99	11.19	938.0E6	104.4E6	11.144	8.850
7)	tc beta-BHC	11.15	11.34	434.3E6	53622749	12.016	10.141
13)	tc 4,4'-DDE	13.63	13.96	28970922	5388682	0.524	0.619
15)	tcm Endrin	14.44	14.66	2594.8E6	334.6E6	63.215	49.574
18)	tc 4,4'-DDD	14.52	14.82	96990487	22932323	2.242m	3.220m#
19)	tcm 4,4'-DDT	14.93	15.27	4914.4E6	697.9E6	110.324	89.923
20)	tc Endrin Aldeh	15.42	15.49	20848175	14495743	0.596	2.264 #
22)	tc Methoxychlor	15.61	16.21	5600.6E6	843.5E6	259.683	214.502
24)	tc Endrin Keton	16.43	16.61	84676305	38055363	1.776m	4.438 #
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

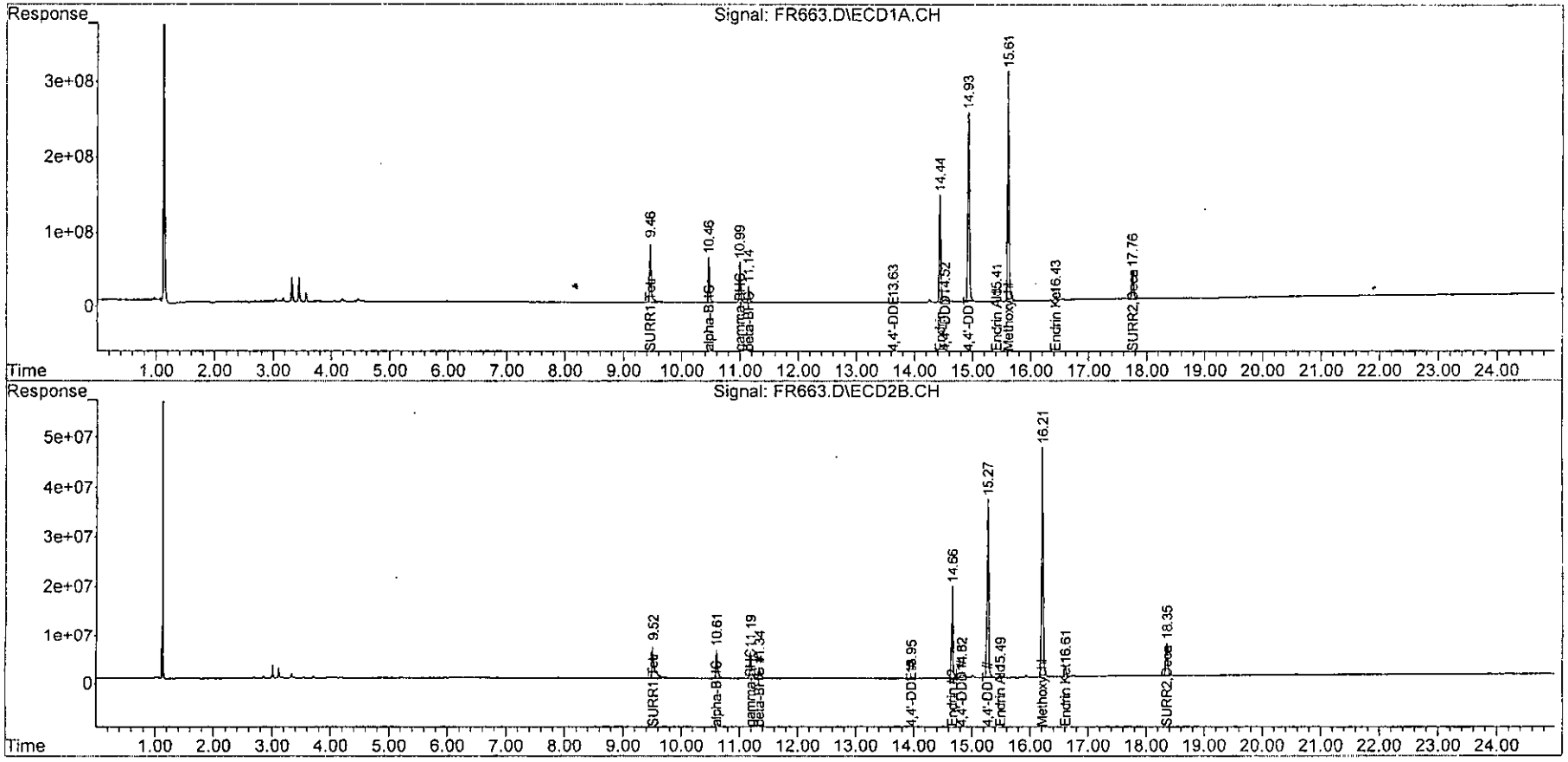
8081E072514.M Thu Oct 09 10:08:32 2014 Page 44

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR663.D
Acq On : 08 Oct 2014 11:40 am
Operator : m.pedro
Sample : pem Inst : 6890D
Misc : pest perform check
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 09 09:08:23 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



00645

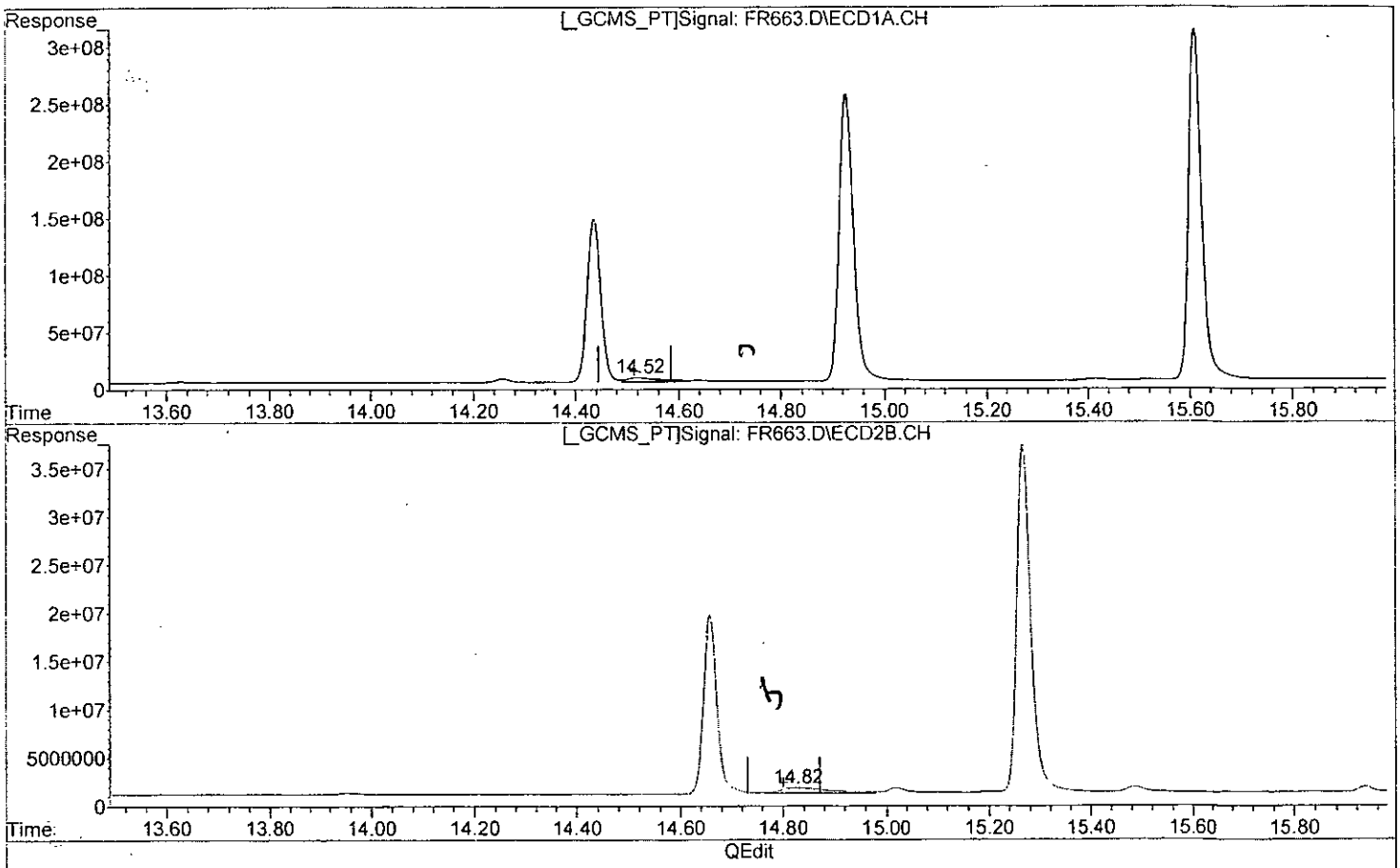
8081E072514.M Thu Oct 09 10:08:33 2014 Page: 2

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR663.D
Acq On : 08 Oct 2014 11:40 am
Operator : m.pedro
Sample : pem Inst : 6890D
Misc : pest perform check
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 09 08:46:04 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



(18) 4,4'-DDD (tc)

14.52min 4.091ug/l

response 176999937

(18) 4,4'-DDD #2 (tc)

14.82min 5.046ug/l

response 35938797

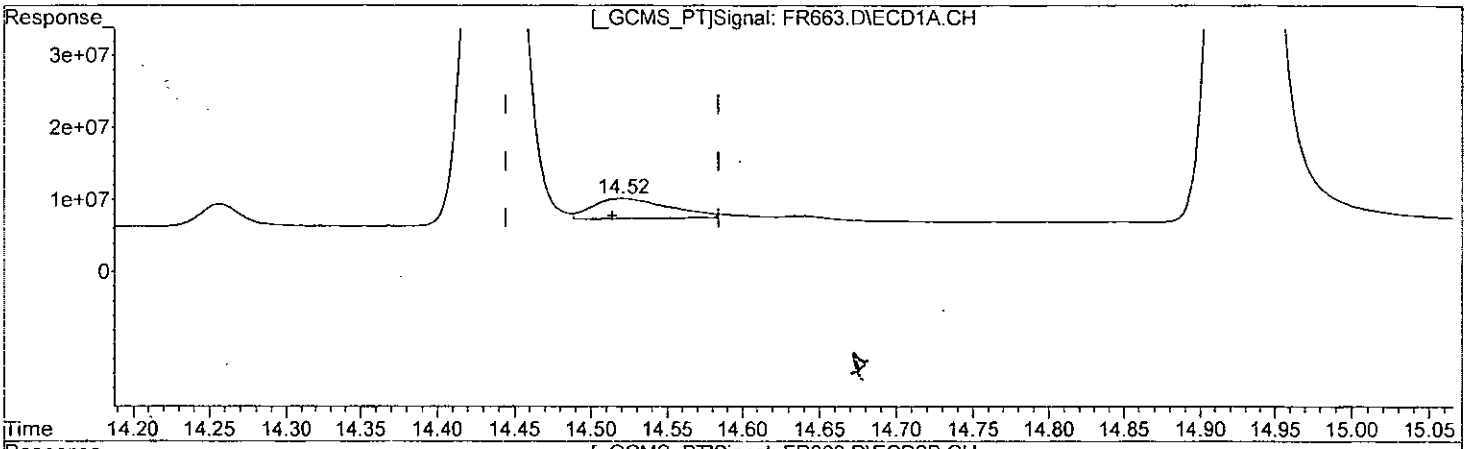
(+) = Expected Retention Time
8081E072514.M Thu Oct 09 09:07:47 2014 Page 1

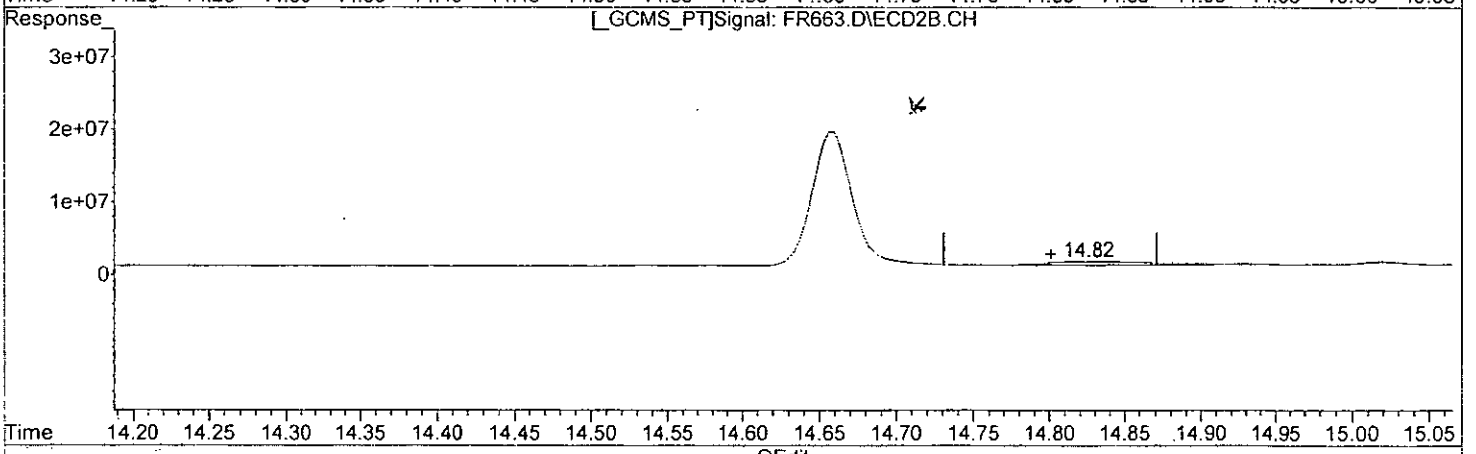
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR663.D
Acq On : 08 Oct 2014 11:40 am
Operator : m.pedro
Sample : pem Inst : 6890D
Misc : pest perform check
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 09 08:46:04 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(18) 4,4'-DDD (tc)

14.52min 2.242ug/l m

response 96990487

(18) 4,4'-DDD #2 (tc)

14.82min 3.220ug/l m

response 22932323

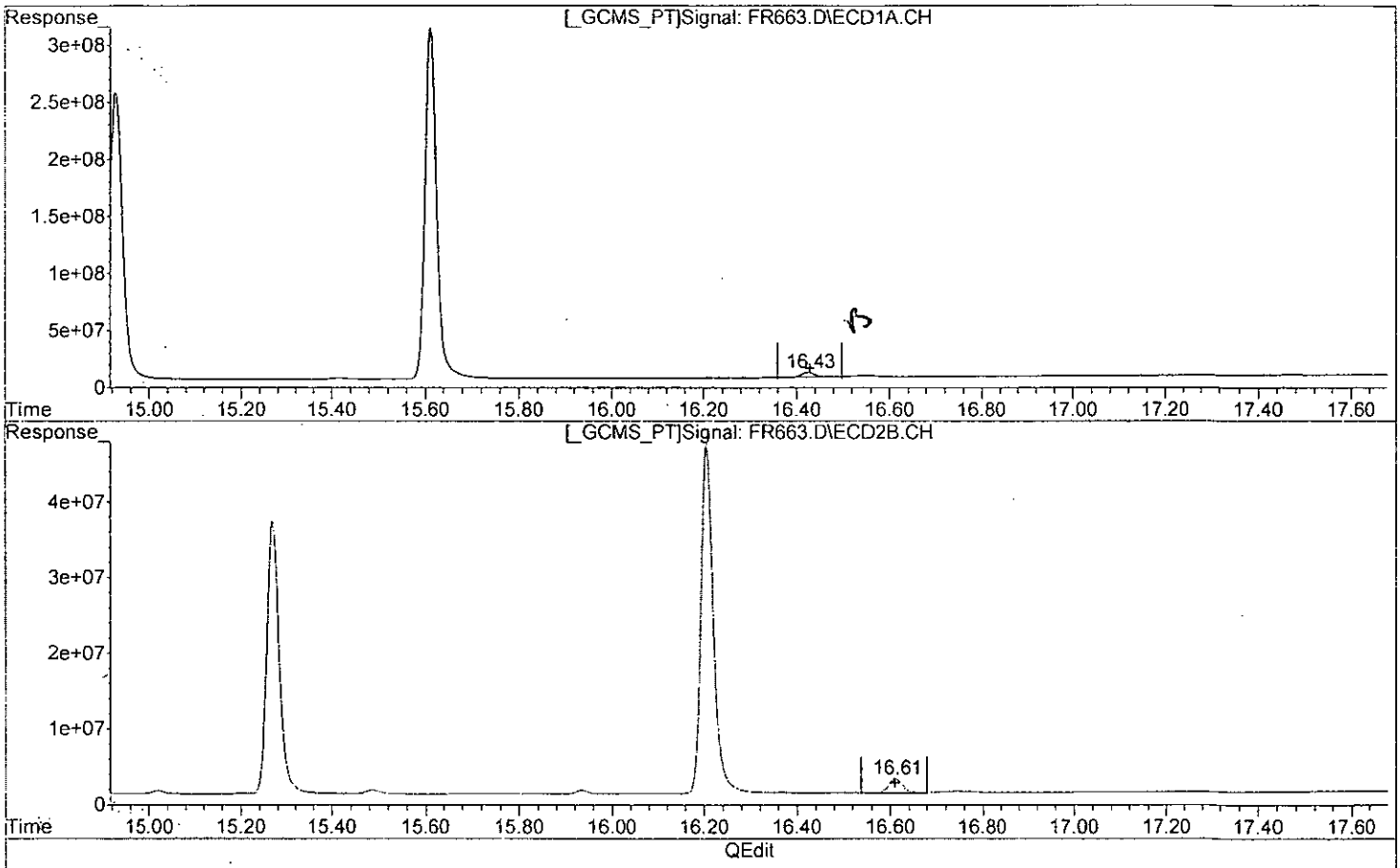
(+) = Expected Retention Time
8081E072514.M Thu Oct 09 09:08:02 2014 Page 1

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR663.D
Acq On : 08 Oct 2014 11:40 am
Operator : m.pedro
Sample : pem Inst : 6890D
Misc : pest perform check
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 09 08:46:04 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



QEdit

(24) Endrin Keton (tc)

16.43min 0.705ug/l

response 33623669

(24) Endrin Keton #2 (tc)

16.61min 4.438ug/l

response 38055363

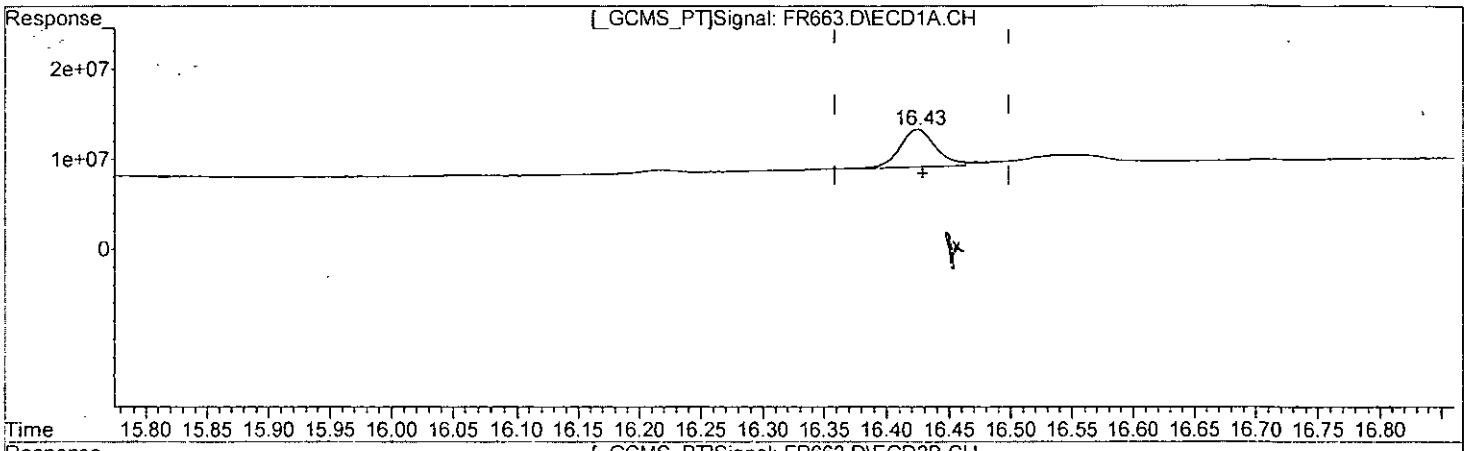
(+) = Expected Retention Time
8081E072514.M Thu Oct 09 09:08:20 2014 Page: 1

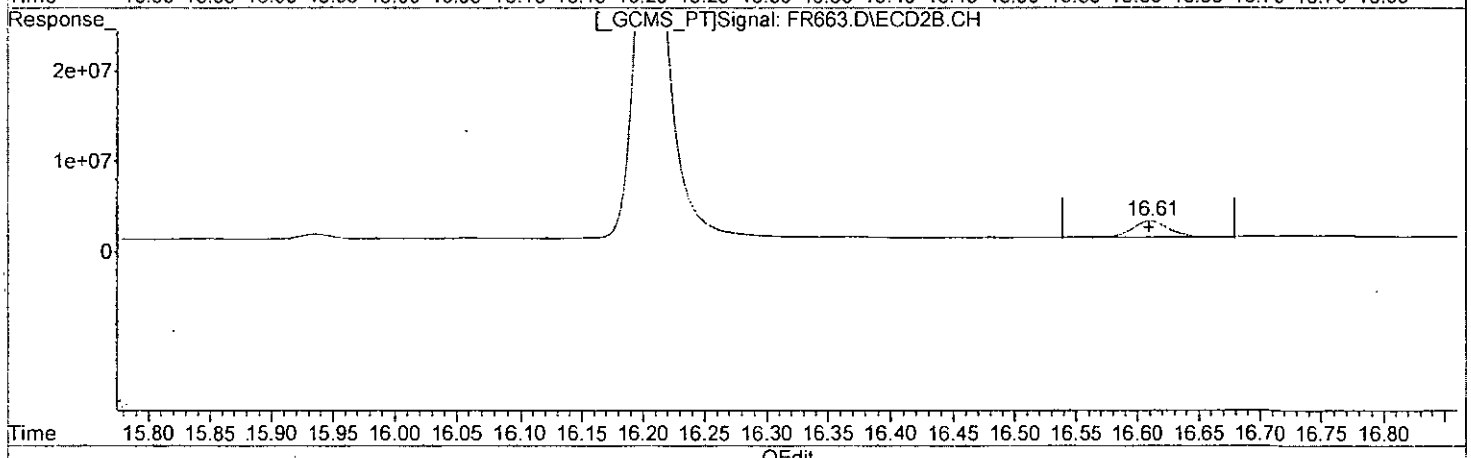
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR663.D
Acq On : 08 Oct 2014 11:40 am
Operator : m.pedro
Sample : pem Inst : 6890D
Misc : pest perform check
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 09 08:46:04 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(24) Endrin Keton (tc)

16.43min 1.776ug/l m

response 84676305

(24) Endrin Keton #2 (tc)

16.61min 4.438ug/l

response 38055363

(+) = Expected Retention Time
8081E072514.M Thu Oct 09 09:08:29 2014 Page 1

8D

Pesticide Analytical Sequence

Lab Name: **ALS Environmental** *Contract:* PARSONS

Lab Code: **10145** *Case.No.:* R1407813 *SAS No.:* _____ *SDG No.:* FTMM-8-GW-697M

GC Column(1) STx-CLPII *(ID):* 0.32mm_30

Instrument ID: 6890D

The analytical sequence of Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT from Initial Calibration

TCX 9.53 DCB 18.38

EPA Sample No.	*Lab Sample ID*	*Date Anlyzed*	*Time Anlyzed*	*TCX rt_time*	*DCB rt_time*
pest 2ppb	pest 2ppb	7/25/2014	10:50	9.53	18.39
pest 5ppb	pest 5ppb	7/25/2014	11:24	9.53	18.38
pest 10ppb	pest 10ppb	7/25/2014	11:58	9.53	18.38
pest 50ppb	pest 50ppb	7/25/2014	12:33	9.53	18.38
pest 100ppb	pest 100ppb	7/25/2014	13:07	9.53	18.38
pest 200ppb	pest 200ppb	7/25/2014	13:41	9.53	18.38
pest icv	pest icv	7/25/2014	14:15	0.00	0.00
k/f low	k/f low	7/25/2014	14:49	0.00	0.00
k/f ml	k/f ml	7/25/2014	15:24	0.00	0.00
k/f m	k/f m	7/25/2014	15:58	0.00	0.00
k/f mh	k/f mh	7/25/2014	16:32	0.00	0.00
k/f h	k/f h	7/25/2014	17:06	0.00	0.00
k/f icv	k/f icv	7/25/2014	17:40	0.00	0.00
mirex icv	mirex icv	7/25/2014	18:14	0.00	0.00
tox ll	tox ll	7/25/2014	18:49	0.00	0.00
tox l	tox l	7/25/2014	19:23	0.00	0.00
tox ml	tox ml	7/25/2014	19:57	0.00	0.00
tox m	tox m	7/25/2014	20:31	0.00	0.00
tox mh	tox mh	7/25/2014	21:06	0.00	0.00
tox h	tox h	7/25/2014	21:40	0.00	0.00
tox icv	tox icv	7/25/2014	22:14	0.00	0.00

QC Limits

TCX = Tetrachloro-m-xylene (+/- 0.05 Minutes)

DCB = Decachlorobiphenyl (+/- 0.10 Minutes)

Column used to flag retention time values with an aste

* Values outside of QC limits

Form VIII Pest

00650

8D

Pesticide Analytical Sequence

Lab Name: **ALS Environmental** *Contract:* PARSONS

Lab Code: **10145** *Case No.:* R1407813 *SAS No.:* _____ *SDG No.:* FTMM-8-GW-697M

GC Column(1) STx-CLPII *(ID):* 0.32mm 30

Instrument ID: 6890D

The analytical sequence of Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT from Initial Calibration

TCX 9.53 DCB 18.38

EPA Sample No.	*Lab Sample ID*	*Date Anlyzed*	*Time Anlyzed*	*TCX rt_time*	*DCB rt_time*
chlor low	chlor low	7/25/2014	22:48	0.00	0.00
chlor ml	chlor ml	7/25/2014	23:23	0.00	0.00
chlor m	chlor m	7/25/2014	23:57	0.00	0.00
chlor mh	chlor mh	7/26/2014	0:31	0.00	0.00
chlor h	chlor h	7/26/2014	1:05	0.00	0.00
chlor icv	chlor icv	7/26/2014	1:39	0.00	0.00
pem	pem	10/8/2014	11:40	9.52	18.35
ccv15	ccv15	10/8/2014	14:03	9.51	18.36
PBLK1	RQ1412023-01|1.0	10/8/2014	14:51	9.51	18.36
PBLK1MS	RQ1412023-02|1.0	10/8/2014	15:26	9.51	18.35
PBLK1MSD	RQ1412023-03|1.0	10/8/2014	16:00	9.51	18.36
ZZZZZ	ZZZZZ	10/8/2014	16:34	9.51	18.35
ZZZZZ	ZZZZZ	10/8/2014	17:08	9.51	18.35
FTMM-8-GW-697MW	R1407813-001|1.0	10/8/2014	17:43	9.51	18.35
FTMM-8-GW-697MW	RQ1412023-04|1.0	10/8/2014	18:17	9.51	18.35
FTMM-8-GW-697MW	RQ1412023-05|1.0	10/8/2014	18:51	9.51	18.35
FTMM-56-GW-80MW	R1407813-007|1.0	10/8/2014	19:25	9.51	18.35
FTMM-EB-100114-01	R1407813-010|1.0	10/8/2014	19:59	9.51	18.35
ccv16	ccv16	10/8/2014	20:34	9.52	18.35
FTMM-56-GW-80MW	R1407813-012|1.0	10/8/2014	21:08	9.51	18.35
ZZZZZ	ZZZZZ	10/8/2014	21:42	0.00	0.00

QC Limits

TCX = Tetrachloro-m-xylene (+/- 0.05 Minutes)

DCB = Decachlorobiphenyl (+/- 0.10 Minutes)

Column used to flag retention time values with an aste

* Values outside of QC limits

Form VIII Pest

00651

8D

Pesticide Analytical Sequence

Lab Name: **ALS Environmental** *Contract:* PARSONS

Lab Code: **10145** *Case.No.:* R1407813 *SAS No.:* _____ *SDG No.:* FTMM-8-GW-697M

GC Column(1) STx-CLPII *(ID):* 0.32mm 30

Instrument ID: 6890D

The analytical sequence of Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT from Initial Calibration

TCX 9.53 DCB 18.38

EPA Sample No.	*Lab Sample ID*	*Date Anlyzed*	*Time Anlyzed*	*TCX rt_time*	*DCB rt_time*
ZZZZZ	ZZZZZ	10/8/2014	22:16	0.00	0.00
ZZZZZ	ZZZZZ	10/8/2014	22:51	0.00	0.00
ZZZZZ	ZZZZZ	10/8/2014	23:25	9.51	18.35
ZZZZZ	ZZZZZ	10/8/2014	23:59	9.51	18.35
ZZZZZ	ZZZZZ	10/9/2014	0:33	0.00	0.00
ZZZZZ	ZZZZZ	10/9/2014	1:07	0.00	0.00
ZZZZZ	ZZZZZ	10/9/2014	1:41	0.00	0.00
ZZZZZ	ZZZZZ	10/9/2014	2:15	0.00	0.00
ccv17	ccv17	10/9/2014	2:50	9.52	18.35

QC Limits

TCX = Tetrachloro-m-xylene (+/- 0.05 Minutes)

DCB = Decachlorobiphenyl (+/- 0.10 Minutes)

Column used to flag retention time values with an aste

* Values outside of QC limits

Form VIII Pest

00652

8D

Pesticide Analytical Sequence

Lab Name: ALS Environmental *Client:* PARSONS

Lab Code: 10145 *Case.No.:* R1407813 *SAS No.:* _____ *SDG No.:* FTMM-8-GW-697

GC Column(1) STx-CLP *(ID):* 0.32mm .30

Instrument ID: 6890D

The analytical sequence of Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT from Initial Calibration

TCX 9.48 DCB 17.79

EPA Sample No.	*Lab Sample ID*	*Date Anlyzed*	*Time Anlyzed*	*TCX rt_time*	*DCB rt_time*
pest 2ppb	pest 2ppb	7/25/2014	10:50	9.48	17.80
pest 5ppb	pest 5ppb	7/25/2014	11:24	9.48	17.79
pest 10ppb	pest 10ppb	7/25/2014	11:58	9.48	17.79
pest 50ppb	pest 50ppb	7/25/2014	12:33	9.48	17.79
pest 100ppb	pest 100ppb	7/25/2014	13:07	9.48	17.79
pest 200ppb	pest 200ppb	7/25/2014	13:41	9.48	17.79
pest icv	pest icv	7/25/2014	14:15	0.00	0.00
k/f low	k/f low	7/25/2014	14:49	0.00	0.00
k/f ml	k/f ml	7/25/2014	15:24	0.00	0.00
k/f m	k/f m	7/25/2014	15:58	0.00	0.00
k/f mh	k/f mh	7/25/2014	16:32	0.00	0.00
k/f h	k/f h	7/25/2014	17:06	0.00	0.00
k/f icv	k/f icv	7/25/2014	17:40	0.00	0.00
mirex icv	mirex icv	7/25/2014	18:14	0.00	0.00
tox ll	tox ll	7/25/2014	18:49	0.00	0.00
tox l	tox l	7/25/2014	19:23	0.00	0.00
tox ml	tox ml	7/25/2014	19:57	0.00	0.00
tox m	tox m	7/25/2014	20:31	0.00	0.00
tox mh	tox mh	7/25/2014	21:06	0.00	0.00
tox h	tox h	7/25/2014	21:40	0.00	0.00
tox icv	tox icv	7/25/2014	22:14	0.00	0.00

QC Limit

TCX = Tetrachloro-m-xylene (+/- 0.05 Minutes)

DCB = Decachlorobiphenyl (+/- 0.10 Minutes)

Column used to flag retention time values with an aste

* Values outside of QC limits

Form VIII Pest

00653

8D

Pesticide Analytical Sequence

Lab Name: **ALS Environmental** *Client:* PARSONS

Lab Code: **10145** *Case.No.:* R1407813 *SAS No.:* _____ *SDG No.:* FTMM-8-GW-697

GC Column(1) STx-CLP *(ID):* 0.32mm_30

Instrument ID: 6890D

The analytical sequence of Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT from Initial Calibration

TCX 9.48 DCB 17.79

EPA Sample No.	*Lab Sample ID*	*Date Anlyzed*	*Time Anlyzed*	*TCX rt_time*	*DCB rt_time*
chlor low	chlor low	7/25/2014	22:48	0.00	0.00
chlor ml	chlor ml	7/25/2014	23:23	0.00	0.00
chlor m	chlor m	7/25/2014	23:57	0.00	0.00
chlor mh	chlor mh	7/26/2014	0:31	0.00	0.00
chlor h	chlor h	7/26/2014	1:05	0.00	0.00
chlor icv	chlor icv	7/26/2014	1:39	0.00	0.00
pem	pem	10/8/2014	11:40	9.46	17.76
ccv15	ccv15	10/8/2014	14:03	9.46	17.77
PBLK1	RQ1412023-01|1.0	10/8/2014	14:51	9.46	17.76
PBLK1MS	RQ1412023-02|1.0	10/8/2014	15:26	9.46	17.76
PBLK1MSD	RQ1412023-03|1.0	10/8/2014	16:00	9.46	17.76
ZZZZZ	ZZZZZ	10/8/2014	16:34	9.46	17.76
ZZZZZ	ZZZZZ	10/8/2014	17:08	9.46	17.76
FTMM-8-GW-697MW	R1407813-001|1.0	10/8/2014	17:43	9.46	17.76
FTMM-8-GW-697MW	RQ1412023-04|1.0	10/8/2014	18:17	9.46	17.76
FTMM-8-GW-697MW	RQ1412023-05|1.0	10/8/2014	18:51	9.46	17.76
FTMM-56-GW-80MW	R1407813-007|1.0	10/8/2014	19:25	9.46	17.76
FTMM-EB-100114-01	R1407813-010|1.0	10/8/2014	19:59	9.46	17.76
ccv16	ccv16	10/8/2014	20:34	9.46	17.76
FTMM-56-GW-80MW	R1407813-012|1.0	10/8/2014	21:08	9.46	17.75
ZZZZZ	ZZZZZ	10/8/2014	21:42	0.00	0.00

QC Limit

TCX = Tetrachloro-m-xylene (+/- 0.05 Minutes)

DCB = Decachlorobiphenyl (+/- 0.10 Minutes)

Column used to flag retention time values with an aste

* Values outside of QC limits

Form VIII Pest

8D

Pesticide Analytical Sequence

Lab Name: ALS Environmental *Client:* PARSONS

Lab Code: 10145 *Case.No.:* R1407813 *SAS No.:* _____ *SDG No.:* FTMM-8-GW-697

GC Column(1) STx-CLP *(ID):* 0.32mm .30

Instrument ID: 6890D

The analytical sequence of Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT from Initial Calibration

TCX 9.48 DCB 17.79

EPA Sample No.	*Lab Sample ID*	*Date Anlyzed*	*Time Anlyzed*	*TCX rt_time*	*DCB rt_time*
ZZZZZ	ZZZZZ	10/8/2014	22:16	0.00	0.00
ZZZZZ	ZZZZZ	10/8/2014	22:51	0.00	0.00
ZZZZZ	ZZZZZ	10/8/2014	23:25	9.46	17.76
ZZZZZ	ZZZZZ	10/8/2014	23:59	9.46	17.75
ZZZZZ	ZZZZZ	10/9/2014	0:33	0.00	0.00
ZZZZZ	ZZZZZ	10/9/2014	1:07	0.00	0.00
ZZZZZ	ZZZZZ	10/9/2014	1:41	0.00	0.00
ZZZZZ	ZZZZZ	10/9/2014	2:15	0.00	0.00
ccv17	ccv17	10/9/2014	2:50	9.46	17.76

QC Limit

TCX = Tetrachloro-m-xylene (+/- 0.05 Minutes)

DCB = Decachlorobiphenyl (+/- 0.10 Minutes)

Column used to flag retention time values with an aste

* Values outside of QC limits

Form VIII Pest

00655

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR664.D
Acq On : 08 Oct 2014 2:03 pm
Operator : m.pedro
Sample : ccv15 Inst : 6890D
Misc : pest 100ppb
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 09 08:45:32 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 09:54:47 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	S	SURR1,Tetrac	65.873	70.291 E6	-6.7	109	-0.01
2	TC	HEXACHLOROBENZENE	71.634	98.866 E6	-38.0#	145	-0.02
3	tc	alpha-BHC	96.042	111.623 E6	-16.2#	111	-0.02
4	tcm	gamma-BHC (L	84.164	95.854 E6	-13.9	110	-0.02
5	tcm	Heptachlor	78.956	84.460 E6	-7.0	109	-0.02
6	tcm	Aldrin	70.252	79.713 E6	-13.5	111	-0.02
7	tc	beta-BHC	36.141	39.487 E6	-9.3	112	-0.02
8	TC	delta-BHC	82.141	95.548 E6	-16.3#	111	-0.02
9	tc	Heptachlor E	59.994	66.037 E6	-10.1	111	-0.02
10	tc	alpha-Endosu	52.713	59.857 E6	-13.6	114	-0.02
11	tc	gamma-Chlord	61.350	70.623 E6	-15.1#	114	-0.02
12	tc	alpha-Chlord	57.201	65.930 E6	-15.3#	114	-0.02
13	tc	4,4'-DDE	55.275	63.981 E6	-15.8#	112	-0.02
14	tcm	Dieldrin	55.275	63.893 E6	-15.6#	112	-0.02
15	tcm	Endrin	41.046	54.770 E6	-33.4#	128	-0.02
17	tc	beta-Endosul	44.725	51.176 E6	-14.4	112	-0.02
18	tc	4,4'-DDD	43.266	51.580 E6	-19.2#	116	-0.02
19	tcm	4,4'-DDT	44.545	52.129 E6	-17.0#	110	-0.02
20	tc	Endrin Aldeh	34.962	37.911 E6	-8.4	103	-0.02
21	tc	Endosulfan S	37.033	41.956 E6	-13.3	111	-0.02
22	tc	Methoxychlor	21.567	23.207 E6	-7.6	107	-0.02
24	tc	Endrin Keton	47.690	47.914 E6	-0.5	102	-0.02
25	tc	Mirex	31.098	32.685 E6	-5.1	109	-0.02
29	S	SURR2,Decachlorobiphenyl	38.956	39.206 E6	-0.6	105	-0.02
Signal #2							
1	S	SURR1,Tetrac	9.214	9.062 E6	1.6	94	-0.02
2	TC	HEXACHLOROBENZENE	9.725	12.112 E6	-24.5#	126	-0.02
3	tc	alpha-BHC	13.107	14.423 E6	-10.0	96	-0.02
4	tcm	gamma-BHC (L	11.797	12.553 E6	-6.4	95	-0.02
5	tcm	Heptachlor	11.652	12.407 E6	-6.5	100	-0.02
6	tcm	Aldrin	10.299	11.173 E6	-8.5	98	-0.02
7	tc	beta-BHC	5.288	5.306 E6	-0.3	98	-0.02
8	tc	delta-BHC	11.456	11.410 E6	0.4	87	-0.02
9	tc	Heptachlor E	9.512	9.750 E6	-2.5	97	-0.02
10	tc	alpha-Endosu	8.502	8.792 E6	-3.4	98	-0.02
11	tc	gamma-Chlord	9.758	10.293 E6	-5.5	97	-0.02
12	tc	alpha-Chlord	9.295	9.616 E6	-3.5	97	-0.02
13	tc	4,4'-DDE	8.706	9.237 E6	-6.1	95	-0.02
14	tcm	Dieldrin	9.084	9.716 E6	-7.0	97	-0.02
15	tcm	Endrin	6.750	7.497 E6	-11.1	102	-0.02
17	tc	beta-Endosul	7.812	8.141 E6	-4.2	99	-0.02
18	tc	4,4'-DDD	7.122	7.465 E6	-4.8	95	-0.02
19	tcm	4,4'-DDT	7.761	7.063 E6	9.0	82	-0.02
20	tc	Endrin Aldeh	6.402	6.030 E6	5.8	90	-0.02
21	tc	Endosulfan S	7.093	6.979 E6	1.6	94	-0.02

8081E072514.M Thu Oct 09 09:09:19 2014 Page 6

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR664.D
Acq On : 08 Oct 2014 2:03 pm
Operator : m.pedro
Sample : ccv15 Inst : 6890D
Misc : pest 100ppb
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 09 08:45:32 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 09:54:47 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
22	tc	Methoxychlor	3.932	3.231 E6	17.8#	82	-0.02
24	tc	Endrin Keton	8.574	8.455 E6	1.4	95	-0.02
25	tc	Mirex	6.125	5.183 E6	15.4#	95	-0.02
29	S	SURR2,Decachlorobiphenyl	7.971	6.976 E6	12.5	95	-0.03

Evaluate Continuing Calibration Report - Not Founds

16	tc	KEPONE	23.126	0.000 E6	100.0#	0#	-14.54#
23	tc	FAMPHUR	32.077	0.000 E6	100.0#	0#	-16.32#
26	tc	2,4'-DDE	0.000	0.000	0.0	0#	-12.93#
27	tc	2,4'-DDD	0.000	0.000	0.0	0#	-13.68#
28	tc	2,4'-DDT	0.000	0.000	0.0	0#	-14.01#
30	L8C	Toxaphene	501.618	0.000 E3	100.0#	0#	-14.59#
31	L8C	Toxaphene{2}	634.125	0.000 E3	100.0#	0#	-14.98#
32	L8C	Toxaphene{3}	1.440	0.000 E6	100.0#	0#	-15.58#
33	L8C	Toxaphene{4}	1.656	0.000 E6	100.0#	0#	-16.42#
34	L8C	Toxaphene{5}	1.436	0.000 E6	100.0#	0#	-16.61#
35	L9C	Chlordane	2.794	0.000 E6	100.0#	0#	-11.65#
36	L9C	Chlordane{2}	3.893	0.000 E6	100.0#	0#	-11.78#
37	L9C	Chlordane{3}	2.917	0.000 E6	100.0#	0#	-12.45#
38	L9C	Chlordane{4}	1.453	0.000 E6	100.0#	0#	-14.50#
39	L9C	Chlordane{5}	2.018	0.000 E6	100.0#	0#	-14.70#

Signal #2

16	tc	KEPONE	4.694	0.000 E6	100.0#	0#	-14.86#
23	tc	FAMPHUR	6.457	0.000 E6	100.0#	0#	-15.98#
26	tc	2,4'-DDE	0.000	0.000	0.0	0#	-12.97#
27	tc	2,4'-DDD	0.000	0.000	0.0	0#	-13.64#
28	tc	2,4'-DDT	0.000	0.000	0.0	0#	-14.08#
30	L8C	Toxaphene	238.387	0.000 E3	100.0#	0#	-15.12#
31	L8C	Toxaphene{2}	260.846	0.000 E3	100.0#	0#	-15.51#
32	L8C	Toxaphene{3}	187.013	0.000 E3	100.0#	0#	-15.88#
33	L8C	Toxaphene{4}	263.732	0.000 E3	100.0#	0#	-16.75#
34	L8C	Toxaphene{5}	269.793	0.000 E3	100.0#	0#	-16.99#
35	L9C	Chlordane	382.667	0.000 E3	100.0#	0#	-11.66#
36	L9C	Chlordane{2}	525.181	0.000 E3	100.0#	0#	-11.89#
37	L9C	Chlordane{3}	408.316	0.000 E3	100.0#	0#	-12.61#
38	L9C	Chlordane{4}	199.237	0.000 E3	100.0#	0#	-14.80#
39	L9C	Chlordane{5}	334.032	0.000 E3	100.0#	0#	-15.08#

(#) = Out of Range SPCC's out = 0 CCC's out = 37

8081E072514.M Thu Oct 09 09:09:19 2014 Page: 2

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR664.D
Acq On : 08 Oct 2014 2:03 pm
Operator : m.pedro
Sample : ccv15 Inst : 6890D
Misc : pest 100ppb
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 09 08:45:32 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 09:54:47 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	System Monitoring Compounds						
1)	S SURR1,Tetrac	9.46	9.51	7029.1E6	906.2E6	106.707	98.351
	Spiked Amount 100.000	Range 30 - 150		Recovery =		106.71%	98.35%
29)	S SURR2,Decachloro	17.77	18.36	3920.6E6	697.6E6	100.644	87.517m
	Spiked Amount 100.000	Range 30 - 150		Recovery =		100.64%	87.52%
	Target Compounds						
2)	TC HEXACHLOROBENZEN	10.16	10.35	9886.6E6	1211.2E6	138.015	124.534
3)	tc alpha-BHC	10.47	10.61	11162.3E6	1442.3E6	116.223	110.037
4)	tcm gamma-BHC (L	11.00	11.19	9585.4E6	1255.3E6	113.890	106.403
5)	tcm Heptachlor	11.76	11.87	8446.0E6	1240.7E6	106.971	106.476
6)	tcm Aldrin	12.23	12.35	7971.3E6	1117.3E6	113.467	108.487
7)	tc beta-BHC	11.15	11.34	3948.7E6	530.6E6	109.259	100.342
8)	tc delta-BHC	11.43	11.79	9554.8E6	1141.0E6	116.323	99.602
9)	tc Heptachlor E	13.14	13.21	6603.7E6	975.0E6	110.073	102.508
10)	tc alpha-Endosu	13.73	13.79	5985.7E6	879.2E6	113.553	103.414
11)	tc gamma-Chlord	13.33	13.49	7062.3E6	1029.3E6	115.116	105.478
12)	tc alpha-Chlord	13.53	13.71	6593.0E6	961.6E6	115.260	103.448
13)	tc 4,4'-DDE	13.63	13.95	6398.1E6	923.7E6	115.751	106.094
14)	tcm Dieldrin	14.09	14.20	6389.3E6	971.6E6	115.591	106.961
15)	tcm Endrin	14.44	14.66	5477.0E6	749.7E6	133.434	111.061
17)	tc beta-Endosul	14.78	14.98	5117.6E6	814.1E6	114.423	104.211
18)	tc 4,4'-DDD	14.51	14.80	5158.0E6	746.5E6	119.214	104.813
19)	tcm 4,4'-DDT	14.94	15.27	5212.9E6	706.3E6	117.026	91.010
20)	tc Endrin Aldeh	15.42	15.48	3791.1E6	603.0E6	108.437	94.183
21)	tc Endosulfan S	16.04	15.87	4195.6E6	697.9E6	113.294	98.393
22)	tc Methoxychlor	15.62	16.21	2320.7E6	323.1E6	107.604	82.161
24)	tc Endrin Keton	16.43	16.61	4791.4E6	845.5E6	100.470	98.606
25)	tc Mirex	15.91	16.57	3268.5E6	518.3E6	105.104	84.618m
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

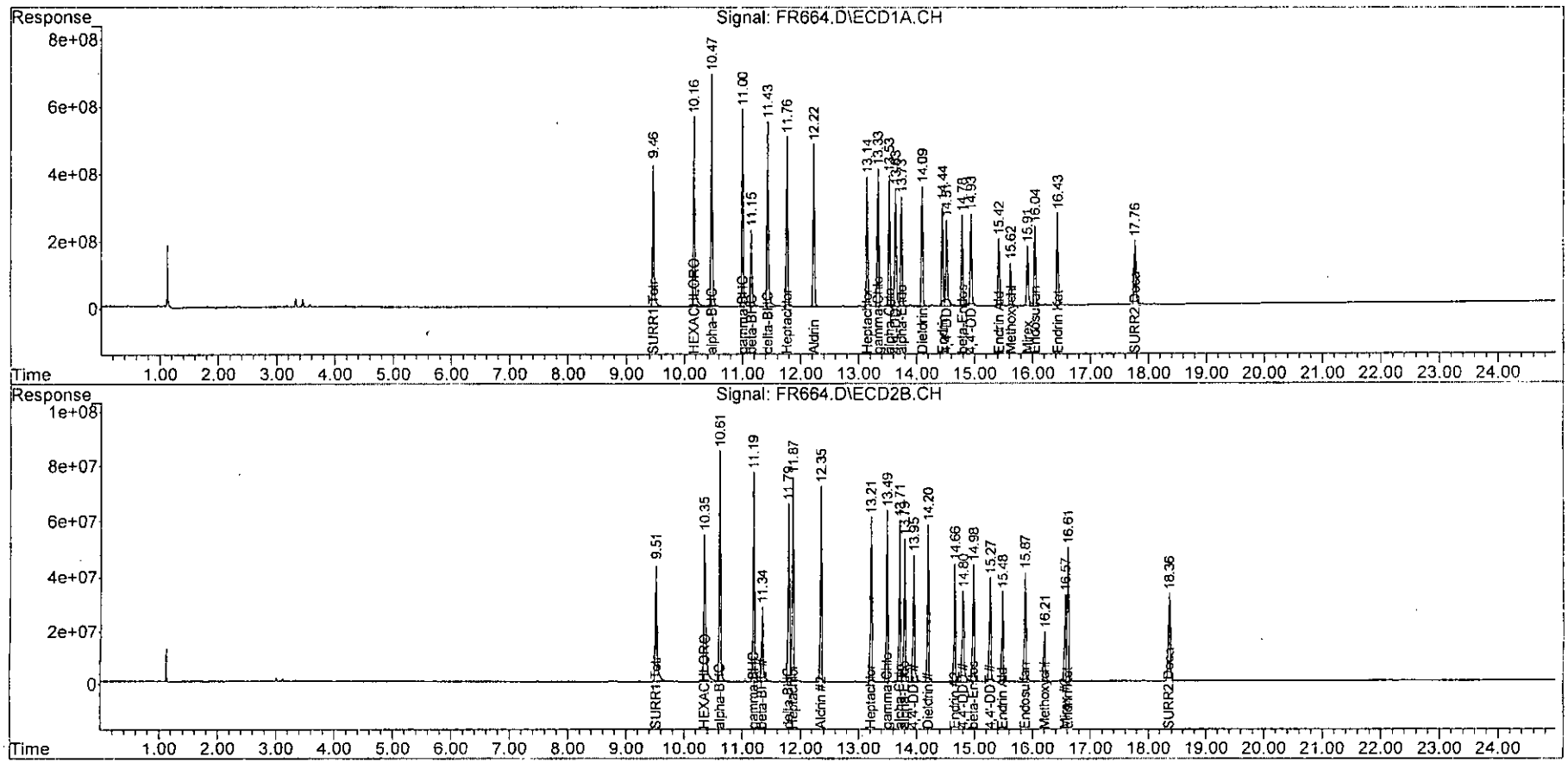
8081E072514.M Thu Oct 09 10:08:35 2014

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR664.D
Acq On : 08 Oct 2014 2:03 pm
Operator : m.pedro
Sample : ccv15 Inst : 6890D
Misc : pest 100ppb
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 09 08:45:32 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 09:54:47 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



5990

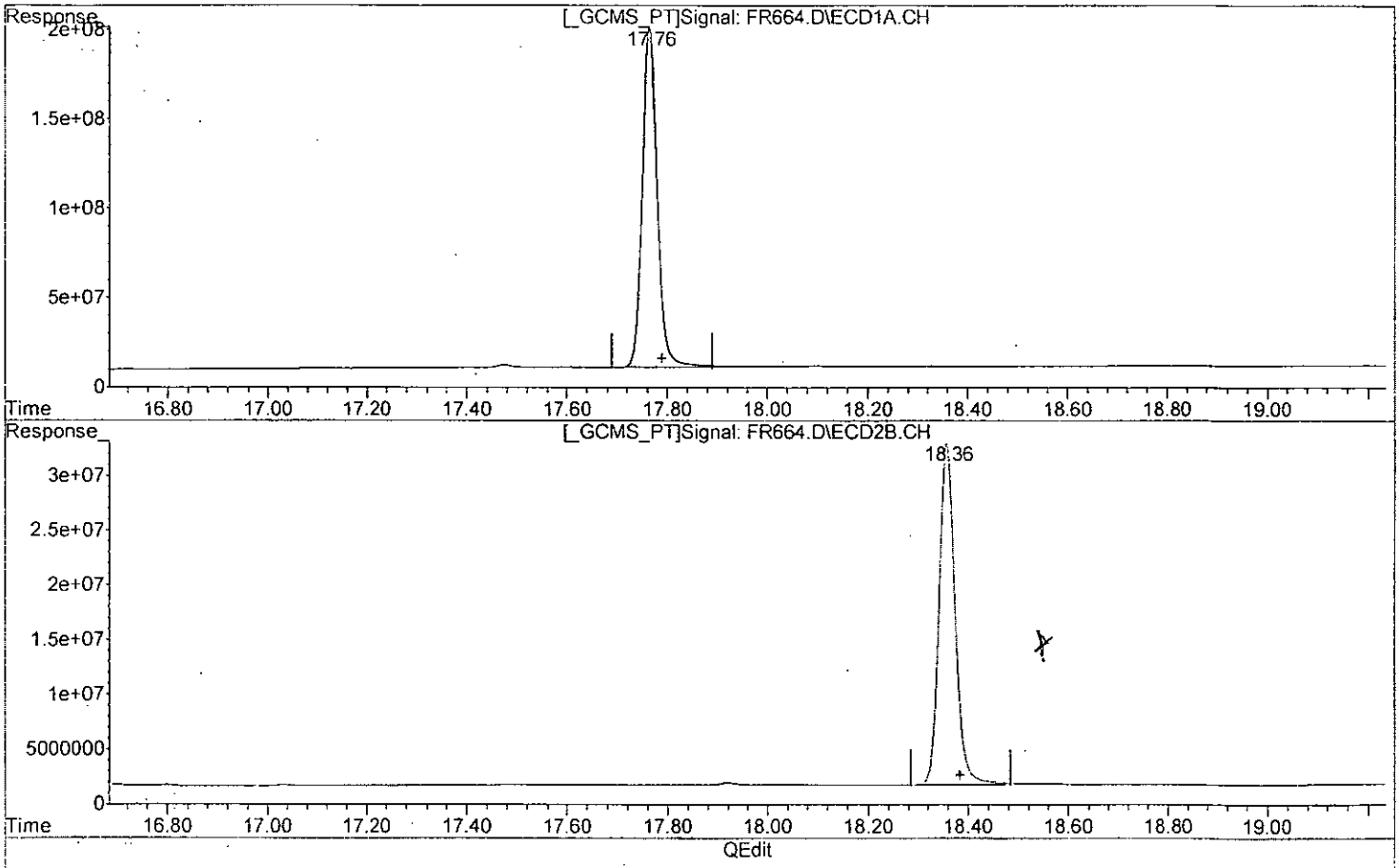
8081E072514.M Thu Oct 09 10:08:36 2014 Page: 2

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR664.D
Acq On : 08 Oct 2014 2:03 pm
Operator : m.pedro
Sample : ccv15 Inst : 6890D
Misc : pest 100ppb
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 08 14:33:07 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 09:54:47 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



(29) SURR2,Decachlorobiphenyl (S)

17.77min 100.644ug/l

response 3920649182

(29) SURR2,Decachlorobiphenyl #2 (S)

18.36min 87.517ug/l m

response 697617155

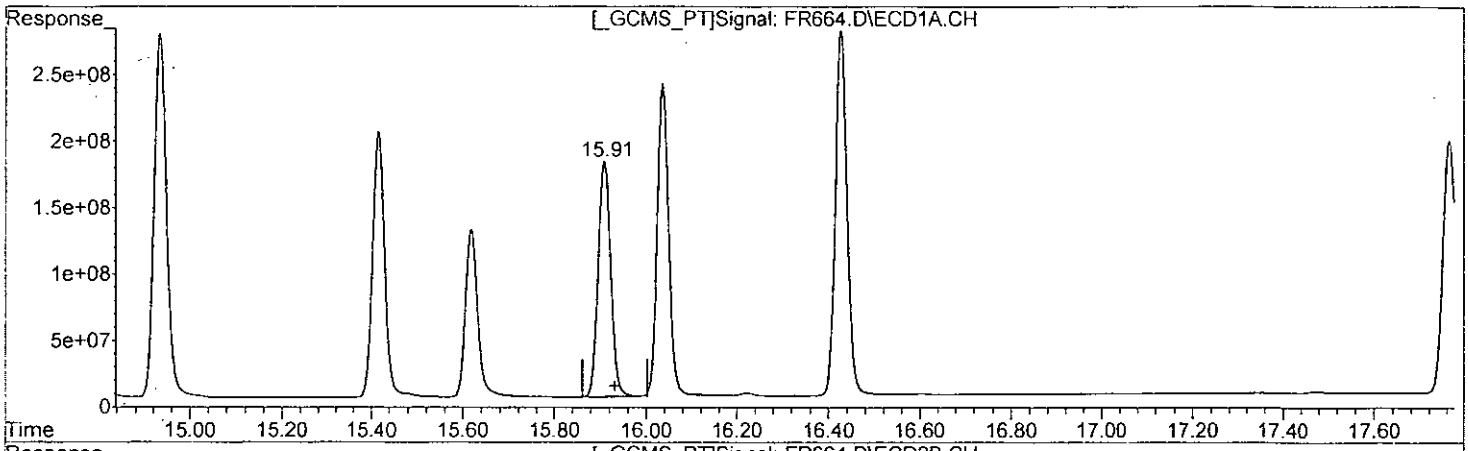
(+) = Expected Retention Time
8081E072514.M Wed Oct 08 14:34:58 2014 Page: 1

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR664.D
Acq On : 08 Oct 2014 2:03 pm
Operator : m.pedro
Sample : ccv15 Inst : 6890D
Misc : pest 100ppb
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 08 14:33:07 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 09:54:47 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



(25) Mirex (tc)

15.91min 105.104ug/l

response 3268496541

(25) Mirex #2 (tc)

16.61min 138.037ug/l

response 845481445

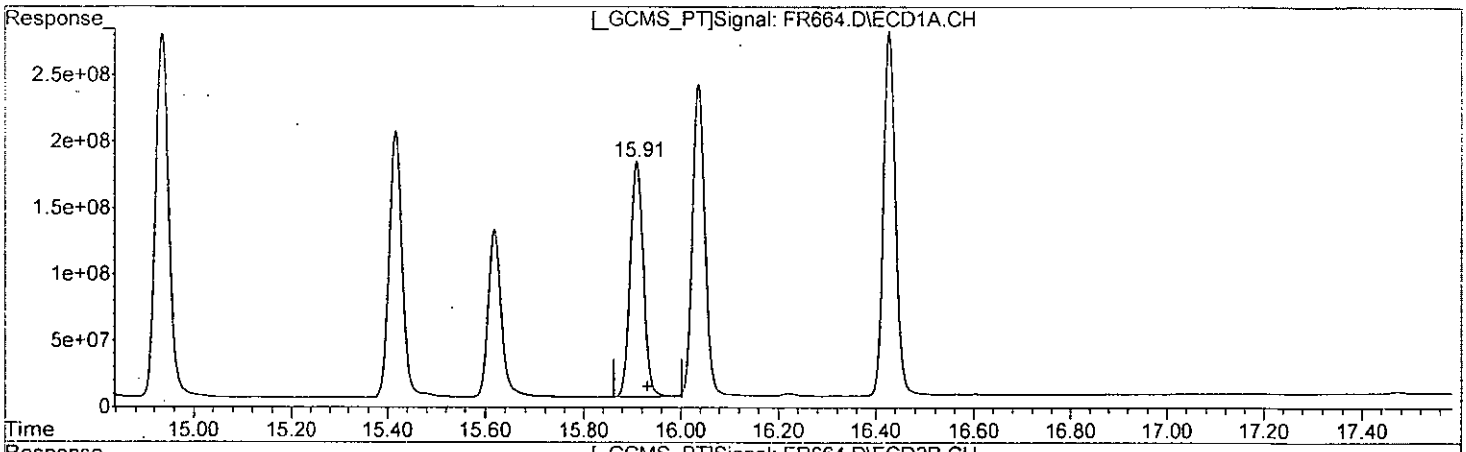
(+) = Expected Retention Time
8081E072514.M Wed Oct 08 14:34:28 2014 Page: 1

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR664.D
Acq On : 08 Oct 2014 2:03 pm
Operator : m.pedro
Sample : ccv15 Inst : 6890D
Misc : pest 100ppb
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 08 14:33:07 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Mon Jul 28 09:54:47 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



(25) Mirex (tc)

15.91min 105.104ug/l

response 3268496541

(25) Mirex #2 (tc)

16.57min 84.618ug/l m

response 518287809

(+) = Expected Retention Time
8081E072514.M Wed Oct 08 14:34:46 2014 Page: 1

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR675.D
Acq On : 08 Oct 2014 8:34 pm
Operator : m.pedro
Sample : ccv16 Inst : 6890D
Misc : pest 100ppb
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 09 08:49:54 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	S	SURR1,Tetrac	65.873	66.283 E6	-0.6	103	0.00
2	TC	HEXACHLOROBENZENE	71.634	93.237 E6	-30.2#	136	0.00
3	tc	alpha-BHC	96.042	105.941 E6	-10.3	105	0.00
4	tcm	gamma-BHC (L	84.164	90.932 E6	-8.0	105	0.00
5	tcm	Heptachlor	78.956	80.798 E6	-2.3	104	0.00
6	tcm	Aldrin	70.252	75.127 E6	-6.9	105	0.00
7	tc	beta-BHC	36.141	37.682 E6	-4.3	107	0.00
8	TC	delta-BHC	82.141	91.082 E6	-10.9	106	0.00
9	tc	Heptachlor E	59.994	63.282 E6	-5.5	106	0.00
10	tc	alpha-Endosu	52.713	57.320 E6	-8.7	109	0.00
11	tc	gamma-Chlord	61.350	66.730 E6	-8.8	107	0.00
12	tc	alpha-Chlord	57.201	62.288 E6	-8.9	108	0.00
13	tc	4,4'-DDE	55.275	59.901 E6	-8.4	105	0.00
14	tcm	Dieldrin	55.275	60.999 E6	-10.4	107	0.00
15	tcm	Endrin	41.046	51.673 E6	-25.9#	121	0.00
17	tc	beta-Endosul	44.725	48.812 E6	-9.1	107	0.00
18	tc	4,4'-DDD	43.266	48.394 E6	-11.9	109	0.00
19	tcm	4,4'-DDT	44.545	48.945 E6	-9.9	103	0.00
20	tc	Endrin Aldeh	34.962	36.219 E6	-3.6	98	0.00
21	tc	Endosulfan S	37.033	40.412 E6	-9.1	107	0.00
22	tc	Methoxychlor	21.567	22.095 E6	-2.4	101	0.00
24	tc	Endrin Keton	47.690	46.513 E6	2.5	99	0.00
25	tc	Mirex	31.098	31.195 E6	-0.3	104	0.00
29	S	SURR2,Decachlorobiphenyl	38.956	37.936 E6	2.6	102	0.00

Signal #2

1	S	SURR1,Tetrac	9.214	8.981 E6	2.5	93	0.00
2	TC	HEXACHLOROBENZENE	9.725	11.914 E6	-22.5#	124	0.00
3	tc	alpha-BHC	13.107	14.356 E6	-9.5	96	0.00
4	tcm	gamma-BHC (L	11.797	12.387 E6	-5.0	94	0.00
5	tcm	Heptachlor	11.652	12.758 E6	-9.5	103	0.00
6	tcm	Aldrin	10.299	11.038 E6	-7.2	96	0.00
7	tc	beta-BHC	5.288	5.271 E6	0.3	98	0.00
8	tc	delta-BHC	11.456	11.186 E6	2.4	85	0.00
9	tc	Heptachlor E	9.512	9.732 E6	-2.3	97	0.00
10	tc	alpha-Endosu	8.502	8.804 E6	-3.6	98	0.00
11	tc	gamma-Chlord	9.758	10.220 E6	-4.7	97	0.00
12	tc	alpha-Chlord	9.295	9.536 E6	-2.6	97	0.00
13	tc	4,4'-DDE	8.706	9.123 E6	-4.8	94	0.00
14	tcm	Dieldrin	9.084	9.783 E6	-7.7	98	0.00
15	tcm	Endrin	6.750	7.186 E6	-6.5	98	0.00
17	tc	beta-Endosul	7.812	8.182 E6	-4.7	99	0.00
18	tc	4,4'-DDD	7.122	7.314 E6	-2.7	94	0.00
19	tcm	4,4'-DDT	7.761	6.997 E6	9.8	82	0.00
20	tc	Endrin Aldeh	6.402	6.140 E6	4.1	91	0.00
21	tc	Endosulfan S	7.093	7.231 E6	-1.9	98	0.00

8081E072514.M Thu Oct 09 12:24:21 2014 Page: 21

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR675.D
Acq On : 08 Oct 2014 8:34 pm
Operator : m.pedro
Sample : ccv16 Inst : 6890D
Misc : pest 100ppb
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 09 08:49:54 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
22	tc	Methoxychlor	3.932	3.228 E6	17.9#	82	0.00
24	tc	Endrin Keton	8.574	8.767 E6	-2.3	98	0.00
25	tc	Mirex	6.125	5.106 E6	16.6#	93	0.00
29	S	SURR2,Decachlorobiphenyl	7.971	7.020 E6	11.9	95	0.00

Evaluate Continuing Calibration Report - Not Founds

16	tc	KEPONE	23.126	0.000 E6	100.0#	0#	-14.54#
23	tc	FAMPHUR	32.077	0.000 E6	100.0#	0#	-16.32#
26	tc	2,4'-DDE	0.000	0.000	0.0	0#	-12.93#
27	tc	2,4'-DDD	0.000	0.000	0.0	0#	-13.68#
28	tc	2,4'-DDT	0.000	0.000	0.0	0#	-14.01#
30	L8C	Toxaphene	501.618	0.000 E3	100.0#	0#	-14.59#
31	L8C	Toxaphene{2}	634.125	0.000 E3	100.0#	0#	-14.98#
32	L8C	Toxaphene{3}	1.440	0.000 E6	100.0#	0#	-15.58#
33	L8C	Toxaphene{4}	1.656	0.000 E6	100.0#	0#	-16.42#
34	L8C	Toxaphene{5}	1.436	0.000 E6	100.0#	0#	-16.61#
35	L9C	Chlordane	2.794	0.000 E6	100.0#	0#	-11.65#
36	L9C	Chlordane{2}	3.893	0.000 E6	100.0#	0#	-11.78#
37	L9C	Chlordane{3}	2.917	0.000 E6	100.0#	0#	-12.45#
38	L9C	Chlordane{4}	1.453	0.000 E6	100.0#	0#	-14.50#
39	L9C	Chlordane{5}	2.018	0.000 E6	100.0#	0#	-14.70#

Signal #2

16	tc	KEPONE	4.694	0.000 E6	100.0#	0#	-14.86#
23	tc	FAMPHUR	6.457	0.000 E6	100.0#	0#	-15.98#
26	tc	2,4'-DDE	0.000	0.000	0.0	0#	-12.97#
27	tc	2,4'-DDD	0.000	0.000	0.0	0#	-13.64#
28	tc	2,4'-DDT	0.000	0.000	0.0	0#	-14.08#
30	L8C	Toxaphene	238.387	0.000 E3	100.0#	0#	-15.12#
31	L8C	Toxaphene{2}	260.846	0.000 E3	100.0#	0#	-15.51#
32	L8C	Toxaphene{3}	187.013	0.000 E3	100.0#	0#	-15.88#
33	L8C	Toxaphene{4}	263.732	0.000 E3	100.0#	0#	-16.75#
34	L8C	Toxaphene{5}	269.793	0.000 E3	100.0#	0#	-16.99#
35	L9C	Chlordane	382.667	0.000 E3	100.0#	0#	-11.66#
36	L9C	Chlordane{2}	525.181	0.000 E3	100.0#	0#	-11.89#
37	L9C	Chlordane{3}	408.316	0.000 E3	100.0#	0#	-12.61#
38	L9C	Chlordane{4}	199.237	0.000 E3	100.0#	0#	-14.80#
39	L9C	Chlordane{5}	334.032	0.000 E3	100.0#	0#	-15.08#

(#) = Out of Range SPCC's out = 0 CCC's out = 29

8081E072514.M Thu Oct 09 12:24:21 2014

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR675.D
Acq On : 08 Oct 2014 8:34 pm
Operator : m.pedro
Sample : ccv16 Inst : 6890D
Misc : pest 100ppb
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 09 08:49:54 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	System Monitoring Compounds						
1)	S SURR1,Tetrac	9.46	9.52	6628.3E6	898.1E6	100.622	97.470
	Spiked Amount 100.000	Range 30 - 150		Recovery =		100.62%	97.47%
29)	S SURR2,Decachloro	17.76	18.35	3793.6E6	702.0E6	97.383	88.067
	Spiked Amount 100.000	Range 30 - 150		Recovery =		97.38%	88.07%
	Target Compounds						
2)	TC HEXACHLOROBENZEN	10.16	10.35	9323.7E6	1191.4E6	130.156	122.500
3)	tc alpha-BHC	10.46	10.61	10594.1E6	1435.6E6	110.307	109.529
4)	tcm gamma-BHC (L	10.99	11.19	9093.2E6	1238.7E6	108.042	104.994
5)	tcm Heptachlor	11.75	11.87	8079.8E6	1275.8E6	102.333	109.487
6)	tcm Aldrin	12.22	12.35	7512.7E6	1103.8E6	106.938	107.178
7)	tc beta-BHC	11.14	11.34	3768.2E6	527.1E6	104.264	99.687
8)	tc delta-BHC	11.42	11.79	9108.2E6	1118.6E6	110.886	97.641
9)	tc Heptachlor E	13.14	13.21	6328.2E6	973.2E6	105.480	102.315
10)	tc alpha-Endosu	13.73	13.79	5732.0E6	880.4E6	108.740	103.556
11)	tc gamma-Chlord	13.32	13.49	6673.0E6	1022.0E6	108.771	104.733
12)	tc alpha-Chlord	13.52	13.70	6228.8E6	953.6E6	108.893	102.591
13)	tc 4,4'-DDE	13.63	13.95	5990.1E6	912.3E6	108.370	104.790
14)	tcm Dieldrin	14.08	14.20	6099.9E6	978.3E6	110.355	107.695
15)	tcm Endrin	14.44	14.66	5167.3E6	718.6E6	125.890	106.457
17)	tc beta-Endosul	14.78	14.98	4881.2E6	818.2E6	109.137	104.739
18)	tc 4,4'-DDD	14.51	14.80	4839.4E6	731.4E6	111.850	102.685
19)	tcm 4,4'-DDT	14.93	15.27	4894.5E6	699.7E6	109.876	90.159
20)	tc Endrin Aldeh	15.41	15.48	3621.9E6	614.0E6	103.598	95.898
21)	tc Endosulfan S	16.03	15.87	4041.2E6	723.1E6	109.127	101.939
22)	tc Methoxychlor	15.61	16.21	2209.5E6	322.8E6	102.451	82.080
24)	tc Endrin Keton	16.42	16.61	4651.3E6	876.7E6	97.532	102.253
25)	tc Mirex	15.90	16.56	3119.5E6	510.6E6	100.313	83.367
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

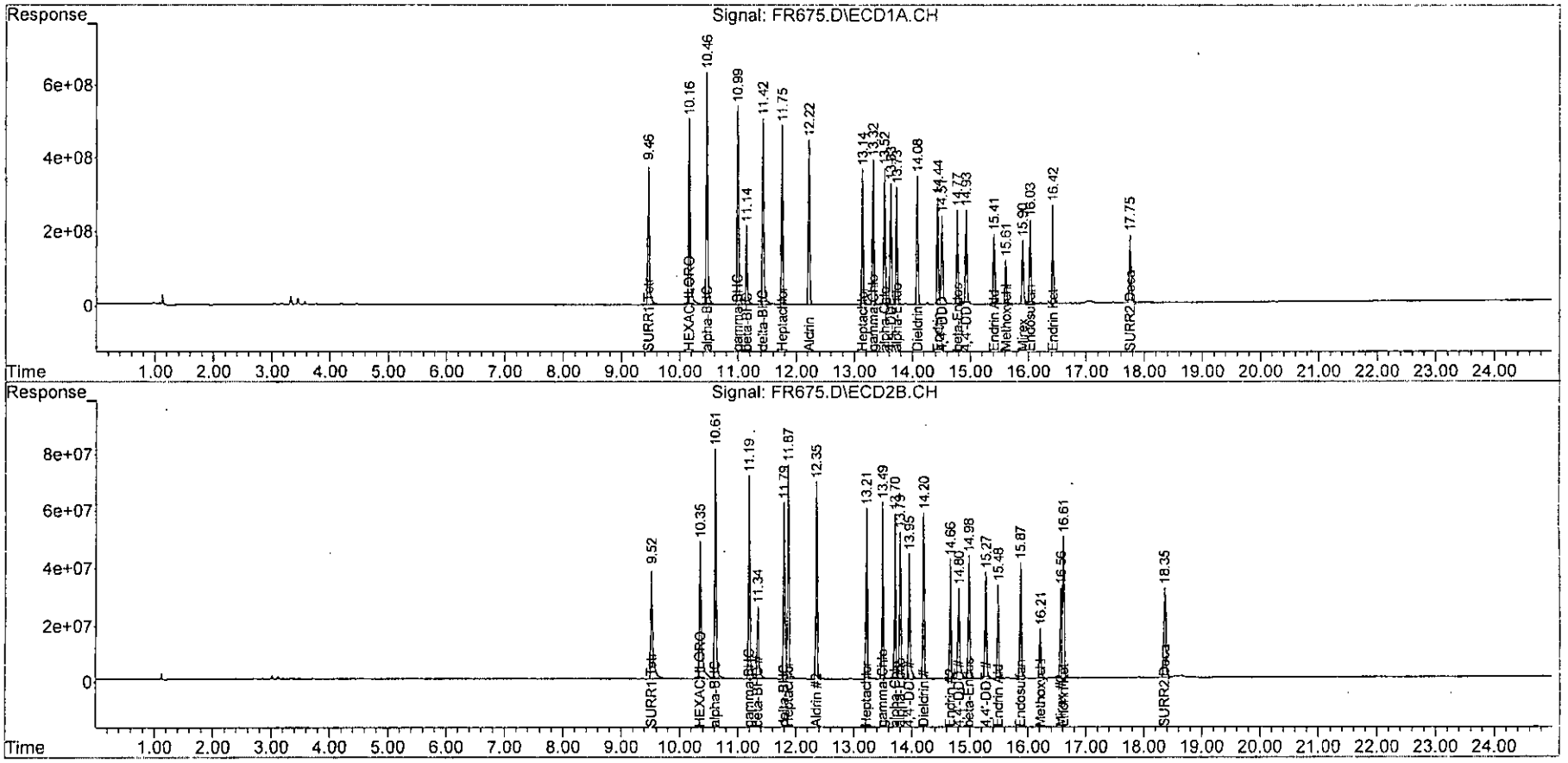
8081E072514.M Thu Oct 09 10:09:07 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR675.D
Acq On : 08 Oct 2014 8:34 pm
Operator : m.pedro
Sample : ccv16 Inst : 6890D
Misc : pest 100ppb
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 09 08:49:54 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



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8081E072S14.M Thu Oct 09 10:09:09 2014 Page: 2

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR686.D
Acq On : 09 Oct 2014 2:50 am
Operator : m.pedro
Sample : ccv17 Inst : 6890D
Misc : pest 100ppb
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 09 08:50:45 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	S	SURR1,Tetrac	65.873	68.151 E6	-3.5	106	-0.02
2	TC	HEXACHLOROBENZENE	71.634	95.664 E6	-33.5#	140	-0.02
3	tc	alpha-BHC	96.042	109.685 E6	-14.2	109	-0.02
4	tcm	gamma-BHC (L	84.164	93.098 E6	-10.6	107	-0.02
5	tcm	Heptachlor	78.956	84.189 E6	-6.6	108	-0.02
6	tcm	Aldrin	70.252	77.638 E6	-10.5	108	-0.03
7	tc	beta-BHC	36.141	39.559 E6	-9.5	112	-0.02
8	TC	delta-BHC	82.141	94.614 E6	-15.2#	110	-0.02
9	tc	Heptachlor E	59.994	64.803 E6	-8.0	109	-0.03
10	tc	alpha-Endosu	52.713	60.707 E6	-15.2#	115	-0.03
11	tc	gamma-Chlord	61.350	68.945 E6	-12.4	111	-0.03
12	tc	alpha-Chlord	57.201	64.198 E6	-12.2	111	-0.03
13	tc	4,4'-DDE	55.275	59.695 E6	-8.0	104	-0.02
14	tcm	Dieldrin	55.275	62.838 E6	-13.7	110	-0.03
15	tcm	Endrin	41.046	51.794 E6	-26.2#	121	-0.03
17	tc	beta-Endosul	44.725	50.486 E6	-12.9	110	-0.03
18	tc	4,4'-DDD	43.266	49.262 E6	-13.9	111	-0.03
19	tcm	4,4'-DDT	44.545	51.194 E6	-14.9	108	-0.03
20	tc	Endrin Aldeh	34.962	37.734 E6	-7.9	103	-0.03
21	tc	Endosulfan S	37.033	41.921 E6	-13.2	111	-0.03
22	tc	Methoxychlor	21.567	22.902 E6	-6.2	105	-0.03
24	tc	Endrin Keton	47.690	48.764 E6	-2.3	104	-0.03
25	tc	Mirex	31.098	32.369 E6	-4.1	108	-0.03
29	S	SURR2,Decachlorobiphenyl	38.956	37.693 E6	3.2	101	-0.03

Signal #2

1	S	SURR1,Tetrac	9.214	8.955 E6	2.8	93	-0.01
2	TC	HEXACHLOROBENZENE	9.725	11.951 E6	-22.9#	125	-0.01
3	tc	alpha-BHC	13.107	14.678 E6	-12.0	98	-0.02
4	tcm	gamma-BHC (L	11.797	12.486 E6	-5.8	95	-0.02
5	tcm	Heptachlor	11.652	14.013 E6	-20.3#	113	-0.02
6	tcm	Aldrin	10.299	11.309 E6	-9.8	99	-0.02
7	tc	beta-BHC	5.288	5.480 E6	-3.6	102	-0.02
8	tc	delta-BHC	11.456	10.596 E6	7.5	81	-0.02
9	tc	Heptachlor E	9.512	9.957 E6	-4.7	99	-0.02
10	tc	alpha-Endosu	8.502	9.027 E6	-6.2	101	-0.02
11	tc	gamma-Chlord	9.758	10.459 E6	-7.2	99	-0.02
12	tc	alpha-Chlord	9.295	9.754 E6	-4.9	99	-0.02
13	tc	4,4'-DDE	8.706	9.132 E6	-4.9	94	-0.02
14	tcm	Dieldrin	9.084	9.999 E6	-10.1	100	-0.03
15	tcm	Endrin	6.750	7.153 E6	-6.0	97	-0.03
17	tc	beta-Endosul	7.812	8.499 E6	-8.8	103	-0.03
18	tc	4,4'-DDD	7.122	7.169 E6	-0.7	92	-0.02
19	tcm	4,4'-DDT	7.761	7.350 E6	5.3	86	-0.02
20	tc	Endrin Aldeh	6.402	6.380 E6	0.3	95	-0.03
21	tc	Endosulfan S	7.093	7.139 E6	-0.6	97	-0.02

8081E072514.M Thu Oct 09 09:28:15 2014 Page 7

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR686.D
Acq On : 09 Oct 2014 2:50 am
Operator : m.pedro
Sample : ccv17 Inst : 6890D
Misc : pest 100ppb
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 09 08:50:45 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
22	tc	Methoxychlor	3.932	3.347 E6	14.9	85	-0.02
24	tc	Endrin Keton	8.574	8.980 E6	-4.7	101	-0.02
25	tc	Mirex	6.125	5.311 E6	13.3	97	-0.03
29	S	SURR2,Decachlorobiphenyl	7.971	7.196 E6	9.7	98	-0.03

Evaluate Continuing Calibration Report - Not Founds

16	tc	KEPONE	23.126	0.000 E6	100.0#	0#	-14.54#
23	tc	FAMPHUR	32.077	0.000 E6	100.0#	0#	-16.32#
26	tc	2,4'-DDE	0.000	0.000	0.0	0#	-12.93#
27	tc	2,4'-DDD	0.000	0.000	0.0	0#	-13.68#
28	tc	2,4'-DDT	0.000	0.000	0.0	0#	-14.01#
30	L8C	Toxaphene	501.618	0.000 E3	100.0#	0#	-14.59#
31	L8C	Toxaphene{2}	634.125	0.000 E3	100.0#	0#	-14.98#
32	L8C	Toxaphene{3}	1.440	0.000 E6	100.0#	0#	-15.58#
33	L8C	Toxaphene{4}	1.656	0.000 E6	100.0#	0#	-16.42#
34	L8C	Toxaphene{5}	1.436	0.000 E6	100.0#	0#	-16.61#
35	L9C	Chlordane	2.794	0.000 E6	100.0#	0#	-11.65#
36	L9C	Chlordane{2}	3.893	0.000 E6	100.0#	0#	-11.78#
37	L9C	Chlordane{3}	2.917	0.000 E6	100.0#	0#	-12.45#
38	L9C	Chlordane{4}	1.453	0.000 E6	100.0#	0#	-14.50#
39	L9C	Chlordane{5}	2.018	0.000 E6	100.0#	0#	-14.70#

Signal #2

16	tc	KEPONE	4.694	0.000 E6	100.0#	0#	-14.86#
23	tc	FAMPHUR	6.457	0.000 E6	100.0#	0#	-15.98#
26	tc	2,4'-DDE	0.000	0.000	0.0	0#	-12.97#
27	tc	2,4'-DDD	0.000	0.000	0.0	0#	-13.64#
28	tc	2,4'-DDT	0.000	0.000	0.0	0#	-14.08#
30	L8C	Toxaphene	238.387	0.000 E3	100.0#	0#	-15.12#
31	L8C	Toxaphene{2}	260.846	0.000 E3	100.0#	0#	-15.51#
32	L8C	Toxaphene{3}	187.013	0.000 E3	100.0#	0#	-15.88#
33	L8C	Toxaphene{4}	263.732	0.000 E3	100.0#	0#	-16.75#
34	L8C	Toxaphene{5}	269.793	0.000 E3	100.0#	0#	-16.99#
35	L9C	Chlordane	382.667	0.000 E3	100.0#	0#	-11.66#
36	L9C	Chlordane{2}	525.181	0.000 E3	100.0#	0#	-11.89#
37	L9C	Chlordane{3}	408.316	0.000 E3	100.0#	0#	-12.61#
38	L9C	Chlordane{4}	199.237	0.000 E3	100.0#	0#	-14.80#
39	L9C	Chlordane{5}	334.032	0.000 E3	100.0#	0#	-15.08#

(#) = Out of Range SPCC's out = 0 CCC's out = 30

8081E072514.M Thu Oct 09 09:28:15 2014

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR686.D
Acq On : 09 Oct 2014 2:50 am
Operator : m.pedro
Sample : ccv17 Inst : 6890D
Misc : pest 100ppb
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 09 08:50:45 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	System Monitoring Compounds						
1)	S SURR1,Tetrac	9.46	9.52	6815.1E6	895.5E6	103.457	97.187
	Spiked Amount 100.000	Range 30 - 150		Recovery =		103.46%	97.19%
29)	S SURR2,Decachloro	17.76	18.35	3769.3E6	719.6E6	96.758	90.277
	Spiked Amount 100.000	Range 30 - 150		Recovery =		96.76%	90.28%
	Target Compounds						
2)	TC HEXACHLOROBENZEN	10.16	10.35	9566.4E6	1195.1E6	133.544	122.884
3)	tc alpha-BHC	10.46	10.61	10968.5E6	1467.8E6	114.206	111.985
4)	tcm gamma-BHC (L	10.99	11.19	9309.8E6	1248.6E6	110.615	105.832
5)	tcm Heptachlor	11.75	11.87	8418.9E6	1401.3E6	106.628	120.256
6)	tcm Aldrin	12.22	12.35	7763.8E6	1130.9E6	110.513	109.816
7)	tc beta-BHC	11.14	11.34	3955.9E6	548.0E6	109.459	103.632
8)	tc delta-BHC	11.42	11.79	9461.4E6	1059.6E6	115.186	92.494
9)	tc Heptachlor E	13.14	13.21	6480.3E6	995.7E6	108.016	104.682
10)	tc alpha-Endosu	13.73	13.79	6070.7E6	902.7E6	115.165	106.176
11)	tc gamma-Chlord	13.32	13.49	6894.5E6	1045.9E6	112.381	107.179
12)	tc alpha-Chlord	13.52	13.70	6419.8E6	975.4E6	112.233	104.934
13)	tc 4,4'-DDE	13.63	13.95	5969.5E6	913.2E6	107.997	104.890
14)	tcm Dieldrin	14.08	14.20	6283.8E6	999.9E6	113.683	110.079
15)	tcm Endrin	14.43	14.66	5179.4E6	715.3E6	126.184	105.966
17)	tc beta-Endosul	14.77	14.98	5048.6E6	849.9E6	112.880	108.788
18)	tc 4,4'-DDD	14.51	14.80	4926.2E6	716.9E6	113.858	100.658
19)	tcm 4,4'-DDT	14.93	15.27	5119.4E6	735.0E6	114.925	94.703
20)	tc Endrin Aldeh	15.41	15.48	3773.4E6	638.0E6	107.930	99.656
21)	tc Endosulfan S	16.03	15.87	4192.1E6	713.9E6	113.201	100.647
22)	tc Methoxychlor	15.61	16.21	2290.2E6	334.7E6	106.192	85.127
24)	tc Endrin Keton	16.42	16.61	4876.4E6	898.0E6	102.252	104.733
25)	tc Mirex	15.90	16.56	3236.9E6	531.1E6	104.089	86.705
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

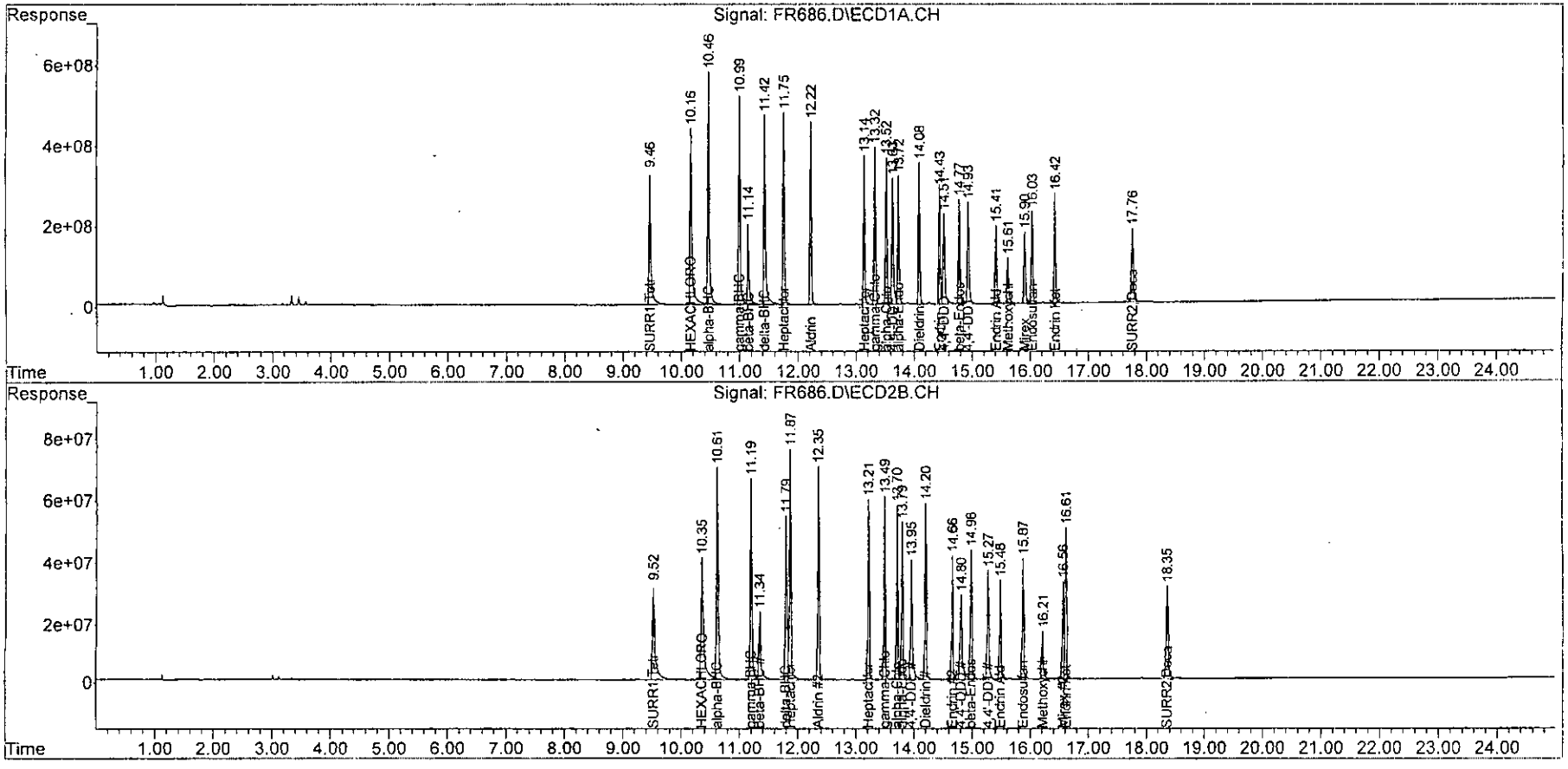
8081E072514.M Thu Oct 09 10:09:40 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR686.D
Acq On : 09 Oct 2014 2:50 am
Operator : m.pedro
Sample : ccv17 Inst : 6890D
Misc : pest 100ppb
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Oct 09 08:50:45 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



6790

8081E072514.M Thu Oct 09 10:09:42 2014 Page: 2

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR693.D
Acq On : 09 Oct 2014 6:49 am
Operator : m.pedro
Sample : ccv18 Inst : 6890D
Misc : pest 100ppb
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Oct 09 08:51:34 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	S	SURR1,Tetrac	65.873	67.983 E6	-3.2	105	-0.02
2	TC	HEXACHLOROBENZENE	71.634	95.638 E6	-33.5#	140	-0.02
3	tc	alpha-BHC	96.042	110.348 E6	-14.9	110	-0.02
4	tcm	gamma-BHC (L	84.164	93.480 E6	-11.1	108	-0.02
5	tcm	Heptachlor	78.956	84.449 E6	-7.0	109	-0.02
6	tcm	Aldrin	70.252	77.799 E6	-10.7	108	-0.03
7	tc	beta-BHC	36.141	39.681 E6	-9.8	113	-0.02
8	TC	delta-BHC	82.141	95.124 E6	-15.8#	111	-0.02
9	tc	Heptachlor E	59.994	65.272 E6	-8.8	110	-0.03
10	tc	alpha-Endosu	52.713	61.502 E6	-16.7#	117	-0.03
11	tc	gamma-Chlord	61.350	69.487 E6	-13.3	112	-0.03
12	tc	alpha-Chlord	57.201	64.527 E6	-12.8	111	-0.03
13	tc	4,4'-DDE	55.275	59.697 E6	-8.0	104	-0.02
14	tcm	Dieldrin	55.275	63.402 E6	-14.7	111	-0.03
15	tcm	Endrin	41.046	50.694 E6	-23.5#	119	-0.03
17	tc	beta-Endosul	44.725	50.789 E6	-13.6	111	-0.03
18	tc	4,4'-DDD	43.266	49.388 E6	-14.1	111	-0.03
19	tcm	4,4'-DDT	44.545	51.945 E6	-16.6#	109	-0.03
20	tc	Endrin Aldeh	34.962	38.620 E6	-10.5	105	-0.03
21	tc	Endosulfan S	37.033	42.300 E6	-14.2	112	-0.03
22	tc	Methoxychlor	21.567	23.109 E6	-7.1	106	-0.03
24	tc	Endrin Keton	47.690	49.440 E6	-3.7	106	-0.03
25	tc	Mirex	31.098	32.428 E6	-4.3	108	-0.03
29	S	SURR2,Decachlorobiphenyl	38.956	38.963 E6	-0.0	104	-0.03

Signal #2

1	S	SURR1,Tetrac	9.214	9.202 E6	0.1	96	-0.01
2	TC	HEXACHLOROBENZENE	9.725	11.928 E6	-22.7#	124	-0.01
3	tc	alpha-BHC	13.107	14.837 E6	-13.2	99	-0.02
4	tcm	gamma-BHC (L	11.797	12.548 E6	-6.4	95	-0.02
5	tcm	Heptachlor	11.652	14.375 E6	-23.4#	116	-0.02
6	tcm	Aldrin	10.299	11.422 E6	-10.9	100	-0.02
7	tc	beta-BHC	5.288	5.550 E6	-5.0	103	-0.02
8	tc	delta-BHC	11.456	10.489 E6	8.4	80	-0.02
9	tc	Heptachlor E	9.512	10.063 E6	-5.8	100	-0.02
10	tc	alpha-Endosu	8.502	9.120 E6	-7.3	102	-0.02
11	tc	gamma-Chlord	9.758	10.554 E6	-8.2	100	-0.02
12	tc	alpha-Chlord	9.295	9.859 E6	-6.1	100	-0.02
13	tc	4,4'-DDE	8.706	9.169 E6	-5.3	95	-0.02
14	tcm	Dieldrin	9.084	10.127 E6	-11.5	101	-0.02
15	tcm	Endrin	6.750	6.984 E6	-3.5	95	-0.03
17	tc	beta-Endosul	7.812	8.623 E6	-10.4	105	-0.03
18	tc	4,4'-DDD	7.122	7.148 E6	-0.4	91	-0.02
19	tcm	4,4'-DDT	7.761	7.513 E6	3.2	88	-0.02
20	tc	Endrin Aldeh	6.402	6.571 E6	-2.6	98	-0.03
21	tc	Endosulfan S	7.093	7.203 E6	-1.6	97	-0.02

8081E072514.M Thu Oct 09 09:35:24 2014 Page 1

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR693.D
Acq On : 09 Oct 2014 6:49 am
Operator : m.pedro
Sample : ccv18 Inst : 6890D
Misc : pest 100ppb
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Oct 09 08:51:34 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
22	tc	Methoxychlor	3.932	3.405 E6	13.4	87	-0.02
24	tc	Endrin Keton	8.574	9.164 E6	-6.9	103	-0.02
25	tc	Mirex	6.125	5.374 E6	12.3	98	-0.03
29	S	SURR2,Decachlorobiphenyl	7.971	7.232 E6	9.3	98	-0.03

Evaluate Continuing Calibration Report - Not Founds

16	tc	KEPONE	23.126	0.000 E6	100.0#	0#	-14.54#
23	tc	FAMPHUR	32.077	0.000 E6	100.0#	0#	-16.32#
26	tc	2,4'-DDE	0.000	0.000	0.0	0#	-12.93#
27	tc	2,4'-DDD	0.000	0.000	0.0	0#	-13.68#
28	tc	2,4'-DDT	0.000	0.000	0.0	0#	-14.01#
30	L8C	Toxaphene	501.618	0.000 E3	100.0#	0#	-14.59#
31	L8C	Toxaphene{2}	634.125	0.000 E3	100.0#	0#	-14.98#
32	L8C	Toxaphene{3}	1.440	0.000 E6	100.0#	0#	-15.58#
33	L8C	Toxaphene{4}	1.656	0.000 E6	100.0#	0#	-16.42#
34	L8C	Toxaphene{5}	1.436	0.000 E6	100.0#	0#	-16.61#
35	L9C	Chlordane	2.794	0.000 E6	100.0#	0#	-11.65#
36	L9C	Chlordane{2}	3.893	0.000 E6	100.0#	0#	-11.78#
37	L9C	Chlordane{3}	2.917	0.000 E6	100.0#	0#	-12.45#
38	L9C	Chlordane{4}	1.453	0.000 E6	100.0#	0#	-14.50#
39	L9C	Chlordane{5}	2.018	0.000 E6	100.0#	0#	-14.70#

Signal #2

16	tc	KEPONE	4.694	0.000 E6	100.0#	0#	-14.86#
23	tc	FAMPHUR	6.457	0.000 E6	100.0#	0#	-15.98#
26	tc	2,4'-DDE	0.000	0.000	0.0	0#	-12.97#
27	tc	2,4'-DDD	0.000	0.000	0.0	0#	-13.64#
28	tc	2,4'-DDT	0.000	0.000	0.0	0#	-14.08#
30	L8C	Toxaphene	238.387	0.000 E3	100.0#	0#	-15.12#
31	L8C	Toxaphene{2}	260.846	0.000 E3	100.0#	0#	-15.51#
32	L8C	Toxaphene{3}	187.013	0.000 E3	100.0#	0#	-15.88#
33	L8C	Toxaphene{4}	263.732	0.000 E3	100.0#	0#	-16.75#
34	L8C	Toxaphene{5}	269.793	0.000 E3	100.0#	0#	-16.99#
35	L9C	Chlordane	382.667	0.000 E3	100.0#	0#	-11.66#
36	L9C	Chlordane{2}	525.181	0.000 E3	100.0#	0#	-11.89#
37	L9C	Chlordane{3}	408.316	0.000 E3	100.0#	0#	-12.61#
38	L9C	Chlordane{4}	199.237	0.000 E3	100.0#	0#	-14.80#
39	L9C	Chlordane{5}	334.032	0.000 E3	100.0#	0#	-15.08#

(#) = Out of Range SPCC's out = 0 CCC's out = 31

8081E072514.M Thu Oct 09 09:35:24 2014 Page 22

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR693.D
Acq On : 09 Oct 2014 6:49 am
Operator : m.pedro
Sample : ccv18 Inst : 6890D
Misc : pest 100ppb
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Oct 09 08:51:34 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	System Monitoring Compounds						
1)	S SURR1,Tetrac	9.46	9.52	6798.3E6	920.2E6	103.202	99.867
	Spiked Amount 100.000	Range 30 - 150		Recovery =		103.20%	99.87%
29)	S SURR2,Decachloro	17.76	18.35	3896.3E6	723.2E6	100.020	90.732
	Spiked Amount 100.000	Range 30 - 150		Recovery =		100.02%	90.73%
	Target Compounds						
2)	TC HEXACHLOROBENZEN	10.16	10.35	9563.8E6	1192.8E6	133.509	122.652
3)	tc alpha-BHC	10.46	10.61	11034.8E6	1483.7E6	114.896	113.196
4)	tcm gamma-BHC (L	10.99	11.19	9348.0E6	1254.8E6	111.069	106.361
5)	tcm Heptachlor	11.75	11.87	8444.9E6	1437.5E6	106.957	123.369
6)	tcm Aldrin	12.22	12.35	7779.9E6	1142.2E6	110.743	110.913
7)	tc beta-BHC	11.14	11.34	3968.1E6	555.0E6	109.795	104.972
8)	tc delta-BHC	11.42	11.79	9512.4E6	1048.9E6	115.806	91.562
9)	tc Heptachlor E	13.14	13.21	6527.2E6	1006.3E6	108.798	105.794
10)	tc alpha-Endosu	13.73	13.79	6150.2E6	912.0E6	116.673	107.271
11)	tc gamma-Chlord	13.32	13.49	6948.7E6	1055.4E6	113.264	108.154
12)	tc alpha-Chlord	13.52	13.70	6452.7E6	985.9E6	112.808	106.068
13)	tc 4,4'-DDE	13.63	13.95	5969.7E6	916.9E6	108.001	105.319
14)	tcm Dieldrin	14.08	14.20	6340.2E6	1012.7E6	114.703	111.484
15)	tcm Endrin	14.43	14.66	5069.4E6	698.4E6	123.503	103.468
17)	tc beta-Endosul	14.77	14.98	5078.9E6	862.3E6	113.558	110.382
18)	tc 4,4'-DDD	14.51	14.80	4938.8E6	714.8E6	114.148	100.364
19)	tcm 4,4'-DDT	14.93	15.27	5194.5E6	751.3E6	116.611	96.811
20)	tc Endrin Aldeh	15.41	15.48	3862.0E6	657.1E6	110.464	102.632
21)	tc Endosulfan S	16.03	15.87	4230.0E6	720.3E6	114.223	101.551
22)	tc Methoxychlor	15.61	16.21	2310.9E6	340.5E6	107.148	86.585
24)	tc Endrin Keton	16.42	16.61	4944.0E6	916.4E6	103.671	106.877
25)	tc Mirex	15.90	16.56	3242.8E6	537.4E6	104.278	87.740
	Sum Toxaphene			0	0	N.D.	N.D.
	Average Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
	Average Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

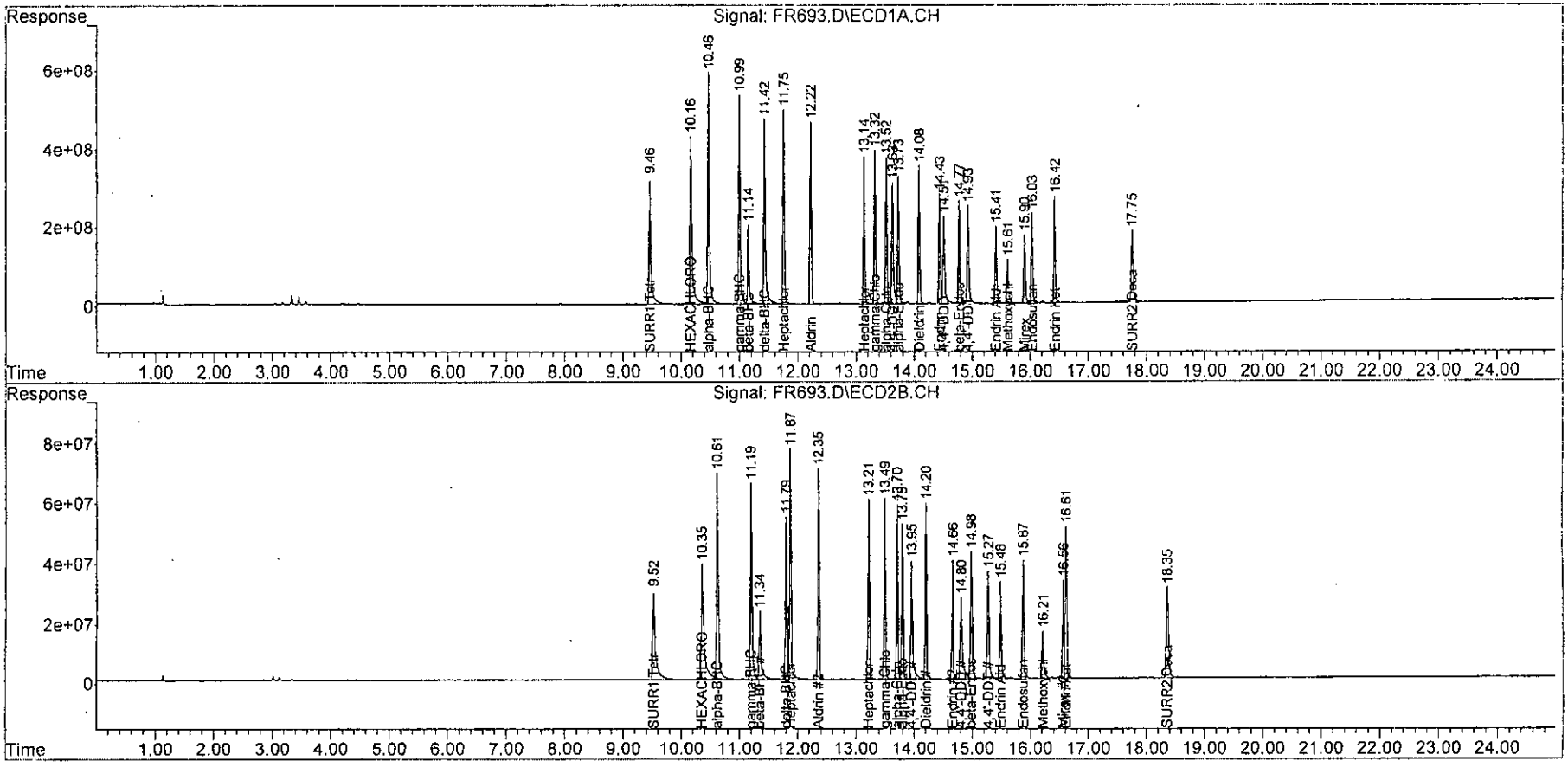
8081E072514.M Thu Oct 09 10:10:02 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR693.D
Acq On : 09 Oct 2014 6:49 am
Operator : m.pedro
Sample : ccv18 Inst : 6890D
Misc : pest 100ppb
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Oct 09 08:51:34 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



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8081E072514.M Thu Oct 09 10:10:03 2014 Page: 2

10A

Pesticide Identification Summary
For Single Component Analytes

NYSDEC Sample No.
MM-8-GW-697MW01-16.

Lab Name: **ALS Environmental** ***Contract:*** PARSONS

Lab Code: **10145** ***Case.No.:*** R1407813 ***SAS No.:*** _____ ***SDG No.:*** FTMM-8-GW-697M

Lab Sample ID R1407813-001|1.0 ***Date anlyzed:*** 10/8/2014

Instrument ID: 6890D ***Instrument ID:*** 6890D

GC Column(1) STx-CLP ***(ID)*** 0.32mm 30m ***GC Column(2)*** STx-CLPII ***(ID)*** 0.32mm 30m

			RT Window			
Analyte	***Column***	***RT***	***From***	***To***	***Concentration***	***%RPD***
2,4'-DDD	*1*	0.00	13.61	13.75	0.00	
	2	13.61	13.57	13.71	0.00	0.00
2,4'-DDE	*1*	12.92	12.86	13.00	0.00	
	2	0.00	12.90	13.04	0.00	0.00
2,4'-DDT	*1*	0.00	13.94	14.08	0.00	
	2	14.06	14.01	14.15	0.00	0.00
4,4'-DDD	*1*	14.51	14.46	14.60	1.10	
	2	14.80	14.75	14.89	1.04	6.07
4,4'-DDT	*1*	14.93	14.89	15.03	0.09	
	2	15.27	15.22	15.36	0.05	56.56
alpha-Chlord	*1*	13.52	13.48	13.62	0.38	
	2	13.70	13.66	13.80	0.30	22.12
gamma-Chlord	*1*	13.32	13.28	13.42	0.35	
	2	13.49	13.44	13.58	0.28	22.03
Heptachlor	*1*	11.75	11.73	11.83	0.03	
	2	11.86	11.84	11.94	0.02	33.24
HEXACHLOROBE	*1*	10.16	10.11	10.25	0.04	
	2	10.35	10.29	10.43	0.03	22.37

FORM X-CLP-PEST

10A

Pesticide Identification Summary
For Single Component Analytes

NYSDEC Sample No.
MM-56-GW-80MW105-7.

Lab Name: ALS Environmental ***Contract:*** PARSONS

Lab Code: 10145 ***Case.No.:*** R1407813 ***SAS No.:*** _____ ***SDG No.:*** FTMM-8-GW-697M

Lab Sample ID R1407813-012|1.0 ***Date anlyzed:*** 10/8/2014

Instrument ID: 6890D ***Instrument ID:*** 6890D

GC Column(1) STx-CLP ***(ID)*** 0.32mm 30m ***GC Column(2)*** STx-CLPII ***(ID)*** 0.32mm 30m

			RT Window			
Analyte	***Column***	***RT***	***From***	***To***	***Concentration***	***%RPD***
alpha-BHC	*1*	10.46	10.43	10.53	0.02	
	2	10.61	10.58	10.68	0.01	48.28
gamma-BHC (L	*1*	10.99	10.97	11.07	0.01	
	2	11.19	11.16	11.26	0.01	28.57
HEXACHLOROBE	*1*	10.16	10.11	10.25	0.02	
	2	10.35	10.29	10.43	0.01	58.74

FORM X-CLP-PEST

10A

Pesticide Identification Summary
For Single Component Analytes

NYSDEC Sample No.
PBLK1MS

Lab Name: **ALS Environmental** ***Contract:*** PARSONS

Lab Code: 10145 ***Case.No.:*** R1407813 ***SAS No.:*** _____ ***SDG No.:*** FTMM-8-GW-697M

Lab Sample ID RQ1412023-02|1.0 ***Date anlyzed:*** 10/8/2014

Instrument ID: 6890D ***Instrument ID:*** 6890D

GC Column(1) STx-CLP ***(ID)*** 0.32mm 30m ***GC Column(2)*** STx-CLPII ***(ID)*** 0.32mm 30m

			RT Window			
Analyte	***Column***	***RT***	***From***	***To***	***Concentration***	***%RPD***
4,4'-DDD	*1*	14.51	14.46	14.60	0.28	
	2	14.80	14.75	14.89	0.23	19.73
4,4'-DDE	*1*	13.63	13.58	13.72	0.26	
	2	13.95	13.90	14.04	0.23	15.75
4,4'-DDT	*1*	14.93	14.89	15.03	0.27	
	2	15.27	15.22	15.36	0.19	34.02
Aldrin	*1*	12.22	12.19	12.29	0.24	
	2	12.35	12.32	12.42	0.20	14.63
alpha-BHC	*1*	10.46	10.43	10.53	0.26	
	2	10.61	10.58	10.68	0.22	16.96
alpha-Chlord	*1*	13.52	13.48	13.62	0.27	
	2	13.71	13.66	13.80	0.23	15.95
alpha-Endosu	*1*	13.73	13.68	13.82	0.28	
	2	13.79	13.74	13.88	0.23	16.86
beta-BHC	*1*	11.14	11.12	11.22	0.26	
	2	11.34	11.31	11.41	0.23	12.66
beta-Endosul	*1*	14.78	14.74	14.88	0.27	
	2	14.98	14.93	15.07	0.23	14.14
delta-BHC	*1*	11.42	11.40	11.50	0.27	
	2	11.79	11.76	11.86	0.20	30.56
Dieldrin	*1*	14.09	14.04	14.18	0.27	
	2	14.20	14.15	14.29	0.23	16.85

FORM X-CLP-PEST

10A

Pesticide Identification Summary
For Single Component Analytes

NYSDEC Sample No.
PBLK1MS

Lab Name: ALS Environmental *Contract:* PARSONS

Lab Code: 10145 *Case.No.:* R1407813 *SAS No.:* _____ *SDG No.:* FTMM-8-GW-697M

Lab Sample ID RQ1412023-02|1.0 *Date anlyzed:* 10/8/2014

Instrument ID: 6890D *Instrument ID:* 6890D

GC Column(I) STx-CLP *(ID)* 0.32mm 30m *GC Column(2)* STx-CLPII *(ID)* 0.32mm 30m

Analyte	Column	RT	RT Window From	RT Window To	Concentration	%RPD
Endosulfan S	1	16.03	15.99	16.13	0.27	
	2	15.87	15.83	15.97	0.23	15.75
Endrin	1	14.44	14.40	14.54	0.32	
	2	14.66	14.61	14.75	0.26	23.71
Endrin Aldeh	1	15.41	15.37	15.51	0.03	
	2	15.48	15.44	15.58	0.03	0.74
Endrin Keton	1	16.42	16.38	16.52	0.24	
	2	16.61	16.56	16.70	0.22	9.84
gamma-BHC (L	1	10.99	10.97	11.07	0.26	
	2	11.19	11.16	11.26	0.23	13.03
gamma-Chlord	1	13.32	13.28	13.42	0.27	
	2	13.49	13.44	13.58	0.22	17.81
Heptachlor	1	11.76	11.73	11.83	0.25	
	2	11.87	11.84	11.94	0.22	10.69
Heptachlor E	1	13.14	13.09	13.23	0.27	
	2	13.21	13.16	13.30	0.23	14.06
HEXACHLOROBE	1	10.16	10.11	10.25	0.26	
	2	10.35	10.29	10.43	0.23	15.04
Methoxychlor	1	15.61	15.57	15.71	0.27	
	2	16.21	16.16	16.30	0.20	30.58
Mirex	1	15.90	15.86	16.00	0.27	
	2	16.57	16.52	16.66	0.22	20.69

FORM X-CLP-PEST

00678

10A

Pesticide Identification Summary
For Single Component Analytes

NYSDEC Sample No.
PBLK1MSD

Lab Name: ALS Environmental ***Contract:*** PARSONS

Lab Code: 10145 ***Case.No.:*** R1407813 ***SAS No.:*** _____ ***SDG No.:*** FTMM-8-GW-697M

Lab Sample ID RQ1412023-03|1.0 ***Date anlyzed:*** 10/8/2014

Instrument ID: 6890D ***Instrument ID:*** 6890D

GC Column(1) STx-CLP ***(ID)*** 0.32mm 30m ***GC Column(2)*** STx-CLPII ***(ID)*** 0.32mm 30m

Analyte	*Column*	*RT*	*RT Window From*	*RT Window To*	*Concentration*	*%RPD*
4,4'-DDD	*1*	14.51	14.46	14.60	0.27	
	2	14.80	14.75	14.89	0.23	17.92
4,4'-DDE	*1*	13.63	13.58	13.72	0.25	
	2	13.95	13.90	14.04	0.22	14.86
4,4'-DDT	*1*	14.93	14.89	15.03	0.25	
	2	15.27	15.22	15.36	0.19	29.09
Aldrin	*1*	12.22	12.19	12.29	0.20	
	2	12.35	12.32	12.42	0.17	14.41
alpha-BHC	*1*	10.46	10.43	10.53	0.25	
	2	10.61	10.58	10.68	0.22	14.02
alpha-Chlord	*1*	13.52	13.48	13.62	0.26	
	2	13.71	13.66	13.80	0.22	15.50
alpha-Endosu	*1*	13.73	13.68	13.82	0.27	
	2	13.79	13.74	13.88	0.23	16.29
beta-BHC	*1*	11.14	11.12	11.22	0.25	
	2	11.34	11.31	11.41	0.23	11.88
beta-Endosul	*1*	14.78	14.74	14.88	0.26	
	2	14.98	14.93	15.07	0.23	13.72
delta-BHC	*1*	11.42	11.40	11.50	0.26	
	2	11.79	11.76	11.86	0.19	30.60
Dieldrin	*1*	14.08	14.04	14.18	0.26	
	2	14.20	14.15	14.29	0.22	16.59

FORM X-CLP-PEST

10A

Pesticide Identification Summary
For Single Component Analytes

NYSDEC Sample No.
PBLK1MSD

Lab Name: ALS Environmental *Contract:* PARSONS

Lab Code: 10145 *Case.No.:* R1407813 *SAS No.:* _____ *SDG No.:* FTMM-8-GW-697M

Lab Sample ID RQ1412023-03|1.0 *Date anlyzed:* 10/8/2014

Instrument ID: 6890D *Instrument ID:* 6890D

GC Column(1) STx-CLP *(ID)* 0.32mm 30m *GC Column(2)* STx-CLPII *(ID)* 0.32mm 30m

Analyte	Column	RT	RT Window From	RT Window To	Concentration	%RPD
Endosulfan S	1	16.03	15.99	16.13	0.26	
	2	15.87	15.83	15.97	0.22	15.35
Endrin	1	14.44	14.40	14.54	0.31	
	2	14.66	14.61	14.75	0.25	23.04
Endrin Aldeh	1	15.41	15.37	15.51	0.04	
	2	15.48	15.44	15.58	0.04	10.00
Endrin Keton	1	16.42	16.38	16.52	0.23	
	2	16.61	16.56	16.70	0.21	8.74
gamma-BHC (L	1	10.99	10.97	11.07	0.25	
	2	11.19	11.16	11.26	0.22	11.32
gamma-Chlord	1	13.32	13.28	13.42	0.26	
	2	13.49	13.44	13.58	0.22	16.65
Heptachlor	1	11.76	11.73	11.83	0.24	
	2	11.87	11.84	11.94	0.22	9.55
Heptachlor E	1	13.14	13.09	13.23	0.26	
	2	13.21	13.16	13.30	0.23	14.12
HEXACHLOROBE	1	10.16	10.11	10.25	0.25	
	2	10.35	10.29	10.43	0.22	11.72
Methoxychlor	1	15.61	15.57	15.71	0.27	
	2	16.21	16.16	16.30	0.19	32.44
Mirex	1	15.90	15.86	16.00	0.25	
	2	16.56	16.52	16.66	0.21	20.29

FORM X-CLP-PEST

10A

Pesticide Identification Summary
For Single Component Analytes

NYSDEC Sample No.
M-8-GW-697MW01-16.45

Lab Name: ALS Environmental *Contract:* PARSONS

Lab Code: 10145 *Case.No.:* R1407813 *SAS No.:* _____ *SDG No.:* FTMM-8-GW-697M

Lab Sample ID RQ1412023-04|1.0 *Date anlyzed:* 10/8/2014

Instrument ID: 6890D *Instrument ID:* 6890D

GC Column(1) STx-CLP *(ID)* 0.32mm 30m *GC Column(2)* STx-CLPII *(ID)* 0.32mm 30m

Analyte	Column	RT	RT Window From	RT Window To	Concentration	%RPD
4,4'-DDD	1	14.51	14.46	14.60	1.41	
	2	14.80	14.75	14.89	1.33	5.63
4,4'-DDE	1	13.63	13.58	13.72	0.26	
	2	13.94	13.90	14.04	0.29	12.02
4,4'-DDT	1	14.93	14.89	15.03	0.25	
	2	15.27	15.22	15.36	0.23	10.09
Aldrin	1	12.22	12.19	12.29	0.20	
	2	12.35	12.32	12.42	0.19	7.90
alpha-BHC	1	10.46	10.43	10.53	0.21	
	2	10.61	10.58	10.68	0.21	1.96
alpha-Chlord	1	13.52	13.48	13.62	0.63	
	2	13.70	13.66	13.80	0.53	17.61
alpha-Endosu	1	13.73	13.68	13.82	0.28	
	2	13.79	13.74	13.88	0.23	19.25
beta-BHC	1	11.14	11.12	11.22	0.22	
	2	11.34	11.31	11.41	0.21	4.27
beta-Endosul	1	14.77	14.74	14.88	0.25	
	2	14.98	14.93	15.07	0.23	10.61
delta-BHC	1	11.42	11.40	11.50	0.24	
	2	11.79	11.76	11.86	0.20	14.42
Dieldrin	1	14.08	14.04	14.18	0.26	
	2	14.20	14.15	14.29	0.22	15.34

FORM X-CLP-PEST

10A

Pesticide Identification Summary
For Single Component Analytes

NYSDEC Sample No.
IM-8-GW-697MW01-16.45

Lab Name: **ALS Environmental** *Contract:* PARSONS

Lab Code: 10145 *Case.No.:* R1407813 *SAS No.:* _____ *SDG No.:* FTMM-8-GW-697M

Lab Sample ID RQ1412023-04|1.0 *Date anlyzed:* 10/8/2014

Instrument ID: 6890D *Instrument ID:* 6890D

GC Column(1) STx-CLP *(ID)* 0.32mm 30m *GC Column(2)* STx-CLPII *(ID)* 0.32mm 30m

Analyte	*Column*	*RT*	*RT Window From*	*To*	*Concentration*	*%RPD*
Endosulfan S	*1*	16.03	15.99	16.13	0.26	
	2	15.87	15.83	15.97	0.22	18.80
Endrin	*1*	14.44	14.40	14.54	0.29	
	2	14.66	14.61	14.75	0.25	16.99
Endrin Aldeh	*1*	15.41	15.37	15.51	0.05	
	2	15.48	15.44	15.58	0.04	13.48
Endrin Keton	*1*	16.42	16.38	16.52	0.22	
	2	16.61	16.56	16.70	0.21	6.66
gamma-BHC (L	*1*	10.99	10.97	11.07	0.22	
	2	11.19	11.16	11.26	0.21	4.88
gamma-Chlord	*1*	13.32	13.28	13.42	0.53	
	2	13.49	13.44	13.58	0.51	2.99
Heptachlor	*1*	11.75	11.73	11.83	0.24	
	2	11.86	11.84	11.94	0.20	17.85
Heptachlor E	*1*	13.14	13.09	13.23	0.31	
	2	13.21	13.16	13.30	0.27	12.73
HEXACHLOROBE	*1*	10.16	10.11	10.25	0.21	
	2	10.35	10.29	10.43	0.22	1.99
Methoxychlor	*1*	15.61	15.57	15.71	0.27	
	2	16.21	16.16	16.30	0.24	11.69

FORM X-CLP-PEST

10A

Pesticide Identification Summary
For Single Component Analytes

NYSDEC Sample No.
M-8-GW-697MW01-16.45

Lab Name: **ALS Environmental** *Contract:* PARSONS

Lab Code: 10145 *Case.No.:* R1407813 *SAS No.:* _____ *SDG No.:* FTMM-8-GW-697M

Lab Sample ID RQ1412023-05|1.0 *Date anlyzed:* 10/8/2014

Instrument ID: 6890D *Instrument ID:* 6890D

GC Column(1) STx-CLP *(ID)* 0.32mm 30m *GC Column(2)* STx-CLPII *(ID)* 0.32mm 30m

Analyte	Column	RT	RT Window From	RT Window To	Concentration	%RPD
4,4'-DDD	1	14.51	14.46	14.60	1.50	
	2	14.80	14.75	14.89	1.45	3.02
4,4'-DDE	1	13.63	13.58	13.72	0.27	
	2	13.95	13.90	14.04	0.32	16.14
4,4'-DDT	1	14.93	14.89	15.03	0.33	
	2	15.27	15.22	15.36	0.23	35.13
Aldrin	1	12.22	12.19	12.29	0.21	
	2	12.35	12.32	12.42	0.20	3.87
alpha-BHC	1	10.46	10.43	10.53	0.22	
	2	10.61	10.58	10.68	0.22	2.57
alpha-Chlord	1	13.52	13.48	13.62	0.68	
	2	13.70	13.66	13.80	0.57	16.44
alpha-Endosu	1	13.73	13.68	13.82	0.29	
	2	13.79	13.74	13.88	0.26	10.66
beta-BHC	1	11.14	11.12	11.22	0.22	
	2	11.34	11.31	11.41	0.22	1.91
beta-Endosul	1	14.78	14.74	14.88	0.27	
	2	14.98	14.93	15.07	0.24	11.02
delta-BHC	1	11.42	11.40	11.50	0.23	
	2	11.79	11.76	11.86	0.21	9.37
Dieldrin	1	14.08	14.04	14.18	0.27	
	2	14.20	14.15	14.29	0.24	13.18

FORM X-CLP-PEST

10A

Pesticide Identification Summary
For Single Component Analytes

NYSDEC Sample No.
M-8-GW-697MW01-16.45

Lab Name: ALS Environmental *Contract:* PARSONS

Lab Code: 10145 *Case.No.:* R1407813 *SAS No.:* _____ *SDG No.:* FTMM-8-GW-697M

Lab Sample ID RQ1412023-05|1.0 *Date anlyzed:* 10/8/2014

Instrument ID: 6890D *Instrument ID:* 6890D

GC Column(1) STx-CLP *(ID)* 0.32mm 30m *GC Column(2)* STx-CLPII *(ID)* 0.32mm 30m

Analyte	*Column*	*RT*	*RT Window From*	*RT Window To*	*Concentration*	*%RPD*
Endosulfan S	*1*	16.03	15.99	16.13	0.24	
	2	15.87	15.83	15.97	0.22	7.10
Endrin	*1*	14.44	14.40	14.54	0.31	
	2	14.66	14.61	14.75	0.26	15.06
Endrin Aldeh	*1*	15.41	15.37	15.51	0.04	
	2	15.48	15.44	15.58	0.04	2.56
Endrin Keton	*1*	16.42	16.38	16.52	0.23	
	2	16.61	16.56	16.70	0.22	5.81
gamma-BHC (L	*1*	10.99	10.97	11.07	0.23	
	2	11.19	11.16	11.26	0.22	3.61
gamma-Chlord	*1*	13.32	13.28	13.42	0.63	
	2	13.49	13.44	13.58	0.56	10.87
Heptachlor	*1*	11.75	11.73	11.83	0.24	
	2	11.86	11.84	11.94	0.22	9.64
Heptachlor E	*1*	13.14	13.09	13.23	0.46	
	2	13.21	13.16	13.30	0.29	46.58
HEXACHLOROBE	*1*	10.16	10.11	10.25	0.23	
	2	10.35	10.29	10.43	0.22	5.88
Methoxychlor	*1*	15.61	15.57	15.71	0.25	
	2	16.21	16.16	16.30	0.18	33.92

FORM X-CLP-PEST

00684

ALS Environmental

PESTICIDES
RAW QC DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

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00685

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 14:51
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412023-01	**Basis:**	NA

Organochlorine Pesticides by Gas Chromatography

Analytical Method:	8081B	**Analysis Lot:**	415375
Prep Method:	EPA 3510C	**Extraction Lot:**	219959
Data File Name:	I:\ACQUDATA\6890D\DATA\100814\FR665.D\	**Instrument Name:**	R-GC-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
72-54-8	4,4'-DDD	ND	U	0.050	0.025	0.025	
72-55-9	4,4'-DDE	ND	U	0.050	0.025	0.025	
50-29-3	4,4'-DDT	ND	U	0.050	0.025	0.025	
309-00-2	Aldrin	ND	U	0.050	0.025	0.025	
60-57-1	Dieldrin	ND	U	0.050	0.025	0.025	
959-98-8	Endosulfan I	ND	U	0.050	0.025	0.025	
33213-65-9	Endosulfan II	ND	U	0.050	0.025	0.025	
1031-07-8	Endosulfan Sulfate	ND	U	0.050	0.025	0.025	
72-20-8	Endrin	ND	U	0.050	0.025	0.025	
7421-93-4	Endrin Aldehyde	ND	U	0.050	0.025	0.025	
53494-70-5	Endrin Ketone	ND	U	0.050	0.035	0.035	
76-44-8	Heptachlor	ND	U	0.050	0.025	0.025	
1024-57-3	Heptachlor Epoxide	ND	U	0.050	0.025	0.025	
72-43-5	Methoxychlor	ND	U	0.50	0.025	0.025	
8001-35-2	Toxaphene	ND	U	1.0	0.50	0.27	
319-84-6	alpha-BHC	ND	U	0.050	0.025	0.025	
5103-71-9	alpha-Chlordane	ND	U	0.050	0.025	0.025	
319-85-7	beta-BHC	ND	U	0.050	0.028	0.028	
319-86-8	delta-BHC	ND	U	0.050	0.025	0.025	
58-89-9	gamma-BHC (Lindane)	ND	U	0.050	0.025	0.025	
5566-34-7	gamma-Chlordane	ND	U	0.050	0.045	0.045	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	61	30-135	10/8/14 14:51	
Tetrachloro-m-xylene	78	25-140	10/8/14 14:51	

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR665.D
Acq On : 08 Oct 2014 2:51 pm
Operator : m.pedro
Sample : RQ1412023-01|1.0 Inst : 6890D
Misc : 219959 100 8081 blk
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 09 09:09:51 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
System Monitoring Compounds						
1) S SURR1,Tetrac	9.46	9.51	5491.2E6	715.3E6	83.360	77.632
Spiked Amount 100.000	Range 30 - 150		Recovery =		83.36%	77.63%
29) S SURR2,Decachloro	17.76	18.36	2737.6E6	489.6E6	70.275	61.419
Spiked Amount 100.000	Range 30 - 150		Recovery =		70.28%	61.42%
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

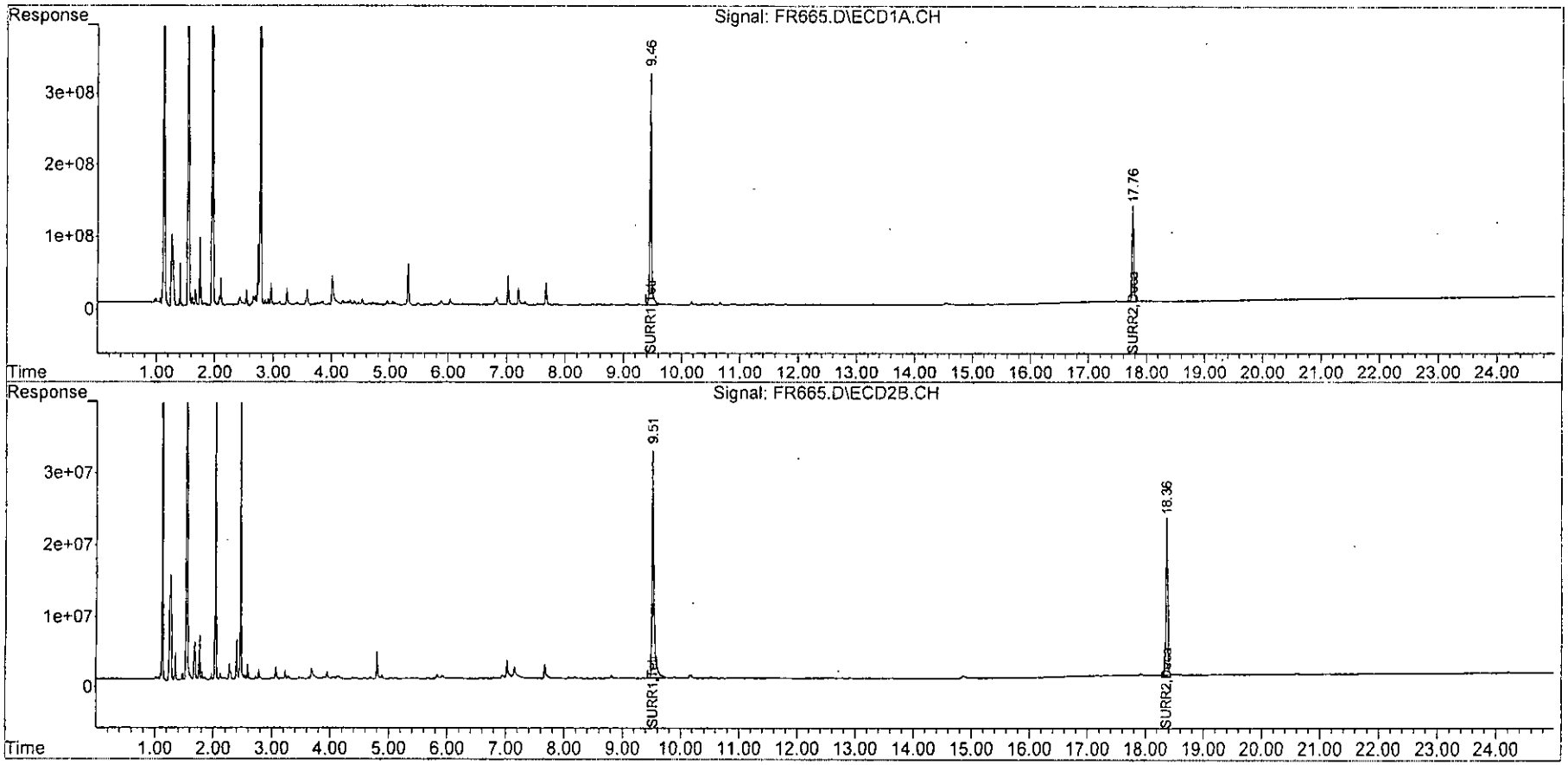
8081E072514.M Thu Oct 09 10:08:37 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR665.D
Acq On : 08 Oct 2014 2:51 pm
Operator : m.pedro
Sample : RQ1412023-01|1.0 Inst : 6890D
Misc : 219959 100 8081 blk
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 09 09:09:51 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



8081E072514.M Thu Oct 09 10:08:38 2014 Page: 2

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 15:26
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1412023-02	**Basis:**	NA

Organochlorine Pesticides by Gas Chromatography

Analytical Method:	8081B	**Analysis Lot:**	415375
Prep Method:	EPA 3510C	**Extraction Lot:**	219959
Data File Name:	I:\ACQUDATA\6890D\DATA\100814\FR666.D\	**Instrument Name:**	R-GC-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
72-54-8	4,4'-DDD	**0.186**		0.050	0.025	0.025	
72-55-9	4,4'-DDE	**0.180**		0.050	0.025	0.025	
50-29-3	4,4'-DDT	**0.151**		0.050	0.025	0.025	
309-00-2	Aldrin	**0.164**		0.050	0.025	0.025	
60-57-1	Dieldrin	**0.184**		0.050	0.025	0.025	
959-98-8	Endosulfan I	**0.187**		0.050	0.025	0.025	
33213-65-9	Endosulfan II	**0.187**		0.050	0.025	0.025	
1031-07-8	Endosulfan Sulfate	**0.183**		0.050	0.025	0.025	
72-20-8	Endrin	**0.205**		0.050	0.025	0.025	
7421-93-4	Endrin Aldehyde	**0.0270**	J	0.050	0.025	0.025	
53494-70-5	Endrin Ketone	**0.176**		0.050	0.035	0.035	
76-44-8	Heptachlor	**0.179**		0.050	0.025	0.025	
1024-57-3	Heptachlor Epoxide	**0.187**		0.050	0.025	0.025	
72-43-5	Methoxychlor	**0.157**	J	0.50	0.025	0.025	
8001-35-2	Toxaphene	ND	U	1.0	0.50	0.27	
319-84-6	alpha-BHC	**0.176**		0.050	0.025	0.025	
5103-71-9	alpha-Chlordane	**0.182**		0.050	0.025	0.025	
319-85-7	beta-BHC	**0.184**		0.050	0.028	0.028	
319-86-8	delta-BHC	**0.159**		0.050	0.025	0.025	
58-89-9	gamma-BHC (Lindane)	**0.183**		0.050	0.025	0.025	
5566-34-7	gamma-Chlordane	**0.180**		0.050	0.045	0.045	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	66	30-135	10/8/14 15:26	
Tetrachloro-m-xylene	84	25-140	10/8/14 15:26	

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR666.D
Acq On : 08 Oct 2014 3:26 pm
Operator : m.pedro
Sample : RQ1412023-02|1.0 Inst : 6890D
Misc : 219959 100 8081 lcs
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 09 09:10:17 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l	
	System Monitoring Compounds							
1)	S SURR1,Tetrac	9.46	9.51	5832.2E6	774.9E6	88.537	84.101	
	Spiked Amount 100.000	Range 30 - 150		Recovery =		88.54%	84.10%	
29)	S SURR2,Decachloro	17.76	18.35	2918.8E6	523.2E6	74.927	65.640	
	Spiked Amount 100.000	Range 30 - 150		Recovery =		74.93%	65.64%	
	Target Compounds							
2)	TC HEXACHLOROBENZEN	10.16	10.35	1500.4E6	175.1E6	20.945	18.009	
3)	tc alpha-BHC	10.46	10.61	2008.2E6	231.3E6	20.910	17.645	
4)	tcm gamma-BHC (L	10.99	11.19	1754.0E6	215.8E6	20.841	18.295	
5)	tcm Heptachlor	11.76	11.87	1571.0E6	208.3E6	19.897	17.878	
6)	tcm Aldrin	12.22	12.35	1329.7E6	168.3E6	18.927	16.345	
7)	tc beta-BHC	11.14	11.34	756.1E6	97426199	20.922	18.426	
8)	tc delta-BHC	11.42	11.79	1781.8E6	182.6E6	21.692	15.941	#
9)	tc Heptachlor E	13.14	13.21	1292.5E6	178.0E6	21.543	18.712	
10)	tc alpha-Endosu	13.73	13.79	1169.9E6	159.4E6	22.194	18.745	
11)	tc gamma-Chlord	13.32	13.49	1316.4E6	175.1E6	21.457	17.949	
12)	tc alpha-Chlord	13.52	13.71	1220.3E6	168.9E6	21.334	18.175	
13)	tc 4,4'-DDE	13.63	13.95	1166.2E6	156.9E6	21.098	18.020	
14)	tcm Dieldrin	14.09	14.20	1205.3E6	167.3E6	21.806	18.418	
15)	tcm Endrin	14.44	14.66	1065.0E6	138.0E6	25.946	20.450	
17)	tc beta-Endosul	14.78	14.98	965.0E6	146.3E6	21.577	18.734	
18)	tc 4,4'-DDD	14.51	14.80	983.1E6	132.8E6	22.721	18.644	
19)	tcm 4,4'-DDT	14.93	15.27	948.2E6	117.2E6	21.287	15.102	#
20)	tc Endrin Aldeh	15.41	15.48	94508768	17419952	2.703	2.721	
21)	tc Endosulfan S	16.03	15.87	791.5E6	129.4E6	21.374	18.246	
22)	tc Methoxychlor	15.61	16.21	459.4E6	61552246	21.301	15.653	#
24)	tc Endrin Keton	16.42	16.61	925.5E6	150.9E6	19.407	17.594	
25)	tc Mirex	15.90	16.57	661.8E6	105.9E6	21.282	17.293	
	Sum Toxaphene			0	0	N.D.	N.D.	
	Average Toxaphene					0.000	0.000	
	Sum Chlordane			0	0	N.D.	N.D.	
	Average Chlordane					0.000	0.000	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

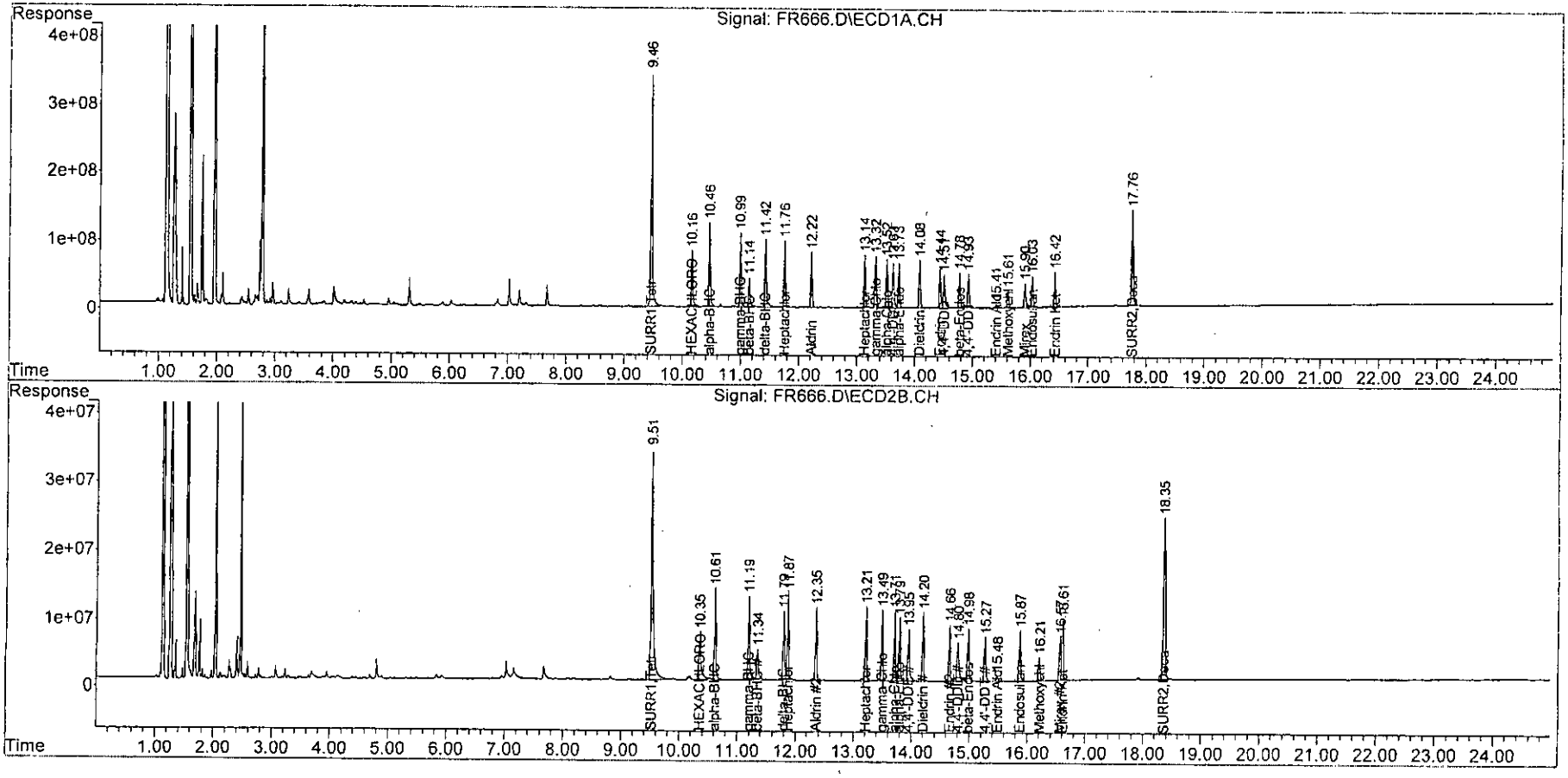
8081E072514.M Thu Oct 09 10:08:40 2014

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR666.D
Acq On : 08 Oct 2014 3:26 pm
Operator : m.pedro
Sample : RQ1412023-02|1.0 Inst : 6890D
Misc : 219959 100 8081 lcs
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 09 09:10:17 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



T6900

8081E072514.M Thu Oct 09 10:08:42 2014

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 16:00
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1412023-03	**Basis:**	NA

Organochlorine Pesticides by Gas Chromatography

Analytical Method:	8081B	**Analysis Lot:**	415375
Prep Method:	EPA 3510C	**Extraction Lot:**	219959
Data File Name:	I:\ACQUDATA\6890D\DATA\100814\FR667.D\	**Instrument Name:**	R-GC-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
72-54-8	4,4'-DDD	**0.180**		0.050	0.025	0.025	
72-55-9	4,4'-DDE	**0.174**		0.050	0.025	0.025	
50-29-3	4,4'-DDT	**0.150**		0.050	0.025	0.025	
309-00-2	Aldrin	**0.137**		0.050	0.025	0.025	
60-57-1	Dieldrin	**0.178**		0.050	0.025	0.025	
959-98-8	Endosulfan I	**0.182**		0.050	0.025	0.025	
33213-65-9	Endosulfan II	**0.182**		0.050	0.025	0.025	
1031-07-8	Endosulfan Sulfate	**0.176**		0.050	0.025	0.025	
72-20-8	Endrin	**0.200**		0.050	0.025	0.025	
7421-93-4	Endrin Aldehyde	**0.0323**	J	0.050	0.025	0.025	
53494-70-5	Endrin Ketone	**0.172**		0.050	0.035	0.035	
76-44-8	Heptachlor	**0.175**		0.050	0.025	0.025	
1024-57-3	Heptachlor Epoxide	**0.182**		0.050	0.025	0.025	
72-43-5	Methoxychlor	**0.155**	J	0.50	0.025	0.025	
8001-35-2	Toxaphene	ND	U	1.0	0.50	0.27	
319-84-6	alpha-BHC	**0.173**		0.050	0.025	0.025	
5103-71-9	alpha-Chlordane	**0.176**		0.050	0.025	0.025	
319-85-7	beta-BHC	**0.181**		0.050	0.028	0.028	
319-86-8	delta-BHC	**0.154**		0.050	0.025	0.025	
58-89-9	gamma-BHC (Lindane)	**0.178**		0.050	0.025	0.025	
5566-34-7	gamma-Chlordane	**0.175**		0.050	0.045	0.045	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	62	30-135	10/8/14 16:00	
Tetrachloro-m-xylene	80	25-140	10/8/14 16:00	

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR667.D
Acq On : 08 Oct 2014 4:00 pm
Operator : m.pedro
Sample : RQ1412023-03|1.0 Inst : 6890D
Misc : 219959 100 8081 lcsd
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 09 09:11:04 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l	
	System Monitoring Compounds							
1) S	SURR1,Tetrac	9.46	9.51	5443.4E6	732.7E6	82.635	79.513	
	Spiked Amount 100.000	Range 30 - 150		Recovery =		82.64%	79.51%	
29) S	SURR2,Decachloro	17.76	18.36	2730.6E6	494.3E6	70.094	62.014	
	Spiked Amount 100.000	Range 30 - 150		Recovery =		70.09%	62.01%	
	Target Compounds							
2) TC	HEXACHLOROBENZEN	10.16	10.35	1417.2E6	171.1E6	19.784	17.592	
3) tc	alpha-BHC	10.46	10.61	1906.9E6	226.1E6	19.854	17.253	
4) tcm	gamma-BHC (L	10.99	11.19	1681.1E6	210.4E6	19.974	17.833	
5) tcm	Heptachlor	11.76	11.87	1523.6E6	204.4E6	19.296	17.542	
6) tcm	Aldrin	12.22	12.35	1113.7E6	141.3E6	15.852	13.720	
7) tc	beta-BHC	11.14	11.34	734.6E6	95465075	20.326	18.055	
8) tc	delta-BHC	11.42	11.79	1724.0E6	176.6E6	20.989	15.417	#
9) tc	Heptachlor E	13.14	13.21	1254.8E6	172.7E6	20.916	18.156	
10) tc	alpha-Endosu	13.73	13.79	1126.9E6	154.4E6	21.378	18.164	
11) tc	gamma-Chlord	13.32	13.49	1264.8E6	170.3E6	20.616	17.451	
12) tc	alpha-Chlord	13.52	13.71	1177.0E6	163.8E6	20.577	17.618	
13) tc	4,4'-DDE	13.63	13.95	1118.8E6	151.8E6	20.240	17.436	
14) tcm	Dieldrin	14.08	14.20	1161.9E6	161.7E6	21.021	17.803	
15) tcm	Endrin	14.44	14.66	1033.3E6	134.8E6	25.174	19.968	
17) tc	beta-Endosul	14.78	14.98	933.6E6	142.1E6	20.875	18.186	
18) tc	4,4'-DDD	14.51	14.80	933.9E6	128.5E6	21.585	18.035	
19) tcm	4,4'-DDT	14.93	15.27	894.3E6	116.3E6	20.076	14.981	#
20) tc	Endrin Aldeh	15.41	15.48	124.8E6	20658698	3.568	3.227	
21) tc	Endosulfan S	16.03	15.87	758.5E6	124.6E6	20.483	17.559	
22) tc	Methoxychlor	15.61	16.21	462.9E6	60828376	21.462	15.469	#
24) tc	Endrin Keton	16.42	16.61	894.1E6	147.3E6	18.749	17.180	
25) tc	Mirex	15.90	16.56	631.3E6	101.4E6	20.302	16.561	
	Sum Toxaphene			0	0	N.D.	N.D.	
Average	Toxaphene					0.000	0.000	
	Sum Chlordane			0	0	N.D.	N.D.	
Average	Chlordane					0.000	0.000	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

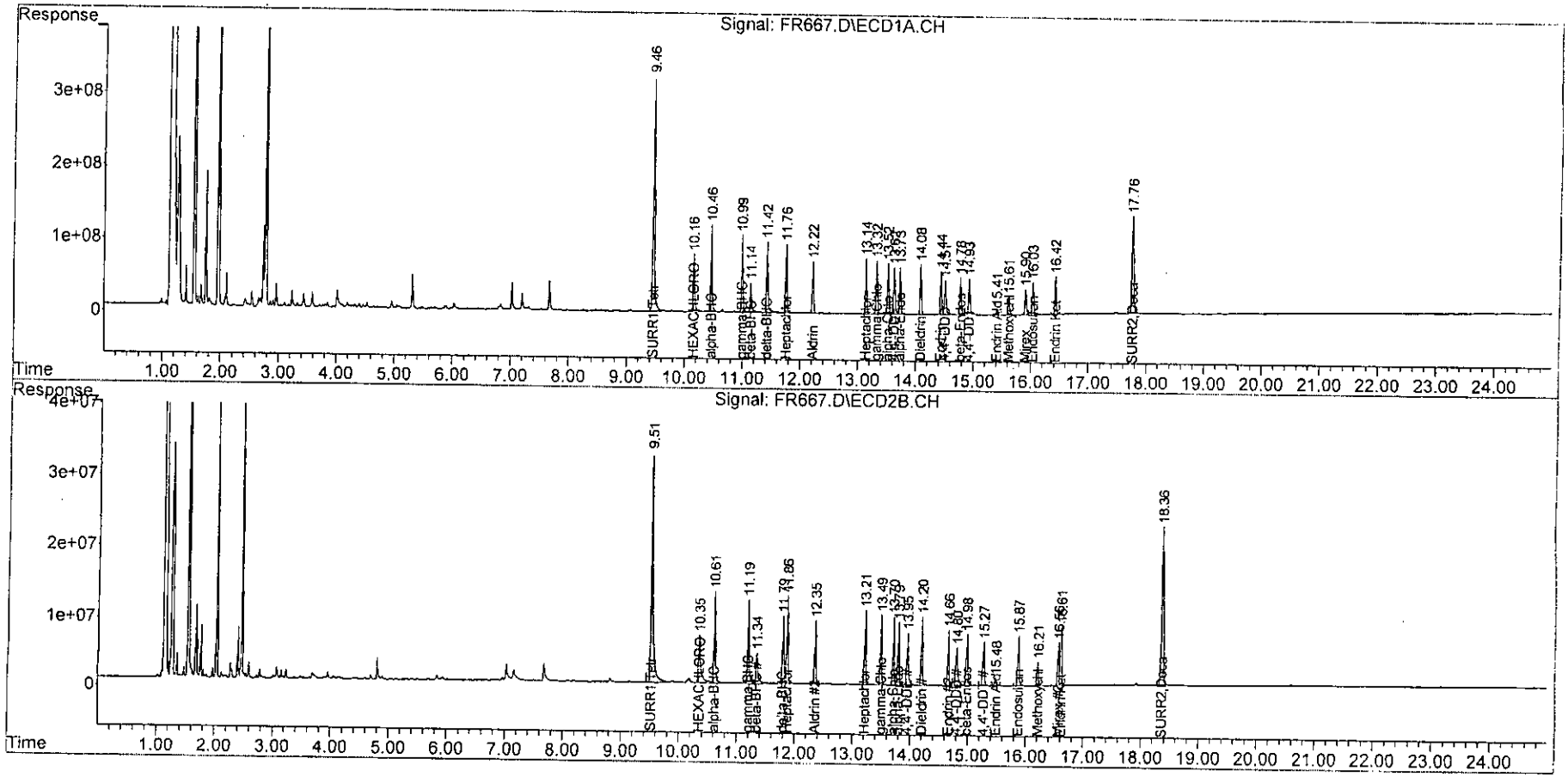
8081E072514.M Thu Oct 09 10:08:44 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR667.D
Acq On : 08 Oct 2014 4:00 pm
Operator : m.pedro
Sample : RQ1412023-03|1.0 Inst : 6890D
Misc : 219959 100 8081 lcsd
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 09 09:11:04 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



006994

8081E072514.M Thu Oct 09 10:08:45 2014 Page: 2

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1105
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 18:17
Sample Name:	FTMM-8-GW-697MW01-16.45	**Units:**	µg/L
Lab Code:	RQ1412023-04	**Basis:**	NA
Run Type:	Matrix Spike		

Organochlorine Pesticides by Gas Chromatography

Analytical Method:	8081B	**Analysis Lot:**	415375
Prep Method:	EPA 3510C	**Extraction Lot:**	219959
Data File Name:	I:\ACQUDATA\6890D\DATA\100814\FR671.D\	**Instrument Name:**	R-GC-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
72-54-8	4,4'-DDD	**1.06**		0.050	0.025	0.025	
72-55-9	4,4'-DDE	**0.206**		0.050	0.025	0.025	
50-29-3	4,4'-DDT	**0.184**		0.050	0.025	0.025	
309-00-2	Aldrin	**0.150**		0.050	0.025	0.025	
60-57-1	Dieldrin	**0.178**		0.050	0.025	0.025	
959-98-8	Endosulfan I	**0.183**		0.050	0.025	0.025	
33213-65-9	Endosulfan II	**0.180**		0.050	0.025	0.025	
1031-07-8	Endosulfan Sulfate	**0.172**		0.050	0.025	0.025	
72-20-8	Endrin	**0.197**		0.050	0.025	0.025	
7421-93-4	Endrin Aldehyde	**0.0339**	J	0.050	0.025	0.025	
53494-70-5	Endrin Ketone	**0.164**		0.050	0.035	0.035	
76-44-8	Heptachlor	**0.164**		0.050	0.025	0.025	
1024-57-3	Heptachlor Epoxide	**0.217**		0.050	0.025	0.025	
72-43-5	Methoxychlor	**0.194**	J	0.50	0.025	0.025	
8001-35-2	Toxaphene	ND	U	1.0	0.50	0.27	
319-84-6	alpha-BHC	**0.167**		0.050	0.025	0.025	
5103-71-9	alpha-Chlordane	**0.425**		0.050	0.025	0.025	
319-85-7	beta-BHC	**0.167**		0.050	0.028	0.028	
319-86-8	delta-BHC	**0.163**		0.050	0.025	0.025	
58-89-9	gamma-BHC (Lindane)	**0.166**		0.050	0.025	0.025	
5566-34-7	gamma-Chlordane	**0.412**		0.050	0.045	0.045	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	42	30-135	10/8/14 18:17	
Tetrachloro-m-xylene	73	25-140	10/8/14 18:17	

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR671.D
Acq On : 08 Oct 2014 6:17 pm
Operator : m.pedro
Sample : RQ1412023-04|1.0 Inst : 6890D
Misc : 219959 100 8081 -001ms
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 09 09:16:27 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	System Monitoring Compounds						
1)	S SURR1,Tetrac	9.46	9.51	4797.3E6	717.3E6	72.827	77.848
	Spiked Amount 100.000	Range 30 - 150		Recovery =		72.83%	77.85%
29)	S SURR2,Decachloro	17.76	18.35	1699.5E6	333.4E6	43.625m	41.821
	Spiked Amount 100.000	Range 30 - 150		Recovery =		43.63%	41.82%
	Target Compounds						
2)	TC HEXACHLOROBENZEN	10.16	10.35	1211.1E6	167.8E6	16.906	17.252
3)	tc alpha-BHC	10.46	10.61	1631.0E6	218.3E6	16.983	16.654
4)	tcm gamma-BHC (L	10.99	11.19	1465.3E6	195.7E6	17.411	16.585
5)	tcm Heptachlor	11.75	11.86	1547.0E6	190.8E6	19.593	16.375
6)	tcm Aldrin	12.22	12.35	1137.3E6	154.0E6	16.189	14.958
7)	tc beta-BHC	11.14	11.34	630.5E6	88425310	17.445	16.723
8)	tc delta-BHC	11.42	11.79	1545.4E6	186.5E6	18.814	16.281
9)	tc Heptachlor E	13.14	13.21	1478.2E6	206.3E6	24.638m	21.693
10)	tc alpha-Endosu	13.73	13.79	1167.5E6	155.2E6	22.148	18.257
11)	tc gamma-Chlord	13.32	13.49	2601.6E6	401.7E6	42.407	41.163
12)	tc alpha-Chlord	13.52	13.70	2898.3E6	394.8E6	50.668	42.470
13)	tc 4,4'-DDE	13.63	13.94	1136.3E6	201.9E6	20.557	23.189
14)	tcm Dieldrin	14.08	14.20	1144.6E6	161.3E6	20.707	17.758
15)	tcm Endrin	14.44	14.66	959.5E6	133.1E6	23.375	19.712
17)	tc beta-Endosul	14.77	14.98	896.2E6	140.7E6	20.038	18.017
18)	tc 4,4'-DDD	14.51	14.80	4871.9E6	758.0E6	112.603	106.430
19)	tcm 4,4'-DDT	14.93	15.27	904.8E6	142.5E6	20.311	18.364
20)	tc Endrin Aldeh	15.41	15.48	135.6E6	21678636	3.879	3.386
21)	tc Endosulfan S	16.03	15.87	769.1E6	122.0E6	20.769	17.197
22)	tc Methoxychlor	15.61	16.21	470.5E6	76328759	21.817	19.411
24)	tc Endrin Keton	16.42	16.61	835.9E6	140.6E6	17.528m	16.403
	Sum Toxaphene			0	0	N.D.	N.D.
Average	Toxaphene					0.000	0.000
	Sum Chlordane			0	0	N.D.	N.D.
Average	Chlordane					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

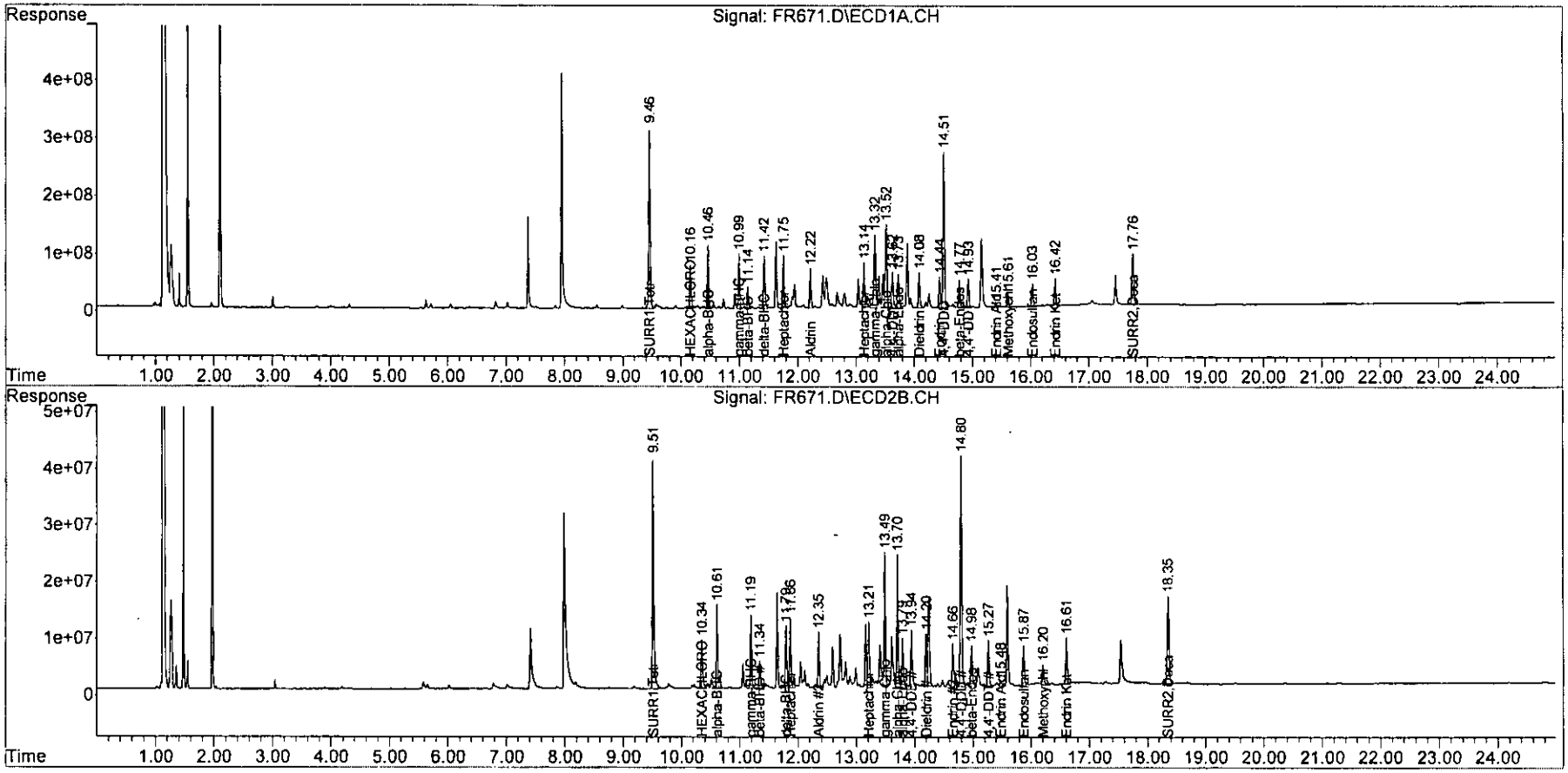
8081E072514.M Thu Oct 09 10:08:55 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR671.D
Acq On : 08 Oct 2014 6:17 pm
Operator : m.pedro
Sample : RQ1412023-04|1.0 Inst : 6890D
Misc : 219959 100 8081 -001ms
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 09 09:16:27 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



6890

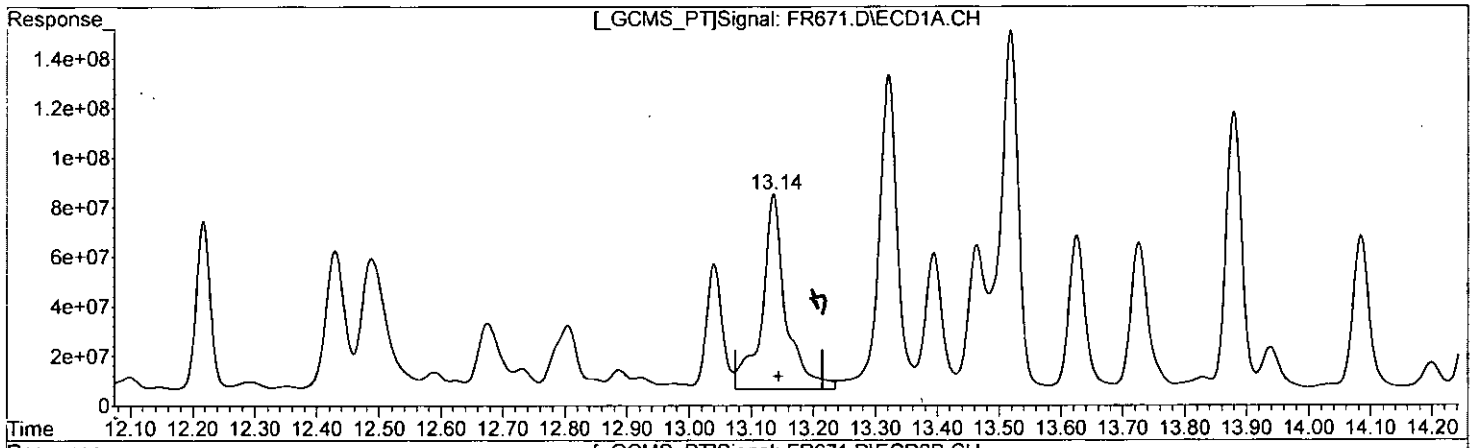
8081E072514.M Thu Oct 09 10:08:57 2014 Page: 2

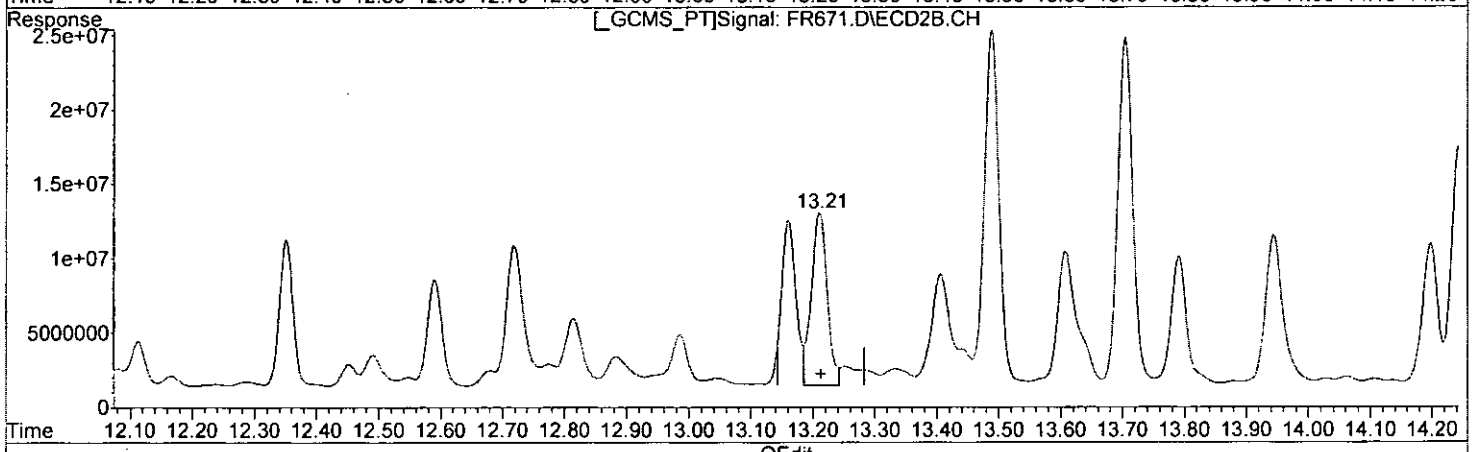
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR671.D
Acq On : 08 Oct 2014 6:17 pm
Operator : m.pedro
Sample : RQ1412023-04|1.0 Inst : 6890D
Misc : 219959 100 8081 -001ms
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 09 08:46:17 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(9) Heptachlor E (tc)

13.14min 34.643ug/l

response 2078347748

(9) Heptachlor E #2 (tc)

13.21min 21.693ug/l

response 206337787

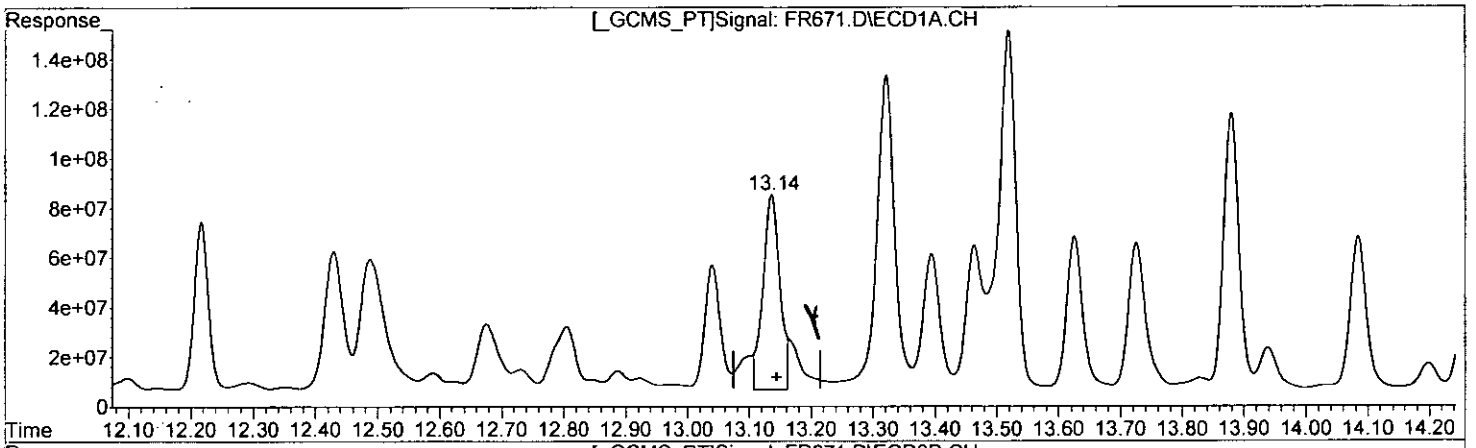
(+) = Expected Retention Time
8081E072514.M Thu Oct 09 09:15:41 2014 Page 1

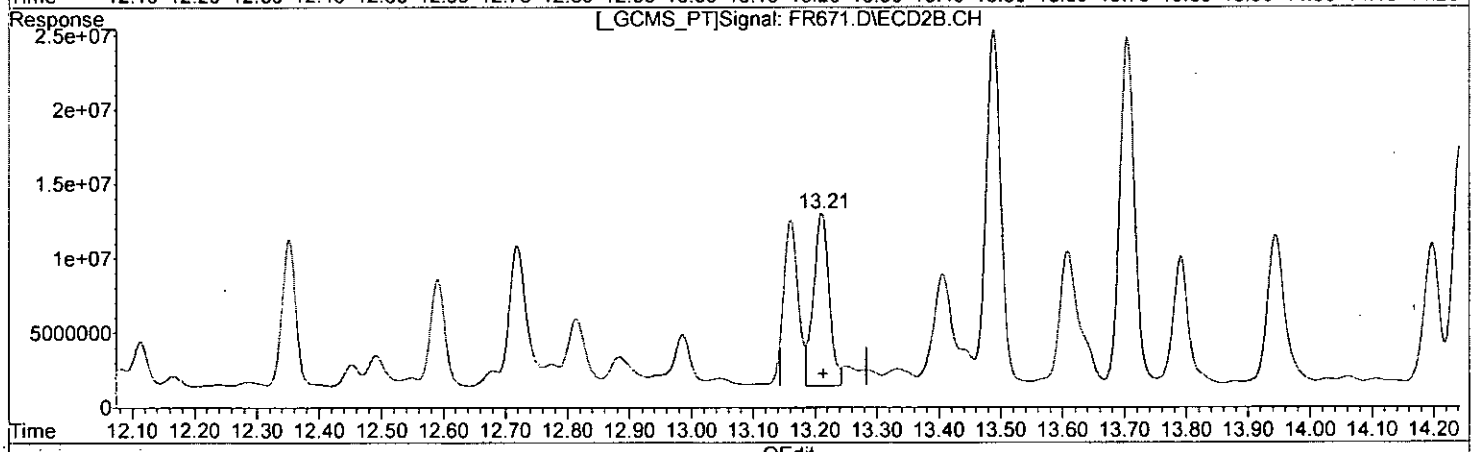
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR671.D
Acq On : 08 Oct 2014 6:17 pm
Operator : m.pedro
Sample : RQ1412023-04|1.0 Inst : 6890D
Misc : 219959 100 8081 -001ms
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 09 08:46:17 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(9) Heptachlor E (tc)

13.14min 24.638ug/l m

response 1478158964

(9) Heptachlor E #2 (tc)

13.21min 21.693ug/l

response 206337787

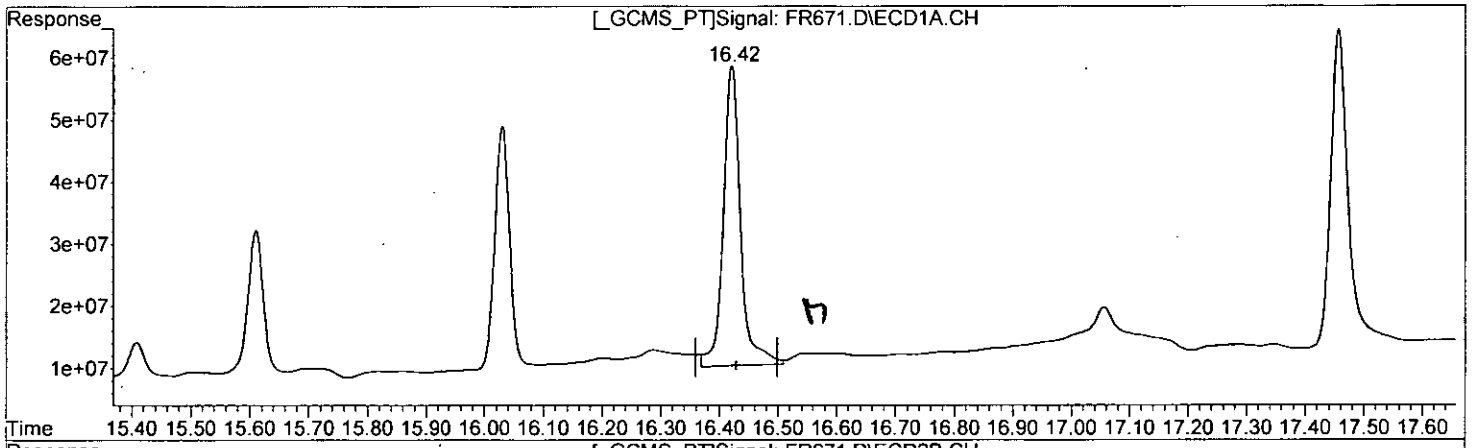
(+) = Expected Retention Time
8081E072514.M Thu Oct 09 09:15:48 2014 Page: 1

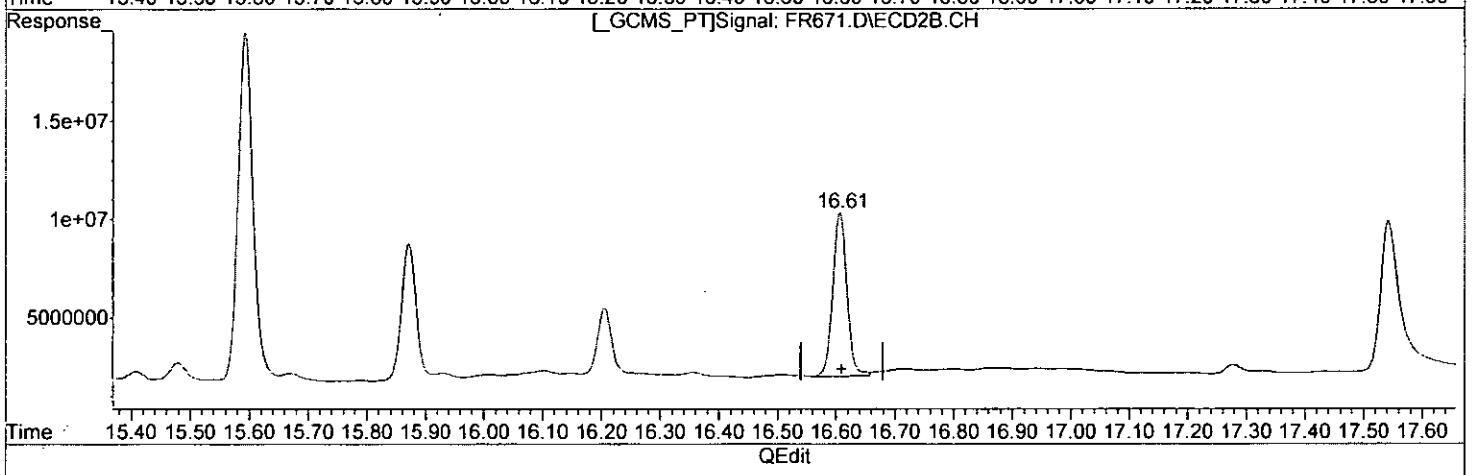
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR671.D
Acq On : 08 Oct 2014 6:17 pm
Operator : m.pedro
Sample : RQ1412023-04|1.0 Inst : 6890D
Misc : 219959 100 8081 -001ms
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 09 08:46:17 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(24) Endrin Keton (tc)

16.42min 20.539ug/l

response 979491528

(24) Endrin Keton #2 (tc)

16.61min 16.403ug/l

response 140648158

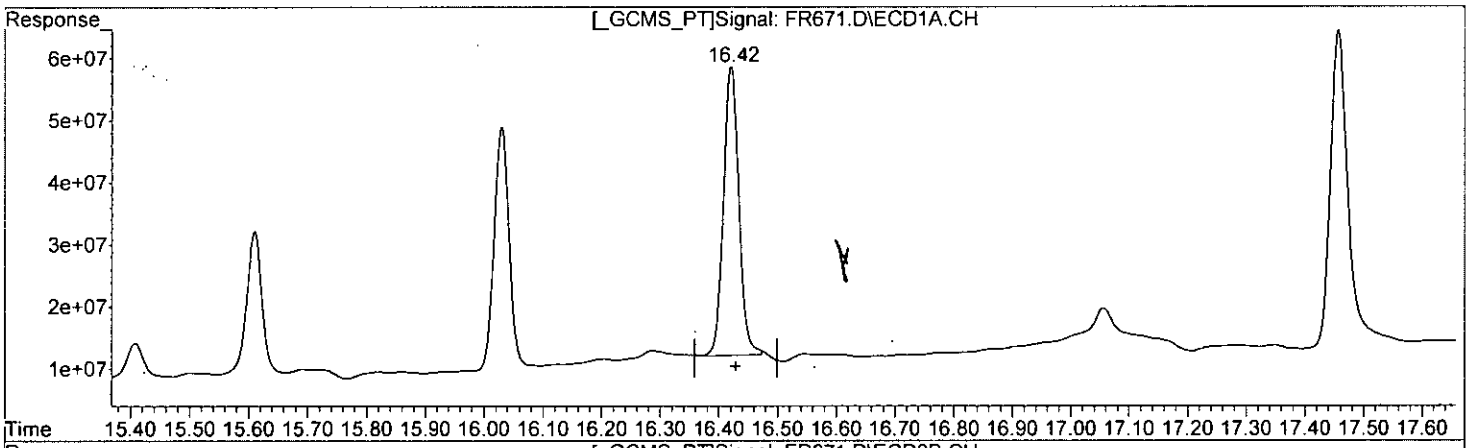
(+) = Expected Retention Time
8081E072514.M Thu Oct 09 09:16:13 2014 Page: 1

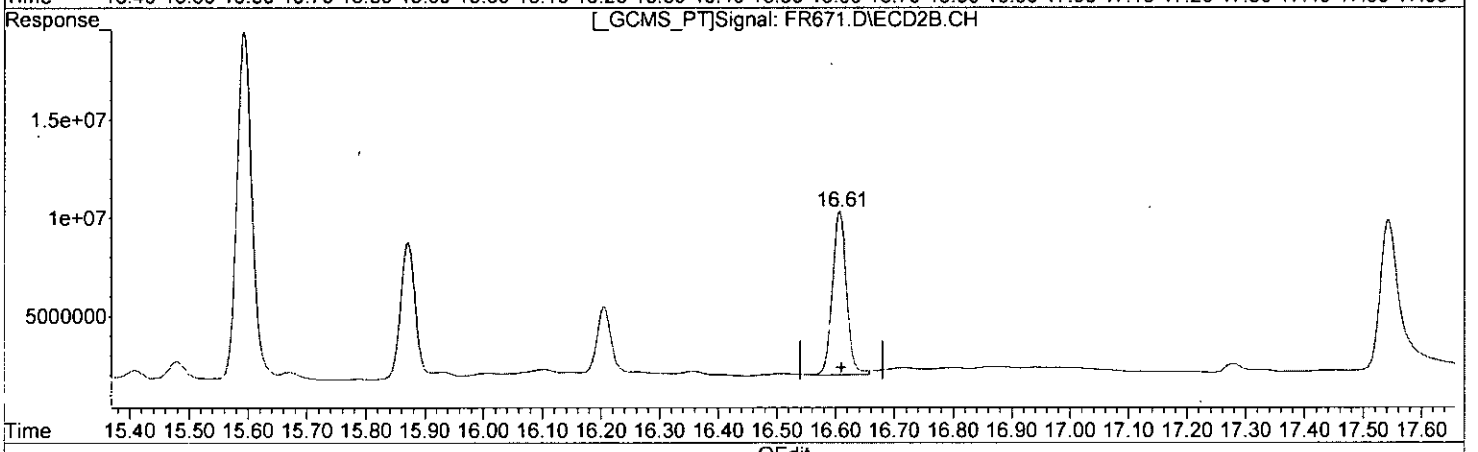
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR671.D
Acq On : 08 Oct 2014 6:17 pm
Operator : m.pedro
Sample : RQ1412023-04|1.0 Inst : 6890D
Misc : 219959 100 8081 -001ms
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 09 08:46:17 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(24) Endrin Keton (tc)

16.42min 17.528ug/l m

response 835882379

(24) Endrin Keton #2 (tc)

16.61min 16.403ug/l

response 140648158

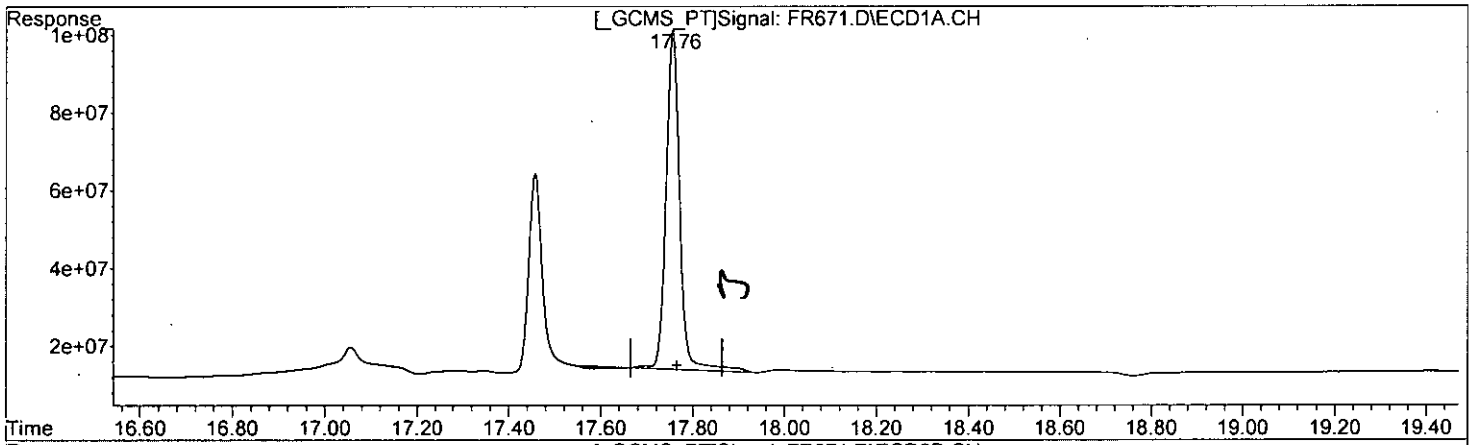
(+) = Expected Retention Time
8081E072514.M Thu Oct 09 09:16:18 2014 Page: 1

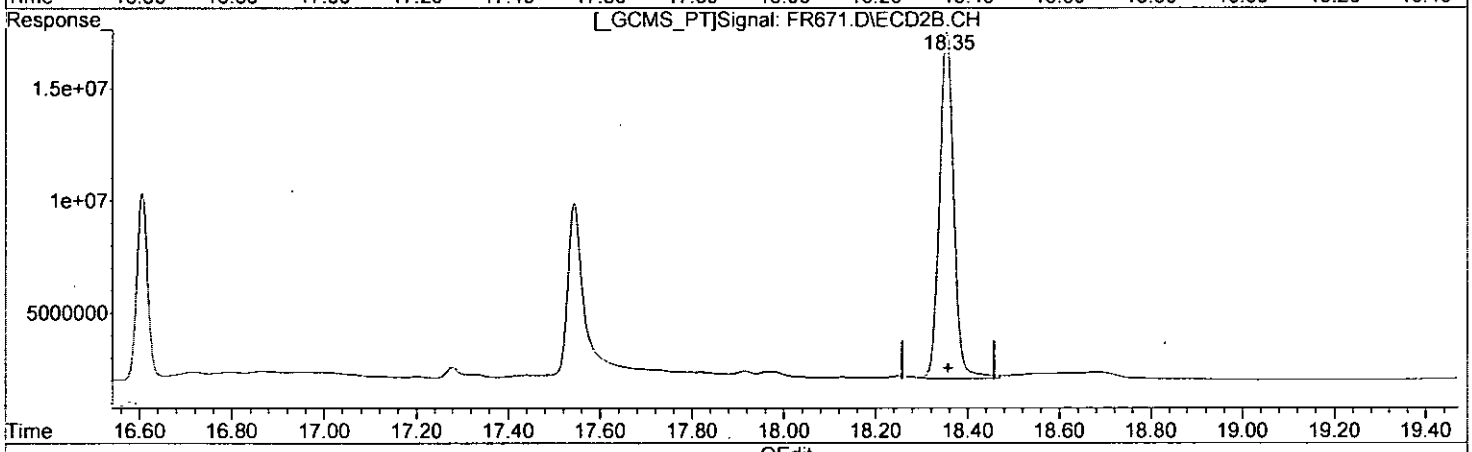
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR671.D
Acq On : 08 Oct 2014 6:17 pm
Operator : m.pedro
Sample : RQ1412023-04|1.0 Inst : 6890D
Misc : 219959 100 8081 -001ms
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 09 08:46:17 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(29) SURR2,Decachlorobiphenyl (S)

17.76min 46.008ug/l

response 1792256269

(29) SURR2,Decachlorobiphenyl #2 (S)

18.35min 41.821ug/l

response 333365049

(+) = Expected Retention Time
8081E072514.M Thu Oct 09 09:16:24 2014 Page: 1

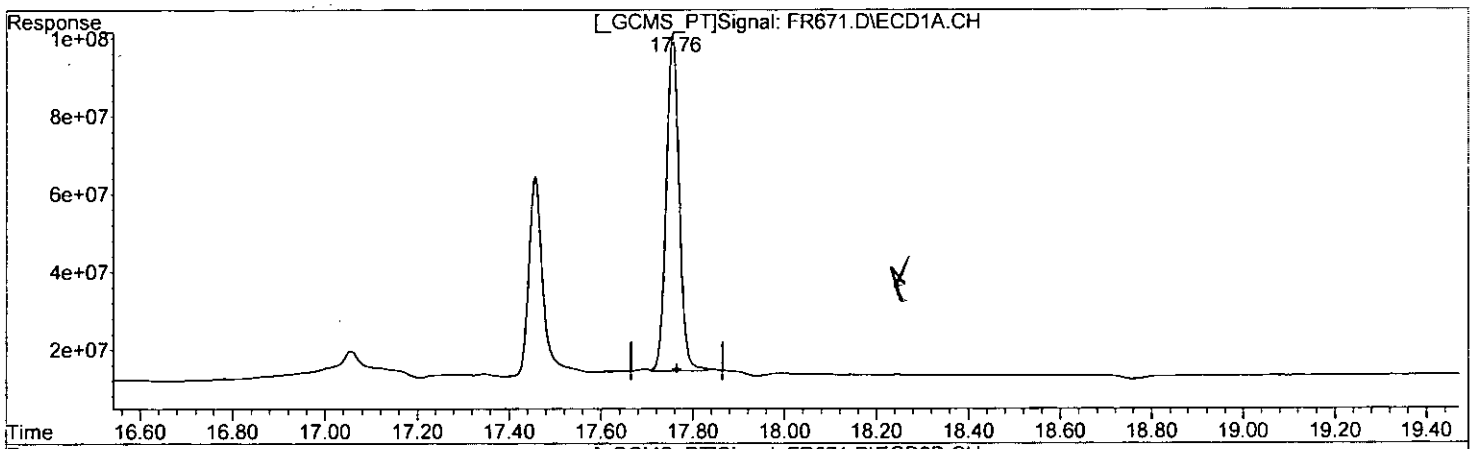
00702

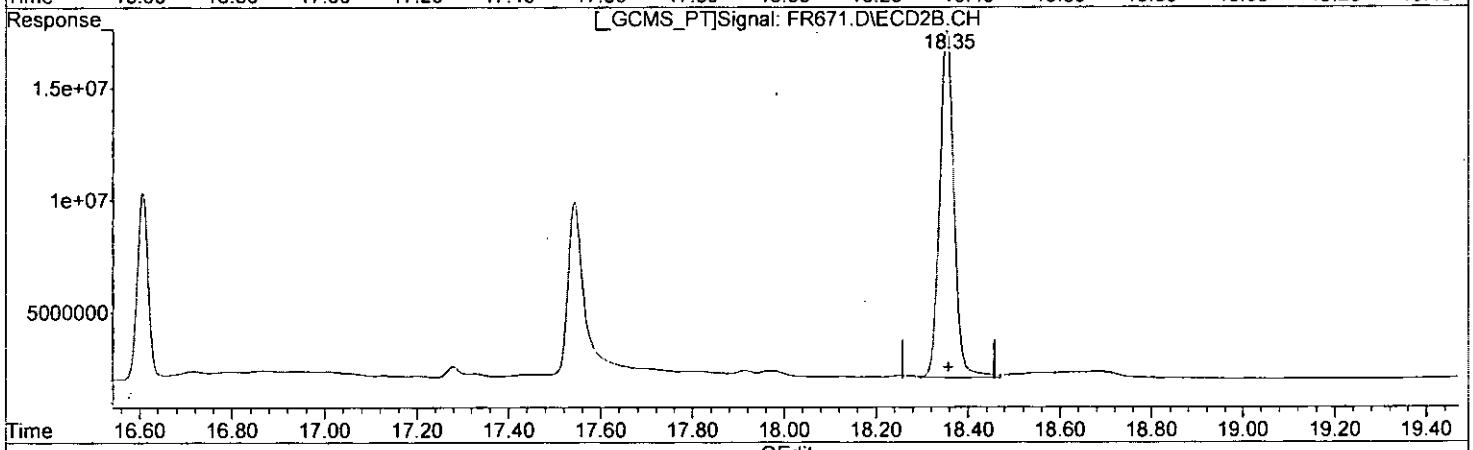
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR671.D
Acq On : 08 Oct 2014 6:17 pm
Operator : m.pedro
Sample : RQ1412023-04|1.0 Inst : 6890D
Misc : 219959 100 8081 -001ms
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 09 08:46:17 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m





QEdit

(29) SURR2,Decachlorobiphenyl (S)

17.76min 43.625ug/l m

response 1699458256

(29) SURR2,Decachlorobiphenyl #2 (S)

18.35min 41.821ug/l

response 333365049

(+) = Expected Retention Time
8081E072514.M Thu Oct 09 09:16:30 2014 Page: 1

Client:	Parsons Engineering Science	**Service Request:**	R1407813
Project:	FTMM 4QGW/748810-03000	**Date Collected:**	10/ 1/14 1105
Sample Matrix:	Water	**Date Received:**	10/ 3/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 18:51
Sample Name:	FTMM-8-GW-697MW01-16.45	**Units:**	µg/L
Lab Code:	RQ1412023-05	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Organochlorine Pesticides by Gas Chromatography

Analytical Method:	8081B	**Analysis Lot:**	415375
Prep Method:	EPA 3510C	**Extraction Lot:**	219959
Data File Name:	I:\ACQUDATA\6890D\DATA\100814\FR672.D\	**Instrument Name:**	R-GC-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
72-54-8	4,4'-DDD	**1.16**		0.050	0.025	0.025	
72-55-9	4,4'-DDE	**0.215**		0.050	0.025	0.025	
50-29-3	4,4'-DDT	**0.185**		0.050	0.025	0.025	
309-00-2	Aldrin	**0.160**		0.050	0.025	0.025	
60-57-1	Dieldrin	**0.191**		0.050	0.025	0.025	
959-98-8	Endosulfan I	**0.209**		0.050	0.025	0.025	
33213-65-9	Endosulfan II	**0.190**		0.050	0.025	0.025	
1031-07-8	Endosulfan Sulfate	**0.179**		0.050	0.025	0.025	
72-20-8	Endrin	**0.210**		0.050	0.025	0.025	
7421-93-4	Endrin Aldehyde	**0.0309**	J	0.050	0.025	0.025	
53494-70-5	Endrin Ketone	**0.175**		0.050	0.035	0.035	
76-44-8	Heptachlor	**0.176**		0.050	0.025	0.025	
1024-57-3	Heptachlor Epoxide	**0.229**		0.050	0.025	0.025	
72-43-5	Methoxychlor	**0.140**	J	0.50	0.025	0.025	
8001-35-2	Toxaphene	ND	U	1.0	0.50	0.27	
319-84-6	alpha-BHC	**0.173**		0.050	0.025	0.025	
5103-71-9	alpha-Chlordane	**0.458**		0.050	0.025	0.025	
319-85-7	beta-BHC	**0.176**		0.050	0.028	0.028	
319-86-8	delta-BHC	**0.170**		0.050	0.025	0.025	
58-89-9	gamma-BHC (Lindane)	**0.177**		0.050	0.025	0.025	
5566-34-7	gamma-Chlordane	**0.449**		0.050	0.045	0.045	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	43	30-135	10/8/14 18:51	
Tetrachloro-m-xylene	79	25-140	10/8/14 18:51	

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR672.D
Acq On : 08 Oct 2014 6:51 pm
Operator : m.pedro
Sample : RQ1412023-05|1.0 Inst : 6890D
Misc : 219959 100 8081 -001msd
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 09 09:17:00 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l	
	System Monitoring Compounds							
1) S	SURR1,Tetrac	9.46	9.51	5182.9E6	749.6E6	78.680	81.351	
	Spiked Amount 100.000	Range 30 - 150		Recovery =		78.68%	81.35%	
29) S	SURR2,Decachloro	17.76	18.35	1785.8E6	340.8E6	45.842	42.752	
	Spiked Amount 100.000	Range 30 - 150		Recovery =		45.84%	42.75%	
	Target Compounds							
2) TC	HEXACHLOROBENZEN	10.16	10.35	1316.0E6	168.5E6	18.371	17.325	
3) tc	alpha-BHC	10.46	10.61	1704.5E6	226.7E6	17.748	17.296	
4) tcm	gamma-BHC (L	10.99	11.19	1542.8E6	208.6E6	18.331	17.679	
5) tcm	Heptachlor	11.75	11.86	1528.3E6	204.8E6	19.357	17.579	
6) tcm	Aldrin	12.22	12.35	1165.9E6	164.5E6	16.596	15.974	
7) tc	beta-BHC	11.14	11.34	636.7E6	94979903	17.617	17.963	
8) tc	delta-BHC	11.42	11.79	1532.2E6	194.5E6	18.653	16.979	
9) tc	Heptachlor E	13.14	13.21	2207.2E6	217.7E6	36.790	22.891	#
10) tc	alpha-Endosu	13.73	13.79	1223.5E6	177.3E6	23.211	20.859	
11) tc	gamma-Chlord	13.32	13.49	3070.5E6	438.0E6	50.049	44.887	
12) tc	alpha-Chlord	13.52	13.70	3091.9E6	426.1E6	54.054	45.844	
13) tc	4,4'-DDE	13.63	13.95	1187.4E6	219.9E6	21.482	25.254	
14) tcm	Dieldrin	14.08	14.20	1206.8E6	173.7E6	21.833	19.127	
15) tcm	Endrin	14.44	14.66	1002.2E6	141.7E6	24.417	20.995	
17) tc	beta-Endosul	14.78	14.98	950.8E6	148.7E6	21.258	19.039	
18) tc	4,4'-DDD	14.51	14.80	5177.6E6	827.0E6	119.667	116.107	
19) tcm	4,4'-DDT	14.93	15.27	1174.5E6	143.5E6	26.367	18.492	#
20) tc	Endrin Aldeh	15.41	15.48	108.1E6	20266540	3.092	3.165	
21) tc	Endosulfan S	16.03	15.87	713.1E6	127.3E6	19.256	17.943	
22) tc	Methoxychlor	15.61	16.21	426.1E6	55152283	19.755	14.025	#
24) tc	Endrin Keton	16.42	16.61	886.3E6	150.4E6	18.586	17.535	
Sum	Toxaphene			0	0	N.D.	N.D.	
Average	Toxaphene					0.000	0.000	
Sum	Chlordane			0	0	N.D.	N.D.	
Average	Chlordane					0.000	0.000	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

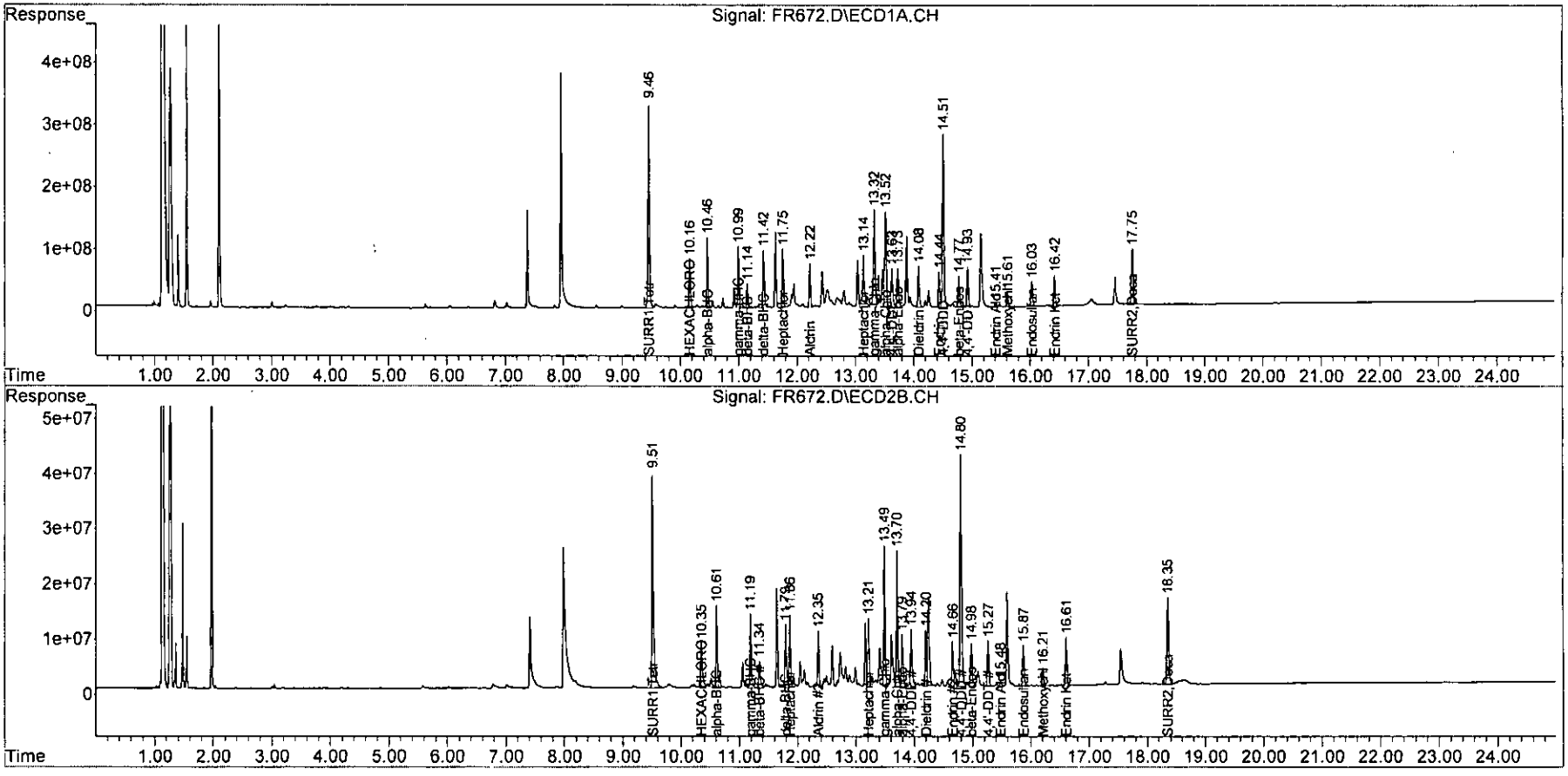
8081E072514.M Thu Oct 09 10:08:59 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\6890D\DATA\100814\
Data File : FR672.D
Acq On : 08 Oct 2014 6:51 pm
Operator : m.pedro
Sample : RQ1412023-05|1.0 Inst : 6890D
Misc : 219959 100 8081 -001msd
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 09 09:17:00 2014
Quant Method : I:\ACQUDATA\6890D\METHODS\8081E072514.M
Quant Title : 608/8081B PESTICIDES
QLast Update : Thu Oct 09 08:45:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1uL
Signal #1 Phase : STx-CLP Signal #2 Phase: STx-CLPII
Signal #1 Info : 0.32mm 30m Signal #2 Info : 0.32mm 30m



90709

8081E072514.M Thu Oct 09 10:09:00 2014 Page: 2

Preparation Information Benchsheet

Prep Run#: 219959 **Prep WorkFlow:** OrgExtAq(7) **Status:** Prepped
Team: Semivoa GC/DMURPHY **Prep Method:** EPA 3510C **Prep Date/Time:** 10/7/14 05:47 AM

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ1412023-01	MB		1000mL	608 Modified/PCB	6			10.00mL	clear-colorless	1.0000 mL/74606	
2	RQ1412023-01	MB		1000mL	608 Modified/PEST_OC	6			10.00mL	clear-colorless	1.0000 mL/74606	
3	RQ1412023-01	MB		1000mL	8081B/Pest OC	6			10.00mL	clear-colorless	1.0000 mL/74606	
4	RQ1412023-01	MB		1000mL	8082A/PCB	6			10.00mL	clear-colorless	1.0000 mL/74606	
5	RQ1412023-02	LCS		1000mL	608 Modified/PCB	6			10.00mL	clear-colorless	1.0000 mL/70612; 1.0000 mL/74930; 1.0000 mL/74606; 1.0000 mL/74656	
6	RQ1412023-02	LCS		1000mL	608 Modified/PEST_OC	6			10.00mL	clear-colorless	1.0000 mL/74606; 1.0000 mL/72157; 1.0000 mL/74930; 1.0000 mL/74656	
7	RQ1412023-02	LCS		1000mL	8081B/Pest OC	6			10.00mL	clear-colorless	1.0000 mL/74606; 1.0000 mL/74930; 1.0000 mL/72157; 1.0000 mL/74656	
8	RQ1412023-02	LCS		1000mL	8082A/PCB	6			10.00mL	clear-colorless	1.0000 mL/70612; 1.0000 mL/74606	
9	RQ1412023-03	DLCS		1000mL	608 Modified/PCB	6			10.00mL	clear-colorless	1.0000 mL/74606; 1.0000 mL/70612	
10	RQ1412023-03	DLCS		1000mL	608 Modified/PEST_OC	6			10.00mL	clear-colorless	1.0000 mL/74606; 1.0000 mL/74930; 1.0000 mL/74656; 1.0000 mL/72157	
11	RQ1412023-03	DLCS		1000mL	8081B/Pest OC	6			10.00mL	clear-colorless	1.0000 mL/72157; 1.0000 mL/74930; 1.0000 mL/74656; 1.0000 mL/74606	
12	RQ1412023-03	DLCS		1000mL	8082A/PCB	6			10.00mL	clear-colorless	1.0000 mL/74606; 1.0000 mL/70612; 1.0000 mL/74656	
13	R1407714-001	ONTARIO COUNTY WWTP LAGOON	.04	1060mL	8081B/Pest OC	8			10.00mL	black-opaque	1.0000 mL/74606	
14	R1407714-001	ONTARIO COUNTY WWTP LAGOON	.04	1060mL	8082A/PCB	7			10.00mL	black-opaque	1.0000 mL/74606	
15	R1407762-001	MH2	.18	1060mL	608 Modified/PCB	7			10.00mL	yellow-cloudy	1.0000 mL/74606	
16	R1407762-001	MH2	.18	1060mL	608 Modified/PEST_OC	7			10.00mL	yellow-cloudy	1.0000 mL/74606	
17	R1407813-001	FTMM-8-GW-697MW01-16.45	.01	1000mL	8081B/Pest OC	7			10.00mL	yellow-cloudy	1.0000 mL/74606	
18	RQ1412023-04	R1407813-001 MS	.02	1000mL	8081B/Pest OC	7			10.00mL	yellow-cloudy	1.0000 mL/74606; 1.0000 mL/74656	
19	*RQ1412023-05*	*R1407813-001 DMS*	.07	*1000mL*	*8081B/Pest OC*	7			10.00mL	yellow-cloudy	1.0000 mL/74606; 1.0000 mL/74656	
20	R1407813-007	FTMM-56-GW-80MW05-7.14	.01	1000mL	8081B/Pest OC	7			10.00mL	orange-opaque	1.0000 mL/74606	
21	R1407813-010	FTMM-EB-100114-01	.06	1000mL	8081B/Pest OC	7			10.00mL	clear-colorless	1.0000 mL/74606	

Preparation Information Benchsheet

Prep Run#: 219959 **Prep WorkFlow:** OrgExtAq(7) **Status:** Prepped
Team: Semivoa GC/DMURPHY **Prep Method:** EPA 3510C **Prep Date/Time:** 10/7/14 05:47 AM

22	R1407813-012	FTMM-56-GW-80MW105 7.14	.01	1000mL	8081B/Pest OC	7			10.00mL	orange-opaque	1.0000 mL/74606	
23	R1407829-001	OBA-9AR-1014 1/1000	.01	1060mL	8081B/Pest OC	7			10.00mL	yellow-cloudy	1.0000 mL/74606	
24	R1407829-002	Influent-1014 1/100	.01	1060mL	8081B/Pest OC	7			10.00mL	yellow-cloudy	1.0000 mL/74606	
25	R1407829-003	GAC-SP1-1014 100	.01	1060mL	8081B/Pest OC	7			10.00mL	orang-cloudy	1.0000 mL/74606	
26	R1407829-004	GAC-SP4-1014	.02	1060mL	8081B/Pest OC	7			10.00mL	yellow-cloudy	1.0000 mL/74606	
27	R1407829-005	GAC-SP3-1014	.01	1060mL	8081B/Pest OC	7			10.00mL	yellow-cloudy	1.0000 mL/74606	
28	R1407829-006	RW5-1014 1/1000	.02	1060mL	8081B/Pest OC	7			10.00mL	yellow-cloudy	1.0000 mL/74606	
29	R1407829-007	RW5D-1014 1/500	.01	1060mL	8081B/Pest OC	7			10.00mL	yellow-cloudy	1.0000 mL/74606	
30	R1407829-008	PR12-1014 1/500	.02	1060mL	8081B/Pest OC	7			10.00mL	yellow-cloudy	1.0000 mL/74606	
31	R1407829-009	RW4-1014 1/50	.01	1060mL	8081B/Pest OC	7			10.00mL	orange-opaque	1.0000 mL/74606	
32	R1407829-010	RW3-1014 1/5	.02	1060mL	8081B/Pest OC	7			10.00mL	clear-colorless	1.0000 mL/74606	
33	R1407829-011	RW2-1014 5	.01	1060mL	8081B/Pest OC	7			10.00mL	clear-colorless	1.0000 mL/74606	
34	RQ1412023-06	R1407829-011 MS	.10	1060mL	8081B/Pest OC	7			10.00mL	clear-colorless	1.0000 mL/74930; 1.0000 mL/72157; 1.0000 mL/74606; 1.0000 mL/74656	
35	RQ1412023-07	R1407829-011 DMS	.09	1060mL	8081B/Pest OC	7			10.00mL	clear-colorless	1.0000 mL/74656; 1.0000 mL/74606; 1.0000 mL/74930; 1.0000 mL/72157	
36	R1407829-012	RW1-1014 1/50	.02	1060mL	8081B/Pest OC	7			10.00mL	yellow-cloudy	1.0000 mL/74606	
37	R1407829-013	PR4-1014 1/100	.04	1060mL	8081B/Pest OC	7			10.00mL	yellow-cloudy	1.0000 mL/74606	

Spiking Solutions

Name:	8082 Spike 5 ug/mL AR 1260	Inventory ID	70612	Logbook Ref:		Expires On:	11/15/2014
Name:	Mirex LCS Spike 200 ppb	Inventory ID	72157	Logbook Ref:		Expires On:	11/30/2014
Name:	8081/8082 Surrogate Spike STD 1 ug/mL	Inventory ID	74606	Logbook Ref:		Expires On:	03/09/2015
Name:	608 LCS Spike STD	Inventory ID	74656	Logbook Ref:		Expires On:	11/30/2014
Name:	Kepone/Famphur Spike STD GCEXT	Inventory ID	74930	Logbook Ref:		Expires On:	03/21/2015

Preparation Materials

Eppendorf Pipette Repeater	EXT #14 (61350)	2mL Graduated Vials	(75296)	Sulfuric Acid Reagent Grade H2SO4	(75114)
Hexanes 95%	(73872)	Dichloromethane (Methylene Chloride) 99.9% MeCl2	canister (75393)	Prepared Sodium Sulfate Na2SO4	(75341)
Prepared Tetrabutylammonium hydrogen sulfate (TBA)	(75160)				

80709

Prep Run#: 219959 **Prep WorkFlow:** OrgExtAq(7) **Status:** Prepped

Team: Semivoa GC/DMURPHY **Prep Method:** EPA 3510C **Prep Date/Time:** 10/7/14 05:47 AM

Preparation Steps

Step:	Extraction	Step:	Concentration	Step:	Acid Clean-EPA 3665A	Step:	Sulfur Clean-EPA 3660B	Step:	Final Volume
Started:	10/7/14 05:47	Started:	10/7/14 14:10	Started:	10/7/14 19:10	Started:	10/7/14 18:10	Started:	10/7/14 19:43
Finished:	10/7/14 14:33	Finished:	10/7/14 16:15	Finished:	10/7/14 19:10	Finished:	10/7/14 18:25	Finished:	10/7/14 19:43
By:	DMURPHY	By:	SGOLBERG	By:	SGOLBERG	By:	SGOLBERG	By:	SGOLBERG
Comments		Comments		Comments		Comments		Comments	

Comments: _____

Reviewed By: MPedro Date: 10/9 Spike Witness: MPEDRO Date: _____

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Appendix P

Analysis: 8081 Analyst: MRao Run Method: 8081

Date: 7/25/14 Instr. 6890D Quant Method: 8081E 073514

LIMS Run#:

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
1	PIBlk			FR475	Y	
2	Rem		69717	476	Y	
3	CeV			477	N	
4	2ppb pest		71539	478	Y	
5	5ppb pest		71538	479	Y	
6	10ppb pest		71537	480	Y	
7	50ppb pest		71536	481	Y	
8	100ppb pest		71535	482	Y	
9	200ppb pest		71534	483	Y	
10	pest ICV		686088	484	YQ	
11	K/f L		71551	485	Y	
12	ML		71550	486	Y	
13	M		71548	487	Y	
14	MH		71547	488	Y	
15	H		71546	489	Y	
16	K/f ICV		72079	490	YQ	
17	Mirex ICV		71587	491	YQ	
18	Tox LL		71545	492	Y	
19	L		71544	493	Y	
20	M		71543	494	Y	
21	MH		71542	495	Y	
22	H		71541	496	Y	
23			71540	497	YQ	
24	Tox ICV		71585	498	YQ	
25	Chlor L		673588	499	Y	
26	ML		673589	500	Y	
27	M		673590	501	Y	
28	MH		673591	502	Y	
29	H		673592	503	Y	
30	ICV		686090	504	YQ	

8/1/14

All samples = _____mL + _____uL Combined IS/Surr.;

Primary :_____ exp: Secondary :_____ exp:

Primary:_____ exp: Secondary :_____ exp:

Analysis: 8081 Analyst: LDD Run Method: 8081
Date: 10/9 Instr. 6890D Quant Method: 8081E072514
LIMS Run#: 965375

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
	Rbl			FRI0602		
	Dem		73150	0603		
	Cal 15		73099	0604	YC	Endrin ↑ F.C. ↑F.C for 0606
	RQ1412023-01			0605	Y	
	02			0606	Y	Endosul. 1 ↑ B.C. for DDD Endrin Ald. also ↑ DDD
	03			0607	Y	
	R1407714-001			0608	Y	
	R1407703-001			0609	Y	
	R1407813-001			0610	Y	
	RQ1412023-04			0611	Y	endosul ↑ B.C. for DDD
	05			0612	Y	endosul ↑ F.C
	R1407813-001			0613	Y	
	R1407813-010			0614	Y	
	CCV16		73099	0615	Y	Endrun ↑ F.C. Methox. 715 for 0616
	R1407813-012			0616	Y	
	R1407839-001	1000		0617	Y	
	002	100		0618	Y	
	003	100		0619	Y	
	004	10		0620	N	1/10
	005	1.0		0621	N	1/10
	006	250		0622	Y	
	007	250		0623	Y	
	008	500		0624	N	1/100
	009	50		0625	Y	
	CCV17		73099	0626	YC	Endrun ↑ F.C. Heptach ↑ B.C
	R1407839-010	5		0627	Y	1/10
	011	1.0		0628	Y	
	RQ1412023-06			0629	Y	
	07			0630	Y	
	R1407839-013	50		0631	BN	1/25
	013	100		0632	Y	
	CCV18		73099	0633	YC	Endrun ↑ F.C Hept ↑ B.C.
	RQ1412023-02			0634	Y	
	03			0635	Y	
	K/F med			0636	YC	

All samples = _____mL + _____uL Combined IS/Surr.;

Primary :_____ exp: Secondary :_____ exp:
Primary:_____ exp: Secondary :_____ exp:

Runlog GCEXT rl 12/5/12

ALS Environmental

METALS DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

METALS

COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: R1407813 SDG No.: FTMM-8-GW-6

Lab Code: _____ Case No.: _____ SAS No.: _____

SOW No.: SW846 CLP-M

Sample ID.	Lab Sample No.
FTMM-8-GW-697MW01-16.45	R1407813-001
FTMM-8-GW-697MW01-16.45D	R1407813-001D
FTMM-8-GW-697MW01-16.45S	R1407813-001S
FTMM-56-GW-80MW02-8.10	R1407813-009
FTMM-EB-100114-01	R1407813-010
FTMM-8-GW-M8MW17-10.90	R1407813-016
FTMM-8-GW-M8MW21-14.31	R1407813-017
FTMM-EB-100214	R1407813-026

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: See Attatched Case Narrative

Signature: [signature] Name: Janice Jaeger

Date: 10/30/14 Title: Project Manager

00713

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Parsons Engineering Science	**Service Request:**	FTMM-8-GW-697-MW01-16.45
Project No.:	R1407813	**Date Collected:**	10/1/2014
Project Name:		**Date Received:**	10/3/2014
Matrix:	WATER	**Units:**	ug/L
		Basis:	

Sample Name: FTMM-8-GW-697MW01-16.45 **Lab Code:** R1407813-001

Analyte	Analysis Method	PQL	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6010C	5.0	2.5	0.807	1.0	10/08/14	10/14/14	2.5	U	

% Solids: 0.0

Comments:

00714

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Parsons Engineering Science	**Service Request:**	FTMM-8-GW-697-MW01-16.45
Project No.:	R1407813	**Date Collected:**	10/1/2014
Project Name:		**Date Received:**	10/3/2014
Matrix:	WATER	**Units:**	ug/L
		Basis:	

Sample Name: FTMM-56-GW-80MW02-8.10 **Lab Code:** R1407813-009

Analyte	Analysis Method	PQL	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6010C	10.0	5.0	1.4	1.0	10/08/14	10/14/14	6.0	J	
Cadmium	6010C	5.0	2.5	0.071	1.0	10/08/14	10/14/14	0.542	J	
Lead	6010C	5.0	2.5	0.807	1.0	10/08/14	10/14/14	1.9	J	

% Solids: 0.0

Comments:

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Parsons Engineering Science	**Service Request:**	FTMM-8-GW-697-MW01-16.45
Project No.:	R1407813	**Date Collected:**	10/1/2014
Project Name:		**Date Received:**	10/3/2014
Matrix:	WATER	**Units:**	ug/L
		Basis:	

Sample Name: FTMM-EB-100114-01 **Lab Code:** R1407813-010

Analyte	Analysis Method	PQL	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	6010C	10.0	5.0	1.4	1.0	10/08/14	10/14/14	5.0	U	
Cadmium	6010C	5.0	2.5	0.071	1.0	10/08/14	10/14/14	2.5	U	
Lead	6010C	5.0	2.5	0.807	1.0	10/08/14	10/14/14	2.5	U	

% Solids: 0.0

Comments:

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Parsons Engineering Science	**Service Request:**	FTMM-8-GW-697-MW01-16.45
Project No.:	R1407813	**Date Collected:**	10/2/2014
Project Name:		**Date Received:**	10/3/2014
Matrix:	WATER	**Units:**	ug/L
		Basis:	

Sample Name: FTMM-8-GW-M8MW17-10.90 **Lab Code:** R1407813-016

Analyte	Analysis Method	PQL	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6010C	5.0	2.5	0.807	1.0	10/08/14	10/14/14	2.5	U	

% Solids: 0.0

Comments:

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Parsons Engineering Science	**Service Request:**	FTMM-8-GW-697-MW01-16.45
Project No.:	R1407813	**Date Collected:**	10/2/2014
Project Name:		**Date Received:**	10/3/2014
Matrix:	WATER	**Units:**	ug/L
		Basis:	

Sample Name: FTMM-8-GW-M8MW21-14.31 **Lab Code:** R1407813-017

Analyte	Analysis Method	PQL	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6010C	5.0	2.5	0.807	1.0	10/08/14	10/14/14	2.5	U	

% Solids: 0.0

Comments:

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Parsons Engineering Science	**Service Request:**	FTMM-8-GW-697-MW01-16.45
Project No.:	R1407813	**Date Collected:**	10/2/2014
Project Name:		**Date Received:**	10/3/2014
Matrix:	WATER	**Units:**	ug/L
		Basis:	

Sample Name: FTMM-EB-100214 **Lab Code:** R1407813-026

Analyte	Analysis Method	PQL	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6010C	5.0	2.5	0.807	1.0	10/08/14	10/14/14	2.5	U	

% Solids: 0.0

Comments:

METALS
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R1407813

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-8-GW-69

Initial Calibration Source: PERKIN ELMER

Continuing Calibration Source: PERKIN ELMER

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic	1000	996	100	1000	1000	100	993	99	P
Cadmium	500	516	103	500	504	101	507	101	P
Lead	500	501	100	500	497	99	502	100	P

Comments:

METALS
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R1407813

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-8-GW-69

Initial Calibration Source: PERKIN ELMER

Continuing Calibration Source: PERKIN ELMER

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				1000	980	98	1000	100	P
Cadmium				500	510	102	512	102	P
Lead				500	498	100	502	100	P

Comments:

METALS
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R1407813

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-8-GW-69

Initial Calibration Source: PERKIN ELMER

Continuing Calibration Source: PERKIN ELMER

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				1000	999	100	988	99	P
Cadmium				500	517	103	515	103	P
Lead				500	506	101	507	101	P

Comments:

00722

METALS
-2B-
CRDL STANDARD FOR AA AND ICP

Contract: R1407813

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FTMM-8-GW-69

AA CRDL Standard Source: ACCUSTANDARD

ICP CRDL Standard Source:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Arsenic				20.0	20.49	102	21.22	106
Cadmium				10.0	10.65	106	10.90	109
Lead				10.0	10.27	103	10.28	103

Comments:

METALS

-3-

BLANKS

Contract: R1407813

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-8-GW-69

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic	1.38	U	2.93	J	1.49	J	1.38	U	1.380	U	P
Cadmium	0.61	J	0.41	J	0.53	J	0.17	J	-0.156	J	P
Lead	1.27	J	0.89	J	0.81	U	1.62	J	0.807	U	P

Comments:

METALS

-3-

BLANKS

Contract: R1407813

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-8-GW-69

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic			1.38	U	1.38	U	1.38	U			P
Cadmium			0.27	J	0.31	J	0.20	J			P
Lead			0.81	U	0.81	U	0.81	U			P

Comments:

METALS

-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: R1407813

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-8-GW-69

ICP ID Number: Optima ICP 3 ICS Source: PERKIN ELMER

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Arsenic		100	2.5	98	98	-0.4	98	98
Cadmium		1000	1.3	979	98	1.0	987	99
Lead		50	0.1	51	102	1.7	52	104

METALS

- 5A -

SPIKE SAMPLE RECOVERY

Client:	Parsons Engineering Science	**Service Request:**	FTMM-8-GW-697-MW01-16.45
Project No.:	R1407813	**Units:**	UG/L
Project Name:	NA	**Basis:**	
Matrix:	WATER	**% Solids:**	0.0

Sample Name: FTMM-8-GW-697MW01-16.45S **Lab Code:** R1407813-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Lead	86 - 113	497.00		2.50	U	500.00	99		6010C

An empty field in the Control Limit column indicates the control limit is not applicable

METALS

- 5B -

POST SPIKE SAMPLE RECOVERY

Client: Parsons Engineering Science **Service Request:** FTMM-8-GW-697-MW01-16.45

Project No.: R1407813 **Units:** UG/L

Project Name: NA **Basis:**

Matrix: WATER

Sample Name: FTMM-8-GW-697MW01-16.45A **Lab Code:** R1407813-001A

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Lead	80 - 120	473.00		2.50	U	500.0	95		6010C

ALS Environmental

METALS

- 6 -

DUPLICATES

Client: Parsons Engineering Science
Service Request: FTMM-8-GW-697-MW01-16.45
Project No.: R1407813
Units: UG/L
Project Name: NA
Basis:
Matrix: WATER
% Solids: 0.0

Sample Name: FTMM-8-GW-697MW01-16.45D **Lab Code:** R1407813-001D

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Lead		2.50	U	2.50	U			6010C

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS

-7-

LABORATORY CONTROL SAMPLE

Contract: R1407813

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-8-GW-69

Solid LCS Source: _____

Aqueous LCS Source: CPI

Analyte	Aqueous (ug/L			Solid (mg/K				
	True	Found	%R	True	Found	C	Limits	%R
Arsenic	40	38	95					
Cadmium	50	51	102					
Lead	500	506	101					

Comments: _____

METALS

- 9 -

ICP SERIAL DILUTIONS

Client: Parsons Engineering Science **Service Request:** FTMM-8-GW-697-MW01-16.45

Project No.: R1407813 **Units:** UG/L

Project Name:

Sample Name: FTMM-8-GW-697MW01-16.45L **Lab Code:** R1407813-001L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Lead	0.81	U	4.04	U			P

METALS

- 10 -

DETECTION LIMITS

Client: Parsons Engineering Science **Service Request:** FTMM-8-GW-697-MW01-16.45

Project No.: R1407813

Project Name:

ICP/ICP-MS ID #: Optima ICP 3

GFAA ID #: **AA ID #:**

Analyte	Wave-length (nm)	Back-ground	PQL ug/L	LOD ug/L	MDL ug/L	M
Arsenic	188.979		10.0	5.0	1.4	P
Cadmium	226.502		5.0	2.5	0.1	P
Lead	220.353		5.0	2.5	0.8	P

Comments:

METALS

-11A-

ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Contract: R1407813

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-8-GW-69

ICP ID Number: Optima ICP 3 Date: 7/29/2014

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg
Aluminum	308.215	0.0000000	0.1537940	-0.4552140	0.0000000
Antimony	206.836	0.0888670	0.0000000	0.0000000	0.0000000
Arsenic	188.979	0.0000000	0.0000000	0.0000000	0.0000000
Barium	233.527	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.107	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.772	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	-0.0031273	0.0000000	0.1413190	0.0000000
Calcium	227.546	-2.8913901	0.0000000	-58.5192986	0.0000000
Chromium	267.716	0.0000000	0.0000000	-0.0457881	-0.0981711
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.752	0.0000000	0.0000000	-0.0931560	0.0000000
Iron	259.939	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	-0.1117000	0.0000000	0.0312244	0.0000000
Magnesium	279.077	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	-0.1330120	0.0000000
Molybdenum	202.031	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	-0.0171731	0.0000000	-0.2282150	0.0000000
Silver	328.068	0.0000000	0.0000000	-0.2758050	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.801	0.0681795	0.0095823	-0.3270760	-0.0098473
Tin	189.927	0.1167290	0.0000000	0.0000000	0.0000000
Titanium	337.279	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0278136	0.0000000
Zinc	206.200	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

00733

METALS
-12-
ICP LINEAR RANGES (QUARTERLY)

Contract: R1407813

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-8-GW-69

ICP ID Number: Optima ICP 3 Date: 5/20/2014

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Arsenic	0.200	4000	P
Cadmium	0.200	2000	P
Lead	0.200	10000	P

Comments: _____

METALS

-13-

PREPARATION LOG

Contract: R1407813

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-8-GW-697-MW0

Method: P

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
LCSW	10/8/2014	50.0	50.0
PBW	10/8/2014	50.0	50.0
FTMM-8-GW-697MW01-16	10/8/2014	50.0	50.0
FTMM-8-GW-697MW01-16	10/8/2014	50.0	50.0
FTMM-8-GW-697MW01-16	10/8/2014	50.0	50.0
FTMM-56-GW-80MW02-8.	10/8/2014	50.0	50.0
FTMM-EB-100114-01	10/8/2014	50.0	50.0
FTMM-8-GW-M8MW17-10.	10/8/2014	50.0	50.0
FTMM-8-GW-M8MW21-14.	10/8/2014	50.0	50.0
FTMM-EB-100214	10/8/2014	50.0	50.0

Comments:

METALS
-14-

ANALYSIS RUN LOG

Contract: R1407813

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FTMM-8-GW-69

Instrument ID Number: Optima ICP 3 Method: P

Start Date: 10/14/2014 End Date: 10/15/2014

Sample ID.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Calib Blank 1	1.00	14:06				X			X						X												
Calib Std 1	1.00	14:12				X			X						X												
Calib Std 2	1.00	14:18				X			X																		
Calib Std 3	1.00	14:23																									
Calib Std 4	1.00	14:29				X			X						X												
Calib Std 5	1.00	14:35				X			X						X												
ICV1	1.00	14:41				X			X						X												
ICB1	1.00	14:48				X			X						X												
ZZZZZZ	1.00	14:54																									
ZZZZZZ	1.00	15:00																									
ZZZZZZ	1.00	15:06																									
ZZZZZZ	1.00	15:12																									
ZZZZZZ	1.00	15:18																									
ZZZZZZ	1.00	15:25																									
ZZZZZZ	1.00	15:31																									
ZZZZZZ	5.00	15:37																									
ZZZZZZ	20.00	15:43																									
ZZZZZZ	5.00	15:48																									
ZZZZZZ	5.00	15:55																									
ZZZZZZ	5.00	16:01																									
ZZZZZZ	5.00	16:07																									
ZZZZZZ	5.00	16:13																									
ZZZZZZ	5.00	16:19																									
ZZZZZZ	1.00	16:25																									
ZZZZZZ	1.00	16:32																									
ZZZZZZ	1.00	16:38																									
ZZZZZZ	1.00	16:44																									
ZZZZZZ	1.00	16:50																									
ZZZZZZ	1.00	16:57																									
ZZZZZZ	1.00	17:03																									
ZZZZZZ	1.00	17:09																									
ZZZZZZ	1.00	17:16																									
ZZZZZZ	1.00	17:22																									

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

METALS
-14-

ANALYSIS RUN LOG

Contract: R1407813

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FTMM-8-GW-69

Instrument ID Number: Optima ICP 3 Method: P

Start Date: 10/14/2014 End Date: 10/15/2014

Sample ID.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	17:28																												
ZZZZZZ	1.00	17:34																												
ZZZZZZ	1.00	17:40																												
ZZZZZZ	1.00	17:46																												
ZZZZZZ	1.00	17:52																												
ZZZZZZ	1.00	17:58																												
ZZZZZZ	10.00	18:04																												
ZZZZZZ	1.00	18:10																												
ZZZZZZ	1.00	18:17																												
ZZZZZZ	1.00	18:24																												
ZZZZZZ	1.00	18:30																												
ZZZZZZ	1.00	18:36																												
ZZZZZZ	1.00	18:42																												
ZZZZZZ	1.00	18:48																												
ZZZZZZ	1.00	18:54																												
ZZZZZZ	5.00	19:00																												
ZZZZZZ	1.00	19:06																												
ZZZZZZ	1.00	19:12																												
ZZZZZZ	1.00	19:18																												
ZZZZZZ	1.00	19:25																												
CCV1	1.00	19:31				X			X						X															
CCB1	1.00	19:37				X			X						X															
CRDL1	1.00	19:43				X			X						X															
ICS-A1	1.00	19:49				X			X						X															
ICS-AB1	1.00	19:55				X			X						X															
ZZZZZZ	1.00	20:02																												
ZZZZZZ	1.00	20:08																												
CCV2	1.00	20:14				X			X						X															
CCB2	1.00	20:20				X			X						X															
PBW	1.00	20:26				X			X						X															
LCSW	1.00	20:32				X			X						X															
FTMM-8-GW-697MW01-	1.00	20:39													X															
FTMM-8-GW-697MW01-	1.00	20:45													X															

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

METALS
-14-

ANALYSIS RUN LOG

Contract: R1407813

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FTMM-8-GW-69

Instrument ID Number: Optima ICP 3 Method: P

Start Date: 10/14/2014 End Date: 10/15/2014

Sample ID.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
FTMM-8-GW-697MW01-	1.00	20:51													X															
FTMM-8-GW-697MW01-	1.00	20:57													X															
FTMM-8-GW-697MW01-	5.00	21:03													X															
FTMM-56-GW-80MW02-	1.00	21:09				X			X						X															
FTMM-EB-100114-01	1.00	21:15				X			X						X															
FTMM-8-GW-M8MW17-1	1.00	21:21													X															
CCV3	1.00	21:28				X			X						X															
CCB3	1.00	21:34				X			X						X															
FTMM-8-GW-M8MW21-1	1.00	21:40													X															
FTMM-EB-100214	1.00	21:46													X															
ZZZZZZ	1.00	21:52																												
ZZZZZZ	1.00	21:58																												
ZZZZZZ	1.00	22:04																												
ZZZZZZ	1.00	22:10																												
ZZZZZZ	5.00	22:16																												
ZZZZZZ	1.00	22:22																												
ZZZZZZ	1.00	22:28																												
ZZZZZZ	1.00	22:34																												
CCV4	1.00	22:40				X			X						X															
CCB4	1.00	22:46				X			X						X															
ZZZZZZ	1.00	22:53																												
ZZZZZZ	1.00	22:59																												
ZZZZZZ	1.00	23:05																												
ZZZZZZ	1.00	23:11																												
ZZZZZZ	1.00	23:17																												
ZZZZZZ	1.00	23:23																												
ZZZZZZ	5.00	23:29																												
ZZZZZZ	1.00	23:35																												
ZZZZZZ	1.00	23:41																												
CCV5	1.00	23:48				X			X						X															
CCB5	1.00	23:54				X			X						X															
CRDL2	1.00	00:00				X			X						X															
ICS-A2	1.00	00:06				X			X						X															

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

METALS
-14-

ANALYSIS RUN LOG

Contract: R1407813

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FTMM-8-GW-69

Instrument ID Number: Optima ICP 3 Method: P

Start Date: 10/14/2014 End Date: 10/15/2014

Sample ID.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN				
ICS-AB2	1.00	00:12				X			X						X															
CCV6	1.00	00:18				X			X						X															
CCB6	1.00	00:25				X			X						X															

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Metals Cover Page

Analyst: DCB **Date:** 10/14/14 **Instrument:** Opt 3

Data File: 30ct14A **Reviewed By:** DCB **Entered By:** DCB

Approval: CK 10/15/14

Starlims Run #	Analytes Used	Batch ID	Method	Failed Analytes	Repeats
416266	Ca Na	220161	6010		
416267	Ag Al B Cd Cr Co Fe Ca K	220481	200.7		
	Mg Mn Mo Na Ni Pb Se Zn				
416268	TAL - Sc	220154	6010	Sc	~~R7825 011 Ca~~

Package Data:

Client Sub#	TIER	Analytes Used	Batch ID	Raw Data Copied?
R 7780	III / (IV) / ILM	Ca Na	220161	Yes / No
✓ R 7830	III / (IV) / ILM	As Cd Pb	220154	Yes / No
R 7825	III / (IV) / ILM	DOD-MM TAL-Sc, Co	220154	Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No

Method: DV200-6010C Opt3 Page 1 Date: 10/14/2014 2:10:04 PM

==========

Analysis Begun

Start Time: 10/14/2014 2:06:26 PM Plasma On Time: 10/14/2014 1:24:58 PM
Logged In Analyst: alrce.metals03 Technique: ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077N6051602Autosampler Model: AS-93plus

Sample Information File: C:\pe\Optima5300\Sample Information\ROUTINE2.sif 10/14/14
Batch ID: r DCS
Results Data Set: 30ct14a
Results Library: C:\pe\Optima5300\Results\Oct14.mdb

==========

Method Loaded
Method Name: DV200-6010C Opt3 Method Last Saved: 9/22/2014 7:35:33 AM
IEC File: DV072914.iec MSF File:
Method Description: 5300DV TAL Metals Method 200.7/6010C-Optima 3

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Al 308.215	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
B 249.772	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Cd 226.502	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Fe 259.939	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
K 766.490	Lin Thru 0	Peak Area	Radial	Y 371.029	Yes
Mg 279.077	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Ni 231.604	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Na 589.592	Lin Thru 0	Peak Area	Radial	Y 371.029	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Se 196.026	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Ti 337.279	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 206.200	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Ca 227.546	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Y 371.029	Yes
Al 394.401	Lin Thru 0	Peak Area	Axial	Y 371.029	No
Al 237.313	Lin Thru 0	Peak Area	Axial	Y 371.029	No

==========

Sequence No.: 1 Autosampler Location: 1
Sample ID: Calib Blank 1 Date Collected: 10/14/2014 2:06:27 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: Calib Blank 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	6731549.1	33067.67	0.49%	1.000	mg/L
Ag 328.068†	-249.6	50.30	20.15%	[0.00]	mg/L
Al 308.215†	10812.9	17.64	0.16%	[0.00]	mg/L
As 188.979†	7.1	1.29	18.30%	[0.00]	mg/L
B 249.772†	746.9	85.95	11.51%	[0.00]	mg/L
Ba 233.527†	-463.9	6.09	1.31%	[0.00]	mg/L
Be 313.107†	-12568.9	4.32	0.03%	[0.00]	mg/L
Cd 226.502†	-198.6	6.84	3.44%	[0.00]	mg/L
Co 228.616†	-49.0	2.84	5.80%	[0.00]	mg/L
Cr 267.716†	-313.0	0.55	0.17%	[0.00]	mg/L

00741

Method: DV200-6010C Opt3 Page 2 Date: 10/14/2014 2:21:38 PM

Cu 324.752†	7807.5	6.00	0.08%	[0.00] mg/L
Fe 259.939†	-1562.5	18.54	1.19%	[0.00] mg/L
K 766.490†	609.6	10.44	1.71%	[0.00] mg/L
Mg 279.077†	-3096.8	29.00	0.94%	[0.00] mg/L
Mn 257.610†	-937.0	13.80	1.47%	[0.00] mg/L
Mo 202.031†	19.3	0.86	4.44%	[0.00] mg/L
Ni 231.604†	-254.3	8.13	3.20%	[0.00] mg/L
Na 589.592†	118.8	2.27	1.91%	[0.00] mg/L
Pb 220.353†	-27.1	3.43	12.65%	[0.00] mg/L
Sb 206.836†	46.3	0.72	1.56%	[0.00] mg/L
Se 196.026†	-0.6	1.32	239.53%	[0.00] mg/L
Sn 189.927†	58.1	3.00	5.16%	[0.00] mg/L
Ti 337.279†	236.4	25.94	10.97%	[0.00] mg/L
Tl 190.801†	11.6	5.19	44.79%	[0.00] mg/L
V 292.402†	62.8	11.93	19.02%	[0.00] mg/L
Zn 206.200†	58.6	0.84	1.43%	[0.00] mg/L
Ca 227.546†	-63.5	0.38	0.59%	[0.00] mg/L
Sr 421.552†	150.8	0.97	0.65%	[0.00] mg/L
Al 394.401†	170.9	29.38	17.19%	[0.00] mg/L
Al 237.313†	141.3	9.90	7.01%	[0.00] mg/L

Sequence No.: 2
Sample ID: Calib Std 1
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 9
Date Collected: 10/14/2014 2:12:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	6719102.8	16171.72	0.24%	0.9982	mg/L
As 188.979†	6.0	1.36	22.69%	[0.0050]	mg/L
Ba 233.527†	1695.8	1.72	0.10%	[0.0200]	mg/L
Cd 226.502†	86.5	0.95	1.09%	[0.0010]	mg/L
Co 228.616†	56.9	2.56	4.50%	[0.0030]	mg/L
Cr 267.716†	122.1	12.27	10.06%	[0.0010]	mg/L
Cu 324.752†	2542.3	30.00	1.18%	[0.0100]	mg/L
Mn 257.610†	3612.5	9.78	0.27%	[0.0100]	mg/L
Mo 202.031†	422.4	3.99	0.95%	[0.0250]	mg/L
Ni 231.604†	186.7	1.08	0.58%	[0.0050]	mg/L
Pb 220.353†	29.4	1.83	6.22%	[0.0050]	mg/L
Sb 206.836†	21.3	1.54	7.25%	[0.0100]	mg/L
Se 196.026†	5.2	1.89	36.54%	[0.0050]	mg/L
Tl 190.801†	16.7	0.80	4.82%	[0.0100]	mg/L
V 292.402†	188.9	30.66	16.23%	[0.0030]	mg/L
Zn 206.200†	282.6	0.62	0.22%	[0.0100]	mg/L

Sequence No.: 3
Sample ID: Calib Std 2
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 10
Date Collected: 10/14/2014 2:18:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	6728928.2	33689.19	0.50%	0.9996	mg/L
Al 308.215†	1533.0	33.21	2.17%	[0.100]	mg/L
As 188.979†	13.7	1.33	9.68%	[0.0100]	mg/L
B 249.772†	20806.4	183.40	0.88%	[0.200]	mg/L
Be 313.107†	7052.9	165.35	2.34%	[0.0030]	mg/L
Cd 226.502†	331.0	0.71	0.21%	[0.005]	mg/L
Cu 324.752†	5198.6	95.08	1.83%	[0.0200]	mg/L
K 766.490†	1354.7	1.21	0.09%	[2.000]	mg/L
Mg 279.077†	10280.9	71.32	0.69%	[1.000]	mg/L
Na 589.592†	5440.5	19.03	0.35%	[1.000]	mg/L
Sb 206.836†	119.4	0.42	0.35%	[0.060]	mg/L
Se 196.026†	9.4	0.76	8.02%	[0.0100]	mg/L

09742

Method: DV200-6010C Opt3 Page 3 Date: 10/14/2014 2:33:28 PM

Sn 189.927†	2344.7	15.40	0.66%	[0.500]	mg/L
Ca 227.546†	162.4	1.93	1.19%	[1.000]	mg/L
Al 394.401†	3539.9	86.63	2.45%	[0.1000]	mg/L
Al 237.313†	582.8	2.20	0.38%	[0.1000]	mg/L

Sequence No.: 4
Sample ID: Calib Std 3
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 10/14/2014 2:23:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	6780545.7	20440.31	0.30%	1.007	mg/L
Ag 328.068†	2917.8	13.66	0.47%	[0.0100]	mg/L
B 249.772†	5826.2	25.89	0.44%	[0.0500]	mg/L
Be 313.107†	16360.7	88.28	0.54%	[0.0050]	mg/L
Co 228.616†	1272.0	2.25	0.18%	[0.050]	mg/L
Cr 267.716†	1356.4	6.24	0.46%	[0.010]	mg/L
Fe 259.939†	6437.6	7.80	0.12%	[0.1000]	mg/L
K 766.490†	373.9	34.78	9.30%	[0.5000]	mg/L
Mg 279.077†	5796.3	8.65	0.15%	[0.5000]	mg/L
Ni 231.604†	1958.5	6.68	0.34%	[0.0400]	mg/L
Na 589.592†	3116.5	55.96	1.80%	[0.5000]	mg/L
Sn 189.927†	543.7	0.12	0.02%	[0.1000]	mg/L
Ti 337.279†	32440.1	409.06	1.26%	[0.0500]	mg/L
V 292.402†	3903.1	56.39	1.44%	[0.050]	mg/L
Zn 206.200†	687.4	3.70	0.54%	[0.020]	mg/L
Ca 227.546†	90.1	1.68	1.86%	[0.5000]	mg/L
Sr 421.552†	6428.8	26.34	0.41%	[0.0500]	mg/L

Sequence No.: 5
Sample ID: Calib Std 4
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 10/14/2014 2:29:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	6735283.4	37093.22	0.55%	1.001	mg/L
Ag 328.068†	57720.5	475.32	0.82%	[0.2000]	mg/L
Al 308.215†	63095.8	1011.10	1.60%	[4.0000]	mg/L
As 188.979†	572.6	6.60	1.15%	[0.4000]	mg/L
B 249.772†	122447.8	457.08	0.37%	[1.0000]	mg/L
Ba 233.527†	397708.1	4974.18	1.25%	[4.0000]	mg/L
Be 313.107†	330460.9	4328.51	1.31%	[0.1000]	mg/L
Cd 226.502†	19177.0	79.28	0.41%	[0.2000]	mg/L
Co 228.616†	25292.0	165.25	0.65%	[1.0000]	mg/L
Cr 267.716†	26834.2	150.60	0.56%	[0.2000]	mg/L
Cu 324.752†	147884.8	2131.38	1.44%	[0.5000]	mg/L
Fe 259.939†	129426.0	1146.36	0.89%	[2.0000]	mg/L
K 766.490†	7636.2	22.30	0.29%	[10.000]	mg/L
Mg 279.077†	117432.7	1140.45	0.97%	[10.000]	mg/L
Mn 257.610†	119079.5	1067.24	0.90%	[0.3000]	mg/L
Mo 202.031†	19122.3	167.31	0.87%	[1.0000]	mg/L
Ni 231.604†	39325.8	294.12	0.75%	[0.8000]	mg/L
Na 589.592†	62175.2	261.67	0.42%	[10.000]	mg/L
Pb 220.353†	1371.3	15.00	1.09%	[0.2000]	mg/L
Sb 206.836†	4440.0	38.34	0.86%	[2.0000]	mg/L
Se 196.026†	188.7	3.29	1.75%	[0.2000]	mg/L
Sn 189.927†	10884.4	119.45	1.10%	[2.0000]	mg/L
Ti 337.279†	642045.7	4415.36	0.69%	[1.0000]	mg/L
Tl 190.801†	819.8	2.81	0.34%	[0.4000]	mg/L
V 292.402†	75992.5	622.47	0.82%	[1.0000]	mg/L
Zn 206.200†	13891.3	127.11	0.92%	[0.4000]	mg/L
Ca 227.546†	1987.4	12.61	0.63%	[10.000]	mg/L

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Method: DV200-6010C Opt3 Page 4 Date: 10/14/2014 2:39:40 PM

Sr 421.552†	130609.2	290.83	0.22%	[1.0000]	mg/L
Al 394.401†	171925.5	2851.91	1.66%	[4.0000]	mg/L
Al 237.313†	27105.1	347.41	1.28%	[4.0000]	mg/L

Sequence No.: 6
Sample ID: Calib Std 5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 10/14/2014 2:35:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	6562953.9	18473.53	0.28%	0.9750	mg/L
Ag 328.068†	251711.5	3008.34	1.20%	[1.0000]	mg/L
Al 308.215†	292731.5	5227.11	1.79%	[20.000]	mg/L
As 188.979†	2503.4	0.12	0.00%	[2.0000]	mg/L
B 249.772†	543622.7	13228.16	2.43%	[5.0000]	mg/L
Ba 233.527†	1676488.2	7336.88	0.44%	[20.000]	mg/L
Be 313.107†	1434053.7	5432.21	0.38%	[0.5000]	mg/L
Cd 226.502†	81232.3	1005.72	1.24%	[1.0000]	mg/L
Co 228.616†	108677.5	1461.21	1.34%	[5.0000]	mg/L
Cr 267.716†	114580.2	1320.00	1.15%	[1.0000]	mg/L
Cu 324.752†	659236.0	12686.84	1.92%	[2.5000]	mg/L
Fe 259.939†	552668.5	7860.66	1.42%	[10.000]	mg/L
K 766.490†	33178.2	42.55	0.13%	[50.000]	mg/L
Mg 279.077†	511643.2	6474.66	1.27%	[50.000]	mg/L
Mn 257.610†	510819.6	6919.95	1.35%	[1.5000]	mg/L
Mo 202.031†	82461.3	1079.79	1.31%	[5.0000]	mg/L
Ni 231.604†	166501.0	2093.01	1.26%	[4.0000]	mg/L
Na 589.592†	272770.8	2313.73	0.85%	[50.000]	mg/L
Pb 220.353†	5959.8	3.23	0.05%	[1.0000]	mg/L
Sb 206.836†	19440.7	85.74	0.44%	[10.000]	mg/L
Se 196.026†	820.9	3.67	0.45%	[1.0000]	mg/L
Sn 189.927†	47438.0	748.86	1.58%	[10.000]	mg/L
Ti 337.279†	2767563.5	5221.47	0.19%	[5.0000]	mg/L
Tl 190.801†	3640.2	9.04	0.25%	[2.0000]	mg/L
V 292.402†	324585.9	4810.88	1.48%	[5.0000]	mg/L
Zn 206.200†	58733.9	667.67	1.14%	[2.0000]	mg/L
Ca 227.546†	9230.0	84.62	0.92%	[50.000]	mg/L
Sr 421.552†	576199.4	822.62	0.14%	[5.0000]	mg/L
Al 394.401†	808524.4	15329.14	1.90%	[20.000]	mg/L
Al 237.313†	121390.5	1929.26	1.59%	[20.000]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	253100	0.00000	0.999606	
Al 308.215	3	Lin Thru 0	0.0	14680	0.00000	0.999889	
As 188.979	4	Lin Thru 0	0.0	1259	0.00000	0.999623	
B 249.772	4	Lin Thru 0	0.0	109200	0.00000	0.999707	
Ba 233.527	3	Lin Thru 0	0.0	84420	0.00000	0.999369	
Be 313.107	4	Lin Thru 0	0.0	2885000	0.00000	0.999576	
Cd 226.502	4	Lin Thru 0	0.0	81800	0.00000	0.999407	
Co 228.616	4	Lin Thru 0	0.0	21870	0.00000	0.999510	
Cr 267.716	4	Lin Thru 0	0.0	115300	0.00000	0.999465	
Cu 324.752	4	Lin Thru 0	0.0	264900	0.00000	0.999729	
Fe 259.939	3	Lin Thru 0	0.0	55630	0.00000	0.999466	
K 766.490	4	Lin Thru 0	0.0	667.4	0.00000	0.999584	
Mg 279.077	4	Lin Thru 0	0.0	10290	0.00000	0.999601	
Mn 257.610	3	Lin Thru 0	0.0	342700	0.00000	0.999500	
Mo 202.031	3	Lin Thru 0	0.0	16590	0.00000	0.999536	
Ni 231.604	4	Lin Thru 0	0.0	41920	0.00000	0.999402	
Na 589.592	4	Lin Thru 0	0.0	5485	0.00000	0.999642	
Pb 220.353	3	Lin Thru 0	0.0	5994	0.00000	0.999587	
Sb 206.836	4	Lin Thru 0	0.0	1955	0.00000	0.999632	
Se 196.026	4	Lin Thru 0	0.0	825.6	0.00000	0.999589	
Sn 189.927	4	Lin Thru 0	0.0	4771	0.00000	0.999604	
Ti 337.279	3	Lin Thru 0	0.0	556900	0.00000	0.999532	

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Method: DV200-6010C Opt3 Page 5 Date: 10/14/2014 2:45:41 PM

Tl 190.801	3	Lin Thru 0	0.0	1829	0.00000	0.999709
V 292.402	4	Lin Thru 0	0.0	65340	0.00000	0.999467
Zn 206.200	4	Lin Thru 0	0.0	29570	0.00000	0.999392
Ca 227.546	4	Lin Thru 0	0.0	185.1	0.00000	0.999889
Sr 421.552	3	Lin Thru 0	0.0	115800	0.00000	0.999674
Al 394.401	3	Lin Thru 0	0.0	40520	0.00000	0.999926
Al 237.313	3	Lin Thru 0	0.0	6097	0.00000	0.999752

Sequence No.: 7 **Autosampler Location: 3**
Sample ID: ICV **Date Collected: 10/14/2014 2:41:59 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6659470.3	0.9893	mg/L	0.00190				0.19%
Ag 328.068†	128496.0	0.5090	mg/L	0.00070	0.5090	mg/L	0.00070	0.14%
QC value within limits for Ag 328.068 Recovery = 101.81%								
Al 308.215†	143473.8	9.772	mg/L	0.0324	9.772	mg/L	0.0324	0.33%
QC value within limits for Al 308.215 Recovery = 97.72%								
As 188.979†	1254.7	0.9965	mg/L	0.00113	0.9965	mg/L	0.00113	0.11%
QC value within limits for As 188.979 Recovery = 99.65%								
B 249.772†	275393.7	2.495	mg/L	0.0140	2.495	mg/L	0.0140	0.56%
QC value within limits for B 249.772 Recovery = 99.78%								
Ba 233.527†	870374.8	10.31	mg/L	0.016	10.31	mg/L	0.016	0.15%
QC value within limits for Ba 233.527 Recovery = 103.10%								
Be 313.107†	726745.8	0.2519	mg/L	0.00032	0.2519	mg/L	0.00032	0.13%
QC value within limits for Be 313.107 Recovery = 100.76%								
Cd 226.502†	42292.5	0.5164	mg/L	0.00349	0.5164	mg/L	0.00349	0.68%
QC value within limits for Cd 226.502 Recovery = 103.27%								
Co 228.616†	55536.8	2.539	mg/L	0.0090	2.539	mg/L	0.0090	0.35%
QC value within limits for Co 228.616 Recovery = 101.56%								
Cr 267.716†	59626.9	0.5197	mg/L	0.00118	0.5197	mg/L	0.00118	0.23%
QC value within limits for Cr 267.716 Recovery = 103.94%								
Cu 324.752†	331247.2	1.251	mg/L	0.0071	1.251	mg/L	0.0071	0.57%
QC value within limits for Cu 324.752 Recovery = 100.06%								
Fe 259.939†	283935.7	5.104	mg/L	0.0061	5.104	mg/L	0.0061	0.12%
QC value within limits for Fe 259.939 Recovery = 102.08%								
K 766.490†	16362.1	24.51	mg/L	0.091	24.51	mg/L	0.091	0.37%
QC value within limits for K 766.490 Recovery = 98.06%								
Mg 279.077†	259584.5	25.22	mg/L	0.053	25.22	mg/L	0.053	0.21%
QC value within limits for Mg 279.077 Recovery = 100.90%								
Mn 257.610†	262410.2	0.7664	mg/L	0.00090	0.7664	mg/L	0.00090	0.12%
QC value within limits for Mn 257.610 Recovery = 102.18%								
Mo 202.031†	40998.1	2.471	mg/L	0.0009	2.471	mg/L	0.0009	0.04%
QC value within limits for Mo 202.031 Recovery = 98.83%								
Ni 231.604†	86039.6	2.053	mg/L	0.0069	2.053	mg/L	0.0069	0.34%
QC value within limits for Ni 231.604 Recovery = 102.63%								
Na 589.592†	134386.0	24.50	mg/L	0.089	24.50	mg/L	0.089	0.36%
QC value within limits for Na 589.592 Recovery = 98.01%								
Pb 220.353†	2997.2	0.5009	mg/L	0.00020	0.5009	mg/L	0.00020	0.04%
QC value within limits for Pb 220.353 Recovery = 100.19%								
Sb 206.836†	9785.3	5.005	mg/L	0.0028	5.005	mg/L	0.0028	0.06%
QC value within limits for Sb 206.836 Recovery = 100.10%								
Se 196.026†	413.3	0.5019	mg/L	0.00289	0.5019	mg/L	0.00289	0.58%
QC value within limits for Se 196.026 Recovery = 100.38%								
Sn 189.927†	24537.0	5.142	mg/L	0.0186	5.142	mg/L	0.0186	0.36%
QC value within limits for Sn 189.927 Recovery = 102.85%								
Ti 337.279†	1377744.5	2.474	mg/L	0.0026	2.474	mg/L	0.0026	0.11%
QC value within limits for Ti 337.279 Recovery = 98.95%								
Tl 190.801†	1820.0	0.9946	mg/L	0.00134	0.9946	mg/L	0.00134	0.13%
QC value within limits for Tl 190.801 Recovery = 99.46%								
V 292.402†	165278.0	2.529	mg/L	0.0089	2.529	mg/L	0.0089	0.35%
QC value within limits for V 292.402 Recovery = 101.16%								
Zn 206.200†	30534.5	1.032	mg/L	0.0081	1.032	mg/L	0.0081	0.79%
QC value within limits for Zn 206.200 Recovery = 103.25%								
Ca 227.546†	4387.9	24.03	mg/L	0.031	24.03	mg/L	0.031	0.13%
QC value within limits for Ca 227.546 Recovery = 96.11%								

00745

Method: DV200-6010C Opt3 Page 6 Date: 10/14/2014 2:51:40 PM

Sr 421.552†	274726.1	2.372 mg/L	0.0123	2.372 mg/L	0.0123	0.52%
QC value less than the lower limit for Sr 421.552 Recovery = 94.87%						
Al 394.401†	392841.4	9.694 mg/L	0.0268	9.694 mg/L	0.0268	0.28%
QC value within limits for Al 394.401 Recovery = 96.94%						
Al 237.313†	60776.9	9.969 mg/L	0.0219	9.969 mg/L	0.0219	0.22%
QC value within limits for Al 237.313 Recovery = 99.69%						

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 10/14/2014 2:48:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6744817.0	1.002	mg/L	0.0025				0.25%
Ag 328.068†	59.0	0.0002	mg/L	0.00010	0.0002	mg/L	0.00010	40.51%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	472.4	0.0322	mg/L	0.00728	0.0322	mg/L	0.00728	22.62%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.1	0.0009	mg/L	0.00176	0.0009	mg/L	0.00176	199.61%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	4982.6	0.0456	mg/L	0.00548	0.0456	mg/L	0.00548	12.03%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	936.7	0.0111	mg/L	0.00341	0.0111	mg/L	0.00341	30.72%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	607.8	0.0002	mg/L	0.00004	0.0002	mg/L	0.00004	17.88%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	49.7	0.0006	mg/L	0.00020	0.0006	mg/L	0.00020	32.48%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	78.2	0.0036	mg/L	0.00114	0.0036	mg/L	0.00114	32.02%
QC value greater than the upper limit for Co 228.616 Recovery = Not calculated								
Cr 267.716†	73.5	0.0006	mg/L	0.00013	0.0006	mg/L	0.00013	21.04%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1959.5	0.0074	mg/L	0.00097	0.0074	mg/L	0.00097	13.14%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	444.3	0.0080	mg/L	0.00179	0.0080	mg/L	0.00179	22.45%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	50.2	0.0752	mg/L	0.04159	0.0752	mg/L	0.04159	55.33%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	260.2	0.0253	mg/L	0.00575	0.0253	mg/L	0.00575	22.74%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	369.6	0.0011	mg/L	0.00024	0.0011	mg/L	0.00024	22.53%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	44.9	0.0027	mg/L	0.00098	0.0027	mg/L	0.00098	36.04%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	134.5	0.0032	mg/L	0.00094	0.0032	mg/L	0.00094	29.35%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	209.4	0.0382	mg/L	0.00241	0.0382	mg/L	0.00241	6.32%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	7.6	0.0013	mg/L	0.00098	0.0013	mg/L	0.00098	77.08%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	10.2	0.0052	mg/L	0.00183	0.0052	mg/L	0.00183	35.02%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	3.4	0.0041	mg/L	0.00309	0.0041	mg/L	0.00309	75.85%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	84.3	0.0177	mg/L	0.00338	0.0177	mg/L	0.00338	19.10%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	1351.5	0.0024	mg/L	0.00011	0.0024	mg/L	0.00011	4.47%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	2.2	0.0012	mg/L	0.00021	0.0012	mg/L	0.00021	18.00%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	148.9	0.0023	mg/L	0.00007	0.0023	mg/L	0.00007	3.13%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	77.3	0.0026	mg/L	0.00021	0.0026	mg/L	0.00021	8.08%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	-0.3	-0.0008	mg/L	0.04259	-0.0008	mg/L	0.04259	>999.9%
QC value within limits for Ca 227.546 Recovery = Not calculated								

00746

Method: DV200-6010C Opt3 Page 7 Date: 10/14/2014 2:57:54 PM

Sr 421.552†	310.1	0.0027 mg/L	0.00002	0.0027 mg/L	0.00002	0.67%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 394.401†	354.6	0.0088 mg/L	0.00012	0.0088 mg/L	0.00012	1.37%
QC value within limits for Al 394.401 Recovery = Not calculated						
Al 237.313†	56.5	0.0093 mg/L	0.00282	0.0093 mg/L	0.00282	30.46%
QC value within limits for Al 237.313 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: MRL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 10/14/2014 2:54:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6758719.2	1.004	mg/L	0.0045				0.45%
Ag 328.068†	2501.0	0.0099	mg/L	0.00003	0.0099	mg/L	0.00003	0.27%
QC value within limits for Ag 328.068 Recovery = 99.10%								
Al 308.215†	2996.5	0.2041	mg/L	0.00838	0.2041	mg/L	0.00838	4.11%
QC value within limits for Al 308.215 Recovery = 102.03%								
As 188.979†	24.6	0.0196	mg/L	0.00075	0.0196	mg/L	0.00075	3.85%
QC value within limits for As 188.979 Recovery = 97.81%								
B 249.772†	24145.4	0.2205	mg/L	0.00194	0.2205	mg/L	0.00194	0.88%
QC value within limits for B 249.772 Recovery = 110.23%								
Ba 233.527†	18007.9	0.2133	mg/L	0.00030	0.2133	mg/L	0.00030	0.14%
QC value within limits for Ba 233.527 Recovery = 106.65%								
Be 313.107†	14704.2	0.0051	mg/L	0.00003	0.0051	mg/L	0.00003	0.66%
QC value within limits for Be 313.107 Recovery = 101.94%								
Cd 226.502†	878.7	0.0107	mg/L	0.00003	0.0107	mg/L	0.00003	0.25%
QC value within limits for Cd 226.502 Recovery = 107.29%								
Co 228.616†	1143.4	0.0523	mg/L	0.00005	0.0523	mg/L	0.00005	0.09%
QC value within limits for Co 228.616 Recovery = 104.55%								
Cr 267.716†	1203.7	0.0105	mg/L	0.00005	0.0105	mg/L	0.00005	0.46%
QC value within limits for Cr 267.716 Recovery = 105.39%								
Cu 324.752†	7387.5	0.0279	mg/L	0.00033	0.0279	mg/L	0.00033	1.17%
QC value within limits for Cu 324.752 Recovery = 111.58%								
Fe 259.939†	5950.9	0.1070	mg/L	0.00044	0.1070	mg/L	0.00044	0.41%
QC value within limits for Fe 259.939 Recovery = 106.97%								
K 766.490†	631.1	0.9455	mg/L	0.02285	0.9455	mg/L	0.02285	2.42%
QC value within limits for K 766.490 Recovery = 94.55%								
Mg 279.077†	10268.6	0.9978	mg/L	0.00337	0.9978	mg/L	0.00337	0.34%
QC value within limits for Mg 279.077 Recovery = 99.78%								
Mn 257.610†	5381.4	0.0157	mg/L	0.00006	0.0157	mg/L	0.00006	0.35%
QC value within limits for Mn 257.610 Recovery = 104.78%								
Mo 202.031†	431.1	0.0260	mg/L	0.00043	0.0260	mg/L	0.00043	1.66%
QC value within limits for Mo 202.031 Recovery = 103.92%								
Ni 231.604†	1748.5	0.0417	mg/L	0.00032	0.0417	mg/L	0.00032	0.76%
QC value within limits for Ni 231.604 Recovery = 104.29%								
Na 589.592†	5551.8	1.012	mg/L	0.0033	1.012	mg/L	0.0033	0.33%
QC value within limits for Na 589.592 Recovery = 101.22%								
Pb 220.353†	63.5	0.0106	mg/L	0.00050	0.0106	mg/L	0.00050	4.68%
QC value within limits for Pb 220.353 Recovery = 106.13%								
Sb 206.836†	119.6	0.0612	mg/L	0.00084	0.0612	mg/L	0.00084	1.37%
QC value within limits for Sb 206.836 Recovery = 101.95%								
Se 196.026†	9.6	0.0116	mg/L	0.00186	0.0116	mg/L	0.00186	16.02%
QC value within limits for Se 196.026 Recovery = 116.31%								
Sn 189.927†	2555.7	0.5357	mg/L	0.00441	0.5357	mg/L	0.00441	0.82%
QC value within limits for Sn 189.927 Recovery = 107.14%								
Ti 337.279†	29242.5	0.0525	mg/L	0.00012	0.0525	mg/L	0.00012	0.23%
QC value within limits for Ti 337.279 Recovery = 105.01%								
Tl 190.801†	33.3	0.0182	mg/L	0.00206	0.0182	mg/L	0.00206	11.33%
QC value within limits for Tl 190.801 Recovery = 90.96%								
V 292.402†	3454.0	0.0529	mg/L	0.00033	0.0529	mg/L	0.00033	0.62%
QC value within limits for V 292.402 Recovery = 105.71%								
Zn 206.200†	592.6	0.0200	mg/L	0.00017	0.0200	mg/L	0.00017	0.86%
QC value within limits for Zn 206.200 Recovery = 100.20%								
Ca 227.546†	161.0	0.8767	mg/L	0.01765	0.8767	mg/L	0.01765	2.01%
QC value within limits for Ca 227.546 Recovery = 87.67%								

Method: DV200-6010C Opt3 Page 8 Date: 10/14/2014 3:06:27 PM

Sr 421.552†	11609.1	0.1002 mg/L	0.00055	0.1002 mg/L	0.00055	0.54%
QC value within limits for Sr 421.552 Recovery = 100.22%						
Al 394.401†	7179.1	0.1772 mg/L	0.00026	0.1772 mg/L	0.00026	0.15%
QC value within limits for Al 394.401 Recovery = 88.58%						
Al 237.313†	1173.6	0.1925 mg/L	0.00035	0.1925 mg/L	0.00035	0.18%
QC value within limits for Al 237.313 Recovery = 96.25%						

All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: ICSA **Date Collected: 10/14/2014 3:00:13 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6348843.8	0.9431	mg/L	0.00753				0.80%
Ag 328.068†	-6733.8	-0.0015	mg/L	0.00011	-0.0015	mg/L	0.00011	7.16%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	3762180.1	256.3	mg/L	0.19	256.3	mg/L	0.19	0.07%
QC value within limits for Al 308.215 Recovery = 102.51%								
As 188.979†	16.0	0.0026	mg/L	0.00296	0.0026	mg/L	0.00296	115.24%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	37974.3	-0.1208	mg/L	0.00160	-0.1208	mg/L	0.00160	1.33%
Ba 233.527†	340.6	0.0040	mg/L	0.00007	0.0040	mg/L	0.00007	1.62%
Be 313.107†	-1366.9	-0.0005	mg/L	0.00004	-0.0005	mg/L	0.00004	8.70%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	1062.6	0.0009	mg/L	0.00013	0.0009	mg/L	0.00013	14.10%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	13.7	0.0006	mg/L	0.00006	0.0006	mg/L	0.00006	8.99%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3539.7	-0.0009	mg/L	0.00039	-0.0009	mg/L	0.00039	43.29%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-1105.0	0.0043	mg/L	0.00011	0.0043	mg/L	0.00011	2.60%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	5063833.4	91.03	mg/L	0.826	91.03	mg/L	0.826	0.91%
QC value within limits for Fe 259.939 Recovery = 91.03%								
K 766.490†	14.2	0.0213	mg/L	0.04132	0.0213	mg/L	0.04132	193.79%
Mg 279.077†	2684686.0	260.9	mg/L	0.37	260.9	mg/L	0.37	0.14%
QC value within limits for Mg 279.077 Recovery = 104.35%								
Mn 257.610†	-5231.8	-0.0032	mg/L	0.00003	-0.0032	mg/L	0.00003	0.96%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	1.7	0.0001	mg/L	0.00013	0.0001	mg/L	0.00013	129.00%
Ni 231.604†	-106.4	-0.0025	mg/L	0.00023	-0.0025	mg/L	0.00023	9.13%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	-47.9	-0.0087	mg/L	0.00493	-0.0087	mg/L	0.00493	56.50%
Pb 220.353†	-151.1	0.0006	mg/L	0.00007	0.0006	mg/L	0.00007	11.34%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	44.2	-0.0002	mg/L	0.00165	-0.0002	mg/L	0.00165	923.14%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-21.8	-0.0012	mg/L	0.00145	-0.0012	mg/L	0.00145	118.29%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-138.9	-0.0590	mg/L	0.00150	-0.0590	mg/L	0.00150	2.55%
Ti 337.279†	332.3	0.0006	mg/L	0.00004	0.0006	mg/L	0.00004	6.55%
Tl 190.801†	29.2	0.0016	mg/L	0.00139	0.0016	mg/L	0.00139	88.67%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	372.2	0.0004	mg/L	0.00078	0.0004	mg/L	0.00078	179.15%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	172.6	0.0058	mg/L	0.00027	0.0058	mg/L	0.00027	4.61%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	47491.6	262.6	mg/L	0.06	262.6	mg/L	0.06	0.02%
QC value within limits for Ca 227.546 Recovery = 105.04%								
Sr 421.552†	460.7	0.0040	mg/L	0.00026	0.0040	mg/L	0.00026	6.53%
Al 394.401†	10804447.2	266.6	mg/L	0.33	266.6	mg/L	0.33	0.12%
QC value within limits for Al 394.401 Recovery = 106.65%								
Al 237.313†	1562249.3	256.2	mg/L	0.09	256.2	mg/L	0.09	0.04%
QC value within limits for Al 237.313 Recovery = 102.50%								

All analyte(s) passed QC.

Method: DV200-6010C Opt3 Page 9 Date: 10/14/2014 3:16:20 PM

Sequence No.: 11
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 10/14/2014 3:06:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6297419.7	0.9355	mg/L	0.00242				0.26%
Ag 328.068†	46233.9	0.2078	mg/L	0.00054	0.2078	mg/L	0.00054	0.26%
QC value within limits for Ag 328.068 Recovery = 103.88%								
Al 308.215†	3827773.1	260.7	mg/L	1.55	260.7	mg/L	1.55	0.59%
QC value within limits for Al 308.215 Recovery = 104.30%								
As 188.979†	139.5	0.1006	mg/L	0.00028	0.1006	mg/L	0.00028	0.28%
QC value within limits for As 188.979 Recovery = 100.55%								
B 249.772†	37571.6	-0.1251	mg/L	0.00253	-0.1251	mg/L	0.00253	2.02%
Ba 233.527†	44924.0	0.5321	mg/L	0.00390	0.5321	mg/L	0.00390	0.73%
QC value within limits for Ba 233.527 Recovery = 106.42%								
Be 313.107†	1454994.8	0.5043	mg/L	0.00380	0.5043	mg/L	0.00380	0.75%
QC value within limits for Be 313.107 Recovery = 100.87%								
Cd 226.502†	81652.9	0.9862	mg/L	0.00453	0.9862	mg/L	0.00453	0.46%
QC value within limits for Cd 226.502 Recovery = 98.62%								
Co 228.616†	10548.8	0.4823	mg/L	0.00022	0.4823	mg/L	0.00022	0.05%
QC value within limits for Co 228.616 Recovery = 96.46%								
Cr 267.716†	55780.5	0.5138	mg/L	0.00325	0.5138	mg/L	0.00325	0.63%
QC value within limits for Cr 267.716 Recovery = 102.76%								
Cu 324.752†	139454.8	0.5349	mg/L	0.00156	0.5349	mg/L	0.00156	0.29%
QC value within limits for Cu 324.752 Recovery = 106.97%								
Fe 259.939†	5066062.6	91.07	mg/L	0.063	91.07	mg/L	0.063	0.07%
QC value within limits for Fe 259.939 Recovery = 91.07%								
K 766.490†	70.5	0.1057	mg/L	0.00334	0.1057	mg/L	0.00334	3.16%
Mg 279.077†	2726540.5	264.9	mg/L	2.22	264.9	mg/L	2.22	0.84%
QC value within limits for Mg 279.077 Recovery = 105.98%								
Mn 257.610†	172263.7	0.5148	mg/L	0.00276	0.5148	mg/L	0.00276	0.54%
QC value within limits for Mn 257.610 Recovery = 102.95%								
Mo 202.031†	0.8	0.0000	mg/L	0.00007	0.0000	mg/L	0.00007	149.06%
Ni 231.604†	40741.4	0.9720	mg/L	0.00282	0.9720	mg/L	0.00282	0.29%
QC value within limits for Ni 231.604 Recovery = 97.20%								
Na 589.592†	-74.8	-0.0136	mg/L	0.00065	-0.0136	mg/L	0.00065	4.79%
Pb 220.353†	158.9	0.0528	mg/L	0.00077	0.0528	mg/L	0.00077	1.46%
QC value within limits for Pb 220.353 Recovery = 105.60%								
Sb 206.836†	1273.6	0.6284	mg/L	0.00524	0.6284	mg/L	0.00524	0.83%
QC value within limits for Sb 206.836 Recovery = 104.73%								
Se 196.026†	20.2	0.0497	mg/L	0.00148	0.0497	mg/L	0.00148	2.97%
QC value within limits for Se 196.026 Recovery = 99.38%								
Sn 189.927†	-113.1	-0.0541	mg/L	0.00010	-0.0541	mg/L	0.00010	0.18%
Ti 337.279†	280.0	0.0005	mg/L	0.00004	0.0005	mg/L	0.00004	7.23%
Tl 190.801†	220.0	0.1056	mg/L	0.00059	0.1056	mg/L	0.00059	0.56%
QC value within limits for Tl 190.801 Recovery = 105.62%								
V 292.402†	33332.6	0.5048	mg/L	0.00414	0.5048	mg/L	0.00414	0.82%
QC value within limits for V 292.402 Recovery = 100.97%								
Zn 206.200†	28792.8	0.9736	mg/L	0.00443	0.9736	mg/L	0.00443	0.45%
QC value within limits for Zn 206.200 Recovery = 97.36%								
Ca 227.546†	47777.4	264.2	mg/L	0.62	264.2	mg/L	0.62	0.23%
QC value within limits for Ca 227.546 Recovery = 105.66%								
Sr 421.552†	492.5	0.0043	mg/L	0.00043	0.0043	mg/L	0.00043	10.07%
Al 394.401†	10802128.8	266.6	mg/L	0.56	266.6	mg/L	0.56	0.21%
QC value within limits for Al 394.401 Recovery = 106.62%								
Al 237.313†	1589962.8	260.8	mg/L	1.90	260.8	mg/L	1.90	0.73%
QC value within limits for Al 237.313 Recovery = 104.32%								

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 10/14/2014 3:12:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

00749

Method: DV200-6010C Opt3 Page 10 Date: 10/14/2014 3:22:55 PM

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6650396.2	0.9879	mg/L	0.00831				0.84%
Ag 328.068†	127658.9	0.5057	mg/L	0.00922	0.5057	mg/L	0.00922	1.82%
QC value within limits for Ag 328.068 Recovery = 101.14%								
Al 308.215†	142369.0	9.697	mg/L	0.2608	9.697	mg/L	0.2608	2.69%
QC value within limits for Al 308.215 Recovery = 96.97%								
As 188.979†	1249.0	0.9920	mg/L	0.00671	0.9920	mg/L	0.00671	0.68%
QC value within limits for As 188.979 Recovery = 99.20%								
B 249.772†	266021.2	2.409	mg/L	0.0315	2.409	mg/L	0.0315	1.31%
QC value within limits for B 249.772 Recovery = 96.36%								
Ba 233.527†	859845.8	10.18	mg/L	0.056	10.18	mg/L	0.056	0.55%
QC value within limits for Ba 233.527 Recovery = 101.85%								
Be 313.107†	719014.3	0.2492	mg/L	0.00113	0.2492	mg/L	0.00113	0.46%
QC value within limits for Be 313.107 Recovery = 99.69%								
Cd 226.502†	41612.0	0.5080	mg/L	0.00994	0.5080	mg/L	0.00994	1.96%
QC value within limits for Cd 226.502 Recovery = 101.61%								
Co 228.616†	54611.8	2.497	mg/L	0.0554	2.497	mg/L	0.0554	2.22%
QC value within limits for Co 228.616 Recovery = 99.87%								
Cr 267.716†	59013.2	0.5143	mg/L	0.00983	0.5143	mg/L	0.00983	1.91%
QC value within limits for Cr 267.716 Recovery = 102.87%								
Cu 324.752†	326329.2	1.232	mg/L	0.0251	1.232	mg/L	0.0251	2.04%
QC value within limits for Cu 324.752 Recovery = 98.58%								
Fe 259.939†	282239.4	5.073	mg/L	0.1205	5.073	mg/L	0.1205	2.38%
QC value within limits for Fe 259.939 Recovery = 101.47%								
K 766.490†	16378.6	24.54	mg/L	0.452	24.54	mg/L	0.452	1.84%
QC value within limits for K 766.490 Recovery = 98.16%								
Mg 279.077†	256536.6	24.93	mg/L	0.536	24.93	mg/L	0.536	2.15%
QC value within limits for Mg 279.077 Recovery = 99.71%								
Mn 257.610†	258094.7	0.7538	mg/L	0.01503	0.7538	mg/L	0.01503	1.99%
QC value within limits for Mn 257.610 Recovery = 100.50%								
Mo 202.031†	40506.2	2.441	mg/L	0.0480	2.441	mg/L	0.0480	1.97%
QC value within limits for Mo 202.031 Recovery = 97.64%								
Ni 231.604†	84822.6	2.024	mg/L	0.0408	2.024	mg/L	0.0408	2.01%
QC value within limits for Ni 231.604 Recovery = 101.18%								
Na 589.592†	135552.9	24.71	mg/L	0.204	24.71	mg/L	0.204	0.83%
QC value within limits for Na 589.592 Recovery = 98.86%								
Pb 220.353†	2972.0	0.4967	mg/L	0.00314	0.4967	mg/L	0.00314	0.63%
QC value within limits for Pb 220.353 Recovery = 99.35%								
Sb 206.836†	9585.7	4.903	mg/L	0.0320	4.903	mg/L	0.0320	0.65%
QC value within limits for Sb 206.836 Recovery = 98.06%								
Se 196.026†	406.0	0.4931	mg/L	0.00246	0.4931	mg/L	0.00246	0.50%
QC value within limits for Se 196.026 Recovery = 98.62%								
Sn 189.927†	23852.5	4.999	mg/L	0.0955	4.999	mg/L	0.0955	1.91%
QC value within limits for Sn 189.927 Recovery = 99.98%								
Ti 337.279†	1368314.9	2.457	mg/L	0.0075	2.457	mg/L	0.0075	0.31%
QC value within limits for Ti 337.279 Recovery = 98.28%								
Tl 190.801†	1805.2	0.9865	mg/L	0.00300	0.9865	mg/L	0.00300	0.30%
QC value within limits for Tl 190.801 Recovery = 98.65%								
V 292.402†	166428.2	2.547	mg/L	0.0512	2.547	mg/L	0.0512	2.01%
QC value within limits for V 292.402 Recovery = 101.87%								
Zn 206.200†	30143.6	1.019	mg/L	0.0187	1.019	mg/L	0.0187	1.84%
QC value within limits for Zn 206.200 Recovery = 101.93%								
Ca 227.546†	4396.5	24.07	mg/L	0.299	24.07	mg/L	0.299	1.24%
QC value within limits for Ca 227.546 Recovery = 96.29%								
Sr 421.552†	276052.1	2.383	mg/L	0.0299	2.383	mg/L	0.0299	1.25%
QC value within limits for Sr 421.552 Recovery = 95.33%								
Al 394.401†	390527.7	9.637	mg/L	0.2501	9.637	mg/L	0.2501	2.60%
QC value within limits for Al 394.401 Recovery = 96.37%								
Al 237.313†	60317.7	9.894	mg/L	0.2564	9.894	mg/L	0.2564	2.59%
QC value within limits for Al 237.313 Recovery = 98.94%								

All analyte(s) passed QC.

Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 10/14/2014 3:18:56 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Method: DV200-6010C Opt3 Page 11 Date: 10/14/2014 3:28:49 PM

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6699172.3	0.9952	mg/L	0.00094				0.09%
Ag 328.068†	27.9	0.0001	mg/L	0.00011	0.0001	mg/L	0.00011	96.25%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	880.7	0.0600	mg/L	0.02018	0.0600	mg/L	0.02018	33.63%
QC value greater than the upper limit for Al 308.215 Recovery = Not calculated								
As 188.979†	1.9	0.0015	mg/L	0.00051	0.0015	mg/L	0.00051	33.36%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3721.3	0.0339	mg/L	0.00451	0.0339	mg/L	0.00451	13.29%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	422.2	0.0050	mg/L	0.00187	0.0050	mg/L	0.00187	37.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	316.1	0.0001	mg/L	0.00003	0.0001	mg/L	0.00003	27.56%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	26.3	0.0003	mg/L	0.00011	0.0003	mg/L	0.00011	33.12%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	46.8	0.0021	mg/L	0.00044	0.0021	mg/L	0.00044	20.78%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	32.9	0.0003	mg/L	0.00007	0.0003	mg/L	0.00007	25.11%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1341.5	0.0051	mg/L	0.00088	0.0051	mg/L	0.00088	17.40%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	1539.9	0.0277	mg/L	0.00556	0.0277	mg/L	0.00556	20.09%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	42.6	0.0638	mg/L	0.03438	0.0638	mg/L	0.03438	53.93%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	458.6	0.0446	mg/L	0.01439	0.0446	mg/L	0.01439	32.30%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	207.1	0.0006	mg/L	0.00017	0.0006	mg/L	0.00017	27.59%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	18.4	0.0011	mg/L	0.00048	0.0011	mg/L	0.00048	42.95%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	83.9	0.0020	mg/L	0.00052	0.0020	mg/L	0.00052	25.82%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	165.7	0.0302	mg/L	0.00450	0.0302	mg/L	0.00450	14.90%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	2.7	0.0005	mg/L	0.00060	0.0005	mg/L	0.00060	130.18%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	5.7	0.0029	mg/L	0.00065	0.0029	mg/L	0.00065	22.51%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	1.6	0.0020	mg/L	0.00167	0.0020	mg/L	0.00167	83.46%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	36.5	0.0077	mg/L	0.00196	0.0077	mg/L	0.00196	25.57%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	733.3	0.0013	mg/L	0.00045	0.0013	mg/L	0.00045	33.81%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	0.3	0.0002	mg/L	0.00171	0.0002	mg/L	0.00171	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	91.0	0.0014	mg/L	0.00074	0.0014	mg/L	0.00074	53.02%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	75.5	0.0026	mg/L	0.00032	0.0026	mg/L	0.00032	12.36%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	7.6	0.0428	mg/L	0.00999	0.0428	mg/L	0.00999	23.36%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	244.4	0.0021	mg/L	0.00008	0.0021	mg/L	0.00008	3.76%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Al 394.401†	1451.6	0.0358	mg/L	0.00901	0.0358	mg/L	0.00901	25.15%
QC value within limits for Al 394.401 Recovery = Not calculated								
Al 237.313†	198.4	0.0325	mg/L	0.01016	0.0325	mg/L	0.01016	31.21%
QC value within limits for Al 237.313 Recovery = Not calculated								

QC Failed. Continue with analysis.

D.1000

Sequence No.: 14
Sample ID: PBW-220161
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 10/14/2014 3:25:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

00751

Method: DV200-6010C Opt3 Page 12 Date: 10/14/2014 3:34:50 PM

Mean Data: PBW-220161

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6928064.7	1.029	mg/L	0.0044				0.43%
Ag 328.068†	-45.8	-0.0002	mg/L	0.00001				8.13%
Al 308.215†	-211.0	-0.0144	mg/L	0.01160				80.69%
As 188.979†	0.6	0.0005	mg/L	0.00059				131.07%
B 249.772†	1677.9	0.0153	mg/L	0.00116				7.56%
Ba 233.527†	73.6	0.0009	mg/L	0.00004				4.22%
Be 313.107†	420.3	0.0001	mg/L	0.00006				41.01%
Cd 226.502†	-6.3	-0.0001	mg/L	0.00000				5.08%
Co 228.616†	4.3	0.0002	mg/L	0.00018				92.34%
Cr 267.716†	72.6	0.0006	mg/L	0.00005				8.20%
Cu 324.752†	584.2	0.0022	mg/L	0.00069				31.42%
Fe 259.939†	595.4	0.0107	mg/L	0.00054				5.03%
K 766.490†	-1.4	-0.0021	mg/L	0.04330				>999.9%
Mg 279.077†	218.5	0.0212	mg/L	0.00195				9.16%
Mn 257.610†	891.3	0.0026	mg/L	0.00001				0.54%
Mo 202.031†	-1.1	-0.0001	mg/L	0.00015				235.40%
Ni 231.604†	14.8	0.0004	mg/L	0.00011				30.41%
Na 589.592†	-87.5	-0.0159	mg/L	0.00286				17.90%
Pb 220.353†	4.4	0.0007	mg/L	0.00128				176.21%
Sb 206.836†	4.1	0.0021	mg/L	0.00003				1.28%
Se 196.026†	1.4	0.0017	mg/L	0.00130				74.54%
Sn 189.927†	19.4	0.0041	mg/L	0.00079				19.47%
Ti 337.279†	250.7	0.0005	mg/L	0.00005				10.53%
Tl 190.801†	-7.4	-0.0040	mg/L	0.00030				7.32%
V 292.402†	-0.7	0.0000	mg/L	0.00007				662.12%
Zn 206.200†	23.5	0.0008	mg/L	0.00011				13.44%
Ca 227.546†	-1.0	-0.0048	mg/L	0.00053				11.09%
Sr 421.552†	28.1	0.0002	mg/L	0.00004				16.25%
Al 394.401†	264.1	0.0065	mg/L	0.00132				20.31%
Al 237.313†	27.8	0.0046	mg/L	0.00315				69.13%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 15
Sample ID: LCSW-220161
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 10/14/2014 3:31:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-220161

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6740011.9	1.001	mg/L	0.0114				1.14%
Ag 328.068†	12837.4	0.0510	mg/L	0.00016				0.32%
Al 308.215†	27725.6	1.889	mg/L	0.0026				0.14%
As 188.979†	48.5	0.0384	mg/L	0.00153				3.97%
B 249.772†	105807.7	0.9634	mg/L	0.01072				1.11%
Ba 233.527†	171055.1	2.026	mg/L	0.0073				0.36%
Be 313.107†	141719.1	0.0491	mg/L	0.00018				0.36%
Cd 226.502†	4145.7	0.0505	mg/L	0.00039				0.78%
Co 228.616†	11066.0	0.5059	mg/L	0.00226				0.45%
Cr 267.716†	24335.1	0.2112	mg/L	0.00121				0.57%
Cu 324.752†	71141.9	0.2686	mg/L	0.00024				0.09%
Fe 259.939†	57330.4	1.031	mg/L	0.0042				0.41%
K 766.490†	12899.8	19.33	mg/L	0.046				0.24%
Mg 279.077†	20514.5	1.993	mg/L	0.0049				0.25%
Mn 257.610†	175474.7	0.5121	mg/L	0.00213				0.42%
Mo 202.031†	8056.4	0.4855	mg/L	0.00567				1.17%
Ni 231.604†	21949.3	0.5237	mg/L	0.00253				0.48%
Na 589.592†	108123.7	19.71	mg/L	0.048				0.24%
Pb 220.353†	3018.9	0.5038	mg/L	0.00461				0.92%
Sb 206.836†	942.1	0.4818	mg/L	0.00338				0.70%
Se 196.026†	762.5	0.9239	mg/L	0.01039				1.12%
Sn 189.927†	25845.4	5.417	mg/L	0.0149				0.28%
Ti 337.279†	273909.8	0.4918	mg/L	0.00142				0.29%
Tl 190.801†	3461.8	1.893	mg/L	0.0154				0.81%
V 292.402†	34110.0	0.5219	mg/L	0.00247				0.47%

00752

Method: DV200-6010C Opt3 Page 13 Date: 10/14/2014 3:46:36 PM

Zn 206.200†	15578.2	0.5268	mg/L	0.00417	0.79%
Ca 227.546†	373.2	2.081	mg/L	0.0101	0.48%
Sr 421.552†	228250.4	1.971	mg/L	0.0065	0.33%
Al 394.401†	76850.8	1.896	mg/L	0.0030	0.16%
Al 237.313†	11722.0	1.923	mg/L	0.0005	0.02%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 16
Sample ID: R1407780-005 5X
Analyst:
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 40
Date Collected: 10/14/2014 3:37:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407780-005 5X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6685325.2	0.9931	mg/L	0.00117				0.12%
Ag 328.068†	-219.3	0.0002	mg/L	0.00008				54.66%
Al 308.215†	193.2	0.0125	mg/L	0.00679				54.28%
As 188.979†	1.9	0.0015	mg/L	0.00138				92.59%
B 249.772†	4353.1	0.0214	mg/L	0.00208				9.70%
Ba 233.527†	824.7	0.0098	mg/L	0.00005				0.47%
Be 313.107†	-155.6	-0.0001	mg/L	0.00003				50.82%
Cd 226.502†	36.8	-0.0001	mg/L	0.00008				109.19%
Co 228.616†	8.8	0.0004	mg/L	0.00020				50.03%
Cr 267.716†	192.6	0.0020	mg/L	0.00006				3.27%
Cu 324.752†	410.1	0.0019	mg/L	0.00016				8.53%
Fe 259.939†	206080.2	3.704	mg/L	0.0174				0.47%
K 766.490†	124.0	0.1858	mg/L	0.11008				59.26%
Mg 279.077†	12665.0	1.231	mg/L	0.0087				0.71%
Mn 257.610†	32467.6	0.0952	mg/L	0.00053				0.56%
Mo 202.031†	19.2	0.0012	mg/L	0.00001				0.86%
Ni 231.604†	123.3	0.0029	mg/L	0.00005				1.73%
Na 589.592†	785.6	0.1432	mg/L	0.00153				1.07%
Pb 220.353†	0.7	0.0000	mg/L	0.00098				>999.9%
Sb 206.836†	3.3	0.0017	mg/L	0.00017				10.09%
Se 196.026†	1.3	0.0025	mg/L	0.00181				73.05%
Sn 189.927†	-56.7	-0.0119	mg/L	0.00079				6.63%
Ti 337.279†	251.4	0.0005	mg/L	0.00007				16.22%
Tl 190.801†	-0.7	-0.0004	mg/L	0.00324				755.03%
V 292.402†	14.0	0.0000	mg/L	0.00049				>999.9%
Zn 206.200†	64.0	0.0022	mg/L	0.00002				0.97%
Ca 227.546†	3189.8	17.45	mg/L	0.052				0.30%
Sr 421.552†	9732.0	0.0840	mg/L	0.00031				0.37%
Al 394.401†	-323.8	-0.0080	mg/L	0.00005				0.67%
Al 237.313†	-7.9	-0.0013	mg/L	0.00052				40.01%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 17
Sample ID: R1407780-009 20X
Analyst:
Initial Sample Wt:
Dilution: 20X

Autosampler Location: 41
Date Collected: 10/14/2014 3:43:01 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407780-009 20X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6700944.5	0.9955	mg/L	0.00228				0.23%
Ag 328.068†	-43.1	-0.0001	mg/L	0.00017				214.61%
Al 308.215†	10.8	0.0003	mg/L	0.01160				>999.9%
As 188.979†	-0.1	-0.0001	mg/L	0.00018				310.61%
B 249.772†	2672.7	0.0226	mg/L	0.00093				4.12%
Ba 233.527†	13923.1	0.1649	mg/L	0.00164				0.99%
Be 313.107†	30.3	0.0000	mg/L	0.00009				825.21%
Cd 226.502†	4.0	0.0000	mg/L	0.00001				492.36%
Co 228.616†	1.9	0.0001	mg/L	0.00007				86.39%
Cr 267.716†	-27.0	0.0002	mg/L	0.00006				34.02%
Cu 324.752†	318.0	0.0012	mg/L	0.00041				33.61%

00753

Method: DV200-6010C Opt3 Page 14 Date: 10/14/2014 3:58:53 PM

Fe 259.939†	18682.8	0.3358 mg/L	0.00230	0.68%
K 766.490†	1023.2	1.533 mg/L	0.0087	0.57%
Mg 279.077†	40473.9	3.933 mg/L	0.0285	0.72%
Mn 257.610†	1314.9	0.0039 mg/L	0.00005	1.34%
Mo 202.031†	0.3	0.0000 mg/L	0.00008	505.74%
Ni 231.604†	46.7	0.0011 mg/L	0.00005	4.08%
Na 589.592†	204101.9	37.21 mg/L	0.154	0.41%
Pb 220.353†	-5.1	-0.0009 mg/L	0.00135	158.65%
Sb 206.836†	1.0	0.0005 mg/L	0.00082	152.72%
Se 196.026†	0.3	0.0005 mg/L	0.00512	>999.9%
Sn 189.927†	-23.8	-0.0050 mg/L	0.00084	16.85%
Ti 337.279†	75.8	0.0001 mg/L	0.00010	73.90%
Tl 190.801†	0.6	0.0003 mg/L	0.00143	417.28%
V 292.402†	-6.2	-0.0001 mg/L	0.00030	257.59%
Zn 206.200†	103.8	0.0035 mg/L	0.00005	1.40%
Ca 227.546†	867.8	4.707 mg/L	0.0102	0.22%
Sr 421.552†	28327.4	0.2446 mg/L	0.00100	0.41%
Al 394.401†	-159.0	-0.0039 mg/L	0.00073	18.61%
Al 237.313†	2.9	0.0005 mg/L	0.00027	57.66%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 18
Sample ID: R1407780-009 5X
Analyst:
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 42
Date Collected: 10/14/2014 3:48:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407780-009 5X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6593352.1	0.9795	mg/L	0.00118				0.12%
Ag 328.068†	-185.7	-0.0004	mg/L	0.00019				49.95%
Al 308.215†	180.6	0.0102	mg/L	0.00220				21.60%
As 188.979†	0.2	0.0002	mg/L	0.00182				>999.9%
B 249.772†	7246.5	0.0592	mg/L	0.00005				0.09%
Ba 233.527†	53245.7	0.6307	mg/L	0.00259				0.41%
Be 313.107†	-317.6	-0.0001	mg/L	0.00001				7.01%
Cd 226.502†	11.2	0.0000	mg/L	0.00000				10.35%
Co 228.616†	-3.6	-0.0002	mg/L	0.00005				32.11%
Cr 267.716†	-86.3	0.0008	mg/L	0.00013				15.33%
Cu 324.752†	300.0	0.0013	mg/L	0.00021				16.57%
Fe 259.939†	72094.8	1.296	mg/L	0.0060				0.46%
K 766.490†	4300.1	6.443	mg/L	0.0190				0.30%
Mg 279.077†	160585.5	15.60	mg/L	0.080				0.51%
Mn 257.610†	5117.9	0.0151	mg/L	0.00006				0.39%
Mo 202.031†	7.4	0.0004	mg/L	0.00002				5.53%
Ni 231.604†	194.8	0.0046	mg/L	0.00011				2.32%
Na 589.592†	807745.9	147.3	mg/L	0.69				0.47%
Pb 220.353†	-5.9	-0.0010	mg/L	0.00022				21.27%
Sb 206.836†	1.0	0.0005	mg/L	0.00003				6.43%
Se 196.026†	0.4	0.0008	mg/L	0.00197				248.20%
Sn 189.927†	-80.7	-0.0169	mg/L	0.00040				2.36%
Ti 337.279†	127.5	0.0002	mg/L	0.00001				6.06%
Tl 190.801†	0.3	0.0002	mg/L	0.00079				444.44%
V 292.402†	8.2	0.0001	mg/L	0.00003				61.54%
Zn 206.200†	307.3	0.0104	mg/L	0.00007				0.71%
Ca 227.546†	3679.5	19.95	mg/L	0.003				0.02%
Sr 421.552†	114092.0	0.9850	mg/L	0.00343				0.35%
Al 394.401†	-353.0	-0.0087	mg/L	0.00105				12.09%
Al 237.313†	34.2	0.0056	mg/L	0.00134				23.85%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 19
Sample ID: R1407780-014 5X
Analyst:
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 43
Date Collected: 10/14/2014 3:55:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

00754

Method: DV200-6010C Opt3 Page 15 Date: 10/14/2014 4:05:04 PM

Mean Data: R1407780-014 5X

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6590567.9	0.9791	mg/L	0.00303				0.31%
Ag 328.068†	-127.7	-0.0004	mg/L	0.00028				74.72%
Al 308.215†	175.1	0.0108	mg/L	0.00617				56.87%
As 188.979†	0.3	0.0003	mg/L	0.00031				121.51%
B 249.772†	29764.6	0.2698	mg/L	0.00438				1.62%
Ba 233.527†	17339.5	0.2054	mg/L	0.00138				0.67%
Be 313.107†	-150.1	-0.0001	mg/L	0.00004				78.87%
Cd 226.502†	10.2	0.0001	mg/L	0.00002				29.92%
Co 228.616†	2.4	0.0001	mg/L	0.00015				141.65%
Cr 267.716†	285.0	0.0031	mg/L	0.00004				1.33%
Cu 324.752†	356.8	0.0014	mg/L	0.00015				10.88%
Fe 259.939†	25772.1	0.4633	mg/L	0.00250				0.54%
K 766.490†	7574.4	11.35	mg/L	0.015				0.13%
Mg 279.077†	65215.7	6.337	mg/L	0.0257				0.41%
Mn 257.610†	2748.4	0.0081	mg/L	0.00002				0.23%
Mo 202.031†	13.6	0.0008	mg/L	0.00007				8.53%
Ni 231.604†	223.0	0.0053	mg/L	0.00003				0.56%
Na 589.592†	770813.3	140.5	mg/L	1.61				1.15%
Pb 220.353†	-1.3	-0.0002	mg/L	0.00034				148.98%
Sb 206.836†	3.6	0.0018	mg/L	0.00013				7.28%
Se 196.026†	8.4	0.0102	mg/L	0.00915				89.39%
Sn 189.927†	-44.2	-0.0093	mg/L	0.00012				1.28%
Ti 337.279†	425.4	0.0008	mg/L	0.00000				0.18%
Tl 190.801†	-1.9	-0.0010	mg/L	0.00284				273.93%
V 292.402†	57.9	0.0009	mg/L	0.00014				16.54%
Zn 206.200†	160.8	0.0054	mg/L	0.00002				0.43%
Ca 227.546†	1763.7	9.554	mg/L	0.0451				0.47%
Sr 421.552†	53070.8	0.4582	mg/L	0.00007				0.01%
Al 394.401†	140.4	0.0035	mg/L	0.00122				35.20%
Al 237.313†	54.0	0.0089	mg/L	0.00092				10.41%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

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Sequence No.: 20
Sample ID: R1407780-015 5X
Analyst:
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 44
Date Collected: 10/14/2014 4:01:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407780-015 5X

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6548944.1	0.9729	mg/L	0.00027				0.03%
Ag 328.068†	-97.9	-0.0003	mg/L	0.00018				53.85%
Al 308.215†	212.6	0.0131	mg/L	0.00039				3.02%
As 188.979†	1.5	0.0012	mg/L	0.00081				65.85%
B 249.772†	10094.1	0.0910	mg/L	0.00062				0.68%
Ba 233.527†	28144.0	0.3334	mg/L	0.00202				0.61%
Be 313.107†	-428.9	-0.0001	mg/L	0.00001				6.70%
Cd 226.502†	3.3	0.0000	mg/L	0.00002				104.93%
Co 228.616†	-3.5	-0.0002	mg/L	0.00010				65.41%
Cr 267.716†	1.3	0.0010	mg/L	0.00005				5.67%
Cu 324.752†	215.6	0.0008	mg/L	0.00015				18.06%
Fe 259.939†	9572.6	0.1721	mg/L	0.00078				0.45%
K 766.490†	3742.3	5.607	mg/L	0.0421				0.75%
Mg 279.077†	99522.5	9.671	mg/L	0.0649				0.67%
Mn 257.610†	1543.0	0.0045	mg/L	0.00004				0.99%
Mo 202.031†	5.1	0.0003	mg/L	0.00018				57.62%
Ni 231.604†	177.3	0.0042	mg/L	0.00045				10.68%
Na 589.592†	638636.9	116.4	mg/L	0.20				0.18%
Pb 220.353†	-5.5	-0.0009	mg/L	0.00029				31.81%
Sb 206.836†	3.8	0.0020	mg/L	0.00156				79.63%
Se 196.026†	2.2	0.0027	mg/L	0.00104				39.29%
Sn 189.927†	-52.4	-0.0110	mg/L	0.00001				0.08%
Ti 337.279†	127.4	0.0002	mg/L	0.00007				30.33%
Tl 190.801†	-4.7	-0.0026	mg/L	0.00048				18.82%
V 292.402†	12.2	0.0002	mg/L	0.00034				195.01%
Zn 206.200†	68.0	0.0023	mg/L	0.00001				0.65%

00755

Method: DV200-6010C Opt3 Page 16 Date: 10/14/2014 4:16:59 PM

Ca 227.546†	2020.0	10.92 mg/L	0.035		0.32%
Sr 421.552†	89473.6	0.7724 mg/L	0.00076		0.10%
Al 394.401†	-132.5	-0.0033 mg/L	0.00117		35.64%
Al 237.313†	34.0	0.0056 mg/L	0.00015		2.63%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 21
Sample ID: R1407780-038 5X
Analyst:
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 45
Date Collected: 10/14/2014 4:07:25 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407780-038 5X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6675805.1	0.9917	mg/L	0.00660				0.67%
Ag 328.068†	-78.6	-0.0003	mg/L	0.00002				9.16%
Al 308.215†	264.9	0.0166	mg/L	0.00873				52.49%
As 188.979†	-0.3	-0.0002	mg/L	0.00006				27.47%
B 249.772†	3541.0	0.0309	mg/L	0.00020				0.66%
Ba 233.527†	1013.1	0.0120	mg/L	0.00001				0.06%
Be 313.107†	-67.1	0.0000	mg/L	0.00005				214.03%
Cd 226.502†	0.5	0.0000	mg/L	0.00007				302.95%
Co 228.616†	-5.9	-0.0003	mg/L	0.00001				5.42%
Cr 267.716†	-40.0	0.0000	mg/L	0.00013				>999.9%
Cu 324.752†	170.4	0.0007	mg/L	0.00027				40.22%
Fe 259.939†	10981.2	0.1974	mg/L	0.00127				0.64%
K 766.490†	1026.3	1.538	mg/L	0.0596				3.88%
Mg 279.077†	36099.0	3.508	mg/L	0.0092				0.26%
Mn 257.610†	33275.6	0.0971	mg/L	0.00041				0.42%
Mo 202.031†	5.7	0.0003	mg/L	0.00015				42.74%
Ni 231.604†	23.8	0.0006	mg/L	0.00010				17.46%
Na 589.592†	125022.9	22.79	mg/L	0.082				0.36%
Pb 220.353†	4.6	0.0008	mg/L	0.00011				14.26%
Sb 206.836†	2.0	0.0010	mg/L	0.00051				50.43%
Se 196.026†	0.9	0.0012	mg/L	0.00068				57.73%
Sn 189.927†	-57.9	-0.0121	mg/L	0.00054				4.45%
Ti 337.279†	523.5	0.0009	mg/L	0.00001				1.31%
Tl 190.801†	-3.1	-0.0018	mg/L	0.00147				83.65%
V 292.402†	-6.4	-0.0001	mg/L	0.00000				4.41%
Zn 206.200†	44.4	0.0015	mg/L	0.00004				2.76%
Ca 227.546†	2032.3	10.99	mg/L	0.061				0.55%
Sr 421.552†	12121.5	0.1046	mg/L	0.00037				0.36%
Al 394.401†	466.1	0.0115	mg/L	0.00091				7.89%
Al 237.313†	119.7	0.0196	mg/L	0.00112				5.70%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 22
Sample ID: R1407780-039 5X
Analyst:
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 46
Date Collected: 10/14/2014 4:13:20 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407780-039 5X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6678548.8	0.9921	mg/L	0.02414				2.43%
Ag 328.068†	-16.7	0.0000	mg/L	0.00003				875.52%
Al 308.215†	-41.8	-0.0041	mg/L	0.02072				509.75%
As 188.979†	1.1	0.0008	mg/L	0.00157				186.93%
B 249.772†	3323.2	0.0289	mg/L	0.00091				3.14%
Ba 233.527†	1379.7	0.0163	mg/L	0.00029				1.80%
Be 313.107†	159.4	0.0001	mg/L	0.00011				204.45%
Cd 226.502†	-11.7	-0.0002	mg/L	0.00004				20.84%
Co 228.616†	-13.5	-0.0006	mg/L	0.00037				60.20%
Cr 267.716†	81.2	0.0010	mg/L	0.00000				0.23%
Cu 324.752†	52.9	0.0002	mg/L	0.00077				348.10%
Fe 259.939†	12739.1	0.2290	mg/L	0.00689				3.01%

Method: DV200-6010C Opt3 Page 17 Date: 10/14/2014 4:29:57 PM

K 766.490†	1199.9	1.798	mg/L	0.0511	2.84%
Mg 279.077†	33124.2	3.219	mg/L	0.0950	2.95%
Mn 257.610†	9447.6	0.0276	mg/L	0.00070	2.54%
Mo 202.031†	6.2	0.0004	mg/L	0.00009	23.50%
Ni 231.604†	37.9	0.0009	mg/L	0.00008	8.57%
Na 589.592†	80694.1	14.71	mg/L	0.360	2.45%
Pb 220.353†	-2.3	-0.0004	mg/L	0.00121	311.48%
Sb 206.836†	3.9	0.0020	mg/L	0.00030	15.19%
Se 196.026†	0.8	0.0010	mg/L	0.00007	7.52%
Sn 189.927†	-49.5	-0.0104	mg/L	0.00017	1.63%
Ti 337.279†	488.5	0.0009	mg/L	0.00006	7.26%
Tl 190.801†	-8.2	-0.0045	mg/L	0.00010	2.29%
V 292.402†	-8.8	-0.0001	mg/L	0.00002	15.54%
Zn 206.200†	-3.0	-0.0001	mg/L	0.00007	70.22%
Ca 227.546†	1803.4	9.755	mg/L	0.2486	2.55%
Sr 421.552†	11696.9	0.1010	mg/L	0.00216	2.14%
Al 394.401†	161.7	0.0040	mg/L	0.00064	16.00%
Al 237.313†	68.4	0.0112	mg/L	0.00012	1.03%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 23
Sample ID: R1407780-039L 5X
Analyst:
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 47
Date Collected: 10/14/2014 4:19:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407780-039L 5X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6727563.1	0.9994	mg/L	0.00859				0.86%
Ag 328.068†	18.6	0.0001	mg/L	0.00007				81.84%
Al 308.215†	-430.5	-0.0296	mg/L	0.00543				18.38%
As 188.979†	-2.9	-0.0023	mg/L	0.00030				13.06%
B 249.772†	442.3	0.0037	mg/L	0.00017				4.58%
Ba 233.527†	267.1	0.0032	mg/L	0.00007				2.29%
Be 313.107†	495.7	0.0002	mg/L	0.00003				18.02%
Cd 226.502†	-13.6	-0.0002	mg/L	0.00002				11.88%
Co 228.616†	-6.8	-0.0003	mg/L	0.00024				78.10%
Cr 267.716†	45.3	0.0005	mg/L	0.00006				13.96%
Cu 324.752†	-132.2	-0.0005	mg/L	0.00041				82.46%
Fe 259.939†	2486.7	0.0447	mg/L	0.00018				0.41%
K 766.490†	249.9	0.3745	mg/L	0.00516				1.38%
Mg 279.077†	6490.4	0.6307	mg/L	0.00607				0.96%
Mn 257.610†	1871.3	0.0055	mg/L	0.00001				0.26%
Mo 202.031†	-1.9	-0.0001	mg/L	0.00011				96.04%
Ni 231.604†	-2.2	-0.0001	mg/L	0.00015				287.66%
Na 589.592†	15652.1	2.854	mg/L	0.0185				0.65%
Pb 220.353†	-2.2	-0.0004	mg/L	0.00014				38.16%
Sb 206.836†	3.7	0.0019	mg/L	0.00025				13.06%
Se 196.026†	2.2	0.0027	mg/L	0.00043				15.98%
Sn 189.927†	-17.8	-0.0037	mg/L	0.00013				3.51%
Ti 337.279†	179.4	0.0003	mg/L	0.00007				20.89%
Tl 190.801†	-8.5	-0.0047	mg/L	0.00006				1.22%
V 292.402†	4.0	0.0001	mg/L	0.00016				272.43%
Zn 206.200†	-25.9	-0.0009	mg/L	0.00002				2.35%
Ca 227.546†	344.5	1.863	mg/L	0.0147				0.79%
Sr 421.552†	2283.8	0.0197	mg/L	0.00044				2.21%
Al 394.401†	-97.6	-0.0024	mg/L	0.00080				33.20%
Al 237.313†	-2.8	-0.0005	mg/L	0.00112				244.83%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 24
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 10/14/2014 4:25:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Method: DV200-6010C Opt3 Page 18 Date: 10/14/2014 4:36:20 PM

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6615667.9	0.9828	mg/L	0.00173				0.18%
Ag 328.068†	128444.2	0.5088	mg/L	0.00084	0.5088	mg/L	0.00084	0.17%
QC value within limits for Ag 328.068 Recovery = 101.76%								
Al 308.215†	141388.8	9.630	mg/L	0.0231	9.630	mg/L	0.0231	0.24%
QC value within limits for Al 308.215 Recovery = 96.30%								
As 188.979†	1244.0	0.9880	mg/L	0.00017	0.9880	mg/L	0.00017	0.02%
QC value within limits for As 188.979 Recovery = 98.80%								
B 249.772†	264518.4	2.396	mg/L	0.0283	2.396	mg/L	0.0283	1.18%
QC value within limits for B 249.772 Recovery = 95.82%								
Ba 233.527†	848106.5	10.05	mg/L	0.019	10.05	mg/L	0.019	0.19%
QC value within limits for Ba 233.527 Recovery = 100.46%								
Be 313.107†	706377.3	0.2449	mg/L	0.00030	0.2449	mg/L	0.00030	0.12%
QC value within limits for Be 313.107 Recovery = 97.94%								
Cd 226.502†	41413.6	0.5056	mg/L	0.00085	0.5056	mg/L	0.00085	0.17%
QC value within limits for Cd 226.502 Recovery = 101.13%								
Co 228.616†	54377.4	2.486	mg/L	0.0009	2.486	mg/L	0.0009	0.04%
QC value within limits for Co 228.616 Recovery = 99.44%								
Cr 267.716†	58963.0	0.5139	mg/L	0.00184	0.5139	mg/L	0.00184	0.36%
QC value within limits for Cr 267.716 Recovery = 102.78%								
Cu 324.752†	325082.5	1.228	mg/L	0.0041	1.228	mg/L	0.0041	0.33%
QC value within limits for Cu 324.752 Recovery = 98.20%								
Fe 259.939†	277022.2	4.980	mg/L	0.0153	4.980	mg/L	0.0153	0.31%
QC value within limits for Fe 259.939 Recovery = 99.59%								
K 766.490†	16383.2	24.55	mg/L	0.040	24.55	mg/L	0.040	0.16%
QC value within limits for K 766.490 Recovery = 98.19%								
Mg 279.077†	253688.2	24.65	mg/L	0.035	24.65	mg/L	0.035	0.14%
QC value within limits for Mg 279.077 Recovery = 98.61%								
Mn 257.610†	256890.1	0.7502	mg/L	0.00148	0.7502	mg/L	0.00148	0.20%
QC value within limits for Mn 257.610 Recovery = 100.03%								
Mo 202.031†	40502.1	2.441	mg/L	0.0038	2.441	mg/L	0.0038	0.16%
QC value within limits for Mo 202.031 Recovery = 97.63%								
Ni 231.604†	84731.6	2.021	mg/L	0.0035	2.021	mg/L	0.0035	0.18%
QC value within limits for Ni 231.604 Recovery = 101.07%								
Na 589.592†	133889.2	24.41	mg/L	0.050	24.41	mg/L	0.050	0.21%
QC value within limits for Na 589.592 Recovery = 97.64%								
Pb 220.353†	2959.2	0.4946	mg/L	0.00002	0.4946	mg/L	0.00002	0.00%
QC value within limits for Pb 220.353 Recovery = 98.92%								
Sb 206.836†	9798.7	5.012	mg/L	0.0345	5.012	mg/L	0.0345	0.69%
QC value within limits for Sb 206.836 Recovery = 100.24%								
Se 196.026†	398.1	0.4835	mg/L	0.00148	0.4835	mg/L	0.00148	0.31%
QC value within limits for Se 196.026 Recovery = 96.70%								
Sn 189.927†	23761.1	4.980	mg/L	0.0166	4.980	mg/L	0.0166	0.33%
QC value within limits for Sn 189.927 Recovery = 99.59%								
Ti 337.279†	1359352.9	2.441	mg/L	0.0053	2.441	mg/L	0.0053	0.22%
QC value within limits for Ti 337.279 Recovery = 97.63%								
Tl 190.801†	1797.1	0.9821	mg/L	0.00115	0.9821	mg/L	0.00115	0.12%
QC value within limits for Tl 190.801 Recovery = 98.21%								
V 292.402†	169654.7	2.596	mg/L	0.0010	2.596	mg/L	0.0010	0.04%
QC value within limits for V 292.402 Recovery = 103.84%								
Zn 206.200†	29797.8	1.008	mg/L	0.0014	1.008	mg/L	0.0014	0.14%
QC value within limits for Zn 206.200 Recovery = 100.76%								
Ca 227.546†	4464.0	24.43	mg/L	0.040	24.43	mg/L	0.040	0.17%
QC value within limits for Ca 227.546 Recovery = 97.73%								
Sr 421.552†	270857.7	2.338	mg/L	0.0009	2.338	mg/L	0.0009	0.04%
QC value within limits for Sr 421.552 Recovery = 93.53%								
Al 394.401†	389897.8	9.621	mg/L	0.0213	9.621	mg/L	0.0213	0.22%
QC value within limits for Al 394.401 Recovery = 96.21%								
Al 237.313†	59551.0	9.768	mg/L	0.0131	9.768	mg/L	0.0131	0.13%
QC value within limits for Al 237.313 Recovery = 97.68%								

All analyte(s) passed QC.

Sequence No.: 25
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 10/14/2014 4:32:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Method: DV200-6010C Opt3 Page 19 Date: 10/14/2014 4:42:14 PM

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6705423.2	0.9961	mg/L	0.00510				0.51%
Ag 328.068†	58.6	0.0002	mg/L	0.00022	0.0002	mg/L	0.00022	92.42%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	44.1	0.0030	mg/L	0.00044	0.0030	mg/L	0.00044	14.63%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.7	0.0013	mg/L	0.00028	0.0013	mg/L	0.00028	20.55%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3111.8	0.0284	mg/L	0.00419	0.0284	mg/L	0.00419	14.71%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	576.1	0.0068	mg/L	0.00246	0.0068	mg/L	0.00246	36.11%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	612.1	0.0002	mg/L	0.00008	0.0002	mg/L	0.00008	38.24%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	35.6	0.0004	mg/L	0.00014	0.0004	mg/L	0.00014	33.07%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	49.7	0.0023	mg/L	0.00053	0.0023	mg/L	0.00053	23.55%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	35.9	0.0003	mg/L	0.00004	0.0003	mg/L	0.00004	11.71%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	931.2	0.0035	mg/L	0.00051	0.0035	mg/L	0.00051	14.47%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	439.0	0.0079	mg/L	0.00185	0.0079	mg/L	0.00185	23.42%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	57.2	0.0857	mg/L	0.01182	0.0857	mg/L	0.01182	13.80%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	164.2	0.0160	mg/L	0.00999	0.0160	mg/L	0.00999	62.59%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	234.4	0.0007	mg/L	0.00025	0.0007	mg/L	0.00025	36.27%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	23.9	0.0014	mg/L	0.00050	0.0014	mg/L	0.00050	35.08%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	76.7	0.0018	mg/L	0.00040	0.0018	mg/L	0.00040	21.67%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	273.1	0.0498	mg/L	0.00307	0.0498	mg/L	0.00307	6.17%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	6.3	0.0011	mg/L	0.00047	0.0011	mg/L	0.00047	44.29%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	8.8	0.0045	mg/L	0.00111	0.0045	mg/L	0.00111	24.71%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.6	0.0008	mg/L	0.00167	0.0008	mg/L	0.00167	222.08%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	42.2	0.0088	mg/L	0.00229	0.0088	mg/L	0.00229	25.83%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	1039.7	0.0019	mg/L	0.00074	0.0019	mg/L	0.00074	39.47%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-0.3	-0.0002	mg/L	0.00042	-0.0002	mg/L	0.00042	244.37%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	104.9	0.0016	mg/L	0.00090	0.0016	mg/L	0.00090	55.78%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	60.1	0.0020	mg/L	0.00034	0.0020	mg/L	0.00034	16.69%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	0.6	0.0036	mg/L	0.01972	0.0036	mg/L	0.01972	543.99%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	309.8	0.0027	mg/L	0.00007	0.0027	mg/L	0.00007	2.47%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Al 394.401†	284.9	0.0070	mg/L	0.00178	0.0070	mg/L	0.00178	25.29%
QC value within limits for Al 394.401 Recovery = Not calculated								
Al 237.313†	37.4	0.0061	mg/L	0.00121	0.0061	mg/L	0.00121	19.76%
QC value within limits for Al 237.313 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 26
Sample ID: MRL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 10/14/2014 4:38:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MRL

Method: DV200-6010C Opt3 Page 20 Date: 10/14/2014 4:48:27 PM

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6708691.8	0.9966	mg/L	0.01183				1.19%
Ag 328.068†	2679.8	0.0106	mg/L	0.00034	0.0106	mg/L	0.00034	3.20%
QC value within limits for Ag 328.068 Recovery = 106.16%								
Al 308.215†	2620.5	0.1784	mg/L	0.01294	0.1784	mg/L	0.01294	7.25%
QC value within limits for Al 308.215 Recovery = 89.22%								
As 188.979†	26.9	0.0214	mg/L	0.00067	0.0214	mg/L	0.00067	3.13%
QC value within limits for As 188.979 Recovery = 106.82%								
B 249.772†	22867.5	0.2088	mg/L	0.00405	0.2088	mg/L	0.00405	1.94%
QC value within limits for B 249.772 Recovery = 104.38%								
Ba 233.527†	17859.7	0.2115	mg/L	0.00238	0.2115	mg/L	0.00238	1.12%
QC value within limits for Ba 233.527 Recovery = 105.77%								
Be 313.107†	14814.4	0.0051	mg/L	0.00002	0.0051	mg/L	0.00002	0.47%
QC value within limits for Be 313.107 Recovery = 102.70%								
Cd 226.502†	875.8	0.0107	mg/L	0.00012	0.0107	mg/L	0.00012	1.10%
QC value within limits for Cd 226.502 Recovery = 106.93%								
Co 228.616†	1125.1	0.0514	mg/L	0.00077	0.0514	mg/L	0.00077	1.50%
QC value within limits for Co 228.616 Recovery = 102.88%								
Cr 267.716†	1171.7	0.0103	mg/L	0.00001	0.0103	mg/L	0.00001	0.06%
QC value within limits for Cr 267.716 Recovery = 102.61%								
Cu 324.752†	6727.3	0.0254	mg/L	0.00068	0.0254	mg/L	0.00068	2.67%
QC value within limits for Cu 324.752 Recovery = 101.61%								
Fe 259.939†	5927.3	0.1065	mg/L	0.00096	0.1065	mg/L	0.00096	0.90%
QC value within limits for Fe 259.939 Recovery = 106.55%								
K 766.490†	595.5	0.8923	mg/L	0.00524	0.8923	mg/L	0.00524	0.59%
QC value within limits for K 766.490 Recovery = 89.23%								
Mg 279.077†	10186.2	0.9898	mg/L	0.01578	0.9898	mg/L	0.01578	1.59%
QC value within limits for Mg 279.077 Recovery = 98.98%								
Mn 257.610†	5268.7	0.0154	mg/L	0.00020	0.0154	mg/L	0.00020	1.29%
QC value within limits for Mn 257.610 Recovery = 102.58%								
Mo 202.031†	426.3	0.0257	mg/L	0.00060	0.0257	mg/L	0.00060	2.35%
QC value within limits for Mo 202.031 Recovery = 102.75%								
Ni 231.604†	1730.7	0.0413	mg/L	0.00058	0.0413	mg/L	0.00058	1.40%
QC value within limits for Ni 231.604 Recovery = 103.23%								
Na 589.592†	5478.9	0.9989	mg/L	0.01251	0.9989	mg/L	0.01251	1.25%
QC value within limits for Na 589.592 Recovery = 99.89%								
Pb 220.353†	60.9	0.0102	mg/L	0.00063	0.0102	mg/L	0.00063	6.15%
QC value within limits for Pb 220.353 Recovery = 101.72%								
Sb 206.836†	121.4	0.0621	mg/L	0.00038	0.0621	mg/L	0.00038	0.61%
QC value within limits for Sb 206.836 Recovery = 103.50%								
Se 196.026†	9.4	0.0114	mg/L	0.00252	0.0114	mg/L	0.00252	22.13%
QC value within limits for Se 196.026 Recovery = 113.95%								
Sn 189.927†	2502.5	0.5246	mg/L	0.00703	0.5246	mg/L	0.00703	1.34%
QC value within limits for Sn 189.927 Recovery = 104.91%								
Ti 337.279†	29228.0	0.0525	mg/L	0.00076	0.0525	mg/L	0.00076	1.46%
QC value within limits for Ti 337.279 Recovery = 104.96%								
Tl 190.801†	35.2	0.0192	mg/L	0.00007	0.0192	mg/L	0.00007	0.37%
QC value within limits for Tl 190.801 Recovery = 96.24%								
V 292.402†	3561.2	0.0545	mg/L	0.00009	0.0545	mg/L	0.00009	0.16%
QC value within limits for V 292.402 Recovery = 108.99%								
Zn 206.200†	580.4	0.0196	mg/L	0.00005	0.0196	mg/L	0.00005	0.25%
QC value within limits for Zn 206.200 Recovery = 98.13%								
Ca 227.546†	166.1	0.9037	mg/L	0.02319	0.9037	mg/L	0.02319	2.57%
QC value within limits for Ca 227.546 Recovery = 90.37%								
Sr 421.552†	11340.4	0.0979	mg/L	0.00134	0.0979	mg/L	0.00134	1.37%
QC value within limits for Sr 421.552 Recovery = 97.90%								
Al 394.401†	7191.2	0.1775	mg/L	0.00176	0.1775	mg/L	0.00176	0.99%
QC value within limits for Al 394.401 Recovery = 88.73%								
Al 237.313†	1163.0	0.1908	mg/L	0.00325	0.1908	mg/L	0.00325	1.70%
QC value within limits for Al 237.313 Recovery = 95.38%								

All analyte(s) passed QC.

Sequence No.: 27 **Autosampler Location: 7**
Sample ID: ICSA **Date Collected: 10/14/2014 4:44:32 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSA

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Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6332640.7	0.9407	mg/L	0.00460				0.49%
Ag 328.068†	-6435.0	-0.0008	mg/L	0.00071	-0.0008	mg/L	0.00071	84.14%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	3701167.1	252.1	mg/L	1.63	252.1	mg/L	1.63	0.64%
QC value within limits for Al 308.215 Recovery = 100.85%								
As 188.979†	15.5	0.0023	mg/L	0.00223	0.0023	mg/L	0.00223	96.22%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	36168.9	-0.1276	mg/L	0.00832	-0.1276	mg/L	0.00832	6.52%
Ba 233.527†	272.5	0.0032	mg/L	0.00008	0.0032	mg/L	0.00008	2.61%
Be 313.107†	-863.2	-0.0003	mg/L	0.00006	-0.0003	mg/L	0.00006	20.09%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	1064.5	0.0012	mg/L	0.00003	0.0012	mg/L	0.00003	2.67%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	17.4	0.0008	mg/L	0.00027	0.0008	mg/L	0.00027	33.77%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3482.2	-0.0010	mg/L	0.00000	-0.0010	mg/L	0.00000	0.25%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-1735.8	0.0017	mg/L	0.00038	0.0017	mg/L	0.00038	21.78%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	4956735.1	89.10	mg/L	0.061	89.10	mg/L	0.061	0.07%
QC value within limits for Fe 259.939 Recovery = 89.10%								
K 766.490†	-0.4	-0.0007	mg/L	0.06380	-0.0007	mg/L	0.06380	>999.9%
Mg 279.077†	2630213.0	255.6	mg/L	1.30	255.6	mg/L	1.30	0.51%
QC value within limits for Mg 279.077 Recovery = 102.23%								
Mn 257.610†	-5006.5	-0.0028	mg/L	0.00025	-0.0028	mg/L	0.00025	9.02%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	0.0	0.0000	mg/L	0.00052	0.0000	mg/L	0.00052	>999.9%
Ni 231.604†	-116.5	-0.0028	mg/L	0.00007	-0.0028	mg/L	0.00007	2.59%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	-13.8	-0.0025	mg/L	0.00223	-0.0025	mg/L	0.00223	88.83%
Pb 220.353†	-141.5	0.0018	mg/L	0.00040	0.0018	mg/L	0.00040	22.26%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	42.7	-0.0006	mg/L	0.00062	-0.0006	mg/L	0.00062	107.53%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-20.0	0.0005	mg/L	0.00225	0.0005	mg/L	0.00225	460.51%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-157.8	-0.0625	mg/L	0.00071	-0.0625	mg/L	0.00071	1.14%
Ti 337.279†	264.0	0.0005	mg/L	0.00004	0.0005	mg/L	0.00004	8.72%
Tl 190.801†	28.2	0.0012	mg/L	0.00089	0.0012	mg/L	0.00089	72.66%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	312.4	-0.0004	mg/L	0.00003	-0.0004	mg/L	0.00003	7.01%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	163.2	0.0055	mg/L	0.00009	0.0055	mg/L	0.00009	1.63%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	46853.6	259.0	mg/L	5.57	259.0	mg/L	5.57	2.15%
QC value within limits for Ca 227.546 Recovery = 103.61%								
Sr 421.552†	452.5	0.0039	mg/L	0.00013	0.0039	mg/L	0.00013	3.36%
Al 394.401†	10689659.1	263.8	mg/L	0.67	263.8	mg/L	0.67	0.25%
QC value within limits for Al 394.401 Recovery = 105.51%								
Al 237.313†	1532257.2	251.3	mg/L	1.46	251.3	mg/L	1.46	0.58%
QC value within limits for Al 237.313 Recovery = 100.53%								

All analyte(s) passed QC.

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Sequence No.: 28 **Autosampler Location: 8**
Sample ID: ICSAB **Date Collected: 10/14/2014 4:50:47 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6219352.5	0.9239	mg/L	0.00203				0.22%
Ag 328.068†	46795.5	0.2098	mg/L	0.00089	0.2098	mg/L	0.00089	0.42%
QC value within limits for Ag 328.068 Recovery = 104.92%								
Al 308.215†	3797910.9	258.7	mg/L	1.15	258.7	mg/L	1.15	0.44%
QC value within limits for Al 308.215 Recovery = 103.49%								
As 188.979†	142.2	0.1028	mg/L	0.00252	0.1028	mg/L	0.00252	2.45%

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QC value within limits for As 188.979 Recovery = 102.78%						
B 249.772†	36440.1	-0.1328 mg/L	0.00059	-0.1328 mg/L	0.00059	0.44%
Ba 233.527†	44355.8	0.5254 mg/L	0.00057	0.5254 mg/L	0.00057	0.11%
QC value within limits for Ba 233.527 Recovery = 105.08%						
Be 313.107†	1450398.9	0.5028 mg/L	0.00196	0.5028 mg/L	0.00196	0.39%
QC value within limits for Be 313.107 Recovery = 100.55%						
Cd 226.502†	81587.7	0.9855 mg/L	0.00174	0.9855 mg/L	0.00174	0.18%
QC value within limits for Cd 226.502 Recovery = 98.55%						
Co 228.616†	10467.1	0.4785 mg/L	0.00164	0.4785 mg/L	0.00164	0.34%
QC value within limits for Co 228.616 Recovery = 95.71%						
Cr 267.716†	55886.7	0.5147 mg/L	0.00077	0.5147 mg/L	0.00077	0.15%
QC value within limits for Cr 267.716 Recovery = 102.93%						
Cu 324.752†	138235.8	0.5302 mg/L	0.00446	0.5302 mg/L	0.00446	0.84%
QC value within limits for Cu 324.752 Recovery = 106.04%						
Fe 259.939†	5036448.1	90.53 mg/L	0.075	90.53 mg/L	0.075	0.08%
QC value within limits for Fe 259.939 Recovery = 90.53%						
K 766.490†	55.0	0.0824 mg/L	0.01600	0.0824 mg/L	0.01600	19.42%
Mg 279.077†	2720448.7	264.4 mg/L	0.61	264.4 mg/L	0.61	0.23%
QC value within limits for Mg 279.077 Recovery = 105.74%						
Mn 257.610†	171164.6	0.5115 mg/L	0.00056	0.5115 mg/L	0.00056	0.11%
QC value within limits for Mn 257.610 Recovery = 102.30%						
Mo 202.031†	2.4	0.0001 mg/L	0.00021	0.0001 mg/L	0.00021	147.05%
Ni 231.604†	40685.7	0.9707 mg/L	0.00050	0.9707 mg/L	0.00050	0.05%
QC value within limits for Ni 231.604 Recovery = 97.07%						
Na 589.592†	-22.1	-0.0040 mg/L	0.00842	-0.0040 mg/L	0.00842	208.64%
Pb 220.353†	153.0	0.0516 mg/L	0.00186	0.0516 mg/L	0.00186	3.61%
QC value within limits for Pb 220.353 Recovery = 103.20%						
Sb 206.836†	1288.6	0.6362 mg/L	0.00120	0.6362 mg/L	0.00120	0.19%
QC value within limits for Sb 206.836 Recovery = 106.04%						
Se 196.026†	24.0	0.0542 mg/L	0.00240	0.0542 mg/L	0.00240	4.42%
QC value within limits for Se 196.026 Recovery = 108.41%						
Sn 189.927†	-128.8	-0.0572 mg/L	0.00100	-0.0572 mg/L	0.00100	1.74%
Ti 337.279†	271.2	0.0005 mg/L	0.00011	0.0005 mg/L	0.00011	22.08%
Tl 190.801†	215.4	0.1032 mg/L	0.00233	0.1032 mg/L	0.00233	2.26%
QC value within limits for Tl 190.801 Recovery = 103.20%						
V 292.402†	34065.5	0.5161 mg/L	0.00229	0.5161 mg/L	0.00229	0.44%
QC value within limits for V 292.402 Recovery = 103.22%						
Zn 206.200†	28787.6	0.9734 mg/L	0.00447	0.9734 mg/L	0.00447	0.46%
QC value within limits for Zn 206.200 Recovery = 97.34%						
Ca 227.546†	47901.5	264.8 mg/L	0.92	264.8 mg/L	0.92	0.35%
QC value within limits for Ca 227.546 Recovery = 105.91%						
Sr 421.552†	429.3	0.0037 mg/L	0.00026	0.0037 mg/L	0.00026	7.06%
Al 394.401†	10704525.9	264.2 mg/L	0.07	264.2 mg/L	0.07	0.03%
QC value within limits for Al 394.401 Recovery = 105.66%						
Al 237.313†	1576128.4	258.5 mg/L	0.49	258.5 mg/L	0.49	0.19%
QC value within limits for Al 237.313 Recovery = 103.41%						

All analyte(s) passed QC.

Sequence No.: 29
Sample ID: HLCCV2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 10/14/2014 4:57:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: HLCCV2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	6058947.1	0.9001	mg/L	0.00416				0.46%
Ag 328.068†	529039.9	2.103	mg/L	0.0139	2.103	mg/L	0.0139	0.66%
QC value within limits for Ag 328.068 Recovery = 105.13%								
Al 308.215†	7635446.8	520.1	mg/L	0.72	520.1	mg/L	0.72	0.14%
QC value within limits for Al 308.215 Recovery = 104.02%								
As 188.979†	5018.9	3.967	mg/L	0.0220	3.967	mg/L	0.0220	0.55%
QC value within limits for As 188.979 Recovery = 99.18%								
B 249.772†	1121804.0	9.990	mg/L	0.1028	9.990	mg/L	0.1028	1.03%
QC value within limits for B 249.772 Recovery = 99.90%								
Ba 233.527†	3121624.6	36.98	mg/L	0.024	36.98	mg/L	0.024	0.07%
QC value within limits for Ba 233.527 Recovery = 92.44%								
Be 313.107†	2756285.2	0.9554	mg/L	0.00277	0.9554	mg/L	0.00277	0.29%
QC value within limits for Be 313.107 Recovery = 95.54%								

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Cd 226.502†	152921.8	1.865 mg/L	0.0028	1.865 mg/L	0.0028	0.15%
QC value within limits for Cd 226.502 Recovery = 93.23%						
Co 228.616†	206131.2	9.424 mg/L	0.0390	9.424 mg/L	0.0390	0.41%
QC value within limits for Co 228.616 Recovery = 94.24%						
Cr 267.716†	1094960.2	9.546 mg/L	0.0089	9.546 mg/L	0.0089	0.09%
QC value within limits for Cr 267.716 Recovery = 95.46%						
Cu 324.752†	1420144.0	5.365 mg/L	0.0439	5.365 mg/L	0.0439	0.82%
QC value within limits for Cu 324.752 Recovery = 107.30%						
Fe 259.939†	2556550.9	45.96 mg/L	0.035	45.96 mg/L	0.035	0.08%
QC value within limits for Fe 259.939 Recovery = 91.91%						
K 766.490†	113270.8	169.7 mg/L	1.14	169.7 mg/L	1.14	0.67%
QC value greater than the upper limit for K 766.490 Recovery = 113.14%						
Mg 279.077†	5241412.6	509.3 mg/L	0.86	509.3 mg/L	0.86	0.17%
QC value within limits for Mg 279.077 Recovery = 101.86%						
Mn 257.610†	3250359.6	9.490 mg/L	0.0105	9.490 mg/L	0.0105	0.11%
QC value within limits for Mn 257.610 Recovery = 94.90%						
Mo 202.031†	159257.8	9.598 mg/L	0.0220	9.598 mg/L	0.0220	0.23%
QC value within limits for Mo 202.031 Recovery = 95.98%						
Ni 231.604†	308765.0	7.366 mg/L	0.0247	7.366 mg/L	0.0247	0.33%
QC value within limits for Ni 231.604 Recovery = 92.08%						
Na 589.592†	860215.9	156.8 mg/L	0.95	156.8 mg/L	0.95	0.60%
QC value within limits for Na 589.592 Recovery = 104.56%						
Pb 220.353†	57834.3	9.705 mg/L	0.0487	9.705 mg/L	0.0487	0.50%
QC value within limits for Pb 220.353 Recovery = 97.05%						
Sb 206.836†	73.6	-0.0085 mg/L	0.00211	-0.0085 mg/L	0.00211	24.69%
Se 196.026†	1568.5	1.919 mg/L	0.0139	1.919 mg/L	0.0139	0.73%
QC value within limits for Se 196.026 Recovery = 95.96%						
Sn 189.927†	-194.9	-0.1016 mg/L	0.00007	-0.1016 mg/L	0.00007	0.07%
Ti 337.279†	5367510.8	9.638 mg/L	0.0165	9.638 mg/L	0.0165	0.17%
QC value within limits for Ti 337.279 Recovery = 96.38%						
Tl 190.801†	7136.1	3.870 mg/L	0.0224	3.870 mg/L	0.0224	0.58%
QC value within limits for Tl 190.801 Recovery = 96.75%						
V 292.402†	637510.3	9.754 mg/L	0.0645	9.754 mg/L	0.0645	0.66%
QC value within limits for V 292.402 Recovery = 97.54%						
Zn 206.200†	107230.6	3.626 mg/L	0.0125	3.626 mg/L	0.0125	0.34%
QC value within limits for Zn 206.200 Recovery = 90.65%						
Ca 227.546†	51627.6	283.1 mg/L	3.83	283.1 mg/L	3.83	1.35%
QC value greater than the upper limit for Ca 227.546 Recovery = 113.22%						
Sr 421.552†	1197147.3	10.34 mg/L	0.067	10.34 mg/L	0.067	0.65%
QC value within limits for Sr 421.552 Recovery = 103.35%						
Al 394.401†	21828833.3	538.7 mg/L	4.75	538.7 mg/L	4.75	0.88%
QC value within limits for Al 394.401 Recovery = 107.73%						
Al 237.313†	3099752.1	508.4 mg/L	1.27	508.4 mg/L	1.27	0.25%
QC value within limits for Al 237.313 Recovery = 101.69%						

QC Failed. Continue with analysis.

Sequence No.: 30 **Autosampler Location: 2**
Sample ID: HLCCV1 **Date Collected: 10/14/2014 5:03:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: HLCCV1

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	6581710.2	0.9777 mg/L	0.00778			0.80%
Ag 328.068†	253234.6	1.003 mg/L	0.0044	1.003 mg/L	0.0044	0.44%
QC value within limits for Ag 328.068 Recovery = 100.31%						
Al 308.215†	296634.2	20.20 mg/L	0.009	20.20 mg/L	0.009	0.05%
QC value within limits for Al 308.215 Recovery = 101.02%						
As 188.979†	2458.4	1.952 mg/L	0.0177	1.952 mg/L	0.0177	0.91%
QC value within limits for As 188.979 Recovery = 97.62%						
B 249.772†	546791.7	4.954 mg/L	0.0411	4.954 mg/L	0.0411	0.83%
QC value within limits for B 249.772 Recovery = 99.07%						
Ba 233.527†	1668102.3	19.76 mg/L	0.068	19.76 mg/L	0.068	0.35%
QC value within limits for Ba 233.527 Recovery = 98.79%						
Be 313.107†	1417107.3	0.4912 mg/L	0.00178	0.4912 mg/L	0.00178	0.36%
QC value within limits for Be 313.107 Recovery = 98.24%						
Cd 226.502†	81142.5	0.9907 mg/L	0.00476	0.9907 mg/L	0.00476	0.48%
QC value within limits for Cd 226.502 Recovery = 99.07%						

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Co 228.616†	108797.7	4.974 mg/L	0.0140	4.974 mg/L	0.0140	0.28%
QC value within limits for Co 228.616 Recovery = 99.48%						
Cr 267.716†	115441.6	1.006 mg/L	0.0040	1.006 mg/L	0.0040	0.39%
QC value within limits for Cr 267.716 Recovery = 100.63%						
Cu 324.752†	665695.3	2.514 mg/L	0.0045	2.514 mg/L	0.0045	0.18%
QC value within limits for Cu 324.752 Recovery = 100.55%						
Fe 259.939†	553550.0	9.950 mg/L	0.0256	9.950 mg/L	0.0256	0.26%
QC value within limits for Fe 259.939 Recovery = 99.50%						
K 766.490†	33608.3	50.35 mg/L	0.176	50.35 mg/L	0.176	0.35%
QC value within limits for K 766.490 Recovery = 100.71%						
Mg 279.077†	511417.9	49.70 mg/L	0.151	49.70 mg/L	0.151	0.30%
QC value within limits for Mg 279.077 Recovery = 99.39%						
Mn 257.610†	512207.7	1.496 mg/L	0.0042	1.496 mg/L	0.0042	0.28%
QC value within limits for Mn 257.610 Recovery = 99.73%						
Mo 202.031†	82798.5	4.990 mg/L	0.0186	4.990 mg/L	0.0186	0.37%
QC value within limits for Mo 202.031 Recovery = 99.80%						
Ni 231.604†	166977.6	3.984 mg/L	0.0235	3.984 mg/L	0.0235	0.59%
QC value within limits for Ni 231.604 Recovery = 99.59%						
Na 589.592†	267048.8	48.69 mg/L	0.034	48.69 mg/L	0.034	0.07%
QC value within limits for Na 589.592 Recovery = 97.38%						
Pb 220.353†	5938.6	0.9927 mg/L	0.01034	0.9927 mg/L	0.01034	1.04%
QC value within limits for Pb 220.353 Recovery = 99.27%						
Sb 206.836†	19308.5	9.876 mg/L	0.1011	9.876 mg/L	0.1011	1.02%
QC value within limits for Sb 206.836 Recovery = 98.76%						
Se 196.026†	795.0	0.9656 mg/L	0.01453	0.9656 mg/L	0.01453	1.50%
QC value within limits for Se 196.026 Recovery = 96.56%						
Sn 189.927†	47172.9	9.886 mg/L	0.0629	9.886 mg/L	0.0629	0.64%
QC value within limits for Sn 189.927 Recovery = 98.86%						
Ti 337.279†	2744126.7	4.927 mg/L	0.0093	4.927 mg/L	0.0093	0.19%
QC value within limits for Ti 337.279 Recovery = 98.55%						
Tl 190.801†	3614.7	1.975 mg/L	0.0243	1.975 mg/L	0.0243	1.23%
QC value within limits for Tl 190.801 Recovery = 98.77%						
V 292.402†	332602.1	5.089 mg/L	0.0252	5.089 mg/L	0.0252	0.49%
QC value within limits for V 292.402 Recovery = 101.79%						
Zn 206.200†	58707.8	1.985 mg/L	0.0172	1.985 mg/L	0.0172	0.87%
QC value within limits for Zn 206.200 Recovery = 99.26%						
Ca 227.546†	9299.4	50.87 mg/L	0.399	50.87 mg/L	0.399	0.78%
QC value within limits for Ca 227.546 Recovery = 101.74%						
Sr 421.552†	559053.6	4.826 mg/L	0.0336	4.826 mg/L	0.0336	0.70%
QC value within limits for Sr 421.552 Recovery = 96.53%						
Al 394.401†	820397.9	20.24 mg/L	0.006	20.24 mg/L	0.006	0.03%
QC value within limits for Al 394.401 Recovery = 101.22%						
Al 237.313†	122043.8	20.02 mg/L	0.003	20.02 mg/L	0.003	0.01%
QC value within limits for Al 237.313 Recovery = 100.09%						

All analyte(s) passed QC.

Sequence No.: 31
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 10/14/2014 5:09:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	6669636.9	0.9908 mg/L	0.00317			0.32%
Ag 328.068†	129374.9	0.5125 mg/L	0.00042	0.5125 mg/L	0.00042	0.08%
QC value within limits for Ag 328.068 Recovery = 102.50%						
Al 308.215†	143587.4	9.780 mg/L	0.0044	9.780 mg/L	0.0044	0.04%
QC value within limits for Al 308.215 Recovery = 97.80%						
As 188.979†	1254.0	0.9959 mg/L	0.00077	0.9959 mg/L	0.00077	0.08%
QC value within limits for As 188.979 Recovery = 99.59%						
B 249.772†	278602.1	2.524 mg/L	0.0171	2.524 mg/L	0.0171	0.68%
QC value within limits for B 249.772 Recovery = 100.96%						
Ba 233.527†	866067.2	10.26 mg/L	0.007	10.26 mg/L	0.007	0.07%
QC value within limits for Ba 233.527 Recovery = 102.58%						
Be 313.107†	722812.5	0.2505 mg/L	0.00010	0.2505 mg/L	0.00010	0.04%
QC value within limits for Be 313.107 Recovery = 100.22%						
Cd 226.502†	42300.7	0.5165 mg/L	0.00170	0.5165 mg/L	0.00170	0.33%
QC value within limits for Cd 226.502 Recovery = 103.29%						

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Co 228.616†	55513.7	2.538 mg/L	0.0043	2.538 mg/L	0.0043	0.17%
QC value within limits for Co 228.616 Recovery = 101.52%						
Cr 267.716†	60088.8	0.5237 mg/L	0.00119	0.5237 mg/L	0.00119	0.23%
QC value within limits for Cr 267.716 Recovery = 104.74%						
Cu 324.752†	332268.7	1.255 mg/L	0.0005	1.255 mg/L	0.0005	0.04%
QC value within limits for Cu 324.752 Recovery = 100.37%						
Fe 259.939†	283885.9	5.103 mg/L	0.0054	5.103 mg/L	0.0054	0.11%
QC value within limits for Fe 259.939 Recovery = 102.06%						
K 766.490†	16578.1	24.84 mg/L	0.085	24.84 mg/L	0.085	0.34%
QC value within limits for K 766.490 Recovery = 99.35%						
Mg 279.077†	259309.7	25.20 mg/L	0.030	25.20 mg/L	0.030	0.12%
QC value within limits for Mg 279.077 Recovery = 100.79%						
Mn 257.610†	262183.0	0.7657 mg/L	0.00080	0.7657 mg/L	0.00080	0.10%
QC value within limits for Mn 257.610 Recovery = 102.09%						
Mo 202.031†	41052.0	2.474 mg/L	0.0043	2.474 mg/L	0.0043	0.17%
QC value within limits for Mo 202.031 Recovery = 98.96%						
Ni 231.604†	86261.1	2.058 mg/L	0.0056	2.058 mg/L	0.0056	0.27%
QC value within limits for Ni 231.604 Recovery = 102.90%						
Na 589.592†	134160.7	24.46 mg/L	0.119	24.46 mg/L	0.119	0.48%
QC value within limits for Na 589.592 Recovery = 97.84%						
Pb 220.353†	3008.0	0.5027 mg/L	0.00159	0.5027 mg/L	0.00159	0.32%
QC value within limits for Pb 220.353 Recovery = 100.55%						
Sb 206.836†	9865.0	5.046 mg/L	0.0352	5.046 mg/L	0.0352	0.70%
QC value within limits for Sb 206.836 Recovery = 100.92%						
Se 196.026†	404.1	0.4908 mg/L	0.00070	0.4908 mg/L	0.00070	0.14%
QC value within limits for Se 196.026 Recovery = 98.16%						
Sn 189.927†	24357.3	5.105 mg/L	0.0173	5.105 mg/L	0.0173	0.34%
QC value within limits for Sn 189.927 Recovery = 102.09%						
Ti 337.279†	1374847.5	2.469 mg/L	0.0008	2.469 mg/L	0.0008	0.03%
QC value within limits for Ti 337.279 Recovery = 98.75%						
Tl 190.801†	1816.2	0.9926 mg/L	0.00268	0.9926 mg/L	0.00268	0.27%
QC value within limits for Tl 190.801 Recovery = 99.26%						
V 292.402†	169503.6	2.594 mg/L	0.0043	2.594 mg/L	0.0043	0.17%
QC value within limits for V 292.402 Recovery = 103.75%						
Zn 206.200†	30679.2	1.037 mg/L	0.0036	1.037 mg/L	0.0036	0.35%
QC value within limits for Zn 206.200 Recovery = 103.74%						
Ca 227.546†	4431.8	24.26 mg/L	0.014	24.26 mg/L	0.014	0.06%
QC value within limits for Ca 227.546 Recovery = 97.06%						
Sr 421.552†	271229.3	2.342 mg/L	0.0125	2.342 mg/L	0.0125	0.53%
QC value within limits for Sr 421.552 Recovery = 93.66%						
Al 394.401†	394865.6	9.744 mg/L	0.0060	9.744 mg/L	0.0060	0.06%
QC value within limits for Al 394.401 Recovery = 97.44%						
Al 237.313†	60692.4	9.955 mg/L	0.0036	9.955 mg/L	0.0036	0.04%
QC value within limits for Al 237.313 Recovery = 99.55%						

All analyte(s) passed QC.

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Sequence No.: 32 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 10/14/2014 5:16:02 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6838912.9	1.016	mg/L	0.0050				0.50%
Ag 328.068†	89.2	0.0004	mg/L	0.00021	0.0004	mg/L	0.00021	59.14%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	533.3	0.0363	mg/L	0.00137	0.0363	mg/L	0.00137	3.77%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.5	0.0012	mg/L	0.00123	0.0012	mg/L	0.00123	104.15%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	8457.3	0.0773	mg/L	0.00717	0.0773	mg/L	0.00717	9.28%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	1034.6	0.0123	mg/L	0.00361	0.0123	mg/L	0.00361	29.48%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	1004.0	0.0003	mg/L	0.00013	0.0003	mg/L	0.00013	36.20%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	49.0	0.0006	mg/L	0.00021	0.0006	mg/L	0.00021	34.55%
QC value within limits for Cd 226.502 Recovery = Not calculated								

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Co 228.616†	112.8	0.0052 mg/L	0.00100	0.0052 mg/L	0.00100	19.41%
QC value greater than the upper limit for Co 228.616 Recovery = Not calculated						
Cr 267.716†	153.1	0.0013 mg/L	0.00031	0.0013 mg/L	0.00031	23.22%
QC value greater than the upper limit for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	2776.0	0.0105 mg/L	0.00076	0.0105 mg/L	0.00076	7.25%
QC value greater than the upper limit for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	1292.5	0.0232 mg/L	0.00304	0.0232 mg/L	0.00304	13.10%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	112.1	0.1680 mg/L	0.00750	0.1680 mg/L	0.00750	4.46%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	389.8	0.0379 mg/L	0.01503	0.0379 mg/L	0.01503	39.68%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	602.0	0.0018 mg/L	0.00037	0.0018 mg/L	0.00037	20.79%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	42.1	0.0025 mg/L	0.00087	0.0025 mg/L	0.00087	34.10%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	197.4	0.0047 mg/L	0.00079	0.0047 mg/L	0.00079	16.87%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	405.0	0.0738 mg/L	0.01314	0.0738 mg/L	0.01314	17.80%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	14.1	0.0024 mg/L	0.00013	0.0024 mg/L	0.00013	5.69%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	9.9	0.0051 mg/L	0.00136	0.0051 mg/L	0.00136	26.81%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.1	-0.0002 mg/L	0.00163	-0.0002 mg/L	0.00163	939.16%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	59.7	0.0125 mg/L	0.00237	0.0125 mg/L	0.00237	18.93%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	1627.4	0.0029 mg/L	0.00077	0.0029 mg/L	0.00077	26.22%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	2.0	0.0011 mg/L	0.00063	0.0011 mg/L	0.00063	57.55%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	188.3	0.0029 mg/L	0.00101	0.0029 mg/L	0.00101	34.95%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	89.6	0.0030 mg/L	0.00049	0.0030 mg/L	0.00049	16.29%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	5.9	0.0334 mg/L	0.03365	0.0334 mg/L	0.03365	100.61%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	430.8	0.0037 mg/L	0.00012	0.0037 mg/L	0.00012	3.11%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 394.401†	1180.2	0.0291 mg/L	0.00743	0.0291 mg/L	0.00743	25.51%
QC value within limits for Al 394.401 Recovery = Not calculated						
Al 237.313†	171.9	0.0282 mg/L	0.00995	0.0282 mg/L	0.00995	35.27%
QC value within limits for Al 237.313 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 33 **Autosampler Location: 48**
Sample ID: LCSW2 **Date Collected: 10/14/2014 5:22:18 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: LCSW2

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6879159.4	1.022	mg/L	0.0024				0.24%
Ag 328.068†	12286.9	0.0488	mg/L	0.00080				1.63%
Al 308.215†	26521.9	1.807	mg/L	0.0447				2.47%
As 188.979†	48.5	0.0385	mg/L	0.00010				0.27%
B 249.772†	103733.2	0.9446	mg/L	0.02485				2.63%
Ba 233.527†	165300.6	1.958	mg/L	0.0344				1.76%
Be 313.107†	135789.9	0.0471	mg/L	0.00072				1.52%
Cd 226.502†	3983.5	0.0486	mg/L	0.00006				0.13%
Co 228.616†	10671.1	0.4879	mg/L	0.00835				1.71%
Cr 267.716†	23425.7	0.2033	mg/L	0.00328				1.61%
Cu 324.752†	68707.7	0.2594	mg/L	0.00538				2.07%
Fe 259.939†	55326.1	0.9945	mg/L	0.01730				1.74%
K 766.490†	12414.4	18.60	mg/L	0.051				0.27%
Mg 279.077†	19873.0	1.931	mg/L	0.0373				1.93%
Mn 257.610†	168370.3	0.4914	mg/L	0.00816				1.66%

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Mo 202.031†	7691.3	0.4635 mg/L	0.00005		0.01%
Ni 231.604†	21143.8	0.5044 mg/L	0.00584		1.16%
Na 589.592†	103459.1	18.86 mg/L	0.017		0.09%
Pb 220.353†	2909.9	0.4856 mg/L	0.00095		0.20%
Sb 206.836†	896.9	0.4587 mg/L	0.00012		0.03%
Se 196.026†	724.9	0.8783 mg/L	0.00441		0.50%
Sn 189.927†	25078.9	5.257 mg/L	0.0977		1.86%
Ti 337.279†	261485.6	0.4695 mg/L	0.00805		1.72%
Tl 190.801†	3333.3	1.822 mg/L	0.0042		0.23%
V 292.402†	32153.2	0.4920 mg/L	0.00741		1.51%
Zn 206.200†	14953.5	0.5056 mg/L	0.00761		1.50%
Ca 227.546†	360.4	2.010 mg/L	0.0270		1.35%
Sr 421.552†	222894.1	1.924 mg/L	0.0012		0.06%
Al 394.401†	73964.1	1.825 mg/L	0.0368		2.02%
Al 237.313†	11324.7	1.858 mg/L	0.0251		1.35%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 34
Sample ID: LCSW3
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 10/14/2014 5:28:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW3

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6786943.7	1.008	mg/L	0.0014				0.13%
Ag 328.068†	12560.7	0.0499	mg/L	0.00039				0.78%
Al 308.215†	27619.4	1.882	mg/L	0.0171				0.91%
As 188.979†	48.4	0.0383	mg/L	0.00010				0.27%
B 249.772†	106186.0	0.9669	mg/L	0.00244				0.25%
Ba 233.527†	169652.6	2.010	mg/L	0.0048				0.24%
Be 313.107†	139632.0	0.0484	mg/L	0.00010				0.21%
Cd 226.502†	4061.1	0.0495	mg/L	0.00002				0.04%
Co 228.616†	10952.6	0.5007	mg/L	0.00216				0.43%
Cr 267.716†	23967.8	0.2080	mg/L	0.00090				0.43%
Cu 324.752†	70765.2	0.2672	mg/L	0.00248				0.93%
Fe 259.939†	56852.3	1.022	mg/L	0.0027				0.27%
K 766.490†	12716.1	19.05	mg/L	0.109				0.57%
Mg 279.077†	20363.7	1.979	mg/L	0.0113				0.57%
Mn 257.610†	173018.9	0.5050	mg/L	0.00129				0.26%
Mo 202.031†	7960.9	0.4798	mg/L	0.00066				0.14%
Ni 231.604†	21690.8	0.5175	mg/L	0.00206				0.40%
Na 589.592†	104828.6	19.11	mg/L	0.102				0.53%
Pb 220.353†	2958.2	0.4937	mg/L	0.00089				0.18%
Sb 206.836†	928.3	0.4747	mg/L	0.00093				0.20%
Se 196.026†	751.9	0.9109	mg/L	0.00428				0.47%
Sn 189.927†	25925.5	5.434	mg/L	0.0008				0.01%
Ti 337.279†	272878.5	0.4900	mg/L	0.00190				0.39%
Tl 190.801†	3398.6	1.858	mg/L	0.0008				0.04%
V 292.402†	32717.3	0.5006	mg/L	0.00264				0.53%
Zn 206.200†	15359.5	0.5194	mg/L	0.00121				0.23%
Ca 227.546†	364.6	2.034	mg/L	0.0189				0.93%
Sr 421.552†	227286.5	1.962	mg/L	0.0083				0.43%
Al 394.401†	75945.8	1.874	mg/L	0.0161				0.86%
Al 237.313†	11590.8	1.901	mg/L	0.0081				0.43%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 35
Sample ID: LCSW4
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 10/14/2014 5:34:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW4

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6840163.3	1.016	mg/L	0.0028				0.28%

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Ag 328.068†	12519.4	0.0497	mg/L	0.00053	1.08%
Al 308.215†	26992.7	1.839	mg/L	0.0305	1.66%
As 188.979†	45.7	0.0362	mg/L	0.00019	0.54%
B 249.772†	104221.1	0.9490	mg/L	0.00523	0.55%
Ba 233.527†	167296.6	1.982	mg/L	0.0215	1.08%
Be 313.107†	137340.0	0.0476	mg/L	0.00048	1.01%
Cd 226.502†	4060.2	0.0495	mg/L	0.00024	0.48%
Co 228.616†	10822.5	0.4948	mg/L	0.00586	1.18%
Cr 267.716†	23575.8	0.2046	mg/L	0.00222	1.08%
Cu 324.752†	69141.6	0.2611	mg/L	0.00347	1.33%
Fe 259.939†	55838.0	1.004	mg/L	0.0114	1.13%
K 766.490†	12629.9	18.92	mg/L	0.127	0.67%
Mg 279.077†	20038.6	1.947	mg/L	0.0190	0.97%
Mn 257.610†	170595.8	0.4979	mg/L	0.00526	1.06%
Mo 202.031†	7861.3	0.4738	mg/L	0.00187	0.40%
Ni 231.604†	21276.3	0.5076	mg/L	0.00593	1.17%
Na 589.592†	105135.1	19.17	mg/L	0.204	1.07%
Pb 220.353†	2960.7	0.4941	mg/L	0.00159	0.32%
Sb 206.836†	909.1	0.4649	mg/L	0.00304	0.65%
Se 196.026†	745.8	0.9036	mg/L	0.00658	0.73%
Sn 189.927†	25436.9	5.332	mg/L	0.0448	0.84%
Ti 337.279†	266478.5	0.4785	mg/L	0.00593	1.24%
Tl 190.801†	3398.4	1.858	mg/L	0.0078	0.42%
V 292.402†	32153.3	0.4920	mg/L	0.00394	0.80%
Zn 206.200†	15159.1	0.5126	mg/L	0.00603	1.18%
Ca 227.546†	360.3	2.010	mg/L	0.0163	0.81%
Sr 421.552†	227860.4	1.967	mg/L	0.0198	1.01%
Al 394.401†	74513.1	1.839	mg/L	0.0257	1.40%
Al 237.313†	11358.6	1.863	mg/L	0.0203	1.09%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 36
Sample ID: PBW-220481
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 10/14/2014 5:40:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: PBW-220481

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6860005.6	1.019	mg/L	0.0068				0.67%
Ag 328.068†	10.3	0.0000	mg/L	0.00028				668.85%
Al 308.215†	347.6	0.0237	mg/L	0.01668				70.44%
As 188.979†	-0.4	-0.0003	mg/L	0.00090				268.66%
B 249.772†	2740.3	0.0251	mg/L	0.00241				9.60%
Ba 233.527†	93.3	0.0011	mg/L	0.00003				2.97%
Be 313.107†	-174.5	-0.0001	mg/L	0.00010				160.53%
Cd 226.502†	-11.9	-0.0001	mg/L	0.00002				14.43%
Co 228.616†	19.1	0.0009	mg/L	0.00025				28.90%
Cr 267.716†	92.1	0.0008	mg/L	0.00003				4.02%
Cu 324.752†	793.1	0.0030	mg/L	0.00070				23.37%
Fe 259.939†	354.2	0.0064	mg/L	0.00041				6.43%
K 766.490†	-3.2	-0.0048	mg/L	0.08267				>999.9%
Mg 279.077†	62.7	0.0061	mg/L	0.00134				21.96%
Mn 257.610†	343.9	0.0010	mg/L	0.00003				3.35%
Mo 202.031†	-0.2	0.0000	mg/L	0.00009				622.44%
Ni 231.604†	35.7	0.0009	mg/L	0.00003				2.94%
Na 589.592†	9.6	0.0018	mg/L	0.00145				82.70%
Pb 220.353†	2.8	0.0005	mg/L	0.00141				302.23%
Sb 206.836†	6.6	0.0034	mg/L	0.00065				19.36%
Se 196.026†	2.4	0.0029	mg/L	0.00148				51.83%
Sn 189.927†	24.0	0.0050	mg/L	0.00030				5.97%
Ti 337.279†	238.5	0.0004	mg/L	0.00009				22.14%
Tl 190.801†	-2.9	-0.0016	mg/L	0.00134				85.10%
V 292.402†	-23.4	-0.0004	mg/L	0.00033				93.25%
Zn 206.200†	23.7	0.0008	mg/L	0.00012				15.07%
Ca 227.546†	-8.6	-0.0461	mg/L	0.00471				10.20%
Sr 421.552†	52.0	0.0004	mg/L	0.00025				55.76%
Al 394.401†	241.9	0.0060	mg/L	0.00121				20.30%
Al 237.313†	33.3	0.0055	mg/L	0.00116				21.24%

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Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 37
Sample ID: LCSW-220481
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 52
Date Collected: 10/14/2014 5:46:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-220481

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6938761.7	1.031	mg/L	0.0023				0.23%
Ag 328.068†	11980.4	0.0476	mg/L	0.00014				0.30%
Al 308.215†	27130.1	1.848	mg/L	0.0131				0.71%
As 188.979†	47.3	0.0375	mg/L	0.00080				2.14%
B 249.772†	102349.0	0.9318	mg/L	0.01075				1.15%
Ba 233.527†	169413.3	2.007	mg/L	0.0070				0.35%
Be 313.107†	138743.1	0.0481	mg/L	0.00015				0.31%
Cd 226.502†	4069.4	0.0496	mg/L	0.00018				0.37%
Co 228.616†	10895.0	0.4981	mg/L	0.00103				0.21%
Cr 267.716†	23764.9	0.2063	mg/L	0.00000				0.00%
Cu 324.752†	69575.3	0.2627	mg/L	0.00159				0.60%
Fe 259.939†	56448.8	1.015	mg/L	0.0045				0.45%
K 766.490†	12614.1	18.90	mg/L	0.017				0.09%
Mg 279.077†	20190.9	1.962	mg/L	0.0058				0.30%
Mn 257.610†	172351.6	0.5030	mg/L	0.00176				0.35%
Mo 202.031†	7979.2	0.4809	mg/L	0.00163				0.34%
Ni 231.604†	21447.0	0.5117	mg/L	0.00081				0.16%
Na 589.592†	104225.7	19.00	mg/L	0.046				0.24%
Pb 220.353†	2970.7	0.4958	mg/L	0.00232				0.47%
Sb 206.836†	913.5	0.4672	mg/L	0.00130				0.28%
Se 196.026†	762.5	0.9238	mg/L	0.00305				0.33%
Sn 189.927†	25104.7	5.262	mg/L	0.0184				0.35%
Ti 337.279†	268997.5	0.4830	mg/L	0.00222				0.46%
Tl 190.801†	3426.0	1.873	mg/L	0.0048				0.26%
V 292.402†	32184.2	0.4925	mg/L	0.00233				0.47%
Zn 206.200†	15133.8	0.5117	mg/L	0.00111				0.22%
Ca 227.546†	357.6	1.996	mg/L	0.0164				0.82%
Sr 421.552†	14.0	0.0001	mg/L	0.00004				33.16%
Al 394.401†	75610.3	1.866	mg/L	0.0076				0.41%
Al 237.313†	11532.8	1.892	mg/L	0.0030				0.16%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 38
Sample ID: R1407904-007
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 53
Date Collected: 10/14/2014 5:52:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407904-007

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6667799.3	0.9905	mg/L	0.00647				0.65%
Ag 328.068†	-72.4	-0.0002	mg/L	0.00002				7.17%
Al 308.215†	1223.6	0.0749	mg/L	0.00323				4.31%
As 188.979†	1.4	0.0011	mg/L	0.00005				4.44%
B 249.772†	30847.8	0.2783	mg/L	0.00075				0.27%
Ba 233.527†	3911.6	0.0463	mg/L	0.00007				0.14%
Be 313.107†	-658.1	-0.0002	mg/L	0.00003				11.90%
Cd 226.502†	-5.2	-0.0001	mg/L	0.00009				99.48%
Co 228.616†	1.9	0.0001	mg/L	0.00011				132.15%
Cr 267.716†	-116.4	0.0006	mg/L	0.00003				5.46%
Cu 324.752†	22326.2	0.0843	mg/L	0.00051				0.61%
Fe 259.939†	11239.5	0.2020	mg/L	0.00120				0.59%
K 766.490†	9532.2	14.28	mg/L	0.127				0.89%
Mg 279.077†	168799.1	16.40	mg/L	0.034				0.21%
Mn 257.610†	5167.0	0.0151	mg/L	0.00001				0.04%
Mo 202.031†	36.4	0.0022	mg/L	0.00028				12.77%

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Ni 231.604†	88.4	0.0021	mg/L	0.00023	11.14%
Na 589.592†	655565.4	119.5	mg/L	1.90	1.59%
Pb 220.353†	12.3	0.0021	mg/L	0.00091	44.22%
Sb 206.836†	7.3	0.0037	mg/L	0.00095	25.76%
Se 196.026†	3.0	0.0037	mg/L	0.00225	60.52%
Sn 189.927†	-111.0	-0.0233	mg/L	0.00091	3.89%
Ti 337.279†	685.9	0.0012	mg/L	0.00038	30.88%
Tl 190.801†	-5.6	-0.0035	mg/L	0.00206	58.82%
V 292.402†	18.5	0.0003	mg/L	0.00000	0.51%
Zn 206.200†	2231.2	0.0754	mg/L	0.00019	0.25%
Ca 227.546†	11664.0	63.01	mg/L	0.021	0.03%
Sr 421.552†	73613.3	0.6355	mg/L	0.00483	0.76%
Al 394.401†	741.2	0.0183	mg/L	0.00172	9.38%
Al 237.313†	248.1	0.0407	mg/L	0.00039	0.97%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 39
Sample ID: R1407905-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 54
Date Collected: 10/14/2014 5:58:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407905-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6296985.8	0.9354	mg/L	0.00003				0.00%
Ag 328.068†	-897.1	-0.0035	mg/L	0.00004				1.10%
Al 308.215†	13643.6	0.8602	mg/L	0.01523				1.77%
As 188.979†	3.6	0.0028	mg/L	0.00309				109.73%
B 249.772†	10026.8	0.0666	mg/L	0.00177				2.65%
Ba 233.527†	15555.7	0.1843	mg/L	0.00238				1.29%
Be 313.107†	-1904.8	-0.0007	mg/L	0.00003				3.88%
Cd 226.502†	-33.3	-0.0004	mg/L	0.00005				12.79%
Co 228.616†	-1.6	-0.0001	mg/L	0.00007				98.88%
Cr 267.716†	-40.6	-0.0001	mg/L	0.00005				42.06%
Cu 324.752†	2208.7	0.0083	mg/L	0.00051				6.15%
Fe 259.939†	3433.9	0.0617	mg/L	0.00061				0.98%
K 766.490†	13466.3	20.18	mg/L	0.116				0.57%
Mg 279.077†	23758.1	2.309	mg/L	0.0200				0.86%
Mn 257.610†	5265.6	0.0154	mg/L	0.00001				0.09%
Mo 202.031†	163.8	0.0099	mg/L	0.00034				3.42%
Ni 231.604†	662.7	0.0158	mg/L	0.00014				0.88%
Na 589.592†	2608214.8	475.5	mg/L	0.23				0.05%
Pb 220.353†	-11.0	-0.0017	mg/L	0.00057				32.50%
Sb 206.836†	10.9	0.0055	mg/L	0.00066				12.05%
Se 196.026†	2.7	0.0033	mg/L	0.00084				25.53%
Sn 189.927†	-212.8	-0.0447	mg/L	0.00098				2.19%
Ti 337.279†	254.6	0.0005	mg/L	0.00002				4.47%
Tl 190.801†	8.1	-0.0005	mg/L	0.00109				210.89%
V 292.402†	157.1	0.0024	mg/L	0.00012				4.88%
Zn 206.200†	96.0	0.0032	mg/L	0.00030				9.24%
Ca 227.546†	94345.9	509.6	mg/L	6.36				1.25%
Sr 421.552†	479836.7	4.143	mg/L	0.0001				0.00%
Al 394.401†	33241.1	0.8203	mg/L	0.01343				1.64%
Al 237.313†	4738.3	0.7772	mg/L	0.00078				0.10%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 40
Sample ID: R1407923-001 10X
Analyst:
Initial Sample Wt:
Dilution: 10X

Autosampler Location: 55
Date Collected: 10/14/2014 6:04:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407923-001 10X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6325582.3	0.9397	mg/L	0.00361				0.38%
Ag 328.068†	-68.2	-0.0003	mg/L	0.00029				107.49%

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Al 308.215†	1044.6	0.0689 mg/L	0.00160	2.32%
As 188.979†	1.7	0.0013 mg/L	0.00086	64.44%
B 249.772†	3101.0	0.0275 mg/L	0.00030	1.09%
Ba 233.527†	314.3	0.0037 mg/L	0.00002	0.66%
Be 313.107†	-1114.6	-0.0004 mg/L	0.00002	4.57%
Cd 226.502†	-24.8	-0.0003 mg/L	0.00004	13.58%
Co 228.616†	-2.6	-0.0001 mg/L	0.00008	69.78%
Cr 267.716†	-33.2	0.0001 mg/L	0.00007	56.05%
Cu 324.752†	1024.3	0.0039 mg/L	0.00008	2.15%
Fe 259.939†	142.8	0.0026 mg/L	0.00015	5.82%
K 766.490†	786.6	1.179 mg/L	0.1071	9.09%
Mg 279.077†	43016.6	4.180 mg/L	0.0244	0.58%
Mn 257.610†	480.7	0.0014 mg/L	0.00002	1.12%
Mo 202.031†	14.5	0.0009 mg/L	0.00007	8.38%
Ni 231.604†	55.5	0.0013 mg/L	0.00005	3.65%
Na 589.592†	3853978.7	702.7 mg/L	11.01	1.57%
Pb 220.353†	-2.9	-0.0005 mg/L	0.00023	47.79%
Sb 206.836†	6.1	0.0031 mg/L	0.00074	23.77%
Se 196.026†	1.8	0.0022 mg/L	0.00070	32.24%
Sn 189.927†	-68.9	-0.0145 mg/L	0.00006	0.44%
Ti 337.279†	173.4	0.0003 mg/L	0.00010	32.38%
Tl 190.801†	-2.7	-0.0016 mg/L	0.00173	108.93%
V 292.402†	-23.7	-0.0004 mg/L	0.00031	83.99%
Zn 206.200†	88.1	0.0030 mg/L	0.00008	2.58%
Ca 227.546†	3135.1	16.93 mg/L	0.144	0.85%
Sr 421.552†	68524.3	0.5916 mg/L	0.00019	0.03%
Al 394.401†	-419.3	-0.0103 mg/L	0.00192	18.57%
Al 237.313†	-1.0	-0.0002 mg/L	0.00034	205.27%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 41
Sample ID: R1407949-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 56
Date Collected: 10/14/2014 6:10:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407949-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6635133.4	0.9857	mg/L	0.00103				0.10%
Ag 328.068†	-45.4	-0.0002	mg/L	0.00013				73.45%
Al 308.215†	608.9	0.0367	mg/L	0.00414				11.30%
As 188.979†	-0.2	-0.0002	mg/L	0.00243				>999.9%
B 249.772†	3560.8	0.0308	mg/L	0.00007				0.24%
Ba 233.527†	2403.3	0.0285	mg/L	0.00015				0.54%
Be 313.107†	-474.6	-0.0002	mg/L	0.00002				10.04%
Cd 226.502†	-23.3	-0.0003	mg/L	0.00004				14.67%
Co 228.616†	-12.9	-0.0006	mg/L	0.00006				10.56%
Cr 267.716†	-183.4	-0.0005	mg/L	0.00007				13.06%
Cu 324.752†	816.8	0.0031	mg/L	0.00011				3.46%
Fe 259.939†	603.0	0.0108	mg/L	0.00000				0.02%
K 766.490†	1834.4	2.748	mg/L	0.0646				2.35%
Mg 279.077†	113515.5	11.03	mg/L	0.025				0.22%
Mn 257.610†	365.2	0.0011	mg/L	0.00000				0.12%
Mo 202.031†	26.0	0.0016	mg/L	0.00004				2.49%
Ni 231.604†	-10.3	-0.0002	mg/L	0.00008				31.59%
Na 589.592†	403049.4	73.49	mg/L	0.501				0.68%
Pb 220.353†	0.8	0.0001	mg/L	0.00093				664.48%
Sb 206.836†	5.7	0.0029	mg/L	0.00064				22.24%
Se 196.026†	3.2	0.0038	mg/L	0.00220				57.45%
Sn 189.927†	-113.6	-0.0238	mg/L	0.00011				0.46%
Ti 337.279†	220.8	0.0004	mg/L	0.00007				18.44%
Tl 190.801†	-3.4	-0.0021	mg/L	0.00274				132.09%
V 292.402†	-2.0	0.0000	mg/L	0.00012				408.35%
Zn 206.200†	96.5	0.0033	mg/L	0.00003				0.90%
Ca 227.546†	6586.2	35.58	mg/L	0.194				0.55%
Sr 421.552†	22251.5	0.1921	mg/L	0.00107				0.56%
Al 394.401†	-596.8	-0.0147	mg/L	0.00199				13.51%
Al 237.313†	31.4	0.0051	mg/L	0.00072				14.05%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

00771

Sequence No.: 42
Sample ID: R1407954-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 10/14/2014 6:17:07 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407954-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6210725.2	0.9226	mg/L	0.00733				0.79%
Ag 328.068†	8173.2	0.0330	mg/L	0.00052				1.57%
Al 308.215†	10350616.7	705.1	mg/L	9.99				1.42%
As 188.979†	34.7	-0.0003	mg/L	0.00509				>999.9%
B 249.772†	38548.6	0.2722	mg/L	0.00221				0.81%
Ba 233.527†	6481.5	0.0768	mg/L	0.00099				1.29%
Be 313.107†	2298.2	0.0008	mg/L	0.00008				10.19%
Cd 226.502†	-144.3	0.0001	mg/L	0.00004				83.18%
Co 228.616†	44.6	0.0020	mg/L	0.00014				6.97%
Cr 267.716†	-2341.5	0.0281	mg/L	0.00024				0.84%
Cu 324.752†	26339.6	0.0997	mg/L	0.00212				2.12%
Fe 259.939†	153536.8	2.760	mg/L	0.0324				1.18%
K 766.490†	4913.7	7.362	mg/L	0.0264				0.36%
Mg 279.077†	5063814.6	492.1	mg/L	2.25				0.46%
Mn 257.610†	70525.2	0.2062	mg/L	0.00243				1.18%
Mo 202.031†	191.9	0.0116	mg/L	0.00017				1.51%
Ni 231.604†	698.0	0.0167	mg/L	0.00027				1.63%
Na 589.592†	1616557.3	294.7	mg/L	3.66				1.24%
Pb 220.353†	-229.8	0.0403	mg/L	0.00135				3.34%
Sb 206.836†	110.3	-0.0062	mg/L	0.00100				16.11%
Se 196.026†	-10.4	0.0002	mg/L	0.00029				146.55%
Sn 189.927†	25.4	-0.0770	mg/L	0.00098				1.28%
Ti 337.279†	610058.6	1.095	mg/L	0.0179				1.63%
Tl 190.801†	92.3	0.0065	mg/L	0.00158				24.26%
V 292.402†	1329.9	0.0202	mg/L	0.00015				0.73%
Zn 206.200†	4014.7	0.1358	mg/L	0.00144				1.06%
Ca 227.546†	16471.1	91.17	mg/L	1.149				1.26%
Sr 421.552†	43735.1	0.3776	mg/L	0.00377				1.00%
Al 394.401†	29983841.7	739.9	mg/L	10.84				1.47%
Al 237.313†	4263653.6	699.3	mg/L	1.87				0.27%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 43
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 10/14/2014 6:24:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6676157.4	0.9918	mg/L	0.00386				0.39%
Ag 328.068†	128523.8	0.5091	mg/L	0.00092	0.5091	mg/L	0.00092	0.18%
QC value within limits for Ag 328.068 Recovery = 101.83%								
Al 308.215†	144120.8	9.816	mg/L	0.0040	9.816	mg/L	0.0040	0.04%
QC value within limits for Al 308.215 Recovery = 98.16%								
As 188.979†	1243.3	0.9874	mg/L	0.00568	0.9874	mg/L	0.00568	0.57%
QC value within limits for As 188.979 Recovery = 98.74%								
B 249.772†	266481.6	2.413	mg/L	0.0329	2.413	mg/L	0.0329	1.36%
QC value within limits for B 249.772 Recovery = 96.53%								
Ba 233.527†	859744.0	10.18	mg/L	0.000	10.18	mg/L	0.000	0.00%
QC value within limits for Ba 233.527 Recovery = 101.84%								
Be 313.107†	718911.0	0.2492	mg/L	0.00018	0.2492	mg/L	0.00018	0.07%
QC value within limits for Be 313.107 Recovery = 99.68%								
Cd 226.502†	41891.0	0.5115	mg/L	0.00247	0.5115	mg/L	0.00247	0.48%
QC value within limits for Cd 226.502 Recovery = 102.29%								
Co 228.616†	55165.6	2.522	mg/L	0.0072	2.522	mg/L	0.0072	0.29%
QC value within limits for Co 228.616 Recovery = 100.89%								

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Cr 267.716†	59228.5	0.5162 mg/L	0.00019	0.5162 mg/L	0.00019	0.04%
QC value within limits for Cr 267.716 Recovery = 103.25%						
Cu 324.752†	329557.9	1.244 mg/L	0.0080	1.244 mg/L	0.0080	0.64%
QC value within limits for Cu 324.752 Recovery = 99.55%						
Fe 259.939†	281671.8	5.063 mg/L	0.0237	5.063 mg/L	0.0237	0.47%
QC value within limits for Fe 259.939 Recovery = 101.26%						
K 766.490†	16508.3	24.73 mg/L	0.401	24.73 mg/L	0.401	1.62%
QC value within limits for K 766.490 Recovery = 98.94%						
Mg 279.077†	259106.4	25.18 mg/L	0.069	25.18 mg/L	0.069	0.27%
QC value within limits for Mg 279.077 Recovery = 100.71%						
Mn 257.610†	260348.4	0.7603 mg/L	0.00333	0.7603 mg/L	0.00333	0.44%
QC value within limits for Mn 257.610 Recovery = 101.38%						
Mo 202.031†	40644.8	2.449 mg/L	0.0117	2.449 mg/L	0.0117	0.48%
QC value within limits for Mo 202.031 Recovery = 97.98%						
Ni 231.604†	85490.5	2.040 mg/L	0.0067	2.040 mg/L	0.0067	0.33%
QC value within limits for Ni 231.604 Recovery = 101.98%						
Na 589.592†	135525.8	24.71 mg/L	0.251	24.71 mg/L	0.251	1.02%
QC value within limits for Na 589.592 Recovery = 98.84%						
Pb 220.353†	2991.5	0.5000 mg/L	0.00230	0.5000 mg/L	0.00230	0.46%
QC value within limits for Pb 220.353 Recovery = 100.00%						
Sb 206.836†	9700.6	4.962 mg/L	0.0007	4.962 mg/L	0.0007	0.01%
QC value within limits for Sb 206.836 Recovery = 99.24%						
Se 196.026†	411.5	0.4997 mg/L	0.00115	0.4997 mg/L	0.00115	0.23%
QC value within limits for Se 196.026 Recovery = 99.94%						
Sn 189.927†	24390.6	5.112 mg/L	0.0261	5.112 mg/L	0.0261	0.51%
QC value within limits for Sn 189.927 Recovery = 102.23%						
Ti 337.279†	1367008.3	2.455 mg/L	0.0015	2.455 mg/L	0.0015	0.06%
QC value within limits for Ti 337.279 Recovery = 98.18%						
Tl 190.801†	1806.0	0.9870 mg/L	0.00338	0.9870 mg/L	0.00338	0.34%
QC value within limits for Tl 190.801 Recovery = 98.70%						
V 292.402†	165343.7	2.530 mg/L	0.0042	2.530 mg/L	0.0042	0.17%
QC value within limits for V 292.402 Recovery = 101.20%						
Zn 206.200†	30282.3	1.024 mg/L	0.0028	1.024 mg/L	0.0028	0.27%
QC value within limits for Zn 206.200 Recovery = 102.40%						
Ca 227.546†	4409.2	24.14 mg/L	0.130	24.14 mg/L	0.130	0.54%
QC value within limits for Ca 227.546 Recovery = 96.56%						
Sr 421.552†	272035.9	2.349 mg/L	0.0231	2.349 mg/L	0.0231	0.98%
QC value within limits for Sr 421.552 Recovery = 93.94%						
Al 394.401†	396591.6	9.786 mg/L	0.0038	9.786 mg/L	0.0038	0.04%
QC value within limits for Al 394.401 Recovery = 97.86%						
Al 237.313†	60992.0	10.00 mg/L	0.021	10.00 mg/L	0.021	0.21%
QC value within limits for Al 237.313 Recovery = 100.04%						

All analyte(s) passed QC.

Sequence No.: 44 **Autosampler Location:** 1
Sample ID: CCB **Date Collected:** 10/14/2014 6:30:24 PM
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6789450.4	1.009	mg/L	0.0026				0.26%
Ag 328.068†	109.9	0.0004	mg/L	0.00028	0.0004	mg/L	0.00028	64.28%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	787.2	0.0536	mg/L	0.01441	0.0536	mg/L	0.01441	26.88%
QC value greater than the upper limit for Al 308.215 Recovery = Not calculated								
As 188.979†	2.1	0.0017	mg/L	0.00008	0.0017	mg/L	0.00008	4.54%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3424.7	0.0313	mg/L	0.00434	0.0313	mg/L	0.00434	13.88%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	736.2	0.0087	mg/L	0.00312	0.0087	mg/L	0.00312	35.74%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	730.6	0.0003	mg/L	0.00007	0.0003	mg/L	0.00007	26.33%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	38.3	0.0005	mg/L	0.00020	0.0005	mg/L	0.00020	42.08%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	57.6	0.0026	mg/L	0.00085	0.0026	mg/L	0.00085	32.42%
QC value within limits for Co 228.616 Recovery = Not calculated								

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Cr 267.716†	34.4	0.0003 mg/L	0.00020	0.0003 mg/L	0.00020	65.32%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	1123.4	0.0042 mg/L	0.00074	0.0042 mg/L	0.00074	17.56%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	466.6	0.0084 mg/L	0.00182	0.0084 mg/L	0.00182	21.74%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	70.8	0.1060 mg/L	0.03642	0.1060 mg/L	0.03642	34.35%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	675.4	0.0656 mg/L	0.01352	0.0656 mg/L	0.01352	20.61%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	308.3	0.0009 mg/L	0.00027	0.0009 mg/L	0.00027	29.48%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	34.4	0.0021 mg/L	0.00086	0.0021 mg/L	0.00086	41.51%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	104.5	0.0025 mg/L	0.00077	0.0025 mg/L	0.00077	31.07%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	709.3	0.1293 mg/L	0.00794	0.1293 mg/L	0.00794	6.14%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	4.8	0.0008 mg/L	0.00009	0.0008 mg/L	0.00009	10.97%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	8.1	0.0042 mg/L	0.00121	0.0042 mg/L	0.00121	28.99%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	1.2	0.0015 mg/L	0.00095	0.0015 mg/L	0.00095	65.37%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	46.9	0.0098 mg/L	0.00265	0.0098 mg/L	0.00265	26.96%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	1344.1	0.0024 mg/L	0.00074	0.0024 mg/L	0.00074	30.70%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	3.0	0.0016 mg/L	0.00078	0.0016 mg/L	0.00078	48.28%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	142.7	0.0022 mg/L	0.00051	0.0022 mg/L	0.00051	23.35%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	64.1	0.0022 mg/L	0.00044	0.0022 mg/L	0.00044	20.34%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	2.8	0.0159 mg/L	0.00323	0.0159 mg/L	0.00323	20.34%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	377.7	0.0033 mg/L	0.00027	0.0033 mg/L	0.00027	8.36%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 394.401†	1759.5	0.0434 mg/L	0.01414	0.0434 mg/L	0.01414	32.57%
QC value within limits for Al 394.401 Recovery = Not calculated						
Al 237.313†	240.6	0.0395 mg/L	0.01254	0.0395 mg/L	0.01254	31.77%
QC value within limits for Al 237.313 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 45 **Autosampler Location: 58**
Sample ID: R1408025-001 **Date Collected: 10/14/2014 6:36:24 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: R1408025-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6317026.5	0.9384	mg/L	0.00817				0.87%
Ag 328.068†	-255.3	-0.0006	mg/L	0.00042				76.21%
Al 308.215†	11572.9	0.7744	mg/L	0.00758				0.98%
As 188.979†	3.4	0.0027	mg/L	0.00086				31.80%
B 249.772†	134832.7	1.221	mg/L	0.0010				0.08%
Ba 233.527†	14672.1	0.1738	mg/L	0.00241				1.39%
Be 313.107†	-1132.5	-0.0004	mg/L	0.00003				8.85%
Cd 226.502†	177.7	0.0019	mg/L	0.00002				1.01%
Co 228.616†	15.7	0.0007	mg/L	0.00010				14.46%
Cr 267.716†	309.2	0.0039	mg/L	0.00007				1.77%
Cu 324.752†	17150.2	0.0649	mg/L	0.00095				1.46%
Fe 259.939†	91095.3	1.637	mg/L	0.0144				0.88%
K 766.490†	222718.8	333.7	mg/L	2.81				0.84%
Mg 279.077†	115865.8	11.26	mg/L	0.103				0.91%
Mn 257.610†	93167.6	0.2721	mg/L	0.00253				0.93%
Mo 202.031†	369.6	0.0223	mg/L	0.00043				1.93%
Ni 231.604†	511.4	0.0122	mg/L	0.00002				0.17%

Na 589.592†	2067373.1	376.9	mg/L	4.17	1.11%
Pb 220.353†	280.1	0.0468	mg/L	0.00024	0.51%
Sb 206.836†	26.2	0.0133	mg/L	0.00067	5.03%
Se 196.026†	3.1	0.0041	mg/L	0.00060	14.54%
Sn 189.927†	-134.2	-0.0282	mg/L	0.00031	1.11%
Ti 337.279†	3316.4	0.0060	mg/L	0.00017	2.93%
Tl 190.801†	3.8	0.0011	mg/L	0.00097	83.94%
V 292.402†	201.8	0.0030	mg/L	0.00004	1.42%
Zn 206.200†	6833.0	0.2311	mg/L	0.00303	1.31%
Ca 227.546†	19951.7	107.9	mg/L	0.69	0.64%
Sr 421.552†	573285.2	4.949	mg/L	0.0532	1.07%
Al 394.401†	29143.4	0.7192	mg/L	0.00163	0.23%
Al 237.313†	4151.9	0.6810	mg/L	0.00453	0.67%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 46
Sample ID: R1408025-001D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 59
Date Collected: 10/14/2014 6:42:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408025-001D

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6366667.4	0.9458	mg/L	0.00569				0.60%
Ag 328.068†	-195.3	-0.0003	mg/L	0.00024				74.76%
Al 308.215†	11440.9	0.7657	mg/L	0.01882				2.46%
As 188.979†	4.3	0.0034	mg/L	0.00087				25.54%
B 249.772†	133617.8	1.210	mg/L	0.0261				2.15%
Ba 233.527†	14457.8	0.1713	mg/L	0.00190				1.11%
Be 313.107†	-980.6	-0.0003	mg/L	0.00006				17.29%
Cd 226.502†	166.3	0.0018	mg/L	0.00002				0.87%
Co 228.616†	14.0	0.0006	mg/L	0.00014				22.44%
Cr 267.716†	488.6	0.0054	mg/L	0.00006				1.06%
Cu 324.752†	16488.3	0.0624	mg/L	0.00095				1.52%
Fe 259.939†	89896.4	1.616	mg/L	0.0237				1.47%
K 766.490†	221570.3	332.0	mg/L	4.24				1.28%
Mg 279.077†	114130.6	11.09	mg/L	0.169				1.52%
Mn 257.610†	91883.1	0.2683	mg/L	0.00352				1.31%
Mo 202.031†	361.6	0.0218	mg/L	0.00033				1.54%
Ni 231.604†	532.4	0.0127	mg/L	0.00019				1.49%
Na 589.592†	2033960.8	370.8	mg/L	4.69				1.26%
Pb 220.353†	276.2	0.0461	mg/L	0.00092				1.99%
Sb 206.836†	20.6	0.0105	mg/L	0.00004				0.35%
Se 196.026†	3.6	0.0048	mg/L	0.00152				31.91%
Sn 189.927†	-146.0	-0.0307	mg/L	0.00103				3.34%
Ti 337.279†	3891.2	0.0070	mg/L	0.00149				21.30%
Tl 190.801†	4.2	0.0014	mg/L	0.00255				182.59%
V 292.402†	184.2	0.0027	mg/L	0.00006				2.36%
Zn 206.200†	6745.3	0.2281	mg/L	0.00214				0.94%
Ca 227.546†	19642.6	106.2	mg/L	1.24				1.17%
Sr 421.552†	563287.6	4.863	mg/L	0.0658				1.35%
Al 394.401†	29418.2	0.7259	mg/L	0.01586				2.18%
Al 237.313†	4150.0	0.6807	mg/L	0.01395				2.05%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 47
Sample ID: R1408025-001S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 10/14/2014 6:48:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408025-001S

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6361834.8	0.9451	mg/L	0.00179				0.19%
Ag 328.068†	12440.8	0.0499	mg/L	0.00002				0.04%
Al 308.215†	42873.1	2.907	mg/L	0.0023				0.08%

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As 188.979†	54.8	0.0434	mg/L	0.00022	0.50%
B 249.772†	236131.3	2.144	mg/L	0.0150	0.70%
Ba 233.527†	183225.0	2.170	mg/L	0.0024	0.11%
Be 313.107†	139587.5	0.0484	mg/L	0.00012	0.25%
Cd 226.502†	4162.8	0.0505	mg/L	0.00034	0.67%
Co 228.616†	10871.2	0.4970	mg/L	0.00285	0.57%
Cr 267.716†	23754.8	0.2073	mg/L	0.00046	0.22%
Cu 324.752†	91326.8	0.3450	mg/L	0.00025	0.07%
Fe 259.939†	141929.4	2.551	mg/L	0.0040	0.16%
K 766.490†	231691.4	347.1	mg/L	1.55	0.45%
Mg 279.077†	132229.6	12.85	mg/L	0.014	0.11%
Mn 257.610†	262364.7	0.7659	mg/L	0.00169	0.22%
Mo 202.031†	8506.2	0.5126	mg/L	0.00265	0.52%
Ni 231.604†	21723.8	0.5183	mg/L	0.00144	0.28%
Na 589.592†	2118698.1	386.3	mg/L	1.05	0.27%
Pb 220.353†	3316.2	0.5535	mg/L	0.00255	0.46%
Sb 206.836†	1021.1	0.5222	mg/L	0.00446	0.85%
Se 196.026†	790.1	0.9576	mg/L	0.00584	0.61%
Sn 189.927†	24878.4	5.215	mg/L	0.0082	0.16%
Ti 337.279†	275894.9	0.4954	mg/L	0.00086	0.17%
Tl 190.801†	3617.7	1.977	mg/L	0.0110	0.56%
V 292.402†	33328.7	0.5099	mg/L	0.00126	0.25%
Zn 206.200†	21959.3	0.7425	mg/L	0.00040	0.05%
Ca 227.546†	19872.7	107.5	mg/L	0.56	0.52%
Sr 421.552†	554538.2	4.787	mg/L	0.0167	0.35%
Al 394.401†	117661.5	2.903	mg/L	0.0040	0.14%
Al 237.313†	16325.5	2.678	mg/L	0.0031	0.12%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

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Sequence No.: 48
Sample ID: R1408025-001A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 61
Date Collected: 10/14/2014 6:54:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408025-001A

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6358050.4	0.9445	mg/L	0.00589				0.62%
Ag 328.068†	12132.7	0.0486	mg/L	0.00085				1.74%
Al 308.215†	42215.2	2.862	mg/L	0.0558				1.95%
As 188.979†	54.2	0.0430	mg/L	0.00026				0.60%
B 249.772†	237409.5	2.156	mg/L	0.0066				0.31%
Ba 233.527†	177125.4	2.098	mg/L	0.0169				0.81%
Be 313.107†	133735.1	0.0464	mg/L	0.00018				0.38%
Cd 226.502†	4021.6	0.0488	mg/L	0.00021				0.43%
Co 228.616†	10396.9	0.4753	mg/L	0.00236				0.50%
Cr 267.716†	22938.9	0.2002	mg/L	0.00110				0.55%
Cu 324.752†	87627.4	0.3310	mg/L	0.00524				1.58%
Fe 259.939†	140973.3	2.534	mg/L	0.0174				0.69%
K 766.490†	232093.3	347.7	mg/L	1.68				0.48%
Mg 279.077†	130549.1	12.69	mg/L	0.079				0.63%
Mn 257.610†	255434.8	0.7457	mg/L	0.00514				0.69%
Mo 202.031†	8674.8	0.5228	mg/L	0.00195				0.37%
Ni 231.604†	20813.9	0.4966	mg/L	0.00314				0.63%
Na 589.592†	2101385.1	383.1	mg/L	1.78				0.46%
Pb 220.353†	3235.9	0.5401	mg/L	0.00159				0.29%
Sb 206.836†	1048.2	0.5360	mg/L	0.00164				0.31%
Se 196.026†	857.6	1.039	mg/L	0.0025				0.24%
Sn 189.927†	-135.8	-0.0288	mg/L	0.00004				0.12%
Ti 337.279†	269670.4	0.4842	mg/L	0.00415				0.86%
Tl 190.801†	3522.9	1.925	mg/L	0.0049				0.26%
V 292.402†	32356.3	0.4950	mg/L	0.00651				1.31%
Zn 206.200†	21111.7	0.7139	mg/L	0.00014				0.02%
Ca 227.546†	20101.8	108.7	mg/L	1.85				1.70%
Sr 421.552†	551298.8	4.759	mg/L	0.0239				0.50%
Al 394.401†	116167.8	2.867	mg/L	0.0429				1.50%
Al 237.313†	15967.1	2.619	mg/L	0.0335				1.28%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

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Sequence No.: 49
Sample ID: R1408025-001L
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 62
Date Collected: 10/14/2014 7:00:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408025-001L

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6565050.5	0.9753	mg/L	0.00710				0.73%
Ag 328.068†	-33.0	0.0000	mg/L	0.00016				399.33%
Al 308.215†	2075.3	0.1390	mg/L	0.01491				10.73%
As 188.979†	-0.2	-0.0002	mg/L	0.00216				>999.9%
B 249.772†	29492.3	0.2675	mg/L	0.00330				1.23%
Ba 233.527†	2858.6	0.0339	mg/L	0.00014				0.40%
Be 313.107†	-499.3	-0.0002	mg/L	0.00005				30.69%
Cd 226.502†	20.3	0.0002	mg/L	0.00000				0.65%
Co 228.616†	-8.8	-0.0004	mg/L	0.00039				96.08%
Cr 267.716†	97.6	0.0011	mg/L	0.00009				8.56%
Cu 324.752†	3464.2	0.0131	mg/L	0.00063				4.84%
Fe 259.939†	18143.7	0.3261	mg/L	0.00109				0.33%
K 766.490†	40880.6	61.25	mg/L	0.620				1.01%
Mg 279.077†	22722.0	2.208	mg/L	0.0100				0.45%
Mn 257.610†	18531.9	0.0541	mg/L	0.00026				0.49%
Mo 202.031†	84.6	0.0051	mg/L	0.00004				0.79%
Ni 231.604†	96.6	0.0023	mg/L	0.00031				13.38%
Na 589.592†	398609.7	72.68	mg/L	0.661				0.91%
Pb 220.353†	53.8	0.0090	mg/L	0.00129				14.39%
Sb 206.836†	7.2	0.0037	mg/L	0.00023				6.14%
Se 196.026†	1.9	0.0024	mg/L	0.00021				8.73%
Sn 189.927†	-64.5	-0.0135	mg/L	0.00037				2.71%
Ti 337.279†	924.2	0.0017	mg/L	0.00028				16.92%
Tl 190.801†	-2.1	-0.0013	mg/L	0.00131				101.53%
V 292.402†	20.3	0.0003	mg/L	0.00008				26.17%
Zn 206.200†	1391.7	0.0471	mg/L	0.00036				0.76%
Ca 227.546†	3471.1	18.77	mg/L	0.078				0.42%
Sr 421.552†	107017.2	0.9239	mg/L	0.00884				0.96%
Al 394.401†	4667.0	0.1152	mg/L	0.00166				1.44%
Al 237.313†	732.6	0.1202	mg/L	0.00104				0.87%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 50
Sample ID: R1408025-002
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 63
Date Collected: 10/14/2014 7:06:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408025-002

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6321838.9	0.9391	mg/L	0.00548				0.58%
Ag 328.068†	-798.5	-0.0030	mg/L	0.00024				7.88%
Al 308.215†	969.2	-0.0016	mg/L	0.00531				333.19%
As 188.979†	1.5	0.0012	mg/L	0.00112				95.10%
B 249.772†	24921.5	0.2013	mg/L	0.00120				0.60%
Ba 233.527†	3756.0	0.0445	mg/L	0.00025				0.55%
Be 313.107†	-920.7	-0.0003	mg/L	0.00006				18.62%
Cd 226.502†	-10.0	-0.0002	mg/L	0.00008				40.82%
Co 228.616†	-19.8	-0.0009	mg/L	0.00004				4.74%
Cr 267.716†	-962.1	-0.0036	mg/L	0.00012				3.27%
Cu 324.752†	1060.0	0.0041	mg/L	0.00001				0.36%
Fe 259.939†	29633.4	0.5327	mg/L	0.00383				0.72%
K 766.490†	4971.8	7.449	mg/L	0.0090				0.12%
Mg 279.077†	490531.6	47.67	mg/L	0.092				0.19%
Mn 257.610†	34405.3	0.1005	mg/L	0.00087				0.86%
Mo 202.031†	39.3	0.0024	mg/L	0.00005				2.10%
Ni 231.604†	-35.7	-0.0009	mg/L	0.00017				19.59%
Na 589.592†	1233206.9	224.8	mg/L	0.87				0.39%

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Pb 220.353†	-13.5	-0.0023	mg/L	0.00043	19.18%
Sb 206.836†	7.9	0.0040	mg/L	0.00116	28.82%
Se 196.026†	1.5	0.0020	mg/L	0.00077	38.96%
Sn 189.927†	-229.5	-0.0481	mg/L	0.00066	1.38%
Ti 337.279†	111.9	0.0002	mg/L	0.00006	29.67%
Tl 190.801†	8.4	0.0003	mg/L	0.00137	439.03%
V 292.402†	-14.8	-0.0003	mg/L	0.00003	11.08%
Zn 206.200†	624.3	0.0211	mg/L	0.00002	0.08%
Ca 227.546†	92514.2	499.7	mg/L	1.65	0.33%
Sr 421.552†	1044836.6	9.020	mg/L	0.0389	0.43%
Al 394.401†	132.6	0.0033	mg/L	0.00211	64.49%
Al 237.313†	210.9	0.0346	mg/L	0.00022	0.64%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 51 **Autosampler Location: 64**
Sample ID: R1408037-001 **Date Collected: 10/14/2014 7:12:50 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: R1408037-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6773306.7	1.006	mg/L	0.0060				0.60%
Ag 328.068†	-98.8	-0.0004	mg/L	0.00031				78.61%
Al 308.215†	2172.4	0.1437	mg/L	0.00958				6.67%
As 188.979†	0.4	0.0003	mg/L	0.00108				321.11%
B 249.772†	3532.5	0.0308	mg/L	0.00165				5.37%
Ba 233.527†	1856.3	0.0220	mg/L	0.00000				0.01%
Be 313.107†	-88.2	0.0000	mg/L	0.00005				147.85%
Cd 226.502†	-14.3	-0.0002	mg/L	0.00006				35.12%
Co 228.616†	-15.1	-0.0007	mg/L	0.00011				16.47%
Cr 267.716†	-114.6	-0.0001	mg/L	0.00013				90.73%
Cu 324.752†	300.2	0.0011	mg/L	0.00053				46.42%
Fe 259.939†	18.1	0.0003	mg/L	0.00049				149.97%
K 766.490†	1139.9	1.708	mg/L	0.0104				0.61%
Mg 279.077†	89006.6	8.649	mg/L	0.1367				1.58%
Mn 257.610†	211.0	0.0006	mg/L	0.00001				0.91%
Mo 202.031†	31.4	0.0019	mg/L	0.00014				7.22%
Ni 231.604†	22.9	0.0005	mg/L	0.00002				3.14%
Na 589.592†	55416.0	10.10	mg/L	0.014				0.14%
Pb 220.353†	-1.7	-0.0003	mg/L	0.00128				478.89%
Sb 206.836†	4.4	0.0022	mg/L	0.00068				30.63%
Se 196.026†	2.4	0.0029	mg/L	0.00063				21.58%
Sn 189.927†	-106.6	-0.0224	mg/L	0.00004				0.19%
Ti 337.279†	269.3	0.0005	mg/L	0.00007				13.78%
Tl 190.801†	-6.4	-0.0037	mg/L	0.00047				12.43%
V 292.402†	3.7	0.0001	mg/L	0.00008				143.20%
Zn 206.200†	44.7	0.0015	mg/L	0.00000				0.18%
Ca 227.546†	5825.5	31.47	mg/L	0.562				1.78%
Sr 421.552†	17741.4	0.1532	mg/L	0.00033				0.22%
Al 394.401†	5763.0	0.1422	mg/L	0.00210				1.48%
Al 237.313†	972.2	0.1595	mg/L	0.00202				1.27%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 52 **Autosampler Location: 65**
Sample ID: R1408069-001 **Date Collected: 10/14/2014 7:18:53 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: R1408069-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6757930.5	1.004	mg/L	0.0092				0.92%
Ag 328.068†	-52.1	0.0001	mg/L	0.00003				41.32%
Al 308.215†	1295.2	0.0854	mg/L	0.01535				17.97%
As 188.979†	0.9	0.0007	mg/L	0.00136				182.17%

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B 249.772†	2519.9	0.0171 mg/L	0.00061	3.55%
Ba 233.527†	1496.7	0.0177 mg/L	0.00016	0.90%
Be 313.107†	56.1	0.0000 mg/L	0.00012	598.07%
Cd 226.502†	15.4	0.0000 mg/L	0.00004	92.97%
Co 228.616†	-12.1	-0.0006 mg/L	0.00010	18.96%
Cr 267.716†	-0.2	0.0006 mg/L	0.00009	14.88%
Cu 324.752†	5936.3	0.0225 mg/L	0.00130	5.77%
Fe 259.939†	56553.7	1.017 mg/L	0.0170	1.67%
K 766.490†	1150.2	1.723 mg/L	0.0185	1.08%
Mg 279.077†	60976.8	5.925 mg/L	0.0902	1.52%
Mn 257.610†	665.0	0.0021 mg/L	0.00001	0.51%
Mo 202.031†	20.5	0.0012 mg/L	0.00010	7.94%
Ni 231.604†	2.5	0.0001 mg/L	0.00014	233.83%
Na 589.592†	110424.4	20.13 mg/L	0.019	0.09%
Pb 220.353†	-3.0	-0.0005 mg/L	0.00138	267.04%
Sb 206.836†	4.1	0.0021 mg/L	0.00022	10.74%
Se 196.026†	1.6	0.0022 mg/L	0.00299	137.78%
Sn 189.927†	-91.2	-0.0191 mg/L	0.00038	1.96%
Ti 337.279†	610.8	0.0011 mg/L	0.00005	4.35%
Tl 190.801†	-6.7	-0.0038 mg/L	0.00133	34.92%
V 292.402†	62.0	0.0009 mg/L	0.00013	14.36%
Zn 206.200†	330.1	0.0112 mg/L	0.00018	1.57%
Ca 227.546†	4427.9	23.98 mg/L	0.501	2.09%
Sr 421.552†	5760.2	0.0497 mg/L	0.00026	0.52%
Al 394.401†	3507.2	0.0865 mg/L	0.00248	2.86%
Al 237.313†	600.6	0.0985 mg/L	0.00173	1.75%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 53
Sample ID: R1408075-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 66
Date Collected: 10/14/2014 7:25:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408075-001

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6617571.4	0.9831	mg/L	0.01916				1.95%
Ag 328.068†	-401.7	0.0001	mg/L	0.00025				196.71%
Al 308.215†	36618.2	2.488	mg/L	0.0329				1.32%
As 188.979†	3.2	0.0025	mg/L	0.00081				32.63%
B 249.772†	26303.3	0.2077	mg/L	0.00501				2.41%
Ba 233.527†	3607.3	0.0427	mg/L	0.00053				1.24%
Be 313.107†	-366.3	-0.0001	mg/L	0.00005				40.84%
Cd 226.502†	59.2	-0.0001	mg/L	0.00001				9.46%
Co 228.616†	-3.5	-0.0002	mg/L	0.00004				27.02%
Cr 267.716†	-125.0	0.0008	mg/L	0.00002				2.61%
Cu 324.752†	12575.2	0.0480	mg/L	0.00078				1.62%
Fe 259.939†	345356.9	6.208	mg/L	0.0961				1.55%
K 766.490†	7001.1	10.49	mg/L	0.335				3.20%
Mg 279.077†	162488.0	15.79	mg/L	0.245				1.55%
Mn 257.610†	49772.9	0.1461	mg/L	0.00192				1.31%
Mo 202.031†	69.5	0.0042	mg/L	0.00012				2.82%
Ni 231.604†	230.0	0.0055	mg/L	0.00007				1.27%
Na 589.592†	916219.4	167.0	mg/L	4.94				2.96%
Pb 220.353†	7.3	0.0013	mg/L	0.00068				52.03%
Sb 206.836†	3.8	0.0017	mg/L	0.00082				47.49%
Se 196.026†	-1.2	0.0000	mg/L J	0.00127				>999.9%
Sn 189.927†	-139.4	-0.0295	mg/L	0.00080				2.70%
Ti 337.279†	33821.1	0.0607	mg/L	0.00092				1.51%
Tl 190.801†	-1.2	-0.0011	mg/L	0.00028				24.80%
V 292.402†	40.2	0.0003	mg/L	0.00005				20.09%
Zn 206.200†	2150.6	0.0727	mg/L	0.00102				1.40%
Ca 227.546†	12729.3	69.13	mg/L	0.760				1.10%
Sr 421.552†	40627.3	0.3507	mg/L	0.00801				2.29%
Al 394.401†	102295.7	2.524	mg/L	0.0253				1.00%
Al 237.313†	14767.2	2.422	mg/L	0.0326				1.35%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

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Method: DV200-6010C Opt3 Page 40 Date: 10/14/2014 7:37:43 PM

Sequence No.: 54
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 10/14/2014 7:31:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6675702.7	0.9917	mg/L	0.00692				0.70%
Ag 328.068†	127769.2	0.5061	mg/L	0.00287	0.5061	mg/L	0.00287	0.57%
QC value within limits for Ag 328.068 Recovery = 101.22%								
Al 308.215†	138887.6	9.460	mg/L	0.0701	9.460	mg/L	0.0701	0.74%
QC value within limits for Al 308.215 Recovery = 94.60%								
As 188.979†	1260.6	1.001	mg/L	0.0094	1.001	mg/L	0.0094	0.94%
QC value within limits for As 188.979 Recovery = 100.12%								
B 249.772†	261335.4	2.367	mg/L	0.0356	2.367	mg/L	0.0356	1.51%
QC value within limits for B 249.772 Recovery = 94.67%								
Ba 233.527†	846864.7	10.03	mg/L	0.012	10.03	mg/L	0.012	0.12%
QC value within limits for Ba 233.527 Recovery = 100.31%								
Be 313.107†	708303.8	0.2455	mg/L	0.00049	0.2455	mg/L	0.00049	0.20%
QC value within limits for Be 313.107 Recovery = 98.21%								
Cd 226.502†	41242.9	0.5036	mg/L	0.00417	0.5036	mg/L	0.00417	0.83%
QC value within limits for Cd 226.502 Recovery = 100.71%								
Co 228.616†	53867.4	2.463	mg/L	0.0130	2.463	mg/L	0.0130	0.53%
QC value within limits for Co 228.616 Recovery = 98.51%								
Cr 267.716†	58493.9	0.5098	mg/L	0.00232	0.5098	mg/L	0.00232	0.46%
QC value within limits for Cr 267.716 Recovery = 101.96%								
Cu 324.752†	320372.2	1.210	mg/L	0.0104	1.210	mg/L	0.0104	0.86%
QC value within limits for Cu 324.752 Recovery = 96.78%								
Fe 259.939†	273603.1	4.918	mg/L	0.0285	4.918	mg/L	0.0285	0.58%
QC value within limits for Fe 259.939 Recovery = 98.36%								
K 766.490†	16499.8	24.72	mg/L	0.177	24.72	mg/L	0.177	0.71%
QC value within limits for K 766.490 Recovery = 98.88%								
Mg 279.077†	251393.3	24.43	mg/L	0.165	24.43	mg/L	0.165	0.68%
QC value within limits for Mg 279.077 Recovery = 97.71%								
Mn 257.610†	254009.8	0.7418	mg/L	0.00461	0.7418	mg/L	0.00461	0.62%
QC value within limits for Mn 257.610 Recovery = 98.91%								
Mo 202.031†	40040.9	2.413	mg/L	0.0157	2.413	mg/L	0.0157	0.65%
QC value within limits for Mo 202.031 Recovery = 96.52%								
Ni 231.604†	84137.1	2.007	mg/L	0.0128	2.007	mg/L	0.0128	0.64%
QC value within limits for Ni 231.604 Recovery = 100.36%								
Na 589.592†	134266.1	24.48	mg/L	0.139	24.48	mg/L	0.139	0.57%
QC value within limits for Na 589.592 Recovery = 97.92%								
Pb 220.353†	2970.8	0.4965	mg/L	0.00428	0.4965	mg/L	0.00428	0.86%
QC value within limits for Pb 220.353 Recovery = 99.30%								
Sb 206.836†	9765.9	4.995	mg/L	0.0389	4.995	mg/L	0.0389	0.78%
QC value within limits for Sb 206.836 Recovery = 99.91%								
Se 196.026†	402.1	0.4884	mg/L	0.00034	0.4884	mg/L	0.00034	0.07%
QC value within limits for Se 196.026 Recovery = 97.67%								
Sn 189.927†	23702.7	4.967	mg/L	0.0386	4.967	mg/L	0.0386	0.78%
QC value within limits for Sn 189.927 Recovery = 99.35%								
Ti 337.279†	1357040.7	2.437	mg/L	0.0045	2.437	mg/L	0.0045	0.18%
QC value within limits for Ti 337.279 Recovery = 97.47%								
Tl 190.801†	1801.0	0.9842	mg/L	0.01082	0.9842	mg/L	0.01082	1.10%
QC value within limits for Tl 190.801 Recovery = 98.42%								
V 292.402†	170355.3	2.607	mg/L	0.0086	2.607	mg/L	0.0086	0.33%
QC value within limits for V 292.402 Recovery = 104.27%								
Zn 206.200†	29737.0	1.006	mg/L	0.0073	1.006	mg/L	0.0073	0.73%
QC value within limits for Zn 206.200 Recovery = 100.55%								
Ca 227.546†	4455.6	24.38	mg/L	0.124	24.38	mg/L	0.124	0.51%
QC value within limits for Ca 227.546 Recovery = 97.53%								
Sr 421.552†	268122.4	2.315	mg/L	0.0140	2.315	mg/L	0.0140	0.61%
QC value within limits for Sr 421.552 Recovery = 92.59%								
Al 394.401†	383830.9	9.472	mg/L	0.0662	9.472	mg/L	0.0662	0.70%
QC value within limits for Al 394.401 Recovery = 94.72%								
Al 237.313†	58657.1	9.621	mg/L	0.0490	9.621	mg/L	0.0490	0.51%
QC value within limits for Al 237.313 Recovery = 96.21%								

All analyte(s) passed QC.

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Method: DV200-6010C Opt3 Page 41 Date: 10/14/2014 7:43:41 PM

Sequence No.: 55
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 10/14/2014 7:37:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6766115.8	1.005	mg/L	0.0033				0.33%
Ag 328.068†	130.1	0.0005	mg/L	0.00046	0.0005	mg/L	0.00046	88.48%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	6.4	0.0004	mg/L	0.01321	0.0004	mg/L	0.01321	>999.9%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	3.7	0.0029	mg/L	0.00071	0.0029	mg/L	0.00071	24.12%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3050.9	0.0279	mg/L	0.00400	0.0279	mg/L	0.00400	14.34%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	621.0	0.0074	mg/L	0.00268	0.0074	mg/L	0.00268	36.47%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	724.6	0.0003	mg/L	0.00004	0.0003	mg/L	0.00004	14.84%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	33.6	0.0004	mg/L	0.00017	0.0004	mg/L	0.00017	42.08%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	47.7	0.0022	mg/L	0.00037	0.0022	mg/L	0.00037	17.07%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	28.4	0.0002	mg/L	0.00014	0.0002	mg/L	0.00014	57.36%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1024.3	0.0039	mg/L	0.00118	0.0039	mg/L	0.00118	30.60%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	357.1	0.0064	mg/L	0.00163	0.0064	mg/L	0.00163	25.45%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	140.1	0.2099	mg/L	0.02939	0.2099	mg/L	0.02939	14.00%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	263.4	0.0256	mg/L	0.00511	0.0256	mg/L	0.00511	19.96%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	253.8	0.0007	mg/L	0.00019	0.0007	mg/L	0.00019	25.41%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	30.3	0.0018	mg/L	0.00082	0.0018	mg/L	0.00082	44.94%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	87.9	0.0021	mg/L	0.00075	0.0021	mg/L	0.00075	35.71%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	770.5	0.1405	mg/L	0.00544	0.1405	mg/L	0.00544	3.87%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	5.3	0.0009	mg/L	0.00010	0.0009	mg/L	0.00010	10.99%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	7.4	0.0038	mg/L	0.00192	0.0038	mg/L	0.00192	50.84%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.7	0.0009	mg/L	0.00283	0.0009	mg/L	0.00283	312.10%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	39.6	0.0083	mg/L	0.00210	0.0083	mg/L	0.00210	25.23%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	1185.4	0.0021	mg/L	0.00094	0.0021	mg/L	0.00094	44.04%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	1.0	0.0005	mg/L	0.00233	0.0005	mg/L	0.00233	424.13%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	157.8	0.0024	mg/L	0.00107	0.0024	mg/L	0.00107	44.36%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	47.6	0.0016	mg/L	0.00028	0.0016	mg/L	0.00028	17.12%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	2.9	0.0163	mg/L	0.02261	0.0163	mg/L	0.02261	138.95%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	420.6	0.0036	mg/L	0.00022	0.0036	mg/L	0.00022	6.18%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Al 394.401†	319.6	0.0079	mg/L	0.00443	0.0079	mg/L	0.00443	56.18%
QC value within limits for Al 394.401 Recovery = Not calculated								
Al 237.313†	52.2	0.0086	mg/L	0.00261	0.0086	mg/L	0.00261	30.44%
QC value within limits for Al 237.313 Recovery = Not calculated								

All analyte(s) passed QC.

Method: DV200-6010C Opt3 Page 42 Date: 10/14/2014 7:49:40 PM

Sequence No.: 56
Sample ID: MRL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 10/14/2014 7:43:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6839712.8	1.016	mg/L	0.0133				1.31%
Ag 328.068†	2483.4	0.0098	mg/L	0.00029	0.0098	mg/L	0.00029	2.96%
QC value within limits for Ag 328.068 Recovery = 98.39%								
Al 308.215†	2337.3	0.1591	mg/L	0.01518	0.1591	mg/L	0.01518	9.54%
QC value less than the lower limit for Al 308.215 Recovery = 79.57%								
As 188.979†	25.8	0.0205	mg/L	0.00179	0.0205	mg/L	0.00179	8.72%
QC value within limits for As 188.979 Recovery = 102.46%								
B 249.772†	22545.1	0.2058	mg/L	0.00597	0.2058	mg/L	0.00597	2.90%
QC value within limits for B 249.772 Recovery = 102.91%								
Ba 233.527†	17514.9	0.2075	mg/L	0.00524	0.2075	mg/L	0.00524	2.52%
QC value within limits for Ba 233.527 Recovery = 103.73%								
Be 313.107†	14695.5	0.0051	mg/L	0.00005	0.0051	mg/L	0.00005	1.00%
QC value within limits for Be 313.107 Recovery = 101.88%								
Cd 226.502†	872.7	0.0107	mg/L	0.00023	0.0107	mg/L	0.00023	2.16%
QC value within limits for Cd 226.502 Recovery = 106.55%								
Co 228.616†	1119.9	0.0512	mg/L	0.00084	0.0512	mg/L	0.00084	1.64%
QC value within limits for Co 228.616 Recovery = 102.41%								
Cr 267.716†	1170.3	0.0102	mg/L	0.00020	0.0102	mg/L	0.00020	1.99%
QC value within limits for Cr 267.716 Recovery = 102.48%								
Cu 324.752†	6485.9	0.0245	mg/L	0.00109	0.0245	mg/L	0.00109	4.44%
QC value within limits for Cu 324.752 Recovery = 97.97%								
Fe 259.939†	5739.2	0.1032	mg/L	0.00183	0.1032	mg/L	0.00183	1.77%
QC value within limits for Fe 259.939 Recovery = 103.17%								
K 766.490†	675.7	1.012	mg/L	0.0354	1.012	mg/L	0.0354	3.50%
QC value within limits for K 766.490 Recovery = 101.24%								
Mg 279.077†	10121.4	0.9835	mg/L	0.01239	0.9835	mg/L	0.01239	1.26%
QC value within limits for Mg 279.077 Recovery = 98.35%								
Mn 257.610†	5272.2	0.0154	mg/L	0.00026	0.0154	mg/L	0.00026	1.70%
QC value within limits for Mn 257.610 Recovery = 102.65%								
Mo 202.031†	429.7	0.0259	mg/L	0.00020	0.0259	mg/L	0.00020	0.76%
QC value within limits for Mo 202.031 Recovery = 103.58%								
Ni 231.604†	1719.5	0.0410	mg/L	0.00073	0.0410	mg/L	0.00073	1.77%
QC value within limits for Ni 231.604 Recovery = 102.56%								
Na 589.592†	5649.8	1.030	mg/L	0.0152	1.030	mg/L	0.0152	1.48%
QC value within limits for Na 589.592 Recovery = 103.01%								
Pb 220.353†	61.5	0.0103	mg/L	0.00062	0.0103	mg/L	0.00062	6.00%
QC value within limits for Pb 220.353 Recovery = 102.72%								
Sb 206.836†	118.7	0.0607	mg/L	0.00106	0.0607	mg/L	0.00106	1.75%
QC value within limits for Sb 206.836 Recovery = 101.23%								
Se 196.026†	11.1	0.0135	mg/L	0.00011	0.0135	mg/L	0.00011	0.78%
QC value greater than the upper limit for Se 196.026 Recovery = 135.09%								
Sn 189.927†	2531.2	0.5306	mg/L	0.00808	0.5306	mg/L	0.00808	1.52%
QC value within limits for Sn 189.927 Recovery = 106.11%								
Ti 337.279†	28529.6	0.0512	mg/L	0.00115	0.0512	mg/L	0.00115	2.24%
QC value within limits for Ti 337.279 Recovery = 102.45%								
Tl 190.801†	29.8	0.0163	mg/L	0.00092	0.0163	mg/L	0.00092	5.63%
QC value within limits for Tl 190.801 Recovery = 81.40%								
V 292.402†	3500.4	0.0536	mg/L	0.00127	0.0536	mg/L	0.00127	2.38%
QC value within limits for V 292.402 Recovery = 107.13%								
Zn 206.200†	577.6	0.0195	mg/L	0.00020	0.0195	mg/L	0.00020	1.02%
QC value within limits for Zn 206.200 Recovery = 97.65%								
Ca 227.546†	160.9	0.8756	mg/L	0.00064	0.8756	mg/L	0.00064	0.07%
QC value within limits for Ca 227.546 Recovery = 87.56%								
Sr 421.552†	11161.2	0.0964	mg/L	0.00091	0.0964	mg/L	0.00091	0.95%
QC value within limits for Sr 421.552 Recovery = 96.36%								
Al 394.401†	7037.8	0.1737	mg/L	0.00483	0.1737	mg/L	0.00483	2.78%
QC value within limits for Al 394.401 Recovery = 86.83%								
Al 237.313†	1158.8	0.1901	mg/L	0.00536	0.1901	mg/L	0.00536	2.82%
QC value within limits for Al 237.313 Recovery = 95.04%								

QC Failed. Continue with analysis.

Method: DV200-6010C Opt3 Page 43 Date: 10/14/2014 7:59:52 PM

Sequence No.: 57
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 10/14/2014 7:49:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6358968.1	0.9447	mg/L	0.00000				0.00%
Ag 328.068†	-6571.5	-0.0012	mg/L	0.00030	-0.0012	mg/L	0.00030	25.42%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	3776853.8	257.3	mg/L	3.34	257.3	mg/L	3.34	1.30%
QC value within limits for Al 308.215 Recovery = 102.91%								
As 188.979†	15.9	0.0025	mg/L	0.00261	0.0025	mg/L	0.00261	104.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	36831.4	-0.1257	mg/L	0.00311	-0.1257	mg/L	0.00311	2.48%
Ba 233.527†	315.1	0.0037	mg/L	0.00014	0.0037	mg/L	0.00014	3.68%
Be 313.107†	-1009.6	-0.0003	mg/L	0.00000	-0.0003	mg/L	0.00000	0.15%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	1076.8	0.0013	mg/L	0.00002	0.0013	mg/L	0.00002	1.65%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	17.9	0.0008	mg/L	0.00032	0.0008	mg/L	0.00032	38.63%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3541.0	-0.0010	mg/L	0.00017	-0.0010	mg/L	0.00017	16.27%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-1583.5	0.0024	mg/L	0.00015	0.0024	mg/L	0.00015	6.15%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	4998266.2	89.85	mg/L	0.134	89.85	mg/L	0.134	0.15%
QC value within limits for Fe 259.939 Recovery = 89.85%								
K 766.490†	94.6	0.1418	mg/L	0.02216	0.1418	mg/L	0.02216	15.63%
Mg 279.077†	2678382.6	260.3	mg/L	2.35	260.3	mg/L	2.35	0.90%
QC value within limits for Mg 279.077 Recovery = 104.11%								
Mn 257.610†	-5060.7	-0.0028	mg/L	0.00000	-0.0028	mg/L	0.00000	0.07%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	6.2	0.0004	mg/L	0.00041	0.0004	mg/L	0.00041	109.04%
Ni 231.604†	-102.9	-0.0025	mg/L	0.00009	-0.0025	mg/L	0.00009	3.72%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	306.0	0.0558	mg/L	0.00637	0.0558	mg/L	0.00637	11.41%
Pb 220.353†	-154.6	0.0001	mg/L	0.00066	0.0001	mg/L	0.00066	486.93%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	45.5	0.0004	mg/L	0.00041	0.0004	mg/L	0.00041	105.65%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-19.7	0.0011	mg/L	0.00216	0.0011	mg/L	0.00216	194.54%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-155.9	-0.0627	mg/L	0.00195	-0.0627	mg/L	0.00195	3.11%
Ti 337.279†	301.1	0.0005	mg/L	0.00002	0.0005	mg/L	0.00002	4.47%
Tl 190.801†	26.8	0.0002	mg/L	0.00033	0.0002	mg/L	0.00033	202.32%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	297.2	-0.0006	mg/L	0.00017	-0.0006	mg/L	0.00017	25.70%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	157.7	0.0053	mg/L	0.00011	0.0053	mg/L	0.00011	2.01%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	47344.1	261.7	mg/L	1.61	261.7	mg/L	1.61	0.62%
QC value within limits for Ca 227.546 Recovery = 104.69%								
Sr 421.552†	464.8	0.0040	mg/L	0.00026	0.0040	mg/L	0.00026	6.58%
Al 394.401†	10707518.3	264.2	mg/L	0.50	264.2	mg/L	0.50	0.19%
QC value within limits for Al 394.401 Recovery = 105.69%								
Al 237.313†	1560393.9	255.9	mg/L	3.08	255.9	mg/L	3.08	1.20%
QC value within limits for Al 237.313 Recovery = 102.38%								

All analyte(s) passed QC.

Sequence No.: 58
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 10/14/2014 7:55:56 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

Method: DV200-6010C Opt3 Page 44 Date: 10/14/2014 8:06:01 PM

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6357325.2	0.9444	mg/L	0.00549				0.58%
Ag 328.068†	45747.7	0.2054	mg/L	0.00073	0.2054	mg/L	0.00073	0.35%
QC value within limits for Ag 328.068 Recovery = 102.71%								
Al 308.215†	3775936.8	257.2	mg/L	1.83	257.2	mg/L	1.83	0.71%
QC value within limits for Al 308.215 Recovery = 102.89%								
As 188.979†	135.7	0.0976	mg/L	0.00045	0.0976	mg/L	0.00045	0.46%
QC value within limits for As 188.979 Recovery = 97.65%								
B 249.772†	36372.7	-0.1284	mg/L	0.00252	-0.1284	mg/L	0.00252	1.96%
Ba 233.527†	44061.4	0.5219	mg/L	0.00008	0.5219	mg/L	0.00008	0.02%
QC value within limits for Ba 233.527 Recovery = 104.38%								
Be 313.107†	1441368.0	0.4996	mg/L	0.00421	0.4996	mg/L	0.00421	0.84%
QC value within limits for Be 313.107 Recovery = 99.92%								
Cd 226.502†	81026.5	0.9787	mg/L	0.00145	0.9787	mg/L	0.00145	0.15%
QC value within limits for Cd 226.502 Recovery = 97.87%								
Co 228.616†	10470.1	0.4787	mg/L	0.00143	0.4787	mg/L	0.00143	0.30%
QC value within limits for Co 228.616 Recovery = 95.74%								
Cr 267.716†	55131.8	0.5079	mg/L	0.00063	0.5079	mg/L	0.00063	0.12%
QC value within limits for Cr 267.716 Recovery = 101.57%								
Cu 324.752†	135746.2	0.5207	mg/L	0.00097	0.5207	mg/L	0.00097	0.19%
QC value within limits for Cu 324.752 Recovery = 104.15%								
Fe 259.939†	4982538.5	89.56	mg/L	0.106	89.56	mg/L	0.106	0.12%
QC value within limits for Fe 259.939 Recovery = 89.56%								
K 766.490†	27.9	0.0417	mg/L	0.03511	0.0417	mg/L	0.03511	84.13%
Mg 279.077†	2699656.4	262.3	mg/L	2.20	262.3	mg/L	2.20	0.84%
QC value within limits for Mg 279.077 Recovery = 104.93%								
Mn 257.610†	169352.5	0.5061	mg/L	0.00054	0.5061	mg/L	0.00054	0.11%
QC value within limits for Mn 257.610 Recovery = 101.21%								
Mo 202.031†	1.3	0.0001	mg/L	0.00040	0.0001	mg/L	0.00040	519.24%
Ni 231.604†	40314.0	0.9618	mg/L	0.00227	0.9618	mg/L	0.00227	0.24%
QC value within limits for Ni 231.604 Recovery = 96.18%								
Na 589.592†	232.9	0.0425	mg/L	0.01106	0.0425	mg/L	0.01106	26.04%
Pb 220.353†	151.6	0.0512	mg/L	0.00030	0.0512	mg/L	0.00030	0.59%
QC value within limits for Pb 220.353 Recovery = 102.45%								
Sb 206.836†	1281.5	0.6328	mg/L	0.00081	0.6328	mg/L	0.00081	0.13%
QC value within limits for Sb 206.836 Recovery = 105.46%								
Se 196.026†	20.5	0.0497	mg/L	0.00127	0.0497	mg/L	0.00127	2.55%
QC value within limits for Se 196.026 Recovery = 99.40%								
Sn 189.927†	-134.4	-0.0582	mg/L	0.00049	-0.0582	mg/L	0.00049	0.84%
Ti 337.279†	306.1	0.0005	mg/L	0.00002	0.0005	mg/L	0.00002	2.91%
Tl 190.801†	216.2	0.1038	mg/L	0.00223	0.1038	mg/L	0.00223	2.15%
QC value within limits for Tl 190.801 Recovery = 103.78%								
V 292.402†	33325.5	0.5048	mg/L	0.00372	0.5048	mg/L	0.00372	0.74%
QC value within limits for V 292.402 Recovery = 100.96%								
Zn 206.200†	28730.0	0.9715	mg/L	0.00115	0.9715	mg/L	0.00115	0.12%
QC value within limits for Zn 206.200 Recovery = 97.15%								
Ca 227.546†	46895.5	259.3	mg/L	0.58	259.3	mg/L	0.58	0.22%
QC value within limits for Ca 227.546 Recovery = 103.72%								
Sr 421.552†	482.9	0.0042	mg/L	0.00004	0.0042	mg/L	0.00004	0.92%
Al 394.401†	10614078.2	261.9	mg/L	0.20	261.9	mg/L	0.20	0.07%
QC value within limits for Al 394.401 Recovery = 104.77%								
Al 237.313†	1565477.0	256.8	mg/L	1.60	256.8	mg/L	1.60	0.62%
QC value within limits for Al 237.313 Recovery = 102.71%								

All analyte(s) passed QC.

Sequence No.: 59 Autosampler Location: 13
Sample ID: HLCCV2 HLCCV2 cup empty Date Collected: 10/14/2014 8:02:15 PM
Analyst: Analyzed & reported earlier in run Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: 10/15/14 Sample Prep Vol:
DCB

Mean Data: HLCCV2

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	16109841.1	2.393	mg/L	0.0102				0.43%
Ag 328.068†	202.9	0.0008	mg/L	0.00014	0.0008	mg/L	0.00014	17.26%
QC value less than the lower limit for Ag 328.068 Recovery = 0.04%								
Al 308.215†	-7791.3	-0.5308	mg/L	0.00516	-0.5308	mg/L	0.00516	0.97%
QC value less than the lower limit for Al 308.215 Recovery = -0.11%								

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As 188.979†	-4.8	-0.0038 mg/L	0.00017	-0.0038 mg/L	0.00017	4.47%
QC value less than the lower limit for As 188.979			Recovery = -0.10%			
B 249.772†	-509.5	-0.0047 mg/L	0.00002	-0.0047 mg/L	0.00002	0.48%
QC value less than the lower limit for B 249.772			Recovery = -0.05%			
Ba 233.527†	275.5	0.0033 mg/L	0.00002	0.0033 mg/L	0.00002	0.50%
QC value less than the lower limit for Ba 233.527			Recovery = 0.01%			
Be 313.107†	9201.7	0.0032 mg/L	0.00000	0.0032 mg/L	0.00000	0.06%
QC value less than the lower limit for Be 313.107			Recovery = 0.32%			
Cd 226.502†	107.6	0.0013 mg/L	0.00002	0.0013 mg/L	0.00002	1.75%
QC value less than the lower limit for Cd 226.502			Recovery = 0.07%			
Co 228.616†	18.3	0.0008 mg/L	0.00007	0.0008 mg/L	0.00007	8.83%
QC value less than the lower limit for Co 228.616			Recovery = 0.01%			
Cr 267.716†	192.2	0.0017 mg/L	0.00002	0.0017 mg/L	0.00002	0.93%
QC value less than the lower limit for Cr 267.716			Recovery = 0.02%			
Cu 324.752†	-5608.6	-0.0212 mg/L	0.00014	-0.0212 mg/L	0.00014	0.66%
QC value less than the lower limit for Cu 324.752			Recovery = -0.42%			
Fe 259.939†	1214.2	0.0218 mg/L	0.00146	0.0218 mg/L	0.00146	6.67%
QC value less than the lower limit for Fe 259.939			Recovery = 0.04%			
K 766.490†	-360.2	-0.5397 mg/L	0.03938	-0.5397 mg/L	0.03938	7.30%
QC value less than the lower limit for K 766.490			Recovery = -0.36%			
Mg 279.077†	1877.9	0.1825 mg/L	0.00127	0.1825 mg/L	0.00127	0.70%
QC value less than the lower limit for Mg 279.077			Recovery = 0.04%			
Mn 257.610†	577.6	0.0017 mg/L	0.00000	0.0017 mg/L	0.00000	0.11%
QC value less than the lower limit for Mn 257.610			Recovery = 0.02%			
Mo 202.031†	-14.5	-0.0009 mg/L	0.00003	-0.0009 mg/L	0.00003	3.42%
QC value less than the lower limit for Mo 202.031			Recovery = -0.01%			
Ni 231.604†	149.5	0.0036 mg/L	0.00006	0.0036 mg/L	0.00006	1.81%
QC value less than the lower limit for Ni 231.604			Recovery = 0.04%			
Na 589.592†	-57.1	-0.0104 mg/L	0.00226	-0.0104 mg/L	0.00226	21.74%
QC value less than the lower limit for Na 589.592			Recovery = -0.01%			
Pb 220.353†	21.6	0.0035 mg/L	0.00022	0.0035 mg/L	0.00022	6.23%
QC value less than the lower limit for Pb 220.353			Recovery = 0.04%			
Sb 206.836†	-22.7	-0.0116 mg/L	0.00016	-0.0116 mg/L	0.00016	1.34%
Se 196.026†	0.8	0.0010 mg/L	0.00018	0.0010 mg/L	0.00018	18.71%
QC value less than the lower limit for Se 196.026			Recovery = 0.05%			
Sn 189.927†	-39.0	-0.0081 mg/L	0.00002	-0.0081 mg/L	0.00002	0.26%
Ti 337.279†	100.3	0.0002 mg/L	0.00002	0.0002 mg/L	0.00002	13.12%
QC value less than the lower limit for Ti 337.279			Recovery = 0.00%			
Tl 190.801†	-13.5	-0.0074 mg/L	0.00063	-0.0074 mg/L	0.00063	8.51%
QC value less than the lower limit for Tl 190.801			Recovery = -0.18%			
V 292.402†	-47.4	-0.0007 mg/L	0.00008	-0.0007 mg/L	0.00008	11.65%
QC value less than the lower limit for V 292.402			Recovery = -0.01%			
Zn 206.200†	-46.5	-0.0016 mg/L	0.00001	-0.0016 mg/L	0.00001	0.75%
QC value less than the lower limit for Zn 206.200			Recovery = -0.04%			
Ca 227.546†	43.1	0.2325 mg/L	0.01260	0.2325 mg/L	0.01260	5.42%
QC value less than the lower limit for Ca 227.546			Recovery = 0.09%			
Sr 421.552†	-87.3	-0.0008 mg/L	0.00012	-0.0008 mg/L	0.00012	15.97%
QC value less than the lower limit for Sr 421.552			Recovery = -0.01%			
Al 394.401†	33.0	0.0008 mg/L	0.00447	0.0008 mg/L	0.00447	548.25%
QC value less than the lower limit for Al 394.401			Recovery = 0.00%			
Al 237.313†	-84.9	-0.0139 mg/L	0.00302	-0.0139 mg/L	0.00302	21.66%
QC value less than the lower limit for Al 237.313			Recovery = -0.00%			

QC Failed. Continue with analysis.

Sequence No.: 60 **Autosampler Location: 2**
Sample ID: HLCCV1 **Date Collected: 10/14/2014 8:08:26 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: HLCCV1

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6606284.5	0.9814	mg/L	0.00781				0.80%
Ag 328.068†	253150.5	1.003	mg/L	0.0107	1.003	mg/L	0.0107	1.06%
QC value within limits for Ag 328.068 Recovery = 100.28%								
Al 308.215†	294366.5	20.05	mg/L	0.267	20.05	mg/L	0.267	1.33%
QC value within limits for Al 308.215 Recovery = 100.25%								
As 188.979†	2481.9	1.971	mg/L	0.0144	1.971	mg/L	0.0144	0.73%
QC value within limits for As 188.979 Recovery = 98.56%								

00785

Method: DV200-6010C Opt3 Page 46 Date: 10/14/2014 8:18:23 PM

B 249.772†	539500.8	4.887 mg/L	0.0193	4.887 mg/L	0.0193	0.40%
QC value within limits for B 249.772 Recovery = 97.73%						
Ba 233.527†	1670851.2	19.79 mg/L	0.019	19.79 mg/L	0.019	0.10%
QC value within limits for Ba 233.527 Recovery = 98.96%						
Be 313.107†	1431289.1	0.4961 mg/L	0.00003	0.4961 mg/L	0.00003	0.01%
QC value within limits for Be 313.107 Recovery = 99.23%						
Cd 226.502†	81683.4	0.9973 mg/L	0.01035	0.9973 mg/L	0.01035	1.04%
QC value within limits for Cd 226.502 Recovery = 99.73%						
Co 228.616†	109230.2	4.994 mg/L	0.0480	4.994 mg/L	0.0480	0.96%
QC value within limits for Co 228.616 Recovery = 99.88%						
Cr 267.716†	115329.1	1.005 mg/L	0.0096	1.005 mg/L	0.0096	0.95%
QC value within limits for Cr 267.716 Recovery = 100.53%						
Cu 324.752†	662664.0	2.502 mg/L	0.0257	2.502 mg/L	0.0257	1.03%
QC value within limits for Cu 324.752 Recovery = 100.09%						
Fe 259.939†	555949.6	9.994 mg/L	0.1104	9.994 mg/L	0.1104	1.11%
QC value within limits for Fe 259.939 Recovery = 99.94%						
K 766.490†	34033.9	50.99 mg/L	0.647	50.99 mg/L	0.647	1.27%
QC value within limits for K 766.490 Recovery = 101.98%						
Mg 279.077†	513873.8	49.93 mg/L	0.522	49.93 mg/L	0.522	1.05%
QC value within limits for Mg 279.077 Recovery = 99.87%						
Mn 257.610†	512769.4	1.498 mg/L	0.0153	1.498 mg/L	0.0153	1.02%
QC value within limits for Mn 257.610 Recovery = 99.83%						
Mo 202.031†	82793.4	4.990 mg/L	0.0524	4.990 mg/L	0.0524	1.05%
QC value within limits for Mo 202.031 Recovery = 99.79%						
Ni 231.604†	167784.6	4.003 mg/L	0.0390	4.003 mg/L	0.0390	0.97%
QC value within limits for Ni 231.604 Recovery = 100.07%						
Na 589.592†	272421.9	49.67 mg/L	0.782	49.67 mg/L	0.782	1.58%
QC value within limits for Na 589.592 Recovery = 99.34%						
Pb 220.353†	5919.5	0.9895 mg/L	0.00605	0.9895 mg/L	0.00605	0.61%
QC value within limits for Pb 220.353 Recovery = 98.95%						
Sb 206.836†	19356.2	9.901 mg/L	0.0406	9.901 mg/L	0.0406	0.41%
QC value within limits for Sb 206.836 Recovery = 99.01%						
Se 196.026†	811.2	0.9852 mg/L	0.00604	0.9852 mg/L	0.00604	0.61%
QC value within limits for Se 196.026 Recovery = 98.52%						
Sn 189.927†	47756.6	10.01 mg/L	0.097	10.01 mg/L	0.097	0.97%
QC value within limits for Sn 189.927 Recovery = 100.08%						
Ti 337.279†	2758826.6	4.954 mg/L	0.0021	4.954 mg/L	0.0021	0.04%
QC value within limits for Ti 337.279 Recovery = 99.07%						
Tl 190.801†	3610.5	1.973 mg/L	0.0087	1.973 mg/L	0.0087	0.44%
QC value within limits for Tl 190.801 Recovery = 98.65%						
V 292.402†	329473.9	5.042 mg/L	0.0544	5.042 mg/L	0.0544	1.08%
QC value within limits for V 292.402 Recovery = 100.83%						
Zn 206.200†	59116.7	1.999 mg/L	0.0198	1.999 mg/L	0.0198	0.99%
QC value within limits for Zn 206.200 Recovery = 99.95%						
Ca 227.546†	9205.1	50.36 mg/L	0.219	50.36 mg/L	0.219	0.44%
QC value within limits for Ca 227.546 Recovery = 100.73%						
Sr 421.552†	573734.8	4.953 mg/L	0.0049	4.953 mg/L	0.0049	0.10%
QC value within limits for Sr 421.552 Recovery = 99.06%						
Al 394.401†	813404.6	20.07 mg/L	0.282	20.07 mg/L	0.282	1.41%
QC value within limits for Al 394.401 Recovery = 100.36%						
Al 237.313†	121895.4	19.99 mg/L	0.234	19.99 mg/L	0.234	1.17%
QC value within limits for Al 237.313 Recovery = 99.97%						

All analyte(s) passed QC.

Sequence No.: 61 **Autosampler Location: 3**
Sample ID: CCV **Date Collected: 10/14/2014 8:14:42 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6735695.9	1.001	mg/L	0.0028				0.28%
Ag 328.068†	127397.1	0.5047	mg/L	0.00205	0.5047	mg/L	0.00205	0.41%
QC value within limits for Ag 328.068 Recovery = 100.94%								
Al 308.215†	143737.8	9.790	mg/L	0.0728	9.790	mg/L	0.0728	0.74%
QC value within limits for Al 308.215 Recovery = 97.90%								
As 188.979†	1250.6	0.9933	mg/L	0.00396	0.9933	mg/L	0.00396	0.40%
QC value within limits for As 188.979 Recovery = 99.33%								

00786

Method: DV200-6010C Opt3 Page 47 Date: 10/14/2014 8:24:25 PM

B 249.772†	270602.7	2.451 mg/L	0.0255	2.451 mg/L	0.0255	1.04%
QC value within limits for B 249.772 Recovery = 98.04%						
Ba 233.527†	869610.7	10.30 mg/L	0.009	10.30 mg/L	0.009	0.08%
QC value within limits for Ba 233.527 Recovery = 103.00%						
Be 313.107†	726622.8	0.2519 mg/L	0.00004	0.2519 mg/L	0.00004	0.02%
QC value within limits for Be 313.107 Recovery = 100.75%						
Cd 226.502†	41557.1	0.5074 mg/L	0.00157	0.5074 mg/L	0.00157	0.31%
QC value within limits for Cd 226.502 Recovery = 101.48%						
Co 228.616†	54998.0	2.514 mg/L	0.0005	2.514 mg/L	0.0005	0.02%
QC value within limits for Co 228.616 Recovery = 100.58%						
Cr 267.716†	58899.4	0.5134 mg/L	0.00029	0.5134 mg/L	0.00029	0.06%
QC value within limits for Cr 267.716 Recovery = 102.67%						
Cu 324.752†	331158.4	1.250 mg/L	0.0156	1.250 mg/L	0.0156	1.25%
QC value within limits for Cu 324.752 Recovery = 100.04%						
Fe 259.939†	281830.7	5.066 mg/L	0.0005	5.066 mg/L	0.0005	0.01%
QC value within limits for Fe 259.939 Recovery = 101.32%						
K 766.490†	16627.0	24.91 mg/L	0.176	24.91 mg/L	0.176	0.71%
QC value within limits for K 766.490 Recovery = 99.65%						
Mg 279.077†	256473.0	24.92 mg/L	0.036	24.92 mg/L	0.036	0.14%
QC value within limits for Mg 279.077 Recovery = 99.69%						
Mn 257.610†	259672.0	0.7584 mg/L	0.00049	0.7584 mg/L	0.00049	0.06%
QC value within limits for Mn 257.610 Recovery = 101.12%						
Mo 202.031†	40332.7	2.431 mg/L	0.0018	2.431 mg/L	0.0018	0.08%
QC value within limits for Mo 202.031 Recovery = 97.23%						
Ni 231.604†	84930.8	2.026 mg/L	0.0036	2.026 mg/L	0.0036	0.18%
QC value within limits for Ni 231.604 Recovery = 101.31%						
Na 589.592†	133022.2	24.25 mg/L	0.157	24.25 mg/L	0.157	0.65%
QC value within limits for Na 589.592 Recovery = 97.01%						
Pb 220.353†	3006.0	0.5024 mg/L	0.00331	0.5024 mg/L	0.00331	0.66%
QC value within limits for Pb 220.353 Recovery = 100.48%						
Sb 206.836†	9647.1	4.934 mg/L	0.0270	4.934 mg/L	0.0270	0.55%
QC value within limits for Sb 206.836 Recovery = 98.69%						
Se 196.026†	416.1	0.5053 mg/L	0.00304	0.5053 mg/L	0.00304	0.60%
QC value within limits for Se 196.026 Recovery = 101.05%						
Sn 189.927†	24181.5	5.068 mg/L	0.0179	5.068 mg/L	0.0179	0.35%
QC value within limits for Sn 189.927 Recovery = 101.36%						
Ti 337.279†	1374320.9	2.468 mg/L	0.0034	2.468 mg/L	0.0034	0.14%
QC value within limits for Ti 337.279 Recovery = 98.71%						
Tl 190.801†	1832.9	1.002 mg/L	0.0067	1.002 mg/L	0.0067	0.66%
QC value within limits for Tl 190.801 Recovery = 100.17%						
V 292.402†	163529.9	2.502 mg/L	0.0051	2.502 mg/L	0.0051	0.20%
QC value within limits for V 292.402 Recovery = 100.09%						
Zn 206.200†	29884.6	1.011 mg/L	0.0094	1.011 mg/L	0.0094	0.93%
QC value within limits for Zn 206.200 Recovery = 101.05%						
Ca 227.546†	4446.1	24.34 mg/L	0.083	24.34 mg/L	0.083	0.34%
QC value within limits for Ca 227.546 Recovery = 97.36%						
Sr 421.552†	269993.5	2.331 mg/L	0.0185	2.331 mg/L	0.0185	0.79%
QC value within limits for Sr 421.552 Recovery = 93.24%						
Al 394.401†	393981.6	9.722 mg/L	0.0632	9.722 mg/L	0.0632	0.65%
QC value within limits for Al 394.401 Recovery = 97.22%						
Al 237.313†	60436.5	9.913 mg/L	0.0646	9.913 mg/L	0.0646	0.65%
QC value within limits for Al 237.313 Recovery = 99.13%						

All analyte(s) passed QC.

Sequence No.: 62 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 10/14/2014 8:20:48 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6845068.1	1.017	mg/L	0.0087				0.85%
Ag 328.068†	102.6	0.0004	mg/L	0.00042	0.0004	mg/L	0.00042	102.49%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	700.9	0.0477	mg/L	0.00443	0.0477	mg/L	0.00443	9.27%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.9	0.0015	mg/L	0.00058	0.0015	mg/L	0.00058	39.01%
QC value within limits for As 188.979 Recovery = Not calculated								

00787

Method: DV200-6010C Opt3 Page 48 Date: 10/14/2014 8:30:24 PM

B 249.772†	6046.7	0.0552 mg/L	0.00628	0.0552 mg/L	0.00628	11.37%
QC value within limits for B 249.772 Recovery = Not calculated						
Ba 233.527†	768.8	0.0091 mg/L	0.00317	0.0091 mg/L	0.00317	34.86%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	690.1	0.0002 mg/L	0.00012	0.0002 mg/L	0.00012	51.11%
QC value within limits for Be 313.107 Recovery = Not calculated						
Cd 226.502†	43.4	0.0005 mg/L	0.00016	0.0005 mg/L	0.00016	31.19%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	72.2	0.0033 mg/L	0.00088	0.0033 mg/L 0.0500U	0.00088	26.54%
QC value greater than the upper limit for Co 228.616 Recovery = Not calculated						
Cr 267.716†	45.0	0.0004 mg/L	0.00015	0.0004 mg/L	0.00015	38.56%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	1647.3	0.0062 mg/L	0.00081	0.0062 mg/L	0.00081	13.02%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	1247.6	0.0224 mg/L	0.00425	0.0224 mg/L	0.00425	18.94%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	81.4	0.1219 mg/L	0.04304	0.1219 mg/L	0.04304	35.29%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	320.3	0.0311 mg/L	0.01324	0.0311 mg/L	0.01324	42.53%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	335.3	0.0010 mg/L	0.00024	0.0010 mg/L	0.00024	24.27%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	35.6	0.0021 mg/L	0.00068	0.0021 mg/L	0.00068	31.58%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	117.7	0.0028 mg/L	0.00072	0.0028 mg/L	0.00072	25.73%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	503.0	0.0917 mg/L	0.00370	0.0917 mg/L	0.00370	4.04%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	4.5	0.0008 mg/L	0.00012	0.0008 mg/L	0.00012	15.71%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	7.3	0.0037 mg/L	0.00116	0.0037 mg/L	0.00116	31.00%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.9	0.0035 mg/L	0.00025	0.0035 mg/L	0.00025	6.99%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	60.9	0.0128 mg/L	0.00263	0.0128 mg/L	0.00263	20.62%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	1331.9	0.0024 mg/L	0.00084	0.0024 mg/L	0.00084	35.24%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	3.0	0.0016 mg/L	0.00134	0.0016 mg/L	0.00134	81.38%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	158.6	0.0024 mg/L	0.00052	0.0024 mg/L	0.00052	21.42%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	68.6	0.0023 mg/L	0.00014	0.0023 mg/L	0.00014	6.18%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	4.3	0.0246 mg/L	0.02332	0.0246 mg/L	0.02332	94.87%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	428.1	0.0037 mg/L	0.00009	0.0037 mg/L	0.00009	2.41%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 394.401†	914.7	0.0226 mg/L	0.00752	0.0226 mg/L	0.00752	33.30%
QC value within limits for Al 394.401 Recovery = Not calculated						
Al 237.313†	141.1	0.0232 mg/L	0.00673	0.0232 mg/L	0.00673	29.08%
QC value within limits for Al 237.313 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 63
Sample ID: PBW-220154
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 67
Date Collected: 10/14/2014 8:26:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: PBW-220154

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6889300.4	1.023	mg/L	0.0030				0.30%
Ag 328.068†	-53.2	-0.0002	mg/L	0.00002				8.27%
Al 308.215†	469.2	0.0320	mg/L	0.01433				44.82%
As 188.979†	-0.4	-0.0003	mg/L	0.00048				153.86%
B 249.772†	3164.6	0.0289	mg/L	0.00233				8.07%
Ba 233.527†	115.4	0.0014	mg/L	0.00005				3.90%
Be 313.107†	-358.7	-0.0001	mg/L	0.00010				76.55%

00788

Method: DV200-6010C Opt3 Page 49 Date: 10/14/2014 8:39:03 PM

Cd 226.502†	-12.7	-0.0002 mg/L	0.00001	7.60%
Co 228.616†	10.7	0.0005 mg/L	0.00005	10.69%
Cr 267.716†	48.0	0.0004 mg/L	0.00004	10.19%
Cu 324.752†	837.0	0.0032 mg/L	0.00074	23.52%
Fe 259.939†	390.6	0.0070 mg/L	0.00020	2.78%
K 766.490†	71.4	0.1070 mg/L	0.08946	83.59%
Mg 279.077†	34.9	0.0034 mg/L	0.00257	75.94%
Mn 257.610†	963.4	0.0028 mg/L	0.00001	0.41%
Mo 202.031†	-2.6	-0.0002 mg/L	0.00009	56.52%
Ni 231.604†	8.2	0.0002 mg/L	0.00003	12.83%
Na 589.592†	248.6	0.0453 mg/L	0.00423	9.33%
Pb 220.353†	-2.9	-0.0005 mg/L	0.00054	111.37%
Sb 206.836†	7.3	0.0037 mg/L	0.00072	19.36%
Se 196.026†	1.4	0.0017 mg/L	0.00042	25.26%
Sn 189.927†	32.7	0.0069 mg/L	0.00185	27.05%
Ti 337.279†	281.0	0.0005 mg/L	0.00007	13.95%
Tl 190.801†	-9.0	-0.0049 mg/L	0.00298	60.80%
V 292.402†	-0.6	0.0000 mg/L	0.00010	>999.9%
Zn 206.200†	23.7	0.0008 mg/L	0.00001	1.01%
Ca 227.546†	-4.9	-0.0257 mg/L	0.01019	39.63%
Sr 421.552†	36.8	0.0003 mg/L	0.00020	62.15%
Al 394.401†	80.6	0.0020 mg/L	0.00094	47.26%
Al 237.313†	11.4	0.0019 mg/L	0.00111	59.41%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 64
Sample ID: LCSW-220154
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 68
Date Collected: 10/14/2014 8:32:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-220154

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6906066.3	1.026	mg/L	0.0098				0.95%
Ag 328.068†	12672.6	0.0504	mg/L	0.00050				1.00%
Al 308.215†	28257.9	1.925	mg/L	0.0186				0.97%
As 188.979†	48.3	0.0383	mg/L	0.00097				2.54%
B 249.772†	105592.5	0.9613	mg/L	0.00124				0.13%
Ba 233.527†	174106.0	2.062	mg/L	0.0178				0.86%
Be 313.107†	143069.5	0.0496	mg/L	0.00033				0.66%
Cd 226.502†	4161.6	0.0507	mg/L	0.00002				0.03%
Co 228.616†	11174.2	0.5109	mg/L	0.00488				0.95%
Cr 267.716†	24310.7	0.2110	mg/L	0.00130				0.62%
Cu 324.752†	71617.0	0.2704	mg/L	0.00180				0.67%
Fe 259.939†	58044.3	1.043	mg/L	0.0085				0.82%
K 766.490†	13000.8	19.48	mg/L	0.221				1.13%
Mg 279.077†	20798.6	2.021	mg/L	0.0158				0.78%
Mn 257.610†	177672.7	0.5186	mg/L	0.00425				0.82%
Mo 202.031†	8271.6	0.4985	mg/L	0.00348				0.70%
Ni 231.604†	22023.8	0.5254	mg/L	0.00466				0.89%
Na 589.592†	107965.7	19.68	mg/L	0.131				0.66%
Pb 220.353†	3030.4	0.5057	mg/L	0.00193				0.38%
Sb 206.836†	944.8	0.4832	mg/L	0.00411				0.85%
Se 196.026†	774.8	0.9388	mg/L	0.00562				0.60%
Sn 189.927†	25746.9	5.397	mg/L	0.0507				0.94%
Ti 337.279†	279699.4	0.5022	mg/L	0.00334				0.67%
Tl 190.801†	3498.5	1.913	mg/L	0.0101				0.53%
V 292.402†	32603.5	0.4989	mg/L	0.00605				1.21%
Zn 206.200†	15608.4	0.5278	mg/L	0.00524				0.99%
Ca 227.546†	369.0	2.060	mg/L	0.0114				0.56%
Sr 421.552†	35.8	0.0003	mg/L	0.00028				89.69%
Al 394.401†	77559.4	1.914	mg/L	0.0128				0.67%
Al 237.313†	11877.9	1.948	mg/L	0.0106				0.54%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 65
Sample ID: R1407813-001
Analyst:

Autosampler Location: 69
Date Collected: 10/14/2014 8:39:00 PM
Data Type: Original

00789

Method: DV200-6010C Opt3 Page 50 Date: 10/14/2014 8:49:05 PM

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol: 50 mL

Mean Data: R1407813-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6824918.5	1.014	mg/L	0.0015				0.15%
Ag 328.068†	-430.7	-0.0001	mg/L	0.00006				85.18%
Al 308.215†	817.3	0.0546	mg/L	0.00273				5.00%
As 188.979†	5.3	0.0042	mg/L	0.00026				6.17%
B 249.772†	11081.5	0.0720	mg/L	0.00125				1.73%
Ba 233.527†	3892.5	0.0461	mg/L	0.00004				0.09%
Be 313.107†	-145.6	-0.0001	mg/L	0.00002				46.67%
Cd 226.502†	60.0	-0.0001	mg/L	0.00002				22.05%
Co 228.616†	29.3	0.0013	mg/L	0.00001				0.68%
Cr 267.716†	-16.0	0.0007	mg/L	0.00003				3.54%
Cu 324.752†	572.3	0.0027	mg/L	0.00011				4.15%
Fe 259.939†	328606.4	5.907	mg/L	0.0515				0.87%
K 766.490†	2251.2	3.373	mg/L	0.0697				2.07%
Mg 279.077†	61835.6	6.009	mg/L	0.0508				0.84%
Mn 257.610†	22789.3	0.0673	mg/L	0.00063				0.94%
Mo 202.031†	12.9	0.0008	mg/L	0.00003				4.16%
Ni 231.604†	257.6	0.0061	mg/L	0.00001				0.14%
Na 589.592†	355769.0	64.86	mg/L	0.266				0.41%
Pb 220.353†	1.4	0.0001	mg/L	0.00072				>999.9%
Sb 206.836†	4.2	0.0021	mg/L	0.00012				5.54%
Se 196.026†	1.2	0.0028	mg/L	0.00041				14.48%
Sn 189.927†	-80.4	-0.0169	mg/L	0.00014				0.86%
Ti 337.279†	446.4	0.0008	mg/L	0.00003				3.74%
Tl 190.801†	-3.8	-0.0021	mg/L	0.00111				52.30%
V 292.402†	52.5	0.0005	mg/L	0.00021				46.42%
Zn 206.200†	206.0	0.0070	mg/L	0.00004				0.52%
Ca 227.546†	5089.0	27.83	mg/L	0.184				0.66%
Sr 421.552†	21465.2	0.1853	mg/L	0.00137				0.74%
Al 394.401†	682.6	0.0168	mg/L	0.00065				3.89%
Al 237.313†	145.9	0.0239	mg/L	0.00053				2.20%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 66 Autosampler Location: 70
Sample ID: R1407813-001D Date Collected: 10/14/2014 8:45:15 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol: 50 mL

Mean Data: R1407813-001D

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6741389.7	1.001	mg/L	0.0059				0.59%
Ag 328.068†	-395.9	0.0001	mg/L	0.00014				280.37%
Al 308.215†	1265.9	0.0852	mg/L	0.00218				2.55%
As 188.979†	5.3	0.0042	mg/L	0.00111				26.33%
B 249.772†	10018.2	0.0625	mg/L	0.00060				0.95%
Ba 233.527†	3860.3	0.0457	mg/L	0.00006				0.14%
Be 313.107†	-657.8	-0.0002	mg/L	0.00001				3.03%
Cd 226.502†	58.4	-0.0001	mg/L	0.00003				22.86%
Co 228.616†	25.2	0.0012	mg/L	0.00001				1.25%
Cr 267.716†	-17.8	0.0007	mg/L	0.00005				6.56%
Cu 324.752†	572.6	0.0027	mg/L	0.00025				9.37%
Fe 259.939†	325903.9	5.858	mg/L	0.0206				0.35%
K 766.490†	2290.3	3.432	mg/L	0.0655				1.91%
Mg 279.077†	61422.6	5.969	mg/L	0.0203				0.34%
Mn 257.610†	22540.0	0.0665	mg/L	0.00019				0.29%
Mo 202.031†	13.4	0.0008	mg/L	0.00032				40.13%
Ni 231.604†	241.3	0.0058	mg/L	0.00002				0.27%
Na 589.592†	359172.0	65.49	mg/L	0.427				0.65%
Pb 220.353†	-1.9	-0.0005	mg/L	0.00069				139.38%
Sb 206.836†	5.8	0.0030	mg/L	0.00105				35.56%
Se 196.026†	0.1	0.0014	mg/L	0.00099				69.03%
Sn 189.927†	-87.8	-0.0184	mg/L	0.00070				3.79%

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Ti 337.279†	539.3	0.0010 mg/L	0.00005		5.32%
Tl 190.801†	-5.6	-0.0031 mg/L	0.00091		29.72%
V 292.402†	46.2	0.0004 mg/L	0.00058		158.30%
Zn 206.200†	224.8	0.0076 mg/L	0.00027		3.49%
Ca 227.546†	5053.7	27.64 mg/L	0.183		0.66%
Sr 421.552†	21706.3	0.1874 mg/L	0.00207		1.10%
Al 394.401†	860.1	0.0212 mg/L	0.00087		4.09%
Al 237.313†	188.8	0.0310 mg/L	0.00035		1.15%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 67
Sample ID: R1407813-001S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 71
Date Collected: 10/14/2014 8:51:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407813-001S

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6764842.5	1.005	mg/L	0.0011				0.11%
Ag 328.068†	12252.1	0.0503	mg/L	0.00023				0.45%
Al 308.215†	30448.7	2.073	mg/L	0.0135				0.65%
As 188.979†	53.3	0.0422	mg/L	0.00032				0.75%
B 249.772†	115994.0	1.028	mg/L	0.0143				1.40%
Ba 233.527†	174299.7	2.065	mg/L	0.0301				1.46%
Be 313.107†	141460.9	0.0490	mg/L	0.00074				1.51%
Cd 226.502†	4104.5	0.0492	mg/L	0.00021				0.44%
Co 228.616†	11015.9	0.5036	mg/L	0.00845				1.68%
Cr 267.716†	23587.9	0.2056	mg/L	0.00221				1.07%
Cu 324.752†	72328.3	0.2737	mg/L	0.00158				0.58%
Fe 259.939†	381476.1	6.857	mg/L	0.0173				0.25%
K 766.490†	15608.9	23.39	mg/L	0.114				0.49%
Mg 279.077†	81838.7	7.952	mg/L	0.0919				1.16%
Mn 257.610†	196494.1	0.5743	mg/L	0.00675				1.17%
Mo 202.031†	8195.4	0.4939	mg/L	0.00656				1.33%
Ni 231.604†	21666.6	0.5169	mg/L	0.00771				1.49%
Na 589.592†	473477.5	86.33	mg/L	0.110				0.13%
Pb 220.353†	2981.5	0.4974	mg/L	0.00315				0.63%
Sb 206.836†	946.3	0.4839	mg/L	0.00019				0.04%
Se 196.026†	1336.8	1.621	mg/L	0.0018				0.11%
Sn 189.927†	25820.9	5.412	mg/L	0.1147				2.12%
Ti 337.279†	276301.1	0.4961	mg/L	0.00292				0.59%
Tl 190.801†	3492.0	1.909	mg/L	0.0030				0.16%
V 292.402†	32012.2	0.4895	mg/L	0.00505				1.03%
Zn 206.200†	15052.1	0.5090	mg/L	0.01550				3.05%
Ca 227.546†	5553.6	30.40	mg/L	0.371				1.22%
Sr 421.552†	21822.6	0.1884	mg/L	0.00115				0.61%
Al 394.401†	82418.2	2.034	mg/L	0.0084				0.41%
Al 237.313†	12177.5	1.997	mg/L	0.0042				0.21%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 68
Sample ID: R1407813-001A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 72
Date Collected: 10/14/2014 8:57:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407813-001A

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6730798.1	0.9999	mg/L	0.00332				0.33%
Ag 328.068†	11584.0	0.0476	mg/L	0.00033				0.70%
Al 308.215†	28848.3	1.964	mg/L	0.0118				0.60%
As 188.979†	50.1	0.0397	mg/L	0.00060				1.51%
B 249.772†	116687.3	1.034	mg/L	0.0001				0.01%
Ba 233.527†	167469.9	1.984	mg/L	0.0128				0.65%
Be 313.107†	136445.1	0.0473	mg/L	0.00033				0.70%
Cd 226.502†	3876.6	0.0464	mg/L	0.00007				0.15%

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Co 228.616†	10453.7	0.4779 mg/L	0.00424	0.89%
Cr 267.716†	22815.8	0.1989 mg/L	0.00100	0.50%
Cu 324.752†	67195.3	0.2543 mg/L	0.00123	0.48%
Fe 259.939†	379155.3	6.816 mg/L	0.0042	0.06%
K 766.490†	14969.1	22.43 mg/L	0.041	0.18%
Mg 279.077†	81951.4	7.963 mg/L	0.0564	0.71%
Mn 257.610†	189312.4	0.5533 mg/L	0.00369	0.67%
Mo 202.031†	8378.3	0.5049 mg/L	0.00206	0.41%
Ni 231.604†	20832.1	0.4970 mg/L	0.00435	0.88%
Na 589.592†	464381.9	84.67 mg/L	0.162	0.19%
Pb 220.353†	2833.5	0.4727 mg/L	0.00121	0.26%
Sb 206.836†	962.5	0.4922 mg/L	0.00347	0.70%
Se 196.026†	319.7	0.3888 mg/L	0.00298	0.77%
Sn 189.927†	-86.9	-0.0184 mg/L	0.00026	1.39%
Ti 337.279†	271603.4	0.4877 mg/L	0.00297	0.61%
Tl 190.801†	3316.0	1.813 mg/L	0.0050	0.28%
V 292.402†	30930.6	0.4730 mg/L	0.00290	0.61%
Zn 206.200†	14730.7	0.4981 mg/L	0.00265	0.53%
Ca 227.546†	5507.1	30.15 mg/L	0.175	0.58%
Sr 421.552†	21999.2	0.1899 mg/L	0.00054	0.28%
Al 394.401†	77898.1	1.922 mg/L	0.0128	0.67%
Al 237.313†	11583.5	1.900 mg/L	0.0163	0.86%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 69 **Autosampler Location: 73**
Sample ID: R1407813-001L **Date Collected: 10/14/2014 9:03:43 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: R1407813-001L

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6814556.7	1.012	mg/L	0.0075				0.74%
Ag 328.068†	-73.4	0.0000	mg/L	0.00004				107.84%
Al 308.215†	559.7	0.0380	mg/L	0.02719				71.58%
As 188.979†	0.5	0.0004	mg/L	0.00001				1.95%
B 249.772†	3533.9	0.0265	mg/L	0.00231				8.71%
Ba 233.527†	798.1	0.0095	mg/L	0.00003				0.27%
Be 313.107†	-393.2	-0.0001	mg/L	0.00012				89.14%
Cd 226.502†	-6.0	-0.0002	mg/L	0.00005				22.10%
Co 228.616†	-1.3	-0.0001	mg/L	0.00001				17.49%
Cr 267.716†	9.9	0.0003	mg/L	0.00002				8.03%
Cu 324.752†	317.1	0.0013	mg/L	0.00098				74.73%
Fe 259.939†	65554.3	1.178	mg/L	0.0086				0.73%
K 766.490†	465.7	0.6978	mg/L	0.06379				9.14%
Mg 279.077†	12084.1	1.174	mg/L	0.0107				0.91%
Mn 257.610†	4545.7	0.0134	mg/L	0.00007				0.52%
Mo 202.031†	0.4	0.0000	mg/L	0.00006				258.39%
Ni 231.604†	39.8	0.0009	mg/L	0.00006				6.27%
Na 589.592†	71968.4	13.12	mg/L	0.094				0.72%
Pb 220.353†	-4.5	-0.0008	mg/L	0.00052				67.12%
Sb 206.836†	5.2	0.0027	mg/L	0.00069				25.98%
Se 196.026†	1.8	0.0024	mg/L	0.00026				10.92%
Sn 189.927†	-15.3	-0.0032	mg/L	0.00057				17.78%
Ti 337.279†	269.5	0.0005	mg/L	0.00009				19.10%
Tl 190.801†	-4.5	-0.0025	mg/L	0.00274				110.91%
V 292.402†	-0.9	-0.0001	mg/L	0.00017				212.01%
Zn 206.200†	62.0	0.0021	mg/L	0.00019				9.28%
Ca 227.546†	929.9	5.092	mg/L	0.0474				0.93%
Sr 421.552†	4248.3	0.0367	mg/L	0.00020				0.55%
Al 394.401†	-77.9	-0.0019	mg/L	0.00041				21.36%
Al 237.313†	7.6	0.0012	mg/L	0.00122				98.12%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 70 **Autosampler Location: 74**
Sample ID: R1407813-009 **Date Collected: 10/14/2014 9:09:42 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**

Method: DV200-6010C Opt3 Page 53 Date: 10/14/2014 9:19:34 PM

Dilution: Sample Prep Vol: 50 mL

Mean Data: R1407813-009

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6656220.2	0.9888	mg/L	0.00432				0.44%
Ag 328.068†	-591.1	-0.0002	mg/L	0.00021				83.09%
Al 308.215†	35002.4	2.381	mg/L	0.0033				0.14%
As 188.979†	7.6	0.0060	mg/L	0.00035				5.83%
B 249.772†	19691.1	0.1418	mg/L	0.00064				0.45%
Ba 233.527†	9972.4	0.1181	mg/L	0.00031				0.27%
Be 313.107†	6209.8	0.0022	mg/L	0.00002				1.02%
Cd 226.502†	131.2	0.0005	mg/L	0.00005				9.13%
Co 228.616†	399.2	0.0183	mg/L	0.00008				0.45%
Cr 267.716†	535.9	0.0062	mg/L	0.00005				0.77%
Cu 324.752†	1812.9	0.0075	mg/L	0.00015				1.96%
Fe 259.939†	420931.6	7.566	mg/L	0.0350				0.46%
K 766.490†	3666.3	5.493	mg/L	0.0932				1.70%
Mg 279.077†	128826.6	12.52	mg/L	0.046				0.37%
Mn 257.610†	314744.3	0.9194	mg/L	0.00265				0.29%
Mo 202.031†	22.7	0.0014	mg/L	0.00008				5.61%
Ni 231.604†	410.4	0.0098	mg/L	0.00004				0.44%
Na 589.592†	1876571.2	342.1	mg/L	1.90				0.56%
Pb 220.353†	11.1	0.0019	mg/L	0.00092				48.98%
Sb 206.836†	6.3	0.0030	mg/L	0.00054				17.98%
Se 196.026†	0.4	0.0022	mg/L	0.00097				43.26%
Sn 189.927†	-116.3	-0.0247	mg/L	0.00009				0.38%
Ti 337.279†	16817.9	0.0302	mg/L	0.00007				0.23%
Tl 190.801†	1.6	0.0006	mg/L	0.00077				121.32%
V 292.402†	356.4	0.0050	mg/L	0.00045				8.98%
Zn 206.200†	3282.6	0.1110	mg/L	0.00019				0.17%
Ca 227.546†	8735.9	47.64	mg/L	0.268				0.56%
Sr 421.552†	55323.5	0.4776	mg/L	0.00024				0.05%
Al 394.401†	95458.0	2.356	mg/L	0.0007				0.03%
Al 237.313†	13626.4	2.235	mg/L	0.0048				0.21%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 71
Sample ID: R1407813-010
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 75
Date Collected: 10/14/2014 9:15:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407813-010

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6944860.6	1.032	mg/L	0.0028				0.27%
Ag 328.068†	16.1	0.0001	mg/L	0.00005				69.63%
Al 308.215†	327.5	0.0223	mg/L	0.00227				10.15%
As 188.979†	-0.5	-0.0004	mg/L	0.00090				243.52%
B 249.772†	384.0	0.0035	mg/L	0.00055				15.82%
Ba 233.527†	4.1	0.0000	mg/L	0.00007				139.13%
Be 313.107†	-324.6	-0.0001	mg/L	0.00000				0.51%
Cd 226.502†	-12.6	-0.0002	mg/L	0.00002				10.28%
Co 228.616†	-7.8	-0.0004	mg/L	0.00009				24.55%
Cr 267.716†	40.7	0.0004	mg/L	0.00006				16.65%
Cu 324.752†	-143.3	-0.0005	mg/L	0.00006				11.55%
Fe 259.939†	257.5	0.0046	mg/L	0.00062				13.35%
K 766.490†	56.0	0.0839	mg/L	0.01170				13.94%
Mg 279.077†	163.7	0.0159	mg/L	0.00245				15.41%
Mn 257.610†	84.1	0.0002	mg/L	0.00004				17.72%
Mo 202.031†	-2.3	-0.0001	mg/L	0.00001				8.95%
Ni 231.604†	-23.6	-0.0006	mg/L	0.00000				0.10%
Na 589.592†	529.8	0.0966	mg/L	0.00312				3.23%
Pb 220.353†	-6.1	-0.0010	mg/L	0.00010				10.03%
Sb 206.836†	3.7	0.0019	mg/L	0.00101				52.78%
Se 196.026†	1.0	0.0013	mg/L	0.00022				17.62%
Sn 189.927†	-7.9	-0.0017	mg/L	0.00044				26.78%
Ti 337.279†	166.0	0.0003	mg/L	0.00004				13.09%

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Tl 190.801†	-8.9	-0.0048	mg/L	0.00121	24.99%
V 292.402†	-8.6	-0.0001	mg/L	0.00012	88.39%
Zn 206.200†	17.9	0.0006	mg/L	0.00001	1.86%
Ca 227.546†	-9.4	-0.0503	mg/L	0.02183	43.39%
Sr 421.552†	19.8	0.0002	mg/L	0.00005	28.01%
Al 394.401†	-37.7	-0.0009	mg/L	0.00027	29.46%
Al 237.313†	-13.7	-0.0023	mg/L	0.00058	25.76%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 72
Sample ID: R1407813-016
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 76
Date Collected: 10/14/2014 9:21:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407813-016

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6269954.7	0.9314	mg/L	0.00154				0.17%
Ag 328.068†	-1164.4	-0.0028	mg/L	0.00011				3.76%
Al 308.215†	1760.2	0.0674	mg/L	0.01204				17.87%
As 188.979†	5.9	0.0047	mg/L	0.00078				16.73%
B 249.772†	86405.6	0.7405	mg/L	0.00267				0.36%
Ba 233.527†	30808.1	0.3649	mg/L	0.00090				0.25%
Be 313.107†	-1548.1	-0.0005	mg/L	0.00003				6.16%
Cd 226.502†	54.1	-0.0002	mg/L	0.00010				40.98%
Co 228.616†	-15.9	-0.0007	mg/L	0.00004				5.30%
Cr 267.716†	-1547.9	-0.0038	mg/L	0.00001				0.37%
Cu 324.752†	516.6	0.0025	mg/L	0.00006				2.17%
Fe 259.939†	357333.0	6.423	mg/L	0.0299				0.47%
K 766.490†	22220.6	33.29	mg/L	0.255				0.77%
Mg 279.077†	979698.1	95.20	mg/L	0.190				0.20%
Mn 257.610†	262405.9	0.7665	mg/L	0.00352				0.46%
Mo 202.031†	18.1	0.0011	mg/L	0.00016				14.93%
Ni 231.604†	-70.7	-0.0017	mg/L	0.00031				18.22%
Na 589.592†	3553661.4	647.9	mg/L	0.12				0.02%
Pb 220.353†	-17.3	-0.0031	mg/L	0.00043				13.93%
Sb 206.836†	6.7	0.0034	mg/L	0.00109				31.72%
Se 196.026†	-1.7	-0.0006	mg/L	0.00061				97.13%
Sn 189.927†	-215.6	-0.0452	mg/L	0.00038				0.83%
Ti 337.279†	941.1	0.0017	mg/L	0.00002				1.46%
Tl 190.801†	2.8	-0.0012	mg/L	0.00217				177.19%
V 292.402†	99.2	0.0011	mg/L	0.00007				5.88%
Zn 206.200†	101.6	0.0034	mg/L	0.00009				2.67%
Ca 227.546†	75563.7	408.5	mg/L	1.66				0.41%
Sr 421.552†	344417.6	2.973	mg/L	0.0153				0.52%
Al 394.401†	-188.7	-0.0047	mg/L	0.00413				88.68%
Al 237.313†	98.8	0.0162	mg/L	0.00290				17.89%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 73
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 10/14/2014 9:28:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6769568.7	1.006	mg/L	0.0012				0.12%
Ag 328.068†	128430.1	0.5088	mg/L	0.00278	0.5088	mg/L	0.00278	0.55%
QC value within limits for Ag 328.068 Recovery = 101.75%								
Al 308.215†	143911.2	9.802	mg/L	0.0770	9.802	mg/L	0.0770	0.79%
QC value within limits for Al 308.215 Recovery = 98.02%								
As 188.979†	1233.6	0.9798	mg/L	0.00034	0.9798	mg/L	0.00034	0.03%
QC value within limits for As 188.979 Recovery = 97.98%								
B 249.772†	266910.8	2.417	mg/L	0.0426	2.417	mg/L	0.0426	1.76%
QC value within limits for B 249.772 Recovery = 96.68%								

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Ba 233.527†	871987.0	10.33 mg/L	0.014	10.33 mg/L	0.014	0.14%
QC value within limits for Ba 233.527 Recovery = 103.29%						
Be 313.107†	726976.4	0.2520 mg/L	0.00022	0.2520 mg/L	0.00022	0.09%
QC value within limits for Be 313.107 Recovery = 100.80%						
Cd 226.502†	41797.8	0.5103 mg/L	0.00347	0.5103 mg/L	0.00347	0.68%
QC value within limits for Cd 226.502 Recovery = 102.06%						
Co 228.616†	55388.2	2.532 mg/L	0.0143	2.532 mg/L	0.0143	0.57%
QC value within limits for Co 228.616 Recovery = 101.29%						
Cr 267.716†	59218.2	0.5161 mg/L	0.00380	0.5161 mg/L	0.00380	0.74%
QC value within limits for Cr 267.716 Recovery = 103.23%						
Cu 324.752†	331601.6	1.252 mg/L	0.0119	1.252 mg/L	0.0119	0.95%
QC value within limits for Cu 324.752 Recovery = 100.17%						
Fe 259.939†	283085.8	5.089 mg/L	0.0316	5.089 mg/L	0.0316	0.62%
QC value within limits for Fe 259.939 Recovery = 101.77%						
K 766.490†	16699.8	25.02 mg/L	0.272	25.02 mg/L	0.272	1.09%
QC value within limits for K 766.490 Recovery = 100.08%						
Mg 279.077†	258890.7	25.16 mg/L	0.155	25.16 mg/L	0.155	0.62%
QC value within limits for Mg 279.077 Recovery = 100.63%						
Mn 257.610†	261723.0	0.7644 mg/L	0.00472	0.7644 mg/L	0.00472	0.62%
QC value within limits for Mn 257.610 Recovery = 101.91%						
Mo 202.031†	40756.1	2.456 mg/L	0.0156	2.456 mg/L	0.0156	0.63%
QC value within limits for Mo 202.031 Recovery = 98.25%						
Ni 231.604†	85500.2	2.040 mg/L	0.0128	2.040 mg/L	0.0128	0.63%
QC value within limits for Ni 231.604 Recovery = 101.99%						
Na 589.592†	137371.0	25.05 mg/L	0.250	25.05 mg/L	0.250	1.00%
QC value within limits for Na 589.592 Recovery = 100.18%						
Pb 220.353†	2980.6	0.4982 mg/L	0.00065	0.4982 mg/L	0.00065	0.13%
QC value within limits for Pb 220.353 Recovery = 99.64%						
Sb 206.836†	9637.1	4.929 mg/L	0.0501	4.929 mg/L	0.0501	1.02%
QC value within limits for Sb 206.836 Recovery = 98.59%						
Se 196.026†	413.0	0.5015 mg/L	0.00056	0.5015 mg/L	0.00056	0.11%
QC value within limits for Se 196.026 Recovery = 100.31%						
Sn 189.927†	24555.7	5.146 mg/L	0.0497	5.146 mg/L	0.0497	0.97%
QC value within limits for Sn 189.927 Recovery = 102.92%						
Ti 337.279†	1380957.8	2.480 mg/L	0.0018	2.480 mg/L	0.0018	0.07%
QC value within limits for Ti 337.279 Recovery = 99.18%						
Tl 190.801†	1818.6	0.9939 mg/L	0.00001	0.9939 mg/L	0.00001	0.00%
QC value within limits for Tl 190.801 Recovery = 99.39%						
V 292.402†	163770.7	2.506 mg/L	0.0194	2.506 mg/L	0.0194	0.77%
QC value within limits for V 292.402 Recovery = 100.24%						
Zn 206.200†	30108.0	1.018 mg/L	0.0069	1.018 mg/L	0.0069	0.67%
QC value within limits for Zn 206.200 Recovery = 101.81%						
Ca 227.546†	4432.2	24.27 mg/L	0.122	24.27 mg/L	0.122	0.50%
QC value within limits for Ca 227.546 Recovery = 97.07%						
Sr 421.552†	274949.5	2.374 mg/L	0.0272	2.374 mg/L	0.0272	1.15%
QC value within limits for Sr 421.552 Recovery = 94.95%						
Al 394.401†	395313.5	9.755 mg/L	0.0954	9.755 mg/L	0.0954	0.98%
QC value within limits for Al 394.401 Recovery = 97.55%						
Al 237.313†	60826.5	9.977 mg/L	0.0534	9.977 mg/L	0.0534	0.54%
QC value within limits for Al 237.313 Recovery = 99.77%						

All analyte(s) passed QC.

Sequence No.: 74
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 10/14/2014 9:34:20 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6886089.6	1.023	mg/L	0.0059				0.58%
Ag 328.068†	-6.9	0.0000	mg/L	0.00015	0.0000	mg/L	0.00015	578.10%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	94.2	0.0064	mg/L	0.00430	0.0064	mg/L	0.00430	67.10%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-0.7	-0.0005	mg/L	0.00049	-0.0005	mg/L	0.00049	91.74%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3450.8	0.0315	mg/L	0.00385	0.0315	mg/L	0.00385	12.20%
QC value within limits for B 249.772 Recovery = Not calculated								

00795

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Ba 233.527†	291.7	0.0035 mg/L	0.00047	0.0035 mg/L	0.00047	13.61%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	419.7	0.0001 mg/L	0.00005	0.0001 mg/L	0.00005	33.59%
QC value within limits for Be 313.107 Recovery = Not calculated						
Cd 226.502†	14.0	0.0002 mg/L	0.00010	0.0002 mg/L	0.00010	58.30%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	24.8	0.0011 mg/L	0.00002	0.0011 mg/L	0.00002	1.37%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	8.3	0.0001 mg/L	0.00004	0.0001 mg/L	0.00004	49.39%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	969.6	0.0037 mg/L	0.00037	0.0037 mg/L	0.00037	10.13%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	398.3	0.0072 mg/L	0.00058	0.0072 mg/L	0.00058	8.12%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	56.8	0.0851 mg/L	0.08667	0.0851 mg/L	0.08667	101.84%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	198.5	0.0193 mg/L	0.00331	0.0193 mg/L	0.00331	17.14%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	211.3	0.0006 mg/L	0.00007	0.0006 mg/L	0.00007	10.78%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	10.0	0.0006 mg/L	0.00001	0.0006 mg/L	0.00001	1.51%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	61.4	0.0015 mg/L	0.00028	0.0015 mg/L	0.00028	19.10%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	706.0	0.1287 mg/L	0.00889	0.1287 mg/L	0.00889	6.91%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	9.7	0.0016 mg/L	0.00012	0.0016 mg/L	0.00012	7.50%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	3.5	0.0018 mg/L	0.00000	0.0018 mg/L	0.00000	0.13%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.7	0.0009 mg/L	0.00081	0.0009 mg/L	0.00081	89.83%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	35.0	0.0073 mg/L	0.00125	0.0073 mg/L	0.00125	17.08%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	350.5	0.0006 mg/L	0.00007	0.0006 mg/L	0.00007	11.63%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	-0.0	0.0000 mg/L	0.00002	0.0000 mg/L	0.00002	145.94%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	41.4	0.0006 mg/L	0.00003	0.0006 mg/L	0.00003	5.45%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	39.4	0.0013 mg/L	0.00003	0.0013 mg/L	0.00003	1.96%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	11.4	0.0622 mg/L	0.03762	0.0622 mg/L	0.03762	60.44%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	114.8	0.0010 mg/L	0.00015	0.0010 mg/L	0.00015	14.69%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 394.401†	59.0	0.0015 mg/L	0.00171	0.0015 mg/L	0.00171	117.36%
QC value within limits for Al 394.401 Recovery = Not calculated						
Al 237.313†	5.4	0.0009 mg/L	0.00023	0.0009 mg/L	0.00023	25.75%
QC value within limits for Al 237.313 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 75
Sample ID: R1407813-017
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 77
Date Collected: 10/14/2014 9:40:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407813-017

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5854464.0	0.8697	mg/L	0.00334				0.38%
Ag 328.068†	-956.1	-0.0021	mg/L	0.00015				7.02%
Al 308.215†	12290.4	0.7992	mg/L	0.01747				2.19%
As 188.979†	9.8	0.0078	mg/L	0.00393				50.45%
B 249.772†	82700.9	0.7129	mg/L	0.00162				0.23%
Ba 233.527†	9590.6	0.1136	mg/L	0.00140				1.23%
Be 313.107†	-1992.1	-0.0007	mg/L	0.00005				7.25%
Cd 226.502†	262.7	0.0023	mg/L	0.00009				4.01%
Co 228.616†	-5.5	-0.0003	mg/L	0.00024				95.95%

00796

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Cr 267.716†	-2915.7	-0.0014 mg/L	0.00008		5.84%
Cu 324.752†	3159.6	0.0125 mg/L	0.00025		1.99%
Fe 259.939†	344409.4	6.191 mg/L	0.0423		0.68%
K 766.490†	53648.6	80.38 mg/L	0.483		0.60%
Mg 279.077†	2476256.6	240.6 mg/L	0.54		0.22%
Mn 257.610†	129491.3	0.3787 mg/L	0.00229		0.61%
Mo 202.031†	46.8	0.0028 mg/L	0.00010		3.62%
Ni 231.604†	322.1	0.0077 mg/L	0.00001		0.17%
Na 589.592†	10304540.0	1879 mg/L	15.1		0.80%
Pb 220.353†	-7.6	-0.0014 mg/L	0.00167		122.11%
Sb 206.836†	6.6	0.0033 mg/L	0.00116		35.01%
Se 196.026†	0.3	0.0018 mg/L	0.00436		245.30%
Sn 189.927†	-187.7	-0.0394 mg/L	0.00104		2.65%
Ti 337.279†	6685.4	0.0120 mg/L	0.00021		1.76%
Tl 190.801†	8.5	0.0043 mg/L	0.00204		47.94%
V 292.402†	138.8	0.0018 mg/L	0.00002		1.08%
Zn 206.200†	6954.4	0.2352 mg/L	0.00312		1.33%
Ca 227.546†	55716.4	301.3 mg/L	3.72		1.23%
Sr 421.552†	287087.7	2.478 mg/L	0.0170		0.68%
Al 394.401†	28472.3	0.7026 mg/L	0.00757		1.08%
Al 237.313†	3907.2	0.6409 mg/L	0.00880		1.37%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 76
Sample ID: R1407813-026
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 78
Date Collected: 10/14/2014 9:46:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407813-026

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6814173.4	1.012	mg/L	0.0037				0.36%
Ag 328.068†	7.3	0.0000	mg/L	0.00004				127.15%
Al 308.215†	201.5	0.0137	mg/L	0.00465				33.90%
As 188.979†	-0.3	-0.0002	mg/L	0.00010				40.63%
B 249.772†	1160.0	0.0106	mg/L	0.00154				14.53%
Ba 233.527†	39.1	0.0005	mg/L	0.00009				20.33%
Be 313.107†	-154.5	-0.0001	mg/L	0.00003				52.26%
Cd 226.502†	-12.4	-0.0002	mg/L	0.00002				10.59%
Co 228.616†	-12.8	-0.0006	mg/L	0.00017				28.73%
Cr 267.716†	73.1	0.0006	mg/L	0.00008				11.88%
Cu 324.752†	-35.3	-0.0001	mg/L	0.00019				141.13%
Fe 259.939†	311.3	0.0056	mg/L	0.00045				8.01%
K 766.490†	229.2	0.3433	mg/L	0.03342				9.73%
Mg 279.077†	292.2	0.0284	mg/L	0.00229				8.06%
Mn 257.610†	76.3	0.0002	mg/L	0.00002				8.65%
Mo 202.031†	-5.1	-0.0003	mg/L	0.00023				73.97%
Ni 231.604†	-5.9	-0.0001	mg/L	0.00007				46.81%
Na 589.592†	3391.0	0.6183	mg/L	0.00568				0.92%
Pb 220.353†	-2.9	-0.0005	mg/L	0.00002				3.82%
Sb 206.836†	5.1	0.0026	mg/L	0.00138				52.59%
Se 196.026†	2.6	0.0031	mg/L	0.00042				13.42%
Sn 189.927†	-7.0	-0.0015	mg/L	0.00055				37.67%
Ti 337.279†	228.4	0.0004	mg/L	0.00001				1.88%
Tl 190.801†	-8.1	-0.0045	mg/L	0.00097				21.71%
V 292.402†	-17.6	-0.0003	mg/L	0.00004				14.93%
Zn 206.200†	12.0	0.0004	mg/L	0.00013				33.28%
Ca 227.546†	0.1	0.0011	mg/L	0.01925				>999.9%
Sr 421.552†	44.1	0.0004	mg/L	0.00001				3.27%
Al 394.401†	-8.8	-0.0002	mg/L	0.00056				256.66%
Al 237.313†	-13.1	-0.0022	mg/L	0.00091				42.47%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 77
Sample ID: R1407821-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 79
Date Collected: 10/14/2014 9:52:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

00797

Method: DV200-6010C Opt3 Page 58 Date: 10/14/2014 10:02:19 PM

Mean Data: R1407821-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6730675.7	0.9999	mg/L	0.00385				0.38%
Ag 328.068†	-31.6	0.0001	mg/L	0.00004				40.32%
Al 308.215†	822.0	0.0553	mg/L	0.00924				16.69%
As 188.979†	1.8	0.0014	mg/L	0.00023				16.52%
B 249.772†	2582.8	0.0192	mg/L	0.00076				3.98%
Ba 233.527†	924.5	0.0110	mg/L	0.00006				0.58%
Be 313.107†	-120.0	0.0000	mg/L	0.00006				138.62%
Cd 226.502†	-2.2	-0.0001	mg/L	0.00005				36.70%
Co 228.616†	-6.0	-0.0003	mg/L	0.00005				19.55%
Cr 267.716†	53.5	0.0006	mg/L	0.00009				13.98%
Cu 324.752†	412.4	0.0016	mg/L	0.00055				33.33%
Fe 259.939†	47534.7	0.8545	mg/L	0.00951				1.11%
K 766.490†	894.7	1.341	mg/L	0.0447				3.33%
Mg 279.077†	14120.7	1.372	mg/L	0.0158				1.15%
Mn 257.610†	491402.3	1.434	mg/L	0.0045				0.31%
Mo 202.031†	1.4	0.0001	mg/L	0.00011				130.18%
Ni 231.604†	-23.5	-0.0006	mg/L	0.00014				25.71%
Na 589.592†	47312.8	8.626	mg/L	0.0439				0.51%
Pb 220.353†	-0.5	-0.0001	mg/L	0.00036				332.65%
Sb 206.836†	3.8	0.0019	mg/L	0.00082				42.62%
Se 196.026†	1.2	0.0017	mg/L	0.00083				49.72%
Sn 189.927†	-52.0	-0.0109	mg/L	0.00033				3.02%
Ti 337.279†	349.2	0.0006	mg/L	0.00003				4.08%
Tl 190.801†	-4.4	-0.0025	mg/L	0.00060				24.19%
V 292.402†	214.4	0.0032	mg/L	0.00013				4.11%
Zn 206.200†	692.1	0.0234	mg/L	0.00016				0.68%
Ca 227.546†	1422.4	7.733	mg/L	0.0315				0.41%
Sr 421.552†	5734.8	0.0495	mg/L	0.00022				0.45%
Al 394.401†	1520.5	0.0375	mg/L	0.00114				3.04%
Al 237.313†	161.2	0.0264	mg/L	0.00116				4.40%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 78
Sample ID: R1407821-001D
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 80
Date Collected: 10/14/2014 9:58:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407821-001D

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6690753.8	0.9939	mg/L	0.00550				0.55%
Ag 328.068†	-99.1	-0.0002	mg/L	0.00018				117.12%
Al 308.215†	688.7	0.0463	mg/L	0.00679				14.68%
As 188.979†	1.1	0.0009	mg/L	0.00061				70.76%
B 249.772†	2243.8	0.0161	mg/L	0.00015				0.90%
Ba 233.527†	931.8	0.0110	mg/L	0.00001				0.11%
Be 313.107†	-98.0	0.0000	mg/L	0.00005				148.31%
Cd 226.502†	-0.5	-0.0001	mg/L	0.00002				15.53%
Co 228.616†	-6.2	-0.0003	mg/L	0.00009				33.18%
Cr 267.716†	42.7	0.0005	mg/L	0.00005				8.53%
Cu 324.752†	377.5	0.0015	mg/L	0.00034				22.89%
Fe 259.939†	47124.3	0.8471	mg/L	0.00109				0.13%
K 766.490†	885.3	1.326	mg/L	0.0475				3.58%
Mg 279.077†	13938.9	1.354	mg/L	0.0021				0.16%
Mn 257.610†	493761.7	1.441	mg/L	0.0044				0.31%
Mo 202.031†	5.4	0.0003	mg/L	0.00015				46.88%
Ni 231.604†	-27.2	-0.0006	mg/L	0.00012				18.73%
Na 589.592†	46877.0	8.547	mg/L	0.0434				0.51%
Pb 220.353†	1.3	0.0002	mg/L	0.00007				36.28%
Sb 206.836†	5.2	0.0026	mg/L	0.00114				43.28%
Se 196.026†	1.5	0.0020	mg/L	0.00129				64.23%
Sn 189.927†	-46.2	-0.0097	mg/L	0.00075				7.73%
Ti 337.279†	372.7	0.0007	mg/L	0.00000				0.38%
Tl 190.801†	-4.1	-0.0023	mg/L	0.00067				28.90%

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V 292.402†	203.9	0.0031 mg/L	0.00011	3.72%
Zn 206.200†	696.2	0.0235 mg/L	0.00016	0.68%
Ca 227.546†	1433.0	7.790 mg/L	0.0151	0.19%
Sr 421.552†	5747.8	0.0496 mg/L	0.00022	0.44%
Al 394.401†	1417.3	0.0350 mg/L	0.00133	3.79%
Al 237.313†	154.6	0.0254 mg/L	0.00195	7.70%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 79
Sample ID: R1407821-001S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 81
Date Collected: 10/14/2014 10:04:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407821-001S

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6700928.5	0.9955	mg/L	0.00095				0.09%
Ag 328.068†	12849.3	0.0513	mg/L	0.00058				1.13%
Al 308.215†	28206.1	1.921	mg/L	0.0318				1.65%
As 188.979†	49.9	0.0396	mg/L	0.00089				2.26%
B 249.772†	106843.5	0.9686	mg/L	0.02198				2.27%
Ba 233.527†	170038.7	2.014	mg/L	0.0295				1.46%
Be 313.107†	140314.3	0.0486	mg/L	0.00059				1.21%
Cd 226.502†	4108.5	0.0500	mg/L	0.00006				0.13%
Co 228.616†	10923.8	0.4994	mg/L	0.00757				1.52%
Cr 267.716†	24057.2	0.2090	mg/L	0.00323				1.55%
Cu 324.752†	69775.7	0.2635	mg/L	0.00344				1.31%
Fe 259.939†	102822.0	1.848	mg/L	0.0257				1.39%
K 766.490†	14145.1	21.19	mg/L	0.261				1.23%
Mg 279.077†	34514.1	3.354	mg/L	0.0443				1.32%
Mn 257.610†	663424.5	1.936	mg/L	0.0070				0.36%
Mo 202.031†	8173.0	0.4925	mg/L	0.00712				1.45%
Ni 231.604†	21737.1	0.5186	mg/L	0.00684				1.32%
Na 589.592†	154525.6	28.17	mg/L	0.424				1.50%
Pb 220.353†	2998.9	0.5005	mg/L	0.00218				0.44%
Sb 206.836†	957.4	0.4896	mg/L	0.00020				0.04%
Se 196.026†	750.0	0.9088	mg/L	0.00305				0.34%
Sn 189.927†	25500.0	5.345	mg/L	0.0904				1.69%
Ti 337.279†	276066.8	0.4957	mg/L	0.00647				1.31%
Tl 190.801†	3443.9	1.883	mg/L	0.0001				0.01%
V 292.402†	34263.8	0.5243	mg/L	0.00815				1.55%
Zn 206.200†	15897.3	0.5376	mg/L	0.00909				1.69%
Ca 227.546†	1852.0	10.12	mg/L	0.011				0.10%
Sr 421.552†	5759.2	0.0497	mg/L	0.00073				1.48%
Al 394.401†	78137.5	1.928	mg/L	0.0251				1.30%
Al 237.313†	11828.6	1.940	mg/L	0.0288				1.48%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 80
Sample ID: R1407821-001A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 82
Date Collected: 10/14/2014 10:10:45 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407821-001A

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6668282.7	0.9906	mg/L	0.00160				0.16%
Ag 328.068†	12458.9	0.0497	mg/L	0.00040				0.81%
Al 308.215†	27924.6	1.902	mg/L	0.0116				0.61%
As 188.979†	48.2	0.0382	mg/L	0.00080				2.10%
B 249.772†	111904.2	1.015	mg/L	0.0131				1.29%
Ba 233.527†	167833.2	1.988	mg/L	0.0134				0.68%
Be 313.107†	138186.3	0.0479	mg/L	0.00021				0.43%
Cd 226.502†	4009.0	0.0488	mg/L	0.00030				0.61%
Co 228.616†	10684.4	0.4885	mg/L	0.00237				0.49%
Cr 267.716†	23981.6	0.2083	mg/L	0.00086				0.41%

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Cu 324.752†	67579.7	0.2553	mg/L	0.00185	0.73%
Fe 259.939†	101479.1	1.824	mg/L	0.0114	0.63%
K 766.490†	13755.3	20.61	mg/L	0.009	0.04%
Mg 279.077†	34025.0	3.306	mg/L	0.0143	0.43%
Mn 257.610†	646789.6	1.887	mg/L	0.0009	0.05%
Mo 202.031†	8479.6	0.5110	mg/L	0.00249	0.49%
Ni 231.604†	21457.8	0.5119	mg/L	0.00231	0.45%
Na 589.592†	152160.9	27.74	mg/L	0.111	0.40%
Pb 220.353†	2958.5	0.4937	mg/L	0.00145	0.29%
Sb 206.836†	1013.1	0.5181	mg/L	0.00311	0.60%
Se 196.026†	854.9	1.036	mg/L	0.0084	0.81%
Sn 189.927†	-54.5	-0.0116	mg/L	0.00055	4.72%
Ti 337.279†	279607.9	0.5021	mg/L	0.00245	0.49%
Tl 190.801†	3399.8	1.859	mg/L	0.0071	0.38%
V 292.402†	34218.0	0.5236	mg/L	0.00462	0.88%
Zn 206.200†	15833.6	0.5354	mg/L	0.00243	0.45%
Ca 227.546†	1798.6	9.827	mg/L	0.0391	0.40%
Sr 421.552†	5721.3	0.0494	mg/L	0.00034	0.70%
Al 394.401†	77300.0	1.907	mg/L	0.0072	0.38%
Al 237.313†	11640.3	1.909	mg/L	0.0037	0.20%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 81 **Autosampler Location: 83**
Sample ID: R1407821-001L **Date Collected: 10/14/2014 10:16:47 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: R1407821-001L

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6626462.7	0.9844	mg/L	0.00454				0.46%
Ag 328.068†	-33.5	-0.0001	mg/L	0.00009				102.65%
Al 308.215†	22.3	0.0014	mg/L	0.00445				318.87%
As 188.979†	-0.3	-0.0003	mg/L	0.00013				48.29%
B 249.772†	1723.2	0.0149	mg/L	0.00152				10.20%
Ba 233.527†	185.1	0.0022	mg/L	0.00002				0.89%
Be 313.107†	-93.5	0.0000	mg/L	0.00002				58.13%
Cd 226.502†	-13.7	-0.0002	mg/L	0.00006				31.11%
Co 228.616†	-10.2	-0.0005	mg/L	0.00004				8.82%
Cr 267.716†	26.3	0.0003	mg/L	0.00002				6.32%
Cu 324.752†	4.7	0.0000	mg/L	0.00002				61.51%
Fe 259.939†	9156.3	0.1646	mg/L	0.00080				0.48%
K 766.490†	195.3	0.2926	mg/L	0.08360				28.57%
Mg 279.077†	2696.5	0.2620	mg/L	0.00235				0.90%
Mn 257.610†	96451.8	0.2815	mg/L	0.00191				0.68%
Mo 202.031†	1.1	0.0001	mg/L	0.00003				47.85%
Ni 231.604†	-15.2	-0.0004	mg/L	0.00014				38.89%
Na 589.592†	9399.6	1.714	mg/L	0.0066				0.38%
Pb 220.353†	-5.0	-0.0008	mg/L	0.00010				12.09%
Sb 206.836†	4.6	0.0023	mg/L	0.00036				15.27%
Se 196.026†	1.6	0.0020	mg/L	0.00065				33.27%
Sn 189.927†	-8.0	-0.0017	mg/L	0.00005				3.28%
Ti 337.279†	265.4	0.0005	mg/L	0.00001				1.96%
Tl 190.801†	-5.2	-0.0029	mg/L	0.00097				34.12%
V 292.402†	35.6	0.0005	mg/L	0.00019				35.12%
Zn 206.200†	156.2	0.0053	mg/L	0.00005				1.02%
Ca 227.546†	270.4	1.470	mg/L	0.0214				1.46%
Sr 421.552†	1110.1	0.0096	mg/L	0.00024				2.48%
Al 394.401†	222.2	0.0055	mg/L	0.00094				17.11%
Al 237.313†	9.1	0.0015	mg/L	0.00140				93.88%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 82 **Autosampler Location: 84**
Sample ID: R1407821-002 **Date Collected: 10/14/2014 10:22:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

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Mean Data: R1407821-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6729819.2	0.9997	mg/L	0.00003				0.00%
Ag 328.068†	-28.0	0.0001	mg/L	0.00028				414.73%
Al 308.215†	623.7	0.0417	mg/L	0.00834				19.98%
As 188.979†	0.7	0.0005	mg/L	0.00006				12.15%
B 249.772†	2454.5	0.0190	mg/L	0.00052				2.76%
Ba 233.527†	901.8	0.0107	mg/L	0.00002				0.16%
Be 313.107†	-15.9	0.0000	mg/L	0.00003				485.99%
Cd 226.502†	-0.1	-0.0001	mg/L	0.00004				42.01%
Co 228.616†	-6.1	-0.0003	mg/L	0.00002				8.51%
Cr 267.716†	35.5	0.0005	mg/L	0.00002				5.22%
Cu 324.752†	36.5	0.0002	mg/L	0.00030				152.93%
Fe 259.939†	35885.9	0.6451	mg/L	0.00616				0.96%
K 766.490†	758.3	1.136	mg/L	0.0051				0.45%
Mg 279.077†	13876.8	1.348	mg/L	0.0141				1.05%
Mn 257.610†	420347.0	1.227	mg/L	0.0069				0.56%
Mo 202.031†	1.5	0.0001	mg/L	0.00003				29.23%
Ni 231.604†	-24.8	-0.0006	mg/L	0.00000				0.24%
Na 589.592†	45859.0	8.361	mg/L	0.0012				0.01%
Pb 220.353†	1.1	0.0002	mg/L	0.00060				361.66%
Sb 206.836†	5.2	0.0027	mg/L	0.00016				6.04%
Se 196.026†	2.3	0.0029	mg/L	0.00152				52.39%
Sn 189.927†	-52.9	-0.0111	mg/L	0.00009				0.82%
Ti 337.279†	317.6	0.0006	mg/L	0.00001				1.05%
Tl 190.801†	-3.2	-0.0018	mg/L	0.00266				147.14%
V 292.402†	186.7	0.0028	mg/L	0.00022				7.83%
Zn 206.200†	306.4	0.0104	mg/L	0.00002				0.23%
Ca 227.546†	1408.3	7.645	mg/L	0.0035				0.05%
Sr 421.552†	5254.5	0.0454	mg/L	0.00008				0.18%
Al 394.401†	1592.9	0.0393	mg/L	0.00131				3.33%
Al 237.313†	190.8	0.0313	mg/L	0.00106				3.39%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 83
Sample ID: R1407821-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 85
Date Collected: 10/14/2014 10:28:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407821-003

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6794929.5	1.009	mg/L	0.0073				0.72%
Ag 328.068†	-571.4	0.0007	mg/L	0.00008				12.50%
Al 308.215†	8345.3	0.5724	mg/L	0.00641				1.12%
As 188.979†	7.8	0.0062	mg/L	0.00166				27.01%
B 249.772†	5927.1	0.0033	mg/L	0.00044				13.31%
Ba 233.527†	1013.4	0.0120	mg/L	0.00004				0.32%
Be 313.107†	283.3	0.0001	mg/L	0.00003				32.34%
Cd 226.502†	117.9	-0.0001	mg/L	0.00006				94.03%
Co 228.616†	3.3	0.0002	mg/L	0.00020				133.13%
Cr 267.716†	209.9	0.0024	mg/L	0.00000				0.06%
Cu 324.752†	636.8	0.0034	mg/L	0.00010				2.80%
Fe 259.939†	591700.9	10.64	mg/L	0.005				0.04%
K 766.490†	992.8	1.488	mg/L	0.0000				0.00%
Mg 279.077†	12246.9	1.190	mg/L	0.0003				0.02%
Mn 257.610†	857621.5	2.504	mg/L	0.0015				0.06%
Mo 202.031†	-0.0	0.0000	mg/L	0.00001				>999.9%
Ni 231.604†	-11.6	-0.0003	mg/L	0.00011				39.06%
Na 589.592†	32980.1	6.013	mg/L	0.0045				0.08%
Pb 220.353†	11.2	0.0016	mg/L	0.00025				15.82%
Sb 206.836†	3.7	0.0018	mg/L	0.00105				57.08%
Se 196.026†	2.2	0.0051	mg/L	0.00147				29.09%
Sn 189.927†	-50.6	-0.0107	mg/L	0.00025				2.31%
Ti 337.279†	8123.8	0.0146	mg/L	0.00012				0.85%
Tl 190.801†	-3.5	-0.0017	mg/L	0.00168				100.63%
V 292.402†	3561.0	0.0539	mg/L	0.00058				1.08%

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Zn 206.200†	972.4	0.0329	mg/L	0.00011	0.34%
Ca 227.546†	1219.3	7.210	mg/L	0.0198	0.28%
Sr 421.552†	6830.7	0.0590	mg/L	0.00004	0.07%
Al 394.401†	23417.1	0.5779	mg/L	0.00248	0.43%
Al 237.313†	3429.8	0.5626	mg/L	0.00247	0.44%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 84
Sample ID: R1407821-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 86
Date Collected: 10/14/2014 10:34:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407821-004

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6768090.6	1.005	mg/L	0.0045				0.44%
Ag 328.068†	-31.2	0.0001	mg/L	0.00002				28.84%
Al 308.215†	439.3	0.0292	mg/L	0.00091				3.10%
As 188.979†	0.7	0.0005	mg/L	0.00055				100.57%
B 249.772†	1917.5	0.0137	mg/L	0.00000				0.02%
Ba 233.527†	869.3	0.0103	mg/L	0.00006				0.57%
Be 313.107†	-83.6	0.0000	mg/L	0.00002				85.46%
Cd 226.502†	2.6	-0.0001	mg/L	0.00001				7.55%
Co 228.616†	-10.7	-0.0005	mg/L	0.00016				32.12%
Cr 267.716†	45.4	0.0006	mg/L	0.00003				5.76%
Cu 324.752†	209.5	0.0009	mg/L	0.00011				13.11%
Fe 259.939†	41268.7	0.7418	mg/L	0.00236				0.32%
K 766.490†	788.2	1.181	mg/L	0.1024				8.67%
Mg 279.077†	13731.4	1.334	mg/L	0.0015				0.11%
Mn 257.610†	479956.9	1.401	mg/L	0.0022				0.15%
Mo 202.031†	5.0	0.0003	mg/L	0.00007				24.05%
Ni 231.604†	-28.0	-0.0007	mg/L	0.00001				2.01%
Na 589.592†	45290.6	8.258	mg/L	0.0814				0.99%
Pb 220.353†	-1.1	-0.0002	mg/L	0.00013				63.39%
Sb 206.836†	3.7	0.0019	mg/L	0.00036				19.29%
Se 196.026†	1.6	0.0021	mg/L	0.00038				17.78%
Sn 189.927†	-51.4	-0.0108	mg/L	0.00016				1.48%
Ti 337.279†	357.5	0.0006	mg/L	0.00003				5.22%
Tl 190.801†	-6.3	-0.0035	mg/L	0.00062				17.65%
V 292.402†	167.3	0.0025	mg/L	0.00005				1.96%
Zn 206.200†	402.6	0.0136	mg/L	0.00038				2.78%
Ca 227.546†	1395.2	7.579	mg/L	0.0384				0.51%
Sr 421.552†	5526.7	0.0477	mg/L	0.00029				0.62%
Al 394.401†	1238.7	0.0306	mg/L	0.00061				1.98%
Al 237.313†	120.7	0.0198	mg/L	0.00047				2.35%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 85
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 10/14/2014 10:40:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6695323.8	0.9946	mg/L	0.00872				0.88%
Ag 328.068†	129005.6	0.5110	mg/L	0.00548	0.5110	mg/L	0.00548	1.07%
QC value within limits for Ag 328.068 Recovery = 102.20%								
Al 308.215†	141466.1	9.635	mg/L	0.0985	9.635	mg/L	0.0985	1.02%
QC value within limits for Al 308.215 Recovery = 96.35%								
As 188.979†	1263.5	1.004	mg/L	0.0087	1.004	mg/L	0.0087	0.87%
QC value within limits for As 188.979 Recovery = 100.35%								
B 249.772†	263933.6	2.390	mg/L	0.0490	2.390	mg/L	0.0490	2.05%
QC value within limits for B 249.772 Recovery = 95.61%								
Ba 233.527†	862972.6	10.22	mg/L	0.052	10.22	mg/L	0.052	0.51%
QC value within limits for Ba 233.527 Recovery = 102.22%								

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Be 313.107†	722259.6	0.2504 mg/L	0.00130	0.2504 mg/L	0.00130	0.52%
QC value within limits for Be 313.107 Recovery = 100.14%						
Cd 226.502†	41896.5	0.5115 mg/L	0.00558	0.5115 mg/L	0.00558	1.09%
QC value within limits for Cd 226.502 Recovery = 102.31%						
Co 228.616†	54735.6	2.502 mg/L	0.0240	2.502 mg/L	0.0240	0.96%
QC value within limits for Co 228.616 Recovery = 100.10%						
Cr 267.716†	59314.0	0.5169 mg/L	0.00596	0.5169 mg/L	0.00596	1.15%
QC value within limits for Cr 267.716 Recovery = 103.39%						
Cu 324.752†	325923.1	1.231 mg/L	0.0166	1.231 mg/L	0.0166	1.35%
QC value within limits for Cu 324.752 Recovery = 98.46%						
Fe 259.939†	278311.4	5.003 mg/L	0.0539	5.003 mg/L	0.0539	1.08%
QC value within limits for Fe 259.939 Recovery = 100.06%						
K 766.490†	16502.9	24.73 mg/L	0.422	24.73 mg/L	0.422	1.71%
QC value within limits for K 766.490 Recovery = 98.90%						
Mg 279.077†	255226.8	24.80 mg/L	0.248	24.80 mg/L	0.248	1.00%
QC value within limits for Mg 279.077 Recovery = 99.20%						
Mn 257.610†	258539.8	0.7551 mg/L	0.00767	0.7551 mg/L	0.00767	1.02%
QC value within limits for Mn 257.610 Recovery = 100.67%						
Mo 202.031†	40648.2	2.450 mg/L	0.0253	2.450 mg/L	0.0253	1.03%
QC value within limits for Mo 202.031 Recovery = 97.99%						
Ni 231.604†	85521.0	2.040 mg/L	0.0199	2.040 mg/L	0.0199	0.97%
QC value within limits for Ni 231.604 Recovery = 102.02%						
Na 589.592†	134716.6	24.56 mg/L	0.308	24.56 mg/L	0.308	1.26%
QC value within limits for Na 589.592 Recovery = 98.25%						
Pb 220.353†	3005.8	0.5024 mg/L	0.00620	0.5024 mg/L	0.00620	1.23%
QC value within limits for Pb 220.353 Recovery = 100.47%						
Sb 206.836†	9831.8	5.029 mg/L	0.0719	5.029 mg/L	0.0719	1.43%
QC value within limits for Sb 206.836 Recovery = 100.58%						
Se 196.026†	407.8	0.4953 mg/L	0.00403	0.4953 mg/L	0.00403	0.81%
QC value within limits for Se 196.026 Recovery = 99.06%						
Sn 189.927†	24261.7	5.085 mg/L	0.0489	5.085 mg/L	0.0489	0.96%
QC value within limits for Sn 189.927 Recovery = 101.69%						
Ti 337.279†	1377617.5	2.474 mg/L	0.0158	2.474 mg/L	0.0158	0.64%
QC value within limits for Ti 337.279 Recovery = 98.94%						
Tl 190.801†	1817.5	0.9933 mg/L	0.00776	0.9933 mg/L	0.00776	0.78%
QC value within limits for Tl 190.801 Recovery = 99.33%						
V 292.402†	170628.3	2.611 mg/L	0.0226	2.611 mg/L	0.0226	0.87%
QC value within limits for V 292.402 Recovery = 104.44%						
Zn 206.200†	30108.1	1.018 mg/L	0.0101	1.018 mg/L	0.0101	1.00%
QC value within limits for Zn 206.200 Recovery = 101.81%						
Ca 227.546†	4460.8	24.42 mg/L	0.184	24.42 mg/L	0.184	0.76%
QC value within limits for Ca 227.546 Recovery = 97.66%						
Sr 421.552†	271275.1	2.342 mg/L	0.0303	2.342 mg/L	0.0303	1.29%
QC value within limits for Sr 421.552 Recovery = 93.68%						
Al 394.401†	389427.4	9.610 mg/L	0.0816	9.610 mg/L	0.0816	0.85%
QC value within limits for Al 394.401 Recovery = 96.10%						
Al 237.313†	59738.9	9.799 mg/L	0.1153	9.799 mg/L	0.1153	1.18%
QC value within limits for Al 237.313 Recovery = 97.99%						

All analyte(s) passed QC.

Sequence No.: 86 **Autosampler Location: 5**
Sample ID: CCB **Date Collected: 10/14/2014 10:46:58 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6799342.1	1.010	mg/L	0.0124				1.23%
Ag 328.068†	18.7	0.0001	mg/L	0.00025	0.0001	mg/L	0.00025	327.59%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-64.6	-0.0044	mg/L	0.01002	-0.0044	mg/L	0.01002	227.98%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.4	0.0011	mg/L	0.00193	0.0011	mg/L	0.00193	167.89%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	2378.1	0.0217	mg/L	0.00333	0.0217	mg/L	0.00333	15.29%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	267.8	0.0032	mg/L	0.00054	0.0032	mg/L	0.00054	17.10%
QC value within limits for Ba 233.527 Recovery = Not calculated								

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Be 313.107†	333.8	0.0001 mg/L	0.00008	0.0001 mg/L	0.00008	68.09%
QC value within limits for Be 313.107 Recovery = Not calculated						
Cd 226.502†	22.3	0.0003 mg/L	0.00002	0.0003 mg/L	0.00002	8.13%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	23.5	0.0011 mg/L	0.00008	0.0011 mg/L	0.00008	7.44%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	16.2	0.0001 mg/L	0.00014	0.0001 mg/L	0.00014	98.35%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	966.9	0.0037 mg/L	0.00129	0.0037 mg/L	0.00129	35.33%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	243.3	0.0044 mg/L	0.00026	0.0044 mg/L	0.00026	5.93%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	64.0	0.0960 mg/L	0.10833	0.0960 mg/L	0.10833	112.90%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	158.9	0.0154 mg/L	0.00536	0.0154 mg/L	0.00536	34.72%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	268.4	0.0008 mg/L	0.00002	0.0008 mg/L	0.00002	2.80%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	10.5	0.0006 mg/L	0.00033	0.0006 mg/L	0.00033	51.49%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	55.0	0.0013 mg/L	0.00015	0.0013 mg/L	0.00015	11.15%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	397.8	0.0725 mg/L	0.00012	0.0725 mg/L	0.00012	0.17%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	3.6	0.0006 mg/L	0.00050	0.0006 mg/L	0.00050	82.81%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	1.9	0.0010 mg/L	0.00049	0.0010 mg/L	0.00049	49.58%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.9	0.0011 mg/L	0.00055	0.0011 mg/L	0.00055	52.09%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	39.3	0.0082 mg/L	0.00222	0.0082 mg/L	0.00222	26.97%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	381.9	0.0007 mg/L	0.00006	0.0007 mg/L	0.00006	9.00%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	1.2	0.0007 mg/L	0.00015	0.0007 mg/L	0.00015	22.01%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	29.3	0.0004 mg/L	0.00044	0.0004 mg/L	0.00044	97.69%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	37.7	0.0013 mg/L	0.00018	0.0013 mg/L	0.00018	14.47%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	-2.9	-0.0155 mg/L	0.00870	-0.0155 mg/L	0.00870	56.12%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	97.0	0.0008 mg/L	0.00030	0.0008 mg/L	0.00030	36.19%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 394.401†	97.6	0.0024 mg/L	0.00043	0.0024 mg/L	0.00043	17.97%
QC value within limits for Al 394.401 Recovery = Not calculated						
Al 237.313†	15.9	0.0026 mg/L	0.00112	0.0026 mg/L	0.00112	42.84%
QC value within limits for Al 237.313 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 87
Sample ID: R1407821-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 87
Date Collected: 10/14/2014 10:53:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407821-005

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6892766.4	1.024	mg/L	0.0020				0.19%
Ag 328.068†	-40.7	0.0001	mg/L	0.00013				248.35%
Al 308.215†	514.8	0.0344	mg/L	0.00389				11.33%
As 188.979†	0.2	0.0001	mg/L	0.00064				433.09%
B 249.772†	3234.0	0.0256	mg/L	0.00099				3.85%
Ba 233.527†	942.8	0.0112	mg/L	0.00003				0.28%
Be 313.107†	140.8	0.0000	mg/L	0.00001				22.01%
Cd 226.502†	11.1	0.0000	mg/L	0.00006				231.81%
Co 228.616†	1.3	0.0001	mg/L	0.00014				222.84%
Cr 267.716†	68.0	0.0008	mg/L	0.00004				5.27%
Cu 324.752†	205.3	0.0008	mg/L	0.00002				2.69%

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Fe 259.939†	42734.1	0.7682 mg/L	0.00408	0.53%
K 766.490†	816.7	1.224 mg/L	0.0227	1.86%
Mg 279.077†	14256.8	1.385 mg/L	0.0081	0.59%
Mn 257.610†	500395.2	1.460 mg/L	0.0002	0.01%
Mo 202.031†	1.9	0.0001 mg/L	0.00019	167.39%
Ni 231.604†	-18.8	-0.0004 mg/L	0.00008	18.40%
Na 589.592†	46100.0	8.405 mg/L	0.0285	0.34%
Pb 220.353†	-6.1	-0.0010 mg/L	0.00060	57.08%
Sb 206.836†	2.0	0.0010 mg/L	0.00009	9.21%
Se 196.026†	1.7	0.0023 mg/L	0.00016	6.87%
Sn 189.927†	-50.2	-0.0105 mg/L	0.00002	0.23%
Ti 337.279†	390.0	0.0007 mg/L	0.00001	1.46%
Tl 190.801†	-8.3	-0.0046 mg/L	0.00062	13.61%
V 292.402†	176.0	0.0026 mg/L	0.00010	3.63%
Zn 206.200†	171.1	0.0058 mg/L	0.00012	2.03%
Ca 227.546†	1440.0	7.823 mg/L	0.0040	0.05%
Sr 421.552†	5725.5	0.0494 mg/L	0.00008	0.16%
Al 394.401†	1387.1	0.0342 mg/L	0.00058	1.70%
Al 237.313†	137.7	0.0226 mg/L	0.00065	2.87%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 88
Sample ID: R1407825-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 88
Date Collected: 10/14/2014 10:59:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6948818.5	1.032	mg/L	0.0017				0.17%
Ag 328.068†	-30.1	-0.0001	mg/L	0.00000				0.91%
Al 308.215†	-172.9	-0.0118	mg/L	0.00187				15.88%
As 188.979†	1.9	0.0015	mg/L	0.00157				106.69%
B 249.772†	403.3	0.0037	mg/L	0.00049				13.43%
Ba 233.527†	28.2	0.0003	mg/L	0.00008				24.32%
Be 313.107†	197.8	0.0001	mg/L	0.00002				28.20%
Cd 226.502†	-6.0	-0.0001	mg/L	0.00003				42.70%
Co 228.616†	-11.6	-0.0005	mg/L	0.00007				13.25%
Cr 267.716†	40.5	0.0004	mg/L	0.00009				24.66%
Cu 324.752†	-124.7	-0.0005	mg/L	0.00028				60.14%
Fe 259.939†	134.8	0.0024	mg/L	0.00015				6.24%
K 766.490†	-8.3	-0.0124	mg/L	0.02242				180.69%
Mg 279.077†	167.2	0.0162	mg/L	0.00152				9.33%
Mn 257.610†	152.1	0.0004	mg/L	0.00001				2.77%
Mo 202.031†	-0.0	0.0000	mg/L	0.00004				>999.9%
Ni 231.604†	-10.5	-0.0003	mg/L	0.00007				27.25%
Na 589.592†	270.6	0.0493	mg/L	0.00053				1.08%
Pb 220.353†	-6.4	-0.0011	mg/L	0.00026				24.41%
Sb 206.836†	3.2	0.0016	mg/L	0.00121				73.91%
Se 196.026†	1.6	0.0019	mg/L	0.00122				64.92%
Sn 189.927†	-1.1	-0.0002	mg/L	0.00026				111.93%
Ti 337.279†	220.5	0.0004	mg/L	0.00003				8.37%
Tl 190.801†	-6.4	-0.0035	mg/L	0.00153				43.97%
V 292.402†	-12.4	-0.0002	mg/L	0.00040				210.62%
Zn 206.200†	16.5	0.0006	mg/L	0.00017				30.01%
Ca 227.546†	-7.7	-0.0413	mg/L	0.01631				39.45%
Sr 421.552†	37.1	0.0003	mg/L	0.00031				97.95%
Al 394.401†	-17.6	-0.0004	mg/L	0.00066				152.58%
Al 237.313†	-20.6	-0.0034	mg/L	0.00050				14.79%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 89
Sample ID: R1407825-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 89
Date Collected: 10/14/2014 11:05:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

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Mean Data: R1407825-003

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6893155.8	1.024	mg/L	0.0058				0.56%
Ag 328.068†	-34.4	-0.0001	mg/L	0.00003				28.07%
Al 308.215†	10069.6	0.6853	mg/L	0.00730				1.07%
As 188.979†	0.4	0.0003	mg/L	0.00083				295.57%
B 249.772†	2315.9	0.0204	mg/L	0.00040				1.96%
Ba 233.527†	4104.9	0.0486	mg/L	0.00037				0.75%
Be 313.107†	2610.0	0.0009	mg/L	0.00004				4.87%
Cd 226.502†	40.5	0.0005	mg/L	0.00007				13.51%
Co 228.616†	116.2	0.0053	mg/L	0.00037				7.00%
Cr 267.716†	-112.7	0.0000	mg/L	0.00001				55.55%
Cu 324.752†	60.3	0.0002	mg/L	0.00015				62.10%
Fe 259.939†	5595.8	0.1006	mg/L	0.00006				0.06%
K 766.490†	2063.3	3.091	mg/L	0.0277				0.90%
Mg 279.077†	104542.1	10.16	mg/L	0.007				0.07%
Mn 257.610†	11094.7	0.0324	mg/L	0.00002				0.07%
Mo 202.031†	1.9	0.0001	mg/L	0.00005				46.06%
Ni 231.604†	2319.0	0.0553	mg/L	0.00019				0.34%
Na 589.592†	67235.8	12.26	mg/L	0.027				0.22%
Pb 220.353†	-2.6	-0.0004	mg/L	0.00102				280.60%
Sb 206.836†	3.3	0.0016	mg/L	0.00008				4.87%
Se 196.026†	2.2	0.0027	mg/L	0.00136				49.98%
Sn 189.927†	-36.9	-0.0078	mg/L	0.00008				1.07%
Ti 337.279†	603.7	0.0011	mg/L	0.00000				0.12%
Tl 190.801†	-8.7	-0.0047	mg/L	0.00034				7.20%
V 292.402†	-10.0	-0.0002	mg/L	0.00028				178.88%
Zn 206.200†	3005.6	0.1016	mg/L	0.00041				0.40%
Ca 227.546†	911.1	4.929	mg/L	0.0445				0.90%
Sr 421.552†	10292.3	0.0889	mg/L	0.00019				0.21%
Al 394.401†	27514.8	0.6790	mg/L	0.00300				0.44%
Al 237.313†	4322.1	0.7089	mg/L	0.00555				0.78%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

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Sequence No.: 90
Sample ID: R1407825-003D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 90
Date Collected: 10/14/2014 11:11:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-003D

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6924472.8	1.029	mg/L	0.0075				0.73%
Ag 328.068†	-16.8	0.0000	mg/L	0.00009				220.82%
Al 308.215†	9773.0	0.6651	mg/L	0.00037				0.06%
As 188.979†	1.3	0.0010	mg/L	0.00008				8.08%
B 249.772†	2149.4	0.0189	mg/L	0.00024				1.28%
Ba 233.527†	4098.7	0.0485	mg/L	0.00030				0.61%
Be 313.107†	2805.4	0.0010	mg/L	0.00003				2.76%
Cd 226.502†	37.2	0.0004	mg/L	0.00003				7.64%
Co 228.616†	121.8	0.0056	mg/L	0.00005				0.94%
Cr 267.716†	-112.2	0.0000	mg/L	0.00001				43.42%
Cu 324.752†	-168.8	-0.0006	mg/L	0.00006				9.10%
Fe 259.939†	5461.7	0.0982	mg/L	0.00052				0.53%
K 766.490†	2073.9	3.107	mg/L	0.0348				1.12%
Mg 279.077†	103780.8	10.08	mg/L	0.008				0.08%
Mn 257.610†	10968.7	0.0320	mg/L	0.00000				0.01%
Mo 202.031†	2.8	0.0002	mg/L	0.00012				74.13%
Ni 231.604†	2276.5	0.0543	mg/L	0.00028				0.52%
Na 589.592†	67608.3	12.33	mg/L	0.205				1.67%
Pb 220.353†	-7.0	-0.0011	mg/L	0.00048				43.98%
Sb 206.836†	1.5	0.0007	mg/L	0.00047				68.76%
Se 196.026†	1.5	0.0019	mg/L	0.00385				208.18%
Sn 189.927†	-39.9	-0.0084	mg/L	0.00034				4.08%
Ti 337.279†	623.2	0.0011	mg/L	0.00008				7.06%
Tl 190.801†	-6.8	-0.0037	mg/L	0.00129				34.65%
V 292.402†	-29.0	-0.0004	mg/L	0.00034				75.91%
Zn 206.200†	3028.3	0.1024	mg/L	0.00081				0.79%

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Ca 227.546†	916.0	4.955	mg/L	0.0510	1.03%
Sr 421.552†	10384.7	0.0897	mg/L	0.00181	2.02%
Al 394.401†	27121.8	0.6693	mg/L	0.00084	0.13%
Al 237.313†	4297.7	0.7049	mg/L	0.00213	0.30%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 91
Sample ID: R1407825-003S
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 91
Date Collected: 10/14/2014 11:17:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-003S

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6808637.0	1.011	mg/L	0.0086				0.85%
Ag 328.068†	12816.5	0.0509	mg/L	0.00016				0.32%
Al 308.215†	38835.9	2.645	mg/L	0.0170				0.64%
As 188.979†	50.3	0.0399	mg/L	0.00198				4.97%
B 249.772†	110554.5	1.006	mg/L	0.0112				1.11%
Ba 233.527†	177937.0	2.108	mg/L	0.0110				0.52%
Be 313.107†	146957.2	0.0509	mg/L	0.00018				0.34%
Cd 226.502†	4151.6	0.0506	mg/L	0.00052				1.02%
Co 228.616†	11329.6	0.5180	mg/L	0.00418				0.81%
Cr 267.716†	24046.4	0.2097	mg/L	0.00070				0.33%
Cu 324.752†	69894.0	0.2639	mg/L	0.00236				0.90%
Fe 259.939†	63309.9	1.138	mg/L	0.0050				0.43%
K 766.490†	15353.2	23.00	mg/L	0.245				1.06%
Mg 279.077†	125693.7	12.21	mg/L	0.070				0.58%
Mn 257.610†	189261.5	0.5524	mg/L	0.00305				0.55%
Mo 202.031†	8090.9	0.4876	mg/L	0.00466				0.95%
Ni 231.604†	24288.8	0.5795	mg/L	0.00424				0.73%
Na 589.592†	176250.6	32.13	mg/L	0.302				0.94%
Pb 220.353†	2994.9	0.4999	mg/L	0.00449				0.90%
Sb 206.836†	952.7	0.4871	mg/L	0.00385				0.79%
Se 196.026†	786.9	0.9534	mg/L	0.01593				1.67%
Sn 189.927†	26053.6	5.461	mg/L	0.0130				0.24%
Ti 337.279†	279413.1	0.5017	mg/L	0.00271				0.54%
Tl 190.801†	3460.4	1.892	mg/L	0.0181				0.96%
V 292.402†	33425.0	0.5115	mg/L	0.00513				1.00%
Zn 206.200†	18603.8	0.6291	mg/L	0.00314				0.50%
Ca 227.546†	1299.0	7.091	mg/L	0.0327				0.46%
Sr 421.552†	10457.1	0.0903	mg/L	0.00101				1.12%
Al 394.401†	106793.9	2.635	mg/L	0.0152				0.58%
Al 237.313†	16303.0	2.674	mg/L	0.0171				0.64%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 92
Sample ID: R1407825-003A
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 92
Date Collected: 10/14/2014 11:23:32 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-003A

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6862724.9	1.019	mg/L	0.0101				0.99%
Ag 328.068†	12228.7	0.0486	mg/L	0.00072				1.49%
Al 308.215†	37389.8	2.547	mg/L	0.0403				1.58%
As 188.979†	50.1	0.0397	mg/L	0.00075				1.89%
B 249.772†	113185.1	1.030	mg/L	0.0070				0.68%
Ba 233.527†	172250.0	2.040	mg/L	0.0225				1.10%
Be 313.107†	142426.9	0.0494	mg/L	0.00055				1.11%
Cd 226.502†	4038.9	0.0492	mg/L	0.00043				0.88%
Co 228.616†	10820.8	0.4947	mg/L	0.00532				1.07%
Cr 267.716†	23403.8	0.2041	mg/L	0.00233				1.14%
Cu 324.752†	65813.6	0.2485	mg/L	0.00336				1.35%
Fe 259.939†	61533.5	1.106	mg/L	0.0120				1.09%

K 766.490†	15104.5	22.63	mg/L	0.174	0.77%
Mg 279.077†	122993.4	11.95	mg/L	0.137	1.15%
Mn 257.610†	182587.8	0.5329	mg/L	0.00590	1.11%
Mo 202.031†	8471.7	0.5105	mg/L	0.00566	1.11%
Ni 231.604†	23737.3	0.5663	mg/L	0.00737	1.30%
Na 589.592†	174701.1	31.85	mg/L	0.486	1.53%
Pb 220.353†	2935.6	0.4900	mg/L	0.00385	0.79%
Sb 206.836†	988.2	0.5053	mg/L	0.00627	1.24%
Se 196.026†	882.6	1.069	mg/L	0.0067	0.62%
Sn 189.927†	-44.4	-0.0096	mg/L	0.00004	0.38%
Ti 337.279†	277951.3	0.4991	mg/L	0.00621	1.24%
Tl 190.801†	3399.8	1.859	mg/L	0.0168	0.90%
V 292.402†	32100.0	0.4912	mg/L	0.00485	0.99%
Zn 206.200†	18078.5	0.6113	mg/L	0.00838	1.37%
Ca 227.546†	1258.5	6.870	mg/L	0.0634	0.92%
Sr 421.552†	10465.6	0.0904	mg/L	0.00114	1.26%
Al 394.401†	103173.9	2.546	mg/L	0.0321	1.26%
Al 237.313†	15728.6	2.580	mg/L	0.0272	1.05%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 93
Sample ID: R1407825-003L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 93
Date Collected: 10/14/2014 11:29:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-003L

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6851799.9	1.018	mg/L	0.0001				0.01%
Ag 328.068†	-10.2	0.0000	mg/L	0.00009				265.33%
Al 308.215†	2159.7	0.1470	mg/L	0.00129				0.88%
As 188.979†	0.2	0.0001	mg/L	0.00004				32.54%
B 249.772†	1632.2	0.0148	mg/L	0.00156				10.54%
Ba 233.527†	814.6	0.0096	mg/L	0.00002				0.20%
Be 313.107†	300.5	0.0001	mg/L	0.00002				20.50%
Cd 226.502†	-6.9	-0.0001	mg/L	0.00007				77.27%
Co 228.616†	12.6	0.0006	mg/L	0.00009				15.99%
Cr 267.716†	16.9	0.0003	mg/L	0.00004				10.99%
Cu 324.752†	45.2	0.0002	mg/L	0.00044				256.86%
Fe 259.939†	1066.8	0.0192	mg/L	0.00000				0.02%
K 766.490†	416.1	0.6234	mg/L	0.14475				23.22%
Mg 279.077†	20696.4	2.011	mg/L	0.0046				0.23%
Mn 257.610†	2227.4	0.0065	mg/L	0.00001				0.21%
Mo 202.031†	4.0	0.0002	mg/L	0.00008				31.18%
Ni 231.604†	447.8	0.0107	mg/L	0.00002				0.20%
Na 589.592†	13529.0	2.467	mg/L	0.0150				0.61%
Pb 220.353†	-4.4	-0.0007	mg/L	0.00040				56.05%
Sb 206.836†	5.2	0.0026	mg/L	0.00038				14.51%
Se 196.026†	3.0	0.0036	mg/L	0.00110				30.28%
Sn 189.927†	-2.7	-0.0006	mg/L	0.00026				45.89%
Ti 337.279†	295.4	0.0005	mg/L	0.00005				10.07%
Tl 190.801†	-3.7	-0.0020	mg/L	0.00276				135.56%
V 292.402†	-31.2	-0.0005	mg/L	0.00021				44.55%
Zn 206.200†	619.2	0.0209	mg/L	0.00010				0.46%
Ca 227.546†	167.2	0.9045	mg/L	0.01880				2.08%
Sr 421.552†	2051.1	0.0177	mg/L	0.00002				0.12%
Al 394.401†	5061.6	0.1249	mg/L	0.00104				0.83%
Al 237.313†	807.6	0.1325	mg/L	0.00017				0.13%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 94
Sample ID: R1407825-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 94
Date Collected: 10/14/2014 11:35:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-004

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Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6907564.8	1.026	mg/L	0.0162				1.58%
Ag 328.068†	-25.9	-0.0001	mg/L	0.00015				193.89%
Al 308.215†	9695.4	0.6599	mg/L	0.02751				4.17%
As 188.979†	-0.6	-0.0005	mg/L	0.00156				325.98%
B 249.772†	2605.4	0.0231	mg/L	0.00097				4.22%
Ba 233.527†	4023.9	0.0477	mg/L	0.00036				0.75%
Be 313.107†	2413.3	0.0008	mg/L	0.00007				7.79%
Cd 226.502†	17.5	0.0002	mg/L	0.00012				60.56%
Co 228.616†	102.9	0.0047	mg/L	0.00020				4.21%
Cr 267.716†	-66.9	0.0004	mg/L	0.00001				1.76%
Cu 324.752†	12.1	0.0001	mg/L	0.00064				>999.9%
Fe 259.939†	5443.1	0.0978	mg/L	0.00134				1.37%
K 766.490†	1995.3	2.989	mg/L	0.0414				1.39%
Mg 279.077†	102020.7	9.914	mg/L	0.1838				1.85%
Mn 257.610†	10621.5	0.0310	mg/L	0.00055				1.76%
Mo 202.031†	4.2	0.0003	mg/L	0.00006				22.29%
Ni 231.604†	2117.2	0.0505	mg/L	0.00039				0.78%
Na 589.592†	66804.6	12.18	mg/L	0.070				0.57%
Pb 220.353†	-7.9	-0.0012	mg/L	0.00081				64.72%
Sb 206.836†	7.5	0.0038	mg/L	0.00062				16.25%
Se 196.026†	2.4	0.0029	mg/L	0.00020				7.00%
Sn 189.927†	-32.0	-0.0068	mg/L	0.00023				3.31%
Ti 337.279†	660.9	0.0012	mg/L	0.00001				0.63%
Tl 190.801†	-11.2	-0.0061	mg/L	0.00042				6.92%
V 292.402†	5.4	0.0001	mg/L	0.00038				491.46%
Zn 206.200†	2863.6	0.0968	mg/L	0.00153				1.58%
Ca 227.546†	854.8	4.625	mg/L	0.0656				1.42%
Sr 421.552†	10034.2	0.0866	mg/L	0.00106				1.22%
Al 394.401†	26261.5	0.6480	mg/L	0.01297				2.00%
Al 237.313†	4058.1	0.6656	mg/L	0.00751				1.13%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

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Sequence No.: 95
Sample ID: R1407825-011
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 95
Date Collected: 10/14/2014 11:41:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-011

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6797104.2	1.010	mg/L	0.0055				0.55%
Ag 328.068†	-125.4	-0.0004	mg/L	0.00020				52.27%
Al 308.215†	3855.6	0.2557	mg/L	0.00463				1.81%
As 188.979†	2.1	0.0017	mg/L	0.00099				59.99%
B 249.772†	4459.9	0.0364	mg/L	0.00005				0.14%
Ba 233.527†	2230.5	0.0264	mg/L	0.00002				0.06%
Be 313.107†	-314.6	-0.0001	mg/L	0.00001				7.63%
Cd 226.502†	5.7	0.0000	mg/L	0.00006				362.09%
Co 228.616†	-17.6	-0.0008	mg/L	0.00002				2.98%
Cr 267.716†	121.4	0.0014	mg/L	0.00001				0.67%
Cu 324.752†	888.6	0.0034	mg/L	0.00016				4.81%
Fe 259.939†	21412.4	0.3849	mg/L	0.00373				0.97%
K 766.490†	2322.6	3.480	mg/L	0.0281				0.81%
Mg 279.077†	34752.6	3.377	mg/L	0.0280				0.83%
Mn 257.610†	2355.2	0.0069	mg/L	0.00002				0.26%
Mo 202.031†	25.0	0.0015	mg/L	0.00004				2.67%
Ni 231.604†	8.2	0.0002	mg/L	0.00003				15.51%
Na 589.592†	31276.9	5.702	mg/L	0.0137				0.24%
Pb 220.353†	1.5	0.0003	mg/L	0.00030				110.83%
Sb 206.836†	5.4	0.0028	mg/L	0.00101				36.47%
Se 196.026†	3.3	0.0041	mg/L	0.00311				75.77%
Sn 189.927†	-132.3	-0.0278	mg/L	0.00002				0.09%
Ti 337.279†	4818.2	0.0087	mg/L	0.00013				1.46%
Tl 190.801†	-5.0	-0.0032	mg/L	0.00096				30.17%
V 292.402†	105.4	0.0016	mg/L	0.00043				26.95%
Zn 206.200†	565.0	0.0191	mg/L	0.00003				0.14%
Ca 227.546†	9629.0	52.03	mg/L	0.566				1.09%

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Sr 421.552†	47939.3	0.4139 mg/L	0.00136	0.33%
Al 394.401†	8829.1	0.2179 mg/L	0.00137	0.63%
Al 237.313†	1484.7	0.2435 mg/L	0.00039	0.16%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 96 **Autosampler Location: 4**
Sample ID: CCV **Date Collected: 10/14/2014 11:48:01 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6742958.9	1.002	mg/L	0.0027				0.27%
Ag 328.068†	129516.1	0.5131	mg/L	0.00102	0.5131	mg/L	0.00102	0.20%
QC value within limits for Ag 328.068 Recovery = 102.61%								
Al 308.215†	145076.3	9.881	mg/L	0.0151	9.881	mg/L	0.0151	0.15%
QC value within limits for Al 308.215 Recovery = 98.81%								
As 188.979†	1258.4	0.9994	mg/L	0.00227	0.9994	mg/L	0.00227	0.23%
QC value within limits for As 188.979 Recovery = 99.94%								
B 249.772†	269168.2	2.437	mg/L	0.0255	2.437	mg/L	0.0255	1.05%
QC value within limits for B 249.772 Recovery = 97.50%								
Ba 233.527†	878381.6	10.40	mg/L	0.031	10.40	mg/L	0.031	0.29%
QC value within limits for Ba 233.527 Recovery = 104.04%								
Be 313.107†	733111.6	0.2541	mg/L	0.00041	0.2541	mg/L	0.00041	0.16%
QC value within limits for Be 313.107 Recovery = 101.65%								
Cd 226.502†	42356.4	0.5171	mg/L	0.00147	0.5171	mg/L	0.00147	0.28%
QC value within limits for Cd 226.502 Recovery = 103.43%								
Co 228.616†	56045.2	2.562	mg/L	0.0069	2.562	mg/L	0.0069	0.27%
QC value within limits for Co 228.616 Recovery = 102.49%								
Cr 267.716†	59793.7	0.5212	mg/L	0.00224	0.5212	mg/L	0.00224	0.43%
QC value within limits for Cr 267.716 Recovery = 104.23%								
Cu 324.752†	334136.9	1.262	mg/L	0.0046	1.262	mg/L	0.0046	0.36%
QC value within limits for Cu 324.752 Recovery = 100.94%								
Fe 259.939†	285635.0	5.134	mg/L	0.0150	5.134	mg/L	0.0150	0.29%
QC value within limits for Fe 259.939 Recovery = 102.69%								
K 766.490†	16767.1	25.12	mg/L	0.103	25.12	mg/L	0.103	0.41%
QC value within limits for K 766.490 Recovery = 100.49%								
Mg 279.077†	261460.7	25.41	mg/L	0.056	25.41	mg/L	0.056	0.22%
QC value within limits for Mg 279.077 Recovery = 101.63%								
Mn 257.610†	264363.3	0.7721	mg/L	0.00206	0.7721	mg/L	0.00206	0.27%
QC value within limits for Mn 257.610 Recovery = 102.94%								
Mo 202.031†	41081.5	2.476	mg/L	0.0080	2.476	mg/L	0.0080	0.32%
QC value within limits for Mo 202.031 Recovery = 99.03%								
Ni 231.604†	86451.2	2.063	mg/L	0.0060	2.063	mg/L	0.0060	0.29%
QC value within limits for Ni 231.604 Recovery = 103.13%								
Na 589.592†	135879.0	24.77	mg/L	0.240	24.77	mg/L	0.240	0.97%
QC value within limits for Na 589.592 Recovery = 99.10%								
Pb 220.353†	3027.6	0.5060	mg/L	0.00307	0.5060	mg/L	0.00307	0.61%
QC value within limits for Pb 220.353 Recovery = 101.21%								
Sb 206.836†	9736.1	4.980	mg/L	0.0094	4.980	mg/L	0.0094	0.19%
QC value within limits for Sb 206.836 Recovery = 99.60%								
Se 196.026†	423.1	0.5139	mg/L	0.00446	0.5139	mg/L	0.00446	0.87%
QC value within limits for Se 196.026 Recovery = 102.77%								
Sn 189.927†	25031.5	5.246	mg/L	0.0300	5.246	mg/L	0.0300	0.57%
QC value within limits for Sn 189.927 Recovery = 104.92%								
Ti 337.279†	1393806.5	2.503	mg/L	0.0029	2.503	mg/L	0.0029	0.12%
QC value within limits for Ti 337.279 Recovery = 100.11%								
Tl 190.801†	1841.7	1.006	mg/L	0.0075	1.006	mg/L	0.0075	0.75%
QC value within limits for Tl 190.801 Recovery = 100.65%								
V 292.402†	165381.2	2.531	mg/L	0.0050	2.531	mg/L	0.0050	0.20%
QC value within limits for V 292.402 Recovery = 101.22%								
Zn 206.200†	30552.4	1.033	mg/L	0.0027	1.033	mg/L	0.0027	0.26%
QC value within limits for Zn 206.200 Recovery = 103.31%								
Ca 227.546†	4482.7	24.54	mg/L	0.103	24.54	mg/L	0.103	0.42%
QC value within limits for Ca 227.546 Recovery = 98.17%								
Sr 421.552†	275611.9	2.379	mg/L	0.0209	2.379	mg/L	0.0209	0.88%
QC value within limits for Sr 421.552 Recovery = 95.18%								
Al 394.401†	397995.9	9.821	mg/L	0.0005	9.821	mg/L	0.0005	0.01%

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QC value within limits for Al 394.401 Recovery = 98.21%
Al 237.313† 61395.2 10.07 mg/L 0.021 10.07 mg/L 0.021 0.21%
QC value within limits for Al 237.313 Recovery = 100.70%
All analyte(s) passed QC.

Sequence No.: 97 **Autosampler Location: 5**
Sample ID: CCB **Date Collected: 10/14/2014 11:54:16 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7015395.7	1.042	mg/L	0.0090				0.87%
Ag 328.068†	-29.0	-0.0001	mg/L	0.00014	-0.0001	mg/L	0.00014	122.16%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	231.3	0.0158	mg/L	0.00724	0.0158	mg/L	0.00724	45.94%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.5	0.0004	mg/L	0.00161	0.0004	mg/L	0.00161	424.59%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	2565.3	0.0235	mg/L	0.00338	0.0235	mg/L	0.00338	14.42%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	355.1	0.0042	mg/L	0.00119	0.0042	mg/L	0.00119	28.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	300.3	0.0001	mg/L	0.00001	0.0001	mg/L	0.00001	11.08%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	25.0	0.0003	mg/L	0.00008	0.0003	mg/L	0.00008	25.83%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	26.1	0.0012	mg/L	0.00053	0.0012	mg/L	0.00053	44.46%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	18.9	0.0002	mg/L	0.00005	0.0002	mg/L	0.00005	28.17%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	913.9	0.0035	mg/L	0.00091	0.0035	mg/L	0.00091	26.31%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	280.0	0.0050	mg/L	0.00058	0.0050	mg/L	0.00058	11.58%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	11.4	0.0171	mg/L	0.04536	0.0171	mg/L	0.04536	264.56%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	269.2	0.0262	mg/L	0.00097	0.0262	mg/L	0.00097	3.69%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	221.8	0.0006	mg/L	0.00008	0.0006	mg/L	0.00008	12.05%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	19.0	0.0011	mg/L	0.00006	0.0011	mg/L	0.00006	4.86%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	65.9	0.0016	mg/L	0.00035	0.0016	mg/L	0.00035	22.03%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	301.4	0.0550	mg/L	0.00362	0.0550	mg/L	0.00362	6.59%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	2.8	0.0005	mg/L	0.00041	0.0005	mg/L	0.00041	87.83%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	3.7	0.0019	mg/L	0.00139	0.0019	mg/L	0.00139	73.82%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.5	0.0007	mg/L	0.00113	0.0007	mg/L	0.00113	171.65%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	41.8	0.0088	mg/L	0.00195	0.0088	mg/L	0.00195	22.27%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	587.9	0.0011	mg/L	0.00021	0.0011	mg/L	0.00021	19.96%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	0.9	0.0005	mg/L	0.00198	0.0005	mg/L	0.00198	396.34%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	54.6	0.0008	mg/L	0.00037	0.0008	mg/L	0.00037	44.03%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	41.3	0.0014	mg/L	0.00009	0.0014	mg/L	0.00009	6.23%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	2.0	0.0109	mg/L	0.04340	0.0109	mg/L	0.04340	398.66%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	149.4	0.0013	mg/L	0.00015	0.0013	mg/L	0.00015	11.61%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Al 394.401†	73.7	0.0018	mg/L	0.00074	0.0018	mg/L	0.00074	40.47%

QC value within limits for Al 394.401 Recovery = Not calculated
Al 237.313† 15.1 0.0025 mg/L 0.00137 0.0025 mg/L 0.00137 55.24%
QC value within limits for Al 237.313 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 98 **Autosampler Location: 6**
Sample ID: MRL **Date Collected: 10/15/2014 12:00:17 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6863939.8	1.020	mg/L	0.0064				0.63%
Ag 328.068†	2552.1	0.0101	mg/L	0.00028	0.0101	mg/L	0.00028	2.74%
QC value within limits for Ag 328.068 Recovery = 101.12%								
Al 308.215†	3142.9	0.2140	mg/L	0.00778	0.2140	mg/L	0.00778	3.64%
QC value within limits for Al 308.215 Recovery = 107.01%								
As 188.979†	26.7	0.0212	mg/L	0.00005	0.0212	mg/L	0.00005	0.24%
QC value within limits for As 188.979 Recovery = 106.12%								
B 249.772†	23264.1	0.2124	mg/L	0.00459	0.2124	mg/L	0.00459	2.16%
QC value within limits for B 249.772 Recovery = 106.19%								
Ba 233.527†	18460.8	0.2187	mg/L	0.00270	0.2187	mg/L	0.00270	1.23%
QC value within limits for Ba 233.527 Recovery = 109.33%								
Be 313.107†	15016.2	0.0052	mg/L	0.00001	0.0052	mg/L	0.00001	0.23%
QC value within limits for Be 313.107 Recovery = 104.10%								
Cd 226.502†	892.6	0.0109	mg/L	0.00004	0.0109	mg/L	0.00004	0.35%
QC value within limits for Cd 226.502 Recovery = 108.98%								
Co 228.616†	1152.5	0.0527	mg/L	0.00014	0.0527	mg/L	0.00014	0.26%
QC value within limits for Co 228.616 Recovery = 105.38%								
Cr 267.716†	1205.5	0.0106	mg/L	0.00003	0.0106	mg/L	0.00003	0.29%
QC value within limits for Cr 267.716 Recovery = 105.59%								
Cu 324.752†	6938.4	0.0262	mg/L	0.00090	0.0262	mg/L	0.00090	3.45%
QC value within limits for Cu 324.752 Recovery = 104.80%								
Fe 259.939†	6073.8	0.1092	mg/L	0.00164	0.1092	mg/L	0.00164	1.50%
QC value within limits for Fe 259.939 Recovery = 109.18%								
K 766.490†	629.6	0.9433	mg/L	0.05761	0.9433	mg/L	0.05761	6.11%
QC value within limits for K 766.490 Recovery = 94.33%								
Mg 279.077†	10655.6	1.035	mg/L	0.0129	1.035	mg/L	0.0129	1.24%
QC value within limits for Mg 279.077 Recovery = 103.54%								
Mn 257.610†	5538.1	0.0162	mg/L	0.00024	0.0162	mg/L	0.00024	1.46%
QC value within limits for Mn 257.610 Recovery = 107.83%								
Mo 202.031†	436.4	0.0263	mg/L	0.00015	0.0263	mg/L	0.00015	0.56%
QC value within limits for Mo 202.031 Recovery = 105.21%								
Ni 231.604†	1758.0	0.0419	mg/L	0.00004	0.0419	mg/L	0.00004	0.08%
QC value within limits for Ni 231.604 Recovery = 104.85%								
Na 589.592†	5775.9	1.053	mg/L	0.0020	1.053	mg/L	0.0020	0.19%
QC value within limits for Na 589.592 Recovery = 105.31%								
Pb 220.353†	61.5	0.0103	mg/L	0.00012	0.0103	mg/L	0.00012	1.15%
QC value within limits for Pb 220.353 Recovery = 102.78%								
Sb 206.836†	120.0	0.0614	mg/L	0.00172	0.0614	mg/L	0.00172	2.81%
QC value within limits for Sb 206.836 Recovery = 102.32%								
Se 196.026†	9.1	0.0111	mg/L	0.00048	0.0111	mg/L	0.00048	4.33%
QC value within limits for Se 196.026 Recovery = 110.88%								
Sn 189.927†	2636.0	0.5525	mg/L	0.00256	0.5525	mg/L	0.00256	0.46%
QC value within limits for Sn 189.927 Recovery = 110.51%								
Ti 337.279†	29835.9	0.0536	mg/L	0.00079	0.0536	mg/L	0.00079	1.48%
QC value within limits for Ti 337.279 Recovery = 107.14%								
Tl 190.801†	34.6	0.0189	mg/L	0.00218	0.0189	mg/L	0.00218	11.54%
QC value within limits for Tl 190.801 Recovery = 94.61%								
V 292.402†	3418.0	0.0523	mg/L	0.00049	0.0523	mg/L	0.00049	0.94%
QC value within limits for V 292.402 Recovery = 104.60%								
Zn 206.200†	590.2	0.0200	mg/L	0.00003	0.0200	mg/L	0.00003	0.13%
QC value within limits for Zn 206.200 Recovery = 99.78%								
Ca 227.546†	159.1	0.8665	mg/L	0.01263	0.8665	mg/L	0.01263	1.46%
QC value within limits for Ca 227.546 Recovery = 86.65%								
Sr 421.552†	11693.7	0.1010	mg/L	0.00055	0.1010	mg/L	0.00055	0.54%
QC value within limits for Sr 421.552 Recovery = 100.95%								
Al 394.401†	7336.1	0.1810	mg/L	0.00196	0.1810	mg/L	0.00196	1.08%

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QC value within limits for Al 394.401 Recovery = 90.51%

Al 237.313†	1196.2	0.1962 mg/L	0.00192	0.1962 mg/L	0.00192	0.98%

QC value within limits for Al 237.313 Recovery = 98.10%
All analyte(s) passed QC.

Sequence No.: 99
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 10/15/2014 12:06:15 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6479054.0	0.9625	mg/L	0.00265				0.28%
Ag 328.068†	-6850.7	-0.0019	mg/L	0.00024	-0.0019	mg/L	0.00024	12.68%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	3821216.6	260.3	mg/L	2.71	260.3	mg/L	2.71	1.04%
QC value within limits for Al 308.215 Recovery = 104.12%								
As 188.979†	12.5	-0.0004	mg/L	0.00131	-0.0004	mg/L	0.00131	337.28%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	36641.8	-0.1346	mg/L	0.00313	-0.1346	mg/L	0.00313	2.33%
Ba 233.527†	275.3	0.0033	mg/L	0.00003	0.0033	mg/L	0.00003	0.95%
Be 313.107†	-1188.5	-0.0004	mg/L	0.00001	-0.0004	mg/L	0.00001	2.14%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	1069.1	0.0010	mg/L	0.00021	0.0010	mg/L	0.00021	21.86%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	14.9	0.0007	mg/L	0.00007	0.0007	mg/L	0.00007	9.61%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3556.3	-0.0007	mg/L	0.00029	-0.0007	mg/L	0.00029	43.97%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-1811.1	0.0017	mg/L	0.00016	0.0017	mg/L	0.00016	9.81%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	5079906.9	91.31	mg/L	0.123	91.31	mg/L	0.123	0.13%
QC value within limits for Fe 259.939 Recovery = 91.31%								
K 766.490†	22.0	0.0329	mg/L	0.06331	0.0329	mg/L	0.06331	192.34%
Mg 279.077†	2723933.1	264.7	mg/L	2.59	264.7	mg/L	2.59	0.98%
QC value within limits for Mg 279.077 Recovery = 105.88%								
Mn 257.610†	-5304.6	-0.0033	mg/L	0.00033	-0.0033	mg/L	0.00033	9.77%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	1.9	0.0001	mg/L	0.00004	0.0001	mg/L	0.00004	33.58%
Ni 231.604†	-111.0	-0.0026	mg/L	0.00015	-0.0026	mg/L	0.00015	5.68%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	114.4	0.0209	mg/L	0.00555	0.0209	mg/L	0.00555	26.59%
Pb 220.353†	-146.9	0.0017	mg/L	0.00035	0.0017	mg/L	0.00035	20.07%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	42.8	-0.0013	mg/L	0.00146	-0.0013	mg/L	0.00146	116.44%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-20.5	0.0005	mg/L	0.00424	0.0005	mg/L	0.00424	836.48%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-144.3	-0.0606	mg/L	0.00114	-0.0606	mg/L	0.00114	1.87%
Ti 337.279†	306.2	0.0005	mg/L	0.00003	0.0005	mg/L	0.00003	4.94%
Tl 190.801†	31.1	0.0024	mg/L	0.00081	0.0024	mg/L	0.00081	33.38%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	433.2	0.0013	mg/L	0.00017	0.0013	mg/L	0.00017	12.90%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	159.0	0.0054	mg/L	0.00013	0.0054	mg/L	0.00013	2.36%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	47075.8	260.4	mg/L	1.53	260.4	mg/L	1.53	0.59%
QC value within limits for Ca 227.546 Recovery = 104.15%								
Sr 421.552†	488.2	0.0042	mg/L	0.00023	0.0042	mg/L	0.00023	5.51%
Al 394.401†	10902414.2	269.0	mg/L	0.87	269.0	mg/L	0.87	0.32%
QC value within limits for Al 394.401 Recovery = 107.61%								
Al 237.313†	1588040.5	260.5	mg/L	2.59	260.5	mg/L	2.59	0.99%
QC value within limits for Al 237.313 Recovery = 104.19%								

All analyte(s) passed QC.

Sequence No.: 100
Sample ID: ICSAB

Autosampler Location: 8
Date Collected: 10/15/2014 12:12:31 AM

00813

Method: DV200-6010C Opt3 Page 74 Date: 10/15/2014 12:23:01 AM

Analyst:
Initial Sample Wt:
Dilution:

Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6421430.1	0.9539	mg/L	0.00673				0.71%
Ag 328.068†	45893.6	0.2066	mg/L	0.00200	0.2066	mg/L	0.00200	0.97%
QC value within limits for Ag 328.068 Recovery = 103.31%								
Al 308.215†	3861772.5	263.1	mg/L	0.58	263.1	mg/L	0.58	0.22%
QC value within limits for Al 308.215 Recovery = 105.23%								
As 188.979†	136.2	0.0978	mg/L	0.00047	0.0978	mg/L	0.00047	0.48%
QC value within limits for As 188.979 Recovery = 97.84%								
B 249.772†	36377.8	-0.1396	mg/L	0.00375	-0.1396	mg/L	0.00375	2.68%
Ba 233.527†	45081.4	0.5340	mg/L	0.00837	0.5340	mg/L	0.00837	1.57%
QC value within limits for Ba 233.527 Recovery = 106.80%								
Be 313.107†	1469639.5	0.5094	mg/L	0.00342	0.5094	mg/L	0.00342	0.67%
QC value within limits for Be 313.107 Recovery = 101.88%								
Cd 226.502†	81746.0	0.9872	mg/L	0.01752	0.9872	mg/L	0.01752	1.77%
QC value within limits for Cd 226.502 Recovery = 98.72%								
Co 228.616†	10708.4	0.4896	mg/L	0.00599	0.4896	mg/L	0.00599	1.22%
QC value within limits for Co 228.616 Recovery = 97.92%								
Cr 267.716†	55636.4	0.5128	mg/L	0.00695	0.5128	mg/L	0.00695	1.35%
QC value within limits for Cr 267.716 Recovery = 102.57%								
Cu 324.752†	139579.0	0.5354	mg/L	0.00171	0.5354	mg/L	0.00171	0.32%
QC value within limits for Cu 324.752 Recovery = 107.08%								
Fe 259.939†	5107100.2	91.80	mg/L	0.371	91.80	mg/L	0.371	0.40%
QC value within limits for Fe 259.939 Recovery = 91.80%								
K 766.490†	11.5	0.0172	mg/L	0.06967	0.0172	mg/L	0.06967	405.61%
Mg 279.077†	2750798.6	267.3	mg/L	1.90	267.3	mg/L	1.90	0.71%
QC value within limits for Mg 279.077 Recovery = 106.92%								
Mn 257.610†	172842.9	0.5165	mg/L	0.00748	0.5165	mg/L	0.00748	1.45%
QC value within limits for Mn 257.610 Recovery = 103.31%								
Mo 202.031†	-0.9	-0.0001	mg/L	0.00010	-0.0001	mg/L	0.00010	194.00%
Ni 231.604†	40732.2	0.9718	mg/L	0.01555	0.9718	mg/L	0.01555	1.60%
QC value within limits for Ni 231.604 Recovery = 97.18%								
Na 589.592†	145.9	0.0266	mg/L	0.00988	0.0266	mg/L	0.00988	37.14%
Pb 220.353†	153.1	0.0521	mg/L	0.00200	0.0521	mg/L	0.00200	3.83%
QC value within limits for Pb 220.353 Recovery = 104.12%								
Sb 206.836†	1265.5	0.6241	mg/L	0.00970	0.6241	mg/L	0.00970	1.55%
QC value within limits for Sb 206.836 Recovery = 104.01%								
Se 196.026†	23.6	0.0541	mg/L	0.00039	0.0541	mg/L	0.00039	0.73%
QC value within limits for Se 196.026 Recovery = 108.19%								
Sn 189.927†	-119.2	-0.0557	mg/L	0.00064	-0.0557	mg/L	0.00064	1.16%
Ti 337.279†	285.3	0.0005	mg/L	0.00002	0.0005	mg/L	0.00002	3.04%
Tl 190.801†	224.0	0.1077	mg/L	0.00101	0.1077	mg/L	0.00101	0.93%
QC value within limits for Tl 190.801 Recovery = 107.73%								
V 292.402†	32652.3	0.4944	mg/L	0.00443	0.4944	mg/L	0.00443	0.90%
QC value within limits for V 292.402 Recovery = 98.88%								
Zn 206.200†	28969.1	0.9796	mg/L	0.01825	0.9796	mg/L	0.01825	1.86%
QC value within limits for Zn 206.200 Recovery = 97.96%								
Ca 227.546†	47238.0	261.3	mg/L	1.50	261.3	mg/L	1.50	0.57%
QC value within limits for Ca 227.546 Recovery = 104.51%								
Sr 421.552†	467.7	0.0040	mg/L	0.00008	0.0040	mg/L	0.00008	1.98%
Al 394.401†	10872103.8	268.3	mg/L	1.03	268.3	mg/L	1.03	0.38%
QC value within limits for Al 394.401 Recovery = 107.31%								
Al 237.313†	1604111.1	263.1	mg/L	0.89	263.1	mg/L	0.89	0.34%
QC value within limits for Al 237.313 Recovery = 105.24%								

All analyte(s) passed QC.

Sequence No.: 101
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 10/15/2014 12:18:59 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected	Calib	Sample

00814

Method: DV200-6010C Opt3 Page 75 Date: 10/15/2014 12:29:05 AM

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	6831630.6	1.015	mg/L	0.0073				0.72%
Ag 328.068†	127865.7	0.5066	mg/L	0.00084	0.5066	mg/L	0.00084	0.17%
QC value within limits for Ag 328.068 Recovery = 101.31%								
Al 308.215†	145190.3	9.889	mg/L	0.0588	9.889	mg/L	0.0588	0.59%
QC value within limits for Al 308.215 Recovery = 98.89%								
As 188.979†	1243.9	0.9879	mg/L	0.01469	0.9879	mg/L	0.01469	1.49%
QC value within limits for As 188.979 Recovery = 98.79%								
B 249.772†	266127.7	2.409	mg/L	0.0074	2.409	mg/L	0.0074	0.31%
QC value within limits for B 249.772 Recovery = 96.38%								
Ba 233.527†	884610.5	10.48	mg/L	0.020	10.48	mg/L	0.020	0.19%
QC value within limits for Ba 233.527 Recovery = 104.78%								
Be 313.107†	734345.1	0.2545	mg/L	0.00019	0.2545	mg/L	0.00019	0.07%
QC value within limits for Be 313.107 Recovery = 101.82%								
Cd 226.502†	42179.6	0.5150	mg/L	0.00080	0.5150	mg/L	0.00080	0.16%
QC value within limits for Cd 226.502 Recovery = 102.99%								
Co 228.616†	55913.4	2.556	mg/L	0.0059	2.556	mg/L	0.0059	0.23%
QC value within limits for Co 228.616 Recovery = 102.25%								
Cr 267.716†	59603.8	0.5195	mg/L	0.00048	0.5195	mg/L	0.00048	0.09%
QC value within limits for Cr 267.716 Recovery = 103.90%								
Cu 324.752†	332040.2	1.254	mg/L	0.0047	1.254	mg/L	0.0047	0.37%
QC value within limits for Cu 324.752 Recovery = 100.30%								
Fe 259.939†	287274.0	5.164	mg/L	0.0134	5.164	mg/L	0.0134	0.26%
QC value within limits for Fe 259.939 Recovery = 103.28%								
K 766.490†	16525.9	24.76	mg/L	0.324	24.76	mg/L	0.324	1.31%
QC value within limits for K 766.490 Recovery = 99.04%								
Mg 279.077†	260698.0	25.33	mg/L	0.051	25.33	mg/L	0.051	0.20%
QC value within limits for Mg 279.077 Recovery = 101.33%								
Mn 257.610†	263541.2	0.7697	mg/L	0.00128	0.7697	mg/L	0.00128	0.17%
QC value within limits for Mn 257.610 Recovery = 102.62%								
Mo 202.031†	40841.5	2.461	mg/L	0.0045	2.461	mg/L	0.0045	0.18%
QC value within limits for Mo 202.031 Recovery = 98.45%								
Ni 231.604†	86027.2	2.052	mg/L	0.0020	2.052	mg/L	0.0020	0.10%
QC value within limits for Ni 231.604 Recovery = 102.62%								
Na 589.592†	135616.5	24.73	mg/L	0.332	24.73	mg/L	0.332	1.34%
QC value within limits for Na 589.592 Recovery = 98.90%								
Pb 220.353†	3036.4	0.5075	mg/L	0.00695	0.5075	mg/L	0.00695	1.37%
QC value within limits for Pb 220.353 Recovery = 101.50%								
Sb 206.836†	9592.2	4.906	mg/L	0.0508	4.906	mg/L	0.0508	1.04%
QC value within limits for Sb 206.836 Recovery = 98.13%								
Se 196.026†	420.3	0.5105	mg/L	0.00732	0.5105	mg/L	0.00732	1.43%
QC value within limits for Se 196.026 Recovery = 102.09%								
Sn 189.927†	24679.6	5.172	mg/L	0.0123	5.172	mg/L	0.0123	0.24%
QC value within limits for Sn 189.927 Recovery = 103.44%								
Ti 337.279†	1392368.5	2.500	mg/L	0.0022	2.500	mg/L	0.0022	0.09%
QC value within limits for Ti 337.279 Recovery = 100.00%								
Tl 190.801†	1849.7	1.011	mg/L	0.0115	1.011	mg/L	0.0115	1.14%
QC value within limits for Tl 190.801 Recovery = 101.09%								
V 292.402†	163177.8	2.497	mg/L	0.0031	2.497	mg/L	0.0031	0.12%
QC value within limits for V 292.402 Recovery = 99.88%								
Zn 206.200†	30447.8	1.030	mg/L	0.0013	1.030	mg/L	0.0013	0.13%
QC value within limits for Zn 206.200 Recovery = 102.96%								
Ca 227.546†	4499.8	24.64	mg/L	0.204	24.64	mg/L	0.204	0.83%
QC value within limits for Ca 227.546 Recovery = 98.54%								
Sr 421.552†	275538.6	2.379	mg/L	0.0331	2.379	mg/L	0.0331	1.39%
QC value within limits for Sr 421.552 Recovery = 95.15%								
Al 394.401†	398709.3	9.839	mg/L	0.0656	9.839	mg/L	0.0656	0.67%
QC value within limits for Al 394.401 Recovery = 98.39%								
Al 237.313†	61368.1	10.07	mg/L	0.059	10.07	mg/L	0.059	0.59%
QC value within limits for Al 237.313 Recovery = 100.66%								

All analyte(s) passed QC.

Sequence No.: 102
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 10/15/2014 12:25:25 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Mean Corrected Calib Sample

00815

Method: DV200-6010C Opt3 Page 76 Date: 10/15/2014 12:35:10 AM

Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 371.029	6876382.3	1.022 mg/L	0.0076			0.74%
Ag 328.068†	-5.1	0.0000 mg/L	0.00031	0.0000 mg/L	0.00031	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 308.215†	791.8	0.0539 mg/L	0.00711	0.0539 mg/L	0.00711	13.18%
QC value greater than the upper limit for Al 308.215 Recovery = Not calculated						
As 188.979†	-1.1	-0.0009 mg/L	0.00021	-0.0009 mg/L	0.00021	23.16%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.772†	3197.4	0.0291 mg/L	0.00414	0.0291 mg/L	0.00414	14.21%
QC value within limits for B 249.772 Recovery = Not calculated						
Ba 233.527†	281.1	0.0033 mg/L	0.00055	0.0033 mg/L	0.00055	16.46%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-158.9	-0.0001 mg/L	0.00005	-0.0001 mg/L	0.00005	94.96%
QC value within limits for Be 313.107 Recovery = Not calculated						
Cd 226.502†	16.5	0.0002 mg/L	0.00006	0.0002 mg/L	0.00006	32.22%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	35.0	0.0016 mg/L	0.00022	0.0016 mg/L	0.00022	13.97%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	11.1	0.0001 mg/L	0.00003	0.0001 mg/L	0.00003	26.67%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	1216.2	0.0046 mg/L	0.00066	0.0046 mg/L	0.00066	14.43%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	1377.2	0.0248 mg/L	0.00102	0.0248 mg/L	0.00102	4.11%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	18.6	0.0278 mg/L	0.00189	0.0278 mg/L	0.00189	6.79%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	236.3	0.0230 mg/L	0.00181	0.0230 mg/L	0.00181	7.86%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	180.4	0.0005 mg/L	0.00001	0.0005 mg/L	0.00001	1.93%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	10.2	0.0006 mg/L	0.00003	0.0006 mg/L	0.00003	5.10%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	79.6	0.0019 mg/L	0.00048	0.0019 mg/L	0.00048	25.01%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	271.5	0.0495 mg/L	0.00624	0.0495 mg/L	0.00624	12.60%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	4.8	0.0008 mg/L	0.00094	0.0008 mg/L	0.00094	117.18%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	5.6	0.0029 mg/L	0.00064	0.0029 mg/L	0.00064	22.47%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	1.0	0.0012 mg/L	0.00032	0.0012 mg/L	0.00032	26.26%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	45.4	0.0095 mg/L	0.00167	0.0095 mg/L	0.00167	17.61%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	412.6	0.0007 mg/L	0.00009	0.0007 mg/L	0.00009	11.79%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	-0.3	-0.0002 mg/L	0.00014	-0.0002 mg/L	0.00014	81.26%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	31.4	0.0005 mg/L	0.00018	0.0005 mg/L	0.00018	37.98%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	54.8	0.0019 mg/L	0.00001	0.0019 mg/L	0.00001	0.46%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	2.6	0.0155 mg/L	0.01567	0.0155 mg/L	0.01567	101.02%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	99.0	0.0009 mg/L	0.00028	0.0009 mg/L	0.00028	33.18%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 394.401†	620.2	0.0153 mg/L	0.00036	0.0153 mg/L	0.00036	2.33%
QC value within limits for Al 394.401 Recovery = Not calculated						
Al 237.313†	102.8	0.0169 mg/L	0.00277	0.0169 mg/L	0.00277	16.41%
QC value within limits for Al 237.313 Recovery = Not calculated						

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QC Failed. Continue with analysis.

End run here - redigest 220437

Sequence No.: 103
Sample ID: PBT-220437
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 96
Date Collected: 10/15/2014 12:31:29 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: PBT-220437

	Mean Corrected	Calib	Sample

Method: DV200-6010C Opt3 Page 77 Date: 10/15/2014 12:41:11 AM

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	6927153.6	1.029	mg/L	0.0052				0.50%
Ag 328.068†	63.3	0.0003	mg/L	0.00001				5.54%
Al 308.215†	665.7	0.0454	mg/L	0.00491				10.82%
As 188.979†	-0.2	-0.0002	mg/L	0.00194				>999.9%
B 249.772†	1573.9	0.0142	mg/L	0.00138				9.73%
Ba 233.527†	259.3	0.0031	mg/L	0.00009				2.80%
Be 313.107†	205.0	0.0001	mg/L	0.00003				45.17%
Cd 226.502†	1.3	0.0000	mg/L	0.00006				573.63%
Co 228.616†	33.7	0.0015	mg/L	0.00017				11.18%
Cr 267.716†	65.7	0.0006	mg/L	0.00002				4.36%
Cu 324.752†	1190.5	0.0045	mg/L	0.00087				19.37%
Fe 259.939†	1913.7	0.0344	mg/L	0.00167				4.87%
K 766.490†	29.0	0.0434	mg/L	0.05075				116.84%
Mg 279.077†	200.3	0.0195	mg/L	0.00169				8.67%
Mn 257.610†	796.1	0.0023	mg/L	0.00003				1.08%
Mo 202.031†	13.9	0.0008	mg/L	0.00004				5.23%
Ni 231.604†	92.0	0.0022	mg/L	0.00009				4.19%
Na 589.592†	342.1	0.0624	mg/L	0.00266				4.27%
Pb 220.353†	-0.5	-0.0001	mg/L	0.00050				612.34%
Sb 206.836†	7.0	0.0036	mg/L	0.00094				26.12%
Se 196.026†	1.8	0.0022	mg/L	0.00065				29.46%
Sn 189.927†	103.0	0.0216	mg/L	0.00295				13.67%
Ti 337.279†	618.4	0.0011	mg/L	0.00006				5.52%
Tl 190.801†	-7.9	-0.0043	mg/L	0.00113				26.12%
V 292.402†	16.0	0.0002	mg/L	0.00028				115.70%
Zn 206.200†	82.0	0.0028	mg/L	0.00019				6.95%
Ca 227.546†	10.9	0.0611	mg/L	0.02641				43.20%
Sr 421.552†	89.2	0.0008	mg/L	0.00006				8.40%
Al 394.401†	1296.3	0.0320	mg/L	0.00123				3.85%
Al 237.313†	202.8	0.0333	mg/L	0.00335				10.08%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 104
Sample ID: LCST 6X
Analyst:
Initial Sample Wt:
Dilution: 6X

Autosampler Location: 97
Date Collected: 10/15/2014 12:37:33 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCST 6X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6943161.4	1.031	mg/L	0.0127				1.23%
Ag 328.068†	21.3	0.0001	mg/L	0.00023				265.34%
Al 308.215†	414.3	0.0282	mg/L	0.00668				23.66%
As 188.979†	0.3	0.0003	mg/L	0.00019				67.85%
B 249.772†	548.7	0.0050	mg/L	0.00073				14.77%
Ba 233.527†	52.7	0.0006	mg/L	0.00003				5.08%
Be 313.107†	-106.1	0.0000	mg/L	0.00002				46.89%
Cd 226.502†	0.9	0.0000	mg/L	0.00004				465.12%
Co 228.616†	14.7	0.0007	mg/L	0.00003				3.88%
Cr 267.716†	2.2	0.0000	mg/L	0.00004				181.60%
Cu 324.752†	162.3	0.0006	mg/L	0.00024				39.86%
Fe 259.939†	831.3	0.0149	mg/L	0.00023				1.51%
K 766.490†	28.5	0.0427	mg/L	0.02128				49.80%
Mg 279.077†	70.5	0.0069	mg/L	0.00259				37.84%
Mn 257.610†	77.9	0.0002	mg/L	0.00002				8.34%
Mo 202.031†	-0.5	0.0000	mg/L	0.00019				580.40%
Ni 231.604†	20.4	0.0005	mg/L	0.00001				1.33%
Na 589.592†	54.7	0.0100	mg/L	0.00170				16.99%
Pb 220.353†	-5.1	-0.0009	mg/L	0.00018				20.78%
Sb 206.836†	2.5	0.0013	mg/L	0.00084				65.02%
Se 196.026†	1.3	0.0015	mg/L	0.00075				49.51%
Sn 189.927†	6.5	0.0014	mg/L	0.00028				20.58%
Ti 337.279†	90.0	0.0002	mg/L	0.00005				32.49%
Tl 190.801†	-2.3	-0.0012	mg/L	0.00038				30.64%
V 292.402†	-9.8	-0.0002	mg/L	0.00005				30.87%
Zn 206.200†	56.4	0.0019	mg/L	0.00000				0.04%
Ca 227.546†	-8.7	-0.0461	mg/L	0.00126				2.74%
Sr 421.552†	22.1	0.0002	mg/L	0.00022				116.90%

Al 394.401†	149.5	0.0037	mg/L	0.00014	3.85%
Al 237.313†	16.6	0.0027	mg/L	0.00009	3.39%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 105
Sample ID: LCST 220437
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 98
Date Collected: 10/15/2014 12:43:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCST 220437

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6866450.8	1.020	mg/L	0.0053				0.52%
Ag 328.068†	-19.6	-0.0001	mg/L	0.00003				41.07%
Al 308.215†	462.3	0.0315	mg/L	0.01495				47.45%
As 188.979†	1.1	0.0009	mg/L	0.00007				7.83%
B 249.772†	484.2	0.0043	mg/L	0.00057				13.12%
Ba 233.527†	127.6	0.0015	mg/L	0.00006				3.75%
Be 313.107†	20.9	0.0000	mg/L	0.00006				826.86%
Cd 226.502†	-11.6	-0.0001	mg/L	0.00007				45.18%
Co 228.616†	24.6	0.0011	mg/L	0.00014				12.16%
Cr 267.716†	57.2	0.0005	mg/L	0.00003				6.22%
Cu 324.752†	451.3	0.0017	mg/L	0.00082				48.26%
Fe 259.939†	1418.8	0.0255	mg/L	0.00154				6.05%
K 766.490†	3.1	0.0047	mg/L	0.01691				361.98%
Mg 279.077†	-0.2	0.0000	mg/L	0.00075				>999.9%
Mn 257.610†	222.9	0.0007	mg/L	0.00002				3.34%
Mo 202.031†	5.0	0.0003	mg/L	0.00000				0.33%
Ni 231.604†	58.4	0.0014	mg/L	0.00003				2.18%
Na 589.592†	168.3	0.0307	mg/L	0.00274				8.93%
Pb 220.353†	-1.4	-0.0002	mg/L	0.00014				64.63%
Sb 206.836†	6.8	0.0035	mg/L	0.00057				16.37%
Se 196.026†	0.9	0.0011	mg/L	0.00123				116.61%
Sn 189.927†	81.2	0.0170	mg/L	0.00103				6.04%
Ti 337.279†	342.4	0.0006	mg/L	0.00004				7.29%
Tl 190.801†	-7.2	-0.0040	mg/L	0.00037				9.39%
V 292.402†	1.9	0.0000	mg/L	0.00036				>999.9%
Zn 206.200†	28.0	0.0009	mg/L	0.00007				7.04%
Ca 227.546†	2.7	0.0160	mg/L	0.02252				140.57%
Sr 421.552†	37.1	0.0003	mg/L	0.00003				8.05%
Al 394.401†	691.3	0.0171	mg/L	0.00061				3.60%
Al 237.313†	114.6	0.0188	mg/L	0.00009				0.47%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 106
Sample ID: LCSW-220437
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 99
Date Collected: 10/15/2014 12:49:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-220437

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6761653.6	1.004	mg/L	0.0006				0.06%
Ag 328.068†	12531.6	0.0498	mg/L	0.00074				1.48%
Al 308.215†	28439.2	1.937	mg/L	0.0261				1.35%
As 188.979†	48.7	0.0386	mg/L	0.00061				1.59%
B 249.772†	103658.6	0.9436	mg/L	0.01639				1.74%
Ba 233.527†	172081.0	2.038	mg/L	0.0207				1.02%
Be 313.107†	148049.8	0.0513	mg/L	0.00054				1.05%
Cd 226.502†	4102.3	0.0500	mg/L	0.00003				0.06%
Co 228.616†	11100.6	0.5075	mg/L	0.00670				1.32%
Cr 267.716†	24107.8	0.2093	mg/L	0.00215				1.03%
Cu 324.752†	70771.6	0.2672	mg/L	0.00296				1.11%
Fe 259.939†	58216.6	1.046	mg/L	0.0094				0.90%
K 766.490†	13155.2	19.71	mg/L	0.008				0.04%
Mg 279.077†	20517.5	1.994	mg/L	0.0198				0.99%

Method: DV200-6010C Opt3 Page 79 Date: 10/15/2014 1:05:56 AM

Mn 257.610†	176077.3	0.5139 mg/L	0.00554	1.08%
Mo 202.031†	8017.6	0.4832 mg/L	0.00116	0.24%
Ni 231.604†	21706.2	0.5179 mg/L	0.00466	0.90%
Na 589.592†	108954.2	19.86 mg/L	0.045	0.22%
Pb 220.353†	2980.5	0.4974 mg/L	0.00121	0.24%
Sb 206.836†	938.5	0.4800 mg/L	0.00069	0.14%
Se 196.026†	8.0	0.0099 mg/L	0.00095	9.54%
Sn 189.927†	52.1	0.0107 mg/L	0.00017	1.57%
Ti 337.279†	275598.9	0.4949 mg/L	0.00530	1.07%
Tl 190.801†	3431.9	1.876 mg/L	0.0017	0.09%
V 292.402†	32265.9	0.4937 mg/L	0.00200	0.40%
Zn 206.200†	15533.2	0.5252 mg/L	0.00368	0.70%
Ca 227.546†	365.8	2.043 mg/L	0.0105	0.51%
Sr 421.552†	66.9	0.0006 mg/L	0.00015	25.27%
Al 394.401†	78154.2	1.929 mg/L	0.0204	1.06%
Al 237.313†	11903.5	1.952 mg/L	0.0200	1.02%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 107 **Autosampler Location: 100**
Sample ID: MBLK 12282-01 **Date Collected: 10/15/2014 12:55:47 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: MBLK 12282-01

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6148733.3	0.9134	mg/L	0.00238				0.26%
Ag 328.068†	-54.7	-0.0002	mg/L	0.00030				141.58%
Al 308.215†	1814.1	0.1236	mg/L	0.00233				1.88%
As 188.979†	10.3	0.0082	mg/L	0.00040				4.91%
B 249.772†	2422.5	0.0220	mg/L	0.00195				8.85%
Ba 233.527†	102.7	0.0012	mg/L	0.00004				3.35%
Be 313.107†	-1414.0	-0.0005	mg/L	0.00001				2.10%
Cd 226.502†	-34.6	-0.0004	mg/L	0.00004				9.11%
Co 228.616†	-0.2	0.0000	mg/L	0.00020				>999.9%
Cr 267.716†	237.1	0.0021	mg/L	0.00007				3.58%
Cu 324.752†	1760.2	0.0066	mg/L	0.00010				1.46%
Fe 259.939†	1451.8	0.0261	mg/L	0.00039				1.50%
K 766.490†	1062.6	1.592	mg/L	0.0111				0.70%
Mg 279.077†	-270.2	-0.0263	mg/L	0.00135				5.15%
Mn 257.610†	676.3	0.0020	mg/L	0.00000				0.15%
Mo 202.031†	8.0	0.0005	mg/L	0.00011				23.49%
Ni 231.604†	-5.3	-0.0001	mg/L	0.00002				14.79%
Na 589.592†	8553685.4	1560	mg/L	5.1				0.33%
Pb 220.353†	1.7	0.0003	mg/L	0.00001				1.68%
Sb 206.836†	8.3	0.0043	mg/L	0.00078				18.30%
Se 196.026†	2.3	0.0028	mg/L	0.00273				97.44%
Sn 189.927†	45.5	0.0095	mg/L	0.00028				2.91%
Ti 337.279†	499.3	0.0009	mg/L	0.00019				21.08%
Tl 190.801†	4.9	0.0027	mg/L	0.00060				22.41%
V 292.402†	-4.2	-0.0001	mg/L	0.00026				385.88%
Zn 206.200†	105.6	0.0036	mg/L	0.00006				1.75%
Ca 227.546†	5.3	0.0305	mg/L	0.01944				63.85%
Sr 421.552†	81.5	0.0007	mg/L	0.00001				1.46%
Al 394.401†	1558.0	0.0384	mg/L	0.00122				3.17%
Al 237.313†	201.3	0.0330	mg/L	0.00172				5.21%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 108 **Autosampler Location: 101**
Sample ID: R1407951-002 **Date Collected: 10/15/2014 1:02:00 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: R1407951-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD

Method: DV200-6010C Opt3 Page 80 Date: 10/15/2014 1:12:24 AM

Y 371.029	6125618.2	0.9100 mg/L	0.00026	0.03%
Ag 328.068†	-1197.7	0.0014 mg/L	0.00037	26.03%
Al 308.215†	382158.1	26.04 mg/L	0.085	0.33%
As 188.979†	19.7	0.0146 mg/L	0.00076	5.23%
B 249.772†	30012.3	0.1649 mg/L	0.00083	0.50%
Ba 233.527†	77696.4	0.9203 mg/L	0.00158	0.17%
Be 313.107†	6482.5	0.0022 mg/L	0.00006	2.60%
Cd 226.502†	275.9	0.0003 mg/L	0.00003	10.30%
Co 228.616†	498.3	0.0228 mg/L	0.00023	1.01%
Cr 267.716†	2743.0	0.0275 mg/L	0.00010	0.36%
Cu 324.752†	7077.2	0.0288 mg/L	0.00045	1.57%
Fe 259.939†	1240345.1	22.30 mg/L	0.002	0.01%
K 766.490†	8747.5	13.11 mg/L	0.115	0.88%
Mg 279.077†	283419.8	27.54 mg/L	0.084	0.30%
Mn 257.610†	3644998.9	10.64 mg/L	0.000	0.00%
Mo 202.031†	28.8	0.0017 mg/L	0.00008	4.57%
Ni 231.604†	1477.3	0.0352 mg/L	0.00050	1.41%
Na 589.592†	8361125.9	1524 mg/L	2.4	0.15%
Pb 220.353†	44.0	0.0096 mg/L	0.00067	7.00%
Sb 206.836†	11.9	0.0038 mg/L	0.00114	30.21%
Se 196.026†	1.4	0.0073 mg/L	0.00014	1.87%
Sn 189.927†	12.9	-0.0003 mg/L	0.00068	203.86%
Ti 337.279†	308738.3	0.5544 mg/L	0.00117	0.21%
Tl 190.801†	18.8	0.0092 mg/L	0.00177	19.11%
V 292.402†	2380.7	0.0351 mg/L	0.00021	0.58%
Zn 206.200†	2343.4	0.0792 mg/L	0.00098	1.23%
Ca 227.546†	5542.6	31.32 mg/L	0.041	0.13%
Sr 421.552†	20137.2	0.1738 mg/L	0.00100	0.58%
Al 394.401†	1060547.6	26.17 mg/L	0.032	0.12%
Al 237.313†	142789.7	23.42 mg/L	0.008	0.03%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 109
Sample ID: R1408007-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 102
Date Collected: 10/15/2014 1:08:20 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408007-001

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5839263.7	0.8674	mg/L	0.00755				0.87%
Ag 328.068†	-745.1	-0.0020	mg/L	0.00025				12.83%
Al 308.215†	5864.7	0.3461	mg/L	0.00674				1.95%
As 188.979†	17.0	0.0135	mg/L	0.00099				7.35%
B 249.772†	26172.7	0.2031	mg/L	0.00136				0.67%
Ba 233.527†	198724.8	2.354	mg/L	0.0010				0.04%
Be 313.107†	99.5	0.0000	mg/L	0.00003				98.91%
Cd 226.502†	159.5	0.0015	mg/L	0.00002				1.07%
Co 228.616†	254.5	0.0116	mg/L	0.00036				3.11%
Cr 267.716†	432.3	0.0058	mg/L	0.00003				0.56%
Cu 324.752†	11880.6	0.0452	mg/L	0.00022				0.49%
Fe 259.939†	196102.4	3.525	mg/L	0.0019				0.05%
K 766.490†	12907.4	19.34	mg/L	0.063				0.32%
Mg 279.077†	198581.1	19.30	mg/L	0.041				0.21%
Mn 257.610†	2368766.2	6.912	mg/L	0.0312				0.45%
Mo 202.031†	144.8	0.0087	mg/L	0.00005				0.53%
Ni 231.604†	1210.6	0.0289	mg/L	0.00026				0.90%
Na 589.592†	8460584.3	1543	mg/L	24.7				1.60%
Pb 220.353†	516.5	0.0861	mg/L	0.00215				2.50%
Sb 206.836†	11.5	0.0058	mg/L	0.00087				14.96%
Se 196.026†	4.5	0.0063	mg/L	0.00491				78.36%
Sn 189.927†	-145.5	-0.0305	mg/L	0.00020				0.66%
Ti 337.279†	1434.8	0.0026	mg/L	0.00013				5.15%
Tl 190.801†	23.7	0.0094	mg/L	0.00133				14.21%
V 292.402†	32.3	0.0003	mg/L	0.00003				9.58%
Zn 206.200†	6295.7	0.2129	mg/L	0.00224				1.05%
Ca 227.546†	74992.5	405.3	mg/L	1.10				0.27%
Sr 421.552†	343486.9	2.965	mg/L	0.0530				1.79%
Al 394.401†	12019.8	0.2966	mg/L	0.00030				0.10%

Al 237.313†	1327.0	0.2177	mg/L	0.00550	2.53%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 110
Sample ID: R1408017-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 10/15/2014 1:14:47 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5995270.4	0.8906	mg/L	0.00097				0.11%
Ag 328.068†	-834.2	0.0007	mg/L	0.00021				29.97%
Al 308.215†	63680.3	4.341	mg/L	0.0201				0.46%
As 188.979†	18.3	0.0143	mg/L	0.00225				15.67%
B 249.772†	10235.5	0.0232	mg/L	0.00059				2.52%
Ba 233.527†	48071.1	0.5694	mg/L	0.00053				0.09%
Be 313.107†	1404.7	0.0005	mg/L	0.00005				10.63%
Cd 226.502†	187.8	0.0003	mg/L	0.00002				7.32%
Co 228.616†	321.4	0.0147	mg/L	0.00001				0.08%
Cr 267.716†	277.1	0.0041	mg/L	0.00001				0.24%
Cu 324.752†	3621.4	0.0150	mg/L	0.00020				1.35%
Fe 259.939†	807355.7	14.51	mg/L	0.010				0.07%
K 766.490†	2993.3	4.485	mg/L	0.0651				1.45%
Mg 279.077†	105871.8	10.29	mg/L	0.002				0.02%
Mn 257.610†	2829747.4	8.259	mg/L	0.0025				0.03%
Mo 202.031†	13.7	0.0008	mg/L	0.00030				36.35%
Ni 231.604†	974.0	0.0232	mg/L	0.00007				0.30%
Na 589.592†	8346093.5	1522	mg/L	4.3				0.28%
Pb 220.353†	97.8	0.0163	mg/L	0.00002				0.11%
Sb 206.836†	7.1	0.0032	mg/L	0.00081				24.98%
Se 196.026†	4.6	0.0089	mg/L	0.00141				15.88%
Sn 189.927†	-35.2	-0.0079	mg/L	0.00012				1.48%
Ti 337.279†	45698.1	0.0821	mg/L	0.00088				1.08%
Tl 190.801†	13.6	0.0075	mg/L	0.00141				18.76%
V 292.402†	337.6	0.0043	mg/L	0.00006				1.39%
Zn 206.200†	2228.0	0.0753	mg/L	0.00035				0.47%
Ca 227.546†	3994.8	22.44	mg/L	0.167				0.74%
Sr 421.552†	16062.8	0.1387	mg/L	0.00036				0.26%
Al 394.401†	175442.0	4.329	mg/L	0.0184				0.43%
Al 237.313†	22743.1	3.730	mg/L	0.0126				0.34%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 111
Sample ID: R1408017-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 10/15/2014 1:21:02 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-004

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5828190.0	0.8658	mg/L	0.00040				0.05%
Ag 328.068†	-772.9	0.0007	mg/L	0.00006				8.54%
Al 308.215†	7276.6	0.4996	mg/L	0.01532				3.07%
As 188.979†	20.8	0.0165	mg/L	0.00199				12.06%
B 249.772†	10555.7	0.0314	mg/L	0.00060				1.91%
Ba 233.527†	48654.2	0.5763	mg/L	0.00726				1.26%
Be 313.107†	2123.9	0.0007	mg/L	0.00005				6.99%
Cd 226.502†	133.6	-0.0003	mg/L	0.00009				33.94%
Co 228.616†	394.6	0.0180	mg/L	0.00006				0.32%
Cr 267.716†	-67.2	0.0008	mg/L	0.00004				4.58%
Cu 324.752†	1490.5	0.0069	mg/L	0.00052				7.53%
Fe 259.939†	752919.2	13.53	mg/L	0.040				0.30%
K 766.490†	3348.6	5.017	mg/L	0.0398				0.79%
Mg 279.077†	83744.8	8.138	mg/L	0.0953				1.17%
Mn 257.610†	2376382.3	6.936	mg/L	0.0193				0.28%

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Mo 202.031†	14.8	0.0009	mg/L	0.00007	8.18%
Ni 231.604†	3262.6	0.0778	mg/L	0.00036	0.46%
Na 589.592†	8465111.3	1543	mg/L	7.2	0.47%
Pb 220.353†	184.0	0.0303	mg/L	0.00047	1.55%
Sb 206.836†	9.7	0.0049	mg/L	0.00202	40.90%
Se 196.026†	1.2	0.0046	mg/L	0.00113	24.53%
Sn 189.927†	-18.8	-0.0040	mg/L	0.00092	22.94%
Ti 337.279†	2687.4	0.0048	mg/L	0.00000	0.08%
Tl 190.801†	9.0	0.0052	mg/L	0.00107	20.49%
V 292.402†	53.5	0.0000	mg/L	0.00023	643.77%
Zn 206.200†	844.9	0.0286	mg/L	0.00009	0.32%
Ca 227.546†	3071.0	17.38	mg/L	0.239	1.37%
Sr 421.552†	13276.9	0.1146	mg/L	0.00079	0.69%
Al 394.401†	16933.9	0.4179	mg/L	0.00729	1.74%
Al 237.313†	1733.4	0.2843	mg/L	0.00529	1.86%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 112
Sample ID: R1408017-006
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 10/15/2014 1:27:20 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-006

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	5929997.2	0.8809	mg/L	0.00159				0.18%
Ag 328.068†	-191.1	-0.0005	mg/L	0.00006				12.68%
Al 308.215†	31987.2	2.178	mg/L	0.0183				0.84%
As 188.979†	8.0	0.0063	mg/L	0.00142				22.60%
B 249.772†	4466.7	0.0349	mg/L	0.00035				1.00%
Ba 233.527†	25625.6	0.3035	mg/L	0.00105				0.35%
Be 313.107†	135.2	0.0000	mg/L	0.00001				24.02%
Cd 226.502†	5.7	-0.0001	mg/L	0.00011				142.37%
Co 228.616†	11.9	0.0005	mg/L	0.00003				4.70%
Cr 267.716†	377.4	0.0039	mg/L	0.00004				0.98%
Cu 324.752†	4092.0	0.0155	mg/L	0.00015				0.96%
Fe 259.939†	61305.9	1.102	mg/L	0.0037				0.33%
K 766.490†	2231.9	3.344	mg/L	0.1096				3.28%
Mg 279.077†	60318.0	5.861	mg/L	0.0190				0.32%
Mn 257.610†	31630.3	0.0924	mg/L	0.00012				0.13%
Mo 202.031†	21.1	0.0013	mg/L	0.00011				8.29%
Ni 231.604†	472.9	0.0113	mg/L	0.00019				1.65%
Na 589.592†	8568056.1	1562	mg/L	8.3				0.53%
Pb 220.353†	1.3	0.0004	mg/L	0.00008				19.42%
Sb 206.836†	7.5	0.0036	mg/L	0.00076				20.88%
Se 196.026†	1.5	0.0021	mg/L	0.00459				222.45%
Sn 189.927†	-9.8	-0.0023	mg/L	0.00028				12.20%
Ti 337.279†	22923.9	0.0412	mg/L	0.00073				1.77%
Tl 190.801†	4.4	0.0022	mg/L	0.00214				96.31%
V 292.402†	154.9	0.0023	mg/L	0.00008				3.38%
Zn 206.200†	880.3	0.0298	mg/L	0.00015				0.49%
Ca 227.546†	2188.0	11.89	mg/L	0.044				0.37%
Sr 421.552†	7539.7	0.0651	mg/L	0.00029				0.45%
Al 394.401†	86953.9	2.146	mg/L	0.0153				0.71%
Al 237.313†	11569.6	1.898	mg/L	0.0211				1.11%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 113
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 10/15/2014 1:33:33 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6410285.0	0.9523	mg/L	0.00766				0.80%

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Ag 328.068†	132687.0	0.5256 mg/L	0.00011	0.5256 mg/L	0.00011	0.02%
QC value within limits for Ag 328.068 Recovery = 105.12%						
Al 308.215†	145696.3	9.924 mg/L	0.0022	9.924 mg/L	0.0022	0.02%
QC value within limits for Al 308.215 Recovery = 99.24%						
As 188.979†	1278.0	1.015 mg/L	0.0135	1.015 mg/L	0.0135	1.33%
QC value within limits for As 188.979 Recovery = 101.50%						
B 249.772†	269176.4	2.437 mg/L	0.0287	2.437 mg/L	0.0287	1.18%
QC value within limits for B 249.772 Recovery = 97.50%						
Ba 233.527†	877754.4	10.40 mg/L	0.015	10.40 mg/L	0.015	0.15%
QC value within limits for Ba 233.527 Recovery = 103.97%						
Be 313.107†	739002.5	0.2562 mg/L	0.00015	0.2562 mg/L	0.00015	0.06%
QC value within limits for Be 313.107 Recovery = 102.46%						
Cd 226.502†	42661.0	0.5209 mg/L	0.00548	0.5209 mg/L	0.00548	1.05%
QC value within limits for Cd 226.502 Recovery = 104.17%						
Co 228.616†	56135.1	2.566 mg/L	0.0121	2.566 mg/L	0.0121	0.47%
QC value within limits for Co 228.616 Recovery = 102.66%						
Cr 267.716†	60815.8	0.5300 mg/L	0.00273	0.5300 mg/L	0.00273	0.52%
QC value within limits for Cr 267.716 Recovery = 106.01%						
Cu 324.752†	335813.3	1.268 mg/L	0.0012	1.268 mg/L	0.0012	0.09%
QC value within limits for Cu 324.752 Recovery = 101.44%						
Fe 259.939†	286665.5	5.153 mg/L	0.0262	5.153 mg/L	0.0262	0.51%
QC value within limits for Fe 259.939 Recovery = 103.06%						
K 766.490†	17601.0	26.37 mg/L	0.314	26.37 mg/L	0.314	1.19%
QC value within limits for K 766.490 Recovery = 105.48%						
Mg 279.077†	263095.1	25.57 mg/L	0.129	25.57 mg/L	0.129	0.50%
QC value within limits for Mg 279.077 Recovery = 102.26%						
Mn 257.610†	266053.4	0.7770 mg/L	0.00349	0.7770 mg/L	0.00349	0.45%
QC value within limits for Mn 257.610 Recovery = 103.60%						
Mo 202.031†	41576.4	2.506 mg/L	0.0125	2.506 mg/L	0.0125	0.50%
QC value within limits for Mo 202.031 Recovery = 100.22%						
Ni 231.604†	87354.4	2.084 mg/L	0.0132	2.084 mg/L	0.0132	0.63%
QC value within limits for Ni 231.604 Recovery = 104.20%						
Na 589.592†	146989.4	26.80 mg/L	0.397	26.80 mg/L	0.397	1.48%
QC value within limits for Na 589.592 Recovery = 107.20%						
Pb 220.353†	3062.5	0.5118 mg/L	0.00379	0.5118 mg/L	0.00379	0.74%
QC value within limits for Pb 220.353 Recovery = 102.37%						
Sb 206.836†	9831.7	5.029 mg/L	0.0589	5.029 mg/L	0.0589	1.17%
QC value within limits for Sb 206.836 Recovery = 100.58%						
Se 196.026†	416.6	0.5059 mg/L	0.00920	0.5059 mg/L	0.00920	1.82%
QC value within limits for Se 196.026 Recovery = 101.18%						
Sn 189.927†	24831.8	5.204 mg/L	0.0639	5.204 mg/L	0.0639	1.23%
QC value within limits for Sn 189.927 Recovery = 104.08%						
Ti 337.279†	1405395.3	2.523 mg/L	0.0012	2.523 mg/L	0.0012	0.05%
QC value within limits for Ti 337.279 Recovery = 100.94%						
Tl 190.801†	1844.0	1.008 mg/L	0.0162	1.008 mg/L	0.0162	1.61%
QC value within limits for Tl 190.801 Recovery = 100.77%						
V 292.402†	171155.7	2.619 mg/L	0.0000	2.619 mg/L	0.0000	0.00%
QC value within limits for V 292.402 Recovery = 104.76%						
Zn 206.200†	30760.5	1.040 mg/L	0.0119	1.040 mg/L	0.0119	1.14%
QC value within limits for Zn 206.200 Recovery = 104.01%						
Ca 227.546†	4518.5	24.74 mg/L	0.286	24.74 mg/L	0.286	1.16%
QC value within limits for Ca 227.546 Recovery = 98.95%						
Sr 421.552†	279108.2	2.410 mg/L	0.0346	2.410 mg/L	0.0346	1.43%
QC value within limits for Sr 421.552 Recovery = 96.38%						
Al 394.401†	399802.3	9.866 mg/L	0.0076	9.866 mg/L	0.0076	0.08%
QC value within limits for Al 394.401 Recovery = 98.66%						
Al 237.313†	61535.3	10.09 mg/L	0.005	10.09 mg/L	0.005	0.05%
QC value within limits for Al 237.313 Recovery = 100.93%						

All analyte(s) passed QC.

Sequence No.: 114 **Autosampler Location: 5**
Sample ID: CCB **Date Collected: 10/15/2014 1:39:38 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6581577.9	0.9777	mg/L	0.00181				0.19%

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Ag 328.068†	43.0	0.0002 mg/L	0.00016	0.0002 mg/L	0.00016	92.83%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 308.215†	19.5	0.0013 mg/L	0.00198	0.0013 mg/L	0.00198	148.65%
QC value within limits for Al 308.215 Recovery = Not calculated						
As 188.979†	0.4	0.0003 mg/L	0.00128	0.0003 mg/L	0.00128	419.50%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.772†	2099.2	0.0192 mg/L	0.00267	0.0192 mg/L	0.00267	13.92%
QC value within limits for B 249.772 Recovery = Not calculated						
Ba 233.527†	318.1	0.0038 mg/L	0.00068	0.0038 mg/L	0.00068	18.07%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	334.5	0.0001 mg/L	0.00002	0.0001 mg/L	0.00002	13.08%
QC value within limits for Be 313.107 Recovery = Not calculated						
Cd 226.502†	10.3	0.0001 mg/L	0.00004	0.0001 mg/L	0.00004	35.60%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	20.3	0.0009 mg/L	0.00004	0.0009 mg/L	0.00004	4.28%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-6.4	-0.0001 mg/L	0.00011	-0.0001 mg/L	0.00011	206.58%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	708.3	0.0027 mg/L	0.00028	0.0027 mg/L	0.00028	10.65%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	402.2	0.0072 mg/L	0.00085	0.0072 mg/L	0.00085	11.78%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	156.6	0.2347 mg/L	0.05923	0.2347 mg/L	0.05923	25.24%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	19.3	0.0019 mg/L	0.00169	0.0019 mg/L	0.00169	89.99%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	577.5	0.0017 mg/L	0.00012	0.0017 mg/L	0.00012	6.93%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	12.9	0.0008 mg/L	0.00037	0.0008 mg/L	0.00037	46.90%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	49.8	0.0012 mg/L	0.00038	0.0012 mg/L	0.00038	31.64%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	2793.4	0.5093 mg/L	0.00026	0.5093 mg/L	0.00026	0.05%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	10.2	0.0017 mg/L	0.00014	0.0017 mg/L	0.00014	8.10%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	6.1	0.0031 mg/L	0.00069	0.0031 mg/L	0.00069	22.10%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.5	0.0007 mg/L	0.00205	0.0007 mg/L	0.00205	313.36%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	36.0	0.0075 mg/L	0.00159	0.0075 mg/L	0.00159	21.08%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	522.3	0.0009 mg/L	0.00009	0.0009 mg/L	0.00009	9.71%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	-0.4	-0.0002 mg/L	0.00045	-0.0002 mg/L	0.00045	201.80%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	57.2	0.0009 mg/L	0.00007	0.0009 mg/L	0.00007	7.44%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	41.7	0.0014 mg/L	0.00024	0.0014 mg/L	0.00024	16.76%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	1.2	0.0070 mg/L	0.00325	0.0070 mg/L	0.00325	46.25%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	114.0	0.0010 mg/L	0.00021	0.0010 mg/L	0.00021	20.89%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 394.401†	51.6	0.0013 mg/L	0.00163	0.0013 mg/L	0.00163	127.83%
QC value within limits for Al 394.401 Recovery = Not calculated						
Al 237.313†	13.8	0.0023 mg/L	0.00007	0.0023 mg/L	0.00007	3.08%
QC value within limits for Al 237.313 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 115
Sample ID: R1408017-006D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 106
Date Collected: 10/15/2014 1:45:39 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-006D

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6047714.7	0.8984	mg/L	0.00141				0.16%

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Ag 328.068†	-132.5	-0.0002 mg/L	0.00011		46.66%
Al 308.215†	29934.3	2.038 mg/L	0.0141		0.69%
As 188.979†	11.1	0.0087 mg/L	0.00003		0.36%
B 249.772†	5596.9	0.0455 mg/L	0.00067		1.47%
Ba 233.527†	24585.2	0.2912 mg/L	0.00295		1.01%
Be 313.107†	256.3	0.0001 mg/L	0.00001		5.75%
Cd 226.502†	15.9	0.0001 mg/L	0.00003		58.16%
Co 228.616†	22.3	0.0010 mg/L	0.00024		23.67%
Cr 267.716†	243.3	0.0027 mg/L	0.00005		1.69%
Cu 324.752†	3585.2	0.0136 mg/L	0.00043		3.17%
Fe 259.939†	57917.8	1.041 mg/L	0.0090		0.86%
K 766.490†	1955.3	2.930 mg/L	0.0049		0.17%
Mg 279.077†	57405.4	5.578 mg/L	0.0521		0.93%
Mn 257.610†	29065.0	0.0849 mg/L	0.00082		0.97%
Mo 202.031†	27.1	0.0016 mg/L	0.00020		11.98%
Ni 231.604†	446.2	0.0106 mg/L	0.00037		3.44%
Na 589.592†	8163448.8	1488 mg/L	24.1		1.62%
Pb 220.353†	0.7	0.0003 mg/L	0.00050		155.97%
Sb 206.836†	7.8	0.0038 mg/L	0.00016		4.10%
Se 196.026†	1.2	0.0017 mg/L	0.00204		116.44%
Sn 189.927†	52.4	0.0107 mg/L	0.00260		24.16%
Ti 337.279†	21977.4	0.0395 mg/L	0.00106		2.69%
Tl 190.801†	6.4	0.0034 mg/L	0.00140		41.81%
V 292.402†	182.8	0.0027 mg/L	0.00004		1.50%
Zn 206.200†	785.6	0.0266 mg/L	0.00001		0.05%
Ca 227.546†	2090.5	11.36 mg/L	0.002		0.02%
Sr 421.552†	7214.0	0.0623 mg/L	0.00036		0.57%
Al 394.401†	81399.4	2.009 mg/L	0.0126		0.63%
Al 237.313†	10860.9	1.781 mg/L	0.0132		0.74%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 116
Sample ID: R1408017-006S 6X
Analyst:
Initial Sample Wt:
Dilution: 6X

Autosampler Location: 107
Date Collected: 10/15/2014 1:52:04 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-006S 6X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6448764.7	0.9580	mg/L	0.00825				0.86%
Ag 328.068†	428797.2	1.694	mg/L	0.0209				1.23%
Al 308.215†	4229.2	0.2879	mg/L	0.00778				2.70%
As 188.979†	2101.4	1.670	mg/L	0.0101				0.60%
B 249.772†	1014.9	0.0085	mg/L	0.00038				4.50%
Ba 233.527†	155405.3	1.841	mg/L	0.0220				1.19%
Be 313.107†	-1053.8	-0.0004	mg/L	0.00004				12.25%
Cd 226.502†	29147.9	0.3563	mg/L	0.00466				1.31%
Co 228.616†	9.9	0.0005	mg/L	0.00003				7.50%
Cr 267.716†	202396.4	1.755	mg/L	0.0218				1.24%
Cu 324.752†	587.0	0.0022	mg/L	0.00047				21.18%
Fe 259.939†	8490.8	0.1526	mg/L	0.00153				1.01%
K 766.490†	438.7	0.6573	mg/L	0.04263				6.49%
Mg 279.077†	9542.5	0.9273	mg/L	0.00707				0.76%
Mn 257.610†	4729.1	0.0138	mg/L	0.00006				0.43%
Mo 202.031†	10.1	0.0006	mg/L	0.00015				23.90%
Ni 231.604†	58.4	0.0014	mg/L	0.00011				7.72%
Na 589.592†	1301229.3	237.2	mg/L	1.51				0.64%
Pb 220.353†	10631.4	1.774	mg/L	0.0221				1.24%
Sb 206.836†	6.5	0.0033	mg/L	0.00124				37.54%
Se 196.026†	278.0	0.3368	mg/L	0.00649				1.93%
Sn 189.927†	-4.0	-0.0009	mg/L	0.00008				9.54%
Ti 337.279†	3715.7	0.0067	mg/L	0.00003				0.48%
Tl 190.801†	1.9	0.0010	mg/L	0.00142				136.58%
V 292.402†	-434.7	-0.0067	mg/L	0.00044				6.54%
Zn 206.200†	149.0	0.0050	mg/L	0.00011				2.25%
Ca 227.546†	301.1	1.636	mg/L	0.0287				1.75%
Sr 421.552†	1146.1	0.0099	mg/L	0.00030				3.03%
Al 394.401†	10604.9	0.2617	mg/L	0.00356				1.36%
Al 237.313†	1508.2	0.2474	mg/L	0.00258				1.04%

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Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 117
Sample ID: R1408017-006S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 10/15/2014 1:58:19 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-006S

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6096007.6	0.9056	mg/L	0.00578				0.64%
Ag 328.068†	2621580.9	10.36	mg/L	0.001				0.01%
Al 308.215†	26867.0	1.829	mg/L	0.0104				0.57%
As 188.979†	13130.6	10.43	mg/L	0.050				0.48%
B 249.772†	4639.2	0.0375	mg/L	0.00048				1.27%
Ba 233.527†	920944.2	10.91	mg/L	0.027				0.25%
Be 313.107†	-4105.3	-0.0014	mg/L	0.00001				0.64%
Cd 226.502†	167657.4	2.050	mg/L	0.0005				0.03%
Co 228.616†	62.9	0.0029	mg/L	0.00006				1.97%
Cr 267.716†	1173821.3	10.18	mg/L	0.013				0.13%
Cu 324.752†	2285.5	0.0087	mg/L	0.00008				0.94%
Fe 259.939†	49371.4	0.8875	mg/L	0.00278				0.31%
K 766.490†	1830.3	2.742	mg/L	0.0224				0.82%
Mg 279.077†	56802.5	5.520	mg/L	0.0074				0.13%
Mn 257.610†	27571.7	0.0806	mg/L	0.00030				0.37%
Mo 202.031†	67.1	0.0040	mg/L	0.00010				2.39%
Ni 231.604†	438.6	0.0105	mg/L	0.00024				2.30%
Na 589.592†	8142708.0	1485	mg/L	14.6				0.98%
Pb 220.353†	63200.4	10.54	mg/L	0.018				0.17%
Sb 206.836†	19.3	0.0097	mg/L	0.00087				8.96%
Se 196.026†	1700.8	2.060	mg/L	0.0292				1.42%
Sn 189.927†	24.4	0.0049	mg/L	0.00039				7.95%
Ti 337.279†	18532.7	0.0333	mg/L	0.00093				2.79%
Tl 190.801†	14.2	0.0076	mg/L	0.00007				0.93%
V 292.402†	-2640.3	-0.0405	mg/L	0.00023				0.56%
Zn 206.200†	646.8	0.0219	mg/L	0.00074				3.40%
Ca 227.546†	2095.3	11.37	mg/L	0.134				1.18%
Sr 421.552†	7201.9	0.0622	mg/L	0.00051				0.82%
Al 394.401†	72383.5	1.786	mg/L	0.0104				0.58%
Al 237.313†	9591.7	1.573	mg/L	0.0050				0.32%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 118
Sample ID: R1408017-006S-W
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 109
Date Collected: 10/15/2014 2:04:38 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-006S-W

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6016379.9	0.8938	mg/L	0.00737				0.82%
Ag 328.068†	11148.8	0.0445	mg/L	0.00073				1.65%
Al 308.215†	57036.3	3.884	mg/L	0.0342				0.88%
As 188.979†	66.2	0.0525	mg/L	0.00127				2.42%
B 249.772†	114887.9	1.043	mg/L	0.0111				1.07%
Ba 233.527†	202544.7	2.399	mg/L	0.0075				0.31%
Be 313.107†	146914.4	0.0509	mg/L	0.00006				0.11%
Cd 226.502†	4164.6	0.0507	mg/L	0.00050				0.99%
Co 228.616†	11349.8	0.5189	mg/L	0.00055				0.11%
Cr 267.716†	24538.3	0.2136	mg/L	0.00055				0.26%
Cu 324.752†	81961.9	0.3095	mg/L	0.00320				1.03%
Fe 259.939†	92431.3	1.662	mg/L	0.0050				0.30%
K 766.490†	18996.2	28.46	mg/L	0.485				1.70%
Mg 279.077†	77122.2	7.494	mg/L	0.0147				0.20%
Mn 257.610†	206316.6	0.6022	mg/L	0.00188				0.31%
Mo 202.031†	8115.4	0.4891	mg/L	0.00502				1.03%

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Ni 231.604†	22136.2	0.5281	mg/L	0.00087	0.16%
Na 589.592†	8260889.5	1506	mg/L	0.7	0.05%
Pb 220.353†	3130.9	0.5227	mg/L	0.00505	0.97%
Sb 206.836†	1022.0	0.5225	mg/L	0.00361	0.69%
Se 196.026†	11.3	0.0141	mg/L	0.00031	2.22%
Sn 189.927†	-9.0	-0.0023	mg/L	0.00060	25.47%
Ti 337.279†	284126.1	0.5102	mg/L	0.00191	0.37%
Tl 190.801†	3722.3	2.035	mg/L	0.0124	0.61%
V 292.402†	33164.7	0.5074	mg/L	0.00158	0.31%
Zn 206.200†	16886.0	0.5710	mg/L	0.00256	0.45%
Ca 227.546†	2555.7	13.91	mg/L	0.025	0.18%
Sr 421.552†	7266.4	0.0627	mg/L	0.00080	1.27%
Al 394.401†	156173.0	3.854	mg/L	0.0389	1.01%
Al 237.313†	20643.2	3.386	mg/L	0.0275	0.81%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 119
Sample ID: R1408017-006L
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 110
Date Collected: 10/15/2014 2:10:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-006L

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6408583.9	0.9520	mg/L	0.00336				0.35%
Ag 328.068†	40.9	0.0002	mg/L	0.00003				15.40%
Al 308.215†	6285.7	0.4280	mg/L	0.01021				2.38%
As 188.979†	2.6	0.0020	mg/L	0.00019				9.15%
B 249.772†	1665.0	0.0140	mg/L	0.00107				7.61%
Ba 233.527†	5169.5	0.0612	mg/L	0.00022				0.36%
Be 313.107†	-514.5	-0.0002	mg/L	0.00003				16.90%
Cd 226.502†	4.1	0.0000	mg/L	0.00002				90.06%
Co 228.616†	1.7	0.0001	mg/L	0.00014				184.69%
Cr 267.716†	135.4	0.0013	mg/L	0.00013				9.71%
Cu 324.752†	940.2	0.0036	mg/L	0.00030				8.38%
Fe 259.939†	12446.5	0.2237	mg/L	0.00326				1.46%
K 766.490†	660.3	0.9893	mg/L	0.04544				4.59%
Mg 279.077†	12325.4	1.198	mg/L	0.0102				0.85%
Mn 257.610†	6262.2	0.0183	mg/L	0.00019				1.06%
Mo 202.031†	1.4	0.0001	mg/L	0.00012				143.32%
Ni 231.604†	79.4	0.0019	mg/L	0.00015				7.66%
Na 589.592†	1667651.3	304.1	mg/L	1.20				0.39%
Pb 220.353†	0.9	0.0002	mg/L	0.00001				3.58%
Sb 206.836†	3.2	0.0016	mg/L	0.00041				26.04%
Se 196.026†	0.5	0.0006	mg/L	0.00069				107.80%
Sn 189.927†	-17.9	-0.0038	mg/L	0.00038				9.95%
Ti 337.279†	4899.8	0.0088	mg/L	0.00006				0.71%
Tl 190.801†	1.2	0.0006	mg/L	0.00046				73.94%
V 292.402†	21.3	0.0003	mg/L	0.00001				4.06%
Zn 206.200†	219.2	0.0074	mg/L	0.00012				1.59%
Ca 227.546†	390.6	2.124	mg/L	0.0253				1.19%
Sr 421.552†	1471.1	0.0127	mg/L	0.00021				1.69%
Al 394.401†	15436.0	0.3809	mg/L	0.00504				1.32%
Al 237.313†	2215.9	0.3635	mg/L	0.00030				0.08%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 120
Sample ID: R1408017-008
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 111
Date Collected: 10/15/2014 2:17:04 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-008

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5984814.8	0.8891	mg/L	0.01003				1.13%
Ag 328.068†	34.4	0.0003	mg/L	0.00033				116.55%

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Al 308.215†	16130.4	1.096	mg/L	0.0079	0.72%
As 188.979†	15.0	0.0119	mg/L	0.00016	1.31%
B 249.772†	24109.5	0.2169	mg/L	0.00392	1.81%
Ba 233.527†	38012.7	0.4503	mg/L	0.00984	2.19%
Be 313.107†	707.2	0.0002	mg/L	0.00007	27.77%
Cd 226.502†	11.8	0.0001	mg/L	0.00009	126.90%
Co 228.616†	146.8	0.0067	mg/L	0.00005	0.69%
Cr 267.716†	107.8	0.0021	mg/L	0.00007	3.43%
Cu 324.752†	17150.2	0.0648	mg/L	0.00024	0.38%
Fe 259.939†	29215.9	0.5252	mg/L	0.00887	1.69%
K 766.490†	1560.8	2.339	mg/L	0.0161	0.69%
Mg 279.077†	124684.1	12.12	mg/L	0.264	2.18%
Mn 257.610†	1226022.2	3.577	mg/L	0.0139	0.39%
Mo 202.031†	23.8	0.0014	mg/L	0.00007	4.85%
Ni 231.604†	294.6	0.0070	mg/L	0.00008	1.17%
Na 589.592†	8418778.4	1535	mg/L	13.3	0.87%
Pb 220.353†	26.7	0.0046	mg/L	0.00095	20.87%
Sb 206.836†	4.5	0.0022	mg/L	0.00140	63.39%
Se 196.026†	2.6	0.0032	mg/L	0.00048	14.80%
Sn 189.927†	-32.3	-0.0069	mg/L	0.00017	2.39%
Ti 337.279†	8924.9	0.0160	mg/L	0.00015	0.91%
Tl 190.801†	11.1	0.0059	mg/L	0.00067	11.40%
V 292.402†	57.0	0.0008	mg/L	0.00018	21.27%
Zn 206.200†	1454.7	0.0492	mg/L	0.00017	0.35%
Ca 227.546†	4706.8	25.46	mg/L	0.008	0.03%
Sr 421.552†	12535.0	0.1082	mg/L	0.00054	0.50%
Al 394.401†	41597.9	1.026	mg/L	0.0012	0.12%
Al 237.313†	5308.4	0.8707	mg/L	0.00643	0.74%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 121
Sample ID: R1408017-010
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 112
Date Collected: 10/15/2014 2:23:22 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-010

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5931129.6	0.8811	mg/L	0.00340				0.39%
Ag 328.068†	24.3	0.0006	mg/L	0.00005				7.72%
Al 308.215†	6988.4	0.4693	mg/L	0.01388				2.96%
As 188.979†	12.8	0.0101	mg/L	0.00104				10.24%
B 249.772†	9775.9	0.0775	mg/L	0.00007				0.09%
Ba 233.527†	72213.3	0.8554	mg/L	0.01053				1.23%
Be 313.107†	2940.1	0.0010	mg/L	0.00001				1.17%
Cd 226.502†	89.8	0.0008	mg/L	0.00007				7.86%
Co 228.616†	806.0	0.0368	mg/L	0.00045				1.23%
Cr 267.716†	-79.9	0.0008	mg/L	0.00004				5.28%
Cu 324.752†	18131.5	0.0686	mg/L	0.00107				1.56%
Fe 259.939†	107307.3	1.929	mg/L	0.0235				1.22%
K 766.490†	2221.7	3.329	mg/L	0.0424				1.27%
Mg 279.077†	145807.8	14.17	mg/L	0.173				1.22%
Mn 257.610†	4050803.0	11.82	mg/L	0.032				0.27%
Mo 202.031†	22.7	0.0014	mg/L	0.00010				7.34%
Ni 231.604†	3976.3	0.0949	mg/L	0.00018				0.19%
Na 589.592†	8288621.0	1511	mg/L	3.1				0.20%
Pb 220.353†	150.5	0.0251	mg/L	0.00027				1.06%
Sb 206.836†	9.9	0.0050	mg/L	0.00078				15.56%
Se 196.026†	3.7	0.0049	mg/L	0.00460				93.62%
Sn 189.927†	-96.3	-0.0202	mg/L	0.00050				2.46%
Ti 337.279†	2772.8	0.0050	mg/L	0.00009				1.86%
Tl 190.801†	21.1	0.0111	mg/L	0.00222				19.90%
V 292.402†	-120.0	-0.0019	mg/L	0.00005				2.79%
Zn 206.200†	10757.8	0.3638	mg/L	0.00093				0.26%
Ca 227.546†	10438.6	56.50	mg/L	0.288				0.51%
Sr 421.552†	19972.4	0.1724	mg/L	0.00060				0.35%
Al 394.401†	15051.0	0.3714	mg/L	0.00264				0.71%
Al 237.313†	1266.4	0.2077	mg/L	0.00184				0.89%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 122
Sample ID: R1408017-012
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 113
Date Collected: 10/15/2014 2:29:38 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-012

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6083441.7	0.9037	mg/L	0.00159				0.18%
Ag 328.068†	-114.1	-0.0003	mg/L	0.00013				39.62%
Al 308.215†	19026.2	1.294	mg/L	0.0008				0.06%
As 188.979†	6.4	0.0050	mg/L	0.00037				7.40%
B 249.772†	9334.9	0.0823	mg/L	0.00053				0.64%
Ba 233.527†	37850.8	0.4483	mg/L	0.00028				0.06%
Be 313.107†	2271.9	0.0008	mg/L	0.00002				2.79%
Cd 226.502†	4.0	0.0000	mg/L	0.00001				96.42%
Co 228.616†	13.1	0.0006	mg/L	0.00009				15.33%
Cr 267.716†	-14.4	0.0012	mg/L	0.00004				3.34%
Cu 324.752†	1913.7	0.0073	mg/L	0.00000				0.05%
Fe 259.939†	25990.3	0.4672	mg/L	0.00045				0.10%
K 766.490†	2098.8	3.145	mg/L	0.0355				1.13%
Mg 279.077†	138680.6	13.48	mg/L	0.019				0.14%
Mn 257.610†	104918.7	0.3062	mg/L	0.00016				0.05%
Mo 202.031†	13.4	0.0008	mg/L	0.00013				16.08%
Ni 231.604†	1103.5	0.0263	mg/L	0.00034				1.29%
Na 589.592†	8126767.6	1482	mg/L	2.5				0.17%
Pb 220.353†	-4.6	-0.0006	mg/L	0.00058				91.07%
Sb 206.836†	5.0	0.0024	mg/L	0.00132				54.59%
Se 196.026†	2.6	0.0033	mg/L	0.00201				60.63%
Sn 189.927†	-38.6	-0.0082	mg/L	0.00003				0.32%
Ti 337.279†	9327.4	0.0167	mg/L	0.00015				0.87%
Tl 190.801†	4.6	0.0024	mg/L	0.00074				30.80%
V 292.402†	45.7	0.0007	mg/L	0.00000				0.31%
Zn 206.200†	721.5	0.0244	mg/L	0.00038				1.55%
Ca 227.546†	3254.5	17.61	mg/L	0.110				0.63%
Sr 421.552†	14947.3	0.1290	mg/L	0.00141				1.09%
Al 394.401†	49622.9	1.225	mg/L	0.0024				0.20%
Al 237.313†	6669.6	1.094	mg/L	0.0038				0.35%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 123
Sample ID: R1408017-014
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 114
Date Collected: 10/15/2014 2:35:52 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-014

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6056158.6	0.8997	mg/L	0.00562				0.62%
Ag 328.068†	-301.9	0.0004	mg/L	0.00024				62.21%
Al 308.215†	118795.6	8.091	mg/L	0.0574				0.71%
As 188.979†	14.9	0.0115	mg/L	0.00074				6.42%
B 249.772†	8254.8	0.0464	mg/L	0.00020				0.43%
Ba 233.527†	54783.2	0.6489	mg/L	0.00539				0.83%
Be 313.107†	3132.8	0.0011	mg/L	0.00000				0.31%
Cd 226.502†	91.2	0.0003	mg/L	0.00006				17.95%
Co 228.616†	814.5	0.0372	mg/L	0.00034				0.91%
Cr 267.716†	512.4	0.0067	mg/L	0.00025				3.68%
Cu 324.752†	5518.3	0.0214	mg/L	0.00015				0.70%
Fe 259.939†	317978.7	5.716	mg/L	0.0490				0.86%
K 766.490†	3435.3	5.147	mg/L	0.0571				1.11%
Mg 279.077†	207309.9	20.14	mg/L	0.208				1.03%
Mn 257.610†	2441092.9	7.124	mg/L	0.0154				0.22%
Mo 202.031†	21.4	0.0013	mg/L	0.00013				9.85%
Ni 231.604†	1221.5	0.0291	mg/L	0.00003				0.11%

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Na 589.592†	8101078.9	1477 mg/L	7.2		0.49%
Pb 220.353†	10.7	0.0025 mg/L	0.00008		3.06%
Sb 206.836†	7.8	0.0033 mg/L	0.00031		9.53%
Se 196.026†	5.6	0.0082 mg/L	0.00457		55.85%
Sn 189.927†	-47.3	-0.0109 mg/L	0.00009		0.80%
Ti 337.279†	90653.5	0.1628 mg/L	0.00421		2.59%
Tl 190.801†	11.6	0.0059 mg/L	0.00176		29.78%
V 292.402†	602.0	0.0089 mg/L	0.00010		1.12%
Zn 206.200†	1108.2	0.0375 mg/L	0.00025		0.66%
Ca 227.546†	4878.5	26.71 mg/L	0.092		0.34%
Sr 421.552†	15335.1	0.1324 mg/L	0.00166		1.25%
Al 394.401†	329618.2	8.134 mg/L	0.0462		0.57%
Al 237.313†	43844.7	7.192 mg/L	0.0417		0.58%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 124
Sample ID: R1408017-016
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 115
Date Collected: 10/15/2014 2:42:13 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-016

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5914406.5	0.8786	mg/L	0.00479				0.54%
Ag 328.068†	-177.4	-0.0005	mg/L	0.00002				3.38%
Al 308.215†	33734.6	2.297	mg/L	0.0485				2.11%
As 188.979†	11.0	0.0086	mg/L	0.00371				43.05%
B 249.772†	3005.7	0.0228	mg/L	0.00023				0.99%
Ba 233.527†	35026.4	0.4149	mg/L	0.00426				1.03%
Be 313.107†	1397.5	0.0005	mg/L	0.00004				8.46%
Cd 226.502†	-5.4	-0.0002	mg/L	0.00002				11.20%
Co 228.616†	3.8	0.0002	mg/L	0.00020				117.27%
Cr 267.716†	138.9	0.0019	mg/L	0.00006				3.27%
Cu 324.752†	1973.7	0.0075	mg/L	0.00030				3.99%
Fe 259.939†	46714.4	0.8397	mg/L	0.00863				1.03%
K 766.490†	2228.7	3.339	mg/L	0.0742				2.22%
Mg 279.077†	65977.4	6.411	mg/L	0.0647				1.01%
Mn 257.610†	39546.2	0.1155	mg/L	0.00096				0.83%
Mo 202.031†	16.1	0.0010	mg/L	0.00028				28.69%
Ni 231.604†	434.7	0.0104	mg/L	0.00003				0.29%
Na 589.592†	8366716.9	1525	mg/L	9.0				0.59%
Pb 220.353†	-2.0	-0.0001	mg/L	0.00022				202.02%
Sb 206.836†	8.4	0.0041	mg/L	0.00068				16.66%
Se 196.026†	5.7	0.0072	mg/L	0.00164				22.94%
Sn 189.927†	-12.6	-0.0029	mg/L	0.00042				14.29%
Ti 337.279†	16128.3	0.0290	mg/L	0.00169				5.82%
Tl 190.801†	4.1	0.0021	mg/L	0.00068				33.21%
V 292.402†	114.5	0.0017	mg/L	0.00001				0.31%
Zn 206.200†	550.0	0.0186	mg/L	0.00021				1.15%
Ca 227.546†	2107.2	11.44	mg/L	0.137				1.20%
Sr 421.552†	7494.6	0.0647	mg/L	0.00088				1.36%
Al 394.401†	90456.0	2.232	mg/L	0.0372				1.67%
Al 237.313†	12011.5	1.970	mg/L	0.0273				1.38%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 125
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 10/15/2014 2:48:27 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6441781.7	0.9570	mg/L	0.00612				0.64%
Ag 328.068†	127207.6	0.5039	mg/L	0.00002	0.5039	mg/L	0.00002	0.00%

QC value within limits for Ag 328.068 Recovery = 100.78%

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Al 308.215†	140995.3	9.603 mg/L	0.0135	9.603 mg/L	0.0135	0.14%
QC value within limits for Al 308.215 Recovery = 96.03%						
As 188.979†	1194.3	0.9485 mg/L	0.00315	0.9485 mg/L	0.00315	0.33%
QC value within limits for As 188.979 Recovery = 94.85%						
B 249.772†	257416.4	2.330 mg/L	0.0172	2.330 mg/L	0.0172	0.74%
QC value within limits for B 249.772 Recovery = 93.22%						
Ba 233.527†	859711.6	10.18 mg/L	0.020	10.18 mg/L	0.020	0.20%
QC value within limits for Ba 233.527 Recovery = 101.83%						
Be 313.107†	716995.5	0.2485 mg/L	0.00073	0.2485 mg/L	0.00073	0.30%
QC value within limits for Be 313.107 Recovery = 99.41%						
Cd 226.502†	41007.8	0.5007 mg/L	0.00085	0.5007 mg/L	0.00085	0.17%
QC value within limits for Cd 226.502 Recovery = 100.13%						
Co 228.616†	54467.4	2.490 mg/L	0.0039	2.490 mg/L	0.0039	0.16%
QC value within limits for Co 228.616 Recovery = 99.61%						
Cr 267.716†	58486.4	0.5098 mg/L	0.00029	0.5098 mg/L	0.00029	0.06%
QC value within limits for Cr 267.716 Recovery = 101.95%						
Cu 324.752†	324491.9	1.225 mg/L	0.0006	1.225 mg/L	0.0006	0.05%
QC value within limits for Cu 324.752 Recovery = 98.02%						
Fe 259.939†	278806.3	5.012 mg/L	0.0029	5.012 mg/L	0.0029	0.06%
QC value within limits for Fe 259.939 Recovery = 100.23%						
K 766.490†	17562.0	26.31 mg/L	0.210	26.31 mg/L	0.210	0.80%
QC value within limits for K 766.490 Recovery = 105.25%						
Mg 279.077†	254887.1	24.77 mg/L	0.023	24.77 mg/L	0.023	0.09%
QC value within limits for Mg 279.077 Recovery = 99.07%						
Mn 257.610†	258566.9	0.7551 mg/L	0.00096	0.7551 mg/L	0.00096	0.13%
QC value within limits for Mn 257.610 Recovery = 100.68%						
Mo 202.031†	39936.8	2.407 mg/L	0.0000	2.407 mg/L	0.0000	0.00%
QC value within limits for Mo 202.031 Recovery = 96.27%						
Ni 231.604†	84061.0	2.005 mg/L	0.0001	2.005 mg/L	0.0001	0.01%
QC value within limits for Ni 231.604 Recovery = 100.27%						
Na 589.592†	146375.5	26.69 mg/L	0.198	26.69 mg/L	0.198	0.74%
QC value within limits for Na 589.592 Recovery = 106.75%						
Pb 220.353†	2935.2	0.4906 mg/L	0.00281	0.4906 mg/L	0.00281	0.57%
QC value within limits for Pb 220.353 Recovery = 98.12%						
Sb 206.836†	9236.1	4.724 mg/L	0.0299	4.724 mg/L	0.0299	0.63%
QC value within limits for Sb 206.836 Recovery = 94.49%						
Se 196.026†	401.6	0.4877 mg/L	0.00141	0.4877 mg/L	0.00141	0.29%
QC value within limits for Se 196.026 Recovery = 97.55%						
Sn 189.927†	24096.5	5.050 mg/L	0.0017	5.050 mg/L	0.0017	0.03%
QC value within limits for Sn 189.927 Recovery = 101.00%						
Ti 337.279†	1364140.9	2.449 mg/L	0.0069	2.449 mg/L	0.0069	0.28%
QC value within limits for Ti 337.279 Recovery = 97.98%						
Tl 190.801†	1776.6	0.9709 mg/L	0.00788	0.9709 mg/L	0.00788	0.81%
QC value within limits for Tl 190.801 Recovery = 97.09%						
V 292.402†	160615.1	2.458 mg/L	0.0078	2.458 mg/L	0.0078	0.32%
QC value within limits for V 292.402 Recovery = 98.31%						
Zn 206.200†	29616.4	1.001 mg/L	0.0012	1.001 mg/L	0.0012	0.12%
QC value within limits for Zn 206.200 Recovery = 100.14%						
Ca 227.546†	4338.2	23.75 mg/L	0.197	23.75 mg/L	0.197	0.83%
QC value within limits for Ca 227.546 Recovery = 95.01%						
Sr 421.552†	272736.1	2.355 mg/L	0.0171	2.355 mg/L	0.0171	0.73%
QC value within limits for Sr 421.552 Recovery = 94.18%						
Al 394.401†	385751.1	9.519 mg/L	0.0239	9.519 mg/L	0.0239	0.25%
QC value within limits for Al 394.401 Recovery = 95.19%						
Al 237.313†	59541.0	9.766 mg/L	0.0180	9.766 mg/L	0.0180	0.18%
QC value within limits for Al 237.313 Recovery = 97.66%						

All analyte(s) passed QC.

Sequence No.: 126 **Autosampler Location: 5**
Sample ID: CCB **Date Collected: 10/15/2014 2:54:33 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6651553.2	0.9881	mg/L	0.00294				0.30%
Ag 328.068†	18.1	0.0001	mg/L	0.00029	0.0001	mg/L	0.00029	391.00%
QC value within limits for Ag 328.068 Recovery = Not calculated								

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Al 308.215†	-201.5	-0.0137 mg/L	0.00289	-0.0137 mg/L	0.00289	21.08%
QC value within limits for Al 308.215 Recovery = Not calculated						
As 188.979†	-1.3	-0.0011 mg/L	0.00003	-0.0011 mg/L	0.00003	3.01%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.772†	1922.4	0.0176 mg/L	0.00264	0.0176 mg/L	0.00264	15.02%
QC value within limits for B 249.772 Recovery = Not calculated						
Ba 233.527†	397.1	0.0047 mg/L	0.00114	0.0047 mg/L	0.00114	24.14%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	929.6	0.0003 mg/L	0.00002	0.0003 mg/L	0.00002	5.89%
QC value within limits for Be 313.107 Recovery = Not calculated						
Cd 226.502†	23.2	0.0003 mg/L	0.00006	0.0003 mg/L	0.00006	22.06%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	20.2	0.0009 mg/L	0.00012	0.0009 mg/L	0.00012	12.98%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	10.2	0.0001 mg/L	0.00004	0.0001 mg/L	0.00004	48.41%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	616.8	0.0023 mg/L	0.00069	0.0023 mg/L	0.00069	29.43%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	330.7	0.0059 mg/L	0.00075	0.0059 mg/L	0.00075	12.58%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	212.0	0.3176 mg/L	0.00321	0.3176 mg/L	0.00321	1.01%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	161.5	0.0157 mg/L	0.00192	0.0157 mg/L	0.00192	12.24%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	508.6	0.0015 mg/L	0.00014	0.0015 mg/L	0.00014	9.55%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	14.8	0.0009 mg/L	0.00037	0.0009 mg/L	0.00037	41.70%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	58.1	0.0014 mg/L	0.00042	0.0014 mg/L	0.00042	30.50%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	4505.1	0.8214 mg/L	0.00421	0.8214 mg/L	0.00421	0.51%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	1.8	0.0003 mg/L	0.00017	0.0003 mg/L	0.00017	56.20%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	5.5	0.0028 mg/L	0.00076	0.0028 mg/L	0.00076	26.98%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.6	0.0032 mg/L	0.00124	0.0032 mg/L	0.00124	38.50%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	35.9	0.0075 mg/L	0.00229	0.0075 mg/L	0.00229	30.44%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	670.1	0.0012 mg/L	0.00027	0.0012 mg/L	0.00027	22.44%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	-0.5	-0.0003 mg/L	0.00080	-0.0003 mg/L	0.00080	317.99%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	56.5	0.0009 mg/L	0.00003	0.0009 mg/L	0.00003	3.65%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	42.5	0.0014 mg/L	0.00012	0.0014 mg/L	0.00012	8.09%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	7.6	0.0415 mg/L	0.04304	0.0415 mg/L	0.04304	103.80%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	154.9	0.0013 mg/L	0.00018	0.0013 mg/L	0.00018	13.22%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 394.401†	139.7	0.0034 mg/L	0.00070	0.0034 mg/L	0.00070	20.36%
QC value within limits for Al 394.401 Recovery = Not calculated						
Al 237.313†	21.5	0.0035 mg/L	0.00089	0.0035 mg/L	0.00089	25.25%
QC value within limits for Al 237.313 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 127 **Autosampler Location: 116**
Sample ID: R1408017-018 **Date Collected: 10/15/2014 3:00:35 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: R1408017-018

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5804693.8	0.8623	mg/L	0.00548				0.64%
Ag 328.068†	-703.5	-0.0003	mg/L	0.00007				22.51%
Al 308.215†	173337.1	11.81	mg/L	0.088				0.75%

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As 188.979†	12.7	0.0096 mg/L	0.00202	20.96%
B 249.772†	15335.3	0.0949 mg/L	0.00212	2.24%
Ba 233.527†	52091.7	0.6170 mg/L	0.00364	0.59%
Be 313.107†	2187.2	0.0008 mg/L	0.00004	4.94%
Cd 226.502†	95.4	-0.0001 mg/L	0.00000	5.42%
Co 228.616†	76.8	0.0035 mg/L	0.00042	12.00%
Cr 267.716†	1191.3	0.0119 mg/L	0.00006	0.54%
Cu 324.752†	8743.7	0.0338 mg/L	0.00088	2.60%
Fe 259.939†	500076.8	8.989 mg/L	0.0066	0.07%
K 766.490†	4700.0	7.042 mg/L	0.0431	0.61%
Mg 279.077†	126539.6	12.30 mg/L	0.071	0.58%
Mn 257.610†	91771.6	0.2690 mg/L	0.00168	0.62%
Mo 202.031†	27.4	0.0016 mg/L	0.00022	13.42%
Ni 231.604†	550.1	0.0131 mg/L	0.00010	0.78%
Na 589.592†	8304456.0	1514 mg/L	9.0	0.59%
Pb 220.353†	6.4	0.0021 mg/L	0.00047	22.30%
Sb 206.836†	10.8	0.0045 mg/L	0.00063	14.09%
Se 196.026†	2.6	0.0054 mg/L	0.00333	62.02%
Sn 189.927†	-29.3	-0.0075 mg/L	0.00111	14.78%
Ti 337.279†	130254.4	0.2339 mg/L	0.00084	0.36%
Tl 190.801†	10.5	0.0050 mg/L	0.00194	38.52%
V 292.402†	1090.3	0.0162 mg/L	0.00002	0.11%
Zn 206.200†	953.4	0.0322 mg/L	0.00025	0.78%
Ca 227.546†	6313.4	34.66 mg/L	0.150	0.43%
Sr 421.552†	11901.0	0.1027 mg/L	0.00010	0.10%
Al 394.401†	483956.4	11.94 mg/L	0.015	0.13%
Al 237.313†	65018.7	10.66 mg/L	0.073	0.68%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 128 **Autosampler Location: 4**
Sample ID: CCV **Date Collected: 10/15/2014 3:06:54 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6525057.0	0.9693	mg/L	0.00406				0.42%
Ag 328.068†	124896.9	0.4947	mg/L	0.00052	0.4947	mg/L	0.00052	0.10%
QC value within limits for Ag 328.068 Recovery = 98.95%								
Al 308.215†	136458.4	9.294	mg/L	0.0067	9.294	mg/L	0.0067	0.07%
QC value within limits for Al 308.215 Recovery = 92.94%								
As 188.979†	1190.7	0.9457	mg/L	0.00751	0.9457	mg/L	0.00751	0.79%
QC value within limits for As 188.979 Recovery = 94.57%								
B 249.772†	253604.2	2.296	mg/L	0.0198	2.296	mg/L	0.0198	0.86%
QC value within limits for B 249.772 Recovery = 91.85%								
Ba 233.527†	839039.0	9.938	mg/L	0.0058	9.938	mg/L	0.0058	0.06%
QC value within limits for Ba 233.527 Recovery = 99.38%								
Be 313.107†	704677.1	0.2443	mg/L	0.00015	0.2443	mg/L	0.00015	0.06%
QC value within limits for Be 313.107 Recovery = 97.71%								
Cd 226.502†	40149.2	0.4902	mg/L	0.00092	0.4902	mg/L	0.00092	0.19%
QC value within limits for Cd 226.502 Recovery = 98.04%								
Co 228.616†	53027.8	2.424	mg/L	0.0024	2.424	mg/L	0.0024	0.10%
QC value within limits for Co 228.616 Recovery = 96.98%								
Cr 267.716†	57206.3	0.4986	mg/L	0.00042	0.4986	mg/L	0.00042	0.08%
QC value within limits for Cr 267.716 Recovery = 99.72%								
Cu 324.752†	315197.1	1.190	mg/L	0.0026	1.190	mg/L	0.0026	0.22%
QC value within limits for Cu 324.752 Recovery = 95.22%								
Fe 259.939†	271103.1	4.873	mg/L	0.0035	4.873	mg/L	0.0035	0.07%
QC value within limits for Fe 259.939 Recovery = 97.46%								
K 766.490†	17073.3	25.58	mg/L	0.141	25.58	mg/L	0.141	0.55%
QC value within limits for K 766.490 Recovery = 102.32%								
Mg 279.077†	248489.2	24.15	mg/L	0.012	24.15	mg/L	0.012	0.05%
QC value within limits for Mg 279.077 Recovery = 96.58%								
Mn 257.610†	251149.5	0.7335	mg/L	0.00052	0.7335	mg/L	0.00052	0.07%
QC value within limits for Mn 257.610 Recovery = 97.80%								
Mo 202.031†	39037.5	2.353	mg/L	0.0037	2.353	mg/L	0.0037	0.16%
QC value within limits for Mo 202.031 Recovery = 94.10%								
Ni 231.604†	82196.6	1.961	mg/L	0.0029	1.961	mg/L	0.0029	0.15%

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QC value within limits for Ni 231.604 Recovery = 98.05%						
Na 589.592†	140675.2	25.65 mg/L	0.159	25.65 mg/L	0.159	0.62%
QC value within limits for Na 589.592 Recovery = 102.59%						
Pb 220.353†	2888.8	0.4828 mg/L	0.00470	0.4828 mg/L	0.00470	0.97%
QC value within limits for Pb 220.353 Recovery = 96.56%						
Sb 206.836†	9153.7	4.682 mg/L	0.0267	4.682 mg/L	0.0267	0.57%
QC value within limits for Sb 206.836 Recovery = 93.64%						
Se 196.026†	398.9	0.4844 mg/L	0.00341	0.4844 mg/L	0.00341	0.70%
QC value within limits for Se 196.026 Recovery = 96.88%						
Sn 189.927†	23548.7	4.935 mg/L	0.0031	4.935 mg/L	0.0031	0.06%
QC value within limits for Sn 189.927 Recovery = 98.70%						
Ti 337.279†	1337084.4	2.401 mg/L	0.0040	2.401 mg/L	0.0040	0.17%
QC value within limits for Ti 337.279 Recovery = 96.03%						
Tl 190.801†	1742.9	0.9525 mg/L	0.00490	0.9525 mg/L	0.00490	0.51%
QC value within limits for Tl 190.801 Recovery = 95.25%						
V 292.402†	159103.6	2.435 mg/L	0.0027	2.435 mg/L	0.0027	0.11%
QC value within limits for V 292.402 Recovery = 97.38%						
Zn 206.200†	29066.0	0.9828 mg/L	0.00010	0.9828 mg/L	0.00010	0.01%
QC value within limits for Zn 206.200 Recovery = 98.28%						
Ca 227.546†	4245.7	23.25 mg/L	0.068	23.25 mg/L	0.068	0.29%
QC value within limits for Ca 227.546 Recovery = 92.98%						
Sr 421.552†	264153.3	2.280 mg/L	0.0149	2.280 mg/L	0.0149	0.65%
QC value within limits for Sr 421.552 Recovery = 91.22%						
Al 394.401†	373592.3	9.219 mg/L	0.0009	9.219 mg/L	0.0009	0.01%
QC value within limits for Al 394.401 Recovery = 92.19%						
Al 237.313†	57920.4	9.500 mg/L	0.0146	9.500 mg/L	0.0146	0.15%
QC value within limits for Al 237.313 Recovery = 95.00%						

All analyte(s) passed QC.

Sequence No.: 129
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 10/15/2014 3:13:00 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6601044.2	0.9806	mg/L	0.00258				0.26%
Ag 328.068†	46.2	0.0002	mg/L	0.00010	0.0002	mg/L	0.00010	53.20%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	69.2	0.0047	mg/L	0.00668	0.0047	mg/L	0.00668	141.84%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.4	0.0003	mg/L	0.00007	0.0003	mg/L	0.00007	22.67%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	2436.9	0.0223	mg/L	0.00293	0.0223	mg/L	0.00293	13.13%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	474.4	0.0056	mg/L	0.00152	0.0056	mg/L	0.00152	27.08%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	646.6	0.0002	mg/L	0.00001	0.0002	mg/L	0.00001	2.31%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	25.5	0.0003	mg/L	0.00008	0.0003	mg/L	0.00008	26.73%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	31.9	0.0015	mg/L	0.00038	0.0015	mg/L	0.00038	26.02%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	9.1	0.0001	mg/L	0.00003	0.0001	mg/L	0.00003	41.90%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	667.3	0.0025	mg/L	0.00081	0.0025	mg/L	0.00081	32.14%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	282.3	0.0051	mg/L	0.00072	0.0051	mg/L	0.00072	14.10%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	233.2	0.3494	mg/L	0.07626	0.3494	mg/L	0.07626	21.82%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	107.1	0.0104	mg/L	0.00084	0.0104	mg/L	0.00084	8.05%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	342.7	0.0010	mg/L	0.00012	0.0010	mg/L	0.00012	12.12%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	22.4	0.0013	mg/L	0.00035	0.0013	mg/L	0.00035	26.28%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	59.9	0.0014	mg/L	0.00042	0.0014	mg/L	0.00042	29.47%

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QC value within limits for Ni 231.604 Recovery = Not calculated

Na 589.592†	3948.6	0.7199 mg/L	0.00115	0.7199 mg/L	0.00115	0.16%
QC value within limits for Na 589.592 Recovery = Not calculated							
Pb 220.353†	5.6	0.0009 mg/L	0.00026	0.0009 mg/L	0.00026	28.48%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	7.3	0.0037 mg/L	0.00060	0.0037 mg/L	0.00060	16.08%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	2.1	0.0026 mg/L	0.00310	0.0026 mg/L	0.00310	121.02%
QC value within limits for Se 196.026 Recovery = Not calculated							
Sn 189.927†	49.1	0.0103 mg/L	0.00183	0.0103 mg/L	0.00183	17.75%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 337.279†	863.8	0.0016 mg/L	0.00037	0.0016 mg/L	0.00037	23.59%
QC value within limits for Ti 337.279 Recovery = Not calculated							
Tl 190.801†	-0.5	-0.0003 mg/L	0.00178	-0.0003 mg/L	0.00178	650.66%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 292.402†	97.3	0.0015 mg/L	0.00032	0.0015 mg/L	0.00032	21.42%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 206.200†	51.1	0.0017 mg/L	0.00027	0.0017 mg/L	0.00027	15.79%
QC value within limits for Zn 206.200 Recovery = Not calculated							
Ca 227.546†	3.7	0.0201 mg/L	0.00630	0.0201 mg/L	0.00630	31.43%
QC value within limits for Ca 227.546 Recovery = Not calculated							
Sr 421.552†	202.3	0.0017 mg/L	0.00029	0.0017 mg/L	0.00029	16.50%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Al 394.401†	206.2	0.0051 mg/L	0.00239	0.0051 mg/L	0.00239	47.00%
QC value within limits for Al 394.401 Recovery = Not calculated							
Al 237.313†	28.1	0.0046 mg/L	0.00440	0.0046 mg/L	0.00440	95.67%
QC value within limits for Al 237.313 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 130 **Autosampler Location: 6**
Sample ID: MRL **Date Collected: 10/15/2014 3:19:02 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6515462.3	0.9679	mg/L	0.00081				0.08%
Ag 328.068†	2574.0	0.0102	mg/L	0.00012	0.0102	mg/L	0.00012	1.17%
QC value within limits for Ag 328.068 Recovery = 101.98%								
Al 308.215†	2615.2	0.1781	mg/L	0.00428	0.1781	mg/L	0.00428	2.40%
QC value within limits for Al 308.215 Recovery = 89.04%								
As 188.979†	25.6	0.0203	mg/L	0.00136	0.0203	mg/L	0.00136	6.71%
QC value within limits for As 188.979 Recovery = 101.68%								
B 249.772†	22460.9	0.2050	mg/L	0.00172	0.2050	mg/L	0.00172	0.84%
QC value within limits for B 249.772 Recovery = 102.52%								
Ba 233.527†	18000.2	0.2132	mg/L	0.00008	0.2132	mg/L	0.00008	0.04%
QC value within limits for Ba 233.527 Recovery = 106.61%								
Be 313.107†	15295.1	0.0053	mg/L	0.00003	0.0053	mg/L	0.00003	0.61%
QC value within limits for Be 313.107 Recovery = 106.03%								
Cd 226.502†	880.4	0.0107	mg/L	0.00006	0.0107	mg/L	0.00006	0.56%
QC value within limits for Cd 226.502 Recovery = 107.49%								
Co 228.616†	1140.4	0.0521	mg/L	0.00005	0.0521	mg/L	0.00005	0.10%
QC value within limits for Co 228.616 Recovery = 104.27%								
Cr 267.716†	1175.0	0.0103	mg/L	0.00003	0.0103	mg/L	0.00003	0.27%
QC value within limits for Cr 267.716 Recovery = 102.90%								
Cu 324.752†	6471.8	0.0244	mg/L	0.00020	0.0244	mg/L	0.00020	0.84%
QC value within limits for Cu 324.752 Recovery = 97.75%								
Fe 259.939†	5880.1	0.1057	mg/L	0.00005	0.1057	mg/L	0.00005	0.05%
QC value within limits for Fe 259.939 Recovery = 105.70%								
K 766.490†	769.4	1.153	mg/L	0.0076	1.153	mg/L	0.0076	0.66%
QC value within limits for K 766.490 Recovery = 115.28%								
Mg 279.077†	10182.6	0.9895	mg/L	0.00601	0.9895	mg/L	0.00601	0.61%
QC value within limits for Mg 279.077 Recovery = 98.95%								
Mn 257.610†	5455.2	0.0159	mg/L	0.00000	0.0159	mg/L	0.00000	0.01%
QC value within limits for Mn 257.610 Recovery = 106.21%								
Mo 202.031†	435.0	0.0262	mg/L	0.00013	0.0262	mg/L	0.00013	0.48%
QC value within limits for Mo 202.031 Recovery = 104.87%								
Ni 231.604†	1733.8	0.0414	mg/L	0.00014	0.0414	mg/L	0.00014	0.33%

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QC value within limits for Ni 231.604 Recovery = 103.41%
Na 589.592† 8396.1 1.531 mg/L 0.0205 1.531 mg/L 0.0205 1.34%
QC value greater than the upper limit for Na 589.592 Recovery = 153.08%
Pb 220.353† 65.6 0.0110 mg/L 0.00038 0.0110 mg/L 0.00038 3.43%
QC value within limits for Pb 220.353 Recovery = 109.63%
Sb 206.836† 122.7 0.0628 mg/L 0.00194 0.0628 mg/L 0.00194 3.08%
QC value within limits for Sb 206.836 Recovery = 104.62%
Se 196.026† 8.9 0.0109 mg/L 0.00281 0.0109 mg/L 0.00281 25.90%
QC value within limits for Se 196.026 Recovery = 108.51%
Sn 189.927† 2593.6 0.5436 mg/L 0.00001 0.5436 mg/L 0.00001 0.00%
QC value within limits for Sn 189.927 Recovery = 108.73%
Ti 337.279† 29161.7 0.0524 mg/L 0.00005 0.0524 mg/L 0.00005 0.09%
QC value within limits for Ti 337.279 Recovery = 104.72%
Tl 190.801† 31.5 0.0172 mg/L 0.00150 0.0172 mg/L 0.00150 8.68%
QC value within limits for Tl 190.801 Recovery = 86.17%
V 292.402† 3446.7 0.0527 mg/L 0.00011 0.0527 mg/L 0.00011 0.21%
QC value within limits for V 292.402 Recovery = 105.48%
Zn 206.200† 589.8 0.0199 mg/L 0.00023 0.0199 mg/L 0.00023 1.17%
QC value within limits for Zn 206.200 Recovery = 99.71%
Ca 227.546† 156.3 0.8507 mg/L 0.02096 0.8507 mg/L 0.02096 2.46%
QC value within limits for Ca 227.546 Recovery = 85.07%
Sr 421.552† 11573.6 0.0999 mg/L 0.00026 0.0999 mg/L 0.00026 0.26%
QC value within limits for Sr 421.552 Recovery = 99.92%
Al 394.401† 7154.8 0.1766 mg/L 0.00178 0.1766 mg/L 0.00178 1.01%
QC value within limits for Al 394.401 Recovery = 88.28%
Al 237.313† 1186.7 0.1947 mg/L 0.00207 0.1947 mg/L 0.00207 1.06%
QC value within limits for Al 237.313 Recovery = 97.33%
QC Failed. Continue with analysis.

Sequence No.: 131 **Autosampler Location: 7**
Sample ID: ICSA **Date Collected: 10/15/2014 3:25:02 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6100203.3	0.9062	mg/L	0.01130				1.25%
Ag 328.068†	-6803.3	-0.0015	mg/L	0.00030	-0.0015	mg/L	0.00030	19.93%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	3830999.4	261.0	mg/L	1.50	261.0	mg/L	1.50	0.57%
QC value within limits for Al 308.215 Recovery = 104.39%								
As 188.979†	15.7	0.0021	mg/L	0.00236	0.0021	mg/L	0.00236	110.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	37543.8	-0.1298	mg/L	0.00087	-0.1298	mg/L	0.00087	0.67%
Ba 233.527†	288.3	0.0034	mg/L	0.00003	0.0034	mg/L	0.00003	0.79%
Be 313.107†	-946.6	-0.0003	mg/L	0.00007	-0.0003	mg/L	0.00007	21.27%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	1079.2	0.0010	mg/L	0.00001	0.0010	mg/L	0.00001	0.88%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	5.8	0.0003	mg/L	0.00005	0.0003	mg/L	0.00005	20.29%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3659.8	-0.0015	mg/L	0.00039	-0.0015	mg/L	0.00039	26.11%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-1874.1	0.0015	mg/L	0.00047	0.0015	mg/L	0.00047	31.13%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	5118053.8	92.00	mg/L	0.471	92.00	mg/L	0.471	0.51%
QC value within limits for Fe 259.939 Recovery = 92.00%								
K 766.490†	127.7	0.1914	mg/L	0.03282	0.1914	mg/L	0.03282	17.15%
Mg 279.077†	2728772.8	265.2	mg/L	1.68	265.2	mg/L	1.68	0.63%
QC value within limits for Mg 279.077 Recovery = 106.06%								
Mn 257.610†	-5259.2	-0.0031	mg/L	0.00025	-0.0031	mg/L	0.00025	7.93%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	1.2	0.0001	mg/L	0.00049	0.0001	mg/L	0.00049	667.99%
Ni 231.604†	-137.1	-0.0033	mg/L	0.00057	-0.0033	mg/L	0.00057	17.53%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	3281.2	0.5982	mg/L	0.00455	0.5982	mg/L	0.00455	0.76%
Pb 220.353†	-158.6	-0.0002	mg/L	0.00013	-0.0002	mg/L	0.00013	70.07%
QC value within limits for Pb 220.353 Recovery = Not calculated								

Sb 206.836†	49.2	0.0020 mg/L	0.00138	0.0020 mg/L	0.00138	69.47%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-18.4	0.0032 mg/L	0.00020	0.0032 mg/L	0.00020	6.33%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	-159.1	-0.0638 mg/L	0.00116	-0.0638 mg/L	0.00116	1.82%
Ti 337.279†	338.4	0.0006 mg/L	0.00005	0.0006 mg/L	0.00005	8.96%
Tl 190.801†	29.1	0.0013 mg/L	0.00160	0.0013 mg/L	0.00160	122.49%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	383.4	0.0005 mg/L	0.00040	0.0005 mg/L	0.00040	73.23%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	164.7	0.0056 mg/L	0.00032	0.0056 mg/L	0.00032	5.77%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	47474.3	262.6 mg/L	2.41	262.6 mg/L	2.41	0.92%
QC value within limits for Ca 227.546 Recovery = 105.03%						
Sr 421.552†	475.9	0.0041 mg/L	0.00013	0.0041 mg/L	0.00013	3.09%
Al 394.401†	10867934.8	268.2 mg/L	0.49	268.2 mg/L	0.49	0.18%
QC value within limits for Al 394.401 Recovery = 107.27%						
Al 237.313†	1589040.9	260.6 mg/L	1.50	260.6 mg/L	1.50	0.58%
QC value within limits for Al 237.313 Recovery = 104.26%						

All analyte(s) passed QC.

Sequence No.: 132 **Autosampler Location: 8**
Sample ID: ICSAB **Date Collected: 10/15/2014 3:31:22 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6035241.1	0.8966	mg/L	0.00157				0.17%
Ag 328.068†	46325.3	0.2087	mg/L	0.00034	0.2087	mg/L	0.00034	0.16%
QC value within limits for Ag 328.068 Recovery = 104.33%								
Al 308.215†	3865099.0	263.3	mg/L	1.63	263.3	mg/L	1.63	0.62%
QC value within limits for Al 308.215 Recovery = 105.32%								
As 188.979†	135.2	0.0970	mg/L	0.00368	0.0970	mg/L	0.00368	3.80%
QC value within limits for As 188.979 Recovery = 97.00%								
B 249.772†	37106.0	-0.1388	mg/L	0.00057	-0.1388	mg/L	0.00057	0.41%
Ba 233.527†	45203.6	0.5354	mg/L	0.00228	0.5354	mg/L	0.00228	0.43%
QC value within limits for Ba 233.527 Recovery = 107.09%								
Be 313.107†	1469194.8	0.5093	mg/L	0.00119	0.5093	mg/L	0.00119	0.23%
QC value within limits for Be 313.107 Recovery = 101.85%								
Cd 226.502†	81897.2	0.9889	mg/L	0.00089	0.9889	mg/L	0.00089	0.09%
QC value within limits for Cd 226.502 Recovery = 98.89%								
Co 228.616†	10737.5	0.4909	mg/L	0.00091	0.4909	mg/L	0.00091	0.19%
QC value within limits for Co 228.616 Recovery = 98.18%								
Cr 267.716†	56297.4	0.5186	mg/L	0.00155	0.5186	mg/L	0.00155	0.30%
QC value within limits for Cr 267.716 Recovery = 103.72%								
Cu 324.752†	138781.9	0.5325	mg/L	0.00131	0.5325	mg/L	0.00131	0.25%
QC value within limits for Cu 324.752 Recovery = 106.50%								
Fe 259.939†	5174402.9	93.01	mg/L	0.065	93.01	mg/L	0.065	0.07%
QC value within limits for Fe 259.939 Recovery = 93.01%								
K 766.490†	200.9	0.3010	mg/L	0.00277	0.3010	mg/L	0.00277	0.92%
Mg 279.077†	2748548.9	267.1	mg/L	0.92	267.1	mg/L	0.92	0.35%
QC value within limits for Mg 279.077 Recovery = 106.83%								
Mn 257.610†	173604.9	0.5189	mg/L	0.00184	0.5189	mg/L	0.00184	0.36%
QC value within limits for Mn 257.610 Recovery = 103.79%								
Mo 202.031†	-4.6	-0.0003	mg/L	0.00025	-0.0003	mg/L	0.00025	89.14%
Ni 231.604†	40883.8	0.9754	mg/L	0.00151	0.9754	mg/L	0.00151	0.16%
QC value within limits for Ni 231.604 Recovery = 97.54%								
Na 589.592†	2763.6	0.5039	mg/L	0.00340	0.5039	mg/L	0.00340	0.68%
Pb 220.353†	155.5	0.0524	mg/L	0.00249	0.0524	mg/L	0.00249	4.76%
QC value within limits for Pb 220.353 Recovery = 104.88%								
Sb 206.836†	1274.7	0.6287	mg/L	0.00611	0.6287	mg/L	0.00611	0.97%
QC value within limits for Sb 206.836 Recovery = 104.79%								
Se 196.026†	23.1	0.0538	mg/L	0.00252	0.0538	mg/L	0.00252	4.68%
QC value within limits for Se 196.026 Recovery = 107.51%								
Sn 189.927†	-135.4	-0.0591	mg/L	0.00015	-0.0591	mg/L	0.00015	0.25%
Ti 337.279†	275.2	0.0005	mg/L	0.00002	0.0005	mg/L	0.00002	4.59%
Tl 190.801†	223.5	0.1075	mg/L	0.00218	0.1075	mg/L	0.00218	2.03%

QC value within limits for Tl 190.801 Recovery = 107.46%

V 292.402†	33336.1	0.5048 mg/L	0.00073	0.5048 mg/L	0.00073	0.14%
QC value within limits for V 292.402 Recovery = 100.96%						
Zn 206.200†	29100.1	0.9840 mg/L	0.00067	0.9840 mg/L	0.00067	0.07%
QC value within limits for Zn 206.200 Recovery = 98.40%						
Ca 227.546†	47589.8	263.3 mg/L	1.49	263.3 mg/L	1.49	0.56%
QC value within limits for Ca 227.546 Recovery = 105.30%						
Sr 421.552†	476.8	0.0041 mg/L	0.00041	0.0041 mg/L	0.00041	10.07%
Al 394.401†	10927183.9	269.6 mg/L	0.67	269.6 mg/L	0.67	0.25%
QC value within limits for Al 394.401 Recovery = 107.86%						
Al 237.313†	1597959.1	262.1 mg/L	1.28	262.1 mg/L	1.28	0.49%
QC value within limits for Al 237.313 Recovery = 104.84%						

All analyte(s) passed QC.

Sequence No.: 133
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 10/15/2014 3:37:45 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6408200.1	0.9520	mg/L	0.00737				0.77%
Ag 328.068†	129611.5	0.5135	mg/L	0.01222	0.5135	mg/L	0.01222	2.38%
QC value within limits for Ag 328.068 Recovery = 102.69%								
Al 308.215†	143488.4	9.773	mg/L	0.2641	9.773	mg/L	0.2641	2.70%
QC value within limits for Al 308.215 Recovery = 97.73%								
As 188.979†	1252.6	0.9948	mg/L	0.01235	0.9948	mg/L	0.01235	1.24%
QC value within limits for As 188.979 Recovery = 99.48%								
B 249.772†	266145.8	2.410	mg/L	0.0861	2.410	mg/L	0.0861	3.57%
QC value within limits for B 249.772 Recovery = 96.38%								
Ba 233.527†	877919.4	10.40	mg/L	0.027	10.40	mg/L	0.027	0.26%
QC value within limits for Ba 233.527 Recovery = 103.99%								
Be 313.107†	738573.0	0.2560	mg/L	0.00115	0.2560	mg/L	0.00115	0.45%
QC value within limits for Be 313.107 Recovery = 102.40%								
Cd 226.502†	42619.6	0.5203	mg/L	0.01542	0.5203	mg/L	0.01542	2.96%
QC value within limits for Cd 226.502 Recovery = 104.07%								
Co 228.616†	55924.0	2.557	mg/L	0.0747	2.557	mg/L	0.0747	2.92%
QC value within limits for Co 228.616 Recovery = 102.27%								
Cr 267.716†	60391.0	0.5263	mg/L	0.01353	0.5263	mg/L	0.01353	2.57%
QC value within limits for Cr 267.716 Recovery = 105.27%								
Cu 324.752†	329046.8	1.243	mg/L	0.0355	1.243	mg/L	0.0355	2.85%
QC value within limits for Cu 324.752 Recovery = 99.40%								
Fe 259.939†	287931.8	5.176	mg/L	0.1318	5.176	mg/L	0.1318	2.55%
QC value within limits for Fe 259.939 Recovery = 103.51%								
K 766.490†	17558.1	26.31	mg/L	0.514	26.31	mg/L	0.514	1.95%
QC value within limits for K 766.490 Recovery = 105.23%								
Mg 279.077†	262015.3	25.46	mg/L	0.647	25.46	mg/L	0.647	2.54%
QC value within limits for Mg 279.077 Recovery = 101.84%								
Mn 257.610†	263936.1	0.7708	mg/L	0.02128	0.7708	mg/L	0.02128	2.76%
QC value within limits for Mn 257.610 Recovery = 102.78%								
Mo 202.031†	41038.6	2.473	mg/L	0.0668	2.473	mg/L	0.0668	2.70%
QC value within limits for Mo 202.031 Recovery = 98.93%								
Ni 231.604†	86789.0	2.071	mg/L	0.0600	2.071	mg/L	0.0600	2.90%
QC value within limits for Ni 231.604 Recovery = 103.53%								
Na 589.592†	140232.2	25.57	mg/L	0.529	25.57	mg/L	0.529	2.07%
QC value within limits for Na 589.592 Recovery = 102.27%								
Pb 220.353†	3040.3	0.5081	mg/L	0.00781	0.5081	mg/L	0.00781	1.54%
QC value within limits for Pb 220.353 Recovery = 101.63%								
Sb 206.836†	9626.2	4.924	mg/L	0.0498	4.924	mg/L	0.0498	1.01%
QC value within limits for Sb 206.836 Recovery = 98.48%								
Se 196.026†	416.0	0.5052	mg/L	0.00670	0.5052	mg/L	0.00670	1.33%
QC value within limits for Se 196.026 Recovery = 101.05%								
Sn 189.927†	24668.5	5.170	mg/L	0.1674	5.170	mg/L	0.1674	3.24%
QC value within limits for Sn 189.927 Recovery = 103.40%								
Ti 337.279†	1391982.3	2.499	mg/L	0.0075	2.499	mg/L	0.0075	0.30%
QC value within limits for Ti 337.279 Recovery = 99.98%								
Tl 190.801†	1832.4	1.001	mg/L	0.0121	1.001	mg/L	0.0121	1.21%
QC value within limits for Tl 190.801 Recovery = 100.14%								

Method: DV200-6010C Opt3 Page 99 Date: 10/15/2014 3:48:25 AM

V 292.402†	166616.3	2.550 mg/L	0.0551	2.550 mg/L	0.0551	2.16%
QC value within limits for V 292.402 Recovery = 101.98%						
Zn 206.200†	30912.6	1.045 mg/L	0.0292	1.045 mg/L	0.0292	2.79%
QC value within limits for Zn 206.200 Recovery = 104.53%						
Ca 227.546†	4431.3	24.27 mg/L	0.249	24.27 mg/L	0.249	1.03%
QC value within limits for Ca 227.546 Recovery = 97.07%						
Sr 421.552†	278803.4	2.407 mg/L	0.0533	2.407 mg/L	0.0533	2.22%
QC value within limits for Sr 421.552 Recovery = 96.28%						
Al 394.401†	390533.2	9.637 mg/L	0.2488	9.637 mg/L	0.2488	2.58%
QC value within limits for Al 394.401 Recovery = 96.37%						
Al 237.313†	61037.7	10.01 mg/L	0.266	10.01 mg/L	0.266	2.66%
QC value within limits for Al 237.313 Recovery = 100.12%						
All analyte(s) passed QC.						

Sequence No.: 134 **Autosampler Location: 5**
Sample ID: CCB **Date Collected: 10/15/2014 3:44:47 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6700890.0	0.9954	mg/L	0.00476				0.48%
Ag 328.068†	23.6	0.0001	mg/L	0.00016	0.0001	mg/L	0.00016	161.43%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	264.3	0.0180	mg/L	0.00545	0.0180	mg/L	0.00545	30.28%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.7	0.0006	mg/L	0.00023	0.0006	mg/L	0.00023	41.15%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3050.7	0.0278	mg/L	0.00347	0.0278	mg/L	0.00347	12.48%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	377.4	0.0045	mg/L	0.00077	0.0045	mg/L	0.00077	17.30%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	705.5	0.0002	mg/L	0.00002	0.0002	mg/L	0.00002	10.03%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	19.2	0.0002	mg/L	0.00010	0.0002	mg/L	0.00010	44.38%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	44.7	0.0020	mg/L	0.00018	0.0020	mg/L	0.00018	8.92%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	16.1	0.0001	mg/L	0.00005	0.0001	mg/L	0.00005	35.97%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1149.3	0.0043	mg/L	0.00065	0.0043	mg/L	0.00065	14.92%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	1559.9	0.0280	mg/L	0.00170	0.0280	mg/L	0.00170	6.08%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	89.0	0.1333	mg/L	0.08428	0.1333	mg/L	0.08428	63.22%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	161.7	0.0157	mg/L	0.00219	0.0157	mg/L	0.00219	13.91%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	259.0	0.0008	mg/L	0.00004	0.0008	mg/L	0.00004	4.98%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	15.4	0.0009	mg/L	0.00026	0.0009	mg/L	0.00026	28.35%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	88.1	0.0021	mg/L	0.00029	0.0021	mg/L	0.00029	13.67%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	1769.8	0.3227	mg/L	0.00082	0.3227	mg/L	0.00082	0.25%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	3.2	0.0005	mg/L	0.00122	0.0005	mg/L	0.00122	228.66%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	5.0	0.0026	mg/L	0.00120	0.0026	mg/L	0.00120	46.97%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	2.7	0.0033	mg/L	0.00405	0.0033	mg/L	0.00405	123.83%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	50.8	0.0106	mg/L	0.00130	0.0106	mg/L	0.00130	12.19%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	632.9	0.0011	mg/L	0.00004	0.0011	mg/L	0.00004	3.76%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-0.9	-0.0005	mg/L	0.00044	-0.0005	mg/L	0.00044	85.49%
QC value within limits for Tl 190.801 Recovery = Not calculated								

V 292.402†	34.9	0.0005 mg/L	0.00036	0.0005 mg/L	0.00036	67.40%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	54.8	0.0019 mg/L	0.00022	0.0019 mg/L	0.00022	11.74%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	7.3	0.0412 mg/L	0.01017	0.0412 mg/L	0.01017	24.70%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	140.5	0.0012 mg/L	0.00009	0.0012 mg/L	0.00009	7.83%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 394.401†	600.6	0.0148 mg/L	0.00177	0.0148 mg/L	0.00177	11.92%
QC value within limits for Al 394.401 Recovery = Not calculated						
Al 237.313†	96.6	0.0158 mg/L	0.00263	0.0158 mg/L	0.00263	16.63%
QC value within limits for Al 237.313 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 135 **Autosampler Location: 117**
Sample ID: Sample117 **Date Collected: 10/15/2014 3:50:48 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: Sample117

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6557922.2	0.9742	mg/L	0.00058				0.06%
Ag 328.068†	-15.0	0.0000	mg/L	0.00030	0.0000	mg/L	0.00030	750.85%
Al 308.215†	724.4	0.0490	mg/L	0.00321	0.0490	mg/L	0.00321	6.56%
As 188.979†	2.3	0.0018	mg/L	0.00007	0.0018	mg/L	0.00007	3.73%
B 249.772†	1864.1	0.0166	mg/L	0.00088	0.0166	mg/L	0.00088	5.30%
Ba 233.527†	430.4	0.0051	mg/L	0.00005	0.0051	mg/L	0.00005	1.05%
Be 313.107†	337.0	0.0001	mg/L	0.00001	0.0001	mg/L	0.00001	8.18%
Cd 226.502†	-12.5	-0.0002	mg/L	0.00001	-0.0002	mg/L	0.00001	6.73%
Co 228.616†	8.3	0.0004	mg/L	0.00018	0.0004	mg/L	0.00018	46.97%
Cr 267.716†	32.4	0.0004	mg/L	0.00008	0.0004	mg/L	0.00008	21.44%
Cu 324.752†	634.2	0.0024	mg/L	0.00029	0.0024	mg/L	0.00029	12.12%
Fe 259.939†	3916.9	0.0704	mg/L	0.00028	0.0704	mg/L	0.00028	0.40%
K 766.490†	200.9	0.3010	mg/L	0.02823	0.3010	mg/L	0.02823	9.38%
Mg 279.077†	6953.4	0.6757	mg/L	0.00233	0.6757	mg/L	0.00233	0.35%
Mn 257.610†	2330.6	0.0068	mg/L	0.00001	0.0068	mg/L	0.00001	0.22%
Mo 202.031†	3.6	0.0002	mg/L	0.00012	0.0002	mg/L	0.00012	54.88%
Ni 231.604†	15.8	0.0004	mg/L	0.00016	0.0004	mg/L	0.00016	43.57%
Na 589.592†	15312.3	2.792	mg/L	0.0057	2.792	mg/L	0.0057	0.20%
Pb 220.353†	-3.7	-0.0006	mg/L	0.00001	-0.0006	mg/L	0.00001	1.60%
Sb 206.836†	9.0	0.0046	mg/L	0.00019	0.0046	mg/L	0.00019	4.10%
Se 196.026†	2.7	0.0033	mg/L	0.00150	0.0033	mg/L	0.00150	45.85%
Sn 189.927†	15.7	0.0033	mg/L	0.00147	0.0033	mg/L	0.00147	44.63%
Ti 337.279†	697.8	0.0013	mg/L	0.00002	0.0013	mg/L	0.00002	1.64%
Tl 190.801†	-6.4	-0.0035	mg/L	0.00099	-0.0035	mg/L	0.00099	28.39%
V 292.402†	23.9	0.0004	mg/L	0.00011	0.0004	mg/L	0.00011	29.49%
Zn 206.200†	66.5	0.0022	mg/L	0.00032	0.0022	mg/L	0.00032	14.44%
Ca 227.546†	507.8	2.747	mg/L	0.0305	2.747	mg/L	0.0305	1.11%
Sr 421.552†	1351.0	0.0117	mg/L	0.00036	0.0117	mg/L	0.00036	3.13%
Al 394.401†	1396.6	0.0345	mg/L	0.00143	0.0345	mg/L	0.00143	4.14%
Al 237.313†	264.2	0.0433	mg/L	0.00005	0.0433	mg/L	0.00005	0.12%

Preparation Information Benchsheet

Prep Run#: 220154 **Prep WorkFlow:** MetDigAqICP **Status:** Prepped
Team: Metals/CWINKSTERN **Prep Method:** EPA 3010A **Prep Date/Time:** 10/8/14 03:04 PM

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ1412130-01	MB		50mL	6010C/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		HB #7 well = A5 temp = 95C correction factor =-0.2C corrected temp = 94.8C
2	RQ1412130-02	LCS		50mL	6010C/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.0500 mL/74566; 0.5000 mL/73573; 0.2500 mL/74428; 0.5000 mL/73574	
3	R1407813-001	FTMM-8-GW-697MW01-16.45	.06	50mL	6010C/Pb T	<2			50.00mL	Colorless-Clear		Tier IV
4	RQ1412130-07	R1407813-001 DUP	.06	50mL	6010C/Pb T	<2			50.00mL			
5	RQ1412130-08	R1407813-001 MS	.06	50mL	6010C/Pb T	<2			50.00mL		0.2500 mL/74428; 0.5000 mL/73573; 0.5000 mL/73574; 0.0500 mL/74566	
6	R1407813-009	FTMM-56-GW-80MW02-8.10	.01	50mL	6010C/As T, Cd T, Pb T	<2			50.00mL	Colorless-Clear		
7	R1407813-010	FTMM-EB-100114-01	.04	50mL	6010C/As T, Cd T, Pb T	<2			50.00mL	Colorless-Clear		
8	R1407813-016	FTMM-8-GW-M8MW17-10.90	.01	50mL	6010C/Pb T	<2			50.00mL	Colorless-Clear		
9	R1407813-017	FTMM-8-GW-M8MW21-14.31	.01	50mL	6010C/Pb T	<2			50.00mL	Colorless-Clear		
10	R1407813-026	FTMM-EB-100214	.06	50mL	6010C/Pb T	<2			50.00mL	Colorless-Clear		
11	R1407821-001	CalvFLTSINF1014	.04	50mL	6010C/Fe T, Mn T	<2			50.00mL	Colorless-Clear		
12	RQ1412130-03	R1407821-001 DUP	.04	50mL	6010C/Fe T, Mn T	<2			50.00mL	Colorless-Clear		
13	RQ1412130-04	R1407821-001 MS	.04	50mL	6010C/Fe T, Mn T	<2			50.00mL	Colorless-Clear	0.0500 mL/74566; 0.2500 mL/74428; 0.5000 mL/73573; 0.5000 mL/73574	
14	R1407821-002	CalvFLTSEW1-1014	.04	50mL	6010C/Fe T, Mn T	<2			50.00mL	Colorless-Clear		
15	R1407821-003	CalvFLTSEW2-1014	.04	50mL	6010C/Fe T, Mn T	<2			50.00mL	Colorless-Clear		
16	R1407821-004	CalvFLTSEFF-1014	.04	50mL	6010C/Fe T, Mn T	<2			50.00mL	Colorless-Clear		
17	R1407821-005	CalvEFFDUP-1014	.04	50mL	6010C/Fe T, Mn T	<2			50.00mL	Colorless-Clear		
18	R1407825-001	FTMM-EB-100314	.06	50mL	6010C/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		Tier IV
19	R1407825-003	FTMM-3-GW-M3MW02-2	.06	50mL	6010C/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 220154 **Prep WorkFlow:** MetDigAqICP **Status:** Prepped
Team: Metals/CWINKSTERN **Prep Method:** EPA 3010A **Prep Date/Time:** 10/8/14 03:04 PM

20	RQ1412130-05	R1407825-003 DUP	.06	50mL	6010C/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
21	RQ1412130-06	R1407825-003 MS	.06	50mL	6010C/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/73573; 0.2500 mL/74428; 0.5000 mL/73574; 0.0500 mL/74566	
22	R1407825-004	FTMM-3-GW-M3MW102-21	.04	50mL	6010C/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		Tier IV
23	R1407825-011	FTMM-57-GW-108MW04-8.25	.01	50mL	6010C/Pb T	<2			50.00mL	Colorless-Clear		

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	73573	Logbook Ref:	M5280039BB	Expires On:	08/04/2015	Lot #:	14D125
Name:	Custom LCS STD B Metals	Inventory ID	73574	Logbook Ref:	M5280039CC	Expires On:	08/04/2015	Lot #:	14D123
Name:	Tin 1000 ug/mL Sn	Inventory ID	74428	Logbook Ref:	M5280040H	Expires On:	02/22/2016	Lot #:	13H086
Name:	Selenium 1000 ug/mL Se	Inventory ID	74566	Logbook Ref:	M5280040P	Expires On:	03/03/2016	Lot #:	1408440

Preparation Materials

1:1 HCl Metals Grade M5280039X (63957) Hot Block Cups 50 mL Lot 1404096 (75494) Nitric Acid Metals Grade HNO3 M5280040W (74716)
Thermometer 293 (12952)

Preparation Steps

Step: Digestion
Started: 10/8/14 15:04
Finished: 10/9/14 08:16
By: DBOND
Comments

Comments: _____

Reviewed By: DB Date: 10/9/14 Spike Witness: TCHRIST Date: _____

Preparation Information Benchsheet

Prep Run#: 220154
Team: Metals/CWINKSTERN
Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3010A
Status: Prepped
Prep Date/Time: 10/8/14 03:04 PM

Chain of Custody

Relinquished By:	DRm	Date:	10/9/14	Extracts Examined
Received By:	R-A01	Date:	10/9/14	Yes No

OPTIMA 3,4,5 CALIBRATION STANDARD #1 (Standard is prepared weekly or as necessary)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Cal Std.1 Int.	AL	m68f0002B	20.0	1.00	1000	0.020	2%HNO3 5%HCl	DcB 10/13/14	A	10/13/14 3x6 m6[illegible] 52860402S	m52802 42Y	10/29/14	m26 ALS
	AS		5.00			0.0050			B				
	CD		1.00			0.0010			C				
	CO		3.00			0.0030			D				
	CR		1.00			0.0010			E				
	NI		5.00			0.0050			F				
	PB		5.00			0.0050			G				
	SE		5.00			0.0050			H				
	V		3.00			0.0030			I				
Cal Std. 1	CA	m52800388	5000	0.100		0.500			J				
	K		5000			BELOW			K				
	MG		5000			0.500			L				
	NA		5000			0.500			M				
Single Element	BA	m52800 36V	1000	0.020		0.020			N				
	CU	m52800400	1000	0.010		0.010			O				
	K	m52800 29K	10000	0.150		2.00			P				
	MN	m52800 37F	1000	0.010		0.010			Q				
	MO	m52800 38X	1000	0.025		0.025			R				
	SB	m52800 376	1000	0.010		0.010			S				
	TL	m52800 30Q	1000	0.010		0.010			T				
	ZN	m52800 34T	1000	0.010		0.010			U				
	P	———	1000	0.100		0.100			V				
									W				
									X				
									Y				
									Z				

0804

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OPTIMA 3,4,5 CALIBRATION STANDARD #2
(Standard is prepared weekly or as necessary)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Single Element	AL	m52800306L	1000	0.100	1000	0.100	2%HNO3	DCB 10/2/14	A	m52800402	m52800398X	10/8/14	m23 m25
	AS	m52800327FF	1000	0.010		0.010	5%HCl	DCB 10/10/14	B	m52800402	m52800402Y	10/17/14	m23 m25
	B	m52800335A	1000	0.200		0.200			C				
	BE (1/10)	m52800376G	100	0.030		0.003			D				
	CA	m52800332J	10000	0.100		1.00			E				
	CD (1/10)	m52800405N	100	0.050		0.005			F				
	CU	m52800400	1000	0.020		0.020			G				
	K	m52800329K	10000	0.200		2.00			H				
	MG	m52800336T	10000	0.100		1.00			I				
	NA	m52800340m	10000	0.100		1.00			J				
	SB	m52800376	1000	0.060		0.060			K				
	SE	m52800409	1000	0.010		0.010			L				
	SN	m52800334F	1000	0.500		0.500			M				
									N				
									O				
									P				
									Q				
									R				
									S				
									T				
									U				
									V				
									W				
									X				
									Y				
									Z				

0845 0084

OPTIMA 3/4/5 CALIBRATION STANDARD #5 / HLCCV1 (Standard is prepared weekly or as necessary)

(CALIBRATION STANDARD #3 IS A 1/100 DILUTION OF THIS STANDARD)
(CALIBRATION STANDARD #4 IS A 1/5 DILUTION OF THIS STANDARD)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Cal Std 1	CA	m52800 35C	5000	5.00	500	50.0	2%HNO3	DCB 9/24/14	A	m52800 39Y	m52800 39Y	10/1/14	m26 m23
	MG		5000			50.0	5%HCl	DCB 10/1/14	B	m52800 40D	m52800 38Y	10/8/14	m26 m23
	K		5000			50.0		DCB 10/9/14	C	m52800 40D	m52800 40Y	10/16/14	m26 m23
	NA		5000			50.0			D				
Cal Std 2	AG	m52800 39A	100	5.00		1.00			E				
	CR		100			1.00			F				
	MN		150			1.50			G				
	NI		400			4.00			H				
	ZN		200			2.00			I				
Cal Std 3	AL	m52800 37B	2000	5.00		20.0			J				
	BA		2000			20.0			K				
	BE		50			0.500			L				
	CO		500			5.00			M				
	CU		250			2.50			N				
	FE		1000			10.0			O				
	V		500			5.00			P				
Cal Std 4	AS	m52800 39C	100	10.00		2.00			Q				
	CD		50			1.00			R				
	PB		50			1.00			S				
	SE		50			1.00			T				
	TL		100			2.00			U				
Single Metals	SB	m52800 37G	1000	5.00		10.0			V				
	SN	m52800 34F	1000	5.00		10.0			W				
	B	m52800 35A	1000	2.50		5.00			X				
	MO	m52800 38X	1000	2.50		5.00			Y				
	TI	m52800 34BB	1000	2.50		5.00			Z				
	SR	m52800 37D	1000	2.50		5.00			AA				
	P	—	1000	5.00		10.0			BB				

G4800

OPTIMA 3/4/5 ICV/CCV (Standard is prepared daily)
(ICV FOR ILM5.3 IS A ½ DILUTION OF THIS STANDARD)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix
Cal Std 1	CA	m52800386	5000	1.00	200	25.0	2%HNO3
	MG		5000			25.0	5%HCl
	K		5000			25.0	
	NA		5000			25.0	
Cal Std 2	AG	m52800388	100	1.00		0.500	
	CR		100			0.500	
	MN		150			0.750	
	NI		400			2.00	
	ZN		200			1.00	
Cal Std 3	AL	m52800388H	2000	1.00		10.0	
	BA		2000			10.0	
	BE		50			0.250	
	CO		500			2.50	
	CU		250			1.25	
	FE		1000			5.00	
	V		500			2.50	
Cal Std 4	AS	m52800396	100	2.00		1.00	
	CD		50			0.500	
	PB		50			0.500	
	SE		50			0.500	
	TL		100			1.00	
Single Metals	SB	m52800377N	1000	1.00		5.00	
	SN	m52800401H	1000	1.00		5.00	
	B	m52800316	1000	0.500		2.50	
	MO	m52800311	1000	0.500		2.50	
	TI	m52800311K	1000	0.500		2.50	
	SR	m52800381	1000	0.500		2.50	
	P	———	1000	1.00		5.00	

Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Pipet ID
DCB 9/28/14	A	m52800398V	m52800394X	m26 m23
DCB 9/26/14	B	m52800394V	m52800394X	m26 m23
DCB 9/30/14	C	m52800400W	m52800394X	m26 m23
DCB 10/1/14	D	m52800400W	m52800394X	m26 m23
DCB 10/2/14	E	m52800400W	m52800394X	m26 m23
DCB 10/3/14	F	m52800400W	m52800394X	m26 m23
DCB 10/6/14	G	m52800400W	m52800400Y	m26 m23
DCB 10/7/14	H	m52800400W	m52800400Y	m26 m23
DCB 10/8/14	I	m52800400W	m52800400Y	m26 m23
DCB 10/9/14	J	m52800400W	m52800400Y	m26 m23
DCB 10/10/14	K	m52800400W	m52800400Y	m26 m23
CBS 10/12/14	L	m52800400W	m52800400Y	m26 m23
DCB 10/13/14	M	m52800400W	m52800400Y	m26 m23
DCB 10/14/14	N	m52800400W	m52800400Y	m26 m23
	O			
	P			
	Q			
	R			
	S			
	T			
	U			
	V			
	W			
	X			
	Y			
	Z			
	AA			
	BB			

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OPTIMA 3/4 HLCCV2 (Standard is prepared every 2 weeks or as necessary)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Cal Std 2	AG	MS2460364A	100	2.00	100	2.00	2%HNO3	TC 10/3/14	A	MS2800240W	MS800384X	10/17/14	M23 M26
	CR		100			Below	5%HCl		B				
	MN		150			Below			C				
	NI		400			8.00			D				
	ZN		200			4.00			E				
Cal Std 3	AL	MS2800 37B	2000	2.00		Below			F				
	BA		2000			40.0			G				
	BE		50			1.00			H				
	CO, V		500			10.0			I				
	CU		250			5.00			J				
	FE		1000			Below			K				
Cal Std 4	AS, TL	MS2800 40K	100	4.00		4.00			L				
	CD, SE		50			2.00			M				
	PB		50			Below			N				
Single Metals	B	MS1800 35A	1000	1.00		10.0			O				
	MO	38X	1000	1.00		10.0			P				
	TI	34BB	1000	1.00		10.0			Q				
	SR	31P	1000	1.00		10.0			R				
	CA	32J	10000	2.50		250			S				
	MG	36T	10000	5.00		500			T				
	NA	~~40M~~ 27D	10000	1.50		150			U				
	CR	37E	1000	0.800		10.0			V				
	FE	40Q	10000	0.300		50			W				
	AL	37H	10000	4.60		500			X				
	MN	37F	1000	0.700		10.00			Y				
	PB	34AA	1000	0.800		10.0			Z				
	K	29K	10000	1.50		150			AA				

8300

OPTIMA 3/4/5 MRL (Standard is prepared every 6 months or as needed)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Cal Std 1	CA	m52800352	5000	0.200	1000	1.00	2%HNO3 5%HCl	DCB 9/22/14	A	m52800397	m52800397	3/22/15	m25
	MG		5000			1.00		DCB 10/9/14	B	m52800402	m52800402	4/9/15	m25
	K		5000			1.00			C				
	NA		5000			1.00			D				
Cal Std 2	AG	m52800394	100	0.100		0.0100			E				
	CR		100			0.0100			F				
	MN		150			0.0150			G				
	NI		400			0.0400			H				
	ZN		200			0.0200			I				
Cal Std 3	AL	m52800378	2000	0.100		0.200			J				
	BA		2000			0.200			K				
	BE		50			0.0050			L				
	CO		500			0.0500			M				
	CU		250			0.0250			N				
	FE		1000			0.100			O				
	V		500			0.0500			P				
Cal Std 4	AS	m52800396	100	0.200		0.0200			Q				
	CD		50			0.0100			R				
	PB		50			0.0100			S				
	SE		50			0.0100			T				
	TL		100			0.0200			U				
Single Metals	B	m52800354	1000	0.200		0.200			V				
	MO	m52800388	1000	0.025		0.0250			W				
	SN	m52800346	1000	0.500		0.500			X				
	TI	m52800360	1000	0.050		0.0500			Y				
	SB	m52800376	1000	0.060		0.0600			Z				
	SR	m52800370	1000	0.100		0.100			AA				
	P	—	1000	0.100		0.100			BB				

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OPTIMA 3 & 5 ICSA STANDARD (Standard is prepared every 6 months or as necessary)

Element	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	ID Letter	Nitric Acid Lot #	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Int. A Sol'n	MS280039AA	Multi	50	1000	Multi	5% HCL	TC 9/25/14	A	MS280039V	MS280040X	3/25/14	—
AL		5000			250	2%HNO3		B				
CA		5000			250			C				
FE		2000			100			D				
MG		5000			250			E				
								F				
								G				
								H				
								I				
								J				
								K				
								L				
								M				
								N				
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								R				
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								T				
								U				
								V				

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OPTIMA 3 & 5 ICSAB STANDARD (Standard is prepared every 6 months or as necessary)

Element	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	ID Letter	Nitric Acid Lot #	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Int. A Sol'n	M528c039AA	Multi	25	500	Multi	5 % HCl	CSW 9/23/14	A	M528c044a	M528c064m	3/23/15	—
AL		5000			250	2%HNO3	DCS 10/7/14	B	m528304615	m528c40y	4/7/15	—
CA		5000			250			C				
FE		2000			100			D				
MG		5000			250			E				
Int. B Sol'n	M528c04CG	Multi	5		Multi			F				
AG		20			0.200			G				
BA		50			0.500			H				
BE		50			0.500			I				
CD		100			1.00			J				
CO		50			0.500			K				
CR		50			0.500			L				
CU		50			0.500			M				
MN		50			0.500			N				
NI		100			1.00			O				
PB		5			0.0500			P				
V		50			0.500			Q				
ZN		100			1.00			R				
AS		10			0.100			S				
SB		60			0.600			T				
SE		5			0.0500			U				
TL		10			0.100			V				

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OPTIMA 3/4 INTERNAL STANDARD (ADDED ON-LINE)

Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Hydro-chloric Acid Lot #	Expiration Date	Pipet ID
Y	M528003AF	10000	2.0	2000	10.0	5 % HCl 2%HNO3	TC 9/14/14	A	M528V039V	M528C039X	3/19/1545	M26
CS	M528003AE	10000	2.0		10.0		DCB 9/25/14	B	M528C039V	M528C039X	3/25/1545	M26
							TC 9/26/14	C	M528W39V	M528C039X TC 9/26/14	~~3/25~~ 3/26/1545	M26
							TC 9/27/14	D	M528W039V	M528W39X	3/27/1545	M26
							DCB 10/1/14	E	M528004OW	M528C039X	4/1/1545 10/6/14 DCB	M26
							DCB 10/6/14	F	M528004OW	M528C039X	4/6/1545	M26
							DCB 10/6/14	G	M528004OW	M528C039X	4/6/1545	M26
							DCB 10/10/14	H	M528004OW	M528C40Y	4/10/15	M26
							DCB 10/12/14	I	M528004OW	M528C40Y	4/12/15	M28
								J				
								K				
								L				
								M				
								N				
								O				
								P				
								Q				
								R				
								S				
								T				
								V				

00852

October 27, 2014 Service Request No: R1407825

Tammy Chang
Parsons, Inc.
8000 Centre Park Drive, Suite 200
Austin, TX 78754

Laboratory Results for: FTMM Baseline/748810-03000

Dear Tammy:

Enclosed are the results of the sample(s) submitted to our laboratory on October 4, 2014. For your reference, these analyses have been assigned our service request number **R1407825**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Janice Jaeger
Client Services Manager

CC: Sandra de las Fuentes

ADDRESS 1565 Jefferson Rd, Building 300, Suite 360, Rochester, NY 14623 PHONE 585-288-5380 | FAX 585-288-8475
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CASE NARRATIVE

Client:	Parsons Engineering Science	**Service Request No.:**	R1307825
Project:	FTMM Baseline	**Project No.:**	748810-0300
Sample Matrix:	Water	**Date Received:**	10/04/14

General Comments

The DOD QSM 4.1 requires detections reported to the Method Detection Limit (MDL). Values greater than the MDL and less than the Limit of Quantitation (LOQ) were flagged as estimates (J). Values less than the MDL and Limit of Detection (LOD) were reported as non-detect (ND). The LOD for each analyte is verified quarterly by the laboratory using procedures defined in DOD Quality Systems Manual Version 4.1.

Sample Receipt

Samples were collected on 10/02-03/14 and received in good condition at cooler temperatures of and 4.9 and 5.5°C as noted on the cooler receipt and preservation check form. The samples were stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the batching form for a cross-reference between Client ID and ALS Job #.

Volatile Organics

Six water samples were analyzed for TCL Volatile organics by SW-846 method 8260C. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

Library Searches against the NBS/EPA library were conducted on all samples. The 20 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

All Tuning criteria for BFB were and within QC limits.

Internal Standard Areas were within QC limits.

All the initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within acceptance limits for all samples.

The Blank Spike (LCS) recoveries were all acceptable.

A Matrix Spike/Matrix spike duplicate (MS/MSD) was done on sample FTMM-3-GW-M3MW02-21. All recoveries and RPD were within QC limits.

The Method Blanks associated with these samples were free of contamination except a "J" flagged value for Bromomethane. No data was affected.

R1307825
Page 2

Semi-Volatile Organics

Five water samples were analyzed for TCL Volatile organics by SW-846 method 8270D. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

All Tuning criteria for DFTPP were within QC limits.

Internal Standard Areas were within QC limits.

All the initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within acceptance limits for all samples.

A Matrix Spike/Matrix spike duplicate (MS/MSD) was done on sample FTMM-66-GW-886RW01-11.55. All recoveries and RPD were within QC limits except 3,3-Dichlorobenzidine and Benzidine and have been flagged with an "*".

All Blank Spike/Blank Spike Duplicate (LCS/LCSD) recoveries were within QC acceptance limits except the LCS/LCSD for Benzidine and the LCSD for Di-n-butylphthalate which have been flagged with an "*". All samples are possibly biased low for Benzidine. No other data was affected.

The Method Blanks associated with these samples were free of contamination.

Metals Analysis

One water sample was analyzed for Lead by method 6010C from SW-846. Three water samples were analyzed for TAL Metals by methods 6010C/7470A from SW-846. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

All blank spike recoveries (LCS) were within QC limits of 80 – 120 %.

A Matrix Spike and Duplicate were done on sample FTMM-3-GW-M3MW02-21. All recoveries were within QC limits. The recovery for Magnesium could not be accurately determined as the amount present in the sample was greater than four times the amount added as spike.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

00003

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 748810-03000	Batch Complete: Yes	Date Revised:
Submission: R1407825	Diskette Requested: No	Date Due: 10/27/14
Client: Parsons Engineering Science	Date: 10/17/14	Protocol: SW846
Client Rep: JJAEGER	Custody Seal: Present/Absent:	Shipping No.:
Project: FTMM Baseline	Chain of Custody: Present/Absent:	SDG #:

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1407825-001	FTMM-EB-100314	Water	7470A, 6010C, 8260C, 8270D	10/3/14	10/4/14			
R1407825-002	FTMM-TB-100314	Water	8260C	10/3/14	10/4/14			
R1407825-003QC	FTMM-3-GW-M3MW02-21	Water	7470A, 6010C, 8260C	10/3/14	10/4/14			
R1407825-004	FTMM-3-GW-M3MW102-21	Water	7470A, 6010C, 8260C	10/3/14	10/4/14			
R1407825-005QC	FTMM-66-GW-886RW01-11.55	Water	8270D	10/3/14	10/4/14			
R1407825-006	FTMM-66-GW-886RW06-10.12	Water	8270D	10/3/14	10/4/14			
R1407825-007	FTMM-66-GW-886RW106-10.12	Water	8270D	10/3/14	10/4/14			
R1407825-008	FTMM-66-GW-886RW08-11.22	Water	8270D	10/3/14	10/4/14			
R1407825-009	FTMM-58-GW-2567MW03-8.03	Water	8260C	10/2/14	10/4/14			
R1407825-010	FTMM-58-GW-2567MW01-8.73	Water	8260C	10/2/14	10/4/14			
R1407825-011	FTMM-57-GW-108MW04-8.25	Water	6010C	10/2/14	10/4/14			

Folder Comments: DoD reporting

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% (25% for CLP) difference between the two GC columns.
C	Confirmed by GC/MS.
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH nelac

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

INORGANIC PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	3010A
200.8	ILM05.3
6010C	3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4S00-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3010A
6010 SPLP (1312) extract	3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.

18649

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

ALS Environmental
1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax)

PAGE 1 OF 2

Project Name: FTMM 4Q GW	Project Number: 748810-03000
Project Manager: Cris Grill	Report CC:
Company/Address: Parsons, 100 High St. Boston, MA 02210	
Phone #: (617) 449-1583	Email: cris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: Nick Lorenz

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs • 8260 • 624 • CLP	GC/MS SVOAs • 8270 • 625	GC VOAs • 8021 • 601/602	PESTICIDES • 8081 • 608	PCBs • 8082 • 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
FTMM-EB-100314	001	10/3/14	1145	EB	6	X	X				X		
FTMM-TB-100314	002		—	TB	3	X					[redacted]		
FTMM-3-GW-MBMW03-21	003		1145	GW	4	X					X		
FTMM-3-GW-MBMW03-21-MS	QC		1145	GW	4	X					X		
FTMM-3-GW-MBMW03-21	004		1200	GW	4	X					X		
FTMM-3-GW-MBMW03-21-MSD	QC		1145	GW	4	X					X		
FTMM-66-GW-BBGRW01-11.55	005		1015	GW	2		X						
FTMM-66-GW-BBGRW01-11.55-MS	QC		1015	GW	2		X						
FTMM-66-GW-BBGRW01-11.55-MSD	QC		1015	GW	2		X						
FTMM-66-GW-BBGRW06-10.12	006		1110	GW	2		X						
FTMM-66-GW-BBGRW105-10.12	007		1200	GW	2		X						

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See OAPP ☐

STATE WHERE SAMPLES WERE COLLECTED

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
REQUESTED REPORT DATE
Standard

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
Edata ____ Yes ____ No

INVOICE INFORMATION
PO #
BILL TO:
R1407825

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	
Printed Name: Nick Lorenz	Printed Name	Printed Name	Printed Name	Printed Name	
Firm: Parsons	Firm: ALS	Firm	Firm	Firm	
Date/Time: 10/3/14 @ 1630	Date/Time: 10/4/14 0910	Date/Time	Date/Time	Date/Time	

R1407825 5
Parsons, Inc.
FTMM Baseline

Distribution: White - Lab Copy; Yellow - Return to Originator

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

19151

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 2 OF 2

Project Name: FTMM 4Q(GW)	Project Number: 748810-03000
Project Manager: Chris Grill	Report CC:
Company/Address: Parsons, 100 High St., Boston, MA 02110	
Phone #: (617) 449-1583	Email: chris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: Nick Lazos

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ○ 8260 ○ 624 ○ CLP	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Pb - lead	REMARKS/ ALTERNATE DESCRIPTION
FTMM-66-GW-3866MW08-11.22		10/3/14	1000	GW	3		X							
FTMM-58-GW-2567MW03-8.03		10/3/14	1440	GW	3	X								-001
FTMM-58-GW-2567MW01-8.73			1350	GW	3	X								-010
FTMM-57-GW-1035MW04-8.25			1035	GW	1								X	-011

Preservative Key
0. NONE
1. HCl
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
Standard
REQUESTED REPORT DATE
_____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
Edata ____Yes ____No

INVOICE INFORMATION
PO #
BILL TO:
R1407825

STATE WHERE SAMPLES WERE COLLECTED

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: Nick Lazos	Printed Name	Printed Name	Printed Name	Printed Name	Printed Name
Firm: Parsons	Firm	Firm	Firm	Firm	Firm
Date/Time: 10/3/14 @ 1630	Date/Time: 10/4/14 0710	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Lab Copy; Yellow - Return to Originator

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Cooler Receipt and Preservation Check Form

Project/Client Parsons Folder Number R1407825

Cooler received on 10/4 by: SFS COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y (N)	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	Y N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y (N) NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	ALS/ROC CLIENT
4	Circle: Wet Ice Dry Ice Gel packs present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 10/4 Time: 1022 ID: (IR#3) IR#4 From: (Temp Blank) Sample Bottle

Observed Temp (°C)	5.1	5.4					
Correction Factor (°C)	-0.2	+0.1					
Corrected Temp (°C)	4.9	5.5					
Within 0-6°C?	(Y) N	(Y) N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: 1022 by SFS on 10/4 at 1022
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: SFS 10/6/14

Cooler Breakdown: Date: 10-6-14 Time: 15:30 by: KC

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct containers used for the tests indicated? (YES) NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3	✓		BD826137E	08/15				
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	4112120	8/15				

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 031014-1BMG, 4-002-003, 060914-2AHW

Other Comments:

NO COC.

HCl Lot 4113070 exp 06/15

1 Amber for location FTMM-3-GW-MJMW102-21 annual listen.

8270 metals Hg. 8260

R1407825 5
Parsons, Inc.
FTMM Baseline

PC Secondary Review: JMH 10/17/14 *significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

P:\INTRANET\QAQC\Forms Controlled\Cooler Receipt r7.doc 5/6/14

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/ 3/14 1145
Date Received: 10/ 4/14
Date Analyzed: 10/14/14 16:37

Sample Name: FTMM-EB-100314
Lab Code: R1407825-001

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA10\DATA\101414\A2952.D\

Analysis Lot: 416090
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 16:37
Sample Name:	FTMM-EB-100314	**Units:**	µg/L
Lab Code:	R1407825-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2952.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 16:37
Sample Name:	FTMM-EB-100314	**Units:**	µg/L
Lab Code:	R1407825-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2952.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	108	75-120	10/14/14 16:37	
Dibromofluoromethane	105	85-115	10/14/14 16:37	
Toluene-d8	102	85-120	10/14/14 16:37	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/3/14
Sample Matrix:	Water	**Date Received:**	10/4/14
		Date Analyzed:	10/14/14 1637

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-EB-100314	**Units:**	µg/L
Lab Code:	R1407825-001	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 17:06
Sample Name:	FTMM-TB-100314	**Units:**	µg/L
Lab Code:	R1407825-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2953.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 17:06
Sample Name:	FTMM-TB-100314	**Units:**	µg/L
Lab Code:	R1407825-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2953.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 17:06
Sample Name:	FTMM-TB-100314	**Units:**	µg/L
Lab Code:	R1407825-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2953.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	75-120	10/14/14 17:06	
Dibromofluoromethane	105	85-115	10/14/14 17:06	
Toluene-d8	101	85-120	10/14/14 17:06	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/3/14
Sample Matrix:	Water	**Date Received:**	10/4/14
		Date Analyzed:	10/14/14 1706

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-TB-100314	**Units:**	µg/L
Lab Code:	R1407825-002	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/ 3/14 1145
Date Received: 10/ 4/14
Date Analyzed: 10/14/14 17:36

Sample Name: FTMM-3-GW-M3MW02-21
Lab Code: R1407825-003

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA10\DATA\101414\A2954.D\

Analysis Lot: 416090
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 17:36
Sample Name:	FTMM-3-GW-M3MW02-21	**Units:**	µg/L
Lab Code:	R1407825-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2954.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 17:36
Sample Name:	FTMM-3-GW-M3MW02-21	**Units:**	µg/L
Lab Code:	R1407825-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2954.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	107	75-120	10/14/14 17:36	
Dibromofluoromethane	102	85-115	10/14/14 17:36	
Toluene-d8	99	85-120	10/14/14 17:36	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/3/14
Date Received: 10/4/14
Date Analyzed: 10/14/14 1736

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-3-GW-M3MW02-21
Lab Code: R1407825-003

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

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Form 1B

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P-983

SuperSet Reference: 14-0000306825 rev 00

00021

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/ 3/14 1200
Date Received: 10/ 4/14
Date Analyzed: 10/14/14 18:06

Sample Name: FTMM-3-GW-M3MW102-21
Lab Code: R1407825-004

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA10\DATA\101414\A2955.D\

Analysis Lot: 416090
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.0**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1200
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 18:06
Sample Name:	FTMM-3-GW-M3MW102-21	**Units:**	µg/L
Lab Code:	R1407825-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2955.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-I,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1200
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 18:06
Sample Name:	FTMM-3-GW-M3MW102-21	**Units:**	µg/L
Lab Code:	R1407825-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2955.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	111	75-120	10/14/14 18:06	
Dibromofluoromethane	106	85-115	10/14/14 18:06	
Toluene-d8	103	85-120	10/14/14 18:06	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/3/14
Sample Matrix:	Water	**Date Received:**	10/4/14
		Date Analyzed:	10/14/14 1806

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-3-GW-M3MW102-21	**Units:**	µg/L
Lab Code:	R1407825-004	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/ 2/14 1440
Date Received: 10/ 4/14
Date Analyzed: 10/14/14 18:35

Sample Name: FTMM-58-GW-2567MW03-8.03
Lab Code: R1407825-009

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA10\DATA\101414\A2956.D\

Analysis Lot: 416090
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/ 2/14 1440
Date Received: 10/ 4/14
Date Analyzed: 10/14/14 18:35

Sample Name: FTMM-58-GW-2567MW03-8.03
Lab Code: R1407825-009

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA10\DATA\101414\A2956.D\

Analysis Lot: 416090
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	2.0	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	1.9	J	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 2/14 1440
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 18:35
Sample Name:	FTMM-58-GW-2567MW03-8.03	**Units:**	µg/L
Lab Code:	R1407825-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2956.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	108	75-120	10/14/14 18:35	
Dibromofluoromethane	106	85-115	10/14/14 18:35	
Toluene-d8	101	85-120	10/14/14 18:35	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/2/14
Sample Matrix:	Water	**Date Received:**	10/4/14
		Date Analyzed:	10/14/14 1835

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-58-GW-2567MW03-8.03	**Units:**	µg/L
Lab Code:	R1407825-009	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
	unknown	2.44	**10.1**	J

Comments:

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/ 2/14 1250
Date Received: 10/ 4/14
Date Analyzed: 10/14/14 19:05

Sample Name: FTMM-58-GW-2567MW01-8.73
Lab Code: R1407825-010

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA10\DATA\101414\A2957.D\

Analysis Lot: 416090
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	**260**		100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.7**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 2/14 1250
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 19:05
Sample Name:	FTMM-58-GW-2567MW01-8.73	**Units:**	µg/L
Lab Code:	R1407825-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2957.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**0.80**	J	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 2/14 1250
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 19:05
Sample Name:	FTMM-58-GW-2567MW01-8.73	**Units:**	µg/L
Lab Code:	R1407825-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2957.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	75-120	10/14/14 19:05	
Dibromofluoromethane	105	85-115	10/14/14 19:05	
Toluene-d8	100	85-120	10/14/14 19:05	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/2/14
Sample Matrix:	Water	**Date Received:**	10/4/14
		Date Analyzed:	10/14/14 1905

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-58-GW-2567MW01-8.73	**Units:**	µg/L
Lab Code:	R1407825-010	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: NA
Date Received: NA
Date Analyzed: 10/14/14 11:39

Sample Name: Method Blank
Lab Code: RQ1412540-01

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA10\DATA\101414\A2942.D\

Analysis Lot: 416090
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.58**	J	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: NA
Date Received: NA
Date Analyzed: 10/14/14 11:39

Sample Name: Method Blank
Lab Code: RQ1412540-01

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA10\DATA\101414\A2942.D\

Analysis Lot: 416090
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/14/14 11:39
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412540-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2942.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	75-120	10/14/14 11:39	
Dibromofluoromethane	103	85-115	10/14/14 11:39	
Toluene-d8	102	85-120	10/14/14 11:39	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/14/14 1139

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412540-01	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/3/14
Date Received: 10/4/14
Date Analyzed: 10/14/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-3-GW-M3MW02-21
Lab Code: R1407825-003

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-3-GW-M3MW02-21MS			FTMM-3-GW-M3MW02-21D MS					
		Matrix Spike RQ1412540-05			Duplicate Matrix Spike RQ1412540-06					
Analyte Name	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND	51.5	50.0	103	51.0	50.0	102	80 - 130	1	30
1,1,1-Trichloroethane (TCA)	ND	56.8	50.0	114	55.9	50.0	112	65 - 130	2	30
1,1,2,2-Tetrachloroethane	ND	49.7	50.0	99	50.1	50.0	100	65 - 130	<1	30
1,1,2-Trichloroethane	ND	51.8	50.0	104	51.3	50.0	103	75 - 125	<1	30
1,1-Dichloroethane (1,1-DCA)	ND	52.7	50.0	105	53.0	50.0	106	70 - 135	<1	30
1,1-Dichloroethene (1,1-DCE)	ND	59.3	50.0	119	59.1	50.0	118	70 - 130	<1	30
1,1-Dichloropropene	ND	59.8	50.0	120	57.0	50.0	114	75 - 130	5	30
1,2,3-Trichlorobenzene	ND	48.5	50.0	97	51.9	50.0	104	75 - 125	7	30
1,2,3-Trichloropropane	ND	47.3	50.0	95	48.2	50.0	96	75 - 125	2	30
1,2,4-Trichlorobenzene	ND	46.7	50.0	93	48.7	50.0	97	65 - 135	4	30
1,2,4-Trimethylbenzene	ND	46.7	50.0	93	46.8	50.0	94	75 - 130	<1	30
1,2-Dibromo-3-chloropropane (DBC	ND	49.5	50.0	99	54.0	50.0	108	50 - 130	9	30
1,2-Dibromoethane	ND	53.0	50.0	106	53.9	50.0	108	80 - 120	2	30
1,2-Dichlorobenzene	ND	46.4	50.0	93	46.6	50.0	93	70 - 120	<1	30
1,2-Dichloroethane	ND	57.5	50.0	115	55.9	50.0	112	70 - 130	3	30
1,2-Dichloropropane	ND	54.9	50.0	110	53.8	50.0	108	75 - 125	2	30
1,3,5-Trimethylbenzene	ND	47.2	50.0	94	47.3	50.0	94	75 - 130	<1	30
1,3-Dichlorobenzene	ND	48.0	50.0	96	46.8	50.0	94	75 - 125	3	30
1,3-Dichloropropane	ND	52.9	50.0	106	51.4	50.0	103	75 - 125	3	30
1,4-Dichlorobenzene	ND	46.8	50.0	94	46.4	50.0	93	75 - 125	<1	30
2,2-Dichloropropane	ND	50.7	50.0	101	50.2	50.0	100	70 - 135	1	30
2-Butanone (MEK)	ND	45.2	50.0	90	47.4	50.0	95	30 - 150	5	30
2-Chlorotoluene	ND	50.3	50.0	101	50.7	50.0	101	75 - 125	<1	30
2-Hexanone	ND	46.2	50.0	92	49.6	50.0	99	55 - 130	7	30
tert-Butyl Alcohol	ND	1050	1000	105	1130	1000	113	50 - 150	8	30
4-Chlorotoluene	ND	50.5	50.0	101	50.0	50.0	100	75 - 130	1	30
p-Isopropyltoluene	ND	48.1	50.0	96	47.8	50.0	96	75 - 130	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/3/14
Date Received: 10/4/14
Date Analyzed: 10/14/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-3-GW-M3MW02-21
Lab Code: R1407825-003

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-3-GW-M3MW02-21MS			FTMM-3-GW-M3MW02-21D MS					
		Matrix Spike RQ1412540-05			Duplicate Matrix Spike RQ1412540-06					
Analyte Name	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
4-Methyl-2-pentanone	ND	50.1	50.0	100	53.0	50.0	106	60 - 135	6	30
Acetone	ND	34.9	50.0	70	39.2	50.0	78	40 - 140	11	30
Benzene	ND	53.6	50.0	107	52.4	50.0	105	80 - 120	2	30
Bromobenzene	ND	48.6	50.0	97	48.7	50.0	97	75 - 125	<1	30
Bromochloromethane	ND	49.6	50.0	99	48.0	50.0	96	65 - 130	3	30
Bromodichloromethane	ND	59.5	50.0	119	57.4	50.0	115	75 - 120	4	30
Bromoform	ND	54.9	50.0	110	54.4	50.0	109	70 - 130	1	30
Bromomethane	ND	50.4	50.0	101	52.8	50.0	106	30 - 145	5	30
Carbon Tetrachloride	ND	59.5	50.0	119	58.9	50.0	118	65 - 140	<1	30
Chlorobenzene	ND	50.1	50.0	100	49.5	50.0	99	80 - 120	1	30
Chloroethane	ND	53.5	50.0	107	52.8	50.0	106	60 - 135	1	30
Chloroform	ND	55.0	50.0	110	53.8	50.0	108	65 - 135	2	30
Chloromethane	ND	54.5	50.0	109	55.4	50.0	111	40 - 125	2	30
Dibromochloromethane	ND	53.5	50.0	107	53.4	50.0	107	60 - 135	<1	30
Dichlorodifluoromethane (CFC 12)	ND	55.3	50.0	111	56.4	50.0	113	30 - 155	2	30
Methylene Chloride	ND	50.6	50.0	101	51.3	50.0	103	55 - 140	1	30
Ethylbenzene	ND	47.8	50.0	96	47.7	50.0	95	75 - 125	<1	30
Hexachlorobutadiene	ND	51.9	50.0	104	53.7	50.0	107	50 - 140	3	30
Isopropylbenzene (Cumene)	ND	52.8	50.0	106	51.9	50.0	104	75 - 125	2	30
Methyl tert-Butyl Ether	ND	56.0	50.0	112	56.4	50.0	113	65 - 125	<1	30
Naphthalene	ND	46.5	50.0	93	50.1	50.0	100	55 - 140	7	30
Styrene	ND	47.5	50.0	95	47.9	50.0	96	65 - 135	<1	30
Tetrachloroethene (PCE)	ND	52.3	50.0	105	50.7	50.0	101	45 - 150	3	30
Toluene	ND	53.2	50.0	106	52.3	50.0	105	75 - 120	2	30
Trichloroethene (TCE)	ND	52.5	50.0	105	50.7	50.0	101	70 - 125	3	30
Trichlorofluoromethane (CFC 11)	ND	56.4	50.0	113	56.0	50.0	112	60 - 145	<1	30
Vinyl Chloride	ND	51.5	50.0	103	51.9	50.0	104	50 - 145	<1	30

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Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/3/14
Date Received: 10/4/14
Date Analyzed: 10/14/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-3-GW-M3MW02-21
Lab Code: R1407825-003

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-3-GW-M3MW02-21MS			FTMM-3-GW-M3MW02-21DMS					
		Matrix Spike RQ1412540-05			Duplicate Matrix Spike RQ1412540-06					
Analyte Name	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	ND	51.5	50.0	103	51.1	50.0	102	70 - 125	<1	30
cis-1,3-Dichloropropene	ND	58.7	50.0	117	58.4	50.0	117	70 - 130	<1	30
m,p-Xylenes	ND	102	100	102	102	100	102	75 - 130	<1	30
n-Butylbenzene	ND	50.3	50.0	101	49.8	50.0	100	70 - 135	<1	30
n-Propylbenzene	ND	51.8	50.0	104	51.8	50.0	104	70 - 130	<1	30
o-Xylene	ND	51.6	50.0	103	49.9	50.0	100	80 - 120	3	30
sec-Butylbenzene	ND	48.1	50.0	96	48.2	50.0	96	70 - 125	<1	30
tert-Butylbenzene	ND	48.8	50.0	98	48.2	50.0	96	70 - 130	1	30
trans-1,2-Dichloroethene	ND	52.6	50.0	105	51.7	50.0	103	60 - 140	2	30
trans-1,3-Dichloropropene	ND	60.3	50.0	121	61.5	50.0	123	55 - 140	2	30

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Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Analyzed: 10/14/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 416090

Analyte Name	Lab Control Sample RQ1412540-02 Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	20.9	20.0	105	80 - 130
1,1,1-Trichloroethane (TCA)	21.5	20.0	108	65 - 130
1,1,2,2-Tetrachloroethane	22.0	20.0	110	65 - 130
1,1,2-Trichloroethane	21.7	20.0	108	75 - 125
1,1-Dichloroethane (1,1-DCA)	20.4	20.0	102	70 - 135
1,1-Dichloroethene (1,1-DCE)	23.4	20.0	117	70 - 130
1,1-Dichloropropene	23.0	20.0	115	75 - 130
1,2,3-Trichlorobenzene	22.0	20.0	110	75 - 125
1,2,3-Trichloropropane	20.7	20.0	104	75 - 125
1,2,4-Trichlorobenzene	20.7	20.0	104	65 - 135
1,2,4-Trimethylbenzene	19.9	20.0	100	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	21.3	20.0	107	50 - 130
1,2-Dibromoethane	22.7	20.0	114	80 - 120
1,2-Dichlorobenzene	19.8	20.0	99	70 - 120
1,2-Dichloroethane	23.3	20.0	117	70 - 130
1,2-Dichloropropane	21.4	20.0	107	75 - 125
1,3,5-Trimethylbenzene	19.7	20.0	98	75 - 130
1,3-Dichlorobenzene	19.8	20.0	99	75 - 125
1,3-Dichloropropane	22.0	20.0	110	75 - 125
1,4-Dichlorobenzene	19.9	20.0	100	75 - 125
2,2-Dichloropropane	22.7	20.0	114	70 - 135
2-Butanone (MEK)	20.4	20.0	102	30 - 150
2-Chlorotoluene	20.4	20.0	102	75 - 125
2-Hexanone	21.0	20.0	105	55 - 130
tert-Butyl Alcohol	477	400	119	50 - 150
4-Chlorotoluene	20.7	20.0	104	75 - 130
p-Isopropyltoluene	19.6	20.0	98	75 - 130
4-Methyl-2-pentanone	21.3	20.0	106	60 - 135
Acetone	20.4	20.0	102	40 - 140
Benzene	21.3	20.0	107	80 - 120
Bromobenzene	20.5	20.0	103	75 - 125
Bromochloromethane	20.8	20.0	104	65 - 130
Bromodichloromethane	23.8	20.0	119	75 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Analyzed: 10/14/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 416090

Lab Control Sample
RQ1412540-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromoform	23.0	20.0	115	70 - 130
Bromomethane	24.4	20.0	122	30 - 145
Carbon Tetrachloride	22.6	20.0	113	65 - 140
Chlorobenzene	20.4	20.0	102	80 - 120
Chloroethane	20.3	20.0	101	60 - 135
Chloroform	21.4	20.0	107	65 - 135
Chloromethane	21.6	20.0	108	40 - 125
Dibromochloromethane	23.3	20.0	117	60 - 135
Dichlorodifluoromethane (CFC 12)	21.4	20.0	107	30 - 155
Methylene Chloride	21.6	20.0	108	55 - 140
Ethylbenzene	19.3	20.0	96	75 - 125
Hexachlorobutadiene	23.7	20.0	118	50 - 140
Isopropylbenzene (Cumene)	20.6	20.0	103	75 - 125
Methyl tert-Butyl Ether	22.8	20.0	114	65 - 125
Naphthalene	20.8	20.0	104	55 - 140
Styrene	21.5	20.0	107	65 - 135
Tetrachloroethene (PCE)	21.3	20.0	107	45 - 150
Toluene	20.5	20.0	103	75 - 120
Trichloroethene (TCE)	20.0	20.0	100	70 - 125
Trichlorofluoromethane (CFC 11)	21.5	20.0	108	60 - 145
Vinyl Chloride	19.7	20.0	98	50 - 145
cis-1,2-Dichloroethene	20.4	20.0	102	70 - 125
cis-1,3-Dichloropropene	24.9	20.0	125	70 - 130
m,p-Xylenes	41.6	40.0	104	75 - 130
n-Butylbenzene	20.5	20.0	103	70 - 135
n-Propylbenzene	20.7	20.0	103	70 - 130
o-Xylene	20.5	20.0	102	80 - 120
sec-Butylbenzene	19.0	20.0	95	70 - 125
tert-Butylbenzene	18.9	20.0	95	70 - 130
trans-1,2-Dichloroethene	20.5	20.0	102	60 - 140
trans-1,3-Dichloropropene	25.2	20.0	126	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 15:39
Sample Name:	FTMM-EB-100314	**Units:**	µg/L
Lab Code:	R1407825-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:		**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
	1,2-Diphenylhydrazine/Azobenzene	ND	U	11	5.6	1.2	
120-82-1	1,2,4-Trichlorobenzene	ND	U	11	5.6	1.2	
95-50-1	1,2-Dichlorobenzene	ND	U	11	5.6	1.2	
541-73-1	1,3-Dichlorobenzene	ND	U	11	5.6	1.2	
106-46-7	1,4-Dichlorobenzene	ND	U	11	5.6	1.2	
95-95-4	2,4,5-Trichlorophenol	ND	U	11	5.6	2.0	
88-06-2	2,4,6-Trichlorophenol	ND	U	11	5.6	1.5	
120-83-2	2,4-Dichlorophenol	ND	U	11	5.6	1.4	
105-67-9	2,4-Dimethylphenol	ND	U	11	5.6	1.7	
51-28-5	2,4-Dinitrophenol	ND	U	56	28	22	
121-14-2	2,4-Dinitrotoluene	ND	U	11	5.6	1.8	
606-20-2	2,6-Dinitrotoluene	ND	U	11	5.6	2.0	
91-58-7	2-Chloronaphthalene	ND	U	11	5.6	1.2	
95-57-8	2-Chlorophenol	ND	U	11	5.6	1.2	
91-57-6	2-Methylnaphthalene	ND	U	11	5.6	1.2	
95-48-7	2-Methylphenol	ND	U	11	5.6	1.2	
88-74-4	2-Nitroaniline	ND	U	56	28	11	
88-75-5	2-Nitrophenol	ND	U	11	5.6	1.6	
91-94-1	3,3'-Dichlorobenzidine	ND	U	11	5.6	5.0	
	3- and 4-Methylphenol Coelution	ND	U	12	11	2.2	
99-09-2	3-Nitroaniline	ND	U	56	28	8.5	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	56	28	12	
101-55-3	4-Bromophenyl Phenyl Ether	ND	U	11	5.6	2.4	
59-50-7	4-Chloro-3-methylphenol	ND	U	11	5.6	1.3	
106-47-8	4-Chloroaniline	ND	U	11	5.6	1.6	
7005-72-3	4-Chlorophenyl Phenyl Ether	ND	U	11	5.6	1.3	
100-01-6	4-Nitroaniline	ND	U	56	28	8.7	
100-02-7	4-Nitrophenol	ND	U	56	28	6.5	
83-32-9	Acenaphthene	ND	U	11	5.6	1.2	
208-96-8	Acenaphthylene	ND	U	11	5.6	1.2	
120-12-7	Anthracene	ND	U	11	5.6	1.2	
56-55-3	Benz(a)anthracene	ND	U	11	5.6	1.2	
92-87-5	Benzidine	ND	U	120	110	100	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 15:39
Sample Name:	FTMM-EB-100314	**Units:**	µg/L
Lab Code:	R1407825-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY352.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
50-32-8	Benzo(a)pyrene	ND	U	11	5.6	1.2	
205-99-2	Benzo(b)fluoranthene	ND	U	11	5.6	1.2	
191-24-2	Benzo(g,h,i)perylene	ND	U	11	5.6	1.2	
207-08-9	Benzo(k)fluoranthene	ND	U	11	5.6	1.2	
100-51-6	Benzyl Alcohol	ND	U	11	5.6	1.5	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	U	11	5.6	1.2	
111-91-1	Bis(2-chloroethoxy)methane	ND	U	11	5.6	2.5	
111-44-4	Bis(2-chloroethyl) Ether	ND	U	11	5.6	1.5	
117-81-7	Bis(2-ethylhexyl) Phthalate	ND	U	11	5.6	1.4	
85-68-7	Butyl Benzyl Phthalate	ND	U	11	5.6	2.7	
86-74-8	Carbazole	ND	U	11	5.6	1.3	
218-01-9	Chrysene	ND	U	11	5.6	1.2	
84-74-2	Di-n-butyl Phthalate	ND	U	11	5.6	1.2	
117-84-0	Di-n-octyl Phthalate	ND	U	11	5.6	1.4	
53-70-3	Dibenz(a,h)anthracene	ND	U	11	5.6	1.4	
132-64-9	Dibenzofuran	ND	U	11	5.6	1.2	
84-66-2	Diethyl Phthalate	ND	U	11	5.6	1.2	
131-11-3	Dimethyl Phthalate	ND	U	11	5.6	1.2	
206-44-0	Fluoranthene	ND	U	11	5.6	1.2	
86-73-7	Fluorene	ND	U	11	5.6	1.2	
118-74-1	Hexachlorobenzene	ND	U	11	5.6	1.2	
87-68-3	Hexachlorobutadiene	ND	U	11	5.6	1.4	
77-47-4	Hexachlorocyclopentadiene	ND	U	11	5.6	1.2	
67-72-1	Hexachloroethane	ND	U	11	5.6	1.4	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	11	5.6	1.4	
78-59-1	Isophorone	ND	U	11	5.6	1.2	
621-64-7	N-Nitrosodi-n-propylamine	ND	U	11	5.6	1.5	
62-75-9	N-Nitrosodimethylamine	ND	U	11	5.6	1.2	
86-30-6	N-Nitrosodiphenylamine	ND	U	11	5.6	1.2	
91-20-3	Naphthalene	ND	U	11	5.6	1.2	
98-95-3	Nitrobenzene	ND	U	11	5.6	1.8	
87-86-5	Pentachlorophenol (PCP)	ND	U	56	28	7.7	
85-01-8	Phenanthrene	ND	U	11	5.6	1.2	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 15:39
Sample Name:	FTMM-EB-100314	**Units:**	µg/L
Lab Code:	R1407825-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY352.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-95-2	Phenol	ND	U	11	5.6	1.2	
129-00-0	Pyrene	ND	U	11	5.6	1.2	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	114	40-125	10/8/14 15:39	
2-Fluorobiphenyl	93	50-110	10/8/14 15:39	
2-Fluorophenol	55	20-110	10/8/14 15:39	
Nitrobenzene-d5	91	40-110	10/8/14 15:39	
Phenol-d6	36	10-115	10/8/14 15:39	
p-Terphenyl-d14	114	50-135	10/8/14 15:39	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/3/14
Date Received: 10/4/14
Date Extracted: 10/7/14
Date Analyzed: 10/8/14 1539

Tentatively Identified Compounds (TIC)
Semivolatile Organic Compounds by GC/MS

Sample Name: FTMM-EB-100314
Lab Code: R1407825-001

Units: µg/L
Basis: NA

Prep Method: EPA 3510C
Analytical Method: 8270D

CAS #	Analyte Name	RT	Result	Q
000540-97-6	Cyclohexasiloxane, dodecamethyl-	5.31	13	JN
	unknown	5.96	21	J
	unknown	6.53	23	J
000556-71-8	Cyclononasiloxane, octadecamethyl-	7.03	20	JN
	unknown	7.18	5.6	J
	unknown	7.47	20	J
	unknown	7.62	6.1	J
	unknown	7.92	23	J
	unknown	8.09	5.5	J
	unknown	8.40	29	J
	unknown cyclononasiloxane	8.94	33	J
	unknown	9.57	46	J
	unknown	10.30	60	J
	unknown	11.12	66	J
	unknown	12.03	69	J
	unknown cyclononasiloxane	12.99	67	J
	unknown cyclononasiloxane	13.84	62	J
	unknown cyclononasiloxane	14.53	54	J
	unknown cyclononasiloxane	15.27	45	J
	unknown cyclononasiloxane	16.11	38	J

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1015
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 16:06
Sample Name:	FTMM-66-GW-886RW01-11.55	**Units:**	µg/L
Lab Code:	R1407825-005	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:		**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
	1,2-Diphenylhydrazine/Azobenzene	ND	U	11	5.3	1.1	
120-82-1	1,2,4-Trichlorobenzene	ND	U	11	5.3	1.1	
95-50-1	1,2-Dichlorobenzene	ND	U	11	5.3	1.1	
541-73-1	1,3-Dichlorobenzene	ND	U	11	5.3	1.1	
106-46-7	1,4-Dichlorobenzene	ND	U	11	5.3	1.1	
95-95-4	2,4,5-Trichlorophenol	ND	U	11	5.3	1.8	
88-06-2	2,4,6-Trichlorophenol	ND	U	11	5.3	1.4	
120-83-2	2,4-Dichlorophenol	ND	U	11	5.3	1.3	
105-67-9	2,4-Dimethylphenol	ND	U	11	5.3	1.6	
51-28-5	2,4-Dinitrophenol	ND	U	53	26	21	
121-14-2	2,4-Dinitrotoluene	ND	U	11	5.3	1.7	
606-20-2	2,6-Dinitrotoluene	ND	U	11	5.3	1.9	
91-58-7	2-Chloronaphthalene	ND	U	11	5.3	1.1	
95-57-8	2-Chlorophenol	ND	U	11	5.3	1.1	
91-57-6	2-Methylnaphthalene	ND	U	11	5.3	1.1	
95-48-7	2-Methylphenol	ND	U	11	5.3	1.1	
88-74-4	2-Nitroaniline	ND	U	53	26	9.6	
88-75-5	2-Nitrophenol	ND	U	11	5.3	1.5	
91-94-1	3,3'-Dichlorobenzidine	ND	U	11	5.3	4.7	
	3- and 4-Methylphenol Coelution	ND	U	11	11	2.1	
99-09-2	3-Nitroaniline	ND	U	53	26	8.1	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	53	26	12	
101-55-3	4-Bromophenyl Phenyl Ether	ND	U	11	5.3	2.3	
59-50-7	4-Chloro-3-methylphenol	ND	U	11	5.3	1.2	
106-47-8	4-Chloroaniline	ND	U	11	5.3	1.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	ND	U	11	5.3	1.2	
100-01-6	4-Nitroaniline	ND	U	53	26	8.2	
100-02-7	4-Nitrophenol	ND	U	53	26	6.2	
83-32-9	Acenaphthene	ND	U	11	5.3	1.1	
208-96-8	Acenaphthylene	ND	U	11	5.3	1.1	
120-12-7	Anthracene	ND	U	11	5.3	1.1	
56-55-3	Benz(a)anthracene	ND	U	11	5.3	1.1	
92-87-5	Benzidine	ND	U	110	110	95	

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/ 3/14 1015
Date Received: 10/ 4/14
Date Extracted: 10/7/14
Date Analyzed: 10/8/14 16:06

Sample Name: FTMM-66-GW-886RW01-11.55
Lab Code: R1407825-005

Units: µg/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analytical Method: 8270D
Prep Method: EPA 3510C
Data File Name: I:\ACQUDATA\5973D\Data\100814\AY353.D\

Analysis Lot: 415497
Extraction Lot: 219960
Instrument Name: R-MS-54
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
50-32-8	Benzo(a)pyrene	ND	U	11	5.3	1.1	
205-99-2	Benzo(b)fluoranthene	ND	U	11	5.3	1.1	
191-24-2	Benzo(g,h,i)perylene	ND	U	11	5.3	1.1	
207-08-9	Benzo(k)fluoranthene	ND	U	11	5.3	1.1	
100-51-6	Benzyl Alcohol	ND	U	11	5.3	1.4	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	U	11	5.3	1.1	
111-91-1	Bis(2-chloroethoxy)methane	ND	U	11	5.3	2.3	
111-44-4	Bis(2-chloroethyl) Ether	ND	U	11	5.3	1.4	
117-81-7	Bis(2-ethylhexyl) Phthalate	ND	U	11	5.3	1.3	
85-68-7	Butyl Benzyl Phthalate	ND	U	11	5.3	2.5	
86-74-8	Carbazole	ND	U	11	5.3	1.2	
218-01-9	Chrysene	ND	U	11	5.3	1.1	
84-74-2	Di-n-butyl Phthalate	ND	U	11	5.3	1.1	
117-84-0	Di-n-octyl Phthalate	ND	U	11	5.3	1.3	
53-70-3	Dibenz(a,h)anthracene	ND	U	11	5.3	1.3	
132-64-9	Dibenzofuran	ND	U	11	5.3	1.1	
84-66-2	Diethyl Phthalate	ND	U	11	5.3	1.1	
131-11-3	Dimethyl Phthalate	ND	U	11	5.3	1.1	
206-44-0	Fluoranthene	ND	U	11	5.3	1.1	
86-73-7	Fluorene	ND	U	11	5.3	1.1	
118-74-1	Hexachlorobenzene	ND	U	11	5.3	1.1	
87-68-3	Hexachlorobutadiene	ND	U	11	5.3	1.3	
77-47-4	Hexachlorocyclopentadiene	ND	U	11	5.3	1.1	
67-72-1	Hexachloroethane	ND	U	11	5.3	1.3	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	11	5.3	1.3	
78-59-1	Isophorone	ND	U	11	5.3	1.1	
621-64-7	N-Nitrosodi-n-propylamine	ND	U	11	5.3	1.4	
62-75-9	N-Nitrosodimethylamine	ND	U	11	5.3	1.1	
86-30-6	N-Nitrosodiphenylamine	ND	U	11	5.3	1.1	
91-20-3	Naphthalene	ND	U	11	5.3	1.1	
98-95-3	Nitrobenzene	ND	U	11	5.3	1.7	
87-86-5	Pentachlorophenol (PCP)	ND	U	53	26	7.3	
85-01-8	Phenanthrene	ND	U	11	5.3	1.1	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1015
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 16:06
Sample Name:	FTMM-66-GW-886RW01-11.55	**Units:**	µg/L
Lab Code:	R1407825-005	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY353.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-95-2	Phenol	ND	U	11	5.3	1.1	
129-00-0	Pyrene	ND	U	11	5.3	1.1	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	98	40-125	10/8/14 16:06	
2-Fluorobiphenyl	75	50-110	10/8/14 16:06	
2-Fluorophenol	48	20-110	10/8/14 16:06	
Nitrobenzene-d5	73	40-110	10/8/14 16:06	
Phenol-d6	31	10-115	10/8/14 16:06	
p-Terphenyl-d14	70	50-135	10/8/14 16:06	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/3/14
Date Received: 10/4/14
Date Extracted: 10/7/14
Date Analyzed: 10/8/14 1606

Tentatively Identified Compounds (TIC)
Semivolatile Organic Compounds by GC/MS

Sample Name: FTMM-66-GW-886RW01-11.55
Lab Code: R1407825-005

Units: µg/L
Basis: NA

Prep Method: EPA 3510C
Analytical Method: 8270D

CAS #	Analyte Name	RT	Result	Q
000107-52-8	Hexasiloxane, tetradecamethyl-	14.89	7.2	JN
	unknown	16.75	8.2	J

Comments:

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Form 1B

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P-1012

SuperSet Reference: 14-0000306825 rev 00

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/ 3/14 1110
Date Received: 10/ 4/14
Date Extracted: 10/7/14
Date Analyzed: 10/8/14 17:25

Sample Name: FTMM-66-GW-886RW06-10.12
Lab Code: R1407825-006

Units: µg/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analytical Method: 8270D
Prep Method: EPA 3510C
Data File Name:

Analysis Lot: 415497
Extraction Lot: 219960
Instrument Name: R-MS-54
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
	1,2-Diphenylhydrazine/Azobenzene	ND	U	11	5.6	1.2	
120-82-1	1,2,4-Trichlorobenzene	ND	U	11	5.6	1.2	
95-50-1	1,2-Dichlorobenzene	ND	U	11	5.6	1.2	
541-73-1	1,3-Dichlorobenzene	ND	U	11	5.6	1.2	
106-46-7	1,4-Dichlorobenzene	ND	U	11	5.6	1.2	
95-95-4	2,4,5-Trichlorophenol	ND	U	11	5.6	2.0	
88-06-2	2,4,6-Trichlorophenol	ND	U	11	5.6	1.5	
120-83-2	2,4-Dichlorophenol	ND	U	11	5.6	1.4	
105-67-9	2,4-Dimethylphenol	ND	U	11	5.6	1.7	
51-28-5	2,4-Dinitrophenol	ND	U	56	28	22	
121-14-2	2,4-Dinitrotoluene	ND	U	11	5.6	1.8	
606-20-2	2,6-Dinitrotoluene	ND	U	11	5.6	2.0	
91-58-7	2-Chloronaphthalene	ND	U	11	5.6	1.2	
95-57-8	2-Chlorophenol	ND	U	11	5.6	1.2	
91-57-6	2-Methylnaphthalene	ND	U	11	5.6	1.2	
95-48-7	2-Methylphenol	ND	U	11	5.6	1.2	
88-74-4	2-Nitroaniline	ND	U	56	28	11	
88-75-5	2-Nitrophenol	ND	U	11	5.6	1.6	
91-94-1	3,3'-Dichlorobenzidine	ND	U	11	5.6	5.0	
	3- and 4-Methylphenol Coelution	ND	U	12	11	2.2	
99-09-2	3-Nitroaniline	ND	U	56	28	8.5	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	56	28	12	
101-55-3	4-Bromophenyl Phenyl Ether	ND	U	11	5.6	2.4	
59-50-7	4-Chloro-3-methylphenol	ND	U	11	5.6	1.3	
106-47-8	4-Chloroaniline	ND	U	11	5.6	1.6	
7005-72-3	4-Chlorophenyl Phenyl Ether	ND	U	11	5.6	1.3	
100-01-6	4-Nitroaniline	ND	U	56	28	8.7	
100-02-7	4-Nitrophenol	ND	U	56	28	6.5	
83-32-9	Acenaphthene	ND	U	11	5.6	1.2	
208-96-8	Acenaphthylene	ND	U	11	5.6	1.2	
120-12-7	Anthracene	ND	U	11	5.6	1.2	
56-55-3	Benz(a)anthracene	ND	U	11	5.6	1.2	
92-87-5	Benzidine	ND	U	120	110	100	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/3/14 1110
Sample Matrix:	Water	**Date Received:**	10/4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 17:25
Sample Name:	FTMM-66-GW-886RW06-10.12	**Units:**	µg/L
Lab Code:	R1407825-006	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY356.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
50-32-8	Benzo(a)pyrene	ND	U	11	5.6	1.2	
205-99-2	Benzo(b)fluoranthene	ND	U	11	5.6	1.2	
191-24-2	Benzo(g,h,i)perylene	ND	U	11	5.6	1.2	
207-08-9	Benzo(k)fluoranthene	ND	U	11	5.6	1.2	
100-51-6	Benzyl Alcohol	ND	U	11	5.6	1.5	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	U	11	5.6	1.2	
111-91-1	Bis(2-chloroethoxy)methane	ND	U	11	5.6	2.5	
111-44-4	Bis(2-chloroethyl) Ether	ND	U	11	5.6	1.5	
117-81-7	Bis(2-ethylhexyl) Phthalate	ND	U	11	5.6	1.4	
85-68-7	Butyl Benzyl Phthalate	ND	U	11	5.6	2.7	
86-74-8	Carbazole	ND	U	11	5.6	1.3	
218-01-9	Chrysene	ND	U	11	5.6	1.2	
84-74-2	Di-n-butyl Phthalate	ND	U	11	5.6	1.2	
117-84-0	Di-n-octyl Phthalate	ND	U	11	5.6	1.4	
53-70-3	Dibenz(a,h)anthracene	ND	U	11	5.6	1.4	
132-64-9	Dibenzofuran	ND	U	11	5.6	1.2	
84-66-2	Diethyl Phthalate	ND	U	11	5.6	1.2	
131-11-3	Dimethyl Phthalate	ND	U	11	5.6	1.2	
206-44-0	Fluoranthene	ND	U	11	5.6	1.2	
86-73-7	Fluorene	ND	U	11	5.6	1.2	
118-74-1	Hexachlorobenzene	ND	U	11	5.6	1.2	
87-68-3	Hexachlorobutadiene	ND	U	11	5.6	1.4	
77-47-4	Hexachlorocyclopentadiene	ND	U	11	5.6	1.2	
67-72-1	Hexachloroethane	ND	U	11	5.6	1.4	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	11	5.6	1.4	
78-59-1	Isophorone	ND	U	11	5.6	1.2	
621-64-7	N-Nitrosodi-n-propylamine	ND	U	11	5.6	1.5	
62-75-9	N-Nitrosodimethylamine	ND	U	11	5.6	1.2	
86-30-6	N-Nitrosodiphenylamine	ND	U	11	5.6	1.2	
91-20-3	Naphthalene	ND	U	11	5.6	1.2	
98-95-3	Nitrobenzene	ND	U	11	5.6	1.8	
87-86-5	Pentachlorophenol (PCP)	ND	U	56	28	7.7	
85-01-8	Phenanthrene	ND	U	11	5.6	1.2	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1110
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 17:25
Sample Name:	FTMM-66-GW-886RW06-10.12	**Units:**	µg/L
Lab Code:	R1407825-006	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY356.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-95-2	Phenol	ND	U	11	5.6	1.2	
129-00-0	Pyrene	ND	U	11	5.6	1.2	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	104	40-125	10/8/14 17:25	
2-Fluorobiphenyl	86	50-110	10/8/14 17:25	
2-Fluorophenol	51	20-110	10/8/14 17:25	
Nitrobenzene-d5	83	40-110	10/8/14 17:25	
Phenol-d6	33	10-115	10/8/14 17:25	
p-Terphenyl-d14	101	50-135	10/8/14 17:25	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/3/14
Sample Matrix:	Water	**Date Received:**	10/4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 1725

Tentatively Identified Compounds (TIC)
Semivolatile Organic Compounds by GC/MS

Sample Name:	FTMM-66-GW-886RW06-10.12	**Units:**	µg/L
Lab Code:	R1407825-006	**Basis:**	NA

Prep Method: EPA 3510C
Analytical Method: 8270D

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1200
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 17:51
Sample Name:	FTMM-66-GW-886RW106-10.12	**Units:**	µg/L
Lab Code:	R1407825-007	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:		**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
	1,2-Diphenylhydrazine/Azobenzene	ND	U	11	5.6	1.2	
120-82-1	1,2,4-Trichlorobenzene	ND	U	11	5.6	1.2	
95-50-1	1,2-Dichlorobenzene	ND	U	11	5.6	1.2	
541-73-1	1,3-Dichlorobenzene	ND	U	11	5.6	1.2	
106-46-7	1,4-Dichlorobenzene	ND	U	11	5.6	1.2	
95-95-4	2,4,5-Trichlorophenol	ND	U	11	5.6	2.0	
88-06-2	2,4,6-Trichlorophenol	ND	U	11	5.6	1.5	
120-83-2	2,4-Dichlorophenol	ND	U	11	5.6	1.4	
105-67-9	2,4-Dimethylphenol	ND	U	11	5.6	1.7	
51-28-5	2,4-Dinitrophenol	ND	U	56	28	22	
121-14-2	2,4-Dinitrotoluene	ND	U	11	5.6	1.8	
606-20-2	2,6-Dinitrotoluene	ND	U	11	5.6	2.0	
91-58-7	2-Chloronaphthalene	ND	U	11	5.6	1.2	
95-57-8	2-Chlorophenol	ND	U	11	5.6	1.2	
91-57-6	2-Methylnaphthalene	ND	U	11	5.6	1.2	
95-48-7	2-Methylphenol	ND	U	11	5.6	1.2	
88-74-4	2-Nitroaniline	ND	U	56	28	11	
88-75-5	2-Nitrophenol	ND	U	11	5.6	1.6	
91-94-1	3,3'-Dichlorobenzidine	ND	U	11	5.6	5.0	
	3- and 4-Methylphenol Coelution	ND	U	12	11	2.2	
99-09-2	3-Nitroaniline	ND	U	56	28	8.5	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	56	28	12	
101-55-3	4-Bromophenyl Phenyl Ether	ND	U	11	5.6	2.4	
59-50-7	4-Chloro-3-methylphenol	ND	U	11	5.6	1.3	
106-47-8	4-Chloroaniline	ND	U	11	5.6	1.6	
7005-72-3	4-Chlorophenyl Phenyl Ether	ND	U	11	5.6	1.3	
100-01-6	4-Nitroaniline	ND	U	56	28	8.7	
100-02-7	4-Nitrophenol	ND	U	56	28	6.5	
83-32-9	Acenaphthene	ND	U	11	5.6	1.2	
208-96-8	Acenaphthylene	ND	U	11	5.6	1.2	
120-12-7	Anthracene	ND	U	11	5.6	1.2	
56-55-3	Benz(a)anthracene	ND	U	11	5.6	1.2	
92-87-5	Benzidine	ND	U	120	110	100	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1200
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 17:51
Sample Name:	FTMM-66-GW-886RW106-10.12	**Units:**	µg/L
Lab Code:	R1407825-007	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY357.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
50-32-8	Benzo(a)pyrene	ND	U	11	5.6	1.2	
205-99-2	Benzo(b)fluoranthene	ND	U	11	5.6	1.2	
191-24-2	Benzo(g,h,i)perylene	ND	U	11	5.6	1.2	
207-08-9	Benzo(k)fluoranthene	ND	U	11	5.6	1.2	
100-51-6	Benzyl Alcohol	ND	U	11	5.6	1.5	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	U	11	5.6	1.2	
111-91-1	Bis(2-chloroethoxy)methane	ND	U	11	5.6	2.5	
111-44-4	Bis(2-chloroethyl) Ether	ND	U	11	5.6	1.5	
117-81-7	Bis(2-ethylhexyl) Phthalate	ND	U	11	5.6	1.4	
85-68-7	Butyl Benzyl Phthalate	ND	U	11	5.6	2.7	
86-74-8	Carbazole	ND	U	11	5.6	1.3	
218-01-9	Chrysene	ND	U	11	5.6	1.2	
84-74-2	Di-n-butyl Phthalate	ND	U	11	5.6	1.2	
117-84-0	Di-n-octyl Phthalate	ND	U	11	5.6	1.4	
53-70-3	Dibenz(a,h)anthracene	ND	U	11	5.6	1.4	
132-64-9	Dibenzofuran	ND	U	11	5.6	1.2	
84-66-2	Diethyl Phthalate	ND	U	11	5.6	1.2	
131-11-3	Dimethyl Phthalate	ND	U	11	5.6	1.2	
206-44-0	Fluoranthene	ND	U	11	5.6	1.2	
86-73-7	Fluorene	ND	U	11	5.6	1.2	
118-74-1	Hexachlorobenzene	ND	U	11	5.6	1.2	
87-68-3	Hexachlorobutadiene	ND	U	11	5.6	1.4	
77-47-4	Hexachlorocyclopentadiene	ND	U	11	5.6	1.2	
67-72-1	Hexachloroethane	ND	U	11	5.6	1.4	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	11	5.6	1.4	
78-59-1	Isophorone	ND	U	11	5.6	1.2	
621-64-7	N-Nitrosodi-n-propylamine	ND	U	11	5.6	1.5	
62-75-9	N-Nitrosodimethylamine	ND	U	11	5.6	1.2	
86-30-6	N-Nitrosodiphenylamine	ND	U	11	5.6	1.2	
91-20-3	Naphthalene	ND	U	11	5.6	1.2	
98-95-3	Nitrobenzene	ND	U	11	5.6	1.8	
87-86-5	Pentachlorophenol (PCP)	ND	U	56	28	7.7	
85-01-8	Phenanthrene	ND	U	11	5.6	1.2	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1200
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 17:51
Sample Name:	FTMM-66-GW-886RW106-10.12	**Units:**	µg/L
Lab Code:	R1407825-007	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY357.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-95-2	Phenol	ND	U	11	5.6	1.2	
129-00-0	Pyrene	ND	U	11	5.6	1.2	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	104	40-125	10/8/14 17:51	
2-Fluorobiphenyl	86	50-110	10/8/14 17:51	
2-Fluorophenol	49	20-110	10/8/14 17:51	
Nitrobenzene-d5	80	40-110	10/8/14 17:51	
Phenol-d6	32	10-115	10/8/14 17:51	
p-Terphenyl-d14	95	50-135	10/8/14 17:51	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/3/14
Sample Matrix:	Water	**Date Received:**	10/4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 1751

Tentatively Identified Compounds (TIC)
Semivolatile Organic Compounds by GC/MS

Sample Name:	FTMM-66-GW-886RW106-10.12	**Units:**	µg/L
Lab Code:	R1407825-007	**Basis:**	NA

Prep Method: EPA 3510C
Analytical Method: 8270D

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1000
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 18:16
Sample Name:	FTMM-66-GW-886RW08-11.22	**Units:**	µg/L
Lab Code:	R1407825-008	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:		**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
	1,2-Diphenylhydrazine/Azobenzene	ND	U	11	5.6	1.2	
120-82-1	1,2,4-Trichlorobenzene	ND	U	11	5.6	1.2	
95-50-1	1,2-Dichlorobenzene	ND	U	11	5.6	1.2	
541-73-1	1,3-Dichlorobenzene	ND	U	11	5.6	1.2	
106-46-7	1,4-Dichlorobenzene	ND	U	11	5.6	1.2	
95-95-4	2,4,5-Trichlorophenol	ND	U	11	5.6	2.0	
88-06-2	2,4,6-Trichlorophenol	ND	U	11	5.6	1.5	
120-83-2	2,4-Dichlorophenol	ND	U	11	5.6	1.4	
105-67-9	2,4-Dimethylphenol	ND	U	11	5.6	1.7	
51-28-5	2,4-Dinitrophenol	ND	U	56	28	22	
121-14-2	2,4-Dinitrotoluene	ND	U	11	5.6	1.8	
606-20-2	2,6-Dinitrotoluene	ND	U	11	5.6	2.0	
91-58-7	2-Chloronaphthalene	ND	U	11	5.6	1.2	
95-57-8	2-Chlorophenol	ND	U	11	5.6	1.2	
91-57-6	2-Methylnaphthalene	ND	U	11	5.6	1.2	
95-48-7	2-Methylphenol	ND	U	11	5.6	1.2	
88-74-4	2-Nitroaniline	ND	U	56	28	11	
88-75-5	2-Nitrophenol	ND	U	11	5.6	1.6	
91-94-1	3,3'-Dichlorobenzidine	ND	U	11	5.6	5.0	
	3- and 4-Methylphenol Coelution	ND	U	12	11	2.2	
99-09-2	3-Nitroaniline	ND	U	56	28	8.5	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	56	28	12	
101-55-3	4-Bromophenyl Phenyl Ether	ND	U	11	5.6	2.4	
59-50-7	4-Chloro-3-methylphenol	ND	U	11	5.6	1.3	
106-47-8	4-Chloroaniline	ND	U	11	5.6	1.6	
7005-72-3	4-Chlorophenyl Phenyl Ether	ND	U	11	5.6	1.3	
100-01-6	4-Nitroaniline	ND	U	56	28	8.7	
100-02-7	4-Nitrophenol	ND	U	56	28	6.5	
83-32-9	Acenaphthene	ND	U	11	5.6	1.2	
208-96-8	Acenaphthylene	ND	U	11	5.6	1.2	
120-12-7	Anthracene	ND	U	11	5.6	1.2	
56-55-3	Benz(a)anthracene	ND	U	11	5.6	1.2	
92-87-5	Benzidine	ND	U	120	110	100	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1000
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 18:16
Sample Name:	FTMM-66-GW-886RW08-11.22	**Units:**	µg/L
Lab Code:	R1407825-008	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY358.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Notc
50-32-8	Benzo(a)pyrene	ND	U	11	5.6	1.2	
205-99-2	Benzo(b)fluoranthene	ND	U	11	5.6	1.2	
191-24-2	Benzo(g,h,i)perylene	ND	U	11	5.6	1.2	
207-08-9	Benzo(k)fluoranthene	ND	U	11	5.6	1.2	
100-51-6	Benzyl Alcohol	ND	U	11	5.6	1.5	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	U	11	5.6	1.2	
111-91-1	Bis(2-chloroethoxy)methane	ND	U	11	5.6	2.5	
111-44-4	Bis(2-chloroethyl) Ether	ND	U	11	5.6	1.5	
117-81-7	Bis(2-ethylhexyl) Phthalate	ND	U	11	5.6	1.4	
85-68-7	Butyl Benzyl Phthalate	ND	U	11	5.6	2.7	
86-74-8	Carbazole	ND	U	11	5.6	1.3	
218-01-9	Chrysene	ND	U	11	5.6	1.2	
84-74-2	Di-n-butyl Phthalate	ND	U	11	5.6	1.2	
117-84-0	Di-n-octyl Phthalate	ND	U	11	5.6	1.4	
53-70-3	Dibenz(a,h)anthracene	ND	U	11	5.6	1.4	
132-64-9	Dibenzofuran	ND	U	11	5.6	1.2	
84-66-2	Diethyl Phthalate	ND	U	11	5.6	1.2	
131-11-3	Dimethyl Phthalate	ND	U	11	5.6	1.2	
206-44-0	Fluoranthene	ND	U	11	5.6	1.2	
86-73-7	Fluorene	ND	U	11	5.6	1.2	
118-74-1	Hexachlorobenzene	ND	U	11	5.6	1.2	
87-68-3	Hexachlorobutadiene	ND	U	11	5.6	1.4	
77-47-4	Hexachlorocyclopentadiene	ND	U	11	5.6	1.2	
67-72-1	Hexachloroethane	ND	U	11	5.6	1.4	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	11	5.6	1.4	
78-59-1	Isophorone	ND	U	11	5.6	1.2	
621-64-7	N-Nitrosodi-n-propylamine	ND	U	11	5.6	1.5	
62-75-9	N-Nitrosodimethylamine	ND	U	11	5.6	1.2	
86-30-6	N-Nitrosodiphenylamine	ND	U	11	5.6	1.2	
91-20-3	Naphthalene	ND	U	11	5.6	1.2	
98-95-3	Nitrobenzene	ND	U	11	5.6	1.8	
87-86-5	Pentachlorophenol (PCP)	ND	U	56	28	7.7	
85-01-8	Phenanthrene	ND	U	11	5.6	1.2	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1000
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 18:16
Sample Name:	FTMM-66-GW-886RW08-11.22	**Units:**	µg/L
Lab Code:	R1407825-008	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY358.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-95-2	Phenol	ND	U	11	5.6	1.2	
129-00-0	Pyrene	ND	U	11	5.6	1.2	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	116	40-125	10/8/14 18:16	
2-Fluorobiphenyl	83	50-110	10/8/14 18:16	
2-Fluorophenol	50	20-110	10/8/14 18:16	
Nitrobenzene-d5	81	40-110	10/8/14 18:16	
Phenol-d6	33	10-115	10/8/14 18:16	
p-Terphenyl-d14	82	50-135	10/8/14 18:16	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/3/14
Date Received: 10/4/14
Date Extracted: 10/7/14
Date Analyzed: 10/8/14 1816

Tentatively Identified Compounds (TIC)
Semivolatile Organic Compounds by GC/MS

Sample Name: FTMM-66-GW-886RW08-11.22
Lab Code: R1407825-008

Units: µg/L
Basis: NA

Prep Method: EPA 3510C
Analytical Method: 8270D

CAS #	Analyte Name	RT	Result	Q
	unknown	10.30	**5.6**	J
	unknown	11.12	**6.4**	J
	unknown	12.03	**6.1**	J
	unknown	12.98	**6.0**	J
	unknown	13.84	**6.0**	J
	unknown	14.53	**6.0**	J
	unknown	15.26	**4.9**	J
	unknown	16.10	**5.4**	J

Comments:

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: NA
Date Received: NA
Date Extracted: 10/7/14
Date Analyzed: 10/8/14 14:21

Sample Name: Method Blank
Lab Code: RQ1412024-01

Units: µg/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analytical Method: 8270D
Prep Method: EPA 3510C
Data File Name:

Analysis Lot: 415497
Extraction Lot: 219960
Instrument Name: R-MS-54
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
	1,2-Diphenylhydrazine/Azobenzene	ND	U	10	5.0	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	U	10	5.0	1.0	
95-50-1	1,2-Dichlorobenzene	ND	U	10	5.0	1.0	
541-73-1	1,3-Dichlorobenzene	ND	U	10	5.0	1.0	
106-46-7	1,4-Dichlorobenzene	ND	U	10	5.0	1.0	
95-95-4	2,4,5-Trichlorophenol	ND	U	10	5.0	1.8	
88-06-2	2,4,6-Trichlorophenol	ND	U	10	5.0	1.4	
120-83-2	2,4-Dichlorophenol	ND	U	10	5.0	1.3	
105-67-9	2,4-Dimethylphenol	ND	U	10	5.0	1.5	
51-28-5	2,4-Dinitrophenol	ND	U	50	25	20	
121-14-2	2,4-Dinitrotoluene	ND	U	10	5.0	1.6	
606-20-2	2,6-Dinitrotoluene	ND	U	10	5.0	1.8	
91-58-7	2-Chloronaphthalene	ND	U	10	5.0	1.0	
95-57-8	2-Chlorophenol	ND	U	10	5.0	1.0	
91-57-6	2-Methylnaphthalene	ND	U	10	5.0	1.0	
95-48-7	2-Methylphenol	ND	U	10	5.0	1.0	
88-74-4	2-Nitroaniline	ND	U	50	25	9.1	
88-75-5	2-Nitrophenol	ND	U	10	5.0	1.4	
91-94-1	3,3'-Dichlorobenzidine	ND	U	10	5.0	4.5	
	3- and 4-Methylphenol Coelution	ND	U	11	10	2.0	
99-09-2	3-Nitroaniline	ND	U	50	25	7.7	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	50	25	11	
101-55-3	4-Bromophenyl Phenyl Ether	ND	U	10	5.0	2.2	
59-50-7	4-Chloro-3-methylphenol	ND	U	10	5.0	1.2	
106-47-8	4-Chloroaniline	ND	U	10	5.0	1.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	ND	U	10	5.0	1.2	
100-01-6	4-Nitroaniline	ND	U	50	25	7.8	
100-02-7	4-Nitrophenol	ND	U	50	25	5.9	
83-32-9	Acenaphthene	ND	U	10	5.0	1.0	
208-96-8	Acenaphthylene	ND	U	10	5.0	1.0	
120-12-7	Anthracene	ND	U	10	5.0	1.0	
56-55-3	Benz(a)anthracene	ND	U	10	5.0	1.0	
92-87-5	Benzidine	ND	U	110	100	90	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 14:21
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412024-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY349.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
50-32-8	Benzo(a)pyrene	ND	U	10	5.0	1.0	
205-99-2	Benzo(b)fluoranthene	ND	U	10	5.0	1.0	
191-24-2	Benzo(g,h,i)perylene	ND	U	10	5.0	1.0	
207-08-9	Benzo(k)fluoranthene	ND	U	10	5.0	1.0	
100-51-6	Benzyl Alcohol	ND	U	10	5.0	1.3	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	U	10	5.0	1.0	
111-91-1	Bis(2-chloroethoxy)methane	ND	U	10	5.0	2.2	
111-44-4	Bis(2-chloroethyl) Ether	ND	U	10	5.0	1.3	
117-81-7	Bis(2-ethylhexyl) Phthalate	ND	U	10	5.0	1.2	
85-68-7	Butyl Benzyl Phthalate	ND	U	10	5.0	2.4	
86-74-8	Carbazole	ND	U	10	5.0	1.1	
218-01-9	Chrysene	ND	U	10	5.0	1.0	
84-74-2	Di-n-butyl Phthalate	ND	U	10	5.0	1.0	
117-84-0	Di-n-octyl Phthalate	ND	U	10	5.0	1.2	
53-70-3	Dibenz(a,h)anthracene	ND	U	10	5.0	1.3	
132-64-9	Dibenzofuran	ND	U	10	5.0	1.0	
84-66-2	Diethyl Phthalate	ND	U	10	5.0	1.0	
131-11-3	Dimethyl Phthalate	ND	U	10	5.0	1.0	
206-44-0	Fluoranthene	ND	U	10	5.0	1.0	
86-73-7	Fluorene	ND	U	10	5.0	1.0	
118-74-1	Hexachlorobenzene	ND	U	10	5.0	1.0	
87-68-3	Hexachlorobutadiene	ND	U	10	5.0	1.3	
77-47-4	Hexachlorocyclopentadiene	ND	U	10	5.0	1.0	
67-72-1	Hexachloroethane	ND	U	10	5.0	1.2	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	10	5.0	1.2	
78-59-1	Isophorone	ND	U	10	5.0	1.0	
621-64-7	N-Nitrosodi-n-propylamine	ND	U	10	5.0	1.3	
62-75-9	N-Nitrosodimethylamine	ND	U	10	5.0	1.0	
86-30-6	N-Nitrosodiphenylamine	ND	U	10	5.0	1.0	
91-20-3	Naphthalene	ND	U	10	5.0	1.0	
98-95-3	Nitrobenzene	ND	U	10	5.0	1.6	
87-86-5	Pentachlorophenol (PCP)	ND	U	50	25	6.9	
85-01-8	Phenanthrene	ND	U	10	5.0	1.0	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 14:21
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412024-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY349.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-95-2	Phenol	ND	U	10	5.0	1.0	
129-00-0	Pyrene	ND	U	10	5.0	1.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	102	40-125	10/8/14 14:21	
2-Fluorobiphenyl	82	50-110	10/8/14 14:21	
2-Fluorophenol	47	20-110	10/8/14 14:21	
Nitrobenzene-d5	78	40-110	10/8/14 14:21	
Phenol-d6	30	10-115	10/8/14 14:21	
p-Terphenyl-d14	107	50-135	10/8/14 14:21	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 1421

Tentatively Identified Compounds (TIC)
Semivolatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412024-01	**Basis:**	NA

Prep Method: EPA 3510C
Analytical Method: 8270D

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/3/14
Date Received: 10/4/14
Date Analyzed: 10/ 8/14

Matrix Spike Summary
Semivolatile Organic Compounds by GC/MS

Sample Name: FTMM-66-GW-886RW01-11.55
Lab Code: R1407825-005

Units: µg/L
Basis: NA

Analytical Method: 8270D
Prep Method: EPA 3510C

		FTMM-66-GW-886RW01-11.55MS Matrix Spike RQ1412024-04				FTMM-66-GW-886RW01-11.55DMS Duplicate Matrix Spike RQ1412024-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**		**% Rec Limits**	**RPD**	**RPD Limit**
1,2,4-Trichlorobenzene	ND	61.0	111	55		54.4	105	52		35 - 105	6	30
1,2-Dichlorobenzene	ND	62.4	111	56		54.0	105	51		35 - 100	9	30
1,3-Dichlorobenzene	ND	57.4	111	52		50.6	105	48		30 - 100	8	30
1,4-Dichlorobenzene	ND	59.3	111	53		51.9	105	49		30 - 100	8	30
2,4,5-Trichlorophenol	ND	103	111	93		99.3	105	94		50 - 110	1	30
2,4,6-Trichlorophenol	ND	102	111	91		98.3	105	93		50 - 115	2	30
2,4-Dichlorophenol	ND	107	111	96		92.9	105	88		50 - 105	9	30
2,4-Dimethylphenol	ND	103	111	93		91.9	105	87		30 - 110	7	30
2,4-Dinitrophenol	ND	109	111	98		112	105	106		15 - 140	8	30
2,4-Dinitrotoluene	ND	103	111	92		96.7	105	92		50 - 120	<1	30
2,6-Dinitrotoluene	ND	106	111	95		98.6	105	94		50 - 115	1	30
2-Chloronaphthalene	ND	82.8	111	75		80.2	105	76		50 - 105	1	30
2-Chlorophenol	ND	94.3	111	85		80.5	105	76		35 - 105	11	30
2-Methylnaphthalene	ND	74.7	111	67		68.9	105	65		45 - 105	3	30
2-Methylphenol	ND	90.5	111	81		77.7	105	74		40 - 110	9	30
2-Nitroaniline	ND	105	111	94		98.4	105	93		50 - 115	1	30
2-Nitrophenol	ND	98.2	111	88		87.7	105	83		40 - 115	6	30
3,3'-Dichlorobenzidine	ND	ND	111	0	*	ND	105	0	*	20 - 110	NC	30
3- and 4-Methylphenol Coelution	ND	180	222	81		150	211	71		30 - 110	13	30
3-Nitroaniline	ND	91.5	111	82		81.1	105	77		20 - 125	6	30
4,6-Dinitro-2-methylphenol	ND	102	111	91		97.2	105	92		40 - 130	1	30
4-Bromophenyl Phenyl Ether	ND	99.5	111	90		91.3	105	87		50 - 115	3	30
4-Chloro-3-methylphenol	ND	109	111	98		97.4	105	93		45 - 110	5	30
4-Chloroaniline	ND	89.1	111	80		75.1	105	71		15 - 110	12	30
4-Chlorophenyl Phenyl Ether	ND	94.0	111	85		92.3	105	88		50 - 110	3	30
4-Nitroaniline	ND	102	111	92		92.7	105	88		35 - 120	4	30
4-Nitrophenol	ND	54.8	111	49		53.4	105	51		0 - 125	4	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/3/14
Date Received: 10/4/14
Date Analyzed: 10/ 8/14

Matrix Spike Summary
Semivolatile Organic Compounds by GC/MS

Sample Name: FTMM-66-GW-886RW01-11.55
Lab Code: R1407825-005

Units: µg/L
Basis: NA

Analytical Method: 8270D
Prep Method: EPA 3510C

		FTMM-66-GW-886RW01-11.5 5MS Matrix Spike RQ1412024-04				FTMM-66-GW-886RW01-11.5 5DMS Duplicate Matrix Spike RQ1412024-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**		**% Rec Limits**	**RPD**	**RPD Limit**
Acenaphthene	ND	88.7	111	80		86.6	105	82		45 - 110	2	30
Acenaphthylene	ND	92.3	111	83		87.1	105	83		50 - 105	<1	30
Anthracene	ND	94.4	111	85		87.4	105	83		55 - 110	2	30
Benz(a)anthracene	ND	96.1	111	87		85.2	105	81		55 - 110	7	30
Benzidine	ND	ND	111	0	*	ND	105	0	*	10 - 130	NC	30
Benzo(a)pyrene	ND	92.6	111	83		85.4	105	81		55 - 110	2	30
Benzo(b)fluoranthene	ND	94.9	111	85		88.6	105	84		45 - 120	1	30
Benzo(g,h,i)perylene	ND	108	111	97		97.3	105	92		40 - 125	5	30
Benzo(k)fluoranthene	ND	92.9	111	84		85.1	105	81		45 - 125	4	30
Benzyl Alcohol	ND	98.6	111	89		83.3	105	79		30 - 110	12	30
2,2'-Oxybis(1-chloropropane)	ND	106	111	95		92.7	105	88		25 - 130	8	30
Bis(2-chloroethoxy)methane	ND	106	111	96		96.9	105	92		45 - 105	4	30
Bis(2-chloroethyl) Ether	ND	93.3	111	84		78.9	105	75		35 - 110	11	30
Bis(2-ethylhexyl) Phthalate	ND	111	111	100		104	105	99		40 - 125	1	30
Butyl Benzyl Phthalate	ND	104	111	93		91.9	105	87		45 - 115	7	30
Carbazole	ND	106	111	96		97.0	105	92		50 - 115	4	30
Chrysene	ND	95.9	111	86		85.5	105	81		55 - 110	6	30
Di-n-butyl Phthalate	ND	106	111	95		97.9	105	93		55 - 115	2	30
Di-n-octyl Phthalate	ND	105	111	94		97.3	105	92		35 - 135	2	30
Dibenz(a,h)anthracene	ND	105	111	95		95.2	105	90		40 - 125	5	30
Dibenzofuran	ND	86.6	111	78		83.3	105	79		55 - 105	1	30
Diethyl Phthalate	ND	102	111	92		102	105	97		40 - 120	5	30
Dimethyl Phthalate	ND	100	111	90		94.9	105	90		25 - 125	<1	30
Fluoranthene	ND	99.7	111	90		92.4	105	88		55 - 115	2	30
Fluorene	ND	92.0	111	83		87.0	105	83		50 - 110	<1	30
Hexachlorobenzene	ND	89.5	111	81		86.3	105	82		50 - 110	1	30
Hexachlorobutadiene	ND	54.4	111	49		46.6	105	44		25 - 105	11	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/3/14
Date Received: 10/4/14
Date Analyzed: 10/ 8/14

Matrix Spike Summary
Semivolatile Organic Compounds by GC/MS

Sample Name: FTMM-66-GW-886RW01-11.55
Lab Code: R1407825-005

Units: µg/L
Basis: NA

Analytical Method: 8270D
Prep Method: EPA 3510C

		FTMM-66-GW-886RW01-11.5 5MS Matrix Spike RQ1412024-04			FTMM-66-GW-886RW01-11.5 5DMS Duplicate Matrix Spike RQ1412024-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Hexachlorocyclopentadiene	ND	73.7	111	66	71.5	105	68	10 - 130	3	30
Hexachloroethane	ND	54.7	111	49	45.1	105	43	30 - 100	13	30
Indeno(1,2,3-cd)pyrene	ND	102	111	92	94.3	105	90	45 - 125	2	30
Isophorone	ND	108	111	97	97.0	105	92	50 - 110	5	30
N-Nitrosodi-n-propylamine	ND	106	111	96	91.2	105	87	35 - 130	10	30
N-Nitrosodimethylamine	ND	75.0	111	67	65.9	105	63	25 - 110	6	30
N-Nitrosodiphenylamine	ND	86.7	111	78	79.8	105	76	50 - 110	3	30
Naphthalene	ND	69.9	111	63	63.2	105	60	40 - 110	5	30
Nitrobenzene	ND	94.5	111	85	85.0	105	81	45 - 110	5	30
Pentachlorophenol (PCP)	ND	111	111	100	104	105	99	40 - 115	1	30
Phenanthrene	ND	97.5	111	88	93.4	105	89	50 - 115	1	30
Phenol	ND	49.5	111	45	43.7	105	41	0 - 115	9	30
Pyrene	ND	113	111	101	99.5	105	95	50 - 130	6	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Analyzed: 10/ 8/14

Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Analytical Method: 8270D
Prep Method: EPA 3510C

Units: µg/L
Basis: NA

Extraction Lot: 219960

Analyte Name	Lab Control Sample RQ1412024-02 Result	Spike Amount	% Rec	Duplicate Lab Control Sample RQ1412024-03 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	62.9	100	63	65.5	100	65	35 - 105	3	30
1,2-Dichlorobenzene	63.0	100	63	66.8	100	67	35 - 100	6	30
1,3-Dichlorobenzene	58.0	100	58	61.5	100	62	30 - 100	7	30
1,4-Dichlorobenzene	58.0	100	58	63.6	100	64	30 - 100	10	30
2,4,5-Trichlorophenol	102	100	102	106	100	106	50 - 110	4	30
2,4,6-Trichlorophenol	100	100	100	103	100	103	50 - 115	3	30
2,4-Dichlorophenol	103	100	103	104	100	104	50 - 105	<1	30
2,4-Dimethylphenol	96.4	100	96	96.6	100	97	30 - 110	1	30
2,4-Dinitrophenol	105	100	105	112	100	112	15 - 140	6	30
2,4-Dinitrotoluene	106	100	106	113	100	113	50 - 120	6	30
2,6-Dinitrotoluene	107	100	107	113	100	113	50 - 115	5	30
2-Chloronaphthalene	75.0	100	75	78.9	100	79	50 - 105	5	30
2-Chlorophenol	89.5	100	90	91.9	100	92	35 - 105	2	30
2-Methylnaphthalene	67.4	100	67	69.0	100	69	45 - 105	3	30
2-Methylphenol	84.3	100	84	86.1	100	86	40 - 110	2	30
2-Nitroaniline	99.9	100	100	109	100	108	50 - 115	8	30
2-Nitrophenol	97.2	100	97	101	100	101	40 - 115	4	30
3,3'-Dichlorobenzidine	88.7	100	89	92.5	100	92	20 - 110	3	30
3- and 4-Methylphenol Coelution	172	200	86	170	200	85	30 - 110	1	30
3-Nitroaniline	82.6	100	83	91.2	100	91	20 - 125	9	30
4,6-Dinitro-2-methylphenol	108	100	108	113	100	113	40 - 130	5	30
4-Bromophenyl Phenyl Ether	98.9	100	99	105	100	105	50 - 115	6	30
4-Chloro-3-methylphenol	106	100	106	105	100	105	45 - 110	<1	30
4-Chloroaniline	94.9	100	95	95.9	100	96	15 - 110	1	30
4-Chlorophenyl Phenyl Ether	93.0	100	93	102	100	102	50 - 110	9	30
4-Nitroaniline	100	100	100	108	100	108	35 - 120	8	30
4-Nitrophenol	55.8	100	56	59.7	100	60	0 - 125	7	30
Acenaphthene	82.9	100	83	91.0	100	91	45 - 110	9	30
Acenaphthylene	87.5	100	88	90.7	100	91	50 - 105	3	30
Anthracene	100	100	100	103	100	103	55 - 110	3	30
Benz(a)anthracene	102	100	102	104	100	104	55 - 110	2	30
Benzidine	ND	100	0 *	ND	100	0 *	10 - 130	NC	30
Benzo(a)pyrene	101	100	101	108	100	108	55 - 110	7	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Analyzed: 10/ 8/14

Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Analytical Method: 8270D
Prep Method: EPA 3510C

Units: µg/L
Basis: NA

Extraction Lot: 219960

Analyte Name	Lab Control Sample RQ1412024-02 Result	Spike Amount	% Rec	Duplicate Lab Control Sample RQ1412024-03 Result	Spike Amount	% Rec		% Rec Limits	RPD	RPD Limit
Benzo(b)fluoranthene	104	100	104	105	100	105		45 - 120	<1	30
Benzo(g,h,i)perylene	114	100	114	116	100	116		40 - 125	2	30
Benzo(k)fluoranthene	94.6	100	95	100	100	100		45 - 125	5	30
Benzyl Alcohol	85.9	100	86	91.2	100	91		30 - 110	6	30
2,2'-Oxybis(1-chloropropane)	100	100	100	107	100	107		25 - 130	7	30
Bis(2-chloroethoxy)methane	103	100	103	105	100	105		45 - 105	2	30
Bis(2-chloroethyl) Ether	86.6	100	87	93.6	100	94		35 - 110	8	30
Bis(2-ethylhexyl) Phthalate	116	100	116	118	100	118		40 - 125	2	30
Butyl Benzyl Phthalate	111	100	111	110	100	110		45 - 115	<1	30
Carbazole	106	100	106	112	100	112		50 - 115	6	30
Chrysene	102	100	102	104	100	104		55 - 110	2	30
Di-n-butyl Phthalate	110	100	110	116	100	116	*	55 - 115	5	30
Di-n-octyl Phthalate	109	100	109	114	100	114		35 - 135	4	30
Dibenz(a,h)anthracene	112	100	112	116	100	116		40 - 125	4	30
Dibenzofuran	84.9	100	85	90.1	100	90		55 - 105	6	30
Diethyl Phthalate	107	100	107	118	100	118		40 - 120	10	30
Dimethyl Phthalate	97.1	100	97	106	100	106		25 - 125	9	30
Fluoranthene	108	100	108	114	100	114		55 - 115	5	30
Fluorene	89.5	100	89	96.3	100	96		50 - 110	8	30
Hexachlorobenzene	96.3	100	96	104	100	104		50 - 110	8	30
Hexachlorobutadiene	59.1	100	59	61.5	100	62		25 - 105	5	30
Hexachlorocyclopentadiene	66.2	100	66	74.2	100	74		10 - 130	11	30
Hexachloroethane	55.2	100	55	58.5	100	58		30 - 100	5	30
Indeno(1,2,3-cd)pyrene	111	100	111	116	100	116		45 - 125	4	30
Isophorone	105	100	105	107	100	107		50 - 110	2	30
N-Nitrosodi-n-propylamine	98.9	100	99	104	100	104		35 - 130	5	30
N-Nitrosodimethylamine	63.0	100	63	67.0	100	67		25 - 110	6	30
N-Nitrosodiphenylamine	104	100	104	108	100	108		50 - 110	4	30
Naphthalene	69.7	100	70	72.1	100	72		40 - 110	3	30
Nitrobenzene	96.2	100	96	95.4	100	95		45 - 110	1	30
Pentachlorophenol (PCP)	112	100	112	114	100	114		40 - 115	2	30
Phenanthrene	102	100	102	106	100	106		50 - 115	4	30
Phenol	46.0	100	46	48.0	100	48		0 - 115	4	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Analyzed: 10/ 8/14

Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Analytical Method: 8270D
Prep Method: EPA 3510C

Units: µg/L
Basis: NA

Extraction Lot: 219960

Analyte Name	Lab Control Sample RQ1412024-02 Result	Spike Amount	% Rec	Duplicate Lab Control Sample RQ1412024-03 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Pyrene	117	100	117	118	100	118	50 - 130	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

METALS
COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: R1407825 SDG No.: FTMM-3-GW-M

Lab Code: Case No.: SAS No.:

SOW No.: SW846 CLP-M

Sample ID.	Lab Sample No.
FTMM-EB-100314	R1407825-001
FTMM-3-GW-M3MW02-21	R1407825-003
FTMM-3-GW-M3MW02-21D	R1407825-003D
FTMM-3-GW-M3MW02-21S	R1407825-003S
FTMM-3-GW-M3MW102-21	R1407825-004
FTMM-57-GW-108MW04-8.25	R1407825-011

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: See Attatched Case Narrative

Signature: Name: Janice Jaeger

Date: 10/30/14 Title: Project Manager

COVER PAGE - IN

METALS
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INORGANIC ANALYSIS DATA PACKAGE

Client:	Parsons Engineering Science	**Service Request:**	FTMM-3-GW-M3MW02-21
Project No.:	R1407825	**Date Collected:**	10/3/2014
Project Name:		**Date Received:**	10/4/2014
Matrix:	WATER	**Units:**	ug/L
		Basis:	

Sample Name: FTMM-EB-100314 **Lab Code:** R1407825-001

Analyte	Analysis Method	PQL	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Silver	6010C	10.0	5.0	0.385	1.0	10/08/14	10/14/14	5.0	U	
Aluminum	6010C	100	50.0	24.4	1.0	10/08/14	10/14/14	50.0	U	
Arsenic	6010C	10.0	5.0	1.4	1.0	10/08/14	10/14/14	1.5	J	
Barium	6010C	20.0	10.0	0.549	1.0	10/08/14	10/14/14	10.0	U	
Beryllium	6010C	5.0	2.5	0.169	1.0	10/08/14	10/14/14	2.5	U	
Calcium	6010C	1000	500	44.6	1.0	10/08/14	10/14/14	500	U	
Cadmium	6010C	5.0	2.5	0.071	1.0	10/08/14	10/14/14	2.5	U	
Cobalt	6010C	50.0	25.0	0.183	1.0	10/08/14	10/16/14	25.0	U	
Chromium	6010C	10.0	5.0	0.403	1.0	10/08/14	10/14/14	5.0	U	
Copper	6010C	20.0	10.0	3.0	1.0	10/08/14	10/14/14	10.0	U	
Iron	6010C	100	50.0	10.0	1.0	10/08/14	10/14/14	50.0	U	
Potassium	6010C	2000	1000	105	1.0	10/08/14	10/14/14	1000	U	
Magnesium	6010C	1000	500	5.6	1.0	10/08/14	10/14/14	16.2	J	
Manganese	6010C	10.0	5.0	0.353	1.0	10/08/14	10/14/14	0.444	J	
Mercury	7470A	0.200	0.100	0.024	1.0	10/10/14	10/10/14	0.100	U	
Sodium	6010C	1000	500	32.6	1.0	10/08/14	10/14/14	49.3	J	
Nickel	6010C	40.0	20.0	0.508	1.0	10/08/14	10/14/14	20.0	U	
Lead	6010C	5.0	2.5	0.807	1.0	10/08/14	10/14/14	2.5	U	
Antimony	6010C	60.0	30.0	2.2	1.0	10/08/14	10/14/14	30.0	U	
Selenium	6010C	10.0	10.0	2.0	1.0	10/08/14	10/16/14	10.0	U	
Thallium	6010C	10.0	10.0	1.8	1.0	10/08/14	10/14/14	10.0	U	
Vanadium	6010C	50.0	25.0	0.169	1.0	10/08/14	10/14/14	25.0	U	
Zinc	6010C	20.0	10.0	4.5	1.0	10/08/14	10/14/14	10.0	U	

% Solids: 0.0

Comments:

ALS Environmental

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Parsons Engineering Science	Service Request:	FTMM-3-GW-M3MW02-21
Project No.:	R1407825	Date Collected:	10/3/2014
Project Name:		Date Received:	10/4/2014
Matrix:	WATER	Units:	ug/L
		Basis:	

Sample Name: FTMM-3-GW-M3MW02-21 Lab Code: R1407825-003

Analyte	Analysis Method	PQL	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Silver	6010C	10.0	5.0	0.385	1.0	10/08/14	10/14/14	5.0	U	
Aluminum	6010C	100	50.0	24.4	1.0	10/08/14	10/14/14	685		
Arsenic	6010C	10.0	5.0	1.4	1.0	10/08/14	10/14/14	5.0	U	
Barium	6010C	20.0	10.0	0.549	1.0	10/08/14	10/14/14	48.6		
Beryllium	6010C	5.0	2.5	0.169	1.0	10/08/14	10/14/14	0.905	J	
Calcium	6010C	1000	500	44.6	1.0	10/08/14	10/14/14	4930		
Cadmium	6010C	5.0	2.5	0.071	1.0	10/08/14	10/14/14	0.483	J	
Cobalt	6010C	50.0	25.0	0.183	1.0	10/08/14	10/16/14	5.5	J	
Chromium	6010C	10.0	5.0	0.403	1.0	10/08/14	10/14/14	5.0	U	
Copper	6010C	20.0	10.0	3.0	1.0	10/08/14	10/14/14	10.0	U	
Iron	6010C	100	50.0	10.0	1.0	10/08/14	10/14/14	101		
Potassium	6010C	2000	1000	105	1.0	10/08/14	10/14/14	3090		
Magnesium	6010C	1000	500	5.6	1.0	10/08/14	10/14/14	10200		
Manganese	6010C	10.0	5.0	0.353	1.0	10/08/14	10/14/14	32.4		
Mercury	7470A	0.200	0.100	0.024	1.0	10/10/14	10/10/14	0.100	U	
Sodium	6010C	1000	500	32.6	1.0	10/08/14	10/14/14	12300		
Nickel	6010C	40.0	20.0	0.508	1.0	10/08/14	10/14/14	55.3		
Lead	6010C	5.0	2.5	0.807	1.0	10/08/14	10/14/14	2.5	U	
Antimony	6010C	60.0	30.0	2.2	1.0	10/08/14	10/14/14	30.0	U	
Selenium	6010C	10.0	10.0	2.0	1.0	10/08/14	10/16/14	10.0	U	
Thallium	6010C	10.0	10.0	1.8	1.0	10/08/14	10/14/14	10.0	U	
Vanadium	6010C	50.0	25.0	0.169	1.0	10/08/14	10/14/14	25.0	U	
Zinc	6010C	20.0	10.0	4.5	1.0	10/08/14	10/14/14	102		

% Solids: 0.0

Comments:

ALS Environmental

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INORGANIC ANALYSIS DATA PACKAGE

Client: Parsons Engineering Science
Project No.: R1407825
Project Name:
Matrix: WATER

Service Request: FTMM-3-GW-M3MW02-21
Date Collected: 10/3/2014
Date Received: 10/4/2014
Units: ug/L
Basis:

Sample Name: FTMM-3-GW-M3MW102-21
Lab Code: R1407825-004

Analyte	Analysis Method	PQL	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Silver	6010C	10.0	5.0	0.385	1.0	10/08/14	10/14/14	5.0	U	
Aluminum	6010C	100	50.0	24.4	1.0	10/08/14	10/14/14	660		
Arsenic	6010C	10.0	5.0	1.4	1.0	10/08/14	10/14/14	5.0	U	
Barium	6010C	20.0	10.0	0.549	1.0	10/08/14	10/14/14	47.7		
Beryllium	6010C	5.0	2.5	0.169	1.0	10/08/14	10/14/14	0.837	J	
Calcium	6010C	1000	500	44.6	1.0	10/08/14	10/14/14	4620		
Cadmium	6010C	5.0	2.5	0.071	1.0	10/08/14	10/14/14	0.203	J	
Cobalt	6010C	50.0	25.0	0.183	1.0	10/08/14	10/16/14	4.9	J	
Chromium	6010C	10.0	5.0	0.403	1.0	10/08/14	10/14/14	5.0	U	
Copper	6010C	20.0	10.0	3.0	1.0	10/08/14	10/14/14	10.0	U	
Iron	6010C	100	50.0	10.0	1.0	10/08/14	10/14/14	97.8	J	
Potassium	6010C	2000	1000	105	1.0	10/08/14	10/14/14	2990		
Magnesium	6010C	1000	500	5.6	1.0	10/08/14	10/14/14	9910		
Manganese	6010C	10.0	5.0	0.353	1.0	10/08/14	10/14/14	31.0		
Mercury	7470A	0.200	0.100	0.024	1.0	10/10/14	10/10/14	0.100	U	
Sodium	6010C	1000	500	32.6	1.0	10/08/14	10/14/14	12200		
Nickel	6010C	40.0	20.0	0.508	1.0	10/08/14	10/14/14	50.5		
Lead	6010C	5.0	2.5	0.807	1.0	10/08/14	10/14/14	2.5	U	
Antimony	6010C	60.0	30.0	2.2	1.0	10/08/14	10/14/14	3.8	J	
Selenium	6010C	10.0	10.0	2.0	1.0	10/08/14	10/16/14	10.0	U	
Thallium	6010C	10.0	10.0	1.8	1.0	10/08/14	10/14/14	10.0	U	
Vanadium	6010C	50.0	25.0	0.169	1.0	10/08/14	10/14/14	25.0	U	
Zinc	6010C	20.0	10.0	4.5	1.0	10/08/14	10/14/14	96.8		

% Solids: 0.0

Comments:

ALS Environmental

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Parsons Engineering Science	**Service Request:**	FTMM-3-GW-M3MW02-21
Project No.:	R1407825	**Date Collected:**	10/2/2014
Project Name:		**Date Received:**	10/4/2014
Matrix:	WATER	**Units:**	ug/L
		Basis:	

Sample Name: FTMM-57-GW-108MW04-8.25 **Lab Code:** R1407825-011

Analyte	Analysis Method	PQL	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6010C	5.0	2.5	0.807	1.0	10/08/14	10/14/14	2.5	U	

% Solids: 0.0

Comments:

METALS

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BLANKS

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-3-GW-M3

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Silver	0.39	U	0.52	J	0.41	J	0.39	U	0.385	U	P
Aluminum	32.18	J	24.40	U	47.75	J	24.40	U	31.967	J	P
Arsenic	1.38	U	2.93	J	1.49	J	1.38	U	1.380	U	P
Barium	11.09	J	7.36	J	9.11	J	3.45	J	1.367	J	P
Beryllium	0.21	J	0.25	J	0.24	J	0.17	U	0.169	U	P
Calcium	44.60	U	44.60	U	44.60	U	62.24	J	44.600	U	P
Cadmium	0.61	J	0.41	J	0.53	J	0.17	J	-0.156	J	P
Cobalt	0.96	J	0.79	J	0.87	J	0.67	J	-0.519	J	P
Chromium	0.64	J	0.40	U	0.40	U	0.40	U	0.417	J	P
Copper	7.40	J	3.87	J	6.22	J	3.66	J	3.160	J	P
Iron	9.97	U	9.97	U	22.43	J	9.97	U	9.970	U	P
Potassium	105.00	U	209.86	J	121.94	J	105.00	U	107.028	J	P
Magnesium	25.29	J	25.60	J	31.12	J	19.29	J	5.630	U	P
Manganese	1.08	J	0.74	J	0.98	J	0.62	J	2.812	J	P
Mercury	0.024	U	0.024	U	0.024	U	0.024	U	0.024	U	CV
Sodium	38.19	J	140.48	J	91.70	J	128.72	J	45.317	J	P
Nickel	3.21	J	2.10	J	2.81	J	1.47	J	0.508	U	P
Lead	1.27	J	0.89	J	0.81	U	1.62	J	0.807	U	P
Antimony	5.21	J	3.78	J	3.75	J	2.15	U	3.729	J	P
Selenium	1.99	U	1.99	U	1.99	U	1.99	U	1.990	U	P
Thallium	1.84	U	1.84	U	1.84	U	1.84	U	-4.909	J	P
Vanadium	2.28	J	2.42	J	2.43	J	0.63	J	0.169	U	P
Zinc	4.47	U	4.47	U	4.47	U	4.47	U	4.470	U	P

Comments:

METALS

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BLANKS

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-3-GW-M3

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Silver			0.39	U	0.39	U	0.39	U			P
Aluminum			24.40	U	24.40	U	53.95	J			P
Arsenic			1.38	U	1.38	U	1.38	U			P
Barium			3.17	J	4.21	J	3.33	J			P
Beryllium			0.17	U	0.17	U	0.17	U			P
Calcium			44.60	U	44.60	U	44.60	U			P
Cadmium			0.27	J	0.31	J	0.20	J			P
Cobalt			1.25	J	0.84	J	0.90	J			P
Chromium			0.40	U	0.40	U	0.40	U			P
Copper			3.65	J	3.45	J	4.59	J			P
Iron			9.97	U	9.97	U	24.76	J			P
Potassium			105.00	U	105.00	U	105.00	U			P
Magnesium			15.44	J	26.16	J	22.96	J			P
Manganese			0.78	J	0.65	J	0.53	J			P
Mercury			0.024	U	0.024	U					CV
Sodium			72.53	J	54.95	J	49.50	J			P
Nickel			1.31	J	1.57	J	1.90	J			P
Lead			0.81	U	0.81	U	0.81	U			P
Antimony			2.15	U	2.15	U	2.86	J			P
Selenium			1.99	U	1.99	U	1.99	U			P
Thallium			1.84	U	1.84	U	1.84	U			P
Vanadium			0.45	J	0.84	J	0.48	J			P
Zinc			4.47	U	4.47	U	4.47	U			P

Comments:

METALS

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BLANKS

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-3-GW-M3

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Cobalt			0.65	J							P
Selenium			1.99	U							P

Comments:

METALS

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SPIKE SAMPLE RECOVERY

Client: Parsons Engineering Science
Service Request: FTMM-3-GW-M3MW02-21

Project No.: R1407825
Units: UG/L

Project Name: NA
Basis:

Matrix: WATER
% Solids: 0.0

Sample Name: FTMM-3-GW-M3MW02-21S
Lab Code: R1407825-003S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Silver	84 - 115	51.00		5.00	U	50.0	102		6010C
Aluminum	88 - 113	2640.00		685.00		2000.0	98		6010C
Arsenic	87 - 113	39.90		5.00	U	40.0	100		6010C
Barium	88 - 113	2110.00		48.60		2000.0	103		6010C
Beryllium	89 - 112	50.90		0.90	J	50.0	100		6010C
Calcium	87 - 113	7090.00		4930.00		2000.0	108		6010C
Cadmium	88 - 113	50.60		0.48	J	50.0	100		6010C
Cobalt	75 - 125	517.00		5.47	J	500.0	102		6010C
Chromium	90 - 113	210.00		5.00	U	200.0	105		6010C
Copper	86 - 114	264.00		10.00	U	250.0	106		6010C
Iron	87 - 115	1140.00		101.00		1000.0	104		6010C
Potassium	86 - 114	23000.00		3090.00		20000.0	100		6010C
Magnesium		12200.00		10200.00		2000.0	100		6010C
Manganese	90 - 114	552.00		32.40		500.0	104		6010C
Mercury	75 - 125	0.931		0.100	U	1.00	93		7470A
Sodium	87 - 115	32100.00		12300.00		20000.0	99		6010C
Nickel	88 - 113	579.00		55.30		500.0	105		6010C
Lead	86 - 113	500.00		2.50	U	500.00	100		6010C
Antimony	88 - 113	487.00		30.00	U	500.0	97		6010C
Selenium	75 - 125	995.00		10.00	U	1010.0	99		6010C
Thallium	85 - 114	1890.00		10.00	U	2000.0	94		6010C
Vanadium	90 - 111	511.00		25.00	U	500.0	102		6010C
Zinc	87 - 115	629.00		102.00		500.0	105		6010C

An empty field in the Control Limit column indicates the control limit is not applicable

METALS

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POST SPIKE SAMPLE RECOVERY

Client: Parsons Engineering Science
Service Request: FTMM-3-GW-M3MW02-21
Project No.: R1407825
Units: UG/L
Project Name: NA
Basis:
Matrix: WATER

Sample Name: FTMM-3-GW-M3MW02-21A
Lab Code: R1407825-003A

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Silver	80 - 120	48.60		5.00	U	50.0	97		6010C
Aluminum	80 - 120	2550.00		685.00		2000.0	93		6010C
Arsenic	80 - 120	39.70		5.00	U	40.0	99		6010C
Barium	80 - 120	2040.00		48.60		2000.0	100		6010C
Beryllium	80 - 120	49.40		0.90	J	50.0	97		6010C
Calcium	80 - 120	6870.00		4930.00		2000.0	97		6010C
Cadmium	80 - 120	49.20		0.48	J	50.0	97		6010C
Cobalt	75 - 125	491.00		5.47	J	500.0	97		6010C
Chromium	80 - 120	204.00		5.00	U	200.0	102		6010C
Copper	80 - 120	249.00		10.00	U	250.0	100		6010C
Iron	80 - 120	1110.00		101.00		1000.0	101		6010C
Potassium	80 - 120	22600.00		3090.00		20000.0	98		6010C
Magnesium	80 - 120	12000.00		10200.00		2000.0	90		6010C
Manganese	80 - 120	533.00		32.40		500.0	100		6010C
Sodium	80 - 120	31900.00		12300.00		20000.0	98		6010C
Nickel	80 - 120	566.00		55.30		500.0	102		6010C
Lead	80 - 120	490.00		2.50	U	500.0	98		6010C
Antimony	80 - 120	505.00		30.00	U	500.0	101		6010C
Selenium	75 - 125	1190.00		10.00	U	1010.0	118		6010C
Thallium	80 - 120	1860.00		10.00	U	2000.0	93		6010C
Vanadium	80 - 120	491.00		25.00	U	500.0	98		6010C
Zinc	80 - 120	611.00		102.00		500.0	102		6010C

METALS

- 6 -

DUPLICATES

Client: Parsons Engineering Science
Service Request: FTMM-3-GW-M3MW02-21
Project No.: R1407825
Units: UG/L
Project Name: NA
Basis:
Matrix: WATER
% Solids: 0.0

Sample Name: FTMM-3-GW-M3MW02-21D
Lab Code: R1407825-003D

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Silver		5.00	U	5.00	U			6010C
Aluminum	20	685.00		665.00		3		6010C
Arsenic		5.00	U	5.00	U			6010C
Barium		48.60		48.60		0		6010C
Beryllium		0.905	J	0.972	J	7		6010C
Calcium		4930.00		4960.00		1		6010C
Cadmium		0.48	J	0.44	J	9		6010C
Cobalt		5.47	J	5.81	J	6		6010C
Chromium		5.00	U	5.00	U			6010C
Copper		10.00	U	10.00	U			6010C
Iron		101.00		98.20	J	3		6010C
Potassium		3090.00		3110.00		1		6010C
Magnesium	20	10200.00		10100.00		1		6010C
Manganese		32.40		32.00		1		6010C
Mercury		0.100	U	0.100	U			7470A
Sodium	20	12300.00		12300.00		0		6010C
Nickel		55.30		54.30		2		6010C
Lead		2.50	U	2.50	U			6010C
Antimony		30.00	U	30.00	U			6010C
Selenium		10.00	U	10.00	U			6010C
Thallium		10.00	U	10.00	U			6010C
Vanadium		25.00	U	25.00	U			6010C
Zinc	20	102.00		102.00		0		6010C

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS

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LABORATORY CONTROL SAMPLE

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-3-GW-M3

Solid LCS Source: _____

Aqueous LCS Source: CPI

Analyte	Aqueous (ug/L			Solid (mg/K				
	True	Found	%R	True	Found	C	Limits	%R
Silver	50	50	100					
Aluminum	2000	1920	96					
Arsenic	40	38	95					
Barium	2000	2060	103					
Beryllium	50	50	100					
Calcium	2000	2060	103					
Cadmium	50	51	102					
Cobalt	500	503	101					
Chromium	200	211	106					
Copper	250	270	108					
Iron	1000	1040	104					
Potassium	20000	19500	98					
Magnesium	2000	2020	101					
Manganese	500	519	104					
Mercury	1.000	0.942	94					
Sodium	20000	19700	98					
Nickel	500	525	105					
Lead	500	506	101					
Antimony	500	483	97					
Selenium	1010	969	96					
Thallium	2000	1910	96					
Vanadium	500	499	100					
Zinc	500	528	106					

Comments: _____

October 27, 2014 Service Request No: R1407825

Tammy Chang
Parsons, Inc.
8000 Centre Park Drive, Suite 200
Austin, TX 78754

Laboratory Results for: FTMM Baseline/748810-03000

Dear Tammy:

Enclosed are the results of the sample(s) submitted to our laboratory on October 4, 2014. For your reference, these analyses have been assigned our service request number **R1407825**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Janice Jaeger
Client Services Manager

CC: Sandra de las Fuentes

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Parsons, Inc.
R1407825

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SDG NARRATIVE

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CASE NARRATIVE

Client:	Parsons Engineering Science	**Service Request No.:**	R1307825
Project:	FTMM Baseline	**Project No.:**	748810-0300
Sample Matrix:	Water	**Date Received:**	10/04/14

General Comments

The DOD QSM 4.1 requires detections reported to the Method Detection Limit (MDL). Values greater than the MDL and less than the Limit of Quantitation (LOQ) were flagged as estimates (J). Values less than the MDL and Limit of Detection (LOD) were reported as non-detect (ND). The LOD for each analyte is verified quarterly by the laboratory using procedures defined in DOD Quality Systems Manual Version 4.1.

Sample Receipt

Samples were collected on 10/02-03/14 and received in good condition at cooler temperatures of and 4.9 and 5.5°C as noted on the cooler receipt and preservation check form. The samples were stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the batching form for a cross-reference between Client ID and ALS Job #.

Volatile Organics

Six water samples were analyzed for TCL Volatile organics by SW-846 method 8260C. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

Library Searches against the NBS/EPA library were conducted on all samples. The 20 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

All Tuning criteria for BFB were and within QC limits.

Internal Standard Areas were within QC limits.

All the initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within acceptance limits for all samples.

The Blank Spike (LCS) recoveries were all acceptable.

A Matrix Spike/Matrix spike duplicate (MS/MSD) was done on sample FTMM-3-GW-M3MW02-21. All recoveries and RPD were within QC limits.

The Method Blanks associated with these samples were free of contamination except a "J" flagged value for Bromomethane. No data was affected.

R1307825
Page 2

Semi-Volatile Organics

Five water samples were analyzed for TCL Volatile organics by SW-846 method 8270D. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

All Tuning criteria for DFTPP were within QC limits.

Internal Standard Areas were within QC limits.

All the initial and continuing calibration criteria were met for all analytes.

All surrogate standard recoveries were within acceptance limits for all samples.

A Matrix Spike/Matrix spike duplicate (MS/MSD) was done on sample FTMM-66-GW-886RW01-11.55. All recoveries and RPD were within QC limits except 3,3-Dichlorobenzidine and Benzidine and have been flagged with an "*".

All Blank Spike/Blank Spike Duplicate (LCS/LCSD) recoveries were within QC acceptance limits except the LCS/LCSD for Benzidine and the LCSD for Di-n-butylphthalate which have been flagged with an "*". All samples are possibly biased low for Benzidine. No other data was affected.

The Method Blanks associated with these samples were free of contamination.

Metals Analysis

One water sample was analyzed for Lead by method 6010C from SW-846. Three water samples were analyzed for TAL Metals by methods 6010C/7470A from SW-846. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

All blank spike recoveries (LCS) were within QC limits of 80 – 120 %.

A Matrix Spike and Duplicate were done on sample FTMM-3-GW-M3MW02-21. All recoveries were within QC limits. The recovery for Magnesium could not be accurately determined as the amount present in the sample was greater than four times the amount added as spike.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 748810-03000	Batch Complete: Yes	Date Revised:
Submission: R1407825	Diskette Requested: No	Date Due: 10/27/14
Client: Parsons Engineering Science	Date: 10/17/14	Protocol: SW846
Client Rep: JJAEGER	Custody Seal: Present/Absent:	Shipping No.:
Project: FTMM Baseline	Chain of Custody: Present/Absent:	SDG #:

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1407825-001	FTMM-EB-100314	Water	7470A, 6010C, 8260C, 8270D	10/3/14	10/4/14			
R1407825-002	FTMM-TB-100314	Water	8260C	10/3/14	10/4/14			
R1407825-003QC	FTMM-3-GW-M3MW02-21	Water	7470A, 6010C, 8260C	10/3/14	10/4/14			
R1407825-004	FTMM-3-GW-M3MW102-21	Water	7470A, 6010C, 8260C	10/3/14	10/4/14			
R1407825-005QC	FTMM-66-GW-886RW01-11.55	Water	8270D	10/3/14	10/4/14			
R1407825-006	FTMM-66-GW-886RW06-10.12	Water	8270D	10/3/14	10/4/14			
R1407825-007	FTMM-66-GW-886RW106-10.12	Water	8270D	10/3/14	10/4/14			
R1407825-008	FTMM-66-GW-886RW08-11.22	Water	8270D	10/3/14	10/4/14			
R1407825-009	FTMM-58-GW-2567MW03-8.03	Water	8260C	10/2/14	10/4/14			
R1407825-010	FTMM-58-GW-2567MW01-8.73	Water	8260C	10/2/14	10/4/14			
R1407825-011	FTMM-57-GW-108MW04-8.25	Water	6010C	10/2/14	10/4/14			

5000

Folder Comments: DoD reporting

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REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also dctected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

\+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS.

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH THE NELAC STANDARDS

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

INORGANIC PREPARATION METHODS

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	3010A
200.8	ILM05.3
6010C	3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3010A
6010 SPLP (1312) extract	3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.

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CHAINS OF CUSTODY

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

18649

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Project Name: FTMM 4Q GW	Project Number: 748810-03000
Project Manager: Cris Grill	Report CC:
Company/Address: Parsons	
100 High St. Boston, MA 02210	
Phone #: (617) 449-1583	Email: cris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: Nick Lazos

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs + TICs ◦ 8260 ◦ 624 ◦ CLP	GC/MS SVOAs ◦ 8270 ◦ 625	GC VOAs ◦ 8021 ◦ 601/602	PESTICIDES ◦ 8081 ◦ 608	PCBs ◦ 8082 ◦ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
FTMM-EB-100314	001	10/3/14	1145	EB	6	X	X				X		
FTMM-TB-100314	002		—	TB	3	X					[redacted]		
FTMM-3-GW-M3MW03-21	003		1145	GW	4	X					X		
FTMM-3-GW-M3MW03-21-MS	QC		1145	GW	4	X					X		
FTMM-3-GW-M3MW03-21	004		1200	GW	4	X					X		
FTMM-3-GW-M3MW03-21-MSD	QC		1145	GW	4	X					X		
FTMM-66-GW-SB66GW01-11.5	005		1015	GW	2		X						
FTMM-66-GW-SB66GW01-11.5-MS	QC		1015	GW	2		X						
FTMM-66-GW-SB66GW01-11.5-MSD	QC		1015	GW	2		X						
FTMM-66-GW-SB66GW06-10.1	006		1110	GW	2		X						
FTMM-66-GW-SB66GW105-10.1	007		1200	GW	2		X						

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
Standard
REQUESTED REPORT DATE
_____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
Edata ____ Yes ____ No

INVOICE INFORMATION
PO #
BILL TO:
R1407825

STATE WHERE SAMPLES WERE COLLECTED

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	
Printed Name: Nick Lazos	Printed Name	Printed Name	Printed Name	Printed Name	
Firm: Parsons	Firm: ALS	Firm	Firm	Firm	
Date/Time: 10/3/14 @ 1630	Date/Time: 10/4/14 0910	Date/Time	Date/Time	Date/Time	

R1407825
Parsons, Inc.
FTMM Baseline
5

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

19151

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Project Name: FTMM 4Q(GW)	Project Number: 748810-03000
Project Manager: Cris Grill	Report CC:
Company/Address: Parsons 100 High St., Boston, MA 02110	
Phone #: (617) 449-1583	Email: cris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: Nicki Lazos

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs • 8260 • 624 • CLP	GC/MS SVOAs • 8270 • 625	GC VOAs • 8021 • 601/602	PESTICIDES • 8081 • 608	PCBs • 8082 • 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Pb - lead	REMARKS/ ALTERNATE DESCRIPTION
FTMM-66-GW-8868W08-11.32		10/3/14	1000	GW	2		X							
FTMM-58-GW-2567MW03-8.03		10/3/14	1440	GW	3	X								-009
FTMM-58-GW-2567MW01-8.73			1350	GW	3	X								-010
FTMM-57-GW-10351W04-8.35			1035	GW	1								X	-011

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
___ RUSH (SURCHARGES APPLY)
___ 1 day ___ 2 day ___ 3 day
___ 4 day ___ 5 day
Standard
REQUESTED REPORT DATE

REPORT REQUIREMENTS
___ I. Results Only
___ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
___ III. Results + QC and Calibration Summaries
___ IV. Data Validation Report with Raw Data
Edata ___ Yes ___ No

INVOICE INFORMATION
PO #
BILL TO:
R1407825

STATE WHERE SAMPLES WERE COLLECTED

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: Nicki Lazos	Printed Name: J Sanders	Printed Name	Printed Name	Printed Name	Printed Name
Firm: Parsons	Firm: TN	Firm	Firm	Firm	Firm
Date/Time: 10/3/14 @ 1630	Date/Time: 10/4/14 0715	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Lab Copy, Yellow - Return to Originator

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Cooler Receipt and Preservation Check Form

Project/Client Parsons Folder Number R1407825

Cooler received on 10/4 by: SFS COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y (N)	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	Y N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y (N) NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	(ALS/ROC) CLIENT
4	Circle: **Wet Ice Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 10/4 Time: 1022 ID: (IR#3) IR#4 From: (Temp Blank) Sample Bottle

Observed Temp (°C)	5.1	5.4					
Correction Factor (°C)	-0.2	+0.1					
Corrected Temp (°C)	4.9	5.5					
Within 0-6°C?	(Y) N	(Y) N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: 1022 by SFS on 10/4 at 1022
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: CB 10/6/14

Cooler Breakdown: Date: 10-6-14 Time: 15:30 by: MC

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct containers used for the tests indicated? (YES) NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3	✓		BDB26137E	08/15				
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	4112120	8/15				

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 031014-1BMG, 4-002-003, 060914-2AKW

Other Comments:

No COC. HCl Lot 4113070 exp 08/15

1 Amber for location FTMM-3-GW-M3MW102-21 arrived broken.

8270 metals Hg. 8260

R1407825 5
Persons, Inc.
FTMM Baseline

PC Secondary Review: JMS 10/17/14 *significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

P:\INTRANET\QAQC\Forms Controlled\Cooler Receipt r7.doc 5/6/14

00011

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM Baseline/748810-03000

Service Request: R1407825

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1407825-001.01					
	8260C				
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-001 / DWARD	
		10/14/14	1137	In Lab / FNAEGLER	
		10/14/14	1647	R-001-S10 / BWOJTASIEWICZ	
R1407825-001.02					
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-001 / DWARD	
R1407825-001.03					
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-001 / DWARD	
R1407825-001.04					
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-002 / DWARD	
R1407825-001.05					
	8270D				
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-002 / DWARD	
		10/7/14	0609	In Lab / DMURPHY	
R1407825-001.06					
	7470A, 6010C				
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-A01 / DWARD	
		10/8/14	1505	In Lab / CWINKSTERN	
		10/8/14	1535	R-002 / CWINKSTERN	
R1407825-002.01					
	8260C				
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-001 / DWARD	
		10/14/14	1137	In Lab / FNAEGLER	
		10/14/14	1647	R-001-S10 / BWOJTASIEWICZ	
R1407825-002.02					
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-001 / DWARD	
R1407825-002.03					
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-001 / DWARD	
R1407825-003.01					
	8260C				
		10/6/14	1545	SMO / DWARD	

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM Baseline/748810-03000

Service Request: R1407825

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		10/6/14	1556	R-001 / DWARD	
		10/14/14	1137	In Lab / FNAEGLER	
		10/14/14	1647	R-001-S10 / BWOJTASIEWICZ	
R1407825-003.02					
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-001 / DWARD	
R1407825-003.03					
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-001 / DWARD	
R1407825-003.06					
	7470A, 6010C				
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-A01 / DWARD	
		10/8/14	1506	In Lab / CWINKSTERN	
		10/8/14	1536	R-002 / CWINKSTERN	
R1407825-003.07					
		10/6/14	1554	SMO / DWARD	
		10/6/14	1556	R-001 / DWARD	
R1407825-003.08					
		10/6/14	1554	SMO / DWARD	
		10/6/14	1556	R-001 / DWARD	
R1407825-003.09					
		10/6/14	1554	SMO / DWARD	
		10/6/14	1556	R-001 / DWARD	
R1407825-003.10					
		10/6/14	1554	SMO / DWARD	
		10/6/14	1556	R-A01 / DWARD	
		10/8/14	1506	In Lab / CWINKSTERN	
		10/8/14	1535	R-002 / CWINKSTERN	
R1407825-003.11					
		10/6/14	1554	SMO / DWARD	
		10/6/14	1556	R-A01 / DWARD	
		10/8/14	1506	In Lab / CWINKSTERN	
		10/8/14	1535	R-002 / CWINKSTERN	
R1407825-003.12					
		10/6/14	1601	SMO / GESMERIAN	
		10/6/14	1604	R-001 / GESMERIAN	
R1407825-003.13					
		10/6/14	1601	SMO / GESMERIAN	
		10/6/14	1604	R-001 / GESMERIAN	

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM Baseline/748810-03000

Service Request: R1407825

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1407825-003.14					
		10/6/14	1601	SMO / GESMERIAN	
		10/6/14	1604	R-001 / GESMERIAN	
R1407825-004.01					
	8260C				
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-001 / DWARD	
		10/14/14	1137	In Lab / FNAEGLER	
		10/14/14	1647	R-001-S10 / BWOJTASIEWICZ	
R1407825-004.02					
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-001 / DWARD	
R1407825-004.03					
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-001 / DWARD	
R1407825-004.04					
	6010C, 7470A				
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-A01 / DWARD	
		10/8/14	1427	In Lab / CWINKSTERN	
		10/8/14	1538	R-002 / CWINKSTERN	
R1407825-005.04					
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-002 / DWARD	
		10/7/14	0609	In Lab / DMURPHY	
R1407825-005.05					
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-002 / DWARD	
		10/7/14	0609	In Lab / DMURPHY	
R1407825-005.06					
	8270D				
		10/6/14	1554	SMO / DWARD	
		10/6/14	1556	R-002 / DWARD	
		10/7/14	0609	In Lab / DMURPHY	
R1407825-005.07					
		10/6/14	1554	SMO / DWARD	
		10/6/14	1556	R-002 / DWARD	
R1407825-005.08					
		10/6/14	1554	SMO / DWARD	
		10/6/14	1556	R-002 / DWARD	
R1407825-005.09					

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM Baseline/748810-03000

Service Request: R1407825

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		10/6/14	1554	SMO / DWARD	
		10/6/14	1556	R-002 / DWARD	
		10/7/14	0609	In Lab / DMURPHY	
R1407825-006.04					
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-002 / DWARD	
R1407825-006.05					
	8270D				
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-002 / DWARD	
		10/7/14	0609	In Lab / DMURPHY	
R1407825-007.04					
	8270D				
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-002 / DWARD	
		10/7/14	0610	In Lab / DMURPHY	
R1407825-008.01					
	8270D				
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-002 / DWARD	
		10/7/14	0610	In Lab / DMURPHY	
R1407825-008.02					
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-002 / DWARD	
R1407825-009.01					
	8260C				
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-001 / DWARD	
		10/14/14	1137	In Lab / FNAEGLER	
		10/14/14	1647	R-001-S10 / BWOJTASIEWICZ	
R1407825-009.02					
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-001 / DWARD	
R1407825-009.03					
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-001 / DWARD	
R1407825-010.01					
	8260C				
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-001 / DWARD	
		10/14/14	1137	In Lab / FNAEGLER	
		10/14/14	1647	R-001-S10 / BWOJTASIEWICZ	

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM Baseline/748810-03000

Service Request: R1407825

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1407825-010.02					
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-001 / DWARD	
R1407825-010.03					
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-001 / DWARD	
R1407825-011.01					
	6010C				
		10/6/14	1545	SMO / DWARD	
		10/6/14	1556	R-A01 / DWARD	
		10/8/14	1506	In Lab / CWINKSTERN	
		10/8/14	1535	R-002 / CWINKSTERN	

ALS Environmental

VOLATILE ORGANICS QC SUMMARY

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/3/14
Date Received: 10/4/14
Date Analyzed: 10/14/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-3-GW-M3MW02-21
Lab Code: R1407825-003

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-3-GW-M3MW02-21MS			FTMM-3-GW-M3MW02-21D MS				
		Matrix Spike RQ1412540-05			Duplicate Matrix Spike RQ1412540-06				
Analyte Name	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND	51.5	50.0	103	51.0	50.0	102	80 - 130	1	30
1,1,1-Trichloroethane (TCA)	ND	56.8	50.0	114	55.9	50.0	112	65 - 130	2	30
1,1,2,2-Tetrachloroethane	ND	49.7	50.0	99	50.1	50.0	100	65 - 130	<1	30
1,1,2-Trichloroethane	ND	51.8	50.0	104	51.3	50.0	103	75 - 125	<1	30
1,1-Dichloroethane (1,1-DCA)	ND	52.7	50.0	105	53.0	50.0	106	70 - 135	<1	30
1,1-Dichloroethene (1,1-DCE)	ND	59.3	50.0	119	59.1	50.0	118	70 - 130	<1	30
1,1-Dichloropropene	ND	59.8	50.0	120	57.0	50.0	114	75 - 130	5	30
1,2,3-Trichlorobenzene	ND	48.5	50.0	97	51.9	50.0	104	75 - 125	7	30
1,2,3-Trichloropropane	ND	47.3	50.0	95	48.2	50.0	96	75 - 125	2	30
1,2,4-Trichlorobenzene	ND	46.7	50.0	93	48.7	50.0	97	65 - 135	4	30
1,2,4-Trimethylbenzene	ND	46.7	50.0	93	46.8	50.0	94	75 - 130	<1	30
1,2-Dibromo-3-chloropropane (DBC	ND	49.5	50.0	99	54.0	50.0	108	50 - 130	9	30
1,2-Dibromoethane	ND	53.0	50.0	106	53.9	50.0	108	80 - 120	2	30
1,2-Dichlorobenzene	ND	46.4	50.0	93	46.6	50.0	93	70 - 120	<1	30
1,2-Dichloroethane	ND	57.5	50.0	115	55.9	50.0	112	70 - 130	3	30
1,2-Dichloropropane	ND	54.9	50.0	110	53.8	50.0	108	75 - 125	2	30
1,3,5-Trimethylbenzene	ND	47.2	50.0	94	47.3	50.0	94	75 - 130	<1	30
1,3-Dichlorobenzene	ND	48.0	50.0	96	46.8	50.0	94	75 - 125	3	30
1,3-Dichloropropane	ND	52.9	50.0	106	51.4	50.0	103	75 - 125	3	30
1,4-Dichlorobenzene	ND	46.8	50.0	94	46.4	50.0	93	75 - 125	<1	30
2,2-Dichloropropane	ND	50.7	50.0	101	50.2	50.0	100	70 - 135	1	30
2-Butanone (MEK)	ND	45.2	50.0	90	47.4	50.0	95	30 - 150	5	30
2-Chlorotoluene	ND	50.3	50.0	101	50.7	50.0	101	75 - 125	<1	30
2-Hexanone	ND	46.2	50.0	92	49.6	50.0	99	55 - 130	7	30
tert-Butyl Alcohol	ND	1050	1000	105	1130	1000	113	50 - 150	8	30
4-Chlorotoluene	ND	50.5	50.0	101	50.0	50.0	100	75 - 130	1	30
p-Isopropyltoluene	ND	48.1	50.0	96	47.8	50.0	96	75 - 130	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/3/14
Date Received: 10/4/14
Date Analyzed: 10/14/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-3-GW-M3MW02-21
Lab Code: R1407825-003

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-3-GW-M3MW02-21MS			FTMM-3-GW-M3MW02-21D MS				
		Matrix Spike RQ1412540-05			Duplicate Matrix Spike RQ1412540-06				
Analyte Name	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
4-Methyl-2-pentanone	ND	50.1	50.0	100	53.0	50.0	106	60 - 135	6	30
Acetone	ND	34.9	50.0	70	39.2	50.0	78	40 - 140	11	30
Benzene	ND	53.6	50.0	107	52.4	50.0	105	80 - 120	2	30
Bromobenzene	ND	48.6	50.0	97	48.7	50.0	97	75 - 125	<1	30
Bromochloromethane	ND	49.6	50.0	99	48.0	50.0	96	65 - 130	3	30
Bromodichloromethane	ND	59.5	50.0	119	57.4	50.0	115	75 - 120	4	30
Bromoform	ND	54.9	50.0	110	54.4	50.0	109	70 - 130	1	30
Bromomethane	ND	50.4	50.0	101	52.8	50.0	106	30 - 145	5	30
Carbon Tetrachloride	ND	59.5	50.0	119	58.9	50.0	118	65 - 140	<1	30
Chlorobenzene	ND	50.1	50.0	100	49.5	50.0	99	80 - 120	1	30
Chloroethane	ND	53.5	50.0	107	52.8	50.0	106	60 - 135	1	30
Chloroform	ND	55.0	50.0	110	53.8	50.0	108	65 - 135	2	30
Chloromethane	ND	54.5	50.0	109	55.4	50.0	111	40 - 125	2	30
Dibromochloromethane	ND	53.5	50.0	107	53.4	50.0	107	60 - 135	<1	30
Dichlorodifluoromethane (CFC 12)	ND	55.3	50.0	111	56.4	50.0	113	30 - 155	2	30
Methylene Chloride	ND	50.6	50.0	101	51.3	50.0	103	55 - 140	1	30
Ethylbenzene	ND	47.8	50.0	96	47.7	50.0	95	75 - 125	<1	30
Hexachlorobutadiene	ND	51.9	50.0	104	53.7	50.0	107	50 - 140	3	30
Isopropylbenzene (Cumene)	ND	52.8	50.0	106	51.9	50.0	104	75 - 125	2	30
Methyl tert-Butyl Ether	ND	56.0	50.0	112	56.4	50.0	113	65 - 125	<1	30
Naphthalene	ND	46.5	50.0	93	50.1	50.0	100	55 - 140	7	30
Styrene	ND	47.5	50.0	95	47.9	50.0	96	65 - 135	<1	30
Tetrachloroethene (PCE)	ND	52.3	50.0	105	50.7	50.0	101	45 - 150	3	30
Toluene	ND	53.2	50.0	106	52.3	50.0	105	75 - 120	2	30
Trichloroethene (TCE)	ND	52.5	50.0	105	50.7	50.0	101	70 - 125	3	30
Trichlorofluoromethane (CFC 11)	ND	56.4	50.0	113	56.0	50.0	112	60 - 145	<1	30
Vinyl Chloride	ND	51.5	50.0	103	51.9	50.0	104	50 - 145	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/3/14
Date Received: 10/4/14
Date Analyzed: 10/14/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-3-GW-M3MW02-21
Lab Code: R1407825-003

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-3-GW-M3MW02-21MS			FTMM-3-GW-M3MW02-21D MS					
		Matrix Spike RQ1412540-05			Duplicate Matrix Spike RQ1412540-06					
Analyte Name	Sample Result	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	ND	51.5	50.0	103	51.1	50.0	102	70 - 125	<1	30
cis-1,3-Dichloropropene	ND	58.7	50.0	117	58.4	50.0	117	70 - 130	<1	30
m,p-Xylenes	ND	102	100	102	102	100	102	75 - 130	<1	30
n-Butylbenzene	ND	50.3	50.0	101	49.8	50.0	100	70 - 135	<1	30
n-Propylbenzene	ND	51.8	50.0	104	51.8	50.0	104	70 - 130	<1	30
o-Xylene	ND	51.6	50.0	103	49.9	50.0	100	80 - 120	3	30
sec-Butylbenzene	ND	48.1	50.0	96	48.2	50.0	96	70 - 125	<1	30
tert-Butylbenzene	ND	48.8	50.0	98	48.2	50.0	96	70 - 130	1	30
trans-1,2-Dichloroethene	ND	52.6	50.0	105	51.7	50.0	103	60 - 140	2	30
trans-1,3-Dichloropropene	ND	60.3	50.0	121	61.5	50.0	123	55 - 140	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Analyzed: 10/14/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 416090

Analyte Name	Lab Control Sample RQ1412540-02 Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	20.9	20.0	105	80 - 130
1,1,1-Trichloroethane (TCA)	21.5	20.0	108	65 - 130
1,1,2,2-Tetrachloroethane	22.0	20.0	110	65 - 130
1,1,2-Trichloroethane	21.7	20.0	108	75 - 125
1,1-Dichloroethane (1,1-DCA)	20.4	20.0	102	70 - 135
1,1-Dichloroethene (1,1-DCE)	23.4	20.0	117	70 - 130
1,1-Dichloropropene	23.0	20.0	115	75 - 130
1,2,3-Trichlorobenzene	22.0	20.0	110	75 - 125
1,2,3-Trichloropropane	20.7	20.0	104	75 - 125
1,2,4-Trichlorobenzene	20.7	20.0	104	65 - 135
1,2,4-Trimethylbenzene	19.9	20.0	100	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	21.3	20.0	107	50 - 130
1,2-Dibromoethane	22.7	20.0	114	80 - 120
1,2-Dichlorobenzene	19.8	20.0	99	70 - 120
1,2-Dichloroethane	23.3	20.0	117	70 - 130
1,2-Dichloropropane	21.4	20.0	107	75 - 125
1,3,5-Trimethylbenzene	19.7	20.0	98	75 - 130
1,3-Dichlorobenzene	19.8	20.0	99	75 - 125
1,3-Dichloropropane	22.0	20.0	110	75 - 125
1,4-Dichlorobenzene	19.9	20.0	100	75 - 125
2,2-Dichloropropane	22.7	20.0	114	70 - 135
2-Butanone (MEK)	20.4	20.0	102	30 - 150
2-Chlorotoluene	20.4	20.0	102	75 - 125
2-Hexanone	21.0	20.0	105	55 - 130
tert-Butyl Alcohol	477	400	119	50 - 150
4-Chlorotoluene	20.7	20.0	104	75 - 130
p-Isopropyltoluene	19.6	20.0	98	75 - 130
4-Methyl-2-pentanone	21.3	20.0	106	60 - 135
Acetone	20.4	20.0	102	40 - 140
Benzene	21.3	20.0	107	80 - 120
Bromobenzene	20.5	20.0	103	75 - 125
Bromochloromethane	20.8	20.0	104	65 - 130
Bromodichloromethane	23.8	20.0	119	75 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Analyzed: 10/14/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 416090

Lab Control Sample
RQ1412540-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromoform	23.0	20.0	115	70 - 130
Bromomethane	24.4	20.0	122	30 - 145
Carbon Tetrachloride	22.6	20.0	113	65 - 140
Chlorobenzene	20.4	20.0	102	80 - 120
Chloroethane	20.3	20.0	101	60 - 135
Chloroform	21.4	20.0	107	65 - 135
Chloromethane	21.6	20.0	108	40 - 125
Dibromochloromethane	23.3	20.0	117	60 - 135
Dichlorodifluoromethane (CFC 12)	21.4	20.0	107	30 - 155
Methylene Chloride	21.6	20.0	108	55 - 140
Ethylbenzene	19.3	20.0	96	75 - 125
Hexachlorobutadiene	23.7	20.0	118	50 - 140
Isopropylbenzene (Cumene)	20.6	20.0	103	75 - 125
Methyl tert-Butyl Ether	22.8	20.0	114	65 - 125
Naphthalene	20.8	20.0	104	55 - 140
Styrene	21.5	20.0	107	65 - 135
Tetrachloroethene (PCE)	21.3	20.0	107	45 - 150
Toluene	20.5	20.0	103	75 - 120
Trichloroethene (TCE)	20.0	20.0	100	70 - 125
Trichlorofluoromethane (CFC 11)	21.5	20.0	108	60 - 145
Vinyl Chloride	19.7	20.0	98	50 - 145
cis-1,2-Dichloroethene	20.4	20.0	102	70 - 125
cis-1,3-Dichloropropene	24.9	20.0	125	70 - 130
m,p-Xylenes	41.6	40.0	104	75 - 130
n-Butylbenzene	20.5	20.0	103	70 - 135
n-Propylbenzene	20.7	20.0	103	70 - 130
o-Xylene	20.5	20.0	102	80 - 120
sec-Butylbenzene	19.0	20.0	95	70 - 125
tert-Butylbenzene	18.9	20.0	95	70 - 130
trans-1,2-Dichloroethene	20.5	20.0	102	60 - 140
trans-1,3-Dichloropropene	25.2	20.0	126	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Analyzed:**	10/14/14 11:39
Sample Matrix:	Water		

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-10
Lab Code:	RQ1412540-01	**File ID:**	I:\ACQUDATA\MSVOA10\DATA\101414\A2942.D\
Analytical Method:	8260C		

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1412540-02	I:\ACQUDATA\MSVOA10\DATA\101414\A2940.D\	10/14/14 10:40
FTMM-EB-100314	R1407825-001	I:\ACQUDATA\MSVOA10\DATA\101414\A2952.D\	10/14/14 16:37
FTMM-TB-100314	R1407825-002	I:\ACQUDATA\MSVOA10\DATA\101414\A2953.D\	10/14/14 17:06
FTMM-3-GW-M3MW02-21	R1407825-003	I:\ACQUDATA\MSVOA10\DATA\101414\A2954.D\	10/14/14 17:36
FTMM-3-GW-M3MW102-21	R1407825-004	I:\ACQUDATA\MSVOA10\DATA\101414\A2955.D\	10/14/14 18:06
FTMM-58-GW-2567MW03-8.03	R1407825-009	I:\ACQUDATA\MSVOA10\DATA\101414\A2956.D\	10/14/14 18:35
FTMM-58-GW-2567MW01-8.73	R1407825-010	I:\ACQUDATA\MSVOA10\DATA\101414\A2957.D\	10/14/14 19:05
FTMM-3-GW-M3MW02-21MS	RQ1412540-05	I:\ACQUDATA\MSVOA10\DATA\101414\A2958.D\	10/14/14 19:35
FTMM-3-GW-M3MW02-21DMS	RQ1412540-06	I:\ACQUDATA\MSVOA10\DATA\101414\A2959.D\	10/14/14 20:04

Client: Parsons Engineering Science
Project: FTMM 3 Quarter 2014/748810-03000

Service Request: R1407825
Date Analyzed: 7/21/14 10:55

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\072114\A0508.D\
Instrument ID: R-MS-10

Analytical Method: 8260C
Analysis Lot: 215799

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	23.99	112021	Pass
75	95	30	60	47.10	219883	Pass
95	95	100	100	100.00	466859	Pass
96	95	5	9	6.38	29771	Pass
173	174	0	2	1.00	3689	Pass
174	95	50	120	79.24	369941	Pass
175	174	5	9	7.65	28299	Pass
176	174	95	101	96.83	358208	Pass
177	176	5	9	6.43	23022	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Initial CalibrationICAL	0.5 ppb	I:\ACQUDATA\msvoa10\data\072114\A0510.D\	7/21/14 11:52	
Initial CalibrationICAL	1.0 ppb	I:\ACQUDATA\msvoa10\data\072114\A0511.D\	7/21/14 12:22	
Initial CalibrationICAL	2.0 ppb	I:\ACQUDATA\msvoa10\data\072114\A0512.D\	7/21/14 12:52	
Initial CalibrationICAL	5.0 ppb	I:\ACQUDATA\msvoa10\data\072114\A0513.D\	7/21/14 13:23	
Initial CalibrationICAL	10 ppb	I:\ACQUDATA\msvoa10\data\072114\A0514.D\	7/21/14 13:53	
Initial CalibrationICAL	50 ppb	I:\ACQUDATA\msvoa10\data\072114\A0515.D\	7/21/14 14:23	
Initial CalibrationICAL	100 ppb	I:\ACQUDATA\msvoa10\data\072114\A0516.D\	7/21/14 14:54	
Initial CalibrationICAL	150 ppb	I:\ACQUDATA\msvoa10\data\072114\A0517.D\	7/21/14 15:24	
Initial CalibrationICAL	200 ppb	I:\ACQUDATA\msvoa10\data\072114\A0518.D\	7/21/14 15:55	

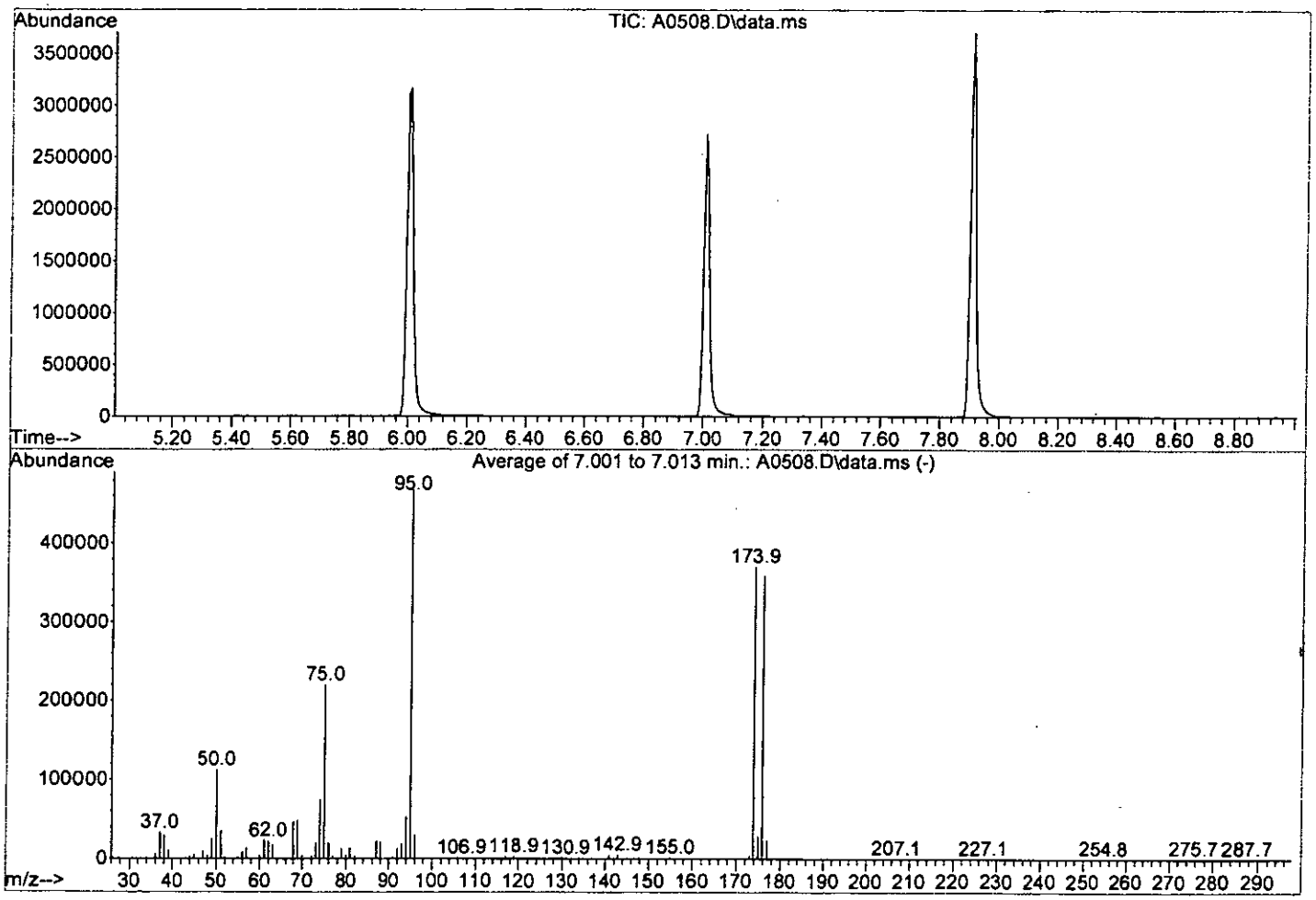
BFB

Data Path : I:\ACQUDATA\msvoa10\data\072114\
Data File : A0508.D
Acq On : 21 Jul 2014 10:55 am
Operator : F.NAEGLER
Sample : TUNE
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: CPD4.P

FW 7/22/14

Method : I:\ACQUDATA\MSVOA10\METHODS\T072114.M
Title : 8260B WATERS
Last Update : Wed Sep 27 14:33:13 2006



AutoFind: Scans 314, 315, 316; Background Corrected with Scan 309

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.0	112021	PASS
75	95	30	60	47.1	219883	PASS
95	95	100	100	100.0	466859	PASS
96	95	5	9	6.4	29771	PASS
173	174	0.00	2	1.0	3689	PASS
174	95	50	120	79.2	369941	PASS
175	174	5	9	7.6	28299	PASS
176	174	95	101	96.8	358208	PASS
177	176	5	9	6.4	23022	PASS

T072114.M Mon Jul 21 11:45:31 2014 MSVO10

00025

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Service Request: R1407825
Date Analyzed: 10/14/14 09:42

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA10\DATA\101414\A2938.D\
Instrument ID: R-MS-10
Analytical Method: 8260C
Analysis Lot: 416090

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	23.00	33006	Pass
75	95	30	60	50.08	71875	Pass
95	95	100	100	100.00	143527	Pass
96	95	5	9	6.87	9855	Pass
173	174	0	2	0.37	465	Pass
174	95	50	120	87.83	126065	Pass
175	174	5	9	7.79	9816	Pass
176	174	95	101	95.74	120690	Pass
177	176	5	9	6.51	7862	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1412540-04	I:\ACQUDATA\MSVOA10\DATA\101414\A2939.D\	10/14/14 10:08	
Lab Control Sample	RQ1412540-02	I:\ACQUDATA\MSVOA10\DATA\101414\A2940.D\	10/14/14 10:40	
Method Blank	RQ1412540-01	I:\ACQUDATA\MSVOA10\DATA\101414\A2942.D\	10/14/14 11:39	
FTMM-EB-100314	R1407825-001	I:\ACQUDATA\MSVOA10\DATA\101414\A2952.D\	10/14/14 16:37	
FTMM-TB-100314	R1407825-002	I:\ACQUDATA\MSVOA10\DATA\101414\A2953.D\	10/14/14 17:06	
FTMM-3-GW-M3MW02-21	R1407825-003	I:\ACQUDATA\MSVOA10\DATA\101414\A2954.D\	10/14/14 17:36	
FTMM-3-GW-M3MW102-21	R1407825-004	I:\ACQUDATA\MSVOA10\DATA\101414\A2955.D\	10/14/14 18:06	
FTMM-58-GW-2567MW03-8.03	R1407825-009	I:\ACQUDATA\MSVOA10\DATA\101414\A2956.D\	10/14/14 18:35	
FTMM-58-GW-2567MW01-8.73	R1407825-010	I:\ACQUDATA\MSVOA10\DATA\101414\A2957.D\	10/14/14 19:05	
FTMM-3-GW-M3MW02-21MS	RQ1412540-05	I:\ACQUDATA\MSVOA10\DATA\101414\A2958.D\	10/14/14 19:35	
FTMM-3-GW-M3MW02-21DMS	RQ1412540-06	I:\ACQUDATA\MSVOA10\DATA\101414\A2959.D\	10/14/14 20:04	

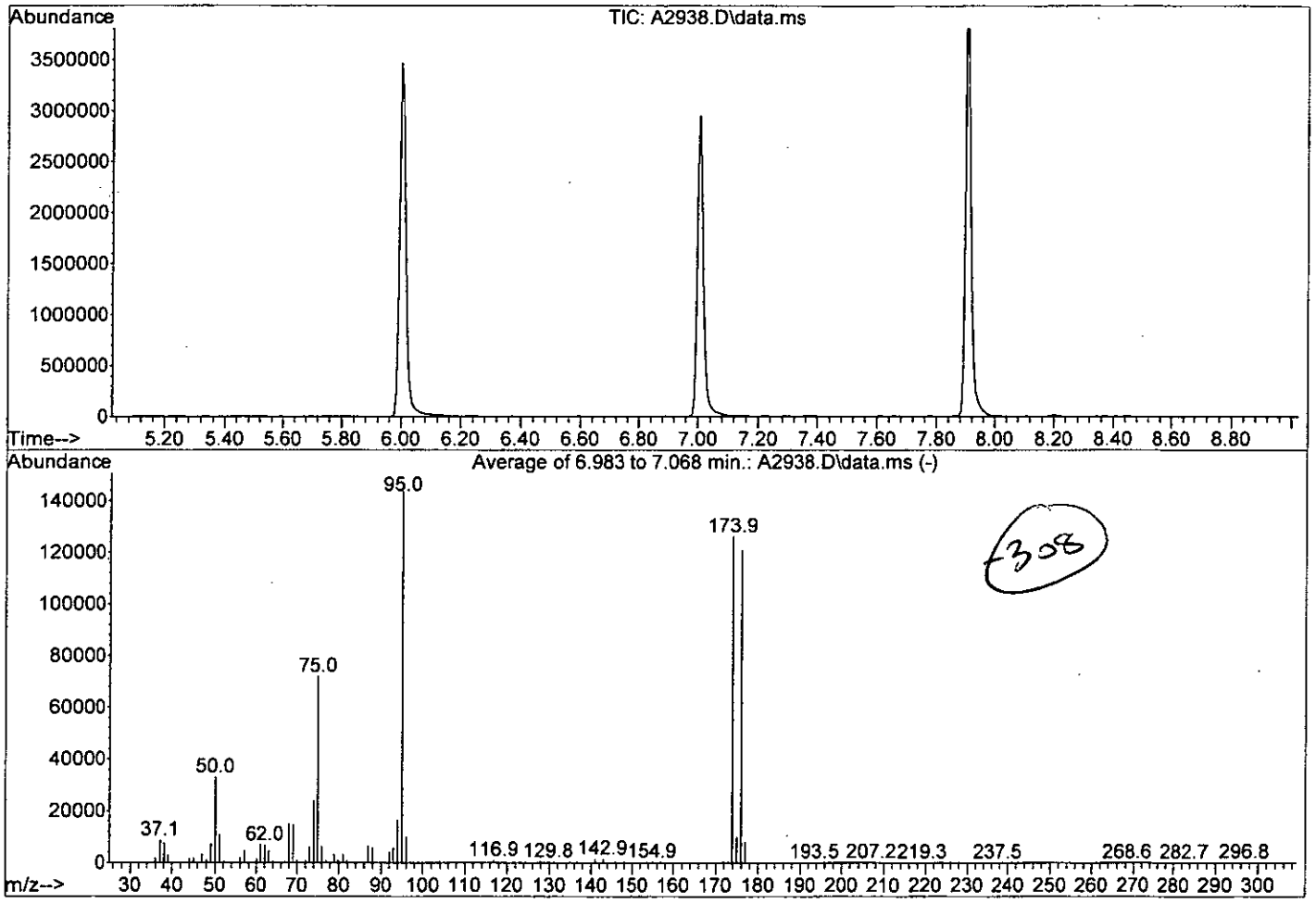
Data Path : I:\ACQUDATA\msvoa10\data\101414\
Data File : A2938.D
Acq On : 14 Oct 2014 9:42 am
Operator : F.NAEGLER
Sample : TUNE
Misc :
ALS Vial : 1 Sample Multiplier: 1

RQM1254S-03

Integration File: CPD4.P

FJ 10/14/14

Method : I:\ACQUDATA\MSVOA10\METHODS\T072114.M
Title : 8260B WATERS
Last Update : Wed Sep 27 14:33:13 2006



Spectrum Information: Average of 6.983 to 7.068 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.0	33006	PASS
75	95	30	60	50.1	71875	PASS
95	95	100	100	100.0	143527	PASS
96	95	5	9	6.9	9855	PASS
173	174	0.00	2	0.4	465	PASS
174	95	50	120	87.8	126065	PASS
175	174	5	9	7.8	9816	PASS
176	174	95	101	95.7	120690	PASS
177	176	5	9	6.5	7862	PASS

T072114.M Tue Oct 14 09:51:57 2014 MSVO10

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000

Service Request: R1407825
Date Analyzed: 10/14/14 10:08

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA10\DATA\101414\A2939.D\
Instrument ID: R-MS-10
Analytical Method: 8260C

Lab Code: RQ1412540-04
Analysis Lot: 416090
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
	Results ==>	718,000	10.84	1,417,881	5.61	1,317,059	8.84
	Upper Limit ==>	1,436,000	11.34	2,835,762	6.11	2,634,118	9.34
	Lower Limit ==>	359,000	10.34	708,941	5.11	658,530	8.34
	ICAL Result ==>	701,453	10.83	1,398,556	5.61	1,270,603	8.84
Associated Analyses							
Lab Control Sample	RQ1412540-02	734,627	10.83	1,435,494	5.61	1,308,582	8.84
Method Blank	RQ1412540-01	714,253	10.83	1,432,156	5.61	1,328,905	8.84
FTMM-EB-100314	R1407825-001	708,378	10.83	1,385,319	5.61	1,320,324	8.84
FTMM-TB-100314	R1407825-002	692,911	10.83	1,391,096	5.61	1,312,913	8.84
FTMM-3-GW-M3MW02-21	R1407825-003	708,116	10.84	1,415,752	5.61	1,313,023	8.84
FTMM-3-GW-M3MW102-21	R1407825-004	695,147	10.83	1,332,779	5.61	1,294,381	8.84
FTMM-58-GW-2567MW03-8.03	R1407825-009	708,023	10.83	1,357,319	5.61	1,277,156	8.84
FTMM-58-GW-2567MW01-8.73	R1407825-010	690,923	10.83	1,384,910	5.61	1,312,416	8.84
FTMM-3-GW-M3MW02-21MS	RQ1412540-05	751,164	10.84	1,428,239	5.61	1,328,745	8.84
FTMM-3-GW-M3MW02-21DMS	RQ1412540-06	758,399	10.84	1,440,454	5.61	1,354,847	8.84

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000

Service Request: R1407825
Date Analyzed: 10/14/14 10:08

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA10\DATA\101414\A2939.D\
Instrument ID: R-MS-10
Analytical Method: 8260C

Lab Code: RQ1412540-04
Analysis Lot: 416090
Signal ID:

		Pentafluorobenzene	
		Area	**RT**
	Results ==>	997,026	4.41
	Upper Limit ==>	1,994,052	4.91
	Lower Limit ==>	498,513	3.91
	ICAL Result ==>	949,160	4.41
Associated Analyses			
Lab Control Sample	RQ1412540-02	1,007,470	4.40
Method Blank	RQ1412540-01	989,825	4.40
FTMM-EB-100314	R1407825-001	977,666	4.40
FTMM-TB-100314	R1407825-002	966,299	4.41
FTMM-3-GW-M3MW02-21	R1407825-003	965,356	4.41
FTMM-3-GW-M3MW102-21	R1407825-004	944,903	4.41
FTMM-58-GW-2567MW03-8.03	R1407825-009	943,161	4.41
FTMM-58-GW-2567MW01-8.73	R1407825-010	967,226	4.41
FTMM-3-GW-M3MW02-21MS	RQ1412540-05	995,930	4.40
FTMM-3-GW-M3MW02-21DMS	RQ1412540-06	989,072	4.41

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Environmental

VOLATILE ORGANICS SAMPLE DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 16:37
Sample Name:	FTMM-EB-100314	**Units:**	µg/L
Lab Code:	R1407825-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2952.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 16:37
Sample Name:	FTMM-EB-100314	**Units:**	µg/L
Lab Code:	R1407825-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2952.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 16:37
Sample Name:	FTMM-EB-100314	**Units:**	µg/L
Lab Code:	R1407825-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2952.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	108	75-120	10/14/14 16:37	
Dibromofluoromethane	105	85-115	10/14/14 16:37	
Toluene-d8	102	85-120	10/14/14 16:37	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/3/14
Sample Matrix:	Water	**Date Received:**	10/4/14
		Date Analyzed:	10/14/14 1637

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-EB-100314	**Units:**	µg/L
Lab Code:	R1407825-001	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407825-001|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2952.D Vial: 15
Acq On : 14 Oct 2014 4:37 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 15 15:41:57 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.403	168	977666	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1385319	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1320324	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	708378	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	464198	52.55	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 105.10%			
48) surrl,1,2-dichloroetha...	4.854	65	507156	54.40	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 108.80%			
65) SURR3,Toluene-d8	7.427	98	1585686	50.97	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.94%			
70) SURR2,BFB	9.878	95	660305	53.93	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 107.86%			
Target Compounds						Qvalue
15) Acetone	2.129	43	3191	1.07	ug/L	85

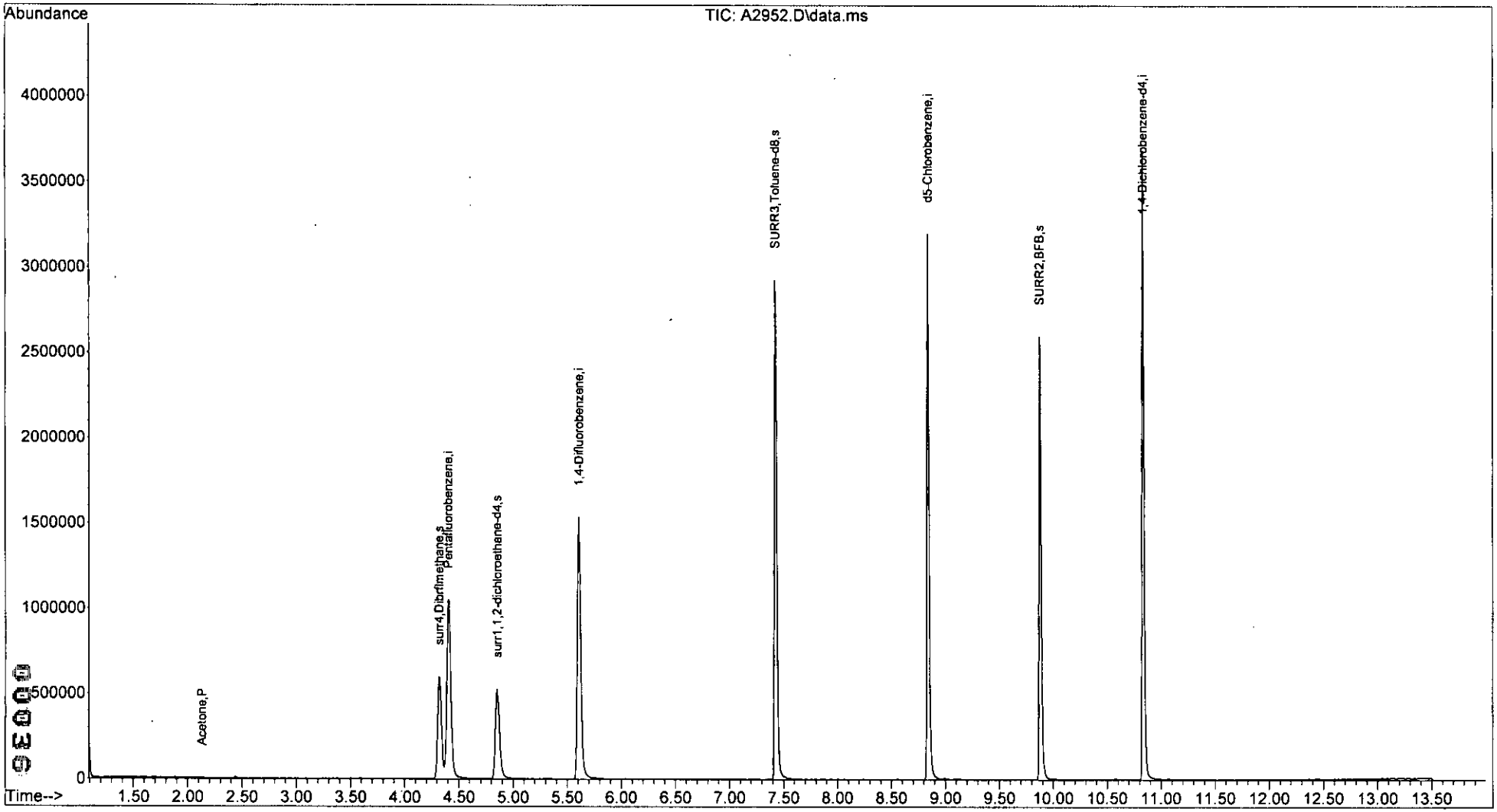
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FJ 10/15/14

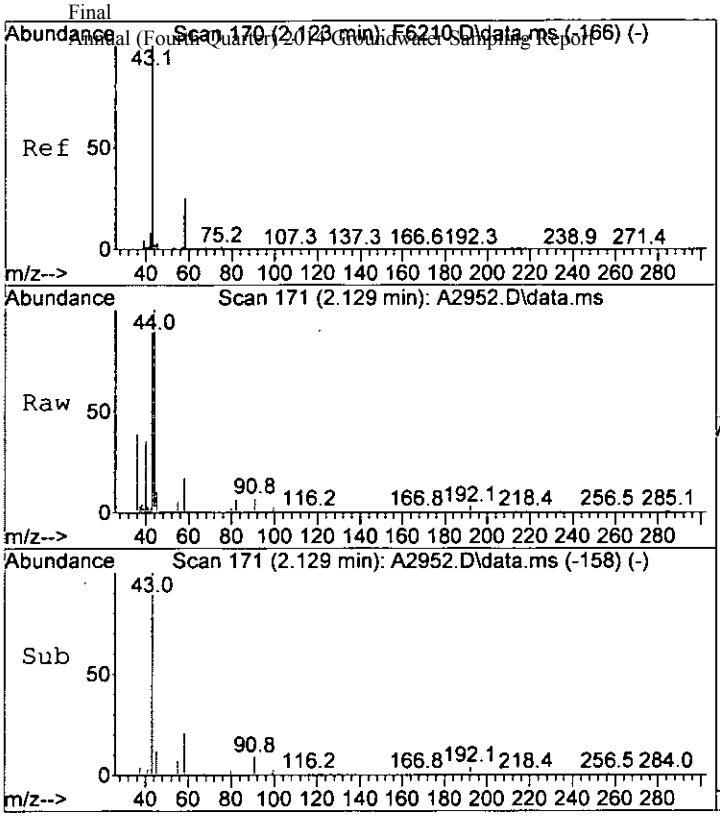
Quantitation Report (QT Reviewed)

Sample : R1407825-001|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2952.D Vial: 15
Acq On : 14 Oct 2014 4:37 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 15 15:41:57 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



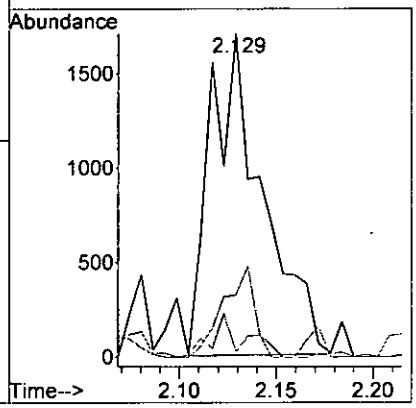
W072114.M Wed Oct 15 15:42:52 2014 MSVO10



#15
Acetone
Concen: 1.07 ug/L
RT: 2.129 min Scan# 171
Delta R.T. 0.006 min
Lab File: A2952.D
Acq: 14 Oct 2014 4:37 pm

Tgt Ion: 43 Resp: 3191

Ion	Ratio	Lower	Upper
43	100		
58	19.2	7.2	47.2
42	1.7	0.0	27.0



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\101414\
Data File : A2952.D
Acq On : 14 Oct 2014 4:37 pm
Operator : F.NAEGLER
Sample : R1407825-001|1.0
Misc : PARSONS 11603 T4
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A2952.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.318	521	530	538	rBV	596897	1485306	32.94%	5.782%
2	4.403	538	544	563	rVB	1042721	2694152	59.75%	10.488%
3	4.854	609	618	634	rBV	522428	1405382	31.17%	5.471%
4	5.610	734	742	762	rBV	1530466	3397528	75.35%	13.226%
5	7.427	1035	1040	1060	rBV	2922665	4509240	100.00%	17.554%
6	8.841	1267	1272	1288	rBV	3193025	4291190	95.16%	16.705%
7	9.878	1437	1442	1459	rBV	2595967	3409924	75.62%	13.274%
8	10.835	1594	1599	1616	rBV	3680764	4495442	99.69%	17.500%

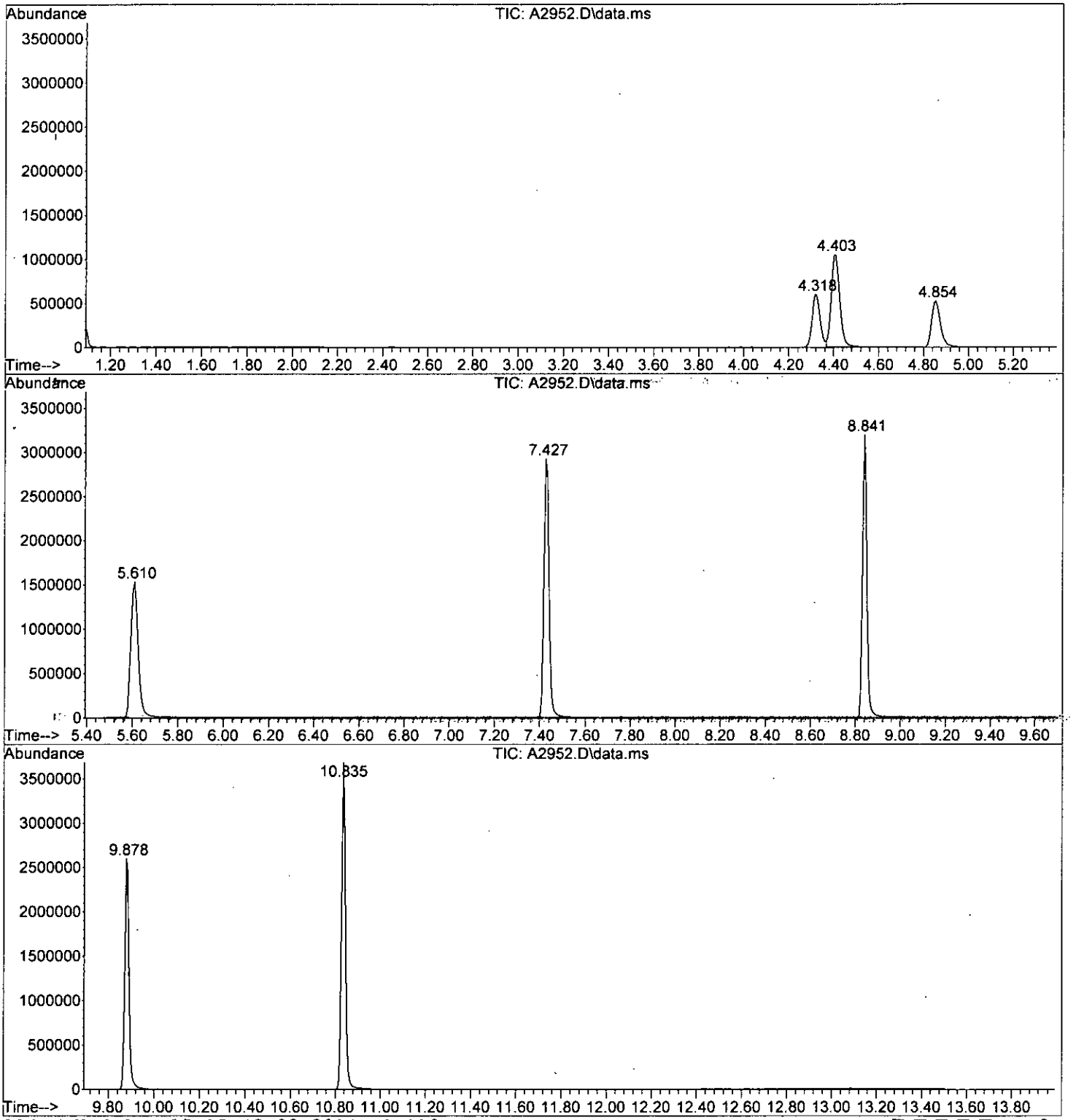
Sum of corrected areas: 25688164

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\101414\
Data File : A2952.D
Acq On : 14 Oct 2014 4:37 pm
Operator : F.NAEGLER
Sample : R1407825-001|1.0
Misc : PARSONS 11603 T4
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W072114.M Wed Oct 15 15:43:03 2014 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\101414\\
Data File : A2952.D
Acq On : 14 Oct 2014 4:37 pmm
Operator : F.NAEGLERR
Sample : R1407825-001|1.0
Misc : PARSONS 11603 T44
ALS Vial : 15 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 17:06
Sample Name:	FTMM-TB-100314	**Units:**	µg/L
Lab Code:	R1407825-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2953.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 17:06
Sample Name:	FTMM-TB-100314	**Units:**	µg/L
Lab Code:	R1407825-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2953.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 17:06
Sample Name:	FTMM-TB-100314	**Units:**	µg/L
Lab Code:	R1407825-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2953.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	106	75-120	10/14/14 17:06	
Dibromofluoromethane	105	85-115	10/14/14 17:06	
Toluene-d8	101	85-120	10/14/14 17:06	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/3/14
Sample Matrix:	Water	**Date Received:**	10/4/14
		Date Analyzed:	10/14/14 1706

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-TB-100314	**Units:**	µg/L
Lab Code:	R1407825-002	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407825-002|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2953.D Vial: 16
Acq On : 14 Oct 2014 5:06 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 15 15:43:21 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	966299	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1391096	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1312913	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	692911	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	465445	52.47	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 104.94%			
48) surr1,1,2-dichloroetha...	4.854	65	516081	55.13	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 110.26%			
65) SURR3,Toluene-d8	7.427	98	1571504	50.30	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.60%			
70) SURR2,BFB	9.878	95	652700	53.09	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 106.18%			
Target Compounds						Qvalue
15) Acetone	2.123	43	3356	1.14	ug/L	79

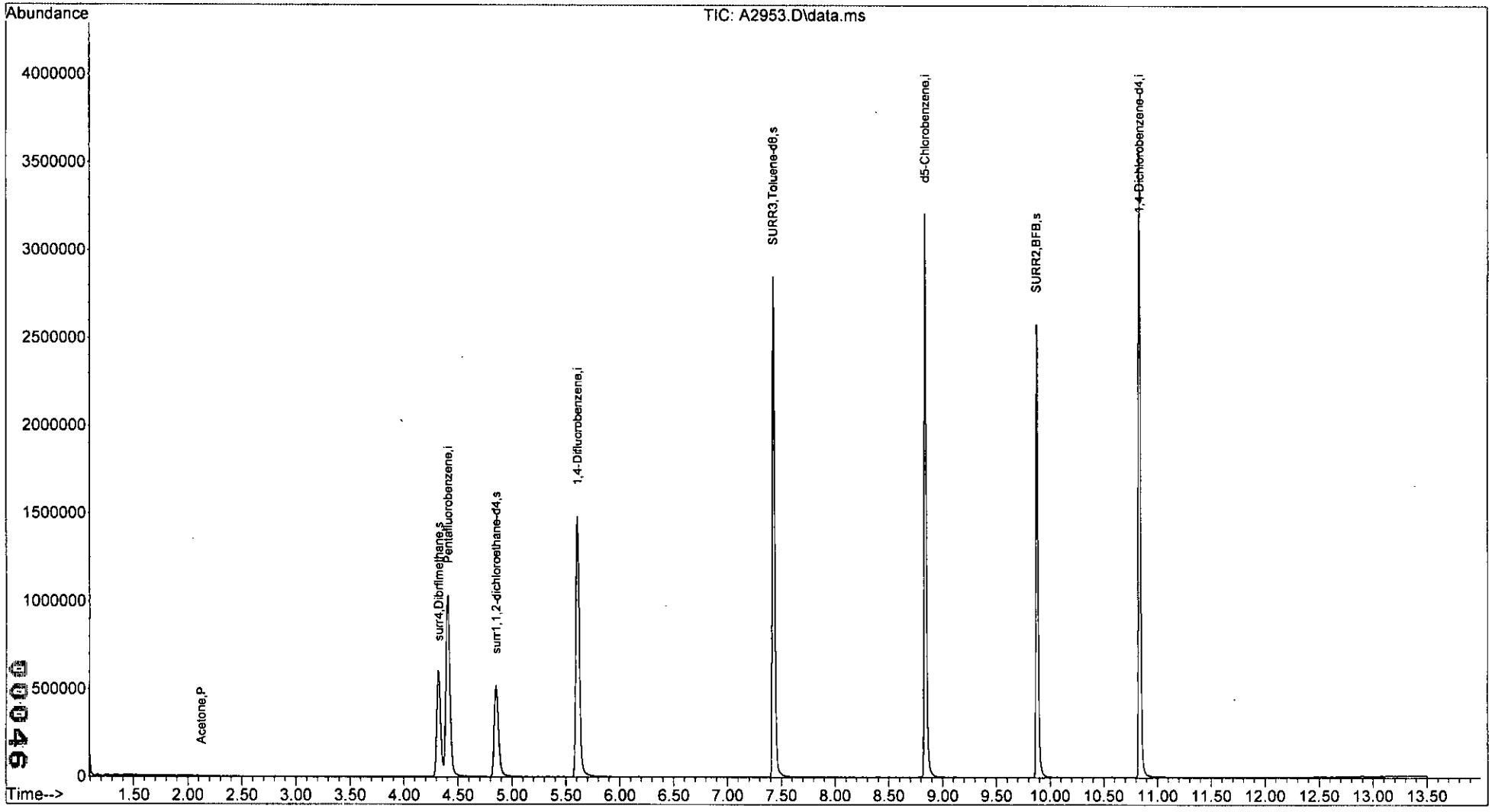
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FU 12/15/14

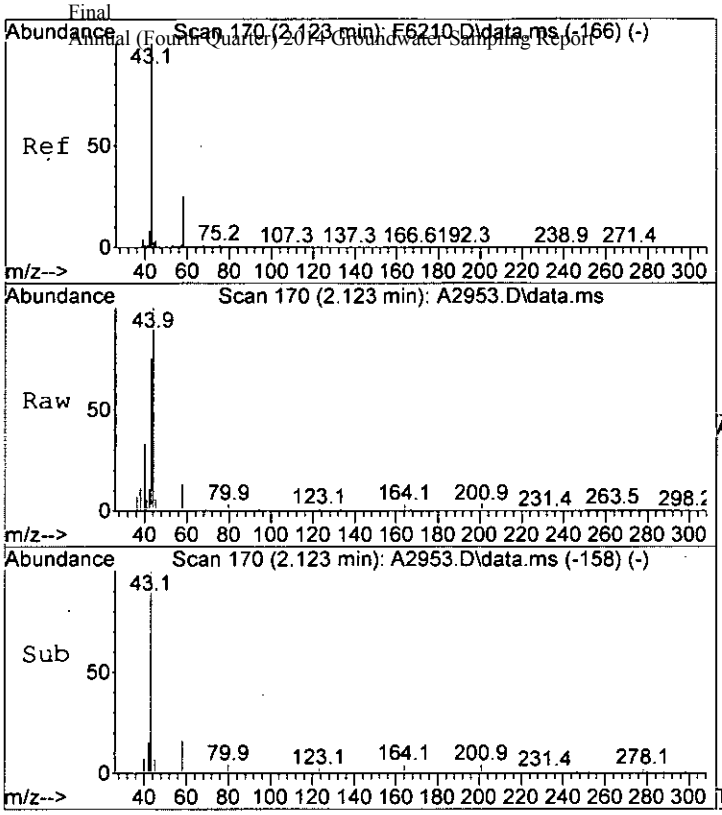
Quantitation Report (QT Reviewed)

Sample : R1407825-002|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2953.D Vial: 16
Acq On : 14 Oct 2014 5:06 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 15 15:43:21 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



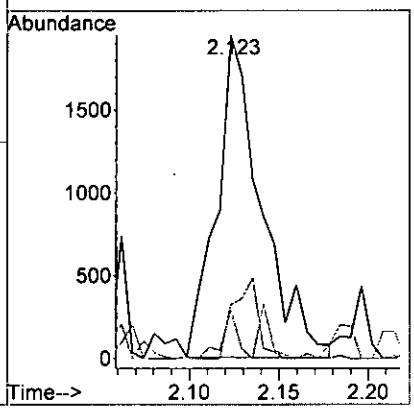
W072114.M Wed Oct 15 15:44:13 2014 MSVO10



#15
Acetone
Concen: 1.14 ug/L
RT: 2.123 min Scan# 170
Delta R.T. 0.000 min
Lab File: A2953.D
Acq: 14 Oct 2014 5:06 pm

Tgt Ion: 43 Resp: 3356

Ion	Ratio	Lower	Upper
43	100		
58	16.6	7.2	47.2
42	15.0	0.0	27.0



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\101414\
Data File : A2953.D
Acq On : 14 Oct 2014 5:06 pm
Operator : F.NAEGLER
Sample : R1407825-002|1.0
Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A2953.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.318	522	530	538	rBV2	604246	1473242	32.91%	5.767%
2	4.409	538	545	563	rVB	1029325	2692720	60.15%	10.541%
3	4.854	609	618	631	rBV2	520713	1414092	31.59%	5.536%
4	5.610	734	742	763	rBV	1480635	3384096	75.59%	13.248%
5	7.427	1035	1040	1054	rBV	2849075	4440164	99.18%	17.382%
6	8.841	1267	1272	1286	rBV	3207524	4245065	94.82%	16.618%
7	9.878	1438	1442	1457	rBV	2581446	3417888	76.34%	13.380%
8	10.835	1594	1599	1613	rBV	3571927	4476972	100.00%	17.526%

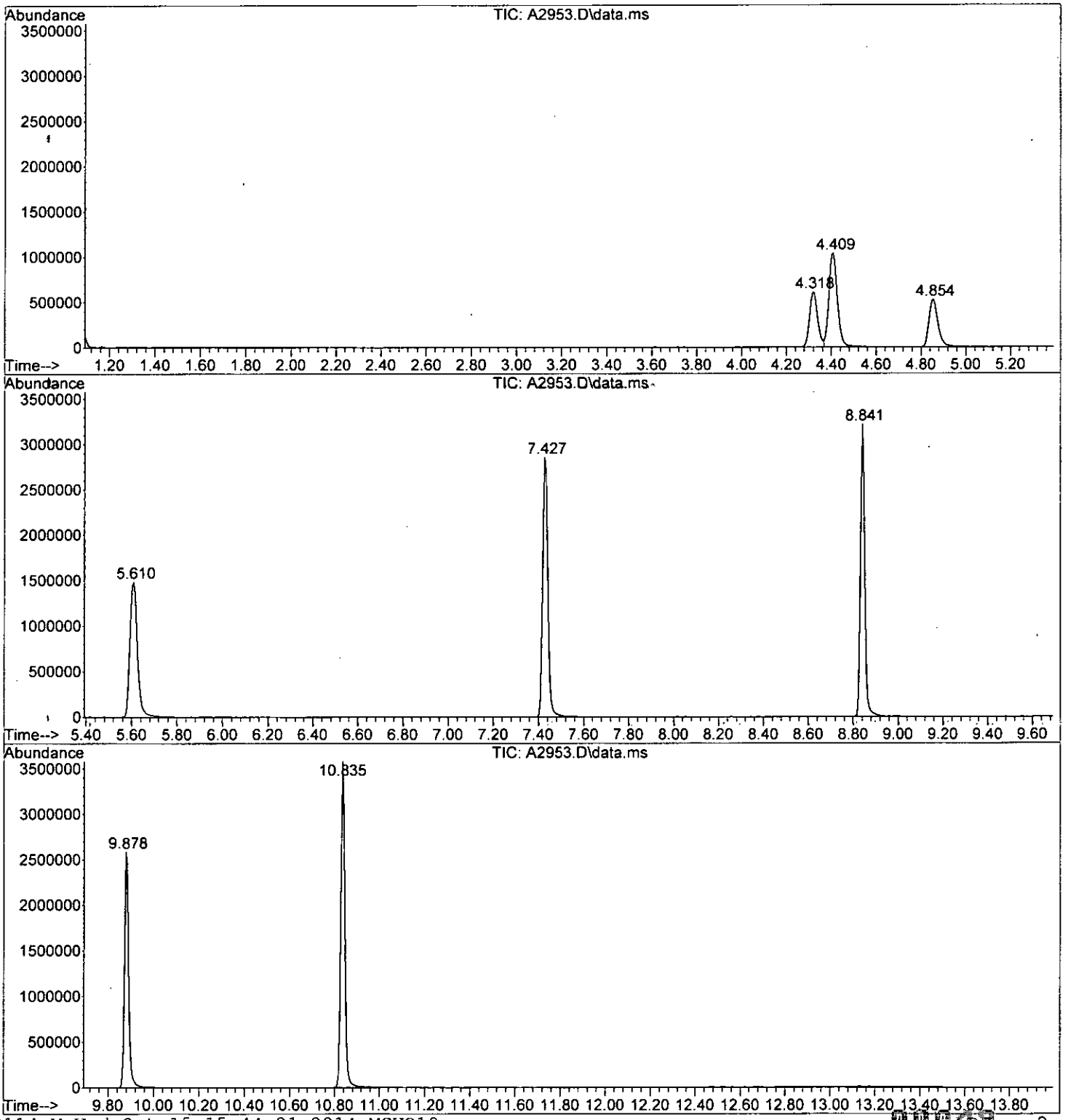
Sum of corrected areas: 25544239

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\101414\
Data File : A2953.D
Acq On : 14 Oct 2014 5:06 pm
Operator : F.NAEGLER
Sample : R1407825-002|1.0
Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W072114.M Wed Oct 15 15:44:21 2014 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\101414\\
Data File : A2953.D
Acq On : 14 Oct 2014 5:06 pm
Operator : F.NAEGLERR
Sample : R1407825-002|1.0
Misc : PARSONS 11603 T44
ALS Vial : 16 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					|--Internal Standard---|		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 17:36
Sample Name:	FTMM-3-GW-M3MW02-21	**Units:**	µg/L
Lab Code:	R1407825-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2954.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 17:36
Sample Name:	FTMM-3-GW-M3MW02-21	**Units:**	µg/L
Lab Code:	R1407825-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2954.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 17:36
Sample Name:	FTMM-3-GW-M3MW02-21	**Units:**	µg/L
Lab Code:	R1407825-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2954.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	107	75-120	10/14/14 17:36	
Dibromofluoromethane	102	85-115	10/14/14 17:36	
Toluene-d8	99	85-120	10/14/14 17:36	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/3/14
Sample Matrix:	Water	**Date Received:**	10/4/14
		Date Analyzed:	10/14/14 1736

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-3-GW-M3MW02-21	**Units:**	µg/L
Lab Code:	R1407825-003	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407825-003|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2954.D Vial: 17
Acq On : 14 Oct 2014 5:36 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 15 15:44:56 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	965356	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1415752	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.842	117	1313023	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	708116	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	460798	51.04	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.08%			
48) surr1,1,2-dichloroetha...	4.854	65	512548	53.80	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 107.60%			
65) SURR3,Toluene-d8	7.427	98	1581425	49.74	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.48%			
70) SURR2,BFB	9.878	95	668302	53.41	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 106.82%			
Target Compounds						Qvalue
15) Acetone	2.129	43	1702	0.58	ug/L	87

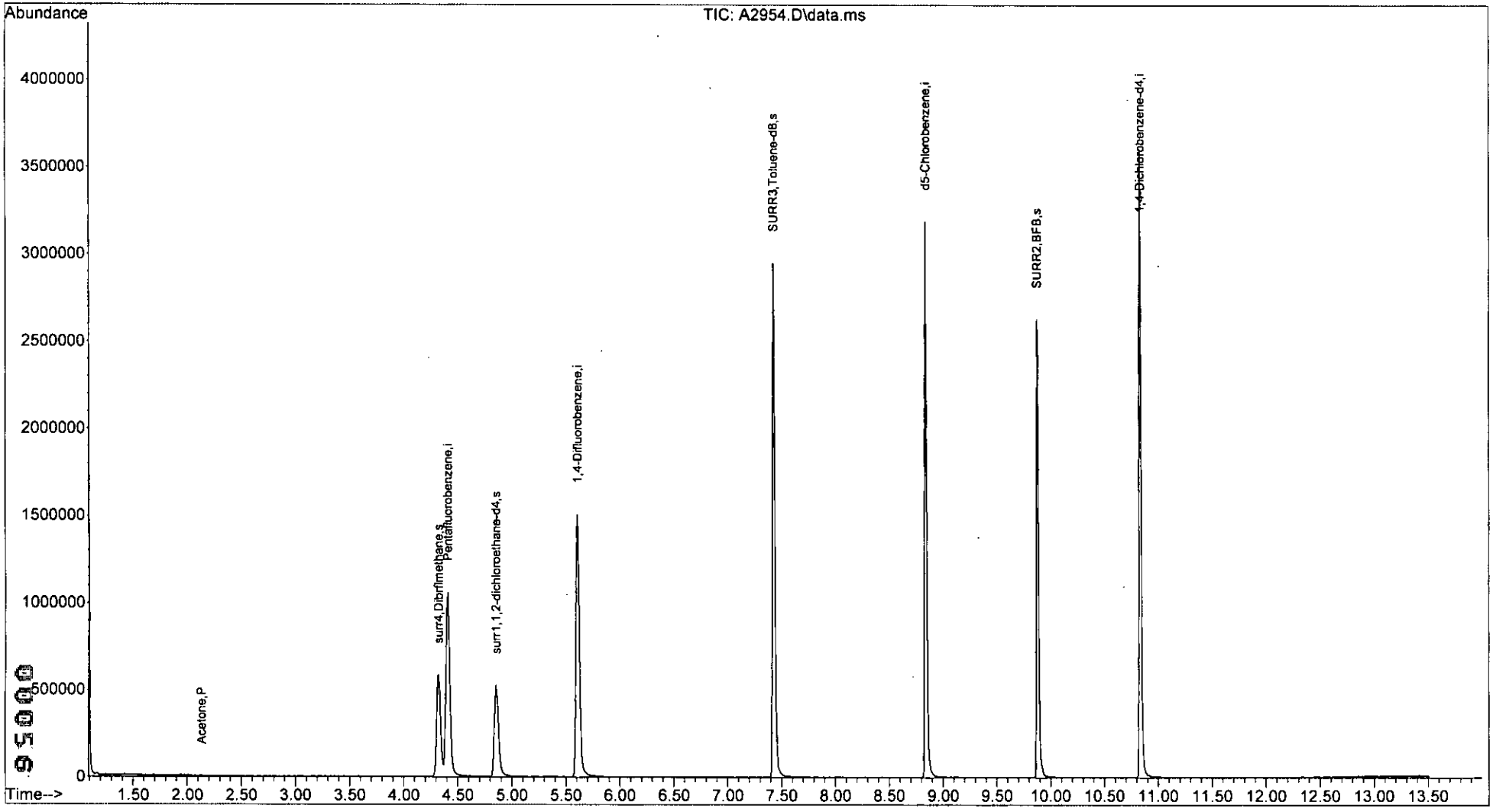
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FV 10/15/14

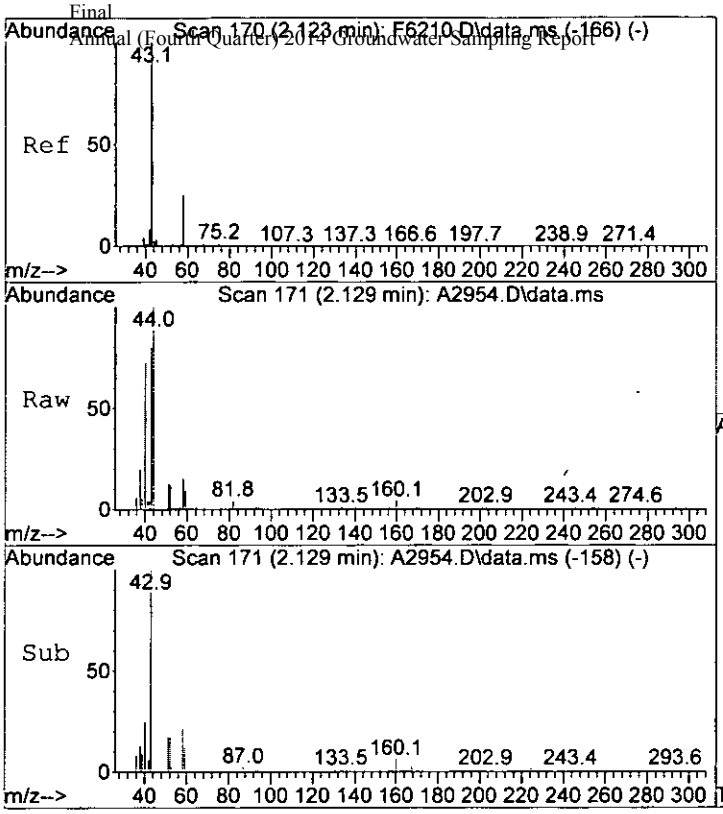
Quantitation Report (QT Reviewed)

Sample : R1407825-003|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2954.D Vial: 17
Acq On : 14 Oct 2014 5:36 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 15 15:44:56 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



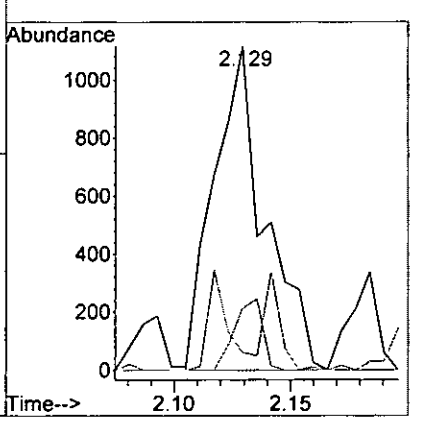
W072114.M Wed Oct 15 15:45:54 2014 MSVO10



#15
Acetone
Concen: 0.58 ug/L
RT: 2.129 min Scan# 171
Delta R.T. 0.006 min
Lab File: A2954.D
Acq: 14 Oct 2014 5:36 pm

Tgt Ion: 43 Resp: 1702

Ion	Ratio	Lower	Upper
43	100		
58	19.1	7.2	47.2
42	5.6	0.0	27.0



A2954.D W072114.M Wed Oct 15 15:45:55 2014 MSVO10

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\101414\
Data File : A2954.D
Acq On : 14 Oct 2014 5:36 pm
Operator : F.NAEGLER
Sample : R1407825-003|1.0
Misc : PARSONS 11603 T4
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A2954.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	521	531	538	rBV	583860	1477851	32.70%	5.753%
2	4.409	538	545	565	rVB	1052906	2712717	60.02%	10.560%
3	4.854	610	618	633	rBV2	524775	1405405	31.10%	5.471%
4	5.610	734	742	760	rBV	1504651	3405383	75.35%	13.256%
5	7.427	1035	1040	1057	rBV	2943513	4519324	100.00%	17.592%
6	8.842	1267	1272	1292	rBV	3183433	4245301	93.94%	16.526%
7	9.878	1438	1442	1455	rBV	2621458	3408414	75.42%	13.268%
8	10.835	1594	1599	1610	rBV	3600543	4514846	99.90%	17.575%

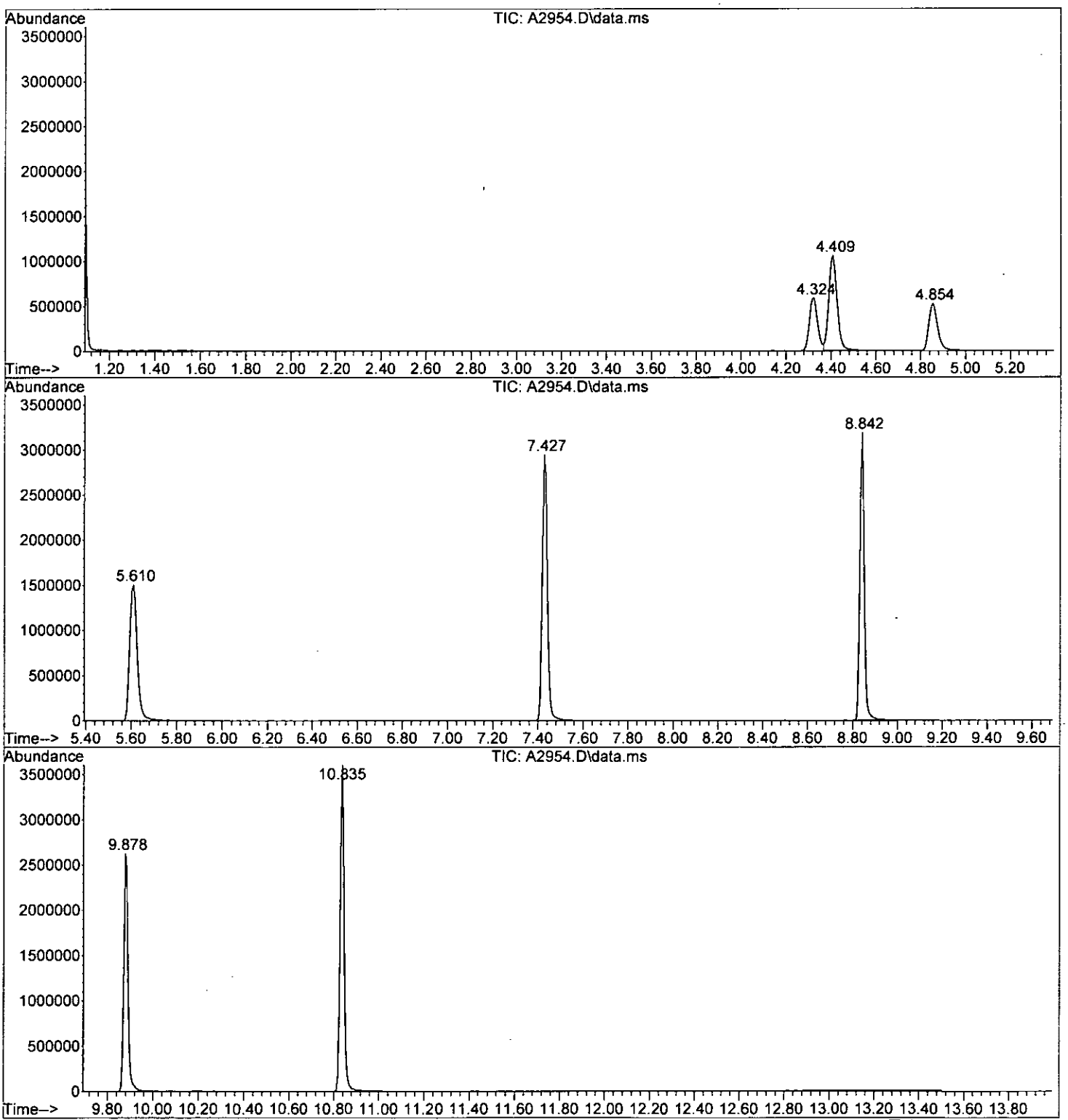
Sum of corrected areas: 25689241

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\101414\
Data File : A2954.D
Acq On : 14 Oct 2014 5:36 pm
Operator : F.NAEGLER
Sample : R1407825-003|1.0
Misc : PARSONS 11603 T4
ALS Vial : 17 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W072114.M Wed Oct 15 15:46:05 2014 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\101414\\
Data File : A2954.D
Acq On : 14 Oct 2014 5:36 pmm
Operator : F.NAEGLERR
Sample : R1407825-003|1.0
Misc : PARSONS 11603 T44
ALS Vial : 17 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1200
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 18:06
Sample Name:	FTMM-3-GW-M3MW102-21	**Units:**	µg/L
Lab Code:	R1407825-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2955.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.0**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1200
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 18:06
Sample Name:	FTMM-3-GW-M3MW102-21	**Units:**	µg/L
Lab Code:	R1407825-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2955.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1200
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 18:06
Sample Name:	FTMM-3-GW-M3MW102-21	**Units:**	µg/L
Lab Code:	R1407825-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2955.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	111	75-120	10/14/14 18:06	
Dibromofluoromethane	106	85-115	10/14/14 18:06	
Toluene-d8	103	85-120	10/14/14 18:06	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/3/14
Sample Matrix:	Water	**Date Received:**	10/4/14
		Date Analyzed:	10/14/14 1806

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-3-GW-M3MW102-21	**Units:**	µg/L
Lab Code:	R1407825-004	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407825-004|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2955.D Vial: 18
Acq On : 14 Oct 2014 6:06 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 15 15:46:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	944903	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1332779	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1294381	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	695147	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	451822	53.17	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 106.34%			
48) surr1,1,2-dichloroetha...	4.854	65	514290	57.34	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 114.68%			
65) SURR3,Toluene-d8	7.427	98	1540663	51.47	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.94%			
70) SURR2,BFB	9.878	95	654196	55.54	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 111.08%			
Target Compounds						Qvalue
15) Acetone	2.129	43	5719	1.99	ug/L	85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

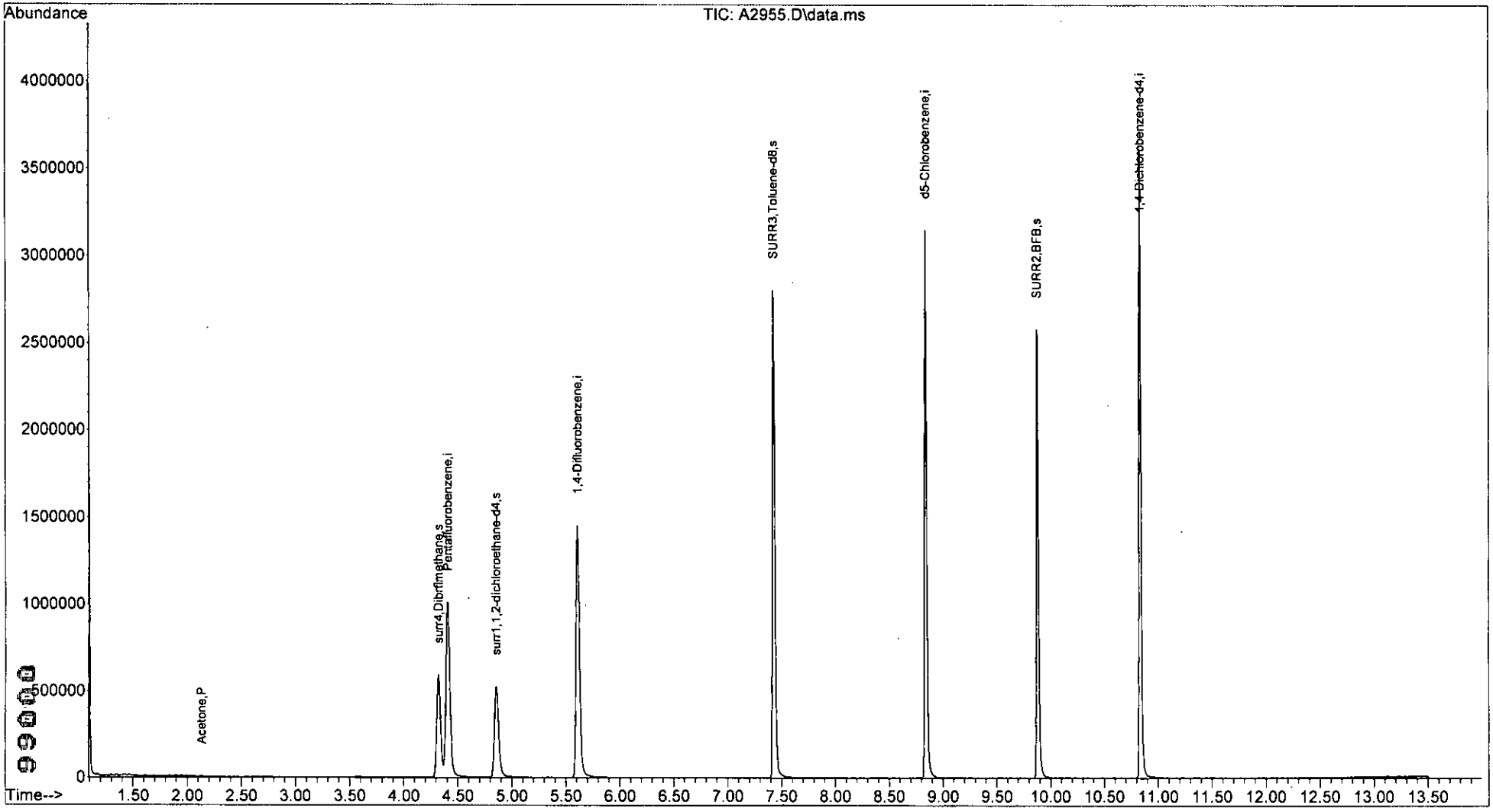
FJ 10/15/14

W072114.M Wed Oct 15 15:47:36 2014 MSVO10 Page: 1

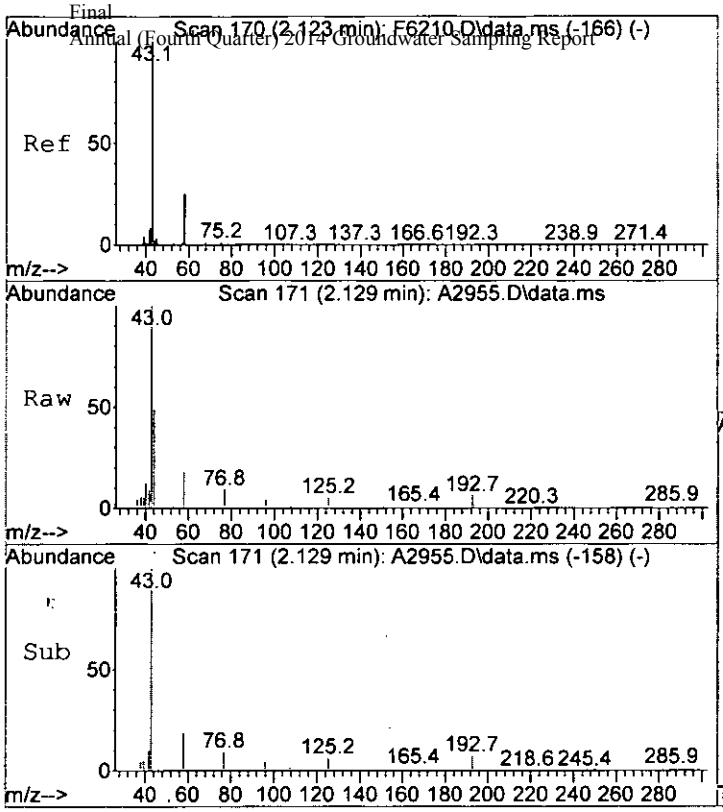
Quantitation Report (QT Reviewed)

Sample : R1407825-004|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2955.D Vial: 18
Acq On : 14 Oct 2014 6:06 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 15 15:46:29 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



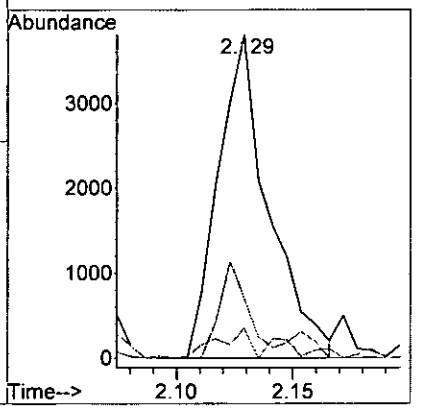
W072114.M Wed Oct 15 15:47:37 2014 MSVO10



#15
Acetone
Concen: 1.99 ug/L
RT: 2.129 min Scan# 171
Delta R.T. 0.006 min
Lab File: A2955.D
Acq: 14 Oct 2014 6:06 pm

Tgt Ion: 43 Resp: 5719

Ion	Ratio	Lower	Upper
43	100		
58	18.4	7.2	47.2
42	9.2	0.0	27.0



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\101414\
Data File : A2955.D
Acq On : 14 Oct 2014 6:06 pm
Operator : F.NAEGLER
Sample : R1407825-004|1.0
Misc : PARSONS 11603 T4
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A2955.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	521	531	538	rBV	592130	1452348	32.47%	5.755%
2	4.409	538	545	560	rVB	999843	2609455	58.34%	10.341%
3	4.854	608	618	636	rBV	522767	1416354	31.66%	5.613%
4	5.610	733	742	755	rBV	1449446	3287618	73.50%	13.028%
5	7.427	1035	1040	1059	rBV	2798057	4394304	98.24%	17.414%
6	8.841	1267	1272	1289	rBV	3146184	4208687	94.09%	16.678%
7	9.878	1438	1442	1455	rBV	2573606	3393133	75.86%	13.446%
8	10.835	1594	1599	1616	rBV	3609530	4473088	100.00%	17.726%

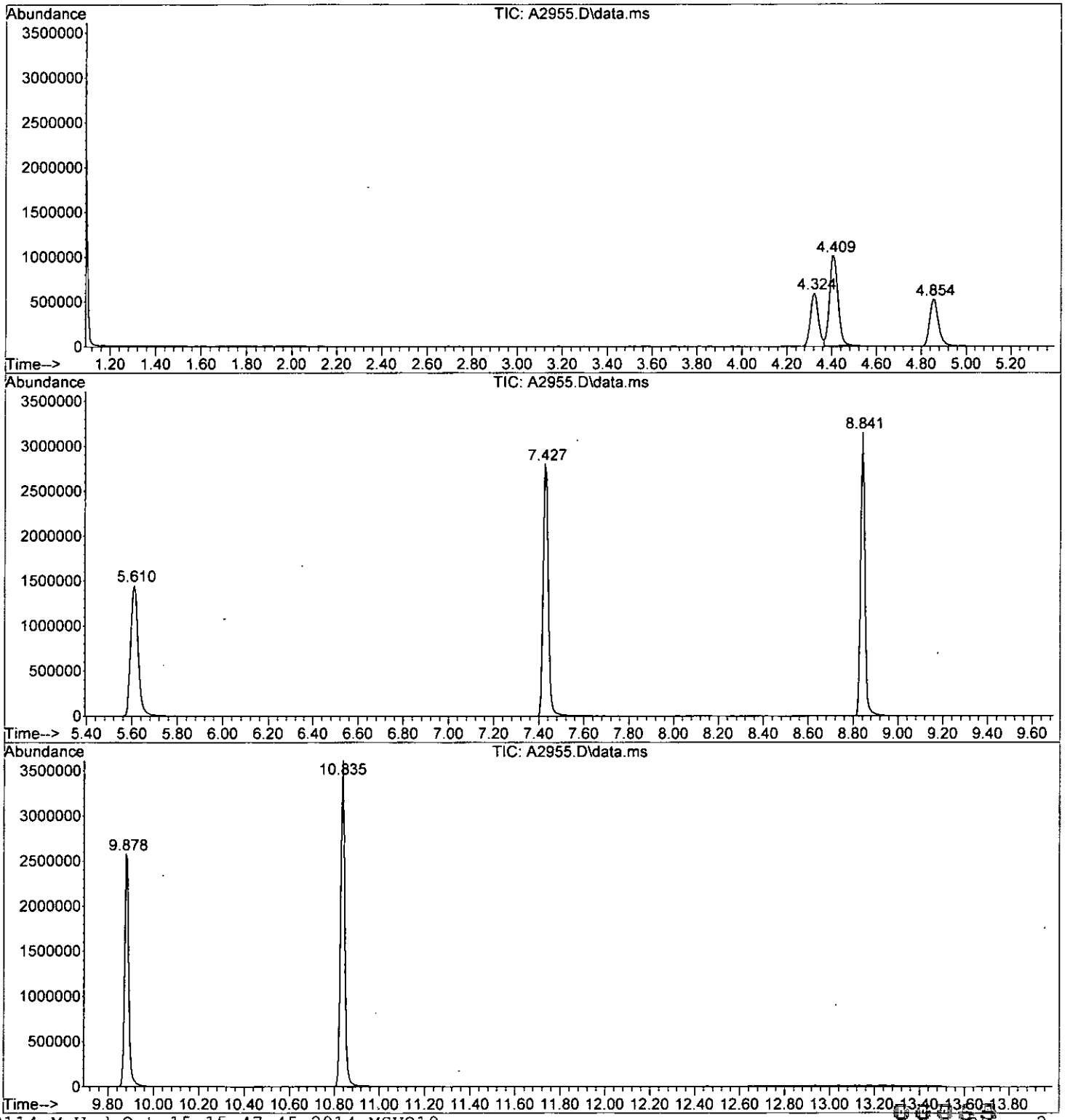
Sum of corrected areas: 25234987

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa10\data\101414\
Data File : A2955.D
Acq On    : 14 Oct 2014    6:06 pm
Operator  : F.NAEGLER
Sample    : R1407825-004|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 18   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```



W072114.M Wed Oct 15 15:47:45 2014 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\101414\\
Data File : A2955.D
Acq On : 14 Oct 2014 6:06 pmm
Operator : F.NAEGLERR
Sample : R1407825-004|1.0
Misc : PARSONS 11603 T44
ALS Vial : 18 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 2/14 1440
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 18:35
Sample Name:	FTMM-58-GW-2567MW03-8.03	**Units:**	µg/L
Lab Code:	R1407825-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2956.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 2/14 1440
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 18:35
Sample Name:	FTMM-58-GW-2567MW03-8.03	**Units:**	µg/L
Lab Code:	R1407825-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2956.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**2.0**	**J**	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**1.9**	**J**	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 2/14 1440
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 18:35
Sample Name:	FTMM-58-GW-2567MW03-8.03	**Units:**	µg/L
Lab Code:	R1407825-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2956.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	108	75-120	10/14/14 18:35	
Dibromofluoromethane	106	85-115	10/14/14 18:35	
Toluene-d8	101	85-120	10/14/14 18:35	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/2/14
Sample Matrix:	Water	**Date Received:**	10/4/14
		Date Analyzed:	10/14/14 1835

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-58-GW-2567MW03-8.03	**Units:**	µg/L
Lab Code:	R1407825-009	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
	unknown	2.44	**10.1**	**J**

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407825-009|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2956.D Vial: 19
Acq On : 14 Oct 2014 6:35 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 15 15:49:20 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	943161	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1357319	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1277156	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	708023	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	459895	53.14	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 106.28%			
48) surr1,1,2-dichloroetha...	4.854	65	506867	55.49	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 110.98%			
65) SURR3,Toluene-d8	7.427	98	1532737	50.28	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.56%			
70) SURR2,BFB	9.878	95	650323	54.22	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 108.44%			
Target Compounds						Qvalue
88) Isopropylbenzene	9.756	105	75623	2.03	ug/L	99
95) n-Propylbenzene	10.109	91	81790	1.85	ug/L	95

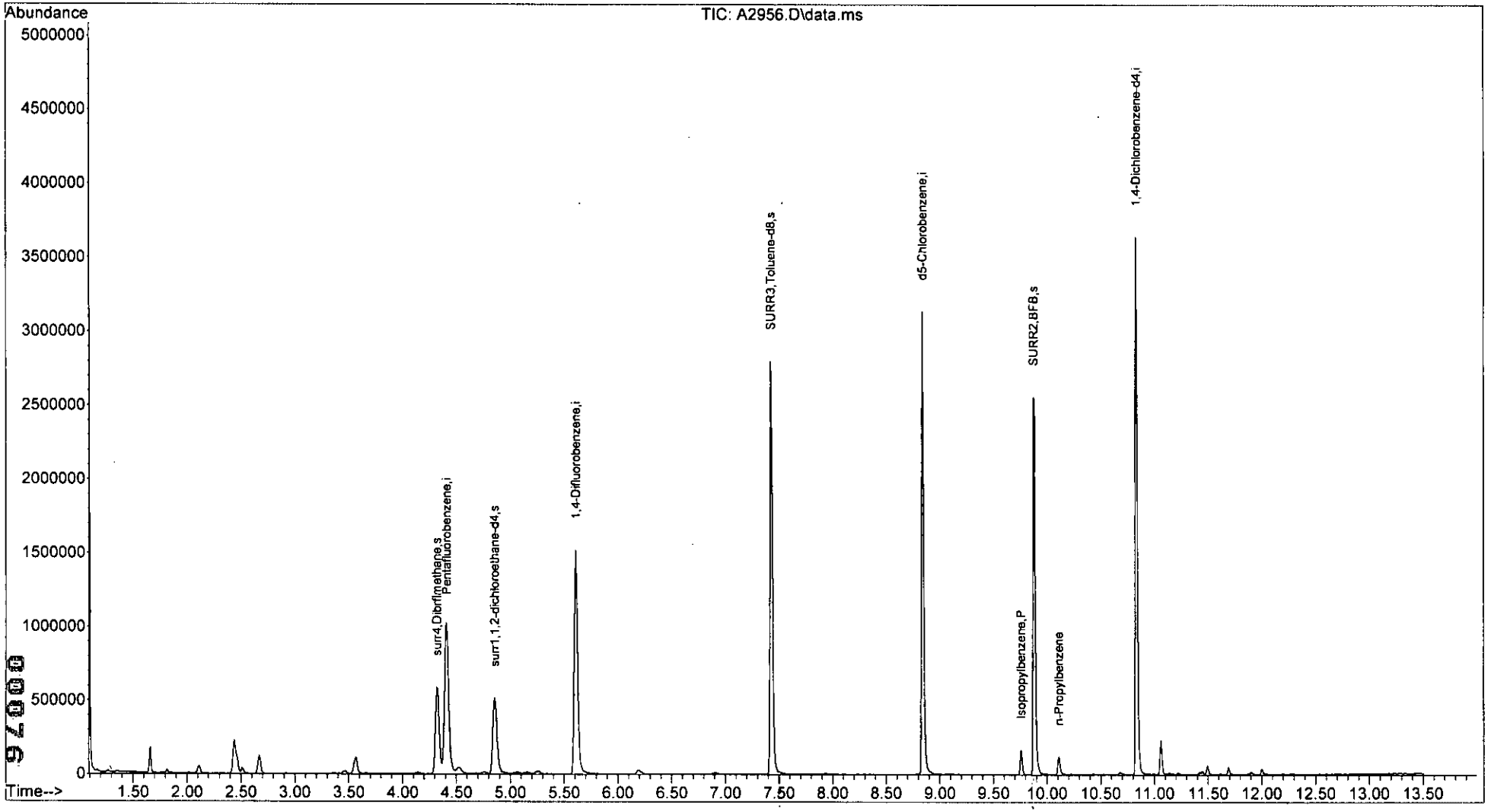
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FJ 12/15/14

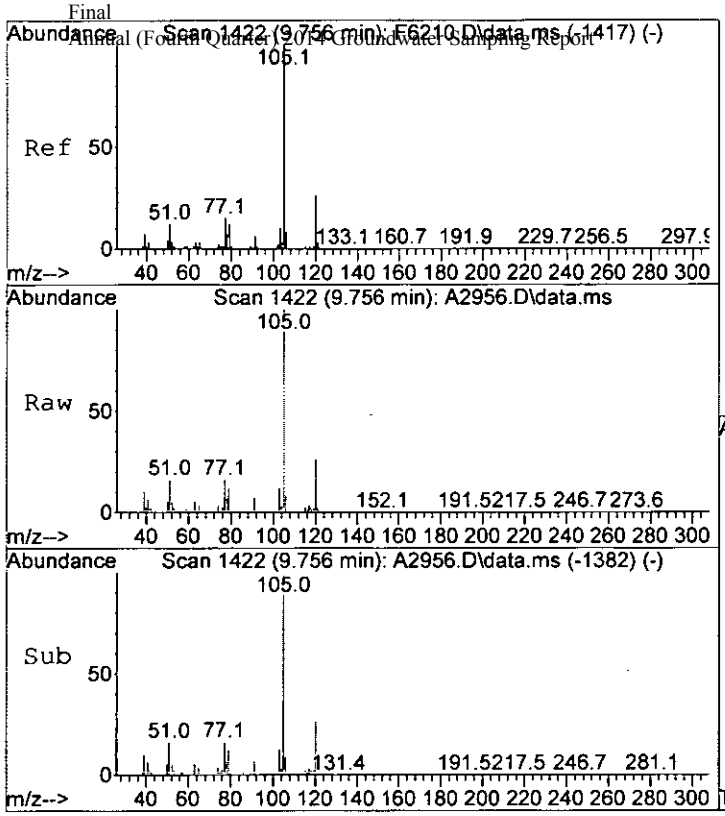
Quantitation Report (QT Reviewed)

Sample : R1407825-009|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2956.D Vial: 19
Acq On : 14 Oct 2014 6:35 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 15 15:49:20 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



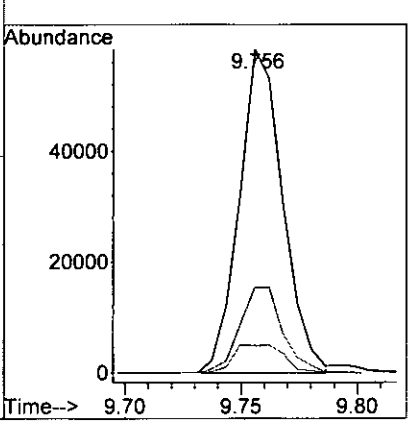
W072114.M Wed Oct 15 15:50:38 2014 MSVO10

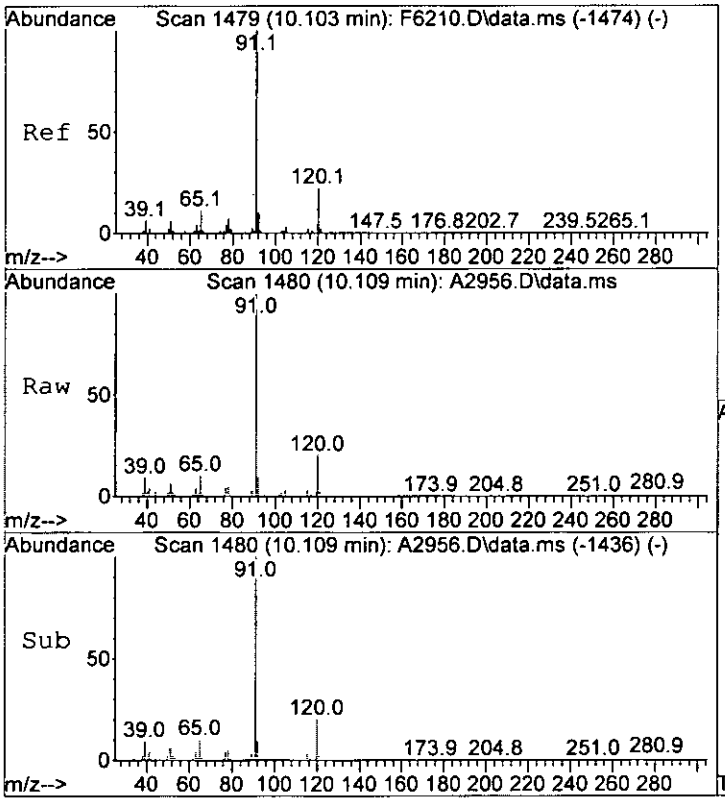


#88
Isopropylbenzene
Concen: 2.03 ug/L
RT: 9.756 min Scan# 1422
Delta R.T. -0.000 min
Lab File: A2956.D
Acq: 14 Oct 2014 6:35 pm

Tgt Ion:105 Resp: 75623

Ion	Ratio	Lower	Upper
105	100		
120	26.4	6.8	46.8
106	8.3	0.0	28.8

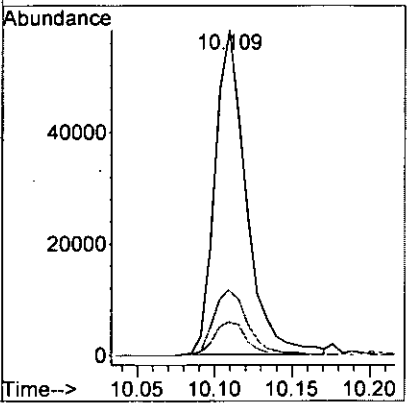




#95
n-Propylbenzene
Concen: 1.85 ug/L
RT: 10.109 min Scan# 1480
Delta R.T. 0.006 min
Lab File: A2956.D
Acq: 14 Oct 2014 6:35 pm

Tgt Ion: 91 Resp: 81790

Ion	Ratio	Lower	Upper
91	100		
120	20.1	2.9	42.9
65	10.3	0.0	31.4



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\101414\
Data File : A2956.D
Acq On : 14 Oct 2014 6:35 pm
Operator : F.NAEGLER
Sample : R1407825-009|1.0
Misc : PARSONS 11603 T4
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A2956.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.660	88	94	98	rBV	172249	192664	4.25%	0.702%
2	2.111	162	168	175	rVB3	52023	91053	2.01%	0.332%
3	2.440	215	222	231	rBV	226044	536141	11.83%	1.953%
4	2.507	231	233	239	rVB3	36493	53773	1.19%	0.196%
5	2.666	252	259	266	rBV2	121317	223717	4.94%	0.815%
6	3.562	398	406	417	rBV3	107567	242687	5.35%	0.884%
7	4.318	521	530	537	rBV2	587250	1445959	31.90%	5.268%
8	4.403	537	544	558	rVB2	1010531	2666184	58.82%	9.713%
9	4.854	610	618	634	rBV2	511570	1384489	30.54%	5.044%
10	5.263	677	685	695	rVB7	18027	50835	1.12%	0.185%
11	5.610	734	742	757	rBV	1515583	3329228	73.45%	12.128%
12	7.427	1034	1040	1060	rBV	2795346	4359695	96.18%	15.882%
13	8.841	1267	1272	1282	rBV	3133050	4134650	91.22%	15.062%
14	9.756	1416	1422	1428	rBV	164271	217744	4.80%	0.793%
15	9.878	1438	1442	1454	rBV	2553940	3375891	74.48%	12.298%
16	10.109	1475	1480	1488	rBV	120712	182858	4.03%	0.666%
17	10.835	1594	1599	1612	rBV	3635935	4532713	100.00%	16.512%
18	11.060	1631	1636	1644	rBV2	231873	303831	6.70%	1.107%
19	11.493	1703	1707	1712	rBV	56718	66004	1.46%	0.240%
20	11.688	1735	1739	1745	rBV	49173	60296	1.33%	0.220%

FD 10/15/14

Sum of corrected areas: 27450412

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa10\data\101414\
Data File : A2956.D
Acq On    : 14 Oct 2014    6:35 pm
Operator  : F.NAEGLER
Sample    : R1407825-009|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 19   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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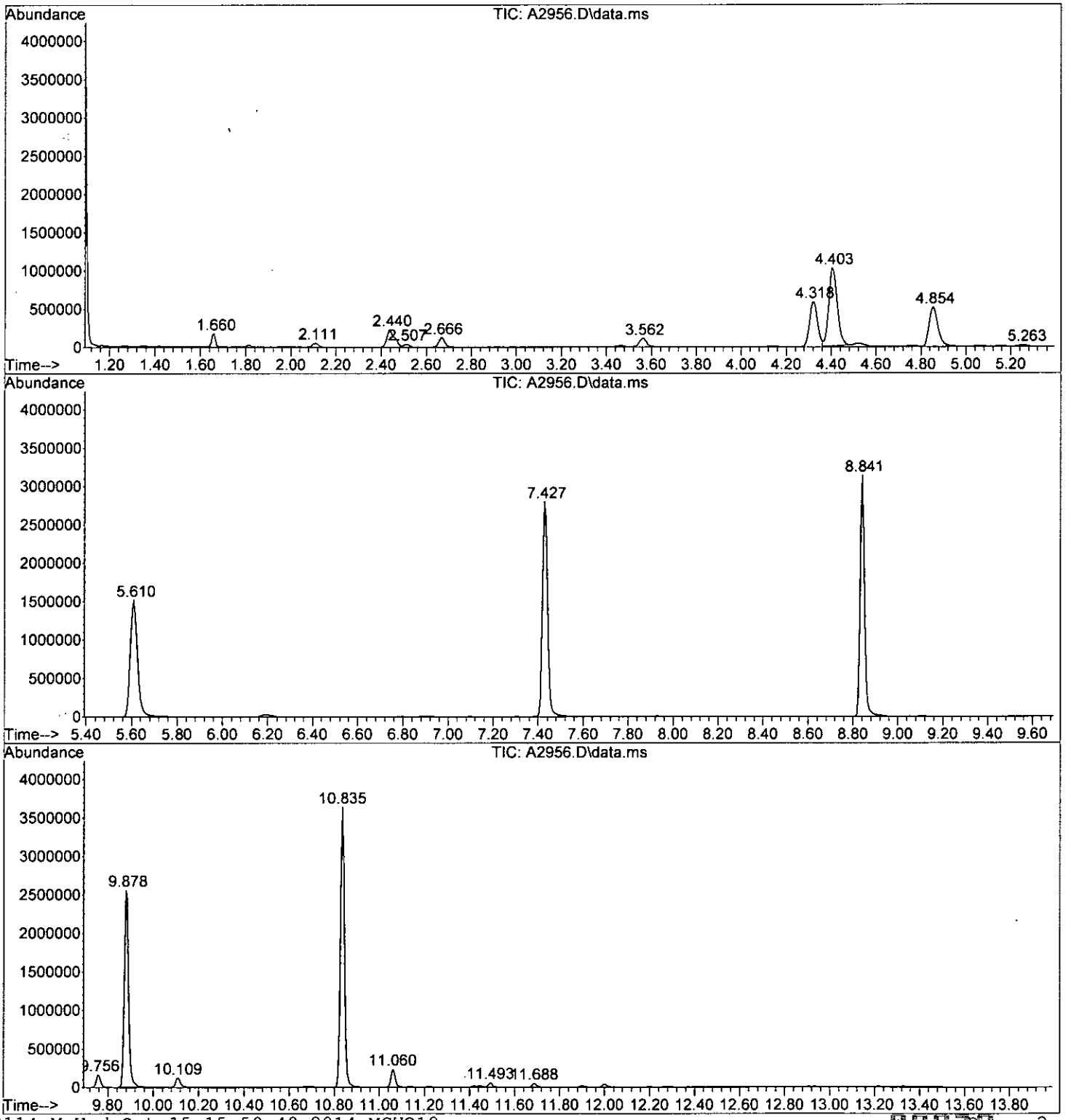


W072114.M Wed Oct 15 15:50:49 2014 MSVO10 Page: 2

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\101414\
Data File : A2956.D
Acq On : 14 Oct 2014 6:35 pm
Operator : F.NAEGLER
Sample : R1407825-009|1.0
Misc : PARSONS 11603 T4
ALS Vial : 19 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

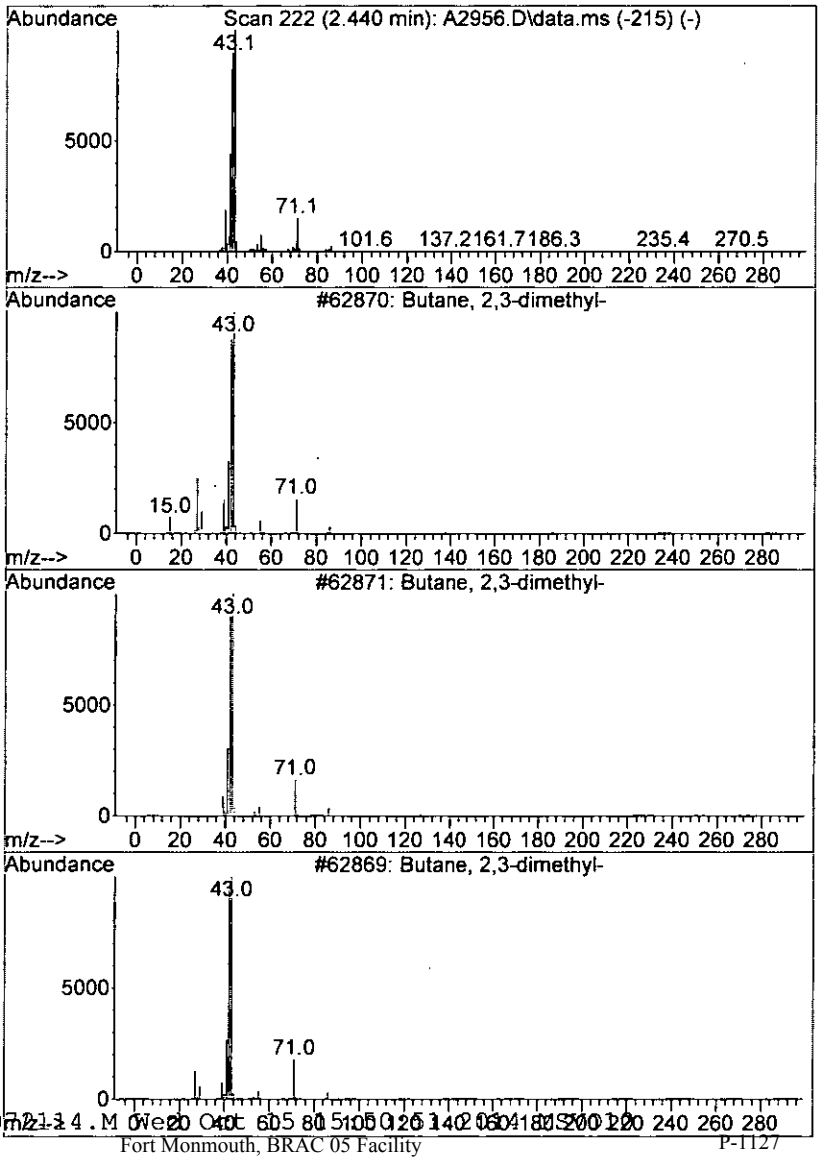
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

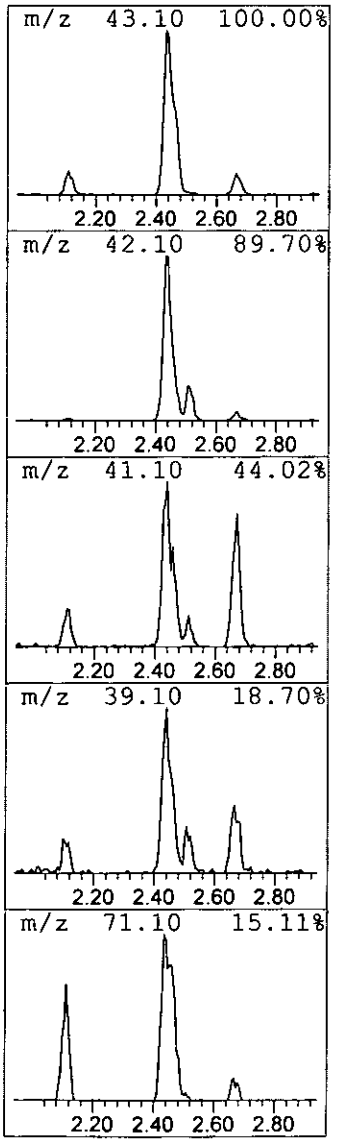
****

Peak Number 1 Butane, 2,3-dimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.440	10.05 ug/L	536141	Pentafluorobenzene	4.409

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	83
2	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	78
3	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	78
4	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	72
5	Furan, tetrahydro-	72	C4H8O	000109-99-9	9





Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 2/14 1250
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 19:05
Sample Name:	FTMM-58-GW-2567MW01-8.73	**Units:**	µg/L
Lab Code:	R1407825-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2957.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	260		100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	1.7	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 2/14 1250
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 19:05
Sample Name:	FTMM-58-GW-2567MW01-8.73	**Units:**	µg/L
Lab Code:	R1407825-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2957.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**0.80**	**J**	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 2/14 1250
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 19:05
Sample Name:	FTMM-58-GW-2567MW01-8.73	**Units:**	µg/L
Lab Code:	R1407825-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2957.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	105	75-120	10/14/14 19:05	
Dibromofluoromethane	105	85-115	10/14/14 19:05	
Toluene-d8	100	85-120	10/14/14 19:05	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/2/14
Sample Matrix:	Water	**Date Received:**	10/4/14
		Date Analyzed:	10/14/14 1905

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-58-GW-2567MW01-8.73	**Units:**	µg/L
Lab Code:	R1407825-010	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1407825-010|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2957.D Vial: 20
Acq On : 14 Oct 2014 7:05 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 15 15:52:23 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	967226	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1384910	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1312416	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	690923	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	462201	52.34	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 104.68%			
48) surr1,1,2-dichloroetha...	4.854	65	503585	54.03	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 108.06%			
65) SURR3,Toluene-d8	7.427	98	1555379	50.01	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.02%			
70) SURR2,BFB	9.878	95	644633	52.67	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 105.34%			
Target Compounds						Qvalue
15) Acetone	2.117	43	5044	1.71	ug/L	89
23) TBA	2.501	59	132647	264.58	ug/L	80
25) Methyl-t-Butyl Ether	2.660	73	15484	0.80	ug/L	65

(#) = qualifier out of range (m) = manual integration (+) = signals summed

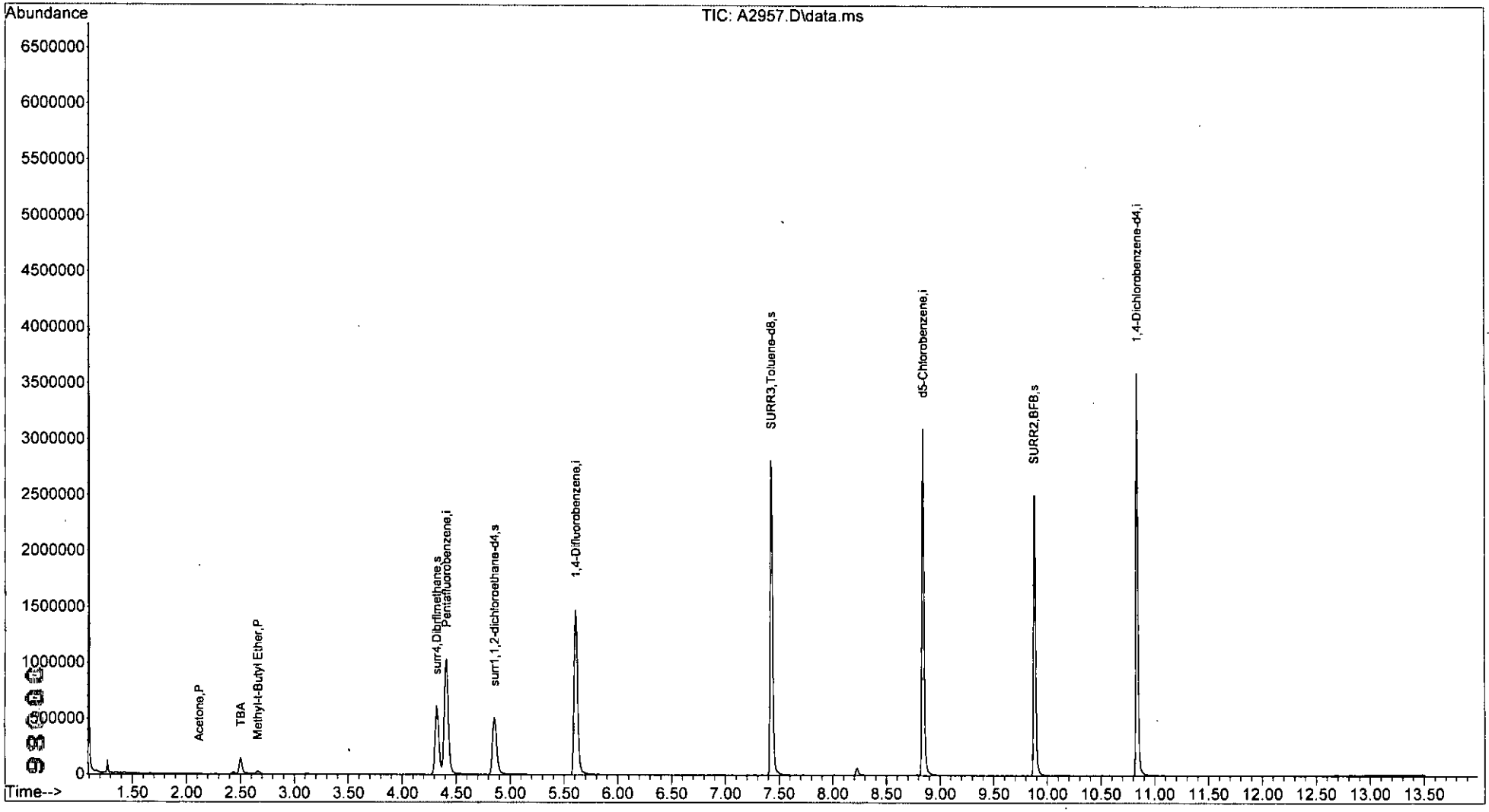
FW 10/15/14

KR 10/15/14

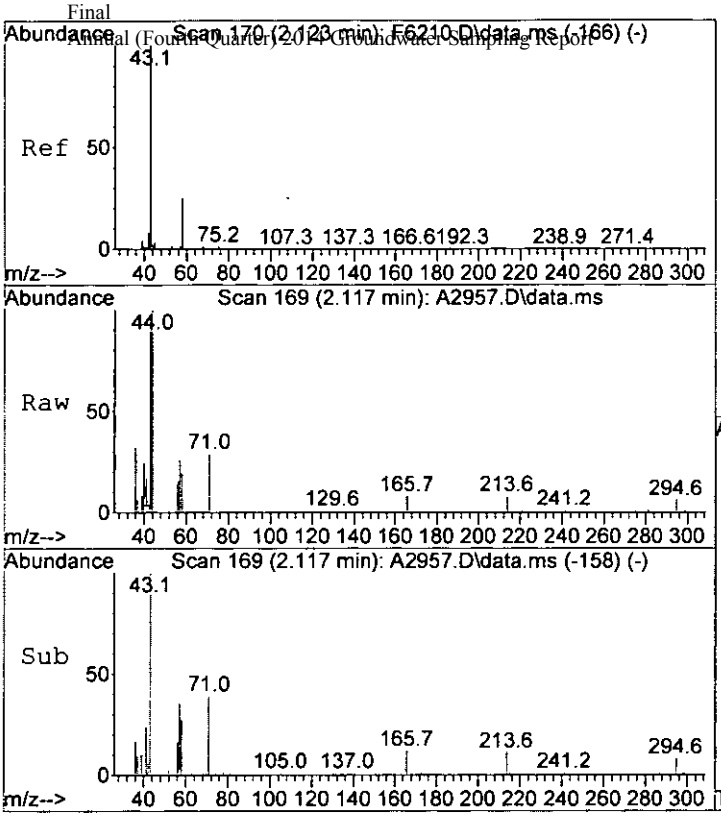
Quantitation Report (QT Reviewed)

Sample : R1407825-010|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2957.D Vial: 20
Acq On : 14 Oct 2014 7:05 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 15 15:52:23 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



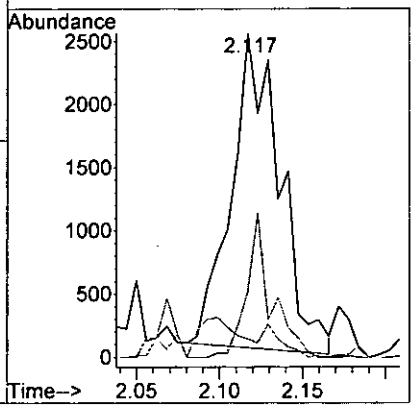
W072114.M Wed Oct 15 15:53:44 2014 MSVO10

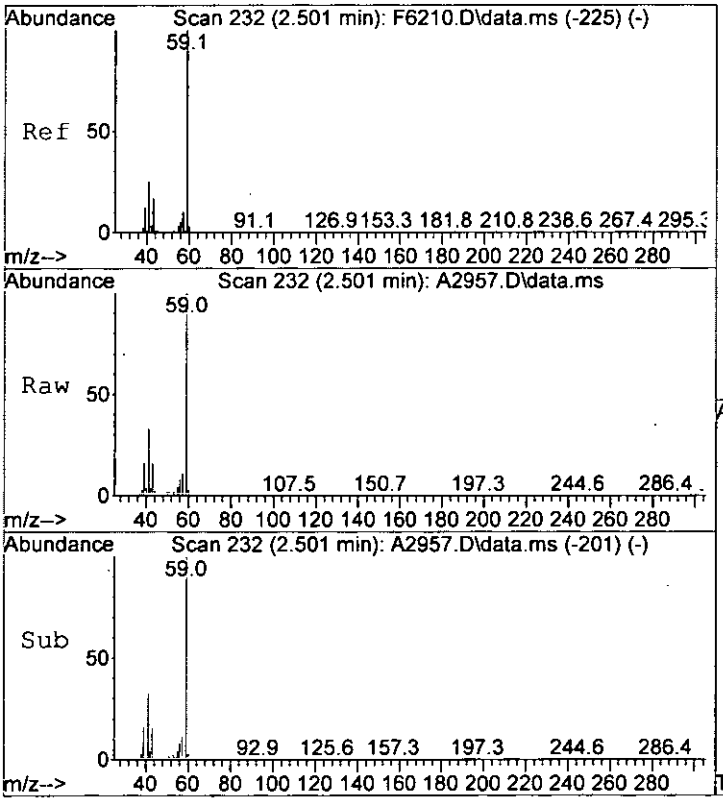


#15
Acetone
Concen: 1.71 ug/L
RT: 2.117 min Scan# 169
Delta R.T. -0.006 min
Lab File: A2957.D
Acq: 14 Oct 2014 7:05 pm

Tgt Ion: 43 Resp: 5044

Ion	Ratio	Lower	Upper
43	100		
58	20.2	7.2	47.2
42	5.7	0.0	27.0

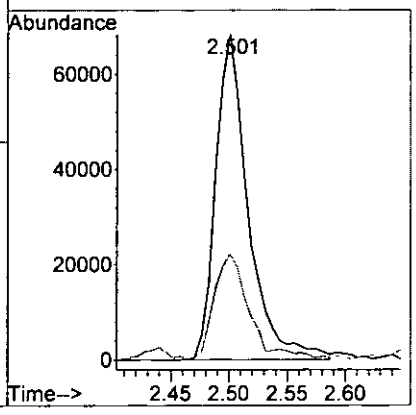


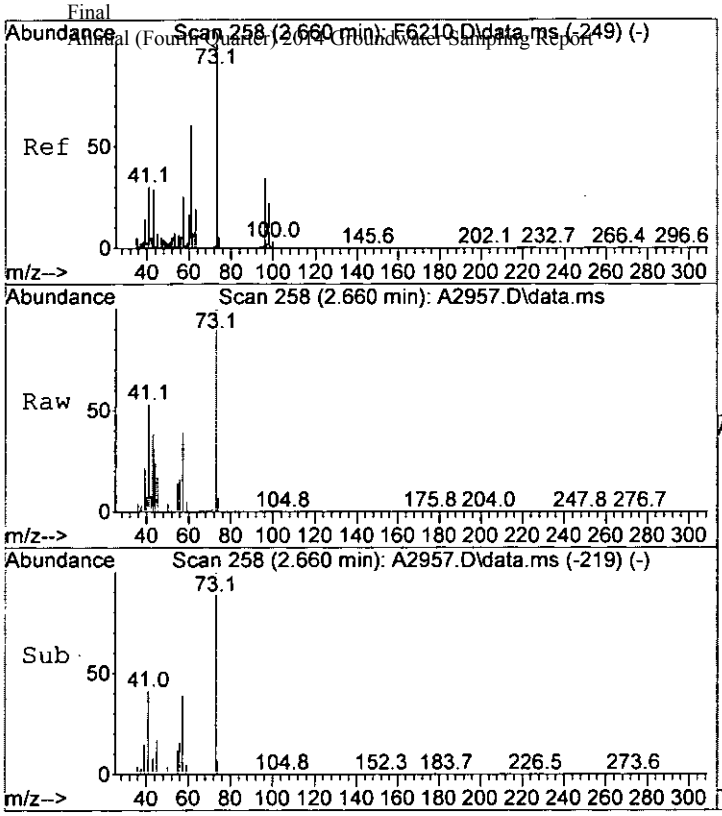


#23
TBA
Concen: 264.58 ug/L
RT: 2.501 min Scan# 232
Delta R.T. -0.000 min
Lab File: A2957.D
Acq: 14 Oct 2014 7:05 pm

Tgt Ion: 59 Resp: 132647

Ion	Ratio	Lower	Upper
59	100		
41	32.6	2.8	42.8

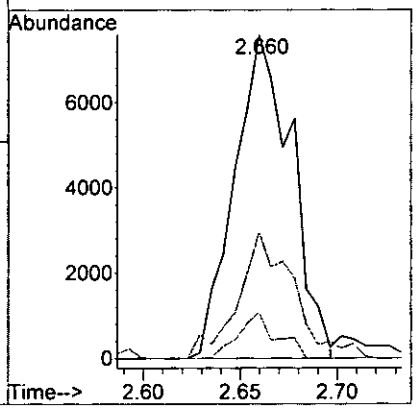




#25
Methyl-t-Butyl Ether
Concen: 0.80 ug/L
RT: 2.660 min Scan# 258
Delta R.T. -0.000 min
Lab File: A2957.D
Acq: 14 Oct 2014 7:05 pm

Tgt Ion: 73 Resp: 15484

Ion	Ratio	Lower	Upper
73	100		
57	38.9	1.6	41.6
55	14.1	0.0	24.7



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\101414\
Data File : A2957.D
Acq On : 14 Oct 2014 7:05 pm
Operator : F.NAEGLER
Sample : R1407825-010|1.0
Misc : PARSONS 11603 T4
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A2957.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.270	28	30	34	rVB	106740	72081	1.61%	0.279%
2	2.501	226	232	246	rVB	141357	276975	6.19%	1.070%
3	4.318	519	530	538	rBV	613344	1481463	33.12%	5.725%
4	4.409	538	545	563	rVB2	1028176	2681246	59.94%	10.362%
5	4.854	607	618	634	rBV2	510076	1400181	31.30%	5.411%
6	5.610	734	742	765	rBV	1480004	3390862	75.81%	13.104%
7	7.427	1035	1040	1052	rBV	2811711	4385272	98.04%	16.947%
8	8.226	1164	1171	1181	rBV	64231	113805	2.54%	0.440%
9	8.841	1267	1272	1290	rBV	3096331	4243603	94.87%	16.400%
10	9.878	1438	1442	1459	rBV	2505679	3357796	75.07%	12.976%
11	10.835	1594	1599	1617	rBV	3599874	4473067	100.00%	17.286%

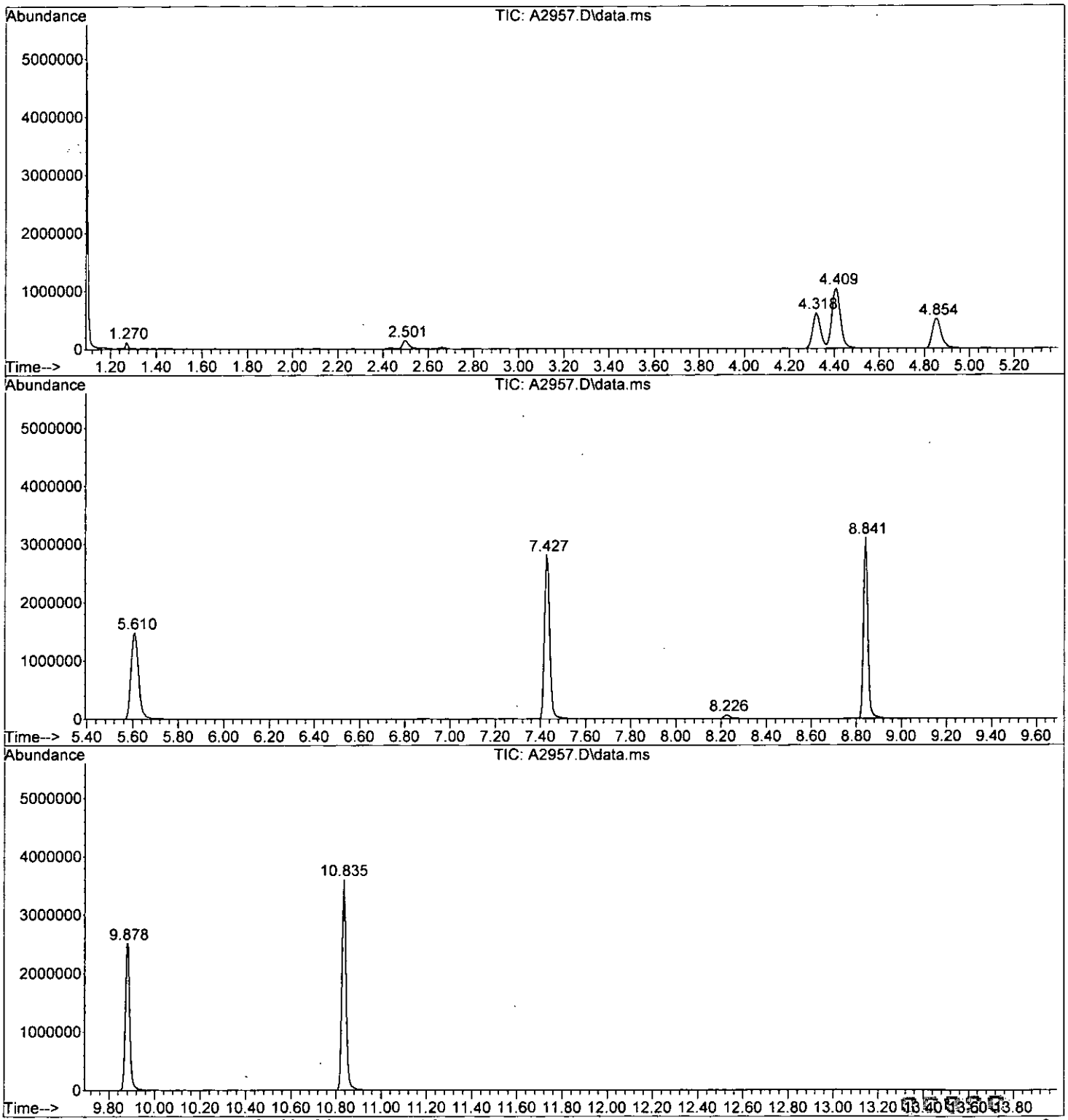
Sum of corrected areas: 25876351

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\101414\
Data File : A2957.D
Acq On : 14 Oct 2014 7:05 pm
Operator : F.NAEGLER
Sample : R1407825-010|1.0
Misc : PARSONS 11603 T4
ALS Vial : 20 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W072114.M Wed Oct 15 15:53:55 2014 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\101414\\
Data File : A2957.D
Acq On : 14 Oct 2014 7:05 pmm
Operator : F.NAEGLERR
Sample : R1407825-010|1.0
Misc : PARSONS 11603 T44
ALS Vial : 20 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					|--Internal Standard---|		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

00091

ALS Environmental

VOLATILE ORGANICS STANDARDS DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

60092

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Initial Calibration - Summary Report

Calibration ID: RC1400062 7/21/14 **Instrument ID:** R-MS-10
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
1,1,1,2-Tetrachloroethane	T	Average RF			0.3374	<=20	9.5
1,1,1-Trichloroethane (TCA)	T	Average RF		0.100	0.6850	<=20	2.5
1,1,2,2-Tetrachloroethane	T	Average RF		0.300	0.5487	<=20	3.9
1,1,2-Trichloroethane	T	Average RF		0.100	0.2259	<=20	3.9
1,1,2-Trichlorotrifluoroethane	T	Average RF		0.100	0.4403	<=20	6.1
1,1-Dichloroethane (1,1-DCA)	T	Average RF		0.200	0.9501	<=20	2.2
1,1-Dichloroethene (1,1-DCE)	T	Average RF		0.100	0.3485	<=20	5.3
1,1-Dichloropropene	T	Average RF			0.3911	<=20	5.2
1,2,3-Trichlorobenzene	T	Average RF			0.5634	<=20	10.0
1,2,3-Trichloropropane	T	Average RF			0.1534	<=20	8.8
1,2,4-Trichlorobenzene	T	Average RF		0.200	0.7687	<=20	5.4
1,2,4-Trimethylbenzene	T	Average RF			2.294	<=20	7.0
1,2-Dibromo-3-chloropropane (DBCP)	T	Average RF		0.050	0.08353	<=20	17.5
1,2-Dibromoethane	T	Average RF		0.100	0.2429	<=20	6.4
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123:	T	Average RF			0.5807	<=20	3.3
1,2-Dichlorobenzene	T	Average RF		0.400	1.357	<=20	2.4
1,2-Dichloroethane	T	Average RF		0.100	0.4240	<=20	2.6
1,2-Dichloropropane	T	Average RF		0.100	0.3562	<=20	3.9
1,3,5-Trichlorobenzene	T	Average RF			0.9702	<=20	5.6
1,3,5-Trimethylbenzene	T	Average RF			2.269	<=20	5.7
1,3-Dichlorobenzene	T	Average RF		0.600	1.444	<=20	4.4
1,3-Dichloropropane	T	Average RF			0.4284	<=20	1.5
1,4-Dichlorobenzene	T	Average RF		0.500	1.496	<=20	2.1
1,4-Dioxane	T	Average RF			0.002027	<=20	8.9
1-Butanol	T	Quadratic	1/X2		0.003955	>=0.99	0.9990
1-Chloro-4-(trifluoromethyl)benzene	T	Average RF			0.4892	<=20	6.7
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	T	Average RF			0.6180	<=20	5.5
2,2-Dichloropropane	T	Average RF			0.5885	<=20	9.5
2,3,6-Trichlorotoluene	T	Average RF			0.3556	<=20	11.0
2,4,5-Trichlorotoluene	T	Average RF			0.3514	<=20	18.1
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	T	Average RF			1.137	<=20	9.3
2,4-Dichlorobenzotrifluoride	T	Average RF			0.6099	<=20	7.0
2,5-Dichlorobenzotrifluoride	T	Average RF			0.7285	<=20	8.0
2-Bromo-2-chloro-1,1,1-trifluoroethane	T	Average RF				<=20	
2-Butanone (MEK)	T	Average RF		0.05	0.2007	<=20	5.9
2-Chloro-1,3-butadiene	T	Average RF			0.9344	<=20	4.7
2-Chlorobenzotrifluoride	T	Average RF			0.5264	<=20	6.6
2-Chloroethyl Vinyl Ether	T	Average RF			0.1490	<=20	18.8
2-Chlorotoluene	T	Average RF			1.925	<=20	4.3
2-Hexanone	T	Average RF		0.05	0.2113	<=20	9.0
2-Methyl-1-propanol	T	Average RF			0.009932	<=20	16.8
2-Methyl-2-propanol	T	Average RF			0.02592	<=20	14.6
2-Nitropropane	T	Average RF			0.04919	<=20	15.5
2-Propanol	T	Average RF			0.02153	<=20	10.4
3,4- and 2,3-Dichlorotoluene Coelution	T	Average RF			1.179	<=20	9.3
3,4-Dichlorobenzotrifluoride	T	Average RF			0.6845	<=20	6.3
3-Chloro-1-propene	T	Average RF			0.2191	<=20	8.2
3-Chlorobenzotrifluoride	T	Average RF			0.5312	<=20	7.3
3-Chlorotoluene	T	Average RF			2.046	<=20	4.1
4-Chlorotoluene	T	Average RF			2.316	<=20	3.1
4-Isopropyltoluene	T	Average RF			2.313	<=20	8.7
4-Methyl-2-pentanone	T	Average RF		0.05	0.2664	<=20	9.5

Initial Calibration - Summary Report

Calibration ID: RC1400062 **Instrument ID:** R-MS-10
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
Acetone	T	Average RF		0.05	0.1523	<=20	16.0
Acetonitrile	T	Average RF			0.01632	<=20	7.9
Acrolein	T	Average RF			0.06115	<=20	8.3
Acrylonitrile	T	Average RF			0.1399	<=20	6.5
Benzene	T	Average RF		0.500	1.222	<=20	3.8
Bromobenzene	T	Average RF			0.7548	<=20	2.7
Bromochloromethane	T	Average RF			0.3021	<=20	5.2
Bromodichloromethane	T	Average RF		0.200	0.3900	<=20	5.0
Bromoform	T	Average RF		0.100	0.1754	<=20	12.9
Bromomethane	T	Quadratic	1/X2	0.100	0.1903	>=0.99	0.9952
Carbon Disulfide	T	Average RF		0.100	1.474	<=20	3.7
Carbon Tetrachloride	T	Average RF		0.05	0.1274	<=20	7.6
Chlorobenzene	T	Average RF		0.500	0.9640	<=20	2.7
Chloroethane	T	Average RF		0.100	0.3320	<=20	2.6
Chloroform	T	Average RF		0.200	0.8279	<=20	4.2
Chloromethane	T	Average RF		0.100	0.7175	<=20	4.5
Cyclohexane	T	Average RF		0.100	0.4527	<=20	5.5
Cyclohexanone	T	Average RF			0.04603	<=20	12.3
Dibromochloromethane	T	Average RF		0.100	0.3054	<=20	10.9
Dibromomethane	T	Average RF			0.1717	<=20	4.1
Dichlorodifluoromethane (CFC 12)	T	Average RF		0.100	0.5381	<=20	8.9
Dichlorofluoromethane (CFC 21)	T	Average RF			0.9222	<=20	2.8
Dichloromethane	T	Average RF		0.100	0.4573	<=20	6.0
Diethyl Ether	T	Average RF			0.3910	<=20	5.2
Diisopropyl Ether	T	Average RF			2.181	<=20	5.5
Ethyl Methacrylate	T	Average RF			0.2657	<=20	13.1
Ethyl tert-Butyl Ether	T	Average RF			1.463	<=20	4.6
Ethylbenzene	T	Average RF		0.100	0.4804	<=20	6.8
Hexachlorobutadiene	T	Average RF			0.3147	<=20	4.0
Iodomethane	T	Quadratic	1/X		0.3548	>=0.99	0.9908
Isopropylbenzene (Cumene)	T	Average RF		0.100	1.457	<=20	7.7
Methacrylonitrile	T	Average RF			0.1086	<=20	14.1
Methyl Acetate	T	Average RF		0.100	0.3020	<=20	5.4
Methyl Methacrylate	T	Average RF			0.1265	<=20	18.5
Methyl tert-Butyl Ether	T	Average RF		0.100	0.9984	<=20	4.0
Methylcyclohexane	T	Average RF		0.100	0.4697	<=20	5.4
Naphthalene	T	Average RF			1.321	<=20	15.3
Propionitrile	T	Linear	1/X		0.04118	>=0.99	0.9991
Styrene	T	Average RF		0.300	0.9623	<=20	12.4
Tetrachloroethene (PCE)	T	Average RF		0.200	0.2891	<=20	4.5
Tetrahydrofuran (THF)	T	Average RF			0.1111	<=20	4.3
Toluene	T	Average RF		0.400	1.281	<=20	2.5
Trichloroethene (TCE)	T	Average RF		0.200	0.3407	<=20	3.6
Trichlorofluoromethane (CFC 11)	T	Average RF		0.100	0.7423	<=20	3.3
Vinyl Acetate	T	Average RF			0.05589	<=20	18.1
Vinyl Chloride	T	Average RF		0.100	0.6553	<=20	3.7
cis-1,2-Dichloroethene	T	Average RF		0.100	0.4913	<=20	4.0
cis-1,3-Dichloropropene	T	Average RF		0.200	0.4120	<=20	13.9
m,p-Xylenes	T	Average RF		0.100	0.5924	<=20	7.8
n-Butyl Acetate	T	Average RF			0.4703	<=20	13.3
n-Butylbenzene	T	Average RF			1.960	<=20	11.6
n-Heptane	T	Average RF			0.4609	<=20	7.6

Initial Calibration - Summary Report

Calibration ID: RC1400062 **Instrument ID:** R-MS-10
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
n-Propylbenzene	T	Average RF			3.120	<=20	6.0
o-Xylene	T	Average RF		0.300	0.5792	<=20	8.8
sec-Butylbenzene	T	Average RF			2.666	<=20	6.4
tert-Amyl Methyl Ether	T	Average RF			0.9868	<=20	8.3
tert-Butylbenzene	T	Average RF			1.902	<=20	6.3
trans-1,2-Dichloroethene	T	Average RF		0.100	0.4493	<=20	3.9
trans-1,3-Dichloropropene	T	Average RF		0.100	0.3260	<=20	17.8
trans-1,4-Dichloro-2-butene	T	Quadratic	1/X2		0.07205	>=0.99	0.9957
1,2-Dichloroethane-d4	S	Average RF			0.3365	<=20	3.6
4-Bromofluorobenzene	S	Average RF			0.4419	<=20	2.8
Dibromofluoromethane	S	Average RF			0.3188	<=20	2.2
Toluene-d8	S	Average RF			1.123	<=20	2.2

Initial Calibration - Detailed Report

Calibration ID:	RC1400062	**Instrument ID:**	R-MS-10
		Signal ID:	1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1400062-01	0.5 PPB STD	I:\ACQUDATA\msvoa10\data\072114\A0510.D	7/21/14 11:52
02	RC1400062-02	1.0 PPB STD	I:\ACQUDATA\msvoa10\data\072114\A0511.D	7/21/14 12:22
03	RC1400062-03	2.0 PPB STD	I:\ACQUDATA\msvoa10\data\072114\A0512.D	7/21/14 12:52
04	RC1400062-04	5.0 PPB STD	I:\ACQUDATA\msvoa10\data\072114\A0513.D	7/21/14 13:23
05	RC1400062-05	10 PPB STD	I:\ACQUDATA\msvoa10\data\072114\A0514.D	7/21/14 13:53
06	RC1400062-06	50 PPB STD	I:\ACQUDATA\msvoa10\data\072114\A0515.D	7/21/14 14:23
07	RC1400062-07	100 PPB STD	I:\ACQUDATA\msvoa10\data\072114\A0516.D	7/21/14 14:54
08	RC1400062-08	150 PPB STD	I:\ACQUDATA\msvoa10\data\072114\A0517.D	7/21/14 15:24
09	RC1400062-09	200 PPB STD	I:\ACQUDATA\msvoa10\data\072114\A0518.D	7/21/14 15:55

Analyte **Curve Fit** **Weighting**

1,1,1,2-Tetrachloroethane Average RF RSD = 9.5 Average RF = 0.3374

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3108	02	1.000	0.2976	03	2.000	0.3013	04	5.000	0.3205
05	10.000	0.3367	06	50.000	0.3450	07	100.000	0.3721	08	150.000	0.3787
09	200.000	0.3737									

1,1,1-Trichloroethane (TCA) Average RF RSD = 2.5 Average RF = 0.6850

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6918	02	1.000	0.6746	03	2.000	0.6764	04	5.000	0.6882
05	10.000	0.6552	06	50.000	0.6704	07	100.000	0.7039	08	150.000	0.7085
09	200.000	0.6956									

1,1,2,2-Tetrachloroethane Average RF RSD = 3.9 Average RF = 0.5487

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5244	02	1.000	0.5222	03	2.000	0.5855	04	5.000	0.5714
05	10.000	0.5603	06	50.000	0.5308	07	100.000	0.5524	08	150.000	0.5518
09	200.000	0.5391									

1,1,2-Trichloroethane Average RF RSD = 3.9 Average RF = 0.2259

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2138	02	1.000	0.2359	03	2.000	0.2210	04	5.000	0.2135
05	10.000	0.2275	06	50.000	0.2228	07	100.000	0.2310	08	150.000	0.2371
09	200.000	0.2308									

1,1,2-Trichlorotrifluoroethane Average RF RSD = 6.1 Average RF = 0.4403

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4656	02	1.000	0.4831	03	2.000	0.4314	04	5.000	0.4561
05	10.000	0.3916	06	50.000	0.4226	07	100.000	0.4432	08	150.000	0.4463
09	200.000	0.4225									

1,1-Dichloroethane (1,1-DCA) Average RF RSD = 2.2 Average RF = 0.9501

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9434	02	1.000	0.9445	03	2.000	0.9993	04	5.000	0.9592
05	10.000	0.9542	06	50.000	0.9379	07	100.000	0.9488	08	150.000	0.9415
09	200.000	0.9221									

1,1-Dichloroethene (1,1-DCE) Average RF RSD = 5.3 Average RF = 0.3485

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3739	02	1.000	0.3370	03	2.000	0.3731	04	5.000	0.3533
05	10.000	0.3186	06	50.000	0.3314	07	100.000	0.3493	08	150.000	0.3586
09	200.000	0.3409									

Initial Calibration - Detailed Report

Calibration ID: RC1400062 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

1,1-Dichloropropene Average RF RSD = 5.2 Average RF = 0.3911

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4241	02	1.000	0.3618	03	2.000	0.3895	04	5.000	0.3863
05	10.000	0.3648	06	50.000	0.3815	07	100.000	0.4073	08	150.000	0.4087
09	200.000	0.3956									

1,2,3-Trichlorobenzene Average RF RSD = 10.0 Average RF = 0.5634

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4936	02	1.000	0.5077	03	2.000	0.5167	04	5.000	0.5119
05	10.000	0.5715	06	50.000	0.5996	07	100.000	0.6079	08	150.000	0.6372
09	200.000	0.6247									

1,2,3-Trichloropropane Average RF RSD = 8.8 Average RF = 0.1534

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1808	02	1.000	0.1507	03	2.000	0.1710	04	5.000	0.1543
05	10.000	0.1436	06	50.000	0.1418	07	100.000	0.1472	08	150.000	0.1434
09	200.000	0.1476									

1,2,4-Trichlorobenzene Average RF RSD = 5.4 Average RF = 0.7687

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7170	02	1.000	0.7290	03	2.000	0.7324	04	5.000	0.7397
05	10.000	0.7655	06	50.000	0.7859	07	100.000	0.8073	08	150.000	0.8304
09	200.000	0.8108									

1,2,4-Trimethylbenzene Average RF RSD = 7.0 Average RF = 2.294

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.071	02	1.000	2.040	03	2.000	2.195	04	5.000	2.328
05	10.000	2.309	06	50.000	2.376	07	100.000	2.505	08	150.000	2.458
09	200.000	2.361									

1,2-Dibromo-3-chloropropane (DBCP) Average RF RSD = 17.5 Average RF = 0.08353

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.06568	02	1.000	0.06613	03	2.000	0.07412	04	5.000	0.07579
05	10.000	0.07834	06	50.000	0.09037	07	100.000	0.09768	08	150.000	0.1016
09	200.000	0.1020									

1,2-Dibromoethane Average RF RSD = 6.4 Average RF = 0.2429

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2437	02	1.000	0.2097	03	2.000	0.2386	04	5.000	0.2433
05	10.000	0.2306	06	50.000	0.2503	07	100.000	0.2576	08	150.000	0.2579
09	200.000	0.2545									

1,2-Dichloro-1,1,2-trifluoroethane (CFC Average RF RSD = 3.3 Average RF = 0.5807

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5669	02	1.000	0.5967	03	2.000	0.6050	04	5.000	0.5828
05	10.000	0.5599	06	50.000	0.6101	07	100.000	0.5673	08	150.000	0.5765
09	200.000	0.5612									

1,2-Dichlorobenzene Average RF RSD = 2.4 Average RF = 1.357

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.336	02	1.000	1.348	03	2.000	1.300	04	5.000	1.360
05	10.000	1.345	06	50.000	1.346	07	100.000	1.395	08	150.000	1.411
09	200.000	1.370									

Initial Calibration - Detailed Report

Calibration ID: RC1400062 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

1,2-Dichloroethane Average RF RSD = 2.6 Average RF = 0.4240

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4372	02	1.000	0.4170	03	2.000	0.4057	04	5.000	0.4372
05	10.000	0.4297	06	50.000	0.4205	07	100.000	0.4269	08	150.000	0.4293
09	200.000	0.4129									

1,2-Dichloroethane-d4 Average RF RSD = 3.6 Average RF = 0.3365

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.3415	04	60.000	0.3457	05	70.000	0.3492	07	100.000	0.3383
08	125.000	0.3262	09	150.000	0.3179						

1,2-Dichloropropane Average RF RSD = 3.9 Average RF = 0.3562

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3457	02	1.000	0.3282	03	2.000	0.3682	04	5.000	0.3538
05	10.000	0.3500	06	50.000	0.3557	07	100.000	0.3675	08	150.000	0.3726
09	200.000	0.3645									

1,3,5-Trichlorobenzene Average RF RSD = 5.6 Average RF = 0.9702

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.041	02	1.000	0.8688	03	2.000	0.9314	04	5.000	0.9249
05	10.000	0.9547	06	50.000	1.004	07	100.000	0.9874	08	150.000	1.019
09	200.000	1.001									

1,3,5-Trimethylbenzene Average RF RSD = 5.7 Average RF = 2.269

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.098	02	1.000	2.142	03	2.000	2.228	04	5.000	2.196
05	10.000	2.207	06	50.000	2.326	07	100.000	2.481	08	150.000	2.435
09	200.000	2.308									

1,3-Dichlorobenzene Average RF RSD = 4.4 Average RF = 1.444

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.361	02	1.000	1.356	03	2.000	1.417	04	5.000	1.417
05	10.000	1.442	06	50.000	1.451	07	100.000	1.527	08	150.000	1.523
09	200.000	1.501									

1,3-Dichloropropane Average RF RSD = 1.5 Average RF = 0.4284

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4417	02	1.000	0.4230	03	2.000	0.4268	04	5.000	0.4223
05	10.000	0.4222	06	50.000	0.4278	07	100.000	0.4341	08	150.000	0.4330
09	200.000	0.4249									

1,4-Dichlorobenzene Average RF RSD = 2.1 Average RF = 1.496

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.499	02	1.000	1.436	03	2.000	1.490	04	5.000	1.488
05	10.000	1.484	06	50.000	1.479	07	100.000	1.530	08	150.000	1.543
09	200.000	1.513									

1,4-Dioxane Average RF RSD = 8.9 Average RF = 0.002027

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.001651	03	40.000	0.002130	04	100.000	0.002058	05	200.000	0.002234
06	1000.000	0.001971	07	2000.000	0.001932	08	3000.000	0.002151	09	4000.000	0.002090

1-Butanol Quadratic 1/X2 COD = 0.9990 $Y = 1.036E\text{-}5\ X^2 + 0.003783\ X + -0.002167$

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	50.000	0.001665	03	100.000	0.002739	04	250.000	0.003084	05	500.000	0.003792
06	2500.000	0.004406	07	5000.000	0.004776	08	7500.000	0.005461	09	10000.000	0.005713

Initial Calibration - Detailed Report

Calibration ID: RC1400062 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

1-Chloro-4-(trifluoromethyl)benzene Average RF RSD = 6.7 Average RF = 0.4892

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4542	02	1.000	0.4567	03	2.000	0.4652	04	5.000	0.4750
05	10.000	0.4618	06	50.000	0.5087	07	100.000	0.5195	08	150.000	0.5371
09	200.000	0.5246									

2,2-Dichloro-1,1,1-trifluoroethane (CFC Average RF RSD = 5.5 Average RF = 0.6180

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6609	02	1.000	0.6670	03	2.000	0.6452	04	5.000	0.6070
05	10.000	0.5678	06	50.000	0.6230	07	100.000	0.5875	08	150.000	0.6055
09	200.000	0.5982									

2,2-Dichloropropane Average RF RSD = 9.5 Average RF = 0.5885

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5596	02	1.000	0.5312	03	2.000	0.5525	04	5.000	0.5482
05	10.000	0.5330	06	50.000	0.6012	07	100.000	0.6423	08	150.000	0.6707
09	200.000	0.6582									

2,3,6-Trichlorotoluene Average RF RSD = 11.0 Average RF = 0.3556

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2902	02	1.000	0.3444	03	2.000	0.3436	04	5.000	0.3110
05	10.000	0.3575	06	50.000	0.3699	07	100.000	0.3715	08	150.000	0.4033
09	200.000	0.4094									

2,4,5-Trichlorotoluene Average RF RSD = 18.1 Average RF = 0.3514

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2794	02	1.000	0.2684	03	2.000	0.2884	04	5.000	0.3238
05	10.000	0.3572	06	50.000	0.3939	07	100.000	0.3950	08	150.000	0.4296
09	200.000	0.4273									

2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut Average RF RSD = 9.3 Average RF = 1.137

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.500	0.9500	02	3.000	1.024	03	6.000	1.066	04	15.000	1.109
05	30.000	1.172	06	150.000	1.244	07	300.000	1.234	08	450.000	1.245
09	600.000	1.188									

2,4-Dichlorobenzotrifluoride Average RF RSD = 7.0 Average RF = 0.6099

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5793	02	1.000	0.5642	03	2.000	0.5576	04	5.000	0.5840
05	10.000	0.5938	06	50.000	0.6422	07	100.000	0.6403	08	150.000	0.6637
09	200.000	0.6643									

2,5-Dichlorobenzotrifluoride Average RF RSD = 8.0 Average RF = 0.7285

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8389	02	1.000	0.6922	03	2.000	0.7400	04	5.000	0.6404
05	10.000	0.6649	06	50.000	0.7279	07	100.000	0.7365	08	150.000	0.7615
09	200.000	0.7542									

2-Butanone (MEK) Average RF RSD = 5.9 Average RF = 0.2007

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1904	04	5.000	0.1834	05	10.000	0.2011	06	50.000	0.2201
07	100.000	0.2046	08	150.000	0.2073	09	200.000	0.1978			

Initial Calibration - Detailed Report

Calibration ID: RC1400062 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

2-Chloro-1,3-butadiene Average RF RSD = 4.7 Average RF = 0.9344

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8693	02	1.000	0.8644	03	2.000	0.9308	04	5.000	0.9625
05	10.000	0.9118	06	50.000	0.9701	07	100.000	0.9817	08	150.000	0.9698
09	200.000	0.9497									

2-Chlorobenzotrifluoride Average RF RSD = 6.6 Average RF = 0.5264

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5176	02	1.000	0.4683	03	2.000	0.4995	04	5.000	0.5062
05	10.000	0.5097	06	50.000	0.5473	07	100.000	0.5561	08	150.000	0.5783
09	200.000	0.5549									

2-Chloroethyl Vinyl Ether Average RF RSD = 18.8 Average RF = 0.1490

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1145	03	2.000	0.1117	04	5.000	0.1315	05	10.000	0.1395
06	50.000	0.1665	07	100.000	0.1751	08	150.000	0.1774	09	200.000	0.1754

2-Chlorotoluene Average RF RSD = 4.3 Average RF = 1.925

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.781	02	1.000	1.830	03	2.000	1.891	04	5.000	1.941
05	10.000	1.939	06	50.000	1.933	07	100.000	2.056	08	150.000	2.008
09	200.000	1.947									

2-Hexanone Average RF RSD = 9.0 Average RF = 0.2113

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1923	04	5.000	0.2002	05	10.000	0.1830	06	50.000	0.2275
07	100.000	0.2239	08	150.000	0.2286	09	200.000	0.2239			

2-Methyl-1-propanol Average RF RSD = 16.8 Average RF = 0.009932

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.008465	03	40.000	0.008984	04	100.000	0.007832	05	200.000	0.008770
06	1000.000	0.01028	07	2000.000	0.01087	08	3000.000	0.01217	09	4000.000	0.01208

2-Methyl-2-propanol Average RF RSD = 14.6 Average RF = 0.02592

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.01923	02	20.000	0.02431	03	40.000	0.02297	04	100.000	0.02413
05	200.000	0.02639	06	1000.000	0.02684	07	2000.000	0.02722	08	3000.000	0.03118
09	4000.000	0.03098									

2-Nitropropane Average RF RSD = 15.5 Average RF = 0.04919

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.06304	03	4.000	0.04854	04	10.000	0.03744	05	20.000	0.04261
06	100.000	0.04639	07	200.000	0.05022	08	300.000	0.05283	09	400.000	0.05248

2-Propanol Average RF RSD = 10.4 Average RF = 0.02153

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.02303	02	20.000	0.02185	03	40.000	0.01792	04	100.000	0.01762
05	200.000	0.02212	06	1000.000	0.02231	07	2000.000	0.02181	08	3000.000	0.02375
09	4000.000	0.02334									

3,4- and 2,3-Dichlorotoluene Coelution Average RF RSD = 9.3 Average RF = 1.179

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.9779	02	2.000	1.084	03	4.000	1.084	04	10.000	1.165
05	20.000	1.251	06	100.000	1.297	07	200.000	1.281	08	300.000	1.266
09	400.000	1.202									

Initial Calibration - Detailed Report

Calibration ID: RC1400062 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

3,4-Dichlorobenzotrifluoride Average RF RSD = 6.3 Average RF = 0.6845

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6214	02	1.000	0.6757	03	2.000	0.6480	04	5.000	0.6781
05	10.000	0.6379	06	50.000	0.7022	07	100.000	0.7211	08	150.000	0.7402
09	200.000	0.7359									

3-Chloro-1-propene Average RF RSD = 8.2 Average RF = 0.2191

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1809	02	1.000	0.2135	03	2.000	0.2217	04	5.000	0.2107
05	10.000	0.2133	06	50.000	0.2324	07	100.000	0.2416	08	150.000	0.2360
09	200.000	0.2215									

3-Chlorobenzotrifluoride Average RF RSD = 7.3 Average RF = 0.5312

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4978	02	1.000	0.5098	03	2.000	0.4891	04	5.000	0.5184
05	10.000	0.4859	06	50.000	0.5568	07	100.000	0.5679	08	150.000	0.5834
09	200.000	0.5715									

3-Chlorotoluene Average RF RSD = 4.1 Average RF = 2.046

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.967	02	1.000	1.920	03	2.000	1.958	04	5.000	2.020
05	10.000	2.143	06	50.000	2.105	07	100.000	2.134	08	150.000	2.107
09	200.000	2.056									

4-Bromofluorobenzene Average RF RSD = 2.8 Average RF = 0.4419

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.4506	04	60.000	0.4320	05	70.000	0.4485	07	100.000	0.4524
08	125.000	0.4462	09	150.000	0.4215						

4-Chlorotoluene Average RF RSD = 3.1 Average RF = 2.316

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.217	02	1.000	2.357	03	2.000	2.353	04	5.000	2.314
05	10.000	2.222	06	50.000	2.275	07	100.000	2.433	08	150.000	2.381
09	200.000	2.292									

4-Isopropyltoluene Average RF RSD = 8.7 Average RF = 2.313

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.000	02	1.000	2.070	03	2.000	2.235	04	5.000	2.238
05	10.000	2.288	06	50.000	2.446	07	100.000	2.592	08	150.000	2.529
09	200.000	2.416									

4-Methyl-2-pentanone Average RF RSD = 9.5 Average RF = 0.2664

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.2283	04	5.000	0.2419	05	10.000	0.2515	06	50.000	0.2813
07	100.000	0.2844	08	150.000	0.2917	09	200.000	0.2859			

Acetone Average RF RSD = 16.0 Average RF = 0.1523

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.2006	04	5.000	0.1539	05	10.000	0.1637	06	50.000	0.1371
07	100.000	0.1269	08	150.000	0.1454	09	200.000	0.1382			

Acetonitrile Average RF RSD = 7.9 Average RF = 0.01632

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.01405	02	5.000	0.01613	03	10.000	0.01663	04	25.000	0.01496
05	50.000	0.01819	06	250.000	0.01596	07	500.000	0.01684	08	750.000	0.01781
09	1000.000	0.01632									

Initial Calibration - Detailed Report

Calibration ID: RC1400062 **Instrument ID:** R-MS-10
Signal ID: 1

Acrolein — Curve Fit: Average RF — Weighting: RSD = 8.3 — Average RF = 0.06115

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.07341	02	5.000	0.06441	03	10.000	0.06026	04	25.000	0.05846
05	50.000	0.05698	06	250.000	0.06061	07	500.000	0.05882	08	750.000	0.05945
09	1000.000	0.05794									

Acrylonitrile — Curve Fit: Average RF — Weighting: RSD = 6.5 — Average RF = 0.1399

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.1169	02	5.000	0.1432	03	10.000	0.1467	04	25.000	0.1429
05	50.000	0.1470	06	250.000	0.1418	07	500.000	0.1415	08	750.000	0.1413
09	1000.000	0.1380									

Benzene — Curve Fit: Average RF — Weighting: RSD = 3.8 — Average RF = 1.222

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.122	02	1.000	1.210	03	2.000	1.194	04	5.000	1.219
05	10.000	1.246	06	50.000	1.220	07	100.000	1.266	08	150.000	1.279
09	200.000	1.244									

Bromobenzene — Curve Fit: Average RF — Weighting: RSD = 2.7 — Average RF = 0.7548

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7476	02	1.000	0.7418	03	2.000	0.7975	04	5.000	0.7394
05	10.000	0.7424	06	50.000	0.7346	07	100.000	0.7768	08	150.000	0.7568
09	200.000	0.7564									

Bromochloromethane — Curve Fit: Average RF — Weighting: RSD = 5.2 — Average RF = 0.3021

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3152	02	1.000	0.3312	03	2.000	0.3034	04	5.000	0.3127
05	10.000	0.3058	06	50.000	0.2908	07	100.000	0.2891	08	150.000	0.2879
09	200.000	0.2832									

Bromodichloromethane — Curve Fit: Average RF — Weighting: RSD = 5.0 — Average RF = 0.3900

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3485	02	1.000	0.3826	03	2.000	0.4034	04	5.000	0.3794
05	10.000	0.3860	06	50.000	0.3881	07	100.000	0.4057	08	150.000	0.4125
09	200.000	0.4038									

Bromoform — Curve Fit: Average RF — Weighting: RSD = 12.9 — Average RF = 0.1754

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1633	02	1.000	0.1361	03	2.000	0.1570	04	5.000	0.1730
05	10.000	0.1680	06	50.000	0.1789	07	100.000	0.1952	08	150.000	0.2049
09	200.000	0.2022									

Bromomethane — Curve Fit: Quadratic — Weighting: 1/X2 — COD = 0.9952 — $Y = 0.02646 X^2 + 0.1677 X + -3.664E-4$

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1448	02	1.000	0.1307	03	2.000	0.1462	04	5.000	0.1517
05	10.000	0.1874	06	50.000	0.2042	07	100.000	0.2395	08	150.000	0.2497
09	200.000	0.2590									

Carbon Disulfide — Curve Fit: Average RF — Weighting: RSD = 3.7 — Average RF = 1.474

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.572	02	1.000	1.516	03	2.000	1.522	04	5.000	1.467
05	10.000	1.406	06	50.000	1.460	07	100.000	1.469	08	150.000	1.454
09	200.000	1.403									

Initial Calibration - Detailed Report

Calibration ID: RC1400062 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Carbon Tetrachloride Average RF RSD = 7.6 Average RF = 0.1274

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1150	02	1.000	0.1276	03	2.000	0.1205	04	5.000	0.1240
05	10.000	0.1179	06	50.000	0.1238	07	100.000	0.1378	08	150.000	0.1420
09	200.000	0.1376									

Chlorobenzene Average RF RSD = 2.7 Average RF = 0.9640

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9164	02	1.000	0.9520	03	2.000	0.9738	04	5.000	0.9784
05	10.000	0.9472	06	50.000	0.9474	07	100.000	0.9968	08	150.000	0.9973
09	200.000	0.9671									

Chloroethane Average RF RSD = 2.6 Average RF = 0.3320

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3410	02	1.000	0.3293	03	2.000	0.3416	04	5.000	0.3341
05	10.000	0.3378	06	50.000	0.3327	07	100.000	0.3319	08	150.000	0.3268
09	200.000	0.3132									

Chloroform Average RF RSD = 4.2 Average RF = 0.8279

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8897	02	1.000	0.8677	03	2.000	0.8333	04	5.000	0.8272
05	10.000	0.8452	06	50.000	0.7861	07	100.000	0.8012	08	150.000	0.8076
09	200.000	0.7930									

Chloromethane Average RF RSD = 4.5 Average RF = 0.7175

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7430	02	1.000	0.6897	03	2.000	0.6771	04	5.000	0.6806
05	10.000	0.7672	06	50.000	0.7395	07	100.000	0.7395	08	150.000	0.7240
09	200.000	0.6966									

Cyclohexane Average RF RSD = 5.5 Average RF = 0.4527

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4964	02	1.000	0.4498	03	2.000	0.4809	04	5.000	0.4416
05	10.000	0.4140	06	50.000	0.4664	07	100.000	0.4384	08	150.000	0.4487
09	200.000	0.4384									

Cyclohexanone Average RF RSD = 12.3 Average RF = 0.04603

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.03458	02	20.000	0.03891	03	40.000	0.04578	04	100.000	0.04682
05	200.000	0.04994	06	1000.000	0.05054	07	2000.000	0.04900	08	3000.000	0.05118
09	4000.000	0.04750									

Dibromochloromethane Average RF RSD = 10.9 Average RF = 0.3054

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2648	02	1.000	0.2699	03	2.000	0.2753	04	5.000	0.2994
05	10.000	0.2882	06	50.000	0.3186	07	100.000	0.3388	08	150.000	0.3461
09	200.000	0.3473									

Dibromofluoromethane Average RF RSD = 2.2 Average RF = 0.3188

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.3253	04	60.000	0.3151	05	70.000	0.3253	07	100.000	0.3250
08	125.000	0.3112	09	150.000	0.3110						

Initial Calibration - Detailed Report

Calibration ID: RC1400062 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Dibromomethane Average RF RSD = 4.1 Average RF = 0.1717

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1793	02	1.000	0.1663	03	2.000	0.1870	04	5.000	0.1713
05	10.000	0.1675	06	50.000	0.1657	07	100.000	0.1702	08	150.000	0.1709
09	200.000	0.1676									

Dichlorodifluoromethane (CFC 12) Average RF RSD = 8.9 Average RF = 0.5381

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4942	02	1.000	0.5485	03	2.000	0.4794	04	5.000	0.4602
05	10.000	0.5654	06	50.000	0.5744	07	100.000	0.5890	08	150.000	0.5817
09	200.000	0.5504									

Dichlorofluoromethane (CFC 21) Average RF RSD = 2.8 Average RF = 0.9222

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9548	02	1.000	0.9324	03	2.000	0.9495	04	5.000	0.9206
05	10.000	0.9227	06	50.000	0.9412	07	100.000	0.8810	08	150.000	0.9108
09	200.000	0.8868									

Dichloromethane Average RF RSD = 6.0 Average RF = 0.4573

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4871	02	1.000	0.5054	03	2.000	0.4849	04	5.000	0.4477
05	10.000	0.4457	06	50.000	0.4347	07	100.000	0.4408	08	150.000	0.4399
09	200.000	0.4298									

Diethyl Ether Average RF RSD = 5.2 Average RF = 0.3910

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4251	02	1.000	0.4153	03	2.000	0.3878	04	5.000	0.3993
05	10.000	0.3993	06	50.000	0.3757	07	100.000	0.3728	08	150.000	0.3792
09	200.000	0.3642									

Diisopropyl Ether Average RF RSD = 5.5 Average RF = 2.181

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.992	02	1.000	2.067	03	2.000	2.182	04	5.000	2.223
05	10.000	2.394	06	50.000	2.285	07	100.000	2.208	08	150.000	2.176
09	200.000	2.102									

Ethyl Methacrylate Average RF RSD = 13.1 Average RF = 0.2657

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2325	02	1.000	0.2446	03	2.000	0.2258	04	5.000	0.2400
05	10.000	0.2480	06	50.000	0.2781	07	100.000	0.2969	08	150.000	0.3153
09	200.000	0.3100									

Ethyl tert-Butyl Ether Average RF RSD = 4.6 Average RF = 1.463

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.447	02	1.000	1.344	03	2.000	1.429	04	5.000	1.387
05	10.000	1.557	06	50.000	1.486	07	100.000	1.483	08	150.000	1.519
09	200.000	1.512									

Ethylbenzene Average RF RSD = 6.8 Average RF = 0.4804

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4418	02	1.000	0.4433	03	2.000	0.4482	04	5.000	0.4733
05	10.000	0.4752	06	50.000	0.4852	07	100.000	0.5209	08	150.000	0.5243
09	200.000	0.5112									

Initial Calibration - Detailed Report

Calibration ID: RC1400062 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Hexachlorobutadiene Average RF RSD = 4.0 Average RF = 0.3147

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3208	02	1.000	0.3132	03	2.000	0.2909	04	5.000	0.3104
05	10.000	0.3020	06	50.000	0.3183	07	100.000	0.3198	08	150.000	0.3328
09	200.000	0.3239									

Iodomethane Quadratic 1/X COD = 0.9908 $Y = 0.04189 X^2 + 0.3945 X + -0.03918$

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.09270	05	10.000	0.1525	06	50.000	0.3199	07	100.000	0.4944
08	150.000	0.5393	09	200.000	0.5301						

Isopropylbenzene (Cumene) Average RF RSD = 7.7 Average RF = 1.457

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.263	02	1.000	1.376	03	2.000	1.426	04	5.000	1.441
05	10.000	1.396	06	50.000	1.514	07	100.000	1.627	08	150.000	1.591
09	200.000	1.476									

Methacrylonitrile Average RF RSD = 14.1 Average RF = 0.1086

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.08756	02	1.000	0.08229	03	2.000	0.1019	04	5.000	0.1112
05	10.000	0.1077	06	50.000	0.1186	07	100.000	0.1215	08	150.000	0.1228
09	200.000	0.1237									

Methyl Acetate Average RF RSD = 5.4 Average RF = 0.3020

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2736	02	1.000	0.2828	03	2.000	0.3043	04	5.000	0.3102
05	10.000	0.3218	06	50.000	0.3246	07	100.000	0.3013	08	150.000	0.3000
09	200.000	0.2999									

Methyl Methacrylate Average RF RSD = 18.5 Average RF = 0.1265

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.07771	02	1.000	0.1430	03	2.000	0.1044	04	5.000	0.1166
05	10.000	0.1267	06	50.000	0.1342	07	100.000	0.1413	08	150.000	0.1495
09	200.000	0.1454									

Methyl tert-Butyl Ether Average RF RSD = 4.0 Average RF = 0.9984

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9383	02	1.000	0.9448	03	2.000	0.9733	04	5.000	0.9997
05	10.000	0.9967	06	50.000	1.010	07	100.000	1.034	08	150.000	1.052
09	200.000	1.037									

Methylcyclohexane Average RF RSD = 5.4 Average RF = 0.4697

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4470	02	1.000	0.4579	03	2.000	0.4810	04	5.000	0.4729
05	10.000	0.4164	06	50.000	0.4955	07	100.000	0.4772	08	150.000	0.4946
09	200.000	0.4848									

Naphthalene Average RF RSD = 15.3 Average RF = 1.321

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	1.104	03	2.000	1.004	04	5.000	1.202	05	10.000	1.289
06	50.000	1.449	07	100.000	1.491	08	150.000	1.542	09	200.000	1.486

Initial Calibration - Detailed Report

Calibration ID: RC1400062 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte	Curve Fit	Weighting		
Propionitrile	Linear	1/X	R2 = 0.9991	Y = 0.04878 X + -0.001783

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.01416	02	5.000	0.04207	03	10.000	0.03601	04	25.000	0.03956
05	50.000	0.04437	06	250.000	0.04887	07	500.000	0.04677	08	750.000	0.05005
09	1000.000	0.04872									

Styrene	Average RF	RSD = 12.4	Average RF = 0.9623

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7468	02	1.000	0.8480	03	2.000	0.8902	04	5.000	0.9342
05	10.000	0.9699	06	50.000	1.023	07	100.000	1.095	08	150.000	1.104
09	200.000	1.049									

Tetrachloroethene (PCE)	Average RF	RSD = 4.5	Average RF = 0.2891

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3021	02	1.000	0.2880	03	2.000	0.2711	04	5.000	0.2832
05	10.000	0.2704	06	50.000	0.2850	07	100.000	0.3031	08	150.000	0.3024
09	200.000	0.2970									

Tetrahydrofuran (THF)	Average RF	RSD = 4.3	Average RF = 0.1111

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1026	03	2.000	0.1138	04	5.000	0.1115	05	10.000	0.1048
06	50.000	0.1141	07	100.000	0.1125	08	150.000	0.1157	09	200.000	0.1141

Toluene	Average RF	RSD = 2.5	Average RF = 1.281

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.246	02	1.000	1.295	03	2.000	1.260	04	5.000	1.262
05	10.000	1.253	06	50.000	1.270	07	100.000	1.323	08	150.000	1.338
09	200.000	1.279									

Toluene-d8	Average RF	RSD = 2.2	Average RF = 1.123

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	1.159	04	60.000	1.105	05	70.000	1.140	07	100.000	1.133
08	125.000	1.106	09	150.000	1.094						

Trichloroethene (TCE)	Average RF	RSD = 3.6	Average RF = 0.3407

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3247	02	1.000	0.3409	03	2.000	0.3377	04	5.000	0.3364
05	10.000	0.3286	06	50.000	0.3323	07	100.000	0.3515	08	150.000	0.3619
09	200.000	0.3526									

Trichlorofluoromethane (CFC 11)	Average RF	RSD = 3.3	Average RF = 0.7423

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7879	02	1.000	0.7432	03	2.000	0.7252	04	5.000	0.7395
05	10.000	0.7016	06	50.000	0.7396	07	100.000	0.7599	08	150.000	0.7575
09	200.000	0.7266									

Vinyl Acetate	Average RF	RSD = 18.1	Average RF = 0.05589

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.03626	03	2.000	0.04476	04	5.000	0.05793	05	10.000	0.05835
06	50.000	0.05905	07	100.000	0.06563	08	150.000	0.06268	09	200.000	0.06250

Vinyl Chloride	Average RF	RSD = 3.7	Average RF = 0.6553

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6511	02	1.000	0.6983	03	2.000	0.6395	04	5.000	0.6148
05	10.000	0.6438	06	50.000	0.6582	07	100.000	0.6765	08	150.000	0.6713
09	200.000	0.6446									

Initial Calibration - Detailed Report

Calibration ID: RC1400062 **Instrument ID:** R-MS-10
Signal ID: I

Analyte **Curve Fit** **Weighting**

cis-1,2-Dichloroethene Average RF RSD = 4.0 Average RF = 0.4913

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4618	02	1.000	0.4589	03	2.000	0.5045	04	5.000	0.5140
05	10.000	0.5091	06	50.000	0.4873	07	100.000	0.4939	08	150.000	0.5008
09	200.000	0.4916									

cis-1,3-Dichloropropene Average RF RSD = 13.9 Average RF = 0.4120

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3343	02	1.000	0.3639	03	2.000	0.3613	04	5.000	0.3697
05	10.000	0.4089	06	50.000	0.4399	07	100.000	0.4685	08	150.000	0.4845
09	200.000	0.4765									

m,p-Xylenes Average RF RSD = 7.8 Average RF = 0.5924

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5081	02	2.000	0.5402	03	4.000	0.5776	04	10.000	0.6066
05	20.000	0.5903	06	100.000	0.6045	07	200.000	0.6497	08	300.000	0.6474
09	400.000	0.6075									

n-Butyl Acetate Average RF RSD = 13.3 Average RF = 0.4703

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3814	02	1.000	0.4167	03	2.000	0.4473	04	5.000	0.3995
05	10.000	0.4638	06	50.000	0.5284	07	100.000	0.5225	08	150.000	0.5408
09	200.000	0.5319									

n-Butylbenzene Average RF RSD = 11.6 Average RF = 1.960

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.520	02	1.000	1.779	03	2.000	1.835	04	5.000	1.921
05	10.000	1.941	06	50.000	2.116	07	100.000	2.212	08	150.000	2.214
09	200.000	2.104									

n-Heptane Average RF RSD = 7.6 Average RF = 0.4609

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4544	02	1.000	0.4668	03	2.000	0.4216	04	5.000	0.4287
05	10.000	0.4087	06	50.000	0.4829	07	100.000	0.4958	08	150.000	0.5082
09	200.000	0.4814									

n-Propylbenzene Average RF RSD = 6.0 Average RF = 3.120

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.799	02	1.000	2.961	03	2.000	3.080	04	5.000	3.158
05	10.000	3.135	06	50.000	3.277	07	100.000	3.431	08	150.000	3.243
09	200.000	2.999									

o-Xylene Average RF RSD = 8.8 Average RF = 0.5792

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5477	02	1.000	0.4764	03	2.000	0.5469	04	5.000	0.5779
05	10.000	0.5754	06	50.000	0.6051	07	100.000	0.6320	08	150.000	0.6378
09	200.000	0.6138									

sec-Butylbenzene Average RF RSD = 6.4 Average RF = 2.666

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.444	02	1.000	2.450	03	2.000	2.660	04	5.000	2.605
05	10.000	2.562	06	50.000	2.793	07	100.000	2.928	08	150.000	2.861
09	200.000	2.692									

Initial Calibration - Detailed Report

Calibration ID: RC1400062 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte	Curve Fit	Weighting							
tert-Amyl Methyl Ether	Average RF		RSD = 8.3		Average RF = 0.9868				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8467	02	1.000	0.9308	03	2.000	0.9110	04	5.000	0.9352
05	10.000	1.043	06	50.000	1.034	07	100.000	1.034	08	150.000	1.074
09	200.000	1.073									
tert-Butylbenzene	Average RF		RSD = 6.3		Average RF = 1.902				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.801	02	1.000	1.783	03	2.000	1.789	04	5.000	1.859
05	10.000	1.801	06	50.000	1.958	07	100.000	2.077	08	150.000	2.059
09	200.000	1.989									
trans-1,2-Dichloroethene	Average RF		RSD = 3.9		Average RF = 0.4493				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4824	02	1.000	0.4293	03	2.000	0.4260	04	5.000	0.4594
05	10.000	0.4594	06	50.000	0.4418	07	100.000	0.4512	08	150.000	0.4544
09	200.000	0.4398									
trans-1,3-Dichloropropene	Average RF		RSD = 17.8		Average RF = 0.3260				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2493	02	1.000	0.2700	03	2.000	0.2759	04	5.000	0.2990
05	10.000	0.3100	06	50.000	0.3489	07	100.000	0.3833	08	150.000	0.4005
09	200.000	0.3974									
trans-1,4-Dichloro-2-butene	Quadratic	1/X2	COD = 0.9957		$Y = 0.007435 X^2 + 0.06784 X + -2.039E-4$				
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.04966	02	1.000	0.05506	03	2.000	0.06137	04	5.000	0.06324
05	10.000	0.06641	06	50.000	0.08121	07	100.000	0.08676	08	150.000	0.09244
09	200.000	0.09235									

Initial Calibration - Detailed Report

Calibration ID:	RC1400062	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

1,1,1,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.9	02	1.000	0.88	-11.8	03	2.000	1.79	-10.7
04	5.000	4.75	-5.0	05	10.000	9.98	-0.2	06	50.000	51.12	2.2
07	100.000	110.30	10.3	08	150.000	168.35	12.2	09	200.000	221.54	10.8

1,1,1-Trichloroethane (TCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.0	02	1.000	0.98	-1.5	03	2.000	1.97	-1.3
04	5.000	5.02	0.5	05	10.000	9.57	-4.3	06	50.000	48.94	-2.1
07	100.000	102.77	2.8	08	150.000	155.16	3.4	09	200.000	203.10	1.6

1,1,2,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.4	02	1.000	0.95	-4.8	03	2.000	2.13	6.7
04	5.000	5.21	4.1	05	10.000	10.21	2.1	06	50.000	48.37	-3.3
07	100.000	100.69	0.7	08	150.000	150.87	0.6	09	200.000	196.51	-1.7

1,1,2-Trichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.4	02	1.000	1.04	4.4	03	2.000	1.96	-2.2
04	5.000	4.72	-5.5	05	10.000	10.07	0.7	06	50.000	49.30	-1.4
07	100.000	102.24	2.2	08	150.000	157.44	5.0	09	200.000	204.30	2.1

1,1,2-Trichlorotrifluoroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.8	02	1.000	1.10	9.7	03	2.000	1.96	-2.0
04	5.000	5.18	3.6	05	10.000	8.90	-11.0	06	50.000	47.99	-4.0
07	100.000	100.67	0.7	08	150.000	152.06	1.4	09	200.000	191.91	-4.0

1,1-Dichloroethane (1,1-DCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.7	02	1.000	0.99	-0.6	03	2.000	2.10	5.2
04	5.000	5.05	1.0	05	10.000	10.04	0.4	06	50.000	49.36	-1.3
07	100.000	99.86	-0.1	08	150.000	148.65	-0.9	09	200.000	194.11	-2.9

1,1-Dichloroethene (1,1-DCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.3	02	1.000	0.97	-3.3	03	2.000	2.14	7.1
04	5.000	5.07	1.4	05	10.000	9.14	-8.6	06	50.000	47.55	-4.9
07	100.000	100.25	0.2	08	150.000	154.36	2.9	09	200.000	195.66	-2.2

1,1-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.4	02	1.000	0.93	-7.5	03	2.000	1.99	-0.4
04	5.000	4.94	-1.2	05	10.000	9.33	-6.7	06	50.000	48.78	-2.4
07	100.000	104.16	4.2	08	150.000	156.76	4.5	09	200.000	202.32	1.2

Initial Calibration - Detailed Report

Calibration ID: RC1400062 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte

1,2,3-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-12.4	02	1.000	0.90	-9.9	03	2.000	1.83	-8.3
04	5.000	4.54	-9.1	05	10.000	10.14	1.4	06	50.000	53.21	6.4
07	100.000	107.90	7.9	08	150.000	169.64	13.1	09	200.000	221.75	10.9

1,2,3-Trichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	17.9	02	1.000	0.98	-1.7	03	2.000	2.23	11.5
04	5.000	5.03	0.6	05	10.000	9.36	-6.4	06	50.000	46.23	-7.5
07	100.000	95.97	-4.0	08	150.000	140.26	-6.5	09	200.000	192.50	-3.8

1,2,4-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.7	02	1.000	0.95	-5.2	03	2.000	1.91	-4.7
04	5.000	4.81	-3.8	05	10.000	9.96	-0.4	06	50.000	51.12	2.2
07	100.000	105.03	5.0	08	150.000	162.05	8.0	09	200.000	210.96	5.5

1,2,4-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.7	02	1.000	0.89	-11.0	03	2.000	1.91	-4.3
04	5.000	5.07	1.5	05	10.000	10.07	0.7	06	50.000	51.78	3.6
07	100.000	109.23	9.2	08	150.000	160.75	7.2	09	200.000	205.89	2.9

1,2-Dibromo-3-chloropropane (DBCP)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.39	-21.4	02	1.000	0.79	-20.8	03	2.000	1.77	-11.3
04	5.000	4.54	-9.3	05	10.000	9.38	-6.2	06	50.000	54.10	8.2
07	100.000	116.94	16.9	08	150.000	182.52	21.7	09	200.000	244.27	22.1

1,2-Dibromoethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.3	02	1.000	0.86	-13.7	03	2.000	1.96	-1.8
04	5.000	5.01	0.2	05	10.000	9.49	-5.1	06	50.000	51.51	3.0
07	100.000	106.06	6.1	08	150.000	159.25	6.2	09	200.000	209.55	4.8

1,2-Dichloro-1,1,2-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.4	02	1.000	1.03	2.8	03	2.000	2.08	4.2
04	5.000	5.02	0.4	05	10.000	9.64	-3.6	06	50.000	52.53	5.1
07	100.000	97.68	-2.3	08	150.000	148.91	-0.7	09	200.000	193.29	-3.4

1,2-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.6	02	1.000	0.99	-0.6	03	2.000	1.92	-4.2
04	5.000	5.01	0.2	05	10.000	9.91	-0.9	06	50.000	49.62	-0.8
07	100.000	102.84	2.8	08	150.000	155.99	4.0	09	200.000	201.99	1.0

Initial Calibration - Detailed Report

Calibration ID:	RC1400062	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

1,2-Dichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.1	02	1.000	0.98	-1.7	03	2.000	1.91	-4.3
04	5.000	5.16	3.1	05	10.000	10.13	1.3	06	50.000	49.58	-0.8
07	100.000	100.67	0.7	08	150.000	151.85	1.2	09	200.000	194.73	-2.6

1,2-Dichloroethane-d4

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	50.75	1.5	04	60.000	61.64	2.7	05	70.000	72.65	3.8
07	100.000	100.55	0.6	08	125.000	121.19	-3.0	09	150.000	141.72	-5.5

1,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-3.0	02	1.000	0.92	-7.9	03	2.000	2.07	3.4
04	5.000	4.97	-0.7	05	10.000	9.82	-1.8	06	50.000	49.93	-0.1
07	100.000	103.16	3.2	08	150.000	156.87	4.6	09	200.000	204.64	2.3

1,3,5-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.3	02	1.000	0.90	-10.5	03	2.000	1.92	-4.0
04	5.000	4.77	-4.7	05	10.000	9.84	-1.6	06	50.000	51.74	3.5
07	100.000	101.77	1.8	08	150.000	157.52	5.0	09	200.000	206.31	3.2

1,3,5-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.5	02	1.000	0.94	-5.6	03	2.000	1.96	-1.8
04	5.000	4.84	-3.2	05	10.000	9.73	-2.7	06	50.000	51.25	2.5
07	100.000	109.33	9.3	08	150.000	160.99	7.3	09	200.000	203.44	1.7

1,3-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.8	02	1.000	0.94	-6.1	03	2.000	1.96	-1.9
04	5.000	4.91	-1.8	05	10.000	9.99	-0.1	06	50.000	50.23	0.5
07	100.000	105.76	5.8	08	150.000	158.21	5.5	09	200.000	207.96	4.0

1,3-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.1	02	1.000	0.99	-1.3	03	2.000	1.99	-0.4
04	5.000	4.93	-1.4	05	10.000	9.85	-1.5	06	50.000	49.93	-0.1
07	100.000	101.32	1.3	08	150.000	151.60	1.1	09	200.000	198.37	-0.8

1,4-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.2	02	1.000	0.96	-4.0	03	2.000	1.99	-0.4
04	5.000	4.98	-0.5	05	10.000	9.92	-0.8	06	50.000	49.46	-1.1
07	100.000	102.25	2.3	08	150.000	154.69	3.1	09	200.000	202.31	1.2

Initial Calibration - Detailed Report

Calibration ID: RC1400062 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte

1,4-Dioxane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	16.29	-18.5	03	40.000	42.03	5.1	04	100.000	101.51	1.5
05	200.000	220.42	10.2	06	1000.000	972.09	-2.8	07	2000.000	1,906.34	-4.7
08	3000.000	3,183.77	6.1	09	4000.000	4,123.39	3.1				

1-Butanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	50.000	50.51	1.0	03	100.000	100.50	0.5	04	250.000	229.54	-8.2
05	500.000	515.33	3.1	06	2500.000	2,576.95	3.1	07	5000.000	4,982.17	-0.4
08	7500.000	7,650.84	2.0	09	10000.000	9,835.61	-1.6				

1-Chloro-4-(trifluoromethyl)benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.2	02	1.000	0.93	-6.6	03	2.000	1.90	-4.9
04	5.000	4.85	-2.9	05	10.000	9.44	-5.6	06	50.000	52.00	4.0
07	100.000	106.19	6.2	08	150.000	164.67	9.8	09	200.000	214.49	7.2

2,2-Dichloro-1,1,1-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.9	02	1.000	1.08	7.9	03	2.000	2.09	4.4
04	5.000	4.91	-1.8	05	10.000	9.19	-8.1	06	50.000	50.40	0.8
07	100.000	95.06	-4.9	08	150.000	146.97	-2.0	09	200.000	193.59	-3.2

2,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.9	02	1.000	0.90	-9.7	03	2.000	1.88	-6.1
04	5.000	4.66	-6.9	05	10.000	9.06	-9.4	06	50.000	51.07	2.1
07	100.000	109.13	9.1	08	150.000	170.93	14.0	09	200.000	223.68	11.8

2,3,6-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.41	-18.4	02	1.000	0.97	-3.2	03	2.000	1.93	-3.4
04	5.000	4.37	-12.6	05	10.000	10.05	0.5	06	50.000	52.01	4.0
07	100.000	104.46	4.5	08	150.000	170.09	13.4	09	200.000	230.23	15.1

2,4,5-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.40	-20.5	02	1.000	0.76	-23.6	03	2.000	1.64	-17.9
04	5.000	4.61	-7.9	05	10.000	10.16	1.6	06	50.000	56.04	12.1
07	100.000	112.38	12.4	08	150.000	183.37	22.2	09	200.000	243.15	21.6

2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.500	1.25	-16.4	02	3.000	2.70	-10.0	03	6.000	5.62	-6.3
04	15.000	14.63	-2.5	05	30.000	30.93	3.1	06	150.000	164.13	9.4
07	300.000	325.70	8.6	08	450.000	493.00	9.6	09	600.000	626.82	4.5

Initial Calibration - Detailed Report

Calibration ID:	RC1400062	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

2,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.0	02	1.000	0.93	-7.5	03	2.000	1.83	-8.6
04	5.000	4.79	-4.3	05	10.000	9.74	-2.6	06	50.000	52.64	5.3
07	100.000	104.98	5.0	08	150.000	163.22	8.8	09	200.000	217.83	8.9

2,5-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.58	15.2	02	1.000	0.95	-5.0	03	2.000	2.03	1.6
04	5.000	4.40	-12.1	05	10.000	9.13	-8.7	06	50.000	49.96	-0.1
07	100.000	101.10	1.1	08	150.000	156.79	4.5	09	200.000	207.05	3.5

2-Butanone (MEK)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.90	-5.1	04	5.000	4.57	-8.6	05	10.000	10.02	0.2
06	50.000	54.85	9.7	07	100.000	101.93	1.9	08	150.000	154.93	3.3
09	200.000	197.12	-1.4								

2-Chloro-1,3-butadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-7.0	02	1.000	0.93	-7.5	03	2.000	1.99	-0.4
04	5.000	5.15	3.0	05	10.000	9.76	-2.4	06	50.000	51.91	3.8
07	100.000	105.06	5.1	08	150.000	155.67	3.8	09	200.000	203.25	1.6

2-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.7	02	1.000	0.89	-11.0	03	2.000	1.90	-5.1
04	5.000	4.81	-3.9	05	10.000	9.68	-3.2	06	50.000	51.98	4.0
07	100.000	105.63	5.6	08	150.000	164.78	9.9	09	200.000	210.83	5.4

2-Chloroethyl Vinyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.77	-23.1	03	2.000	1.50	-25.0	04	5.000	4.41	-11.7
05	10.000	9.36	-6.4	06	50.000	55.89	11.8	07	100.000	117.57	17.6
08	150.000	178.63	19.1	09	200.000	235.56	17.8				

2-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.5	02	1.000	0.95	-5.0	03	2.000	1.96	-1.8
04	5.000	5.04	0.8	05	10.000	10.07	0.7	06	50.000	50.20	0.4
07	100.000	106.82	6.8	08	150.000	156.49	4.3	09	200.000	202.22	1.1

2-Hexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.82	-9.0	04	5.000	4.74	-5.3	05	10.000	8.66	-13.4
06	50.000	53.81	7.6	07	100.000	105.94	5.9	08	150.000	162.24	8.2
09	200.000	211.86	5.9								

Initial Calibration - Detailed Report

Calibration ID:	RC1400062	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

2-Methyl-1-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	17.05	-14.8	03	40.000	36.18	-9.5	04	100.000	78.86	-21.1
05	200.000	176.61	-11.7	06	1000.000	1,035.18	3.5	07	2000.000	2,189.80	9.5
08	3000.000	3,676.51	22.6	09	4000.000	4,863.64	21.6				

2-Methyl-2-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	7.42	-25.8	02	20.000	18.76	-6.2	03	40.000	35.45	-11.4
04	100.000	93.10	-6.9	05	200.000	203.64	1.8	06	1000.000	1,035.71	3.6
07	2000.000	2,100.84	5.0	08	3000.000	3,608.65	20.3	09	4000.000	4,781.53	19.5

2-Nitropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	2.000	2.56	28.1	03	4.000	3.95	-1.3	04	10.000	7.61	-23.9
05	20.000	17.32	-13.4	06	100.000	94.31	-5.7	07	200.000	204.17	2.1
08	300.000	322.16	7.4	09	400.000	426.73	6.7				

2-Propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	10.70	7.0	02	20.000	20.30	1.5	03	40.000	33.29	-16.8
04	100.000	81.84	-18.2	05	200.000	205.48	2.7	06	1000.000	1,036.50	3.6
07	2000.000	2,025.96	1.3	08	3000.000	3,309.83	10.3	09	4000.000	4,337.45	8.4

3,4- and 2,3-Dichlorotoluene Coelution

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	0.83	-17.0	02	2.000	1.84	-8.0	03	4.000	3.68	-8.1
04	10.000	9.88	-1.2	05	20.000	21.23	6.1	06	100.000	110.01	10.0
07	200.000	217.38	8.7	08	300.000	322.30	7.4	09	400.000	407.99	2.0

3,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.2	02	1.000	0.99	-1.3	03	2.000	1.89	-5.3
04	5.000	4.95	-0.9	05	10.000	9.32	-6.8	06	50.000	51.30	2.6
07	100.000	105.35	5.3	08	150.000	162.20	8.1	09	200.000	215.03	7.5

3-Chloro-1-propene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.41	-17.4	02	1.000	0.97	-2.6	03	2.000	2.02	1.2
04	5.000	4.81	-3.8	05	10.000	9.74	-2.6	06	50.000	53.04	6.1
07	100.000	110.29	10.3	08	150.000	161.61	7.7	09	200.000	202.20	1.1

3-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.3	02	1.000	0.96	-4.0	03	2.000	1.84	-7.9
04	5.000	4.88	-2.4	05	10.000	9.15	-8.5	06	50.000	52.41	4.8
07	100.000	106.91	6.9	08	150.000	164.75	9.8	09	200.000	215.18	7.6

Initial Calibration - Detailed Report

Calibration ID: RC1400062 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte

3-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.9	02	1.000	0.94	-6.1	03	2.000	1.91	-4.3
04	5.000	4.94	-1.2	05	10.000	10.48	4.8	06	50.000	51.45	2.9
07	100.000	104.32	4.3	08	150.000	154.52	3.0	09	200.000	201.06	0.5

4-Bromofluorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	50.98	2.0	04	60.000	58.66	-2.2	05	70.000	71.05	1.5
07	100.000	102.39	2.4	08	125.000	126.23	1.0	09	150.000	143.09	-4.6

4-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.3	02	1.000	1.02	1.8	03	2.000	2.03	1.6
04	5.000	4.99	-0.1	05	10.000	9.59	-4.1	06	50.000	49.12	-1.8
07	100.000	105.07	5.1	08	150.000	154.25	2.8	09	200.000	197.91	-1.0

4-Isopropyltoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.43	-13.5	02	1.000	0.89	-10.5	03	2.000	1.93	-3.4
04	5.000	4.84	-3.2	05	10.000	9.89	-1.1	06	50.000	52.88	5.8
07	100.000	112.06	12.1	08	150.000	164.05	9.4	09	200.000	208.92	4.5

4-Methyl-2-pentanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.71	-14.3	04	5.000	4.54	-9.2	05	10.000	9.44	-5.6
06	50.000	52.79	5.6	07	100.000	106.76	6.8	08	150.000	164.20	9.5
09	200.000	214.63	7.3								

Acetone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	2.63	31.7	04	5.000	5.06	1.1	05	10.000	10.75	7.5
06	50.000	45.03	-9.9	07	100.000	83.38	-16.6	08	150.000	143.22	-4.5
09	200.000	181.49	-9.3								

Acetonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.15	-13.9	02	5.000	4.94	-1.2	03	10.000	10.19	1.9
04	25.000	22.91	-8.4	05	50.000	55.73	11.5	06	250.000	244.42	-2.2
07	500.000	515.83	3.2	08	750.000	818.65	9.2	09	1000.000	999.74	0.0

Acrolein

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	3.00	20.0	02	5.000	5.27	5.3	03	10.000	9.86	-1.4
04	25.000	23.90	-4.4	05	50.000	46.59	-6.8	06	250.000	247.78	-0.9
07	500.000	480.97	-3.8	08	750.000	729.20	-2.8	09	1000.000	947.53	-5.2

Initial Calibration - Detailed Report

Calibration ID:	RC1400062	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

Acrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.09	-16.5	02	5.000	5.12	2.3	03	10.000	10.48	4.8
04	25.000	25.54	2.2	05	50.000	52.53	5.1	06	250.000	253.38	1.4
07	500.000	505.50	1.1	08	750.000	757.45	1.0	09	1000.000	986.54	-1.3

Benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-8.2	02	1.000	0.99	-1.0	03	2.000	1.95	-2.3
04	5.000	4.99	-0.2	05	10.000	10.19	1.9	06	50.000	49.91	-0.2
07	100.000	103.59	3.6	08	150.000	156.96	4.6	09	200.000	203.50	1.8

Bromobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-1.0	02	1.000	0.98	-1.7	03	2.000	2.11	5.7
04	5.000	4.90	-2.0	05	10.000	9.84	-1.6	06	50.000	48.66	-2.7
07	100.000	102.91	2.9	08	150.000	150.40	0.3	09	200.000	200.41	0.2

Bromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.3	02	1.000	1.10	9.6	03	2.000	2.01	0.4
04	5.000	5.17	3.5	05	10.000	10.12	1.2	06	50.000	48.12	-3.8
07	100.000	95.67	-4.3	08	150.000	142.92	-4.7	09	200.000	187.49	-6.3

Bromodichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-10.6	02	1.000	0.98	-1.9	03	2.000	2.07	3.4
04	5.000	4.86	-2.7	05	10.000	9.90	-1.0	06	50.000	49.76	-0.5
07	100.000	104.02	4.0	08	150.000	158.67	5.8	09	200.000	207.08	3.5

Bromoform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.9	02	1.000	0.78	-22.4	03	2.000	1.79	-10.5
04	5.000	4.93	-1.4	05	10.000	9.58	-4.2	06	50.000	51.01	2.0
07	100.000	111.29	11.3	08	150.000	175.18	16.8	09	200.000	230.56	15.3

Bromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.0	02	1.000	0.89	-11.4	03	2.000	1.84	-7.9
04	5.000	4.57	-8.7	05	10.000	10.91	9.1	06	50.000	52.35	4.7
07	100.000	106.88	6.9	08	150.000	151.27	0.8	09	200.000	192.29	-3.9

Carbon Disulfide

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.6	02	1.000	1.03	2.8	03	2.000	2.06	3.2
04	5.000	4.97	-0.5	05	10.000	9.54	-4.6	06	50.000	49.52	-1.0
07	100.000	99.63	-0.4	08	150.000	147.90	-1.4	09	200.000	190.30	-4.9

Initial Calibration - Detailed Report

Calibration ID:	RC1400062	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

Carbon Tetrachloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.7	02	1.000	1.00	0.2	03	2.000	1.89	-5.4
04	5.000	4.87	-2.7	05	10.000	9.26	-7.4	06	50.000	48.60	-2.8
07	100.000	108.21	8.2	08	150.000	167.28	11.5	09	200.000	216.03	8.0

Chlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.9	02	1.000	0.99	-1.3	03	2.000	2.02	1.0
04	5.000	5.07	1.5	05	10.000	9.83	-1.7	06	50.000	49.14	-1.7
07	100.000	103.40	3.4	08	150.000	155.18	3.5	09	200.000	200.64	0.3

Chloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.7	02	1.000	0.99	-0.8	03	2.000	2.06	2.9
04	5.000	5.03	0.6	05	10.000	10.17	1.7	06	50.000	50.09	0.2
07	100.000	99.96	0.0	08	150.000	147.64	-1.6	09	200.000	188.64	-5.7

Chloroform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.5	02	1.000	1.05	4.8	03	2.000	2.01	0.6
04	5.000	5.00	-0.1	05	10.000	10.21	2.1	06	50.000	47.48	-5.0
07	100.000	96.77	-3.2	08	150.000	146.32	-2.5	09	200.000	191.57	-4.2

Chloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.6	02	1.000	0.96	-3.9	03	2.000	1.89	-5.6
04	5.000	4.74	-5.1	05	10.000	10.69	6.9	06	50.000	51.53	3.1
07	100.000	103.07	3.1	08	150.000	151.36	0.9	09	200.000	194.18	-2.9

Cyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.6	02	1.000	0.99	-0.6	03	2.000	2.12	6.2
04	5.000	4.88	-2.5	05	10.000	9.15	-8.5	06	50.000	51.51	3.0
07	100.000	96.82	-3.2	08	150.000	148.65	-0.9	09	200.000	193.67	-3.2

Cyclohexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	7.51	-24.9	02	20.000	16.91	-15.5	03	40.000	39.78	-0.5
04	100.000	101.72	1.7	05	200.000	217.02	8.5	06	1000.000	1,098.03	9.8
07	2000.000	2,129.22	6.5	08	3000.000	3,335.60	11.2	09	4000.000	4,127.84	3.2

Dibromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.43	-13.3	02	1.000	0.88	-11.6	03	2.000	1.80	-9.9
04	5.000	4.90	-2.0	05	10.000	9.44	-5.6	06	50.000	52.17	4.3
07	100.000	110.96	11.0	08	150.000	170.00	13.3	09	200.000	227.44	13.7

Initial Calibration - Detailed Report

Calibration ID:	RC1400062	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

Dibromofluoromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	51.02	2.0	04	60.000	59.31	-1.2	05	70.000	71.42	2.0
07	100.000	101.95	1.9	08	125.000	121.99	-2.4	09	150.000	146.32	-2.5

Dibromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.4	02	1.000	0.97	-3.2	03	2.000	2.18	8.9
04	5.000	4.99	-0.3	05	10.000	9.75	-2.5	06	50.000	48.25	-3.5
07	100.000	99.09	-0.9	08	150.000	149.22	-0.5	09	200.000	195.16	-2.4

Dichlorodifluoromethane (CFC 12)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-8.2	02	1.000	1.02	1.9	03	2.000	1.78	-10.9
04	5.000	4.28	-14.5	05	10.000	10.51	5.1	06	50.000	53.37	6.7
07	100.000	109.46	9.5	08	150.000	162.14	8.1	09	200.000	204.56	2.3

Dichlorofluoromethane (CFC 21)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.5	02	1.000	1.01	1.1	03	2.000	2.06	3.0
04	5.000	4.99	-0.2	05	10.000	10.01	0.1	06	50.000	51.03	2.1
07	100.000	95.53	-4.5	08	150.000	148.15	-1.2	09	200.000	192.33	-3.8

Dichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.5	02	1.000	1.11	10.5	03	2.000	2.12	6.0
04	5.000	4.90	-2.1	05	10.000	9.75	-2.5	06	50.000	47.53	-4.9
07	100.000	96.38	-3.6	08	150.000	144.27	-3.8	09	200.000	187.97	-6.0

Diethyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.7	02	1.000	1.06	6.2	03	2.000	1.98	-0.8
04	5.000	5.11	2.1	05	10.000	10.21	2.1	06	50.000	48.05	-3.9
07	100.000	95.36	-4.6	08	150.000	145.47	-3.0	09	200.000	186.30	-6.8

Diisopropyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-8.6	02	1.000	0.95	-5.2	03	2.000	2.00	0.1
04	5.000	5.10	1.9	05	10.000	10.97	9.7	06	50.000	52.39	4.8
07	100.000	101.22	1.2	08	150.000	149.68	-0.2	09	200.000	192.73	-3.6

Ethyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-12.5	02	1.000	0.92	-7.9	03	2.000	1.70	-15.0
04	5.000	4.52	-9.7	05	10.000	9.33	-6.7	06	50.000	52.34	4.7
07	100.000	111.75	11.8	08	150.000	178.02	18.7	09	200.000	233.33	16.7

Initial Calibration - Detailed Report

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		Signal ID:	1

Analyte

Ethyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.1	02	1.000	0.92	-8.1	03	2.000	1.95	-2.3
04	5.000	4.74	-5.2	05	10.000	10.65	6.5	06	50.000	50.81	1.6
07	100.000	101.41	1.4	08	150.000	155.77	3.8	09	200.000	206.76	3.4

Ethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-8.0	02	1.000	0.92	-7.7	03	2.000	1.87	-6.7
04	5.000	4.93	-1.5	05	10.000	9.89	-1.1	06	50.000	50.51	1.0
07	100.000	108.43	8.4	08	150.000	163.72	9.1	09	200.000	212.81	6.4

Hexachlorobutadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.0	02	1.000	1.00	-0.5	03	2.000	1.85	-7.6
04	5.000	4.93	-1.4	05	10.000	9.60	-4.0	06	50.000	50.57	1.1
07	100.000	101.62	1.6	08	150.000	158.64	5.8	09	200.000	205.88	2.9

Iodomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	5.000	6.06	21.3	05	10.000	8.67	-13.3	06	50.000	41.80	-16.4
07	100.000	106.30	6.3	08	150.000	157.41	4.9	09	200.000	193.88	-3.1

Isopropylbenzene (Cumene)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.43	-13.3	02	1.000	0.94	-5.6	03	2.000	1.96	-2.1
04	5.000	4.95	-1.1	05	10.000	9.59	-4.1	06	50.000	51.96	3.9
07	100.000	111.70	11.7	08	150.000	163.84	9.2	09	200.000	202.66	1.3

Methacrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.40	-19.4	02	1.000	0.76	-24.2	03	2.000	1.88	-6.2
04	5.000	5.12	2.4	05	10.000	9.92	-0.8	06	50.000	54.63	9.3
07	100.000	111.91	11.9	08	150.000	169.63	13.1	09	200.000	227.85	13.9

Methyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.4	02	1.000	0.94	-6.4	03	2.000	2.02	0.8
04	5.000	5.13	2.7	05	10.000	10.65	6.5	06	50.000	53.73	7.5
07	100.000	99.76	-0.2	08	150.000	149.00	-0.7	09	200.000	198.57	-0.7

Methyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.31	-38.6	02	1.000	1.13	13.0	03	2.000	1.65	-17.5
04	5.000	4.61	-7.9	05	10.000	10.02	0.2	06	50.000	53.03	6.1
07	100.000	111.68	11.7	08	150.000	177.22	18.1	09	200.000	229.88	14.9

Initial Calibration - Detailed Report

Calibration ID:	RC1400062	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

Methyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.0	02	1.000	0.95	-5.4	03	2.000	1.95	-2.5
04	5.000	5.01	0.1	05	10.000	9.98	-0.2	06	50.000	50.59	1.2
07	100.000	103.52	3.5	08	150.000	158.05	5.4	09	200.000	207.80	3.9

Methylcyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.8	02	1.000	0.97	-2.5	03	2.000	2.05	2.4
04	5.000	5.03	0.7	05	10.000	8.87	-11.3	06	50.000	52.74	5.5
07	100.000	101.59	1.6	08	150.000	157.95	5.3	09	200.000	206.44	3.2

Naphthalene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.84	-16.4	03	2.000	1.52	-24.0	04	5.000	4.55	-9.0
05	10.000	9.76	-2.4	06	50.000	54.86	9.7	07	100.000	112.86	12.9
08	150.000	175.06	16.7	09	200.000	225.06	12.5				

Propionitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.55	2.1	02	5.000	6.14	22.8	03	10.000	9.21	-7.9
04	25.000	22.10	-11.6	05	50.000	47.30	-5.4	06	250.000	252.26	0.9
07	500.000	481.16	-3.8	08	750.000	771.31	2.8	09	1000.000	1,000.46	0.0

Styrene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.39	-22.4	02	1.000	0.88	-11.9	03	2.000	1.85	-7.5
04	5.000	4.85	-2.9	05	10.000	10.08	0.8	06	50.000	53.15	6.3
07	100.000	113.83	13.8	08	150.000	172.15	14.8	09	200.000	217.99	9.0

Tetrachloroethene (PCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.5	02	1.000	1.00	-0.4	03	2.000	1.88	-6.2
04	5.000	4.90	-2.0	05	10.000	9.35	-6.5	06	50.000	49.29	-1.4
07	100.000	104.83	4.8	08	150.000	156.86	4.6	09	200.000	205.41	2.7

Tetrahydrofuran (THF)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.92	-7.7	03	2.000	2.05	2.4	04	5.000	5.02	0.4
05	10.000	9.43	-5.7	06	50.000	51.35	2.7	07	100.000	101.24	1.2
08	150.000	156.13	4.1	09	200.000	205.27	2.6				

Toluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.7	02	1.000	1.01	1.1	03	2.000	1.97	-1.6
04	5.000	4.93	-1.4	05	10.000	9.78	-2.2	06	50.000	49.60	-0.8
07	100.000	103.27	3.3	08	150.000	156.75	4.5	09	200.000	199.67	-0.2

Initial Calibration - Detailed Report

Calibration ID:	RC1400062	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

Toluene-d8

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	51.62	3.2	04	60.000	59.06	-1.6	05	70.000	71.05	1.5
07	100.000	100.87	0.9	08	125.000	123.16	-1.5	09	150.000	146.13	-2.6

Trichloroethene (TCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.7	02	1.000	1.00	0.0	03	2.000	1.98	-0.9
04	5.000	4.94	-1.3	05	10.000	9.64	-3.6	06	50.000	48.76	-2.5
07	100.000	103.17	3.2	08	150.000	159.32	6.2	09	200.000	206.97	3.5

Trichlorofluoromethane (CFC 11)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.1	02	1.000	1.00	0.1	03	2.000	1.95	-2.3
04	5.000	4.98	-0.4	05	10.000	9.45	-5.5	06	50.000	49.82	-0.4
07	100.000	102.36	2.4	08	150.000	153.07	2.0	09	200.000	195.77	-2.1

Vinyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.65	-35.1	03	2.000	1.60	-19.9	04	5.000	5.18	3.6
05	10.000	10.44	4.4	06	50.000	52.82	5.6	07	100.000	117.41	17.4
08	150.000	168.21	12.1	09	200.000	223.65	11.8				

Vinyl Chloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.6	02	1.000	1.07	6.5	03	2.000	1.95	-2.4
04	5.000	4.69	-6.2	05	10.000	9.82	-1.8	06	50.000	50.22	0.4
07	100.000	103.24	3.2	08	150.000	153.66	2.4	09	200.000	196.73	-1.6

cis-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.0	02	1.000	0.93	-6.6	03	2.000	2.05	2.7
04	5.000	5.23	4.6	05	10.000	10.36	3.6	06	50.000	49.59	-0.8
07	100.000	100.53	0.5	08	150.000	152.90	1.9	09	200.000	200.12	0.1

cis-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.41	-18.9	02	1.000	0.88	-11.7	03	2.000	1.75	-12.3
04	5.000	4.49	-10.2	05	10.000	9.93	-0.7	06	50.000	53.40	6.8
07	100.000	113.72	13.7	08	150.000	176.43	17.6	09	200.000	231.35	15.7

m,p-Xylenes

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	0.86	-14.2	02	2.000	1.82	-8.8	03	4.000	3.90	-2.5
04	10.000	10.24	2.4	05	20.000	19.93	-0.4	06	100.000	102.03	2.0
07	200.000	219.33	9.7	08	300.000	327.85	9.3	09	400.000	410.17	2.5

Initial Calibration - Detailed Report

Calibration ID:	RC1400062	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

n-Butyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.41	-18.9	02	1.000	0.89	-11.4	03	2.000	1.90	-4.9
04	5.000	4.25	-15.0	05	10.000	9.86	-1.4	06	50.000	56.18	12.4
07	100.000	111.12	11.1	08	150.000	172.49	15.0	09	200.000	226.20	13.1

n-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.39	-22.5	02	1.000	0.91	-9.2	03	2.000	1.87	-6.4
04	5.000	4.90	-2.0	05	10.000	9.90	-1.0	06	50.000	53.97	7.9
07	100.000	112.84	12.8	08	150.000	169.42	12.9	09	200.000	214.69	7.3

n-Heptane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.4	02	1.000	1.01	1.3	03	2.000	1.83	-8.5
04	5.000	4.65	-7.0	05	10.000	8.87	-11.3	06	50.000	52.39	4.8
07	100.000	107.55	7.6	08	150.000	165.39	10.3	09	200.000	208.87	4.4

n-Propylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-10.3	02	1.000	0.95	-5.1	03	2.000	1.97	-1.3
04	5.000	5.06	1.2	05	10.000	10.05	0.5	06	50.000	52.51	5.0
07	100.000	109.97	10.0	08	150.000	155.90	3.9	09	200.000	192.20	-3.9

o-Xylene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.4	02	1.000	0.82	-17.8	03	2.000	1.89	-5.6
04	5.000	4.99	-0.2	05	10.000	9.93	-0.7	06	50.000	52.23	4.5
07	100.000	109.10	9.1	08	150.000	165.18	10.1	09	200.000	211.95	6.0

sec-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-8.3	02	1.000	0.92	-8.1	03	2.000	2.00	-0.2
04	5.000	4.88	-2.3	05	10.000	9.61	-3.9	06	50.000	52.39	4.8
07	100.000	109.84	9.8	08	150.000	160.95	7.3	09	200.000	201.90	1.0

tert-Amyl Methyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.43	-14.2	02	1.000	0.94	-5.7	03	2.000	1.85	-7.7
04	5.000	4.74	-5.2	05	10.000	10.57	5.7	06	50.000	52.37	4.7
07	100.000	104.78	4.8	08	150.000	163.18	8.8	09	200.000	217.50	8.7

tert-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.3	02	1.000	0.94	-6.2	03	2.000	1.88	-5.9
04	5.000	4.89	-2.3	05	10.000	9.47	-5.3	06	50.000	51.49	3.0
07	100.000	109.23	9.2	08	150.000	162.38	8.3	09	200.000	209.20	4.6

Initial Calibration - Detailed Report

Calibration ID:	RC1400062	**Instrument ID:**	R-MS-10
		Signal ID:	1

Analyte

trans-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.4	02	1.000	0.96	-4.5	03	2.000	1.90	-5.2
04	5.000	5.11	2.3	05	10.000	10.22	2.2	06	50.000	49.16	-1.7
07	100.000	100.43	0.4	08	150.000	151.69	1.1	09	200.000	195.77	-2.1

trans-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.38	-23.5	02	1.000	0.83	-17.2	03	2.000	1.69	-15.4
04	5.000	4.59	-8.3	05	10.000	9.51	-4.9	06	50.000	53.51	7.0
07	100.000	117.57	17.6	08	150.000	184.27	22.8	09	200.000	243.79	21.9

trans-1,4-Dichloro-2-butene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.1	02	1.000	0.96	-4.0	03	2.000	1.95	-2.4
04	5.000	4.76	-4.8	05	10.000	9.73	-2.7	06	50.000	53.69	7.4
07	100.000	104.23	4.2	08	150.000	153.13	2.1	09	200.000	191.79	-4.1

Quantitation Report (QT Reviewed)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 16:13:30 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration

FV 7/22/14

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	935323	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1383304	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1262685	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	659289	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.324	113	453295	54.98	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 109.96%				
48) surr1,1,2-dichloroetha...	4.854	65	473241	57.92	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 115.84%				
65) SURR3,Toluene-d8	7.433	98	1591336	49.98	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.96%				
70) SURR2,BFB	9.878	95	623027	49.69	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.38%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.191	85	4622	0.53	ug/L		89
3) Chloromethane	1.294	50	6949	0.64	ug/L		99
4) Vinyl Chloride	1.361	62	6090	0.54	ug/L		89
5) Bromomethane	1.562	94	1354	0.33	ug/L	#	68
6) Chloroethane	1.617	64	3189	0.52	ug/L		95
7) Freon 21	1.721	67	8930	0.54	ug/L		95
8) Trichlorofluoromethane	1.770	101	7369	0.60	ug/L	#	73
9) Diethyl Ether	1.940	59	3976	0.57	ug/L	#	71
10) Freon 123a	1.934	67	5302m	0.50	ug/L		
11) Freon 123	1.971	83	6182	0.55	ug/L		88
12) Acrolein	2.032	56	3433	3.16	ug/L		97
13) 1,1-Diclethene	2.099	96	3497	0.56	ug/L	#	81
14) Freon 113	2.093	101	4355	0.61	ug/L		88
15) Acetone	2.129	43	2412	1.14	ug/L		76
16) 2-Propanol	2.196	45	4309m	11.80	ug/L		
18) Carbon Disulfide	2.270	76	14703	0.55	ug/L		98
19) Acetonitrile	2.324	40	657	2.32	ug/L	#	14
20) Allyl Chloride	2.355	76	1692	0.38	ug/L	#	80
21) Methyl Acetate	2.361	43	2559	0.57	ug/L		87
22) Methylene Chloride	2.440	84	4556	0.49	ug/L	#	82
23) TBA	2.507	59	3598m	6.25	ug/L		
24) Acrylonitrile	2.654	53	5466m	2.37	ug/L		
25) Methyl-t-Butyl Ether	2.660	73	8776	0.44	ug/L	#	62
26) trans-1,2-Dichloroethene	2.672	96	4512	0.57	ug/L	#	63
28) 1,1-Diclethane	3.050	63	8824	0.54	ug/L		79
30) DIPE	3.117	45	18636	0.57	ug/L		92
31) 2-Chloro-1,3-Butadiene	3.154	53	8131	0.52	ug/L	#	55
32) ETBE	3.513	59	13530	0.48	ug/L		90
33) 2,2-Dichloropropane	3.678	77	5234	0.44	ug/L		87
34) cis-1,2-Dichloroethene	3.696	96	4319	0.48	ug/L		98
36) Propionitrile	3.836	54	662m	0.89	ug/L		
37) Bromochloromethane	4.001	130	2948m	0.56	ug/L		
38) Methacrylonitrile	4.044	67	819m	0.35	ug/L		
40) Chloroform	4.092	83	8322	0.57	ug/L		96
41) 1,1,1-Trichloroethane	4.355	97	6471m	0.51	ug/L		

Quantitation Report (QT Reviewed)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 16:13:30 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
42) TAME	5.190	73	7919	0.38 ug/L #	84
44) Cyclohexane	4.434	41	6867m	0.67 ug/L	
46) Carbontetrachloride	4.617	121	1591	0.43 ug/L #	53
47) 1,1-Dichloropropene	4.629	75	5866	0.52 ug/L	83
49) Benzene	4.958	78	15519	0.43 ug/L	81
50) 1,2-Dichloroethane	5.007	62	6048	0.52 ug/L #	74
52) n-Heptane	5.470	43	6286	0.63 ug/L	79
54) Trichloroethene	5.995	130	4491	0.47 ug/L #	57
55) Methylcyclohexane	6.220	55	6183	0.49 ug/L #	72
56) 1,2-Diclpropane	6.269	63	4782	0.47 ug/L	82
57) Dibromomethane	6.409	93	2480	0.53 ug/L #	58
59) Methyl Methacrylate	6.507	69	1075m	0.26 ug/L	
60) Bromodichloromethane	6.629	83	4821	0.43 ug/L	90
61) 2-Nitropropane	6.927	41	1949m	1.22 ug/L	
62) 2-Chloroethylvinyl Ether	7.043	63	1121	0.24 ug/L #	47
63) cis-1,3-Dichloropropene	7.165	75	4624	0.34 ug/L	88
64) 4-Methyl-2-pentanone	7.366	43	2917m	0.43 ug/L	
66) Toluene	7.506	91	17235	0.45 ug/L	95
67) trans-1,3-Dichloropropene	7.762	75	3448	0.31 ug/L	88
68) Ethyl Methacrylate	7.903	69	3216m	0.37 ug/L	
69) 1,1,2-Trichloroethane	7.939	97	2958	0.44 ug/L	94
72) Tetrachloroethene	8.061	164	3814	0.49 ug/L #	91
74) 1,3-Dichloropropane	8.098	76	5577	0.48 ug/L	93
75) Dibromochloromethane	8.311	129	3343	0.40 ug/L	96
76) N-Butyl Acetate	8.384	43	4816m	0.37 ug/L	
77) 1,2-Dibromoethane	8.415	107	3077	0.45 ug/L #	71
78) 3-Chlorobenzotrifluoride	8.884	180	6286	0.43 ug/L #	95
79) Chlorobenzene	8.866	112	11571	0.44 ug/L	97
80) 4-Chlorobenzotrifluoride	8.933	180	5735	0.43 ug/L	83
81) 1,1,1,2-Tetrachloroethane	8.951	131	3924	0.41 ug/L #	38
82) Ethylbenzene	8.988	106	5578	0.41 ug/L #	66
83) (m+p)Xylene	9.098	106	12832	0.78 ug/L	92
84) o-Xylene	9.445	106	6916	0.41 ug/L #	71
85) Styrene	9.463	104	9430	0.33 ug/L	96
86) Bromoform	9.610	173	2062	0.41 ug/L	77
87) 2-Chlorobenzotrifluoride	9.677	180	6536	0.45 ug/L	96
88) Isopropylbenzene	9.756	105	15953	0.39 ug/L	98
89) Cyclohexanone	9.835	55	8732	8.85 ug/L	95
90) trans-1,4-Dichloro-2-B...	10.073	53	627m	0.29 ug/L	
92) 1,1,2,2-Tetrachloroethane	10.018	83	3457	0.46 ug/L	84
93) Bromobenzene	10.006	156	4929	0.45 ug/L	97
94) 1,2,3-Trichloropropane	10.042	110	1192	0.59 ug/L #	23
95) n-Propylbenzene	10.110	91	18455	0.41 ug/L	90
96) 2-Chlorotoluene	10.177	91	11743	0.43 ug/L	97
97) 3-Chlorotoluene	10.231	91	12965	0.47 ug/L	89
98) 4-Chlorotoluene	10.274	91	14614	0.44 ug/L	94
99) 1,3,5-Trimethylbenzene	10.256	105	13830	0.42 ug/L	84
100) tert-Butylbenzene	10.518	119	11873	0.44 ug/L	93
101) 1,2,4-Trimethylbenzene	10.567	105	13651	0.41 ug/L	93
102) 3,4-Dichlorobenzotrifl...	10.622	214	4097	0.42 ug/L	83
103) sec-Butylbenzene	10.701	105	16112	0.43 ug/L	94
104) p-Isopropyltoluene	10.817	119	13188	0.40 ug/L	96

Quantitation Report (QT Reviewed)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 16:13:30 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
105) 1,3-Dclbenz	10.792	146	8970	0.44	ug/L		95
106) 1,4-Dclbenz	10.853	146	9880	0.48	ug/L	#	71
107) 2,4-Dichlorobenzotrifl...	10.914	214	3819	0.43	ug/L		97
108) 2,5-Dichlorobenzotrifl...	10.951	214	5531m	0.55	ug/L		
109) n-Butylbenzene	11.158	91	10018	0.35	ug/L		88
110) 1,2-Dclbenz	11.170	146	8805	0.47	ug/L		81
111) 1,2-Dibromo-3-chloropr...	11.719	157	433	0.37	ug/L	#	46
112) Trielution Dichlorotol...	11.823	125	18789	1.25	ug/L		93
113) 1,3,5-Trichlorobenzene	11.859	180	6863	0.54	ug/L		89
114) Coelution Dichlorotoluene	12.085	125	12894	0.84	ug/L		93
115) 1,2,4-Tcbenzene	12.255	180	4727	0.46	ug/L		89
116) Hexachlorobt	12.335	225	2115	0.43	ug/L		96
117) Naphthalen	12.420	128	4940m	0.31	ug/L		
118) 1,2,3-Tclbenzene	12.542	180	3254	0.46	ug/L		94
119) 2,4,5-Trichlorotoluene	12.969	159	1842	0.48	ug/L		83
120) 2,3,6-Trichlorotoluene	13.024	159	1913	0.50	ug/L		97

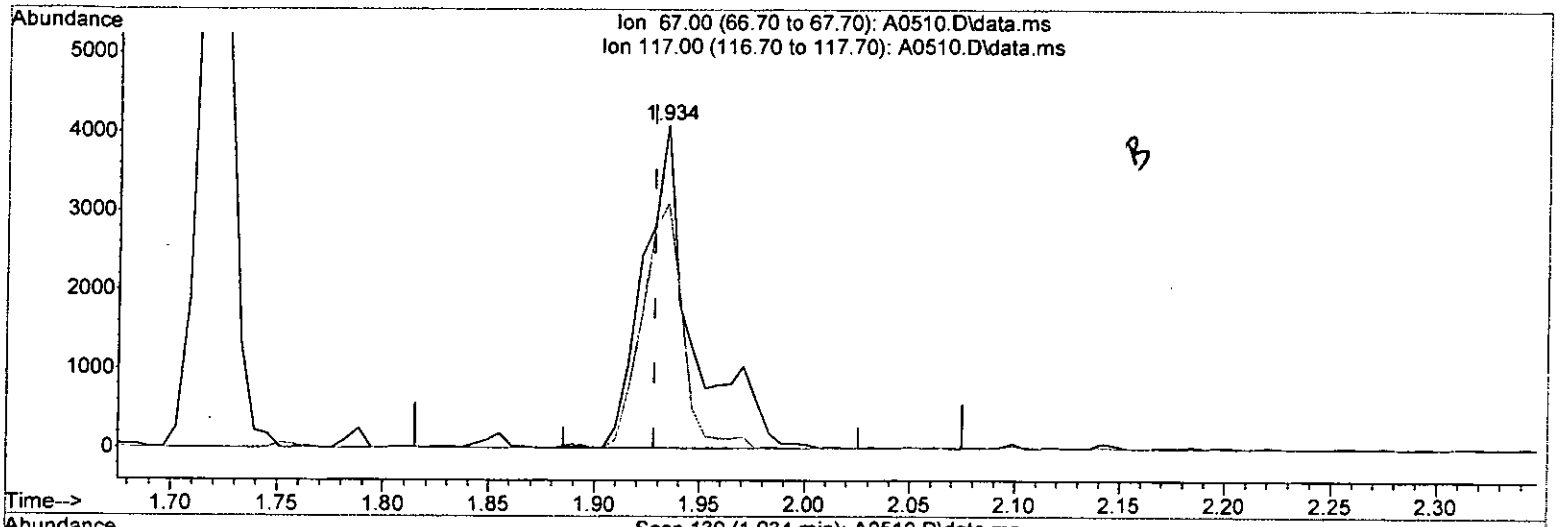
(#) = qualifier out of range (m) = manual integration (+) = signals summed

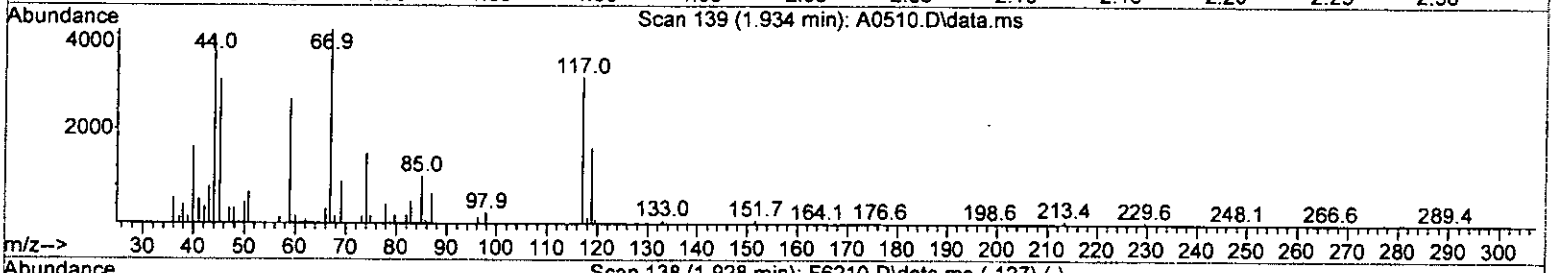
00126

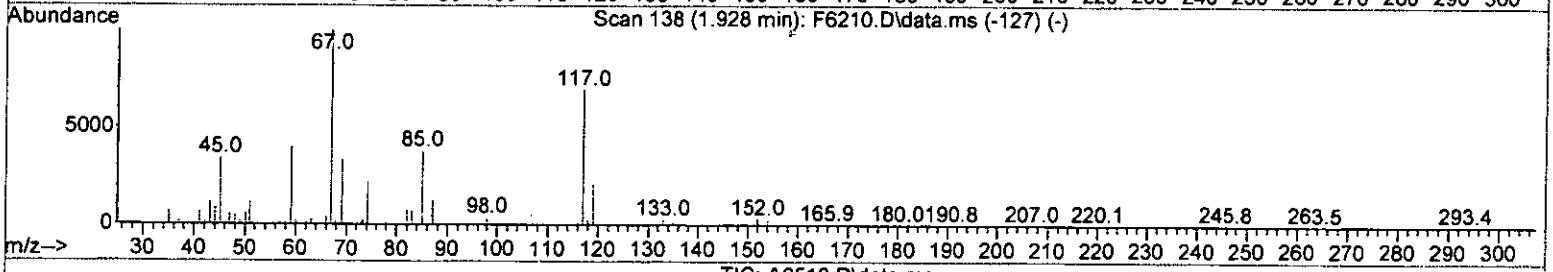
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(10) Freon 123a

1.934min (+0.006) 0.62 ug/L

response 6624

Ion	Exp%	Act%
67.00	100	100
117.00	73.00	75.75
0.00	0.00	0.00
0.00	0.00	0.00

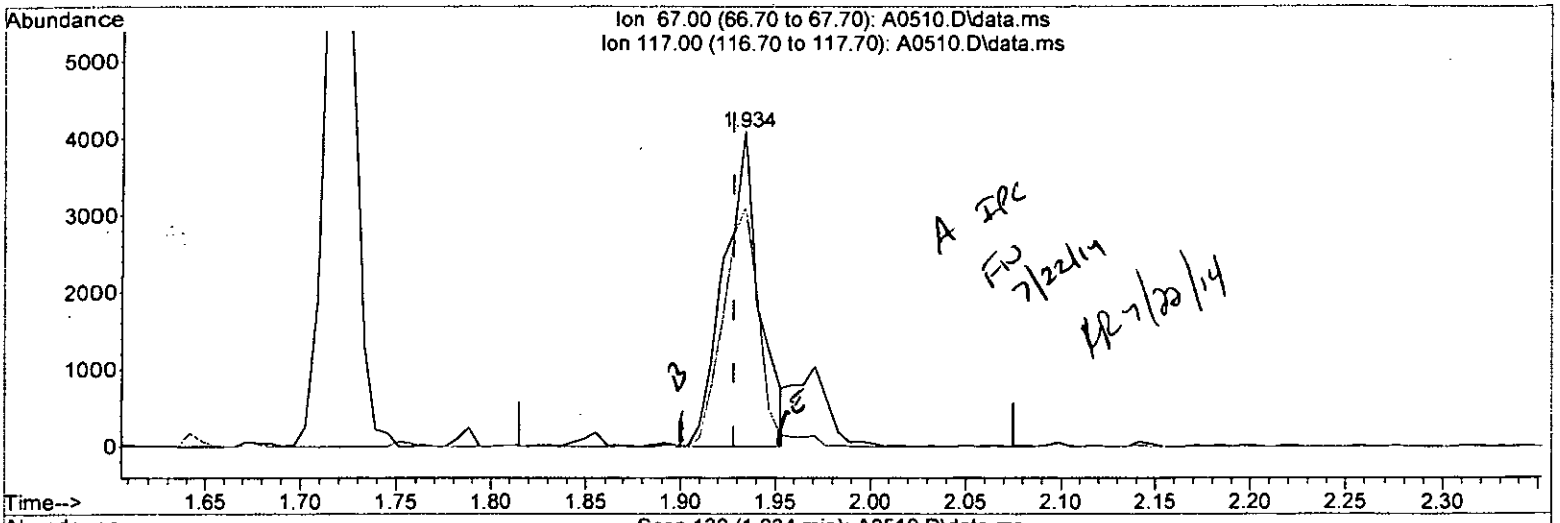
W072114.M Mon Jul 21 12:17:01 2014 MSVO10

00127

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0510.D\data.ms

(10) Freon 123a

1.934min (+0.006) 0.50 ug/L m

response 5302

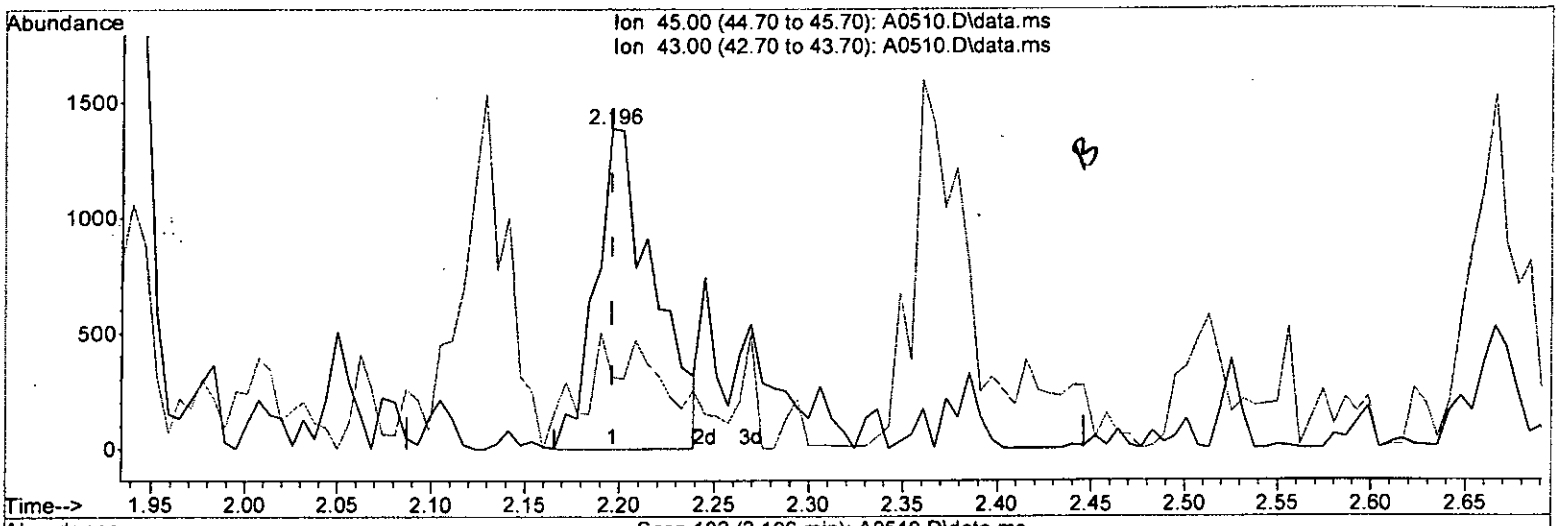
Ion	Exp%	Act%
67.00	100	100
117.00	73.00	75.75
0.00	0.00	0.00
0.00	0.00	0.00

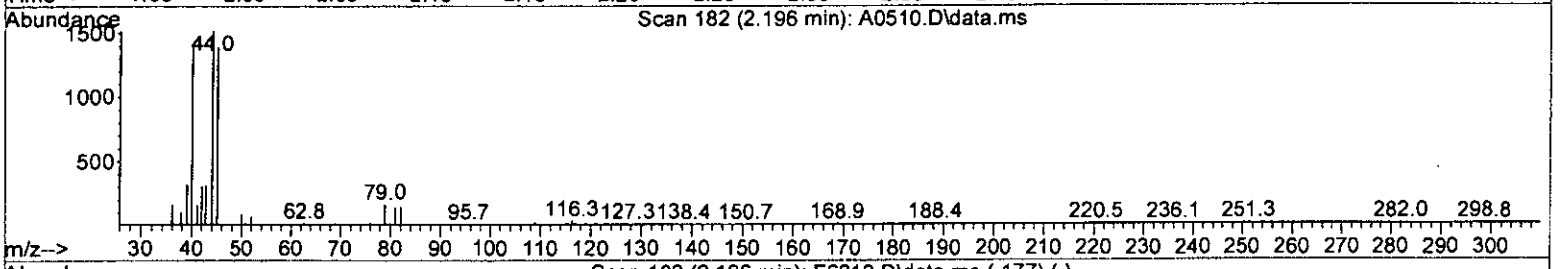
00128

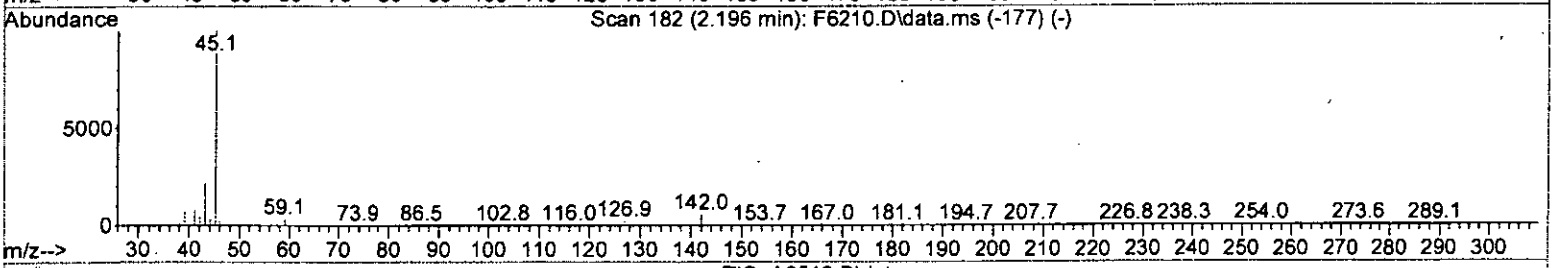
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(16) 2-Propanol

2.196min (+0.000) 8.04 ug/L

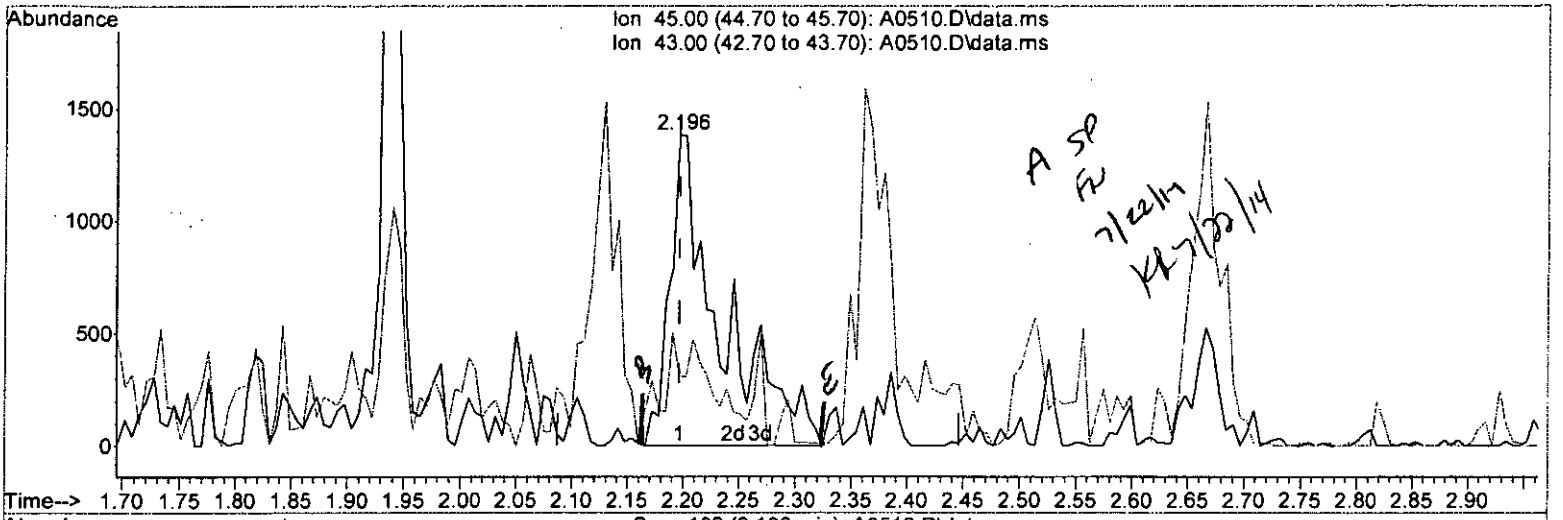
response 2937

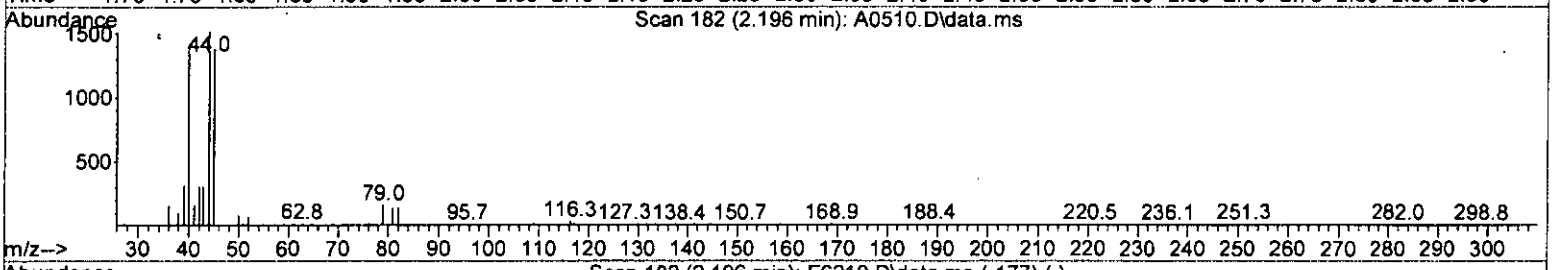
Ion	Exp%	Act%
45.00	100	100
43.00	22.80	22.54
0.00	0.00	0.00
0.00	0.00	0.00

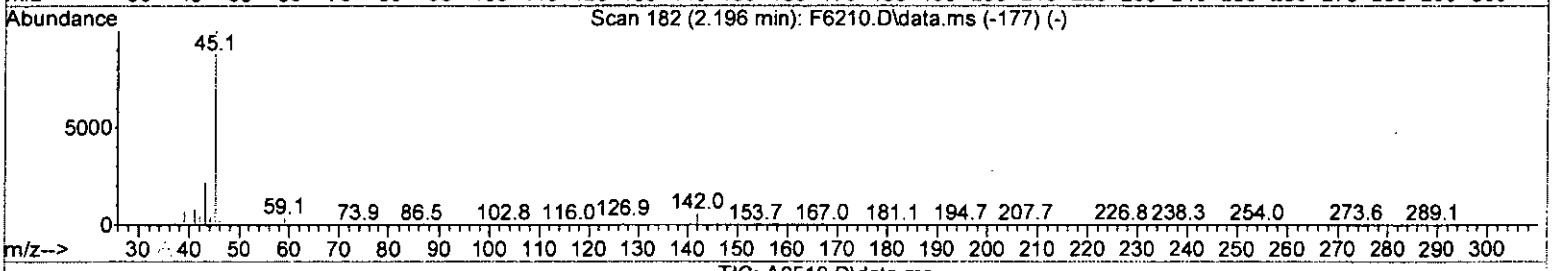
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(16) 2-Propanol

2.196min (+0.000) 11.80 ug/L m

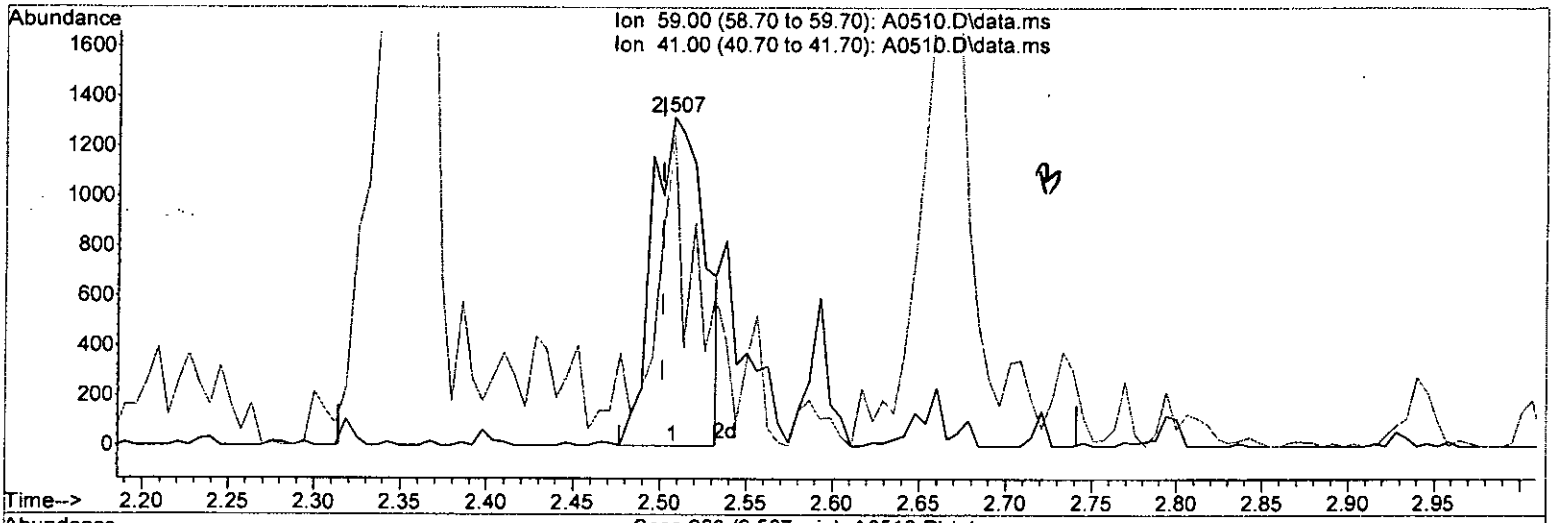
response 4309

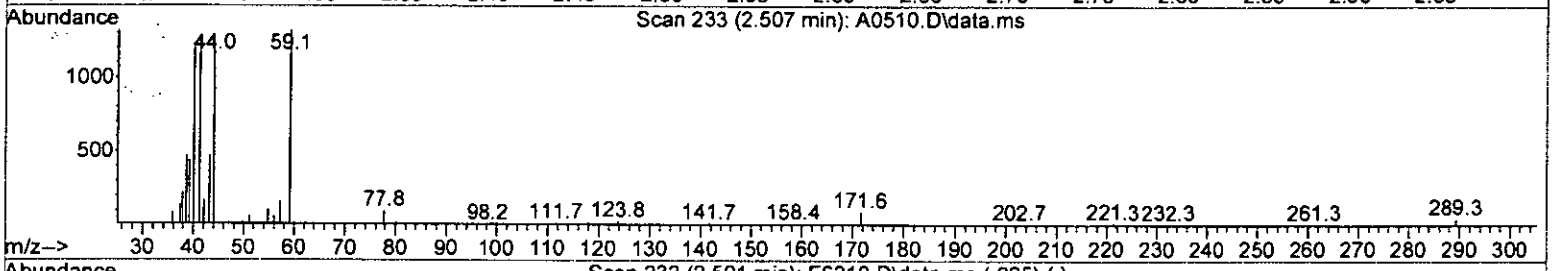
Ion	Exp%	Act%
45.00	100	100
43.00	22.80	22.54
0.00	0.00	0.00
0.00	0.00	0.00

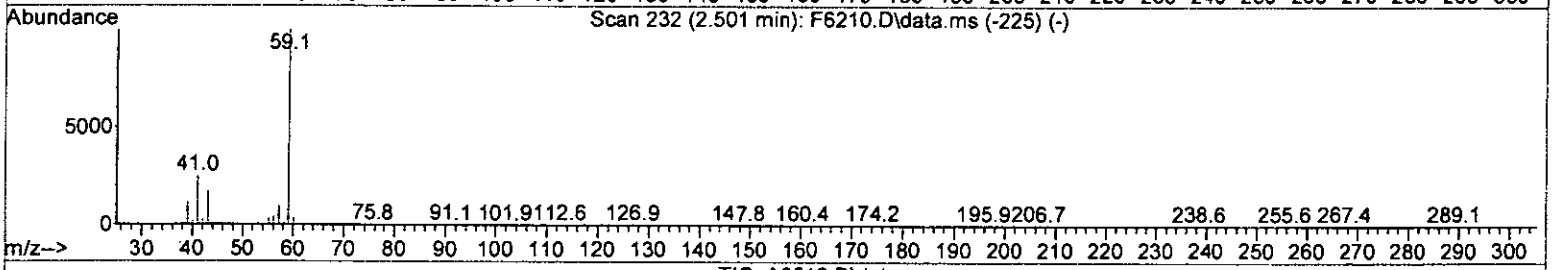
W072114.M Mon Jul 21 12:18:07 2014 MSVO10

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(23) TBA

2.507min (+0.006) 4.83 ug/L

response 2780

Ion	Exp%	Act%
59.00	100	100
41.00	22.80	94.68#
0.00	0.00	0.00
0.00	0.00	0.00

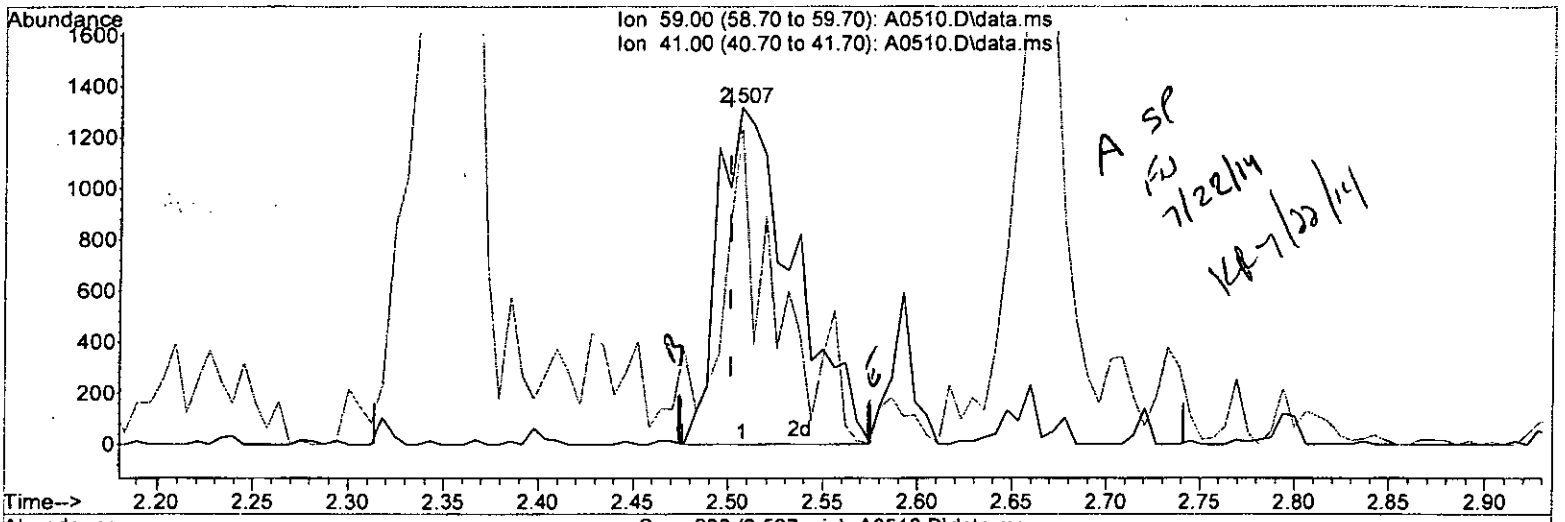
W072114.M Mon Jul 21 12:18:39 2014 MSVO10

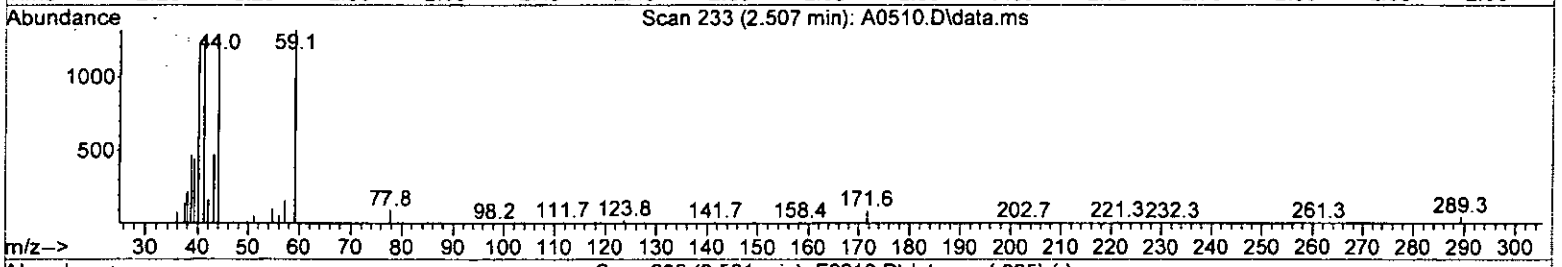
00131

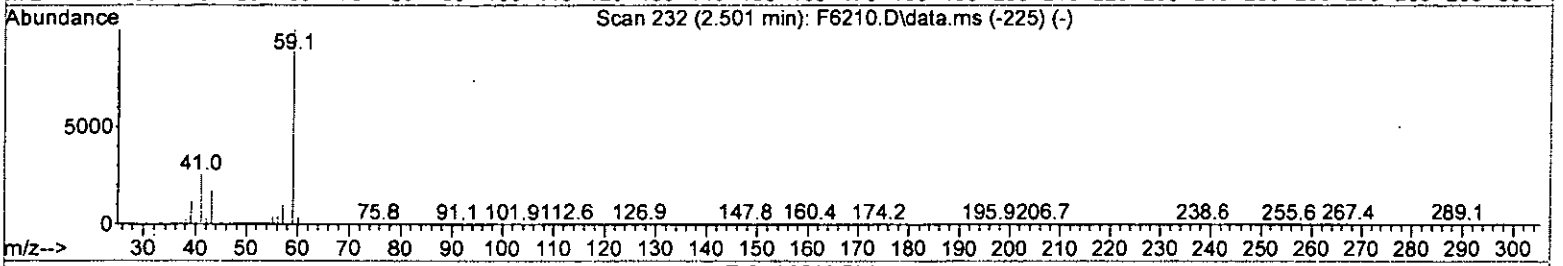
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(23) TBA

2.507min (+0.006) 6.25 ug/L m

response 3598

Ion	Exp%	Act%
59.00	100	100
41.00	22.80	94.68#
0.00	0.00	0.00
0.00	0.00	0.00

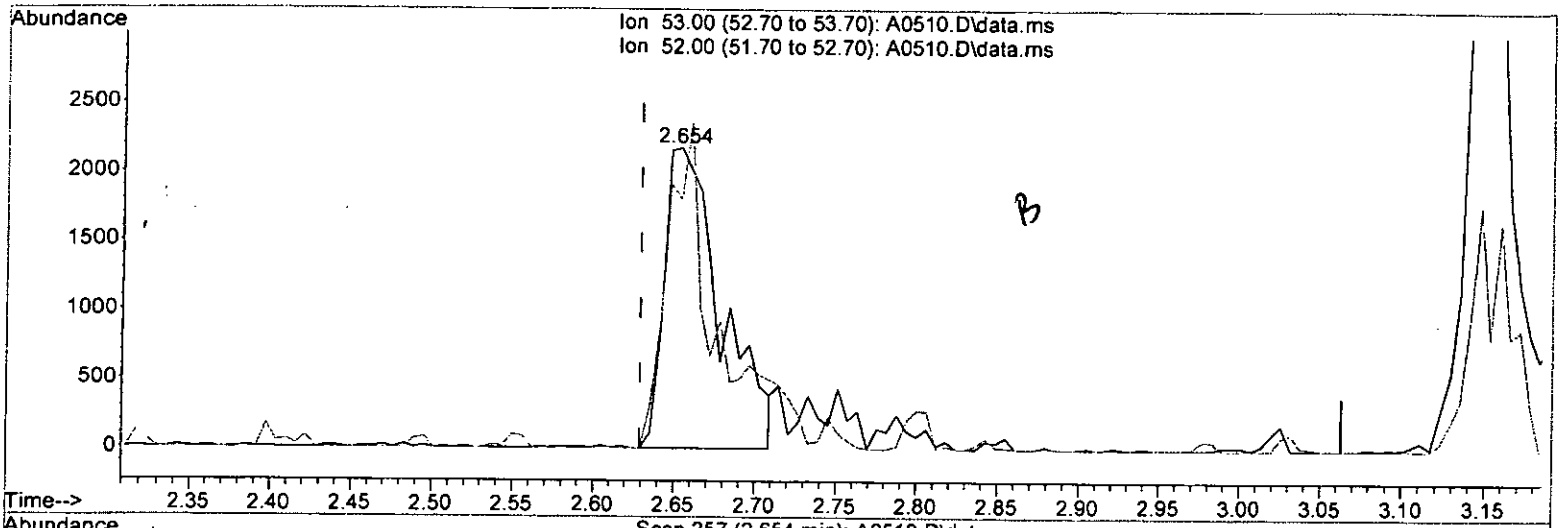
00132

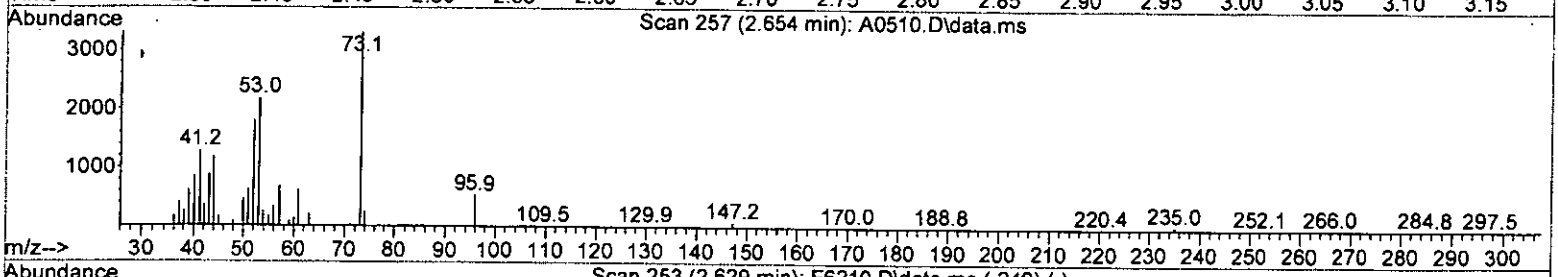
W072114.M Mon Jul 21 12:18:49 2014 MSVO10 Page: 1

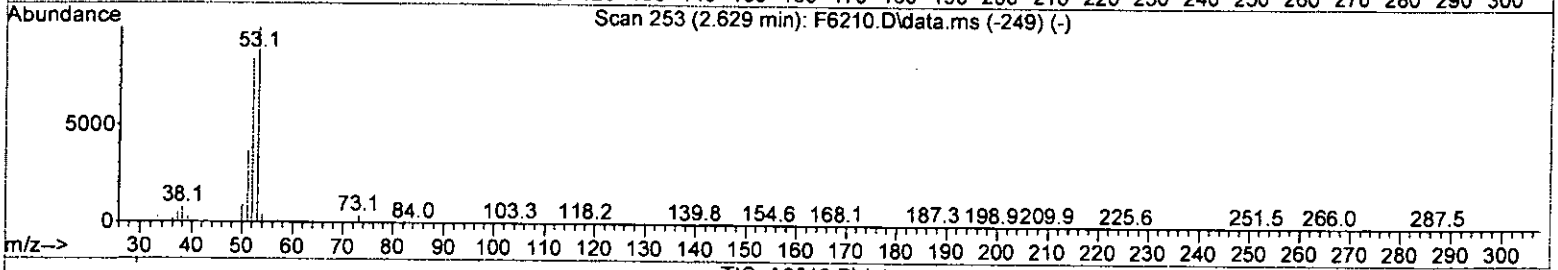
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(24) Acrylonitrile

2.654min (+0.024) 2.28 ug/L

response 5261

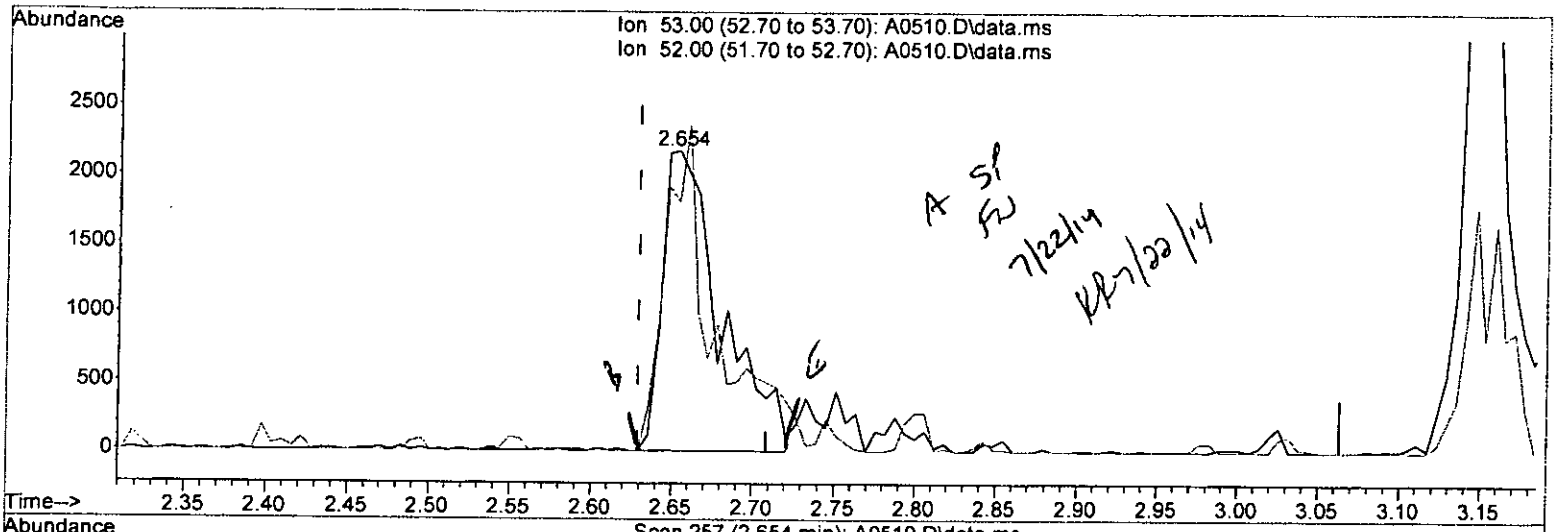
Ion	Exp%	Act%
53.00	100	100
52.00	85.70	82.93
0.00	0.00	0.00
0.00	0.00	0.00

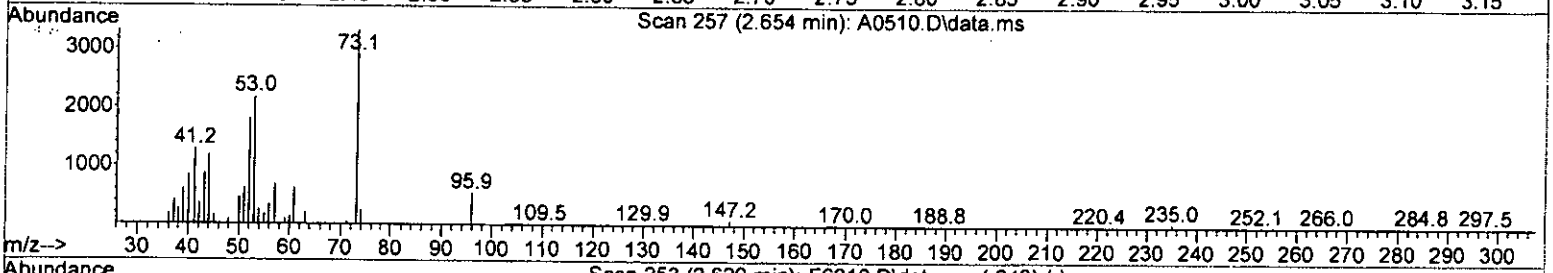
W072114.M Mon Jul 21 12:18:59 2014 MSVO10

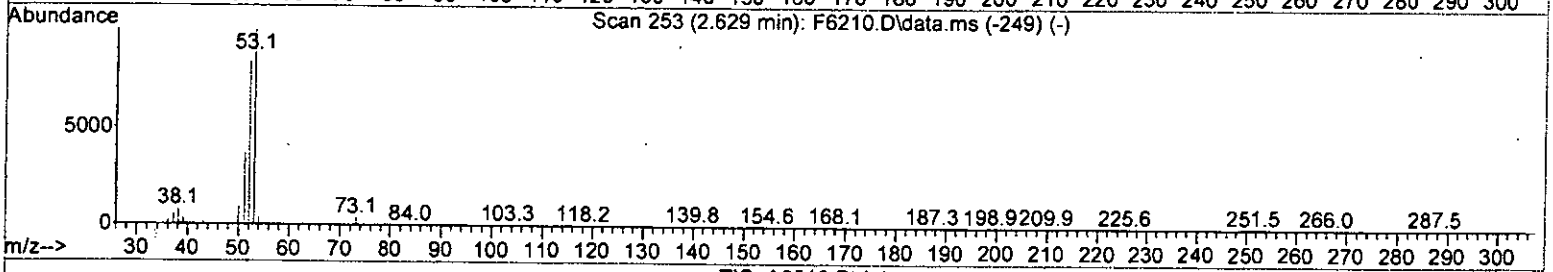
00133

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(24) Acrylonitrile

2.654min (+0.024) 2.37 ug/L m

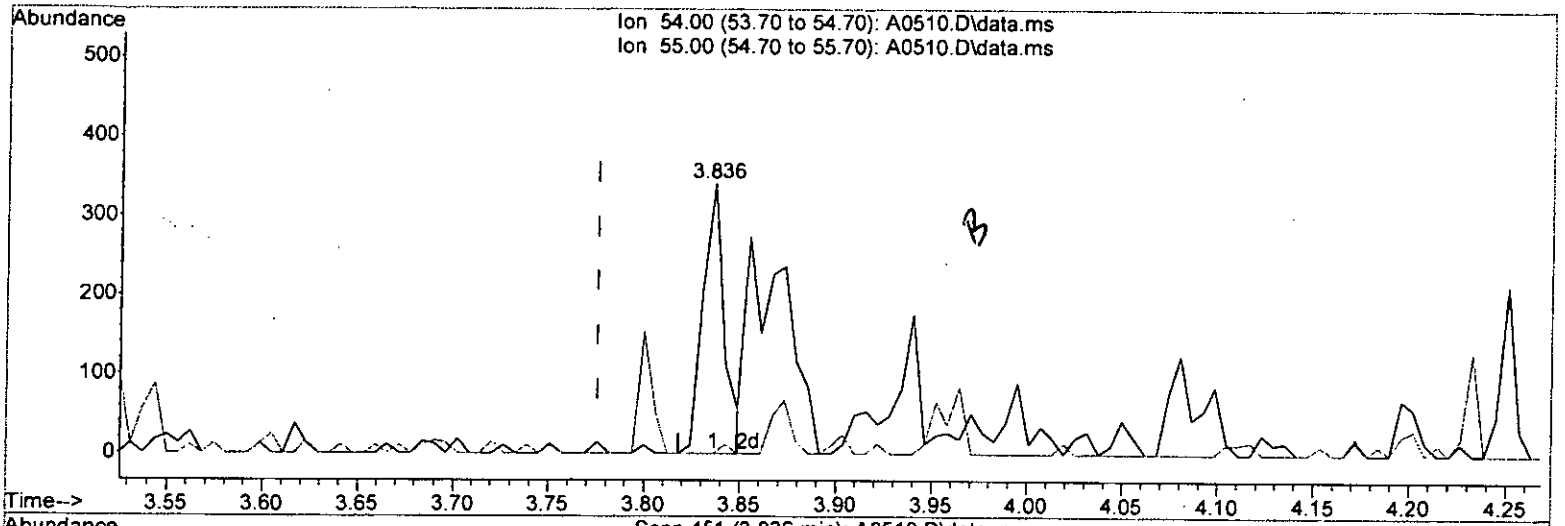
response 5466

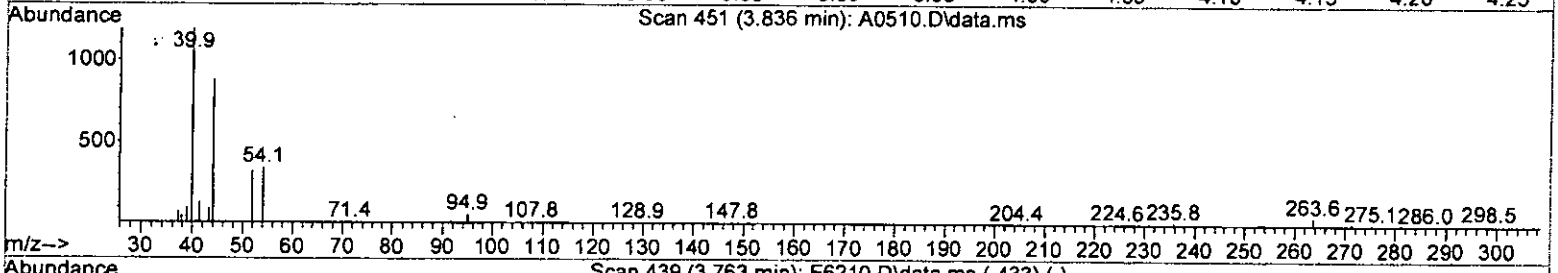
Ion	Exp%	Act%
53.00	100	100
52.00	85.70	82.93
0.00	0.00	0.00
0.00	0.00	0.00

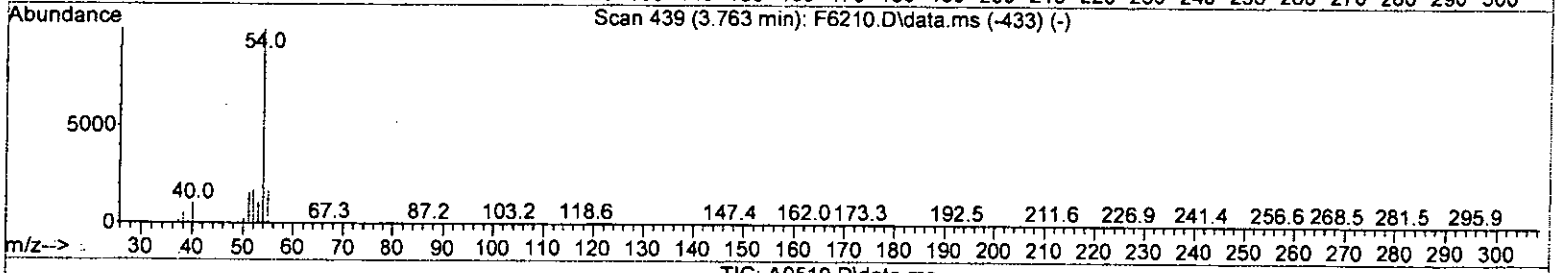
00134

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(36) Propionitrile

3.836min (+0.061) 0.36 ug/L

response 266

Ion	Exp%	Act%
54.00	100	100
55.00	13.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

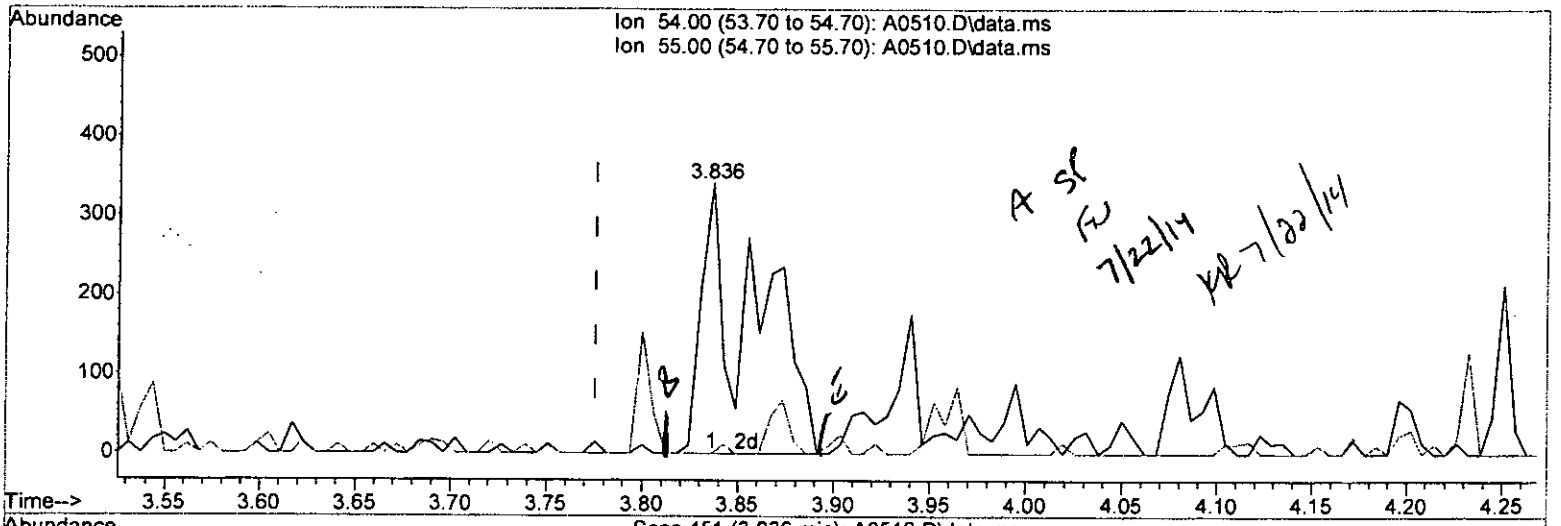
00135

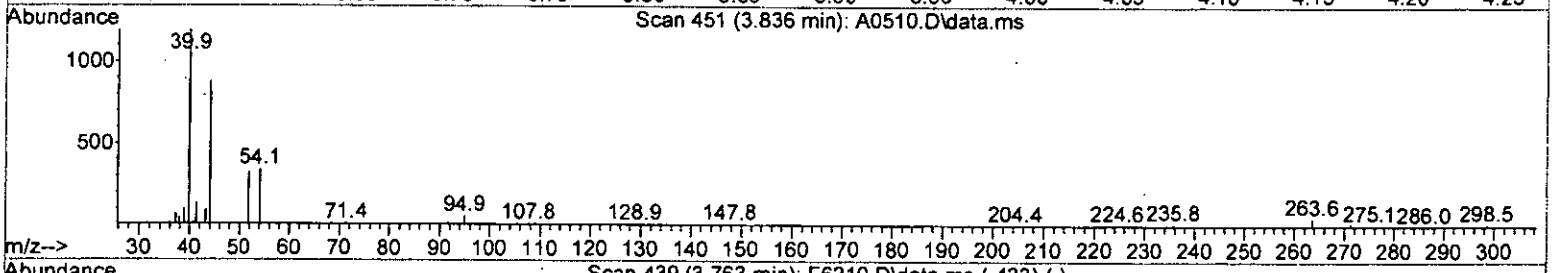
W072114.M Mon Jul 21 12:19:28 2014 MSVO10

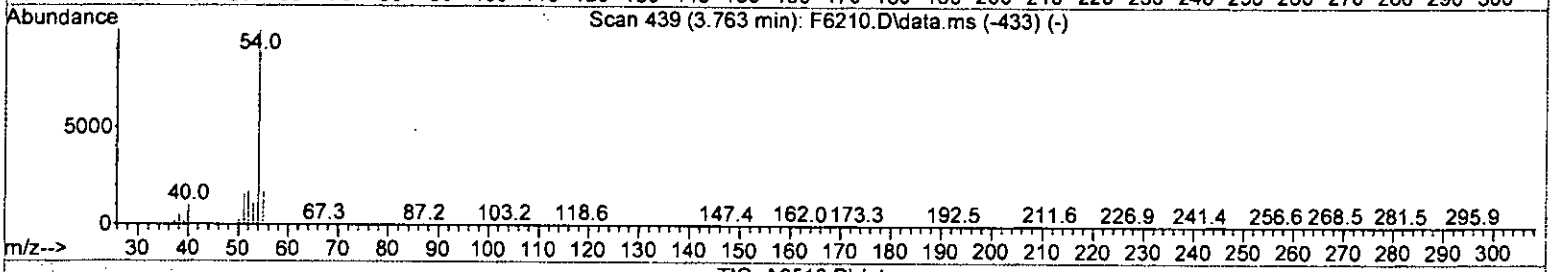
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(36) Propionitrile

3.836min (+0.061) 0.89 ug/L m

response 662

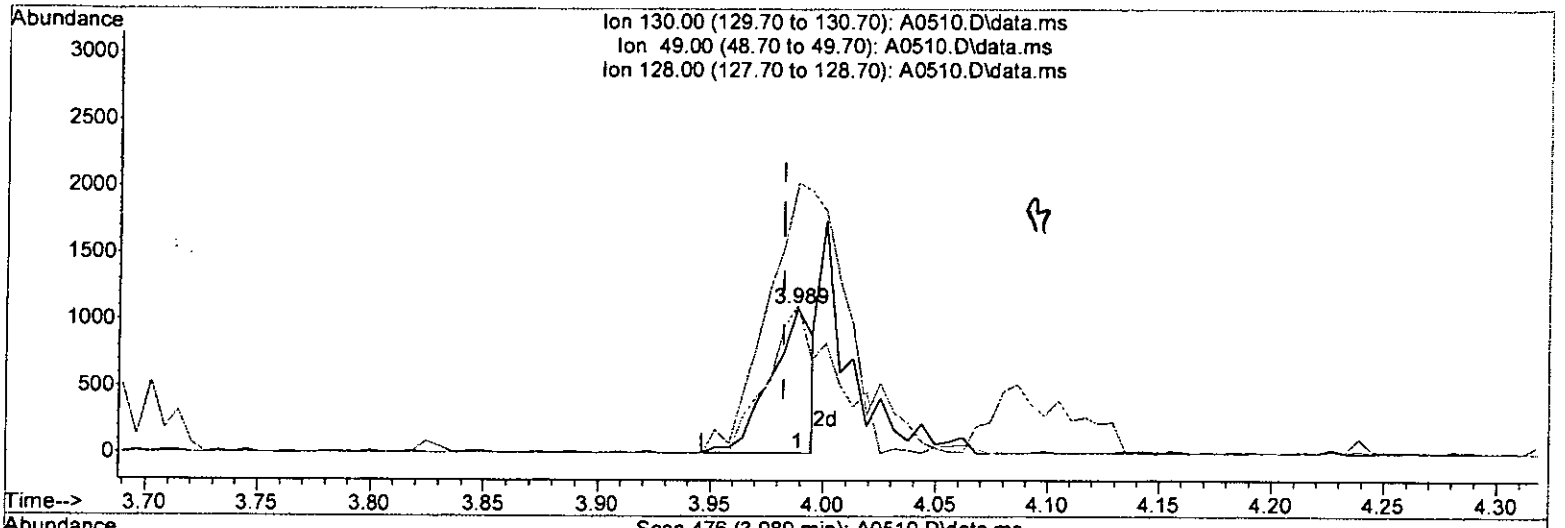
Ion	Exp%	Act%
54.00	100	100
55.00	13.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

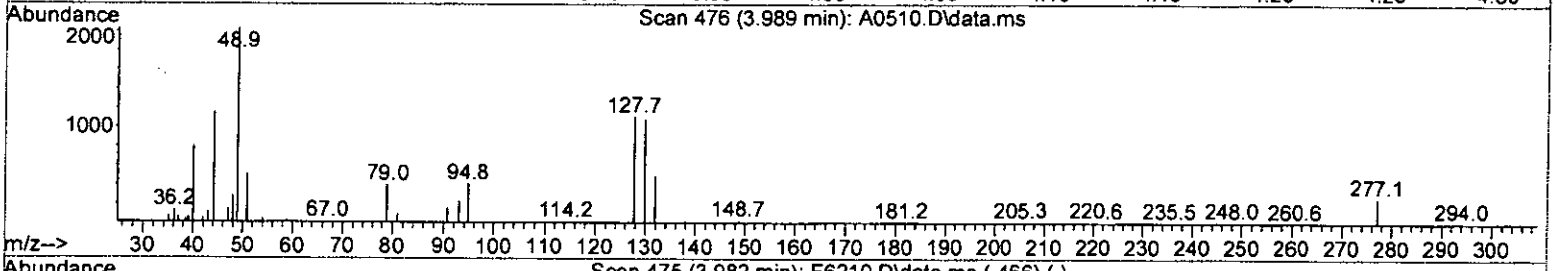
00136

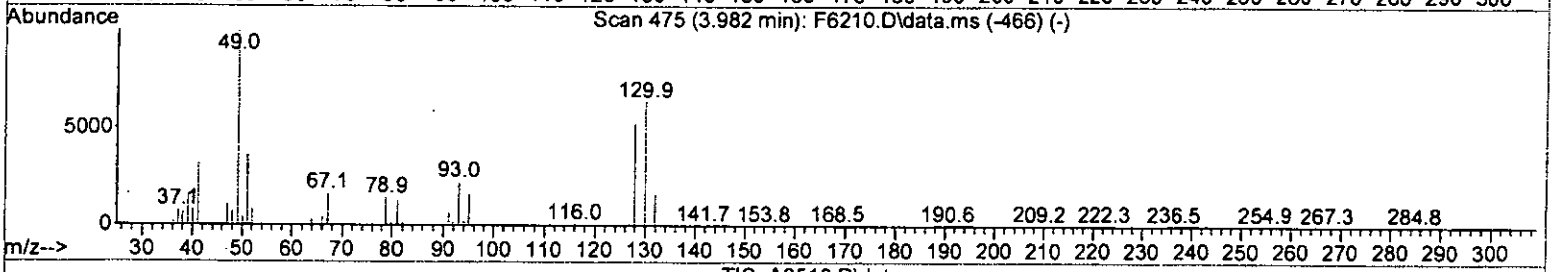
W072114.M Mon Jul 21 12:19:39 2014 MSVO10 Page: 1

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(37) Bromochloromethane

3.989min (+0.006) 0.27 ug/L

response 1409

Ion	Exp%	Act%
130.00	100	100
49.00	135.10	186.56#
128.00	77.50	102.21#
0.00	0.00	0.00

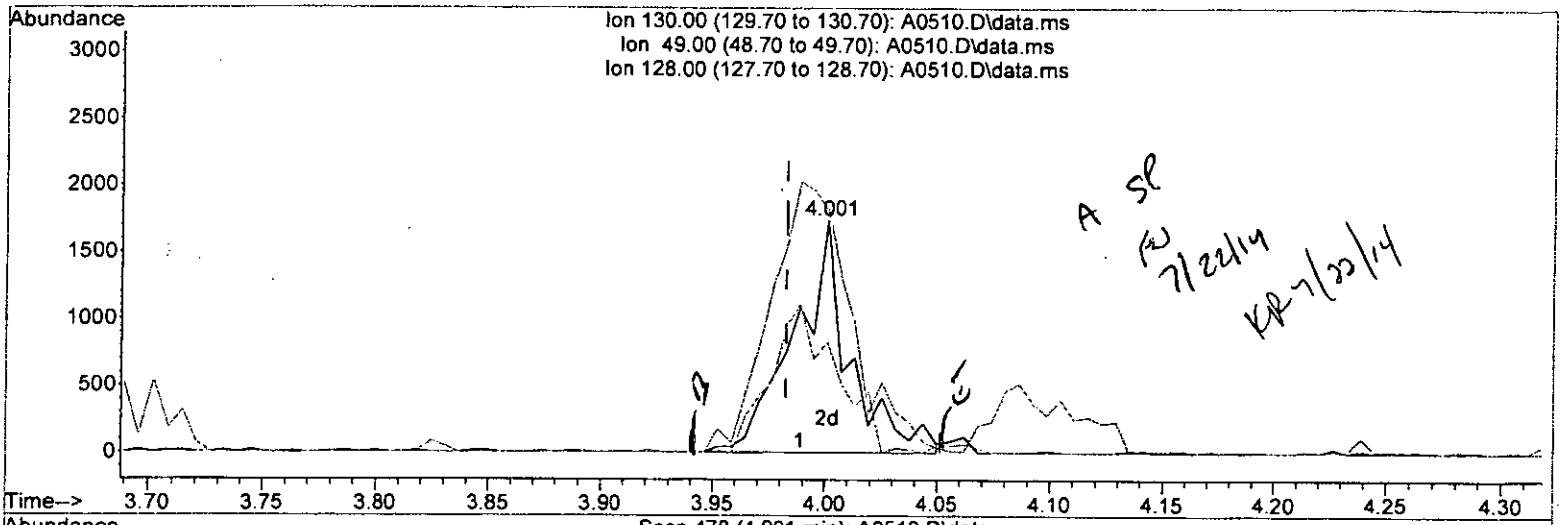
0137

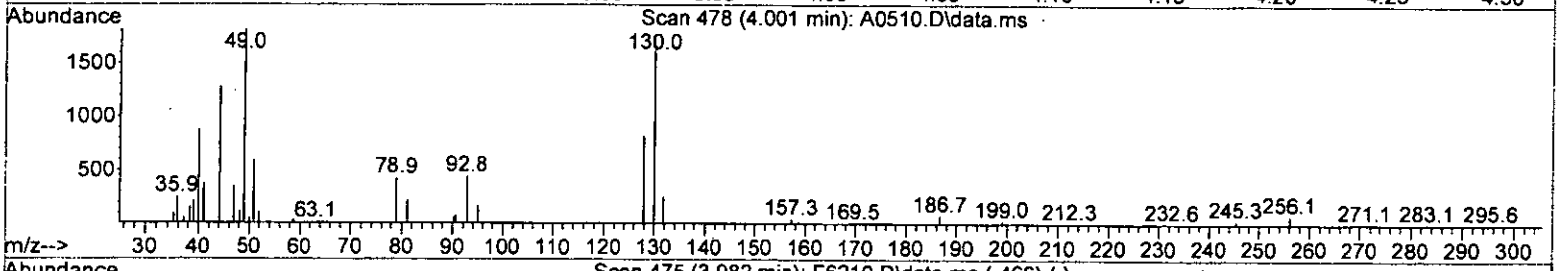
W072114.M Mon Jul 21 12:19:43 2014 MSVO10

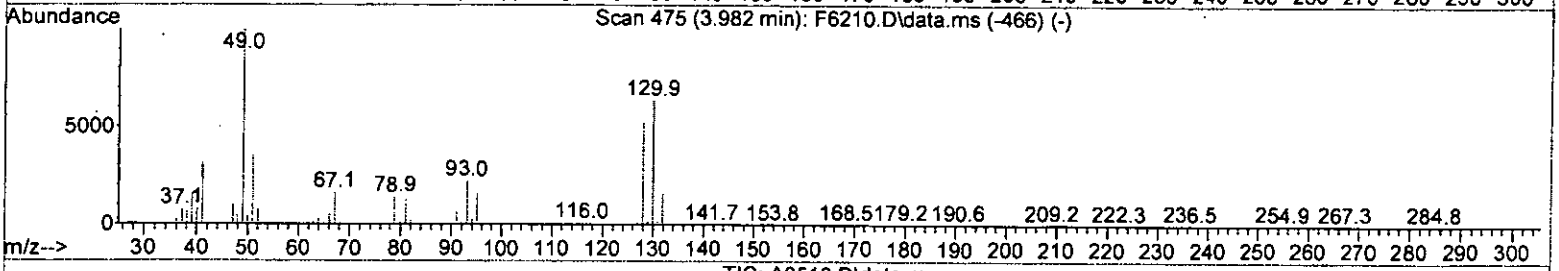
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(37) Bromochloromethane

4.001min (+0.018) 0.56 ug/L m

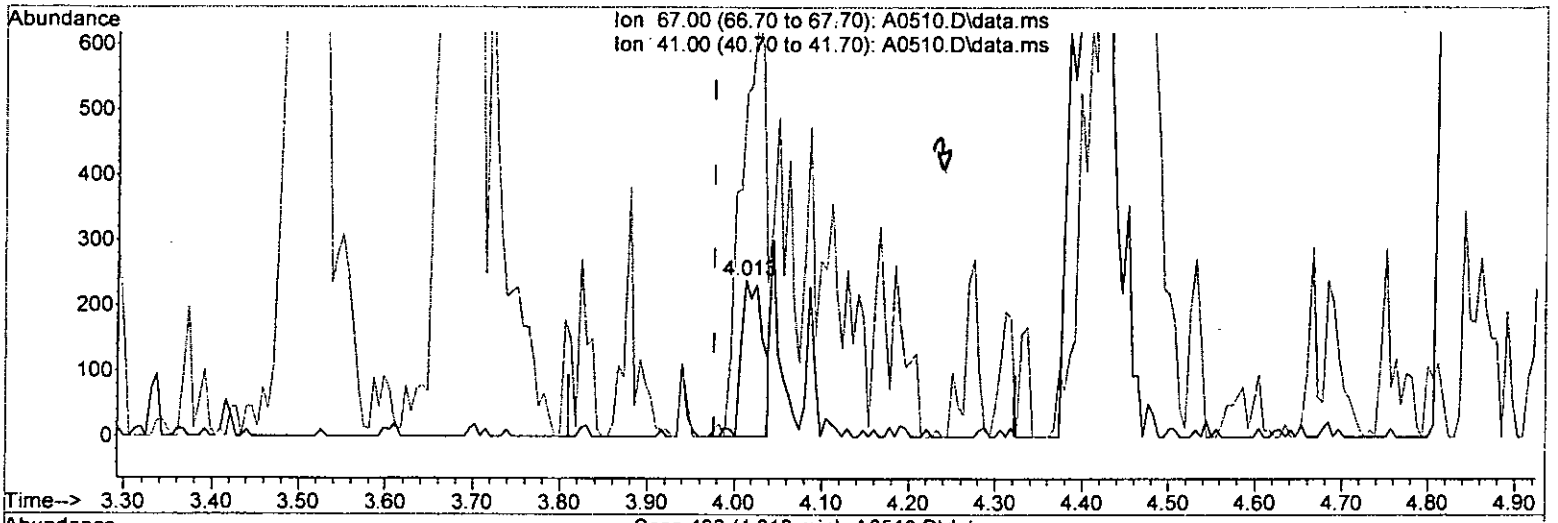
response 2948

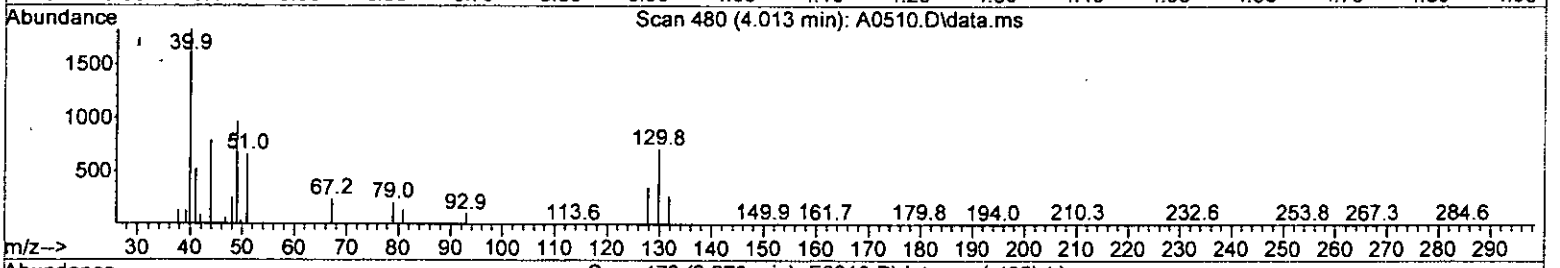
Ion	Exp%	Act%
130.00	100	100
49.00	135.10	104.32#
128.00	77.50	47.53#
0.00	0.00	0.00

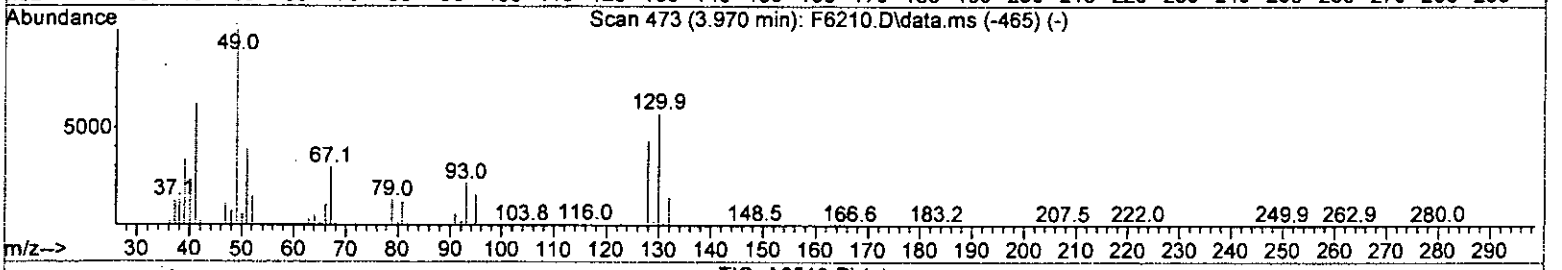
00138

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(38) Methacrylonitrile

4.013min (+0.037) 0.17 ug/L

response 408

Ion	Exp%	Act%
67.00	100	100
41.00	149.10	219.25#
0.00	0.00	0.00
0.00	0.00	0.00

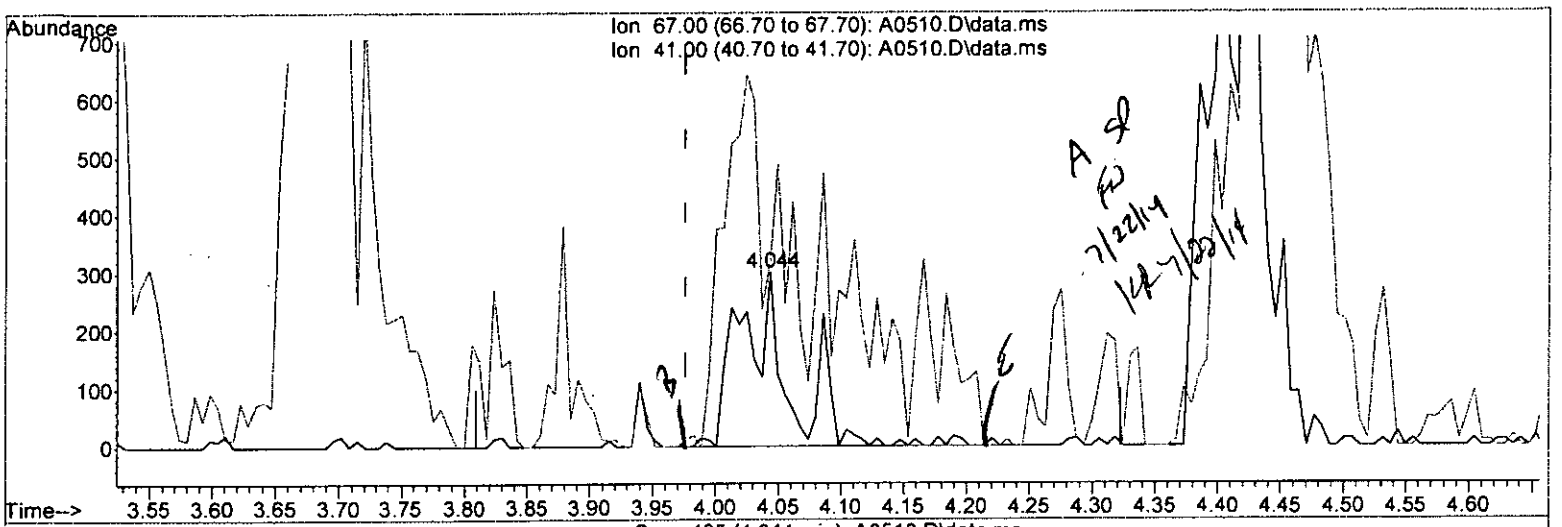
W072114.M Mon Jul 21 12:20:06 2014 MSVO10

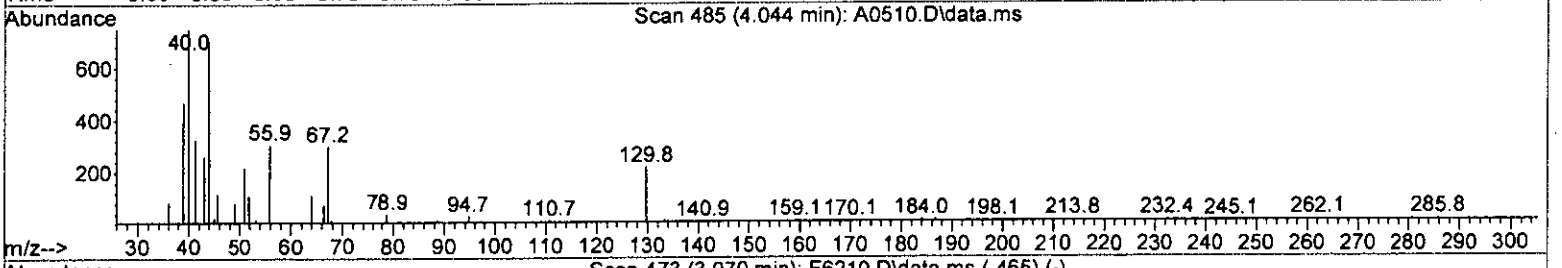
00139

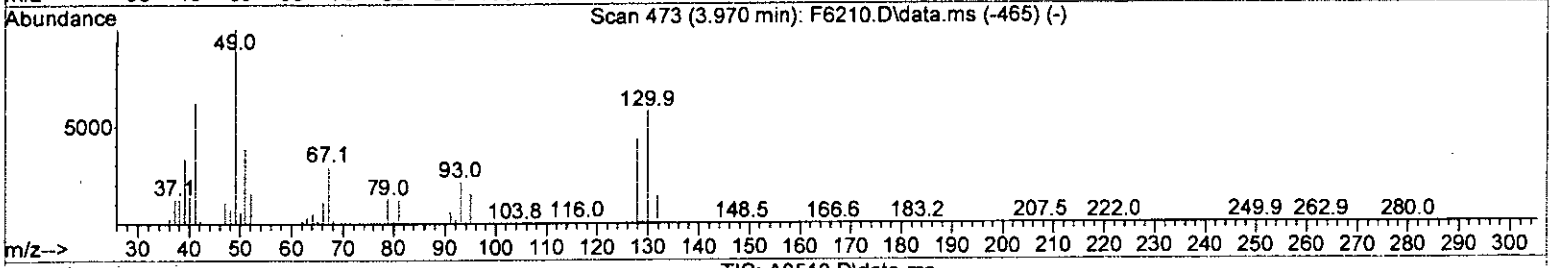
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:24:48 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(38) Methacrylonitrile

4.044min (+0.067) 0.35 ug/L m

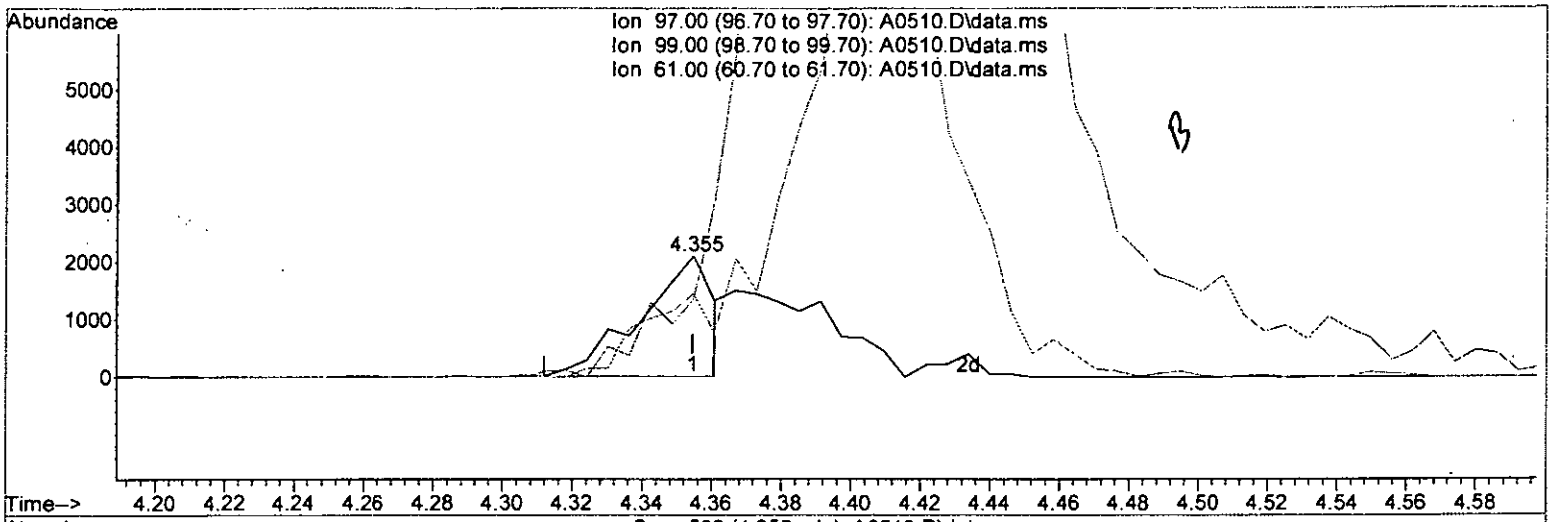
response 819

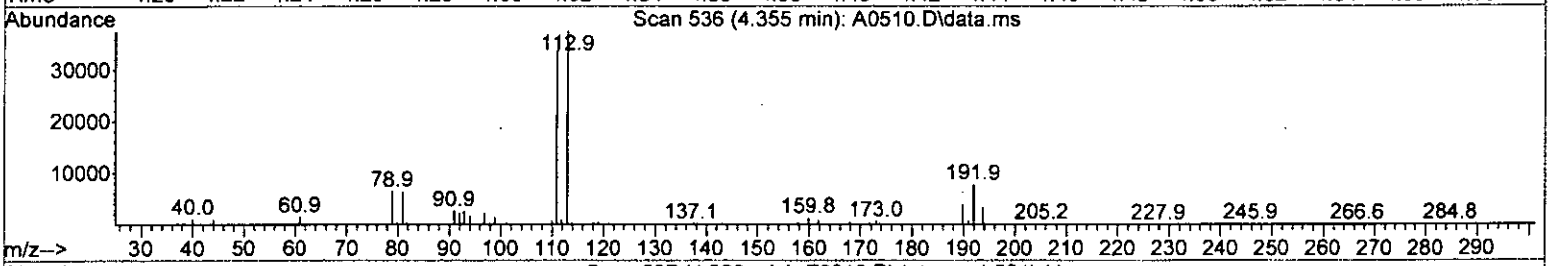
Ion	Exp%	Act%
67.00	100	100
41.00	149.10	108.33#
0.00	0.00	0.00
0.00	0.00	0.00

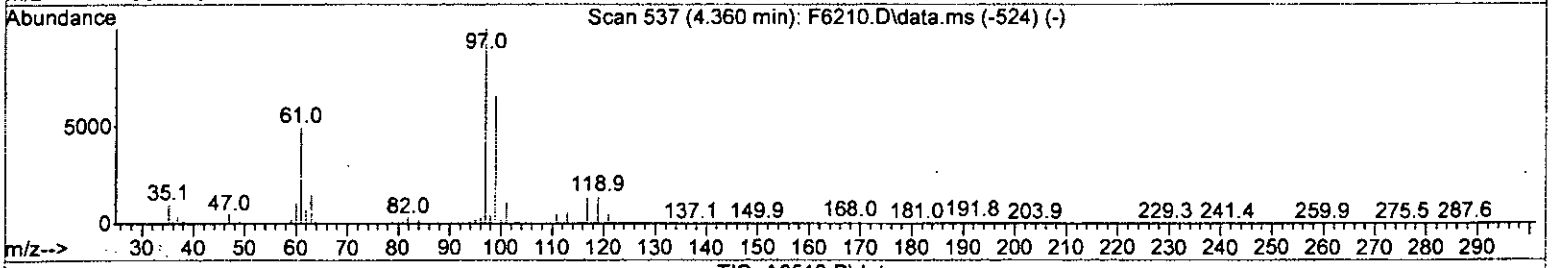
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(41) 1,1,1-Trichloroethane (P)

4.355min (+0.000) 0.23 ug/L

response 2980

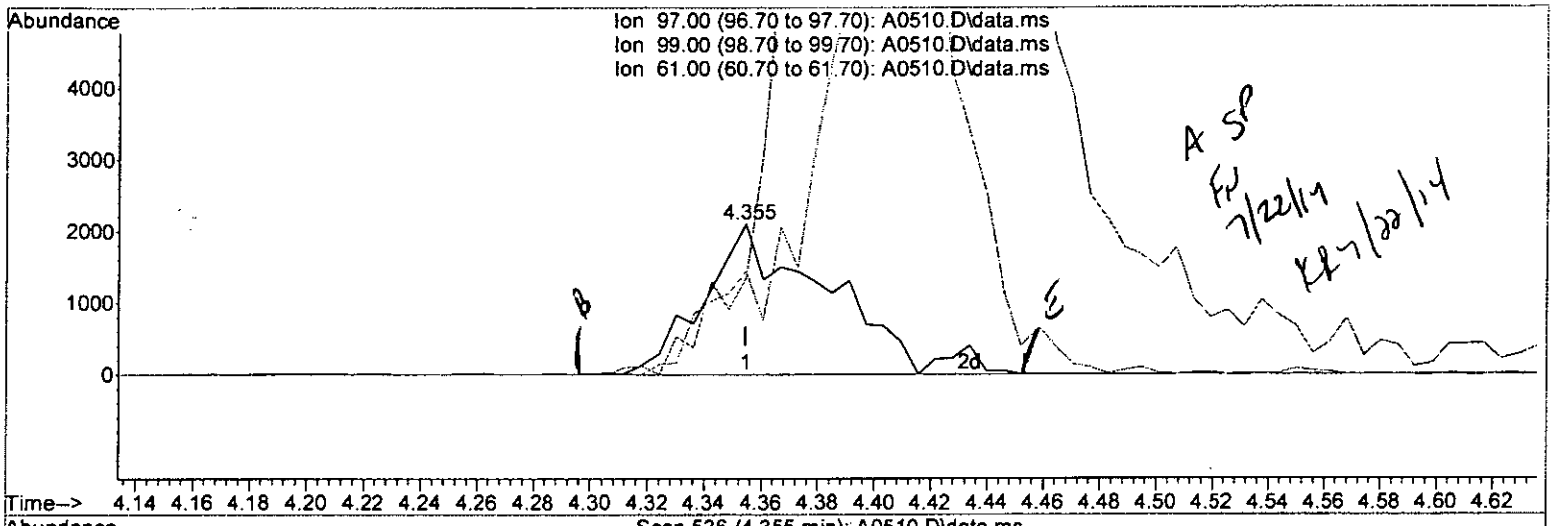
Ion	Exp%	Act%
97.00	100	100
99.00	67.60	63.67
61.00	47.60	68.67#
0.00	0.00	0.00

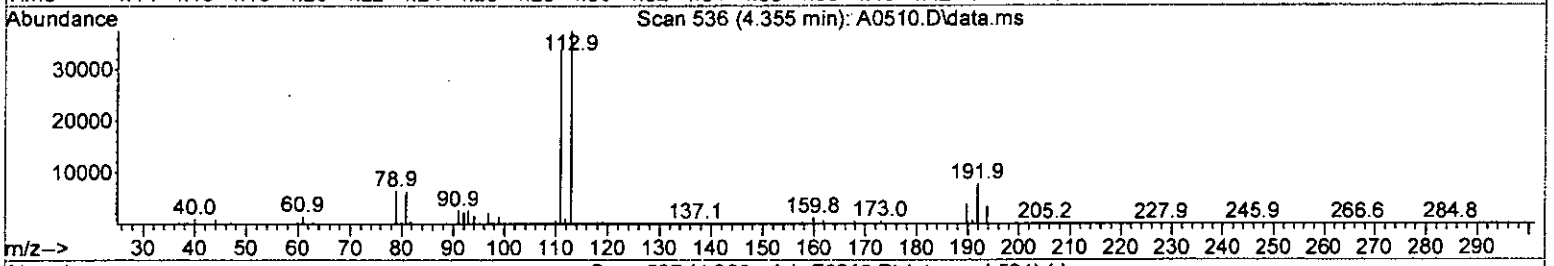
W072114.M Mon Jul 21 12:21:01 2014 MSVO10

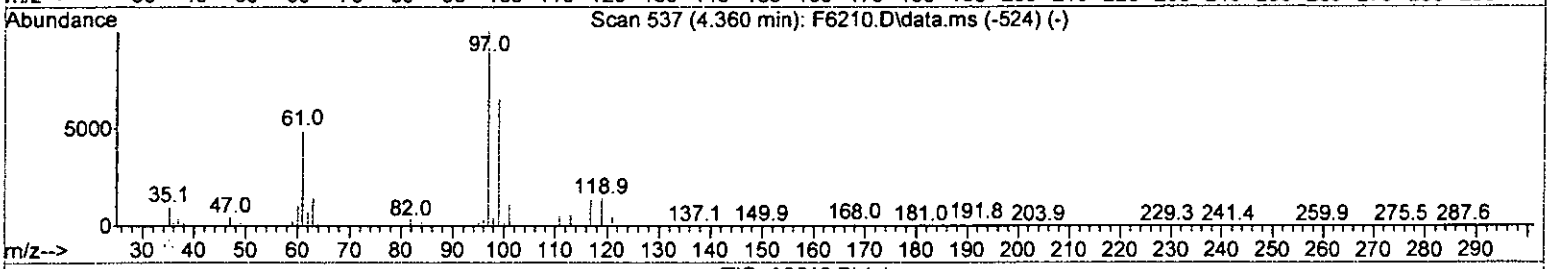
00141

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(41) 1,1,1-Trichloroethane (P)

4.355min (+0.000) 0.51 ug/L m

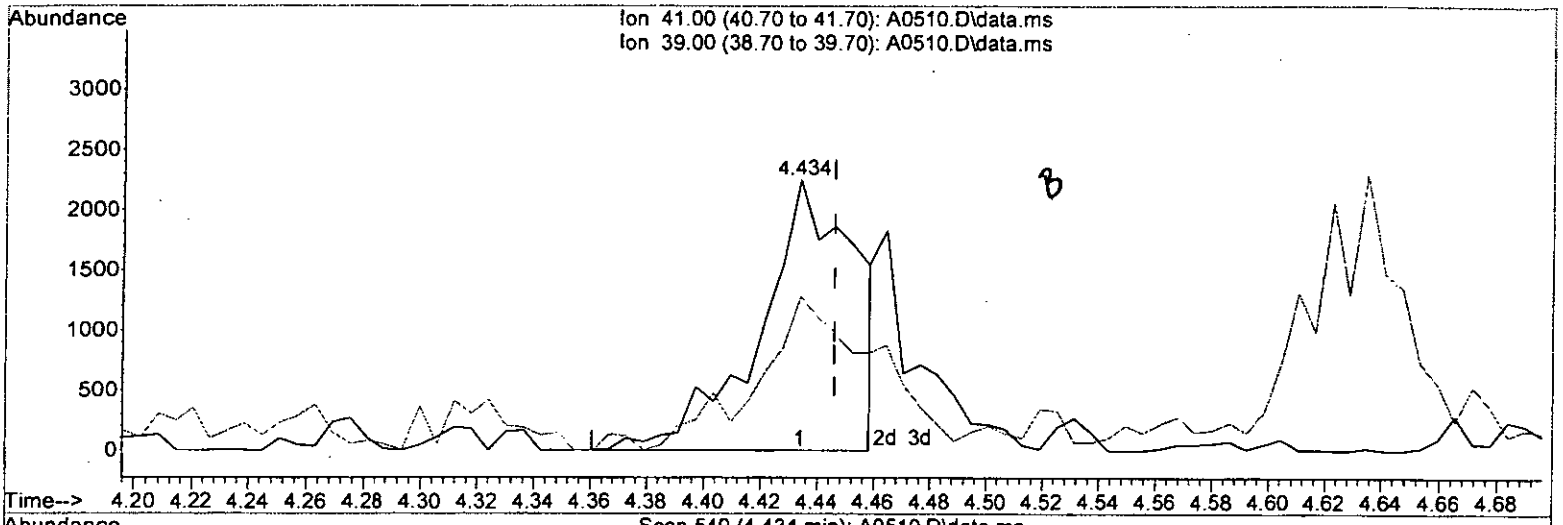
response 6471

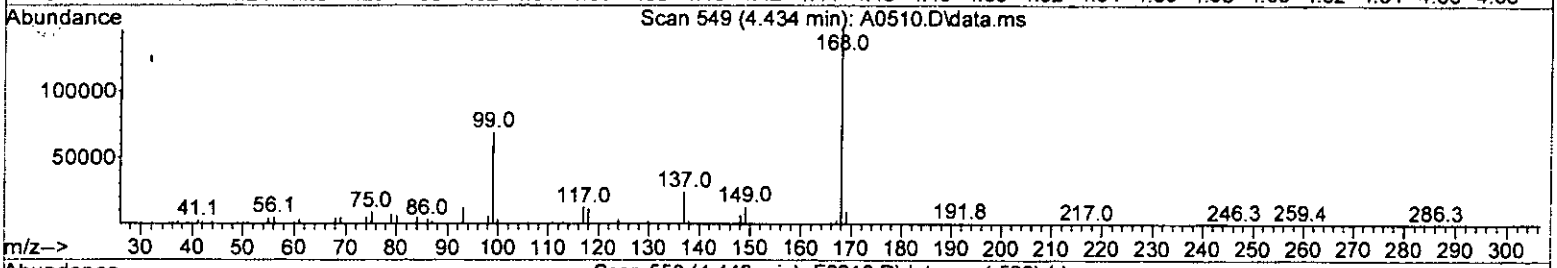
Ion	Exp%	Act%
97.00	100	100
99.00	67.60	63.67
61.00	47.60	68.67#
0.00	0.00	0.00

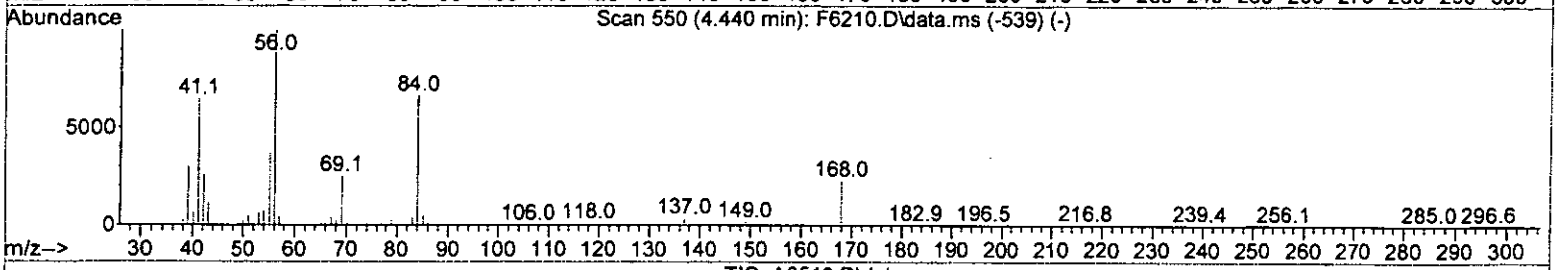
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(44) Cyclohexane (P)

4.434min (-0.012) 0.51 ug/L

response 5231

Ion	Exp%	Act%
41.00	100	100
39.00	51.30	56.81
0.00	0.00	0.00
0.00	0.00	0.00

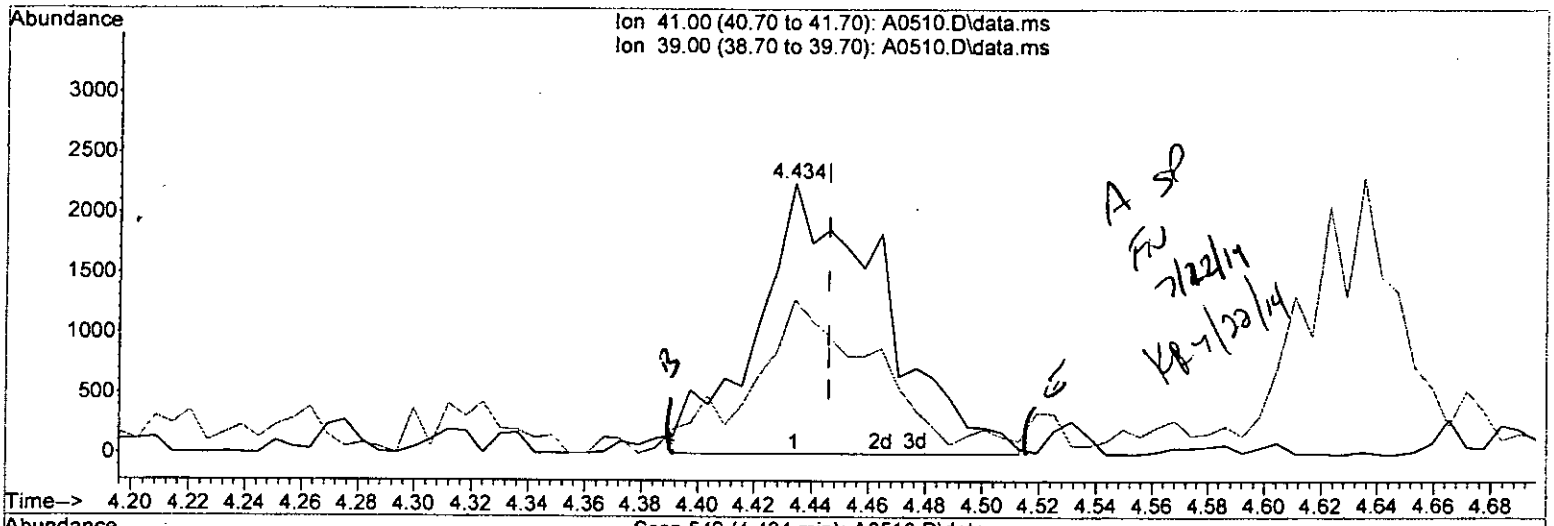
00143

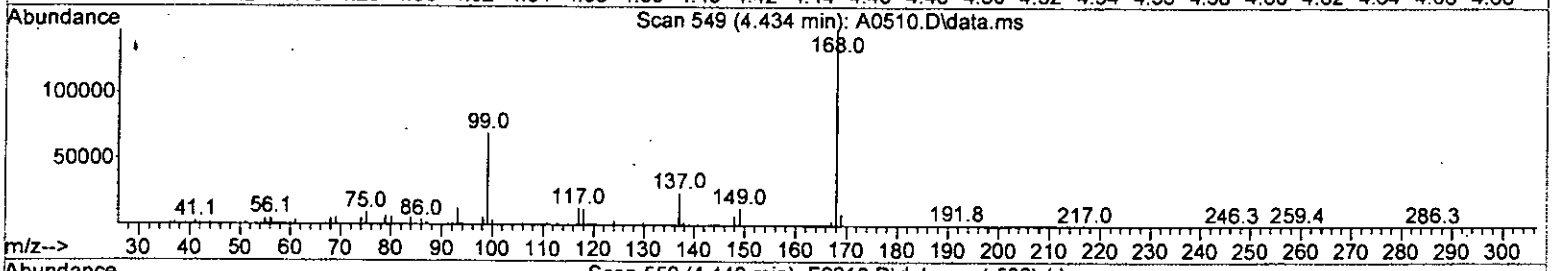
W072114.M Mon Jul 21 12:21:23 2014 MSVO10

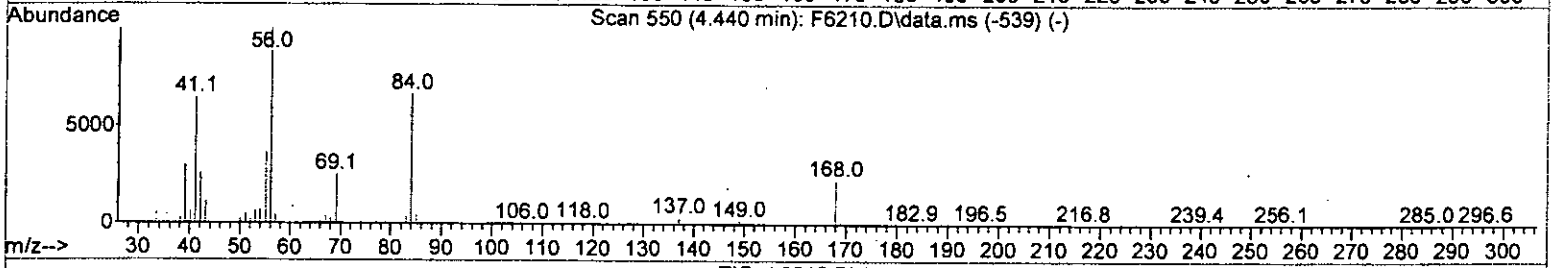
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(44) Cyclohexane (P)

4.434min (-0.012) 0.67 ug/L m

response 6867

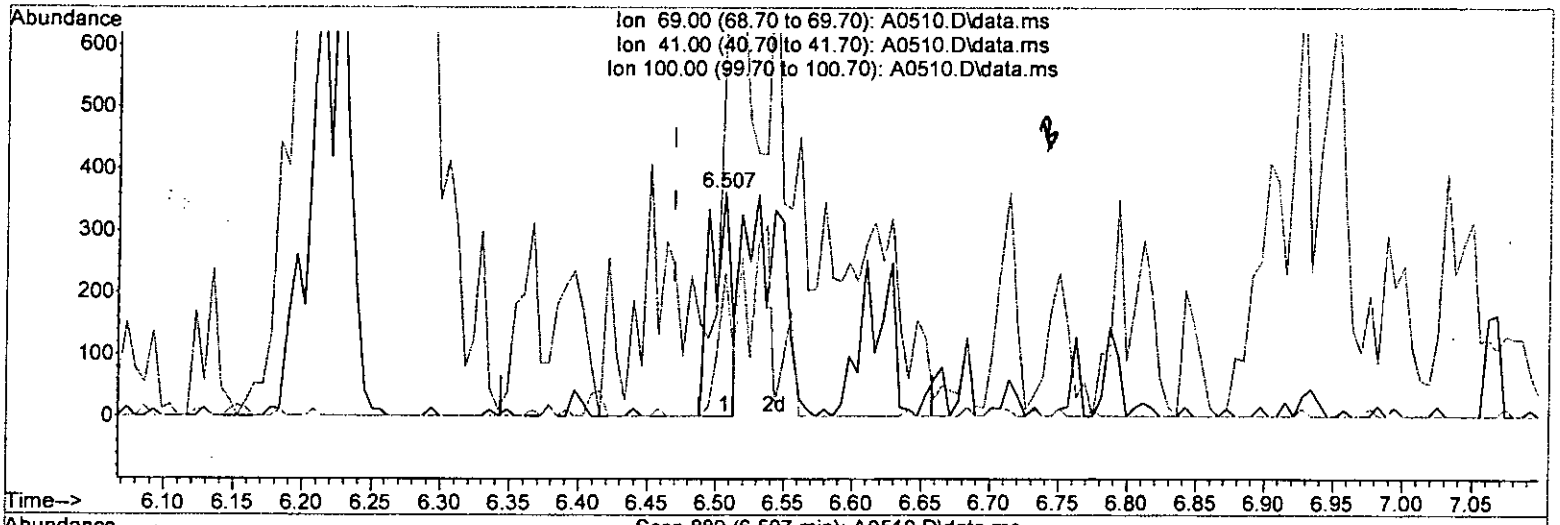
Ion	Exp%	Act%
41.00	100	100
39.00	51.30	56.81
0.00	0.00	0.00
0.00	0.00	0.00

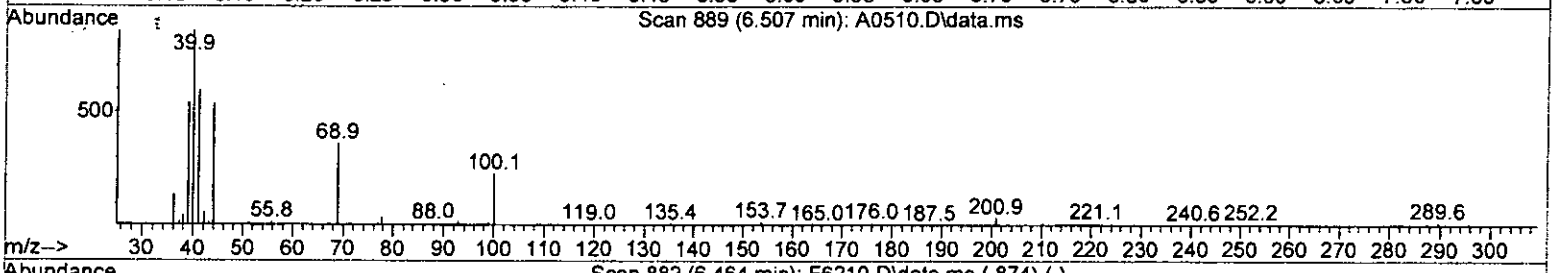
00144

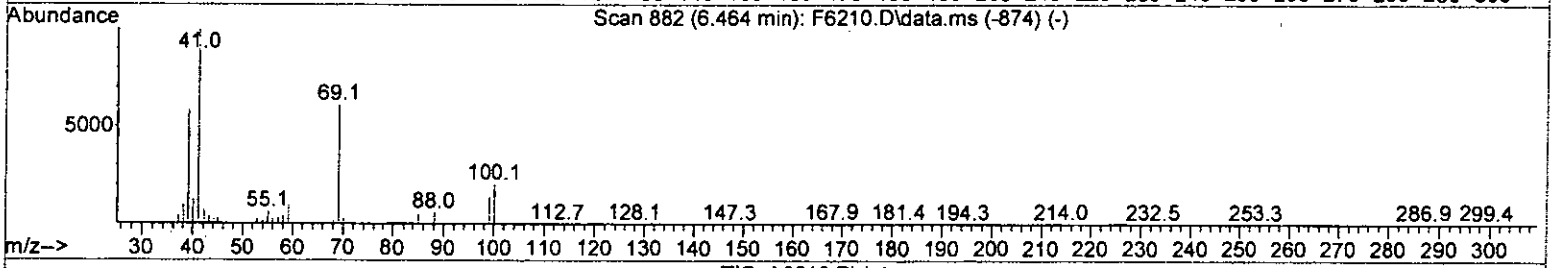
W072114.M Mon Jul 21 12:21:31 2014 MSVO10 Page: 1

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(59) Methyl Methacrylate

6.507min (+0.037) 0.09 ug/L

response 377

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	163.99#
100.00	36.90	63.71#
0.00	0.00	0.00

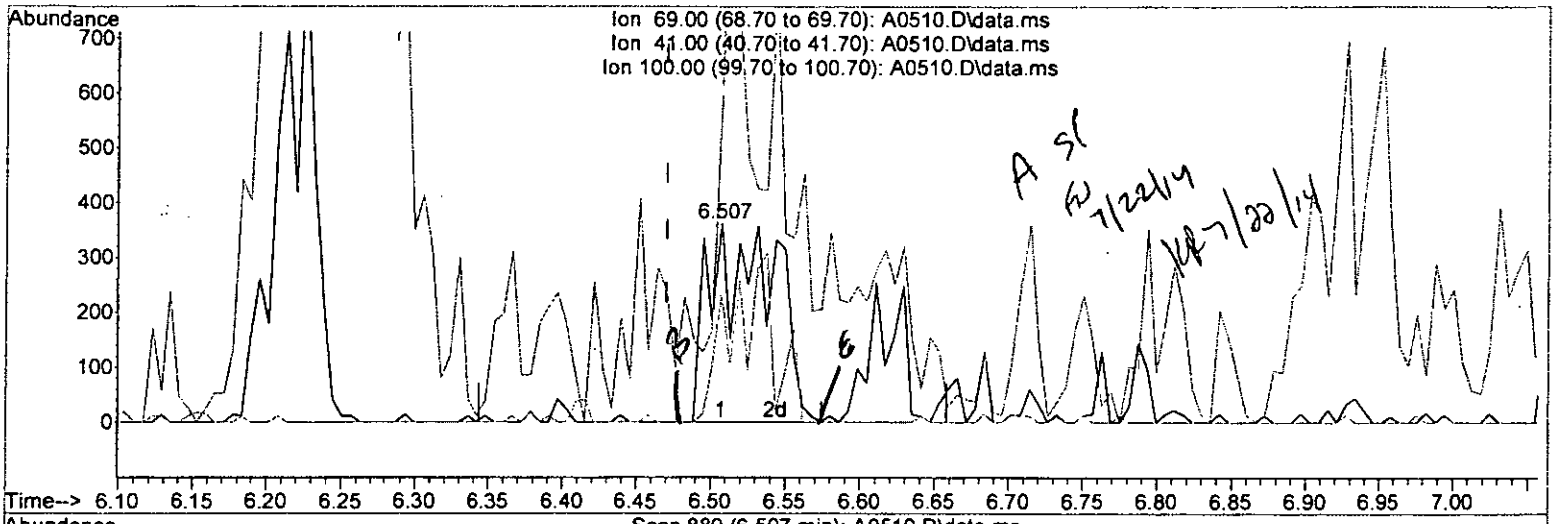
00145

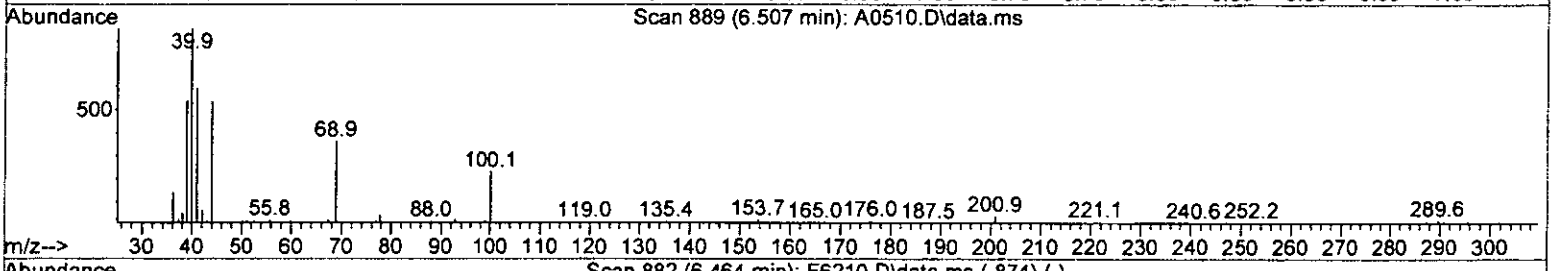
W072114.M Mon Jul 21 12:21:54 2014 MSVO10

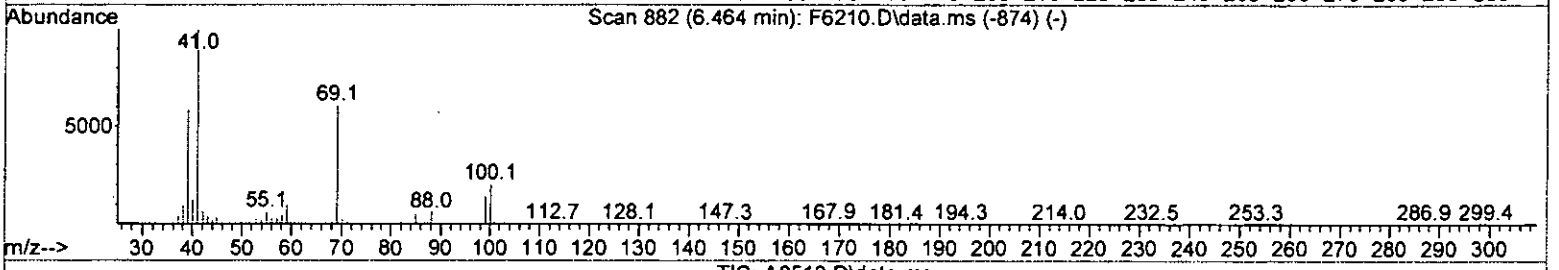
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(59) Methyl Methacrylate

6.507min (+0.037) 0.26 ug/L m

response 1075

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	163.99#
100.00	36.90	63.71#
0.00	0.00	0.00

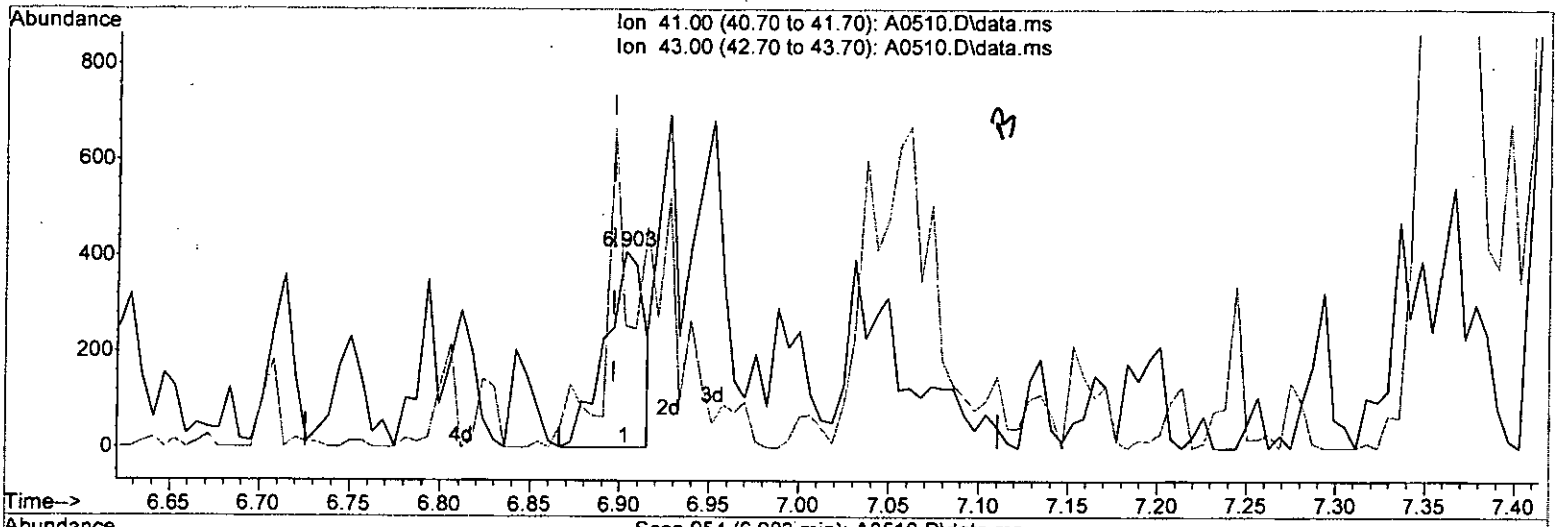
00146

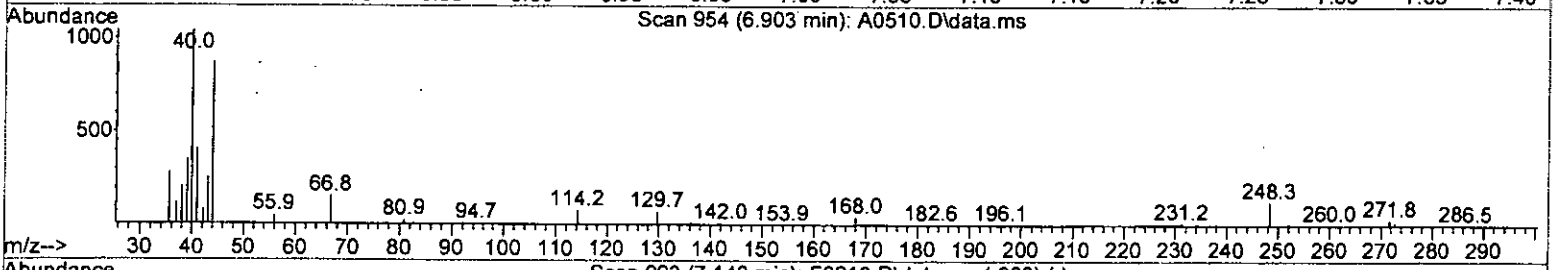
W072114.M Mon Jul 21 12:22:07 2014 MSVO10

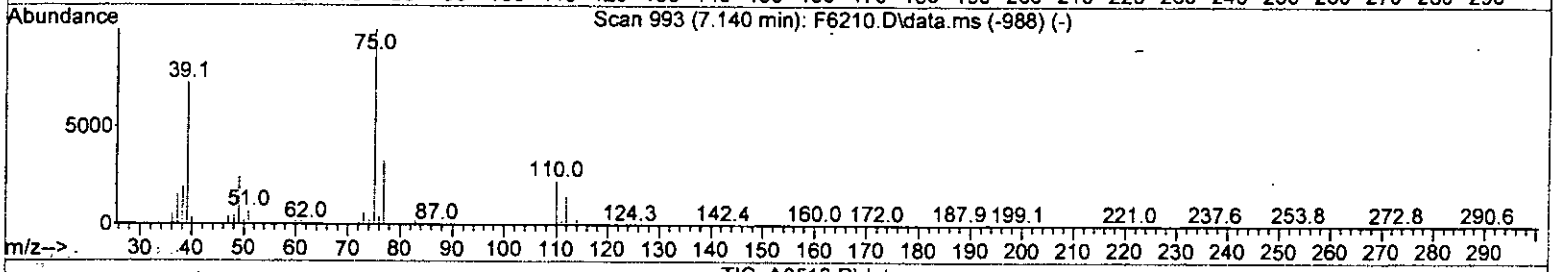
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(61) 2-Nitropropane

6.903min (+0.006) 0.39 ug/L

response 618

Ion	Exp%	Act%
41.00	100	100
43.00	108.60	62.10#
0.00	0.00	0.00
0.00	0.00	0.00

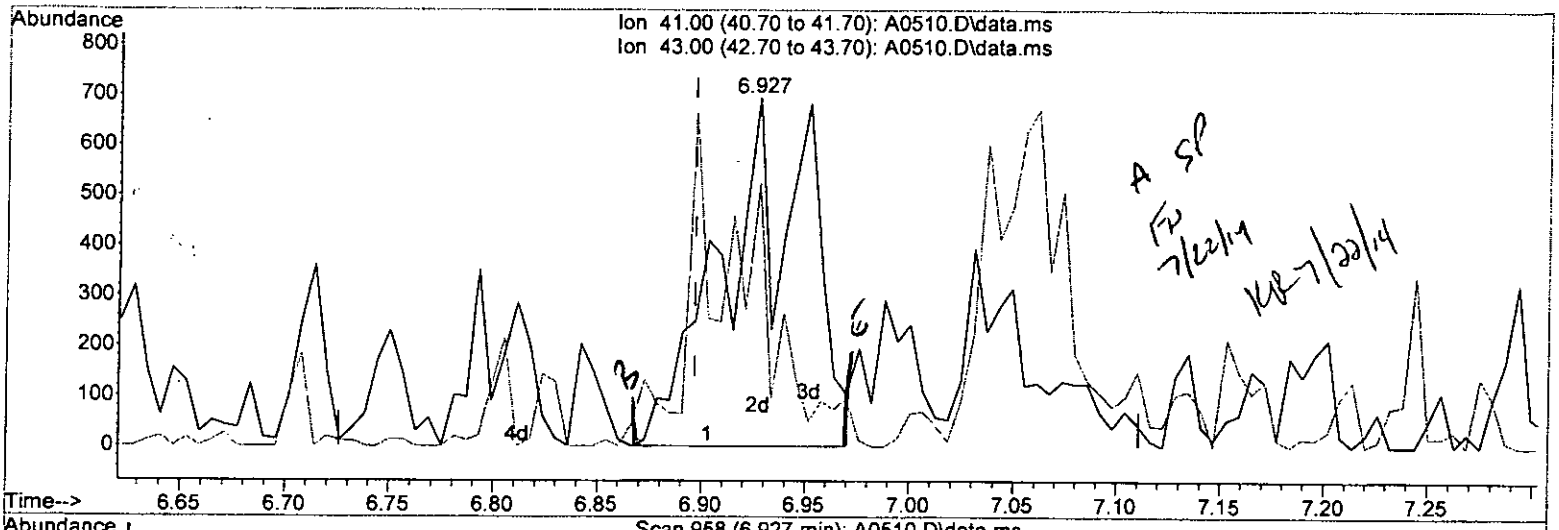
00147

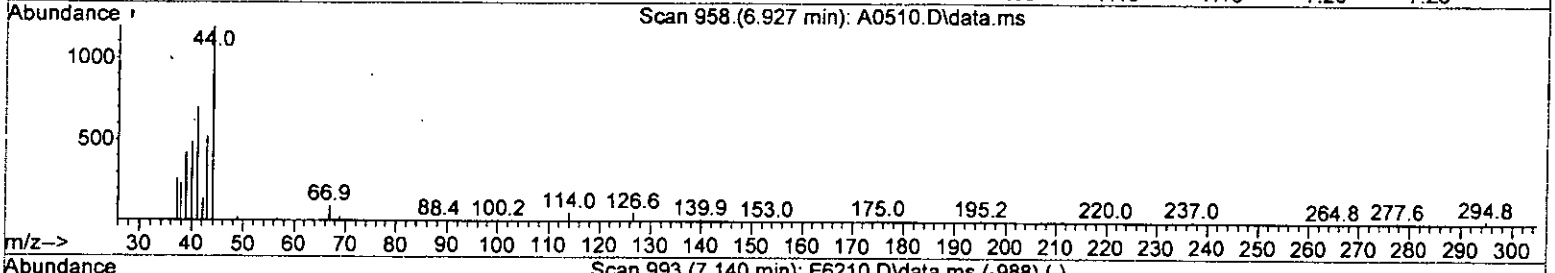
W072114.M Mon Jul 21 12:22:21 2014 MSVO10

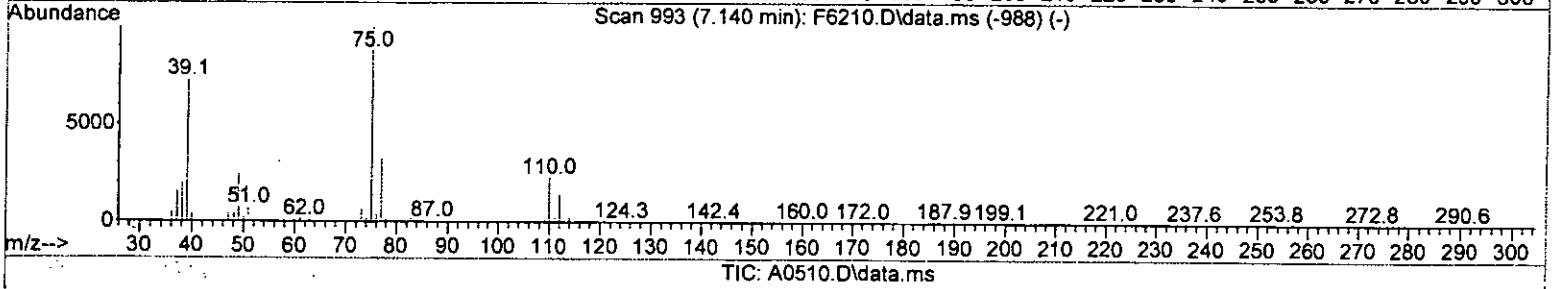
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(61) 2-Nitropropane

6.927min (+0.031) 1.22 ug/L m

response 1949

Ion	Exp%	Act%
41.00	100	100
43.00	108.60	75.22#
0.00	0.00	0.00
0.00	0.00	0.00

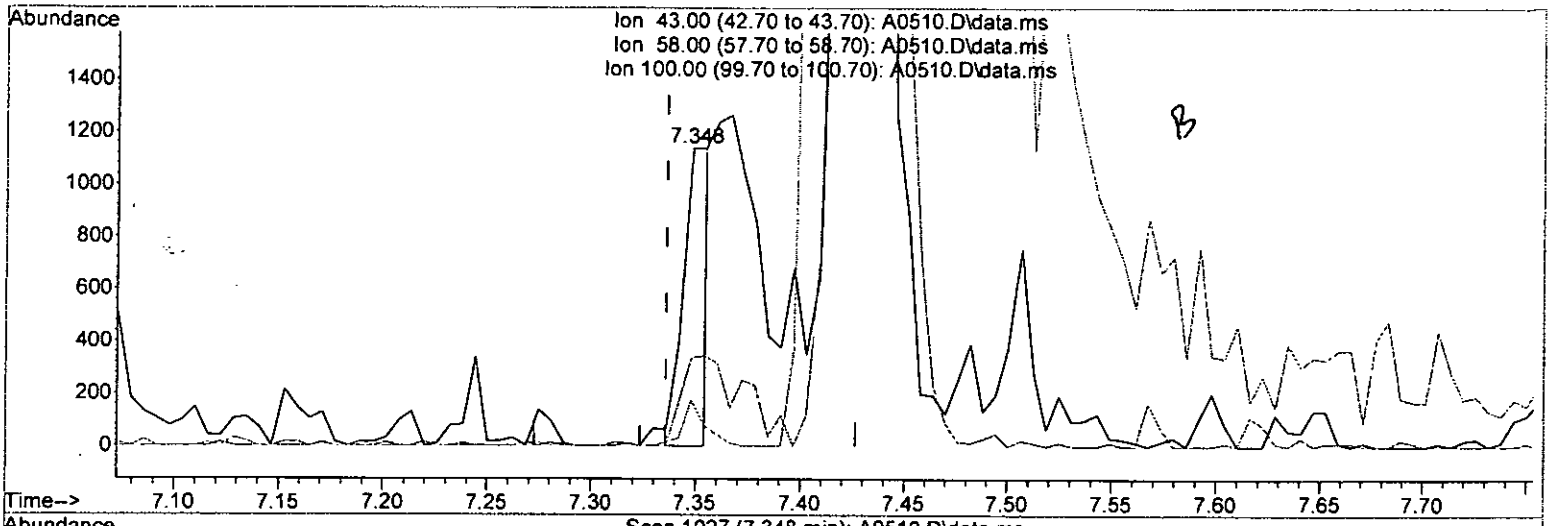
00148

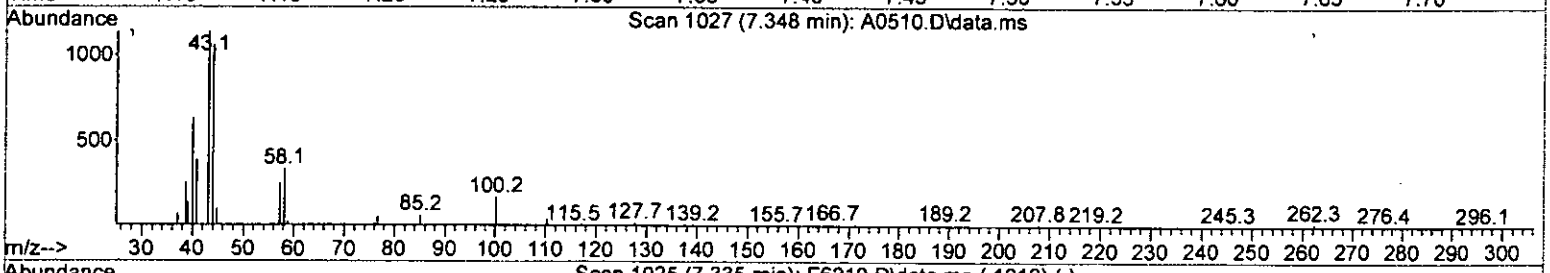
W072114.M Mon Jul 21 12:22:35 2014 MSVO10

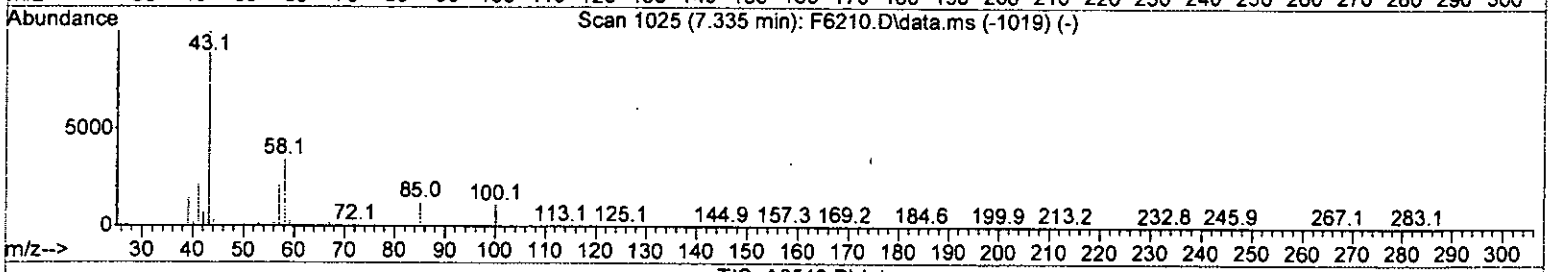
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(64) 4-Methyl-2-pentanone (P)

7.348min (+0.012) 0.15 ug/L

response 1020

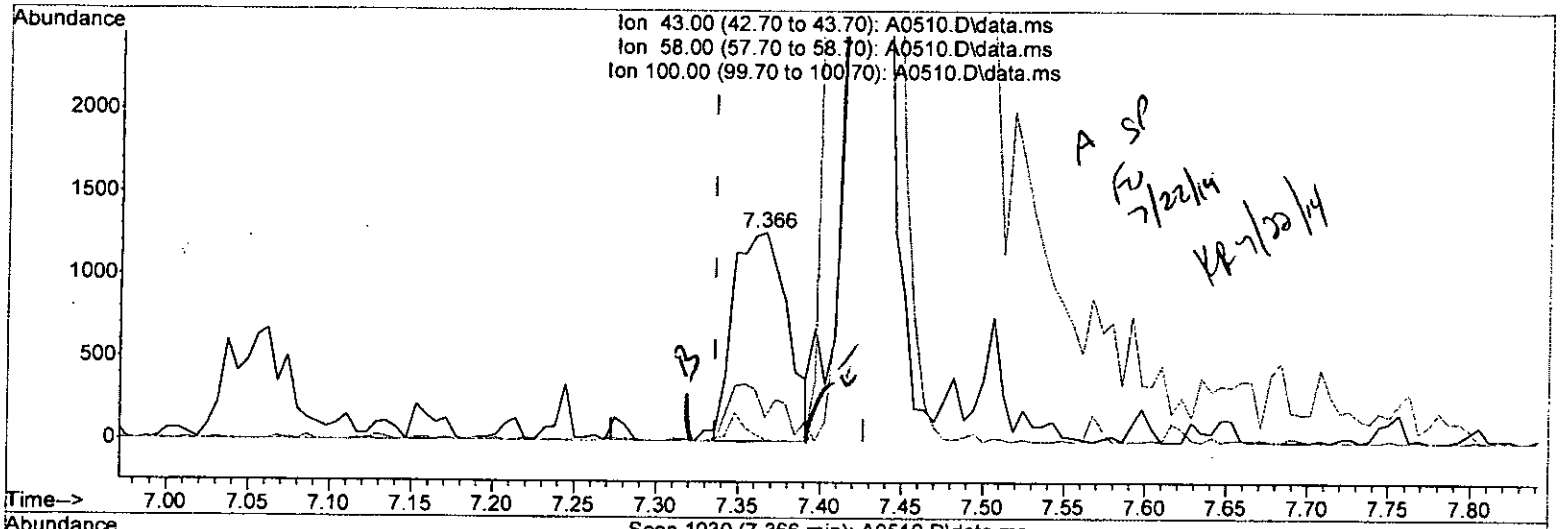
Ion	Exp%	Act%
43.00	100	100
58.00	36.30	29.38
100.00	12.60	15.13
0.00	0.00	0.00

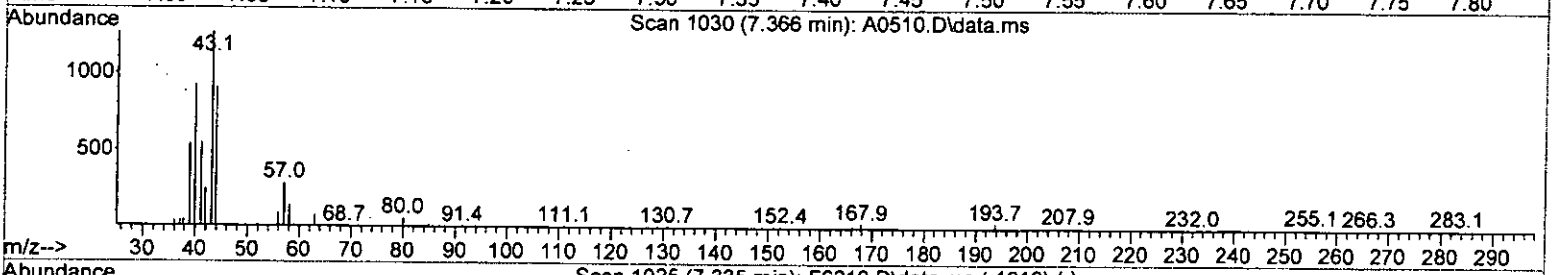
W072114.M Mon Jul 21 12:22:46 2014 MSVO10

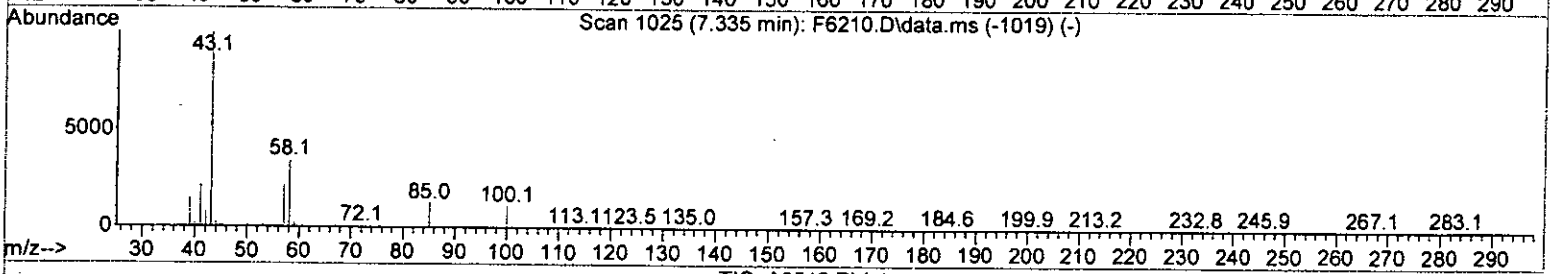
00149

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(64) 4-Methyl-2-pentanone (P)

7.366min (+0.031) 0.43 ug/L m

response 2917

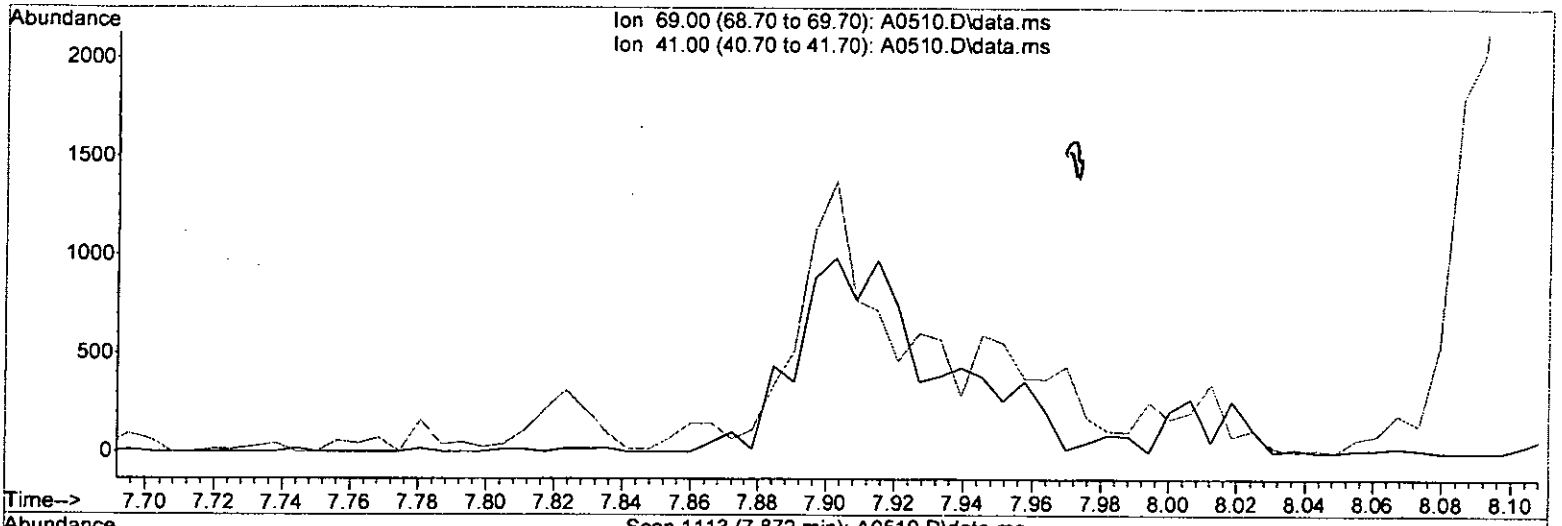
Ion	Exp%	Act%
43.00	100	100
58.00	36.30	11.41#
100.00	12.60	0.87
0.00	0.00	0.00

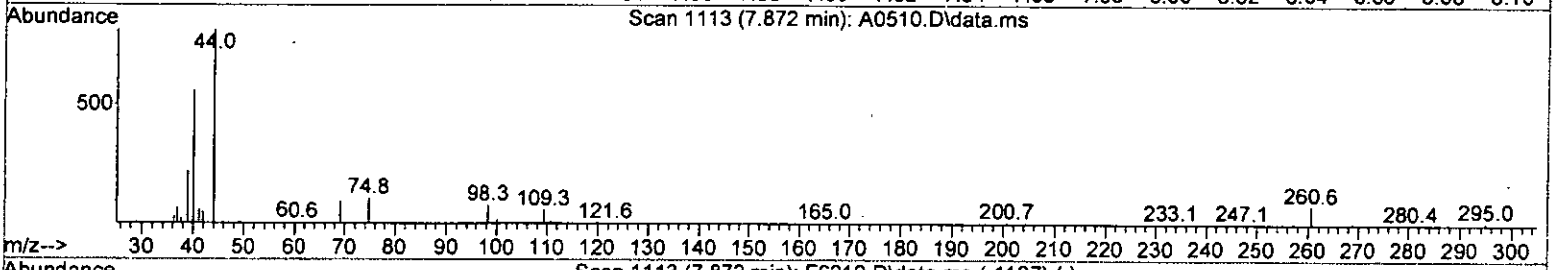
W072114.M Mon Jul 21 12:22:59 2014 MSVO10

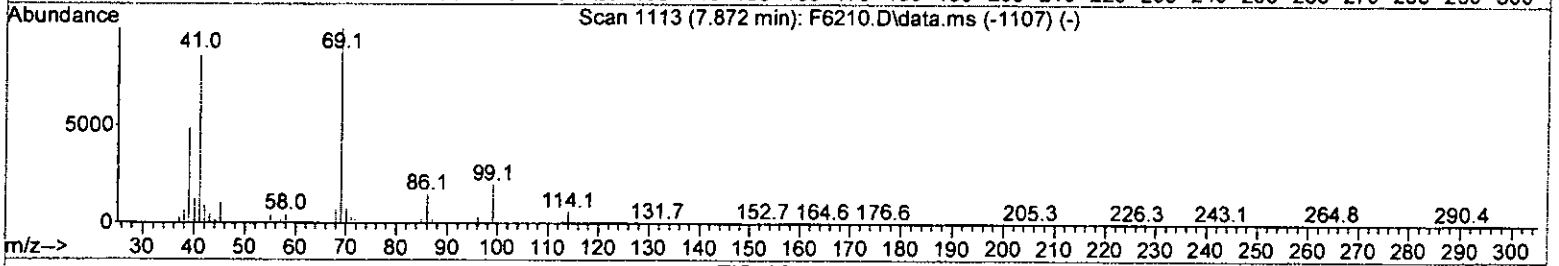
00150

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(68) Ethyl Methacrylate

7.872min (-7.872) 0.00 ug/L

response 0

Ion	Exp%	Act%
69.00	100	0.00
41.00	71.50	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

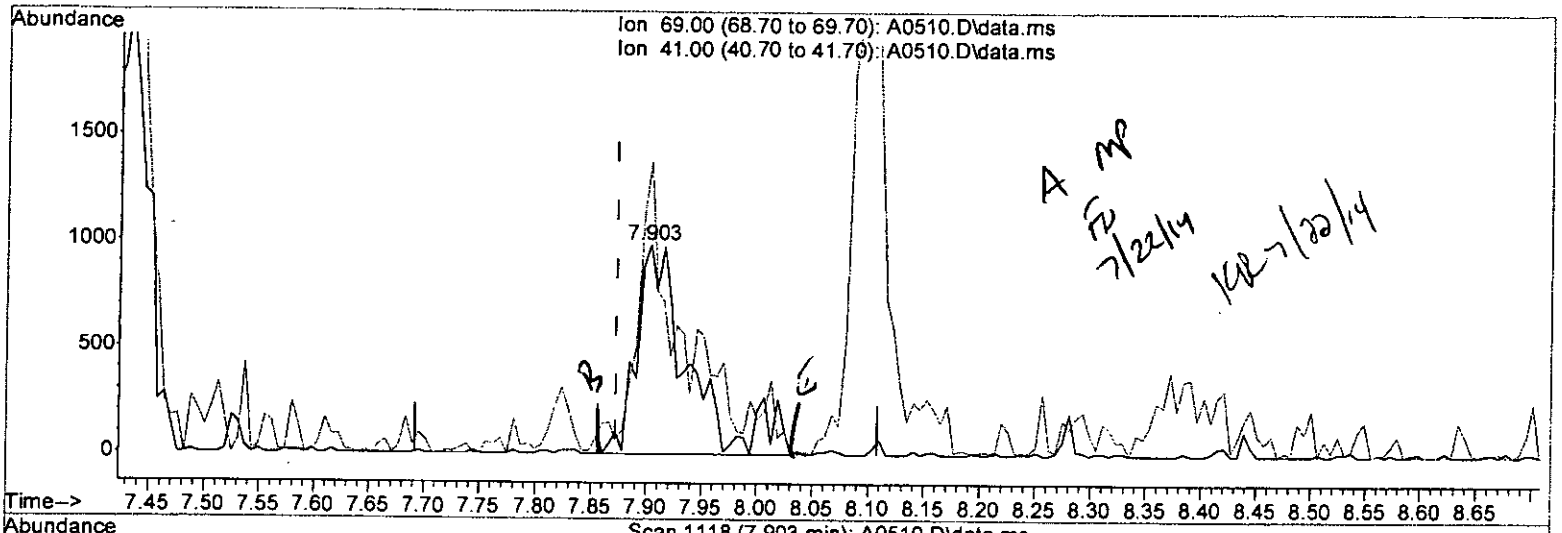
W072114.M Mon Jul 21 12:23:07 2014 MSVO10

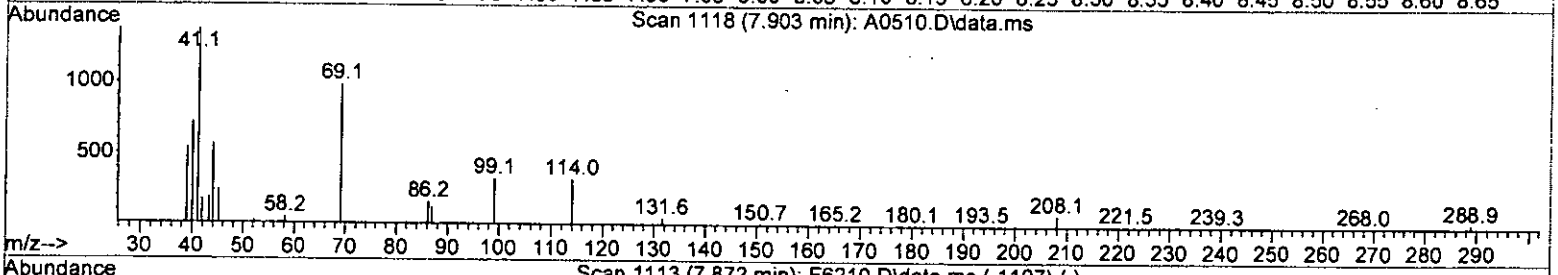
00151

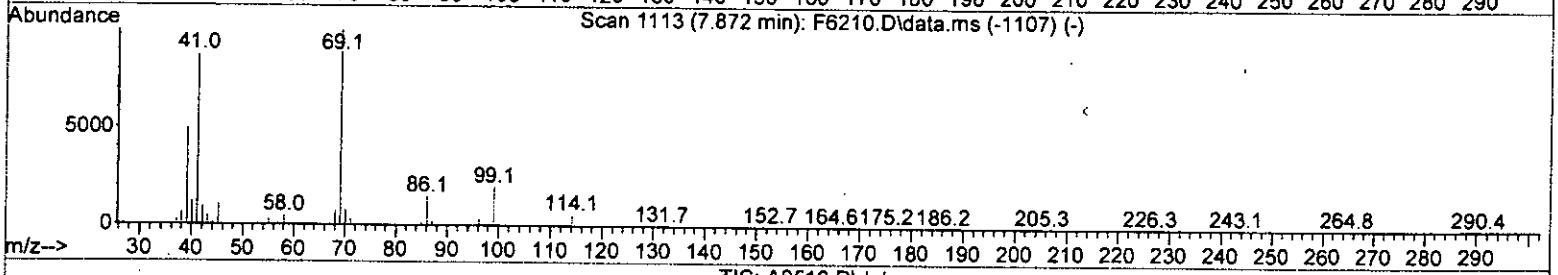
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:24:48 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(68) Ethyl Methacrylate

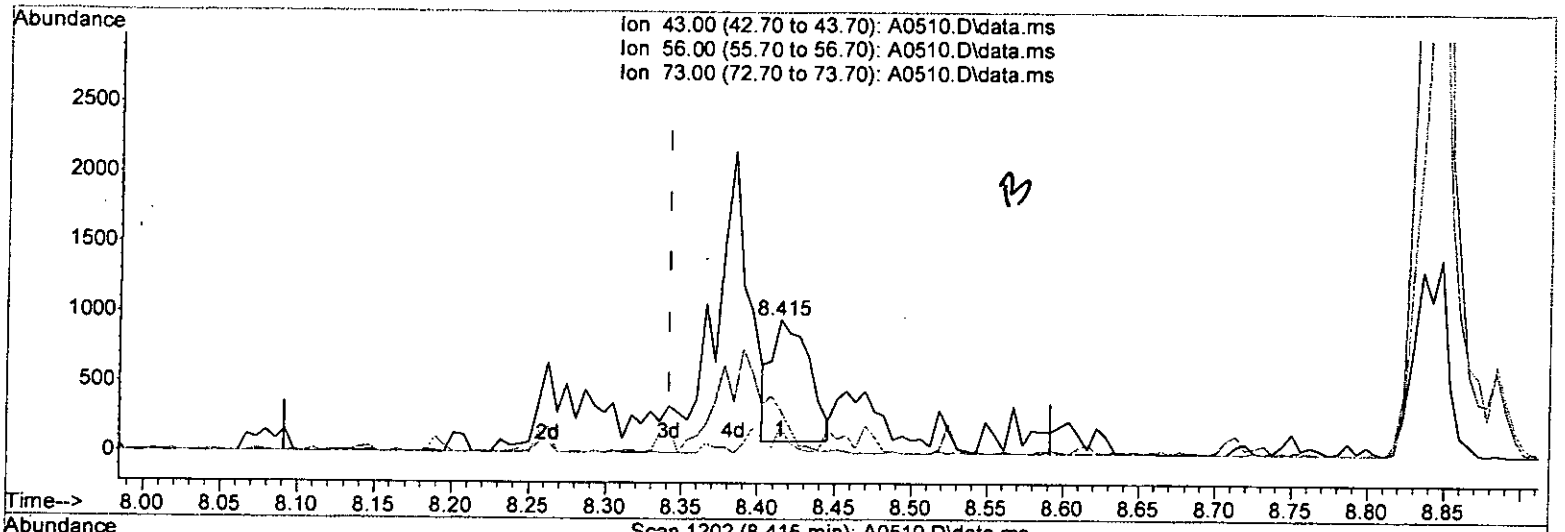
7.903min (+0.031) 0.37 ug/L m

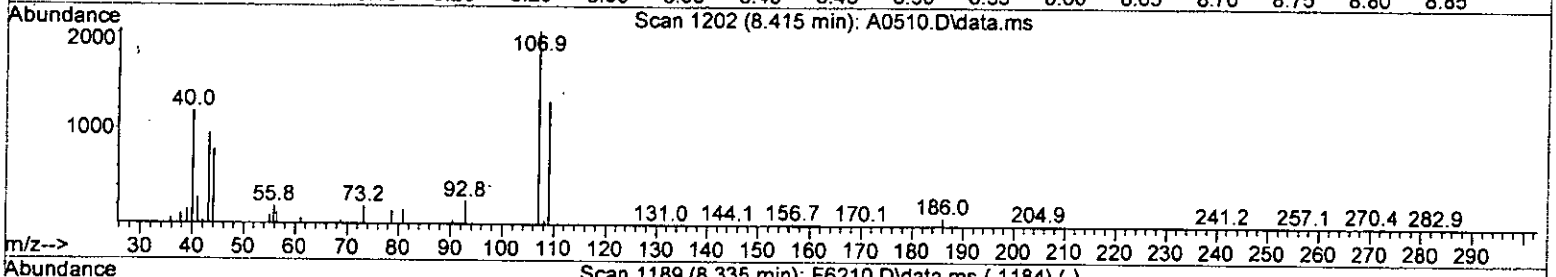
response 3216

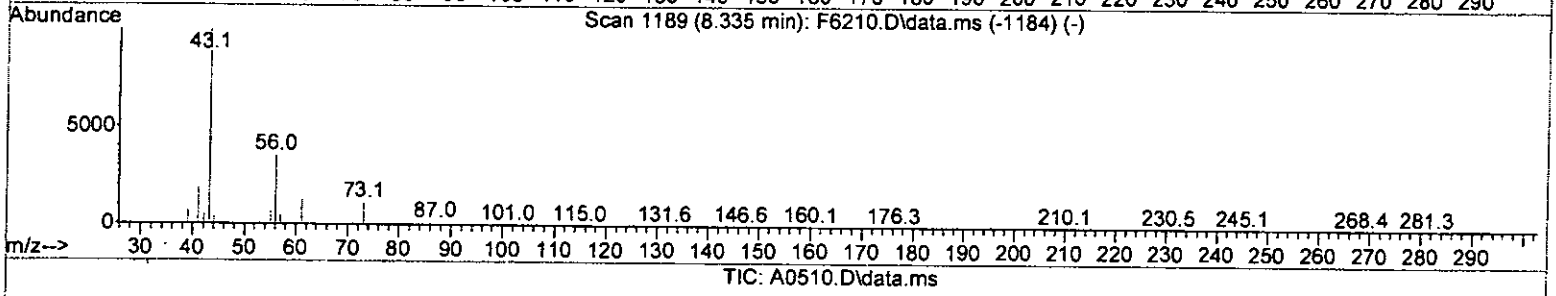
Ion	Exp%	Act%
69.00	100	100
41.00	71.50	139.43#
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(76) N-Butyl Acetate

8.415min (+0.073) 0.11 ug/L

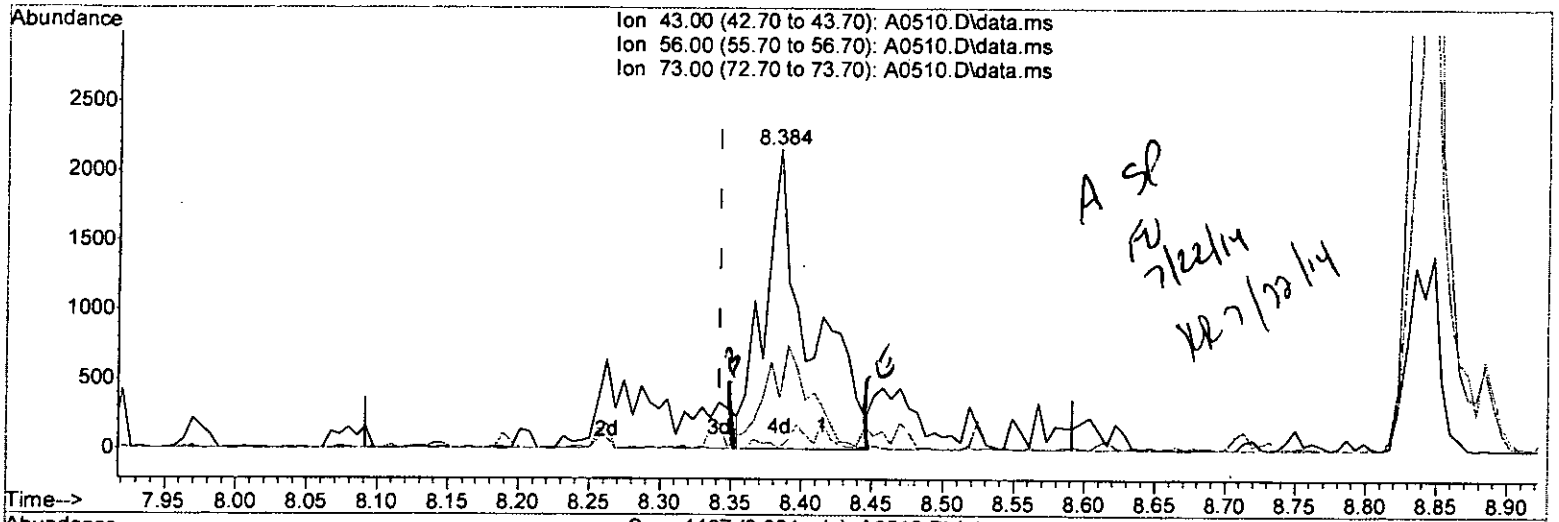
response 1456

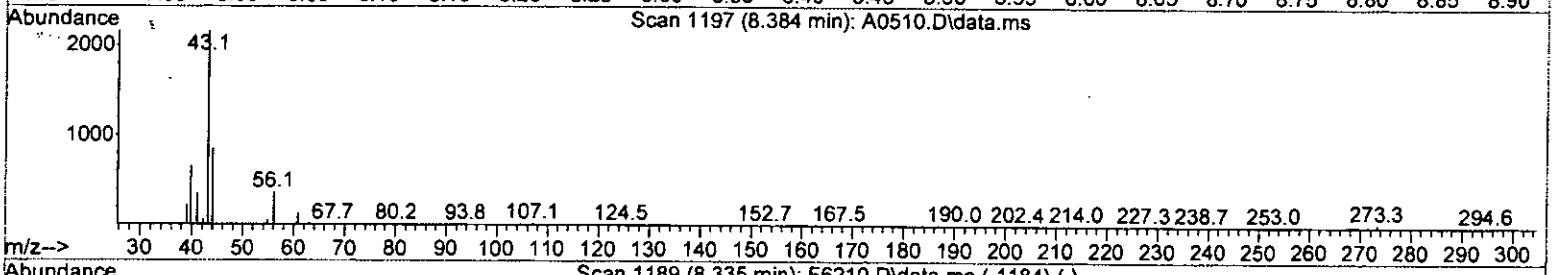
Ion	Exp%	Act%
43.00	100	100
56.00	38.80	31.97
73.00	14.00	20.08
0.00	0.00	0.00

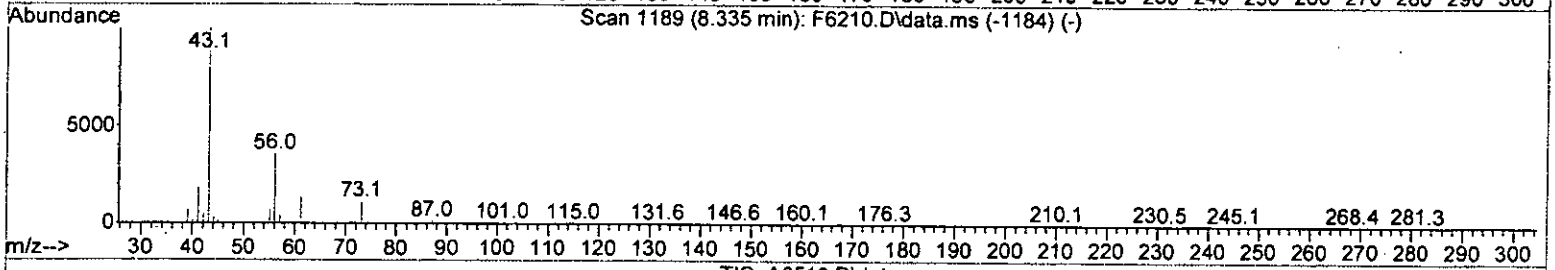
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(76) N-Butyl Acetate

8.384min (+0.043) 0.37 ug/L m

response 4816

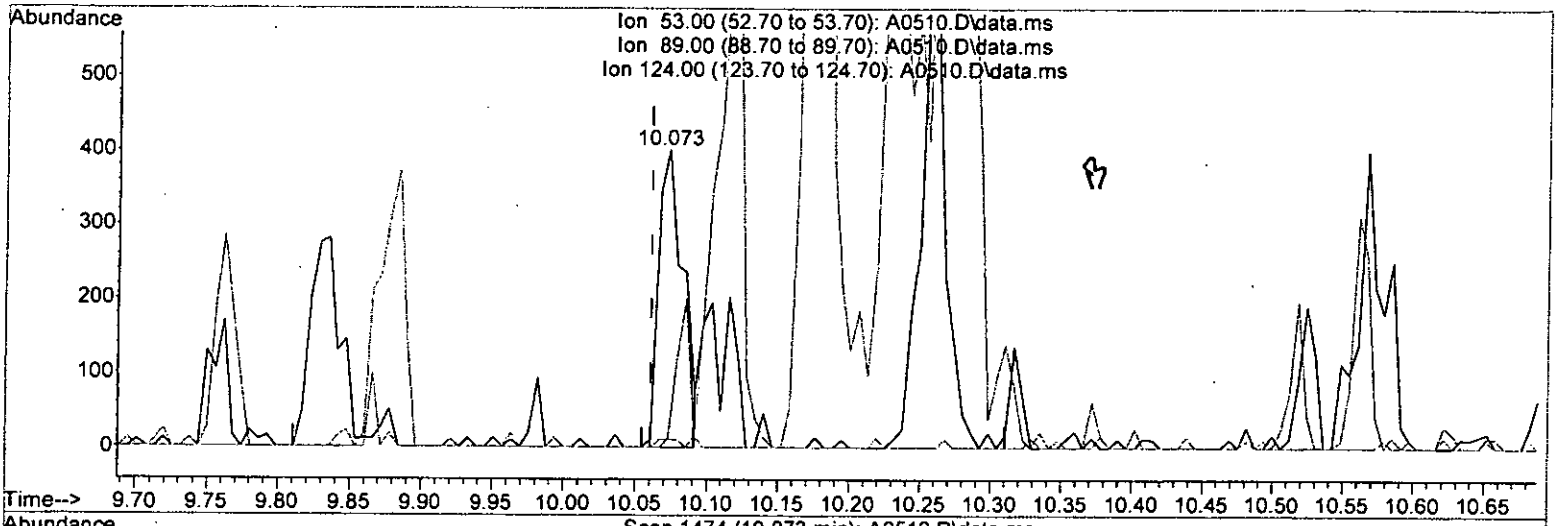
Ion	Exp%	Act%
43.00	100	100
56.00	38.80	16.89#
73.00	14.00	0.00
0.00	0.00	0.00

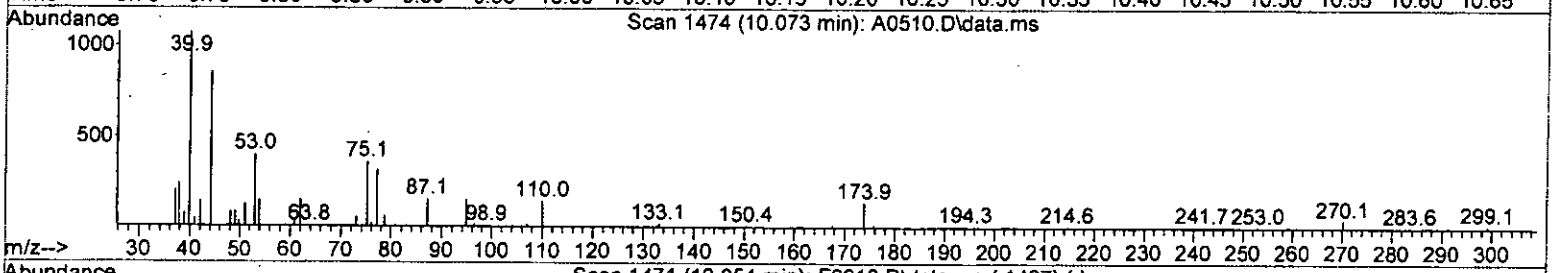
00154

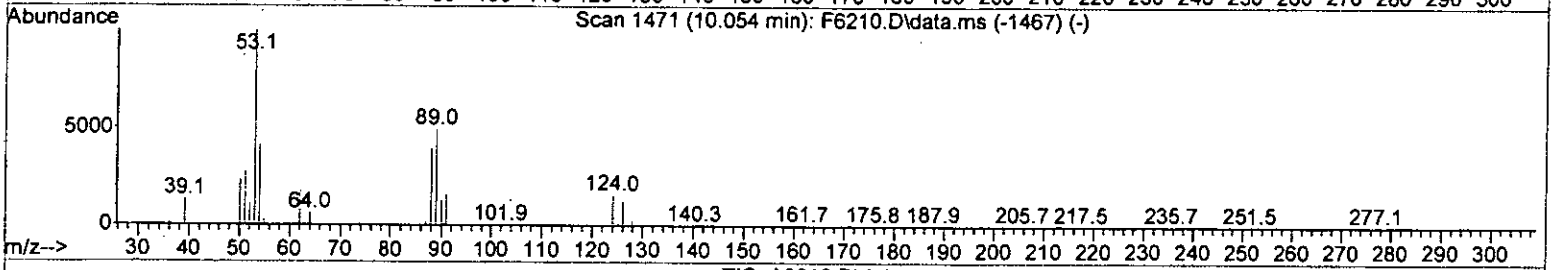
W072114.M Mon Jul 21 12:23:59 2014 MSVO10 Page: 1

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:24:48 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(90) trans-1,4-Dichloro-2-Butene

10.073min (+0.012) 0.22 ug/L

response 477

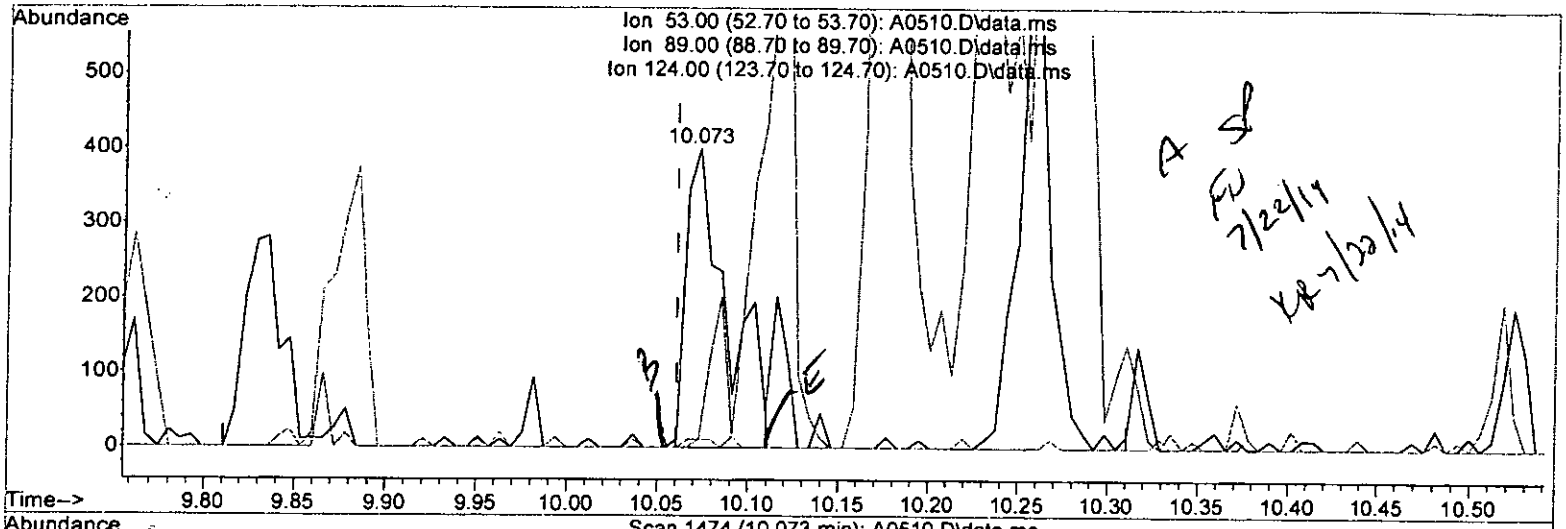
Ion	Exp%	Act%
53.00	100	100
89.00	57.40	3.00#
124.00	20.90	2.75
0.00	0.00	0.00

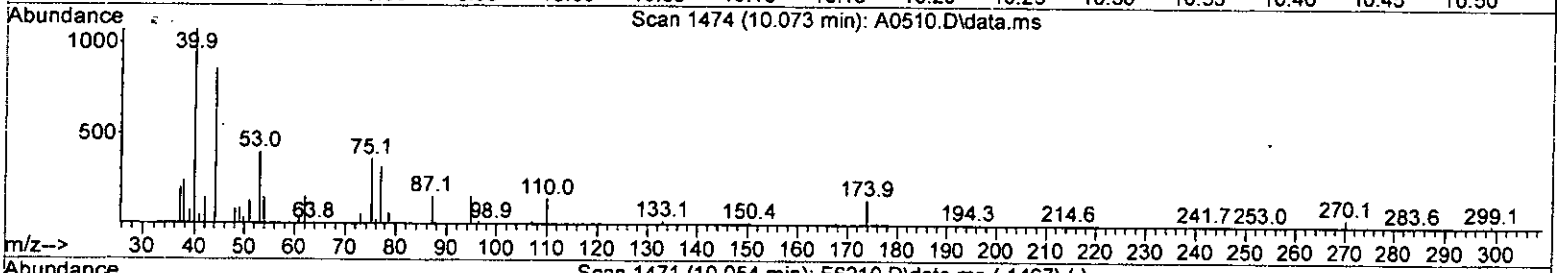
00155

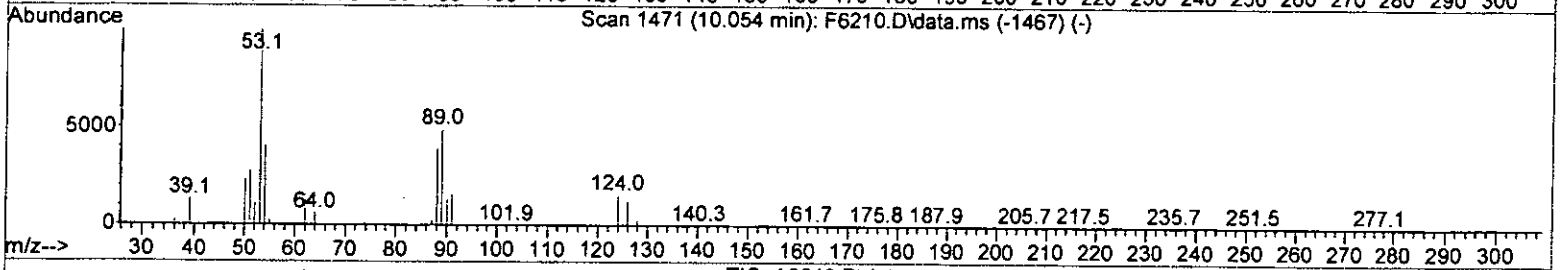
W072114.M Mon Jul 21 16:13:24 2014 MSVO10

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:24:48 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(90) trans-1,4-Dichloro-2-Butene

10.073min (+0.012) 0.29 ug/L m

response 627

Ion	Exp%	Act%
53.00	100	100
89.00	57.40	3.00#
124.00	20.90	2.75
0.00	0.00	0.00

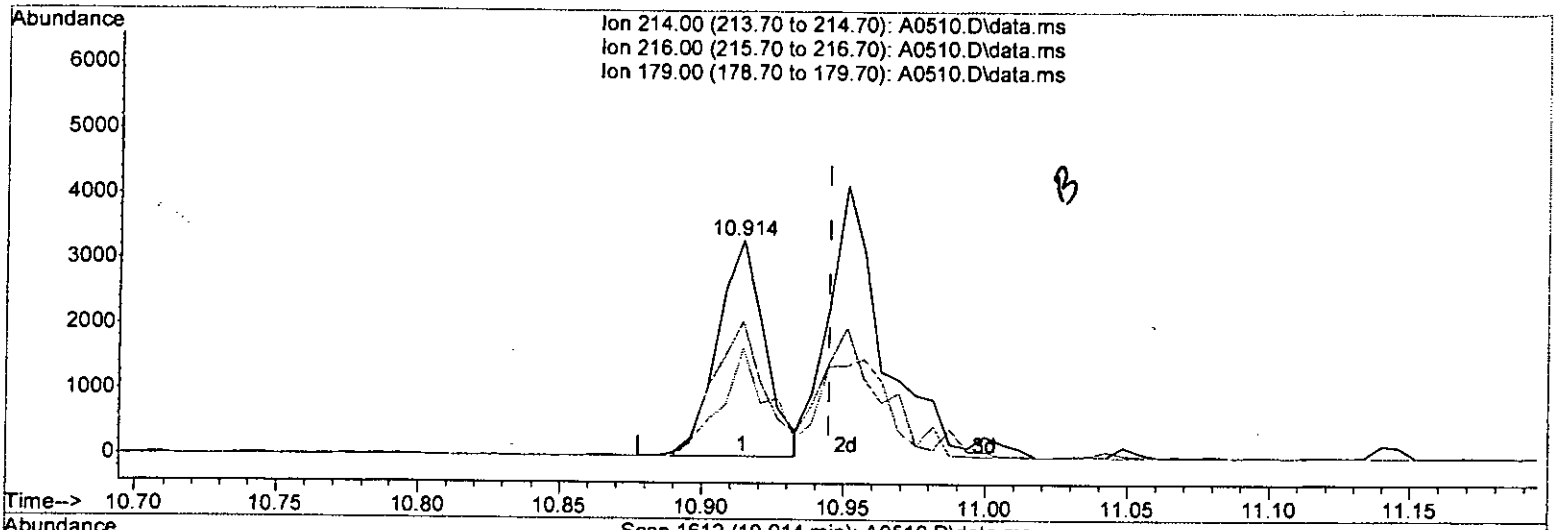
00156

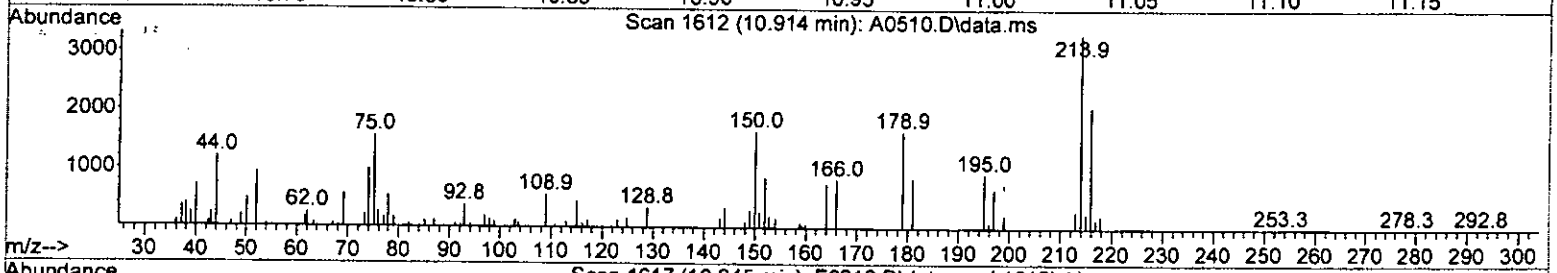
W072114.M Mon Jul 21 16:13:44 2014 MSVO10

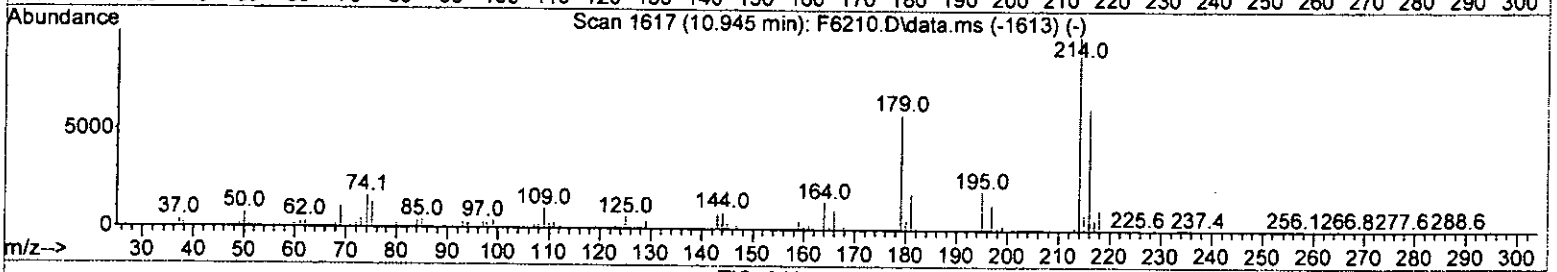
Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(108) 2,5-Dichlorobenzotrifluoride

10.914min (-0.030) 0.38 ug/L

response 3819

Ion	Exp%	Act%
214.00	100	100
216.00	62.10	62.51
179.00	62.80	49.94
0.00	0.00	0.00

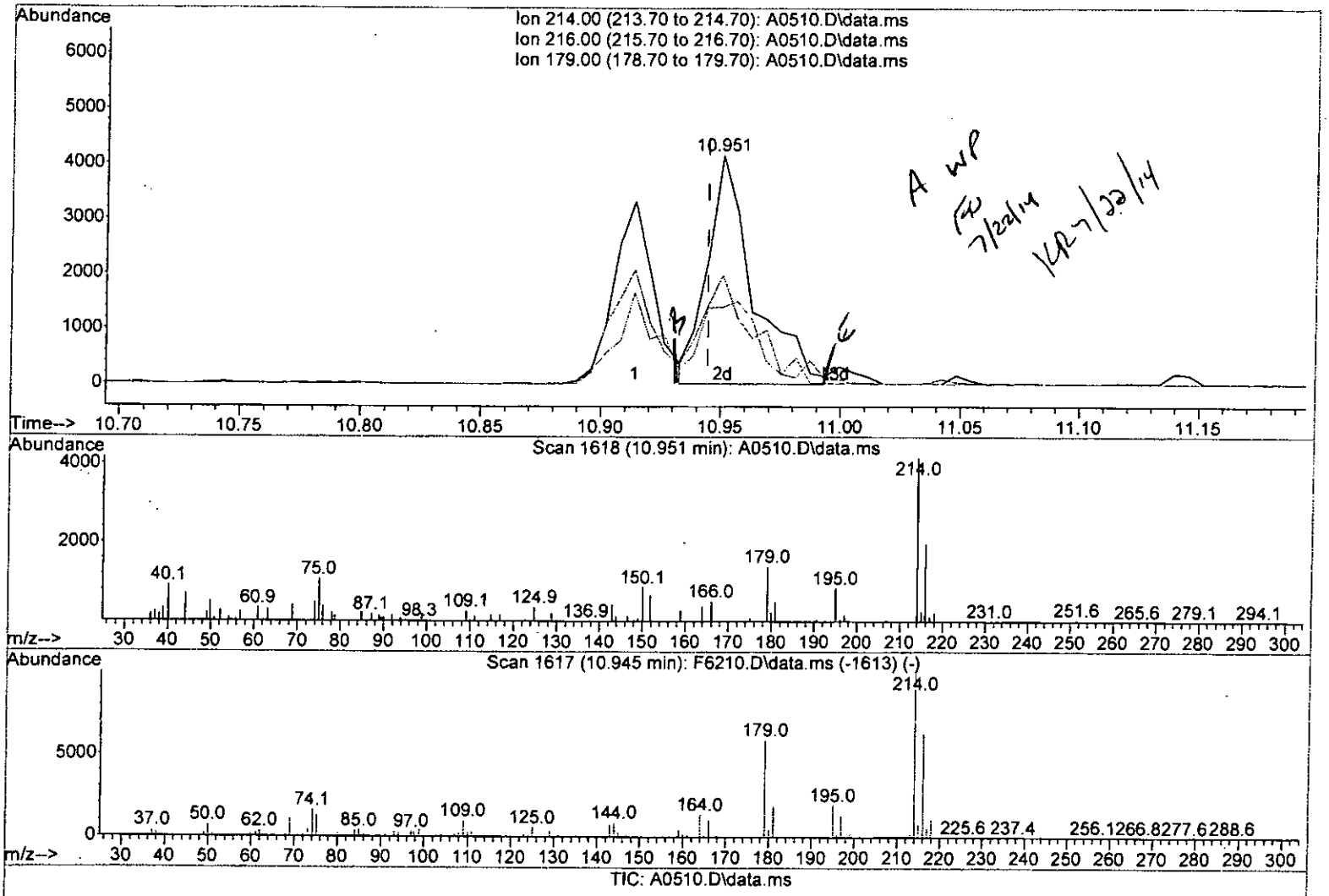
00157

W072114.M Mon Jul 21 12:24:21 2014 MSVO10

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(108) 2,5-Dichlorobenzotrifluoride

10.951min (+0.006) 0.55 ug/L m

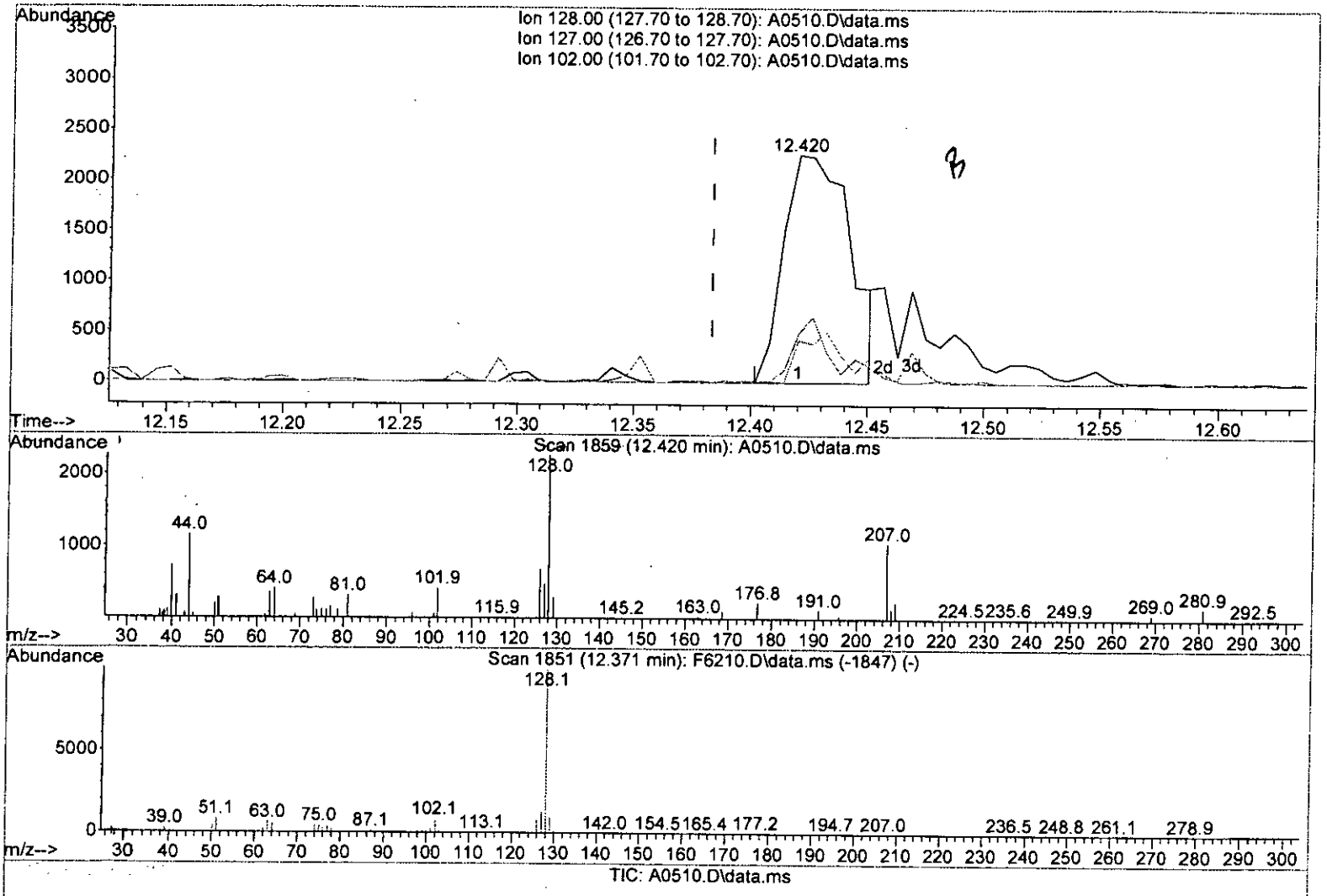
response 5531

Ion	Exp%	Act%
214.00	100	100
216.00	62.10	47.40
179.00	62.80	33.56#
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0510.D\data.ms

(117) Naphthalen

12.420min (+0.037) 0.28 ug/L

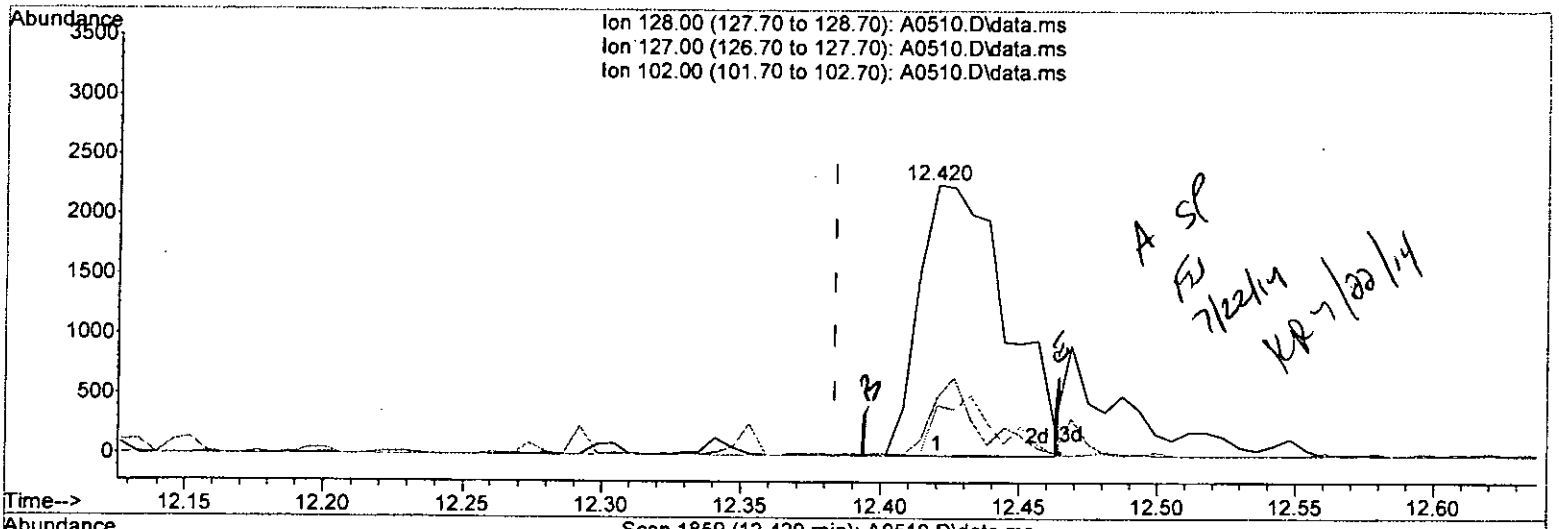
response 4495

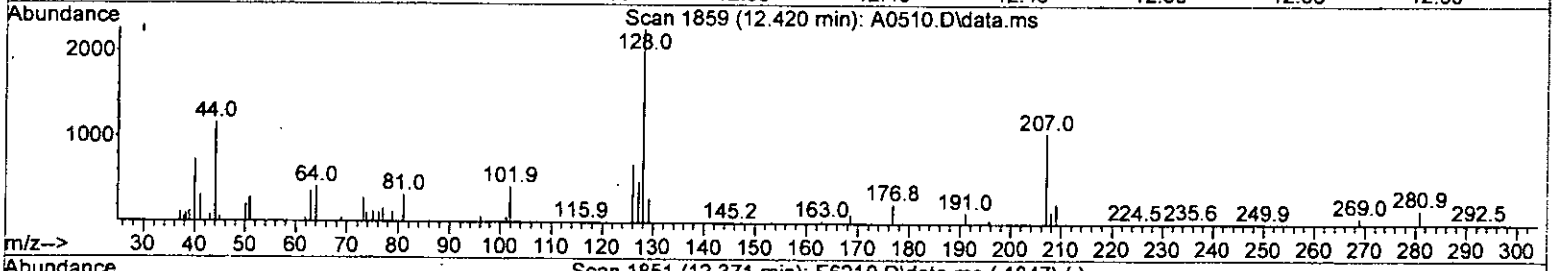
Ion	Exp%	Act%
128.00	100	100
127.00	12.90	21.36
102.00	8.70	18.53
0.00	0.00	0.00

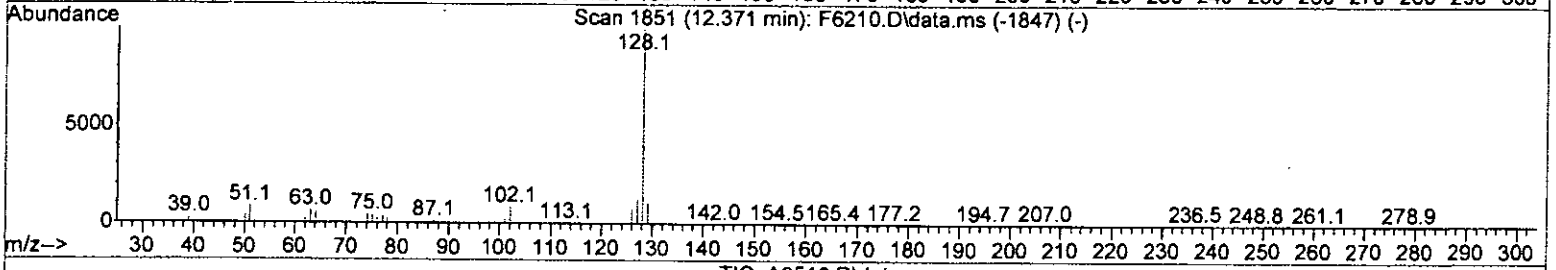
W072114.M Mon Jul 21 12:24:45 2014 MSVO10

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:05:34 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0510.D\data.ms

(117) Naphthalen

12.420min (+0.037) 0.31 ug/L m

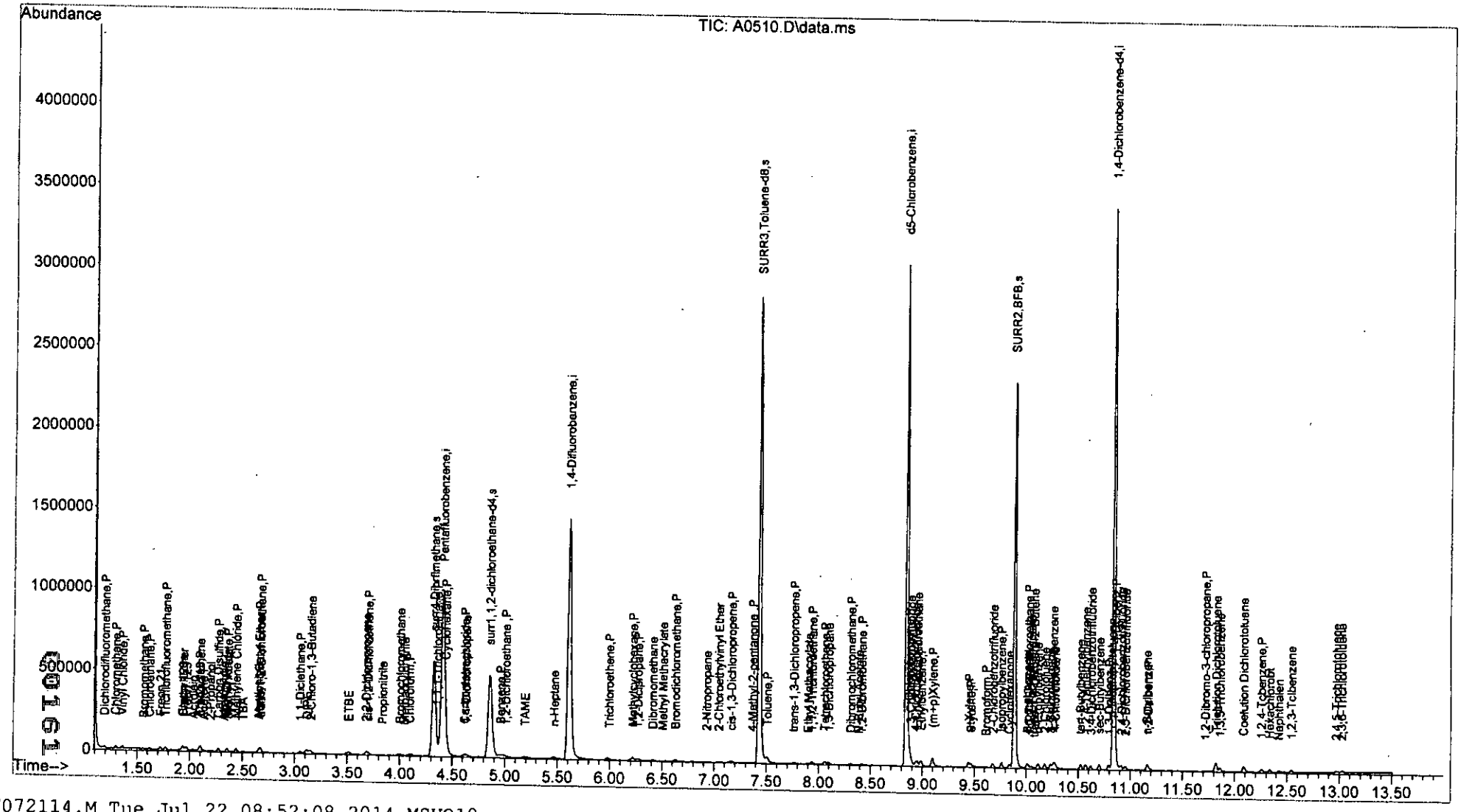
response 4940

Ion	Exp%	Act%
128.00	100	100
127.00	12.90	21.36
102.00	8.70	18.53
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0510.D Vial: 3
Acq On : 21 Jul 2014 11:52 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 16:13:30 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



W072114.M Tue Jul 22 08:52:08 2014 MSVO10

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 16:17:40 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration

FJ 7/22/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.415	168	915629	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1383652	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1274162	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	647214	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	450996	54.69	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 109.38%			
48) surr1,1,2-dichloroetha...	4.854	65	480346	58.77	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 117.54%			
65) SURR3,Toluene-d8	7.427	98	1613221	50.65	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.30%			
70) SURR2,BFB	9.878	95	623933	49.75	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.50%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.190	85	10045	1.17	ug/L	92
3) Chloromethane	1.294	50	12631	1.19	ug/L	90
4) Vinyl Chloride	1.361	62	12787	1.15	ug/L	91
5) Bromomethane	1.556	94	2393	0.60	ug/L #	60
6) Chloroethane	1.611	64	6031	1.00	ug/L	94
7) Freon 21	1.721	67	17075	1.06	ug/L	99
8) Trichlorofluoromethane	1.770	101	13610	1.14	ug/L	96
9) Diethyl Ether	1.934	59	7605	1.11	ug/L #	73
10) Freon 123a	1.928	67	10928	1.05	ug/L	95
11) Freon 123	1.965	83	12215	1.11	ug/L	92
12) Acrolein	2.026	56	5898	5.55	ug/L	84
13) 1,1-Diclethene	2.099	96	6172	1.01	ug/L #	83
14) Freon 113	2.093	101	8847	1.27	ug/L	98
15) Acetone	2.123	43	3665m	1.78	ug/L	
16) 2-Propanol	2.202	45	8002m	22.39	ug/L	
17) Iodomethane	2.215	142	1441	0.23	ug/L	99
18) Carbon Disulfide	2.276	76	27756	1.07	ug/L	96
19) Acetonitrile	2.324	40	1477	5.33	ug/L #	62
20) Allyl Chloride	2.349	76	3909	0.89	ug/L #	41
21) Methyl Acetate	2.361	43	5178	1.17	ug/L	83
22) Methylene Chloride	2.440	84	9255	1.01	ug/L #	70
23) TBA	2.507	59	8904	15.81	ug/L	60
24) Acrylonitrile	2.647	53	13108	5.81	ug/L	85
25) Methyl-t-Butyl Ether	2.660	73	17301	0.89	ug/L	95
26) trans-1,2-Dichloroethene	2.672	96	7861	1.01	ug/L #	85
28) 1,1-Diclethane	3.044	63	17296	1.08	ug/L	88
29) Vinyl Acetate	3.111	86	664m	0.59	ug/L	
30) DIPE	3.111	45	37861	1.17	ug/L	83
31) 2-Chloro-1,3-Butadiene	3.147	53	15829	1.03	ug/L	85
32) ETBE	3.513	59	24603m	0.90	ug/L	
33) 2,2-Dichloropropane	3.678	77	9728	0.83	ug/L	81
34) cis-1,2-Dichloroethene	3.690	96	8403	0.96	ug/L #	79
36) Propionitrile	3.824	54	3852m	5.30	ug/L	
37) Bromochloromethane	3.989	130	6065	1.18	ug/L	93
38) Methacrylonitrile	4.007	67	1507m	0.66	ug/L	

Quantitation Report (QT Reviewed)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 16:17:40 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
39) Tetrahydrofuran	4.098	42	1879	1.12 ug/L #	48
40) Chloroform	4.098	83	15889	1.11 ug/L	85
41) 1,1,1-Trichloroethane	4.354	97	12354	0.99 ug/L	85
42) TAME	5.183	73	17045m	0.83 ug/L	
44) Cyclohexane	4.446	41	12448	1.21 ug/L	95
46) Carbontetrachloride	4.623	121	3532m	0.95 ug/L	
47) 1,1-Dichloropropene	4.629	75	10013	0.89 ug/L	97
49) Benzene	4.970	78	33493	0.94 ug/L	89
50) 1,2-Dichloroethane	4.994	62	11541	0.98 ug/L	79
51) Iso-Butyl Alcohol	4.885	43	4685m	16.14 ug/L	
52) n-Heptane	5.458	43	12917	1.29 ug/L #	56
53) 1-Butanol	6.086	56	2304m	16.96 ug/L	
54) Trichloroethene	5.976	130	9434	0.98 ug/L #	84
55) Methylcyclohexane	6.220	55	12672	1.01 ug/L	92
56) 1,2-Diclpropane	6.269	63	9083	0.89 ug/L	85
57) Dibromomethane	6.409	93	4602	0.98 ug/L #	68
58) 1,4-Dioxane	6.482	88	914m	18.22 ug/L	
59) Methyl Methacrylate	6.494	69	3956m	0.96 ug/L	
60) Bromodichloromethane	6.622	83	10588	0.94 ug/L	92
61) 2-Nitropropane	6.903	41	3489m	2.18 ug/L	
62) 2-Chloroethylvinyl Ether	7.037	63	3169m	0.67 ug/L	
63) cis-1,3-Dichloropropene	7.159	75	10071m	0.74 ug/L	
64) 4-Methyl-2-pentanone	7.360	43	6033m	0.88 ug/L	
66) Toluene	7.506	91	35842	0.93 ug/L	98
67) trans-1,3-Dichloropropene	7.762	75	7473	0.67 ug/L	94
68) Ethyl Methacrylate	7.902	69	6769m	0.79 ug/L	
69) 1,1,2-Trichloroethane	7.933	97	6529	0.98 ug/L	94
72) Tetrachloroethene	8.061	164	7340	0.93 ug/L	89
73) 2-Hexanone	8.262	43	3902m	0.78 ug/L	
74) 1,3-Dichloropropane	8.098	76	10780	0.92 ug/L #	72
75) Dibromochloromethane	8.311	129	6879	0.82 ug/L	88
76) N-Butyl Acetate	8.360	43	10618m	0.81 ug/L	
77) 1,2-Dibromoethane	8.408	107	5343	0.78 ug/L	92
78) 3-Chlorobenzotrifluoride	8.884	180	12992	0.89 ug/L	91
79) Chlorobenzene	8.872	112	24259	0.92 ug/L	88
80) 4-Chlorobenzotrifluoride	8.939	180	11639	0.86 ug/L	88
81) 1,1,1,2-Tetrachloroethane	8.951	131	7585	0.79 ug/L #	81
82) Ethylbenzene	8.988	106	11297	0.83 ug/L #	81
83) (m+p)Xylene	9.091	106	27530	1.65 ug/L #	81
84) o-Xylene	9.439	106	12139	0.72 ug/L	89
85) Styrene	9.457	104	21611	0.76 ug/L	92
86) Bromoform	9.609	173	3468	0.69 ug/L	95
87) 2-Chlorobenzotrifluoride	9.670	180	11933	0.82 ug/L	93
88) Isopropylbenzene	9.762	105	35053	0.85 ug/L	98
89) Cyclohexanone	9.829	55	19833	19.92 ug/L	98
90) trans-1,4-Dichloro-2-B...	10.073	53	1403m	0.64 ug/L	
92) 1,1,2,2-Tetrachloroethane	10.012	83	6760	0.91 ug/L	88
93) Bromobenzene	10.012	156	9602	0.89 ug/L #	83
94) 1,2,3-Trichloropropane	10.048	110	1951	0.99 ug/L #	57
95) n-Propylbenzene	10.109	91	38328	0.87 ug/L	97
96) 2-Chlorotoluene	10.176	91	23686	0.88 ug/L	93
97) 3-Chlorotoluene	10.231	91	24855	0.91 ug/L	95

00163

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

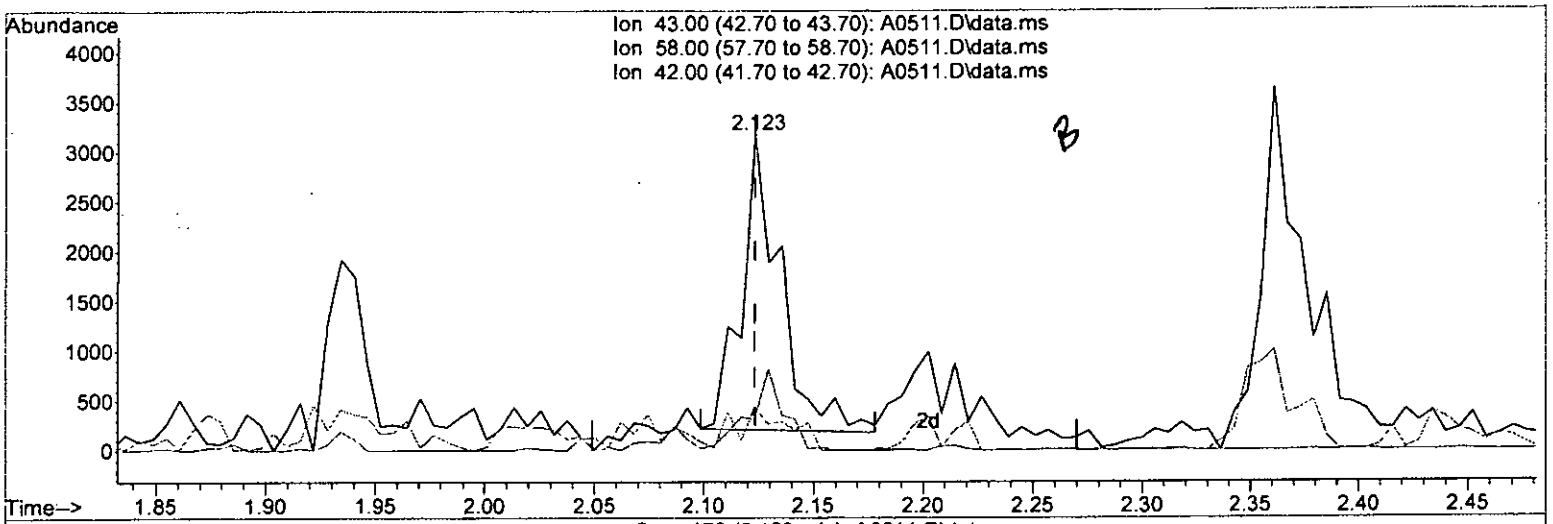
Quant Time: Jul 21 16:17:40 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration

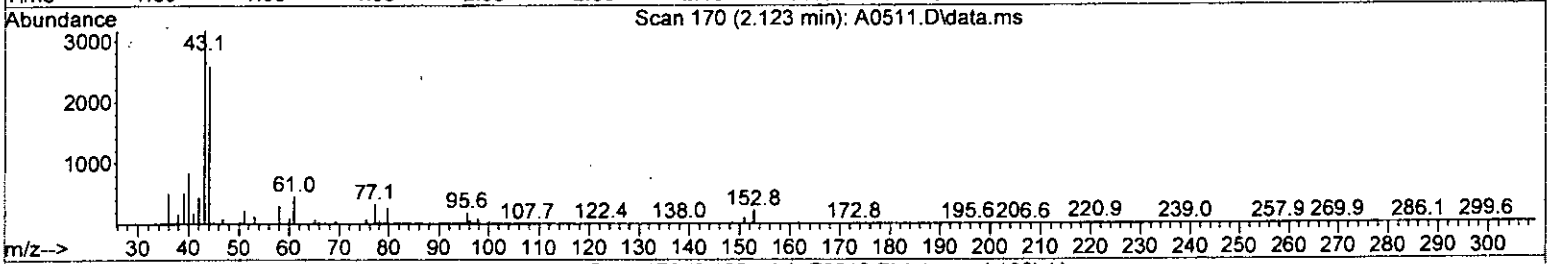
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
98)	4-Chlorotoluene	10.268	91	30511	0.93 ug/L	89
99)	1,3,5-Trimethylbenzene	10.262	105	27724	0.86 ug/L	93
100)	tert-Butylbenzene	10.518	119	23080	0.86 ug/L	98
101)	1,2,4-Trimethylbenzene	10.567	105	26412	0.81 ug/L	83
102)	3,4-Dichlorobenzotrifl...	10.621	214	8746	0.90 ug/L	96
103)	sec-Butylbenzene	10.701	105	31710	0.86 ug/L	97
104)	p-Isopropyltoluene	10.823	119	26791	0.83 ug/L	91
105)	1,3-Dclbenz	10.786	146	17557	0.88 ug/L	85
106)	1,4-Dclbenz	10.853	146	18590	0.92 ug/L	95
107)	2,4-Dichlorobenzotrifl...	10.914	214	7303	0.84 ug/L	92
108)	2,5-Dichlorobenzotrifl...	10.945	214	8960	0.90 ug/L	80
109)	n-Butylbenzene	11.152	91	23029	0.83 ug/L	90
110)	1,2-Dclbenz	11.158	146	17451	0.96 ug/L	96
111)	1,2-Dibromo-3-chloropr...	11.719	157	856	0.75 ug/L #	78
112)	Trielution Dichlorotol...	11.816	125	39746	2.69 ug/L	96
113)	1,3,5-Trichlorobenzene	11.853	180	11246	0.91 ug/L	85
114)	Coelution Dichlorotoluene	12.078	125	28070	1.87 ug/L	93
115)	1,2,4-Tcbenzene	12.249	180	9437	0.93 ug/L	95
116)	Hexachlorobt	12.335	225	4054	0.84 ug/L	99
117)	Naphthalen	12.414	128	14291	0.92 ug/L	88
118)	1,2,3-Tclbenzene	12.536	180	6572	0.95 ug/L	92
119)	2,4,5-Trichlorotoluene	12.956	159	3474	0.92 ug/L	90
120)	2,3,6-Trichlorotoluene	13.023	159	4458	1.19 ug/L	88

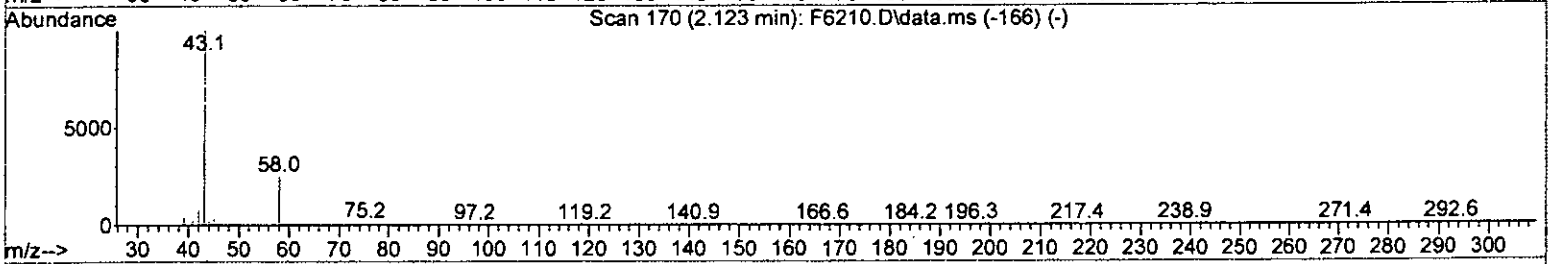
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(15) Acetone (P)

2.123min (-0.000) 1.77 ug/L

response 3648

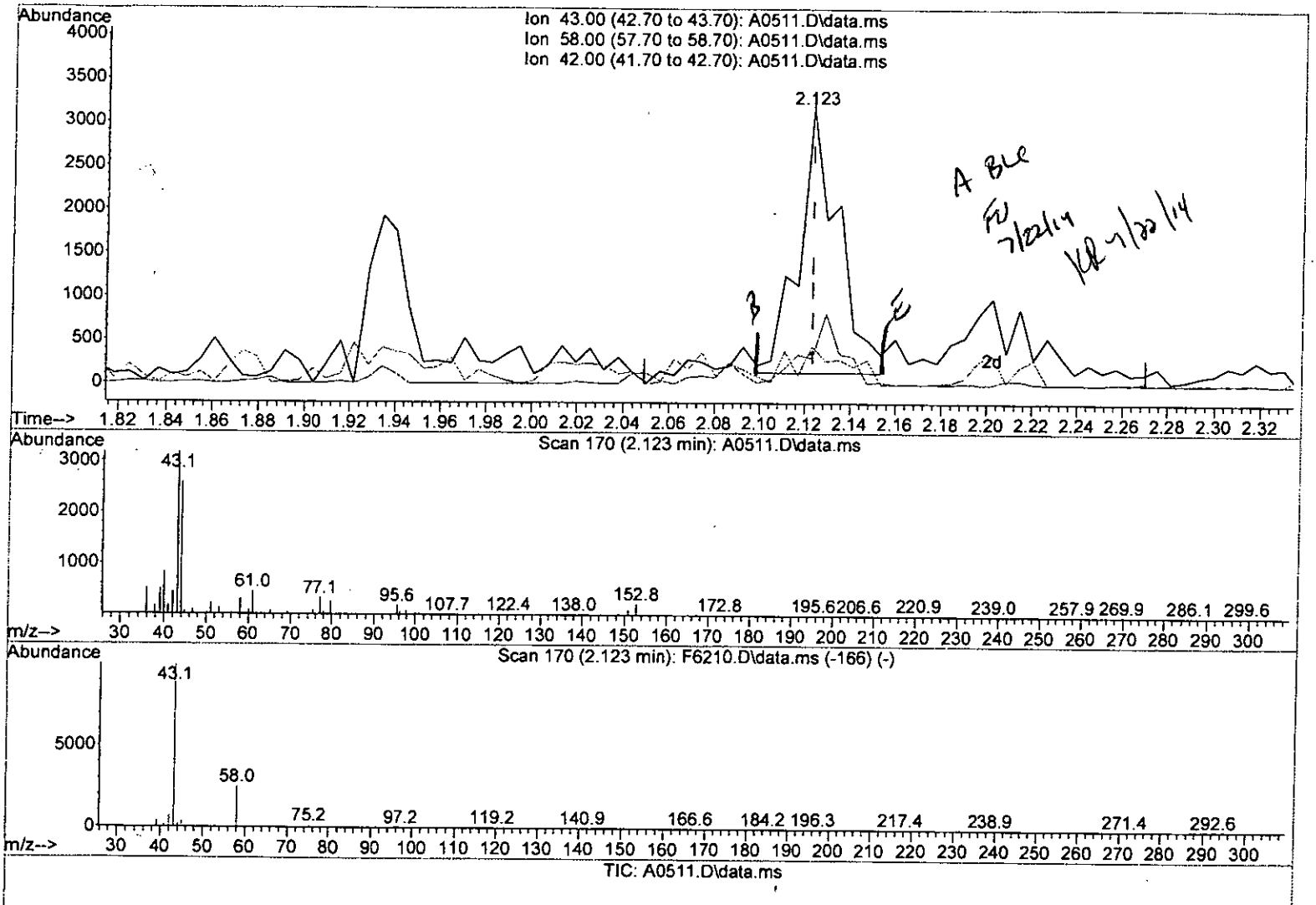
Ion	Exp%	Act%
43.00	100	100
58.00	27.20	9.56
42.00	7.00	13.82
0.00	0.00	0.00

00165

W072114.M Mon Jul 21 15:13:27 2014 MSVO10 Page: 1

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0511.D\data.ms

(15) Acetone (P)

2.123min (-0.000) 1.78 ug/L m

response 3665

Ion	Exp%	Act%
43.00	100	100
58.00	27.20	9.56
42.00	7.00	13.82
0.00	0.00	0.00

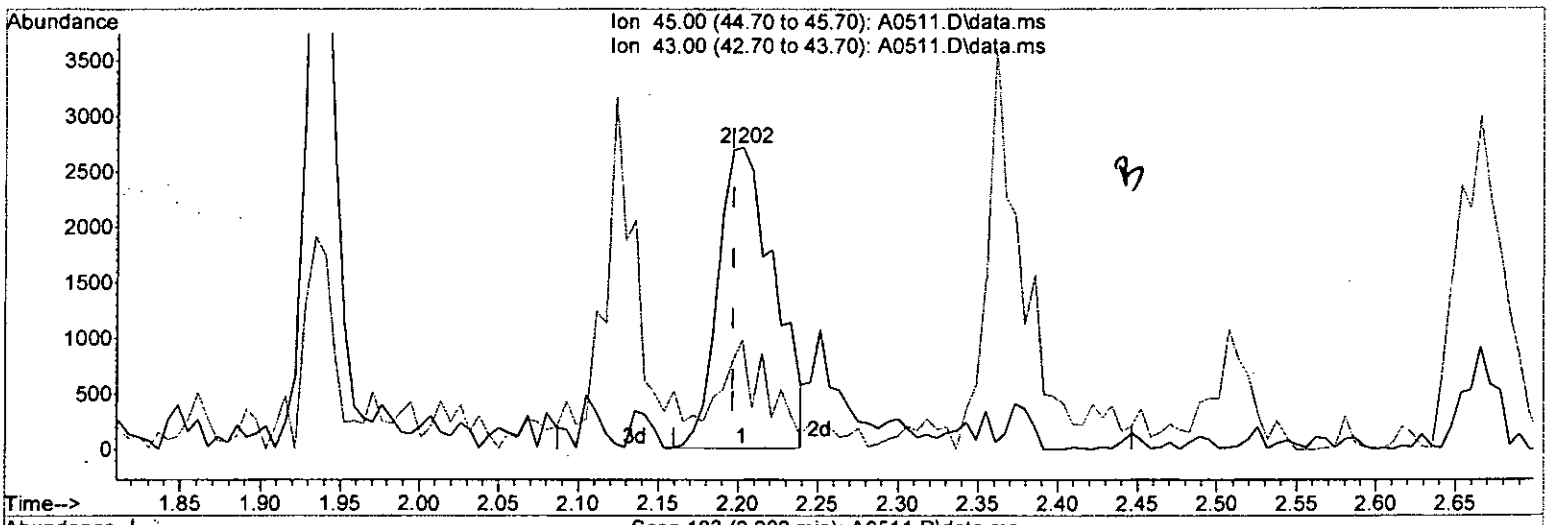
00166

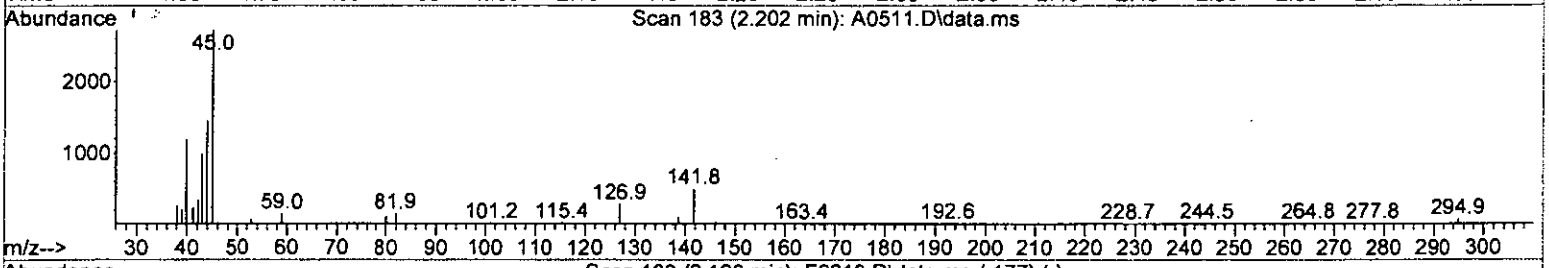
W072114.M Mon Jul 21 15:13:43 2014 MSVO10

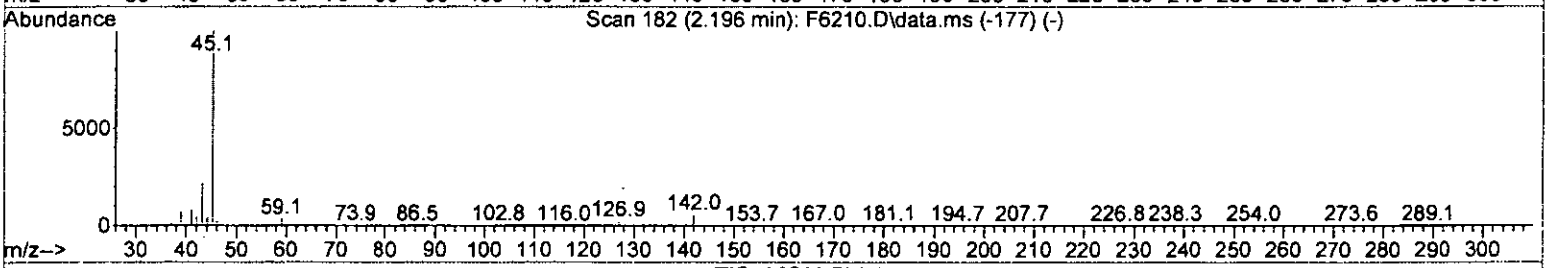
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(16) 2-Propanol

2.202min (+0.006) 18.33 ug/L

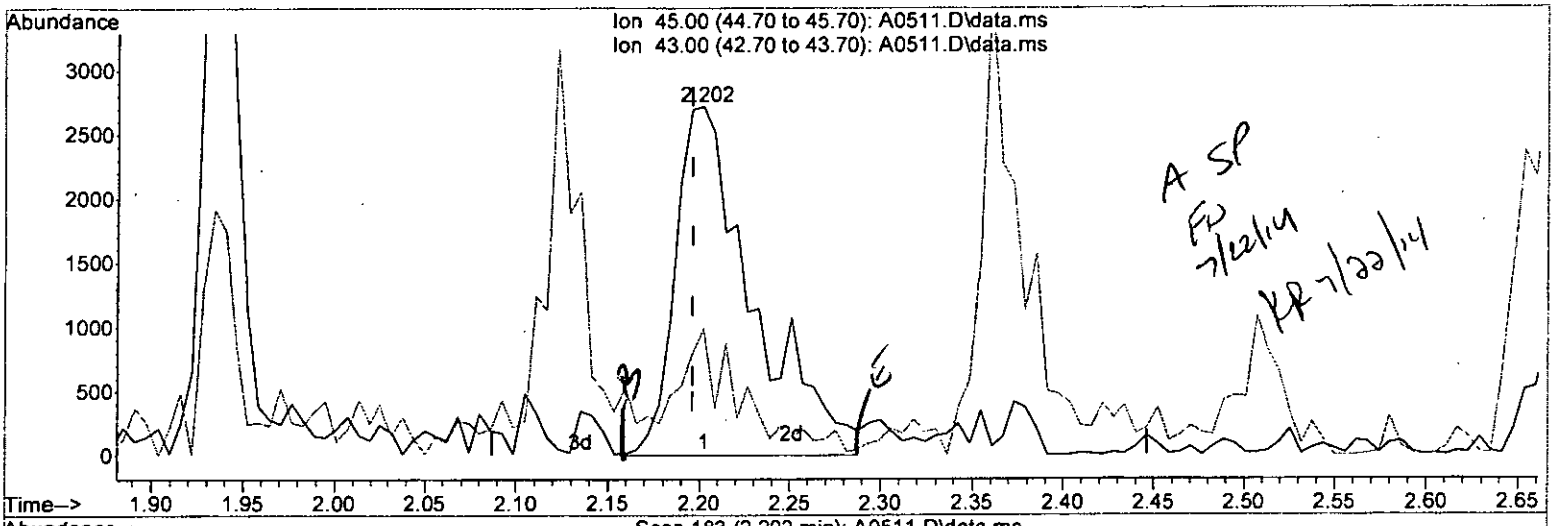
response 6551

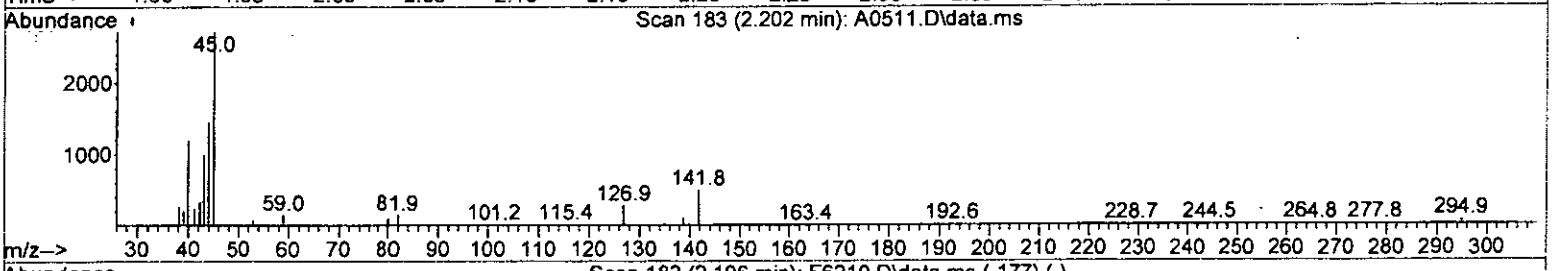
Ion	Exp%	Act%
45.00	100	100
43.00	22.80	36.36
0.00	0.00	0.00
0.00	0.00	0.00

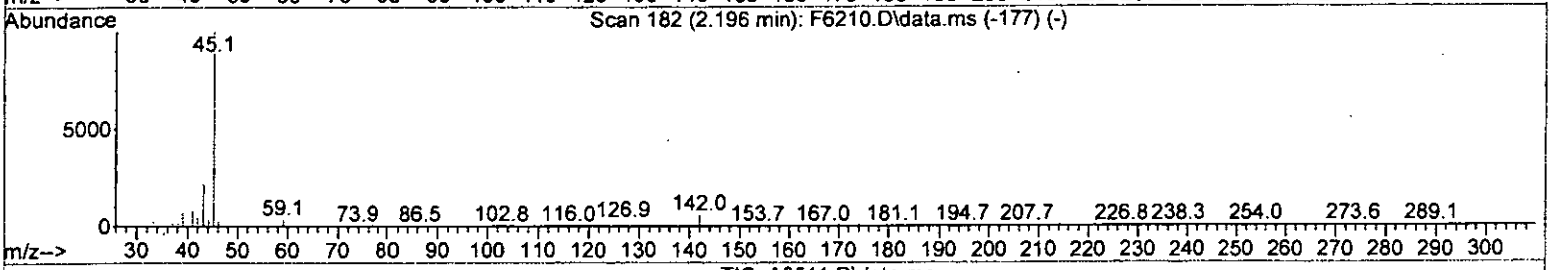
00167

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(16) 2-Propanol

2.202min (+0.006) 22.39 ug/L m

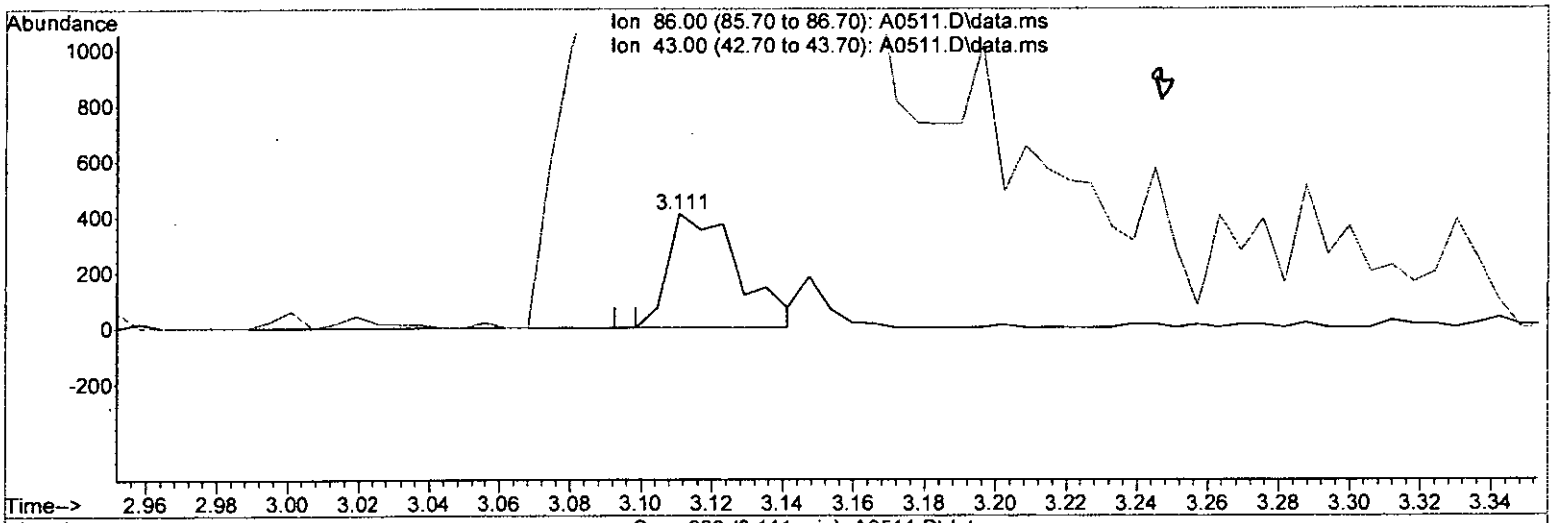
response 8002

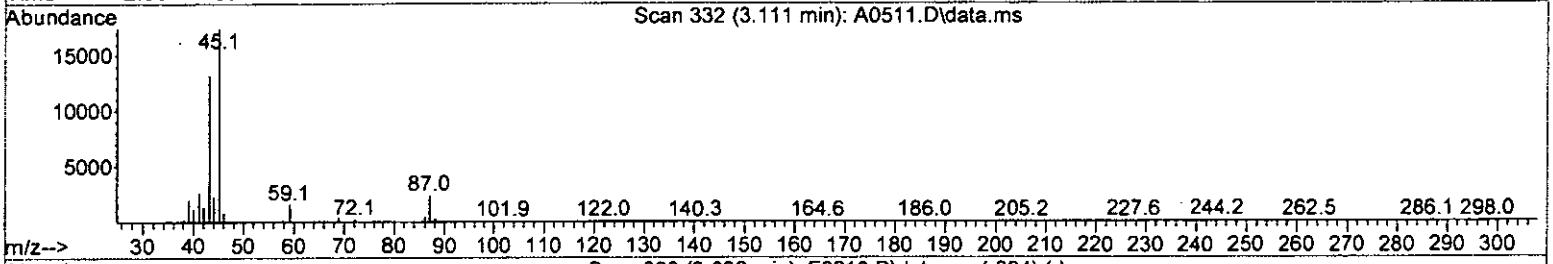
Ion	Exp%	Act%
45.00	100	100
43.00	22.80	36.36
0.00	0.00	0.00
0.00	0.00	0.00

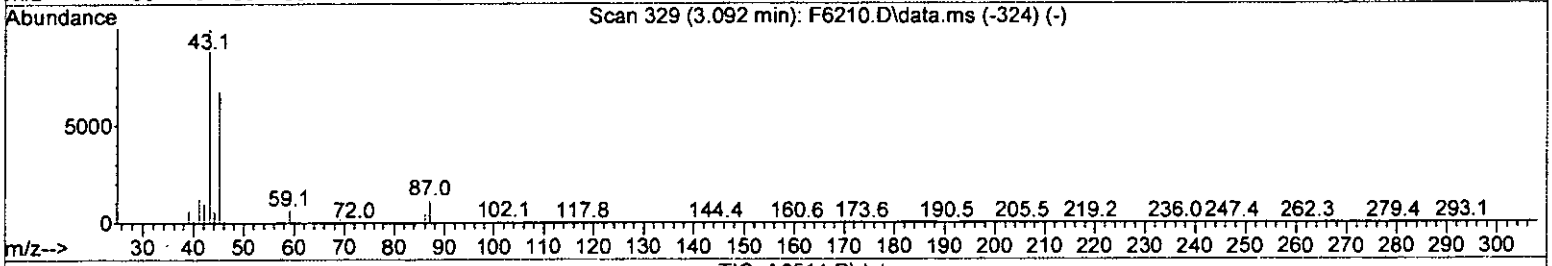
00168

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:20:37 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(29) Vinyl Acetate

3.111min (+0.018) 0.50 ug/L

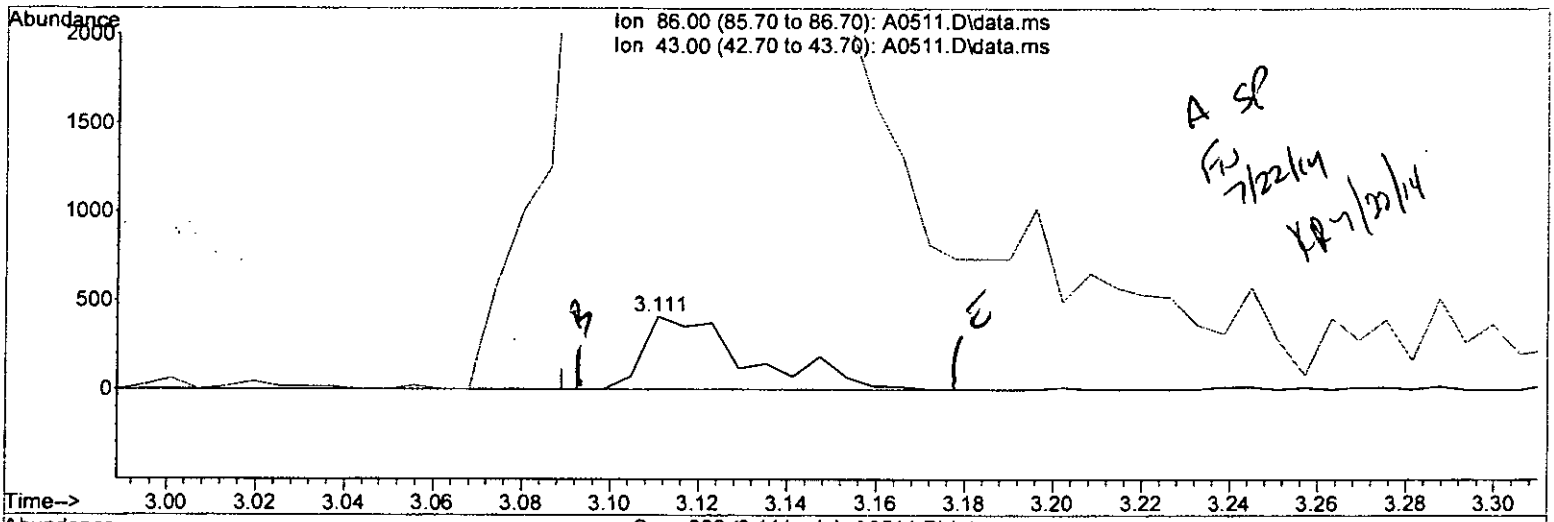
response 562

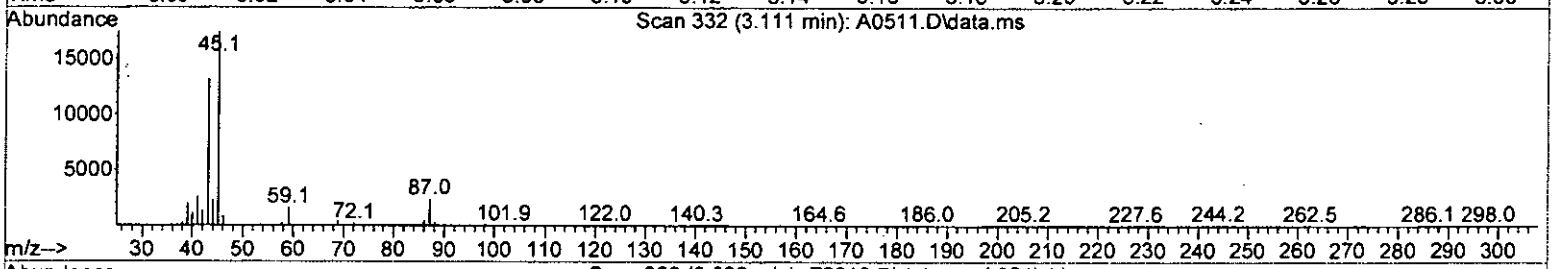
Ion	Exp%	Act%
86.00	100	100
43.00	1729.40	3219.80#
0.00	0.00	0.00
0.00	0.00	0.00

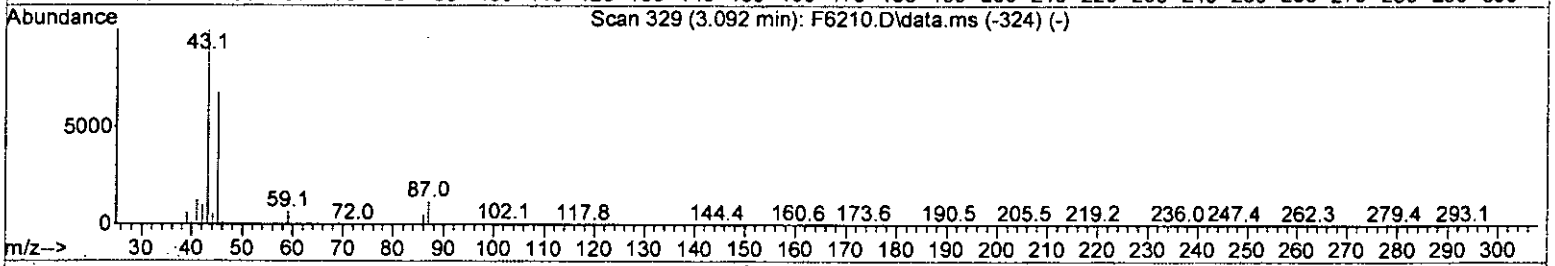
00169

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:20:37 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(29) Vinyl Acetate

3.111min (+0.018) 0.59 ug/L m

response 664

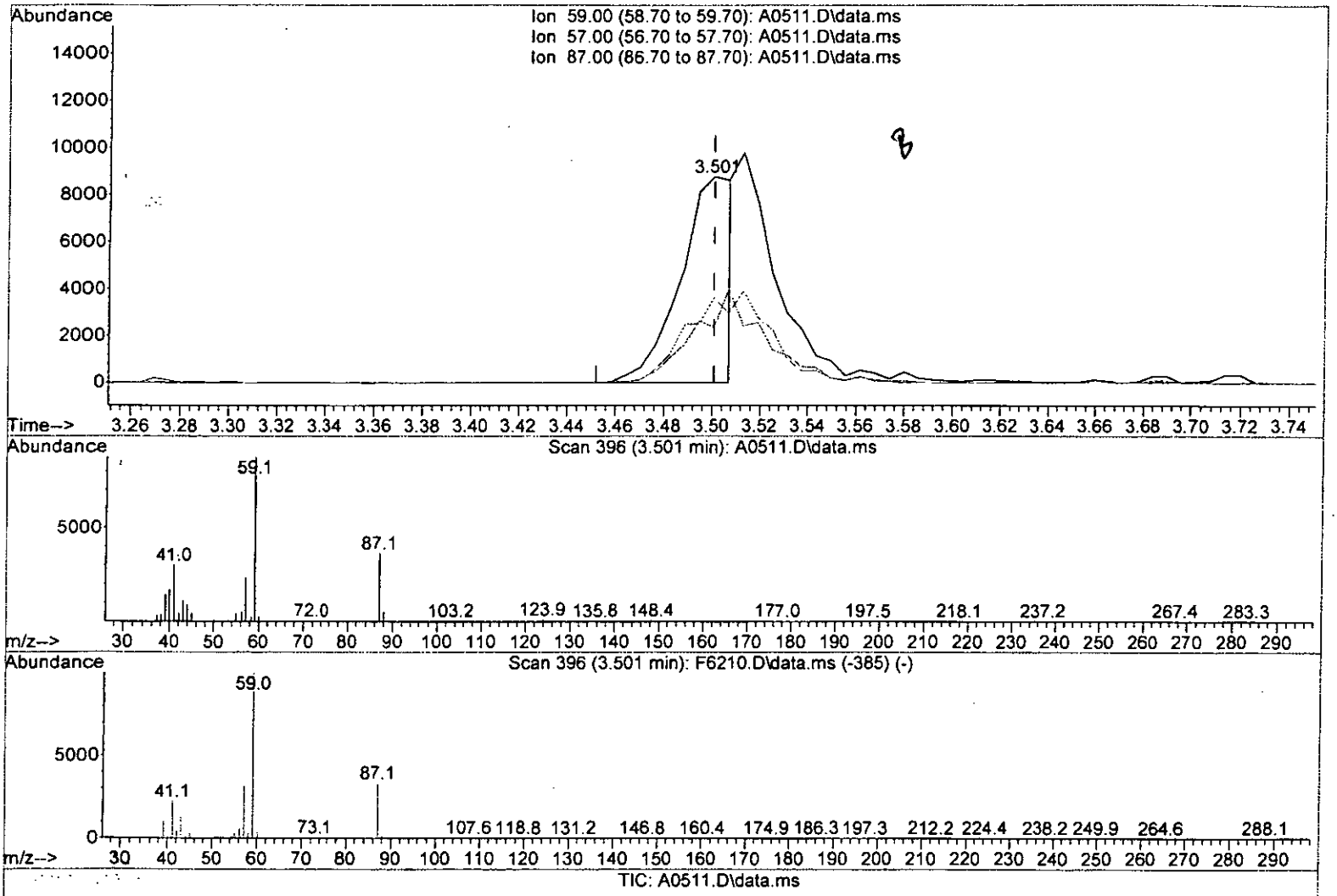
Ion	Exp%	Act%
86.00	100	100
43.00	1729.40	3219.80#
0.00	0.00	0.00
0.00	0.00	0.00

00170

W072114.M Mon Jul 21 16:15:07 2014 MSVO10

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(32) ETBE

3.501min (-0.000) 0.48 ug/L

response 13112

Ion	Exp%	Act%
59.00	100	100
57.00	29.50	26.72
87.00	38.90	41.36
0.00	0.00	0.00

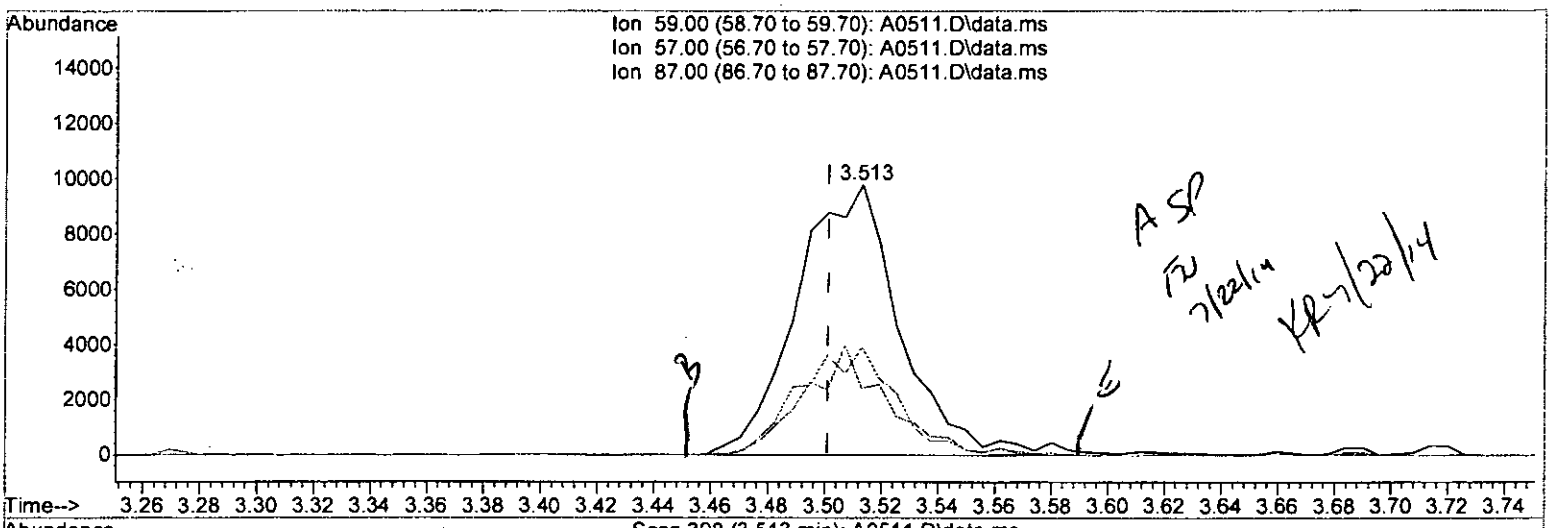
00171

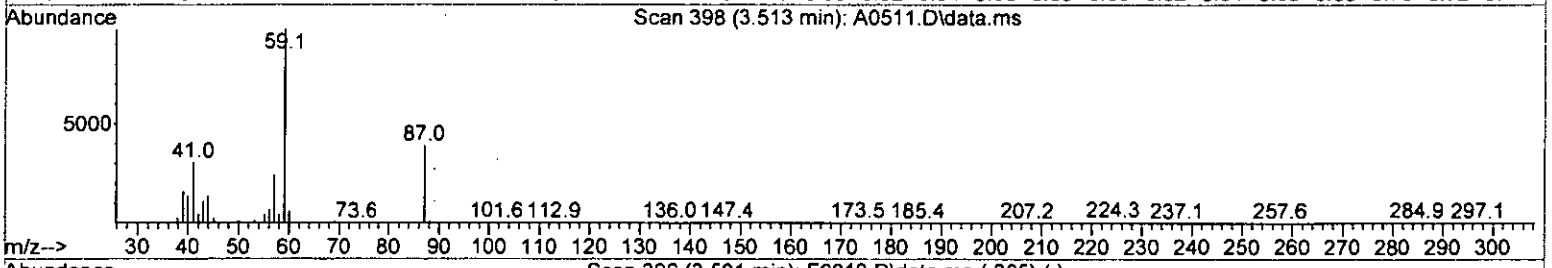
W072114.M Mon Jul 21 15:14:22 2014 MSVO10 Page: 1

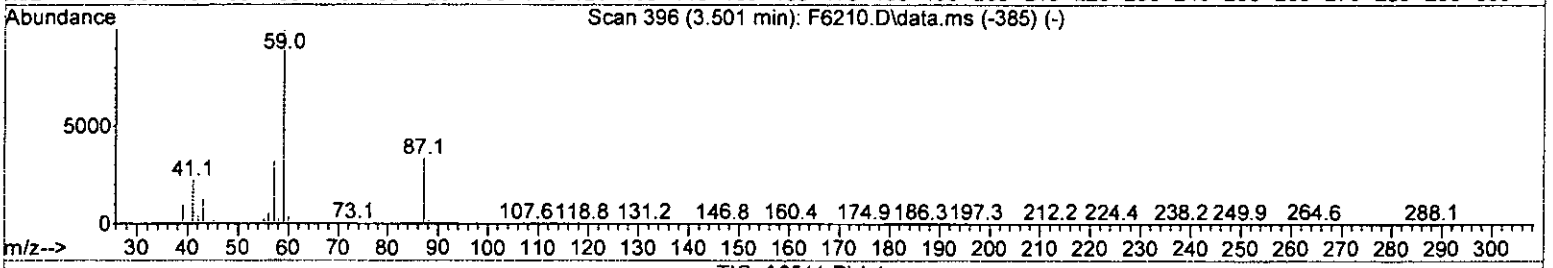
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(32) ETBE

3.513min (+0.012) 0.90 ug/L m

response 24603

Ion	Exp%	Act%
59.00	100	100
57.00	29.50	24.69
87.00	38.90	39.79
0.00	0.00	0.00

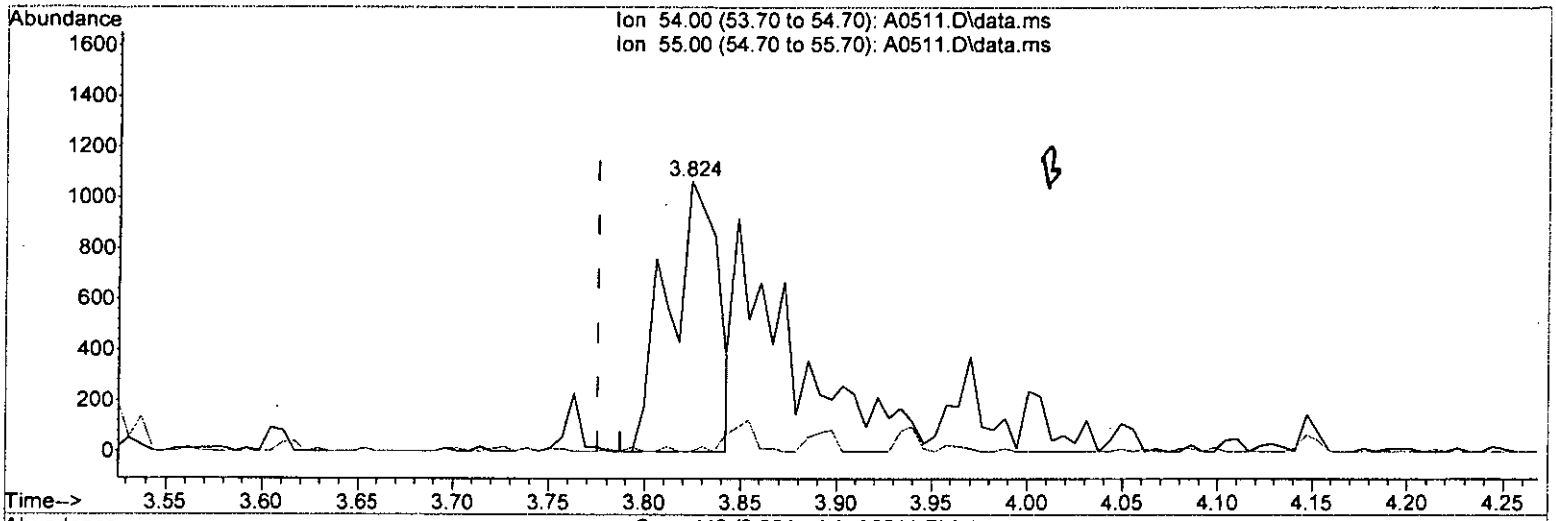
W072114.M Mon Jul 21 15:14:31 2014 MSVO10

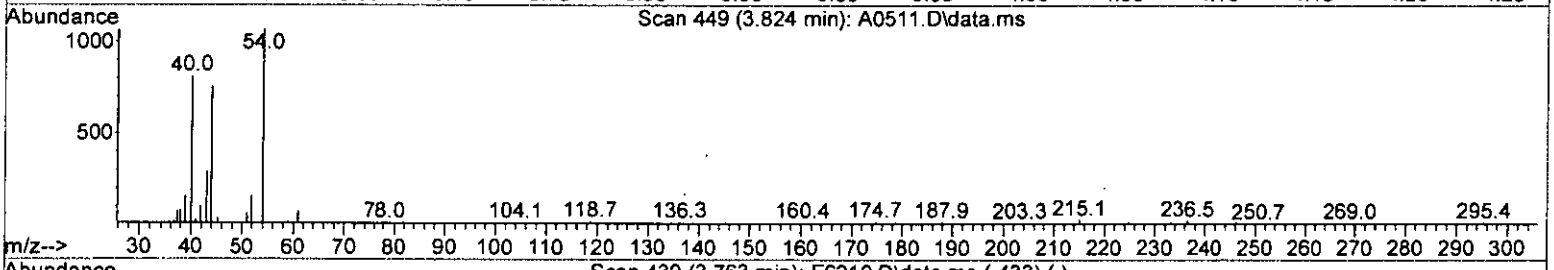
00172

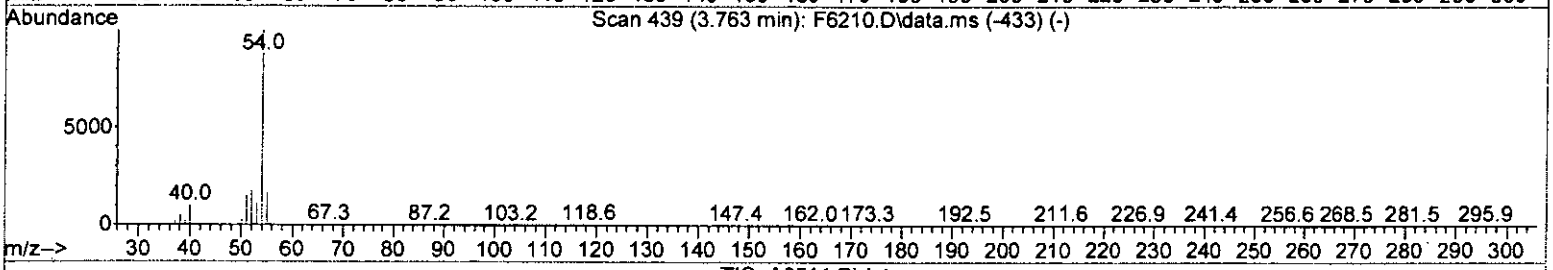
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(36) Propionitrile

3.824min (+0.049) 2.60 ug/L

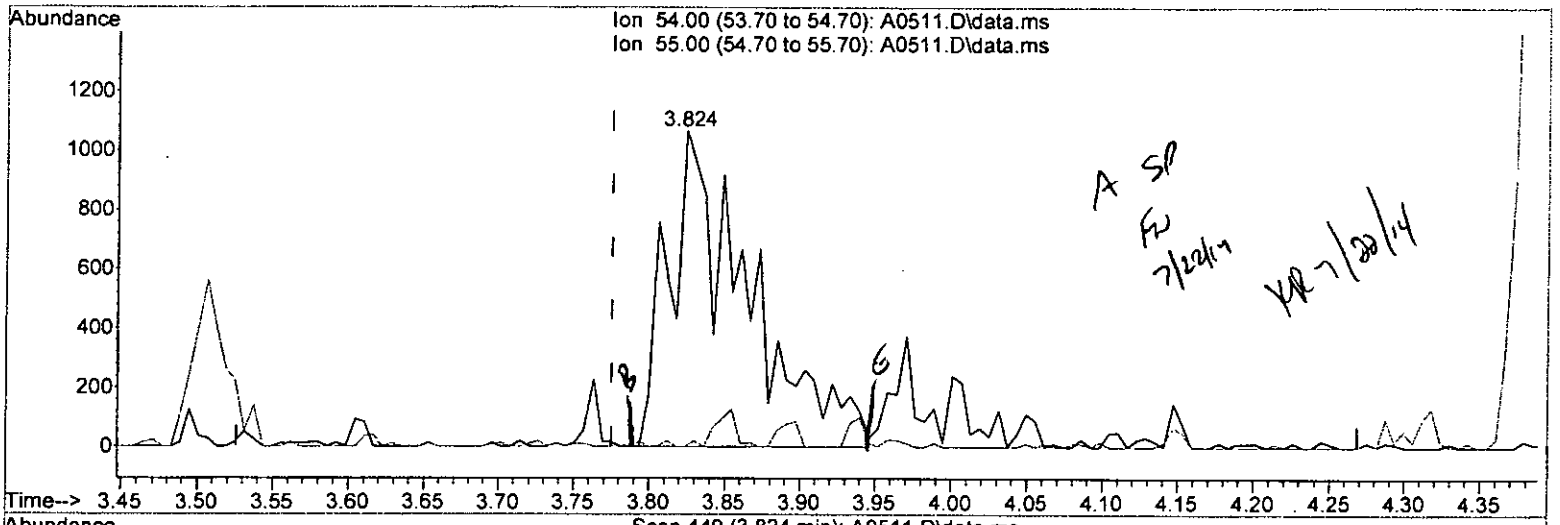
response 1892

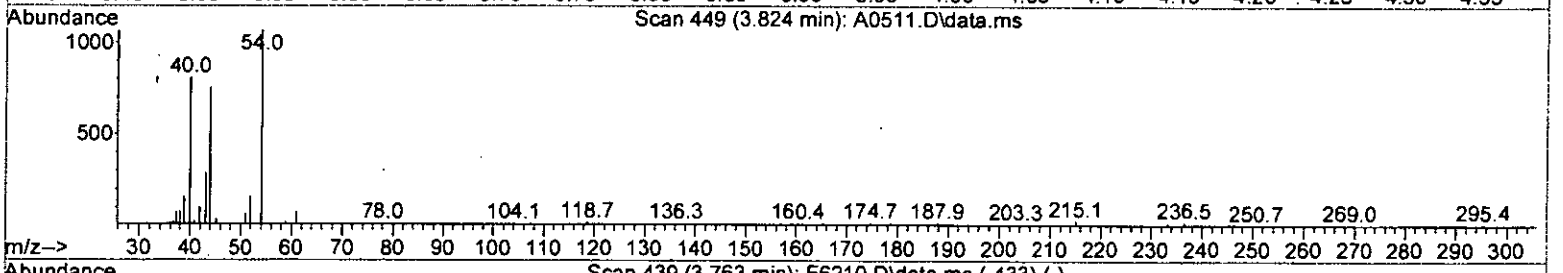
Ion	Exp%	Act%
54.00	100	100
55.00	13.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

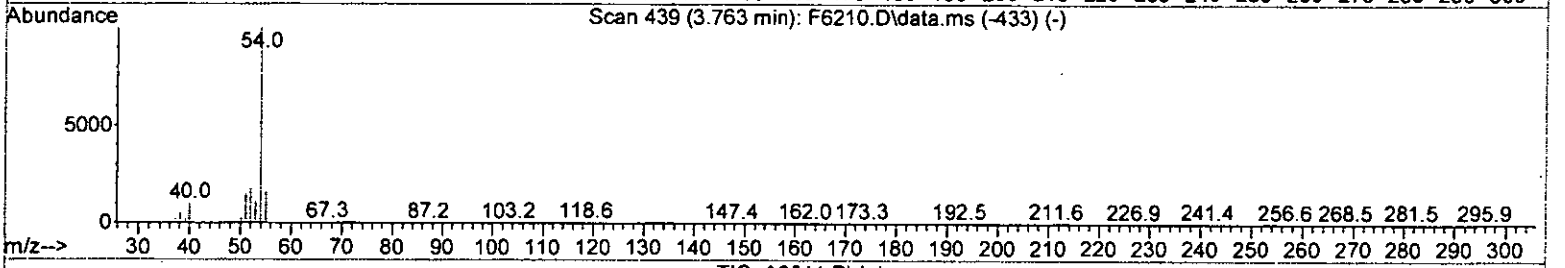
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(36) Propionitrile

3.824min (+0.049) 5.30 ug/L m

response 3852

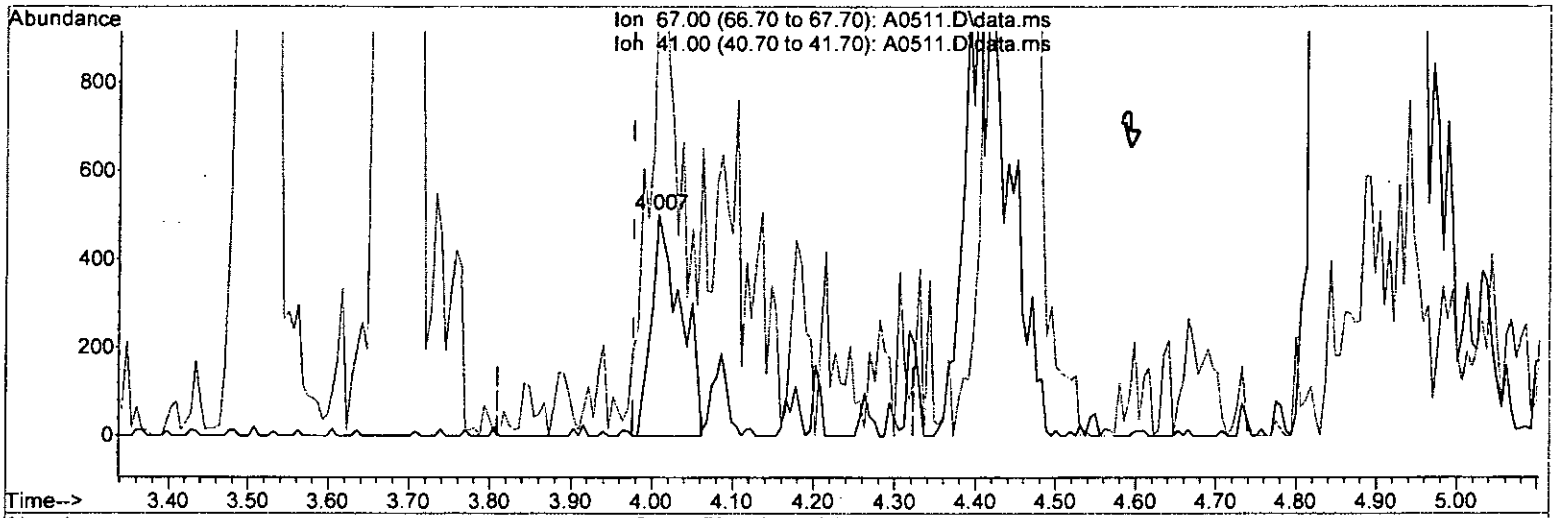
Ion	Exp%	Act%
54.00	100	100
55.00	13.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

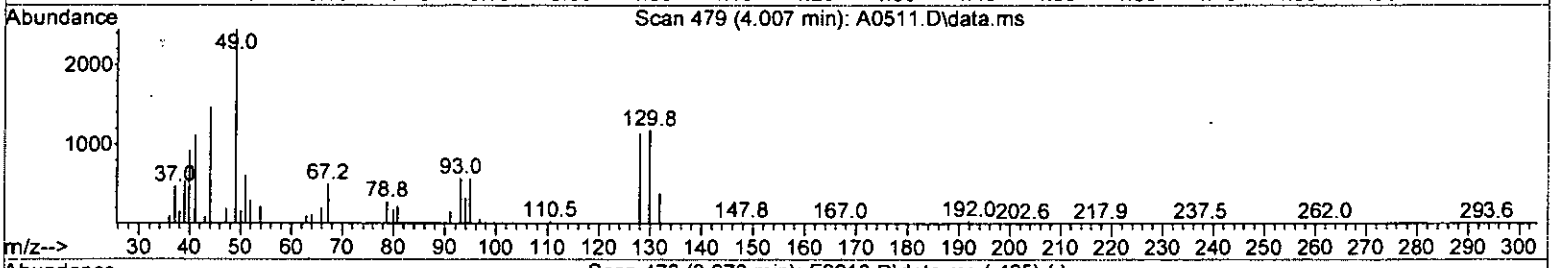
00174

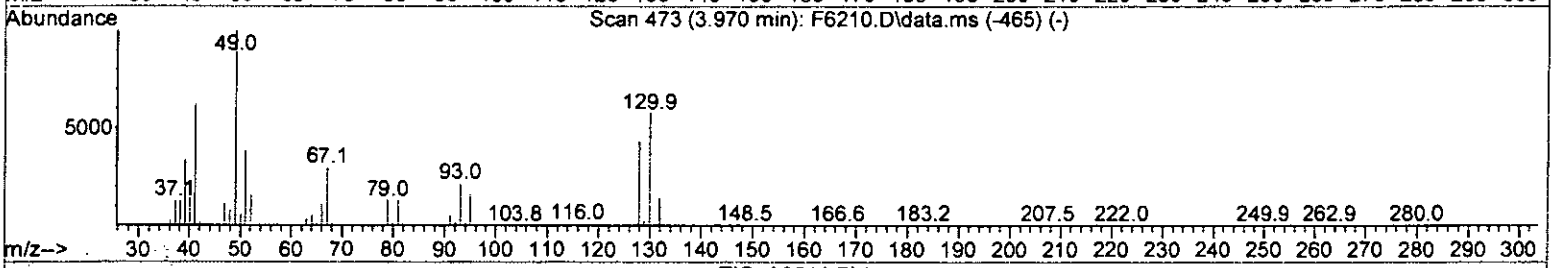
W072114.M Mon Jul 21 15:14:59 2014 MSVO10 Page: 1

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:20:37 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(38) Methacrylonitrile

4.007min (+0.030) 0.55 ug/L

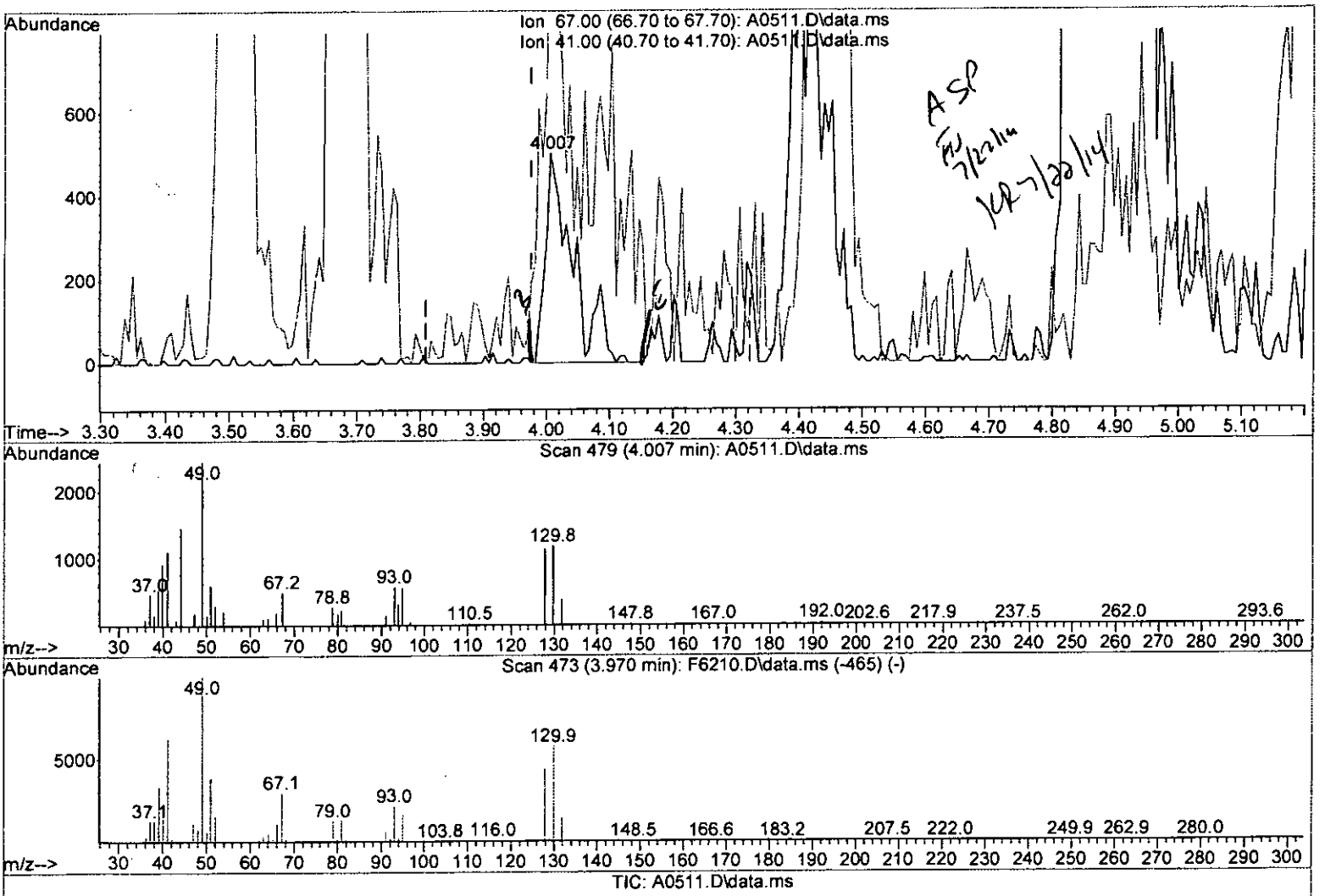
response 1268

Ion	Exp%	Act%
67.00	100	100
41.00	149.10	221.56#
0.00	0.00	0.00
0.00	0.00	0.00

00175

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:20:37 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0511.D\data.ms

(38) Methacrylonitrile

4.007min (+0.030) 0.66 ug/L m

response 1507

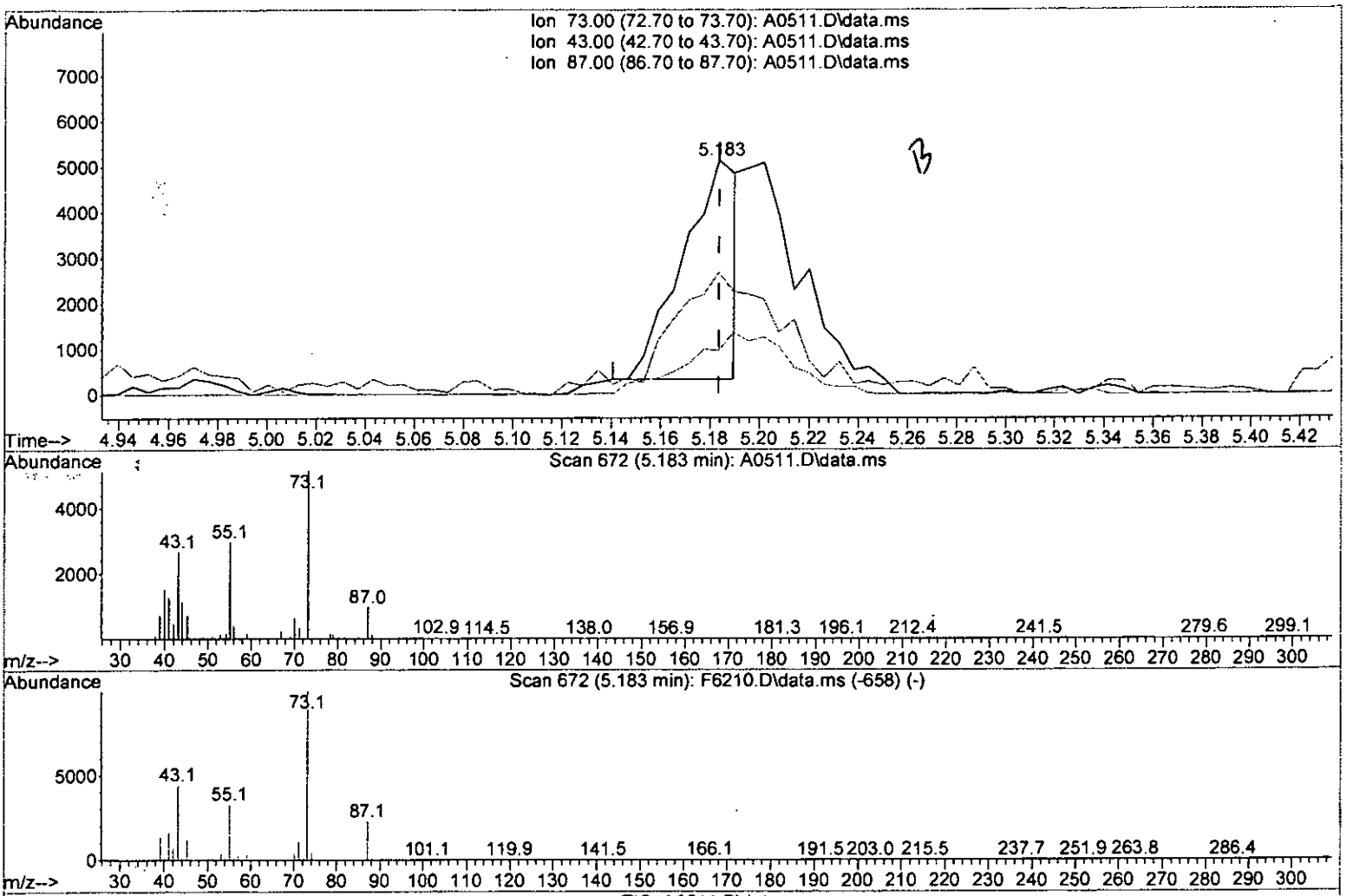
Ion	Exp%	Act%
67.00	100	100
41.00	149.10	221.56#
0.00	0.00	0.00
0.00	0.00	0.00

00176

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0511.D\data.ms

(42) TAME

5.183min (-0.000) 0.36 ug/L

response 7344

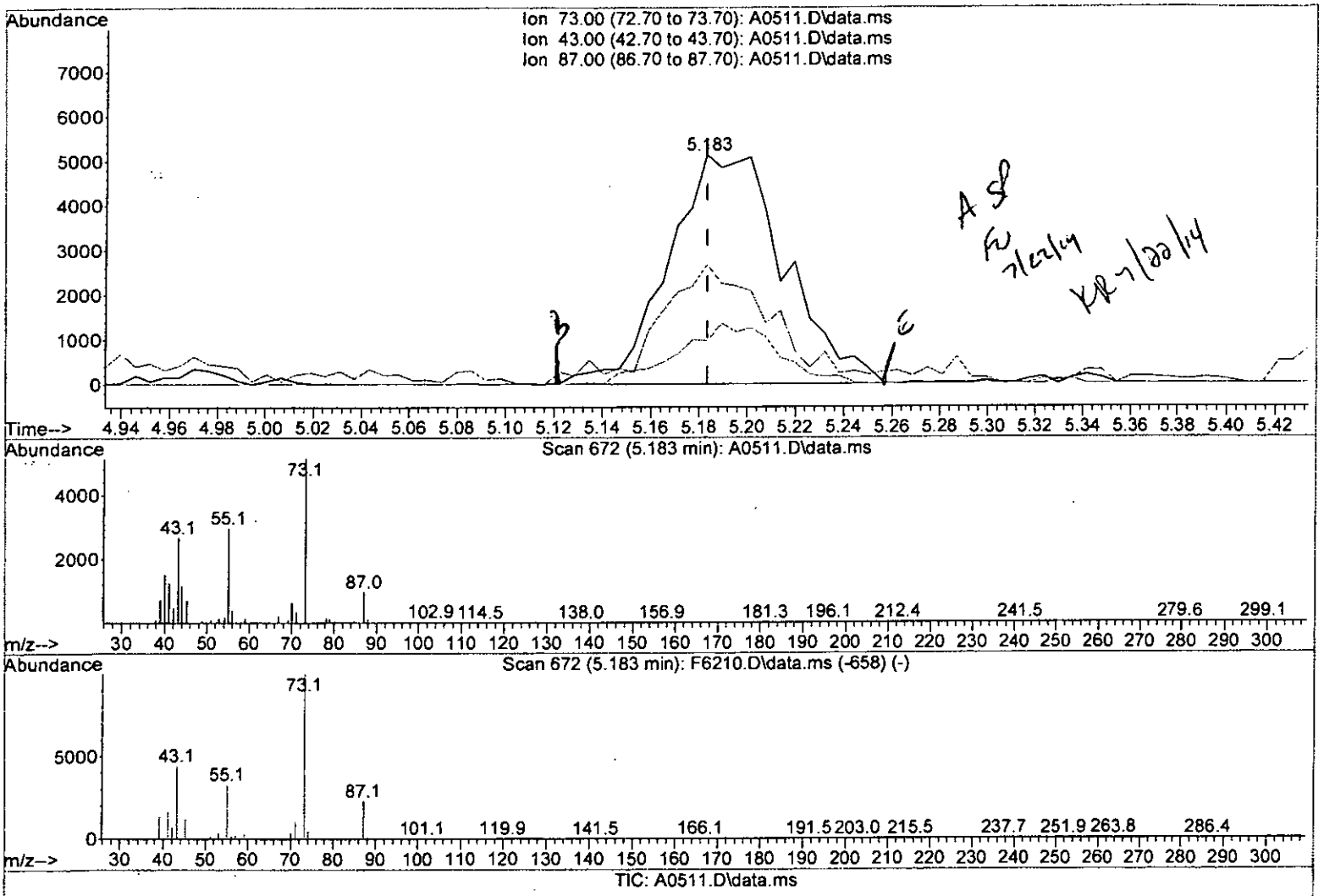
Ion	Exp%	Act%
73.00	100	100
43.00	38.40	51.98
87.00	23.80	18.93
0.00	0.00	0.00

00177

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0511.D\data.ms

(42) TAME

5.183min (-0.000) 0.83 ug/L m

response 17045

Ion	Exp%	Act%
73.00	100	100
43.00	38.40	51.98
87.00	23.80	18.93
0.00	0.00	0.00

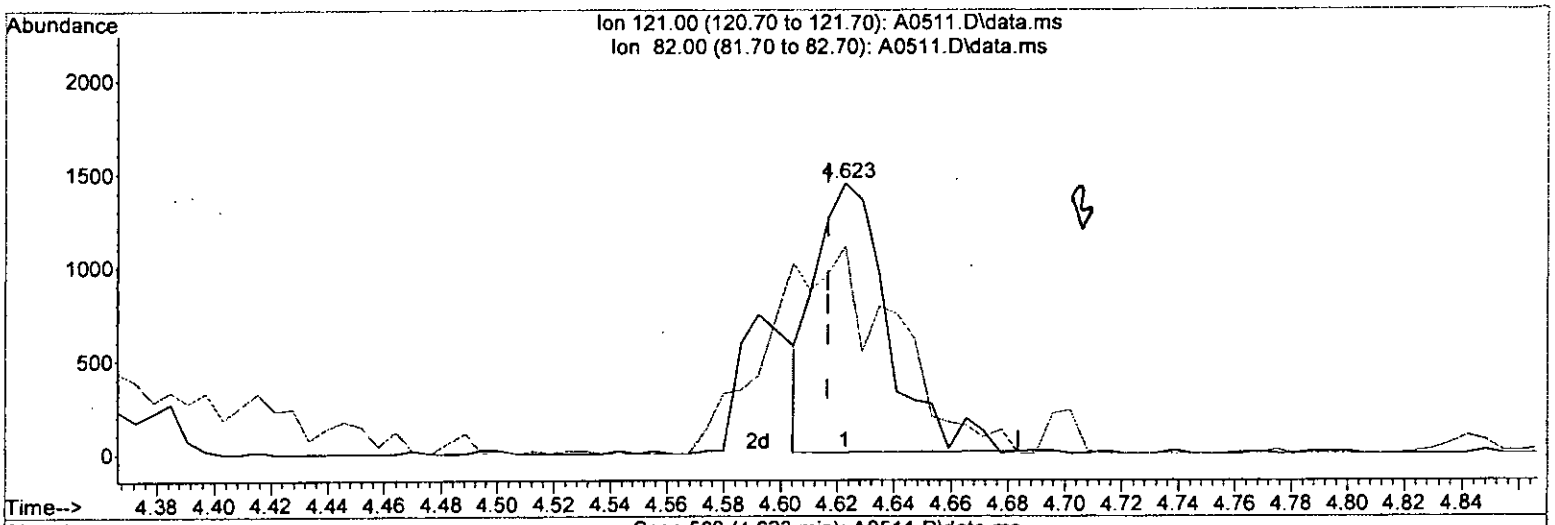
00178

W072114.M Mon Jul 21 15:15:19 2014 MSVO10 Page: 1

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0511.D\data.ms

(46) Carbontetrachloride (P)

4.623min (+0.006) 0.69 ug/L

response 2557

Ion	Exp%	Act%
121.00	100	100
82.00	93.30	76.52
0.00	0.00	0.00
0.00	0.00	0.00

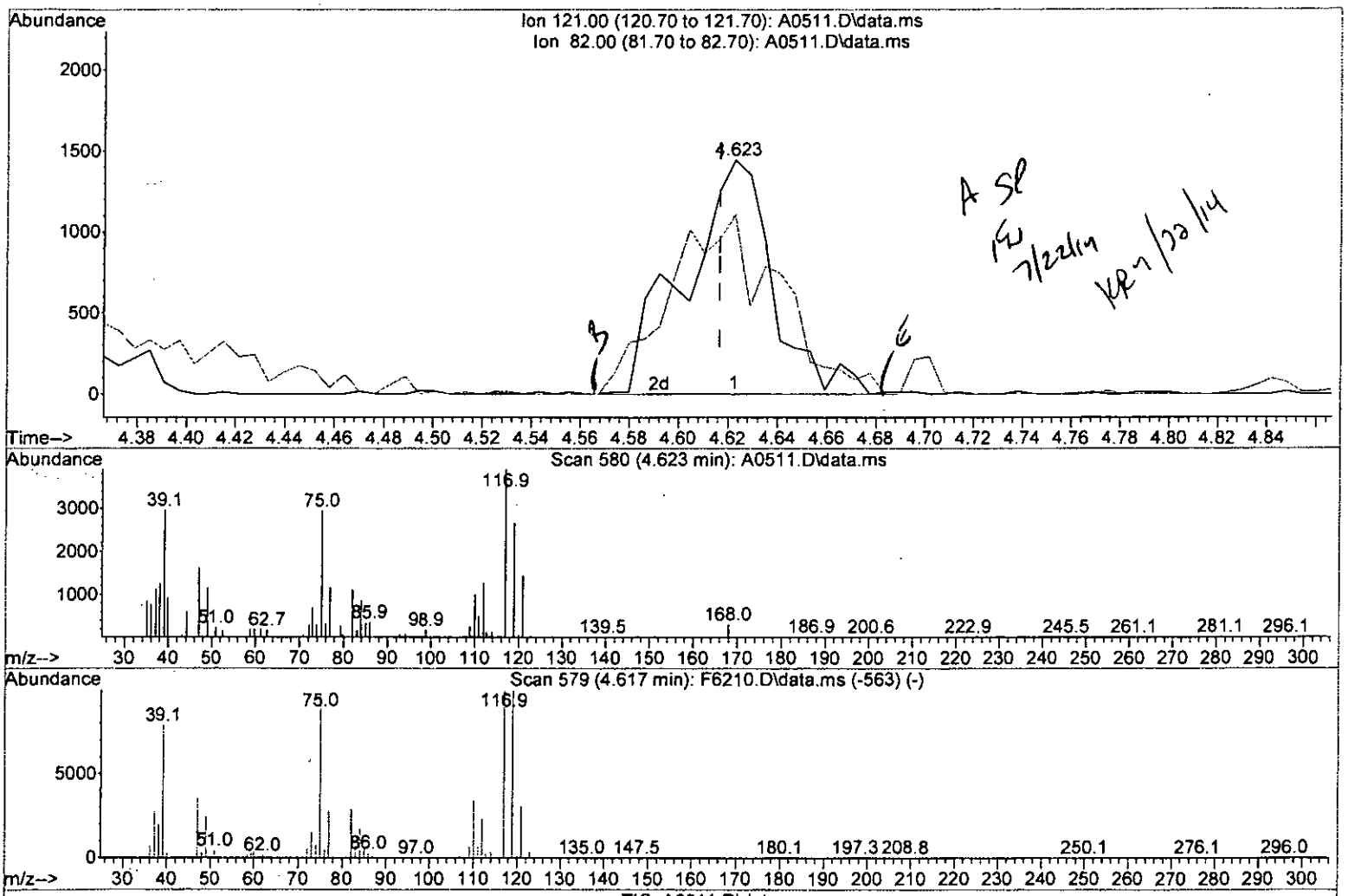
00179

W072114.M Mon Jul 21 15:15:30 2014 MSVO10

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0511.D\data.ms

(46) Carbontetrachloride (P)

4.623min (+0.006) 0.95 ug/L m

response 3532

Ion	Exp%	Act%
121.00	100	100
82.00	93.30	76.52
0.00	0.00	0.00
0.00	0.00	0.00

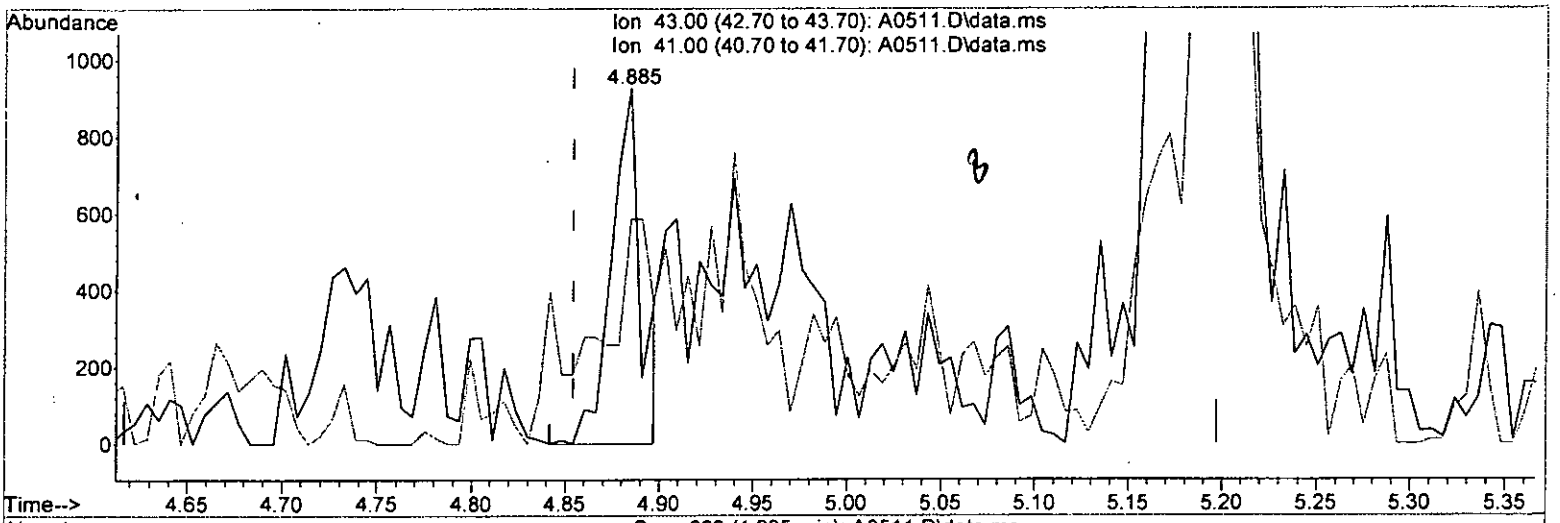
00180

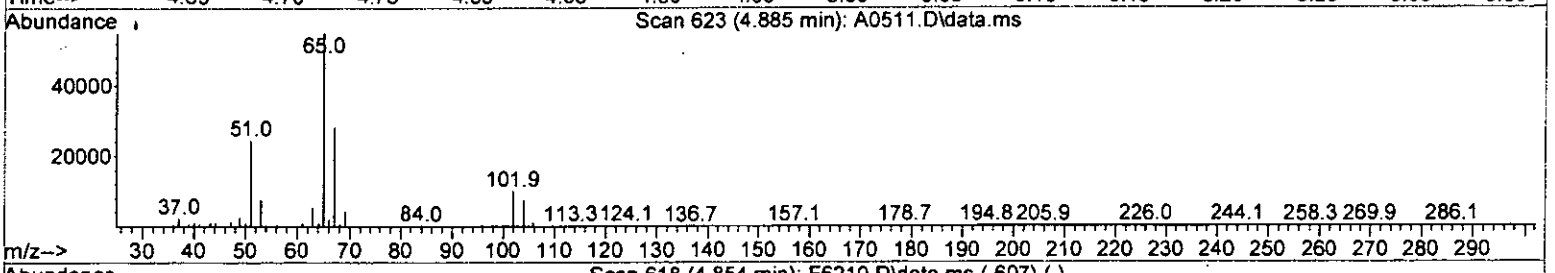
W072114.M Mon Jul 21 15:15:37 2014 MSVO10 Page: 1

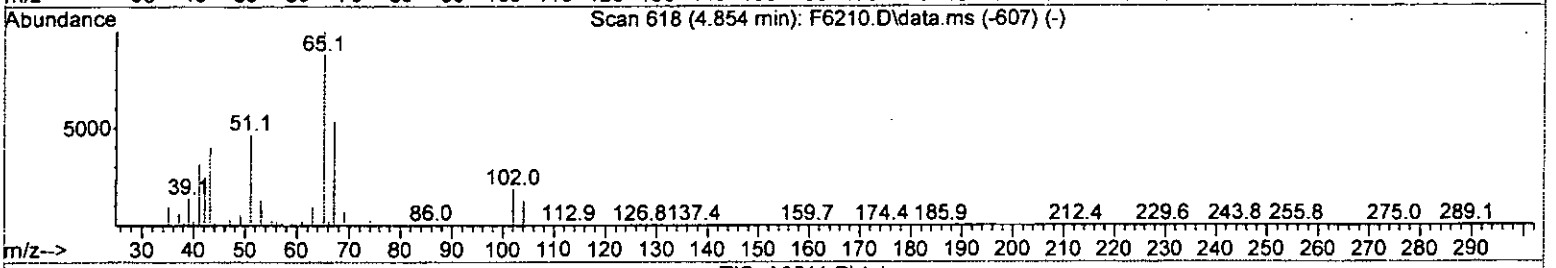
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(51) Iso-Butyl Alcohol

4.885min (+0.030) 3.47 ug/L

response 1007

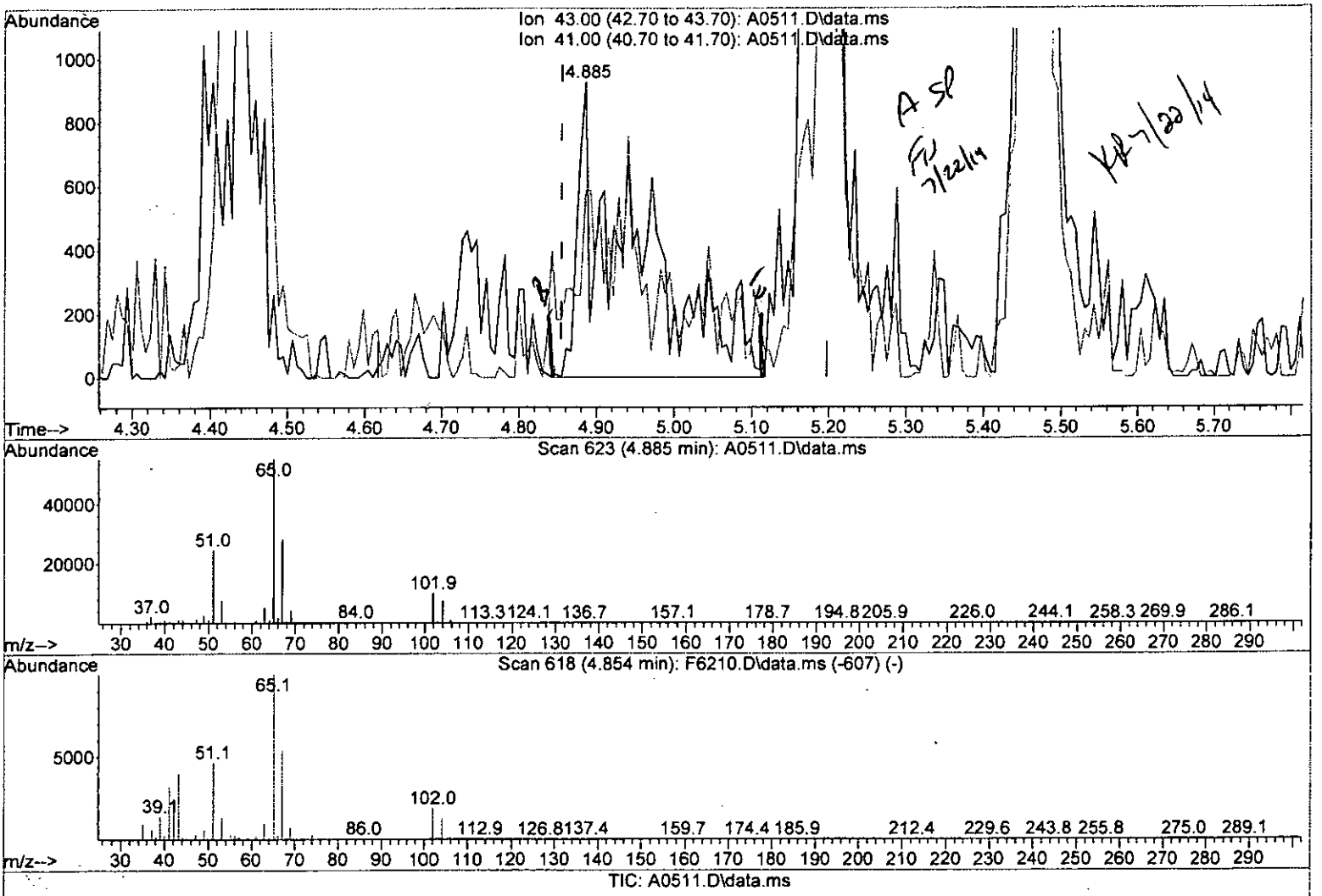
Ion	Exp%	Act%
43.00	100	100
41.00	76.40	63.35
0.00	0.00	0.00
0.00	0.00	0.00

00181

Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:20:37 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0511.D\data.ms

(51) Iso-Butyl Alcohol

4.885min (+0.030) 16.14 ug/L m

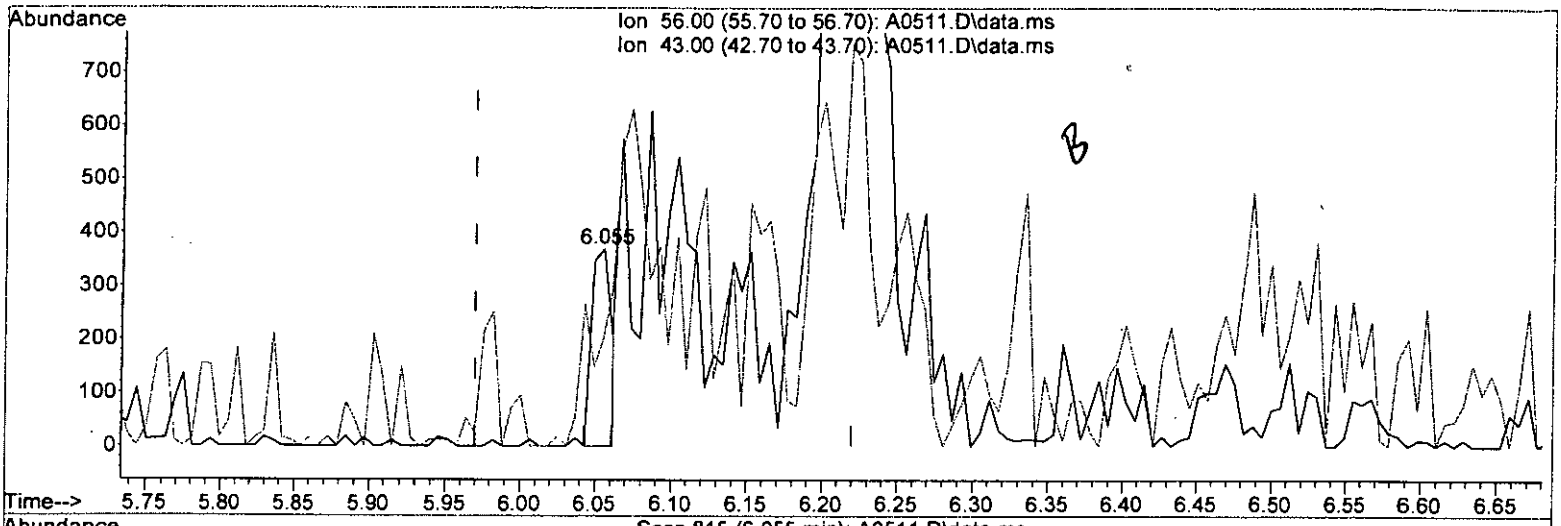
response 4685

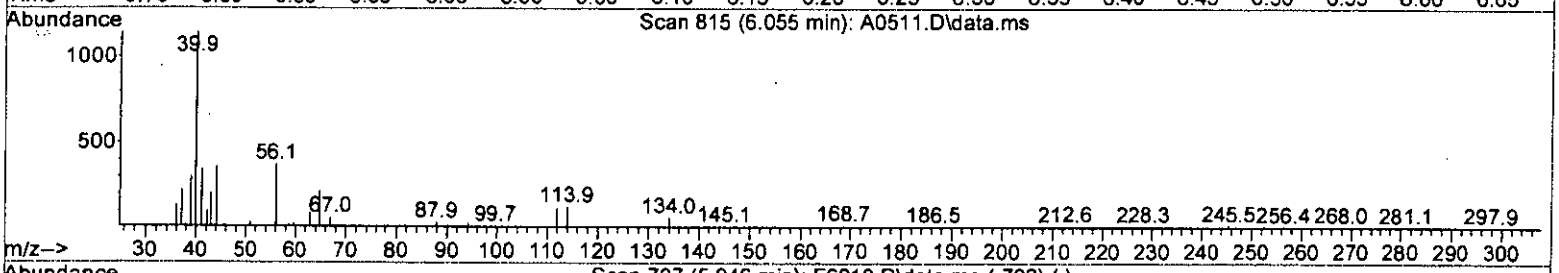
Ion	Exp%	Act%
43.00	100	100
41.00	76.40	63.35
0.00	0.00	0.00
0.00	0.00	0.00

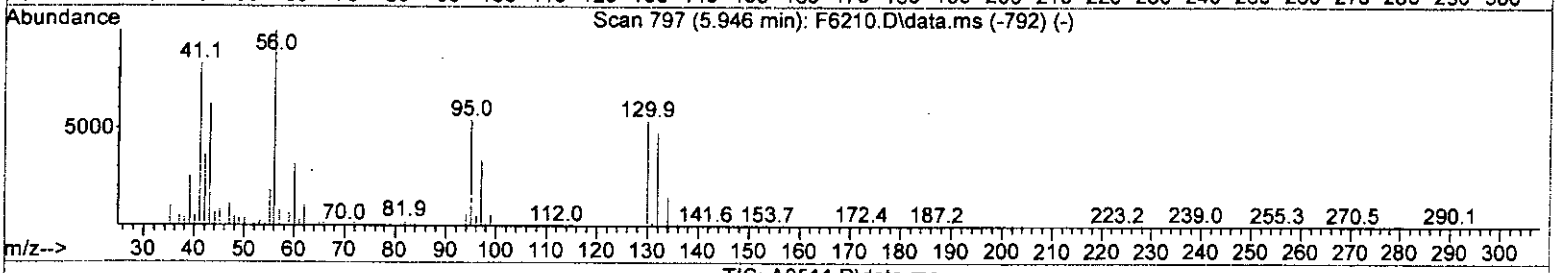
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(53) 1-Butanol

6.055min (+0.085) 2.50 ug/L

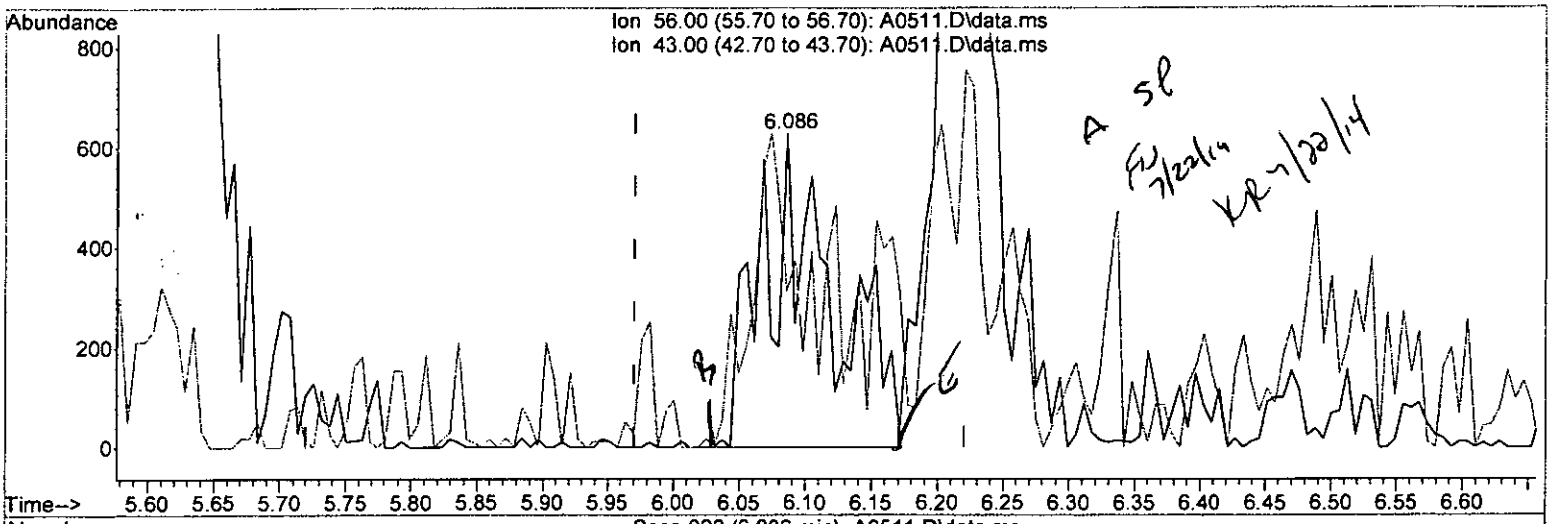
response 339

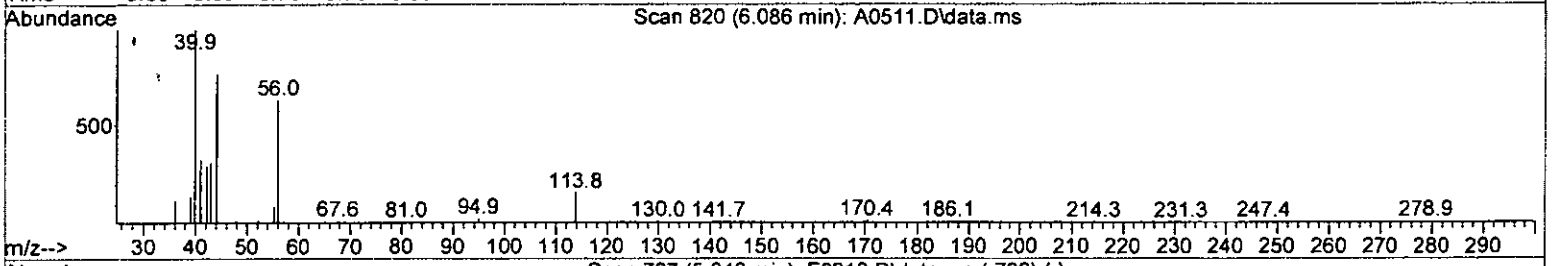
Ion	Exp%	Act%
56.00	100	100
43.00	56.20	55.01
0.00	0.00	0.00
0.00	0.00	0.00

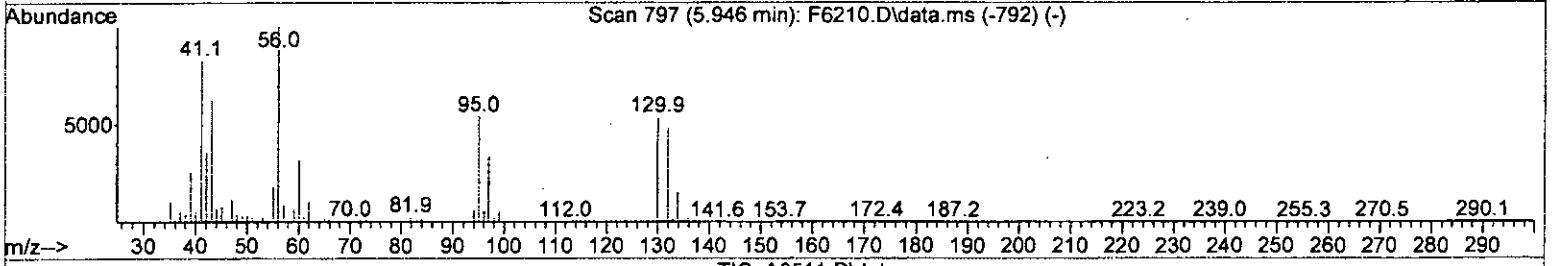
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(53) 1-Butanol

6.086min (+0.116) 16.96 ug/L m

response 2304

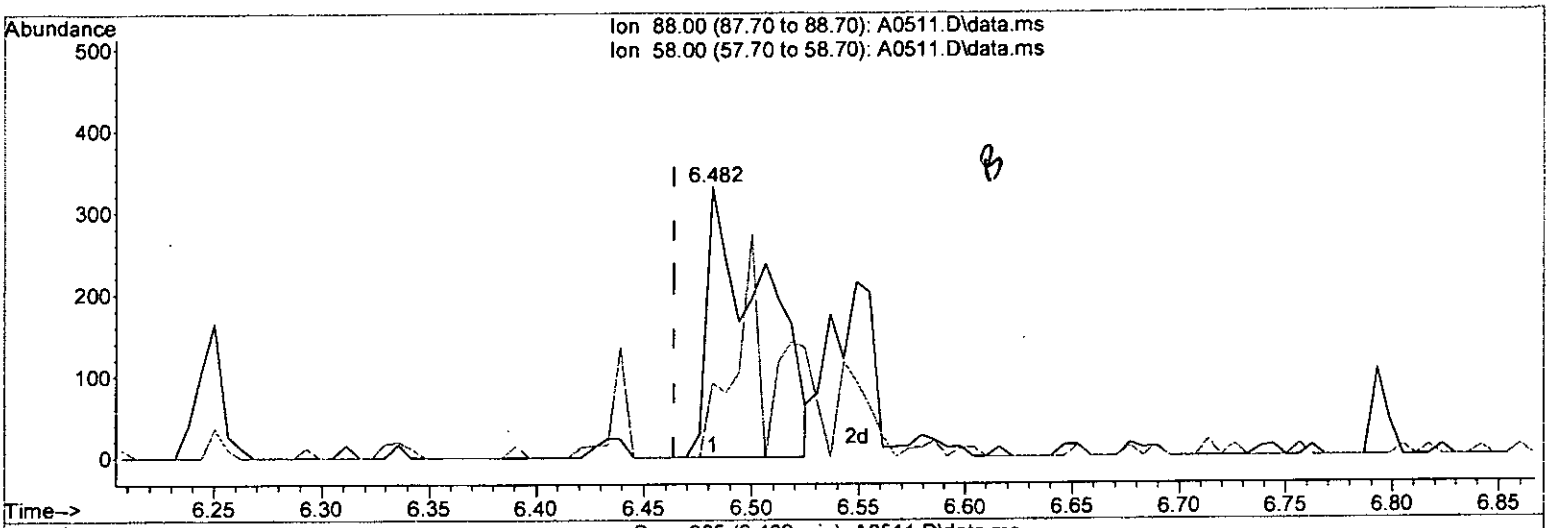
Ion	Exp%	Act%
56.00	100	100
43.00	56.20	49.76
0.00	0.00	0.00
0.00	0.00	0.00

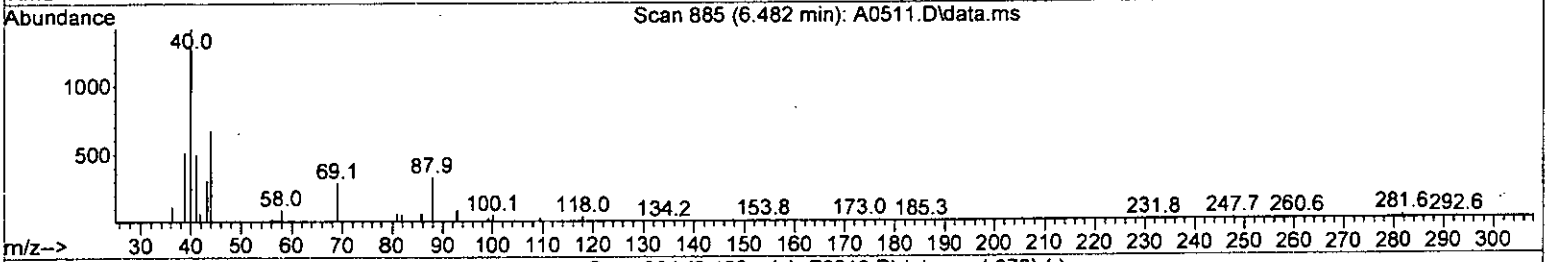
00184

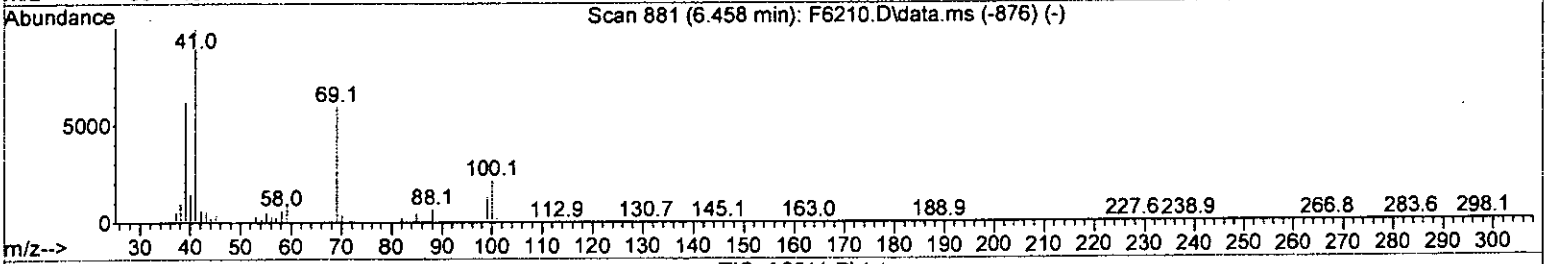
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(58) 1,4-Dioxane

6.482min (+0.018) 11.74 ug/L

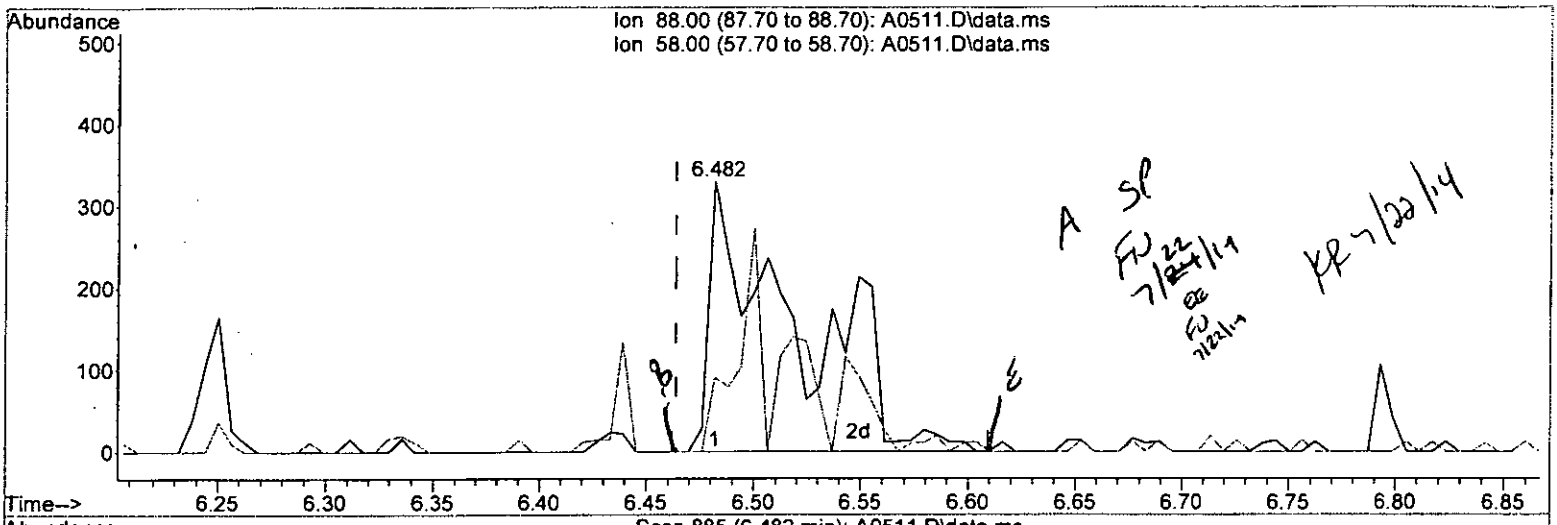
response 589

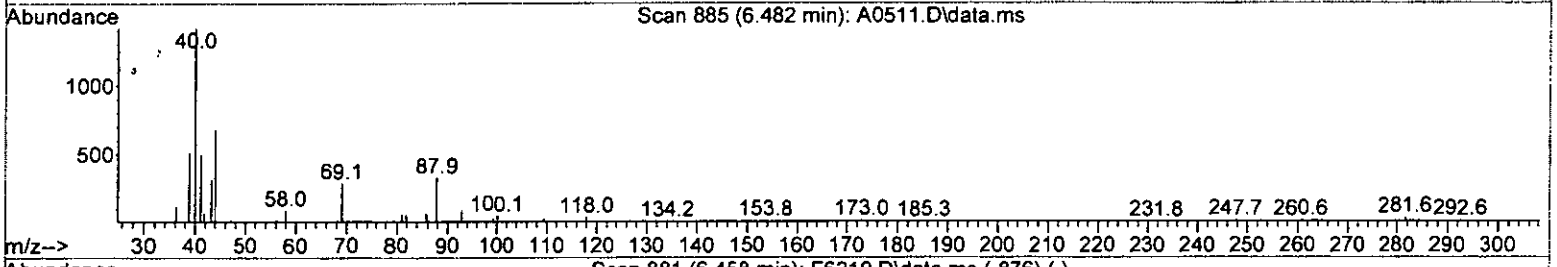
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	27.27#
0.00	0.00	0.00
0.00	0.00	0.00

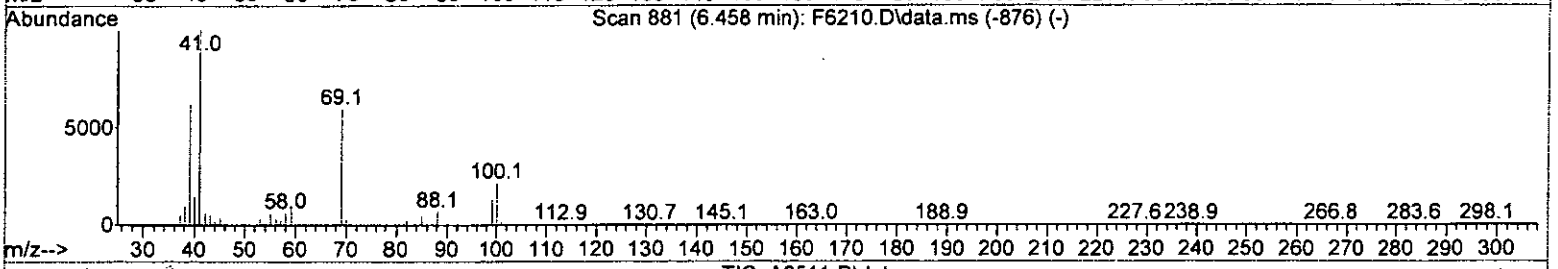
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(58) 1,4-Dioxane

6.482min (+0.018) 18.22 ug/L m

response 914

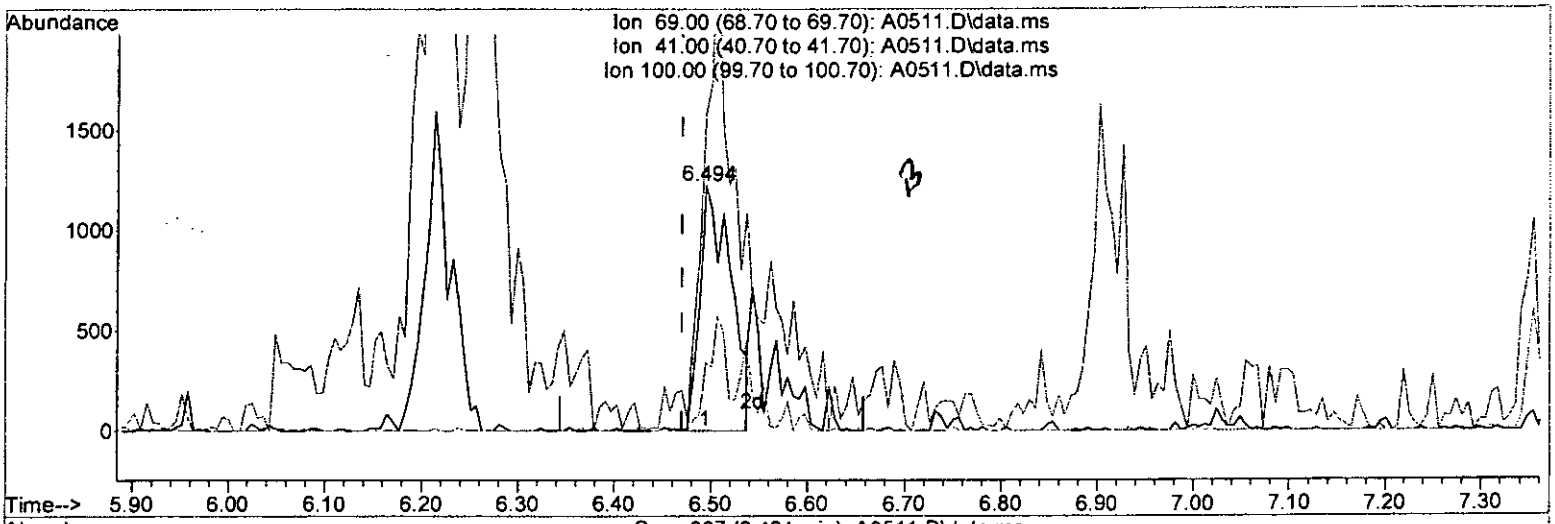
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	27.27#
0.00	0.00	0.00
0.00	0.00	0.00

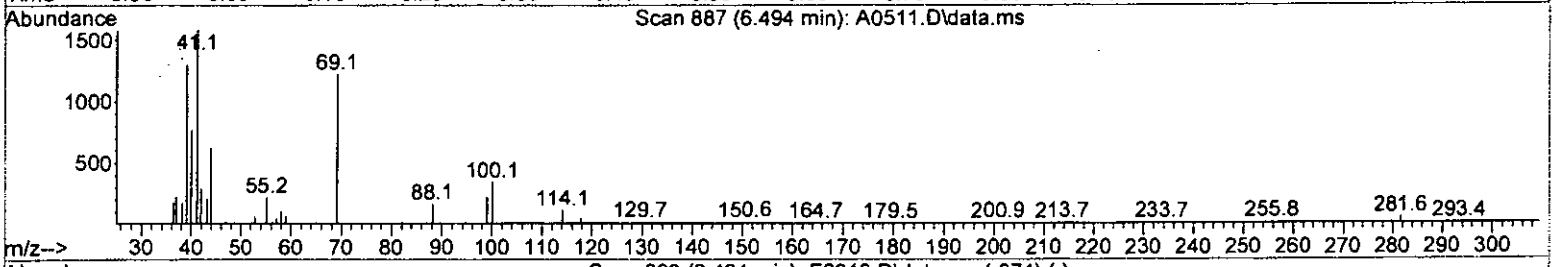
00186

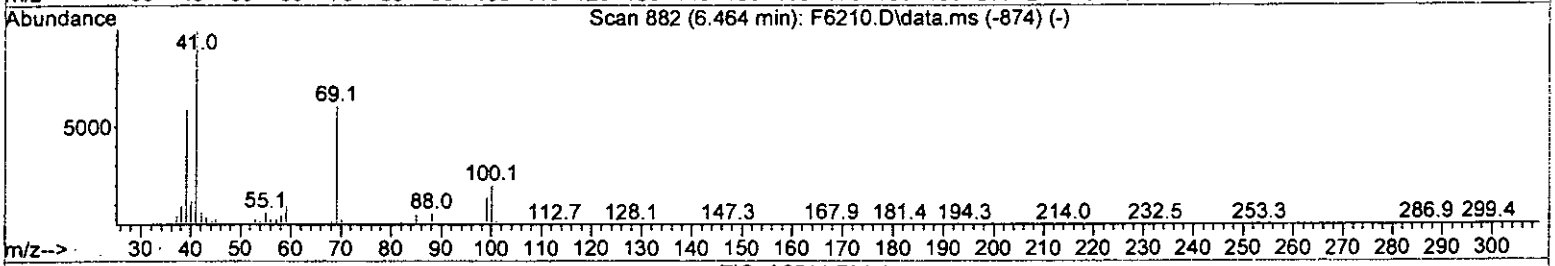
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(59) Methyl Methacrylate

6.494min (+0.024) 0.66 ug/L

response 2719

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	129.27
100.00	36.90	28.13
0.00	0.00	0.00

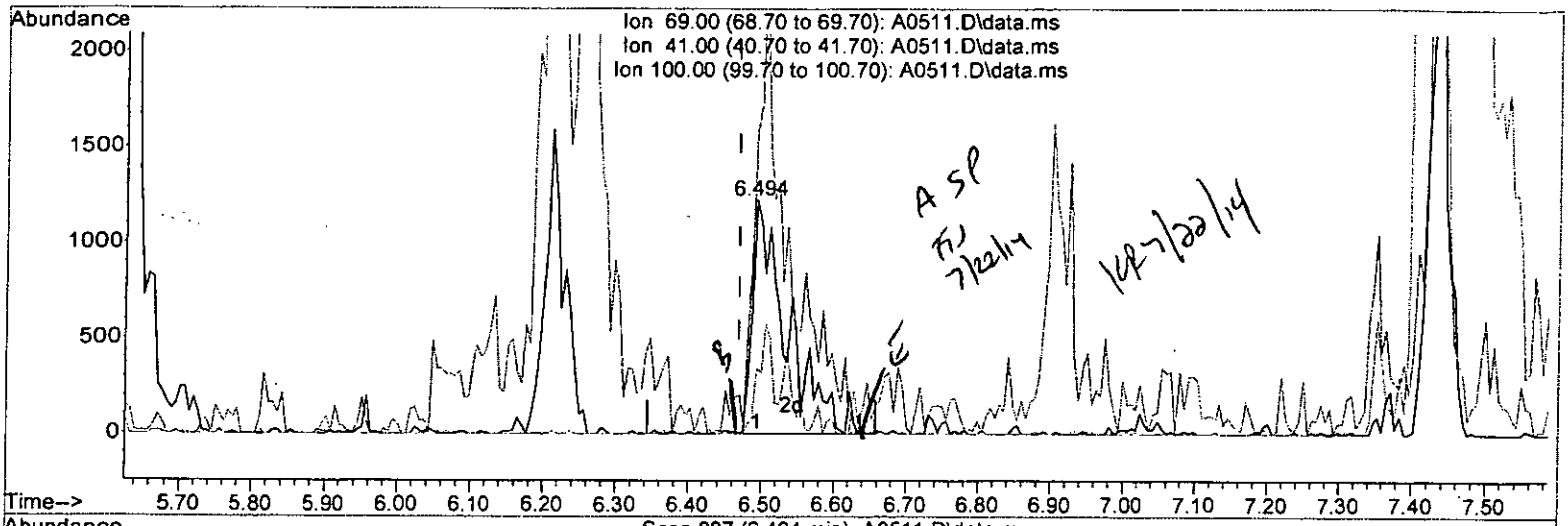
00187

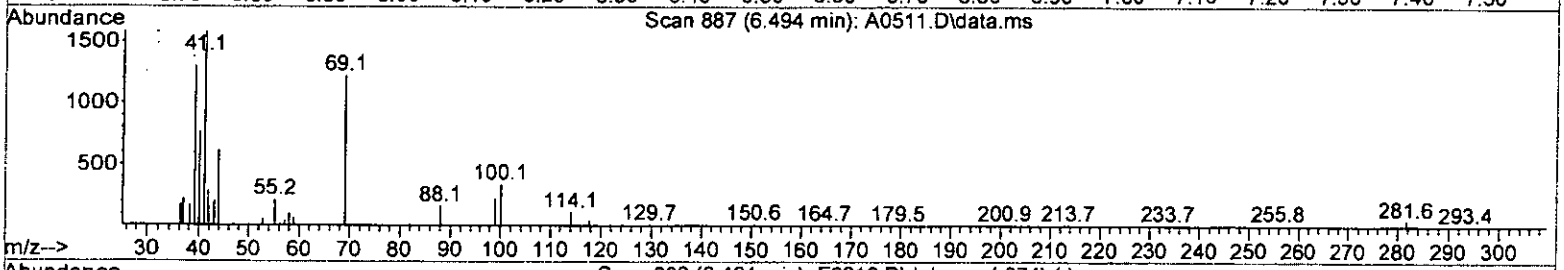
W072114.M Mon Jul 21 15:17:11 2014 MSVO10 Page: 1

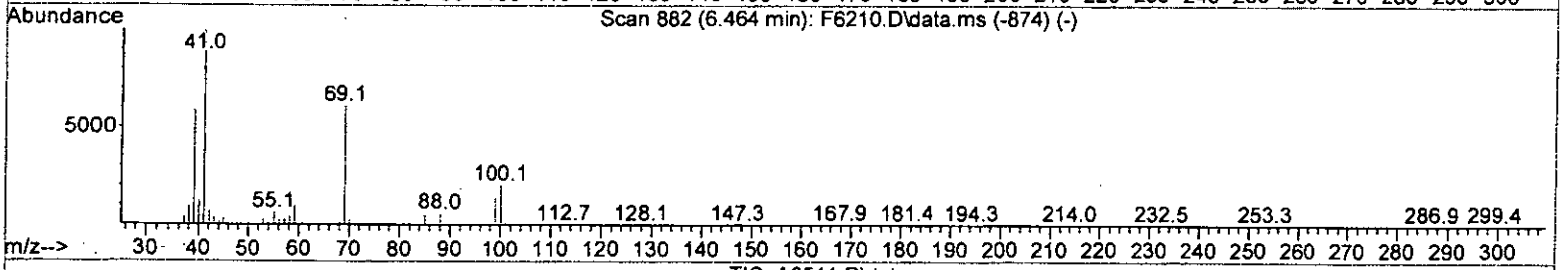
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(59) Methyl Methacrylate

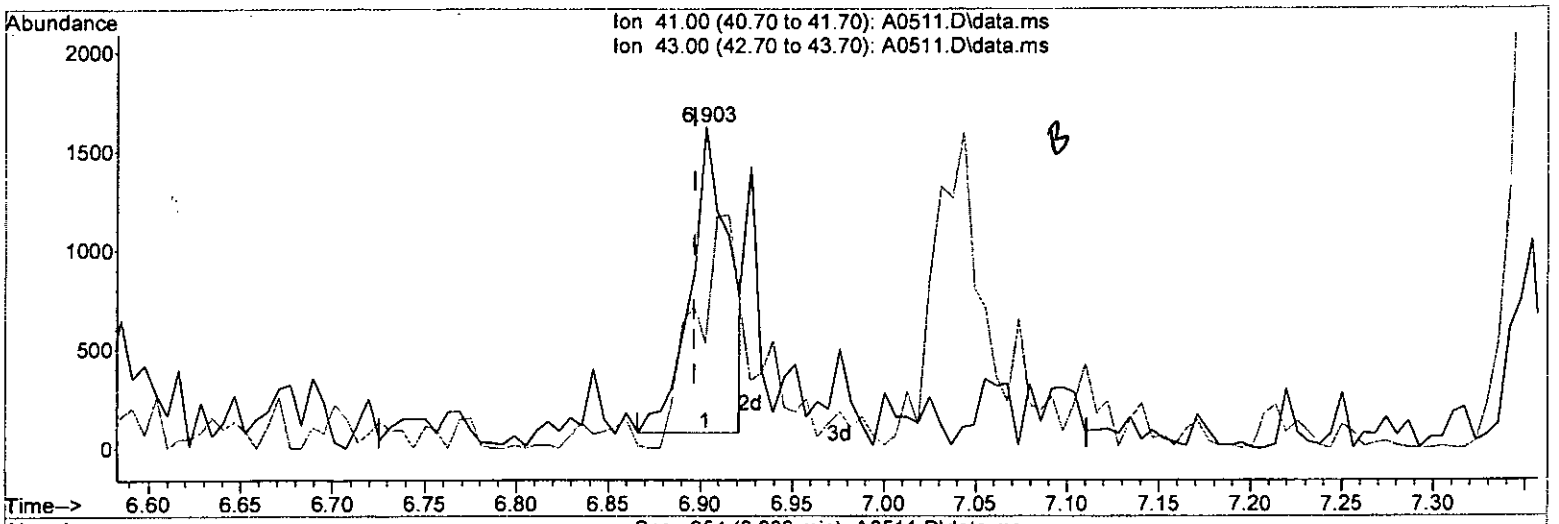
6.494min (+0.024) 0.96 ug/L m

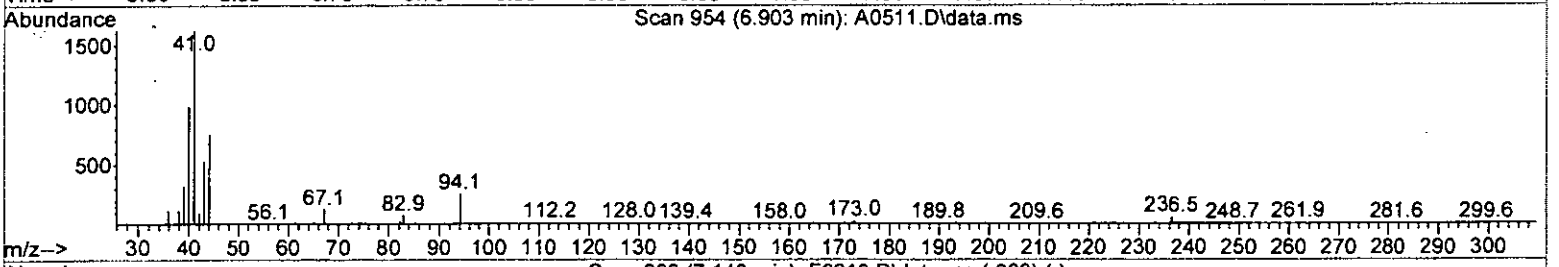
response 3956

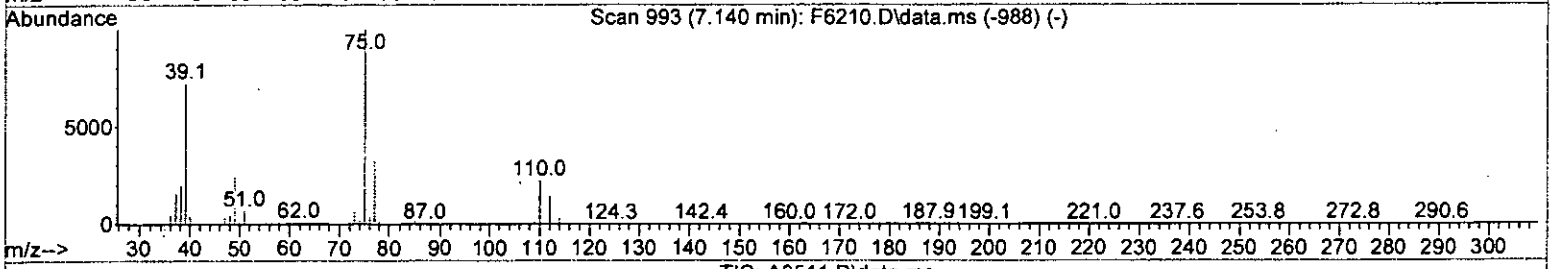
Ion	Exp%	Act%
69.00	100	100
41.00	128.90	129.27
100.00	36.90	28.13
0.00	0.00	0.00

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(61) 2-Nitropropane

6.903min (+0.006) 1.39 ug/L

response 2228

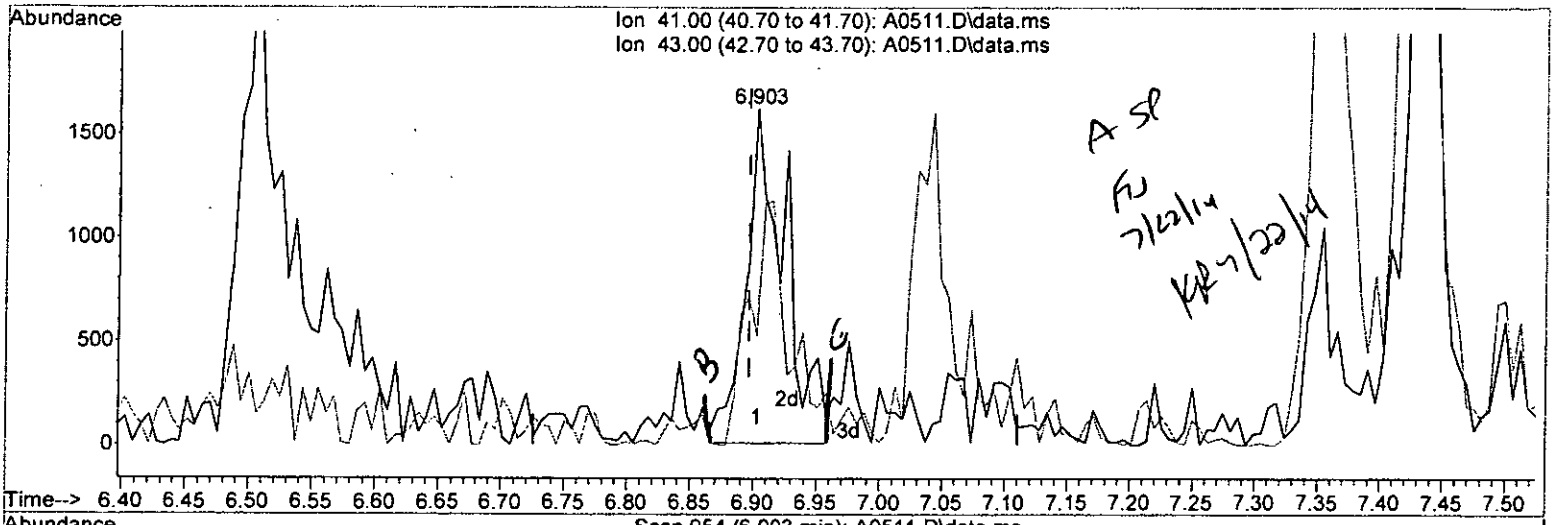
Ion	Exp%	Act%
41.00	100	100
43.00	108.60	32.43#
0.00	0.00	0.00
0.00	0.00	0.00

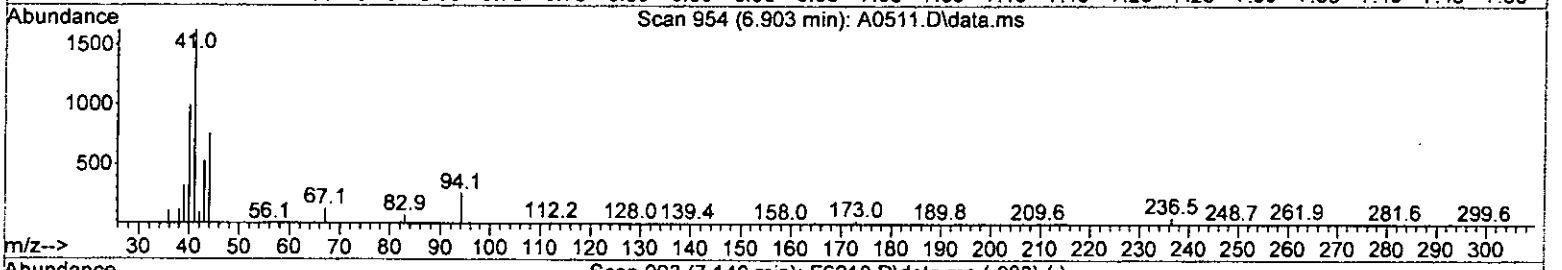
00189

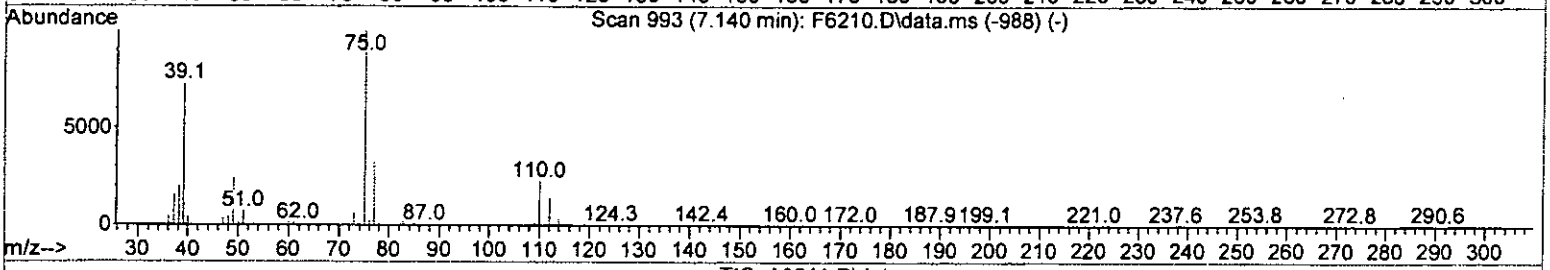
W072114.M Mon Jul 21 15:17:38 2014 MSVO10

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(61) 2-Nitropropane

6.903min (+0.006) 2.18 ug/L m

response 3489

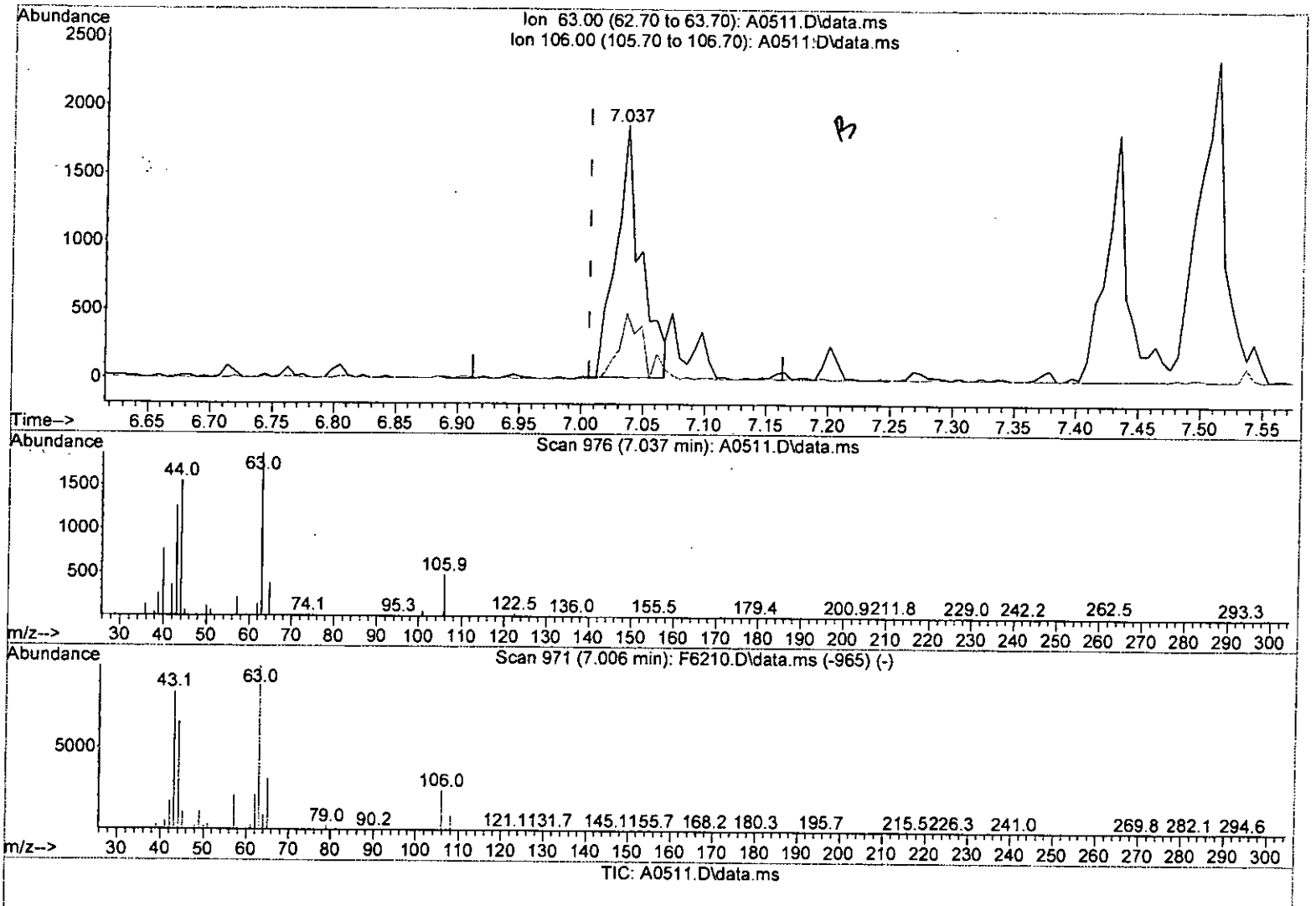
Ion	Exp%	Act%
41.00	100	100
43.00	108.60	32.43#
0.00	0.00	0.00
0.00	0.00	0.00

00190

W072114.M Mon Jul 21 15:17:59 2014 MSVO10

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:20:37 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0511.D\data.ms

(62) 2-Chloroethylvinyl Ether

7.037min (+0.030) 0.55 ug/L

response 2602

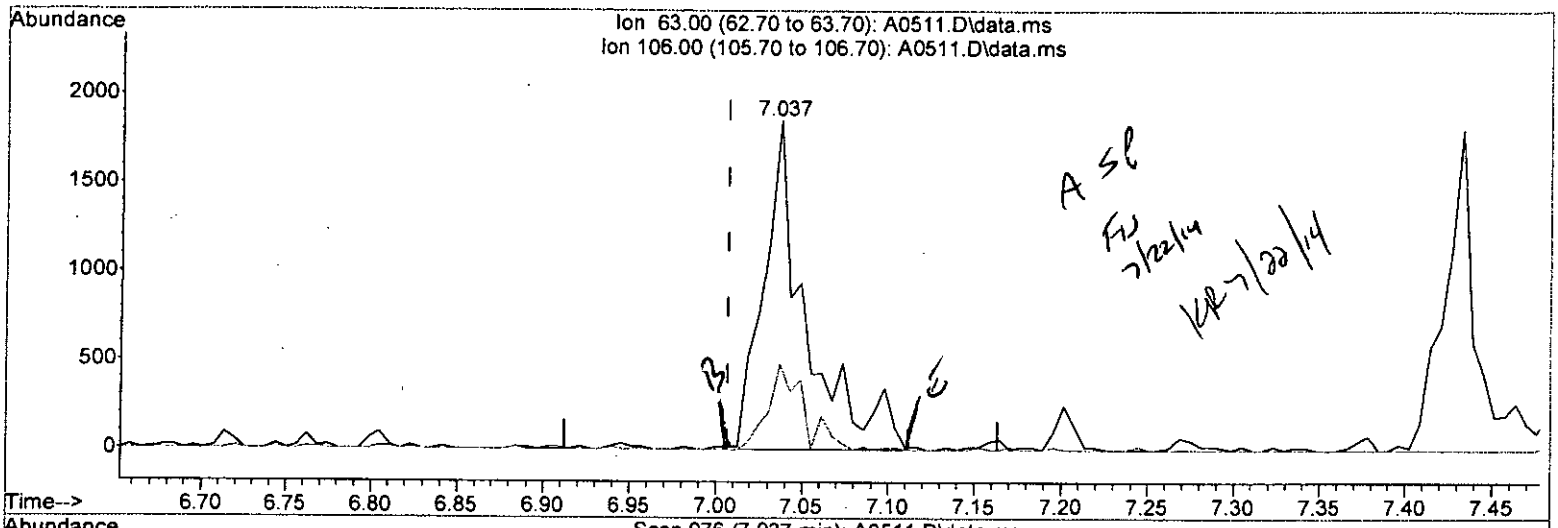
Ion	Exp%	Act%
63.00	100	100
106.00	27.80	25.94
0.00	0.00	0.00
0.00	0.00	0.00

W072114.M Mon Jul 21 16:17:04 2014 MSVO10

00191

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:20:37 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0511.D\data.ms

(62) 2-Chloroethylvinyl Ether

7.037min (+0.030) 0.67 ug/L m

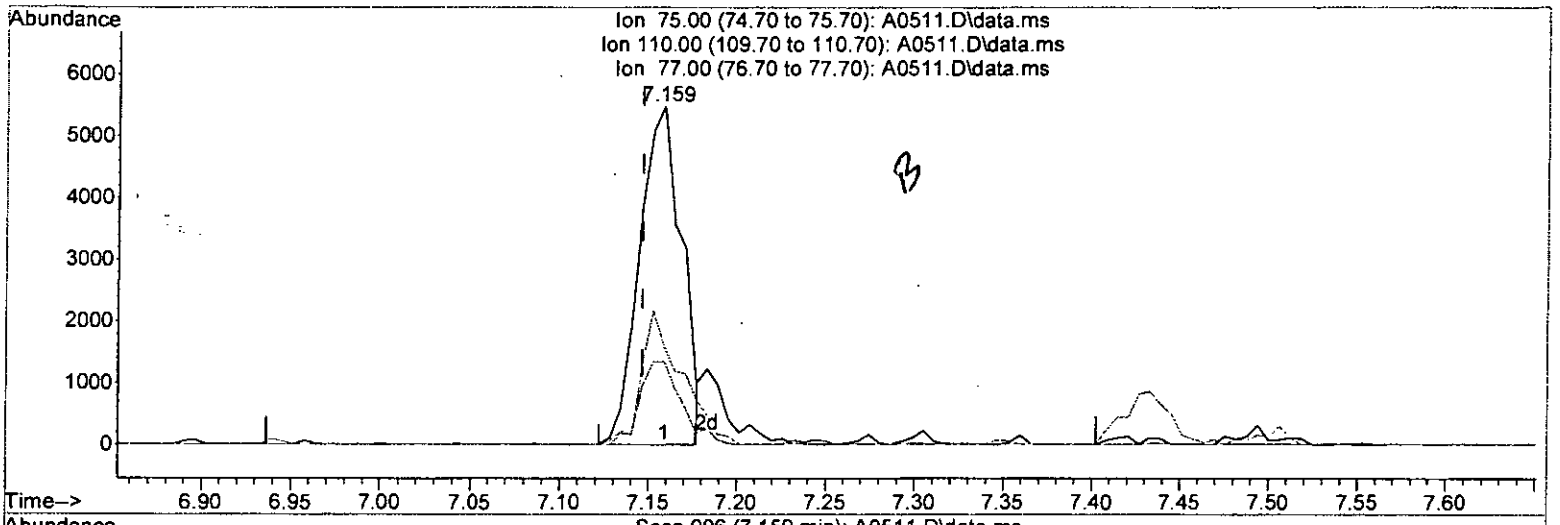
response 3169

Ion	Exp%	Act%
63.00	100	100
106.00	27.80	25.94
0.00	0.00	0.00
0.00	0.00	0.00

W072114.M Mon Jul 21 16:17:14 2014 MSVO10

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0511.D\data.ms

(63) cis-1,3-Dichloropropene (P)

7.159min (+0.012) 0.67 ug/L

response 9058

Ion	Exp%	Act%
75.00	100	100
110.00	23.70	27.37
77.00	31.80	28.83
0.00	0.00	0.00

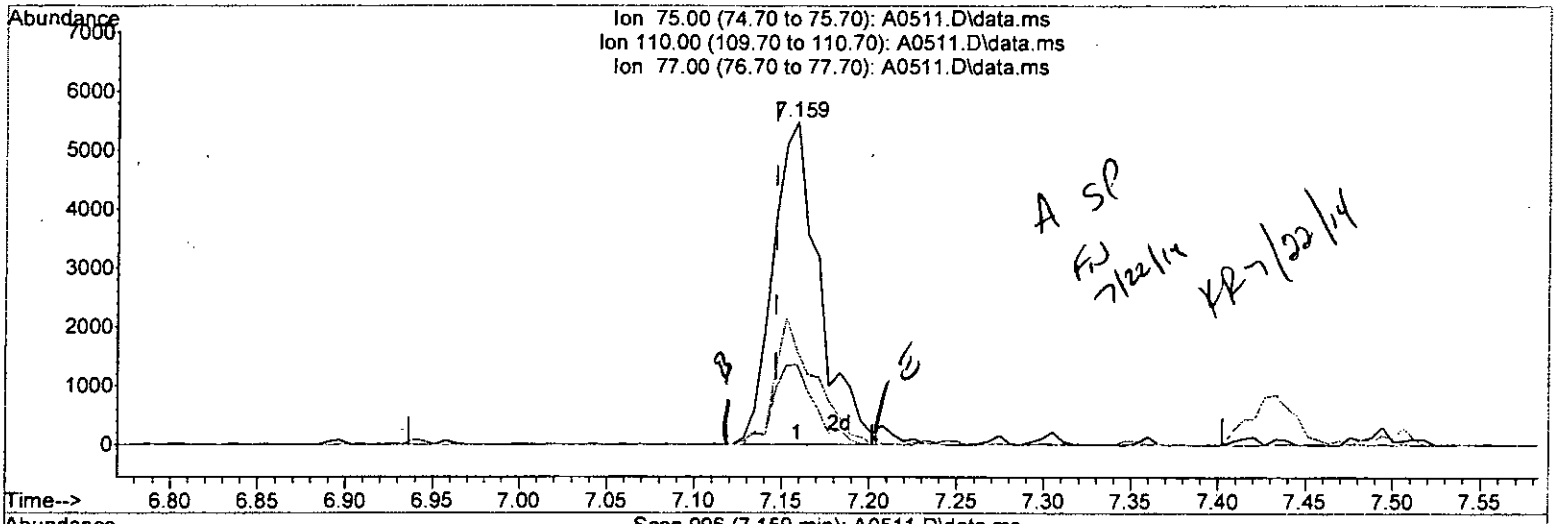
00193

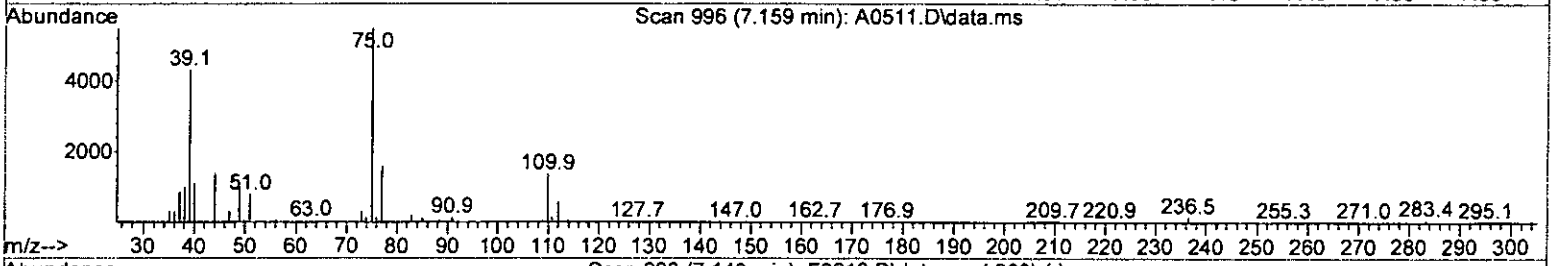
W072114.M Mon Jul 21 15:18:10 2014 MSVO10

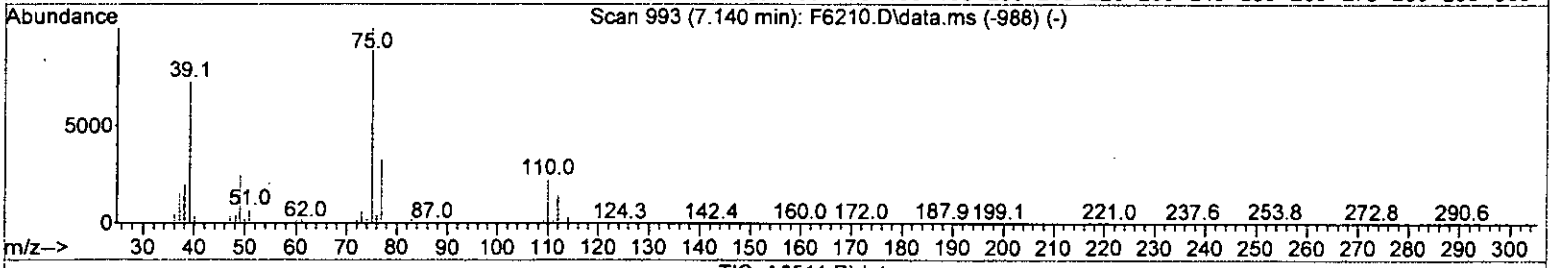
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(63) cis-1,3-Dichloropropene (P)

7.159min (+0.012) 0.74 ug/L m

response 10071

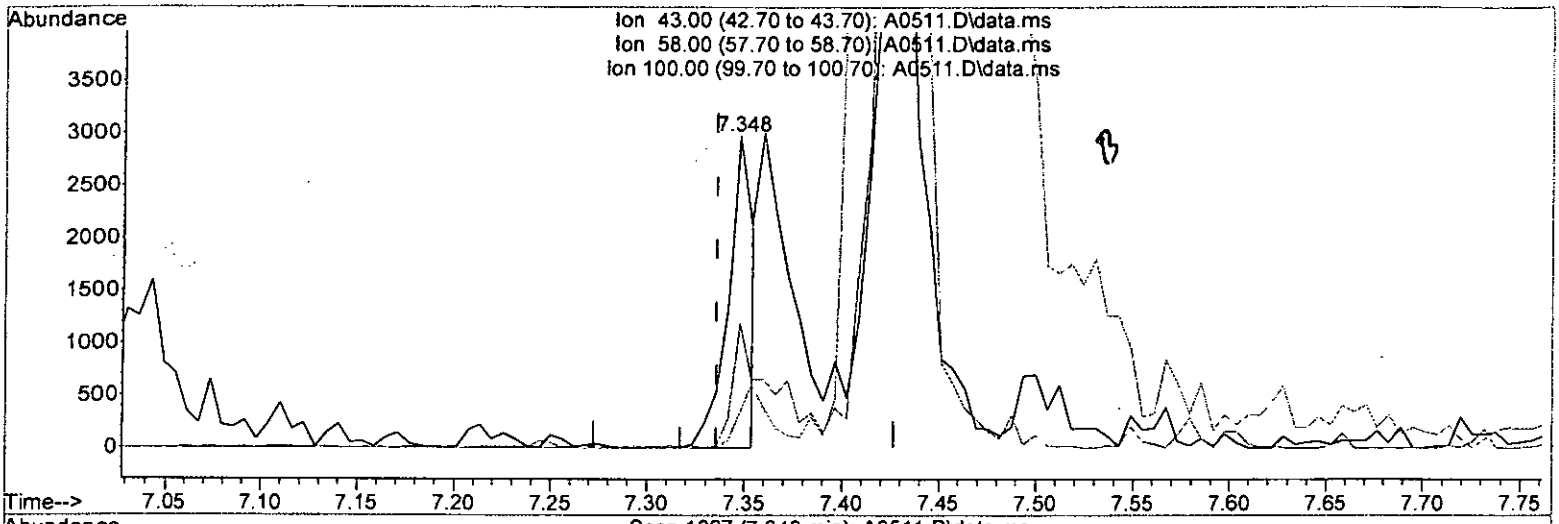
Ion	Exp%	Act%
75.00	100	100
110.00	23.70	24.65
77.00	31.80	28.83
0.00	0.00	0.00

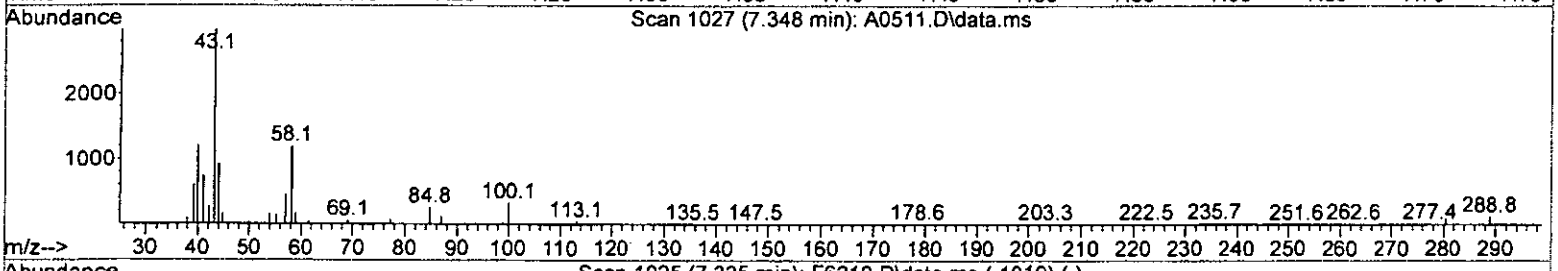
00194

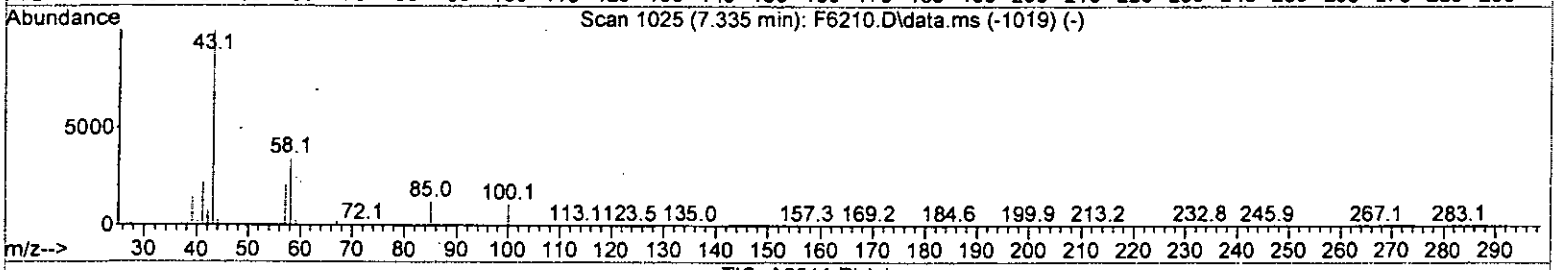
W072114.M Mon Jul 21 15:18:21 2014 MSVO10

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(64) 4-Methyl-2-pentanone (P)

7.348min (+0.012) 0.39 ug/L

response 2639

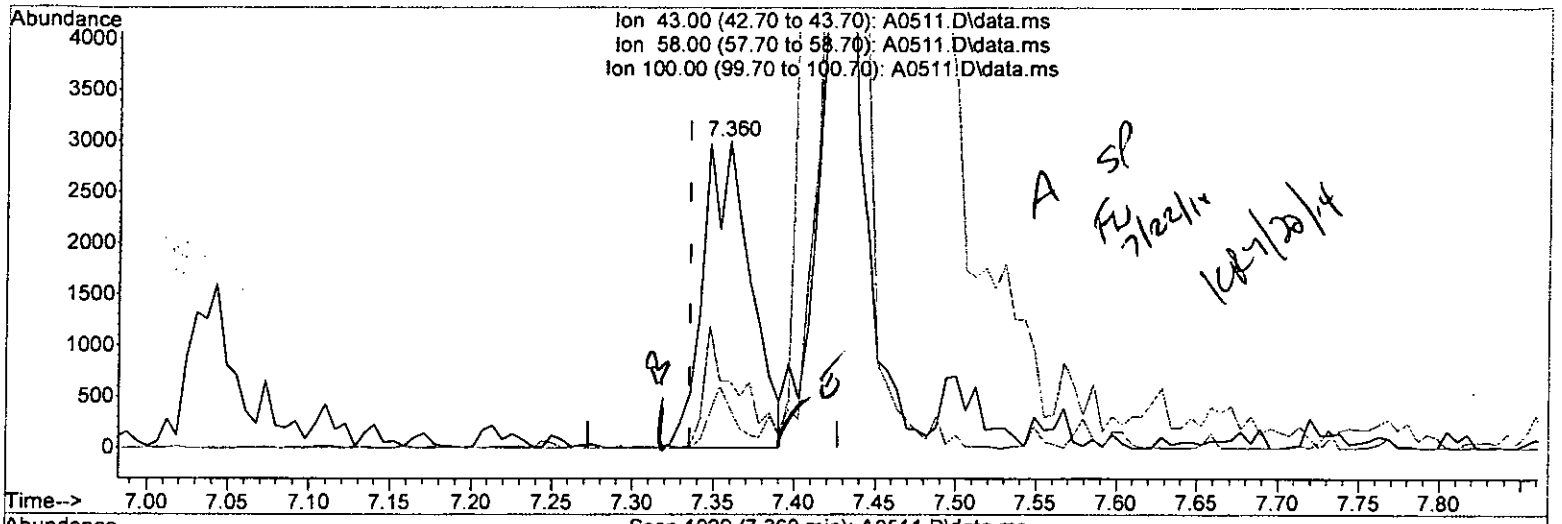
Ion	Exp%	Act%
43.00	100	100
58.00	36.30	40.07
100.00	12.60	11.20
0.00	0.00	0.00

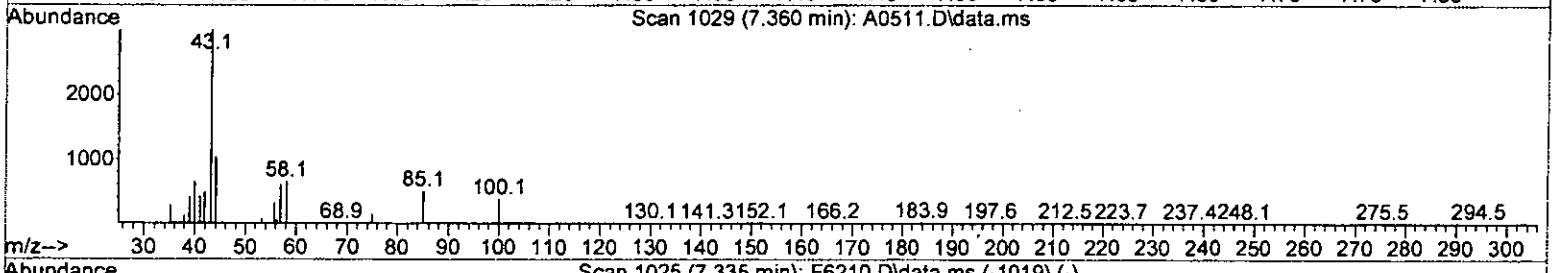
00195

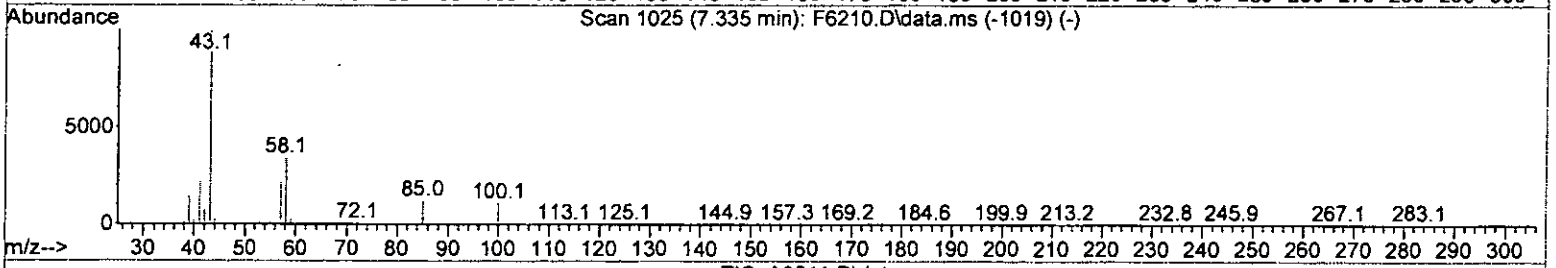
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(64) 4-Methyl-2-pentanone (P)

7.360min (+0.024) 0.88 ug/L m

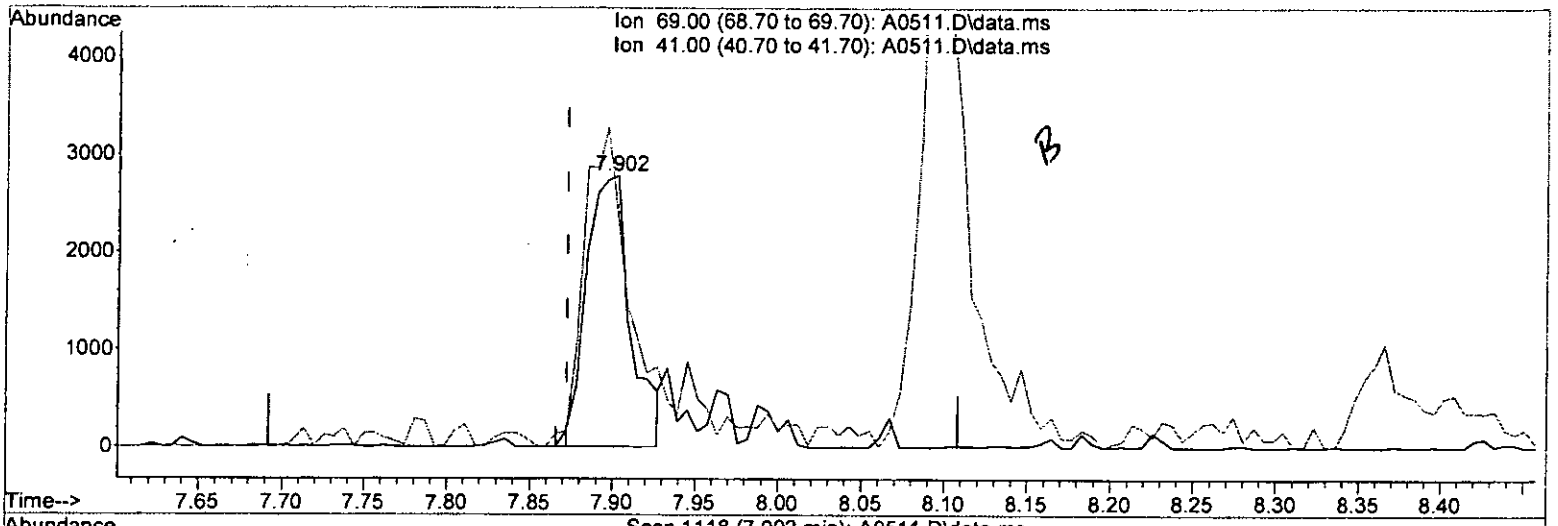
response 6033

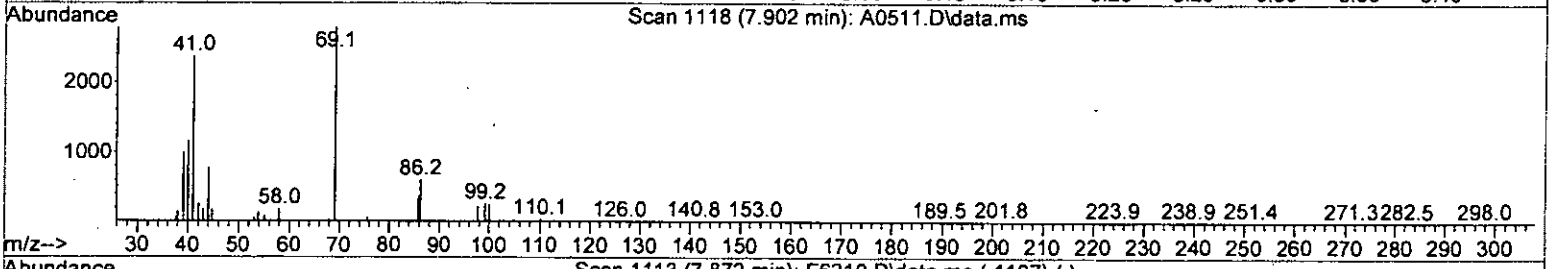
Ion	Exp%	Act%
43.00	100	100
58.00	36.30	21.81
100.00	12.60	12.84
0.00	0.00	0.00

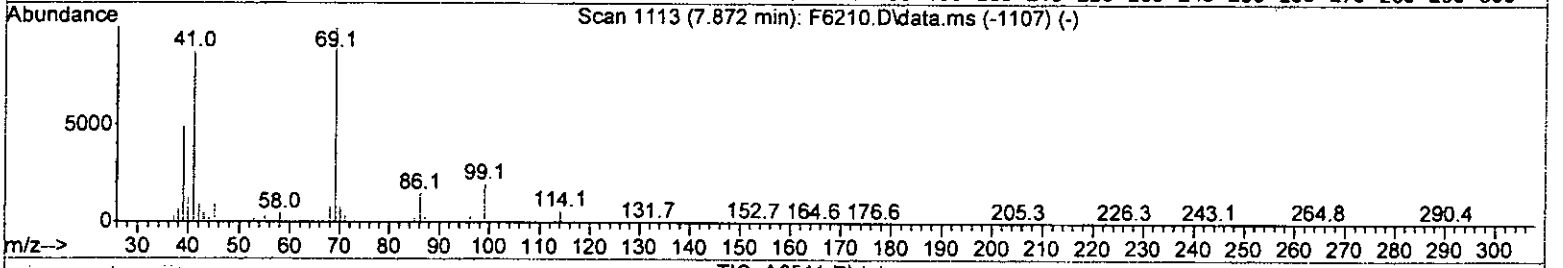
00196

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(68) Ethyl Methacrylate

7.902min (+0.030) 0.60 ug/L

response 5195

Ion	Exp%	Act%
69.00	100	100
41.00	71.50	85.35
0.00	0.00	0.00
0.00	0.00	0.00

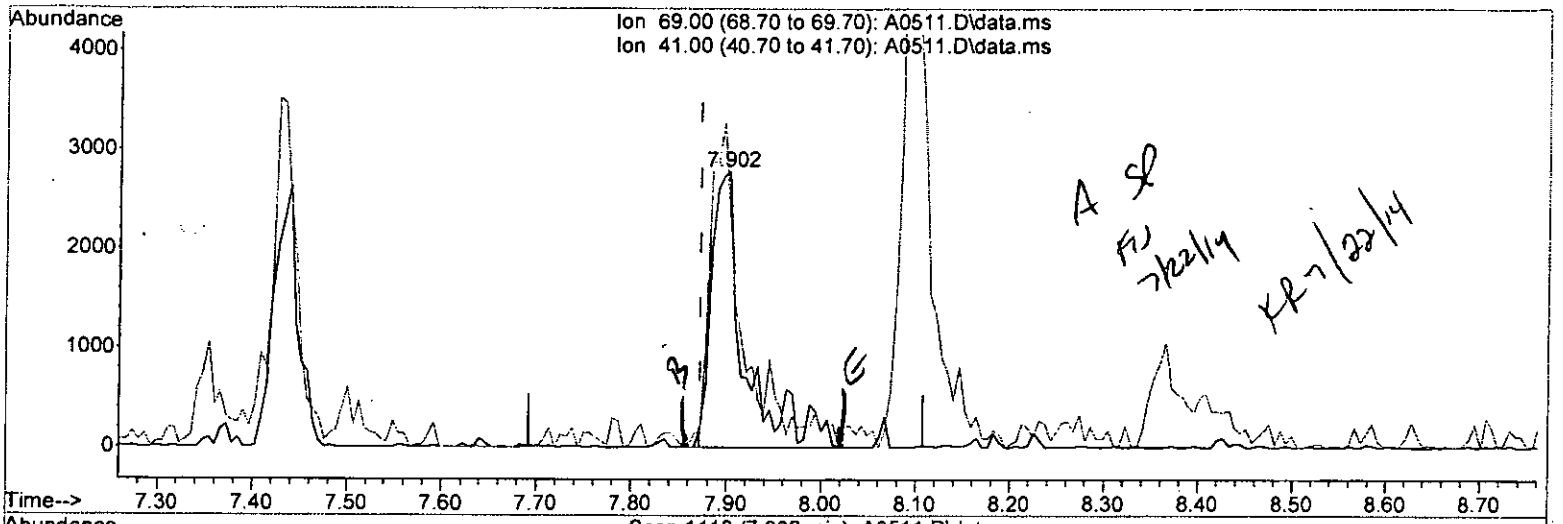
00197

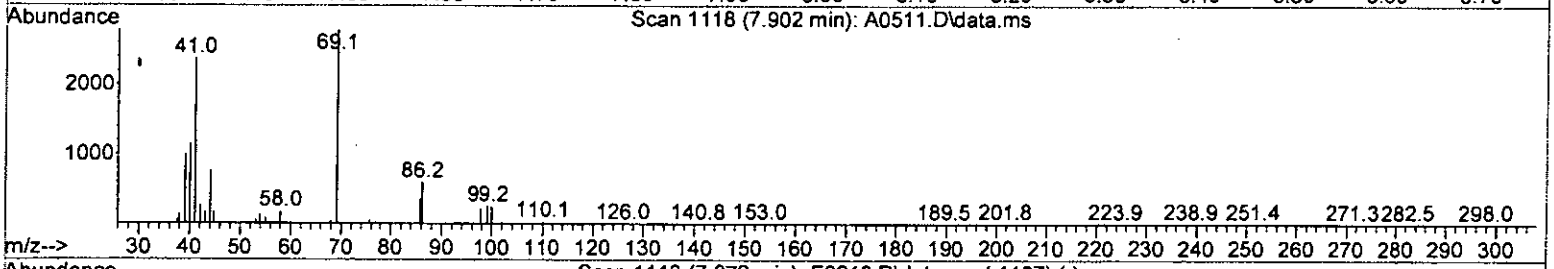
W072114.M Mon Jul 21 15:18:53 2014 MSVO10

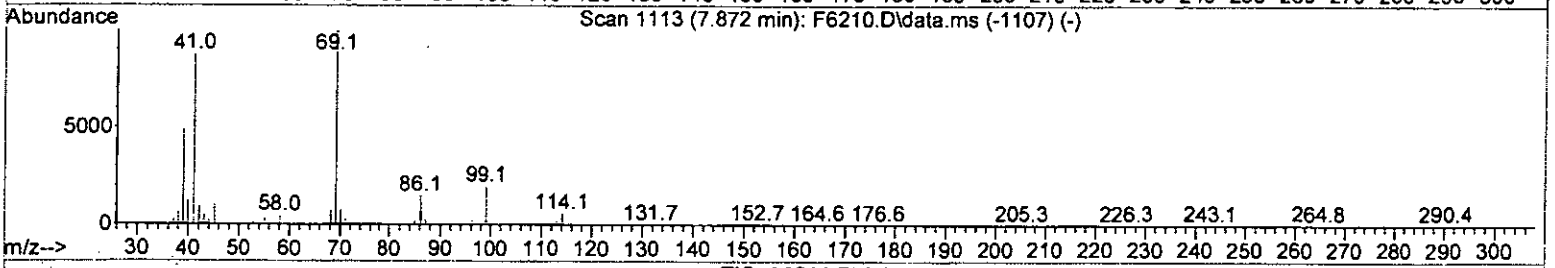
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(68) Ethyl Methacrylate

7.902min (+0.030) 0.79 ug/L m

response 6769

Ion	Exp%	Act%
69.00	100	100
41.00	71.50	85.35
0.00	0.00	0.00
0.00	0.00	0.00

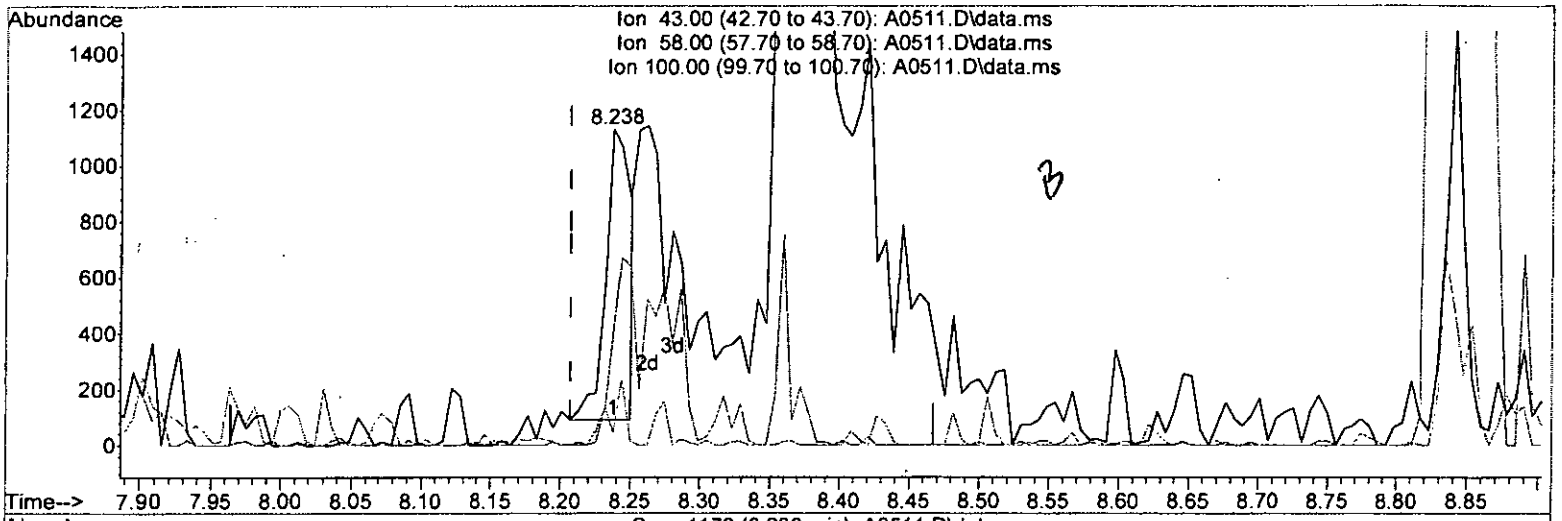
00198

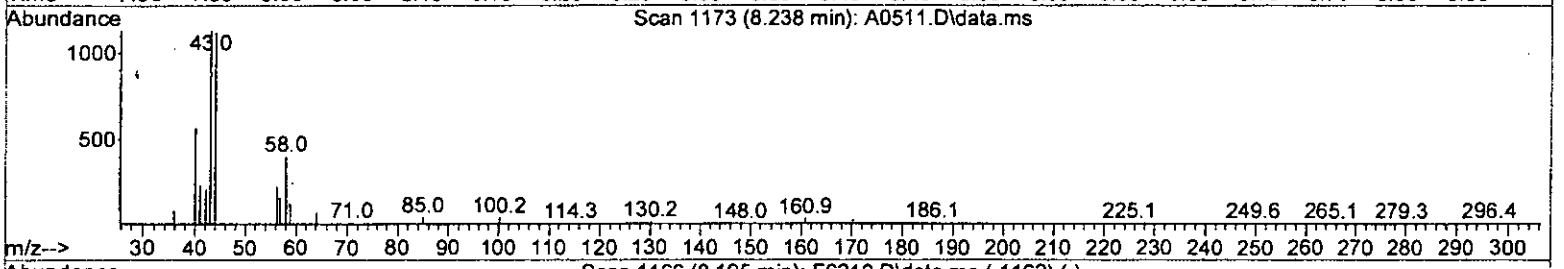
W072114.M Mon Jul 21 15:19:06 2014 MSVO10

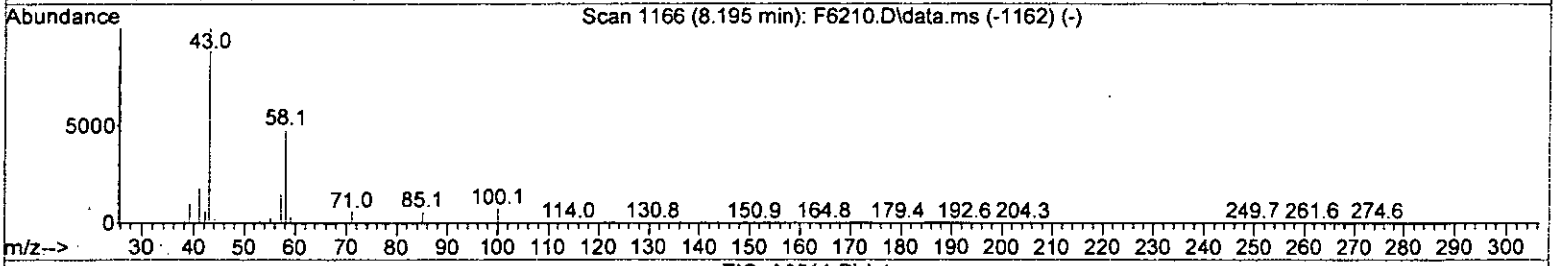
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(73) 2-Hexanone (P)

8.238min (+0.030) 0.26 ug/L

response 1279

Ion	Exp%	Act%
43.00	100	100
58.00	50.80	35.46
100.00	10.10	4.07
0.00	0.00	0.00

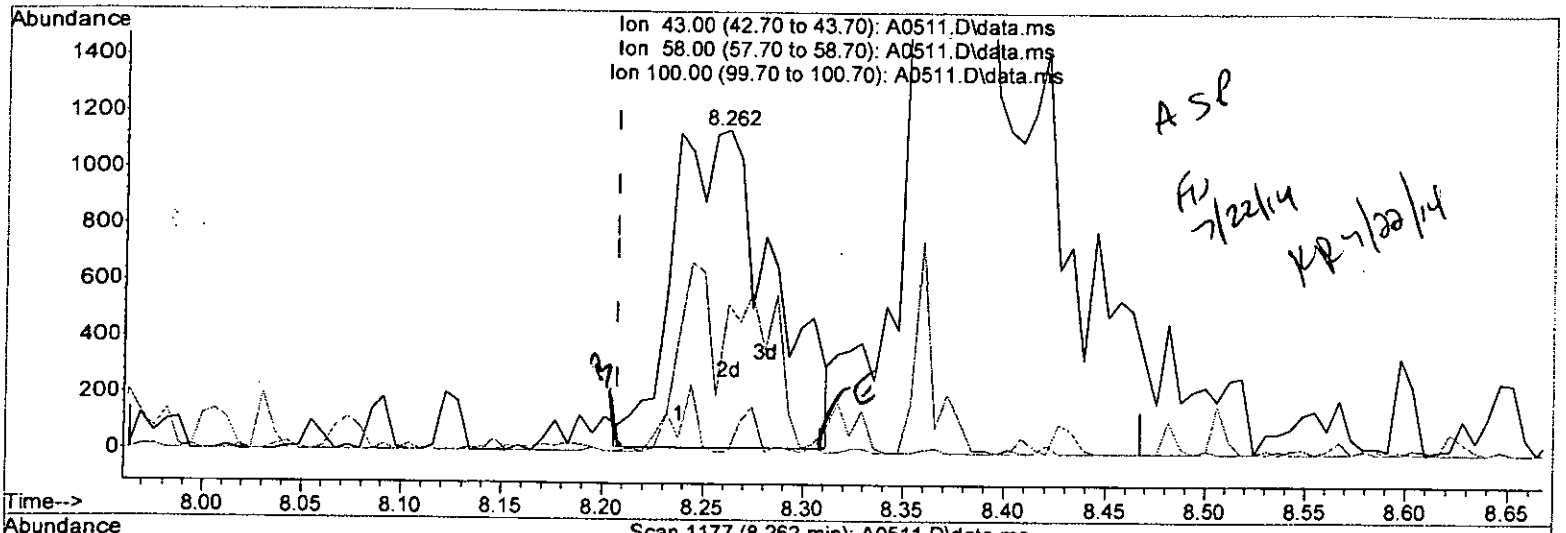
00195

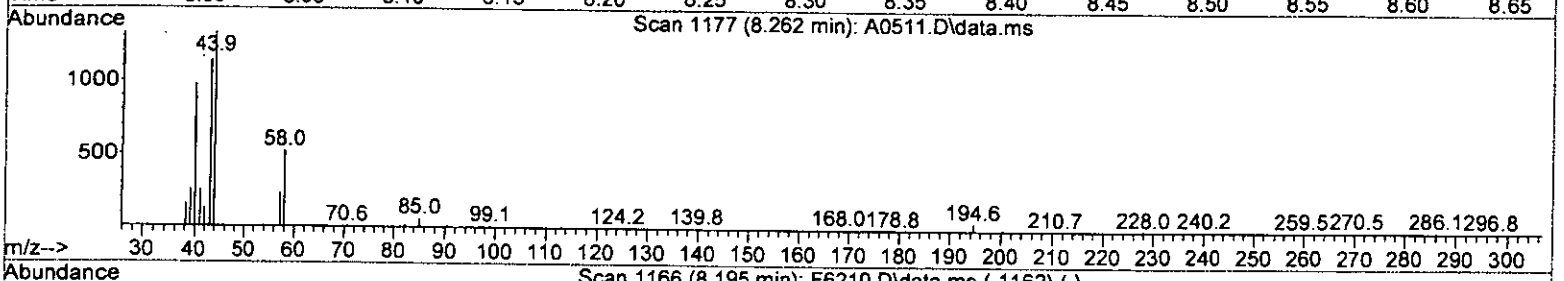
W072114.M Mon Jul 21 15:19:22 2014 MSVO10 Page: 1

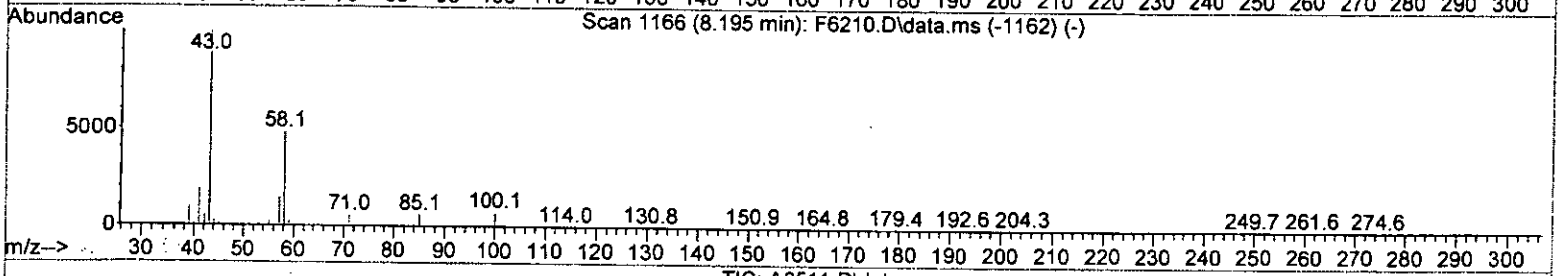
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(73) 2-Hexanone (P)

8.262min (+0.055) 0.78 ug/L m

response 3902

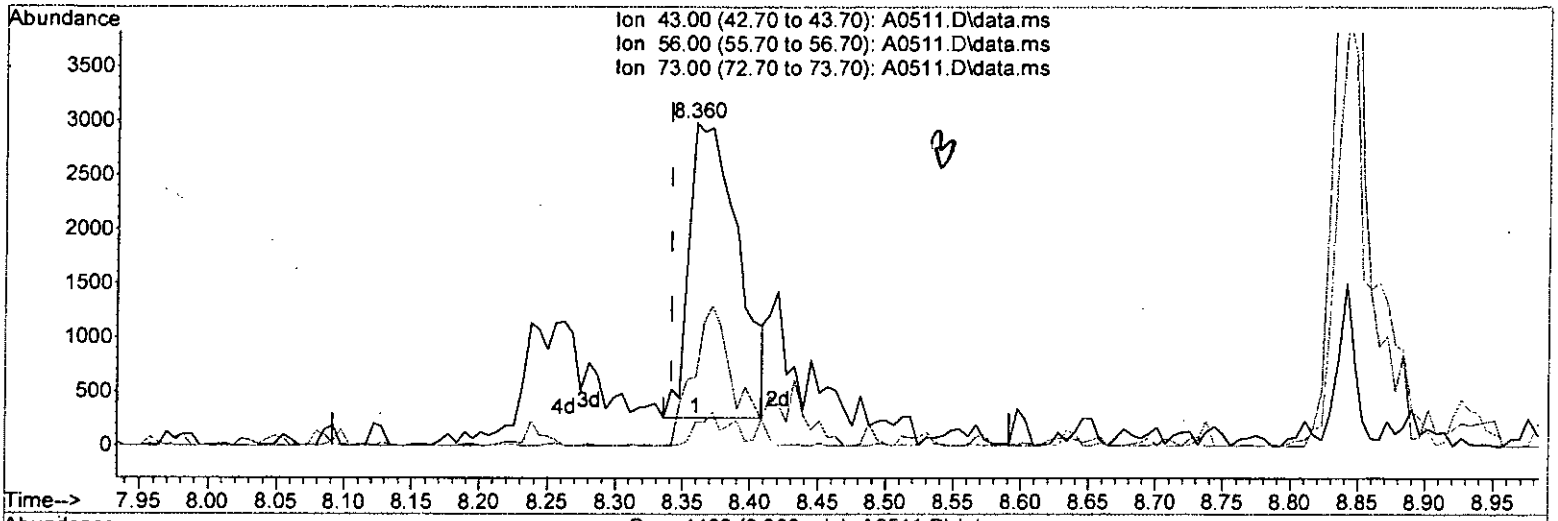
Ion	Exp%	Act%
43.00	100	100
58.00	50.80	45.71
100.00	10.10	0.00
0.00	0.00	0.00

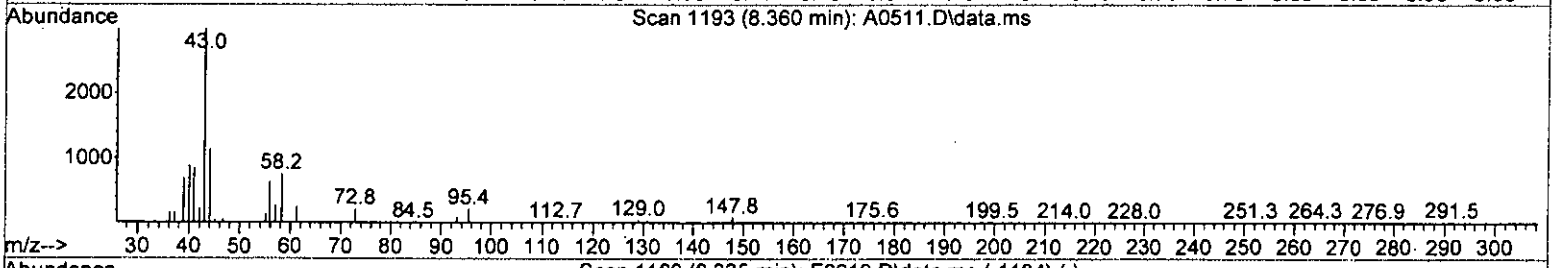
W072114.M Mon Jul 21 15:19:43 2014 MSVO10

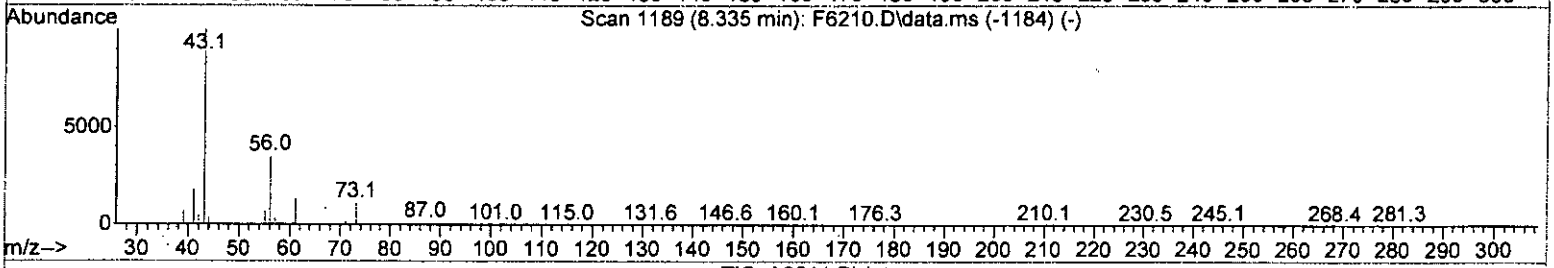
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(76) N-Butyl Acetate

8.360min (+0.018) 0.52 ug/L

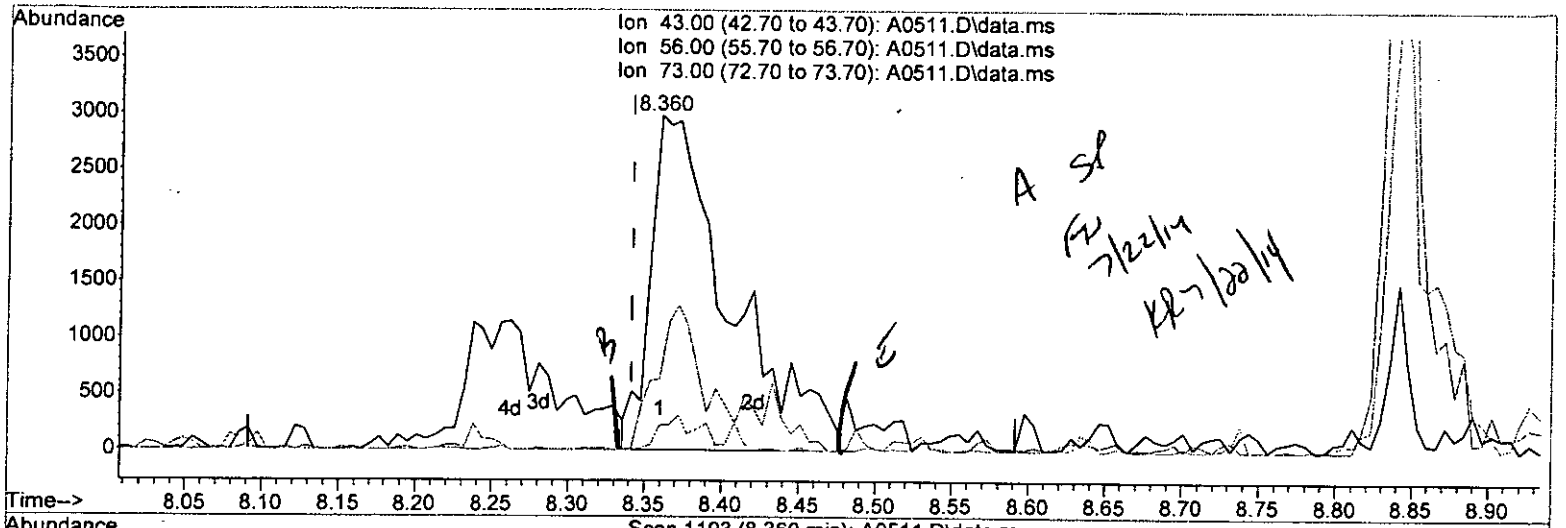
response 6867

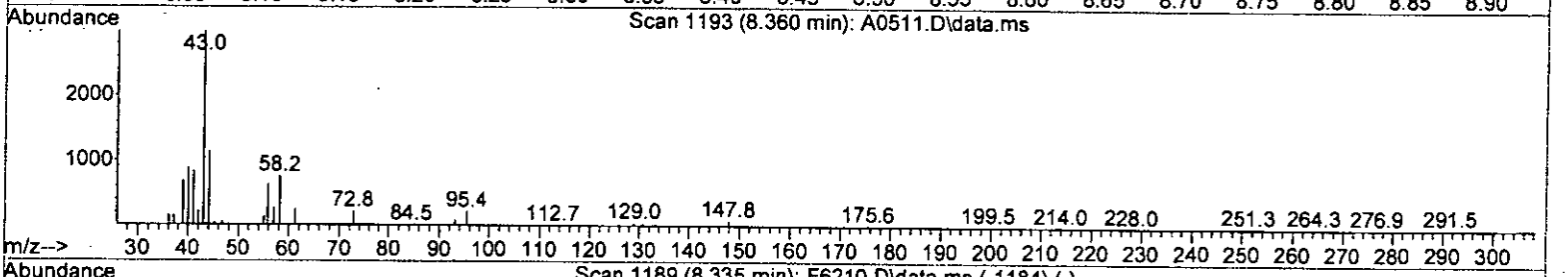
Ion	Exp%	Act%
43.00	100	100
56.00	38.80	21.28
73.00	14.00	7.65
0.00	0.00	0.00

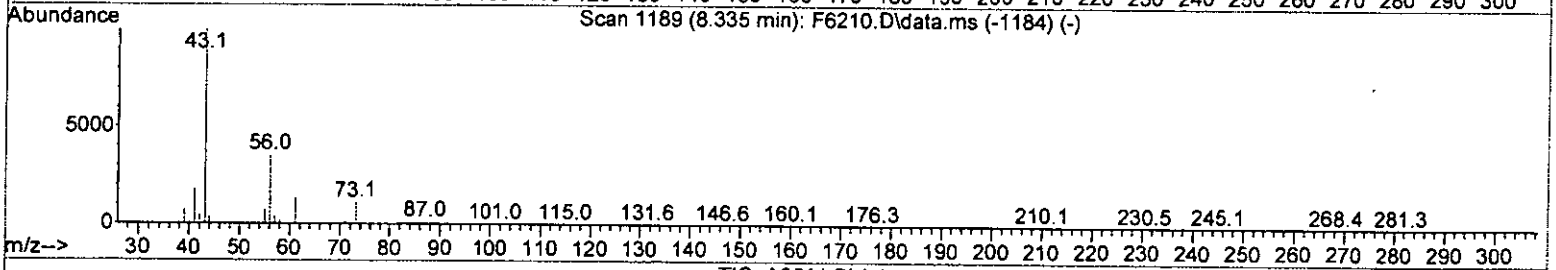
W072114.M Mon Jul 21 15:19:56 2014 MSVO10

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 12:35:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(76) N-Butyl Acetate

8.360min (+0.018) 0.81 ug/L m

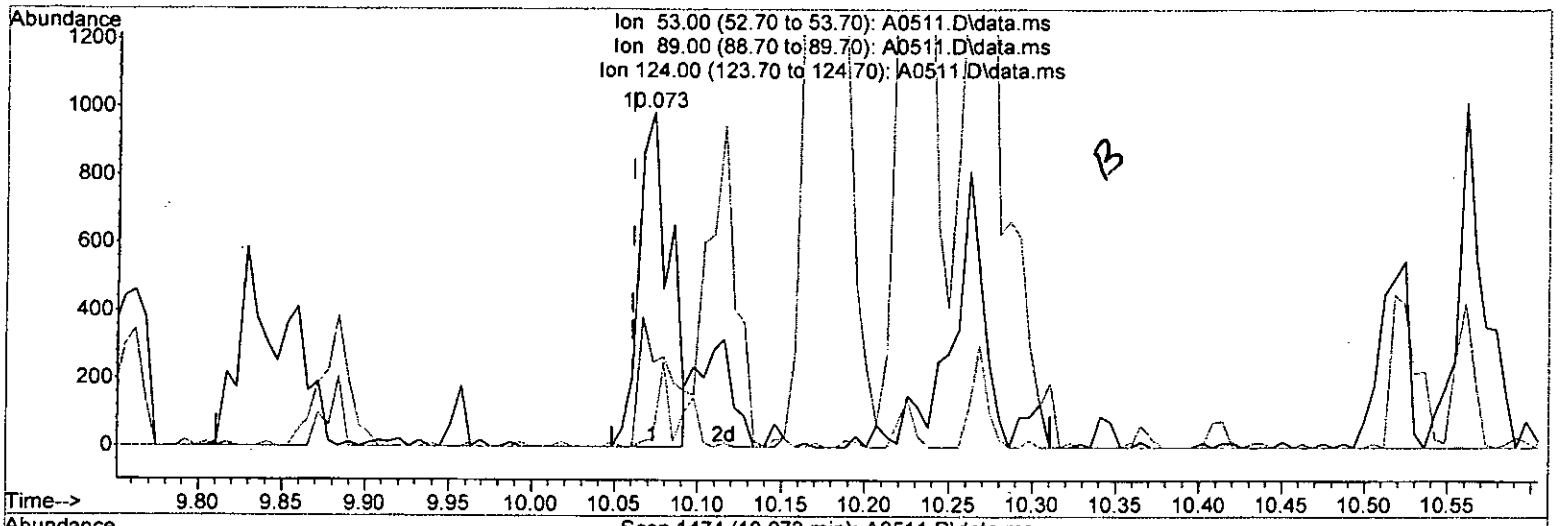
response 10618

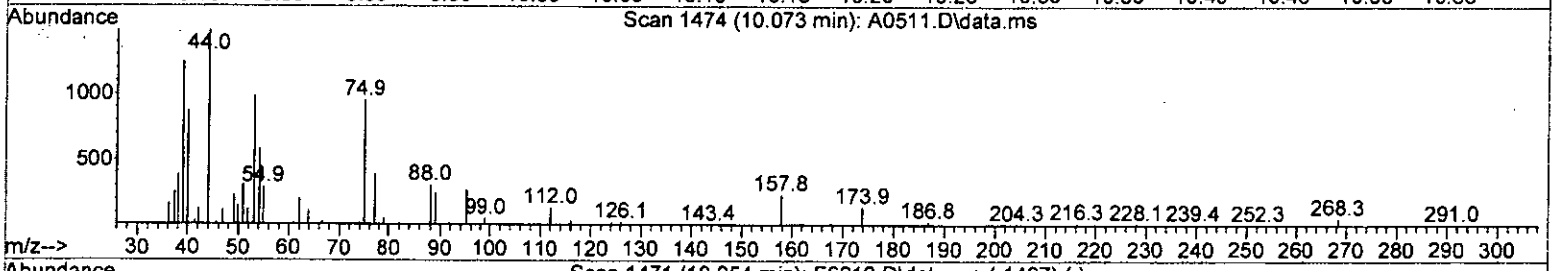
Ion	Exp%	Act%
43.00	100	100
56.00	38.80	21.28
73.00	14.00	7.22
0.00	0.00	0.00

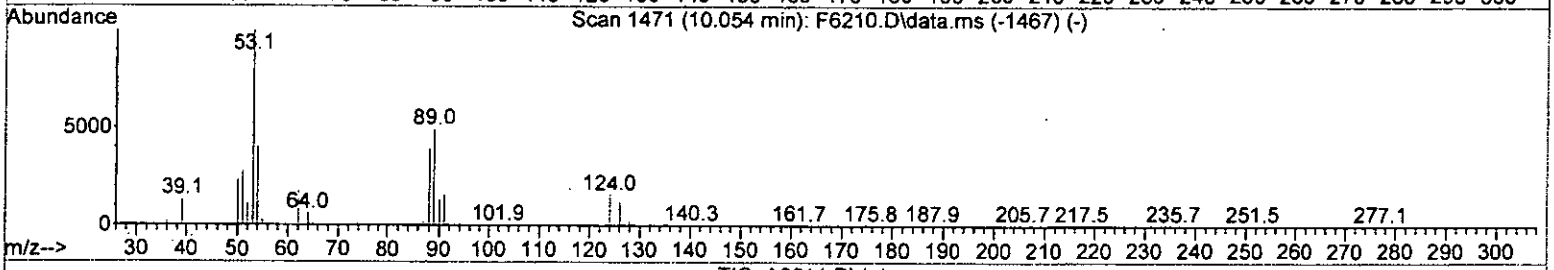
Quantitation Report (Qedit)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:20:37 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(90) trans-1,4-Dichloro-2-Butene

10.073min (+0.012) 0.57 ug/L

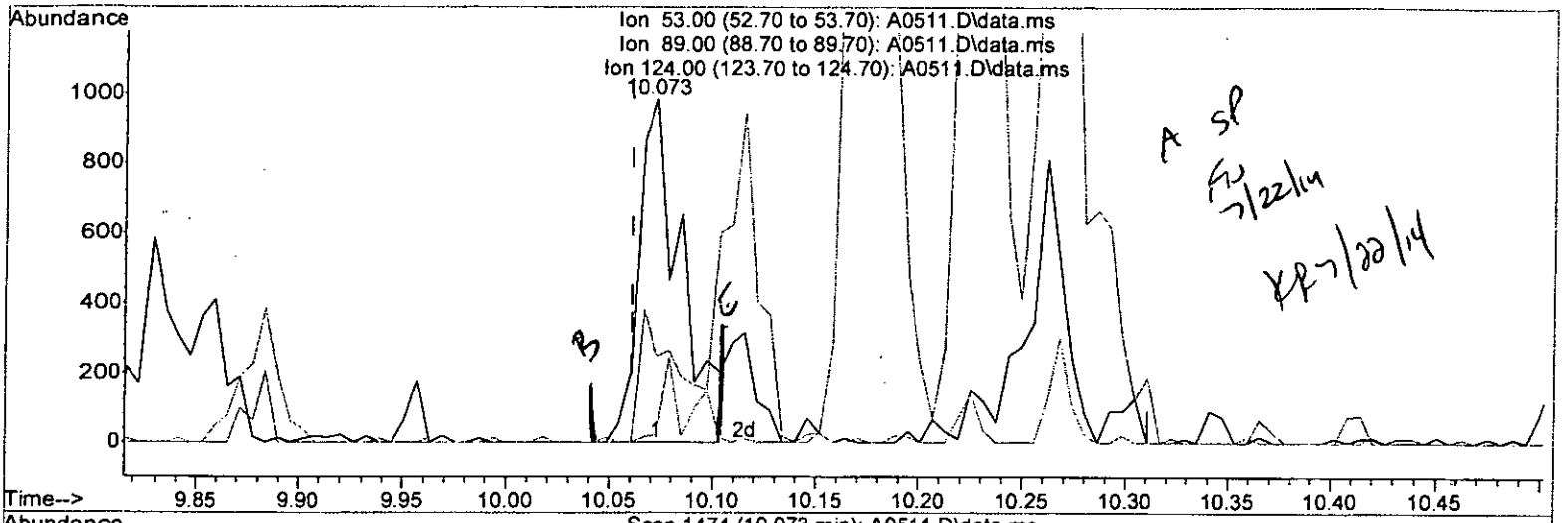
response 1243

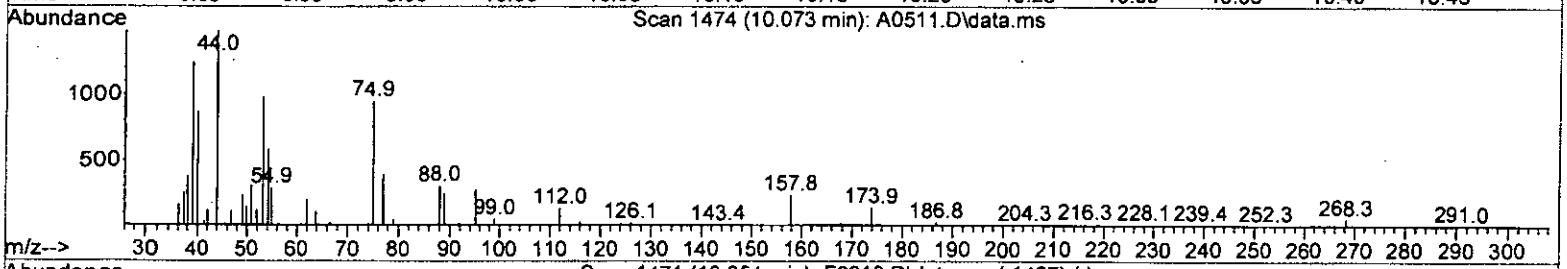
Ion	Exp%	Act%
53.00	100	100
89.00	57.40	25.10#
124.00	20.90	2.24
0.00	0.00	0.00

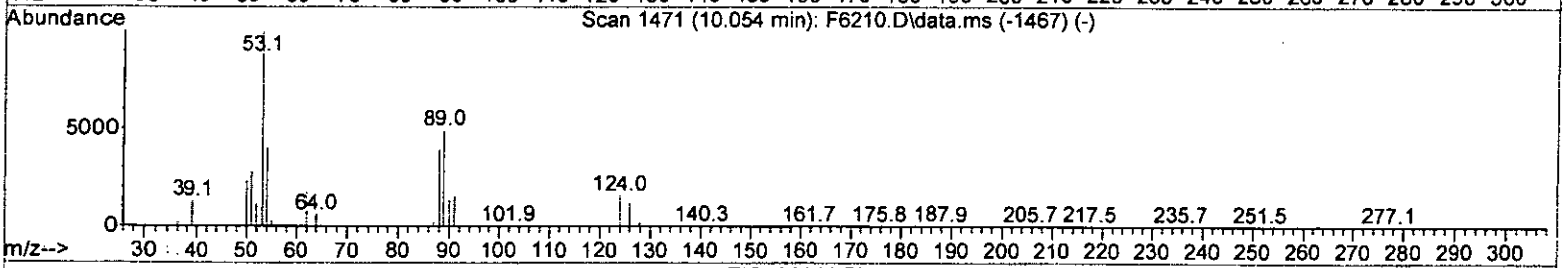
00203

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:20:37 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0511.D\data.ms

(90) trans-1,4-Dichloro-2-Butene

10.073min (+0.012) 0.64 ug/L m

response 1403

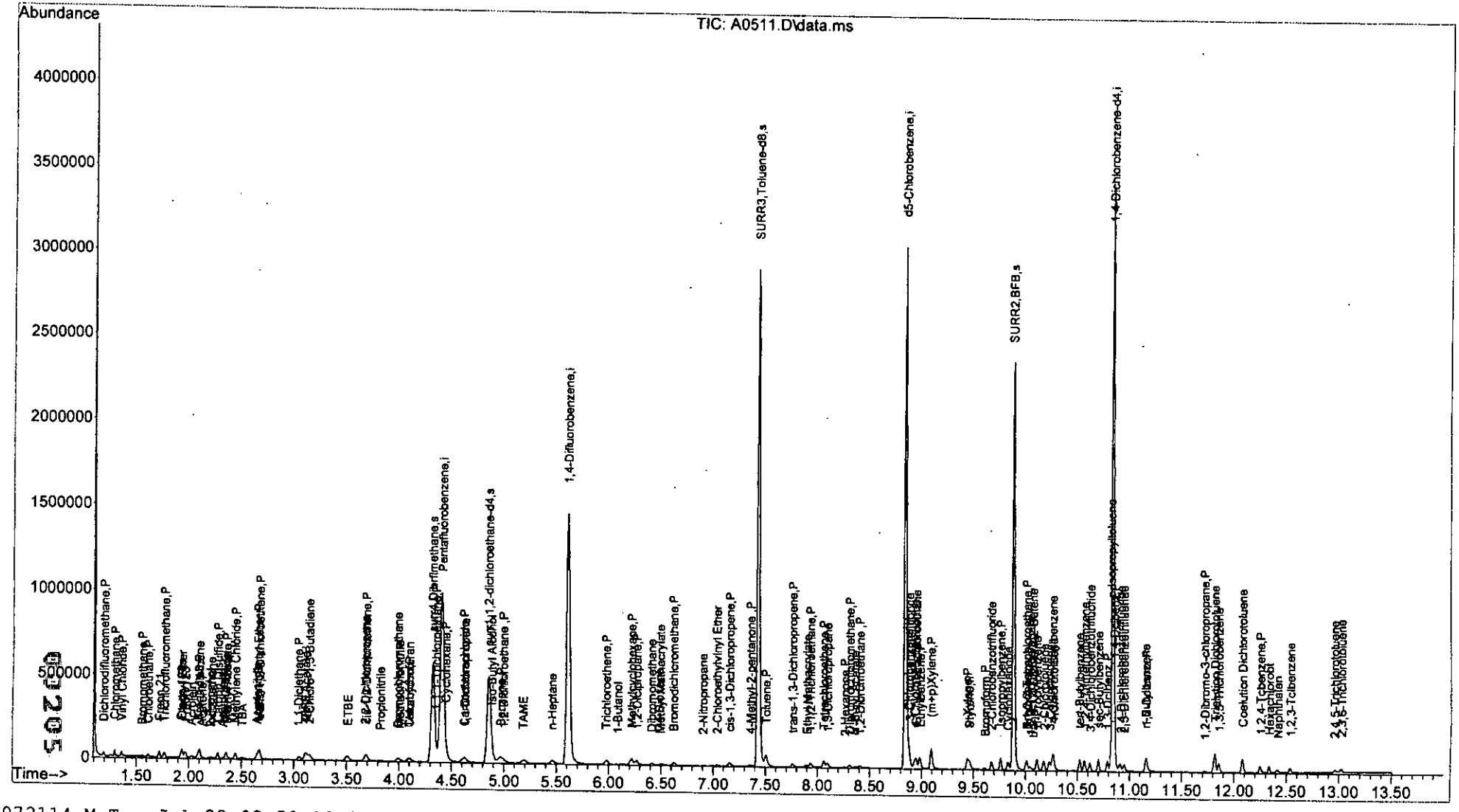
Ion	Exp%	Act%
53.00	100	100
89.00	57.40	25.10#
124.00	20.90	2.24
0.00	0.00	0.00

00204

Quantitation Report (QT Reviewed)

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0511.D Vial: 4
Acq On : 21 Jul 2014 12:22 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 16:17:40 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



W072114.M Tue Jul 22 08:52:19 2014 MSVO10

Quantitation Report (QT Reviewed)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

FJ 7/22/14

Quant Time: Jul 22 13:18:07 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	908244	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1375547	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.842	117	1263990	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	661125	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.324	113	451095	55.02	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 110.04%				
48) surr1,1,2-dichloroetha...	4.854	65	484305	59.61	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 119.22%				
65) SURR3,Toluene-d8	7.427	98	1599431	50.51	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.02%				
70) SURR2,BFB	9.878	95	626389	50.24	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.48%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.191	85	17416	2.05	ug/L		96
3) Chloromethane	1.294	50	24600	2.34	ug/L		98
4) Vinyl Chloride	1.361	62	23232	2.10	ug/L		99
5) Bromomethane	1.556	94	5312	1.33	ug/L		99
6) Chloroethane	1.611	64	12409	2.07	ug/L		94
7) Freon 21	1.721	67	34495	2.16	ug/L		96
8) Trichlorofluoromethane	1.770	101	26346	2.22	ug/L		88
9) Diethyl Ether	1.934	59	14090	2.07	ug/L		78
10) Freon 123a	1.928	67	21981	2.14	ug/L		84
11) Freon 123	1.965	83	23441	2.14	ug/L		98
12) Acrolein	2.026	56	10947	10.38	ug/L		90
13) 1,1-Diclethene	2.105	96	13556	2.24	ug/L	#	83
14) Freon 113	2.093	101	15674	2.27	ug/L		91
15) Acetone	2.117	43	7286m	3.56	ug/L		
16) 2-Propanol	2.196	45	13018	36.72	ug/L		92
17) Iodomethane	2.209	142	3078	0.49	ug/L		96
18) Carbon Disulfide	2.270	76	55287	2.15	ug/L		97
19) Acetonitrile	2.318	40	3021	10.98	ug/L	#	61
20) Allyl Chloride	2.355	76	8053	1.84	ug/L	#	72
21) Methyl Acetate	2.361	43	11056	2.52	ug/L		95
22) Methylene Chloride	2.440	84	17616	1.93	ug/L	#	78
23) TBA	2.507	59	16689	29.87	ug/L		77
24) Acrylonitrile	2.635	53	26643	11.91	ug/L		83
25) Methyl-t-Butyl Ether	2.660	73	35358	1.84	ug/L		90
26) trans-1,2-Dichloroethene	2.666	96	15477	2.01	ug/L	#	87
28) 1,1-Diclethane	3.050	63	36304	2.30	ug/L		95
29) Vinyl Acetate	3.111	86	1626	1.45	ug/L	#	25
30) DIPE	3.111	45	79281	2.48	ug/L		81
31) 2-Chloro-1,3-Butadiene	3.141	53	33814	2.22	ug/L		89
32) ETBE	3.501	59	51913	1.91	ug/L		92
33) 2,2-Dichloropropane	3.678	77	20072	1.73	ug/L		96
34) cis-1,2-Dichloroethene	3.690	96	18328	2.10	ug/L		89
35) 2-Butanone	3.769	43	6918m	2.48	ug/L		
36) Propionitrile	3.794	54	6542m	9.07	ug/L		
37) Bromochloromethane	3.983	130	11024	2.15	ug/L		88

00206

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 22 13:18:07 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Methacrylonitrile	3.989	67	3701	1.63 ug/L #	45
39) Tetrahydrofuran	4.092	42	4133	2.49 ug/L #	56
40) Chloroform	4.099	83	30272	2.14 ug/L	92
41) 1,1,1-Trichloroethane	4.361	97	24572	1.98 ug/L #	81
42) TAME	5.190	73	33098	1.62 ug/L	91
44) Cyclohexane	4.446	41	26461	2.59 ug/L	100
46) Carbontetrachloride	4.605	121	6629	1.79 ug/L	88
47) 1,1-Dichloropropene	4.617	75	21429	1.93 ug/L	91
49) Benzene	4.964	78	65693	1.85 ug/L	88
50) 1,2-Dichloroethane	4.989	62	22324	1.92 ug/L	78
51) Iso-Butyl Alcohol	4.885	43	9886m	34.27 ug/L	
52) n-Heptane	5.458	43	23196	2.33 ug/L #	79
53) 1-Butanol	6.037	56	7536m	55.80 ug/L	
54) Trichloroethene	5.976	130	18580	1.95 ug/L	90
55) Methylcyclohexane	6.214	55	26465	2.11 ug/L #	64
56) 1,2-Diclpropane	6.263	63	20260	1.99 ug/L	96
57) Dibromomethane	6.409	93	10288	2.21 ug/L #	81
58) 1,4-Dioxane	6.494	88	2344m	47.00 ug/L	
59) Methyl Methacrylate	6.494	69	5744m	1.40 ug/L	
60) Bromodichloromethane	6.622	83	22196	1.99 ug/L	95
61) 2-Nitropropane	6.909	41	5342m	3.36 ug/L	
62) 2-Chloroethylvinyl Ether	7.031	63	6148m	1.31 ug/L	
63) cis-1,3-Dichloropropene	7.153	75	19878	1.48 ug/L	81
64) 4-Methyl-2-pentanone	7.354	43	12562	1.85 ug/L	89
66) Toluene	7.506	91	69335	1.82 ug/L	94
67) trans-1,3-Dichloropropene	7.756	75	15178	1.38 ug/L	86
68) Ethyl Methacrylate	7.884	69	12423m	1.45 ug/L	
69) 1,1,2-Trichloroethane	7.933	97	12160	1.84 ug/L	96
72) Tetrachloroethene	8.061	164	13708	1.75 ug/L	92
73) 2-Hexanone	8.232	43	9725m	1.97 ug/L	
74) 1,3-Dichloropropane	8.092	76	21580	1.85 ug/L #	73
75) Dibromochloromethane	8.305	129	13918	1.67 ug/L	94
76) N-Butyl Acetate	8.354	43	22614m	1.74 ug/L	
77) 1,2-Dibromoethane	8.409	107	12066	1.78 ug/L	83
78) 3-Chlorobenzotrifluoride	8.878	180	24728	1.70 ug/L	97
79) Chlorobenzene	8.872	112	49233	1.88 ug/L	90
80) 4-Chlorobenzotrifluoride	8.933	180	23520	1.75 ug/L	91
81) 1,1,1,2-Tetrachloroethane	8.951	131	15236	1.60 ug/L	97
82) Ethylbenzene	8.982	106	22662	1.67 ug/L	91
83) (m+p)Xylene	9.091	106	58405	3.52 ug/L #	87
84) o-Xylene	9.439	106	27653	1.65 ug/L	95
85) Styrene	9.451	104	45009	1.59 ug/L	97
86) Bromoform	9.604	173	7936	1.59 ug/L	86
87) 2-Chlorobenzotrifluoride	9.671	180	25254	1.75 ug/L	96
88) Isopropylbenzene	9.756	105	72100	1.76 ug/L	94
89) Cyclohexanone	9.829	55	46290	46.86 ug/L	98
90) trans-1,4-Dichloro-2-B...	10.073	53	3103	1.43 ug/L #	76
92) 1,1,2,2-Tetrachloroethane	10.012	83	15484	2.04 ug/L	94
93) Bromobenzene	10.006	156	21091	1.91 ug/L	95
94) 1,2,3-Trichloropropane	10.049	110	4523	2.24 ug/L #	56
95) n-Propylbenzene	10.103	91	81443	1.82 ug/L	96
96) 2-Chlorotoluene	10.171	91	50019	1.82 ug/L	99

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 22 13:18:07 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration

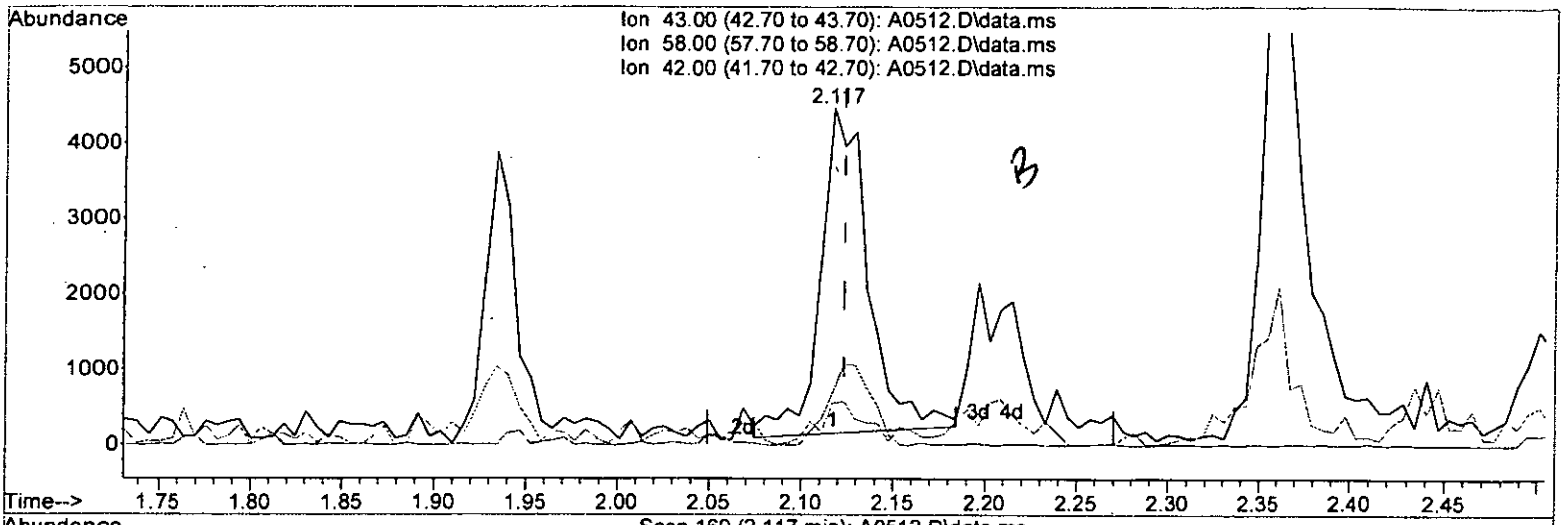
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
97)	3-Chlorotoluene	10.225	91	51783	1.85	ug/L		97
98)	4-Chlorotoluene	10.268	91	62225	1.86	ug/L		93
99)	1,3,5-Trimethylbenzene	10.256	105	58925	1.79	ug/L		98
100)	tert-Butylbenzene	10.518	119	47303	1.73	ug/L		98
101)	1,2,4-Trimethylbenzene	10.561	105	58036	1.74	ug/L		99
102)	3,4-Dichlorobenzotrifl...	10.616	214	17137	1.74	ug/L		98
103)	sec-Butylbenzene	10.701	105	70354	1.87	ug/L		97
104)	p-Isopropyltoluene	10.817	119	59099	1.79	ug/L		98
105)	1,3-Dclbenz	10.786	146	37472	1.84	ug/L		95
106)	1,4-Dclbenz	10.853	146	39414	1.91	ug/L		97
107)	2,4-Dichlorobenzotrifl...	10.908	214	14745	1.67	ug/L		99
108)	2,5-Dichlorobenzotrifl...	10.945	214	19568	1.92	ug/L		85
109)	n-Butylbenzene	11.146	91	48518	1.70	ug/L		95
110)	1,2-Dclbenz	11.158	146	34370	1.84	ug/L		92
111)	1,2-Dibromo-3-chloropr...	11.713	157	1960	1.68	ug/L		84
112)	Trielution Dichlorotol...	11.810	125	84532	5.61	ug/L		95
113)	1,3,5-Trichlorobenzene	11.853	180	24632	1.94	ug/L		98
114)	Coelution Dichlorotoluene	12.073	125	57307	3.74	ug/L		96
115)	1,2,4-Tcbenzene	12.243	180	19368	1.87	ug/L		93
116)	Hexachlorobt	12.335	225	7692	1.55	ug/L		90
117)	Naphthalen	12.396	128	26549	1.68	ug/L		93
118)	1,2,3-Tclbenzene	12.530	180	13663	1.94	ug/L	#	79
119)	2,4,5-Trichlorotoluene	12.950	159	7626	1.98	ug/L		83
120)	2,3,6-Trichlorotoluene	13.018	159	9087	2.38	ug/L		96

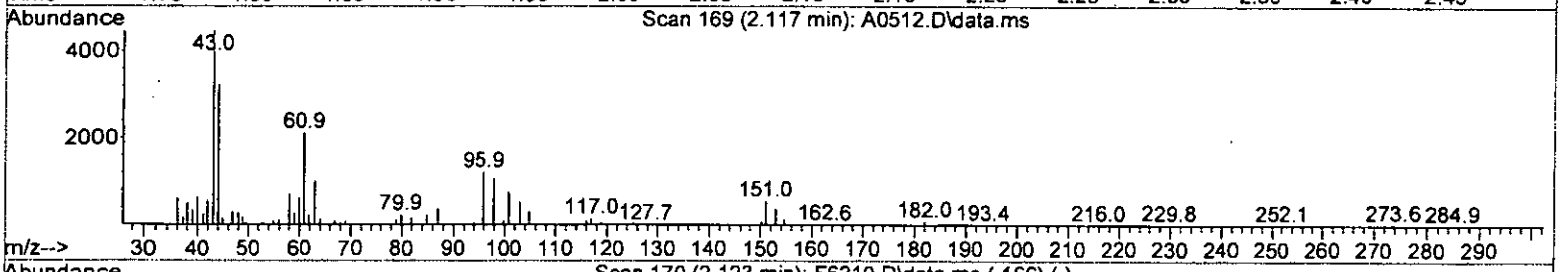
(#) = qualifier out of range (m) = manual integration (+) = signals summed

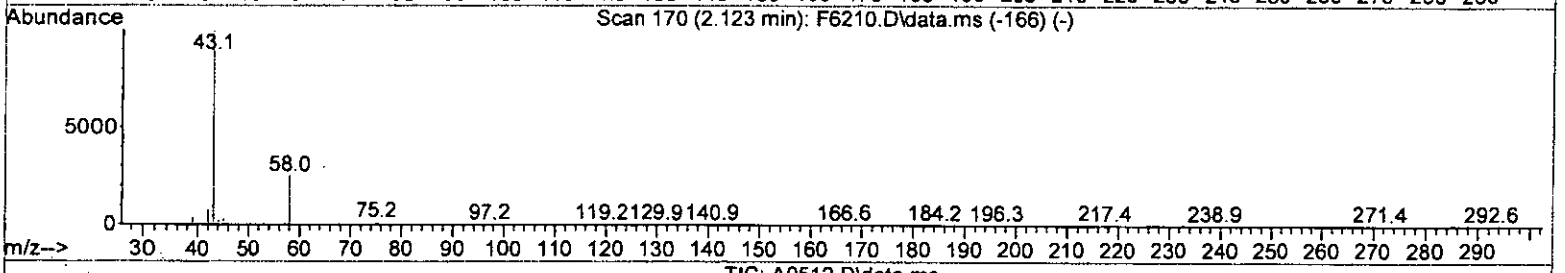
Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 16:19:39 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0512.D\data.ms

(15) Acetone (P)

2.117min (-0.006) 3.82 ug/L

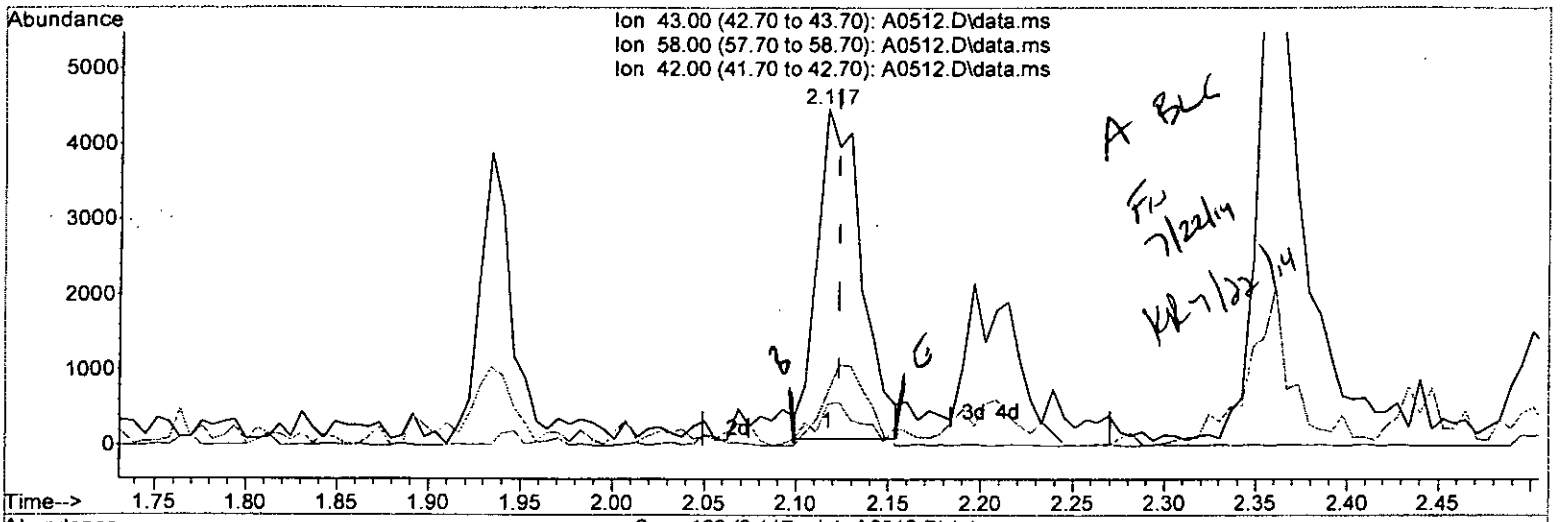
response 7819

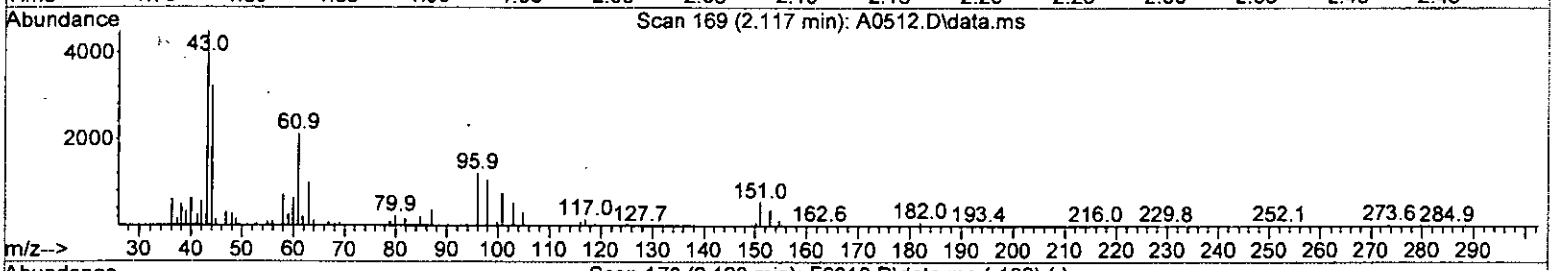
Ion	Exp%	Act%
43.00	100	100
58.00	27.20	15.80
42.00	7.00	12.32
0.00	0.00	0.00

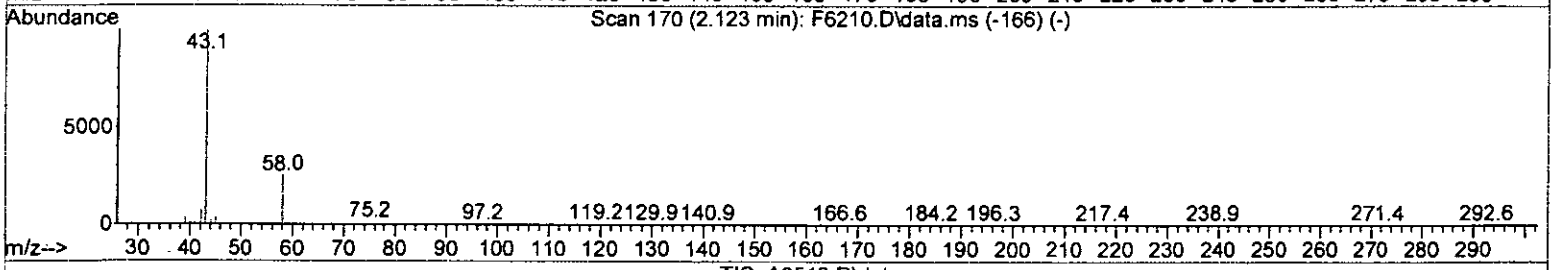
00209

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 16:19:39 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0512.D\data.ms

(15) Acetone (P)

2.117min (-0.006) 3.56 ug/L m

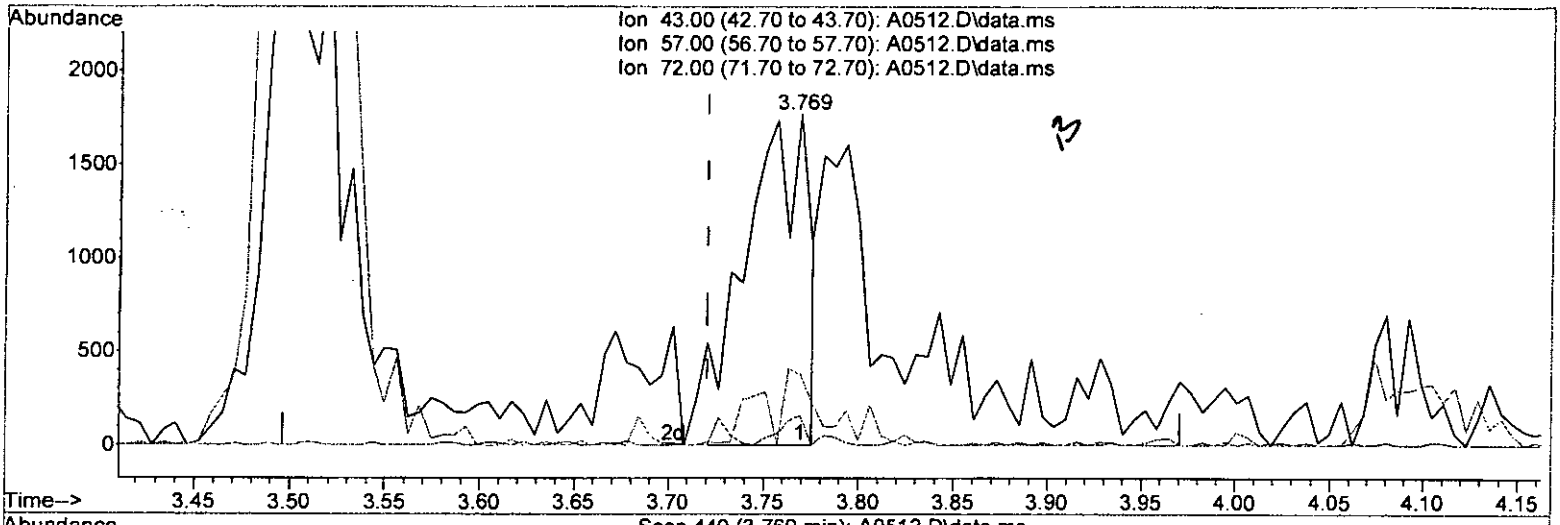
response 7286

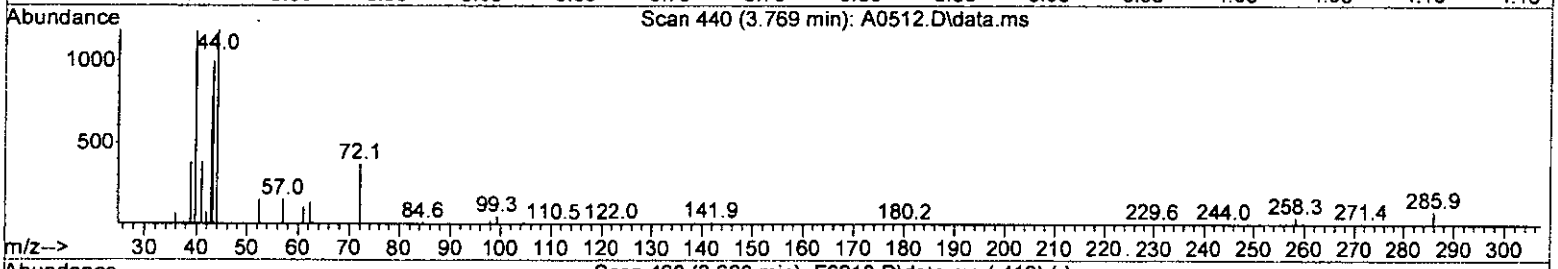
Ion	Exp%	Act%
43.00	100	100
58.00	27.20	15.80
42.00	7.00	12.32
0.00	0.00	0.00

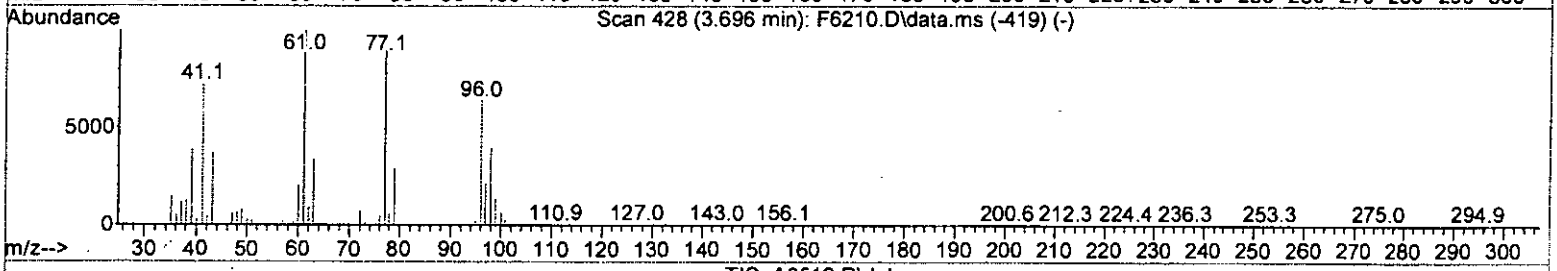
W072114.M Tue Jul 22 13:18:08 2014 MSVO10 Page: 1

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:06:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0512.D\data.ms

(35) 2-Butanone (P)

3.769min (+0.049) 1.49 ug/L

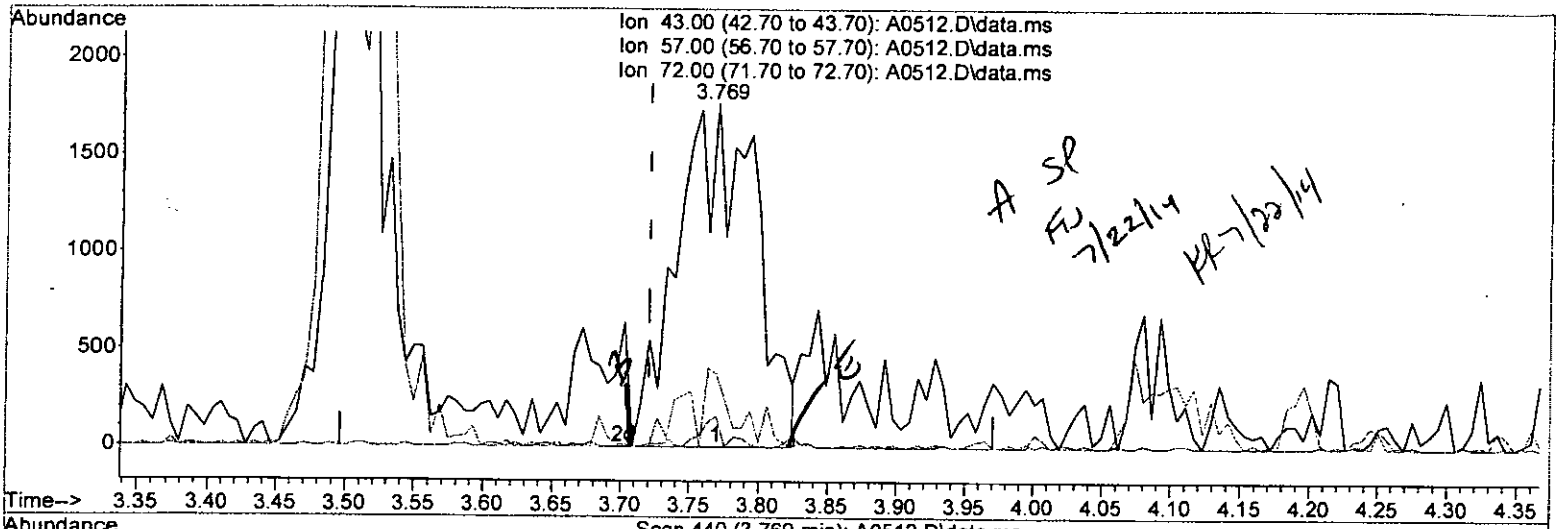
response 4165

Ion	Exp%	Act%
43.00	100	100
57.00	8.30	8.89
72.00	23.50	21.12
0.00	0.00	0.00

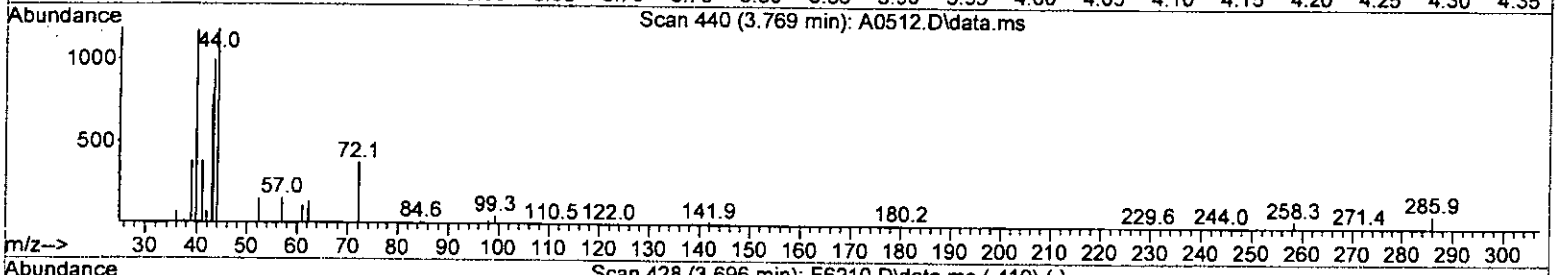
Quantitation Report (Qedit)

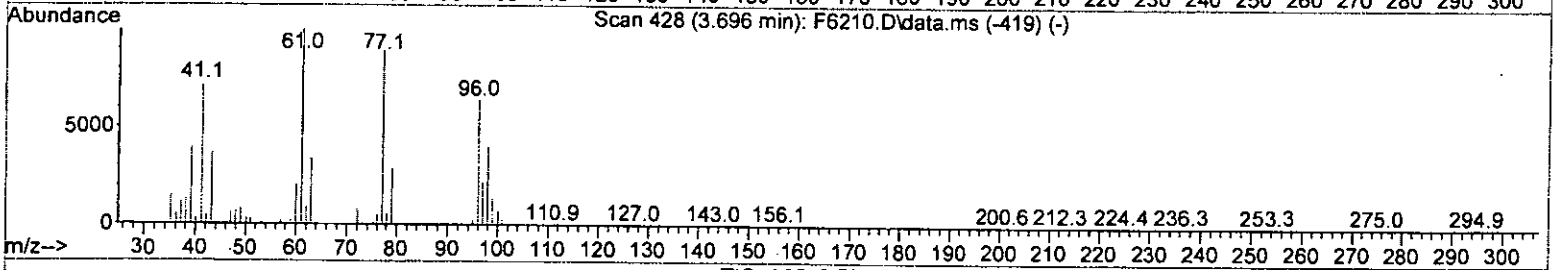
Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:06:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



A SP 7/22/14 KF 7/23/14





TIC: A0512.D\data.ms

(35) 2-Butanone (P)

3.769min (+0.049) 2.48 ug/L m

response 6918

Ion	Exp%	Act%
43.00	100	100
57.00	8.30	15.86
72.00	23.50	37.68
0.00	0.00	0.00

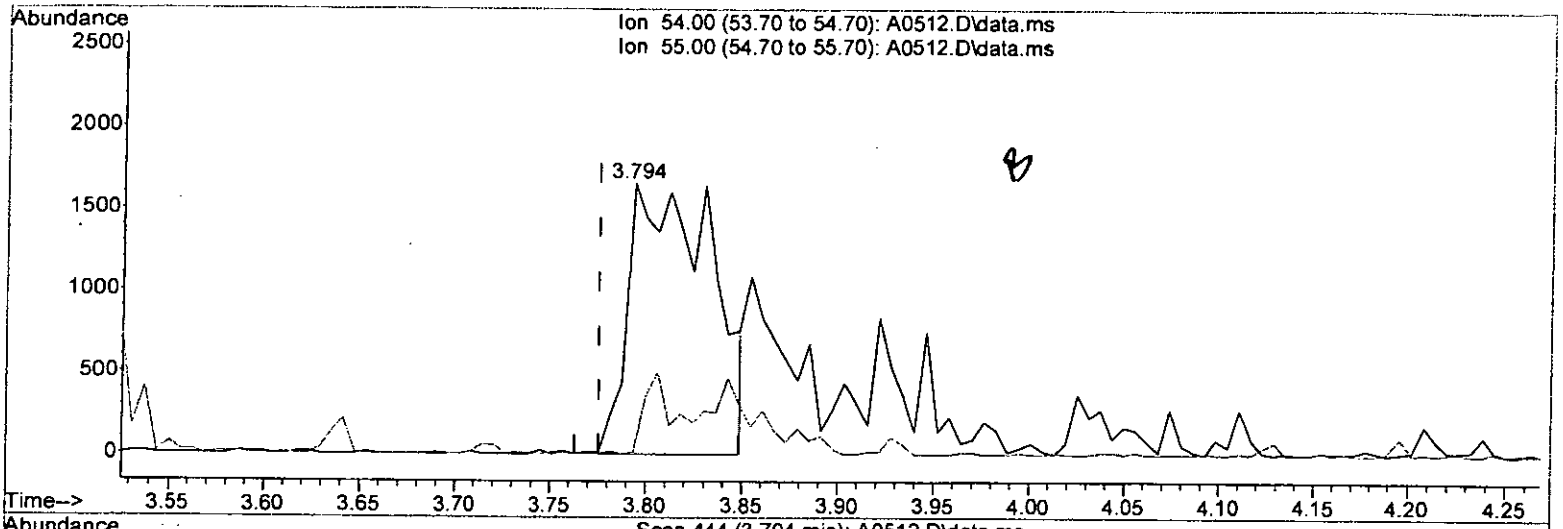
W072114.M Mon Jul 21 15:22:37 2014 MSVO10

0212

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:06:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0512.D\data.ms

(36) Propionitrile

3.794min (+0.018) 6.81 ug/L

response 4914

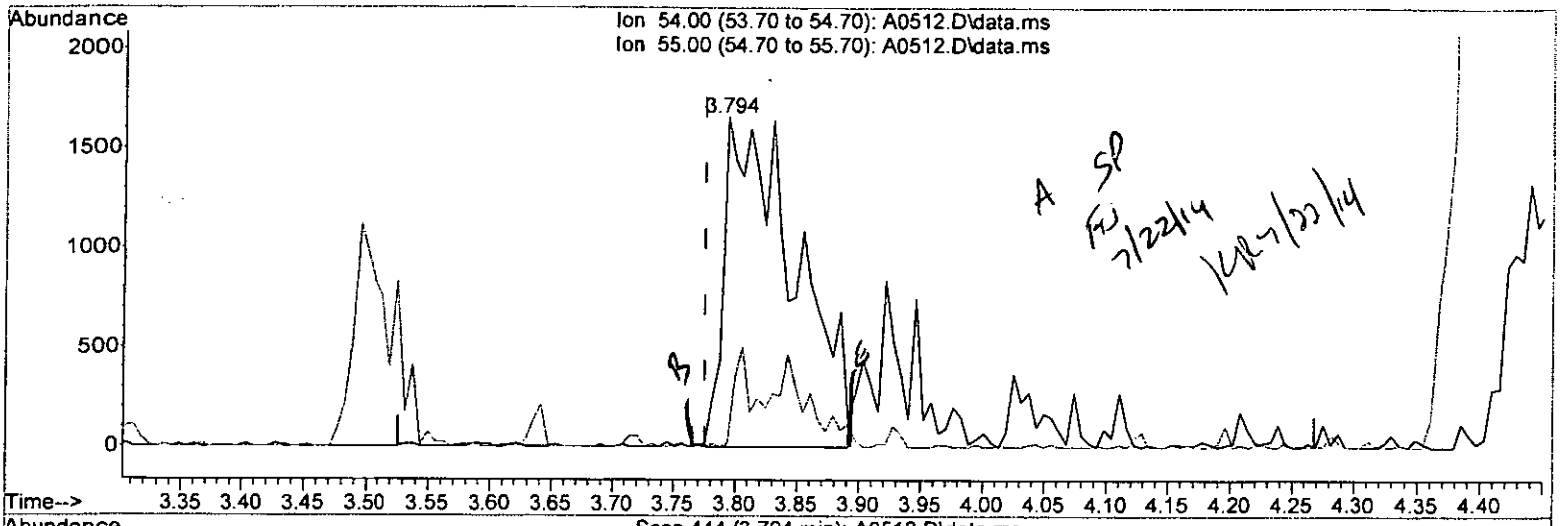
Ion	Exp%	Act%
54.00	100	100
55.00	13.70	1.03
0.00	0.00	0.00
0.00	0.00	0.00

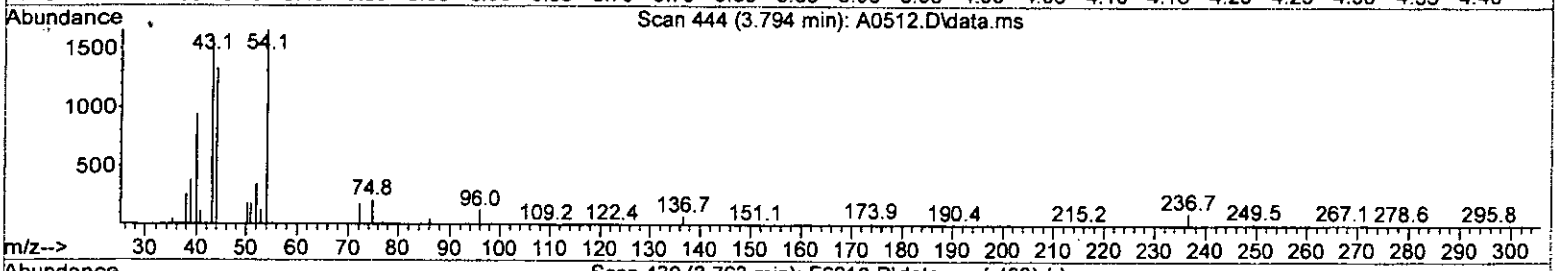
00213

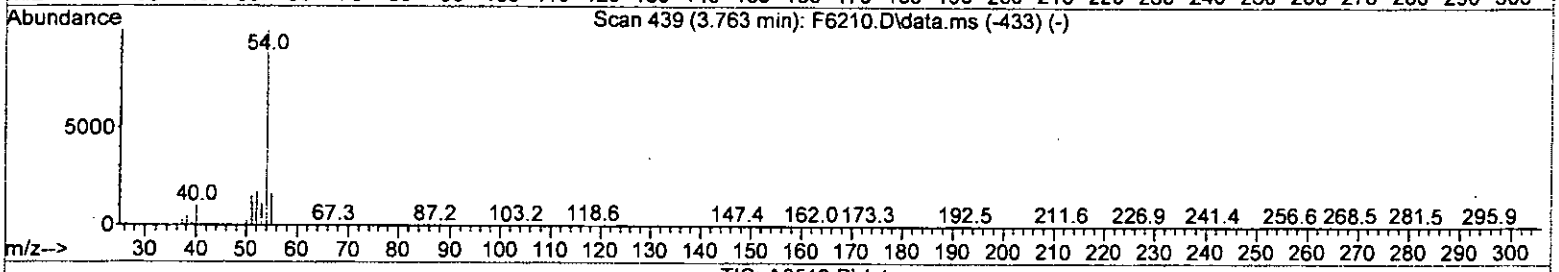
W072114.M Mon Jul 21 15:22:42 2014 MSVO10 Page: 1

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:06:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0512.D\data.ms

(36) Propionitrile

3.794min (+0.018) 9.07 ug/L m

response 6542

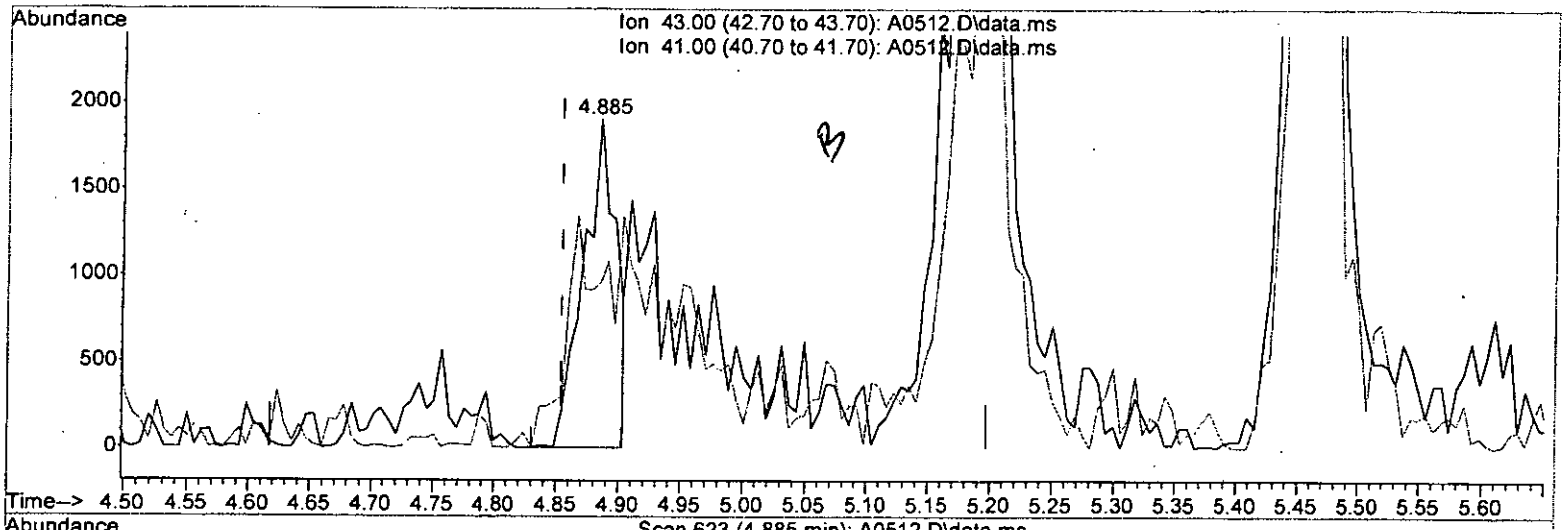
Ion	Exp%	Act%
54.00	100	100
55.00	13.70	1.03
0.00	0.00	0.00
0.00	0.00	0.00

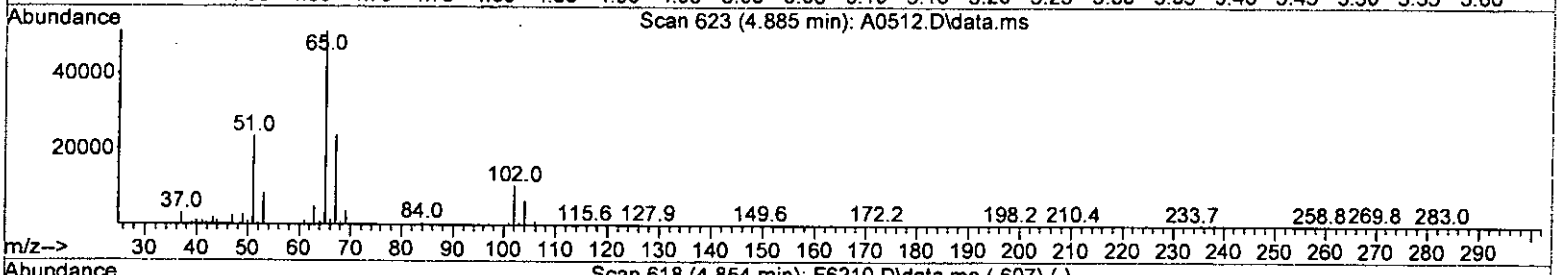
00214

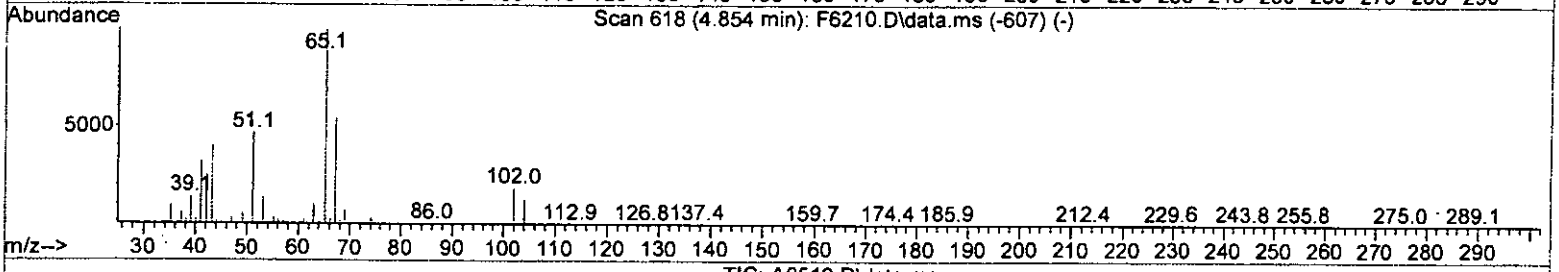
Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:06:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0512.D\data.ms

(51) Iso-Butyl Alcohol

4.885min (+0.031) 12.01 ug/L

response 3466

Ion	Exp%	Act%
43.00	100	100
41.00	76.40	49.84#
0.00	0.00	0.00
0.00	0.00	0.00

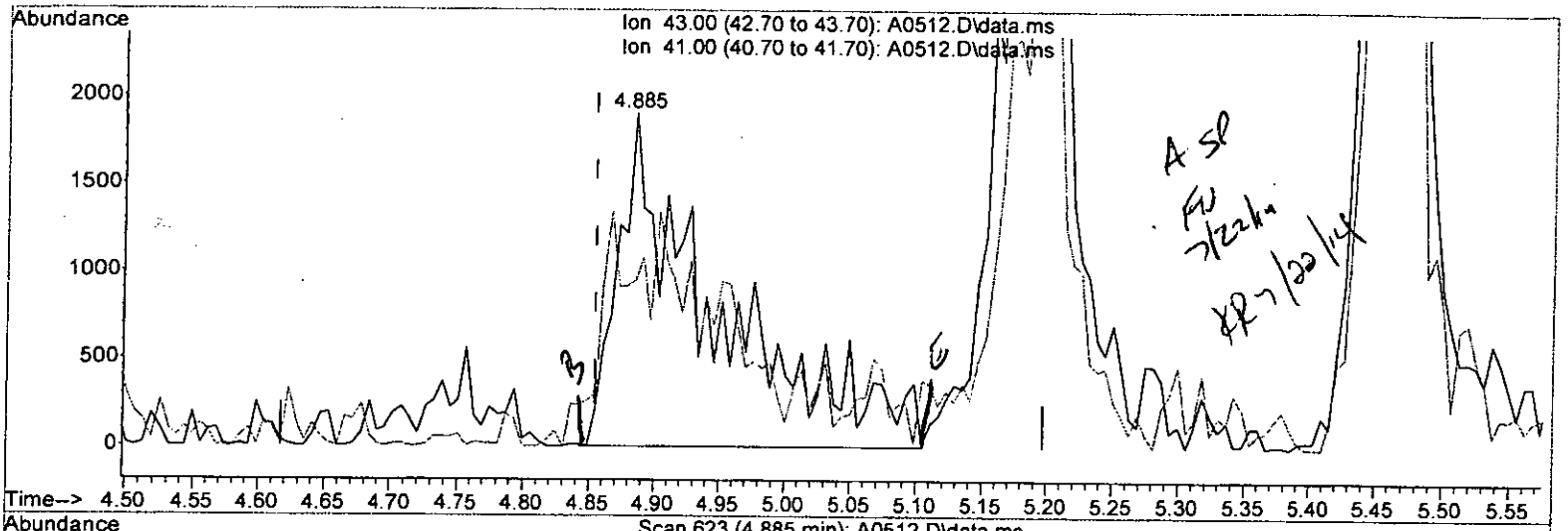
W072114.M Mon Jul 21 15:23:51 2014 MSVO10

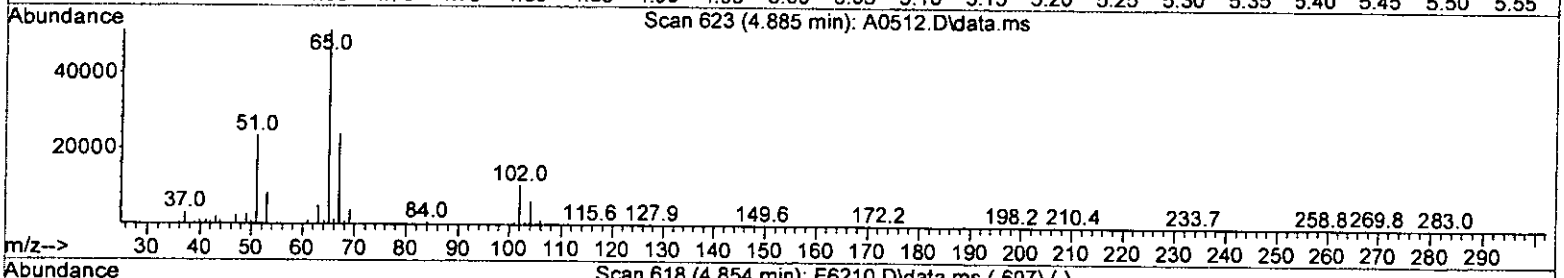
00215

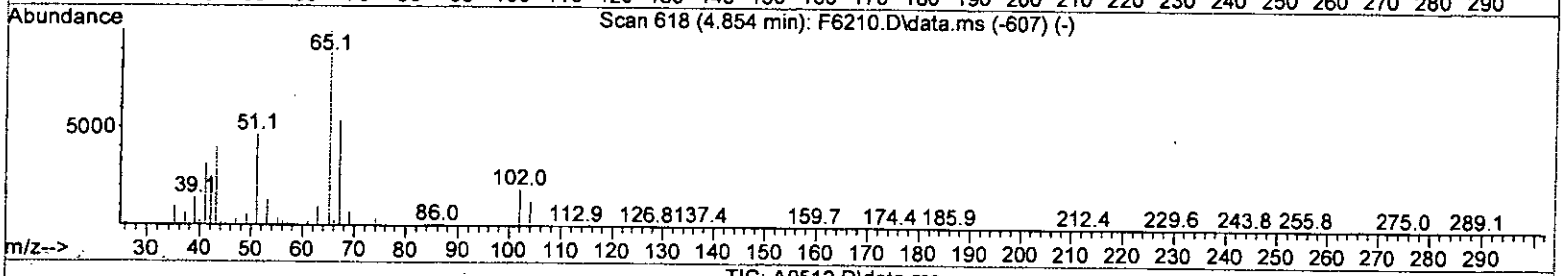
Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:06:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0512.D\data.ms

(51) Iso-Butyl Alcohol

4.885min (+0.031) 34.27 ug/L m

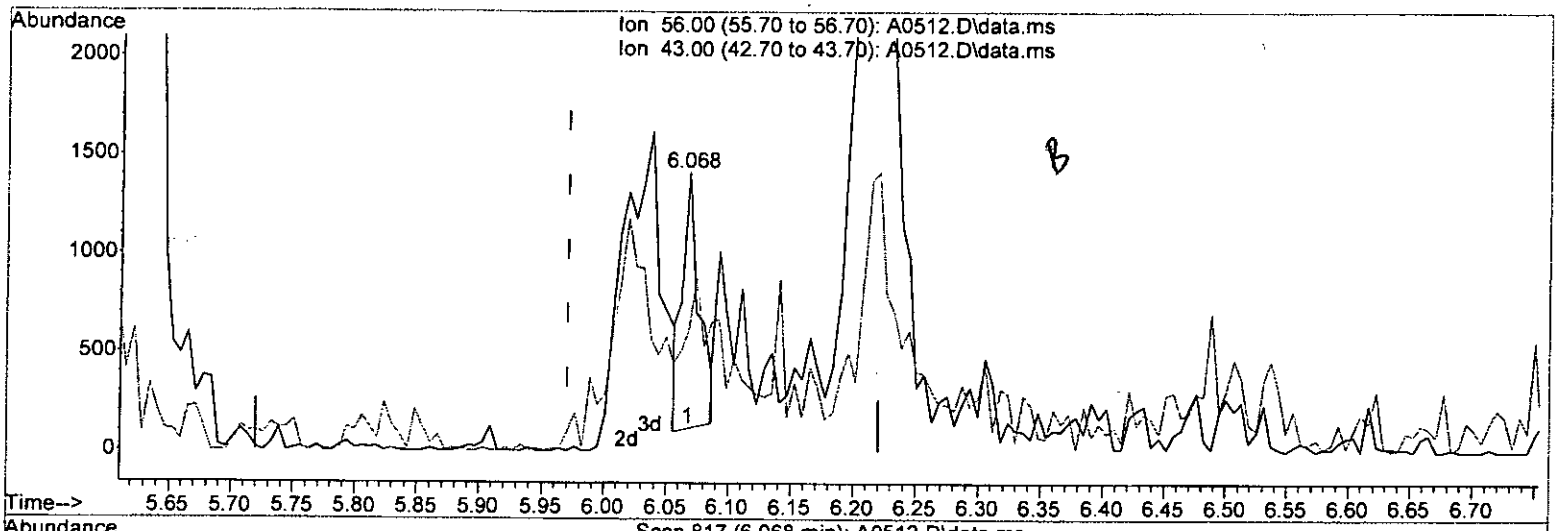
response 9886

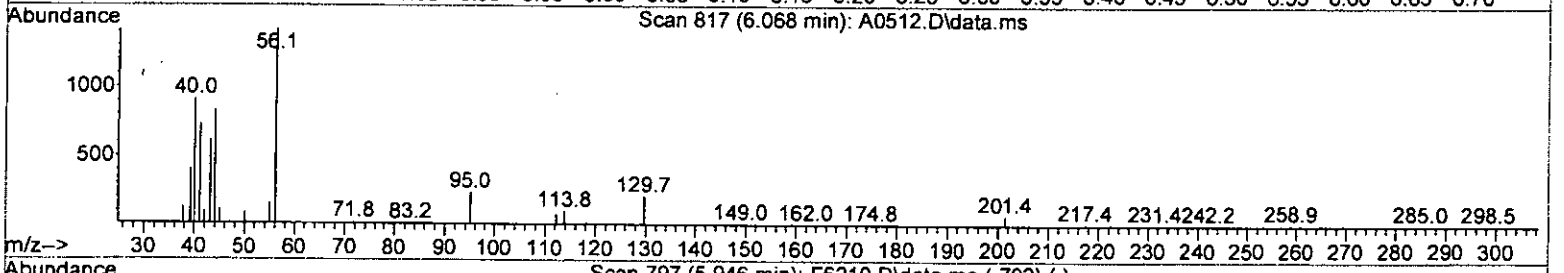
Ion	Exp%	Act%
43.00	100	100
41.00	76.40	49.84#
0.00	0.00	0.00
0.00	0.00	0.00

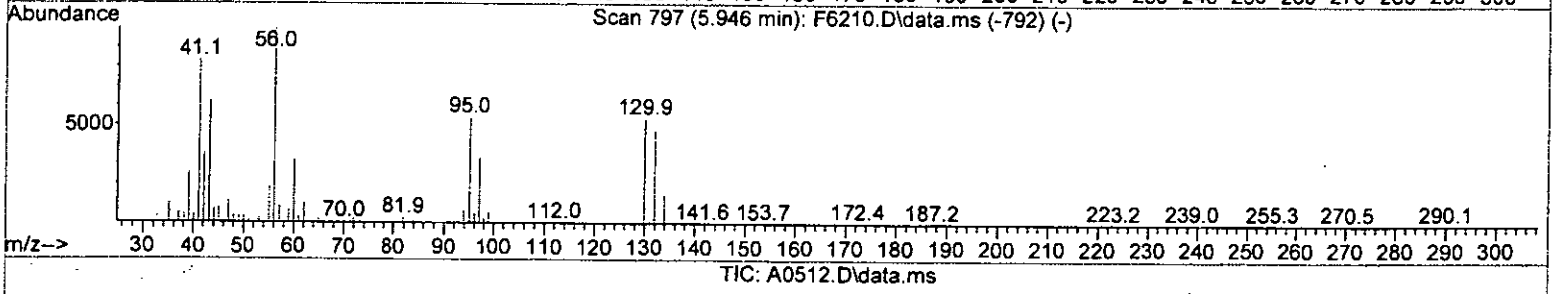
00216

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:06:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0512.D\data.ms

(53) 1-Butanol

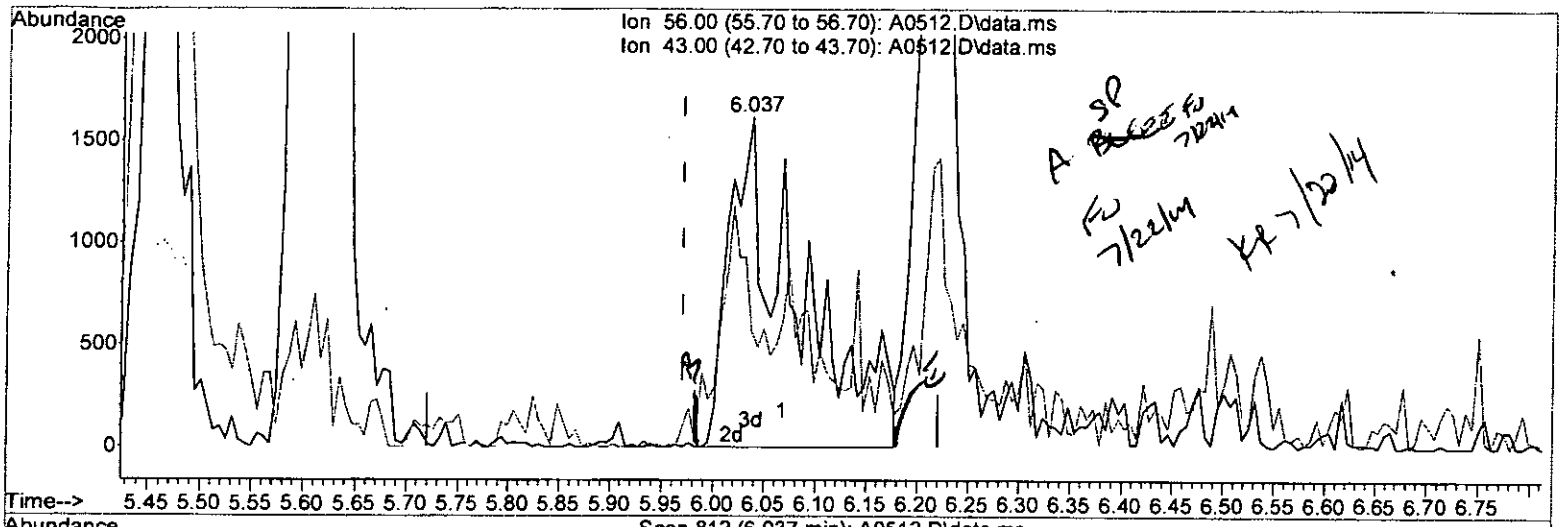
6.068min (+0.098) 8.98 ug/L

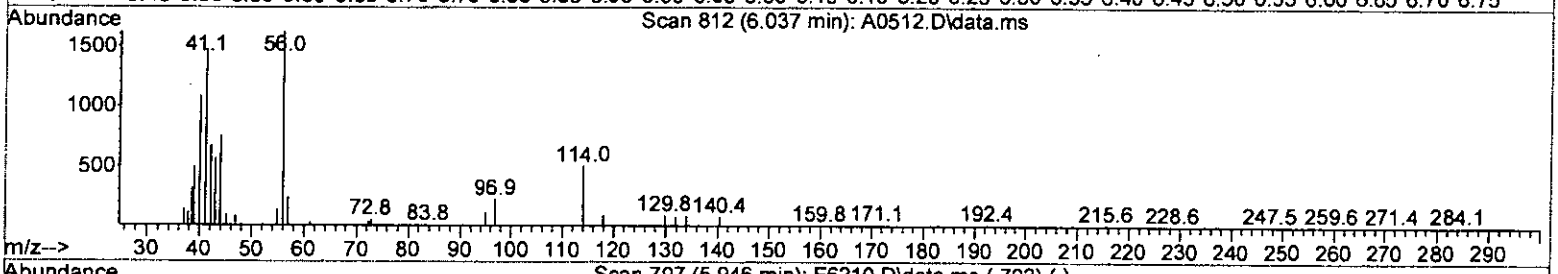
response 1213

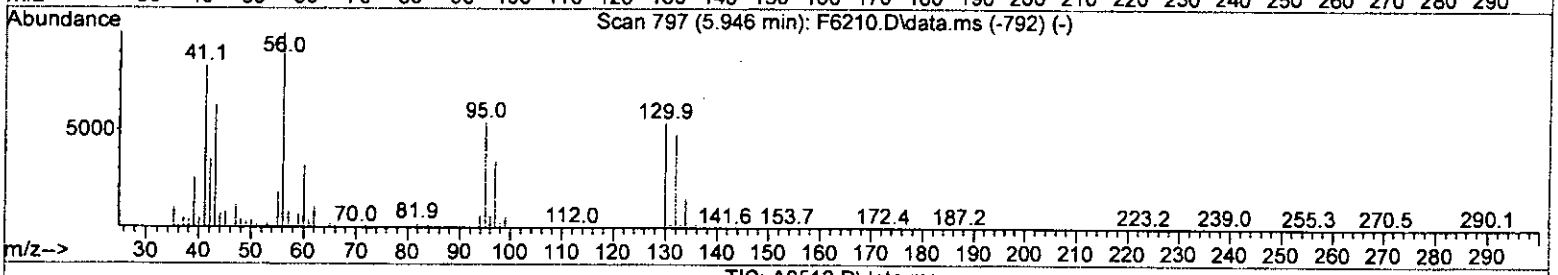
Ion	Exp%	Act%
56.00	100	100
43.00	56.20	43.06
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:27:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0512.D\data.ms

(53) 1-Butanol

6.037min (+0.067) 55.80 ug/L m

response 7536

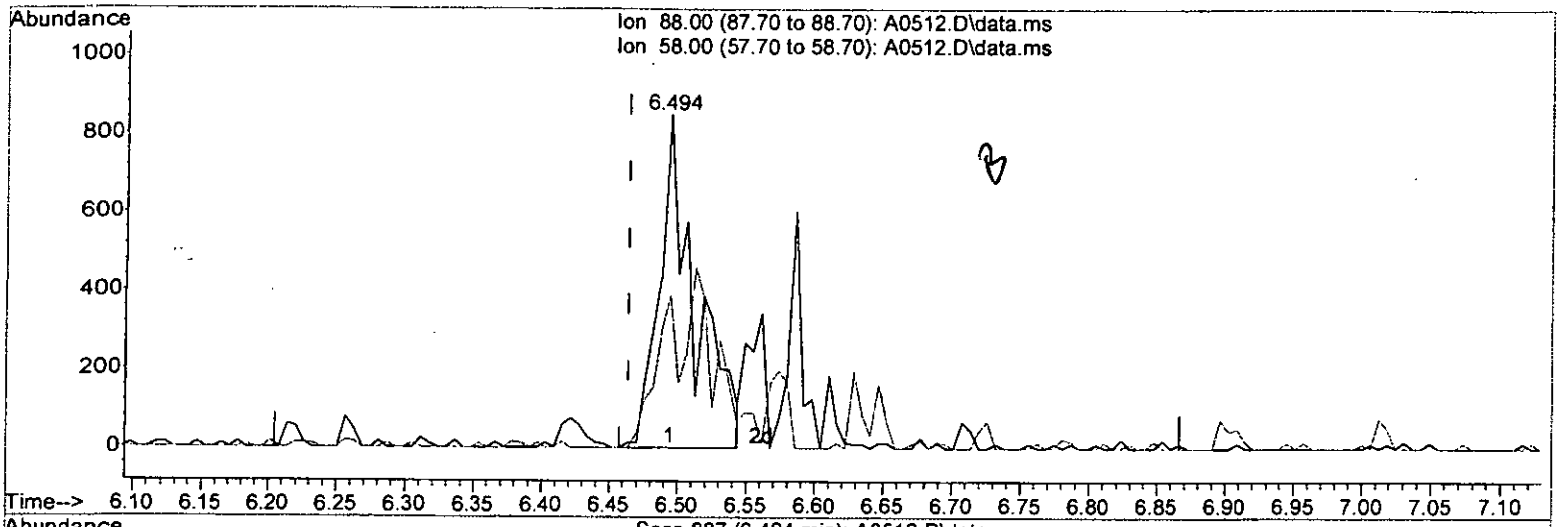
Ion	Exp%	Act%
56.00	100	100
43.00	56.20	35.04#
0.00	0.00	0.00
0.00	0.00	0.00

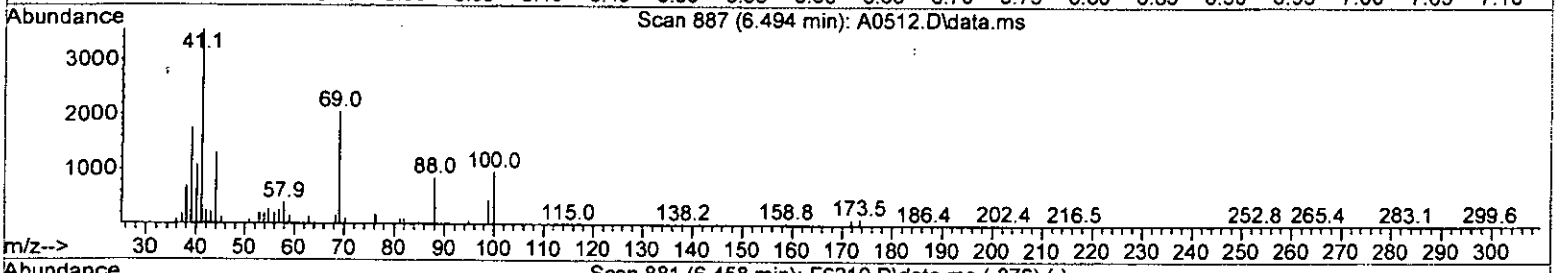
00218

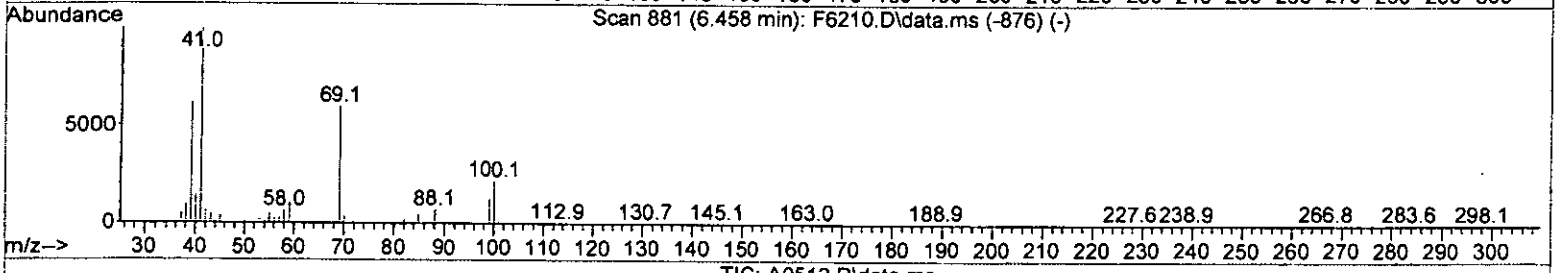
W072114.M Mon Jul 21 16:18:31 2014 MSVO10

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:06:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0512.D\data.ms

(58) 1,4-Dioxane

6.494min (+0.031) 30.58 ug/L

response 1525

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	45.70#
0.00	0.00	0.00
0.00	0.00	0.00

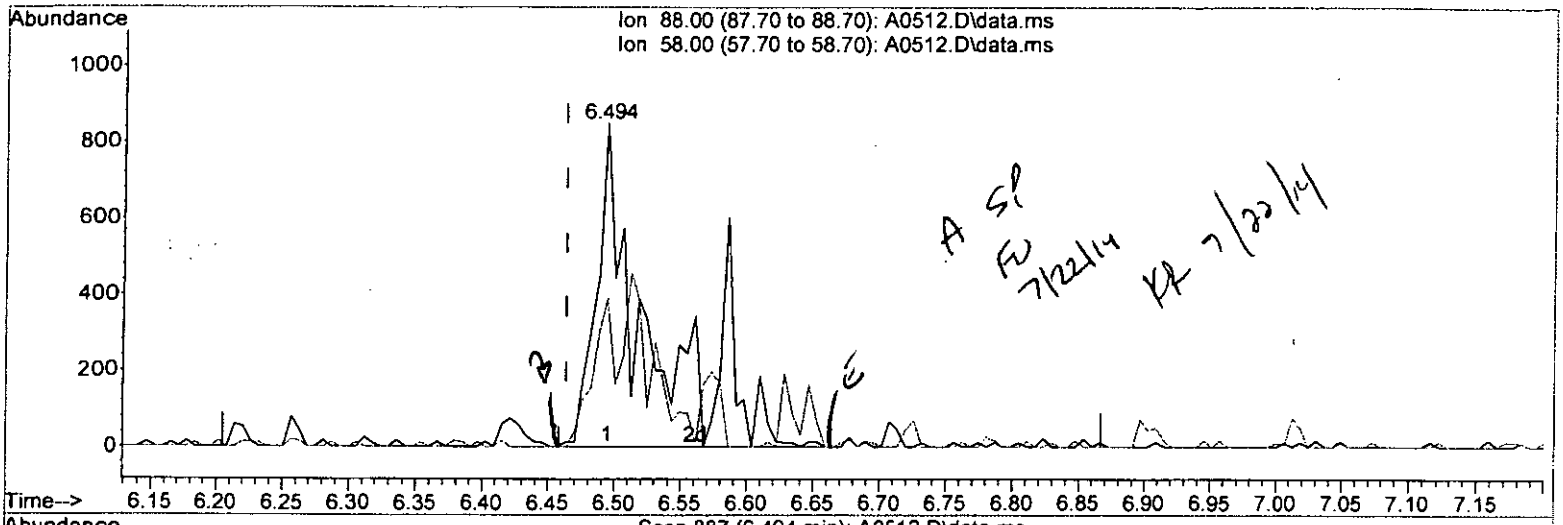
00219

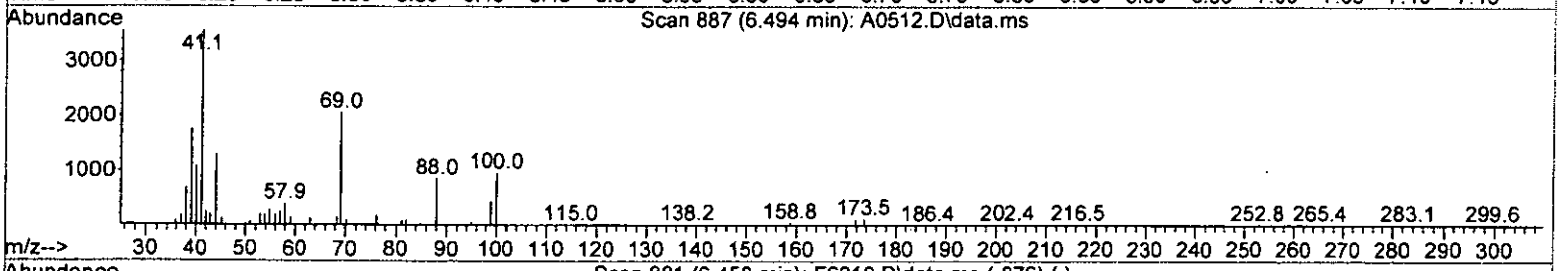
W072114.M Mon Jul 21 15:24:46 2014 MSVO10 Page: 1

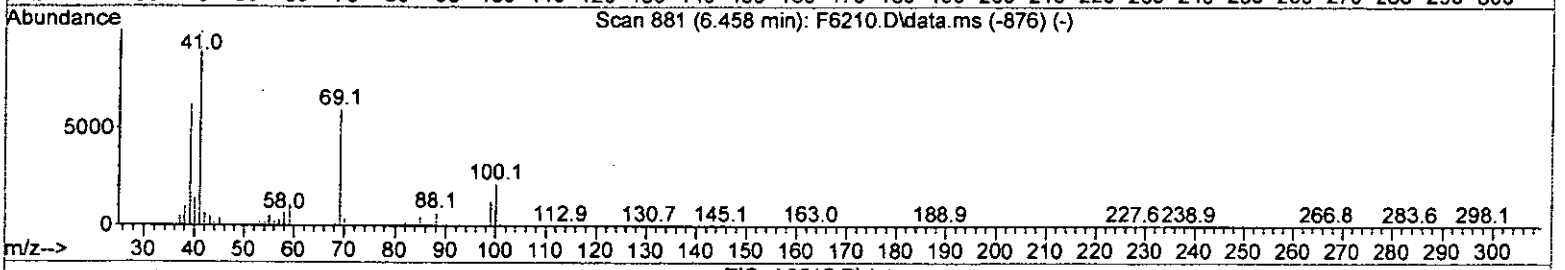
Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:06:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0512.D\data.ms

(58) 1,4-Dioxane

6.494min (+0.031) 47.00 ug/L m

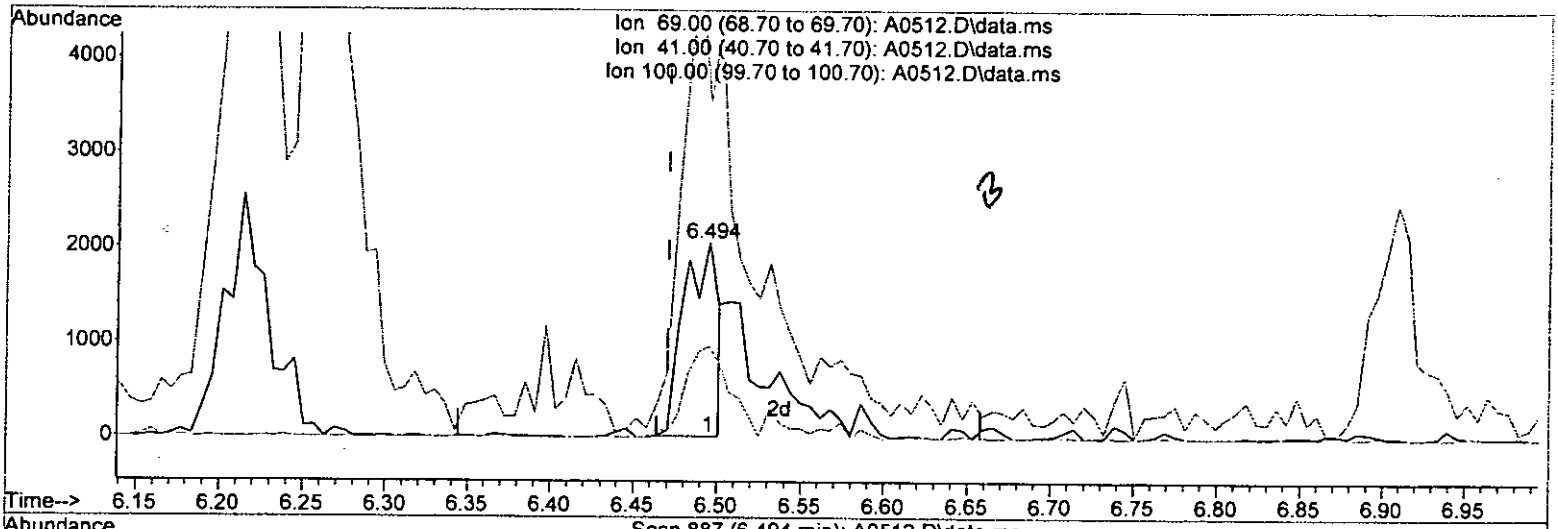
response 2344

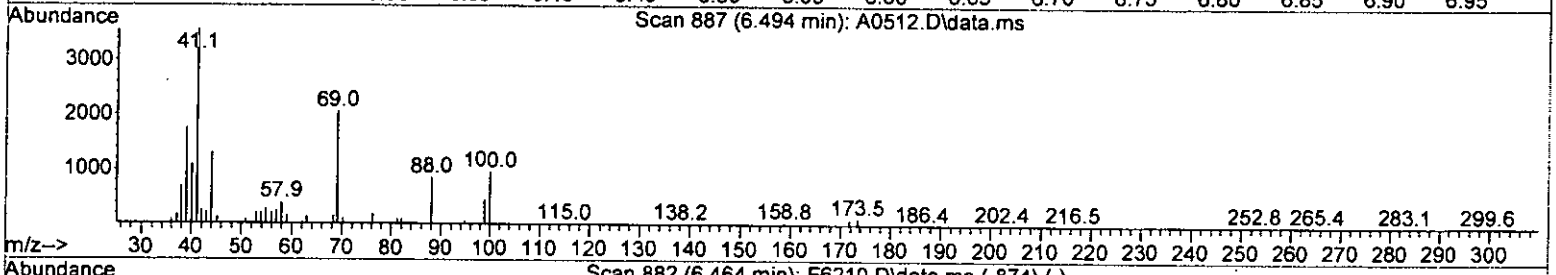
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	45.70#
0.00	0.00	0.00
0.00	0.00	0.00

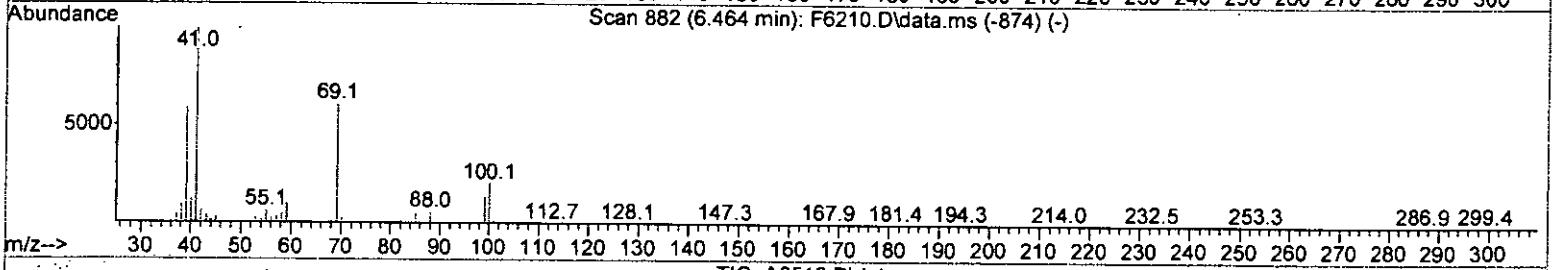
Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:06:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0512.D\data.ms

(59) Methyl Methacrylate

6.494min (+0.025) 0.70 ug/L

response 2894

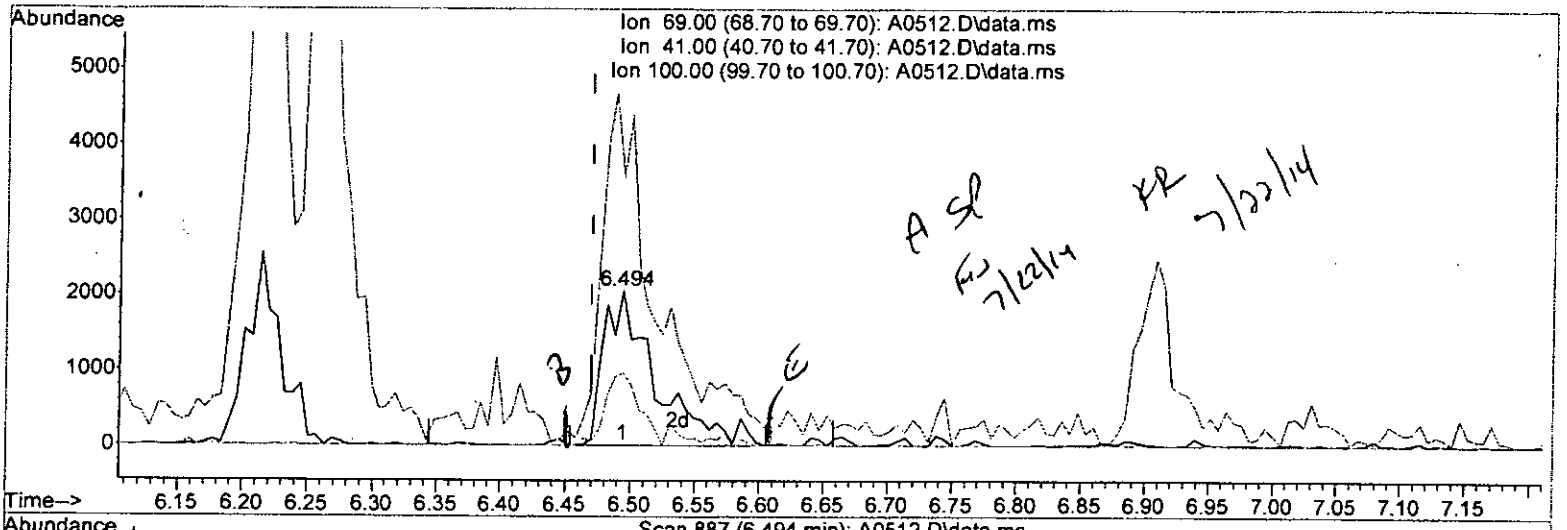
Ion	Exp%	Act%
69.00	100	100
41.00	128.90	172.86#
100.00	36.90	46.64
0.00	0.00	0.00

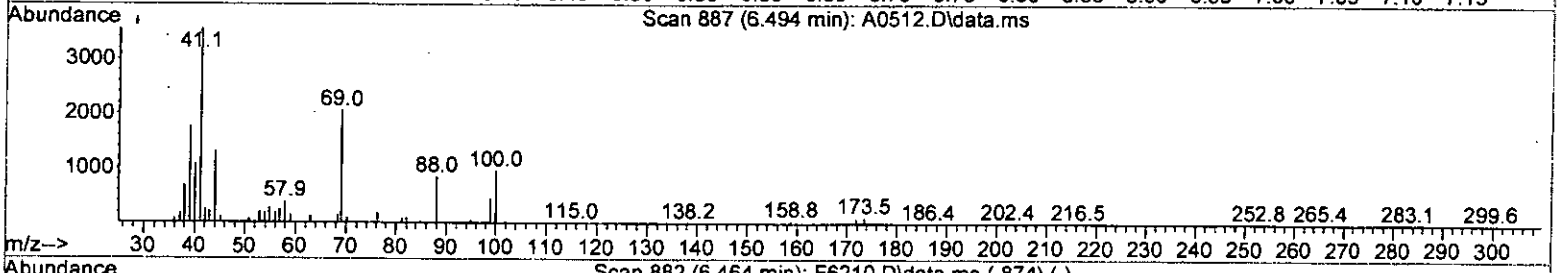
W072114.M Mon Jul 21 15:25:08 2014 MSVO10

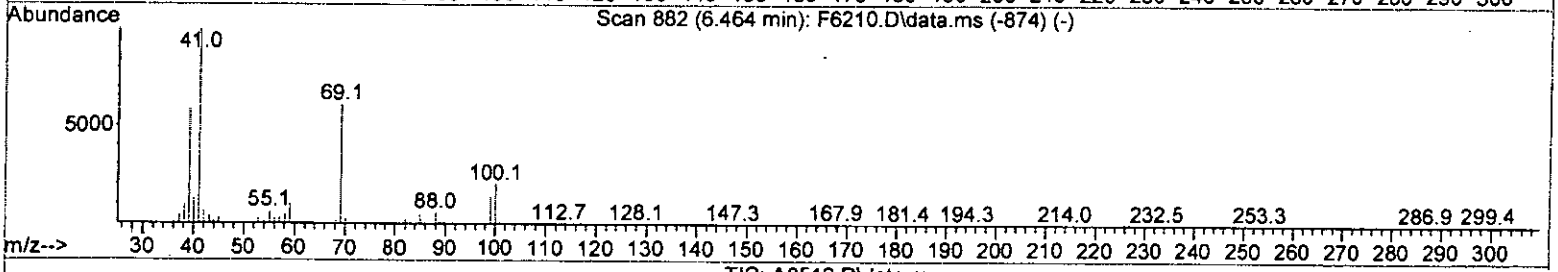
Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:06:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0512.D\data.ms

(59) Methyl Methacrylate

6.494min (+0.025) 1.40 ug/L m

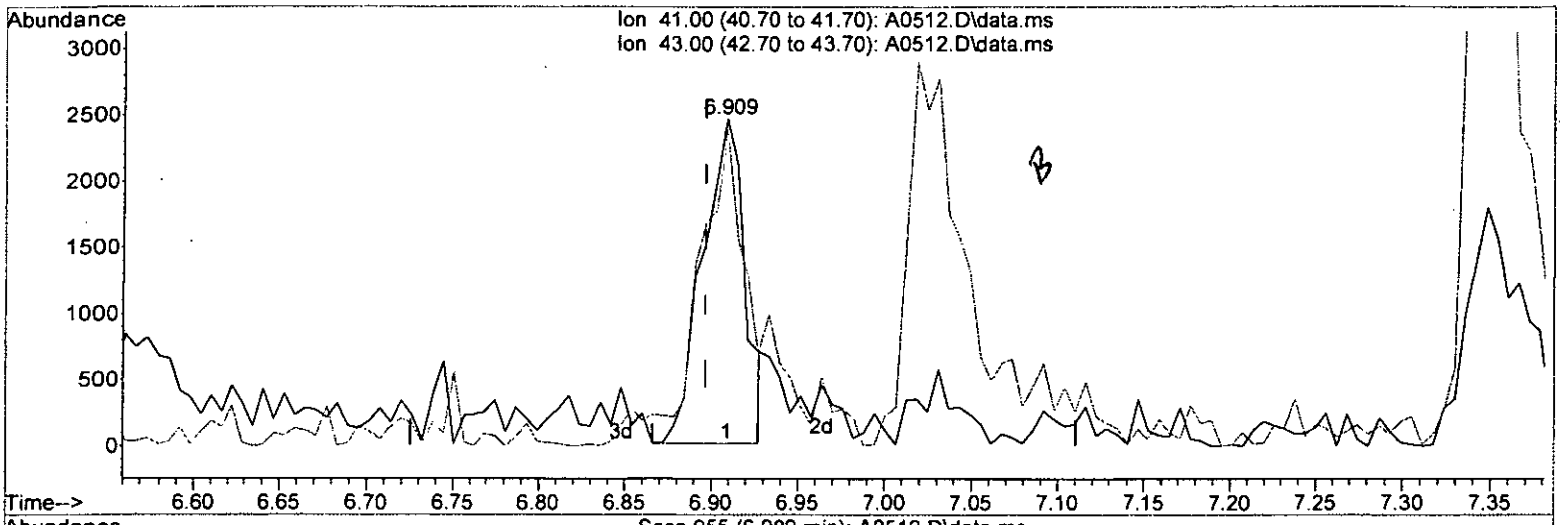
response 5744

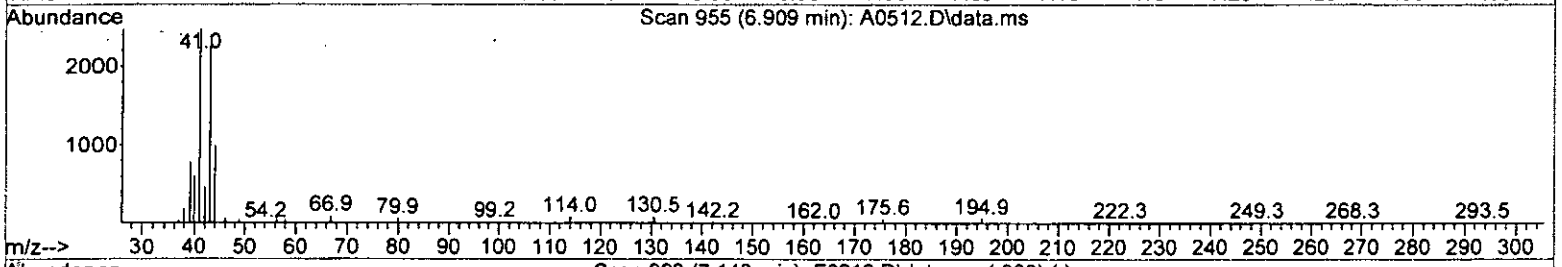
Ion	Exp%	Act%
69.00	100	100
41.00	128.90	172.86#
100.00	36.90	46.64
0.00	0.00	0.00

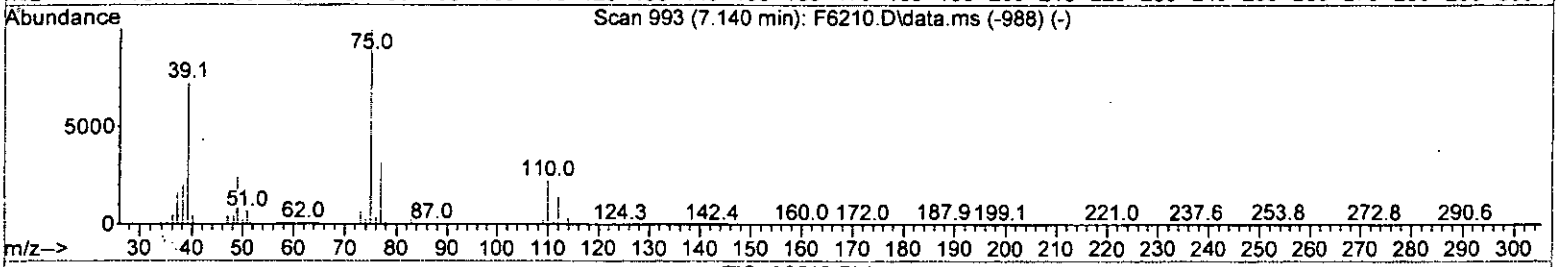
Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:06:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0512.D\data.ms

(61) 2-Nitropropane

6.909min (+0.012) 2.59 ug/L

response 4119

Ion	Exp%	Act%
41.00	100	100
43.00	108.60	96.64
0.00	0.00	0.00
0.00	0.00	0.00

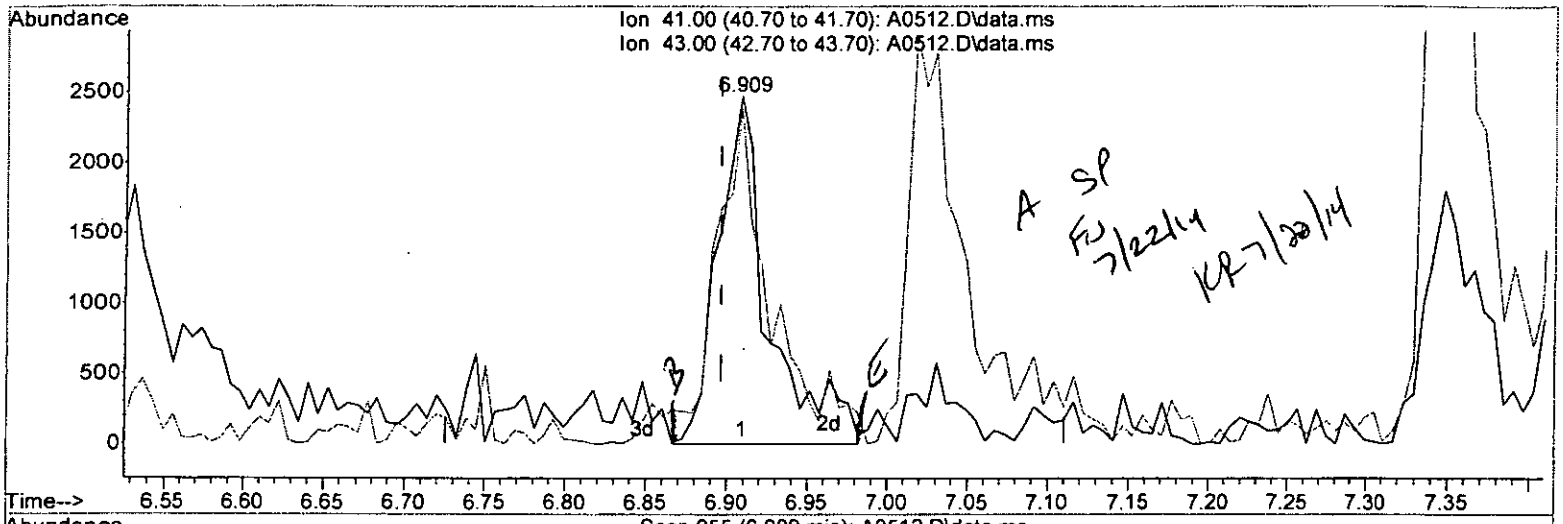
W072114.M Mon Jul 21 15:25:34 2014 MSVO10

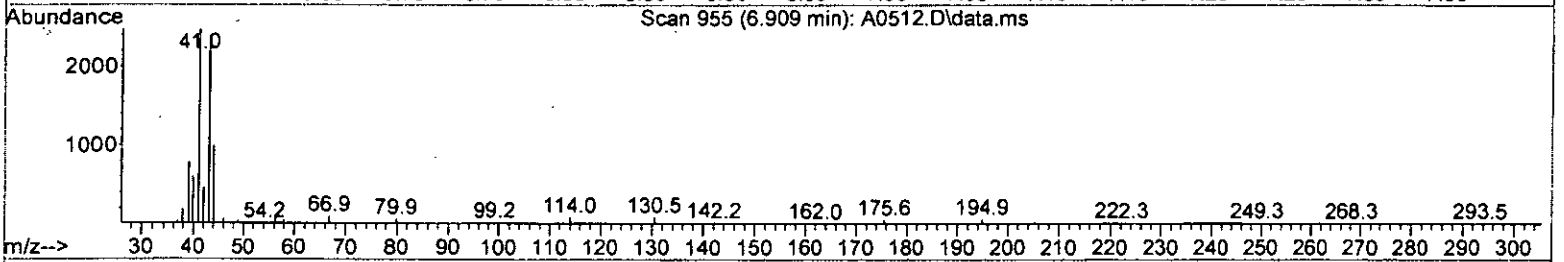
00223

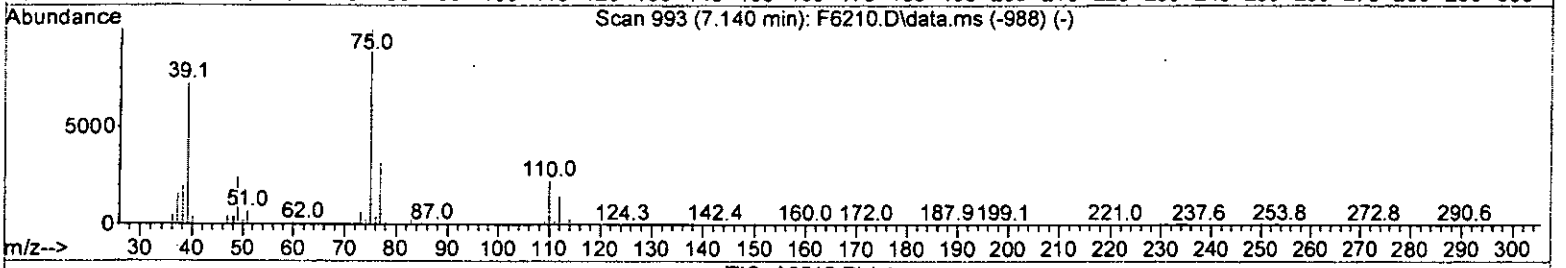
Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:06:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0512.D\data.ms

(61) 2-Nitropropane

6.909min (+0.012) 3.36 ug/L m

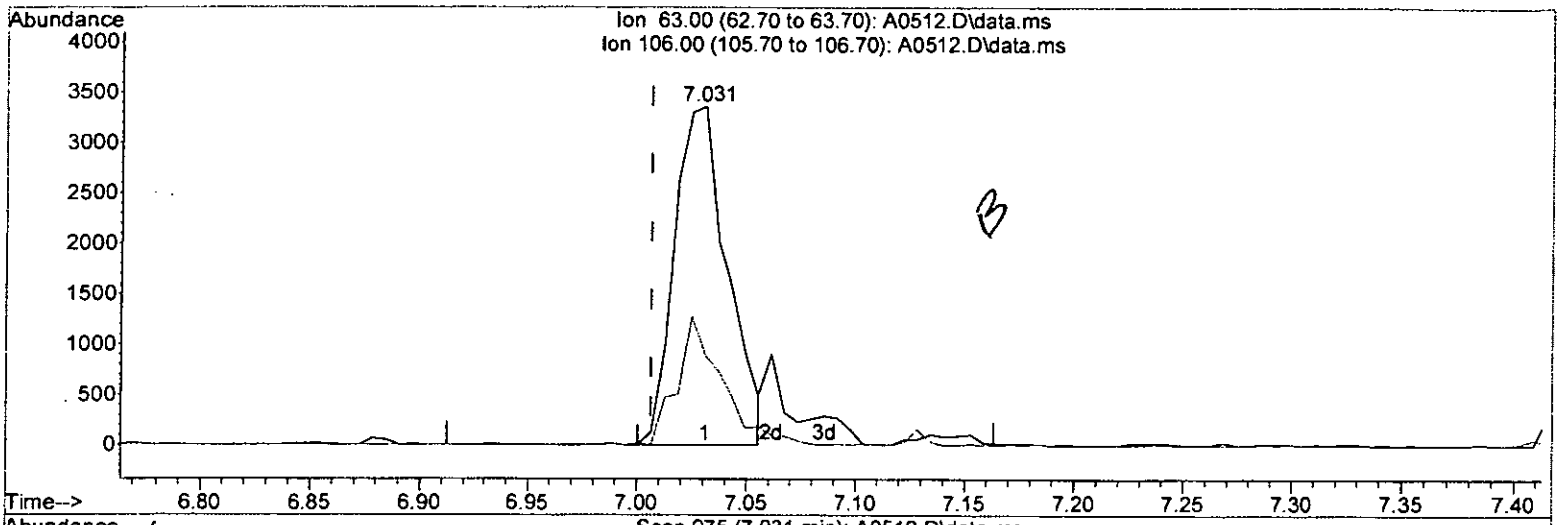
response 5342

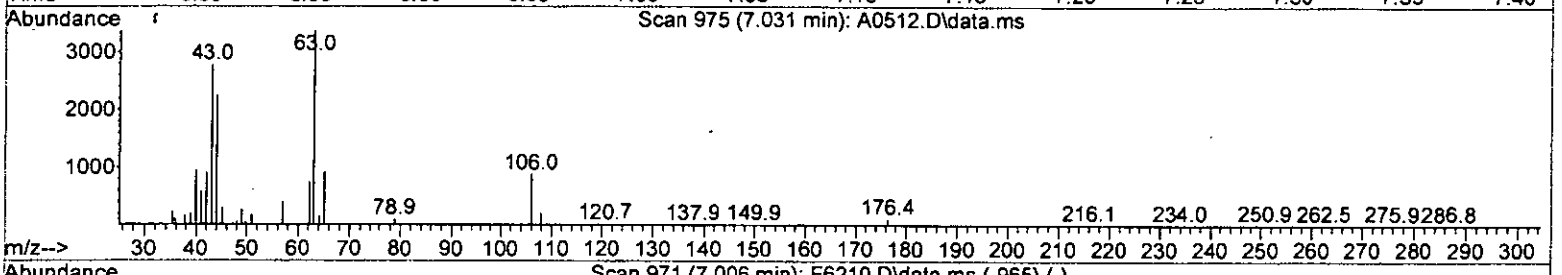
Ion	Exp%	Act%
41.00	100	100
43.00	108.60	96.64
0.00	0.00	0.00
0.00	0.00	0.00

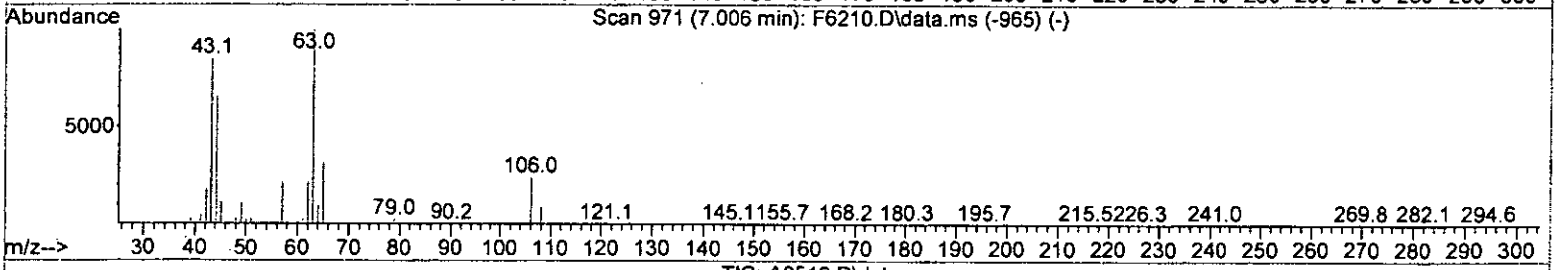
Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:06:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0512.D\data.ms

(62) 2-Chloroethylvinyl Ether

7.031min (+0.024) 1.20 ug/L

response 5619

Ion	Exp%	Act%
63.00	100	100
106.00	27.80	26.30
0.00	0.00	0.00
0.00	0.00	0.00

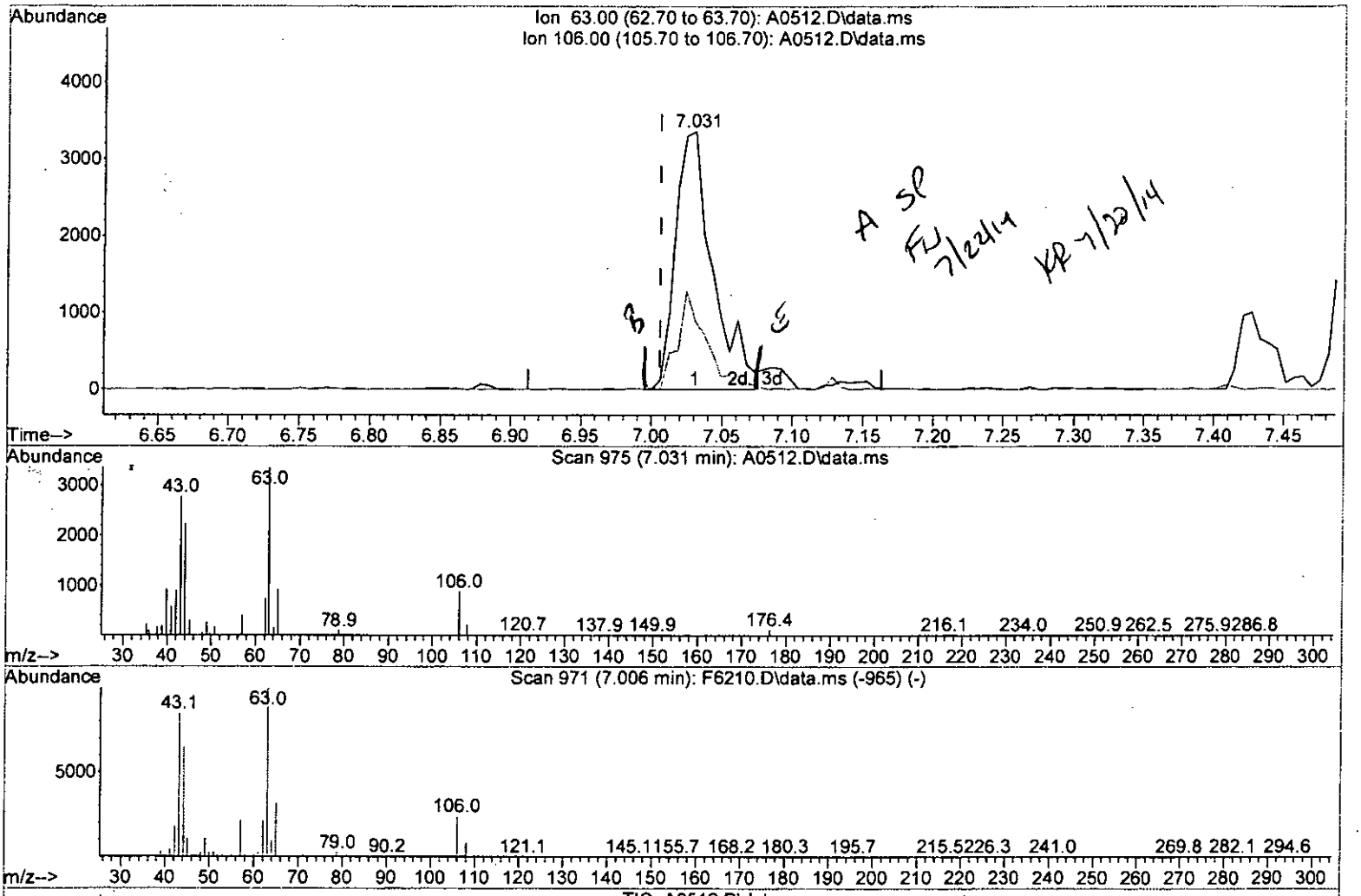
00225

W072114.M Mon Jul 21 15:26:09 2014 MSVO10

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:06:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0512.D\data.ms

(62) 2-Chloroethylvinyl Ether

7.031min (+0.024) 1.31 ug/L m

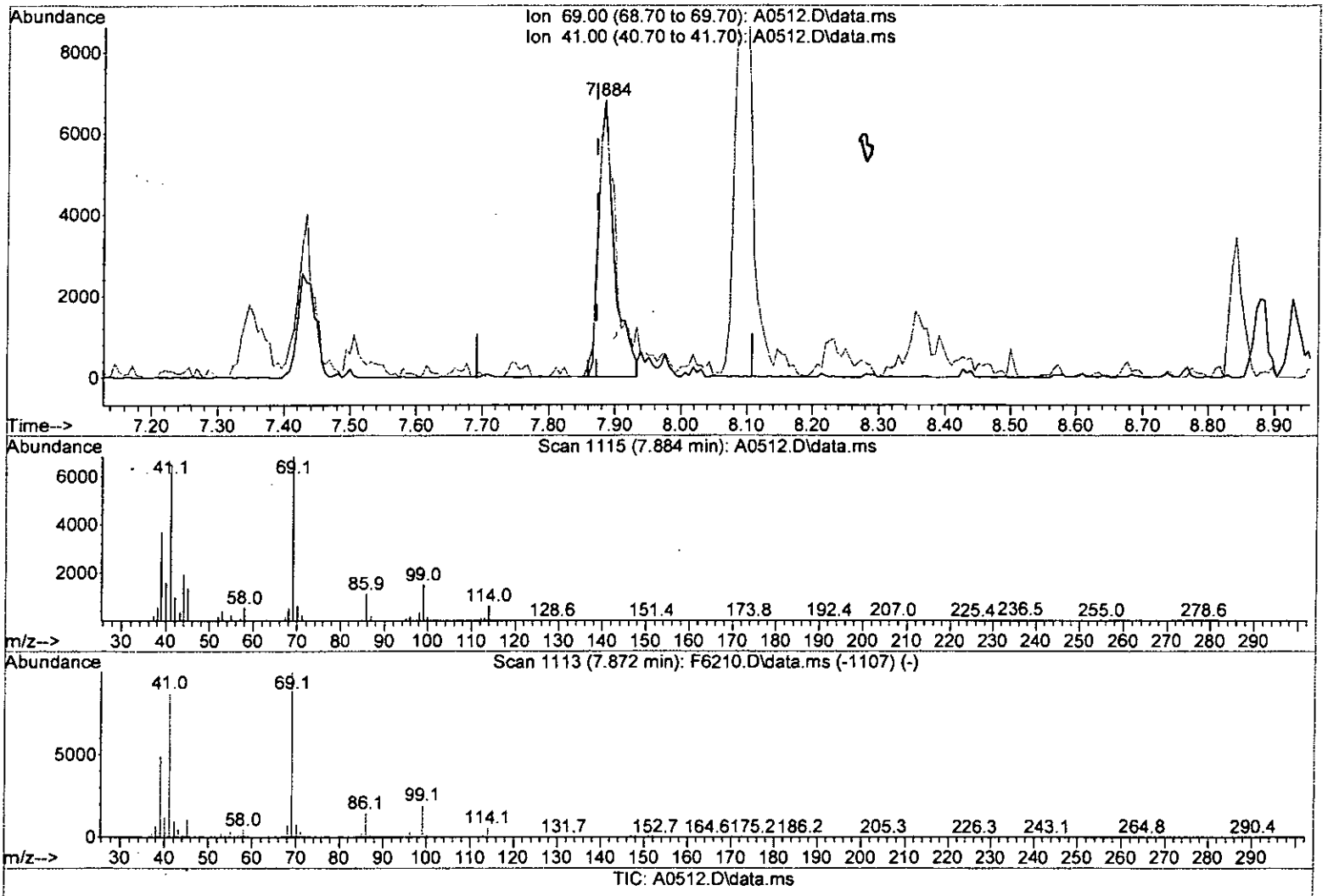
response 6148

Ion	Exp%	Act%
63.00	100	100
106.00	27.80	26.30
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:27:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0512.D\data.ms

(68) Ethyl Methacrylate

7.884min (+0.012) 1.31 ug/L

response 11254

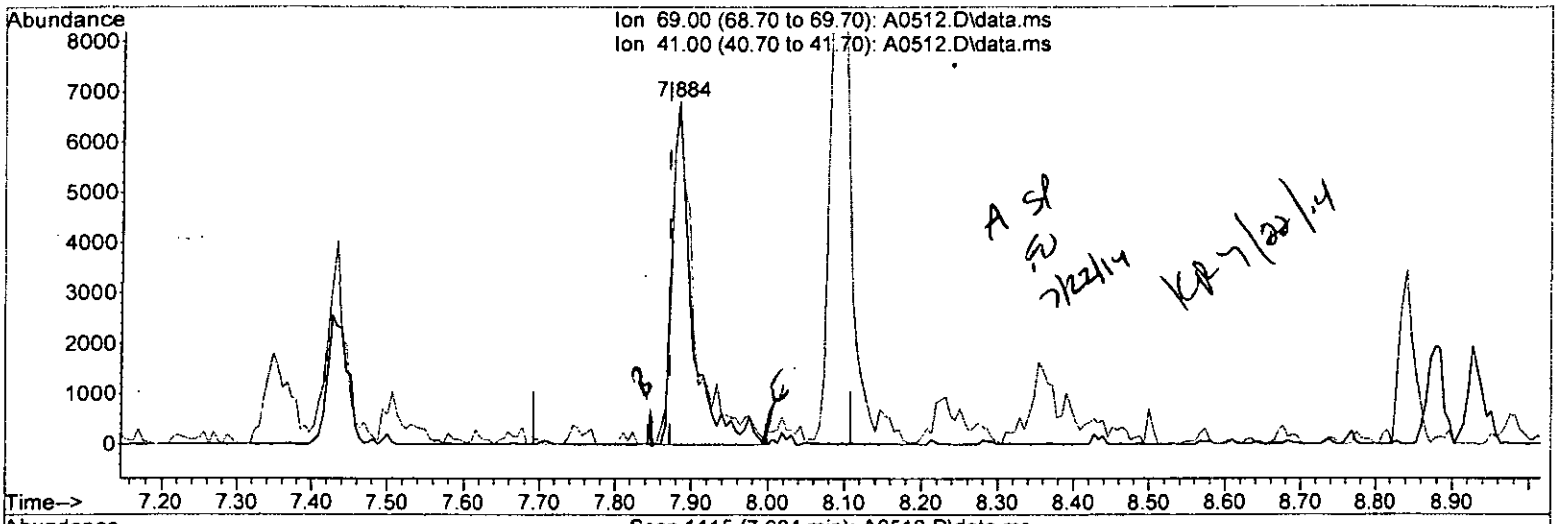
Ion	Exp%	Act%
69.00	100	100
41.00	71.50	95.31#
0.00	0.00	0.00
0.00	0.00	0.00

00227

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:27:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



(68) Ethyl Methacrylate

7.884min (+0.012) 1.45 ug/L m

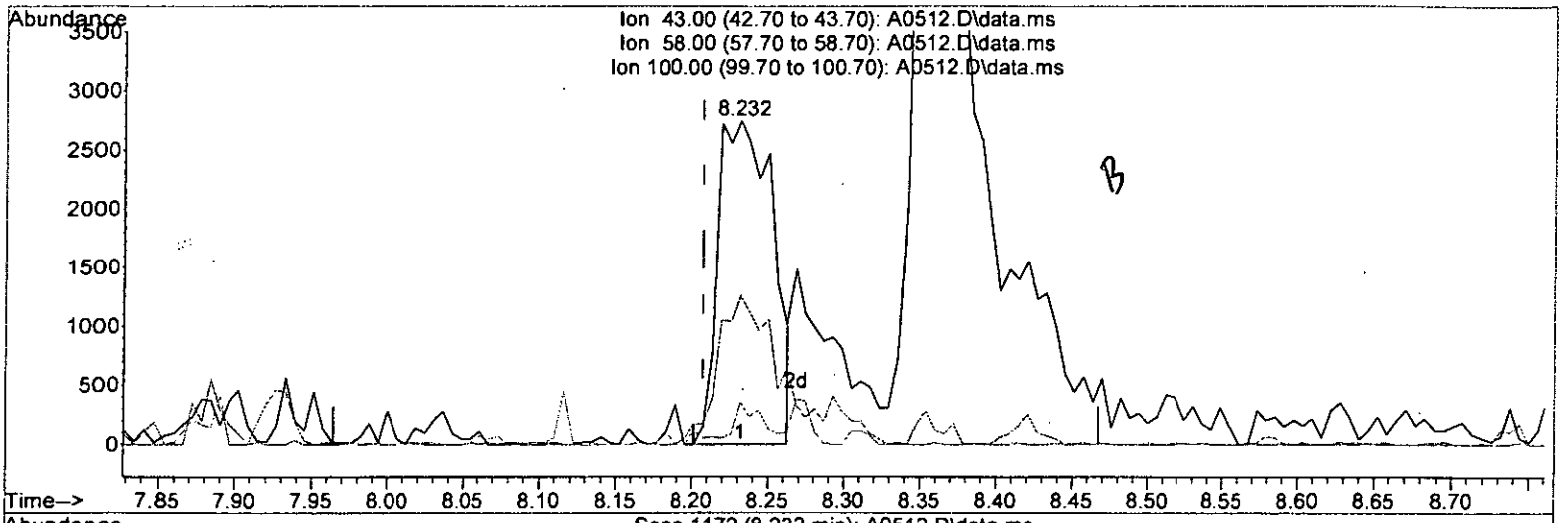
response 12423

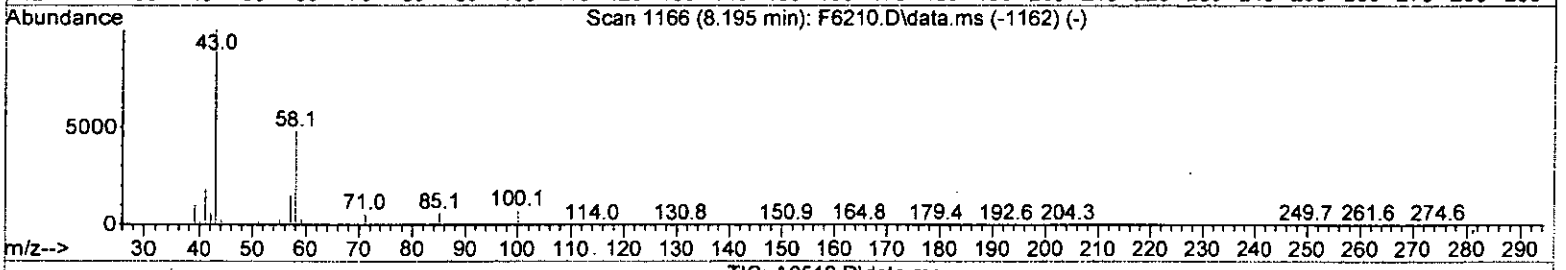
Ion	Exp%	Act%
69.00	100	100
41.00	71.50	95.31#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:06:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration





TIC: A0512.D\data.ms

(73) 2-Hexanone (P)

8.232min (+0.025) 1.38 ug/L

response 6817

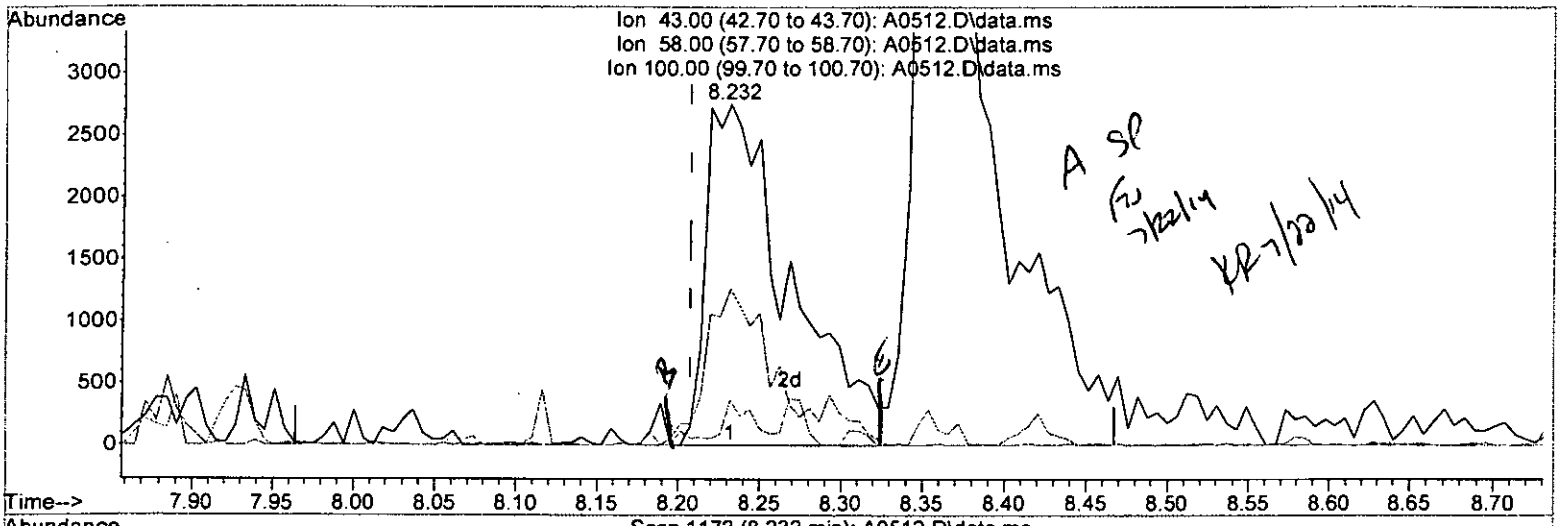
Ion	Exp%	Act%
43.00	100	100
58.00	50.80	45.71
100.00	10.10	13.01
0.00	0.00	0.00

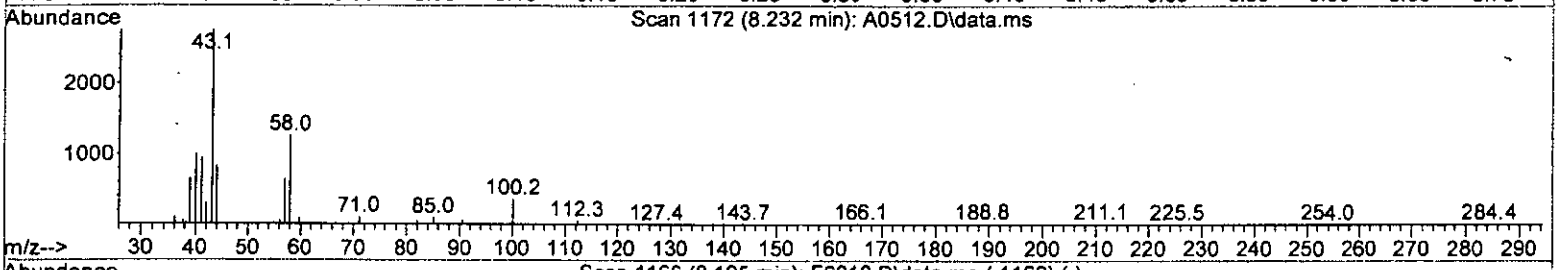
W072114.M Mon Jul 21 15:27:07 2014 MSVO10

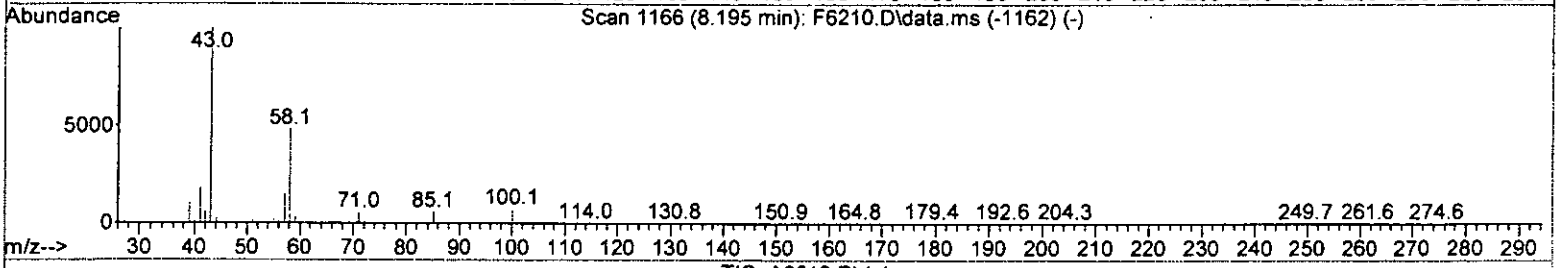
Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:06:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0512.D\data.ms

(73) 2-Hexanone (P)

8.232min (+0.025) 1.97 ug/L m

response 9725

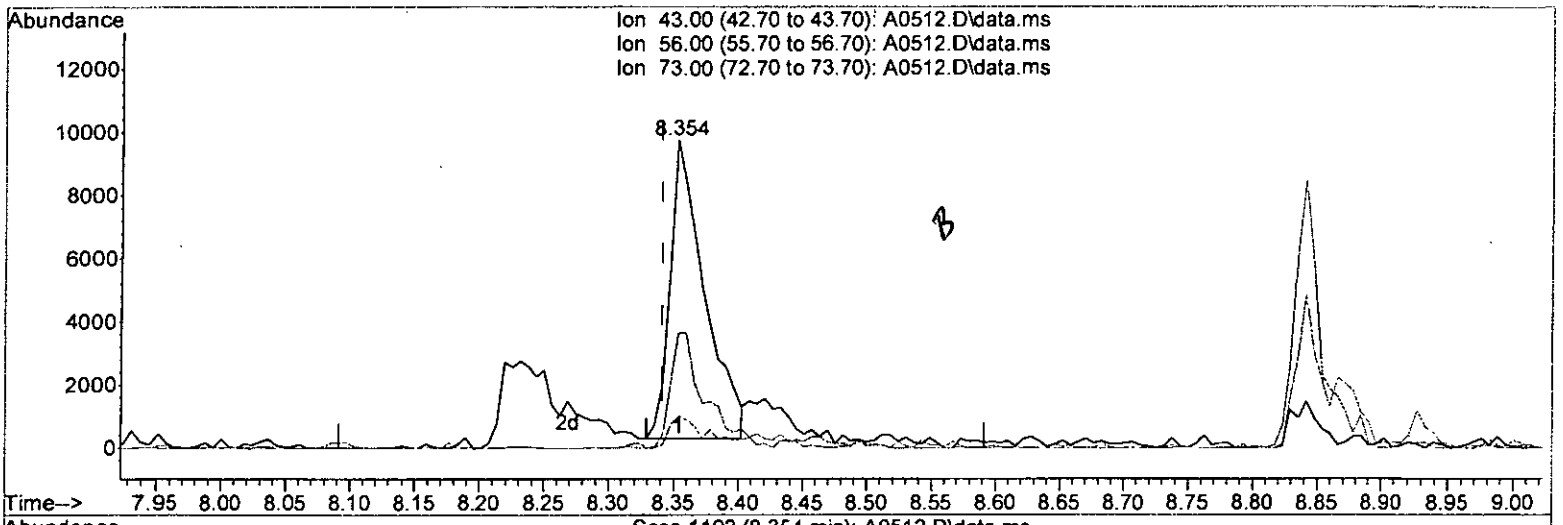
Ion	Exp%	Act%
43.00	100	100
58.00	50.80	45.71
100.00	10.10	13.01
0.00	0.00	0.00

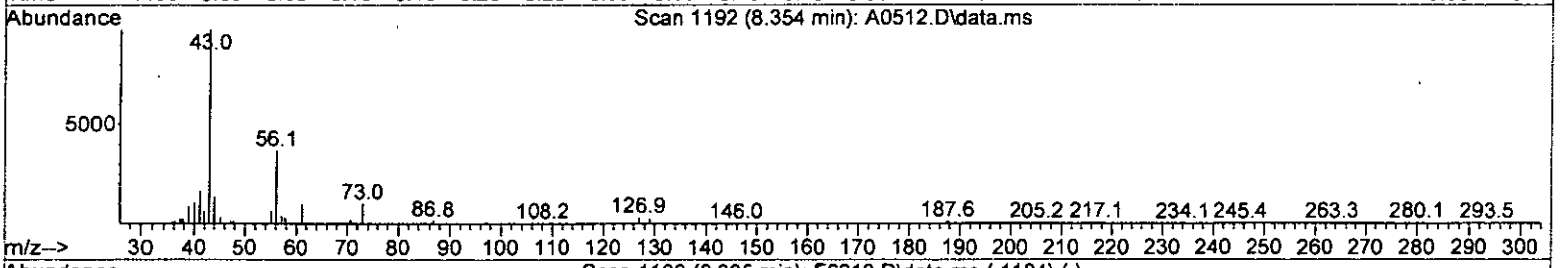
W072114.M Mon Jul 21 15:27:28 2014 MSVO10 Page: 1

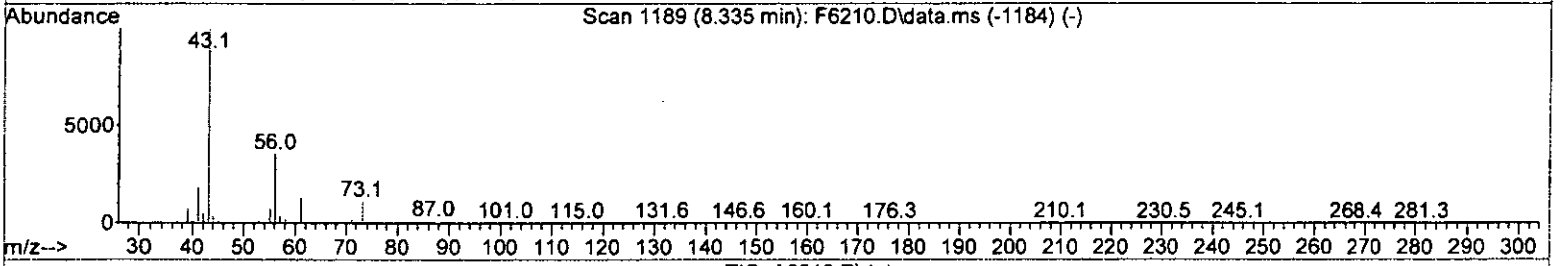
Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:27:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0512.D\data.ms

(76) N-Butyl Acetate

8.354min (+0.012) 1.33 ug/L

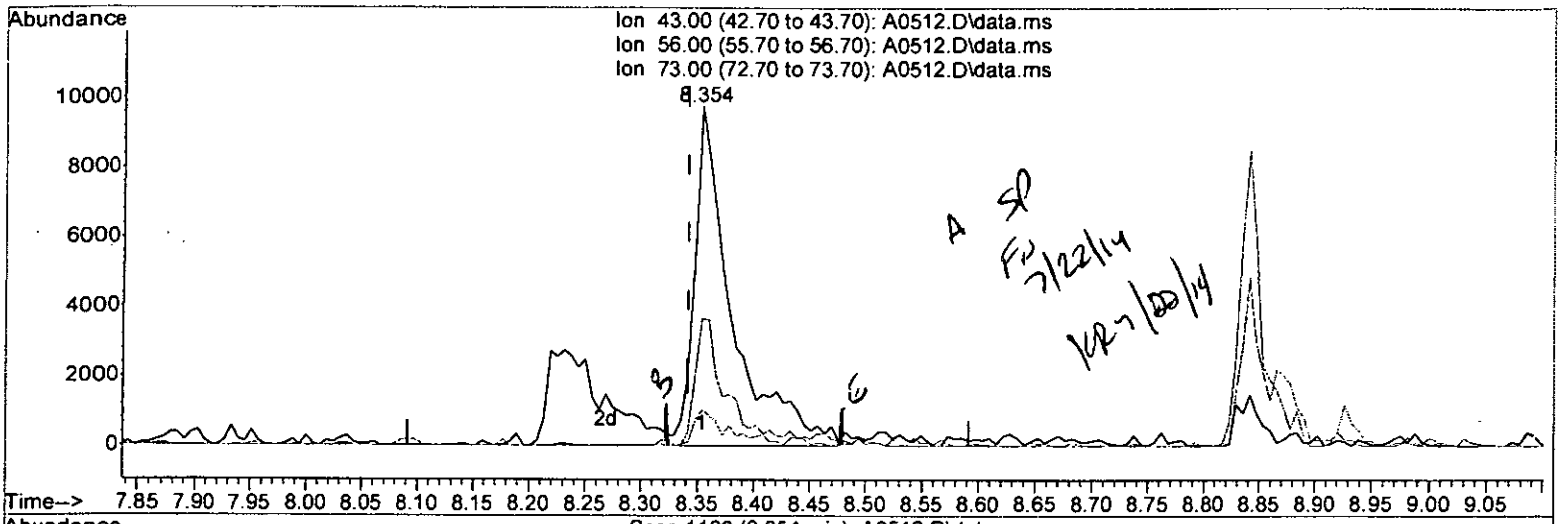
response 17278

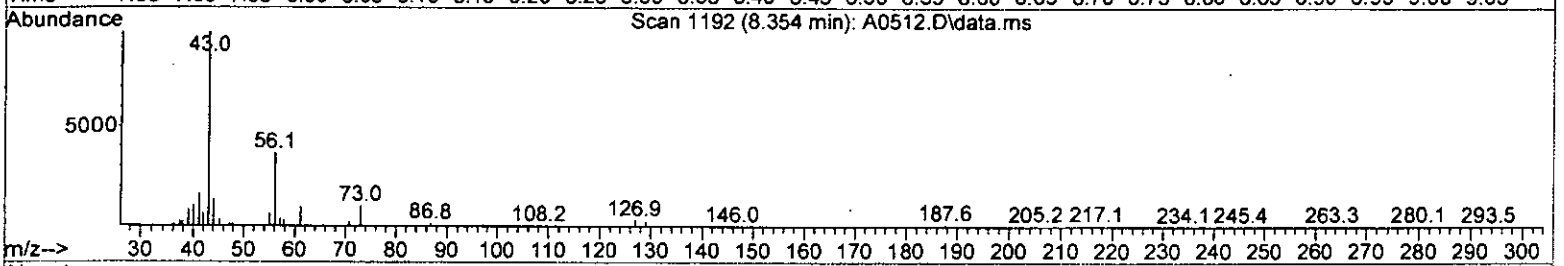
Ion	Exp%	Act%
43.00	100	100
56.00	38.80	37.52
73.00	14.00	10.38
0.00	0.00	0.00

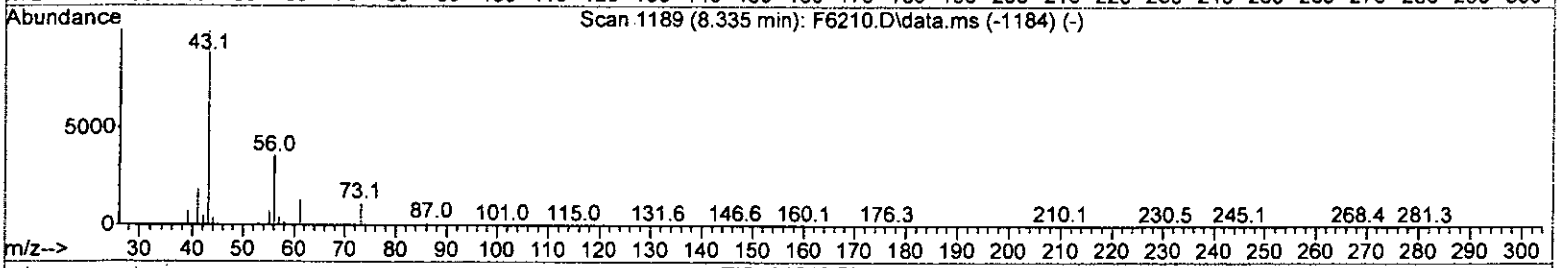
Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:27:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0512.D\data.ms

(76) N-Butyl Acetate

8.354min (+0.012) 1.74 ug/L m

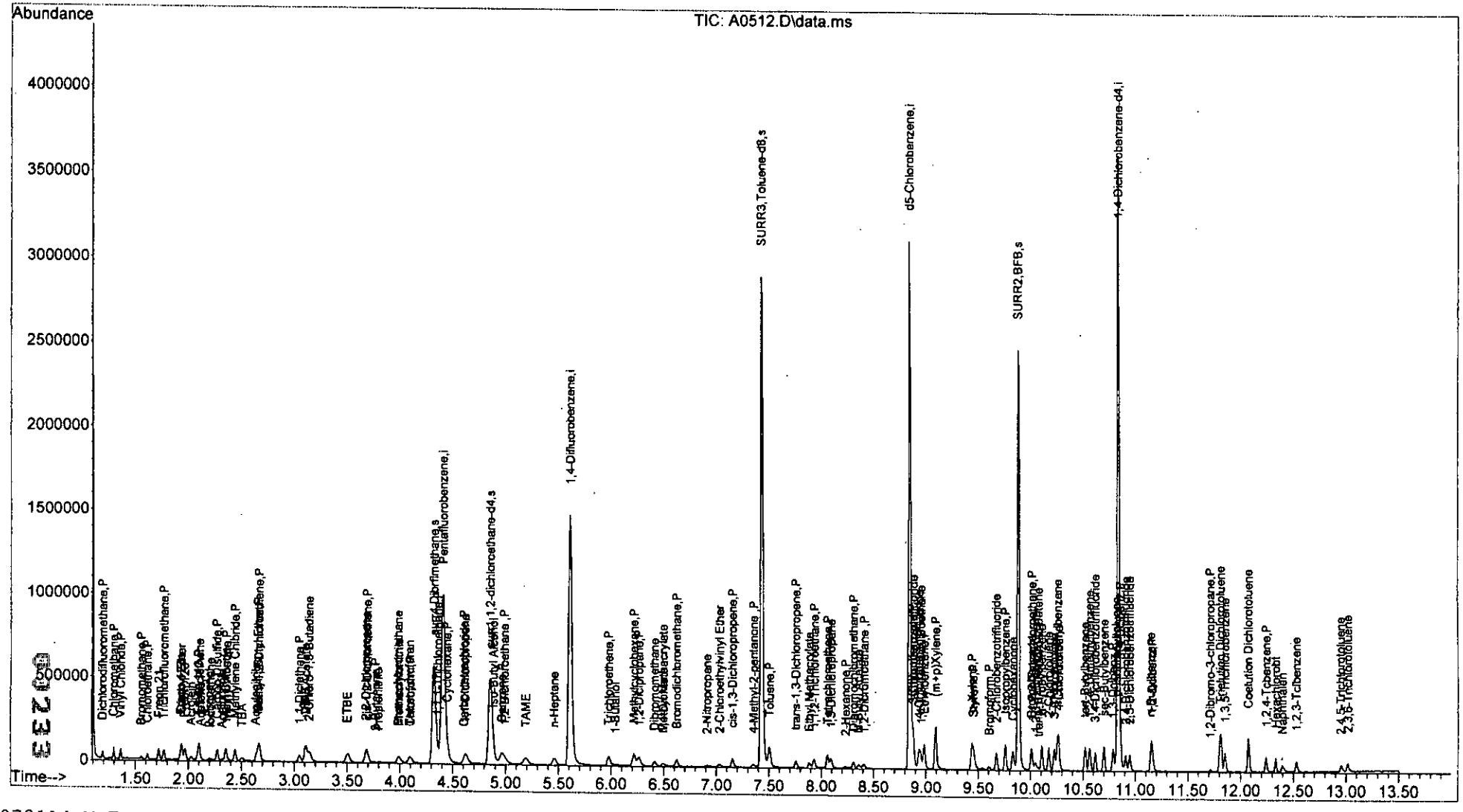
response 22614

Ion	Exp%	Act%
43.00	100	100
56.00	38.80	37.52
73.00	14.00	10.38
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0512.D Vial: 5
Acq On : 21 Jul 2014 12:52 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 16:19:39 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



W072114.M Tue Jul 22 08:52:28 2014 MSVO10

Quantitation Report (QT Reviewed)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

FJ 7/22/14

Quant Time: Jul 21 16:22:02 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	939367	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1413896	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1261317	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	679621	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.324	113	534669	63.45	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 126.90%#				
48) surr1,1,2-dichloroetha...	4.854	65	586473	70.22	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 140.44%#				
65) SURR3,Toluene-d8	7.427	98	1875444	57.62	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 115.24%				
70) SURR2,BFB	9.878	95	733005	57.20	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 114.40%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.190	85	43234	4.92	ug/L		94
3) Chloromethane	1.294	50	63934	5.87	ug/L		98
4) Vinyl Chloride	1.361	62	57753	5.06	ug/L		98
5) Bromomethane	1.556	94	14250	3.46	ug/L		99
6) Chloroethane	1.611	64	31388	5.05	ug/L		91
7) Freon 21	1.721	67	86474	5.23	ug/L		96
8) Trichlorofluoromethane	1.770	101	69467	5.66	ug/L		96
9) Diethyl Ether	1.934	59	37507	5.32	ug/L		81
10) Freon 123a	1.928	67	54749	5.14	ug/L		96
11) Freon 123	1.965	83	57017	5.03	ug/L		98
12) Acrolein	2.026	56	27456	25.17	ug/L		98
13) 1,1-Diclethene	2.099	96	33192	5.30	ug/L	#	80
14) Freon 113	2.093	101	42845	6.00	ug/L		98
15) Acetone	2.123	43	14460	6.83	ug/L		87
16) 2-Propanol	2.196	45	33103	90.27	ug/L		99
17) Iodomethane	2.208	142	8708	1.33	ug/L		96
18) Carbon Disulfide	2.269	76	137770	5.17	ug/L		97
19) Acetonitrile	2.318	40	7025	24.69	ug/L		94
20) Allyl Chloride	2.349	76	19796	4.37	ug/L	#	23
21) Methyl Acetate	2.355	43	29135	6.41	ug/L		88
22) Methylene Chloride	2.440	84	42058	4.46	ug/L	#	72
23) TBA	2.501	59	45331	78.45	ug/L	#	57
24) Acrylonitrile	2.635	53	67129	29.01	ug/L		89
25) Methyl-t-Butyl Ether	2.666	73	93912	4.73	ug/L		89
26) trans-1,2-Dichloroethene	2.672	96	43157	5.42	ug/L	#	82
28) 1,1-Diclethane	3.050	63	90103	5.51	ug/L		98
29) Vinyl Acetate	3.092	86	5442	4.70	ug/L	#	68
30) DIPE	3.111	45	208781	6.31	ug/L		89
31) 2-Chloro-1,3-Butadiene	3.141	53	90417	5.75	ug/L		80
32) ETBE	3.501	59	130263	4.63	ug/L		87
33) 2,2-Dichloropropane	3.684	77	51495	4.30	ug/L		95
34) cis-1,2-Dichloroethene	3.684	96	48288	5.35	ug/L	#	84
35) 2-Butanone	3.720	43	17230m	5.97	ug/L		
36) Propionitrile	3.781	54	18579	24.91	ug/L		92
37) Bromochloromethane	3.989	130	29370	5.55	ug/L	#	75

Quantitation Report (QT Reviewed)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 16:22:02 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.983	67	10442	4.45	ug/L	#	59
39) Tetrahydrofuran	4.074	42	10478	6.10	ug/L		96
40) Chloroform	4.098	83	77707	5.31	ug/L		94
41) 1,1,1-Trichloroethane	4.361	97	64647	5.04	ug/L		100
42) TAME	5.177	73	87845	4.15	ug/L		88
44) Cyclohexane	4.440	41	62439	5.93	ug/L		95
46) Carbontetrachloride	4.623	121	17531	4.61	ug/L		81
47) 1,1-Dichloropropene	4.623	75	54624	4.78	ug/L		87
49) Benzene	4.958	78	172390	4.72	ug/L		92
50) 1,2-Dichloroethane	4.988	62	61815	5.16	ug/L		95
51) Iso-Butyl Alcohol	4.867	43	22147m	74.68	ug/L		
52) n-Heptane	5.464	43	60613	5.92	ug/L	#	78
53) 1-Butanol	5.988	56	21799m	157.03	ug/L		
54) Trichloroethene	5.970	130	47569	4.85	ug/L		93
55) Methylcyclohexane	6.214	55	66867	5.20	ug/L	#	76
56) 1,2-Diclpropane	6.263	63	50023	4.79	ug/L		94
57) Dibromomethane	6.403	93	24219	5.07	ug/L	#	77
58) 1,4-Dioxane	6.470	88	5819m	113.50	ug/L		
59) Methyl Methacrylate	6.476	69	16483m	3.90	ug/L		
60) Bromodichloromethane	6.616	83	53640	4.68	ug/L		93
61) 2-Nitropropane	6.897	41	10586	6.48	ug/L	#	70
62) 2-Chloroethylvinyl Ether	7.012	63	18586	3.86	ug/L		80
63) cis-1,3-Dichloropropene	7.147	75	52278	3.78	ug/L		96
64) 4-Methyl-2-pentanone	7.342	43	34200	4.91	ug/L		95
66) Toluene	7.500	91	178454	4.55	ug/L		95
67) trans-1,3-Dichloropropene	7.750	75	42275	3.73	ug/L		97
68) Ethyl Methacrylate	7.878	69	33933	3.85	ug/L	#	68
69) 1,1,2-Trichloroethane	7.927	97	30181	4.44	ug/L		86
72) Tetrachloroethene	8.055	164	35723	4.56	ug/L		97
73) 2-Hexanone	8.213	43	25252m	5.12	ug/L		
74) 1,3-Dichloropropane	8.085	76	53265	4.57	ug/L	#	73
75) Dibromochloromethane	8.305	129	37759	4.53	ug/L		95
76) N-Butyl Acetate	8.348	43	50392	3.88	ug/L		86
77) 1,2-Dibromoethane	8.402	107	30690	4.54	ug/L		81
78) 3-Chlorobenzotrifluoride	8.878	180	65383	4.51	ug/L		90
79) Chlorobenzene	8.866	112	123405	4.72	ug/L		97
80) 4-Chlorobenzotrifluoride	8.933	180	59912	4.46	ug/L		97
81) 1,1,1,2-Tetrachloroethane	8.951	131	40420	4.25	ug/L		96
82) Ethylbenzene	8.982	106	59697	4.42	ug/L	#	89
83) (m+p)Xylene	9.091	106	153019	9.25	ug/L		94
84) o-Xylene	9.439	106	72891	4.37	ug/L		92
85) Styrene	9.451	104	117838	4.18	ug/L		96
86) Bromoform	9.597	173	21825	4.37	ug/L		97
87) 2-Chlorobenzotrifluoride	9.670	180	63842	4.45	ug/L		94
88) Isopropylbenzene	9.756	105	181770	4.45	ug/L		99
89) Cyclohexanone	9.829	55	118101	119.82	ug/L		90
90) trans-1,4-Dichloro-2-B...	10.067	53	7977	3.68	ug/L		81
92) 1,1,2,2-Tetrachloroethane	10.012	83	38831	4.97	ug/L		93
93) Bromobenzene	10.006	156	50253	4.43	ug/L		96
94) 1,2,3-Trichloropropane	10.042	110	10484	5.04	ug/L		100
95) n-Propylbenzene	10.103	91	214592	4.65	ug/L		96
96) 2-Chlorotoluene	10.170	91	131888	4.66	ug/L		94

00235

Quantitation Report (QT Reviewed)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 16:22:02 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration

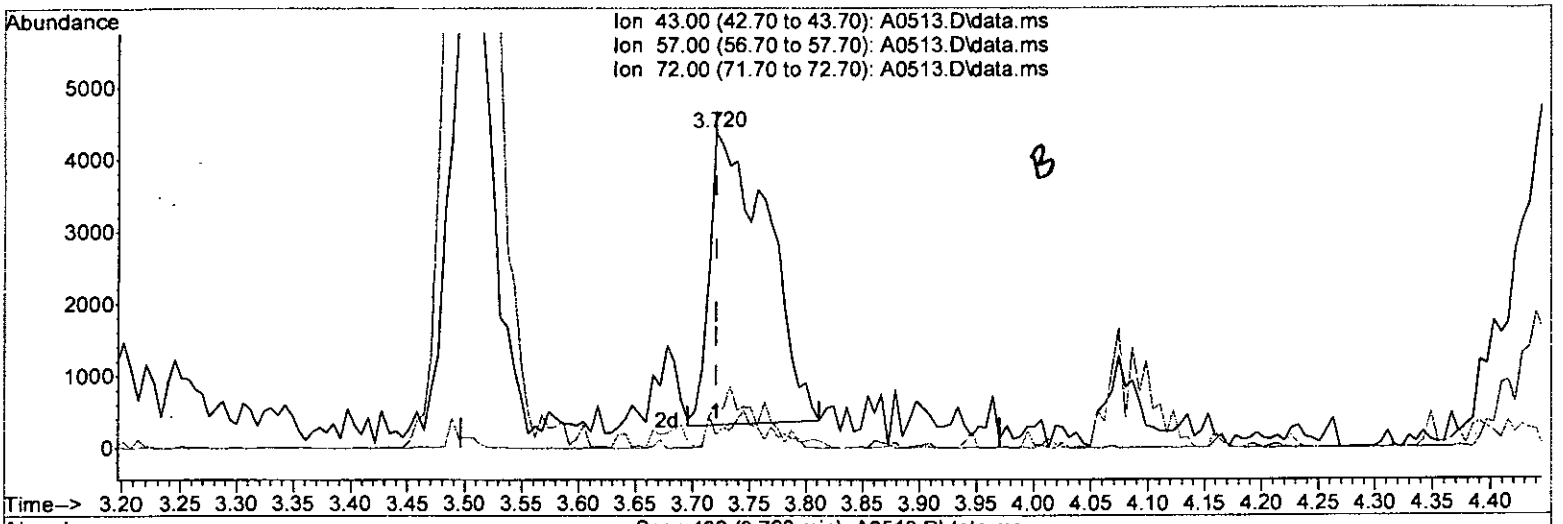
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.225	91	137297	4.78	ug/L	92
98)	4-Chlorotoluene	10.262	91	157231	4.58	ug/L	98
99)	1,3,5-Trimethylbenzene	10.256	105	149259	4.41	ug/L	99
100)	tert-Butylbenzene	10.518	119	126311	4.49	ug/L	99
101)	1,2,4-Trimethylbenzene	10.561	105	158212	4.62	ug/L	98
102)	3,4-Dichlorobenzotrifl...	10.615	214	46082	4.54	ug/L	90
103)	sec-Butylbenzene	10.701	105	177027	4.57	ug/L	98
104)	p-Isopropyltoluene	10.817	119	152126	4.49	ug/L	97
105)	1,3-Dclbenz	10.786	146	96336	4.59	ug/L	96
106)	1,4-Dclbenz	10.853	146	101159	4.76	ug/L	91
107)	2,4-Dichlorobenzotrifl...	10.908	214	39687	4.36	ug/L	87
108)	2,5-Dichlorobenzotrifl...	10.945	214	43525	4.16	ug/L	92
109)	n-Butylbenzene	11.146	91	130533	4.45	ug/L	96
110)	1,2-Dclbenz	11.152	146	92437	4.82	ug/L	94
111)	1,2-Dibromo-3-chloropr...	11.707	157	5151	4.28	ug/L	80
112)	Trielution Dichlorotol...	11.810	125	226082	14.59	ug/L	96
113)	1,3,5-Trichlorobenzene	11.847	180	62858	4.82	ug/L	94
114)	Coelution Dichlorotoluene	12.072	125	158359	10.06	ug/L	96
115)	1,2,4-Tcbenzene	12.237	180	50274	4.73	ug/L	100
116)	Hexachlorobt	12.335	225	21093	4.14	ug/L	95
117)	Naphthalen	12.389	128	81684	5.02	ug/L	98
118)	1,2,3-Tclbenzene	12.524	180	34792	4.81	ug/L	98
119)	2,4,5-Trichlorotoluene	12.950	159	22009	5.55	ug/L	92
120)	2,3,6-Trichlorotoluene	13.011	159	21134	5.37	ug/L	94

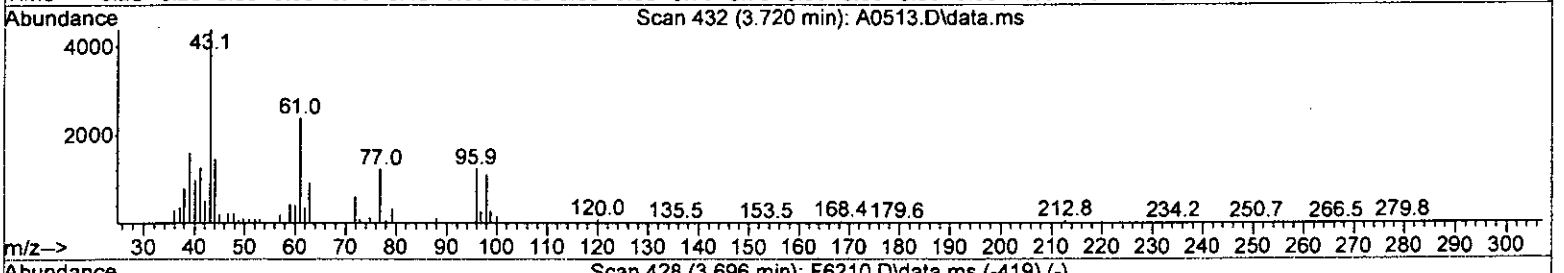
(#) = qualifier out of range (m) = manual integration (+) = signals summed

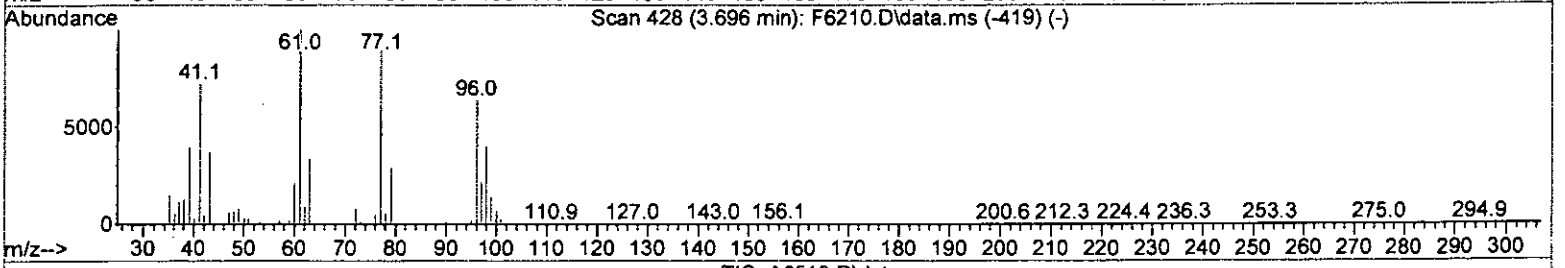
Quantitation Report (Qedit)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:32:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0513.D\data.ms

(35) 2-Butanone (P)

3.720min (-0.000) 4.97 ug/L

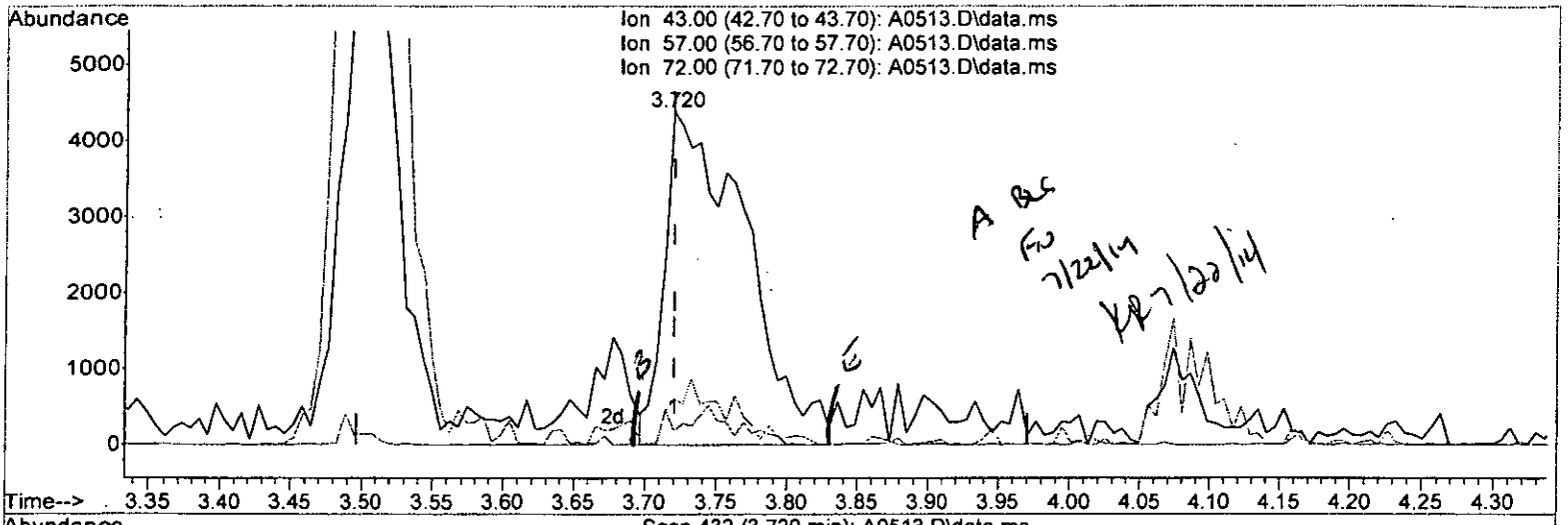
response 14346

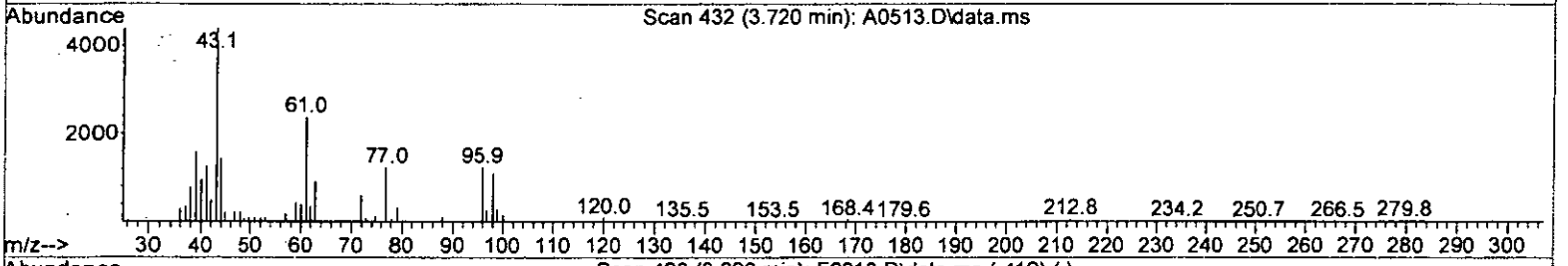
Ion	Exp%	Act%
43.00	100	100
57.00	8.30	4.27
72.00	23.50	13.74
0.00	0.00	0.00

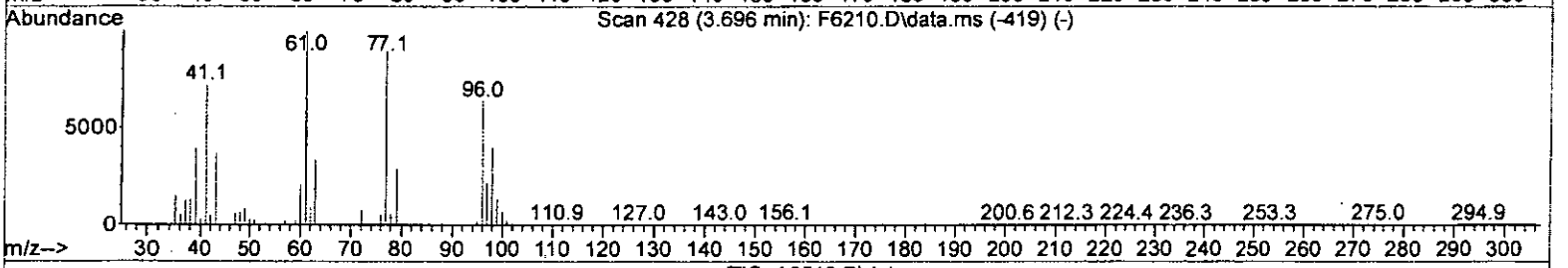
Quantitation Report (Qedit)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:32:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0513.D\data.ms

(35) 2-Butanone (P)

3.720min (-0.000) 5.97 ug/L m

response 17230

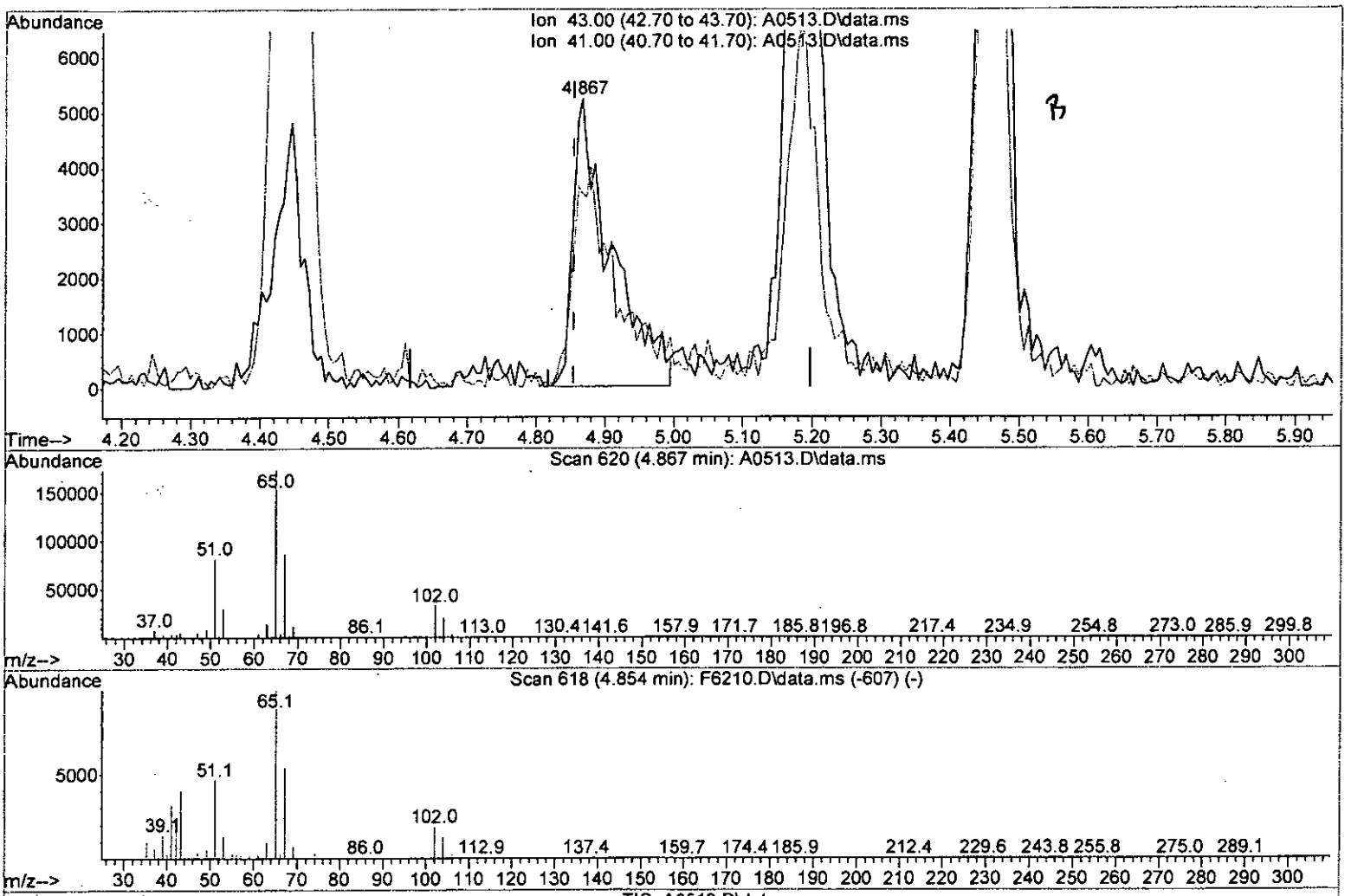
Ion	Exp%	Act%
43.00	100	100
57.00	8.30	4.27
72.00	23.50	13.74
0.00	0.00	0.00

W072114.M Mon Jul 21 16:20:35 2014 MSVO10

Quantitation Report (Qedit)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:32:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0513.D\data.ms

(51) Iso-Butyl Alcohol

4.867min (+0.012) 67.91 ug/L

response 20139

Ion	Exp%	Act%
43.00	100	100
41.00	76.40	66.92
0.00	0.00	0.00
0.00	0.00	0.00

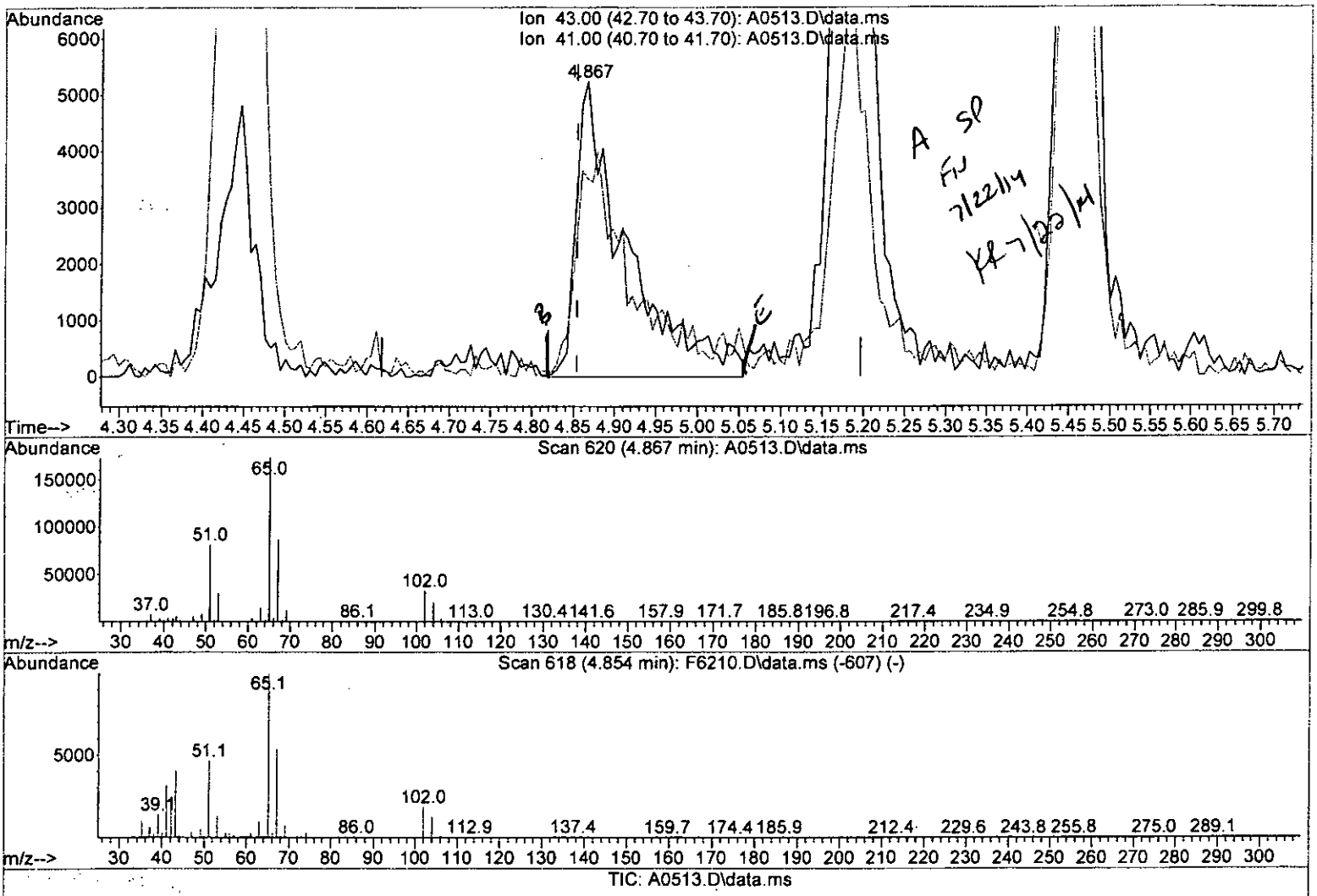
W072114.M Mon Jul 21 16:21:01 2014 MSVO10

00239

Quantitation Report (Qedit)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:32:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0513.D\data.ms

(51) Iso-Butyl Alcohol

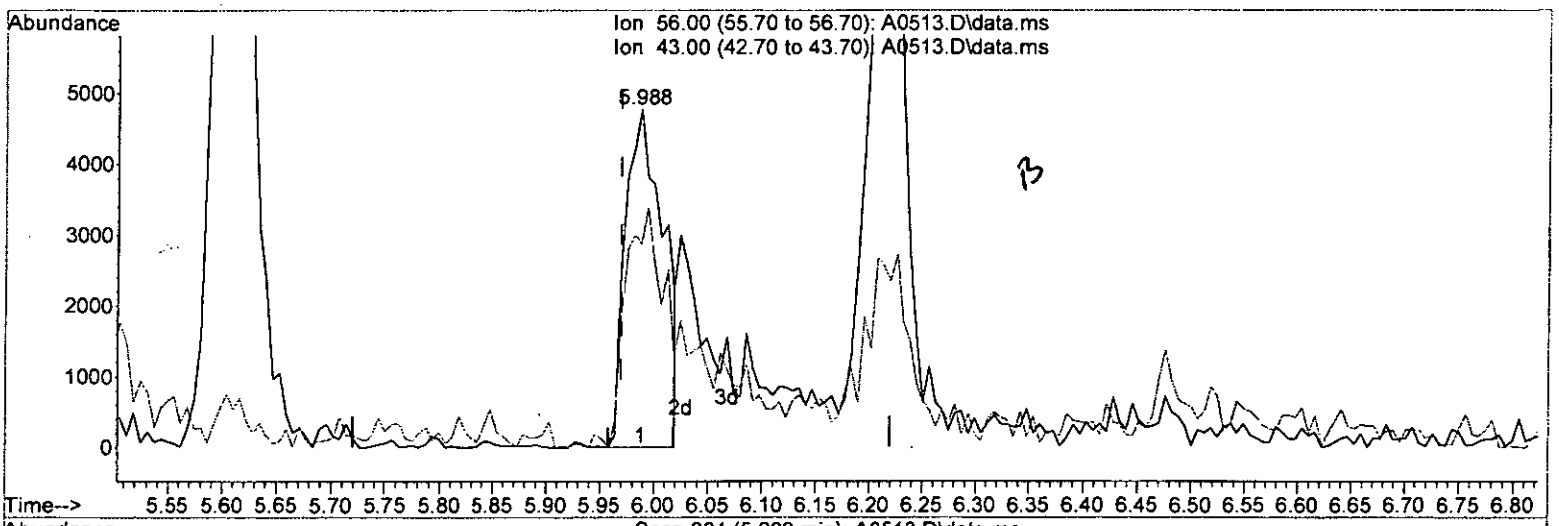
4.867min (+0.012) 74.68 ug/L m

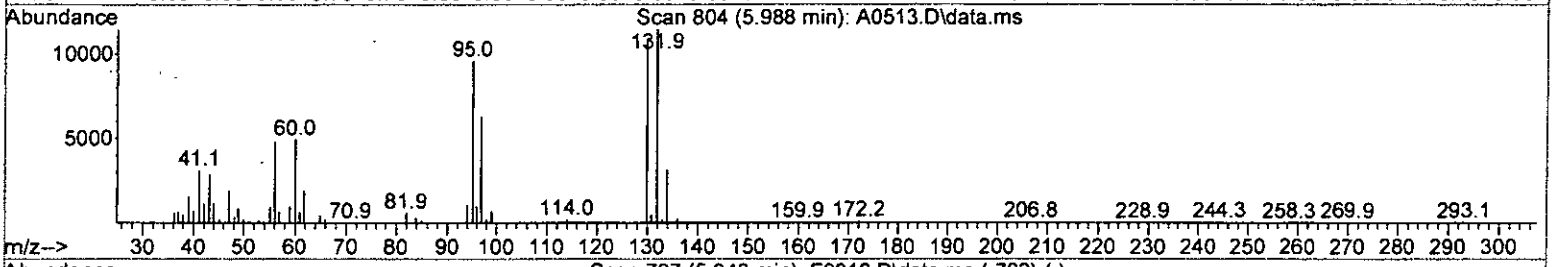
response 22147

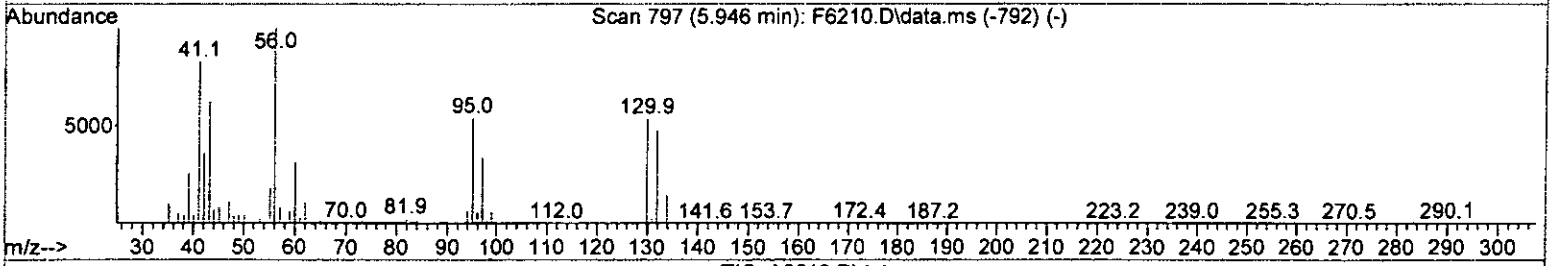
Ion	Exp%	Act%
43.00	100	100
41.00	76.40	66.92
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:36:27 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0513.D\data.ms

(53) 1-Butanol

5.988min (+0.018) 82.76 ug/L

response 11488

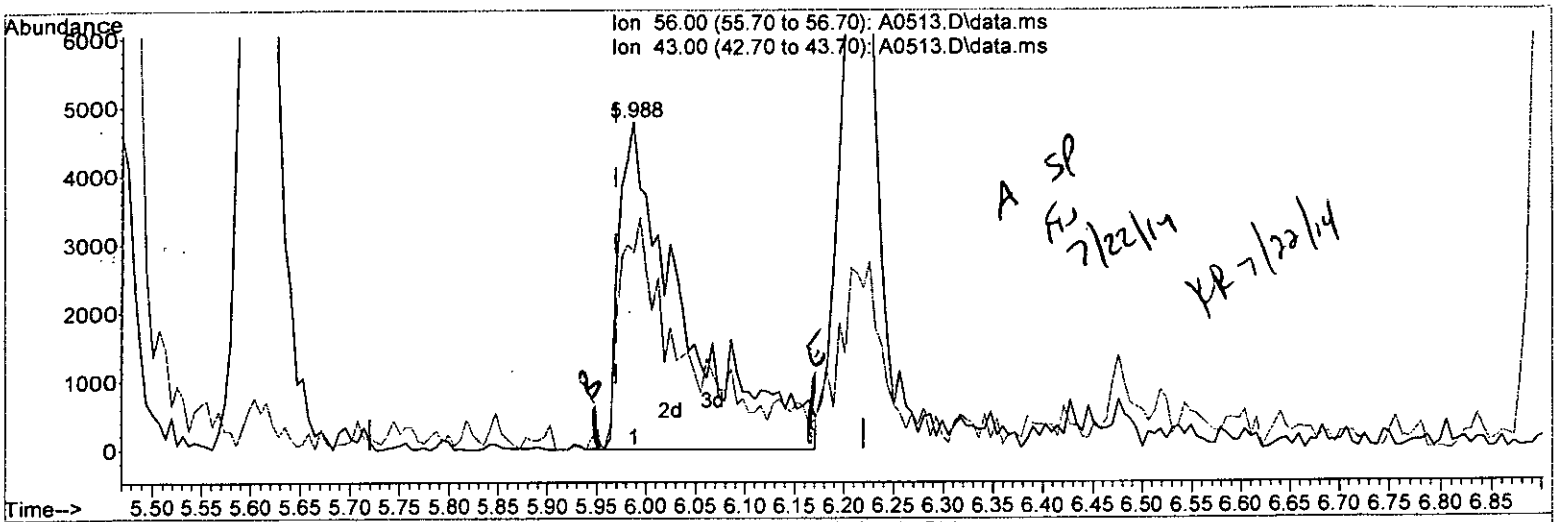
Ion	Exp%	Act%
56.00	100	100
43.00	56.20	60.17
0.00	0.00	0.00
0.00	0.00	0.00

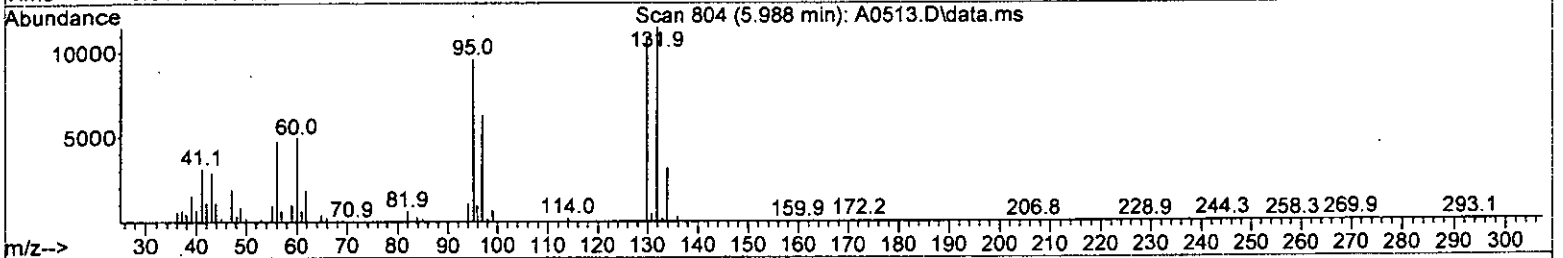
00241

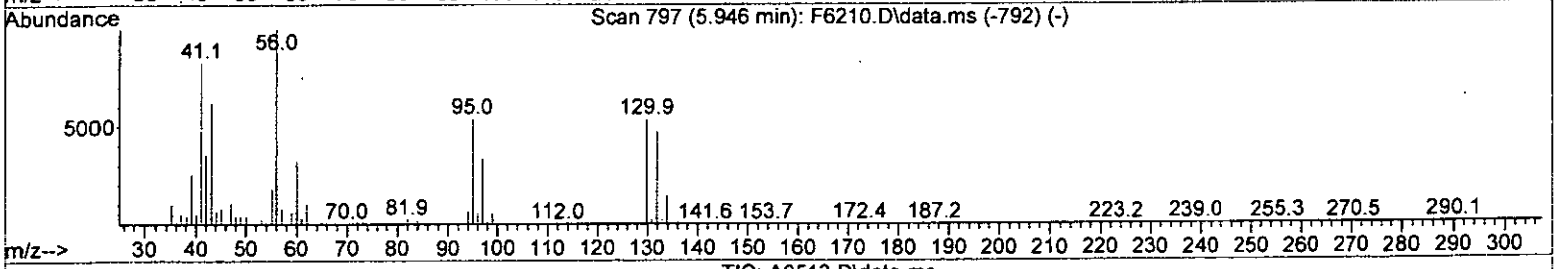
Quantitation Report (Qedit)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:32:14 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0513.D\data.ms

(53) 1-Butanol

5.988min (+0.018) 157.03 ug/L m

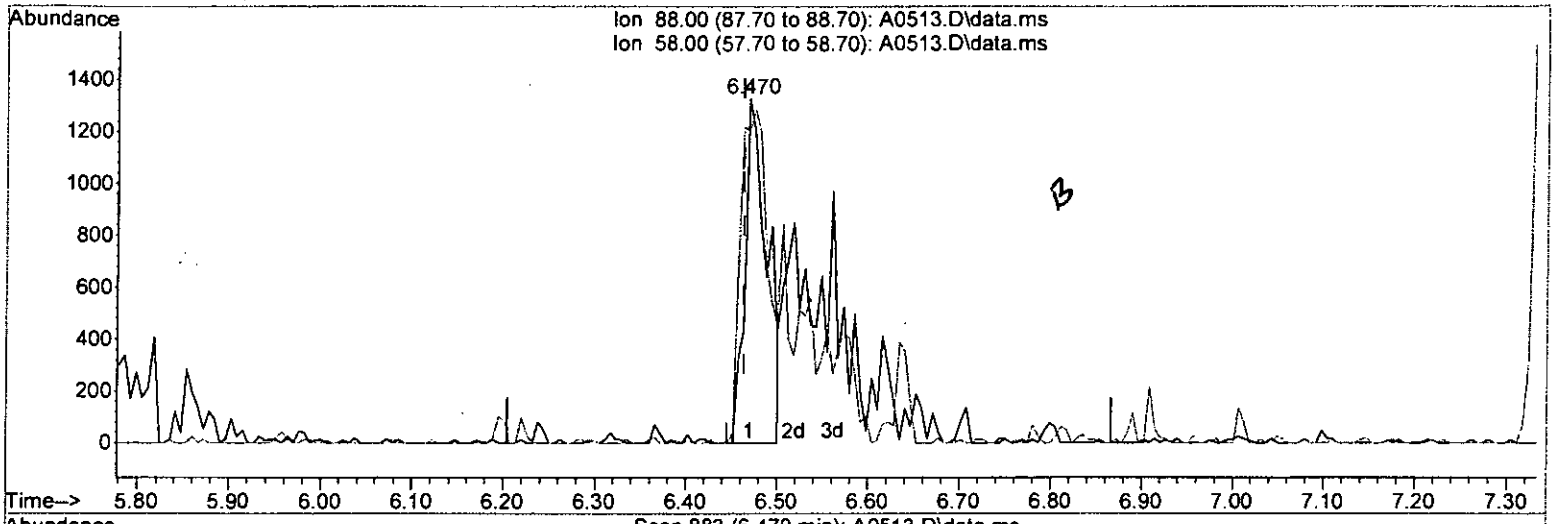
response 21799

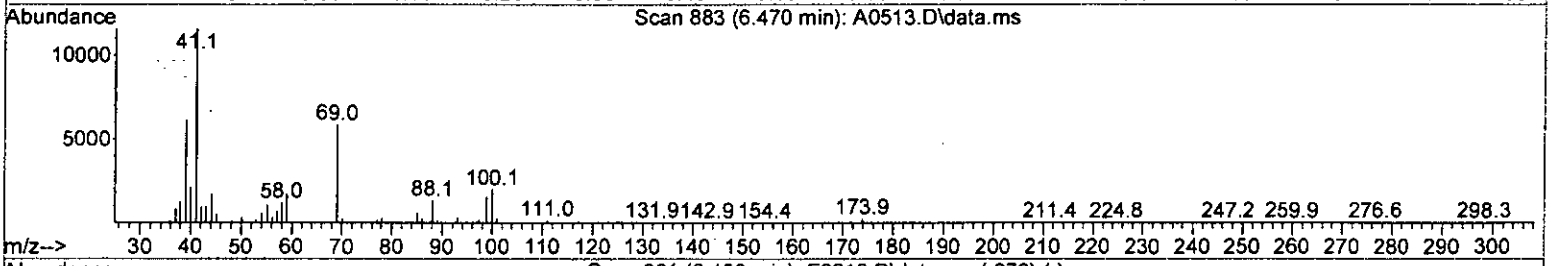
Ion	Exp%	Act%
56.00	100	100
43.00	56.20	60.17
0.00	0.00	0.00
0.00	0.00	0.00

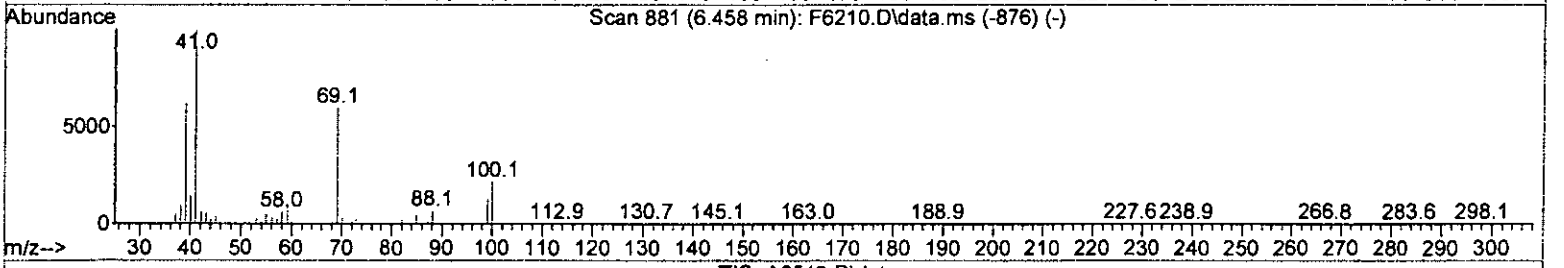
Quantitation Report (Qedit)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:36:27 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0513.D\data.ms

(58) 1,4-Dioxane

6.470min (+0.006) 42.99 ug/L

response 2204

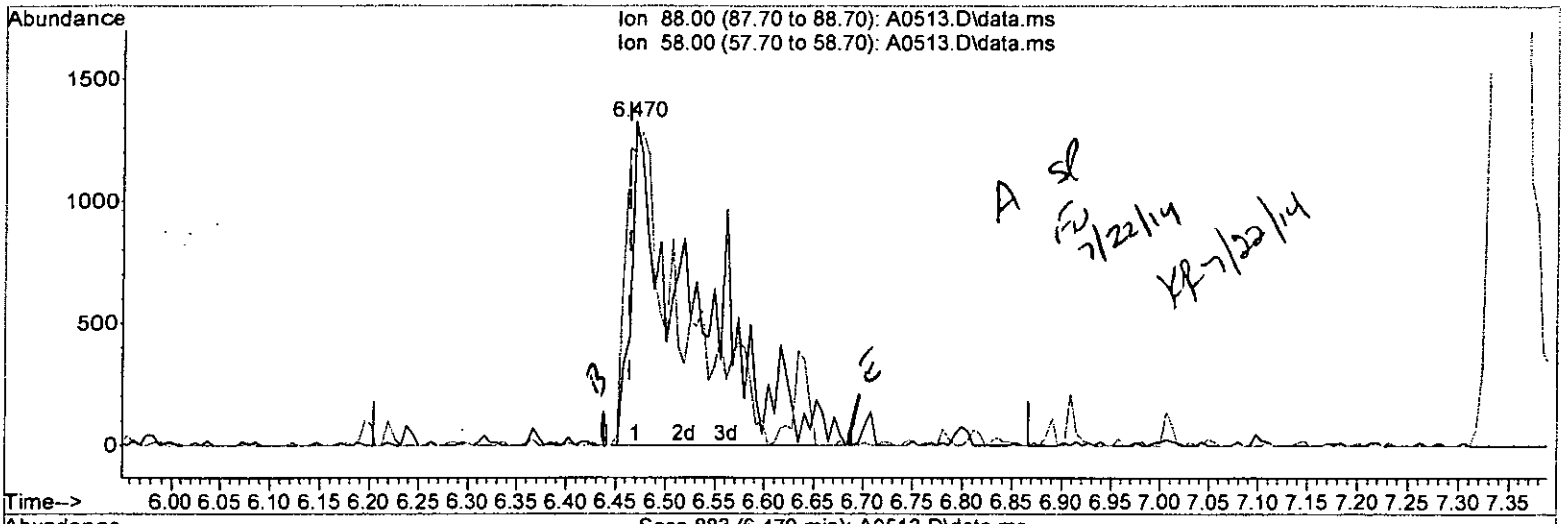
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	90.42
0.00	0.00	0.00
0.00	0.00	0.00

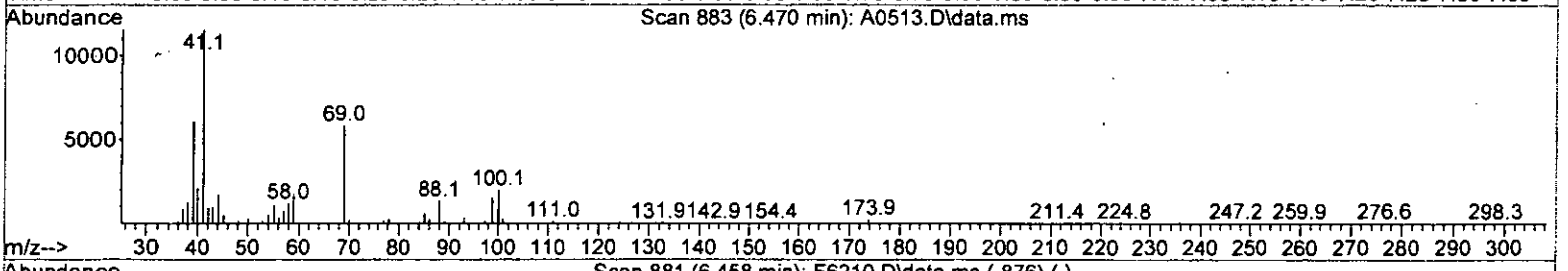
W072114.M Mon Jul 21 15:31:27 2014 MSVO10

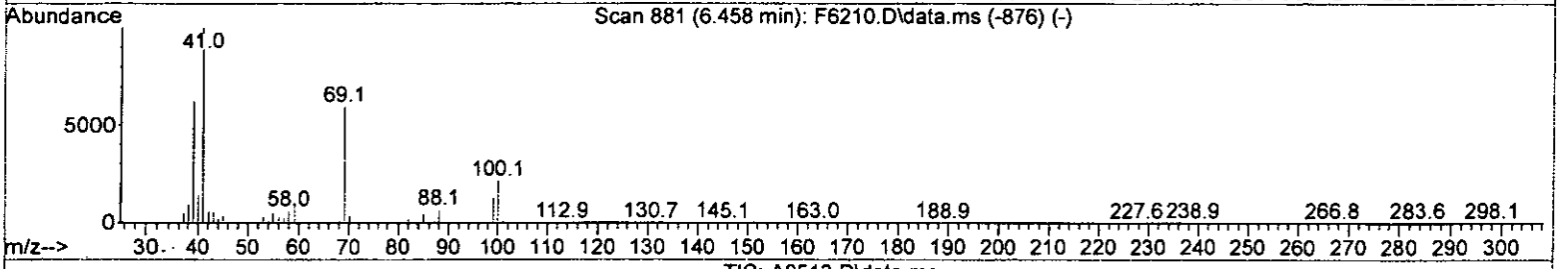
00243

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:36:27 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0513.D\data.ms

(58) 1,4-Dioxane

6.470min (+0.006) 113.50 ug/L m

response 5819

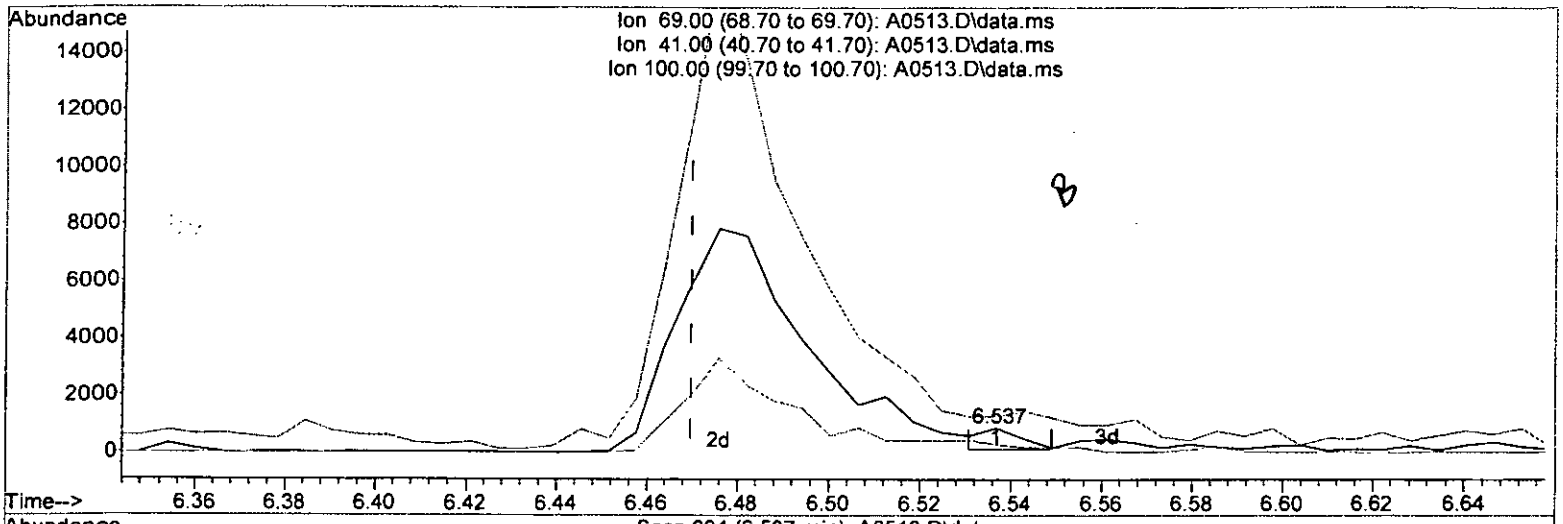
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	90.42
0.00	0.00	0.00
0.00	0.00	0.00

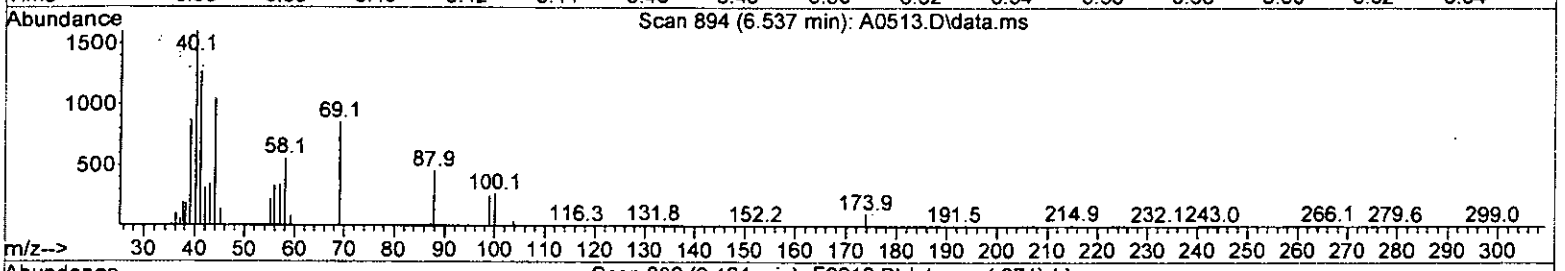
00244

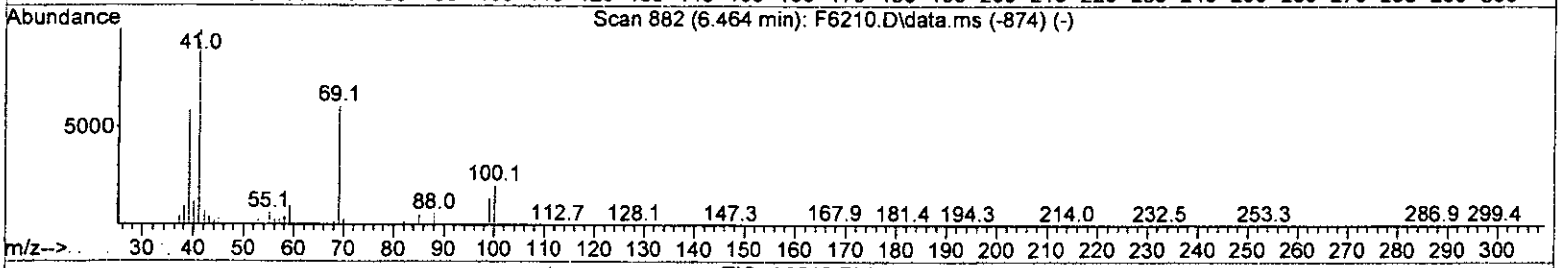
Quantitation Report (Qedit)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:36:27 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0513.D\data.ms

(59) Methyl Methacrylate

6.537min (+0.067) 0.10 ug/L

response 423

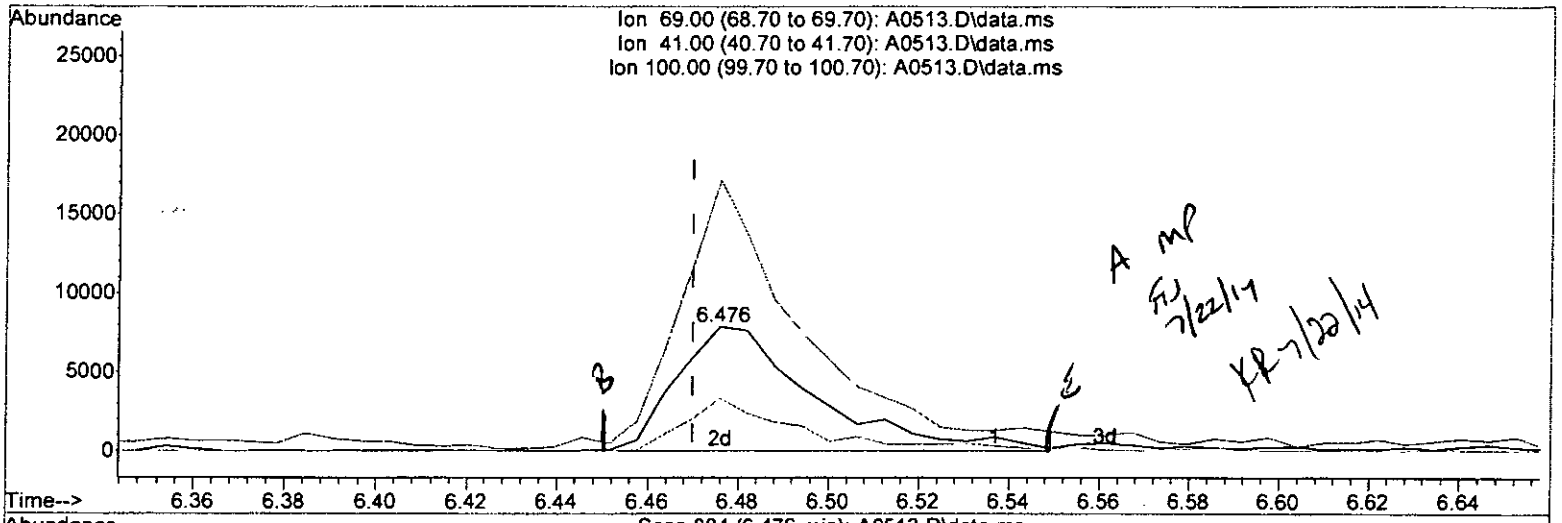
Ion	Exp%	Act%
69.00	100	100
41.00	128.90	148.83
100.00	36.90	31.57
0.00	0.00	0.00

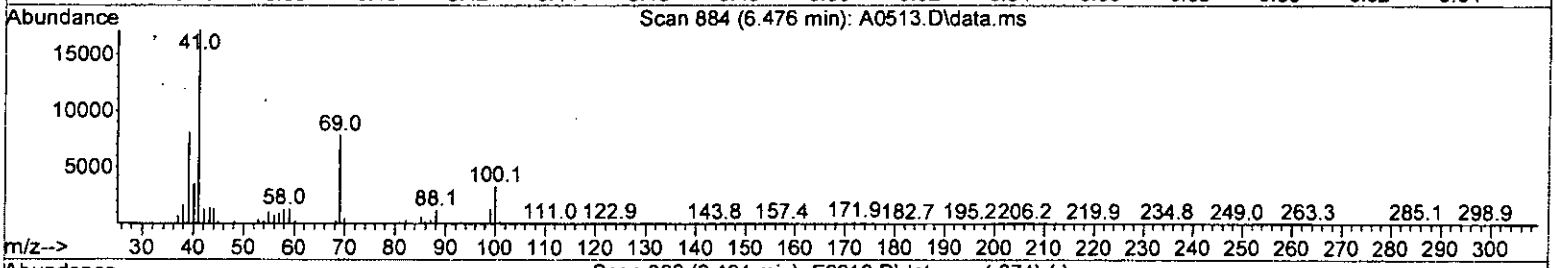
W072114.M Mon Jul 21 15:31:45 2014 MSVO10 Page: 1

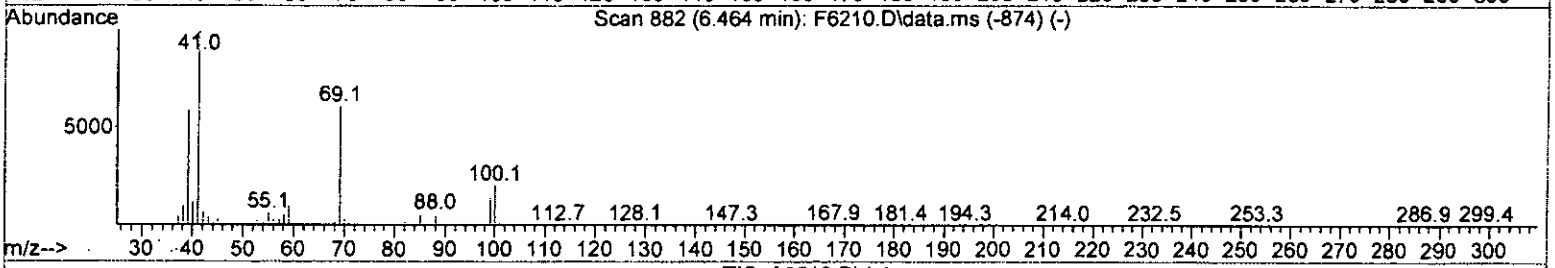
Quantitation Report (Qedit)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:36:27 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0513.D\data.ms

(59) Methyl Methacrylate

6.476min (+0.006) 3.90 ug/L m

response 16483

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	218.93#
100.00	36.90	42.06
0.00	0.00	0.00

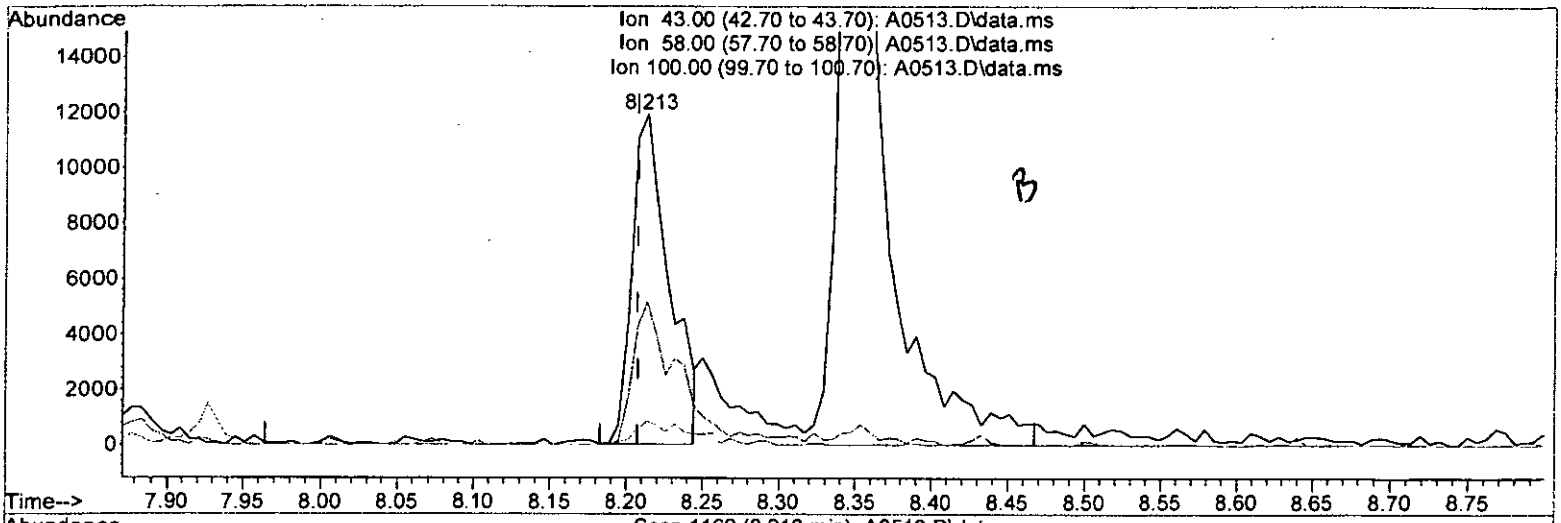
W072114.M Mon Jul 21 15:31:54 2014 MSVO10

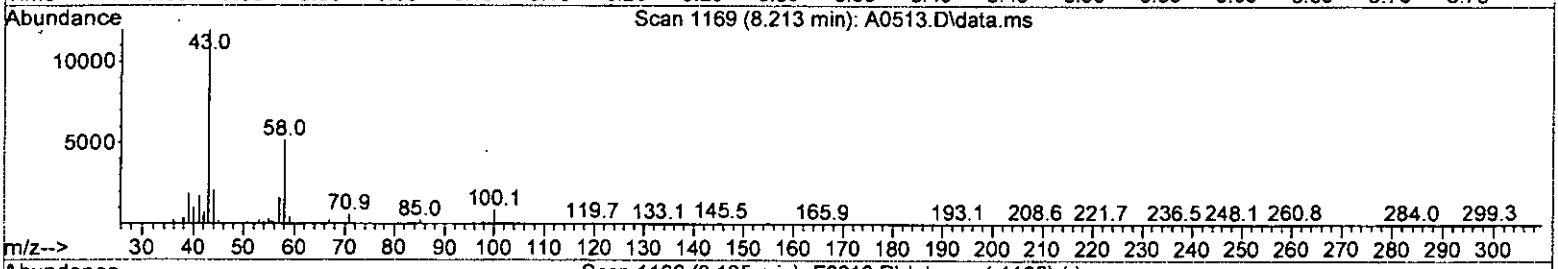
00246

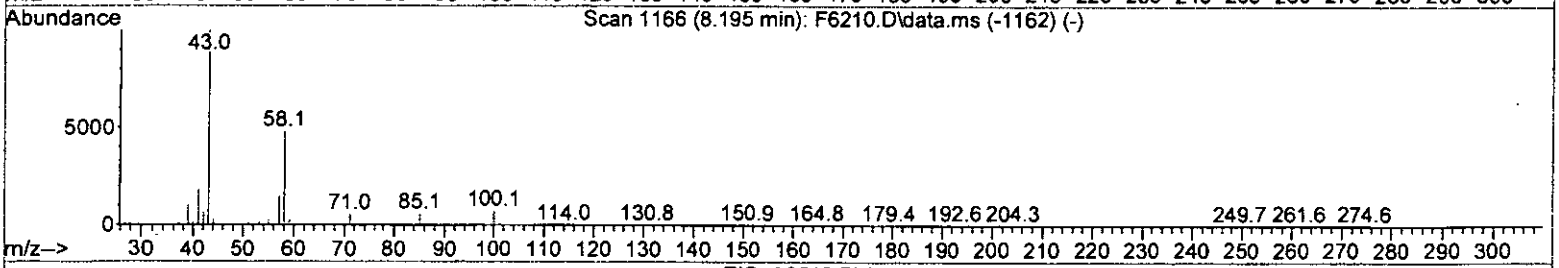
Quantitation Report (Qedit)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:36:27 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0513.D\data.ms

(73) 2-Hexanone (P)

8.213min (+0.006) 4.06 ug/L

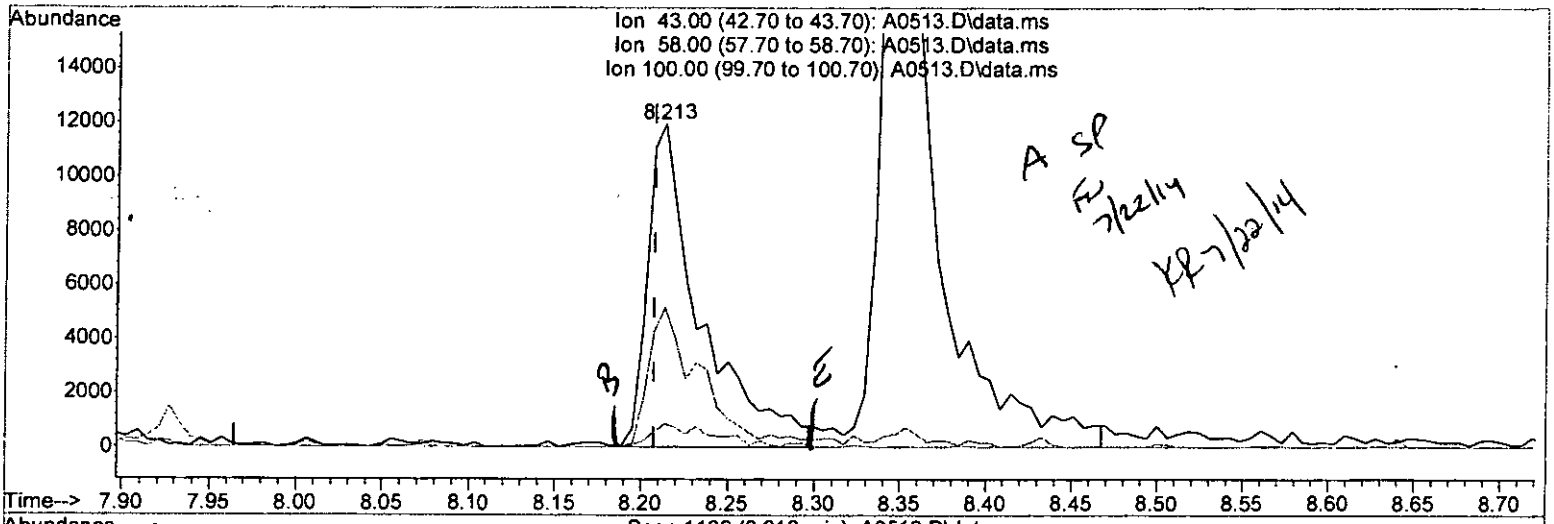
response 20043

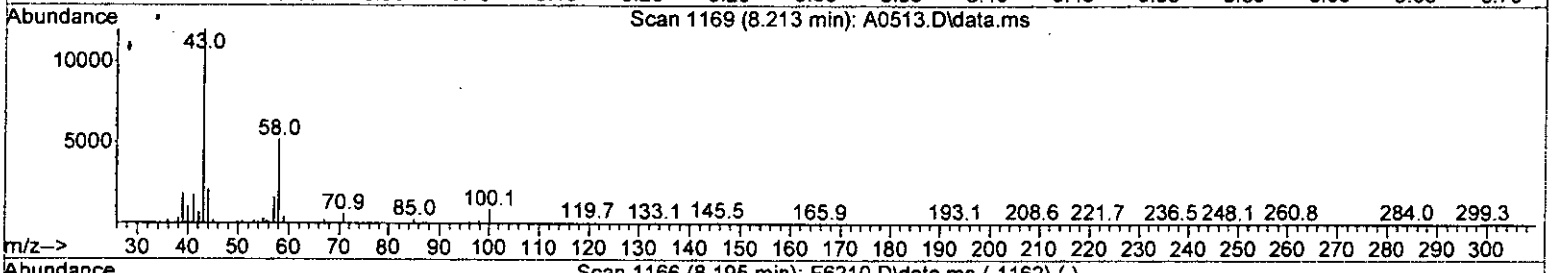
Ion	Exp%	Act%
43.00	100	100
58.00	50.80	43.02
100.00	10.10	7.05
0.00	0.00	0.00

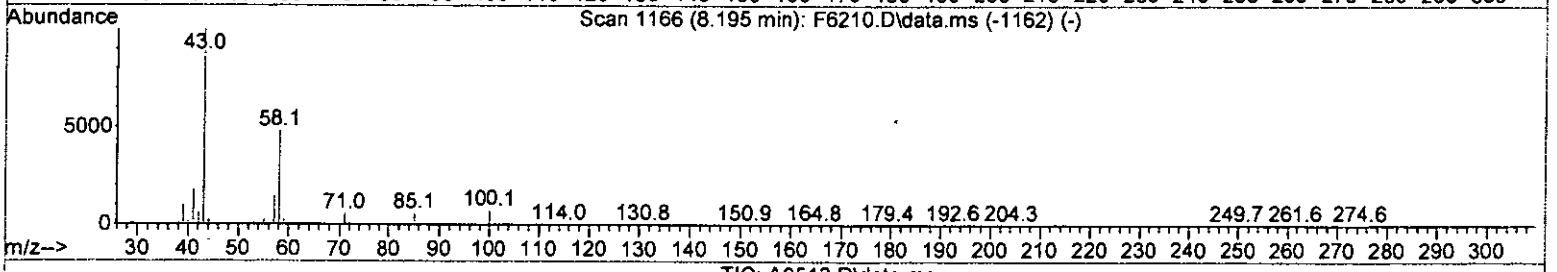
00247

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 13:36:27 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0513.D\data.ms

(73) 2-Hexanone (P)

8.213min (+0.006) 5.12 ug/L m

response 25252

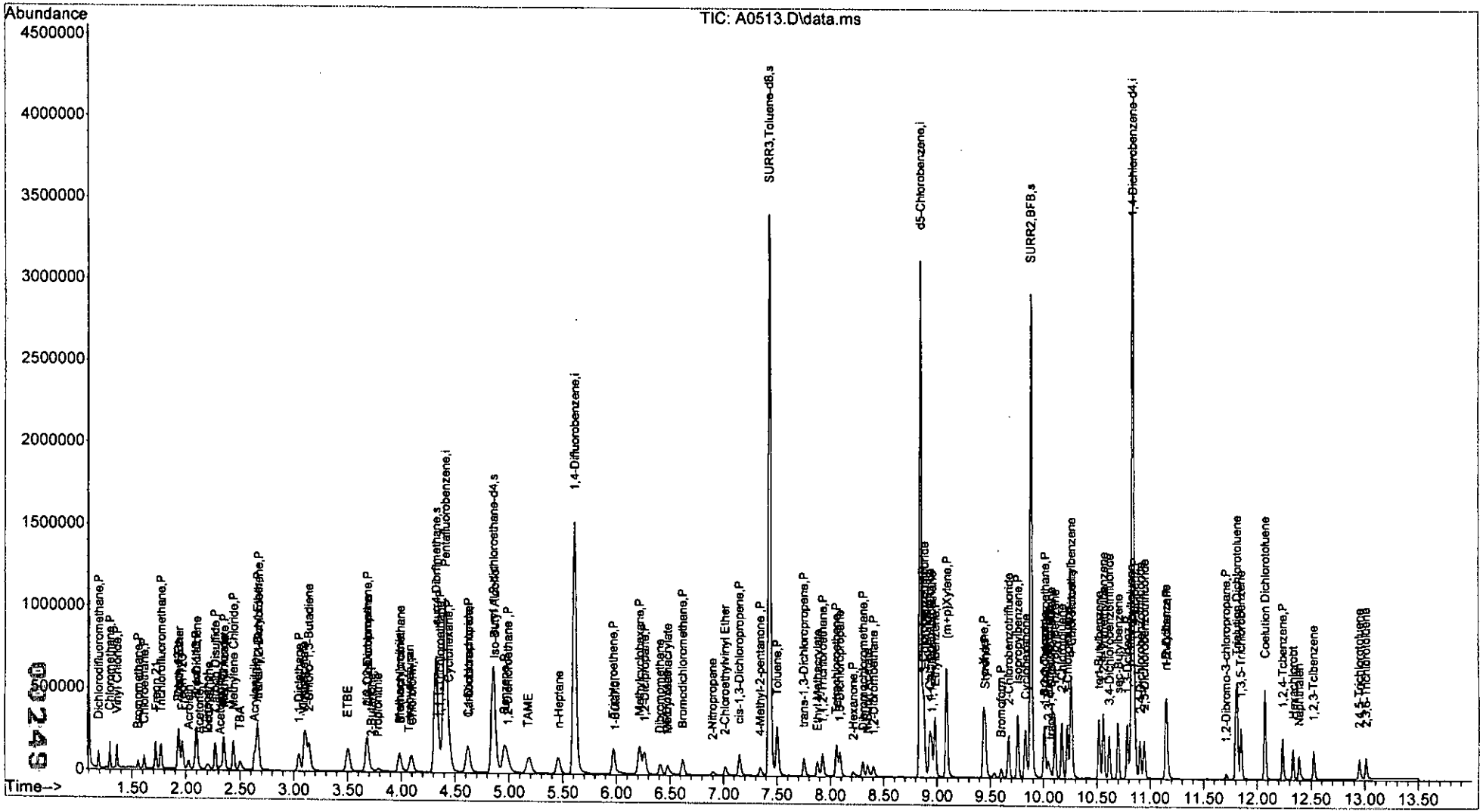
Ion	Exp%	Act%
43.00	100	100
58.00	50.80	43.02
100.00	10.10	7.05
0.00	0.00	0.00

00248

Quantitation Report (QT Reviewed)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0513.D Vial: 6
Acq On : 21 Jul 2014 1:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 16:22:02 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



W072114.M Tue Jul 22 08:52:37 2014 MSVO10

Sample : 10 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0514.D Vial: 7
Acq On : 21 Jul 2014 1:53 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:34:12 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration

FV 7/22/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	921376	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1385793	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1266668	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	685970	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	631137	76.42	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery =	152.84%#		
48) surr1,1,2-dichloroetha...	4.854	65	677471	82.76	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery =	165.52%#		
65) SURR3,Toluene-d8	7.427	98	2211126	69.31	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	138.62%#		
70) SURR2,BFB	9.878	95	870086	69.28	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	138.56%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.190	85	104190	12.09	ug/L	94
3) Chloromethane	1.294	50	141375	13.24	ug/L	98
4) Vinyl Chloride	1.361	62	118631	10.59	ug/L	99
5) Bromomethane	1.556	94	34536	8.54	ug/L	95
6) Chloroethane	1.611	64	62253	10.22	ug/L	88
7) Freon 21	1.721	67	170036	10.48	ug/L	99
8) Trichlorofluoromethane	1.770	101	129293	10.75	ug/L	99
9) Diethyl Ether	1.934	59	73589	10.65	ug/L #	78
10) Freon 123a	1.928	67	103181	9.88	ug/L	91
11) Freon 123	1.965	83	104630	9.41	ug/L	98
12) Acrolein	2.026	56	52503	49.07	ug/L	97
13) 1,1-Diclethene	2.099	96	58707	9.56	ug/L #	77
14) Freon 113	2.093	101	72170	10.30	ug/L	93
15) Acetone	2.123	43	30164	14.52	ug/L	99
16) 2-Propanol	2.196	45	81516	226.63	ug/L	96
17) Iodomethane	2.215	142	28095	4.37	ug/L	96
18) Carbon Disulfide	2.270	76	259118	9.91	ug/L	99
19) Acetonitrile	2.324	40	16761	60.07	ug/L	89
20) Allyl Chloride	2.349	76	39299	8.85	ug/L #	7
21) Methyl Acetate	2.355	43	59297	13.31	ug/L	89
22) Methylene Chloride	2.440	84	82135	8.88	ug/L #	77
23) TBA	2.501	59	97257	171.60	ug/L	65
24) Acrylonitrile	2.635	53	135423	59.67	ug/L	100
25) Methyl-t-Butyl Ether	2.660	73	183659	9.43	ug/L	90
26) trans-1,2-Dichloroethene	2.666	96	84655	10.85	ug/L #	86
28) 1,1-Diclethane	3.050	63	175839	10.96	ug/L	100
29) Vinyl Acetate	3.093	86	10752	9.46	ug/L #	1
30) DIPE	3.111	45	441073	13.58	ug/L	94
31) 2-Chloro-1,3-Butadiene	3.147	53	168015	10.89	ug/L	86
32) ETBE	3.501	59	286967	10.39	ug/L	89
33) 2,2-Dichloropropane	3.684	77	98220	8.36	ug/L	99
34) cis-1,2-Dichloroethene	3.678	96	93822	10.61	ug/L #	84
35) 2-Butanone	3.714	43	37066	13.09	ug/L	86
36) Propionitrile	3.775	54	40883	55.89	ug/L	98
37) Bromochloromethane	3.983	130	56348	10.86	ug/L #	74

00250

Quantitation Report (QT Reviewed)

Sample : 10 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0514.D Vial: 7
Acq On : 21 Jul 2014 1:53 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:34:12 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.977	67	19845	8.63	ug/L	#	31
39) Tetrahydrofuran	4.062	42	19308	11.45	ug/L	#	61
40) Chloroform	4.098	83	155755	10.86	ug/L		94
41) 1,1,1-Trichloroethane	4.355	97	120740	9.59	ug/L		88
42) TAME	5.184	73	192278	9.26	ug/L		88
44) Cyclohexane	4.440	41	114753	11.13	ug/L		87
46) Carbontetrachloride	4.611	121	32688	8.77	ug/L		89
47) 1,1-Dichloropropene	4.617	75	101099	9.02	ug/L		92
49) Benzene	4.958	78	345251	9.65	ug/L		88
50) 1,2-Dichloroethane	4.989	62	119098	10.15	ug/L		90
51) Iso-Butyl Alcohol	4.867	43	48616	167.26	ug/L		90
52) n-Heptane	5.452	43	113284	11.30	ug/L	#	78
53) 1-Butanol	5.964	56	52550m	386.23	ug/L		
54) Trichloroethene	5.970	130	91084	9.48	ug/L		91
55) Methylcyclohexane	6.214	55	115416	9.15	ug/L	#	72
56) 1,2-Diclpropane	6.257	63	96996	9.48	ug/L		98
57) Dibromomethane	6.403	93	46430	9.91	ug/L		93
58) 1,4-Dioxane	6.464	88	12384m	246.46	ug/L		
59) Methyl Methacrylate	6.470	69	35127	8.49	ug/L	#	65
60) Bromodichloromethane	6.616	83	106974	9.51	ug/L		95
61) 2-Nitropropane	6.897	41	23618	14.76	ug/L		85
62) 2-Chloroethylvinyl Ether	7.013	63	38653	8.19	ug/L		91
63) cis-1,3-Dichloropropene	7.147	75	113333	8.35	ug/L		97
64) 4-Methyl-2-pentanone	7.342	43	69717	10.21	ug/L		90
66) Toluene	7.500	91	347224	9.03	ug/L		99
67) trans-1,3-Dichloropropene	7.750	75	85906	7.74	ug/L		94
68) Ethyl Methacrylate	7.872	69	68722	7.96	ug/L	#	57
69) 1,1,2-Trichloroethane	7.927	97	63051	9.46	ug/L		91
72) Tetrachloroethene	8.055	164	68499	8.71	ug/L		94
73) 2-Hexanone	8.207	43	46361	9.36	ug/L		98
74) 1,3-Dichloropropane	8.085	76	106963	9.14	ug/L	#	78
75) Dibromochloromethane	8.305	129	73000	8.72	ug/L		97
76) N-Butyl Acetate	8.342	43	117501	9.02	ug/L		90
77) 1,2-Dibromoethane	8.402	107	58425	8.60	ug/L		88
78) 3-Chlorobenzotrifluoride	8.878	180	123086	8.45	ug/L		93
79) Chlorobenzene	8.866	112	239952	9.14	ug/L		99
80) 4-Chlorobenzotrifluoride	8.927	180	116985	8.68	ug/L		97
81) 1,1,1,2-Tetrachloroethane	8.945	131	85303	8.92	ug/L		97
82) Ethylbenzene	8.982	106	120391	8.88	ug/L	#	87
83) (m+p)Xylene	9.085	106	299073	18.01	ug/L		97
84) o-Xylene	9.433	106	145762	8.69	ug/L		96
85) Styrene	9.451	104	245705	8.67	ug/L		96
86) Bromoform	9.597	173	42572	8.49	ug/L		90
87) 2-Chlorobenzotrifluoride	9.671	180	129130	8.95	ug/L		89
88) Isopropylbenzene	9.756	105	353731	8.62	ug/L		98
89) Cyclohexanone	9.823	55	253052	255.64	ug/L		88
90) trans-1,4-Dichloro-2-B...	10.061	53	16823	7.72	ug/L	#	70
92) 1,1,2,2-Tetrachloroethane	10.012	83	76869	9.74	ug/L		98
93) Bromobenzene	10.006	156	101855	8.90	ug/L		95
94) 1,2,3-Trichloropropane	10.042	110	19707	9.39	ug/L	#	90
95) n-Propylbenzene	10.103	91	430055	9.24	ug/L		99
96) 2-Chlorotoluene	10.170	91	266087	9.31	ug/L		94

Quantitation Report (QT Reviewed)

Sample : 10 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0514.D Vial: 7
Acq On : 21 Jul 2014 1:53 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:34:12 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration

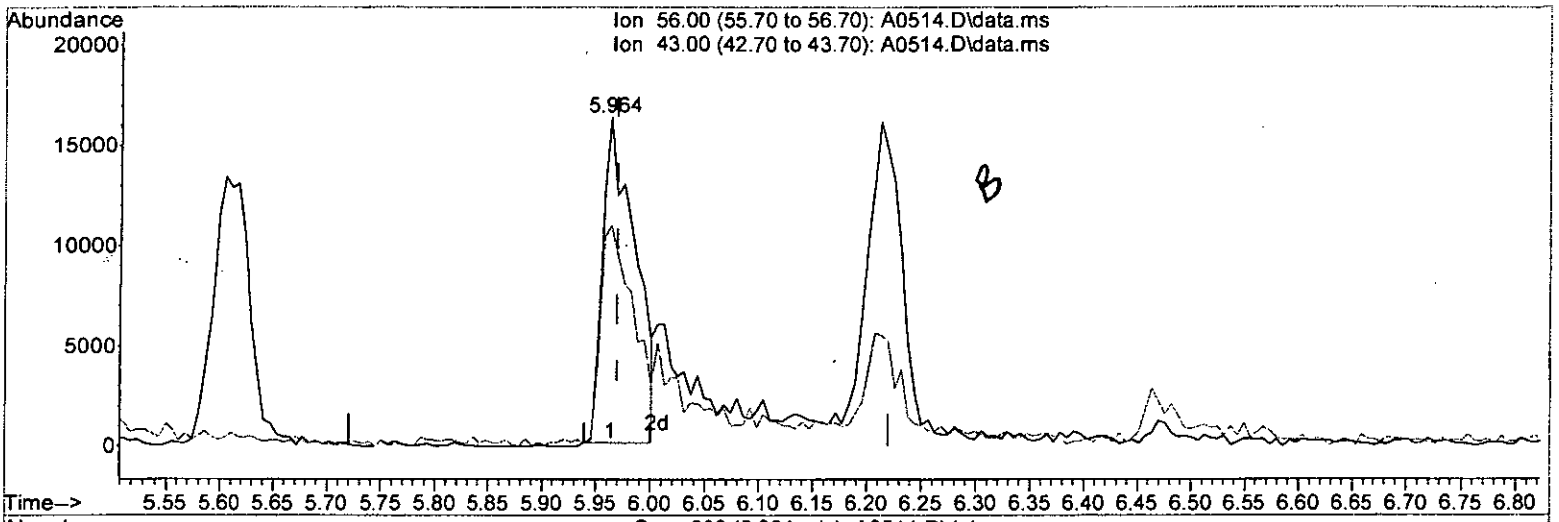
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
97)	3-Chlorotoluene	10.219	91	294016	10.15	ug/L		97
98)	4-Chlorotoluene	10.262	91	304788	8.80	ug/L		93
99)	1,3,5-Trimethylbenzene	10.256	105	302748	8.86	ug/L		96
100)	tert-Butylbenzene	10.518	119	247046	8.70	ug/L		97
101)	1,2,4-Trimethylbenzene	10.561	105	316834	9.17	ug/L		99
102)	3,4-Dichlorobenzotrifl...	10.615	214	87518	8.54	ug/L		100
103)	sec-Butylbenzene	10.701	105	351518	8.98	ug/L		98
104)	p-Isopropyltoluene	10.817	119	313952	9.17	ug/L		98
105)	1,3-Dclbenz	10.786	146	197860	9.35	ug/L		97
106)	1,4-Dclbenz	10.853	146	203572	9.49	ug/L		96
107)	2,4-Dichlorobenzotrifl...	10.902	214	81472	8.87	ug/L		93
108)	2,5-Dichlorobenzotrifl...	10.945	214	91215	8.64	ug/L		95
109)	n-Butylbenzene	11.146	91	266276	9.00	ug/L		97
110)	1,2-Dclbenz	11.152	146	184491	9.53	ug/L		98
111)	1,2-Dibromo-3-chloropr...	11.707	157	10748	8.86	ug/L	#	82
112)	Trielution Dichlorotol...	11.804	125	482469	30.84	ug/L		97
113)	1,3,5-Trichlorobenzene	11.847	180	130979	9.96	ug/L		99
114)	Coelution Dichlorotoluene	12.066	125	343281	21.61	ug/L		95
115)	1,2,4-Tcbenzene	12.237	180	105016	9.79	ug/L		96
116)	Hexachlorobt	12.335	225	41434	8.06	ug/L		97
117)	Naphthalen	12.383	128	176873	10.76	ug/L		100
118)	1,2,3-Tclbenzene	12.524	180	78405	10.75	ug/L		97
119)	2,4,5-Trichlorotoluene	12.944	159	49008	12.24	ug/L		94
120)	2,3,6-Trichlorotoluene	13.011	159	49047	12.36	ug/L		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Sample : 10 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0514.D Vial: 7
Acq On : 21 Jul 2014 1:53 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 14:06:48 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



TIC: A0514.D\data.ms

(53) 1-Butanol

5.964min (-0.006) 246.99 ug/L

response 33606

Ion	Exp%	Act%
56.00	100	100
43.00	56.20	67.05
0.00	0.00	0.00
0.00	0.00	0.00

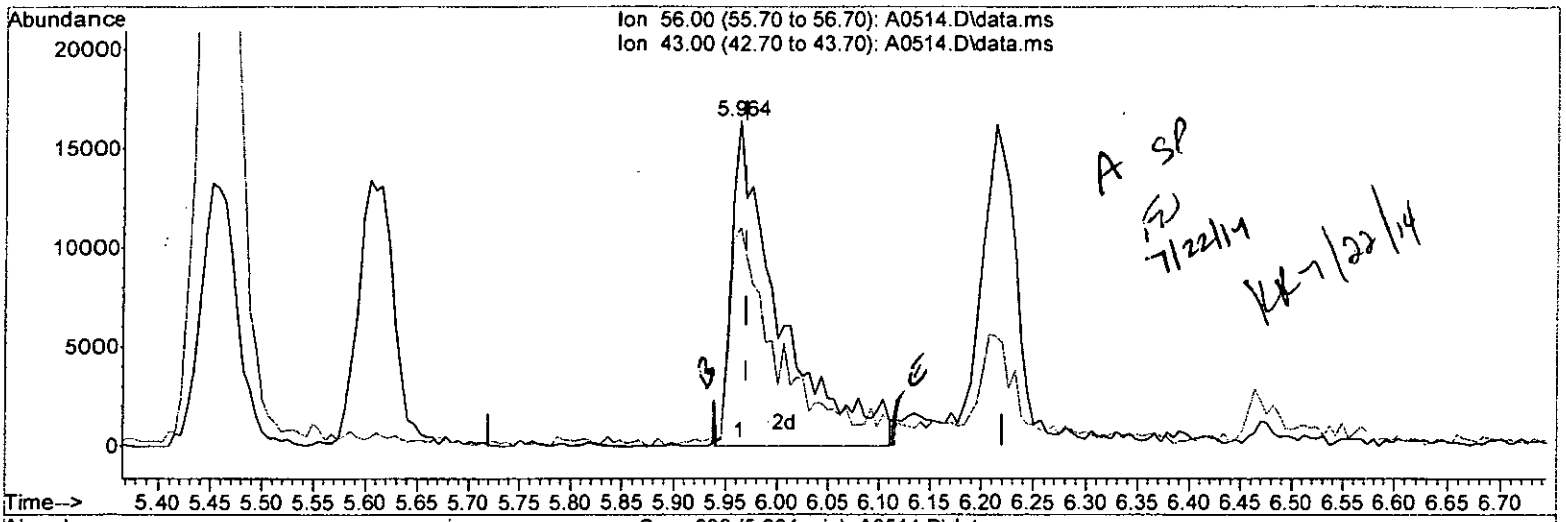
00253

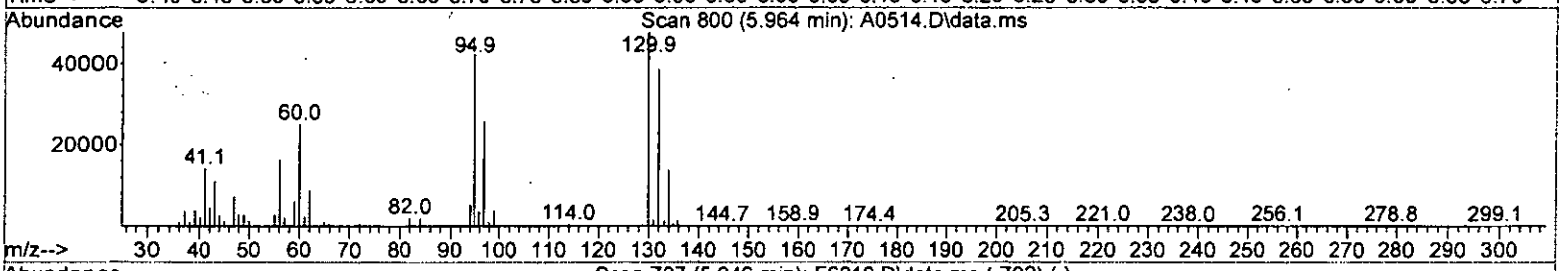
W072114.M Mon Jul 21 15:33:43 2014 MSVO10 Page: 1

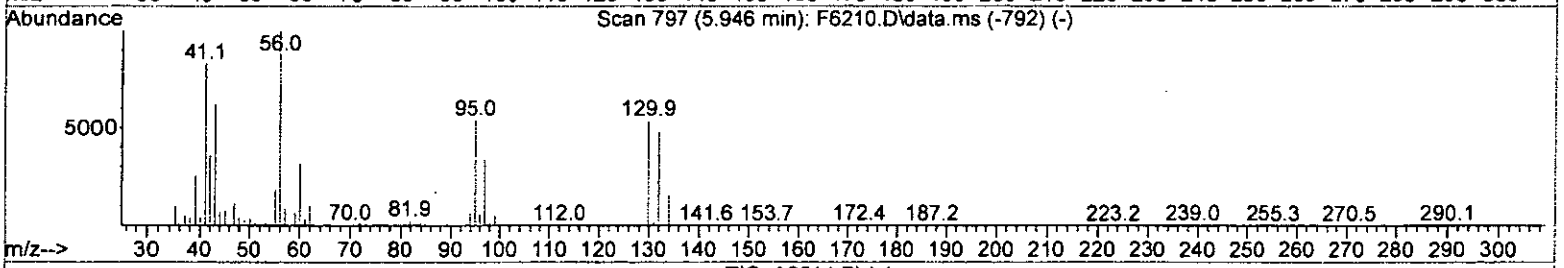
Quantitation Report (Qedit)

Sample : 10 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0514.D Vial: 7
Acq On : 21 Jul 2014 1:53 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 14:06:48 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0514.D\data.ms

(53) 1-Butanol

5.964min (-0.006) 386.23 ug/L m

response 52550

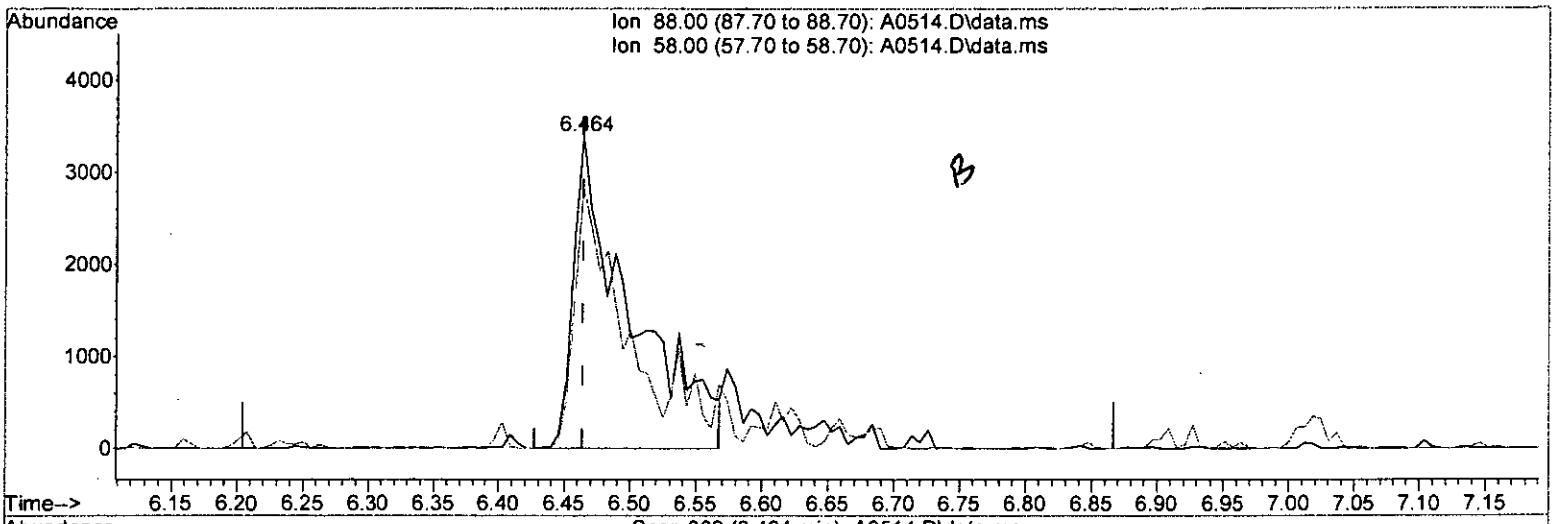
Ion	Exp%	Act%
56.00	100	100
43.00	56.20	67.05
0.00	0.00	0.00
0.00	0.00	0.00

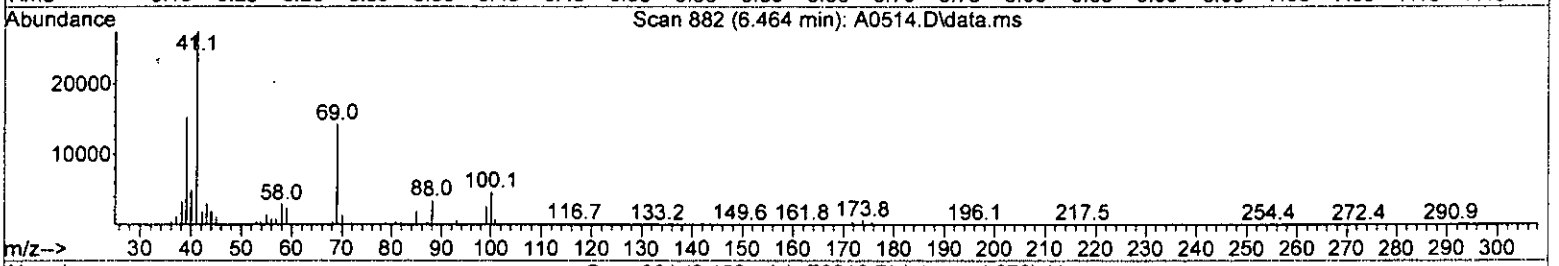
W072114.M Mon Jul 21 15:33:56 2014 MSVO10 Page: 1

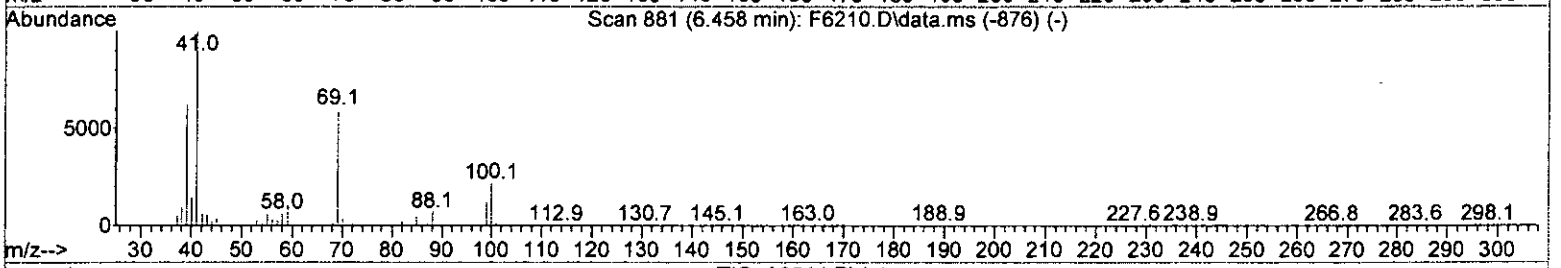
Quantitation Report (Qedit)

Sample : 10 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0514.D Vial: 7
Acq On : 21 Jul 2014 1:53 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 14:06:48 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0514.D\data.ms

(58) 1,4-Dioxane

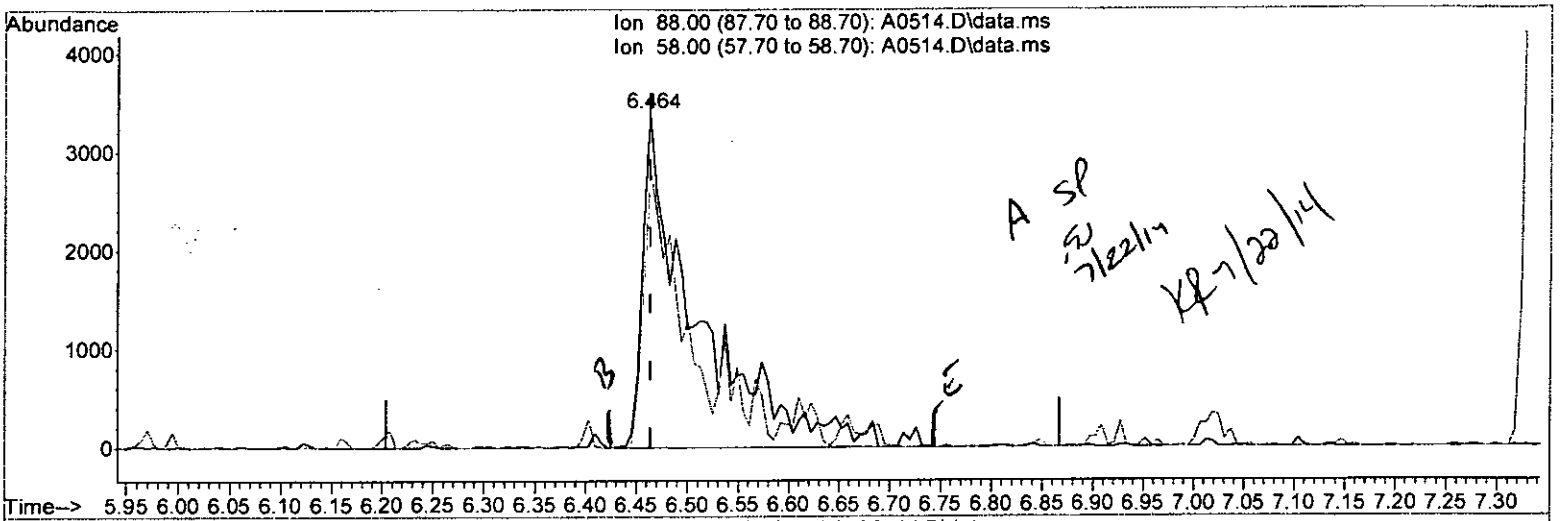
6.464min (+0.000) 203.67 ug/L

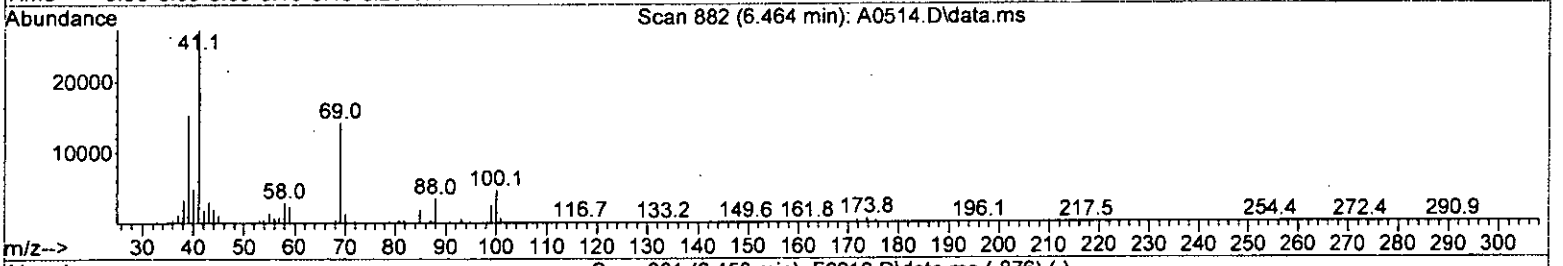
response 10234

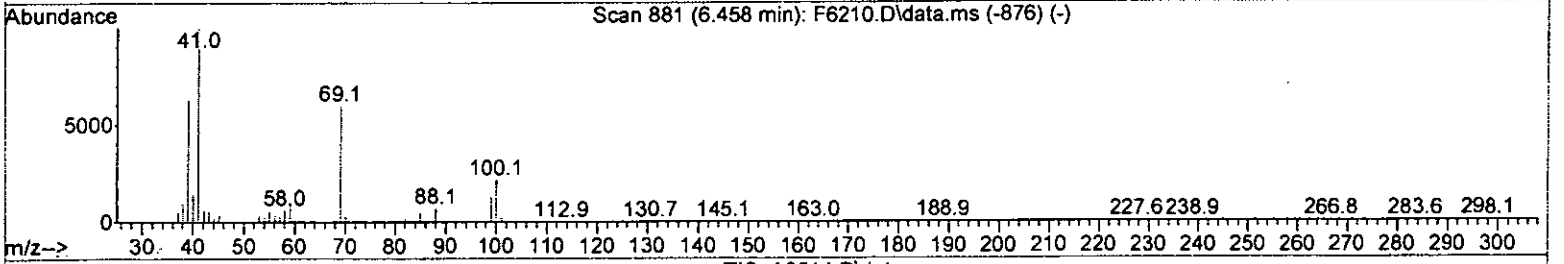
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	83.66
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 10 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0514.D Vial: 7
Acq On : 21 Jul 2014 1:53 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 14:06:48 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0514.D\data.ms

(58) 1,4-Dioxane

6.464min (+0.000) 246.46 ug/L m

response 12384

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	83.66
0.00	0.00	0.00
0.00	0.00	0.00

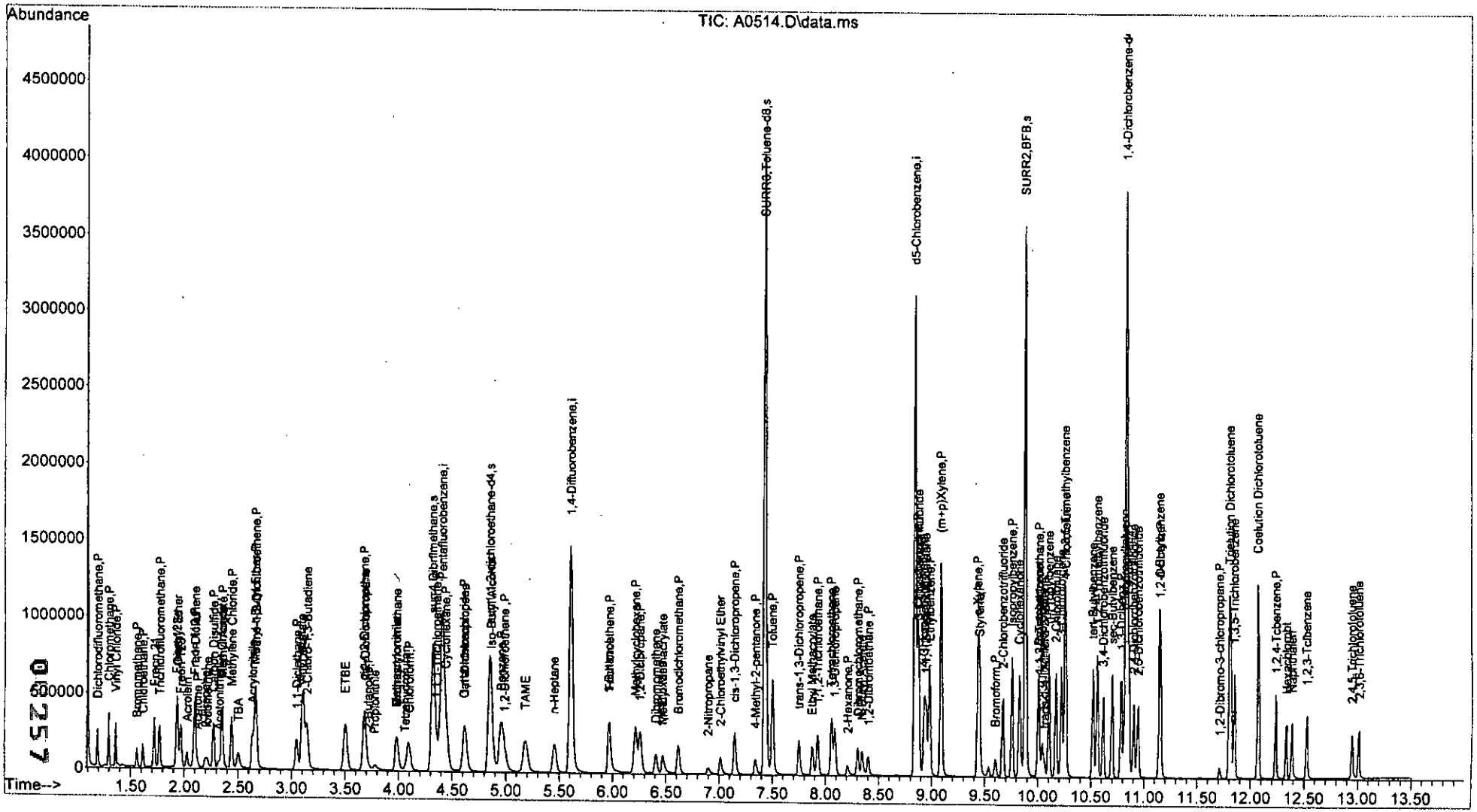
W072114.M Mon Jul 21 15:34:19 2014 MSVO10

00256

Quantitation Report (QT Reviewed)

Sample : 10 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0514.D Vial: 7
Acq On : 21 Jul 2014 1:53 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:34:12 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



W072114.M Tue Jul 22 08:52:50 2014 MSVO10

Quantitation Report (QT Reviewed)

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0515.D Vial: 8
Acq On : 21 Jul 2014 2:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:37:10 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration

FW 7/22/14

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	949160	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1398556	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1270603	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	701453	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.324	113	454971	54.58	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 109.16%				
48) surr1,1,2-dichloroetha...	4.854	65	477641	57.82	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 115.64%				
65) SURR3,Toluene-d8	7.427	98	1621400	50.36	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.72%				
70) SURR2,BFB	9.878	95	630157	49.72	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.44%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.190	85	545182	61.41	ug/L		97
3) Chloromethane	1.294	50	701881	63.81	ug/L		100
4) Vinyl Chloride	1.361	62	624729	54.13	ug/L		99
5) Bromomethane	1.556	94	193829	46.51	ug/L		98
6) Chloroethane	1.611	64	315747	50.30	ug/L		93
7) Freon 21	1.721	67	893319	53.43	ug/L		99
8) Trichlorofluoromethane	1.770	101	701988	56.65	ug/L		99
9) Diethyl Ether	1.934	59	356589	50.08	ug/L	#	80
10) Freon 123a	1.928	67	579067	53.82	ug/L		91
11) Freon 123	1.965	83	591348	51.61	ug/L		98
12) Acrolein	2.026	56	287632	260.96	ug/L		100
13) 1,1-Diclethene	2.099	96	314561	49.73	ug/L	#	77
14) Freon 113	2.093	101	401072	55.58	ug/L		99
15) Acetone	2.123	43	130151	60.81	ug/L		94
16) 2-Propanol	2.196	45	423594	1143.17	ug/L		98
17) Iodomethane	2.215	142	303620	45.84	ug/L		100
18) Carbon Disulfide	2.269	76	1385880	51.47	ug/L		98
19) Acetonitrile	2.318	40	75724	263.45	ug/L		94
20) Allyl Chloride	2.349	76	220579	48.20	ug/L	#	27
21) Methyl Acetate	2.355	43	308066	67.13	ug/L		87
22) Methylene Chloride	2.440	84	412593	43.29	ug/L	#	73
23) TBA	2.501	59	509556	872.76	ug/L		68
24) Acrylonitrile	2.629	53	672980	287.84	ug/L		100
25) Methyl-t-Butyl Ether	2.660	73	958922	47.78	ug/L		90
26) trans-1,2-Dichloroethene	2.666	96	419320m	52.16	ug/L		
28) 1,1-Diclethane	3.044	63	890219	53.87	ug/L		95
29) Vinyl Acetate	3.092	86	56045	47.88	ug/L	#	1
30) DIPE	3.105	45	2169226	64.85	ug/L		92
31) 2-Chloro-1,3-Butadiene	3.141	53	920805	57.91	ug/L		81
32) ETBE	3.501	59	1410811	49.59	ug/L		92
33) 2,2-Dichloropropane	3.678	77	570611	47.14	ug/L		96
34) cis-1,2-Dichloroethene	3.678	96	462521	50.75	ug/L	#	77
35) 2-Butanone	3.696	43	208936	71.60	ug/L		90
36) Propionitrile	3.769	54	231929	307.78	ug/L		95
37) Bromochloromethane	3.983	130	275977	51.62	ug/L	#	78

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0515.D Vial: 8
Acq On : 21 Jul 2014 2:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:37:10 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.970	67	112594	47.52	ug/L	#	40
39) Tetrahydrofuran	4.056	42	108322	62.38	ug/L		72
40) Chloroform	4.092	83	746181	50.51	ug/L		92
41) 1,1,1-Trichloroethane	4.361	97	636305	49.06	ug/L		94
42) TAME	5.184	73	981058	45.85	ug/L		89
44) Cyclohexane	4.446	41	652292	62.68	ug/L		92
46) Carbontetrachloride	4.617	121	173149	46.04	ug/L		98
47) 1,1-Dichloropropene	4.617	75	533535	47.17	ug/L		99
49) Benzene	4.958	78	1706240	47.27	ug/L		90
50) 1,2-Dichloroethane	4.988	62	588037	49.65	ug/L		92
51) Iso-Butyl Alcohol	4.860	43	287576	980.36	ug/L		99
52) n-Heptane	5.458	43	675415	66.73	ug/L		82
53) 1-Butanol	5.946	56	308102	2243.80	ug/L		85
54) Trichloroethene	5.970	130	464772	47.94	ug/L		97
55) Methylcyclohexane	6.214	55	692960	54.44	ug/L	#	77
56) 1,2-Diclpropane	6.257	63	497491	48.16	ug/L		97
57) Dibromomethane	6.403	93	231776	49.04	ug/L		95
58) 1,4-Dioxane	6.458	88	55119m	1086.93	ug/L		
59) Methyl Methacrylate	6.464	69	187676	44.94	ug/L	#	49
60) Bromodichloromethane	6.616	83	542774	47.83	ug/L		97
61) 2-Nitropropane	6.897	41	129763	80.33	ug/L		92
62) 2-Chloroethylvinyl Ether	7.006	63	232844	48.91	ug/L		92
63) cis-1,3-Dichloropropene	7.147	75	615269	44.94	ug/L		99
64) 4-Methyl-2-pentanone	7.336	43	393405	57.07	ug/L		91
66) Toluene	7.500	91	1776654	45.79	ug/L		99
67) trans-1,3-Dichloropropene	7.750	75	487933	43.54	ug/L		95
68) Ethyl Methacrylate	7.872	69	388954	44.64	ug/L	#	64
69) 1,1,2-Trichloroethane	7.927	97	311576	46.30	ug/L		97
72) Tetrachloroethene	8.055	164	362185	45.91	ug/L		93
73) 2-Hexanone	8.195	43	289001	58.15	ug/L		85
74) 1,3-Dichloropropane	8.085	76	543624m	46.30	ug/L		
75) Dibromochloromethane	8.299	129	404866	48.21	ug/L		98
76) N-Butyl Acetate	8.335	43	671394	51.37	ug/L		91
77) 1,2-Dibromoethane	8.396	107	318006	46.65	ug/L		97
78) 3-Chlorobenzotrifluoride	8.878	180	707477	48.41	ug/L		97
79) Chlorobenzene	8.866	112	1203777	45.69	ug/L		96
80) 4-Chlorobenzotrifluoride	8.927	180	646387	47.78	ug/L		96
81) 1,1,1,2-Tetrachloroethane	8.945	131	438317	45.71	ug/L		97
82) Ethylbenzene	8.976	106	616548	45.32	ug/L		96
83) (m+p)Xylene	9.085	106	1536086	92.21	ug/L		99
84) o-Xylene	9.433	106	768843	45.71	ug/L		94
85) Styrene	9.445	104	1299709	45.75	ug/L		97
86) Bromoform	9.597	173	227367	45.21	ug/L		99
87) 2-Chlorobenzotrifluoride	9.670	180	695435	48.07	ug/L		95
88) Isopropylbenzene	9.756	105	1923423	46.72	ug/L		99
89) Cyclohexanone	9.823	55	1284304	1293.43	ug/L		94
90) trans-1,4-Dichloro-2-B...	10.061	53	103183	47.20	ug/L		84
92) 1,1,2,2-Tetrachloroethane	10.012	83	372312	46.14	ug/L		96
93) Bromobenzene	10.000	156	515276	44.02	ug/L		96
94) 1,2,3-Trichloropropane	10.042	110	99478	46.36	ug/L		98
95) n-Propylbenzene	10.103	91	2298713	48.30	ug/L		99
96) 2-Chlorotoluene	10.170	91	1355725	46.38	ug/L		94

Quantitation Report (QT Reviewed)

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0515.D Vial: 8
Acq On : 21 Jul 2014 2:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:37:10 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration

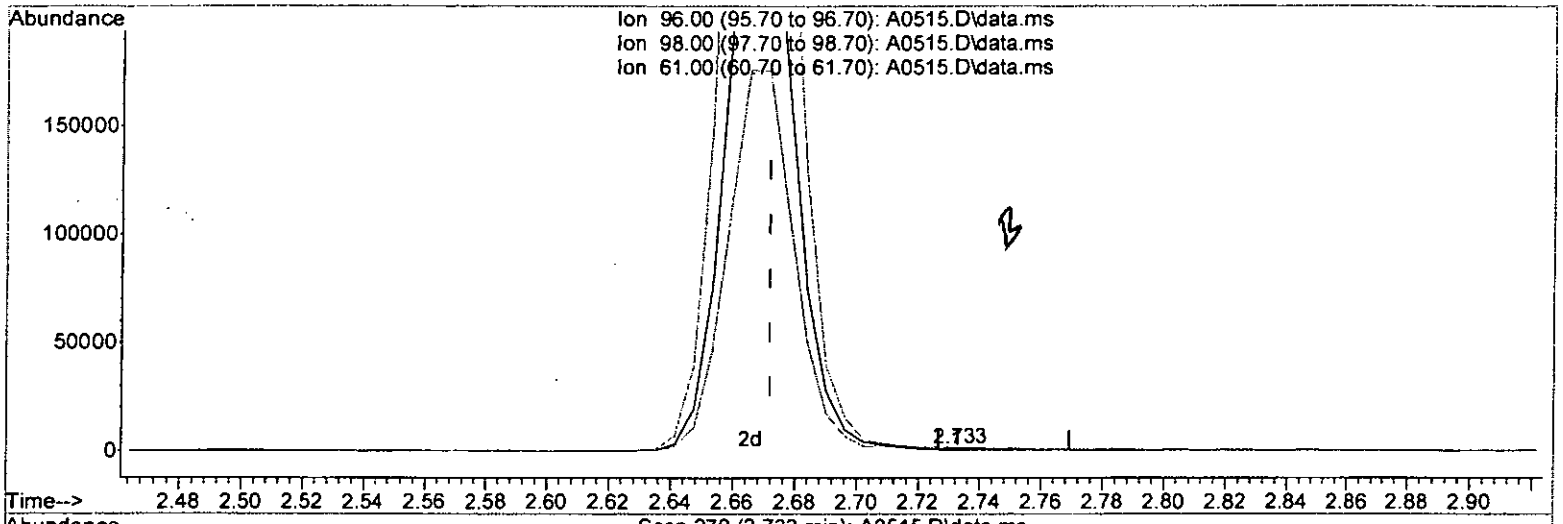
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	1476462	49.85	ug/L	96
98)	4-Chlorotoluene	10.262	91	1595818	45.07	ug/L	91
99)	1,3,5-Trimethylbenzene	10.250	105	1631363	46.68	ug/L	97
100)	tert-Butylbenzene	10.518	119	1373703	47.32	ug/L	100
101)	1,2,4-Trimethylbenzene	10.561	105	1666349	47.16	ug/L	96
102)	3,4-Dichlorobenzotrifl...	10.615	214	492586	47.03	ug/L	96
103)	sec-Butylbenzene	10.701	105	1959431	48.97	ug/L	98
104)	p-Isopropyltoluene	10.817	119	1715812	49.03	ug/L	97
105)	1,3-Dclbenz	10.780	146	1017540	47.00	ug/L	98
106)	1,4-Dclbenz	10.853	146	1037790	47.32	ug/L	98
107)	2,4-Dichlorobenzotrifl...	10.902	214	450439	47.96	ug/L	98
108)	2,5-Dichlorobenzotrifl...	10.945	214	510594	47.29	ug/L	98
109)	n-Butylbenzene	11.140	91	1484071	49.07	ug/L	99
110)	1,2-Dclbenz	11.152	146	944412	47.73	ug/L	98
111)	1,2-Dibromo-3-chloropr...	11.707	157	63391	51.08	ug/L	95
112)	Trielution Dichlorotol...	11.798	125	2617606	163.65	ug/L	90
113)	1,3,5-Trichlorobenzene	11.847	180	704265	52.35	ug/L	94
114)	Coelution Dichlorotoluene	12.066	125	1819179	111.99	ug/L	96
115)	1,2,4-Tcbenzene	12.231	180	551250	50.24	ug/L	93
116)	Hexachlorobt	12.329	225	223256	42.47	ug/L	99
117)	Naphthalen	12.377	128	1016613	60.48	ug/L	99
118)	1,2,3-Tclbenzene	12.517	180	420593	56.38	ug/L	99
119)	2,4,5-Trichlorotoluene	12.944	159	276281	67.45	ug/L	96
120)	2,3,6-Trichlorotoluene	13.005	159	259500	63.93	ug/L	99

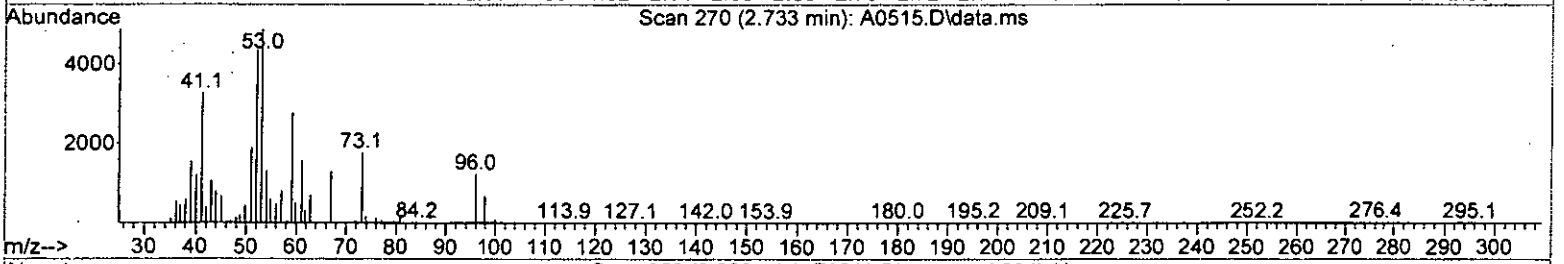
(#) = qualifier out of range (m) = manual integration (+) = signals summed

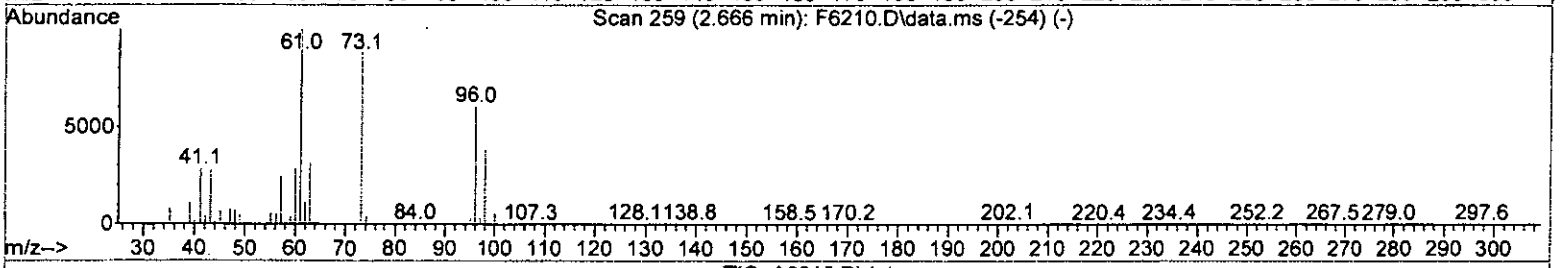
Quantitation Report (Qedit)

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0515.D Vial: 8
Acq On : 21 Jul 2014 2:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 14:37:05 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0515.D\data.ms

(26) trans-1,2-Dichloroethene (P)

2.733min (+0.061) 0.15 ug/L

response 1179

Ion	Exp%	Act%
96.00	100	100
98.00	64.00	54.69
61.00	144.30	126.13
0.00	0.00	0.00

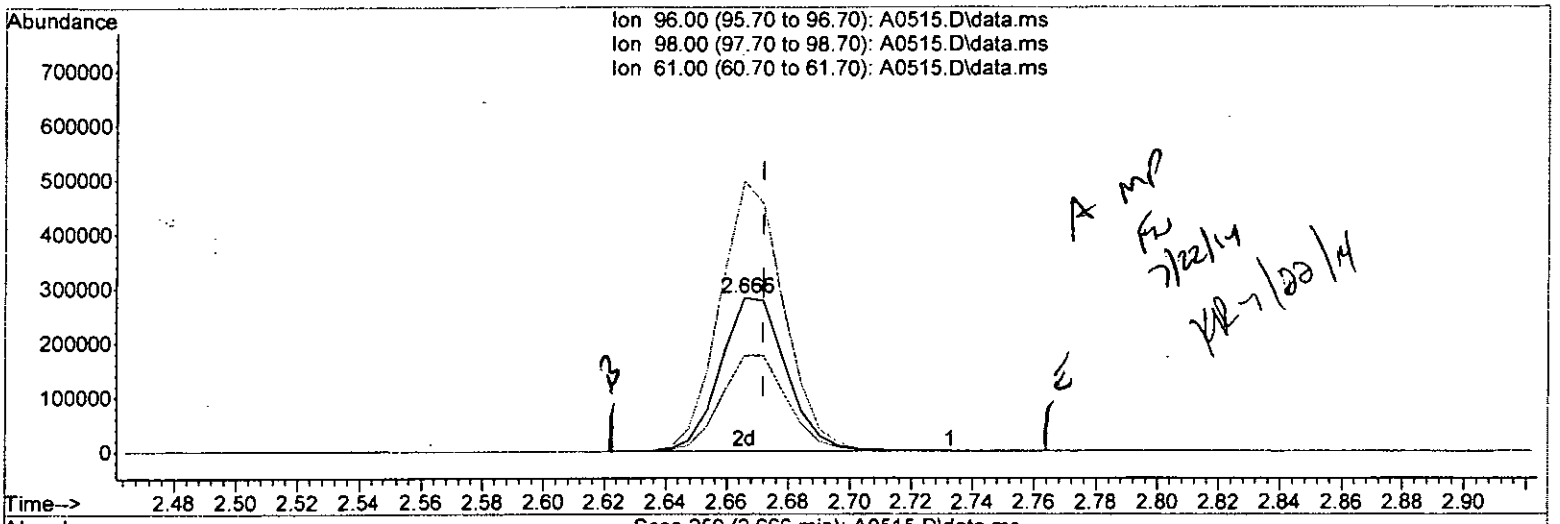
00261

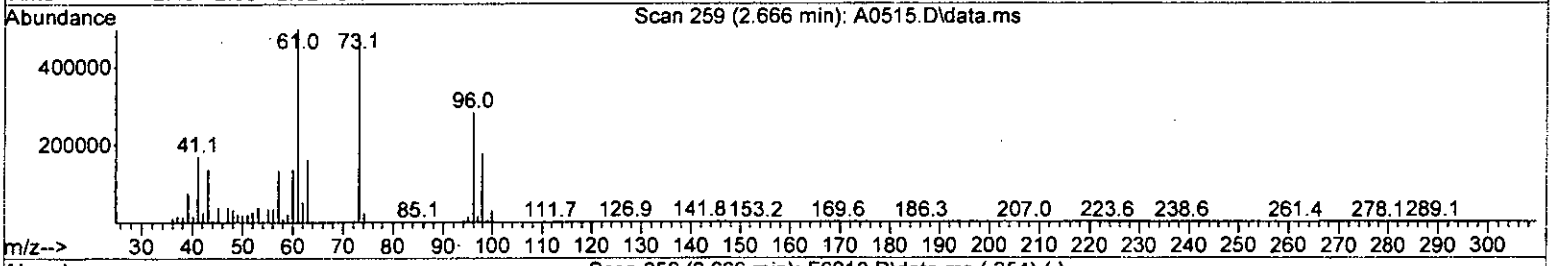
W072114.M Mon Jul 21 15:36:06 2014 MSVO10

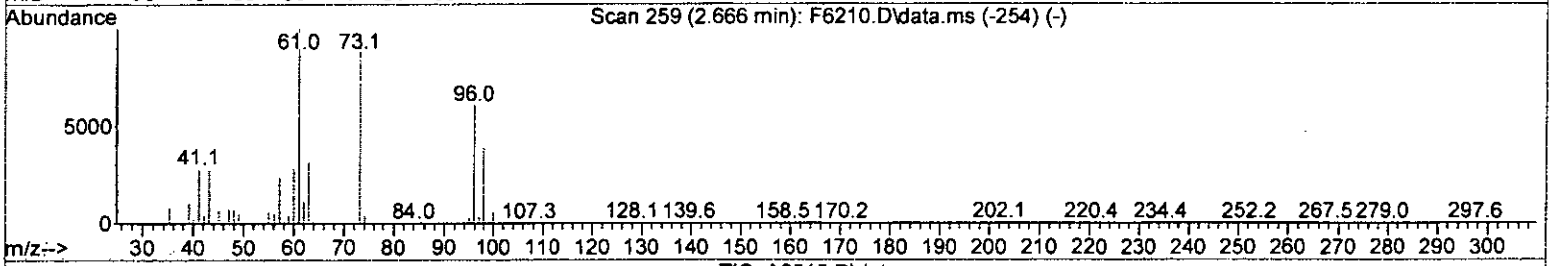
Quantitation Report (Qedit)

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0515.D Vial: 8
Acq On : 21 Jul 2014 2:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 14:37:05 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0515.D\data.ms

(26) trans-1,2-Dichloroethene (P)

2.666min (-0.006) 52.16 ug/L m

response 419320

Ion	Exp%	Act%
96.00	100	100
98.00	64.00	62.55
61.00	144.30	176.87#
0.00	0.00	0.00

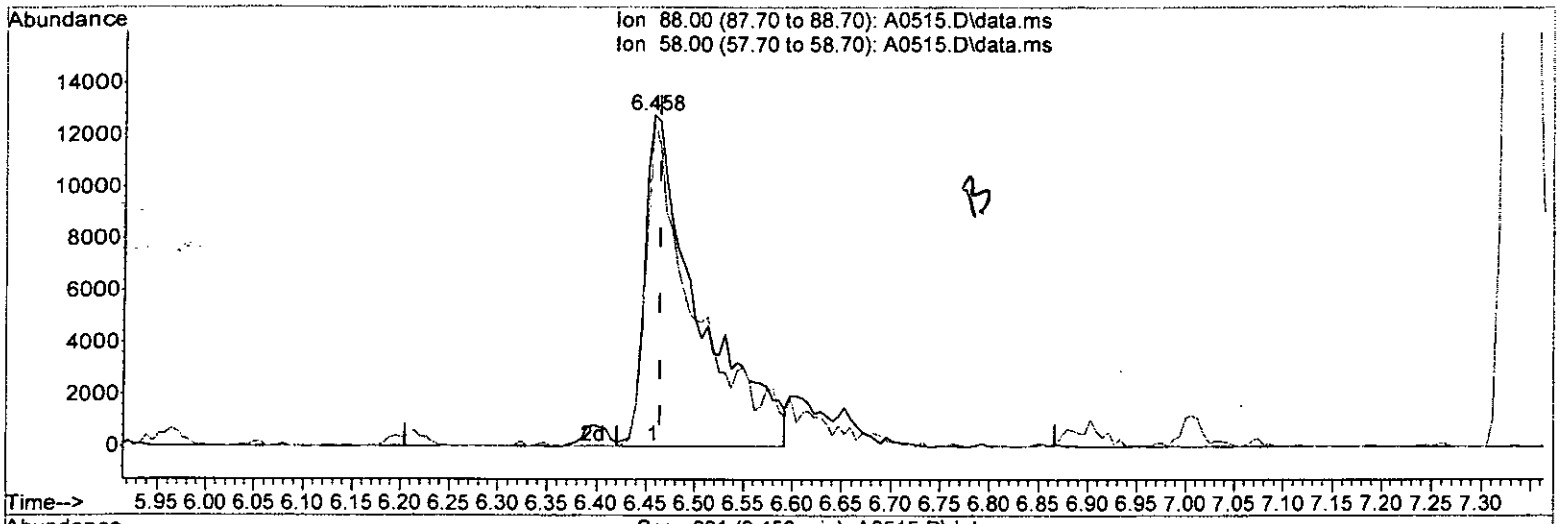
W072114.M Mon Jul 21 15:36:14 2014 MSVO10

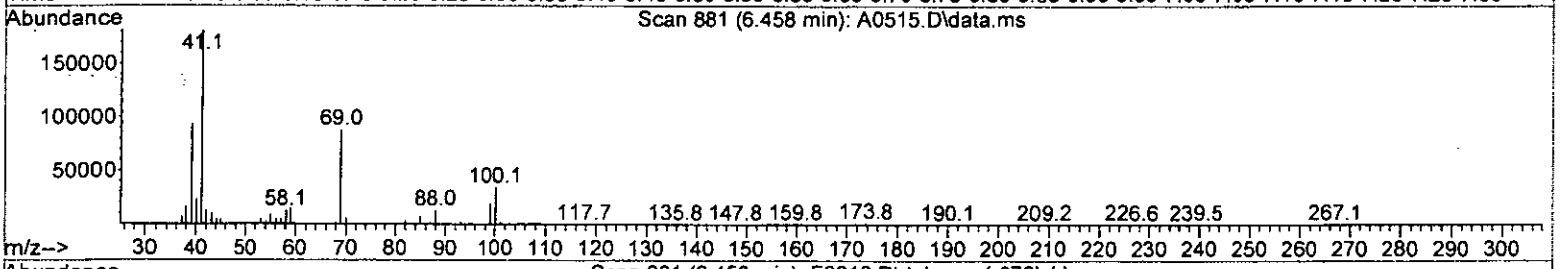
00262

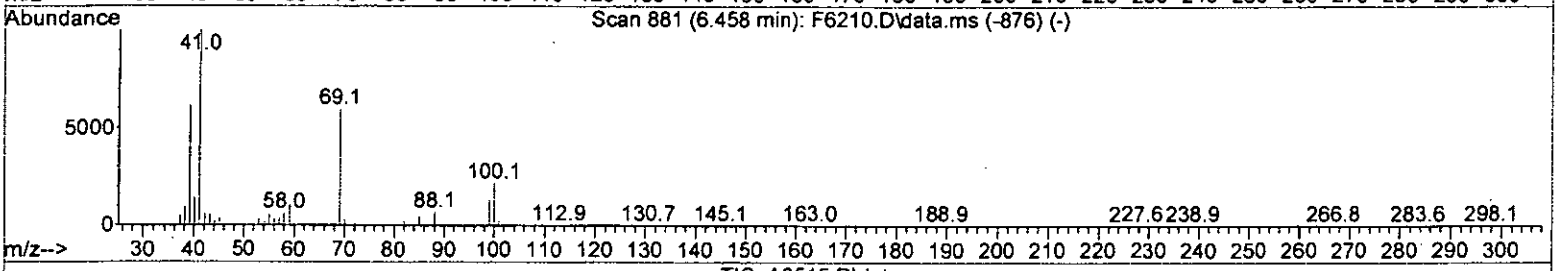
Quantitation Report (Qedit)

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0515.D Vial: 8
Acq On : 21 Jul 2014 2:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 14:37:05 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0515.D\data.ms

(58) 1,4-Dioxane

6.458min (-0.006) 949.18 ug/L

response 48134

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	97.42#
0.00	0.00	0.00
0.00	0.00	0.00

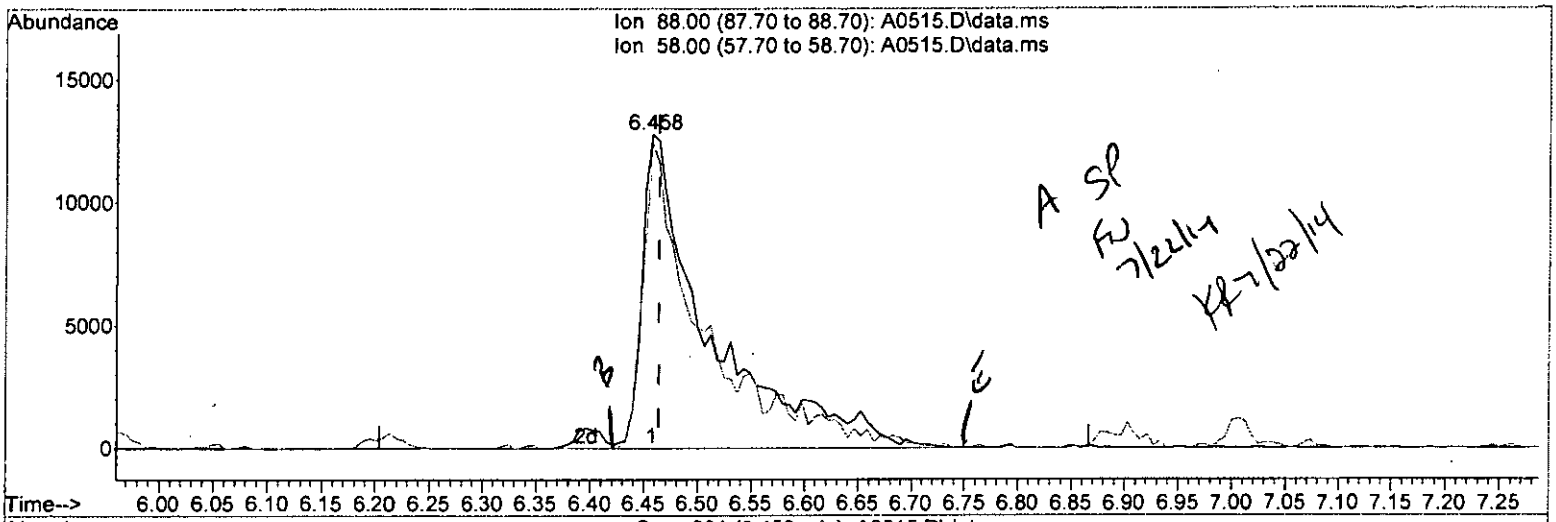
W072114.M Mon Jul 21 15:36:39 2014 MSVO10 Page: 1

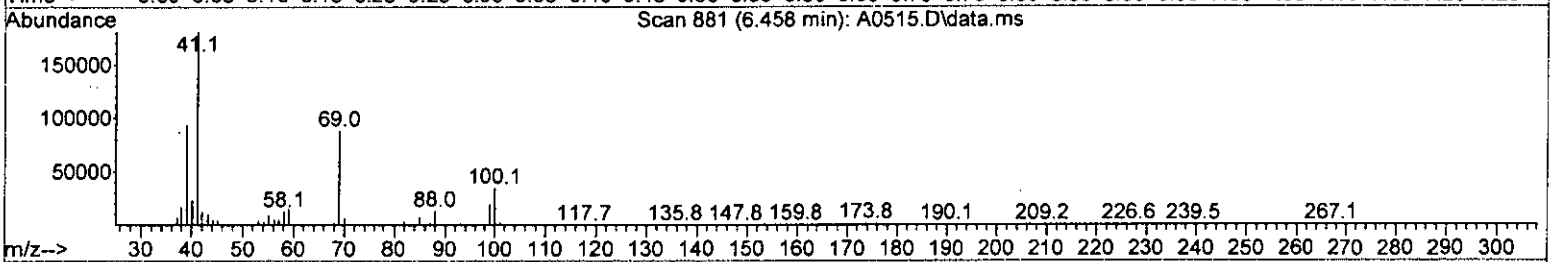
00263

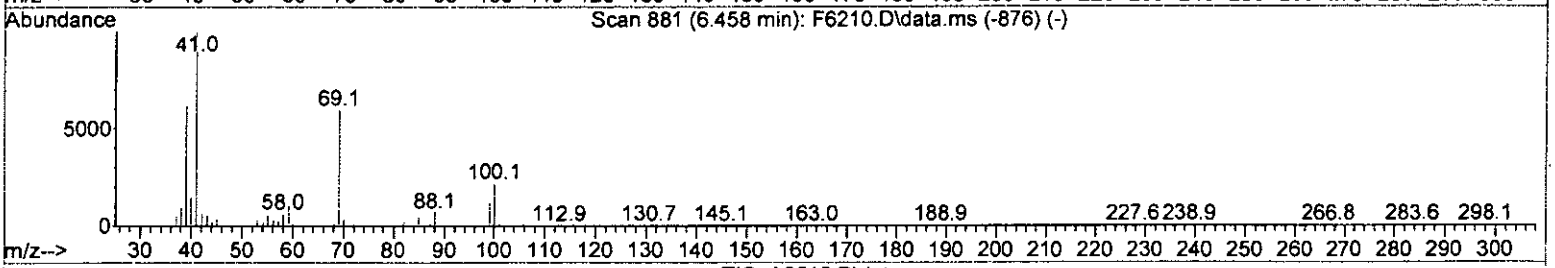
Quantitation Report (Qedit)

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0515.D Vial: 8
Acq On : 21 Jul 2014 2:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 14:37:05 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0515.D\data.ms

(58) 1,4-Dioxane

6.458min (-0.006) 1086.93 ug/L m

response 55119

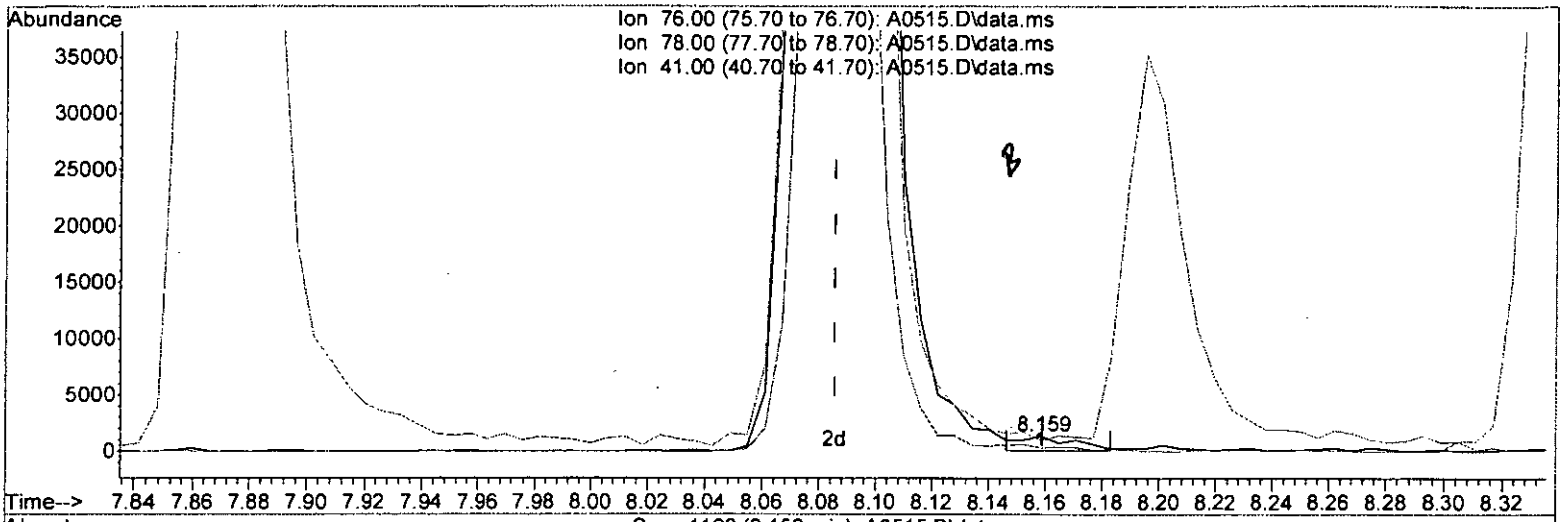
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	97.42#
0.00	0.00	0.00
0.00	0.00	0.00

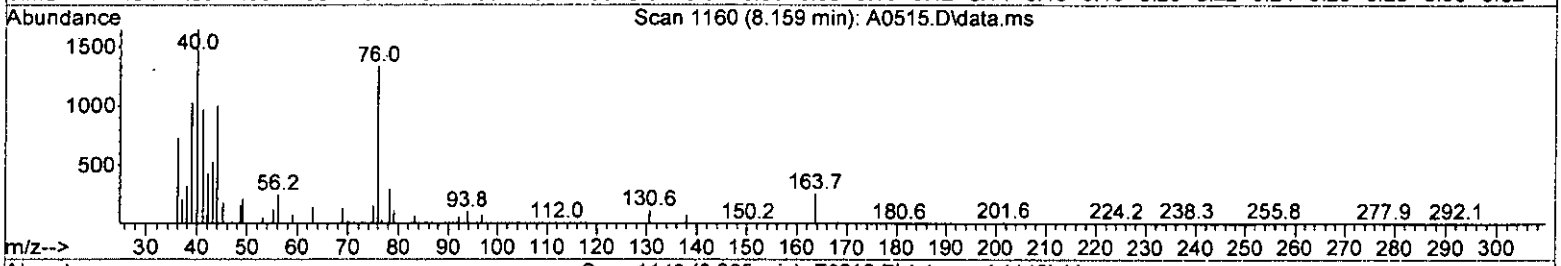
W072114.M Mon Jul 21 15:36:50 2014 MSVO10

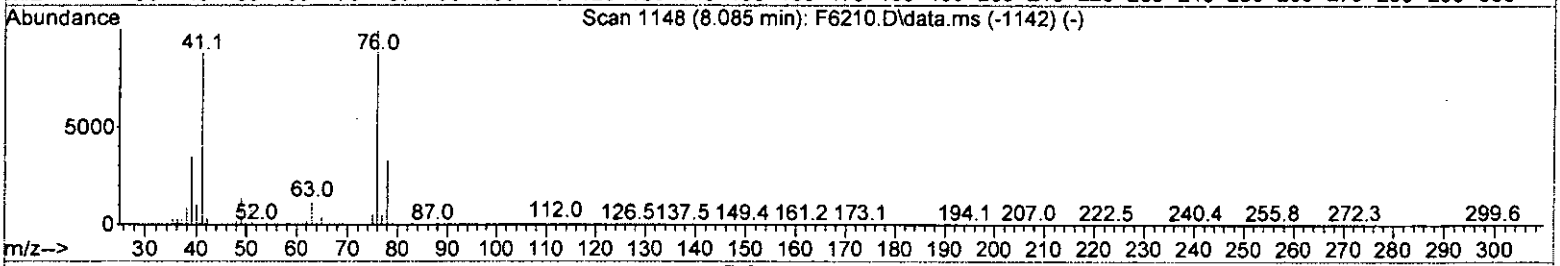
Quantitation Report (Qedit)

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0515.D Vial: 8
Acq On : 21 Jul 2014 2:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 14:37:05 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0515.D\data.ms

(74) 1,3-Dichloropropane

8.159min (+0.073) 0.14 ug/L

response 1656

Ion	Exp%	Act%
76.00	100	100
78.00	31.70	21.85
41.00	66.30	72.45
0.00	0.00	0.00

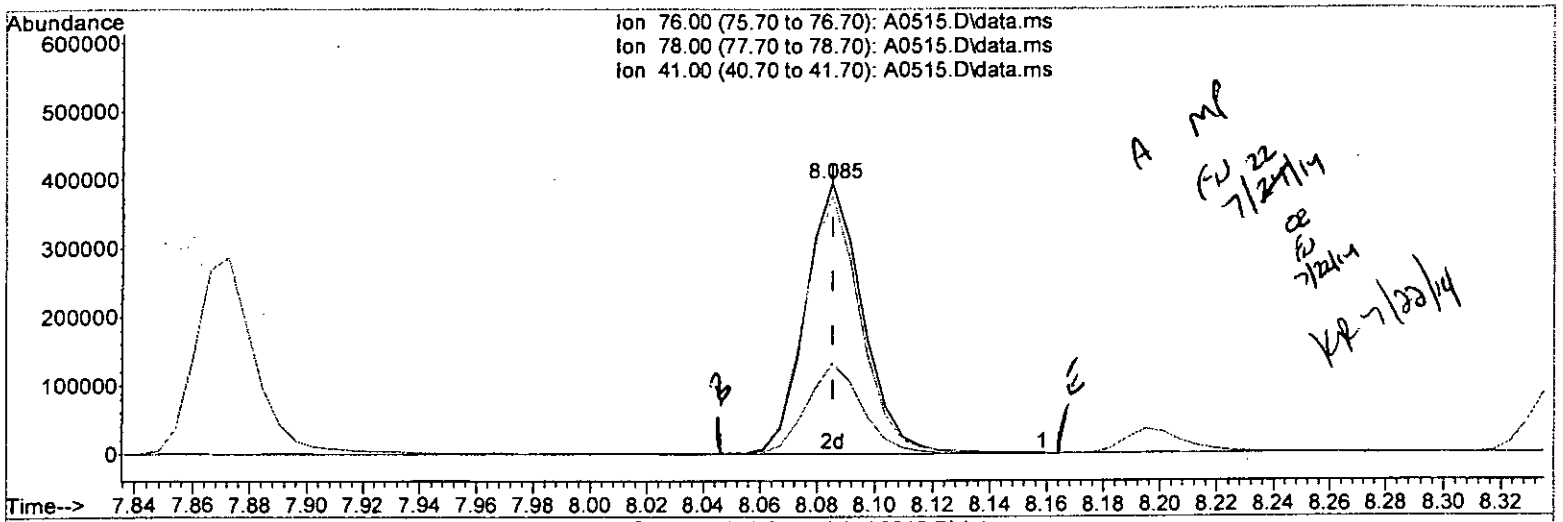
W072114.M Mon Jul 21 15:37:06 2014 MSVO10

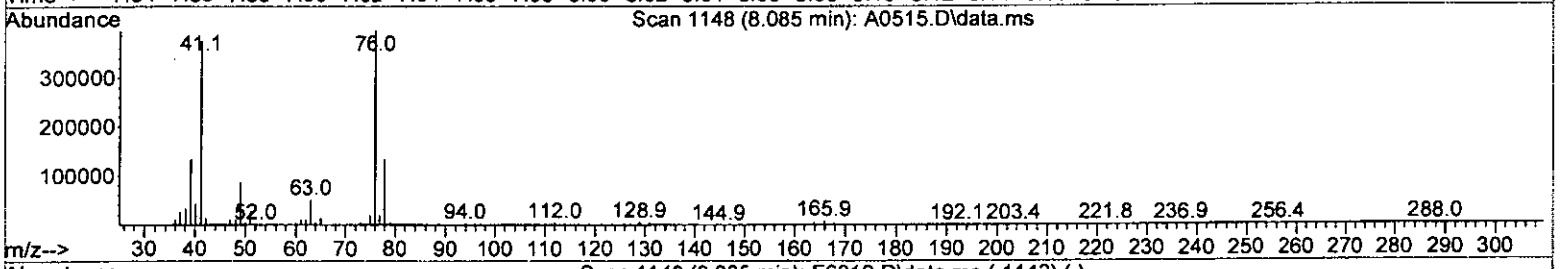
00265

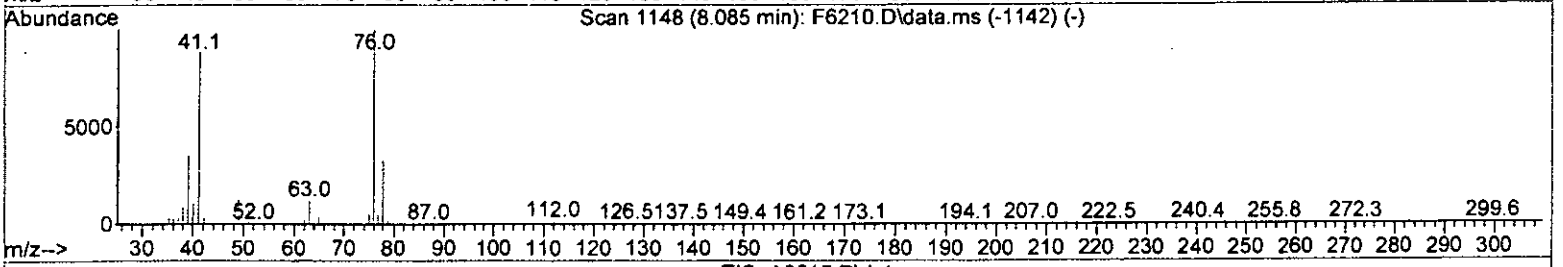
Quantitation Report (Qedit)

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0515.D Vial: 8
Acq On : 21 Jul 2014 2:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 14:37:05 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration







TIC: A0515.D\data.ms

(74) 1,3-Dichloropropane

8.085min (-0.000) 46.30 ug/L m

response 543624

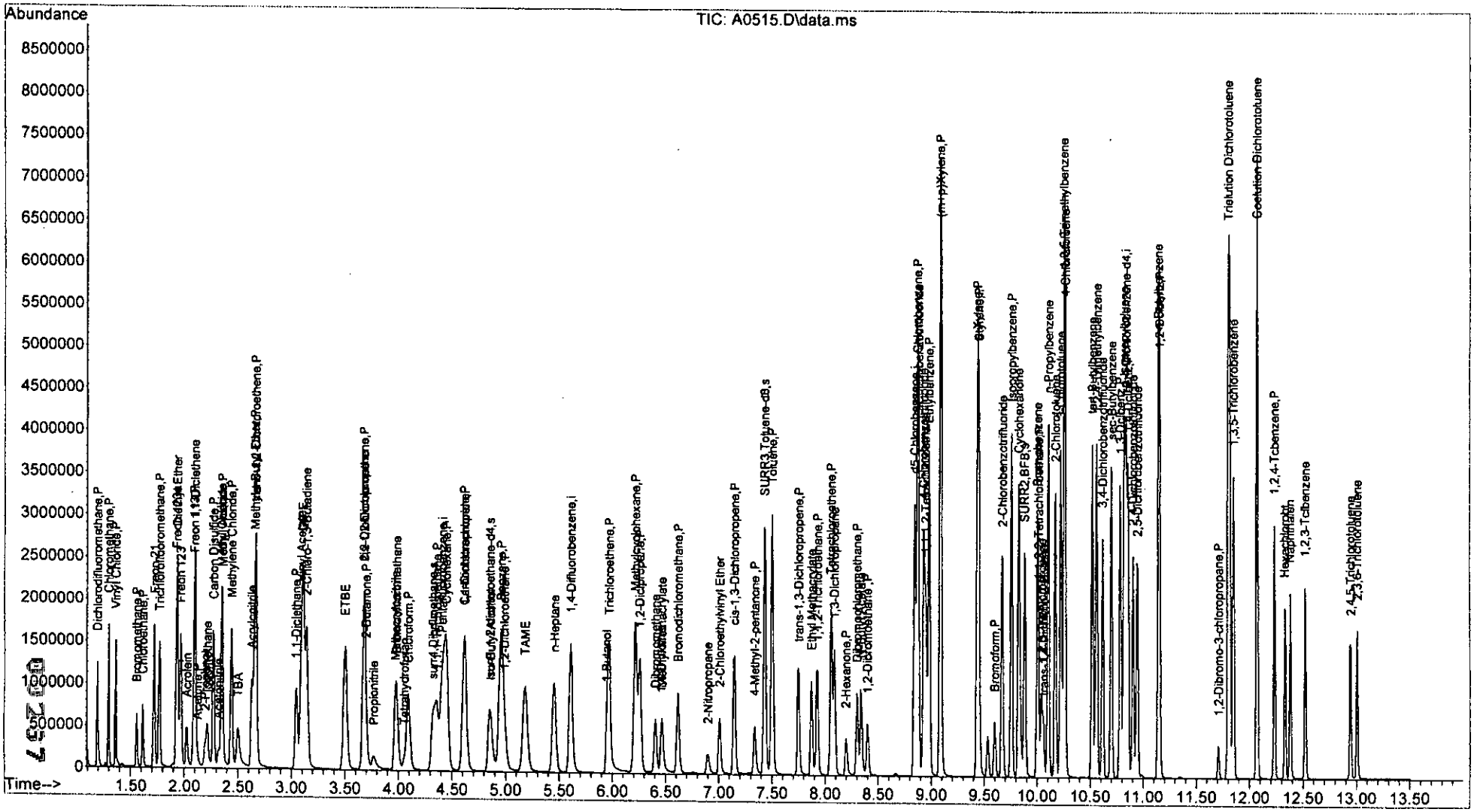
Ion	Exp%	Act%
76.00	100	100
78.00	31.70	33.49
41.00	66.30	95.00#
0.00	0.00	0.00

00266

Quantitation Report (QT Reviewed)

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0515.D Vial: 8
Acq On : 21 Jul 2014 2:23 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:37:10 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 10:57:04 2014
Response via : Initial Calibration



W072114.M Tue Jul 22 08:53:01 2014 MSVO10

Quantitation Report (QT Reviewed)

Sample : 100 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0516.D Vial: 9
Acq On : 21 Jul 2014 2:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:07:22 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 15:07:03 2014
Response via : Initial Calibration

FJ 7/22/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	1003324	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1461897	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1326464	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	731081	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	950301	173.58	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 347.16%#			
48) surr1,1,2-dichloroetha...	4.854	65	989224	114.56	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 229.12%#			
65) SURR3,Toluene-d8	7.427	98	3311847	98.42	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 196.84%#			
70) SURR2,BFB	9.878	95	1322803	99.84	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 199.68%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.190	85	1181955	125.95	ug/L	96
3) Chloromethane	1.294	50	1483867	127.62	ug/L	98
4) Vinyl Chloride	1.361	62	1357590	111.28	ug/L	97
5) Bromomethane	1.556	94	480548	109.09	ug/L	99
6) Chloroethane	1.611	64	666054	100.38	ug/L	94
7) Freon 21	1.721	67	1767840	100.04	ug/L	97
8) Trichlorofluoromethane	1.770	101	1524824	116.40	ug/L	99
9) Diethyl Ether	1.934	59	748105	99.40	ug/L	81
10) Freon 123a	1.928	67	1138311	100.09	ug/L	94
11) Freon 123	1.965	83	1178826	97.33	ug/L	98
12) Acrolein	2.019	56	590183	506.54	ug/L	95
13) 1,1-Dichlethene	2.099	96	700982	104.85	ug/L #	82
14) Freon 113	2.093	101	889388	116.60	ug/L	99
15) Acetone	2.117	43	254735	112.59	ug/L	96
16) 2-Propanol	2.196	45	875214	2234.47	ug/L	96
17) Iodomethane	2.215	142	992094	141.69	ug/L	100
18) Carbon Disulfide	2.269	76	2947100	103.54	ug/L	100
19) Acetonitrile	2.318	40	168928	555.98	ug/L	99
20) Allyl Chloride	2.349	76	484787	100.21	ug/L #	36
21) Methyl Acetate	2.355	43	604659	124.64	ug/L	89
22) Methylene Chloride	2.440	84	884487	87.79	ug/L #	78
23) TBA	2.501	59	1092571	1770.31	ug/L	80
24) Acrylonitrile	2.629	53	1419211	574.25	ug/L	96
25) Methyl-t-Butyl Ether	2.660	73	2073959	97.76	ug/L	90
26) trans-1,2-Dichloroethene	2.666	96	905498	106.56	ug/L #	83
28) 1,1-Diclethane	3.044	63	1903812	108.99	ug/L	98
29) Vinyl Acetate	3.086	86	131689	106.43	ug/L #	45
30) DIPE	3.105	45	4429902	125.28	ug/L	94
31) 2-Chloro-1,3-Butadiene	3.141	53	1969989	117.21	ug/L	83
32) ETBE	3.501	59	2976321	98.96	ug/L	91
33) 2,2-Dichloropropane	3.684	77	1288819	100.72	ug/L	98
34) cis-1,2-Dichloroethene	3.678	96	991164	102.89	ug/L #	75
35) 2-Butanone	3.696	43	410469	133.07	ug/L	89
36) Propionitrile	3.763	54	469239	589.08	ug/L	89
37) Bromochloromethane	3.983	130	580032	102.63	ug/L #	80

00268

Quantitation Report (QT Reviewed)

Sample : 100 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0516.D Vial: 9
Acq On : 21 Jul 2014 2:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:07:22 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 15:07:03 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.964	67	243819	97.35	ug/L	#	44
39) Tetrahydrofuran	4.056	42	225768	122.99	ug/L		74
40) Chloroform	4.092	83	1607663	102.95	ug/L		93
41) 1,1,1-Trichloroethane	4.360	97	1412570	103.03	ug/L		94
42) TAME	5.184	73	2074906	91.74	ug/L		90
44) Cyclohexane	4.446	41	1281670	117.82	ug/L		90
46) Carbontetrachloride	4.617	121	402990	102.51	ug/L		91
47) 1,1-Dichloropropene	4.617	75	1190936	100.74	ug/L		99
49) Benzene	4.952	78	3701767	98.11	ug/L		91
50) 1,2-Dichloroethane	4.988	62	1248188	100.81	ug/L		94
51) Iso-Butyl Alcohol	4.848	43	635882	2073.84	ug/L		97
52) n-Heptane	5.452	43	1449514	137.01	ug/L		82
53) 1-Butanol	5.946	56	698177	4864.28	ug/L		86
54) Trichloroethene	5.964	130	1027820	101.42	ug/L		96
55) Methylcyclohexane	6.214	55	1395178	104.86	ug/L	#	80
56) 1,2-Diclpropane	6.256	63	1074490	99.52	ug/L		100
57) Dibromomethane	6.403	93	497593	100.72	ug/L		98
58) 1,4-Dioxane	6.458	88	112988	2131.54	ug/L		77
59) Methyl Methacrylate	6.464	69	413172	94.65	ug/L	#	61
60) Bromodichloromethane	6.616	83	1186157	100.00	ug/L		98
61) 2-Nitropropane	6.890	41	293666	173.91	ug/L		94
62) 2-Chloroethylvinyl Ether	7.006	63	512039	102.89	ug/L		92
63) cis-1,3-Dichloropropene	7.140	75	1369756	95.71	ug/L		99
64) 4-Methyl-2-pentanone	7.336	43	831641	115.41	ug/L		93
66) Toluene	7.500	91	3866771	95.34	ug/L		99
67) trans-1,3-Dichloropropene	7.744	75	1120753	95.68	ug/L		97
68) Ethyl Methacrylate	7.872	69	868062	95.31	ug/L	#	62
69) 1,1,2-Trichloroethane	7.921	97	675419	96.02	ug/L		99
72) Tetrachloroethene	8.055	164	804106	97.64	ug/L		96
73) 2-Hexanone	8.195	43	593948	114.48	ug/L		94
74) 1,3-Dichloropropane	8.085	76	1151644	93.95	ug/L	#	77
75) Dibromochloromethane	8.299	129	898909	102.54	ug/L		98
76) N-Butyl Acetate	8.335	43	1386271	101.60	ug/L		92
77) 1,2-Dibromoethane	8.396	107	683507	96.05	ug/L		95
78) 3-Chlorobenzotrifluoride	8.878	180	1506496	98.75	ug/L		96
79) Chlorobenzene	8.866	112	2644424	96.14	ug/L		98
80) 4-Chlorobenzotrifluoride	8.927	180	1378153	97.59	ug/L		95
81) 1,1,1,2-Tetrachloroethane	8.945	131	987238	98.61	ug/L		98
82) Ethylbenzene	8.982	106	1381893	97.29	ug/L	#	90
83) (m+p)Xylene	9.085	106	3447083	198.21	ug/L		91
84) o-Xylene	9.433	106	1676553	95.47	ug/L		92
85) Styrene	9.445	104	2905894	97.97	ug/L		99
86) Bromoform	9.597	173	517868	98.65	ug/L		99
87) 2-Chlorobenzotrifluoride	9.670	180	1475162	97.67	ug/L		95
88) Isopropylbenzene	9.756	105	4316620	100.43	ug/L		100
89) Cyclohexanone	9.823	55	2599915	2508.12	ug/L		94
90) trans-1,4-Dichloro-2-B...	10.061	53	230169	100.85	ug/L		95
92) 1,1,2,2-Tetrachloroethane	10.012	83	807754	96.05	ug/L		97
93) Bromobenzene	10.000	156	1135765	93.09	ug/L		99
94) 1,2,3-Trichloropropane	10.042	110	215252	96.25	ug/L		94
95) n-Propylbenzene	10.103	91	5016897	101.15	ug/L		99
96) 2-Chlorotoluene	10.170	91	3006883	98.69	ug/L		93

Quantitation Report (QT Reviewed)

Sample : 100 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0516.D Vial: 9
Acq On : 21 Jul 2014 2:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:07:22 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 15:07:03 2014
Response via : Initial Calibration

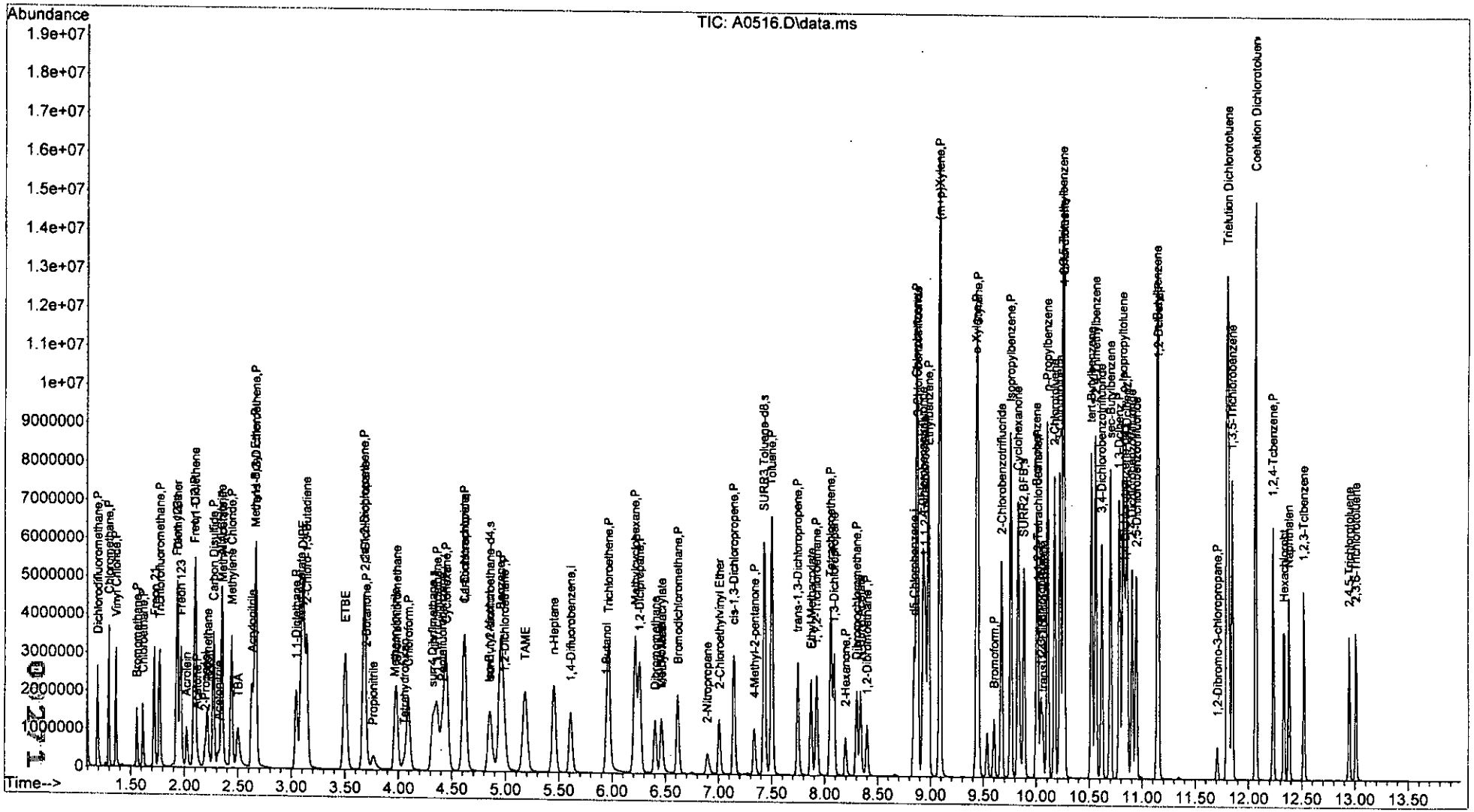
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	3120274	101.07	ug/L	96
98)	4-Chlorotoluene	10.262	91	3557954	96.42	ug/L	91
99)	1,3,5-Trimethylbenzene	10.250	105	3627138	99.59	ug/L	97
100)	tert-Butylbenzene	10.518	119	3037197	100.39	ug/L	100
101)	1,2,4-Trimethylbenzene	10.560	105	3663264	99.48	ug/L	95
102)	3,4-Dichlorobenzotrifl...	10.615	214	1054354	96.58	ug/L	97
103)	sec-Butylbenzene	10.701	105	4281932	102.67	ug/L	97
104)	p-Isopropyltoluene	10.817	119	3789549	103.89	ug/L	97
105)	1,3-Dclbenz	10.780	146	2233047	98.97	ug/L	99
106)	1,4-Dclbenz	10.853	146	2236383	97.85	ug/L	98
107)	2,4-Dichlorobenzotrifl...	10.902	214	936160	95.64	ug/L	99
108)	2,5-Dichlorobenzotrifl...	10.945	214	1076850	95.69	ug/L	98
109)	n-Butylbenzene	11.140	91	3233837	102.59	ug/L	99
110)	1,2-Dclbenz	11.152	146	2040191	98.93	ug/L	99
111)	1,2-Dibromo-3-chloropr...	11.707	157	142822	110.42	ug/L	94
112)	Trielution Dichlorotol...	11.804	125	5413820	324.75	ug/L	95
113)	1,3,5-Trichlorobenzene	11.847	180	1443714	102.97	ug/L	97
114)	Coelution Dichlorotoluene	12.066	125	3746451	221.29	ug/L	96
115)	1,2,4-Tcbenzene	12.231	180	1180455	103.23	ug/L	97
116)	Hexachlorobt	12.335	225	467533	85.34	ug/L	98
117)	Naphthalen	12.377	128	2179772	124.42	ug/L	98
118)	1,2,3-Tclbenzene	12.517	180	888845	114.32	ug/L	98
119)	2,4,5-Trichlorotoluene	12.944	159	577481	135.28	ug/L	98
120)	2,3,6-Trichlorotoluene	13.005	159	543206	128.41	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Sample : 100 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0516.D Vial: 9
Acq On : 21 Jul 2014 2:54 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:07:22 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 15:07:03 2014
Response via : Initial Calibration



W072114.M Tue Jul 22 08:53:11 2014 MSVO10

Quantitation Report (QT Reviewed)

Sample : 150 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0517.D Vial: 10
Acq On : 21 Jul 2014 3:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:37:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 15:12:44 2014
Response via : Initial Calibration

FV 7/22/14

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	1000347	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1449804	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1355583	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	763740	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.318	113	1127768	207.72	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 415.44%#				
48) surr1,1,2-dichloroetha...	4.854	65	1182408	218.47	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 436.94%#				
65) SURR3,Toluene-d8	7.427	98	4010198	190.82	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 381.64%#				
70) SURR2,BFB	9.878	95	1617321	195.46	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 390.92%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.190	85	1745672	186.58	ug/L		97
3) Chloromethane	1.294	50	2172696	187.42	ug/L		98
4) Vinyl Chloride	1.361	62	2014643	165.63	ug/L		98
5) Bromomethane	1.556	94	749393	170.62	ug/L		99
6) Chloroethane	1.611	64	980779	148.26	ug/L		96
7) Freon 21	1.721	67	2733469	155.14	ug/L		98
8) Trichlorofluoromethane	1.770	101	2273309	174.06	ug/L		99
9) Diethyl Ether	1.934	59	1137898	151.64	ug/L		81
10) Freon 123a	1.928	67	1730057	152.57	ug/L		96
11) Freon 123	1.965	83	1817198	150.49	ug/L		99
12) Acrolein	2.020	56	892129	767.98	ug/L		95
13) 1,1-Diclethene	2.099	96	1076195	161.45	ug/L	#	82
14) Freon 113	2.093	101	1339413	176.13	ug/L		99
15) Acetone	2.123	43	436269	193.40	ug/L		96
16) 2-Propanol	2.196	45	1425602	3650.48	ug/L		92
17) Iodomethane	2.215	142	1618465	231.84	ug/L		99
18) Carbon Disulfide	2.269	76	4362093	153.70	ug/L		100
19) Acetonitrile	2.318	40	267302	882.37	ug/L		94
20) Allyl Chloride	2.349	76	708296	146.85	ug/L	#	44
21) Methyl Acetate	2.355	43	900393	186.16	ug/L		89
22) Methylene Chloride	2.440	84	1320013	131.40	ug/L	#	78
23) TBA	2.501	59	1871165	3040.90	ug/L		84
24) Acrylonitrile	2.629	53	2120253	860.46	ug/L		97
25) Methyl-t-Butyl Ether	2.660	73	3157239	149.27	ug/L		90
26) trans-1,2-Dichloroethene	2.666	96	1363562	160.94	ug/L	#	83
28) 1,1-Diclethane	3.044	63	2825563	162.23	ug/L		98
29) Vinyl Acetate	3.086	86	188099	152.48	ug/L	#	39
30) DIPE	3.105	45	6531249	185.25	ug/L		96
31) 2-Chloro-1,3-Butadiene	3.141	53	2910350	173.68	ug/L		85
32) ETBE	3.501	59	4558222	152.01	ug/L		92
33) 2,2-Dichloropropane	3.684	77	2012651	157.76	ug/L		98
34) cis-1,2-Dichloroethene	3.678	96	1503050	156.49	ug/L	#	80
35) 2-Butanone	3.696	43	622044	202.27	ug/L		89
36) Propionitrile	3.763	54	751044	945.66	ug/L		94
37) Bromochloromethane	3.983	130	863926	153.32	ug/L	#	82

Sample : 150 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0517.D Vial: 10
Acq On : 21 Jul 2014 3:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:37:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 15:12:44 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.964	67	368489	147.56	ug/L	#	46
39) Tetrahydrofuran	4.056	42	347147	189.68	ug/L		74
40) Chloroform	4.092	83	2423513	155.65	ug/L		93
41) 1,1,1-Trichloroethane	4.361	97	2126300	155.55	ug/L		97
42) TAME	5.184	73	3221737	142.87	ug/L		91
44) Cyclohexane	4.446	41	1951463	180.89	ug/L		89
46) Carbontetrachloride	4.617	121	617794	158.47	ug/L		89
47) 1,1-Dichloropropene	4.617	75	1777604	151.61	ug/L		99
49) Benzene	4.958	78	5562553	148.66	ug/L		92
50) 1,2-Dichloroethane	4.988	62	1867153	152.06	ug/L		93
51) Iso-Butyl Alcohol	4.854	43	1058766	3481.81	ug/L		97
52) n-Heptane	5.452	43	2210564	210.69	ug/L		81
53) 1-Butanol	5.946	56	1187594	8343.12	ug/L		91
54) Trichloroethene	5.964	130	1574175	156.63	ug/L		97
55) Methylcyclohexane	6.214	55	2151246	163.03	ug/L	#	80
56) 1,2-Diclpropane	6.257	63	1620374	151.33	ug/L		99
57) Dibromomethane	6.403	93	743108	151.67	ug/L		99
58) 1,4-Dioxane	6.458	88	187140	3559.88	ug/L		90
59) Methyl Methacrylate	6.464	69	650239	150.20	ug/L	#	61
60) Bromodichloromethane	6.616	83	1794305	152.54	ug/L		97
61) 2-Nitropropane	6.891	41	459531	274.41	ug/L		89
62) 2-Chloroethylvinyl Ether	7.006	63	771518	156.32	ug/L		92
63) cis-1,3-Dichloropropene	7.140	75	2107430	148.48	ug/L		98
64) 4-Methyl-2-pentanone	7.336	43	1268560	177.51	ug/L		94
66) Toluene	7.500	91	5820810	144.72	ug/L		99
67) trans-1,3-Dichloropropene	7.744	75	1741960	149.96	ug/L		96
68) Ethyl Methacrylate	7.872	69	1371387	151.82	ug/L	#	62
69) 1,1,2-Trichloroethane	7.921	97	1031454	147.86	ug/L		99
72) Tetrachloroethene	8.055	164	1229639	146.10	ug/L		96
73) 2-Hexanone	8.195	43	929552	175.32	ug/L		94
74) 1,3-Dichloropropane	8.085	76	1760875	140.56	ug/L	#	78
75) Dibromochloromethane	8.299	129	1407445	157.09	ug/L		99
76) N-Butyl Acetate	8.335	43	2199150	157.71	ug/L		92
77) 1,2-Dibromoethane	8.396	107	1048829	144.21	ug/L		95
78) 3-Chlorobenzotrifluoride	8.878	180	2372523	152.18	ug/L		96
79) Chlorobenzene	8.866	112	4055903	144.29	ug/L		98
80) 4-Chlorobenzotrifluoride	8.927	180	2184071	151.34	ug/L		98
81) 1,1,1,2-Tetrachloroethane	8.945	131	1539883	150.51	ug/L		98
82) Ethylbenzene	8.975	106	2132265	146.90	ug/L	#	88
83) (m+p)Xylene	9.085	106	5265837	296.28	ug/L	#	84
84) o-Xylene	9.433	106	2593956	144.54	ug/L		90
85) Styrene	9.445	104	4491313	148.17	ug/L		98
86) Bromoform	9.597	173	833083	155.28	ug/L		97
87) 2-Chlorobenzotrifluoride	9.670	180	2351812	152.36	ug/L		93
88) Isopropylbenzene	9.756	105	6470678	147.31	ug/L		97
89) Cyclohexanone	9.823	55	4162395	3929.19	ug/L		93
90) trans-1,4-Dichloro-2-B...	10.055	53	375916	161.18	ug/L		92
92) 1,1,2,2-Tetrachloroethane	10.012	83	1264392	143.92	ug/L		95
93) Bromobenzene	10.000	156	1734010	136.05	ug/L		98
94) 1,2,3-Trichloropropane	10.042	110	328638	140.67	ug/L		95
95) n-Propylbenzene	10.103	91	7430211	143.40	ug/L		95
96) 2-Chlorotoluene	10.170	91	4601794	144.58	ug/L		94

Sample : 150 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0517.D Vial: 10
Acq On : 21 Jul 2014 3:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:37:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 15:12:44 2014
Response via : Initial Calibration

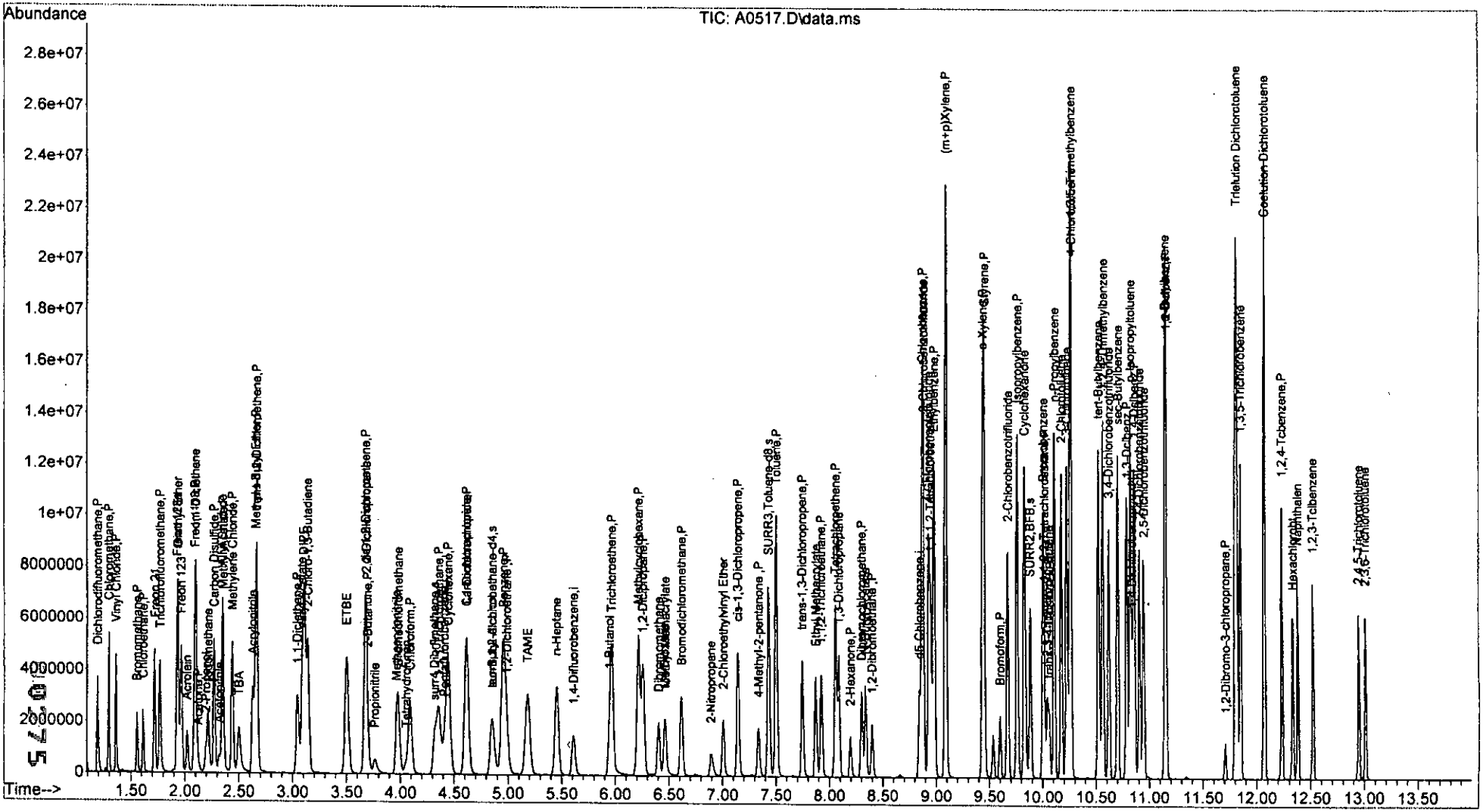
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	4828281	149.71	ug/L	96
98)	4-Chlorotoluene	10.262	91	5456530	141.54	ug/L	91
99)	1,3,5-Trimethylbenzene	10.256	105	5579327	146.64	ug/L	94
100)	tert-Butylbenzene	10.518	119	4716808	149.24	ug/L	99
101)	1,2,4-Trimethylbenzene	10.561	105	5632121	146.40	ug/L	94
102)	3,4-Dichlorobenzotrifl...	10.615	214	1695916	148.71	ug/L	96
103)	sec-Butylbenzene	10.701	105	6554663	150.44	ug/L	96
104)	p-Isopropyltoluene	10.817	119	5795450	152.09	ug/L	97
105)	1,3-Dclbenz	10.786	146	3489696	148.05	ug/L	97
106)	1,4-Dclbenz	10.853	146	3534225	148.02	ug/L	99
107)	2,4-Dichlorobenzotrifl...	10.902	214	1520576	148.71	ug/L	99
108)	2,5-Dichlorobenzotrifl...	10.945	214	1744734	148.41	ug/L	99
109)	n-Butylbenzene	11.140	91	5072249	154.03	ug/L	97
110)	1,2-Dclbenz	11.152	146	3232792	150.06	ug/L	100
111)	1,2-Dibromo-3-chloropr...	11.707	157	232875	172.34	ug/L	94
112)	Trielution Dichlorotol...	11.804	125	8560582	491.54	ug/L	96
113)	1,3,5-Trichlorobenzene	11.847	180	2334357	159.37	ug/L	96
114)	Coelution Dichlorotoluene	12.066	125	5802655	328.09	ug/L	99
115)	1,2,4-Tcbenzene	12.231	180	1902657	159.28	ug/L	97
116)	Hexachlorobt	12.335	225	762510	133.24	ug/L	98
117)	Naphthalen	12.377	128	3531985	192.98	ug/L	99
118)	1,2,3-Tclbenzene	12.517	180	1459914	179.73	ug/L	98
119)	2,4,5-Trichlorotoluene	12.944	159	984355	220.73	ug/L	96
120)	2,3,6-Trichlorotoluene	13.005	159	923964	209.07	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Sample : 150 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0517.D Vial: 10
Acq On : 21 Jul 2014 3:24 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 15:37:52 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 15:12:44 2014
Response via : Initial Calibration



W072114.M Tue Jul 22 08:53:26 2014 MSVO10

Quantitation Report (QT Reviewed)

Sample : 200 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0518.D Vial: 11
Acq On : 21 Jul 2014 3:55 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

FJ 7/22/14

Quant Time: Jul 21 16:08:08 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 15:12:44 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	1056657	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1542031	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1411689	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	775885	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.324	113	1438694	249.14	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 498.28%#				
48) surr1,1,2-dichloroetha...	4.854	65	1470598	255.46	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 510.92%#				
65) SURR3,Toluene-d8	7.433	98	5060528	226.40	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 452.80%#				
70) SURR2,BFB	9.878	95	1949995	221.57	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 443.14%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.190	85	2326323	235.39	ug/L		97
3) Chloromethane	1.294	50	2944213	240.44	ug/L		95
4) Vinyl Chloride	1.361	62	2724597	212.06	ug/L		99
5) Bromomethane	1.556	94	1094599	235.94	ug/L		100
6) Chloroethane	1.611	64	1323737	189.44	ug/L		96
7) Freon 21	1.721	67	3748282	201.40	ug/L		99
8) Trichlorofluoromethane	1.770	101	3071129	222.61	ug/L		99
9) Diethyl Ether	1.934	59	1539316	194.20	ug/L		81
10) Freon 123a	1.928	67	2372088	198.05	ug/L		95
11) Freon 123	1.965	83	2528356	198.23	ug/L		97
12) Acrolein	2.020	56	1224493	997.91	ug/L		96
13) 1,1-Diclethene	2.099	96	1440857	204.63	ug/L	#	85
14) Freon 113	2.093	101	1785623	222.29	ug/L		98
15) Acetone	2.123	43	583966	245.08	ug/L		96
16) 2-Propanol	2.196	45	1973379	4783.86	ug/L		94
17) Iodomethane	2.215	142	2240414	303.82	ug/L		99
18) Carbon Disulfide	2.270	76	5928370	197.76	ug/L		99
19) Acetonitrile	2.318	40	344806	1077.55	ug/L		96
20) Allyl Chloride	2.349	76	936059	183.73	ug/L	#	39
21) Methyl Acetate	2.355	43	1267543	248.10	ug/L		89
22) Methylene Chloride	2.440	84	1816683	171.21	ug/L	#	79
23) TBA	2.501	59	2618887	4029.25	ug/L		86
24) Acrylonitrile	2.629	53	2916963	1120.70	ug/L		96
25) Methyl-t-Butyl Ether	2.660	73	4384490	196.25	ug/L		90
26) trans-1,2-Dichloroethene	2.666	96	1858859	207.71	ug/L	#	83
28) 1,1-Diclethane	3.050	63	3897348	211.85	ug/L		99
29) Vinyl Acetate	3.086	86	264182	202.74	ug/L	#	52
30) DIPE	3.111	45	8883421	238.54	ug/L		90
31) 2-Chloro-1,3-Butadiene	3.141	53	4013826	226.77	ug/L		86
32) ETBE	3.501	59	6390766	201.77	ug/L		92
33) 2,2-Dichloropropane	3.678	77	2781992	206.44	ug/L		99
34) cis-1,2-Dichloroethene	3.678	96	2077959	204.82	ug/L	#	83
35) 2-Butanone	3.696	43	835984	257.35	ug/L		90
36) Propionitrile	3.763	54	1029573	1227.28	ug/L		93
37) Bromochloromethane	3.983	130	1197093	201.12	ug/L	#	84

Quantitation Report (QT Reviewed)

Sample : 200 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0518.D Vial: 11
Acq On : 21 Jul 2014 3:55 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 16:08:08 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 15:12:44 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.970	67	522821	198.20	ug/L	#	64
39) Tetrahydrofuran	4.056	42	482095	249.38	ug/L		77
40) Chloroform	4.092	83	3351600	203.79	ug/L		95
41) 1,1,1-Trichloroethane	4.361	97	2939998	203.61	ug/L		98
42) TAME	5.184	73	4535844	190.42	ug/L		92
44) Cyclohexane	4.446	41	2704168	235.67	ug/L		89
46) Carbontetrachloride	4.617	121	848608	204.65	ug/L		91
47) 1,1-Dichloropropene	4.617	75	2440084	195.67	ug/L		99
49) Benzene	4.958	78	7670644	192.73	ug/L		93
50) 1,2-Dichloroethane	4.989	62	2546669	195.00	ug/L		93
51) Iso-Butyl Alcohol	4.854	43	1489735	4606.07	ug/L		93
52) n-Heptane	5.452	43	2969236	266.07	ug/L		83
53) 1-Butanol	5.952	56	1762065	11638.54	ug/L		85
54) Trichloroethene	5.964	130	2175018	203.48	ug/L		97
55) Methylcyclohexane	6.214	55	2990525	213.08	ug/L	#	81
56) 1,2-Diclpropane	6.257	63	2248319	197.42	ug/L		99
57) Dibromomethane	6.403	93	1033700	198.37	ug/L		97
58) 1,4-Dioxane	6.464	88	257788	4610.50	ug/L		87
59) Methyl Methacrylate	6.458	69	897094	194.83	ug/L	#	61
60) Bromodichloromethane	6.616	83	2490675	199.07	ug/L		97
61) 2-Nitropropane	6.891	41	647409	363.48	ug/L		91
62) 2-Chloroethylvinyl Ether	7.006	63	1082107	206.13	ug/L		92
63) cis-1,3-Dichloropropene	7.147	75	2939297	194.71	ug/L		99
64) 4-Methyl-2-pentanone	7.336	43	1763669	232.03	ug/L		96
66) Toluene	7.500	91	7886383	184.35	ug/L		96
67) trans-1,3-Dichloropropene	7.744	75	2451320	198.40	ug/L		96
68) Ethyl Methacrylate	7.872	69	1911846	199.00	ug/L	#	64
69) 1,1,2-Trichloroethane	7.927	97	1423574	191.86	ug/L		98
72) Tetrachloroethene	8.055	164	1676937	191.32	ug/L		95
73) 2-Hexanone	8.195	43	1264116	228.95	ug/L		94
74) 1,3-Dichloropropane	8.085	76	2399551	183.93	ug/L	#	77
75) Dibromochloromethane	8.299	129	1960903	210.17	ug/L		99
76) N-Butyl Acetate	8.335	43	3003263	206.82	ug/L		92
77) 1,2-Dibromoethane	8.396	107	1437206	189.76	ug/L		96
78) 3-Chlorobenzotrifluoride	8.878	180	3226988	198.76	ug/L		95
79) Chlorobenzene	8.866	112	5461177	186.56	ug/L		99
80) 4-Chlorobenzotrifluoride	8.933	180	2962526	197.12	ug/L		99
81) 1,1,1,2-Tetrachloroethane	8.951	131	2110323	198.07	ug/L		98
82) Ethylbenzene	8.982	106	2886377	190.95	ug/L	#	75
83) (m+p)Xylene	9.091	106	6860660	370.67	ug/L	#	73
84) o-Xylene	9.433	106	3466224	185.46	ug/L	#	86
85) Styrene	9.445	104	5922556	187.62	ug/L		97
86) Bromoform	9.597	173	1141834	204.38	ug/L		98
87) 2-Chlorobenzotrifluoride	9.671	180	3133633	194.94	ug/L		92
88) Isopropylbenzene	9.756	105	8335124	182.22	ug/L		96
89) Cyclohexanone	9.823	55	5364205	4862.41	ug/L		94
90) trans-1,4-Dichloro-2-B...	10.061	53	521497	214.71	ug/L		98
92) 1,1,2,2-Tetrachloroethane	10.012	83	1673056	187.45	ug/L		97
93) Bromobenzene	10.000	156	2347383	181.29	ug/L		99
94) 1,2,3-Trichloropropane	10.042	110	458212	193.06	ug/L		95
95) n-Propylbenzene	10.103	91	9306016	176.80	ug/L		91
96) 2-Chlorotoluene	10.170	91	6041163	186.84	ug/L		92

Quantitation Report (QT Reviewed)

Sample : 200 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0518.D Vial: 11
Acq On : 21 Jul 2014 3:55 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 16:08:08 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 15:12:44 2014
Response via : Initial Calibration

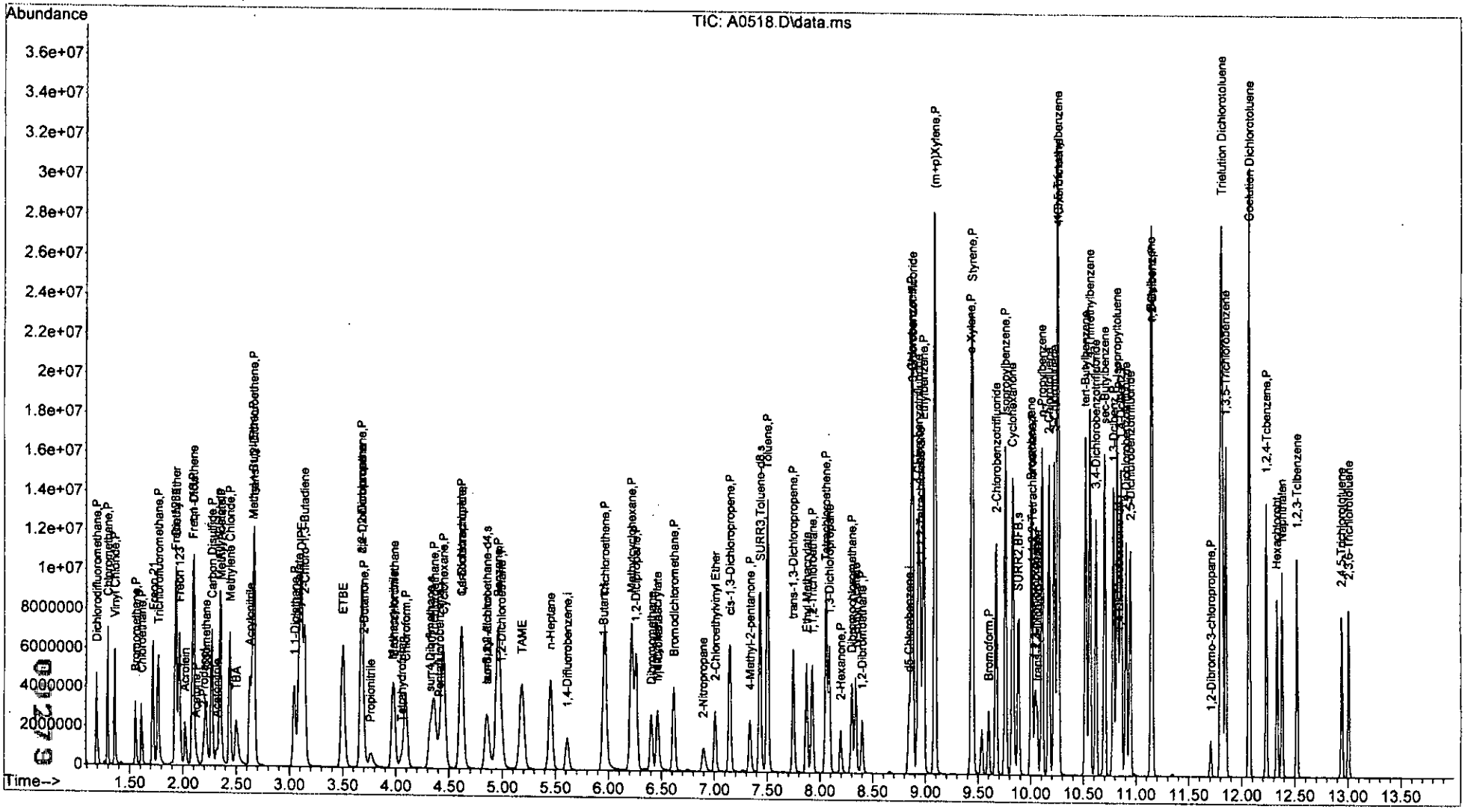
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	6382306	194.80	ug/L	93
98)	4-Chlorotoluene	10.262	91	7112352	181.61	ug/L	89
99)	1,3,5-Trimethylbenzene	10.256	105	7162726	185.31	ug/L	91
100)	tert-Butylbenzene	10.518	119	6173653	192.27	ug/L	97
101)	1,2,4-Trimethylbenzene	10.561	105	7328402	187.51	ug/L	90
102)	3,4-Dichlorobenzotrifl...	10.615	214	2283989	197.14	ug/L	98
103)	sec-Butylbenzene	10.701	105	8353213	188.72	ug/L	93
104)	p-Isopropyltoluene	10.817	119	7497962	193.69	ug/L	97
105)	1,3-Dclbenz	10.786	146	4659863	194.60	ug/L	97
106)	1,4-Dclbenz	10.853	146	4695934	193.59	ug/L	99
107)	2,4-Dichlorobenzotrifl...	10.902	214	2061581	198.46	ug/L	98
108)	2,5-Dichlorobenzotrifl...	10.945	214	2340594	195.98	ug/L	98
109)	n-Butylbenzene	11.140	91	6529795	195.19	ug/L	94
110)	1,2-Dclbenz	11.152	146	4252769	194.32	ug/L	99
111)	1,2-Dibromo-3-chloropr...	11.707	157	316618	230.65	ug/L	93
112)	Trielution Dichlorotol...	11.804	125	11057389	624.97	ug/L	95
113)	1,3,5-Trichlorobenzene	11.847	180	3106138	208.75	ug/L	96
114)	Coelution Dichlorotoluene	12.066	125	7462351	415.33	ug/L	96
115)	1,2,4-Tcbenzene	12.231	180	2516361	207.36	ug/L	95
116)	Hexachlorobt	12.329	225	1005257	172.90	ug/L	100
117)	Naphthalen	12.377	128	4613155	248.11	ug/L	99
118)	1,2,3-Tclbenzene	12.518	180	1938703	234.94	ug/L	97
119)	2,4,5-Trichlorotoluene	12.938	159	1326030	292.69	ug/L	94
120)	2,3,6-Trichlorotoluene	13.005	159	1270584	283.01	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Sample : 200 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\072114\A0518.D Vial: 11
Acq On : 21 Jul 2014 3:55 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 21 16:08:08 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Jul 21 15:12:44 2014
Response via : Initial Calibration



W072114.M Tue Jul 22 08:53:39 2014 MSVO10

Initial Calibration Verification Summary Report

Calibration ID: RC1400062 **Instrument ID:** R-MS-10
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
1,1,1,2-Tetrachloroethane	RC1400062-10	T	Average RF	50	53.36	ppm	6.7	<=30
1,1,1-Trichloroethane (TCA)	RC1400062-10	T	Average RF	50	51.41	ppm	2.8	<=30
1,1,2,2-Tetrachloroethane	RC1400062-10	T	Average RF	50	52.00	ppm	4.0	<=30
1,1,2-Trichloroethane	RC1400062-10	T	Average RF	50	51.62	ppm	3.2	<=30
1,1,2-Trichlorotrifluoroethane	RC1400062-10	T	Average RF	50	49.58	ppm	-0.8	<=30
1,1-Dichloroethane (1,1-DCA)	RC1400062-10	T	Average RF	50	50.26	ppm	0.5	<=30
1,1-Dichloroethene (1,1-DCE)	RC1400062-10	T	Average RF	50	55.79	ppm	11.6	<=30
1,1-Dichloropropene	RC1400062-10	T	Average RF	50	53.16	ppm	6.3	<=30
1,2,3-Trichlorobenzene	RC1400062-10	T	Average RF	50	57.27	ppm	14.5	<=30
1,2,3-Trichloropropane	RC1400062-10	T	Average RF	50	51.15	ppm	2.3	<=30
1,2,4-Trichlorobenzene	RC1400062-10	T	Average RF	50	55.42	ppm	10.8	<=30
1,2,4-Trimethylbenzene	RC1400062-10	T	Average RF	50	53.74	ppm	7.5	<=30
1,2-Dibromo-3-chloropropane (DBCP)	RC1400062-10	T	Average RF	50	59.40	ppm	18.8	<=30
1,2-Dibromoethane	RC1400062-10	T	Average RF	50	54.56	ppm	9.1	<=30
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	RC1400062-10	T	Average RF	50	61.08	ppm	22.2	<=30
1,2-Dichlorobenzene	RC1400062-10	T	Average RF	50	51.83	ppm	3.7	<=30
1,2-Dichloroethane	RC1400062-10	T	Average RF	50	51.76	ppm	3.5	<=30
1,2-Dichloropropane	RC1400062-10	T	Average RF	50	52.65	ppm	5.3	<=30
1,3,5-Trichlorobenzene	RC1400062-10	T	Average RF	50	49.33	ppm	-1.3	<=30
1,3,5-Trimethylbenzene	RC1400062-10	T	Average RF	50	53.41	ppm	6.8	<=30
1,3-Dichlorobenzene	RC1400062-10	T	Average RF	50	52.75	ppm	5.5	<=30
1,3-Dichloropropane	RC1400062-10	T	Average RF	50	51.90	ppm	3.8	<=30
1,4-Dichlorobenzene	RC1400062-10	T	Average RF	50	52.13	ppm	4.3	<=30
1,4-Dioxane	RC1400062-10	T	Average RF	1000	963.0	ppm	-3.7	<=30
1-Butanol	RC1400062-10	T	Quadratic	2500	2629	ppm	5.2	<=30
1-Chloro-4-(trifluoromethyl)benzene	RC1400062-10	T	Average RF	50	49.49	ppm	-1.0	<=30
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	RC1400062-10	T	Average RF	50	52.03	ppm	4.1	<=30
2,2-Dichloropropane	RC1400062-10	T	Average RF	50	54.34	ppm	8.7	<=30
2,3,6-Trichlorotoluene	RC1400062-10	T	Average RF	50	51.45	ppm	2.9	<=30
2,4,5-Trichlorotoluene	RC1400062-10	T	Average RF	50	55.00	ppm	10.0	<=30
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	RC1400062-10	T	Average RF	150	155.9	ppm	3.9	<=30
2,4-Dichlorobenzotrifluoride	RC1400062-10	T	Average RF	50	49.90	ppm	-0.2	<=30
2,5-Dichlorobenzotrifluoride	RC1400062-10	T	Average RF	50	47.52	ppm	-5.0	<=30
2-Butanone (MEK)	RC1400062-10	T	Average RF	50	57.03	ppm	14.1	<=30
2-Chloro-1,3-butadiene	RC1400062-10	T	Average RF	50	47.42	ppm	-5.2	<=30
2-Chlorobenzotrifluoride	RC1400062-10	T	Average RF	50	49.41	ppm	-1.2	<=30
2-Chloroethyl Vinyl Ether	RC1400062-10	T	Average RF	50	43.55	ppm	-12.9	<=30
2-Chlorotoluene	RC1400062-10	T	Average RF	50	52.32	ppm	4.6	<=30
2-Hexanone	RC1400062-10	T	Average RF	50	57.49	ppm	15.0	<=30
2-Methyl-1-propanol	RC1400062-10	T	Average RF	1000	1064	ppm	6.4	<=30
2-Methyl-2-propanol	RC1400062-10	T	Average RF	1000	1132	ppm	13.2	<=30
2-Nitropropane	RC1400062-10	T	Average RF	100	105.2	ppm	5.2	<=30
2-Propanol	RC1400062-10	T	Average RF	1000	1138	ppm	13.8	<=30
3,4- and 2,3-Dichlorotoluene Coelution	RC1400062-10	T	Average RF	100	104.3	ppm	4.3	<=30
3,4-Dichlorobenzotrifluoride	RC1400062-10	T	Average RF	50	49.79	ppm	-0.4	<=30
3-Chloro-1-propene	RC1400062-10	T	Average RF	50	52.82	ppm	5.6	<=30
3-Chlorobenzotrifluoride	RC1400062-10	T	Average RF	50	50.30	ppm	0.6	<=30
3-Chlorotoluene	RC1400062-10	T	Average RF	50	48.05	ppm	-3.9	<=30
4-Chlorotoluene	RC1400062-10	T	Average RF	50	52.47	ppm	4.9	<=30
4-Isopropyltoluene	RC1400062-10	T	Average RF	50	54.90	ppm	9.8	<=30
4-Methyl-2-pentanone	RC1400062-10	T	Average RF	50	51.88	ppm	3.8	<=30

Initial Calibration Verification Summary Report

Calibration ID: RC1400062 **Instrument ID:** R-MS-10
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Acetone	RC1400062-10	T	Average RF	50	62.84	ppm	25.7	<=30
Acetonitrile	RC1400062-10	T	Average RF	250	286.5	ppm	14.6	<=30
Acrolein	RC1400062-10	T	Average RF	100	78.86	ppm	-21.1	<=30
Acrylonitrile	RC1400062-10	T	Average RF	250	266.6	ppm	6.6	<=30
Benzene	RC1400062-10	T	Average RF	50	51.62	ppm	3.2	<=30
Bromobenzene	RC1400062-10	T	Average RF	50	51.12	ppm	2.2	<=30
Bromochloromethane	RC1400062-10	T	Average RF	50	50.30	ppm	0.6	<=30
Bromodichloromethane	RC1400062-10	T	Average RF	50	52.29	ppm	4.6	<=30
Bromoform	RC1400062-10	T	Average RF	50	54.36	ppm	8.7	<=30
Bromomethane	RC1400062-10	T	Quadratic	50	58.00	ppm	16.0	<=30
Carbon Disulfide	RC1400062-10	T	Average RF	50	45.13	ppm	-9.7	<=30
Carbon Tetrachloride	RC1400062-10	T	Average RF	50	53.22	ppm	6.4	<=30
Chlorobenzene	RC1400062-10	T	Average RF	50	52.78	ppm	5.6	<=30
Chloroethane	RC1400062-10	T	Average RF	50	50.65	ppm	1.3	<=30
Chloroform	RC1400062-10	T	Average RF	50	49.62	ppm	-0.8	<=30
Chloromethane	RC1400062-10	T	Average RF	50	51.97	ppm	3.9	<=30
Cyclohexane	RC1400062-10	T	Average RF	50	48.93	ppm	-2.1	<=30
Cyclohexanone	RC1400062-10	T	Average RF	1000	798.6	ppm	-20.1	<=30
Dibromochloromethane	RC1400062-10	T	Average RF	50	55.32	ppm	10.6	<=30
Dibromomethane	RC1400062-10	T	Average RF	50	50.09	ppm	0.2	<=30
Dichlorodifluoromethane (CFC 12)	RC1400062-10	T	Average RF	50	54.51	ppm	9.0	<=30
Dichlorofluoromethane (CFC 21)	RC1400062-10	T	Average RF	50	44.90	ppm	-10.2	<=30
Dichloromethane	RC1400062-10	T	Average RF	50	51.22	ppm	2.4	<=30
Diethyl Ether	RC1400062-10	T	Average RF	50	52.01	ppm	4.0	<=30
Diisopropyl Ether	RC1400062-10	T	Average RF	50	43.90	ppm	-12.2	<=30
Ethyl Methacrylate	RC1400062-10	T	Average RF	50	58.15	ppm	16.3	<=30
Ethyl tert-Butyl Ether	RC1400062-10	T	Average RF	50	44.80	ppm	-10.4	<=30
Ethylbenzene	RC1400062-10	T	Average RF	50	49.48	ppm	-1.0	<=30
Hexachlorobutadiene	RC1400062-10	T	Average RF	50	51.68	ppm	3.4	<=30
Iodomethane	RC1400062-10	T	Quadratic	50	38.33	ppm	-23.3	<=30
Isopropylbenzene (Cumene)	RC1400062-10	T	Average RF	50	55.16	ppm	10.3	<=30
Methacrylonitrile	RC1400062-10	T	Average RF	50	60.10	ppm	20.2	<=30
Methyl Acetate	RC1400062-10	T	Average RF	50	53.57	ppm	7.1	<=30
Methyl Methacrylate	RC1400062-10	T	Average RF	50	59.67	ppm	19.3	<=30
Methyl tert-Butyl Ether	RC1400062-10	T	Average RF	50	55.65	ppm	11.3	<=30
Methylcyclohexane	RC1400062-10	T	Average RF	50	52.25	ppm	4.5	<=30
Naphthalene	RC1400062-10	T	Average RF	50	58.99	ppm	18.0	<=30
Propionitrile	RC1400062-10	T	Linear	250	271.2	ppm	8.5	<=30
Styrene	RC1400062-10	T	Average RF	50	56.40	ppm	12.8	<=30
Tetrachloroethene (PCE)	RC1400062-10	T	Average RF	50	51.96	ppm	3.9	<=30
Tetrahydrofuran (THF)	RC1400062-10	T	Average RF	50	55.43	ppm	10.9	<=30
Toluene	RC1400062-10	T	Average RF	50	51.68	ppm	3.4	<=30
Trichloroethene (TCE)	RC1400062-10	T	Average RF	50	51.46	ppm	2.9	<=30
Trichlorofluoromethane (CFC 11)	RC1400062-10	T	Average RF	50	49.56	ppm	-0.9	<=30
Vinyl Acetate	RC1400062-10	T	Average RF	50	53.90	ppm	7.8	<=30
Vinyl Chloride	RC1400062-10	T	Average RF	50	50.11	ppm	0.2	<=30
cis-1,2-Dichloroethene	RC1400062-10	T	Average RF	50	51.21	ppm	2.4	<=30
cis-1,3-Dichloropropene	RC1400062-10	T	Average RF	50	57.20	ppm	14.4	<=30
m,p-Xylenes	RC1400062-10	T	Average RF	100	108.1	ppm	8.1	<=30
n-Butyl Acetate	RC1400062-10	T	Average RF	50	60.99	ppm	22.0	<=30
n-Butylbenzene	RC1400062-10	T	Average RF	50	55.69	ppm	11.4	<=30

Initial Calibration Verification Summary Report

Calibration ID:	RC1400062	**Instrument ID:**	R-MS-10
		Column Name:	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
n-Heptane	RC1400062-10	T	Average RF	50	52.06	ppm	4.1	<=30
n-Propylbenzene	RC1400062-10	T	Average RF	50	54.48	ppm	9.0	<=30
o-Xylene	RC1400062-10	T	Average RF	50	53.84	ppm	7.7	<=30
sec-Butylbenzene	RC1400062-10	T	Average RF	50	53.28	ppm	6.6	<=30
tert-Amyl Methyl Ether	RC1400062-10	T	Average RF	50	47.94	ppm	-4.1	<=30
tert-Butylbenzene	RC1400062-10	T	Average RF	50	53.79	ppm	7.6	<=30
trans-1,2-Dichloroethene	RC1400062-10	T	Average RF	50	50.71	ppm	1.4	<=30
trans-1,3-Dichloropropene	RC1400062-10	T	Average RF	50	59.10	ppm	18.2	<=30
trans-1,4-Dichloro-2-butene	RC1400062-10	T	Quadratic	50	54.49	ppm	9.0	<=30
1,2-Dichloroethane-d4	RC1400062-10	S	Average RF	50	50.26	ppm	0.5	<=30
4-Bromofluorobenzene	RC1400062-10	S	Average RF	50	51.65	ppm	3.3	<=30
Dibromofluoromethane	RC1400062-10	S	Average RF	50	50.70	ppm	1.4	<=30
Toluene-d8	RC1400062-10	S	Average RF	50	51.10	ppm	2.2	<=30

Sample : 50 PPB ICV
Data File : I:\ACQUDATA\msvoa10\data\072114\A0521.D Vial: 14
Acq On : 21 Jul 2014 5:26 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 22 13:19:45 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

FV 7/22/14

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	1019728	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1497671	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1350672	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	747880	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.318	113	484172	50.70	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.40%				
48) surr1,1,2-dichloroetha...	4.854	65	506535	50.26	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 100.52%				
65) SURR3,Toluene-d8	7.427	98	1718815	51.10	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.20%				
70) SURR2,BFB	9.878	95	683596	51.65	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 103.30%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.190	85	598254	54.51	ug/L		97
3) Chloromethane	1.294	50	760460	51.97	ug/L		100
4) Vinyl Chloride	1.361	62	669706	50.11	ug/L		97
5) Bromomethane	1.556	94	234295	58.00	ug/L		97
6) Chloroethane	1.611	64	343026	50.65	ug/L		92
7) Freon 21	1.721	67	844548	44.90	ug/L		98
8) Trichlorofluoromethane	1.770	101	750297	49.56	ug/L		98
9) Diethyl Ether	1.934	59	414709	52.01	ug/L	#	79
10) Freon 123a	1.928	67	723411	61.08	ug/L		93
11) Freon 123	1.965	83	655809	52.03	ug/L		98
12) Acrolein	2.026	56	98352	78.86	ug/L		94
13) 1,1-Diclethene	2.099	96	396468	55.79	ug/L	#	79
14) Freon 113	2.093	101	445223	49.58	ug/L		98
15) Acetone	2.123	43	195141	62.84	ug/L		96
16) 2-Propanol	2.196	45	499512	1137.68	ug/L		99
17) Iodomethane	2.215	142	293464	38.33	ug/L		99
18) Carbon Disulfide	2.270	76	1356772	45.13	ug/L		99
19) Acetonitrile	2.318	40	95361	286.50	ug/L		94
20) Allyl Chloride	2.349	76	235991	52.82	ug/L	#	33
21) Methyl Acetate	2.355	43	329987	53.57	ug/L		88
22) Methylene Chloride	2.440	84	477698	51.22	ug/L	#	77
23) TBA	2.501	59	598507	1132.32	ug/L		75
24) Acrylonitrile	2.629	53	760781	266.62	ug/L		97
25) Methyl-t-Butyl Ether	2.660	73	1133096	55.65	ug/L		92
26) trans-1,2-Dichloroethene	2.666	96	464705	50.71	ug/L	#	85
28) 1,1-Diclethane	3.044	63	973808	50.26	ug/L		96
29) Vinyl Acetate	3.086	86	61437	53.90	ug/L	#	37
30) DIPE	3.105	45	1952692	43.90	ug/L		88
31) 2-Chloro-1,3-Butadiene	3.141	53	903755	47.42	ug/L		85
32) ETBE	3.501	59	1336321	44.80	ug/L		91
33) 2,2-Dichloropropane	3.684	77	652245	54.34	ug/L		97
34) cis-1,2-Dichloroethene	3.678	96	513165	51.21	ug/L	#	72
35) 2-Butanone	3.696	43	233390	57.03	ug/L		89
36) Propionitrile	3.763	54	268024	271.21	ug/L		90
37) Bromochloromethane	3.983	130	309927	50.30	ug/L	#	80

00283

Quantitation Report (Not Reviewed)

Sample : 50 PPB ICV
Data File : I:\ACQUDATA\msvoa10\data\072114\A0521.D Vial: 14
Acq On : 21 Jul 2014 5:26 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 22 13:19:45 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.970	67	133092	60.10	ug/L	#	54
39) Tetrahydrofuran	4.056	42	125622	55.43	ug/L		71
40) Chloroform	4.092	83	837849	49.62	ug/L		93
41) 1,1,1-Trichloroethane	4.361	97	718139	51.41	ug/L		97
42) TAME	5.184	73	964917	47.94	ug/L		91
44) Cyclohexane	4.446	41	663488	48.93	ug/L		92
46) Carbontetrachloride	4.617	121	203037	53.22	ug/L		91
47) 1,1-Dichloropropene	4.617	75	622717	53.16	ug/L		97
49) Benzene	4.958	78	1889711	51.62	ug/L		92
50) 1,2-Dichloroethane	4.989	62	657410	51.76	ug/L		92
51) Iso-Butyl Alcohol	4.861	43	316611	1064.28	ug/L		99
52) n-Heptane	5.452	43	718722	52.06	ug/L	#	81
53) 1-Butanol	5.946	56	337543	2629.19	ug/L		86
54) Trichloroethene	5.964	130	525265	51.46	ug/L		95
55) Methylcyclohexane	6.214	55	735108	52.25	ug/L	#	79
56) 1,2-Diclpropane	6.257	63	561837	52.65	ug/L		99
57) Dibromomethane	6.403	93	257664	50.09	ug/L		98
58) 1,4-Dioxane	6.458	88	58472	962.98	ug/L		79
59) Methyl Methacrylate	6.464	69	226176	59.67	ug/L	#	58
60) Bromodichloromethane	6.616	83	610796	52.29	ug/L		98
61) 2-Nitropropane	6.891	41	154977	105.18	ug/L		91
62) 2-Chloroethylvinyl Ether	7.006	63	194305	43.55	ug/L		93
63) cis-1,3-Dichloropropene	7.141	75	705840	57.20	ug/L		96
64) 4-Methyl-2-pentanone	7.336	43	414023	51.88	ug/L		94
66) Toluene	7.500	91	1982495	51.68	ug/L		98
67) trans-1,3-Dichloropropene	7.744	75	577114	59.10	ug/L		96
68) Ethyl Methacrylate	7.872	69	462782	58.15	ug/L	#	65
69) 1,1,2-Trichloroethane	7.921	97	349365	51.62	ug/L		97
72) Tetrachloroethene	8.055	164	405857	51.96	ug/L		94
73) 2-Hexanone	8.195	43	328208	57.49	ug/L		88
74) 1,3-Dichloropropane	8.085	76	600646	51.90	ug/L	#	79
75) Dibromochloromethane	8.299	129	456297	55.32	ug/L		98
76) N-Butyl Acetate	8.335	43	774720	60.99	ug/L		93
77) 1,2-Dibromoethane	8.396	107	358035	54.56	ug/L		95
78) 3-Chlorobenzotrifluoride	8.878	180	721765	50.30	ug/L		99
79) Chlorobenzene	8.866	112	1374523	52.78	ug/L		96
80) 4-Chlorobenzotrifluoride	8.927	180	654021	49.49	ug/L		96
81) 1,1,1,2-Tetrachloroethane	8.945	131	486316	53.36	ug/L		100
82) Ethylbenzene	8.976	106	642108	49.48	ug/L		93
83) (m+p)Xylene	9.085	106	1730572	108.14	ug/L		98
84) o-Xylene	9.433	106	842492	53.84	ug/L		95
85) Styrene	9.445	104	1466039	56.40	ug/L		97
86) Bromoform	9.597	173	257594	54.36	ug/L		100
87) 2-Chlorobenzotrifluoride	9.671	180	702598	49.41	ug/L		95
88) Isopropylbenzene	9.756	105	2170611	55.16	ug/L		100
89) Cyclohexanone	9.823	55	992892	798.56	ug/L		95
90) trans-1,4-Dichloro-2-B...	10.055	53	111508	54.49	ug/L		84
92) 1,1,2,2-Tetrachloroethane	10.006	83	426726	52.00	ug/L		96
93) Bromobenzene	10.000	156	577121	51.12	ug/L		98
94) 1,2,3-Trichloropropane	10.042	110	117363	51.15	ug/L		98
95) n-Propylbenzene	10.103	91	2542428	54.48	ug/L		99
96) 2-Chlorotoluene	10.170	91	1506478	52.32	ug/L		95

Quantitation Report (Not Reviewed)

Sample : 50 PPB ICV
Data File : I:\ACQUDATA\msvoa10\data\072114\A0521.D Vial: 14
Acq On : 21 Jul 2014 5:26 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 22 13:19:45 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

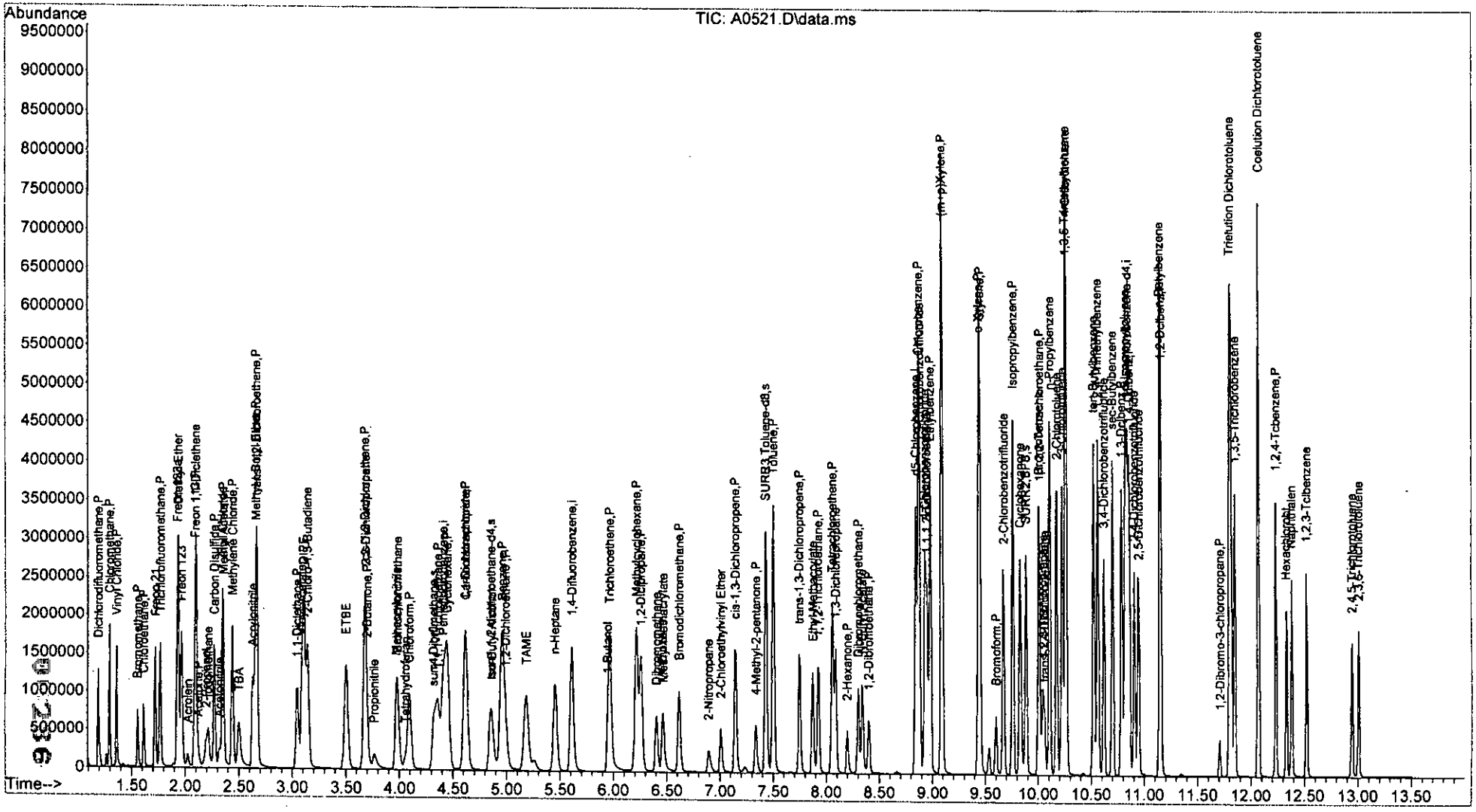
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	1470088	48.05	ug/L	97
98)	4-Chlorotoluene	10.256	91	1817579	52.47	ug/L	99
99)	1,3,5-Trimethylbenzene	10.250	105	1812475	53.41	ug/L	98
100)	tert-Butylbenzene	10.518	119	1530013	53.79	ug/L	99
101)	1,2,4-Trimethylbenzene	10.555	105	1843596	53.74	ug/L	99
102)	3,4-Dichlorobenzotrifl...	10.615	214	509773	49.79	ug/L	100
103)	sec-Butylbenzene	10.695	105	2124806	53.28	ug/L	99
104)	p-Isopropyltoluene	10.817	119	1899048	54.90	ug/L	97
105)	1,3-Dclbenz	10.780	146	1139413	52.75	ug/L	99
106)	1,4-Dclbenz	10.853	146	1166221	52.13	ug/L	98
107)	2,4-Dichlorobenzotrifl...	10.902	214	455217	49.90	ug/L	99
108)	2,5-Dichlorobenzotrifl...	10.945	214	517830	47.52	ug/L	97
109)	n-Butylbenzene	11.140	91	1632620	55.69	ug/L	99
110)	1,2-Dclbenz	11.152	146	1051907	51.83	ug/L	99
111)	1,2-Dibromo-3-chloropr...	11.707	157	74213	59.40	ug/L	94
112)	Trielution Dichlorotol...	11.798	125	2650784	155.89	ug/L	90
113)	1,3,5-Trichlorobenzene	11.847	180	715893	49.33	ug/L	97
114)	Coelution Dichlorotoluene	12.066	125	1838099	104.26	ug/L	96
115)	1,2,4-Tcbenzene	12.231	180	637184	55.42	ug/L	96
116)	Hexachlorobt	12.329	225	243231	51.68	ug/L	98
117)	Naphthalen	12.377	128	1165493	58.99	ug/L	98
118)	1,2,3-Tclbenzene	12.518	180	482655	57.27	ug/L	99
119)	2,4,5-Trichlorotoluene	12.944	159	289114	55.00	ug/L	98
120)	2,3,6-Trichlorotoluene	13.005	159	273712	51.45	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Sample : 50 PPB ICV
Data File : I:\ACQUDATA\msvoa10\data\072114\A0521.D Vial: 14
Acq On : 21 Jul 2014 5:26 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Jul 22 13:19:45 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



W072114.M Tue Jul 22 13:19:42 2014 MSVO10

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000

Service Request: R1407825
Date Analyzed: 10/14/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\MSVOA10\DATA\101414\A2939.D\

Calibration Date: 7/21/14
Calibration ID: RC1400062
Analysis Lot: 416090
Units: µg/L

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	48.8	0.3374	0.3291	-2.5	NA	± 20 %	Average RF
1,1,1-Trichloroethane (TCA)	50.0	49.0	0.6850	0.6711	-2.0	NA	± 20 %	Average RF
1,1,2,2-Tetrachloroethane	50.0	50.7	0.5487	0.5567	1.5	NA	± 20 %	Average RF
1,1,2-Trichloroethane	50.0	50.8	0.2259	0.2297	1.7	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	48.1	0.9501	0.9148	-3.7	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	46.8	0.3485	0.3261	-6.4	NA	± 20 %	Average RF
1,1-Dichloropropene	50.0	48.6	0.3911	0.3798	-2.9	NA	± 20 %	Average RF
1,2,3-Trichlorobenzene	50.0	49.3	0.5634	0.5558	-1.4	NA	± 20 %	Average RF
1,2,3-Trichloropropane	50.0	48.5	0.1534	0.1487	-3.1	NA	± 20 %	Average RF
1,2,4-Trichlorobenzene	50.0	47.1	0.7687	0.7235	-5.9	NA	± 20 %	Average RF
1,2,4-Trimethylbenzene	50.0	46.4	2.294	2.129	-7.2	NA	± 20 %	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	50.7	0.08353	0.08473	1.4	NA	± 20 %	Average RF
1,2-Dibromoethane	50.0	52.9	0.2429	0.2571	5.8	NA	± 20 %	Average RF
1,2-Dichlorobenzene	50.0	45.0	1.357	1.220	-10.1	NA	± 20 %	Average RF
1,2-Dichloroethane	50.0	54.5	0.4240	0.4623	9.0	NA	± 20 %	Average RF
1,2-Dichloropropane	50.0	50.4	0.3562	0.3587	0.7	NA	± 20 %	Average RF
1,3,5-Trimethylbenzene	50.0	44.7	2.269	2.027	-10.7	NA	± 20 %	Average RF
1,3-Dichlorobenzene	50.0	44.1	1.444	1.274	-11.8	NA	± 20 %	Average RF
1,3-Dichloropropane	50.0	52.1	0.4284	0.4464	4.2	NA	± 20 %	Average RF
1,4-Dichlorobenzene	50.0	44.2	1.496	1.321	-11.7	NA	± 20 %	Average RF
2,2-Dichloropropane	50.0	52.8	0.5885	0.6218	5.7	NA	± 20 %	Average RF
2-Butanone (MEK)	50.0	56.0	0.2007	0.2248	12.0	NA	± 20 %	Average RF
2-Chlorotoluene	50.0	46.9	1.925	1.807	-6.1	NA	± 20 %	Average RF
2-Hexanone	50.0	55.2	0.2113	0.2331	10.3	NA	± 20 %	Average RF
tert-Butyl Alcohol	1000	1130	0.02592	0.02939	13.4	NA	± 20 %	Average RF
4-Chlorotoluene	50.0	46.4	2.316	2.150	-7.2	NA	± 20 %	Average RF
p-Isopropyltoluene	50.0	43.0	2.313	1.991	-13.9	NA	± 20 %	Average RF
4-Methyl-2-pentanone	50.0	59.0	0.2664	0.3144	18.0	NA	± 20 %	Average RF
Acetone	50.0	54.9	0.1523	0.1670	9.7	NA	± 20 %	Average RF
Benzene	50.0	48.3	1.222	1.181	-3.4	NA	± 20 %	Average RF
Bromobenzene	50.0	47.1	0.7548	0.7104	-5.9	NA	± 20 %	Average RF
Bromochloromethane	50.0	47.0	0.3021	0.2838	-6.1	NA	± 20 %	Average RF
Bromodichloromethane	50.0	53.6	0.3900	0.4184	7.3	NA	± 20 %	Average RF
Bromoform	50.0	57.5	0.1754	0.2017	15.0	NA	± 20 %	Average RF
Bromomethane	50.0	50.3	NA	NA	NA	0.6	± 20 %	Quadratic
Carbon Tetrachloride	50.0	51.6	0.1274	0.1315	3.2	NA	± 20 %	Average RF
Chlorobenzene	50.0	45.3	0.9640	0.8738	-9.4	NA	± 20 %	Average RF
Chloroethane	50.0	47.8	0.3320	0.3177	-4.3	NA	± 20 %	Average RF
Chloroform	50.0	48.2	0.8279	0.7977	-3.6	NA	± 20 %	Average RF
Chloromethane	50.0	47.1	0.7175	0.6754	-5.9	NA	± 20 %	Average RF
Dibromochloromethane	50.0	53.6	0.3054	0.3273	7.2	NA	± 20 %	Average RF

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000

Service Request: R1407825
Date Analyzed: 10/14/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\MSVOA10\DATA\101414\A2939.D\

Calibration Date: 7/21/14
Calibration ID: RC1400062
Analysis Lot: 416090
Units: µg/L

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane (CFC 12)	50.0	44.2	0.5381	0.4760	-11.6	NA	± 20 %	Average RF
Methylene Chloride	50.0	47.1	0.4573	0.4310	-5.8	NA	± 20 %	Average RF
Ethylbenzene	50.0	45.5	0.4804	0.4375	-8.9	NA	± 20 %	Average RF
Hexachlorobutadiene	50.0	56.0	0.3147	0.3524	12.0	NA	± 20 %	Average RF
Isopropylbenzene (Cumene)	50.0	45.5	1.457	1.325	-9.1	NA	± 20 %	Average RF
Methyl tert-Butyl Ether	50.0	53.5	0.9984	1.069	7.0	NA	± 20 %	Average RF
Naphthalene	50.0	48.4	1.321	1.278	-3.2	NA	± 20 %	Average RF
Styrene	50.0	49.3	0.9623	0.9484	-1.4	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	45.6	0.2891	0.2635	-8.9	NA	± 20 %	Average RF
Toluene	50.0	46.9	1.281	1.200	-6.3	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	45.7	0.3407	0.3117	-8.5	NA	± 20 %	Average RF
Trichlorofluoromethane (CFC 11)	50.0	51.2	0.7423	0.7599	2.4	NA	± 20 %	Average RF
Vinyl Chloride	50.0	43.1	0.6553	0.5648	-13.8	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	47.0	0.4913	0.4620	-6.0	NA	± 20 %	Average RF
cis-1,3-Dichloropropene	50.0	56.7	0.4120	0.4668	13.3	NA	± 20 %	Average RF
m,p-Xylenes	100	91.5	0.5924	0.5419	-8.5	NA	± 20 %	Average RF
n-Butylbenzene	50.0	46.6	1.960	1.828	-6.7	NA	± 20 %	Average RF
n-Propylbenzene	50.0	46.7	3.120	2.914	-6.6	NA	± 20 %	Average RF
o-Xylene	50.0	46.6	0.5792	0.5398	-6.8	NA	± 20 %	Average RF
sec-Butylbenzene	50.0	43.8	2.666	2.337	-12.3	NA	± 20 %	Average RF
tert-Butylbenzene	50.0	42.4	1.902	1.613	-15.2	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	45.9	0.4493	0.4121	-8.3	NA	± 20 %	Average RF
trans-1,3-Dichloropropene	50.0	59.1	0.3260	0.3855	18.2	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	53.6	0.4419	0.4738	7.2	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	52.1	0.3188	0.3322	4.2	NA	± 20 %	Average RF
Toluene-d8	50.0	51.9	1.123	1.166	3.9	NA	± 20 %	Average RF

Evaluate Continuing Calibration Report

Sample
Data File : I:\ACQUDATA\msvoa10\data\101414\A2939.D Vial: 2
Acq On : 14 Oct 2014 10:08 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 10:33:32 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

FV 10/14/14

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	
1	i	Pentafluorobenzene	1.0000	1.0000	0.0	105	0.00	
2	P	Dichlorodifluoromethane	0.5381	0.4760	11.5	87	0.00	
3	P	Chloromethane	0.7175	0.6754	5.9	96	0.00	
4	P	Vinyl Chloride	0.6553	0.5648	13.8	90	0.00	
5	P	Bromomethane	0.1903	0.1951	-0.6 ~~-2.5~~	100	0.00	
6	P	Chloroethane	0.3320	0.3177	4.3	100	0.00	
7		Freon 21	0.9222	0.9356	-1.5	104	0.00	
8	P	Trichlorofluoromethane	0.7423	0.7599	-2.4	108	0.00	
9		Diethyl Ether	0.3910	0.3718	4.9	104	0.00	
10		Freon 123a	0.5807	0.5592	3.7	96	0.00	
11		Freon 123	0.6180	0.5828	5.7	98	0.00	
12		Acrolein	0.0612	0.0868	-41.8#	150	0.00	NT
13		1,1-Diclethene	0.3485	0.3261	6.4	103	0.00	
14	P	Freon 113	0.4403	0.3977	9.7	99	0.00	
15	P	Acetone	0.1523	0.1670	-9.7	128	0.00	
16		2-Propanol	0.0215	0.0237	-10.2	112	0.00	
17		Iodomethane	0.3548	0.3287	14.5 ~~-7.4~~	108	0.00	
18	P	Carbon Disulfide	1.4741	1.4087	4.4	101	0.00	
19		Acetonitrile	0.0163	0.0177	-8.6	117	0.00	
20		Allyl Chloride	0.2191	0.2385	-8.9	108	0.00	
21	P	Methyl Acetate	0.3020	0.3419	-13.2	111	0.00	
22	P	Methylene Chloride	0.4573	0.4310	5.8	104	0.00	
23		TBA	0.0259	0.0294	-13.5	115	0.00	
24		Acrylonitrile	0.1399	0.1509	-7.9	112	0.00	
25	P	Methyl-t-Butyl Ether	0.9984	1.0688	-7.1	111	0.00	
26	P	trans-1,2-Dichloroethene	0.4493	0.4121	8.3	98	0.00	
27		Halothane	0.0000	0.0000	0.0	0#	-3.03#	
28	P	1,1-Diclethane	0.9501	0.9148	3.7	102	0.00	
29		Vinyl Acetate	0.0559	0.0638	-14.1	113	0.00	
30		DIPE	2.1811	2.3192	-6.3	107	0.00	
31		2-Chloro-1,3-Butadiene	0.9344	0.9171	1.9	99	0.00	
32		ETBE	1.4626	1.5585	-6.6	110	0.00	
33		2,2-Dichloropropane	0.5885	0.6218	-5.7	109	0.00	
34	P	cis-1,2-Dichloroethene	0.4913	0.4620	6.0	100	0.00	
35	P	2-Butanone	0.2007	0.2248	-12.0	107	0.00	
36		Propionitrile	0.0412	0.0521	-7.4 ~~-26.5#~~	112	0.00	
37		Bromochloromethane	0.3021	0.2838	6.1	103	0.00	
38		Methacrylonitrile	0.1086	0.1233	-13.5	109	0.00	
39		Tetrahydrofuran	0.1111	0.1208	-8.7	111	0.00	
40	P	Chloroform	0.8279	0.7977	3.6	107	0.00	
41	P	1,1,1-Trichloroethane	0.6850	0.6711	2.0	105	0.00	
42		TAME	0.9868	1.0889	-10.3	111	0.00	
43	i	1,4-Difluorobenzene	1.0000	1.0000	0.0	101	0.00	
44	P	Cyclohexane	0.4527	0.4305	4.9	94	0.00	
45	s	surr4,Dibrflmethane	0.3188	0.3322	-4.2	104	0.00	
46	P	Carbontetrachloride	0.1274	0.1315	-3.2	108	0.00	
47		1,1-Dichloropropene	0.3911	0.3798	2.9	101	0.00	

W072114.M Tue Oct 14 10:33:59 2014 MSVO10 Page: 1

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\101414\A2939.D Vial: 2
Acq On : 14 Oct 2014 10:08 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 10:33:32 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	
48	s	surr1,1,2-dichloroethane-d4	0.3365	0.3751	-11.5	111	0.00	
49	P	Benzene	1.2222	1.1805	3.4	98	0.00	
50	P	1,2-Dichloroethane	0.4240	0.4623	-9.0	111	0.00	
51		Iso-Butyl Alcohol	0.0099	0.0110	-11.1	108	0.00	
52		n-Heptane	0.4609	0.4744	-2.9	100	0.00	
53		1-Butanol	0.0040	0.0052	~~-19.9 -30.0#~~	120	0.00	
54	P	Trichloroethene	0.3407	0.3117	8.5	95	0.00	
55	P	Methylcyclohexane	0.4697	0.4708	-0.2	96	0.00	
56	P	1,2-Diclpropane	0.3562	0.3587	-0.7	102	0.00	
57		Dibromomethane	0.1717	0.1749	-1.9	107	0.00	
58		1,4-Dioxane	0.0020	0.0018	10.0	90	0.00	
59		Methyl Methacrylate	0.1265	0.1439	-13.8	109	0.00	
60	P	Bromodichloromethane	0.3900	0.4184	-7.3	109	0.00	
61		2-Nitropropane	0.0492	0.0567	-15.2	124	0.00	
62		2-Chloroethylvinyl Ether	0.1490	0.1048	29.7#	64	0.00	NT
63	P	cis-1,3-Dichloropropene	0.4120	0.4668	-13.3	108	0.00	
64	P	4-Methyl-2-pentanone	0.2664	0.3144	-18.0	113	0.00	
65	s	SURR3,Toluene-d8	1.1229	1.1664	-3.9	102	0.00	
66	P	Toluene	1.2807	1.2002	6.3	96	0.00	
67	P	trans-1,3-Dichloropropene	0.3260	0.3855	-18.3	112	0.00	
68		Ethyl Methacrylate	0.2657	0.3089	-16.3	113	0.00	
69	P	1,1,2-Trichloroethane	0.2259	0.2297	-1.7	105	0.00	
70	s	SURR2,BFB	0.4419	0.4738	-7.2	107	0.00	
71	i	d5-Chlorobenzene	1.0000	1.0000	0.0	104	0.00	
72	P	Tetrachloroethene	0.2891	0.2635	8.9	96	0.00	
73	P	2-Hexanone	0.2113	0.2331	-10.3	106	0.00	
74		1,3-Dichloropropane	0.4284	0.4464	-4.2	108	0.00	
75	P	Dibromochloromethane	0.3054	0.3273	-7.2	106	0.00	
76		N-Butyl Acetate	0.4703	0.5816	-23.7#	114	0.00	NT
77	P	1,2-Dibromoethane	0.2429	0.2571	-5.8	106	0.00	
78		3-Chlorobenzotrifluoride	~~0.5312~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~0.02~~	
79	P	Chlorobenzene	0.9640	0.8738	9.4	96	0.00	
80		4-Chlorobenzotrifluoride	~~0.4892~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~0.08~~	
81		1,1,1,2-Tetrachloroethane	0.3374	0.3291	2.5	99	0.00	
82	P	Ethylbenzene	0.4804	0.4375	8.9	93	0.00	
83	P	(m+p)Xylene	0.5924	0.5419	8.5	93	0.00	
84	P	o-Xylene	0.5792	0.5398	6.8	92	0.00	
85	P	Styrene	0.9623	0.9484	1.4	96	0.00	
86	P	Bromoform	0.1754	0.2017	-15.0	117	0.00	
87		2-Chlorobenzotrifluoride	~~0.5264~~	~~0.0001~~	~~100.0#~~	~~0#~~	~~0.00~~	
88	P	Isopropylbenzene	1.4567	1.3246	9.1	91	0.00	
89		Cyclohexanone	0.0460	0.0568	-23.5#	116	0.00	NT
90		trans-1,4-Dichloro-2-Butene	0.0721	0.0846	~~-11.1 -17.3~~	108	0.00	
91	i	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	102	0.00	
92	P	1,1,2,2-Tetrachloroethane	0.5487	0.5567	-1.5	107	0.00	
93		Bromobenzene	0.7548	0.7104	5.9	99	0.00	

Evaluate Continuing Calibration Report

Sample CCV

Data File : I:\ACQUDATA\msvoa10\data\101414\A2939.D Vial: 2
Acq On : 14 Oct 2014 10:08 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 10:33:32 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
94		1,2,3-Trichloropropane	0.1534	0.1487	3.1	107	0.00
95		n-Propylbenzene	3.1202	2.9136	6.6	91	0.00
96		2-Chlorotoluene	1.9252	1.8069	6.1	96	0.00
97		3-Chlorotoluene	2.0456	0.0000	100.0#	0#	-10.22#
98		4-Chlorotoluene	2.3159	2.1502	7.2	97	0.00
99		1,3,5-Trimethylbenzene	2.2689	2.0266	10.7	89	0.00
100		tert-Butylbenzene	1.9017	1.6132	15.2	84	0.00
101		1,2,4-Trimethylbenzene	2.2937	2.1288	7.2	92	0.00
102		3,4-Dichlorobenzotrifluorid	0.6845	0.0000	100.0#	0#	-0.04
103		sec-Butylbenzene	2.6661	2.3370	12.3	86	0.00
104		p-Isopropyltoluene	2.3128	1.9906	13.9	83	0.00
105	P	1,3-Dclbenz	1.4440	1.2737	11.8	90	0.00
106	P	1,4-Dclbenz	1.4958	1.3208	11.7	91	0.00
107		2,4-Dichlorobenzotrifluorid	0.6099	0.0000	100.0#	0#	0.00
108		2,5-Dichlorobenzotrifluorid	0.7285	0.0000	100.0#	0#	0.00
109		n-Butylbenzene	1.9600	1.8284	6.7	88	0.00
110	P	1,2-Dclbenz	1.3568	1.2197	10.1	93	0.00
111	P	1,2-Dibromo-3-chloropropane	0.0835	0.0847	-1.4	96	0.00
112		Trielution Dichlorotoluene	1.1368	0.0002	100.0#	0#	0.01
113		1,3,5-Trichlorobenzene	0.9702	0.0001	100.0#	0#	0.01
114		Coelution Dichlorotoluene	1.1787	0.0000	100.0#	0#	0.02
115	P	1,2,4-Tcbenzene	0.7687	0.7235	5.9	94	0.00
116		Hexachlorobt	0.3147	0.3524	-12.0	113	0.00
117		Naphthalen	1.3209	1.2780	3.2	90	0.00
118		1,2,3-Tclbenzene	0.5634	0.5558	1.3	95	0.00
119		2,4,5-Trichlorotoluene	0.3514	0.0000	100.0#	0#	0.03
120		2,3,6-Trichlorotoluene	0.3556	0.0000	100.0#	0#	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

W072114.M Tue Oct 14 10:33:59 2014 MSVO10 Page: 3

Quantitation Report (QT Reviewed)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\101414\A2939.D Vial: 2
Acq On : 14 Oct 2014 10:08 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

RQ1412SM3-04

Quant Time: Oct 14 10:33:32 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

FD 10/14/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	997026	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1417881	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1317059	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	718000	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	471085	52.11	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 104.22%			
48) surr1,1,2-dichloroetha...	4.848	65	531832	55.74	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 111.48%			
65) SURR3,Toluene-d8	7.427	98	1653865	51.94	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 103.88%			
70) SURR2,BFB	9.878	95	671812	53.61	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 107.22%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.191	85	474563	44.22	ug/L	98
3) Chloromethane	1.294	50	673370	47.07	ug/L	98
4) Vinyl Chloride	1.361	62	563113	43.09	ug/L	99
5) Bromomethane	1.556	94	194504	50.30	ug/L	98
6) Chloroethane	1.611	64	316767	47.84	ug/L	95
7) Freon 21	1.715	67	932829	50.73	ug/L	96
8) Trichlorofluoromethane	1.770	101	757628	51.18	ug/L	98
9) Diethyl Ether	1.934	59	370731	47.55	ug/L	81
10) Freon 123a	1.928	67	557493	48.14	ug/L	96
11) Freon 123	1.965	83	581047	47.15	ug/L	98
12) Acrolein	2.020	56	432558	354.74	ug/L	97
13) 1,1-Diclethene	2.099	96	325163	46.79	ug/L #	80
14) Freon 113	2.093	101	396558	45.17	ug/L	95
15) Acetone	2.117	43	166541	54.85	ug/L	97
16) 2-Propanol	2.190	45	473462	1102.90	ug/L	95
17) Iodomethane	2.215	142	327702	42.75	ug/L	100
18) Carbon Disulfide	2.270	76	1404530	47.78	ug/L	98
19) Acetonitrile	2.318	40	88414	271.68	ug/L	97
20) Allyl Chloride	2.349	76	237798	54.44	ug/L #	42
21) Methyl Acetate	2.355	43	340883	56.60	ug/L	90
22) Methylene Chloride	2.440	84	429714	47.12	ug/L #	76
23) TBA	2.501	59	586083	1134.06	ug/L	83
24) Acrylonitrile	2.629	53	752293	269.65	ug/L	99
25) Methyl-t-Butyl Ether	2.660	73	1065622	53.52	ug/L	87
26) trans-1,2-Dichloroethene	2.666	96	410914m	45.86	ug/L	
28) 1,1-Diclethane	3.044	63	912128	48.14	ug/L	97
29) Vinyl Acetate	3.087	86	63578	57.04	ug/L #	35
30) DIPE	3.105	45	2312262	53.17	ug/L	94
31) 2-Chloro-1,3-Butadiene	3.141	53	914384	49.07	ug/L	83
32) ETBE	3.501	59	1553840	53.28	ug/L	91
33) 2,2-Dichloropropane	3.678	77	619970	52.83	ug/L	97
34) cis-1,2-Dichloroethene	3.678	96	460631	47.02	ug/L #	74
35) 2-Butanone	3.696	43	224104	56.00	ug/L	92
36) Propionitrile	3.769	54	259535	268.62	ug/L	97
37) Bromochloromethane	3.977	130	282956	46.97	ug/L #	71

W072114.M Tue Oct 14 10:33:49 2014 MSVO10 Page: 1

Sample CCV

Data File : I:\ACQUDATA\msvoa10\data\101414\A2939.D Vial: 2
Acq On : 14 Oct 2014 10:08 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 10:33:32 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Methacrylonitrile	3.964	67	122975	56.80	ug/L	#	45
39)	Tetrahydrofuran	4.050	42	120474	54.36	ug/L		74
40)	Chloroform	4.092	83	795346	48.18	ug/L		97
41)	1,1,1-Trichloroethane	4.355	97	669148	48.99	ug/L		95
42)	TAME	5.178	73	1085628	55.17	ug/L		89
44)	Cyclohexane	4.440	41	610425	47.55	ug/L		89
46)	Carbontetrachloride	4.611	121	186421	51.61	ug/L		94
47)	1,1-Dichloropropene	4.617	75	538537	48.56	ug/L		96
49)	Benzene	4.952	78	1673852	48.30	ug/L		89
50)	1,2-Dichloroethane	4.982	62	655445	54.51	ug/L		95
51)	Iso-Butyl Alcohol	4.848	43	311962	1107.66	ug/L		96
52)	n-Heptane	5.452	43	672633	51.46	ug/L	#	78
53)	1-Butanol	5.946	56	371108	2996.56	ug/L		82
54)	Trichloroethene	5.964	130	442024	45.74	ug/L		99
55)	Methylcyclohexane	6.214	55	667570	50.12	ug/L	#	77
56)	1,2-Diclpropane	6.257	63	508634	50.35	ug/L		99
57)	Dibromomethane	6.403	93	248007	50.92	ug/L		97
58)	1,4-Dioxane	6.458	88	49854m	867.25	ug/L		
59)	Methyl Methacrylate	6.458	69	204087	56.88	ug/L	#	62
60)	Bromodichloromethane	6.610	83	593255	53.64	ug/L		100
61)	2-Nitropropane	6.891	41	160689	115.19	ug/L		94
62)	2-Chloroethylvinyl Ether	7.006	63	148593	35.18	ug/L		86
63)	cis-1,3-Dichloropropene	7.141	75	661881	56.66	ug/L		98
64)	4-Methyl-2-pentanone	7.336	43	445804	59.00	ug/L		95
66)	Toluene	7.500	91	1701724	46.86	ug/L		98
67)	trans-1,3-Dichloropropene	7.744	75	546583	59.12	ug/L		96
68)	Ethyl Methacrylate	7.872	69	438000	58.14	ug/L	#	72
69)	1,1,2-Trichloroethane	7.921	97	325670	50.83	ug/L		98
72)	Tetrachloroethene	8.055	164	346988	45.56	ug/L		98
73)	2-Hexanone	8.195	43	307007	55.15	ug/L		93
74)	1,3-Dichloropropane	8.086	76	587905m	52.09	ug/L		
75)	Dibromochloromethane	8.299	129	431008	53.58	ug/L		97
76)	N-Butyl Acetate	8.335	43	765974	61.84	ug/L		91
77)	1,2-Dibromoethane	8.396	107	338561	52.91	ug/L		95
79)	Chlorobenzene	8.866	112	1150814	45.32	ug/L		100
81)	1,1,1,2-Tetrachloroethane	8.945	131	433427	48.77	ug/L		98
82)	Ethylbenzene	8.976	106	576218	45.54	ug/L		99
83)	(m+p)Xylene	9.085	106	1427455	91.47	ug/L		96
84)	o-Xylene	9.433	106	710993	46.60	ug/L		99
85)	Styrene	9.445	104	1249157	49.28	ug/L		99
86)	Bromoform	9.597	173	265599	57.48	ug/L		98
88)	Isopropylbenzene	9.756	105	1744614	45.47	ug/L		99
89)	Cyclohexanone	9.823	55	1496111	1234.00	ug/L		98
90)	trans-1,4-Dichloro-2-B...	10.055	53	111453	55.72	ug/L		82
92)	1,1,2,2-Tetrachloroethane	10.006	83	399729	50.74	ug/L		95
93)	Bromobenzene	10.000	156	510102	47.06	ug/L		97
94)	1,2,3-Trichloropropane	10.036	110	106779	48.47	ug/L		98
95)	n-Propylbenzene	10.103	91	2091937	46.69	ug/L		99
96)	2-Chlorotoluene	10.164	91	1297354	46.93	ug/L		99
98)	4-Chlorotoluene	10.256	91	1543822	46.42	ug/L		99
99)	1,3,5-Trimethylbenzene	10.250	105	1455125	44.66	ug/L		98
100)	tert-Butylbenzene	10.518	119	1158276	42.41	ug/L		98

Quantitation Report (QT Reviewed)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\101414\A2939.D Vial: 2
Acq On : 14 Oct 2014 10:08 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 10:33:32 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 1,2,4-Trimethylbenzene	10.555	105	1528513	46.41	ug/L	99
103) sec-Butylbenzene	10.695	105	1677992	43.83	ug/L	98
104) p-Isopropyltoluene	10.817	119	1429269	43.04	ug/L	98
105) 1,3-Dclbenz	10.780	146	914541	44.10	ug/L	96
106) 1,4-Dclbenz	10.853	146	948331	44.15	ug/L	99
109) n-Butylbenzene	11.140	91	1312814	46.64	ug/L	99
110) 1,2-Dclbenz	11.152	146	875763	44.95	ug/L	98
111) 1,2-Dibromo-3-chloropr...	11.707	157	60833	50.72	ug/L	89
115) 1,2,4-Tcbenzene	12.231	180	519485	47.06	ug/L	94
116) Hexachlorobt	12.329	225	253024	56.00	ug/L	98
117) Naphthalen	12.377	128	917583	48.38	ug/L	98
118) 1,2,3-Tclbenzene	12.512	180	399029	49.32	ug/L	96

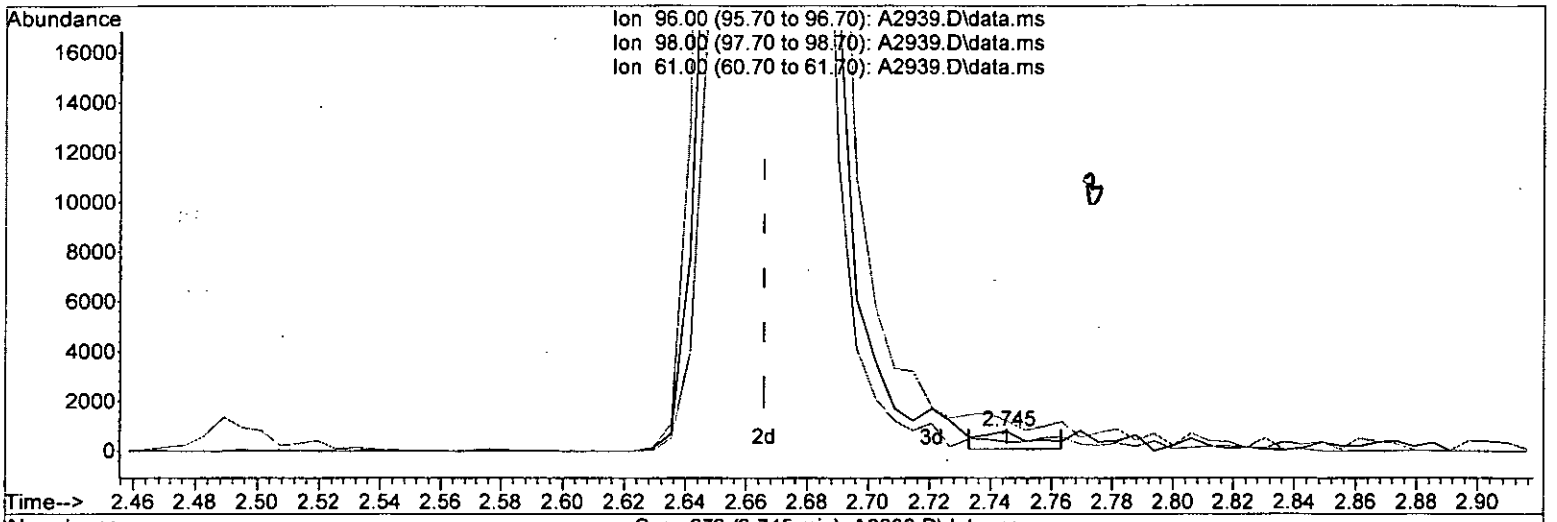
(#) = qualifier out of range (m) = manual integration (+) = signals summed

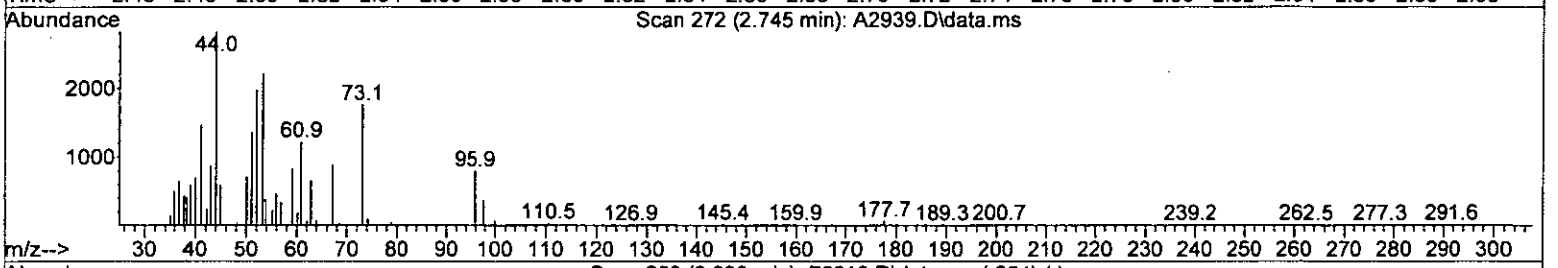
W072114.M Tue Oct 14 10:33:49 2014 MSVO10 Page: 3

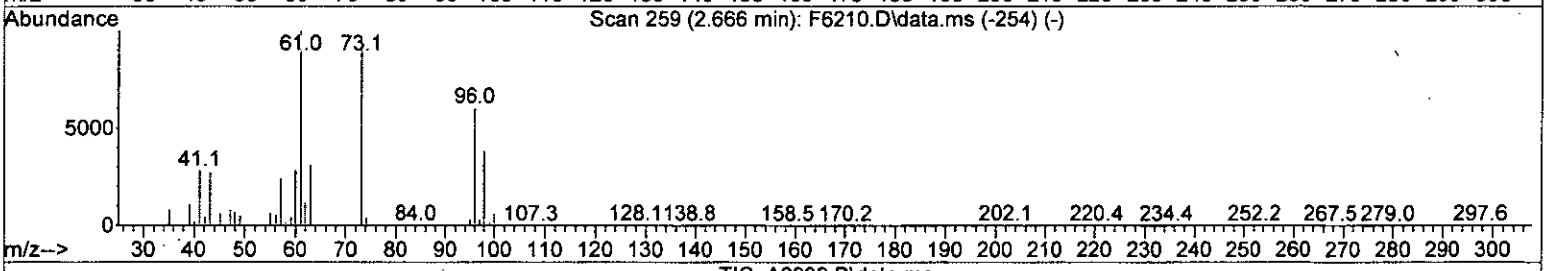
Quantitation Report (Qedit)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\101414\A2939.D Vial: 2
Acq On : 14 Oct 2014 10:08 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 10:21:47 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration







TIC: A2939.D\data.ms

(26) trans-1,2-Dichloroethene (P)

2.745min (+0.079) 0.09 ug/L

response 849

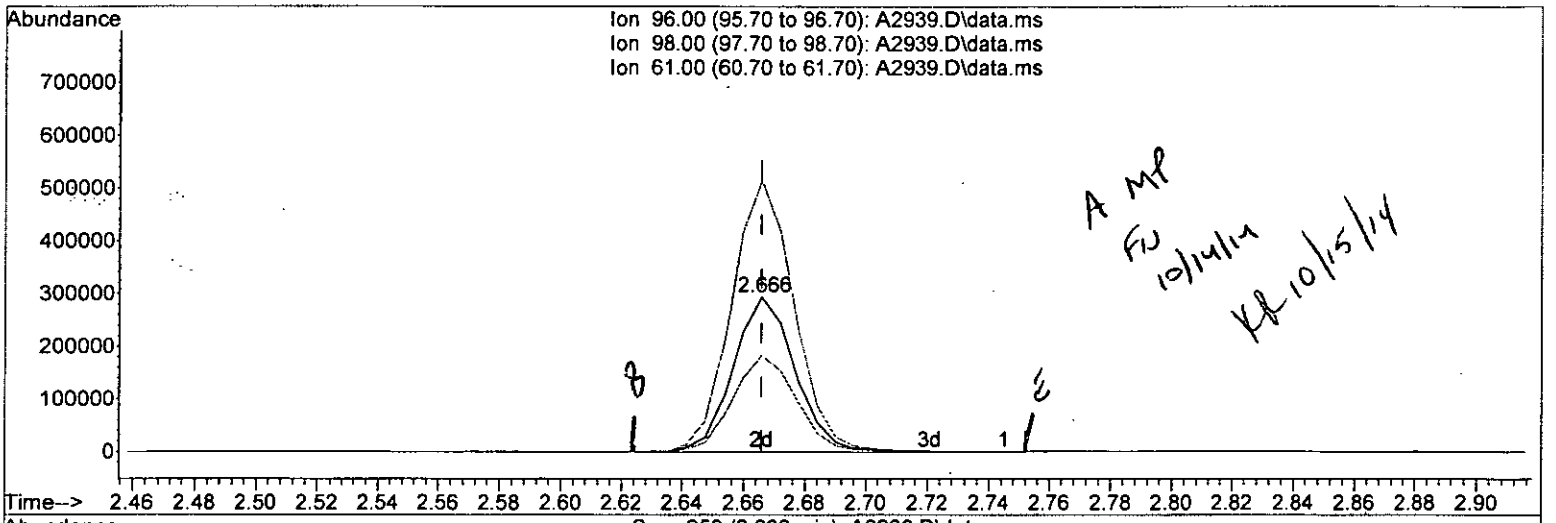
Ion	Exp%	Act%
96.00	100	100
98.00	64.00	45.97
61.00	144.30	153.15
0.00	0.00	0.00

W072114.M Tue Oct 14 10:32:25 2014 MSVO10 Page: 1

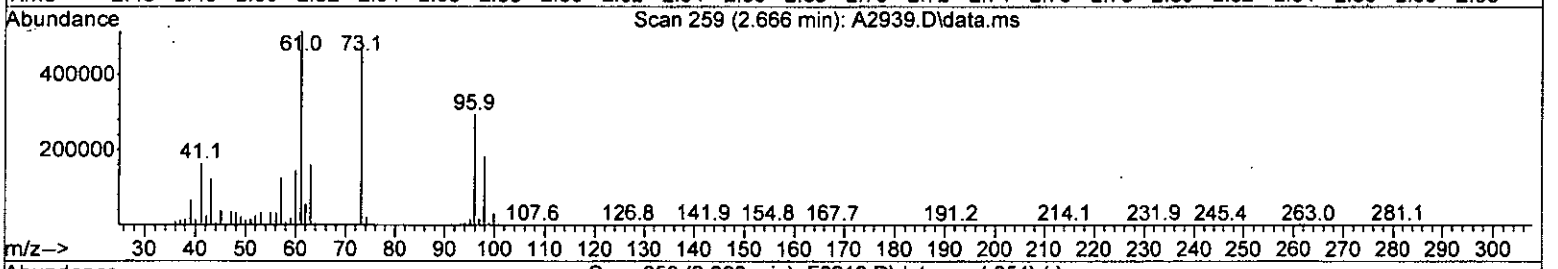
Quantitation Report (Qedit)

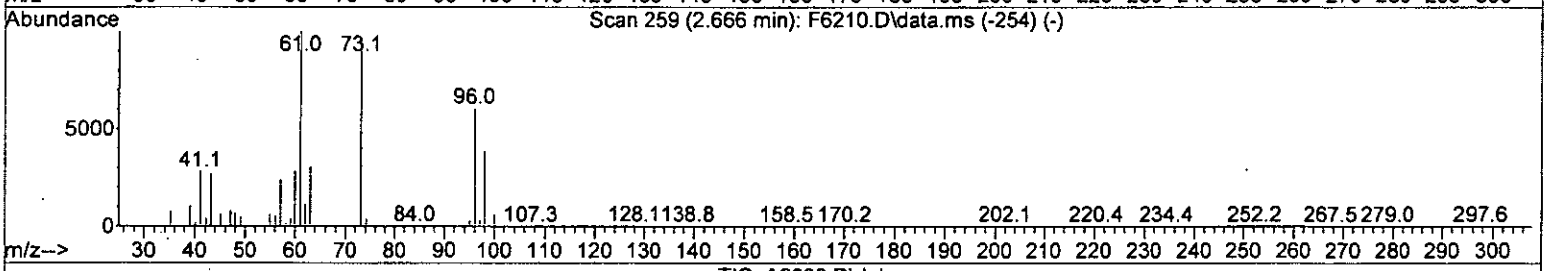
Sample CCV
Data File : I:\ACQUDATA\msvoa10\data\101414\A2939.D Vial: 2
Acq On : 14 Oct 2014 10:08 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 10:21:47 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



A MP FJ 10/14/14 KF 10/15/14





TIC: A2939.D\data.ms

(26) trans-1,2-Dichloroethene (P)

2.666min (+0.000) 45.86 ug/L m

response 410914

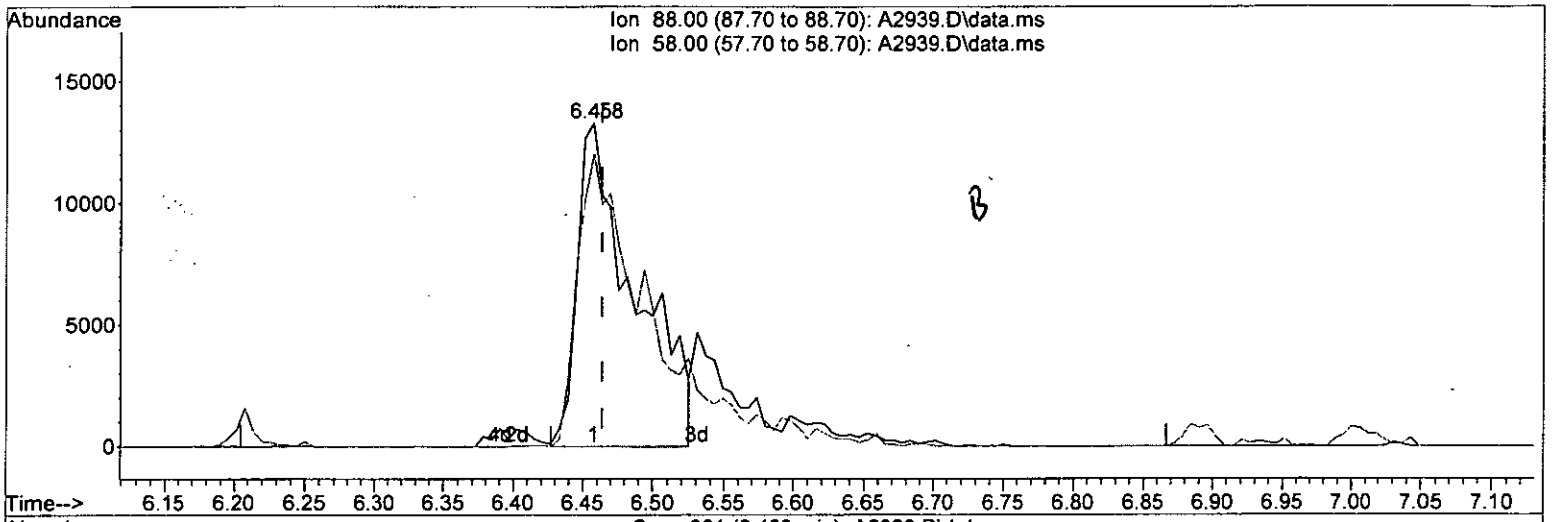
Ion	Exp%	Act%
96.00	100	100
98.00	64.00	61.98
61.00	144.30	175.28#
0.00	0.00	0.00

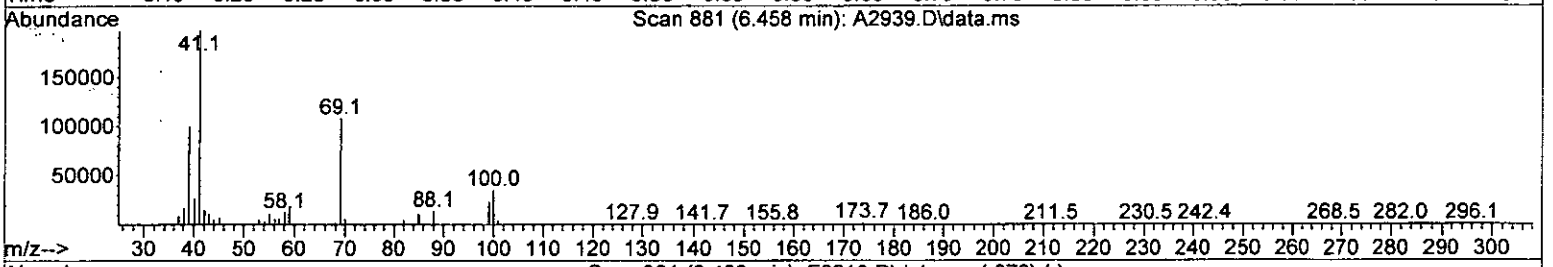
W072114.M Tue Oct 14 10:32:32 2014 MSVO10 Page: 1

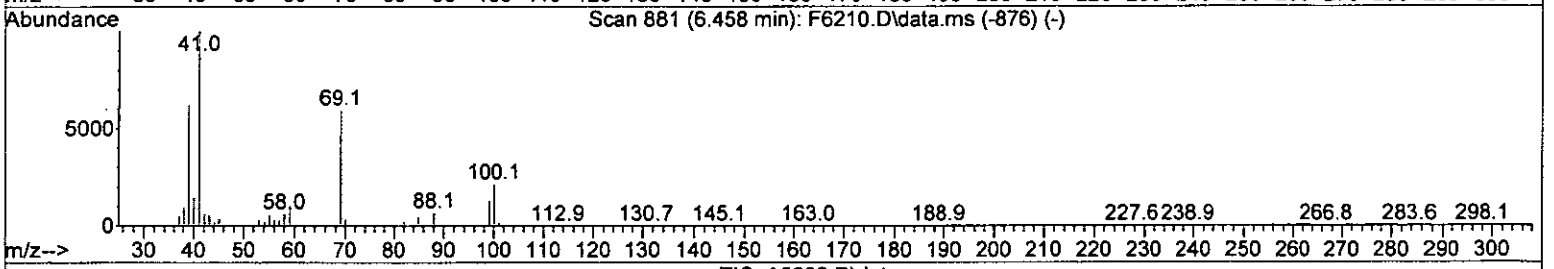
Quantitation Report (Qedit)

Sample CCV
Data File : I:\ACQUDATA\msvoa10\data\101414\A2939.D Vial: 2
Acq On : 14 Oct 2014 10:08 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 10:21:47 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration







TIC: A2939.D\data.ms

(58) 1,4-Dioxane

6.458min (-0.006) 655.27 ug/L

response 37668

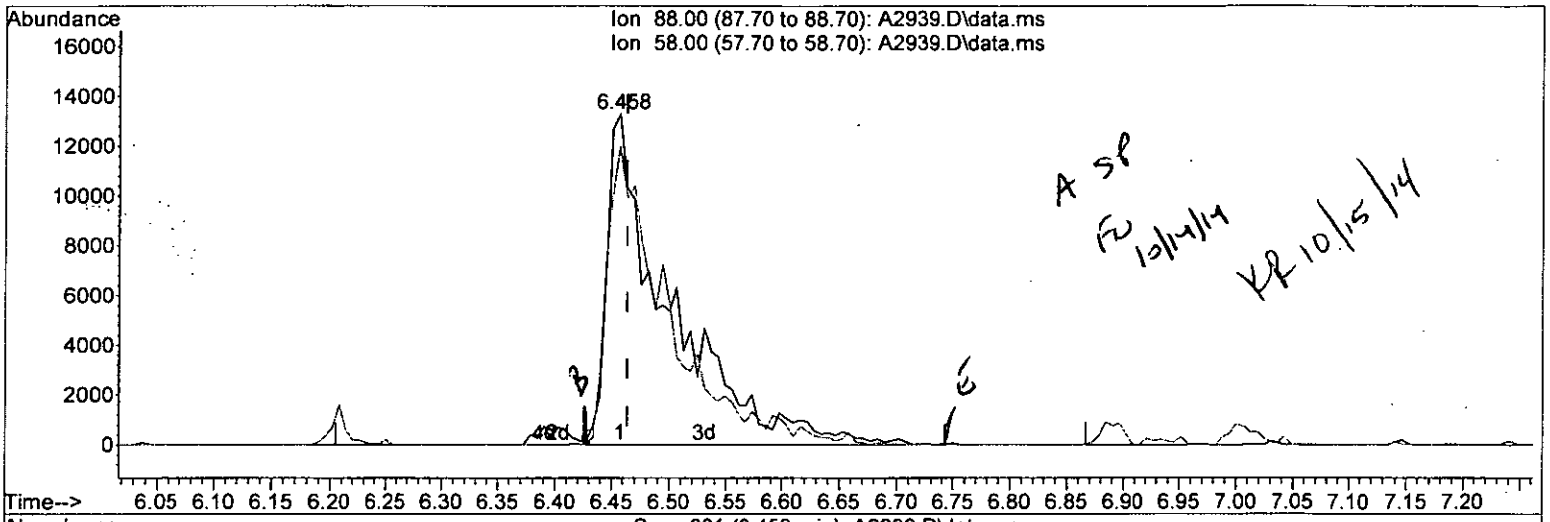
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	90.38
0.00	0.00	0.00
0.00	0.00	0.00

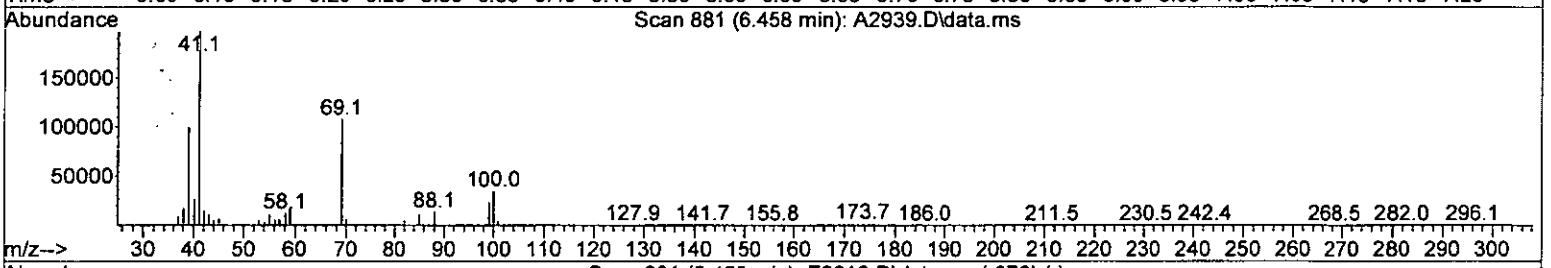
W072114.M Tue Oct 14 10:32:50 2014 MSVO10 Page: 1

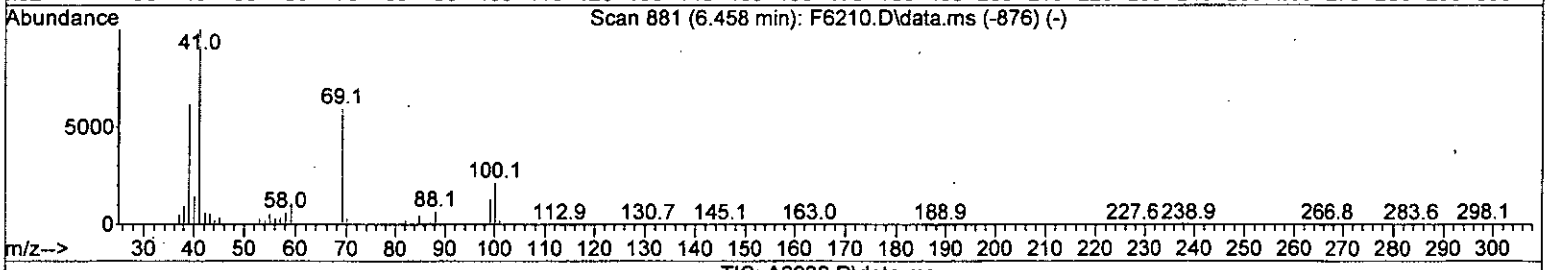
Quantitation Report (Qedit)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\101414\A2939.D Vial: 2
Acq On : 14 Oct 2014 10:08 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 10:21:47 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration







TIC: A2939.D\data.ms

(58) 1,4-Dioxane

6.458min (-0.006) 867.25 ug/L m

response 49854

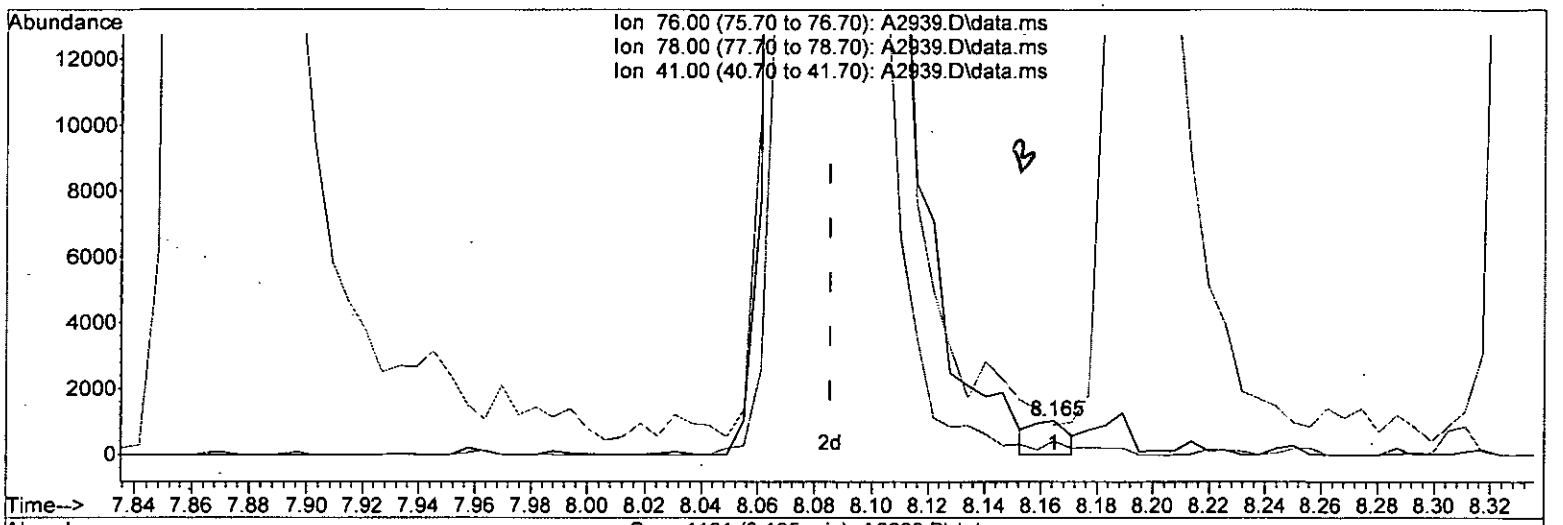
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	90.38
0.00	0.00	0.00
0.00	0.00	0.00

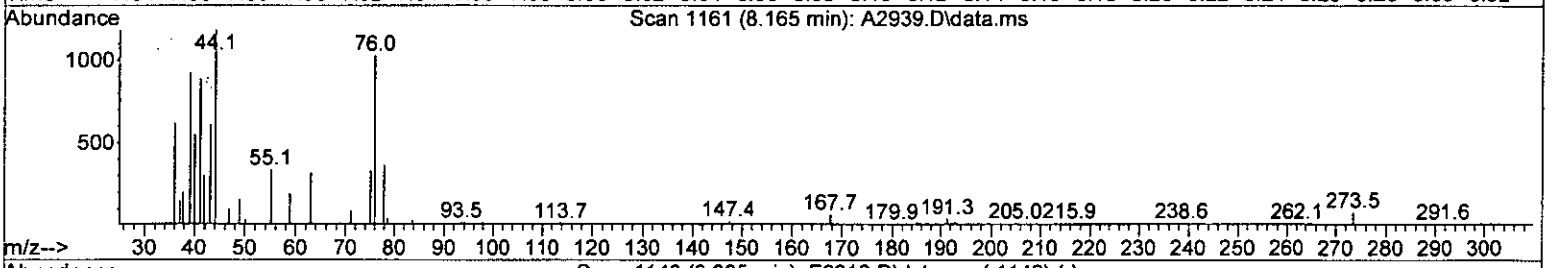
W072114.M Tue Oct 14 10:33:00 2014 MSVO10 Page: 1

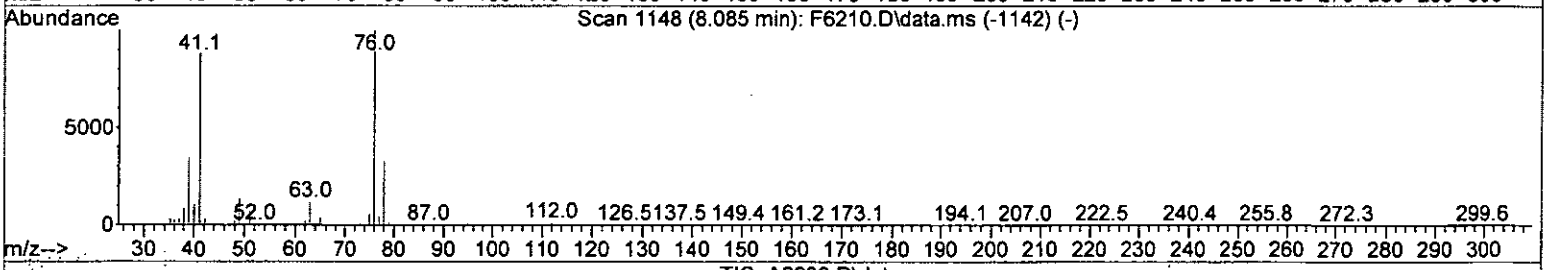
Quantitation Report (Qedit)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\101414\A2939.D Vial: 2
Acq On : 14 Oct 2014 10:08 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 10:21:47 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration







TIC: A2939.D\data.ms

(74) 1,3-Dichloropropane

8.165min (+0.079) 0.08 ug/L

response 932

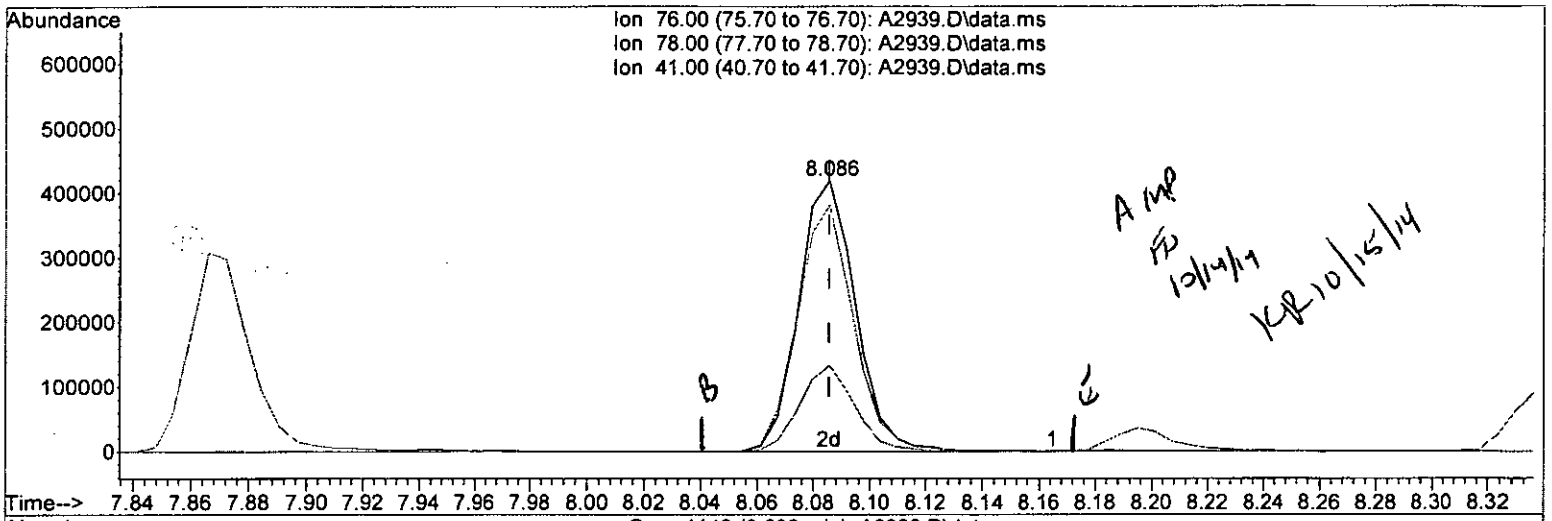
Ion	Exp%	Act%
76.00	100	100
78.00	31.70	39.59
41.00	66.30	86.19
0.00	0.00	0.00

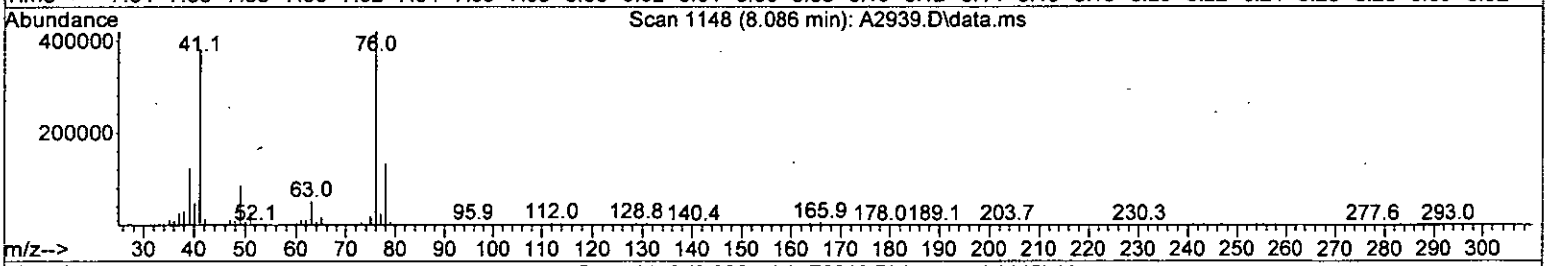
W072114.M Tue Oct 14 10:33:12 2014 MSVO10 Page: 1

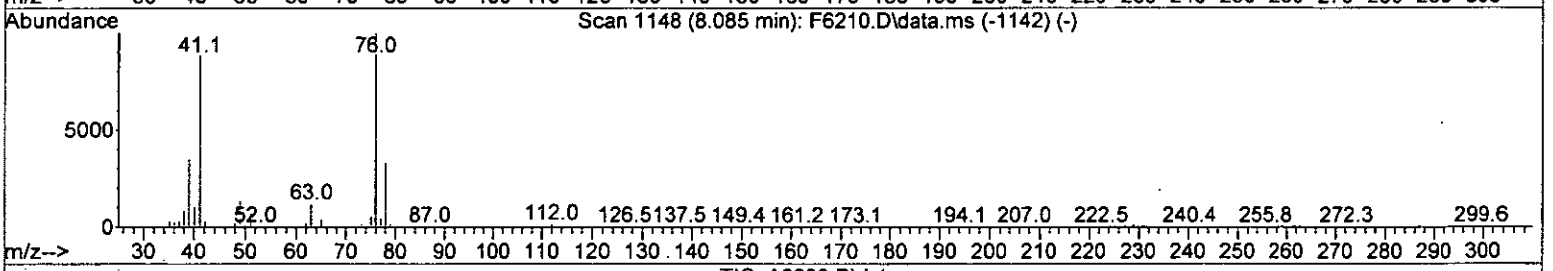
Quantitation Report (Qedit)

Sample CCV
Data File : I:\ACQUDATA\msvoa10\data\101414\A2939.D Vial: 2
Acq On : 14 Oct 2014 10:08 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 10:21:47 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration







TIC: A2939.D\data.ms

(74) 1,3-Dichloropropane

8.086min (+0.000) 52.09 ug/L m

response 587905

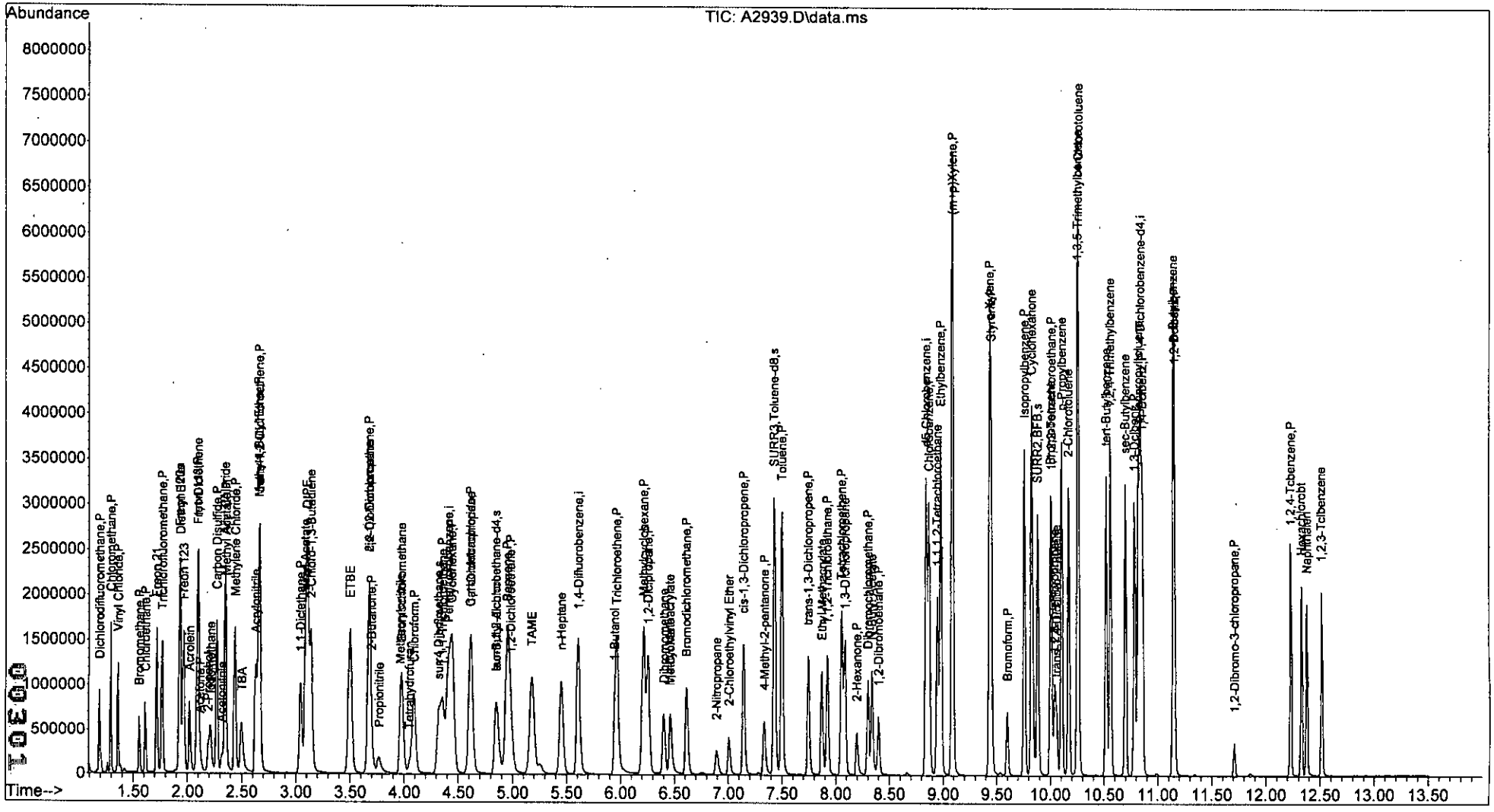
Ion	Exp%	Act%
76.00	100	100
78.00	31.70	31.77
41.00	66.30	90.93#
0.00	0.00	0.00

W072114.M Tue Oct 14 10:33:20 2014 MSVO10 Page: 1

Quantitation Report (QT Reviewed)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\101414\A2939.D Vial: 2
Acq On : 14 Oct 2014 10:08 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 10:33:32 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



W072114.M Tue Oct 14 10:33:51 2014 MSVO10

ALS Environmental

VOLATILE ORGANICS
RAW QC DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

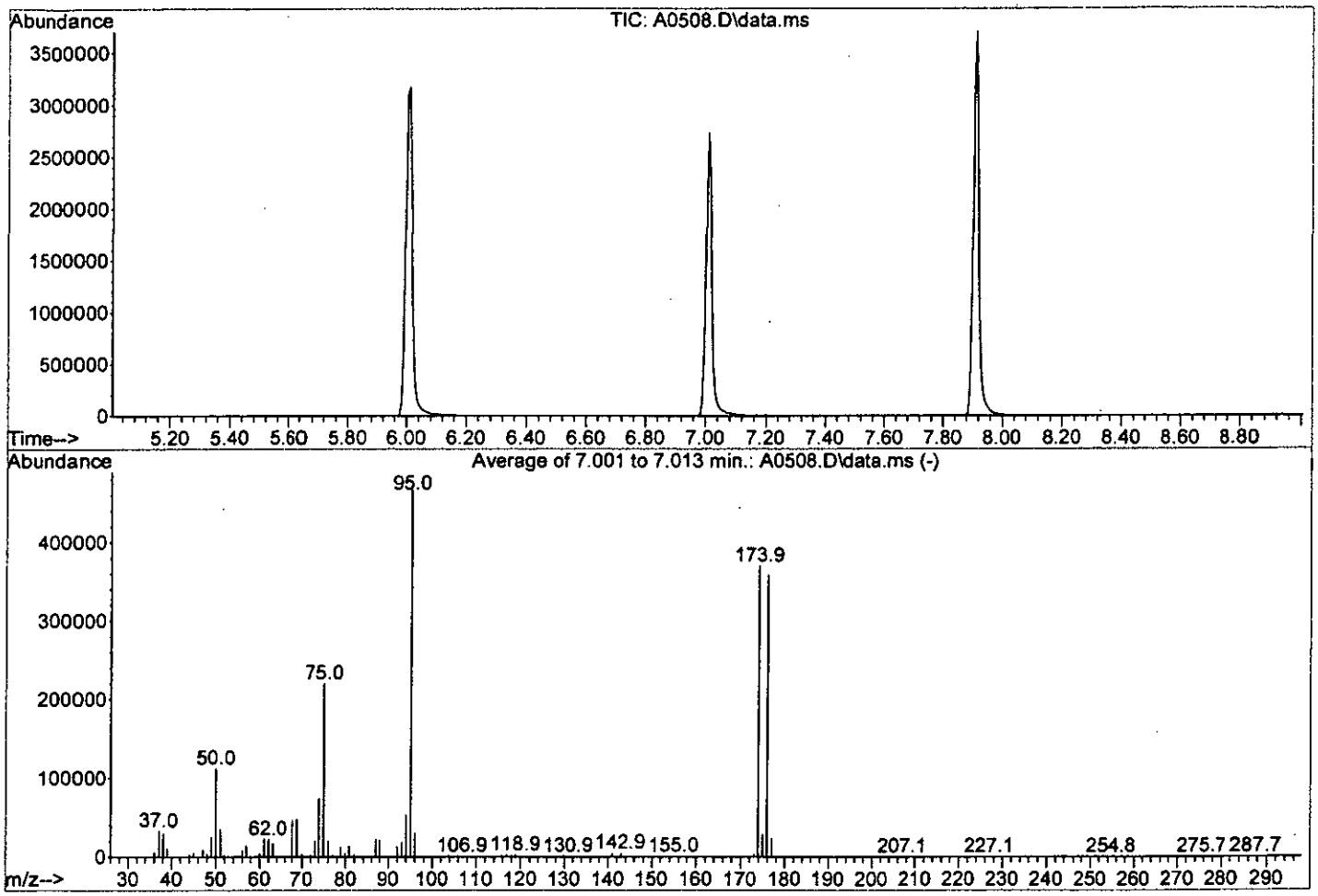
RIGHT SOLUTIONS | RIGHT PARTNER

Data Path : I:\ACQUDATA\msvoa10\data\072114\
Data File : A0508.D
Acq On : 21 Jul 2014 10:55 am
Operator : F.NAEGLER
Sample : TUNE
Misc :
ALS Vial : 1 Sample Multiplier: 1

FN 7/22/14

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\T072114.M
Title : 8260B WATERS
Last Update : Wed Sep 27 14:33:13 2006



AutoFind: Scans 314, 315, 316; Background Corrected with Scan 309

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.0	112021	PASS
75	95	30	60	47.1	219883	PASS
95	95	100	100	100.0	466859	PASS
96	95	5	9	6.4	29771	PASS
173	174	0.00	2	1.0	3689	PASS
174	95	50	120	79.2	369941	PASS
175	174	5	9	7.6	28299	PASS
176	174	95	101	96.8	358208	PASS
177	176	5	9	6.4	23022	PASS

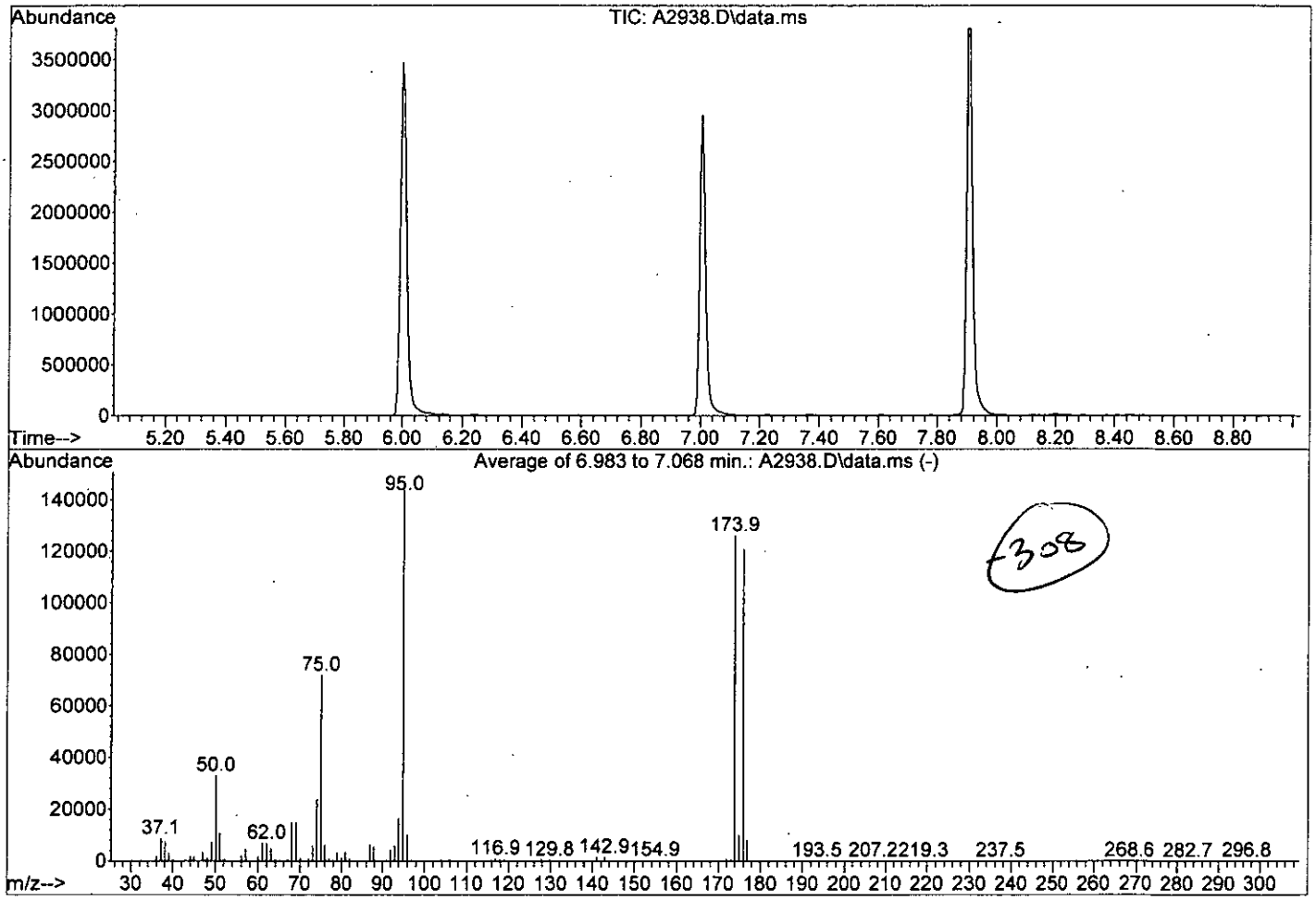
```
Data Path : I:\ACQUDATA\MSVOA10\DATA\101414\
Data File : A2938.D
Acq On    : 14 Oct 2014    9:42 am
Operator  : F.NAEGLER
Sample    : TUNE
Misc      :
ALS Vial  : 1   Sample Multiplier: 1

Integration File: CPD4.P

Method    : I:\ACQUDATA\MSVOA10\METHODS\T072114.M
Title     : 8260B WATERS
Last Update  : Wed Sep 27 14:33:13 2006
```

RQM12543-03

FN 10/14/14



308

Spectrum Information: Average of 6.983 to 7.068 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.0	33006	PASS
75	95	30	60	50.1	71875	PASS
95	95	100	100	100.0	143527	PASS
96	95	5	9	6.9	9855	PASS
173	174	0.00	2	0.4	465	PASS
174	95	50	120	87.8	126065	PASS
175	174	5	9	7.8	9816	PASS
176	174	95	101	95.7	120690	PASS
177	176	5	9	6.5	7862	PASS

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/14/14 11:39
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412540-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2942.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	**0.58**	J	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/14/14 11:39
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412540-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2942.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.32	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: NA
Date Received: NA
Date Analyzed: 10/14/14 11:39

Sample Name: Method Blank
Lab Code: RQ1412540-01

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA10\DATA\101414\A2942.D\

Analysis Lot: 416090
Instrument Name: R-MS-10
Dilution Factor: 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	75-120	10/14/14 11:39	
Dibromofluoromethane	103	85-115	10/14/14 11:39	
Toluene-d8	102	85-120	10/14/14 11:39	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/14/14 1139

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412540-01	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Sample MBLK
Data File : I:\ACQUDATA\msvoa10\data\101414\A2942.D Vial: 5
Acq On : 14 Oct 2014 11:39 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

RQ1412543-01

Quant Time: Oct 15 15:03:40 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.403	168	989825	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1432156	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1328905	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	714253	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	471943	51.68	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.36%			
48) surr1,1,2-dichloroetha...	4.854	65	519184	53.87	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 107.74%			
65) SURR3,Toluene-d8	7.427	98	1638041	50.93	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.86%			
70) SURR2,BFB	9.878	95	654501	51.71	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 103.42%			
Target Compounds						Qvalue
5) Bromomethane	1.556	94	1576	0.58	ug/L #	35
23) TBA	2.519	59	2100m	4.09	ug/L	
115) 1,2,4-Tcbenzene	12.274	180	2359	0.21	ug/L	90
116) Hexachlorobt	12.335	225	1436	0.32	ug/L	78
118) 1,2,3-Tclbenzene	12.542	180	3095	0.38	ug/L	84

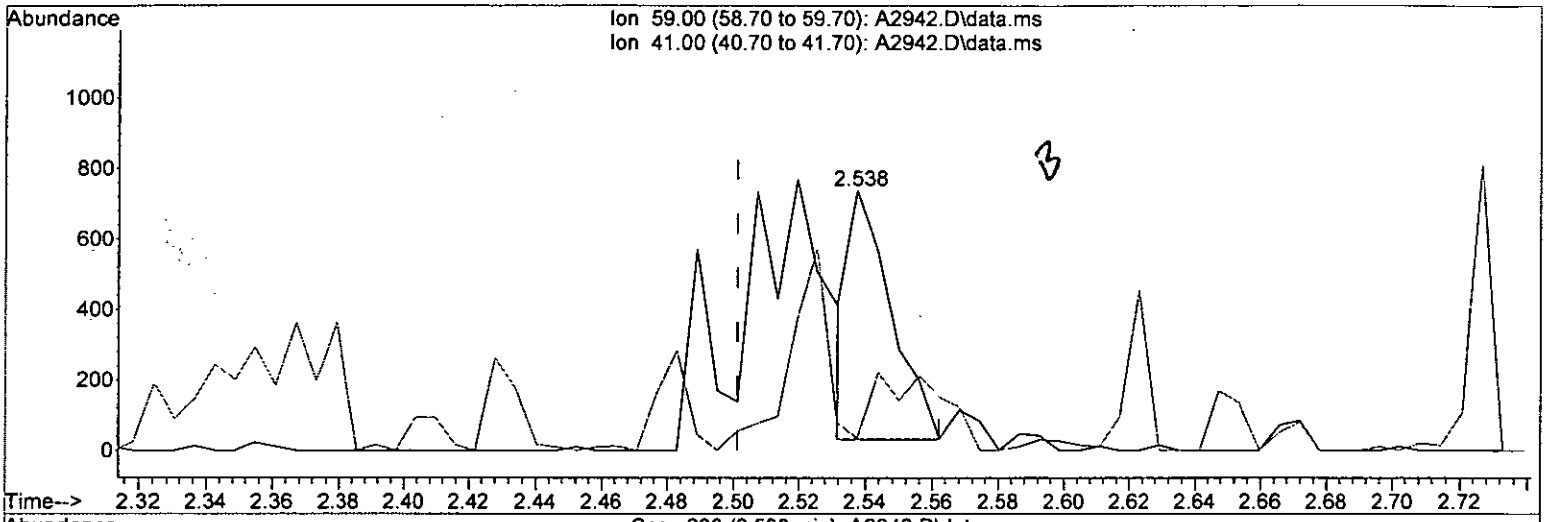
(#) = qualifier out of range (m) = manual integration (+) = signals summed

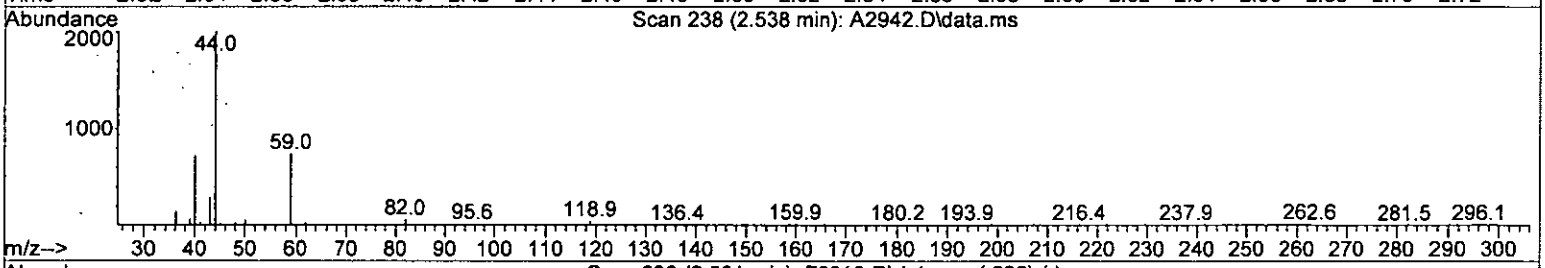
FJ 12/15/14

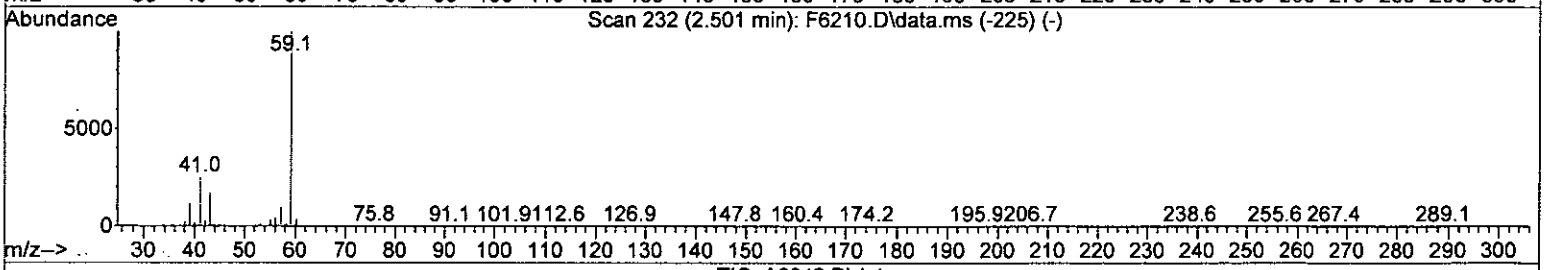
Quantitation Report (Qedit)

Sample MBLK
Data File : I:\ACQUDATA\msvoa10\data\101414\A2942.D Vial: 5
Acq On : 14 Oct 2014 11:39 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 11:53:01 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration







TIC: A2942.D\data.ms

(23) TBA

2.538min (+0.037) 1.18 ug/L

response 606

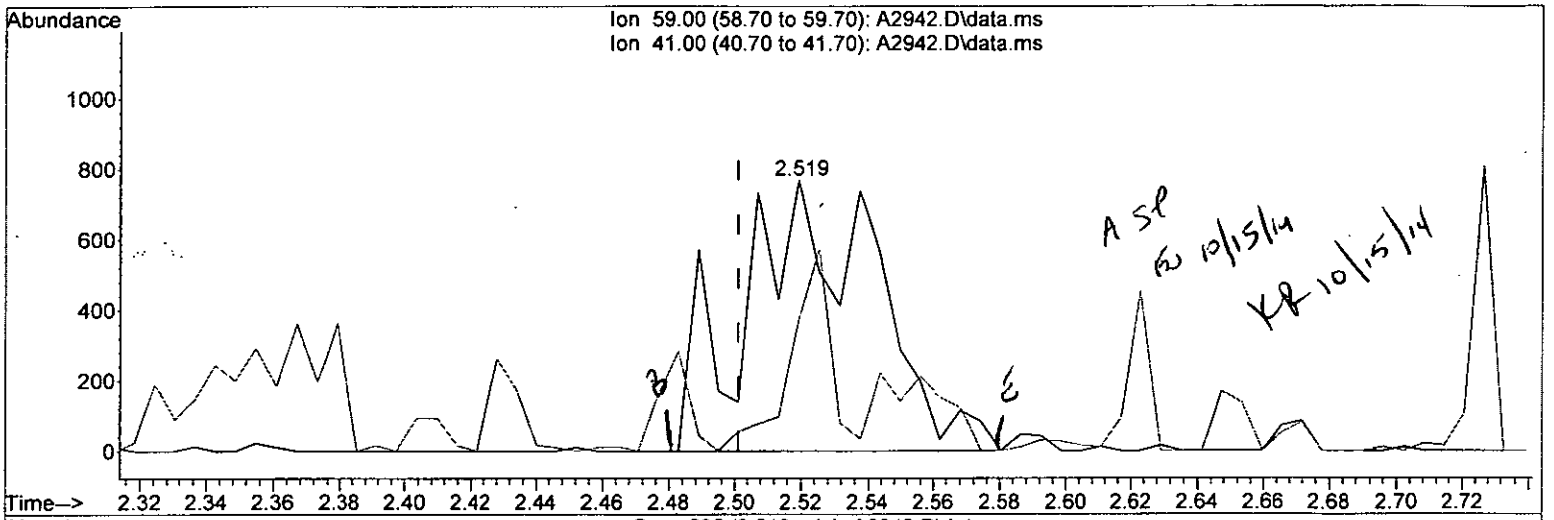
Ion	Exp%	Act%
59.00	100	100
41.00	22.80	4.75
0.00	0.00	0.00
0.00	0.00	0.00

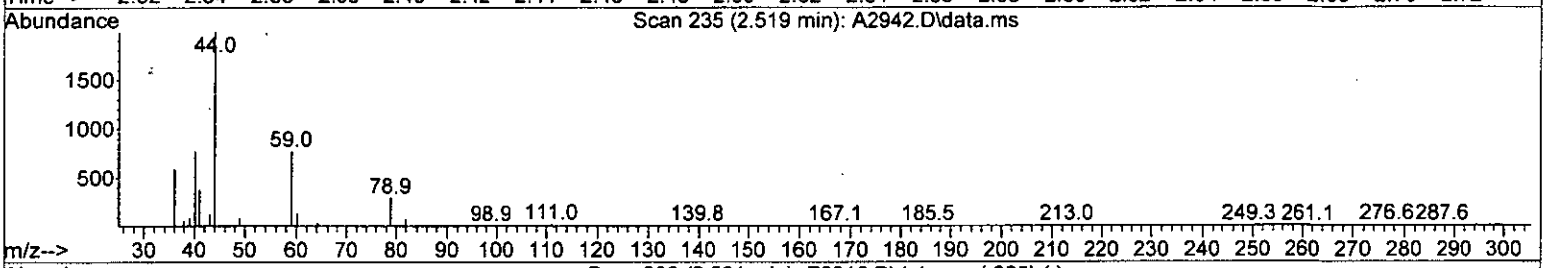
W072114.M Wed Oct 15 15:02:21 2014 MSVO10 Page: 1

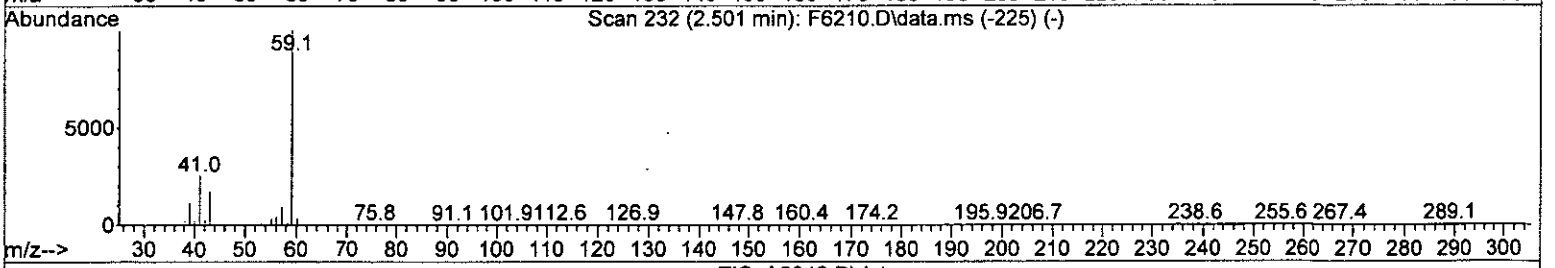
Quantitation Report (Qedit)

Sample MBLK
Data File : I:\ACQUDATA\msvoa10\data\101414\A2942.D Vial: 5
Acq On : 14 Oct 2014 11:39 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 11:53:01 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration







TIC: A2942.D\data.ms

(23) TBA

2.519min (+0.018) 4.09 ug/L m

response 2100

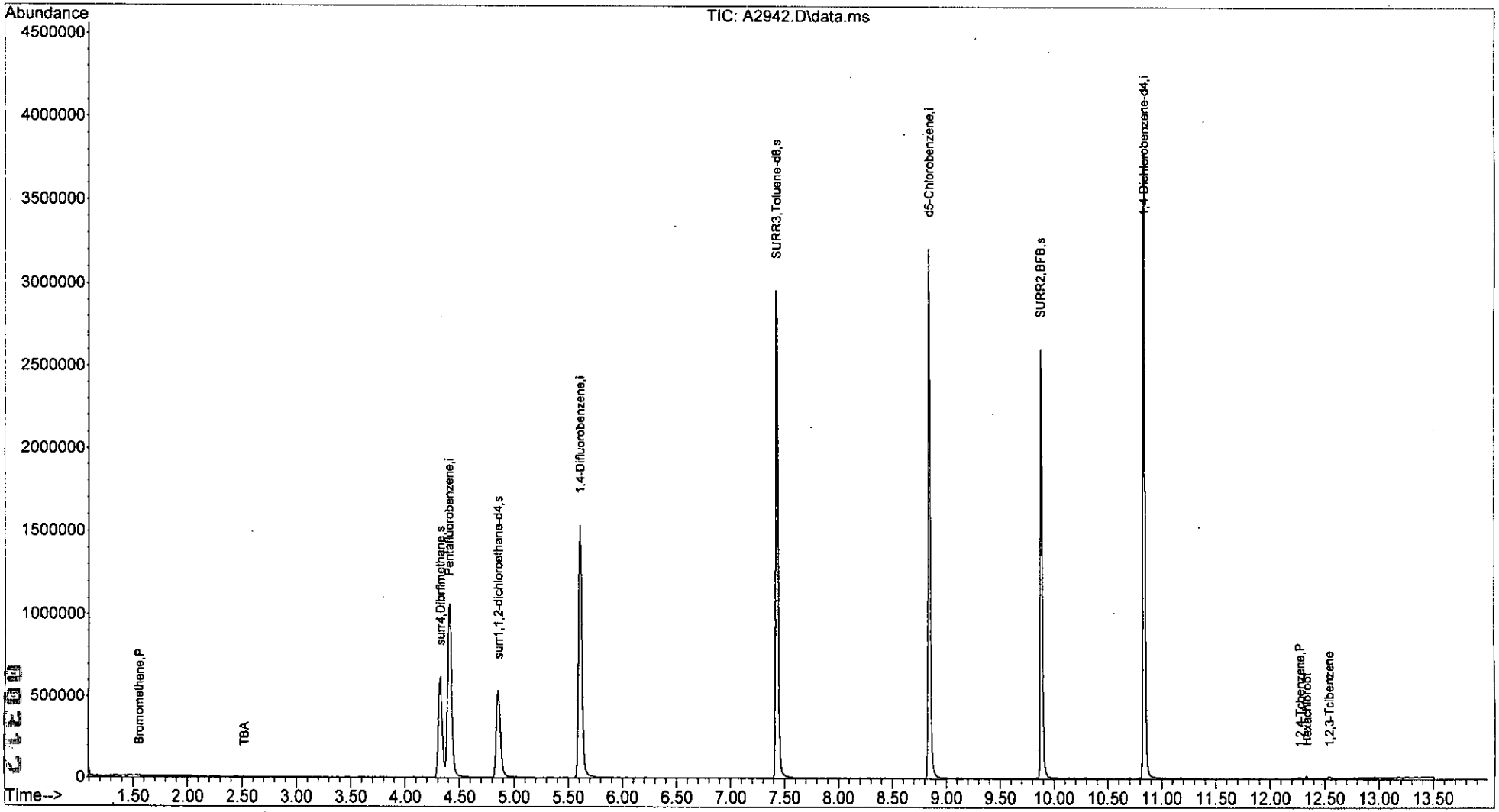
Ion	Exp%	Act%
59.00	100	100
41.00	22.80	49.09#
0.00	0.00	0.00
0.00	0.00	0.00

W072114.M Wed Oct 15 15:02:30 2014 MSVO10 Page: 1

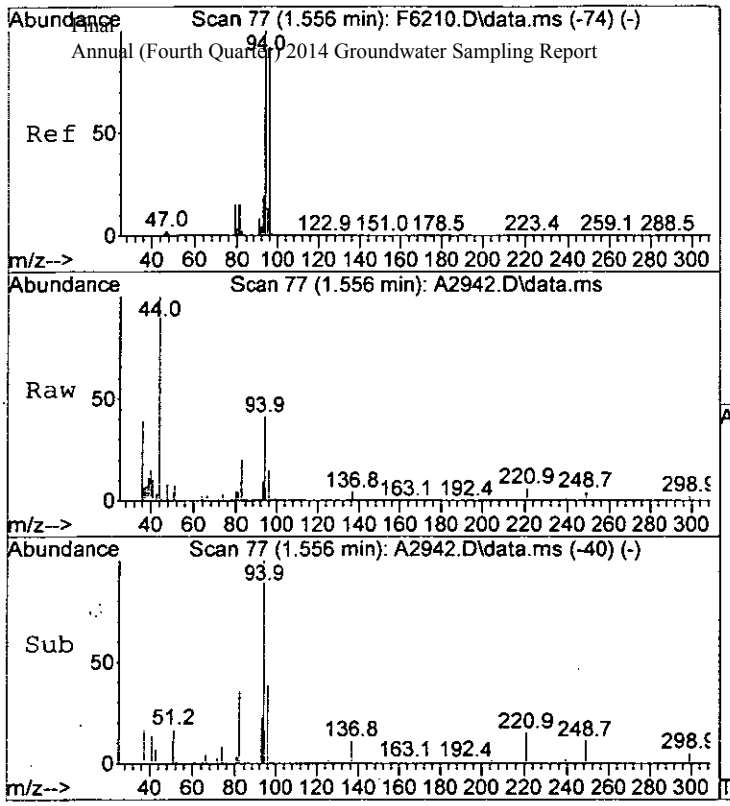
Quantitation Report (QT Reviewed)

Sample : MBLK
Data File : I:\ACQUDATA\msvoa10\data\101414\A2942.D Vial: 5
Acq On : 14 Oct 2014 11:39 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 15 15:03:40 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



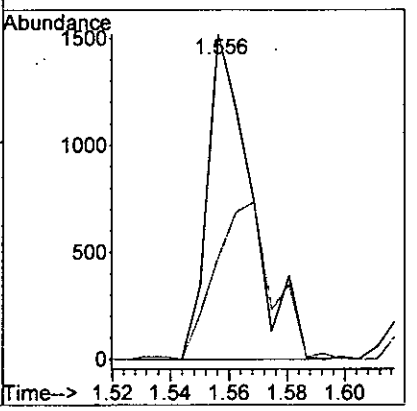
W072114.M Wed Oct 15 15:04:47 2014 MSVO10

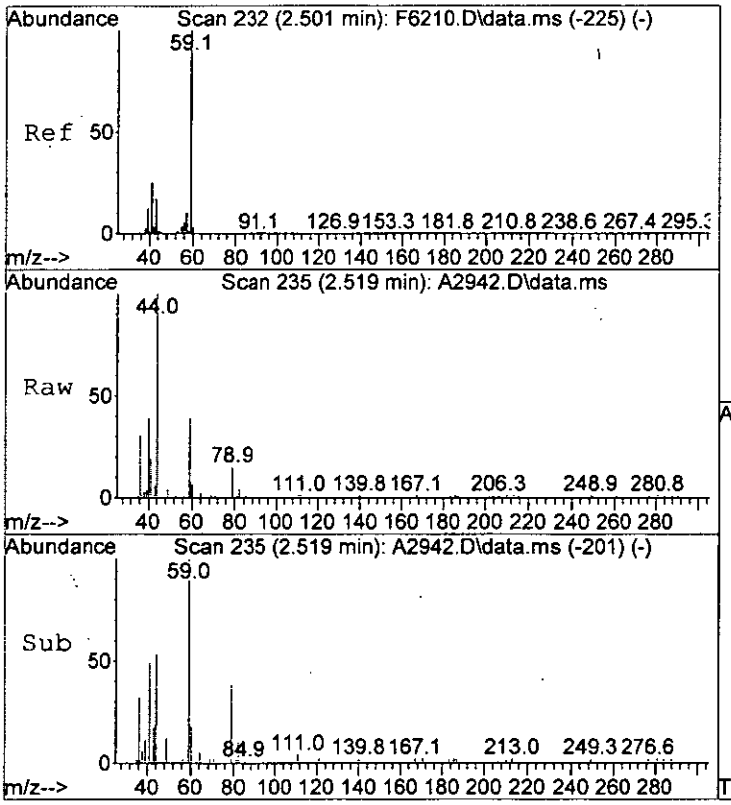


#5
Bromomethane
Concen: 0.58 ug/L
RT: 1.556 min Scan# 77
Delta R.T. 0.000 min
Lab File: A2942.D
Acq: 14 Oct 2014 11:39 am

Tgt Ion: 94 Resp: 1576

Ion	Ratio	Lower	Upper
94	100		
96	31.2	74.0	114.0#

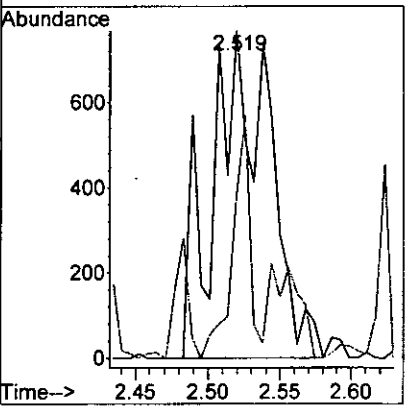


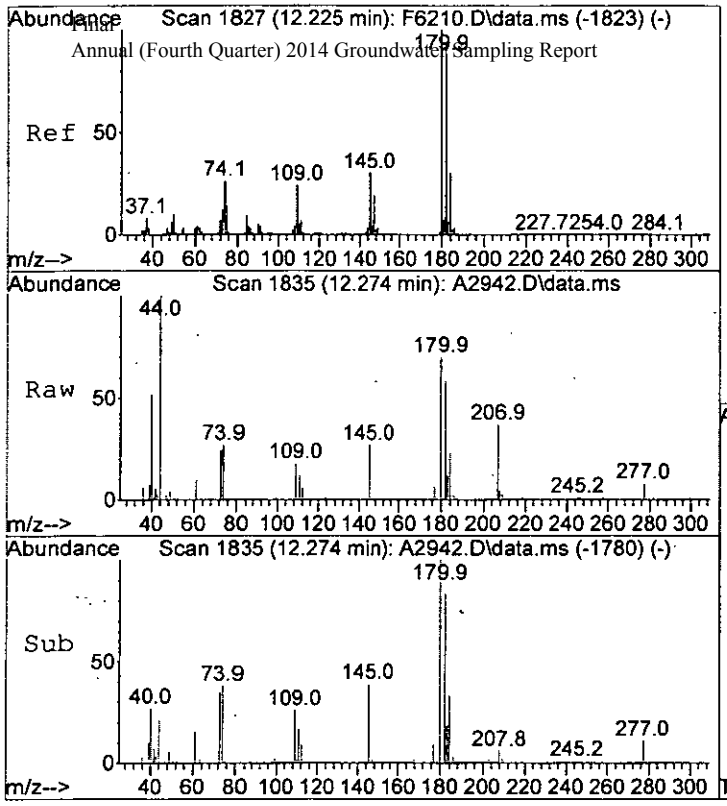


#23
TBA
Concen: 4.09 ug/L m
RT: 2.519 min Scan# 235
Delta R.T. 0.018 min
Lab File: A2942.D
Acq: 14 Oct 2014 11:39 am

Tgt Ion: 59 Resp: 2100

Ion	Ratio	Lower	Upper
59	100		
41	49.1	2.8	42.8#

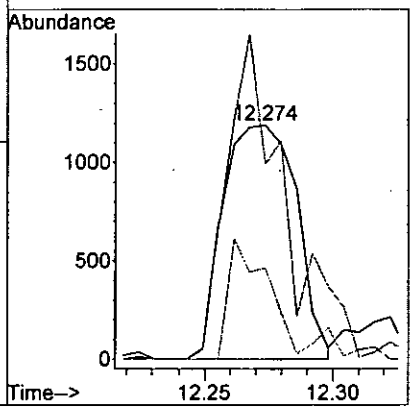


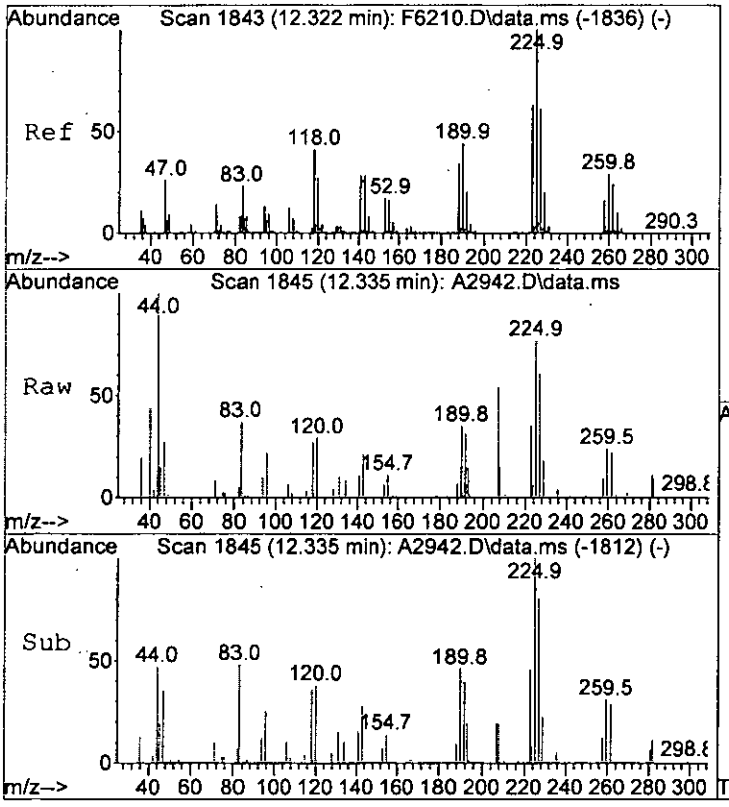


#115
1,2,4-Tcbenzene
Concen: 0.21 ug/L
RT: 12.274 min Scan# 1835
Delta R.T. 0.043 min
Lab File: A2942.D
Acq: 14 Oct 2014 11:39 am

Tgt Ion:180 Resp: 2359

Ion	Ratio	Lower	Upper
180	100		
182	83.6	71.2	111.2
145	38.9	9.6	49.6

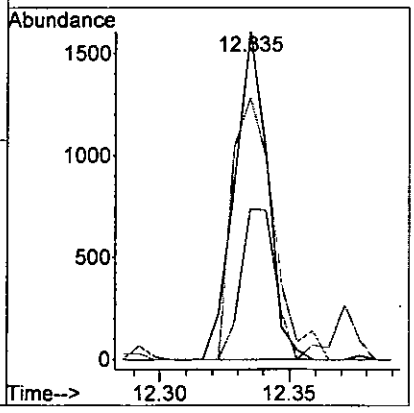


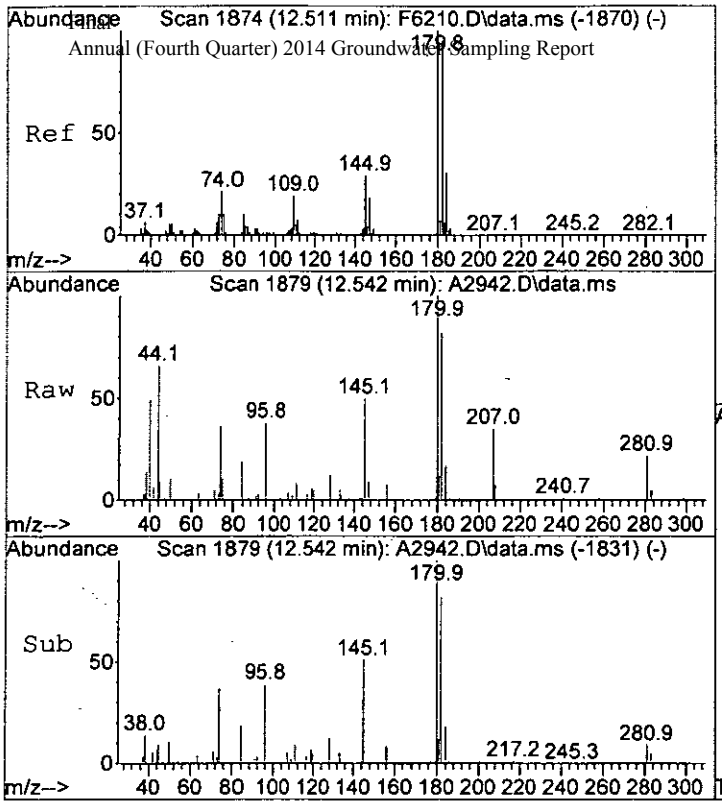


#116
Hexachlorobt
Concen: 0.32 ug/L
RT: 12.335 min Scan# 1845
Delta R.T. 0.006 min
Lab File: A2942.D
Acq: 14 Oct 2014 11:39 am

Tgt Ion:225 Resp: 1436

Ion	Ratio	Lower	Upper
225	100		
223	45.9	43.0	83.0
227	80.0	43.6	83.6

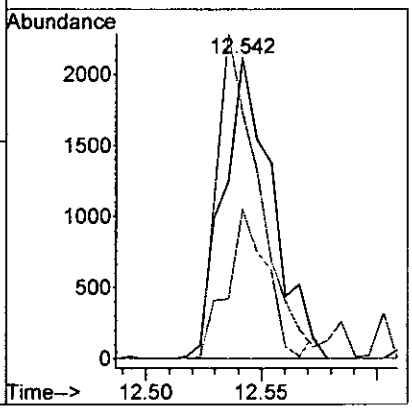




#118
1,2,3-Tclbenzene
Concen: 0.38 ug/L
RT: 12.542 min Scan# 1879
Delta R.T. 0.024 min
Lab File: A2942.D
Acq: 14 Oct 2014 11:39 am

Tgt Ion:180 Resp: 3095

Ion	Ratio	Lower	Upper
180	100		
182	81.9	72.8	112.8
145	49.6	12.2	52.2



ESC Area Percent Report

Data Path : I:\ACQUDATA\MSVOA10\DATA\101414\
Data File : A2942.D
Acq On : 14 Oct 2014 11:39 am
Operator : F.NAEGLER
Sample : MBLK
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A2942.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	520	531	538	rBV	619365	1513045	32.83%	5.815%
2	4.409	538	545	562	rVB	1056982	2754863	59.77%	10.587%
3	4.854	609	618	632	rBV	536648	1439833	31.24%	5.533%
4	5.610	734	742	758	rBV	1535571	3445226	74.75%	13.240%
5	7.427	1035	1040	1056	rBV	2959224	4608942	100.00%	17.712%
6	8.841	1267	1272	1292	rBV	3211768	4281208	92.89%	16.452%
7	9.878	1438	1442	1454	rBV	2604728	3404399	73.87%	13.083%
8	10.835	1594	1599	1614	rBV	3794462	4574111	99.24%	17.578%

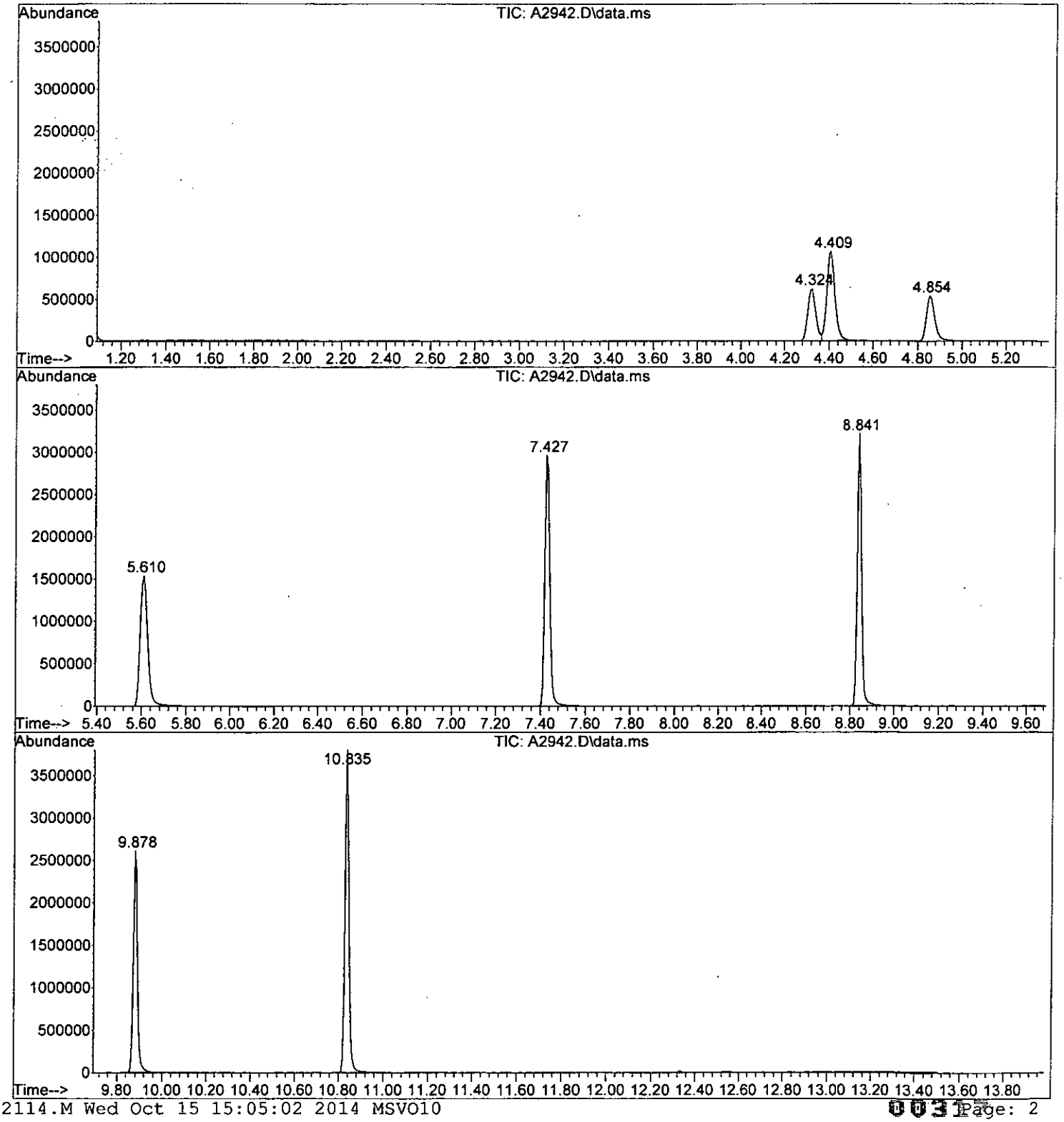
Sum of corrected areas: 26021627

BSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\MSVOA10\DATA\101414\
Data File : A2942.D
Acq On : 14 Oct 2014 11:39 am
Operator : F.NAEGLER
Sample : MBLK
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W072114.M Wed Oct 15 15:05:02 2014 MSVO10 Page: 2

Data Path : I:\ACQUDATA\msvoa10\data\101414\\
Data File : A2942.D
Acq On : 14 Oct 2014 11:39 amm
Operator : F.NAEGLERR
Sample : MBLKK
Misc :
ALS Vial : 5 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/14/14 10:40
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1412540-02	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2940.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**20.9**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**21.5**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**22.0**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**21.7**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**20.4**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**23.4**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**23.0**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**22.0**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**20.7**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**20.7**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**19.9**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**21.3**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**22.7**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**19.8**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**23.3**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**21.4**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**19.7**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**19.8**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**22.0**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**19.9**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**22.7**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**20.4**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**20.4**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**21.0**		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	477		100	20	11	
106-43-4	4-Chlorotoluene	**20.7**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**19.6**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**21.3**		5.0	1.0	0.67	
67-64-1	Acetone	**20.4**		5.0	5.0	1.3	
71-43-2	Benzene	**21.3**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**20.5**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**20.8**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**23.8**		5.0	1.0	0.32	
75-25-2	Bromoform	**23.0**		5.0	1.0	0.42	
74-83-9	Bromomethane	**24.4**		5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/14/14 10:40
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1412540-02	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2940.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**22.6**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**20.4**		5.0	1.0	0.29	
75-00-3	Chloroethane	**20.3**		5.0	1.0	0.24	
67-66-3	Chloroform	**21.4**		5.0	1.0	0.25	
74-87-3	Chloromethane	**21.6**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**23.3**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**21.4**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**21.6**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**19.3**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**23.7**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**20.6**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**22.8**		5.0	1.0	0.29	
91-20-3	Naphthalene	**20.8**		5.0	1.0	0.20	
100-42-5	Styrene	**21.5**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**21.3**		5.0	1.0	0.30	
108-88-3	Toluene	**20.5**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**20.0**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**21.5**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**19.7**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**20.4**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**24.9**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**41.6**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**20.5**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**20.7**		5.0	1.0	0.20	
95-47-6	o-Xylene	**20.5**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**19.0**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**18.9**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**20.5**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**25.2**		5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	10/14/14 10:40
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1412540-02	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2940.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	107	75-120	10/14/14 10:40	
Dibromofluoromethane	103	85-115	10/14/14 10:40	
Toluene-d8	102	85-120	10/14/14 10:40	

Sample IGS

Data File : I:\ACQUDATA\msvoa10\data\101414\A2940.D Vial: 3
Acq On : 14 Oct 2014 10:40 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

RQM12545-02
FN
12/14/14

Quant Time: Oct 14 10:58:19 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.403	168	1007470	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1435494	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1308582	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	734627	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.318	113	470204	51.37	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.74%				
48) surr1,1,2-dichloroetha...	4.854	65	509959	52.79	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 105.58%				
65) SURR3,Toluene-d8	7.427	98	1644334	51.01	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.02%				
70) SURR2,BFB	9.878	95	681602	53.73	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 107.46%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.190	85	231497	21.35	ug/L		97
3) Chloromethane	1.294	50	311826	21.57	ug/L		99
4) Vinyl Chloride	1.361	62	259960	19.69	ug/L		97
5) Bromomethane	1.556	94	88518	24.43	ug/L		99
6) Chloroethane	1.611	64	135528	20.26	ug/L		96
7) Freon 21	1.715	67	434283	23.37	ug/L		97
8) Trichlorofluoromethane	1.770	101	321660	21.50	ug/L		98
9) Diethyl Ether	1.934	59	167042	21.20	ug/L		83
10) Freon 123a	1.928	67	267375	22.85	ug/L		99
11) Freon 123	1.965	83	263386	21.15	ug/L		95
12) Acrolein	2.020	56	63190	51.28	ug/L		96
13) 1,1-Diclethene	2.099	96	163948	23.35	ug/L	#	78
14) Freon 113	2.093	101	167520	18.88	ug/L		95
15) Acetone	2.123	43	62687	20.43	ug/L		96
16) 2-Propanol	2.190	45	198541	457.69	ug/L		93
17) Iodomethane	2.215	142	121727	19.48	ug/L		100
18) Carbon Disulfide	2.270	76	541794	18.24	ug/L		100
19) Acetonitrile	2.324	40	48907	148.73	ug/L		93
20) Allyl Chloride	2.349	76	94595	21.43	ug/L	#	46
21) Methyl Acetate	2.355	43	126978	20.86	ug/L		90
22) Methylene Chloride	2.440	84	199414	21.64	ug/L	#	73
23) TBA	2.495	59	249060	476.93	ug/L		79
24) Acrylonitrile	2.629	53	303697	107.73	ug/L		99
25) Methyl-t-Butyl Ether	2.660	73	458844	22.81	ug/L		89
26) trans-1,2-Dichloroethene	2.666	96	185241	20.46	ug/L	#	82
28) 1,1-Diclethane	3.044	63	390042	20.37	ug/L		95
29) Vinyl Acetate	3.093	86	23545	20.91	ug/L	#	22
30) DIPE	3.105	45	796238	18.12	ug/L		86
31) 2-Chloro-1,3-Butadiene	3.141	53	365435	19.41	ug/L		84
32) ETBE	3.501	59	529586	17.97	ug/L		90
33) 2,2-Dichloropropane	3.678	77	269473	22.72	ug/L		96
34) cis-1,2-Dichloroethene	3.678	96	202397	20.44	ug/L	#	72
35) 2-Butanone	3.702	43	82519	20.41	ug/L		86
36) Propionitrile	3.775	54	102689	106.29	ug/L		96
37) Bromochloromethane	3.983	130	126833	20.83	ug/L	#	72

W072114.M Tue Oct 14 10:58:38 2014 MSVO10

Quantitation Report (QT Reviewed)

Sample LCS
Data File : I:\ACQUDATA\msvoa10\data\101414\A2940.D Vial: 3
Acq On : 14 Oct 2014 10:40 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 10:58:19 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Methacrylonitrile	3.970	67	51881	23.71	ug/L	#	43
39)	Tetrahydrofuran	4.062	42	49251	21.99	ug/L		74
40)	Chloroform	4.092	83	356198	21.35	ug/L		90
41)	1,1,1-Trichloroethane	4.361	97	296672	21.50	ug/L		97
42)	TAME	5.184	73	385172	19.37	ug/L		90
44)	Cyclohexane	4.440	41	256322	19.72	ug/L		90
46)	Carbontetrachloride	4.623	121	82486	22.56	ug/L	#	77
47)	1,1-Dichloropropene	4.617	75	257902	22.97	ug/L		92
49)	Benzene	4.952	78	748409	21.33	ug/L		90
50)	1,2-Dichloroethane	4.982	62	284047	23.33	ug/L		91
51)	Iso-Butyl Alcohol	4.848	43	130157	456.47	ug/L		84
52)	n-Heptane	5.458	43	272211	20.57	ug/L	#	79
53)	1-Butanol	5.952	56	146344	1285.66	ug/L		85
54)	Trichloroethene	5.964	130	195713	20.01	ug/L		97
55)	Methylcyclohexane	6.214	55	277068	20.55	ug/L	#	84
56)	1,2-Diclpropane	6.257	63	218472	21.36	ug/L		98
57)	Dibromomethane	6.403	93	105753	21.45	ug/L		96
58)	1,4-Dioxane	6.464	88	27996m	481.04	ug/L		
59)	Methyl Methacrylate	6.464	69	85540m	23.55	ug/L		
60)	Bromodichloromethane	6.616	83	266905	23.84	ug/L		97
61)	2-Nitropropane	6.897	41	65978	46.72	ug/L		90
62)	2-Chloroethylvinyl Ether	7.006	63	64702	15.13	ug/L		92
63)	cis-1,3-Dichloropropene	7.147	75	294691	24.92	ug/L		93
64)	4-Methyl-2-pentanone	7.336	43	162534	21.25	ug/L		97
66)	Toluene	7.500	91	754202	20.51	ug/L		98
67)	trans-1,3-Dichloropropene	7.744	75	235869	25.20	ug/L		96
68)	Ethyl Methacrylate	7.872	69	175889	23.06	ug/L	#	58
69)	1,1,2-Trichloroethane	7.921	97	140436	21.65	ug/L		94
72)	Tetrachloroethene	8.055	164	161233	21.31	ug/L		98
73)	2-Hexanone	8.195	43	116376	21.04	ug/L		83
74)	1,3-Dichloropropane	8.085	76	246642	22.00	ug/L	#	75
75)	Dibromochloromethane	8.299	129	186454	23.33	ug/L		95
76)	N-Butyl Acetate	8.335	43	290061	23.57	ug/L		88
77)	1,2-Dibromoethane	8.396	107	144462	22.72	ug/L		94
79)	Chlorobenzene	8.866	112	514043	20.37	ug/L		99
81)	1,1,1,2-Tetrachloroethane	8.945	131	184742	20.92	ug/L		95
82)	Ethylbenzene	8.976	106	242491	19.29	ug/L		98
83)	(m+p)Xylene	9.085	106	645139	41.61	ug/L		98
84)	o-Xylene	9.433	106	310480	20.48	ug/L		98
85)	Styrene	9.445	104	541154	21.49	ug/L		98
86)	Bromoform	9.597	173	105410	22.96	ug/L		98
88)	Isopropylbenzene	9.756	105	784911	20.59	ug/L		99
89)	Cyclohexanone	9.823	55	432506	359.04	ug/L		97
90)	trans-1,4-Dichloro-2-B...	10.055	53	38850	21.06	ug/L		80
92)	1,1,2,2-Tetrachloroethane	10.006	83	177411	22.01	ug/L		97
93)	Bromobenzene	10.000	156	227442	20.51	ug/L		92
94)	1,2,3-Trichloropropane	10.042	110	46650	20.70	ug/L		93
95)	n-Propylbenzene	10.103	91	947841	20.68	ug/L		99
96)	2-Chlorotoluene	10.170	91	577152	20.40	ug/L		95
98)	4-Chlorotoluene	10.256	91	705665	20.74	ug/L		99
99)	1,3,5-Trimethylbenzene	10.250	105	656177	19.68	ug/L		98
100)	tert-Butylbenzene	10.518	119	528362	18.91	ug/L		98

W072114.M Tue Oct 14 10:58:38 2014 MSVO10

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\101414\A2940.D Vial: 3
Acq On : 14 Oct 2014 10:40 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 10:58:19 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

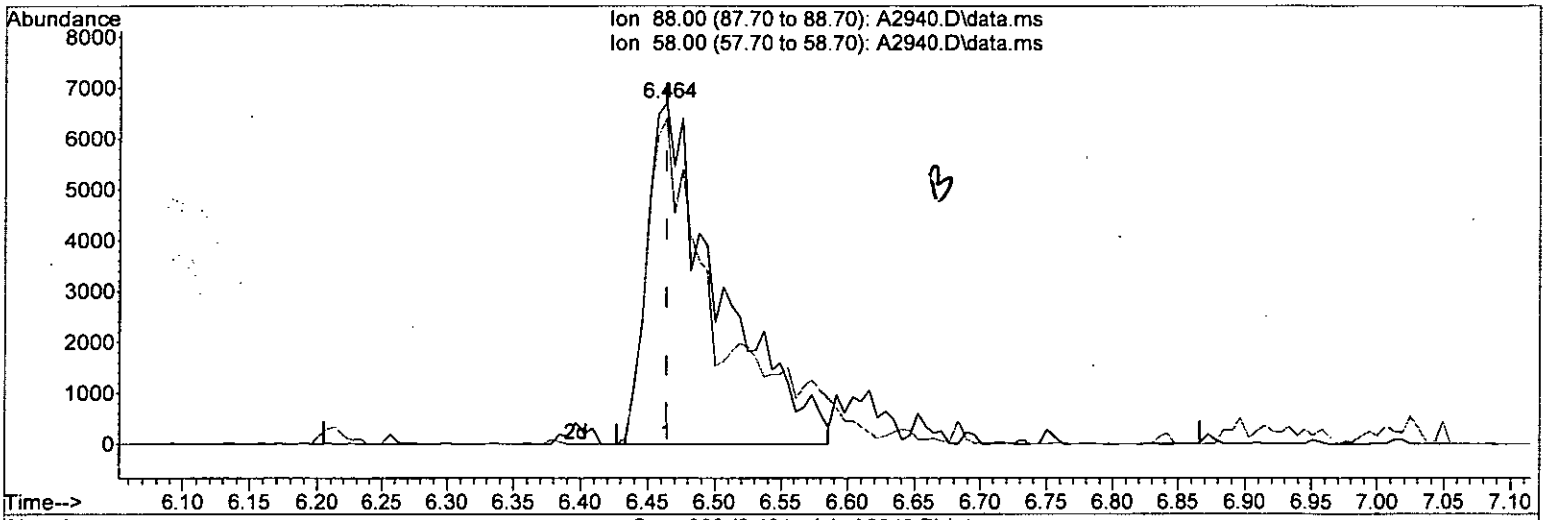
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
101) 1,2,4-Trimethylbenzene	10.555	105	672056	19.94	ug/L	100
103) sec-Butylbenzene	10.695	105	743497	18.98	ug/L	100
104) p-Isopropyltoluene	10.817	119	665241	19.58	ug/L	97
105) 1,3-Dclbenz	10.780	146	420309	19.81	ug/L	99
106) 1,4-Dclbenz	10.853	146	437872	19.92	ug/L	99
109) n-Butylbenzene	11.140	91	591040	20.52	ug/L	96
110) 1,2-Dclbenz	11.152	146	394482	19.79	ug/L	100
111) 1,2-Dibromo-3-chloropr...	11.713	157	26150	21.31	ug/L	95
115) 1,2,4-Tcbenzene	12.231	180	234152	20.73	ug/L	95
116) Hexachlorobt	12.329	225	109589	23.70	ug/L	92
117) Naphthalen	12.377	128	402835	20.76	ug/L	100
118) 1,2,3-Tclbenzene	12.518	180	182443	22.04	ug/L	93

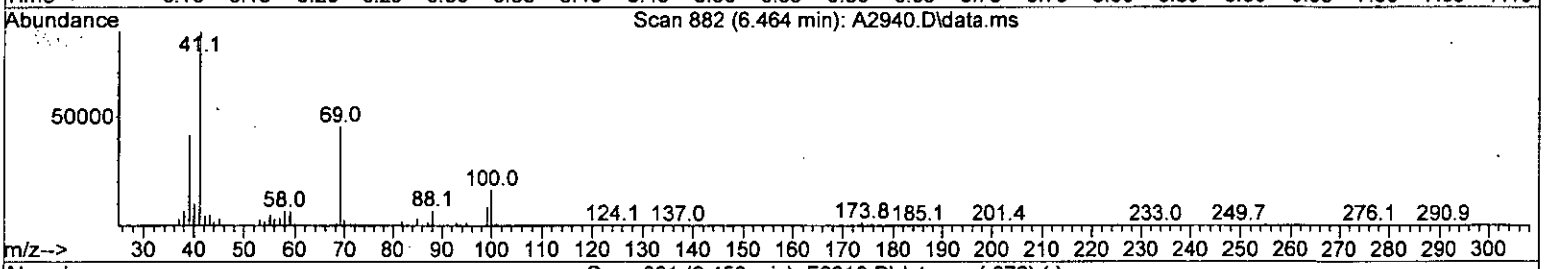
(#) = qualifier out of range (m) = manual integration (+) = signals summed

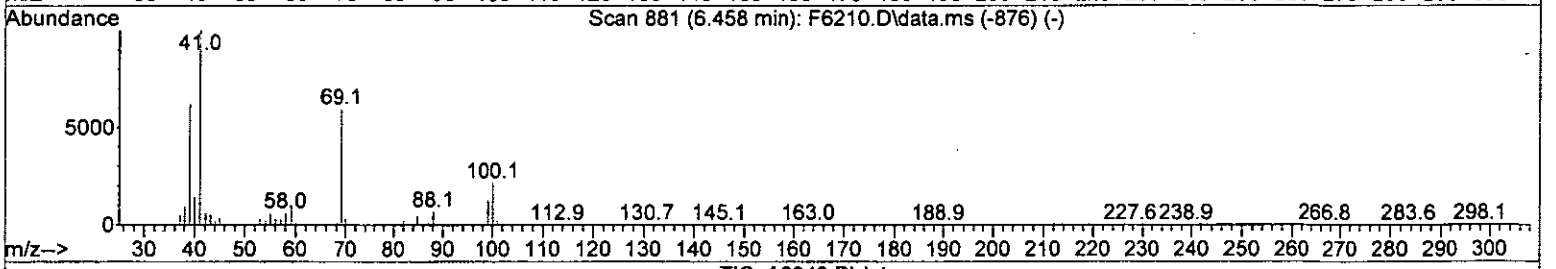
Quantitation Report (Qedit)

Sample LCS
Data File : I:\ACQUDATA\msvoa10\data\101414\A2940.D Vial: 3
Acq On : 14 Oct 2014 10:40 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 10:53:33 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration







TIC: A2940.D\data.ms

(58) 1,4-Dioxane

6.464min (-0.000) 432.70 ug/L

response 25183

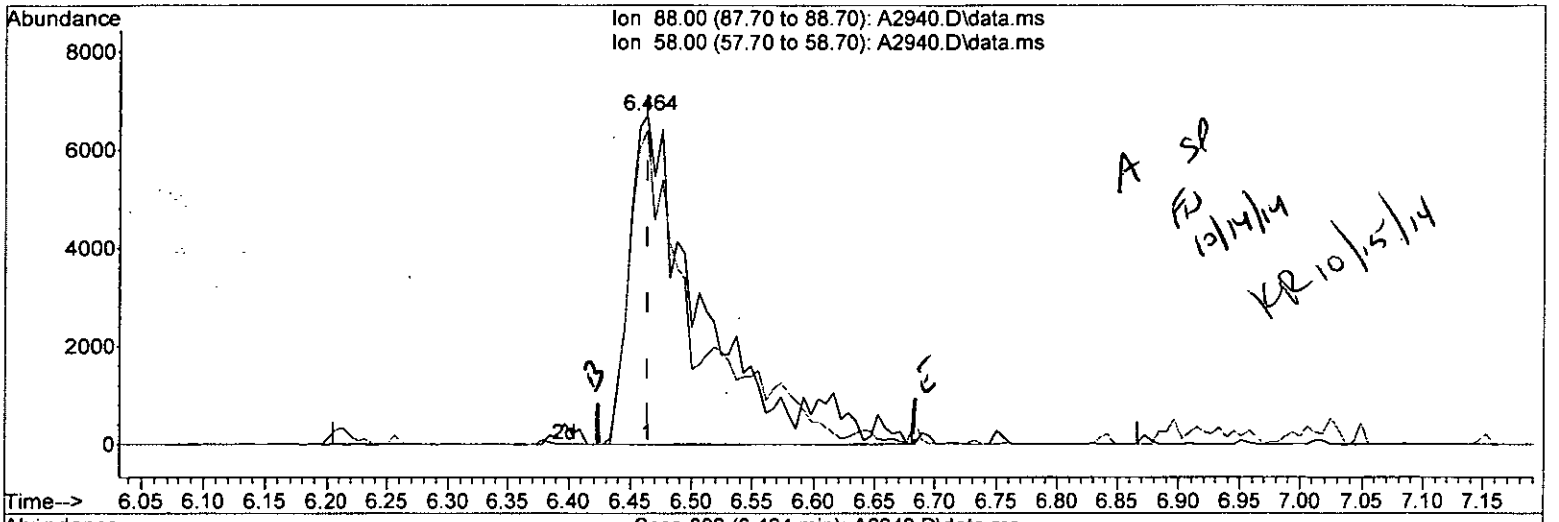
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	95.52#
0.00	0.00	0.00
0.00	0.00	0.00

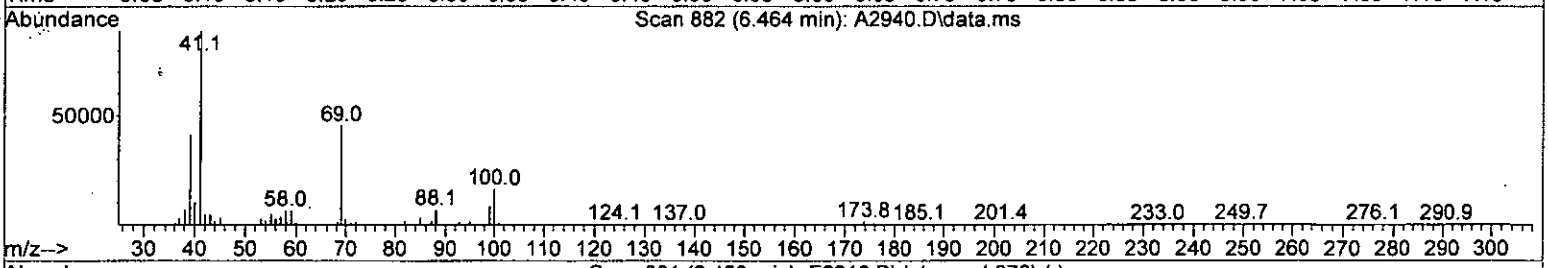
W072114.M Tue Oct 14 10:57:41 2014 MSVO10 Page: 1

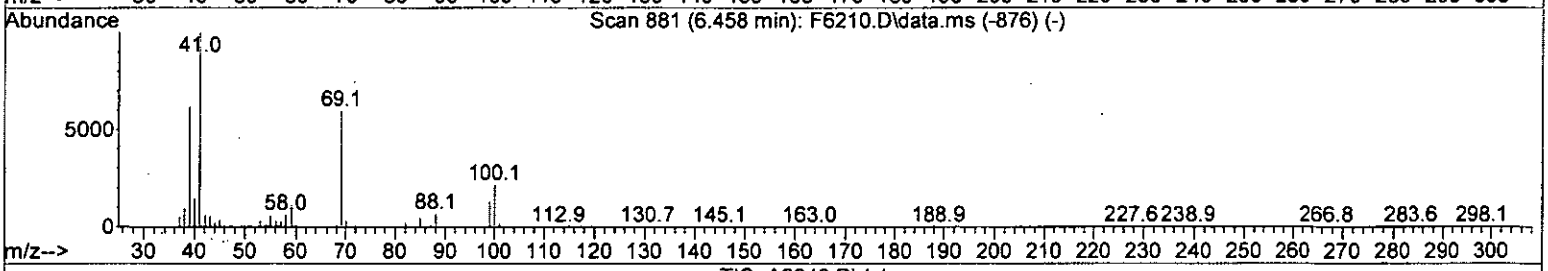
Quantitation Report (Qedit)

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\101414\A2940.D Vial: 3
Acq On : 14 Oct 2014 10:40 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 10:53:33 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration







TIC: A2940.D\data.ms

(58) 1,4-Dioxane

6.464min (-0.000) 481.04 ug/L m

response 27996

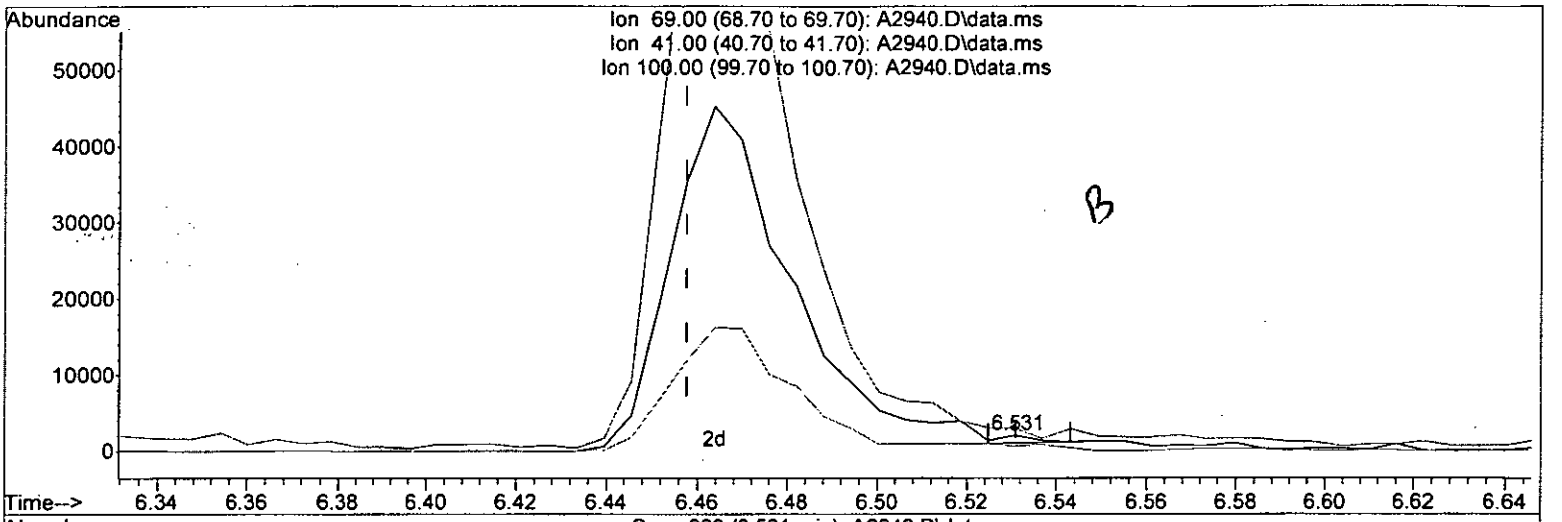
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	95.52#
0.00	0.00	0.00
0.00	0.00	0.00

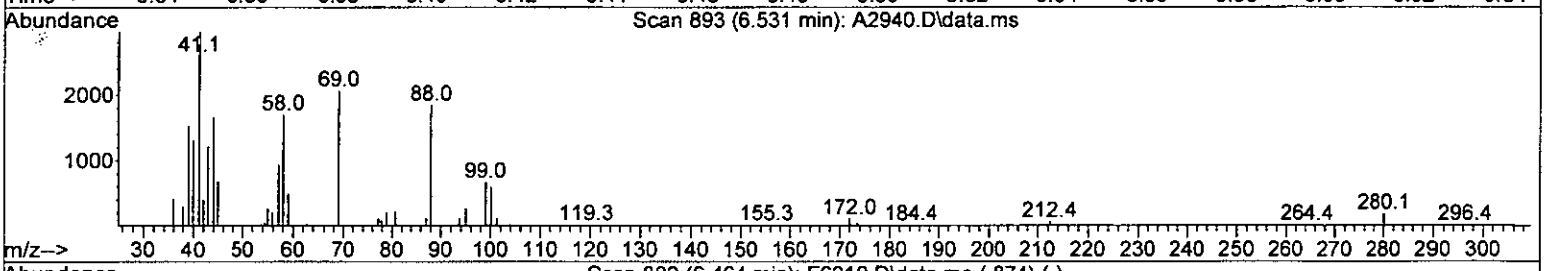
W072114.M Tue Oct 14 10:57:54 2014 MSVO10 Page: 1

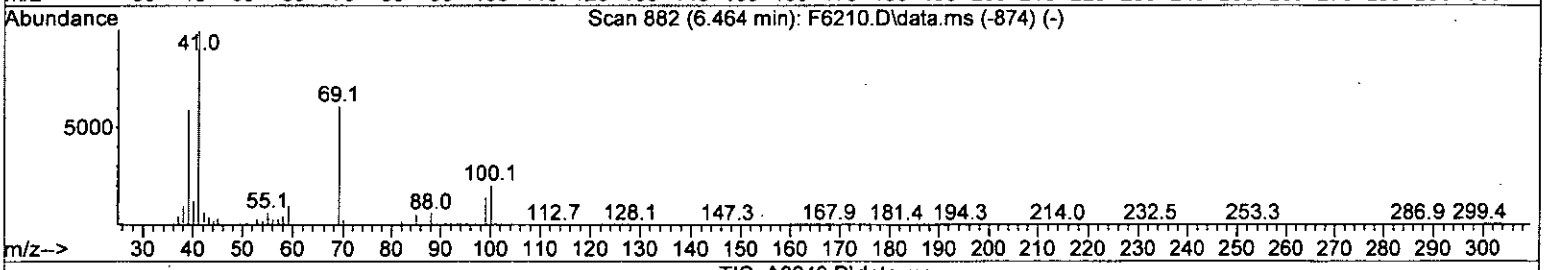
Quantitation Report (Qedit)

Sample LCS
Data File : I:\ACQUDATA\msvoa10\data\101414\A2940.D Vial: 3
Acq On : 14 Oct 2014 10:40 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 10:53:33 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration







TIC: A2940.D\data.ms

(59) Methyl Methacrylate

6.531min (+0.073) 0.14 ug/L

response 519

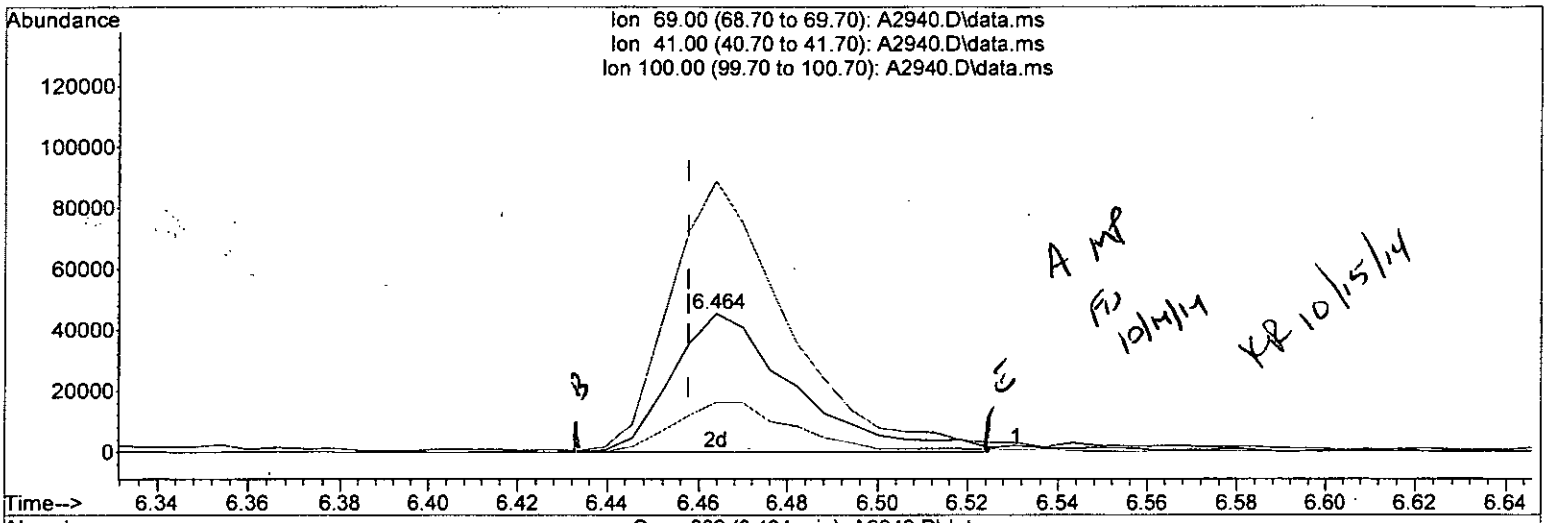
Ion	Exp%	Act%
69.00	100	100
41.00	128.90	143.73
100.00	36.90	28.86
0.00	0.00	0.00

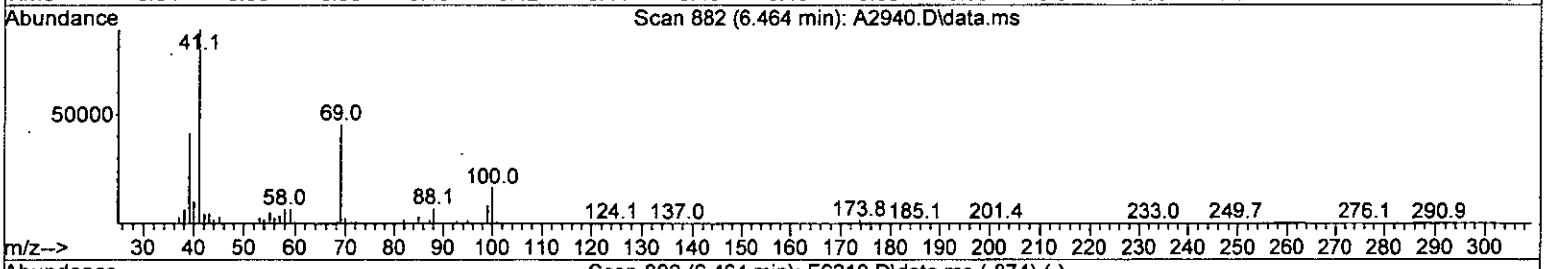
W072114.M Tue Oct 14 10:58:00 2014 MSVO10 Page: 1

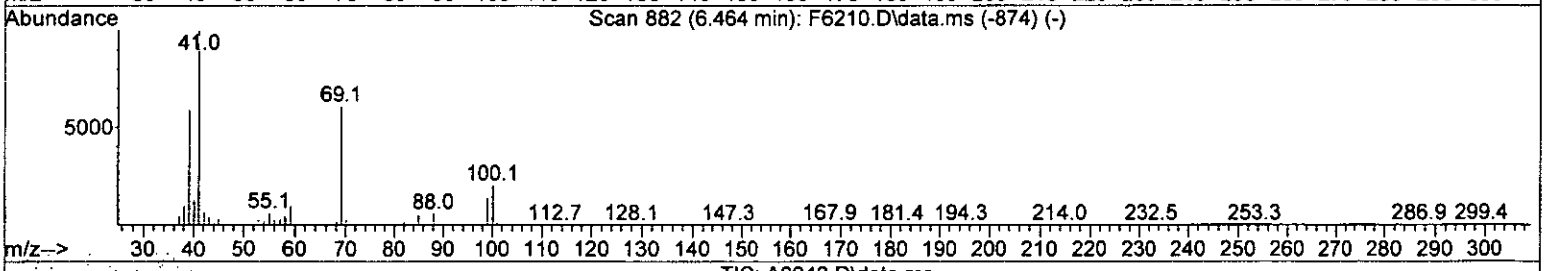
Quantitation Report (Qedit)

Sample LCS
Data File : I:\ACQUDATA\msvoa10\data\101414\A2940.D Vial: 3
Acq On : 14 Oct 2014 10:40 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 10:53:33 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration







TIC: A2940.D\data.ms

(59) Methyl Methacrylate

6.464min (+0.006) 23.55 ug/L m

response 85540

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	196.20#
100.00	36.90	35.78
0.00	0.00	0.00

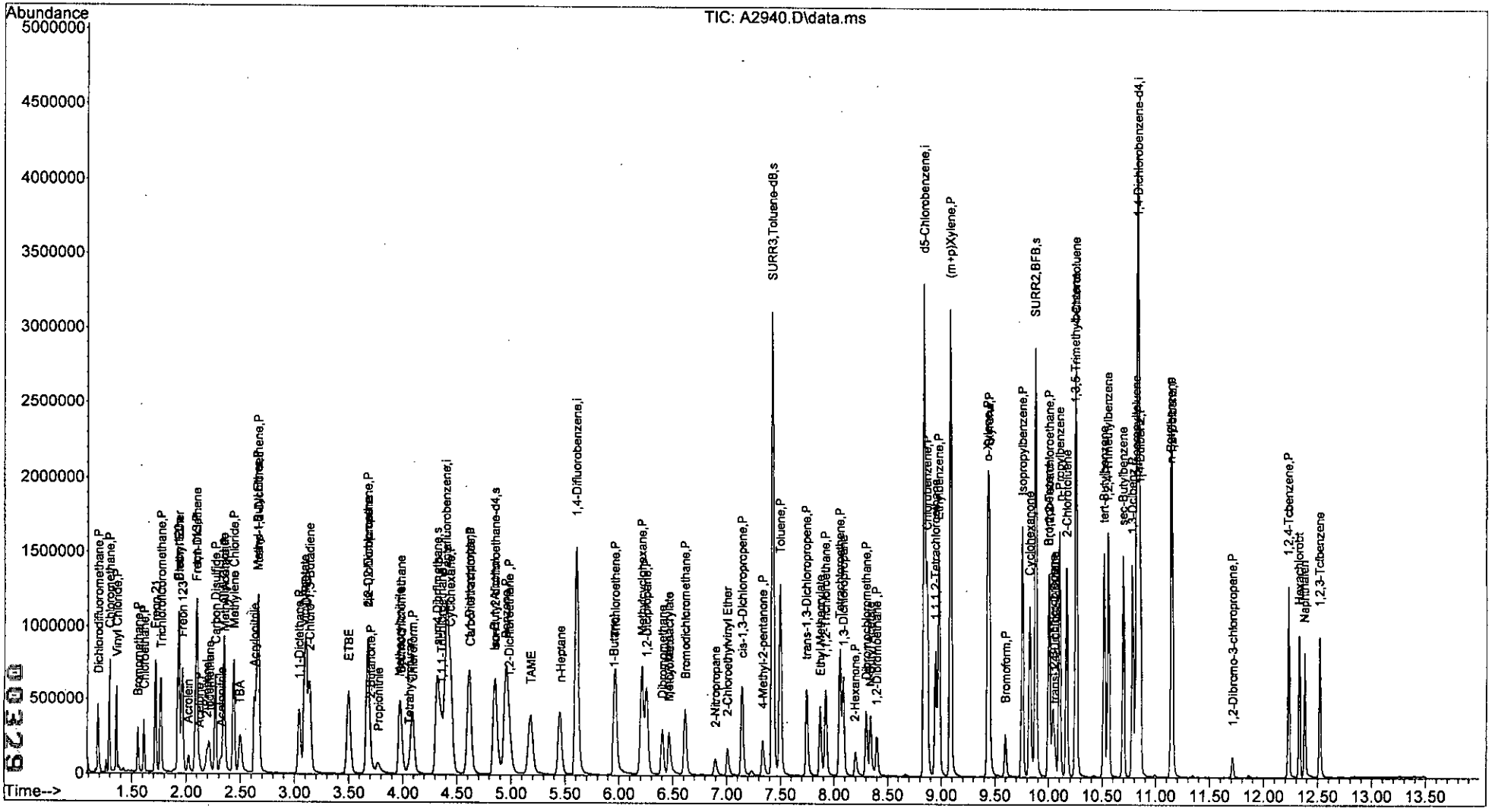
W072114.M Tue Oct 14 10:58:06 2014 MSVO10 Page: 1

0032

Quantitation Report (QT Reviewed)

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\101414\A2940.D Vial: 3
Acq On : 14 Oct 2014 10:40 am
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Oct 14 10:58:19 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



W072114.M Tue Oct 14 10:58:40 2014 MSVO10

Page: 4

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 19:35
Sample Name:	FTMM-3-GW-M3MW02-21	**Units:**	µg/L
Lab Code:	RQ1412540-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2958.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**51.5**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**56.8**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**49.7**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**51.8**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**52.7**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**59.3**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**59.8**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**48.5**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**47.3**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**46.7**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**46.7**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**49.5**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**53.0**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**46.4**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**57.5**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**54.9**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**47.2**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**48.0**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**52.9**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**46.8**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**50.7**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**45.2**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**50.3**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**46.2**		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	**1050**		100	20	11	
106-43-4	4-Chlorotoluene	**50.5**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**48.1**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**50.1**		5.0	1.0	0.67	
67-64-1	Acetone	**34.9**		5.0	5.0	1.3	
71-43-2	Benzene	**53.6**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**48.6**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**49.6**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**59.5**		5.0	1.0	0.32	
75-25-2	Bromoform	**54.9**		5.0	1.0	0.42	
74-83-9	Bromomethane	**50.4**		5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 19:35
Sample Name:	FTMM-3-GW-M3MW02-21	**Units:**	µg/L
Lab Code:	RQ1412540-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2958.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**59.5**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**50.1**		5.0	1.0	0.29	
75-00-3	Chloroethane	**53.5**		5.0	1.0	0.24	
67-66-3	Chloroform	**55.0**		5.0	1.0	0.25	
74-87-3	Chloromethane	**54.5**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**53.5**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**55.3**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**50.6**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**47.8**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**51.9**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**52.8**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**56.0**		5.0	1.0	0.29	
91-20-3	Naphthalene	**46.5**		5.0	1.0	0.20	
100-42-5	Styrene	**47.5**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**52.3**		5.0	1.0	0.30	
108-88-3	Toluene	**53.2**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**52.5**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**56.4**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**51.5**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**51.5**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**58.7**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**102**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**50.3**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**51.8**		5.0	1.0	0.20	
95-47-6	o-Xylene	**51.6**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**48.1**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**48.8**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**52.6**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**60.3**		5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 19:35
Sample Name:	FTMM-3-GW-M3MW02-21	**Units:**	µg/L
Lab Code:	RQ1412540-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2958.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	109	75-120	10/14/14 19:35	
Dibromofluoromethane	105	85-115	10/14/14 19:35	
Toluene-d8	102	85-120	10/14/14 19:35	

Quantitation Report (QT Reviewed)

Sample : R1407825-003MS|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2958.D Vial: 21
Acq On : 14 Oct 2014 7:35 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

R1407825-003

Quant Time: Oct 15 16:02:35 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

FV 10/15/14

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.403	168	995930	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1428239	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.842	117	1328745	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	751164	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.318	113	479239	52.62	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 105.24%				
48) surr1,1,2-dichloroetha...	4.848	65	517399	53.83	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 107.66%				
65) SURR3,Toluene-d8	7.427	98	1638361	51.08	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.16%				
70) SURR2,BFB	9.878	95	686402	54.38	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 108.76%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.191	85	592769	55.30	ug/L		97
3) Chloromethane	1.294	50	779428	54.54	ug/L		97
4) Vinyl Chloride	1.361	62	671695	51.46	ug/L		98
5) Bromomethane	1.556	94	194826	50.42	ug/L		97
6) Chloroethane	1.611	64	353532	53.45	ug/L		97
7) Freon 21	1.715	67	978985	53.30	ug/L		99
8) Trichlorofluoromethane	1.764	101	833770	56.39	ug/L		99
9) Diethyl Ether	1.934	59	395343	50.77	ug/L		81
10) Freon 123a	1.928	67	603774	52.20	ug/L		96
11) Freon 123	1.965	83	600796	48.81	ug/L		98
12) Acrolein	2.020	56	100491	82.50	ug/L		95
13) 1,1-Diclethene	2.099	96	411837	59.33	ug/L	#	83
14) Freon 113	2.093	101	455034	51.89	ug/L		92
15) Acetone	2.117	43	105843	34.90	ug/L		98
16) 2-Propanol	2.196	45	366748	855.26	ug/L		92
17) Iodomethane	2.215	142	295869	39.34	ug/L		99
18) Carbon Disulfide	2.270	76	1238595	42.18	ug/L		99
19) Acetonitrile	2.318	40	80739	248.37	ug/L		90
20) Allyl Chloride	2.349	76	225858	51.76	ug/L	#	38
21) Methyl Acetate	2.355	43	252141	41.91	ug/L		89
22) Methylene Chloride	2.440	84	461077	50.62	ug/L	#	70
23) TBA	2.495	59	541444	1048.84	ug/L		82
24) Acrylonitrile	2.629	53	716930	257.26	ug/L		99
25) Methyl-t-Butyl Ether	2.660	73	1114546	56.04	ug/L		88
26) trans-1,2-Dichloroethene	2.666	96	470496m	52.57	ug/L		
28) 1,1-Diclethane	3.044	63	998131	52.74	ug/L		99
29) Vinyl Acetate	3.093	86	45654	41.01	ug/L	#	1
30) DIPE	3.105	45	2100679	48.35	ug/L		93
31) 2-Chloro-1,3-Butadiene	3.141	53	915870	49.21	ug/L		83
32) ETBE	3.501	59	1375151	47.20	ug/L		91
33) 2,2-Dichloropropane	3.678	77	594637	50.72	ug/L		96
34) cis-1,2-Dichloroethene	3.678	96	504171	51.52	ug/L	#	75
35) 2-Butanone	3.696	43	180781	45.23	ug/L		87
36) Propionitrile	3.763	54	246154	255.14	ug/L		91
37) Bromochloromethane	3.977	130	298509	49.60	ug/L	#	65

Quantitation Report (QT Reviewed)

Sample : R1407825-003MS|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2958.D Vial: 21
Acq On : 14 Oct 2014 7:35 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 15 16:02:35 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Methacrylonitrile	3.971	67	127730	59.06	ug/L	#	55
39)	Tetrahydrofuran	4.056	42	113377	51.22	ug/L		72
40)	Chloroform	4.086	83	906196	54.95	ug/L		96
41)	1,1,1-Trichloroethane	4.355	97	774713	56.78	ug/L		95
42)	TAME	5.184	73	962216	48.95	ug/L		92
44)	Cyclohexane	4.446	41	599411	46.35	ug/L		81
46)	Carbontetrachloride	4.617	121	216321	59.46	ug/L		95
47)	1,1-Dichloropropene	4.617	75	667682	59.77	ug/L		93
49)	Benzene	4.952	78	1871156	53.60	ug/L		89
50)	1,2-Dichloroethane	4.983	62	696378	57.49	ug/L		95
51)	Iso-Butyl Alcohol	4.848	43	278665	982.26	ug/L		96
52)	n-Heptane	5.452	43	608306	46.20	ug/L	#	80
53)	1-Butanol	5.946	56	323741	2642.45	ug/L		89
54)	Trichloroethene	5.964	130	511029	52.50	ug/L		95
55)	Methylcyclohexane	6.214	55	641772	47.83	ug/L	#	77
56)	1,2-Diclpropane	6.257	63	558637	54.90	ug/L		100
57)	Dibromomethane	6.403	93	261685	53.34	ug/L		90
58)	1,4-Dioxane	6.458	88	45903m	792.73	ug/L		
59)	Methyl Methacrylate	6.464	69	205769m	56.93	ug/L		
60)	Bromodichloromethane	6.610	83	662565	59.47	ug/L		98
61)	2-Nitropropane	6.891	41	169141	120.37	ug/L		99
63)	cis-1,3-Dichloropropene	7.141	75	690650	58.69	ug/L		97
64)	4-Methyl-2-pentanone	7.336	43	381180	50.08	ug/L		92
66)	Toluene	7.500	91	1944835	53.16	ug/L		99
67)	trans-1,3-Dichloropropene	7.744	75	561439	60.29	ug/L		95
68)	Ethyl Methacrylate	7.872	69	422909	55.73	ug/L	#	69
69)	1,1,2-Trichloroethane	7.921	97	334509	51.83	ug/L		98
72)	Tetrachloroethene	8.055	164	401967	52.31	ug/L		95
73)	2-Hexanone	8.195	43	259590	46.22	ug/L		96
74)	1,3-Dichloropropane	8.086	76	601887	52.86	ug/L	#	79
75)	Dibromochloromethane	8.299	129	433742	53.45	ug/L		98
76)	N-Butyl Acetate	8.336	43	545356	43.64	ug/L		95
77)	1,2-Dibromoethane	8.396	107	342009	52.98	ug/L		93
79)	Chlorobenzene	8.866	112	1282772	50.07	ug/L		100
81)	1,1,1,2-Tetrachloroethane	8.945	131	461712	51.50	ug/L		96
82)	Ethylbenzene	8.976	106	610503	47.82	ug/L		96
83)	(m+p)Xylene	9.085	106	1610612	102.30	ug/L		97
84)	o-Xylene	9.433	106	793686	51.56	ug/L		97
85)	Styrene	9.445	104	1215499	47.53	ug/L		99
86)	Bromoform	9.597	173	256012	54.92	ug/L		99
88)	Isopropylbenzene	9.756	105	2042571	52.76	ug/L		97
89)	Cyclohexanone	9.823	55	173567	141.90	ug/L		94
90)	trans-1,4-Dichloro-2-B...	10.055	53	91862	46.39	ug/L		86
92)	1,1,2,2-Tetrachloroethane	10.006	83	409254	49.65	ug/L		98
93)	Bromobenzene	10.000	156	550590	48.55	ug/L		95
94)	1,2,3-Trichloropropane	10.036	110	109035	47.31	ug/L		100
95)	n-Propylbenzene	10.103	91	2425653	51.75	ug/L		99
96)	2-Chlorotoluene	10.164	91	1455576	50.33	ug/L		97
98)	4-Chlorotoluene	10.256	91	1756818	50.49	ug/L		99
99)	1,3,5-Trimethylbenzene	10.250	105	1607386	47.16	ug/L		99
100)	tert-Butylbenzene	10.518	119	1394250	48.80	ug/L		99
101)	1,2,4-Trimethylbenzene	10.555	105	1607386	46.65	ug/L		99

Quantitation Report (QT Reviewed)

Sample : R1407825-003MS|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2958.D Vial: 21
Acq On : 14 Oct 2014 7:35 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 15 16:02:35 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

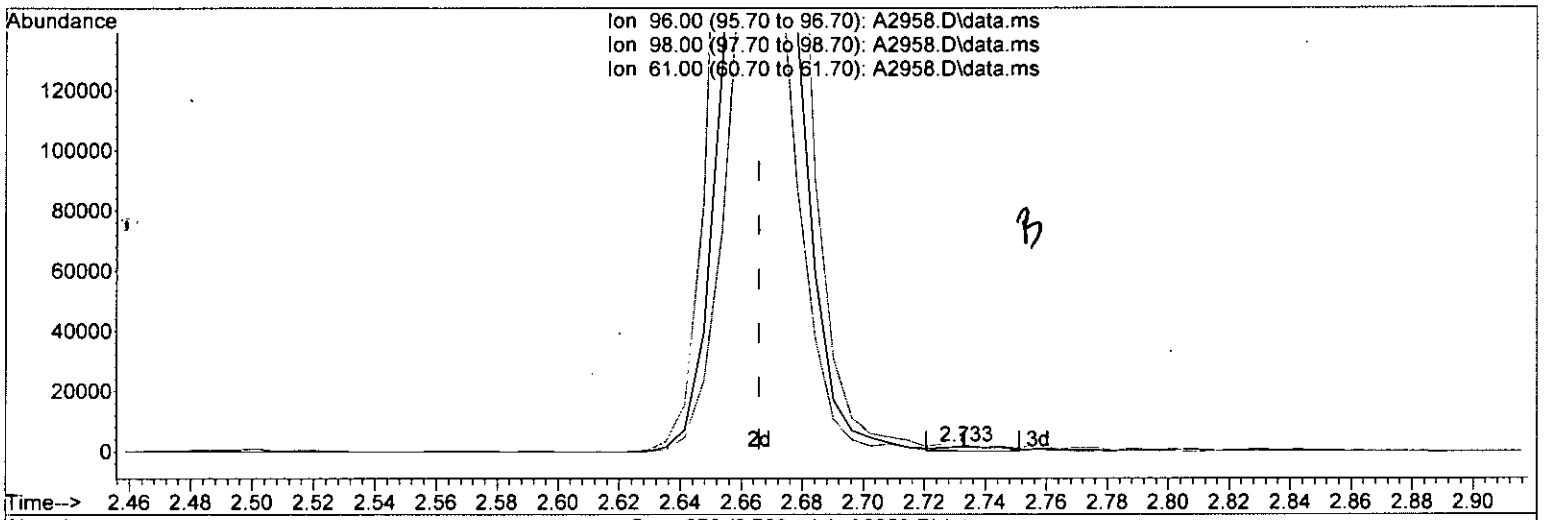
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
103) sec-Butylbenzene	10.695	105	1925576	48.07	ug/L	98
104) p-Isopropyltoluene	10.817	119	1669498	48.05	ug/L	99
105) 1,3-Dclbenz	10.780	146	1041961	48.03	ug/L	98
106) 1,4-Dclbenz	10.853	146	1050956	46.77	ug/L	99
109) n-Butylbenzene	11.140	91	1479939	50.26	ug/L	99
110) 1,2-Dclbenz	11.152	146	945326	46.38	ug/L	96
111) 1,2-Dibromo-3-chloropr...	11.707	157	62134	49.51	ug/L	94
115) 1,2,4-Tcbenzene	12.225	180	538745	46.65	ug/L	96
116) Hexachlorobt	12.329	225	245496	51.93	ug/L	98
117) Naphthalen	12.371	128	923177	46.52	ug/L	100
118) 1,2,3-Tclbenzene	12.512	180	410758	48.53	ug/L	96

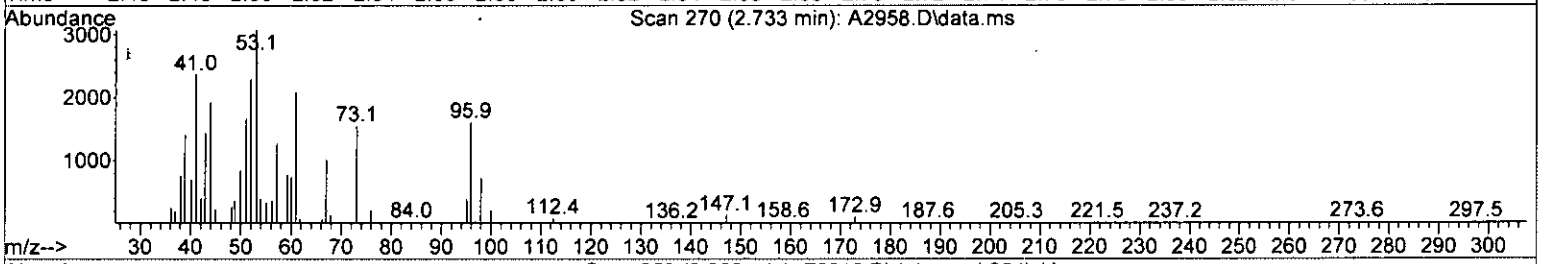
(#) = qualifier out of range (m) = manual integration (+) = signals summed

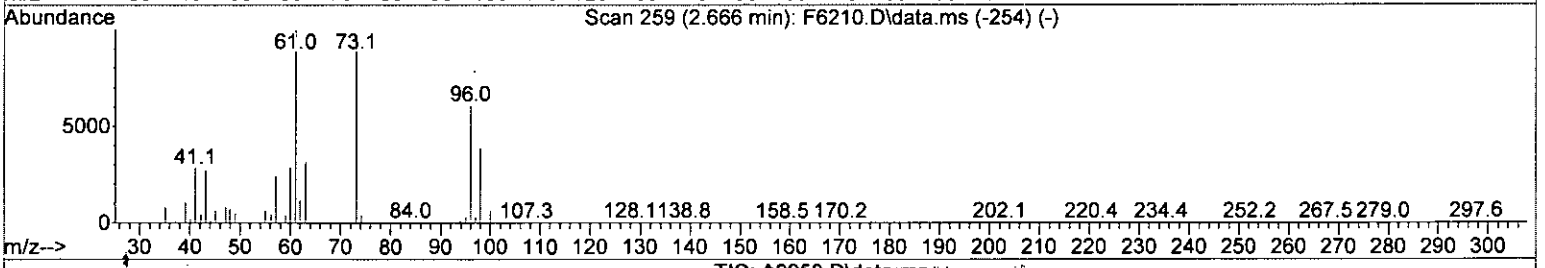
Quantitation Report (Qedit)

Sample : R1407825-003MS|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2958.D Vial: 21
Acq On : 14 Oct 2014 7:35 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 14 19:48:20 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration







TIC: A2958.D\data.ms

(26) trans-1,2-Dichloroethene (P)

2.733min (+0.067) 0.22 ug/L

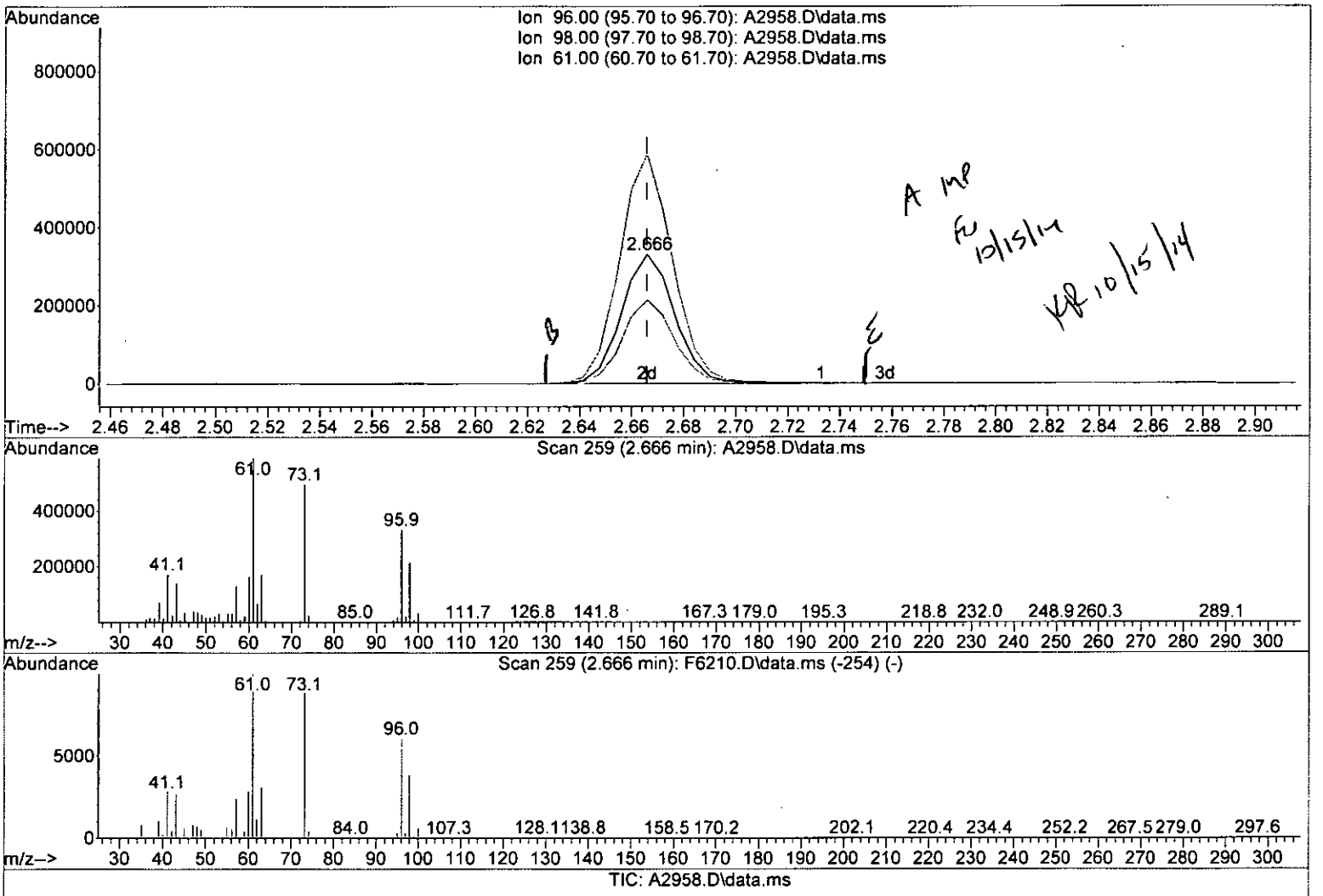
response 1979

Ion	Exp%	Act%
96.00	100	100
98.00	64.00	44.63
61.00	144.30	129.75
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : R1407825-003MS|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2958.D Vial: 21
Acq On : 14 Oct 2014 7:35 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 14 19:48:20 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



A MP 10/15/14
KP 10/15/14

(26) trans-1,2-Dichloroethene (P)

2.666min (+0.000) 52.57 ug/L m

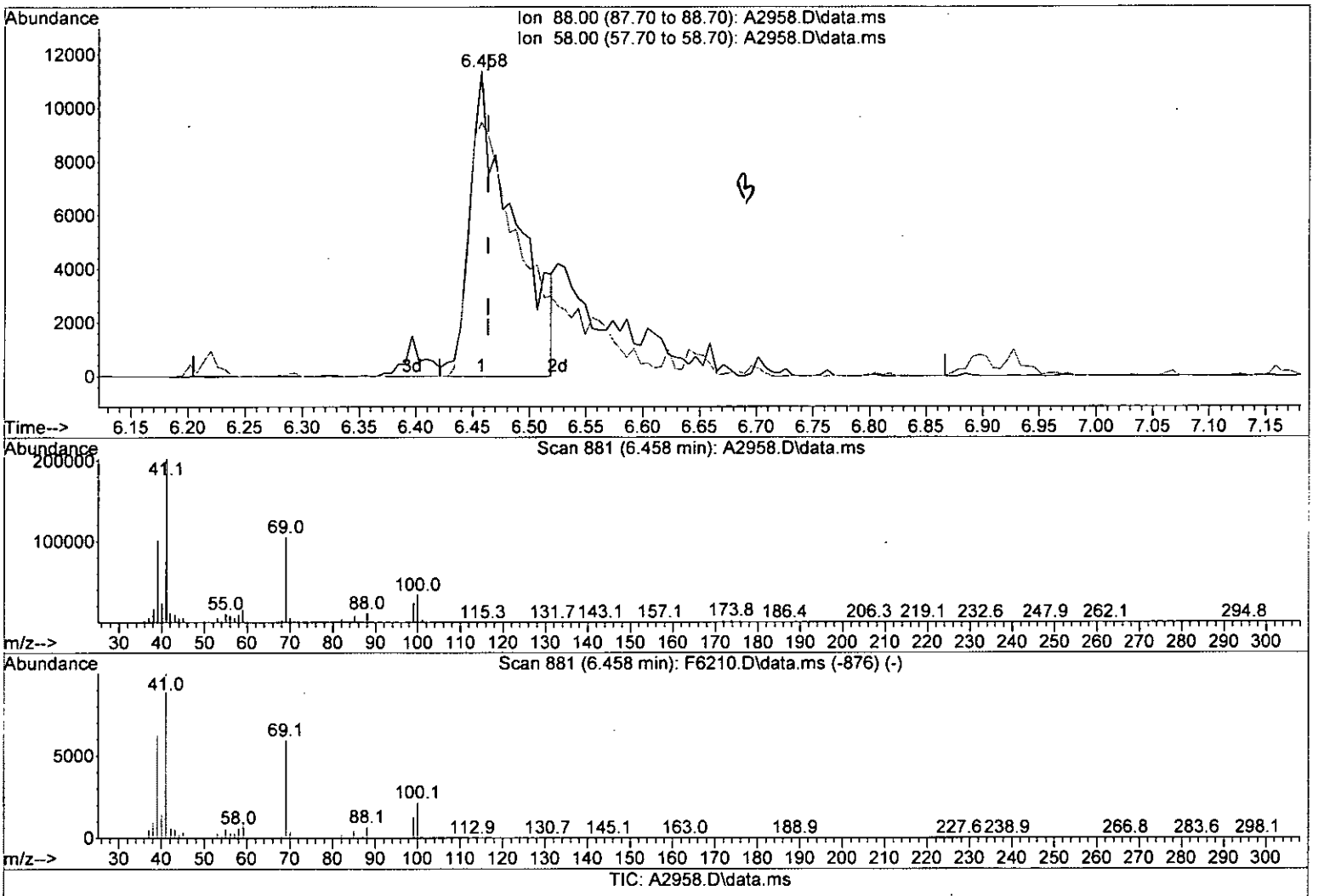
response 470496

Ion	Exp%	Act%
96.00	100	100
98.00	64.00	64.43
61.00	144.30	177.84#
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : R1407825-003MS|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2958.D Vial: 21
Acq On : 14 Oct 2014 7:35 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 14 19:48:20 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



TIC: A2958.D\data.ms

(58) 1,4-Dioxane

6.458min (-0.006) 523.89 ug/L

response 30336

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	83.19
0.00	0.00	0.00
0.00	0.00	0.00

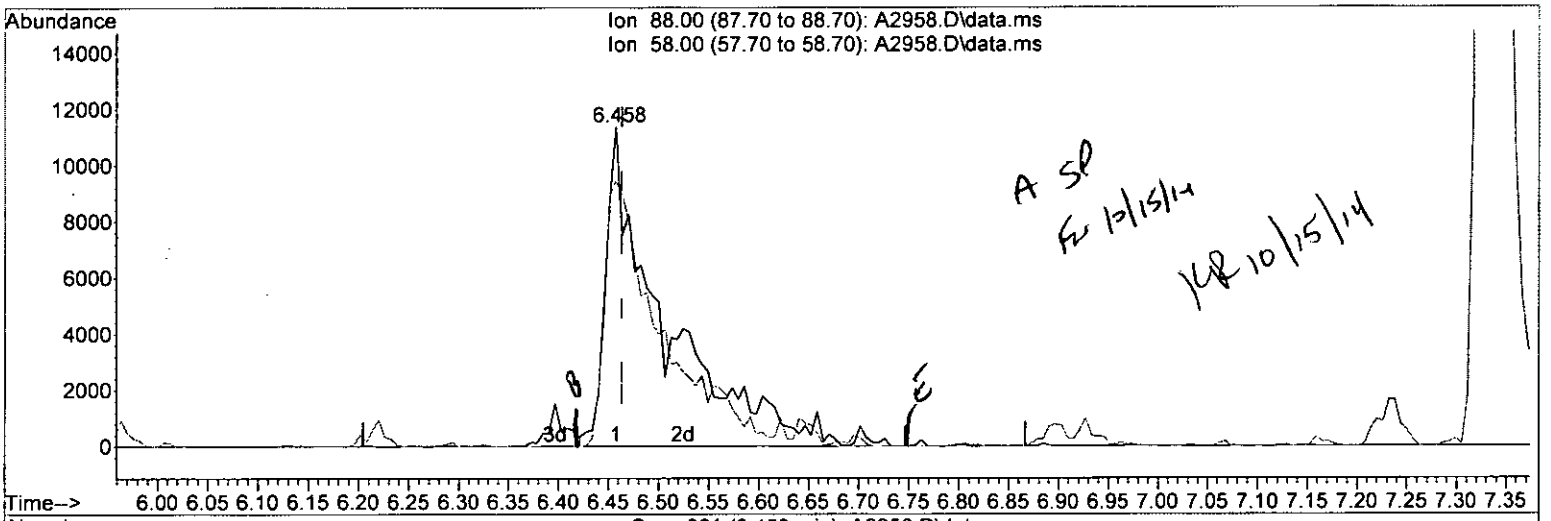
W072114.M Wed Oct 15 16:01:59 2014 MSVO10 Page: 1

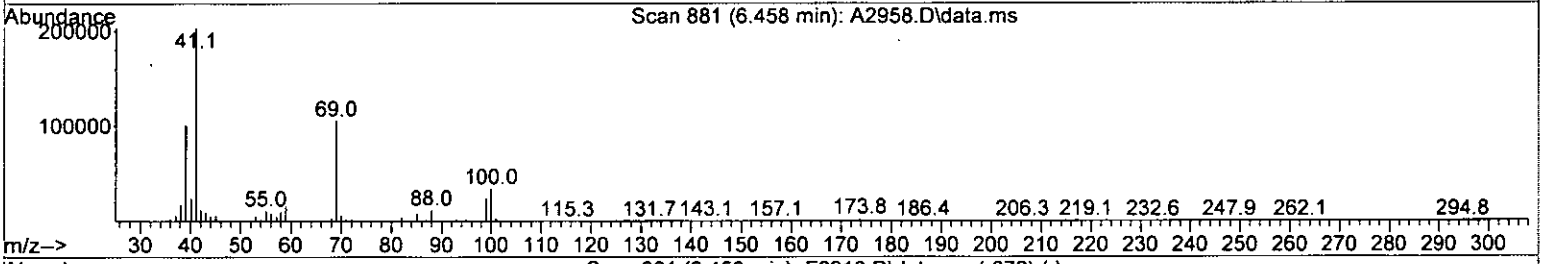
00338

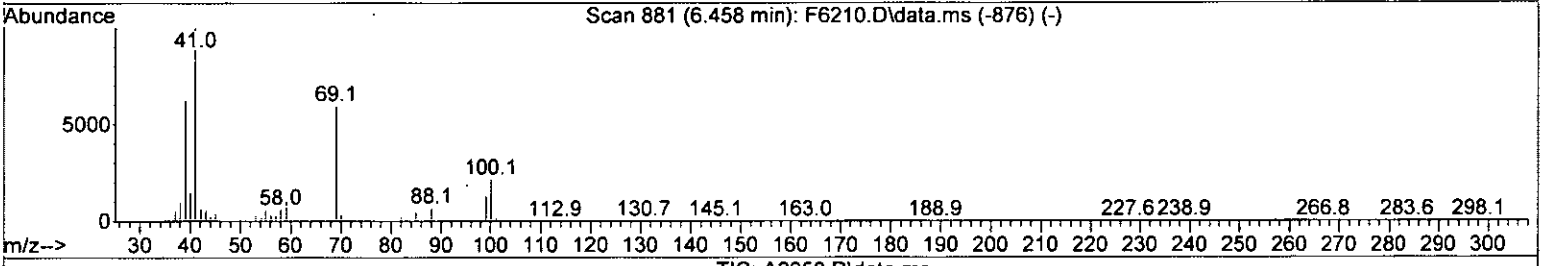
Quantitation Report (Qedit)

Sample : R1407825-003MS|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2958.D Vial: 21
Acq On : 14 Oct 2014 7:35 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 14 19:48:20 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration







TIC: A2958.D\data.ms

(58) 1,4-Dioxane

6.458min (-0.006) 792.73 ug/L m

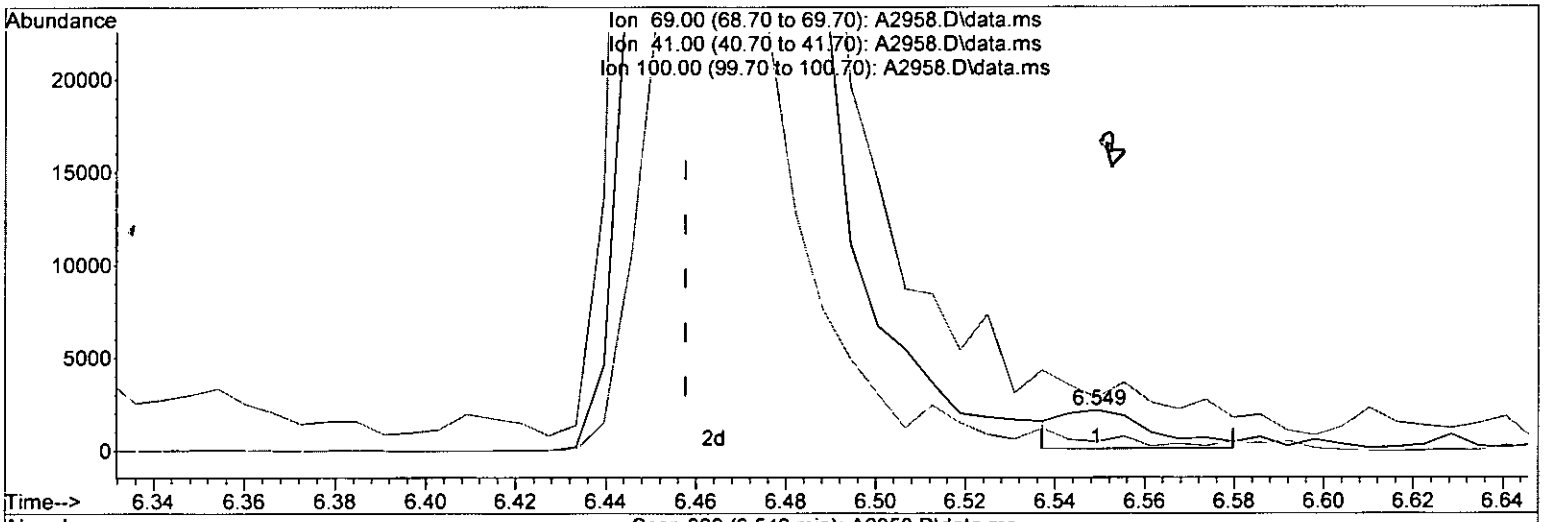
response 45903

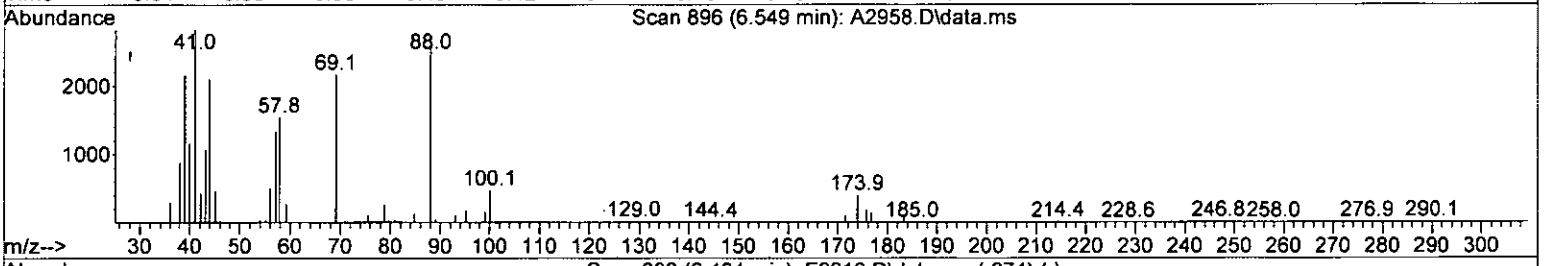
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	83.19
0.00	0.00	0.00
0.00	0.00	0.00

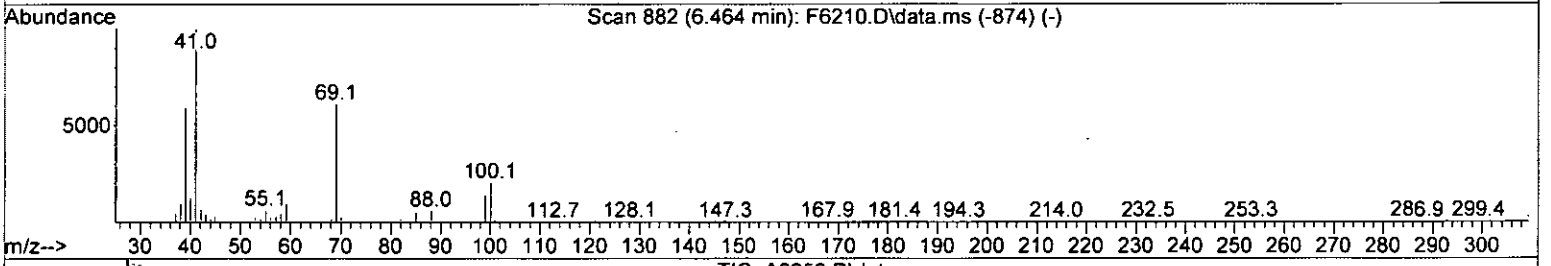
Quantitation Report (Qedit)

Sample : R1407825-003MS|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2958.D Vial: 21
Acq On : 14 Oct 2014 7:35 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 14 19:48:20 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration







TIC: A2958.D\data.ms

(59) Methyl Methacrylate

6.549min (+0.092) 0.82 ug/L

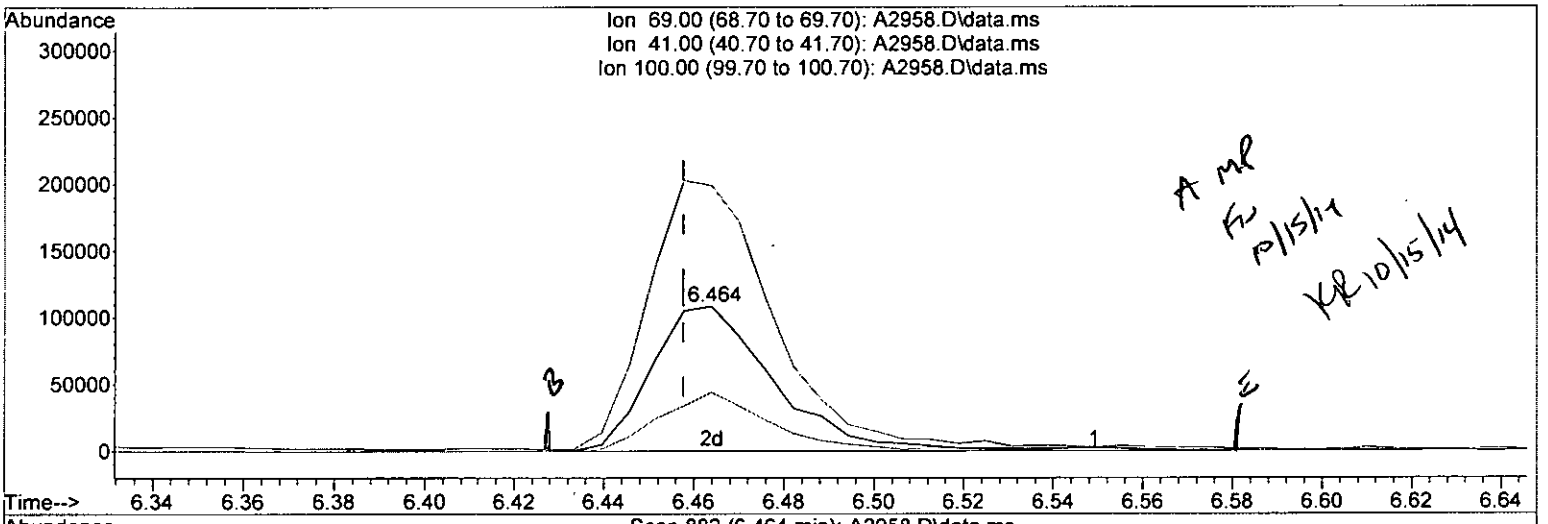
response 2959

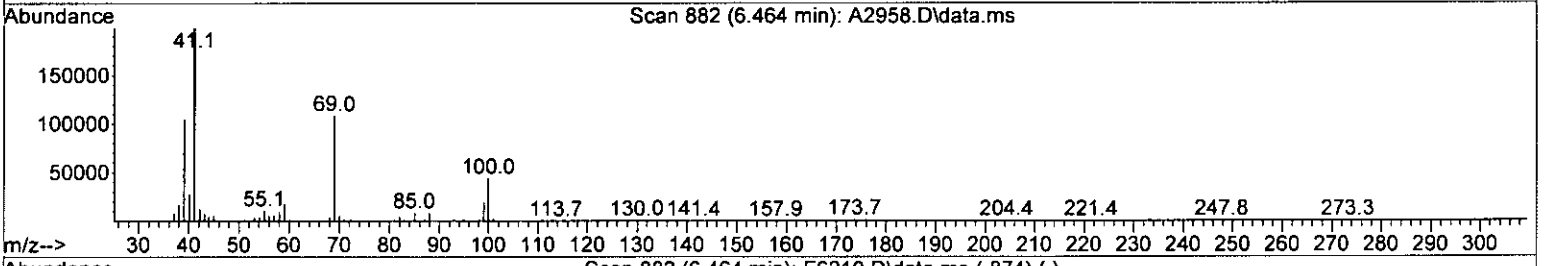
Ion	Exp%	Act%
69.00	100	100
41.00	128.90	130.40
100.00	36.90	22.09
0.00	0.00	0.00

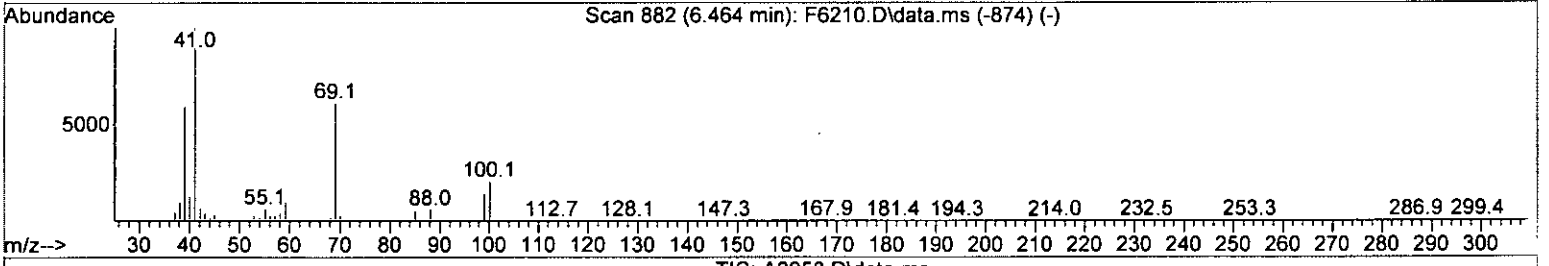
Quantitation Report (Qedit)

Sample : R1407825-003MS|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2958.D Vial: 21
Acq On : 14 Oct 2014 7:35 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 14 19:48:20 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration







TIC: A2958.D\data.ms

(59) Methyl Methacrylate

6.464min (+0.006) 56.93 ug/L m

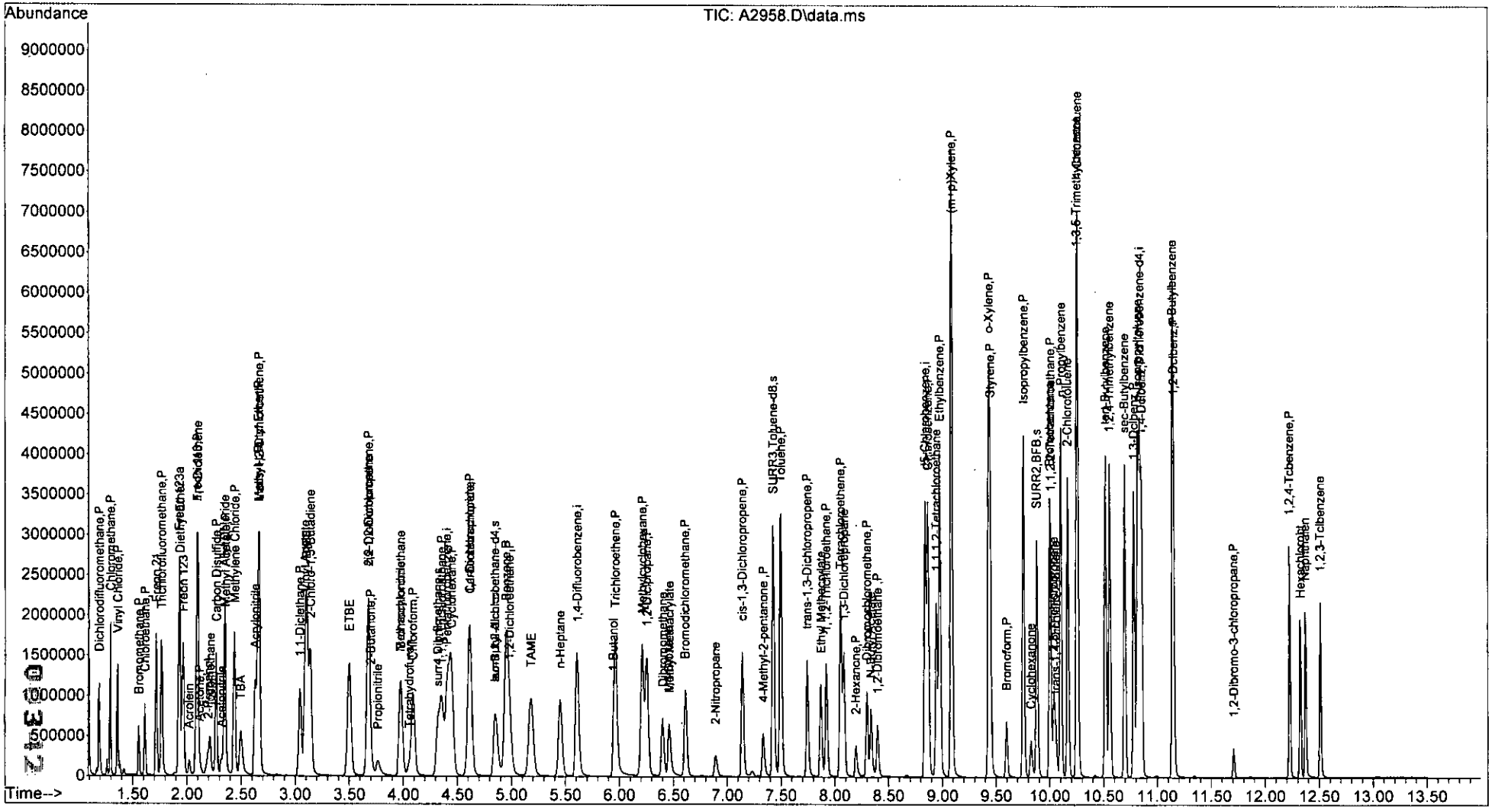
response 205769

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	183.68#
100.00	36.90	40.46
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Sample : R1407825-003MS|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2958.D Vial: 21
Acq On : 14 Oct 2014 7:35 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 15 16:02:35 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



W072114.M Wed Oct 15 16:03:06 2014 MSVO10

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 20:04
Sample Name:	FTMM-3-GW-M3MW02-21	**Units:**	µg/L
Lab Code:	RQ1412540-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2959.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**51.0**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**55.9**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**50.1**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**51.3**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**53.0**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**59.1**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**57.0**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**51.9**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**48.2**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**48.7**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**46.8**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**54.0**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**53.9**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**46.6**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**55.9**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**53.8**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**47.3**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**46.8**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**51.4**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**46.4**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**50.2**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**47.4**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**50.7**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**49.6**		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	**1130**		100	20	11	
106-43-4	4-Chlorotoluene	**50.0**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**47.8**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**53.0**		5.0	1.0	0.67	
67-64-1	Acetone	**39.2**		5.0	5.0	1.3	
71-43-2	Benzene	**52.4**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**48.7**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**48.0**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**57.4**		5.0	1.0	0.32	
75-25-2	Bromoform	**54.4**		5.0	1.0	0.42	
74-83-9	Bromomethane	**52.8**		5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 20:04
Sample Name:	FTMM-3-GW-M3MW02-21	**Units:**	µg/L
Lab Code:	RQ1412540-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2959.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**58.9**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**49.5**		5.0	1.0	0.29	
75-00-3	Chloroethane	**52.8**		5.0	1.0	0.24	
67-66-3	Chloroform	**53.8**		5.0	1.0	0.25	
74-87-3	Chloromethane	**55.4**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**53.4**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**56.4**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**51.3**		5.0	1.0	0.32	
100-41-4	Ethylbenzene	**47.7**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**53.7**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**51.9**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**56.4**		5.0	1.0	0.29	
91-20-3	Naphthalene	**50.1**		5.0	1.0	0.20	
100-42-5	Styrene	**47.9**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**50.7**		5.0	1.0	0.30	
108-88-3	Toluene	**52.3**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**50.7**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**56.0**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**51.9**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**51.1**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**58.4**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**102**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**49.8**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**51.8**		5.0	1.0	0.20	
95-47-6	o-Xylene	**49.9**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**48.2**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**48.2**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**51.7**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**61.5**		5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Analyzed:	10/14/14 20:04
Sample Name:	FTMM-3-GW-M3MW02-21	**Units:**	µg/L
Lab Code:	RQ1412540-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	416090
Data File Name:	I:\ACQUDATA\MSVOA10\DATA\101414\A2959.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	111	75-120	10/14/14 20:04	
Dibromofluoromethane	104	85-115	10/14/14 20:04	
Toluene-d8	101	85-120	10/14/14 20:04	

Quantitation Report (QT Reviewed)

Sample : R1407825-003DMS|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2959.D Vial: 22
Acq On : 14 Oct 2014 8:04 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

RQ1412542-06

FV 10/15/14

Quant Time: Oct 15 16:05:44 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	989072	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1440454	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.842	117	1354847	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	758399	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.318	113	479577	52.21	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 104.42%				
48) surr1,1,2-dichloroetha...	4.848	65	513884	53.01	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 106.02%				
65) SURR3,Toluene-d8	7.427	98	1641522	50.74	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.48%				
70) SURR2,BFB	9.878	95	705108	55.39	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 110.78%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.191	85	599941	56.36	ug/L		98
3) Chloromethane	1.294	50	785976	55.38	ug/L		98
4) Vinyl Chloride	1.361	62	673273	51.94	ug/L		95
5) Bromomethane	1.556	94	203982	52.81	ug/L		96
6) Chloroethane	1.611	64	346724	52.79	ug/L		95
7) Freon 21	1.715	67	978382	53.63	ug/L		99
8) Trichlorofluoromethane	1.770	101	822211	55.99	ug/L		100
9) Diethyl Ether	1.934	59	392258	50.72	ug/L		80
10) Freon 123a	1.928	67	595921	51.88	ug/L		96
11) Freon 123	1.965	83	607043	49.65	ug/L		98
12) Acrolein	2.020	56	108769	89.92	ug/L		95
13) 1,1-Diclethene	2.099	96	407270	59.08	ug/L	#	79
14) Freon 113	2.093	101	450078	51.68	ug/L		95
15) Acetone	2.117	43	117918	39.15	ug/L		95
16) 2-Propanol	2.196	45	411592	966.49	ug/L		98
17) Iodomethane	2.215	142	410510	51.86	ug/L		97
18) Carbon Disulfide	2.270	76	1276395	43.77	ug/L		98
19) Acetonitrile	2.318	40	84289	261.09	ug/L		94
20) Allyl Chloride	2.349	76	219675	50.70	ug/L	#	36
21) Methyl Acetate	2.355	43	252481	42.26	ug/L		86
22) Methylene Chloride	2.440	84	464086	51.30	ug/L	#	73
23) TBA	2.501	59	579836	1131.00	ug/L		76
24) Acrylonitrile	2.629	53	717984	259.42	ug/L		97
25) Methyl-t-Butyl Ether	2.660	73	1113572	56.38	ug/L		90
26) trans-1,2-Dichloroethene	2.666	96	459320	51.68	ug/L	#	80
28) 1,1-Diclethane	3.044	63	996317	53.01	ug/L		97
29) Vinyl Acetate	3.087	86	47457m	42.92	ug/L		
30) DIPE	3.105	45	2081119	48.24	ug/L		95
31) 2-Chloro-1,3-Butadiene	3.141	53	944769	51.11	ug/L		82
32) ETBE	3.501	59	1381287	47.74	ug/L		92
33) 2,2-Dichloropropane	3.678	77	583912	50.16	ug/L		97
34) cis-1,2-Dichloroethene	3.678	96	496203	51.05	ug/L	#	69
35) 2-Butanone	3.702	43	188179	47.40	ug/L		84
36) Propionitrile	3.763	54	265526	276.97	ug/L		98
37) Bromochloromethane	3.983	130	286908	48.01	ug/L	#	72

Quantitation Report (QT Reviewed)

Sample : R1407825-003DMS|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2959.D Vial: 22
Acq On : 14 Oct 2014 8:04 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 15 16:05:44 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Methacrylonitrile	3.971	67	126057	58.69	ug/L	#	53
39)	Tetrahydrofuran	4.056	42	120882	54.99	ug/L		78
40)	Chloroform	4.092	83	880290	53.75	ug/L		97
41)	1,1,1-Trichloroethane	4.355	97	756700	55.85	ug/L		96
42)	TAME	5.178	73	978577	50.13	ug/L		92
44)	Cyclohexane	4.440	41	597203	45.79	ug/L		87
46)	Carbontetrachloride	4.617	121	216025	58.87	ug/L		92
47)	1,1-Dichloropropene	4.617	75	642222	57.00	ug/L		96
49)	Benzene	4.952	78	1846025	52.43	ug/L		89
50)	1,2-Dichloroethane	4.983	62	682868	55.90	ug/L		94
51)	Iso-Butyl Alcohol	4.848	43	305477	1067.64	ug/L		91
52)	n-Heptane	5.452	43	597470	44.99	ug/L	#	81
53)	1-Butanol	5.946	56	399516	3151.03	ug/L		86
54)	Trichloroethene	5.964	130	497918	50.72	ug/L		98
55)	Methylcyclohexane	6.214	55	645027	47.67	ug/L	#	80
56)	1,2-Diclpropane	6.257	63	552168	53.80	ug/L		98
57)	Dibromomethane	6.403	93	252916	51.12	ug/L		96
58)	1,4-Dioxane	6.476	88	57475m	984.16	ug/L		
59)	Methyl Methacrylate	6.464	69	211125m	57.92	ug/L		
60)	Bromodichloromethane	6.616	83	644808	57.39	ug/L		98
61)	2-Nitropropane	6.897	41	164376	115.99	ug/L		94
63)	cis-1,3-Dichloropropene	7.141	75	692487	58.35	ug/L		95
64)	4-Methyl-2-pentanone	7.336	43	407119	53.04	ug/L		90
66)	Toluene	7.500	91	1930018	52.31	ug/L		99
67)	trans-1,3-Dichloropropene	7.744	75	577475	61.48	ug/L		96
68)	Ethyl Methacrylate	7.872	69	433905	56.69	ug/L	#	62
69)	1,1,2-Trichloroethane	7.921	97	334167	51.34	ug/L		98
72)	Tetrachloroethene	8.055	164	397098	50.68	ug/L		96
73)	2-Hexanone	8.195	43	284057	49.60	ug/L		91
74)	1,3-Dichloropropane	8.086	76	596197	51.36	ug/L	#	81
75)	Dibromochloromethane	8.299	129	441475	53.35	ug/L		97
76)	N-Butyl Acetate	8.336	43	562641	44.16	ug/L		91
77)	1,2-Dibromoethane	8.396	107	354752	53.89	ug/L		97
79)	Chlorobenzene	8.866	112	1293597	49.52	ug/L		99
81)	1,1,1,2-Tetrachloroethane	8.945	131	465812	50.95	ug/L		98
82)	Ethylbenzene	8.976	106	620247	47.65	ug/L		98
83)	(m+p)Xylene	9.085	106	1636061	101.92	ug/L		96
84)	o-Xylene	9.433	106	782638	49.86	ug/L		98
85)	Styrene	9.445	104	1249937	47.94	ug/L		97
86)	Bromoform	9.597	173	258337	54.35	ug/L		98
88)	Isopropylbenzene	9.756	105	2049597	51.92	ug/L		97
89)	Cyclohexanone	9.823	55	208005	166.78	ug/L		90
90)	trans-1,4-Dichloro-2-B...	10.055	53	89308	44.41	ug/L		85
92)	1,1,2,2-Tetrachloroethane	10.006	83	416830	50.09	ug/L		93
93)	Bromobenzene	10.000	156	557419	48.69	ug/L		98
94)	1,2,3-Trichloropropane	10.036	110	112071	48.17	ug/L		94
95)	n-Propylbenzene	10.103	91	2451452	51.80	ug/L		99
96)	2-Chlorotoluene	10.164	91	1481504	50.73	ug/L		99
98)	4-Chlorotoluene	10.256	91	1755801	49.98	ug/L		99
99)	1,3,5-Trimethylbenzene	10.250	105	1626179	47.25	ug/L		100
100)	tert-Butylbenzene	10.518	119	1390716	48.21	ug/L		99
101)	1,2,4-Trimethylbenzene	10.555	105	1629609	46.84	ug/L		99

Quantitation Report (QT Reviewed)

Sample : R1407825-003DMS|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2959.D Vial: 22
Acq On : 14 Oct 2014 8:04 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 15 16:05:44 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration

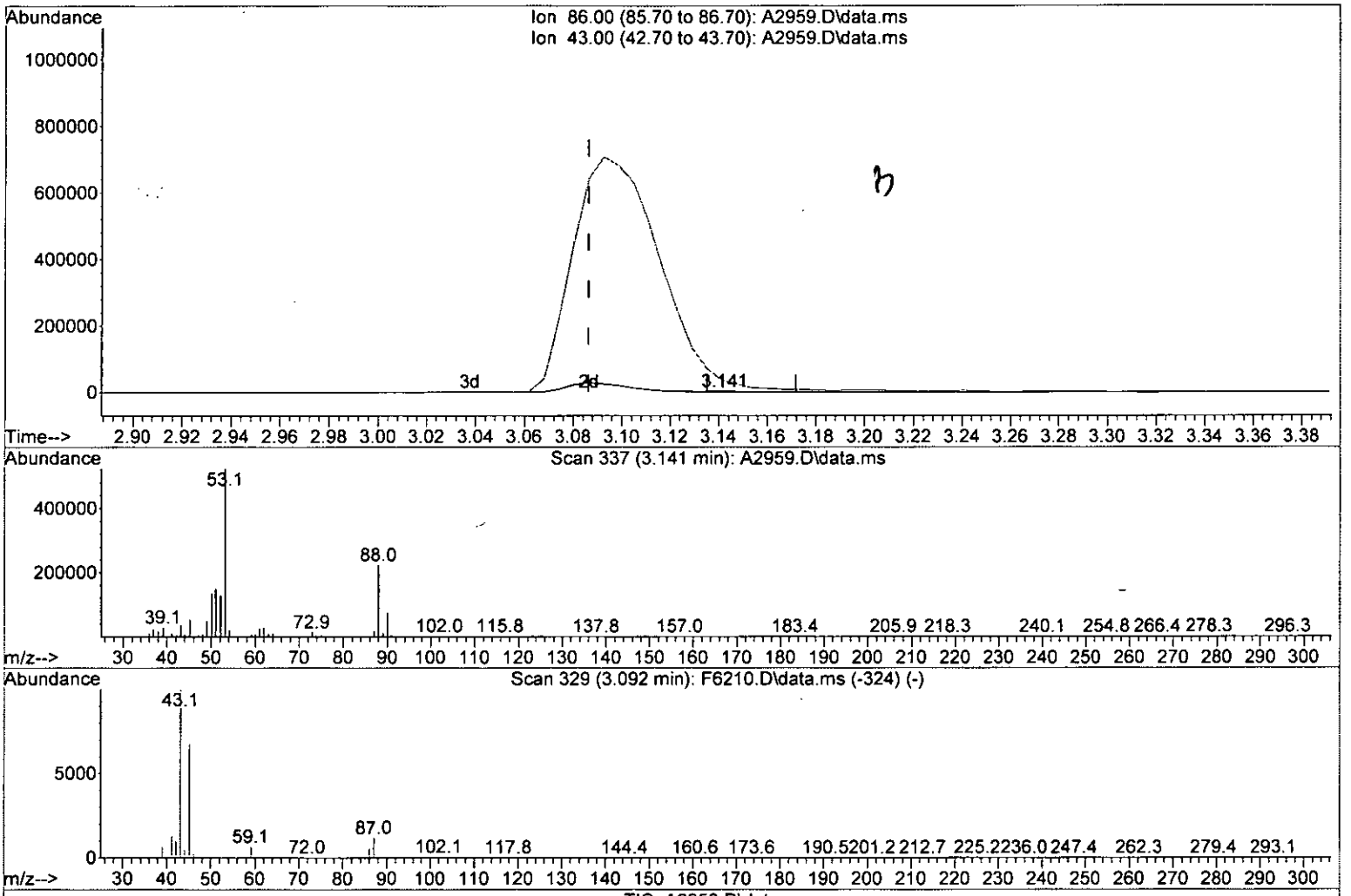
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
103) sec-Butylbenzene	10.695	105	1950822	48.24	ug/L	99
104) p-Isopropyltoluene	10.817	119	1678101	47.84	ug/L	98
105) 1,3-Dclbenz	10.780	146	1025617	46.83	ug/L	99
106) 1,4-Dclbenz	10.853	146	1052507	46.39	ug/L	99
109) n-Butylbenzene	11.140	91	1480632	49.80	ug/L	99
110) 1,2-Dclbenz	11.152	146	957970	46.55	ug/L	99
111) 1,2-Dibromo-3-chloropr...	11.707	157	68451	54.03	ug/L	96
115) 1,2,4-Tcbenzene	12.225	180	567636	48.69	ug/L	96
116) Hexachlorobt	12.323	225	256349	53.71	ug/L	99
117) Naphthalen	12.371	128	1004585	50.14	ug/L	99
118) 1,2,3-Tclbenzene	12.512	180	443839	51.94	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Sample : R1407825-003DMS|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2959.D Vial: 22
Acq On : 14 Oct 2014 8:04 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 14 20:17:53 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



TIC: A2959.D\data.ms

(29) Vinyl Acetate

3.141min (+0.055) 1.82 ug/L

response 2012

Ion	Exp%	Act%
86.00	100	100
43.00	1729.40	1720.14
0.00	0.00	0.00
0.00	0.00	0.00

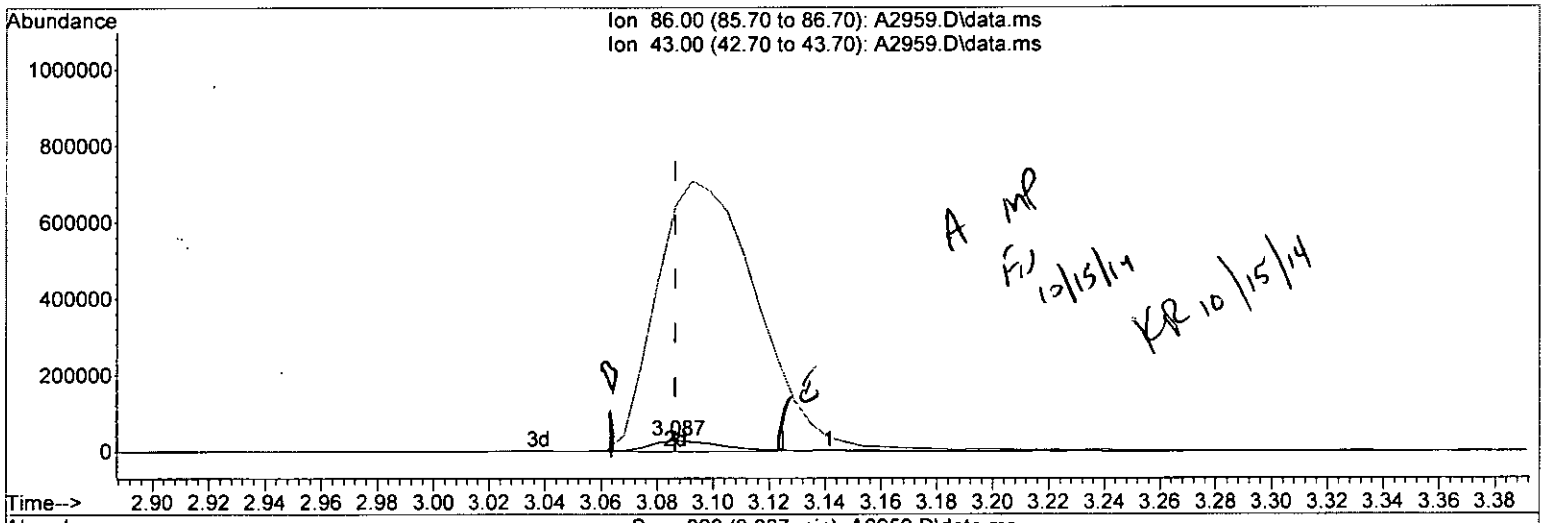
W072114.M Wed Oct 15 16:03:26 2014 MSVO10

00349

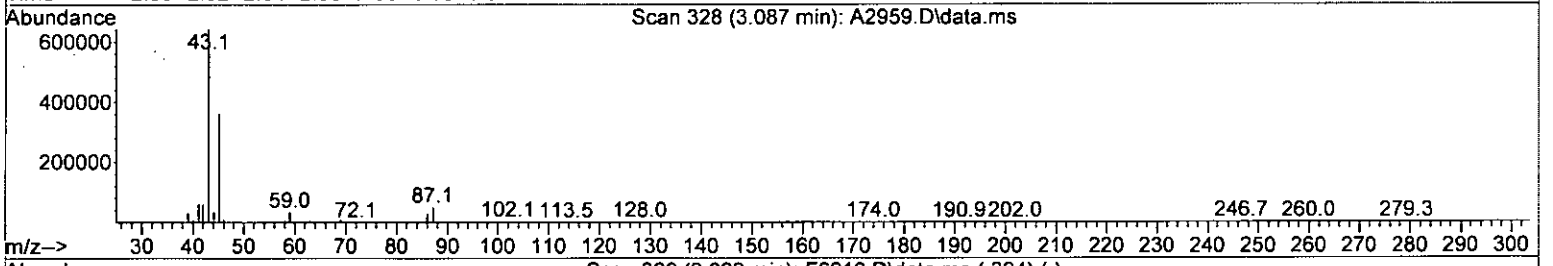
Quantitation Report (Qedit)

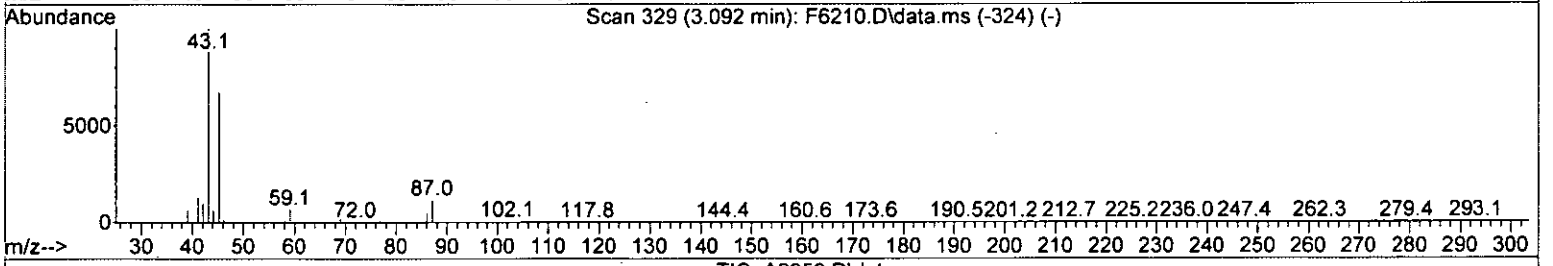
Sample : R1407825-003DMS|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2959.D Vial: 22
Acq On : 14 Oct 2014 8:04 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 14 20:17:53 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



A MP 12/15/14 KR 10/15/14





TIC: A2959.D\data.ms

(29) Vinyl Acetate

3.087min (+0.000) 42.92 ug/L m

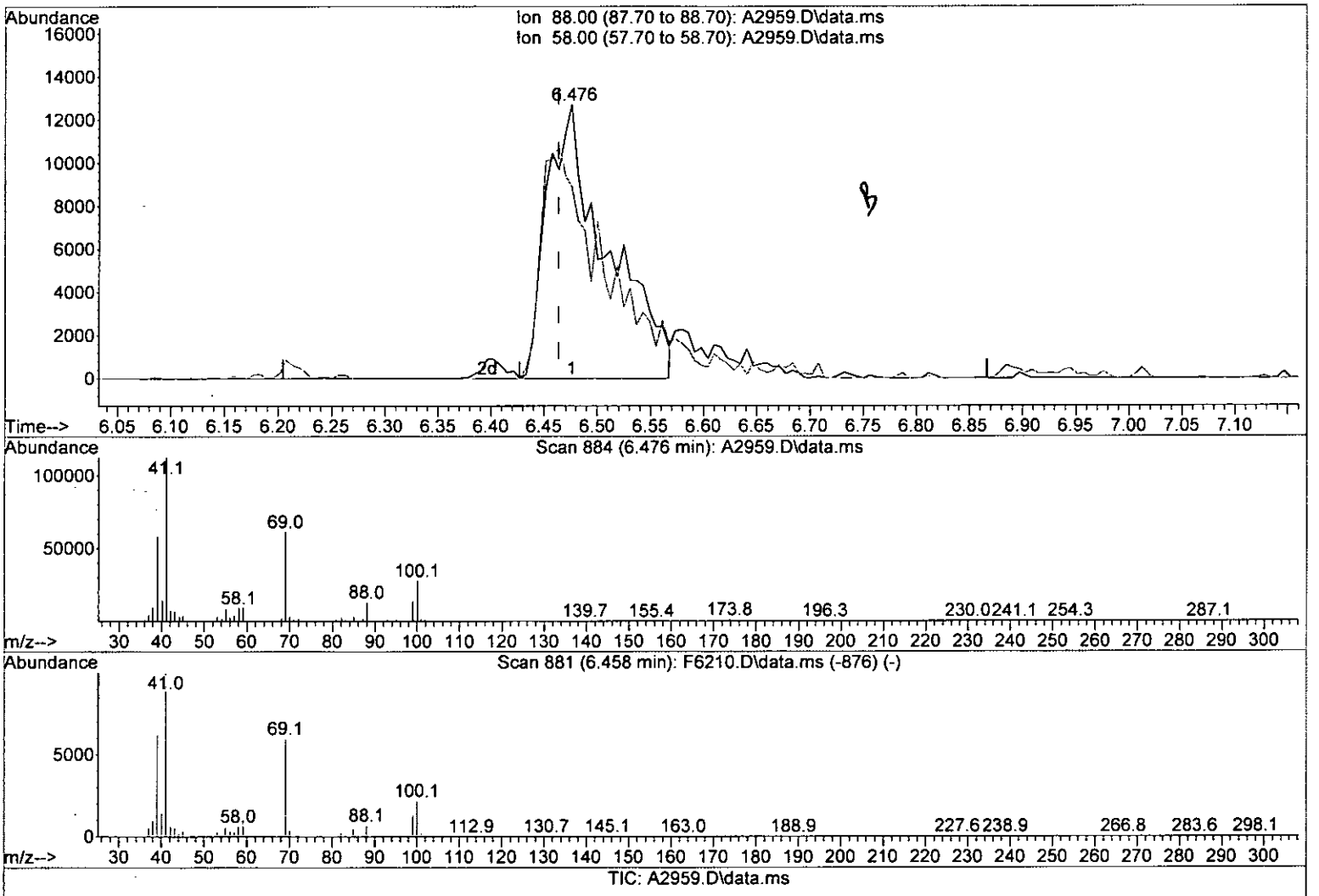
response 47457

Ion	Exp%	Act%
86.00	100	100
43.00	1729.40	2251.73#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : R1407825-003DMS|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2959.D Vial: 22
Acq On : 14 Oct 2014 8:04 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 14 20:17:53 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



TIC: A2959.D\data.ms

(58) 1,4-Dioxane

6.476min (+0.012) 853.68 ug/L

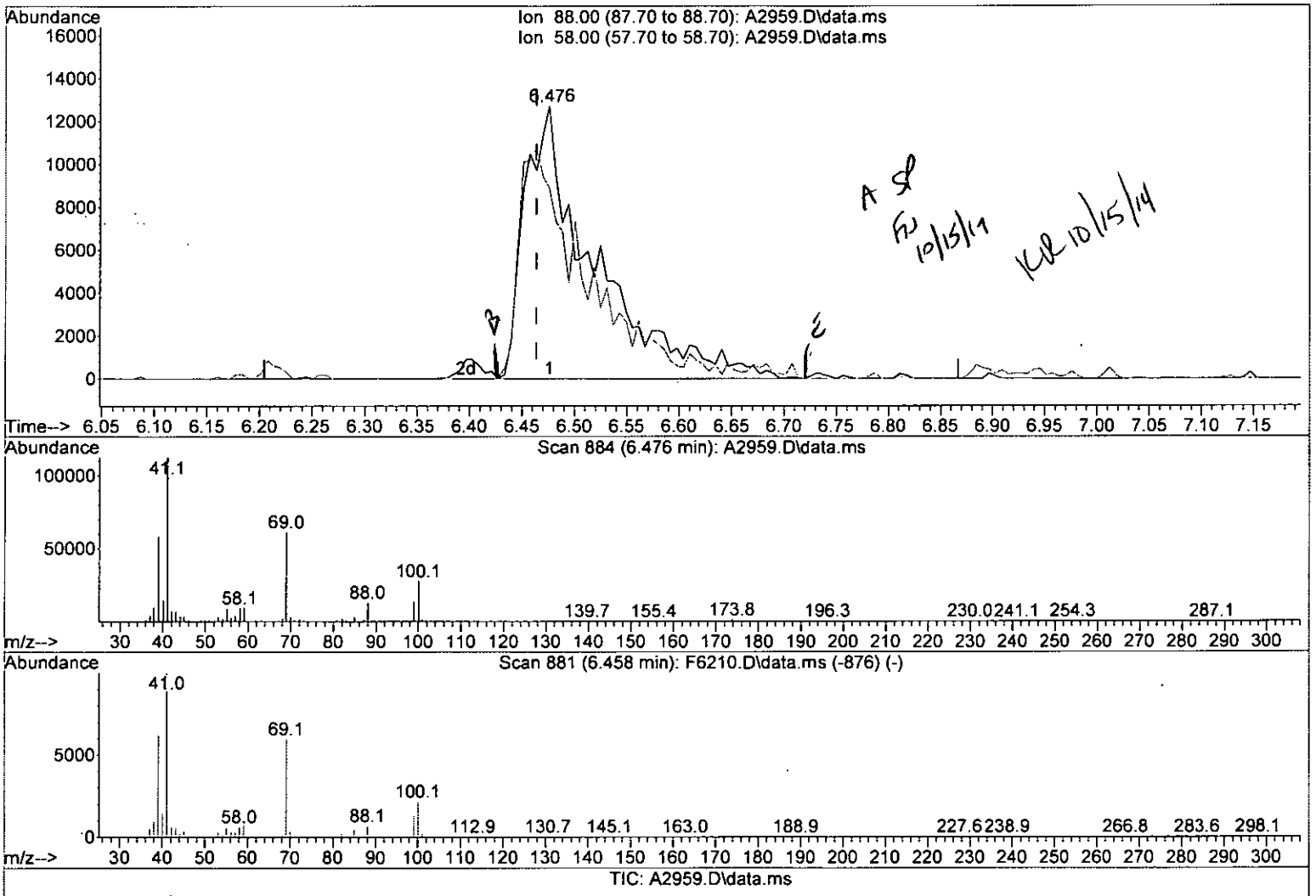
response 49855

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	69.90
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : R1407825-003DMS|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2959.D Vial: 22
Acq On : 14 Oct 2014 8:04 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 14 20:17:53 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



TIC: A2959.D\data.ms

(58) 1,4-Dioxane

6.476min (+0.012) 984.16 ug/L m

response 57475

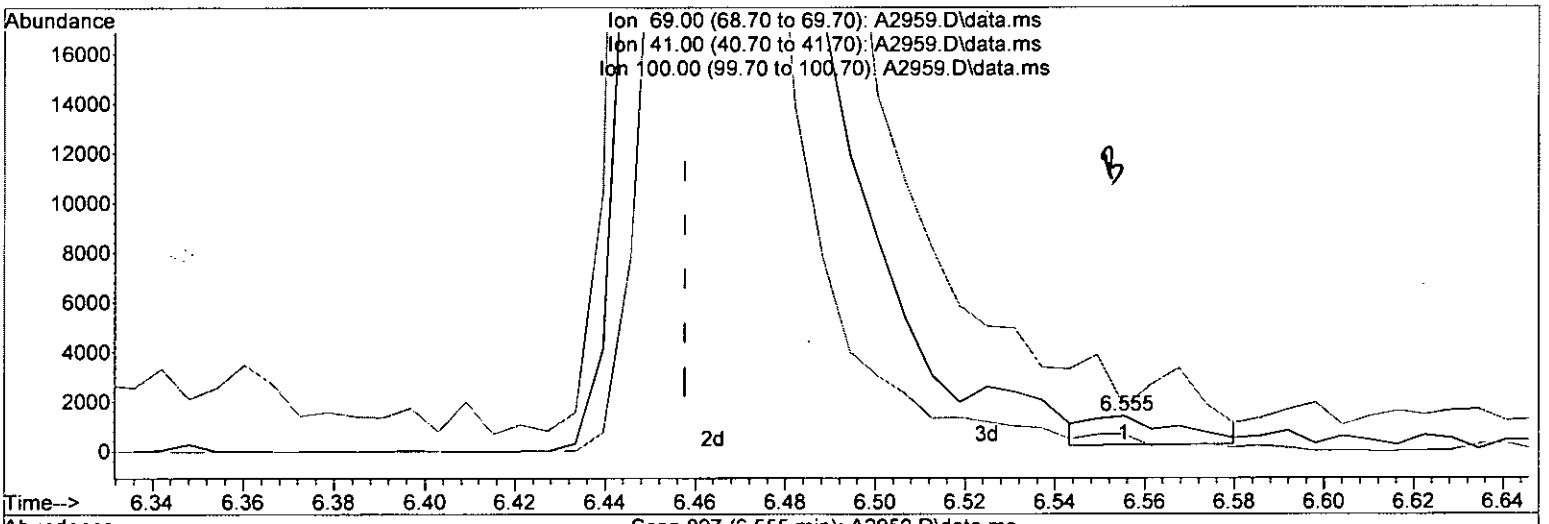
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	69.90
0.00	0.00	0.00
0.00	0.00	0.00

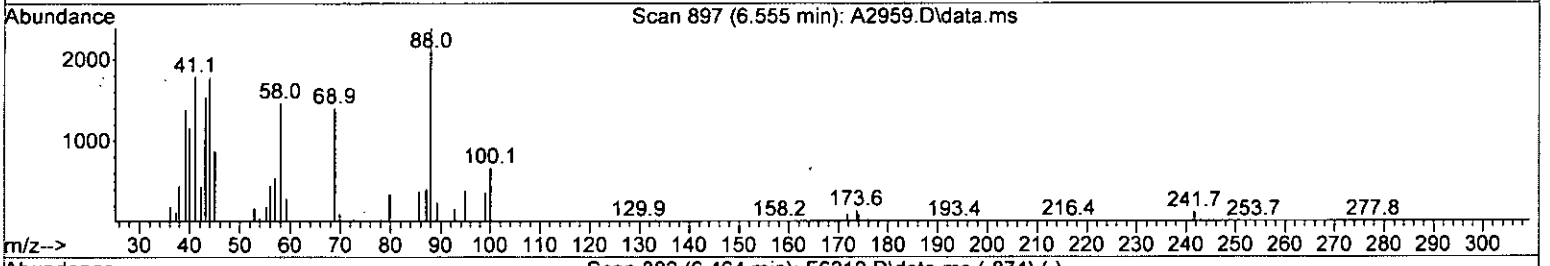
A SP FJ 10/15/14 KLR 10/15/14

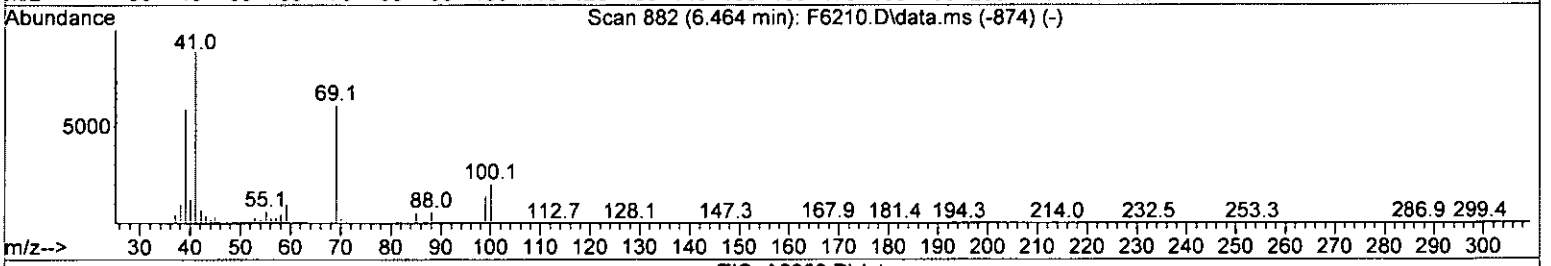
Quantitation Report (Qedit)

Sample : R1407825-003DMS|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2959.D Vial: 22
Acq On : 14 Oct 2014 8:04 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 14 20:17:53 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration







TIC: A2959.D\data.ms

(59) Methyl Methacrylate

6.555min (+0.098) 0.44 ug/L

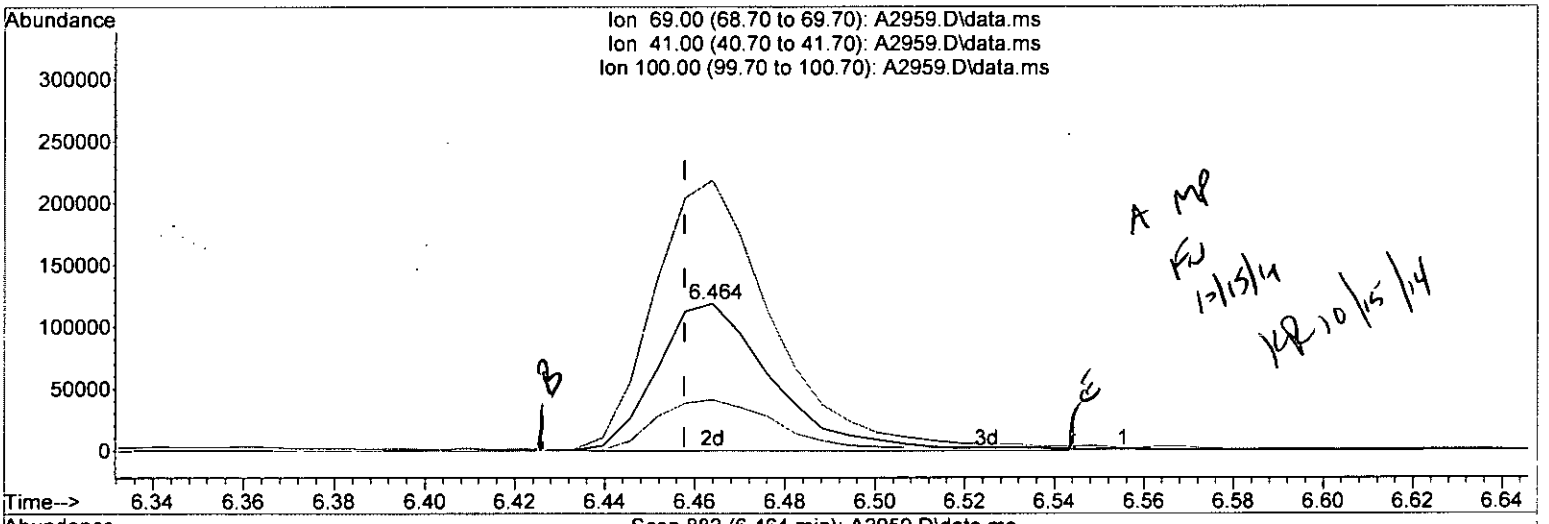
response 1595

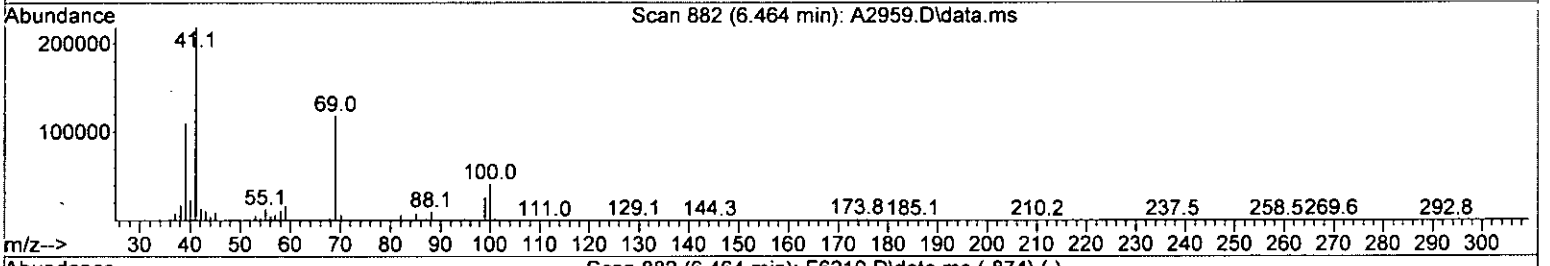
Ion	Exp%	Act%
69.00	100	100
41.00	128.90	127.64
100.00	36.90	47.29
0.00	0.00	0.00

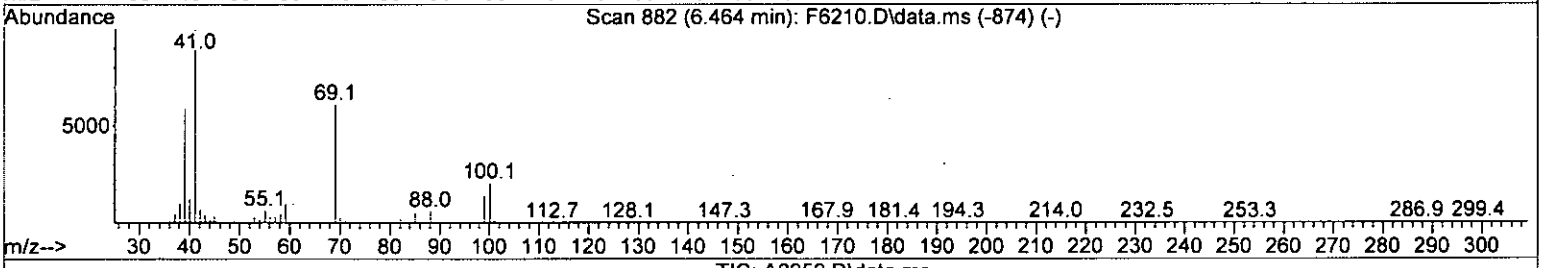
Quantitation Report (Qedit)

Sample : R1407825-003DMS|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2959.D Vial: 22
Acq On : 14 Oct 2014 8:04 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 14 20:17:53 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration







TIC: A2959.D\data.ms

(59) Methyl Methacrylate

6.464min (+0.006) 57.92 ug/L m

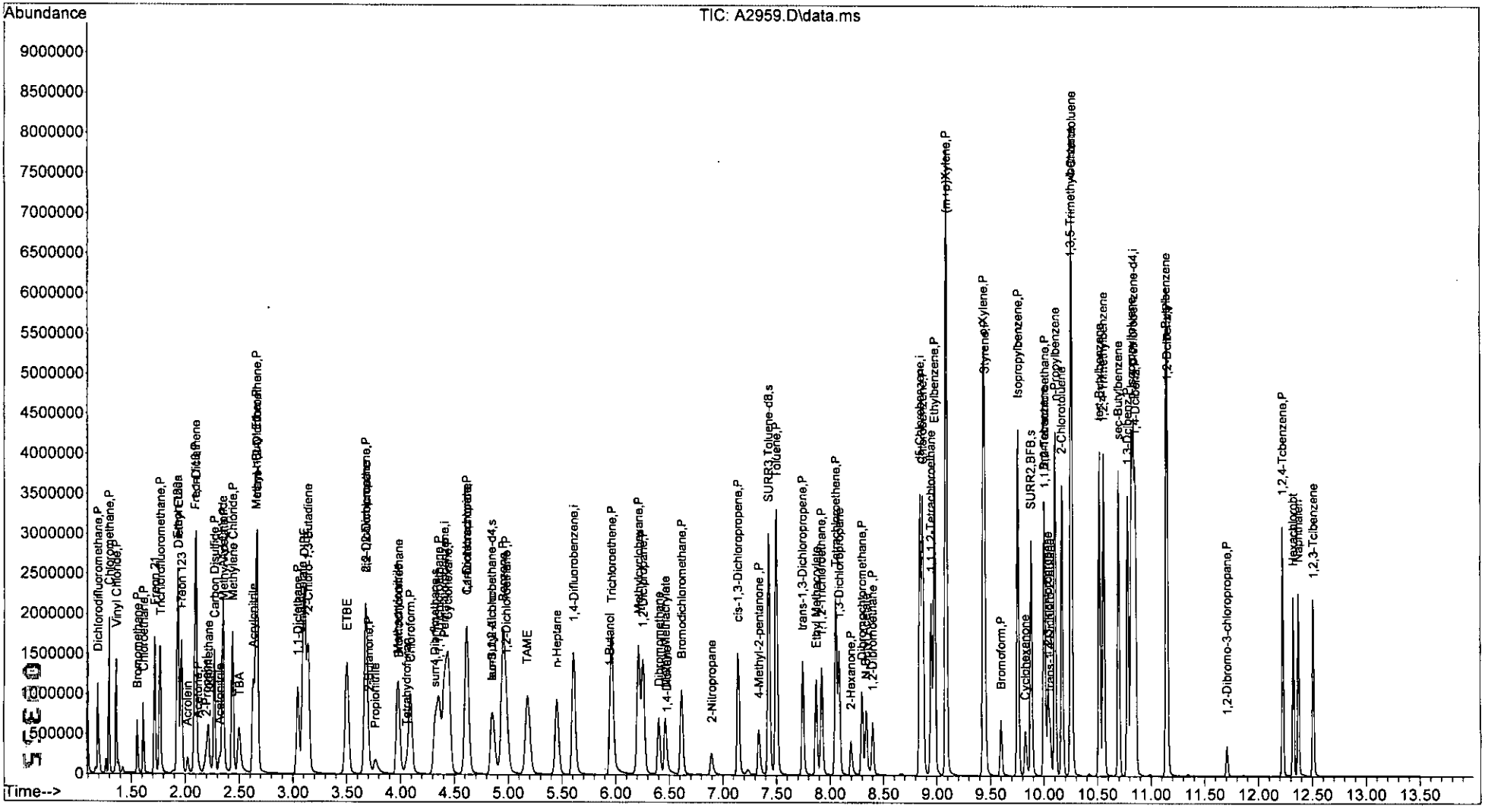
response 211125

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	184.27#
100.00	36.90	34.69
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Sample : R1407825-003DMS|1.0
Data File : I:\ACQUDATA\msvoa10\data\101414\A2959.D Vial: 22
Acq On : 14 Oct 2014 8:04 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Oct 15 16:05:44 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W072114.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Jul 22 13:18:57 2014
Response via : Initial Calibration



W072114.M Wed Oct 15 16:06:05 2014 MSVO10 Page: 4

Analysis: 8260C
Analyst: F. Naegler
Tune Method: T072114.M
Date: 7/21/14
Data Path: j:\acqudata\msvoa10\072114
Run Method: W072114.M
Instr. MS#10
LIMS Run# : —

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								A0506	Y	
2	BLK								A0507	Y	
1	TUNE								08	Y	
2	ICAL BLK								09	Y	
3	0.5ppb Std								10	Y	
4	1.0								11	Y	
5	2.0								12	Y	
6	5.0								13	Y	
7	10								14	Y	
8	50								15	Y	
9	100								16	Y	
10	150								17	Y	
11	200								18	Y	
12	BLK								19	Y	
13	BLK								20	Y	
14	50ppb ICV								21	Y	
15	BLK								22	Y	

WATER ICAL TABLE

CONC (PPB)	0.5	1.0	2.0	5.0	10	50	100	150	200
1°T/G = 72623	10mL/1mL → 5mL/10mL	10mL/5mL	20mL/5mL	50mL/5mL	2mL/10mL	5mL/50mL	10mL/50mL	15mL/50mL	20mL/50mL
1° HSL = 72499	↓	↓	↓	↓	↓	↓	↓	↓	↓
1° Fr = 72625	↓	↓	↓	↓	↓	↓	↓	↓	↓
1° HBO = 72046	↓	↓	↓	↓	↓	↓	↓	↓	↓
1° OCC = 72130	↓	↓	↓	↓	↓	↓	↓	↓	↓
SURR = 72622	—	—	—	1mL/50mL	4mL/100mL	—	5mL/50mL	7.5mL/50mL	10mL/50mL

T/G Primary 500 : SEE ICAL TABLE
HSL Primary :
Fr Primary :
HBO Primary :
OCC Primary :

Fr Secondary 500 : 72454 - 12.5mL
T/G Secondary 200 : 72050 - 5mL
HSL Secondary : 72064 -
HBO Secondary : 72455 -
OCC Secondary : 72140 -

5mL (ICV)

Combined IS/Surr 500 : 72621
Surrogate :
Internal Std :

Runlog-MSVOAr2 9/20/13
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Analysis: 8260C | Analyst: F. Naegler | Tune Method: T072114.M
Date: 10/14/14 | Data Path: j:\acqudata\msvoa10\101414 | Run Method: W072114.M
Instr. MS #10 | LIMS Run#: 416090

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	TUNE								A2938	Y	
2	CCV								39	Y	
3	LCS								40	Y	
4	MBLK								41	(N)	
5	MBLK								42	Y	RQ1412540-01
6	R1408097-001	1.0		[redacted]	6691	1	2	<2	43	Y	
7	-002	1.0					2	<2	44	Y	
8	-003	1.0					2	<2	45	Y	
9	-004	1.0					2	<2	46	Y	
10	-005	1.0					2	<2	47	Y	
11	R1407806-012	1.0		[redacted]	11603	4	2	<2	48	Y	
12	-003	1.0					2	<2	49	Y	
13	-009	1.0					2	<2	50	Y	
14	BLK								51	Y	
15	R1407825-001	1.0		[redacted]	11603	4	1	<2	52	Y	
16	-002	1.0					1	<2	53	Y	
17	-003	1.0					1	<2	54	Y	
18	-004	1.0					1	<2	55	Y	
19	-009	1.0					1	<2	56	Y	
20	-010	1.0					1	<2	57	Y	
21	-003MS	1.0					2	<2	58	Y	
22	-003MSD	1.0					3	<2	59	Y	
23	R1407806-003MS	1.0		[redacted]	11603	4	4	<2	60	Y	
24	-003MSD	1.0					5	<2	61	Y	
25	BLK								62	Y	

RD 10/15/14

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

T/G Primary 500 : 75337 - 5mL | 50mL
HSL Primary : 75338 - | (CCV)
Fr Primary : 75277 - |
HBa Primary : 75032 - |
Primary :

Fr Secondary 200 : 75142 - 5mL | 50mL (LCS) | 125mL - 5mL | 50mL (SPK)
T/G Secondary 500 : 75033 - 2mL |
HSL Secondary : 75084 - |
HBa Secondary : 74908 - |
Secondary :

Combined IS/Surr 500 : 75442
Surrogate :
Internal Std :

Runlog-MSVOAr2 9/20/13

ALS Environmental

SEMI-VOLATILE ORGANICS QC SUMMARY

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
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00358

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/3/14
Date Received: 10/4/14
Date Analyzed: 10/ 8/14

Matrix Spike Summary
Semivolatile Organic Compounds by GC/MS

Sample Name: FTMM-66-GW-886RW01-11.55
Lab Code: R1407825-005

Units: µg/L
Basis: NA

Analytical Method: 8270D
Prep Method: EPA 3510C

		FTMM-66-GW-886RW01-11.5 5MS Matrix Spike RQ1412024-04				FTMM-66-GW-886RW01-11.5 5DMS Duplicate Matrix Spike RQ1412024-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**		**% Rec Limits**	**RPD**	**RPD Limit**
1,2,4-Trichlorobenzene	ND	61.0	111	55		54.4	105	52		35 - 105	6	30
1,2-Dichlorobenzene	ND	62.4	111	56		54.0	105	51		35 - 100	9	30
1,3-Dichlorobenzene	ND	57.4	111	52		50.6	105	48		30 - 100	8	30
1,4-Dichlorobenzene	ND	59.3	111	53		51.9	105	49		30 - 100	8	30
2,4,5-Trichlorophenol	ND	103	111	93		99.3	105	94		50 - 110	1	30
2,4,6-Trichlorophenol	ND	102	111	91		98.3	105	93		50 - 115	2	30
2,4-Dichlorophenol	ND	107	111	96		92.9	105	88		50 - 105	9	30
2,4-Dimethylphenol	ND	103	111	93		91.9	105	87		30 - 110	7	30
2,4-Dinitrophenol	ND	109	111	98		112	105	106		15 - 140	8	30
2,4-Dinitrotoluene	ND	103	111	92		96.7	105	92		50 - 120	<1	30
2,6-Dinitrotoluene	ND	106	111	95		98.6	105	94		50 - 115	1	30
2-Chloronaphthalene	ND	82.8	111	75		80.2	105	76		50 - 105	1	30
2-Chlorophenol	ND	94.3	111	85		80.5	105	76		35 - 105	11	30
2-Methylnaphthalene	ND	74.7	111	67		68.9	105	65		45 - 105	3	30
2-Methylphenol	ND	90.5	111	81		77.7	105	74		40 - 110	9	30
2-Nitroaniline	ND	105	111	94		98.4	105	93		50 - 115	1	30
2-Nitrophenol	ND	98.2	111	88		87.7	105	83		40 - 115	6	30
3,3'-Dichlorobenzidine	ND	ND	111	0	*	ND	105	0	*	20 - 110	NC	30
3- and 4-Methylphenol Coelution	ND	180	222	81		150	211	71		30 - 110	13	30
3-Nitroaniline	ND	91.5	111	82		81.1	105	77		20 - 125	6	30
4,6-Dinitro-2-methylphenol	ND	102	111	91		97.2	105	92		40 - 130	1	30
4-Bromophenyl Phenyl Ether	ND	99.5	111	90		91.3	105	87		50 - 115	3	30
4-Chloro-3-methylphenol	ND	109	111	98		97.4	105	93		45 - 110	5	30
4-Chloroaniline	ND	89.1	111	80		75.1	105	71		15 - 110	12	30
4-Chlorophenyl Phenyl Ether	ND	94.0	111	85		92.3	105	88		50 - 110	3	30
4-Nitroaniline	ND	102	111	92		92.7	105	88		35 - 120	4	30
4-Nitrophenol	ND	54.8	111	49		53.4	105	51		0 - 125	4	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/3/14
Date Received: 10/4/14
Date Analyzed: 10/ 8/14

Matrix Spike Summary
Semivolatile Organic Compounds by GC/MS

Sample Name: FTMM-66-GW-886RW01-11.55
Lab Code: R1407825-005

Units: µg/L
Basis: NA

Analytical Method: 8270D
Prep Method: EPA 3510C

		FTMM-66-GW-886RW01-11.5 5MS Matrix Spike RQ1412024-04				FTMM-66-GW-886RW01-11.5 5DMS Duplicate Matrix Spike RQ1412024-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**		**RPD**	**RPD Limit**
Acenaphthene	ND	88.7	111	80		86.6	105	82	45 - 110	2	30
Acenaphthylene	ND	92.3	111	83		87.1	105	83	50 - 105	<1	30
Anthracene	ND	94.4	111	85		87.4	105	83	55 - 110	2	30
Benz(a)anthracene	ND	96.1	111	87		85.2	105	81	55 - 110	7	30
Benzidine	ND	ND	111	0	*	ND	105	0	* 10 - 130	NC	30
Benzo(a)pyrene	ND	92.6	111	83		85.4	105	81	55 - 110	2	30
Benzo(b)fluoranthene	ND	94.9	111	85		88.6	105	84	45 - 120	1	30
Benzo(g,h,i)perylene	ND	108	111	97		97.3	105	92	40 - 125	5	30
Benzo(k)fluoranthene	ND	92.9	111	84		85.1	105	81	45 - 125	4	30
Benzyl Alcohol	ND	98.6	111	89		83.3	105	79	30 - 110	12	30
2,2'-Oxybis(1-chloropropane)	ND	106	111	95		92.7	105	88	25 - 130	8	30
Bis(2-chloroethoxy)methane	ND	106	111	96		96.9	105	92	45 - 105	4	30
Bis(2-chloroethyl) Ether	ND	93.3	111	84		78.9	105	75	35 - 110	11	30
Bis(2-ethylhexyl) Phthalate	ND	111	111	100		104	105	99	40 - 125	1	30
Butyl Benzyl Phthalate	ND	104	111	93		91.9	105	87	45 - 115	7	30
Carbazole	ND	106	111	96		97.0	105	92	50 - 115	4	30
Chrysene	ND	95.9	111	86		85.5	105	81	55 - 110	6	30
Di-n-butyl Phthalate	ND	106	111	95		97.9	105	93	55 - 115	2	30
Di-n-octyl Phthalate	ND	105	111	94		97.3	105	92	35 - 135	2	30
Dibenz(a,h)anthracene	ND	105	111	95		95.2	105	90	40 - 125	5	30
Dibenzofuran	ND	86.6	111	78		83.3	105	79	55 - 105	1	30
Diethyl Phthalate	ND	102	111	92		102	105	97	40 - 120	5	30
Dimethyl Phthalate	ND	100	111	90		94.9	105	90	25 - 125	<1	30
Fluoranthene	ND	99.7	111	90		92.4	105	88	55 - 115	2	30
Fluorene	ND	92.0	111	83		87.0	105	83	50 - 110	<1	30
Hexachlorobenzene	ND	89.5	111	81		86.3	105	82	50 - 110	1	30
Hexachlorobutadiene	ND	54.4	111	49		46.6	105	44	25 - 105	11	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/3/14
Date Received: 10/4/14
Date Analyzed: 10/ 8/14

Matrix Spike Summary
Semivolatile Organic Compounds by GC/MS

Sample Name: FTMM-66-GW-886RW01-11.55
Lab Code: R1407825-005

Units: µg/L
Basis: NA

Analytical Method: 8270D
Prep Method: EPA 3510C

		FTMM-66-GW-886RW01-11.5 5MS Matrix Spike RQ1412024-04			FTMM-66-GW-886RW01-11.5 5DMS Duplicate Matrix Spike RQ1412024-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Hexachlorocyclopentadiene	ND	73.7	111	66	71.5	105	68	10 - 130	3	30
Hexachloroethane	ND	54.7	111	49	45.1	105	43	30 - 100	13	30
Indeno(1,2,3-cd)pyrene	ND	102	111	92	94.3	105	90	45 - 125	2	30
Isophorone	ND	108	111	97	97.0	105	92	50 - 110	5	30
N-Nitrosodi-n-propylamine	ND	106	111	96	91.2	105	87	35 - 130	10	30
N-Nitrosodimethylamine	ND	75.0	111	67	65.9	105	63	25 - 110	6	30
N-Nitrosodiphenylamine	ND	86.7	111	78	79.8	105	76	50 - 110	3	30
Naphthalene	ND	69.9	111	63	63.2	105	60	40 - 110	5	30
Nitrobenzene	ND	94.5	111	85	85.0	105	81	45 - 110	5	30
Pentachlorophenol (PCP)	ND	111	111	100	104	105	99	40 - 115	1	30
Phenanthrene	ND	97.5	111	88	93.4	105	89	50 - 115	1	30
Phenol	ND	49.5	111	45	43.7	105	41	0 - 115	9	30
Pyrene	ND	113	111	101	99.5	105	95	50 - 130	6	30

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Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Analyzed: 10/ 8/14

Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Analytical Method: 8270D
Prep Method: EPA 3510C

Units: µg/L
Basis: NA

Extraction Lot: 219960

	Lab Control Sample RQ1412024-02			Duplicate Lab Control Sample RQ1412024-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,2,4-Trichlorobenzene	62.9	100	63	65.5	100	65	35 - 105	3	30
1,2-Dichlorobenzene	63.0	100	63	66.8	100	67	35 - 100	6	30
1,3-Dichlorobenzene	58.0	100	58	61.5	100	62	30 - 100	7	30
1,4-Dichlorobenzene	58.0	100	58	63.6	100	64	30 - 100	10	30
2,4,5-Trichlorophenol	102	100	102	106	100	106	50 - 110	4	30
2,4,6-Trichlorophenol	100	100	100	103	100	103	50 - 115	3	30
2,4-Dichlorophenol	103	100	103	104	100	104	50 - 105	<1	30
2,4-Dimethylphenol	96.4	100	96	96.6	100	97	30 - 110	1	30
2,4-Dinitrophenol	105	100	105	112	100	112	15 - 140	6	30
2,4-Dinitrotoluene	106	100	106	113	100	113	50 - 120	6	30
2,6-Dinitrotoluene	107	100	107	113	100	113	50 - 115	5	30
2-Chloronaphthalene	75.0	100	75	78.9	100	79	50 - 105	5	30
2-Chlorophenol	89.5	100	90	91.9	100	92	35 - 105	2	30
2-Methylnaphthalene	67.4	100	67	69.0	100	69	45 - 105	3	30
2-Methylphenol	84.3	100	84	86.1	100	86	40 - 110	2	30
2-Nitroaniline	99.9	100	100	109	100	108	50 - 115	8	30
2-Nitrophenol	97.2	100	97	101	100	101	40 - 115	4	30
3,3'-Dichlorobenzidine	88.7	100	89	92.5	100	92	20 - 110	3	30
3- and 4-Methylphenol Coelution	172	200	86	170	200	85	30 - 110	1	30
3-Nitroaniline	82.6	100	83	91.2	100	91	20 - 125	9	30
4,6-Dinitro-2-methylphenol	108	100	108	113	100	113	40 - 130	5	30
4-Bromophenyl Phenyl Ether	98.9	100	99	105	100	105	50 - 115	6	30
4-Chloro-3-methylphenol	106	100	106	105	100	105	45 - 110	<1	30
4-Chloroaniline	94.9	100	95	95.9	100	96	15 - 110	1	30
4-Chlorophenyl Phenyl Ether	93.0	100	93	102	100	102	50 - 110	9	30
4-Nitroaniline	100	100	100	108	100	108	35 - 120	8	30
4-Nitrophenol	55.8	100	56	59.7	100	60	0 - 125	7	30
Acenaphthene	82.9	100	83	91.0	100	91	45 - 110	9	30
Acenaphthylene	87.5	100	88	90.7	100	91	50 - 105	3	30
Anthracene	100	100	100	103	100	103	55 - 110	3	30
Benz(a)anthracene	102	100	102	104	100	104	55 - 110	2	30
Benzidine	ND	100	0 *	ND	100	0 *	10 - 130	NC	30
Benzo(a)pyrene	101	100	101	108	100	108	55 - 110	7	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Analyzed: 10/ 8/14

Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Analytical Method: 8270D
Prep Method: EPA 3510C

Units: µg/L
Basis: NA

Extraction Lot: 219960

	Lab Control Sample RQ1412024-02			Duplicate Lab Control Sample RQ1412024-03					
Analyte Name	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Benzo(b)fluoranthene	104	100	104	105	100	105	45 - 120	<1	30
Benzo(g,h,i)perylene	114	100	114	116	100	116	40 - 125	2	30
Benzo(k)fluoranthene	94.6	100	95	100	100	100	45 - 125	5	30
Benzyl Alcohol	85.9	100	86	91.2	100	91	30 - 110	6	30
2,2'-Oxybis(1-chloropropane)	100	100	100	107	100	107	25 - 130	7	30
Bis(2-chloroethoxy)methane	103	100	103	105	100	105	45 - 105	2	30
Bis(2-chloroethyl) Ether	86.6	100	87	93.6	100	94	35 - 110	8	30
Bis(2-ethylhexyl) Phthalate	116	100	116	118	100	118	40 - 125	2	30
Butyl Benzyl Phthalate	111	100	111	110	100	110	45 - 115	<1	30
Carbazole	106	100	106	112	100	112	50 - 115	6	30
Chrysene	102	100	102	104	100	104	55 - 110	2	30
Di-n-butyl Phthalate	110	100	110	116	100	116 *	55 - 115	5	30
Di-n-octyl Phthalate	109	100	109	114	100	114	35 - 135	4	30
Dibenz(a,h)anthracene	112	100	112	116	100	116	40 - 125	4	30
Dibenzofuran	84.9	100	85	90.1	100	90	55 - 105	6	30
Diethyl Phthalate	107	100	107	118	100	118	40 - 120	10	30
Dimethyl Phthalate	97.1	100	97	106	100	106	25 - 125	9	30
Fluoranthene	108	100	108	114	100	114	55 - 115	5	30
Fluorene	89.5	100	89	96.3	100	96	50 - 110	8	30
Hexachlorobenzene	96.3	100	96	104	100	104	50 - 110	8	30
Hexachlorobutadiene	59.1	100	59	61.5	100	62	25 - 105	5	30
Hexachlorocyclopentadiene	66.2	100	66	74.2	100	74	10 - 130	11	30
Hexachloroethane	55.2	100	55	58.5	100	58	30 - 100	5	30
Indeno(1,2,3-cd)pyrene	111	100	111	116	100	116	45 - 125	4	30
Isophorone	105	100	105	107	100	107	50 - 110	2	30
N-Nitrosodi-n-propylamine	98.9	100	99	104	100	104	35 - 130	5	30
N-Nitrosodimethylamine	63.0	100	63	67.0	100	67	25 - 110	6	30
N-Nitrosodiphenylamine	104	100	104	108	100	108	50 - 110	4	30
Naphthalene	69.7	100	70	72.1	100	72	40 - 110	3	30
Nitrobenzene	96.2	100	96	95.4	100	95	45 - 110	1	30
Pentachlorophenol (PCP)	112	100	112	114	100	114	40 - 115	2	30
Phenanthrene	102	100	102	106	100	106	50 - 115	4	30
Phenol	46.0	100	46	48.0	100	48	0 - 115	4	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Analyzed: 10/ 8/14

Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Analytical Method: 8270D
Prep Method: EPA 3510C

Units: µg/L
Basis: NA

Extraction Lot: 219960

	Lab Control Sample RQ1412024-02			Duplicate Lab Control Sample RQ1412024-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Pyrene	117	100	117	118	100	118	50 - 130	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Analyzed:**	10/8/14 14:21
Sample Matrix:	Water	**Date Extracted:**	10/7/14

Method Blank Summary
Semivolatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Instrument ID:**	R-MS-54
Lab Code:	RQ1412024-01	**File ID:**	I:\ACQUDATA\5973D\Data\100814\AY349.D\
Analytical Method:	8270D		
Prep Method:	EPA 3510C		

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1412024-02	I:\ACQUDATA\5973D\Data\100814\AY350.D\	10/8/14 14:47
Duplicate Lab Control Sample	RQ1412024-03	I:\ACQUDATA\5973D\Data\100814\AY351.D\	10/8/14 15:13
FTMM-EB-100314	R1407825-001	I:\ACQUDATA\5973D\Data\100814\AY352.D\	10/8/14 15:39
FTMM-66-GW-886RW01-11.55	R1407825-005	I:\ACQUDATA\5973D\Data\100814\AY353.D\	10/8/14 16:06
FTMM-66-GW-886RW01-11.55MS	RQ1412024-04	I:\ACQUDATA\5973D\Data\100814\AY354.D\	10/8/14 16:32
FTMM-66-GW-886RW01-11.55DMS	RQ1412024-05	I:\ACQUDATA\5973D\Data\100814\AY355.D\	10/8/14 16:58
FTMM-66-GW-886RW06-10.12	R1407825-006	I:\ACQUDATA\5973D\Data\100814\AY356.D\	10/8/14 17:25
FTMM-66-GW-886RW106-10.12	R1407825-007	I:\ACQUDATA\5973D\Data\100814\AY357.D\	10/8/14 17:51
FTMM-66-GW-886RW08-11.22	R1407825-008	I:\ACQUDATA\5973D\Data\100814\AY358.D\	10/8/14 18:16

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000

Service Request: R1407825
Date Analyzed: 10/8/14 12:48

Internal Standard Area and RT Summary
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973D\Data\100814\AY347.D\
Instrument ID: R-MS-54
Analytical Method: 8270D

Lab Code: RQ1412208-02
Analysis Lot: 415497
Signal ID:

		1,4-Dichlorobenzene-d4		Acenaphthene-d10		Chrysene-d12	
		Area	RT	Area	RT	Area	RT
	Results ==>	42,195	4.13	104,881	6.22	222,955	10.08
	Upper Limit ==>	84,390	4.63	209,762	6.72	445,910	10.58
	Lower Limit ==>	21,098	3.63	52,441	5.72	111,478	9.58
	ICAL Result ==>						
Associated Analyses							
Method Blank	RQ1412024-01	33,525	4.13	83,354	6.22	154,144	10.08
Lab Control Sample	RQ1412024-02	36,776	4.13	93,266	6.22	178,545	10.08
Duplicate Lab Control Sample	RQ1412024-03	36,952	4.13	90,519	6.22	177,718	10.08
FTMM-EB-100314	R1407825-001	33,876	4.13	83,013	6.21	162,869	10.07
FTMM-66-GW-886RW01-11.55	R1407825-005	32,629	4.13	79,296	6.21	151,439	10.07
FTMM-66-GW-886RW01-11.55MS	RQ1412024-04	35,142	4.13	92,497	6.22	166,581	10.07
FTMM-66-GW-886RW01-11.55DMS	RQ1412024-05	38,550	4.13	92,601	6.22	177,869	10.07
FTMM-66-GW-886RW06-10.12	R1407825-006	35,154	4.13	86,772	6.22	154,025	10.07
FTMM-66-GW-886RW106-10.12	R1407825-007	33,234	4.13	79,583	6.21	152,273	10.07
FTMM-66-GW-886RW08-11.22	R1407825-008	32,383	4.13	79,118	6.22	159,593	10.07

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000

Service Request: R1407825
Date Analyzed: 10/8/14 12:48

Internal Standard Area and RT Summary
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973D\Data\100814\AY347.D\
Instrument ID: R-MS-54
Analytical Method: 8270D

Lab Code: RQ1412208-02
Analysis Lot: 415497
Signal ID:

		Naphthalene-d8		Perylene-d12		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	168,487	4.98	209,111	12.84	178,586	7.28
	Upper Limit ==>	336,974	5.48	418,222	13.34	357,172	7.78
	Lower Limit ==>	84,244	4.48	104,556	12.34	89,293	6.78
	ICAL Result ==>						
Associated Analyses							
Method Blank	RQ1412024-01	137,105	4.98	153,406	12.84	142,780	7.28
Lab Control Sample	RQ1412024-02	142,727	4.98	166,373	12.83	156,579	7.28
Duplicate Lab Control Sample	RQ1412024-03	147,860	4.98	164,082	12.83	153,906	7.28
FTMM-EB-100314	R1407825-001	133,604	4.98	164,124	12.83	150,991	7.28
FTMM-66-GW-886RW01-11.55	R1407825-005	131,195	4.98	142,652	12.83	146,925	7.28
FTMM-66-GW-886RW01-11.55MS	RQ1412024-04	141,123	4.98	153,852	12.83	152,816	7.28
FTMM-66-GW-886RW01-11.55DMS	RQ1412024-05	148,574	4.98	161,192	12.83	158,310	7.28
FTMM-66-GW-886RW06-10.12	R1407825-006	138,632	4.98	155,244	12.83	146,510	7.28
FTMM-66-GW-886RW106-10.12	R1407825-007	131,745	4.98	151,058	12.83	142,717	7.28
FTMM-66-GW-886RW08-11.22	R1407825-008	130,882	4.98	152,605	12.83	151,566	7.28

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000

Service Request: R1407825
Date Analyzed: 10/1/14 15:09

Tune Summary
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973D\Data\100114\AY265.D\
Instrument ID: R-MS-54

Analytical Method: 8270D
Analysis Lot: 415497

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	41.10	12240	Pass
68	69	0.00	2	0.00	0	Pass
69	198	0.00	100	36.52	10875	Pass
70	69	0.00	2	0.00	0	Pass
127	198	10	80	43.63	12992	Pass
197	198	0.00	2	0.00	0	Pass
198	198	100	100	100.00	29779	Pass
199	198	5	9	6.23	1854	Pass
275	198	10	60	25.97	7735	Pass
365	198	1	100	3.54	1055	Pass
441	442	0.01	24	15.28	3748	Pass
442	442	100	100	100.00	24527	Pass
443	442	15	24	19.10	4685	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
SSTD005	5.0 PPM STD	I:\ACQUDATA\5973D\Data\100114\AY271.D\	10/1/14 18:09	
SSTD010	10 PPM STD	I:\ACQUDATA\5973D\Data\100114\AY272.D\	10/1/14 18:35	
SSTD050	50 PPM STD	I:\ACQUDATA\5973D\Data\100114\AY273.D\	10/1/14 19:01	
SSTD080	80 PPM STD	I:\ACQUDATA\5973D\Data\100114\AY274.D\	10/1/14 19:27	
SSTD100	100 PPM STD	I:\ACQUDATA\5973D\Data\100114\AY275.D\	10/1/14 19:52	
SSTD120	120 PPM STD	I:\ACQUDATA\5973D\Data\100114\AY276.D\	10/1/14 20:18	
SSTD160	160 PPM STD	I:\ACQUDATA\5973D\Data\100114\AY277.D\	10/1/14 20:44	

FTMM-66-GW-886RW08-11.22 \Data\100814\AY358.D\

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000

Service Request: R1407825
Date Analyzed: 10/8/14 12:30

Tune Summary
Semivolatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\5973D\Data\100814\AY346.D\
Instrument ID: R-MS-54

Analytical Method: 8270D
Analysis Lot: 415497

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	46.35	12384	Pass
68	69	0.00	2	0.00	0	Pass
69	198	0.00	100	39.36	10516	Pass
70	69	0.00	2	0.00	0	Pass
127	198	10	80	45.20	12078	Pass
197	198	0.00	2	0.97	260	Pass
198	198	100	100	100.00	26720	Pass
199	198	5	9	6.67	1782	Pass
275	198	10	60	26.49	7079	Pass
365	198	1	100	4.30	1148	Pass
441	442	0.01	24	16.15	3546	Pass
442	442	100	100	100.00	21953	Pass
443	442	15	24	19.74	4334	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1412208-02	I:\ACQUDATA\5973D\Data\100814\AY347.D\	10/8/14 12:48	
Method Blank	RQ1412024-01	I:\ACQUDATA\5973D\Data\100814\AY349.D\	10/8/14 14:21	
Lab Control Sample	RQ1412024-02	I:\ACQUDATA\5973D\Data\100814\AY350.D\	10/8/14 14:47	
Duplicate Lab Control Sample	RQ1412024-03	I:\ACQUDATA\5973D\Data\100814\AY351.D\	10/8/14 15:13	
FTMM-EB-100314	R1407825-001	I:\ACQUDATA\5973D\Data\100814\AY352.D\	10/8/14 15:39	
FTMM-66-GW-886RW01-11.55	R1407825-005	I:\ACQUDATA\5973D\Data\100814\AY353.D\	10/8/14 16:06	
FTMM-66-GW-886RW01-11.55MS	RQ1412024-04	I:\ACQUDATA\5973D\Data\100814\AY354.D\	10/8/14 16:32	
FTMM-66-GW-886RW01-11.55DMS	RQ1412024-05	I:\ACQUDATA\5973D\Data\100814\AY355.D\	10/8/14 16:58	
FTMM-66-GW-886RW06-10.12	R1407825-006	I:\ACQUDATA\5973D\Data\100814\AY356.D\	10/8/14 17:25	
FTMM-66-GW-886RW106-10.12	R1407825-007	I:\ACQUDATA\5973D\Data\100814\AY357.D\	10/8/14 17:51	
FTMM-66-GW-886RW08-11.22	R1407825-008	I:\ACQUDATA\5973D\Data\100814\AY358.D\	10/8/14 18:16	

ALS Environmental

SEMI-VOLATILE ORGANICS SAMPLE DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 15:39
Sample Name:	FTMM-EB-100314	**Units:**	µg/L
Lab Code:	R1407825-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:		**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
	1,2-Diphenylhydrazine/Azobenzene	ND	U	11	5.6	1.2	
120-82-1	1,2,4-Trichlorobenzene	ND	U	11	5.6	1.2	
95-50-1	1,2-Dichlorobenzene	ND	U	11	5.6	1.2	
541-73-1	1,3-Dichlorobenzene	ND	U	11	5.6	1.2	
106-46-7	1,4-Dichlorobenzene	ND	U	11	5.6	1.2	
95-95-4	2,4,5-Trichlorophenol	ND	U	11	5.6	2.0	
88-06-2	2,4,6-Trichlorophenol	ND	U	11	5.6	1.5	
120-83-2	2,4-Dichlorophenol	ND	U	11	5.6	1.4	
105-67-9	2,4-Dimethylphenol	ND	U	11	5.6	1.7	
51-28-5	2,4-Dinitrophenol	ND	U	56	28	22	
121-14-2	2,4-Dinitrotoluene	ND	U	11	5.6	1.8	
606-20-2	2,6-Dinitrotoluene	ND	U	11	5.6	2.0	
91-58-7	2-Chloronaphthalene	ND	U	11	5.6	1.2	
95-57-8	2-Chlorophenol	ND	U	11	5.6	1.2	
91-57-6	2-Methylnaphthalene	ND	U	11	5.6	1.2	
95-48-7	2-Methylphenol	ND	U	11	5.6	1.2	
88-74-4	2-Nitroaniline	ND	U	56	28	11	
88-75-5	2-Nitrophenol	ND	U	11	5.6	1.6	
91-94-1	3,3'-Dichlorobenzidine	ND	U	11	5.6	5.0	
	3- and 4-Methylphenol Coelution	ND	U	12	11	2.2	
99-09-2	3-Nitroaniline	ND	U	56	28	8.5	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	56	28	12	
101-55-3	4-Bromophenyl Phenyl Ether	ND	U	11	5.6	2.4	
59-50-7	4-Chloro-3-methylphenol	ND	U	11	5.6	1.3	
106-47-8	4-Chloroaniline	ND	U	11	5.6	1.6	
7005-72-3	4-Chlorophenyl Phenyl Ether	ND	U	11	5.6	1.3	
100-01-6	4-Nitroaniline	ND	U	56	28	8.7	
100-02-7	4-Nitrophenol	ND	U	56	28	6.5	
83-32-9	Acenaphthene	ND	U	11	5.6	1.2	
208-96-8	Acenaphthylene	ND	U	11	5.6	1.2	
120-12-7	Anthracene	ND	U	11	5.6	1.2	
56-55-3	Benz(a)anthracene	ND	U	11	5.6	1.2	
92-87-5	Benzidine	ND	U	120	110	100	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 15:39
Sample Name:	FTMM-EB-100314	**Units:**	µg/L
Lab Code:	R1407825-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY352.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
50-32-8	Benzo(a)pyrene	ND	U	11	5.6	1.2	
205-99-2	Benzo(b)fluoranthene	ND	U	11	5.6	1.2	
191-24-2	Benzo(g,h,i)perylene	ND	U	11	5.6	1.2	
207-08-9	Benzo(k)fluoranthene	ND	U	11	5.6	1.2	
100-51-6	Benzyl Alcohol	ND	U	11	5.6	1.5	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	U	11	5.6	1.2	
111-91-1	Bis(2-chloroethoxy)methane	ND	U	11	5.6	2.5	
111-44-4	Bis(2-chloroethyl) Ether	ND	U	11	5.6	1.5	
117-81-7	Bis(2-ethylhexyl) Phthalate	ND	U	11	5.6	1.4	
85-68-7	Butyl Benzyl Phthalate	ND	U	11	5.6	2.7	
86-74-8	Carbazole	ND	U	11	5.6	1.3	
218-01-9	Chrysene	ND	U	11	5.6	1.2	
84-74-2	Di-n-butyl Phthalate	ND	U	11	5.6	1.2	
117-84-0	Di-n-octyl Phthalate	ND	U	11	5.6	1.4	
53-70-3	Dibenz(a,h)anthracene	ND	U	11	5.6	1.4	
132-64-9	Dibenzofuran	ND	U	11	5.6	1.2	
84-66-2	Diethyl Phthalate	ND	U	11	5.6	1.2	
131-11-3	Dimethyl Phthalate	ND	U	11	5.6	1.2	
206-44-0	Fluoranthene	ND	U	11	5.6	1.2	
86-73-7	Fluorene	ND	U	11	5.6	1.2	
118-74-1	Hexachlorobenzene	ND	U	11	5.6	1.2	
87-68-3	Hexachlorobutadiene	ND	U	11	5.6	1.4	
77-47-4	Hexachlorocyclopentadiene	ND	U	11	5.6	1.2	
67-72-1	Hexachloroethane	ND	U	11	5.6	1.4	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	11	5.6	1.4	
78-59-1	Isophorone	ND	U	11	5.6	1.2	
621-64-7	N-Nitrosodi-n-propylamine	ND	U	11	5.6	1.5	
62-75-9	N-Nitrosodimethylamine	ND	U	11	5.6	1.2	
86-30-6	N-Nitrosodiphenylamine	ND	U	11	5.6	1.2	
91-20-3	Naphthalene	ND	U	11	5.6	1.2	
98-95-3	Nitrobenzene	ND	U	11	5.6	1.8	
87-86-5	Pentachlorophenol (PCP)	ND	U	56	28	7.7	
85-01-8	Phenanthrene	ND	U	11	5.6	1.2	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1145
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 15:39
Sample Name:	FTMM-EB-100314	**Units:**	µg/L
Lab Code:	R1407825-001	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY352.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-95-2	Phenol	ND	U	11	5.6	1.2	
129-00-0	Pyrene	ND	U	11	5.6	1.2	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	114	40-125	10/8/14 15:39	
2-Fluorobiphenyl	93	50-110	10/8/14 15:39	
2-Fluorophenol	55	20-110	10/8/14 15:39	
Nitrobenzene-d5	91	40-110	10/8/14 15:39	
Phenol-d6	36	10-115	10/8/14 15:39	
p-Terphenyl-d14	114	50-135	10/8/14 15:39	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/3/14
Date Received: 10/4/14
Date Extracted: 10/7/14
Date Analyzed: 10/8/14 1539

Tentatively Identified Compounds (TIC)
Semivolatile Organic Compounds by GC/MS

Sample Name: FTMM-EB-100314
Lab Code: R1407825-001

Units: µg/L
Basis: NA

Prep Method: EPA 3510C
Analytical Method: 8270D

CAS #	Analyte Name	RT	Result	Q
000540-97-6	Cyclohexasiloxane, dodecamethyl-	5.31	**13**	JN
	unknown	5.96	**21**	J
	unknown	6.53	**23**	J
000556-71-8	Cyclononasiloxane, octadecamethyl-	7.03	**20**	JN
	unknown	7.18	**5.6**	J
	unknown	7.47	**20**	J
	unknown	7.62	**6.1**	J
	unknown	7.92	**23**	J
	unknown	8.09	**5.5**	J
	unknown	8.40	**29**	J
	unknown cyclononasiloxane	8.94	**33**	J
	unknown	9.57	**46**	J
	unknown	10.30	**60**	J
	unknown	11.12	**66**	J
	unknown	12.03	**69**	J
	unknown cyclononasiloxane	12.99	**67**	J
	unknown cyclononasiloxane	13.84	**62**	J
	unknown cyclononasiloxane	14.53	**54**	J
	unknown cyclononasiloxane	15.27	**45**	J
	unknown cyclononasiloxane	16.11	**38**	J

Comments:

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 09 15:35:54 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

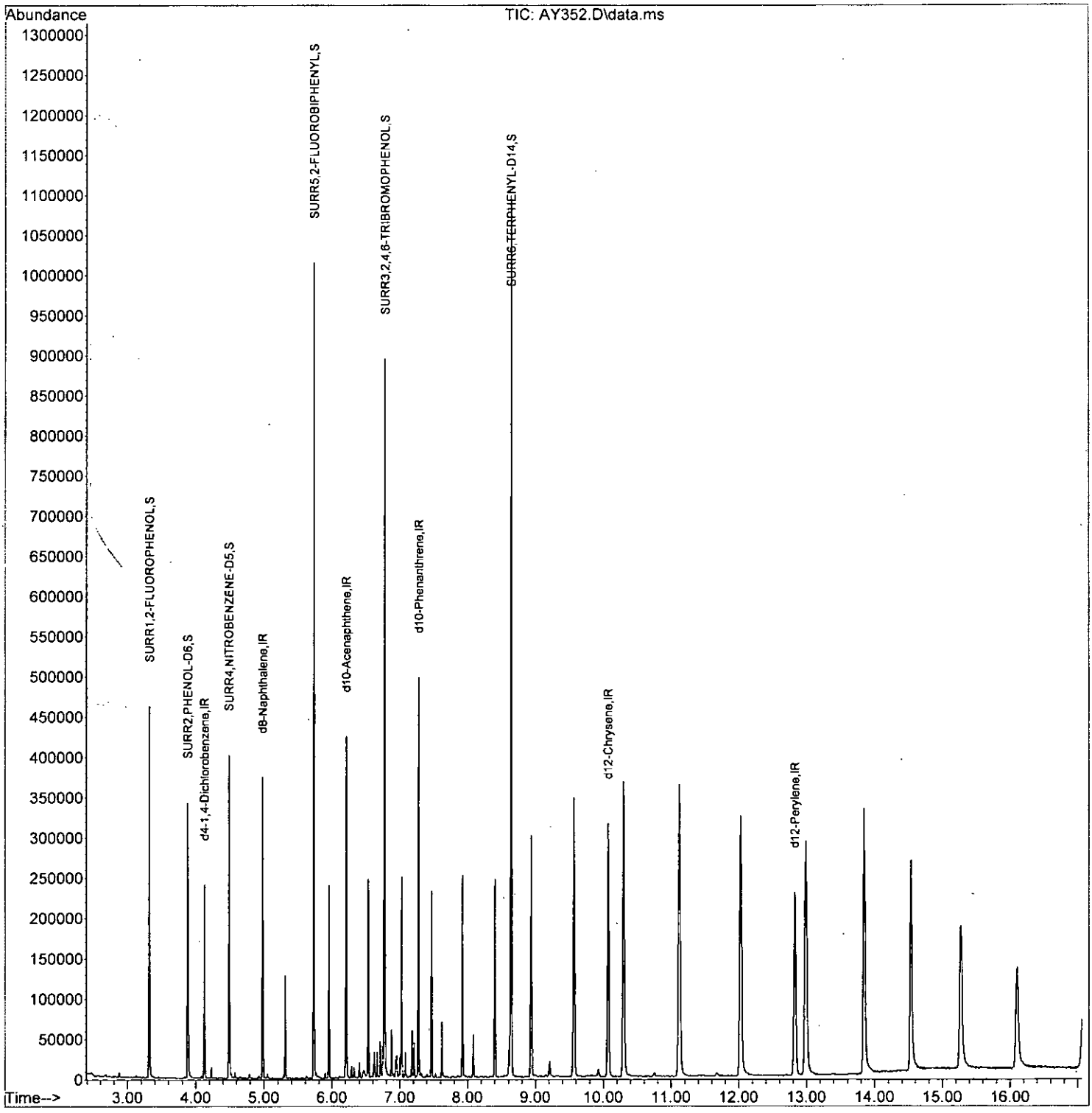
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.130	152	33876	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	133604	40.00	ppm	0.00
39) d10-Acenaphthene	6.211	164	83013	40.00	ppm	0.00
61) d10-Phenanthrene	7.275	188	150991	40.00	ppm	0.00
76) d12-Chrysene	10.067	240	162869	40.00	ppm	0.00
85) d12-Perylene	12.827	264	164124	40.00	ppm	0.00
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.323	112	116182	110.75	ppm	0.00
Spiked Amount 200.000	Range 10 - 105		Recovery = 55.38%			
7) SURR2,PHENOL-D6	3.879	99	100199	72.70	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 36.35%			
23) SURR4,NITROBENZENE-D5	4.489	82	105240	91.07	ppm	0.00
Spiked Amount 100.000	Range 37 - 117		Recovery = 91.07%			
43) SURR5,2-FLUOROBIPHENYL	5.724	172	247987	93.25	ppm	0.00
Spiked Amount 100.000	Range 39 - 119		Recovery = 93.25%			
60) SURR3,2,4,6-TRIBROMOPH...	6.778	330	93909	228.45	ppm	0.00
Spiked Amount 200.000	Range 28 - 157		Recovery = 114.22%			
79) SURR6,TERPHENYL-D14	8.639	244	368729	114.07	ppm	0.00
Spiked Amount 100.000	Range 40 - 133		Recovery = 114.07%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 09 15:35:54 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration



82701001D.M Thu Oct 09 15:36:25 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

					Internal Standard		
TIC Top Hit name	RT	EstConc	Units	Response	# RT	Resp	Conc
Cyclohexasiloxa...	5.307	12.0	ppm	83226	2 4.981	277722	40.0
N-Benzyl-N-ethy...	5.960	18.9	ppm	171017	3 6.211	362707	40.0
Benzeneethanami...	6.532	21.1	ppm	191105	3 6.211	362707	40.0
Cyclononasiloxa...	7.029	18.4	ppm	173565	4 7.275	376489	40.0
2-Amino-2-oxo-a...	7.179	5.0	ppm	47219	4 7.275	376489	40.0
1,1,1,5,7,7,7-H...	7.473	17.7	ppm	166418	4 7.275	376489	40.0
3,6-Dioxa-2,4,5...	7.623	5.5	ppm	51738	4 7.275	376489	40.0
Trisiloxane, 1,...	7.923	20.7	ppm	194977	4 7.275	376489	40.0
Trisiloxane, oc...	8.088	5.0	ppm	46645	4 7.275	376489	40.0
Hexasiloxane, t...	8.404	25.7	ppm	241549	4 7.275	376489	40.0
Cyclononasiloxa...	8.939	29.9	ppm	332662	5 10.067	444861	40.0
Cyclononasiloxa...	9.570	41.5	ppm	461444	5 10.067	444861	40.0
Hexasiloxane, t...	10.297	53.8	ppm	597783	5 10.067	444861	40.0
Hexasiloxane, t...	11.121	59.4	ppm	660317	5 10.067	444861	40.0
Hexasiloxane, t...	12.025	62.4	ppm	699184	6 12.827	448125	40.0
Cyclononasiloxa...	12.988	60.2	ppm	674210	6 12.827	448125	40.0
Cyclononasiloxa...	13.844	55.8	ppm	625556	6 12.827	448125	40.0
Cyclononasiloxa...	14.534	48.7	ppm	545893	6 12.827	448125	40.0
Cyclononasiloxa...	15.272	40.3	ppm	451156	6 12.827	448125	40.0
Cyclononasiloxa...	16.106	33.9	ppm	380146	6 12.827	448125	40.0

LSC Area Percent Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 25000 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Title : 8270 BNA ANALYSIS

Signal : TIC: AY352.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.323	172	176	184	rBV	460286	411756	39.96%	3.262%
2	3.879	277	280	293	rVB	340808	288637	28.01%	2.287%
3	4.130	323	327	332	rVB	239390	203894	19.79%	1.615%
4	4.489	391	394	399	rBV	400153	328160	31.85%	2.600%
5	4.981	482	486	490	rBV	373117	277722	26.95%	2.200%
6	5.307	544	547	550	rVB	126704	83226	8.08%	0.659%
7	5.724	621	625	628	rBV	1013913	705780	68.50%	5.591%
8	5.960	664	669	672	rVB	239545	171017	16.60%	1.355%
9	6.211	711	716	724	rBV	424094	362707	35.20%	2.873%
10	6.532	773	776	780	rVB2	245205	191105	18.55%	1.514%
11	6.628	789	794	799	rVB2	31309	32735	3.18%	0.259%
12	6.714	807	810	813	rBV	44407	31804	3.09%	0.252%
13	6.751	815	817	819	rVV	37240	31155	3.02%	0.247%
14	6.778	819	822	830	rVB	891191	749577	72.75%	5.938%
15	6.880	839	841	844	rBV	57699	41304	4.01%	0.327%
16	7.029	866	869	872	rVB	248072	173565	16.84%	1.375%
17	7.179	894	897	900	rBV	57984	47219	4.58%	0.374%
18	7.211	900	903	907	rVB	42875	30481	2.96%	0.241%
19	7.275	911	915	918	rBV	494448	376489	36.54%	2.982%
20	7.473	948	952	956	rVB	230821	166418	16.15%	1.318%
21	7.623	977	980	983	rBV	68921	51738	5.02%	0.410%
22	7.923	1032	1036	1040	rBV	249908	194977	18.92%	1.545%
23	8.088	1060	1067	1071	rBV	52865	46645	4.53%	0.370%
24	8.404	1121	1126	1130	rVB	245131	241549	23.44%	1.914%
25	8.607	1160	1164	1166	rBV	32624	31890	3.09%	0.253%
26	8.639	1166	1170	1178	rVB	1090458	1030402	100.00%	8.163%
27	8.939	1221	1226	1233	rBV	299812	332662	32.28%	2.635%
28	9.570	1336	1344	1352	rBV	346513	461444	44.78%	3.655%
29	10.067	1430	1437	1449	rVB	314508	444861	43.17%	3.524%
30	10.297	1473	1480	1493	rBV2	366497	597783	58.01%	4.736%
31	11.121	1626	1634	1650	rBV	362512	660317	64.08%	5.231%
32	12.025	1792	1803	1819	rBV	323460	699184	67.86%	5.539%
33	12.827	1943	1953	1967	rBV2	226793	448125	43.49%	3.550%
34	12.988	1974	1983	1999	rBV2	289418	674210	65.43%	5.341%
35	13.844	2135	2143	2154	rBV	329756	625556	60.71%	4.956%

82701001D.M Thu Oct 09 15:45:59 2014 Page: 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 25000 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Title : 8270 BNA ANALYSIS

36	14.534	2263	2272	2282	rBV2	261656	545893	52.98%	4.324%
37	15.272	2400	2410	2423	rBV4	176070	451156	43.78%	3.574%
38	16.106	2551	2566	2577	rBV3	126885	380146	36.89%	3.011%

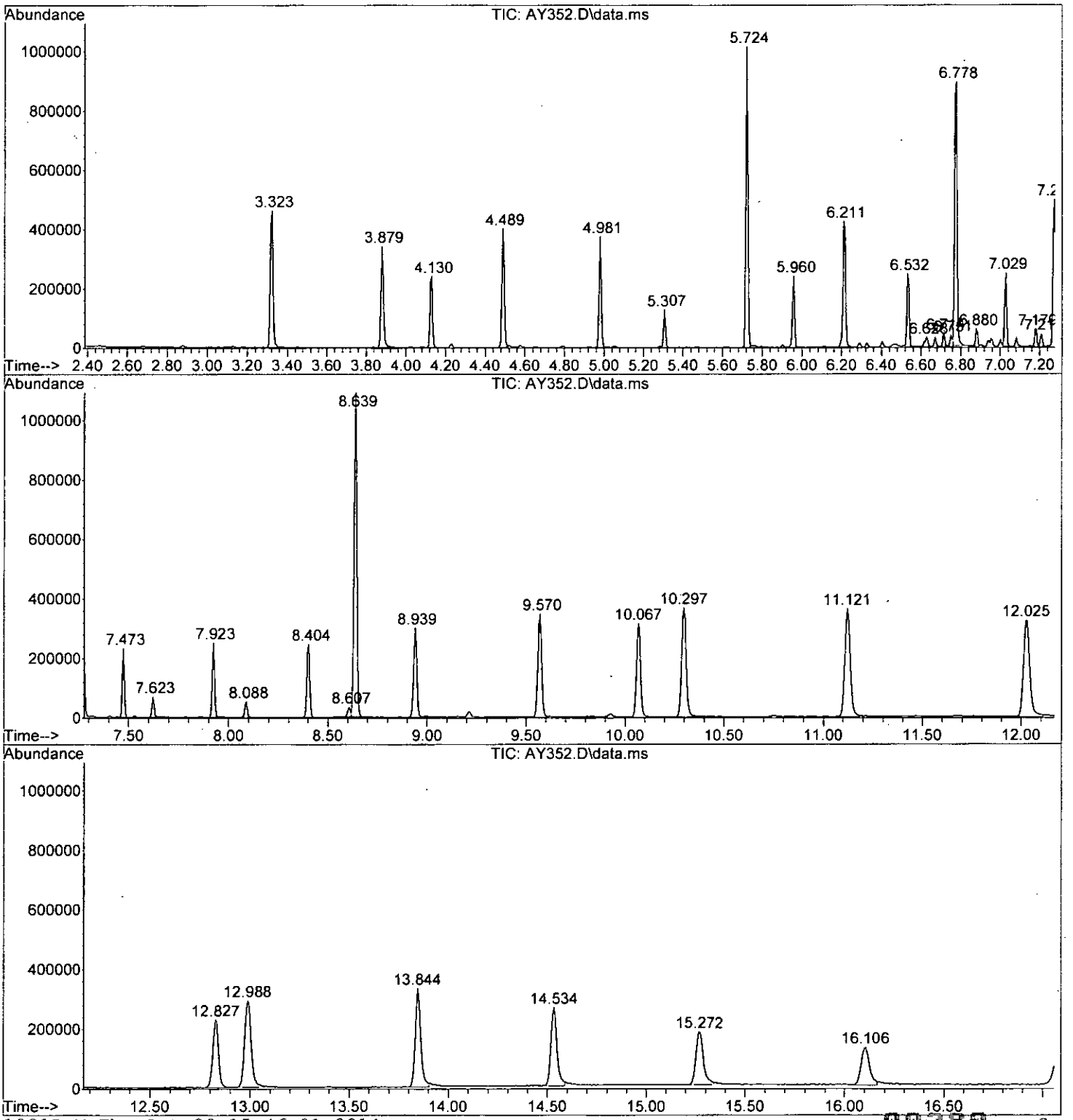
Sum of corrected areas: 12623289

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P



82701001D.M Thu Oct 09 15:46:01 2014 Page: 3

Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

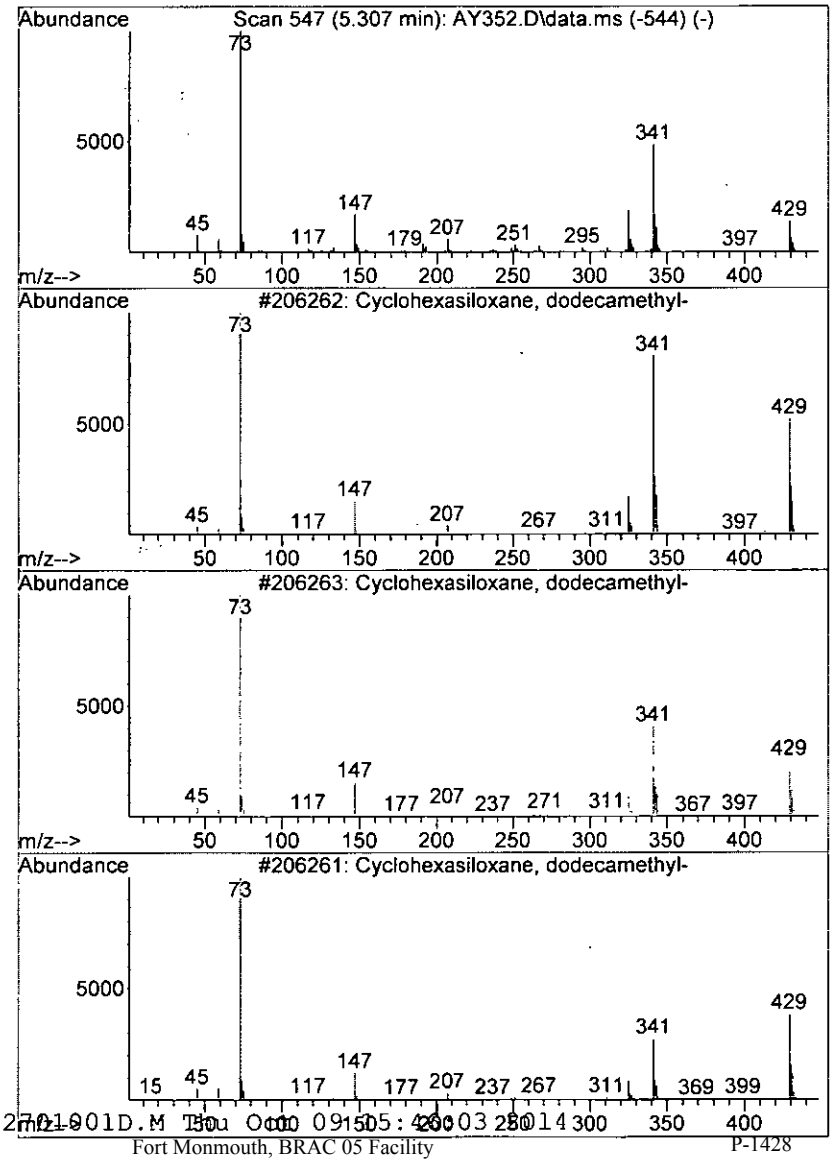
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

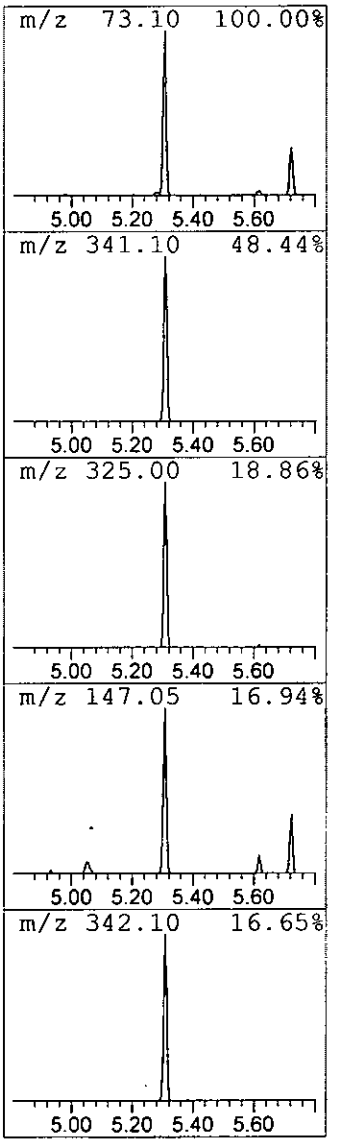
****

Peak Number 1 Cyclohexasiloxane, dodecame... Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.307	11.99 ppm	83226	d8-Naphthalene	4.981

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexasiloxane, dodecamethyl-	444	C12H36O6Si6	000540-97-6	91
2	Cyclohexasiloxane, dodecamethyl-	444	C12H36O6Si6	000540-97-6	86
3	Cyclohexasiloxane, dodecamethyl-	444	C12H36O6Si6	000540-97-6	53
4	Silane, [1,2,3-benzenetriyltris(...	342	C15H30O3Si3	017864-23-2	22
5	17-Epi-trenbolone, trimethylsily...	342	C21H30O2Si	1000293-11-0	22





82701001D.M Thu Oct 09 15:05:42 2014 P-1428

Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

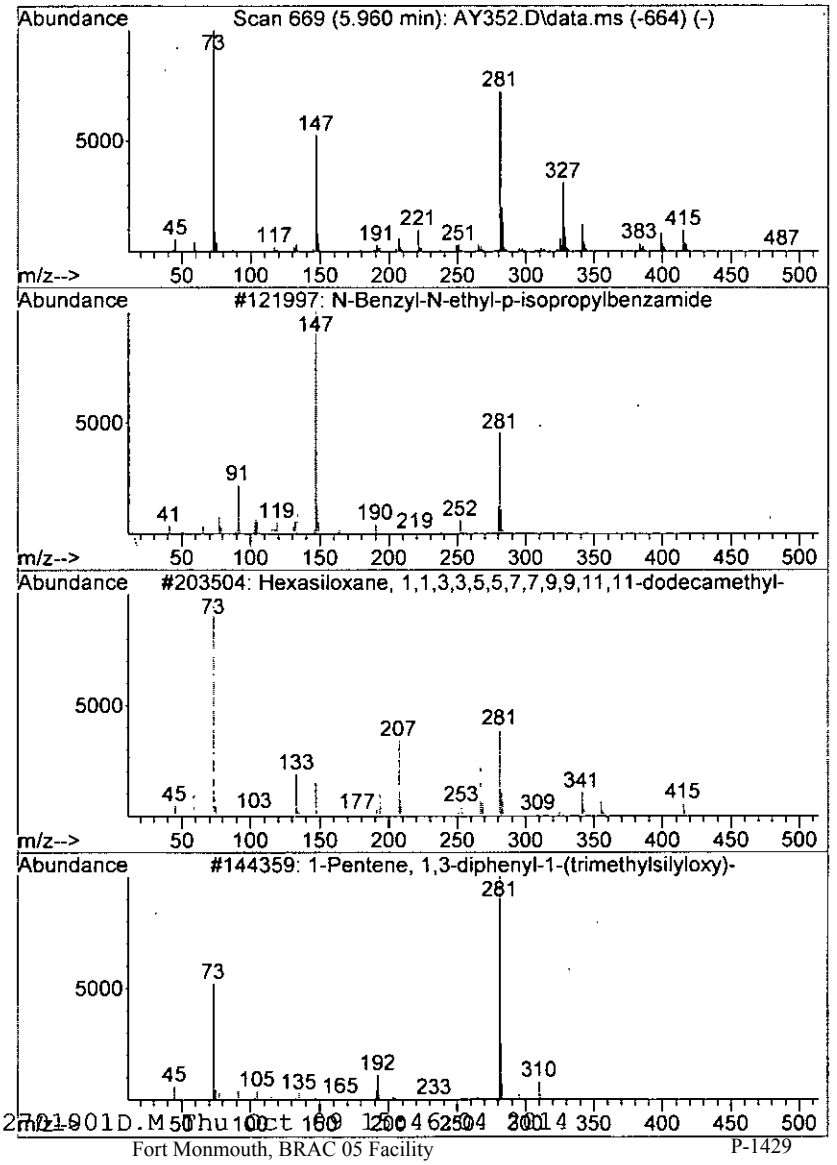
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

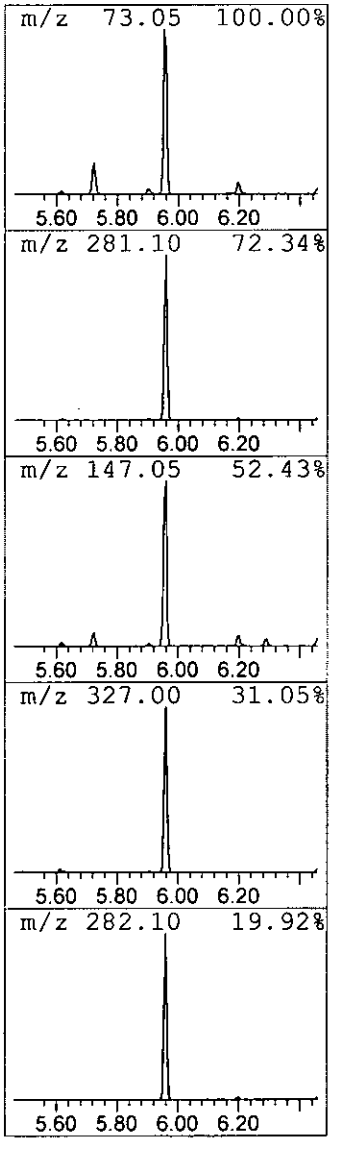
****

Peak Number 2 N-Benzyl-N-ethyl-p-isopropy... Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.960	18.86 ppm	171017	d10-Acenaphthene	6.211

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	N-Benzyl-N-ethyl-p-isopropylbenz...	281	C19H23NO	015089-22-2	43
2	Hexasiloxane, 1,1,3,3,5,5,7,7,9,...	430	C12H38O5Si6	000995-82-4	38
3	1-Pentene, 1,3-diphenyl-1-(trime...	310	C20H26OSi	138983-00-3	35
4	3-Isopropoxy-1,1,1,7,7,7-hexamet...	576	C18H52O7Si7	071579-69-6	32
5	Trisiloxane, 1,1,1,5,5,5-hexamet...	384	C12H36O4Si5	003555-47-3	27





Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

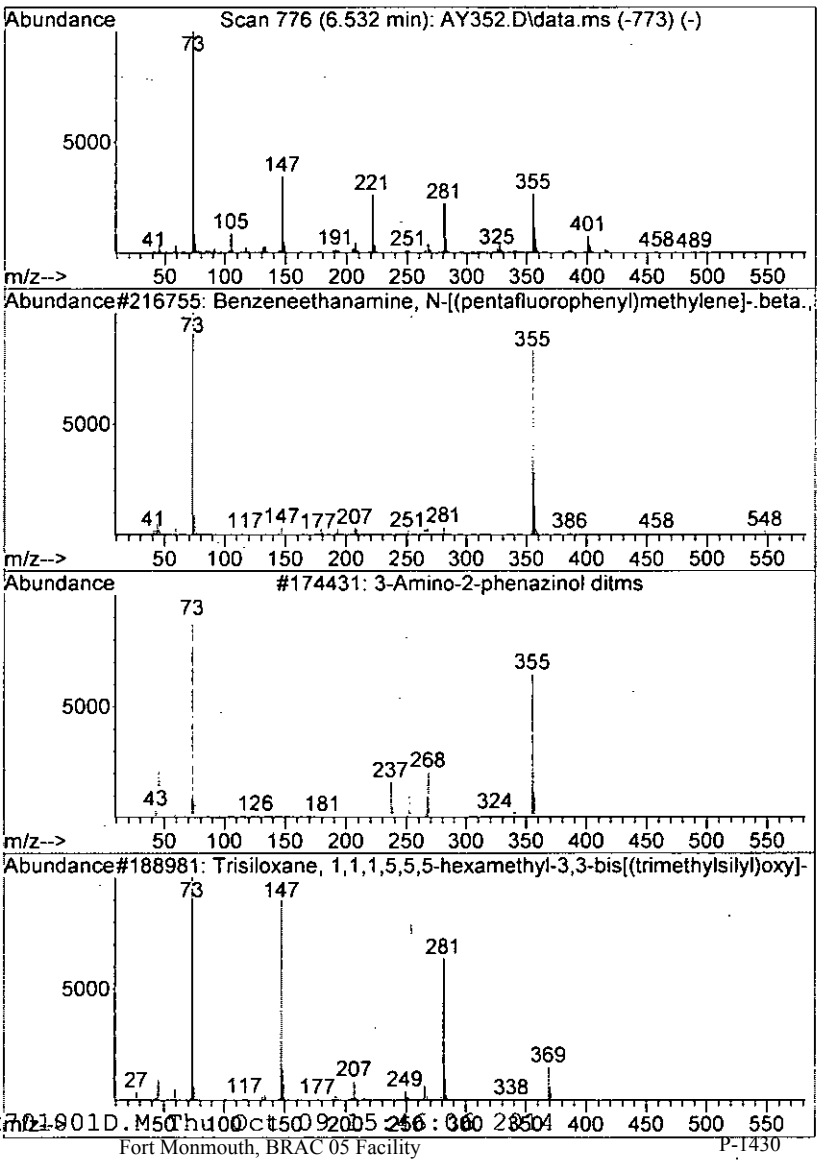
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

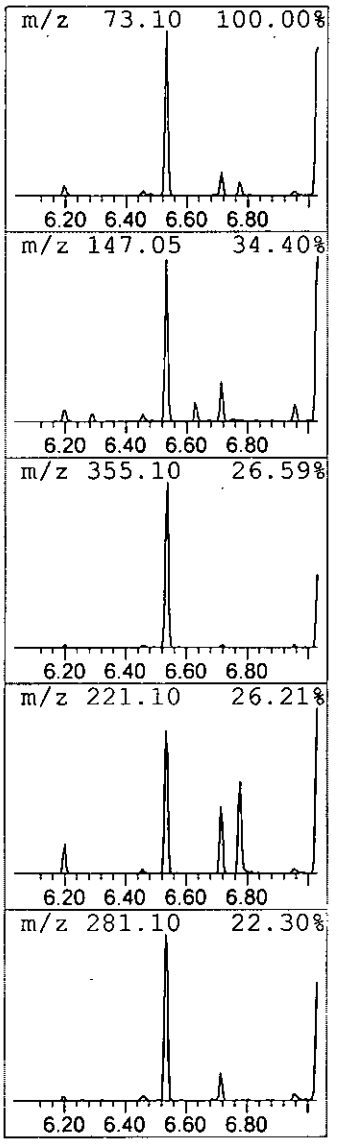
****

Peak Number 3 Benzeneethanamine, N-[(pent... Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.532	21.08 ppm	191105	d10-Acenaphthene	6.211

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzeneethanamine, N-[(pentafluo...	563	C24H34F5NO3Si3	055429-13-5	27
2	3-Amino-2-phenazinol ditms	355	C18H25N3OSi2	1000332-15-5	27
3	Trisiloxane, 1,1,1,5,5,5-hexamet...	384	C12H36O4Si5	003555-47-3	25
4	Phenethylamine, N-methyl-.beta.,...	399	C18H37NO3Si3	010538-85-9	17
5	Hexasiloxane, tetradecamethyl-	458	C14H42O5Si6	000107-52-8	17





Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

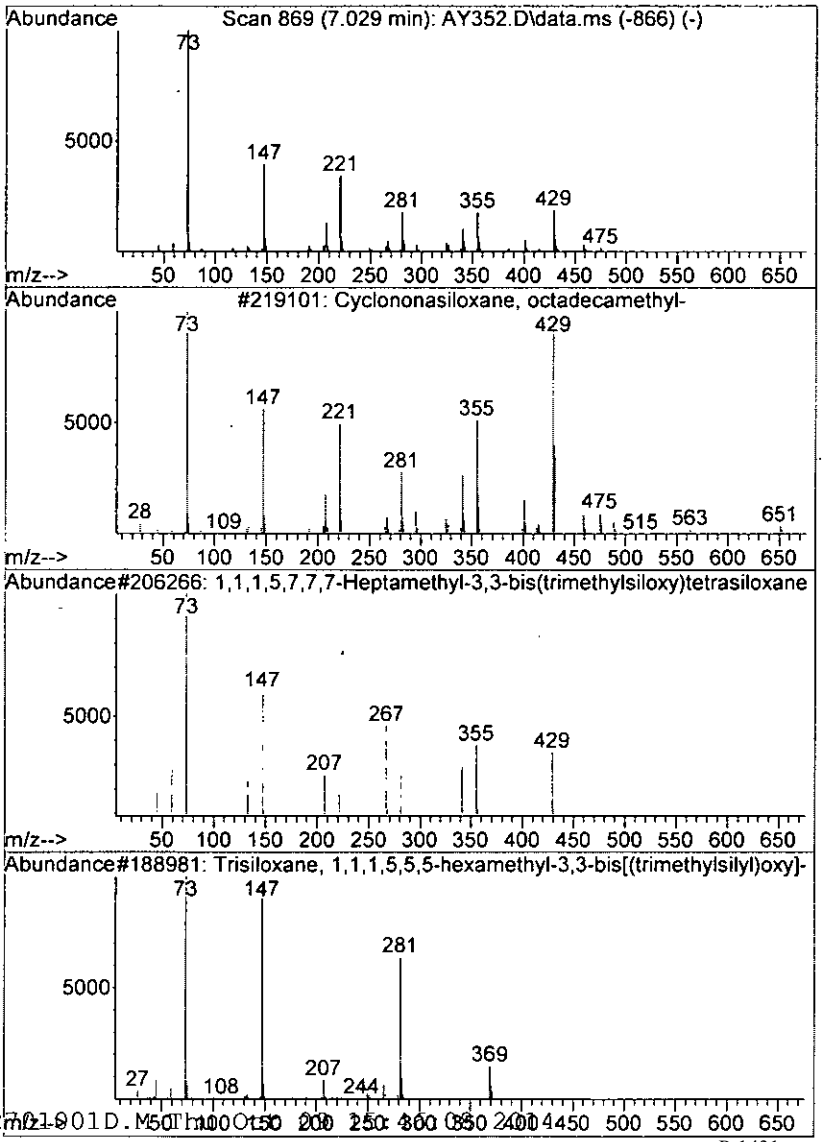
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

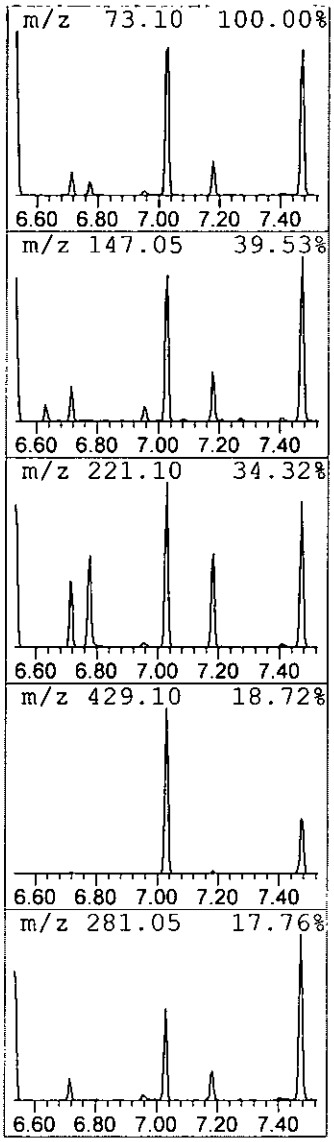
****

Peak Number 4 Cyclononasiloxane, octadeca... Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.029	18.44 ppm	173565	d10-Phenanthrene	7.275

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclononasiloxane, octadecamethyl-	666	C18H54O9Si9	000556-71-8	91
2	1,1,1,5,7,7,7-Heptamethyl-3,3-bi...	444	C13H40O5Si6	038147-00-1	56
3	Trisiloxane, 1,1,1,5,5,5-hexamet...	384	C12H36O4Si5	003555-47-3	38
4	Cyclononasiloxane, octadecamethyl-	666	C18H54O9Si9	000556-71-8	38
5	3-Trimethylsilyloxystearic acid,...	444	C24H52O3Si2	1000079-42-6	37





Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

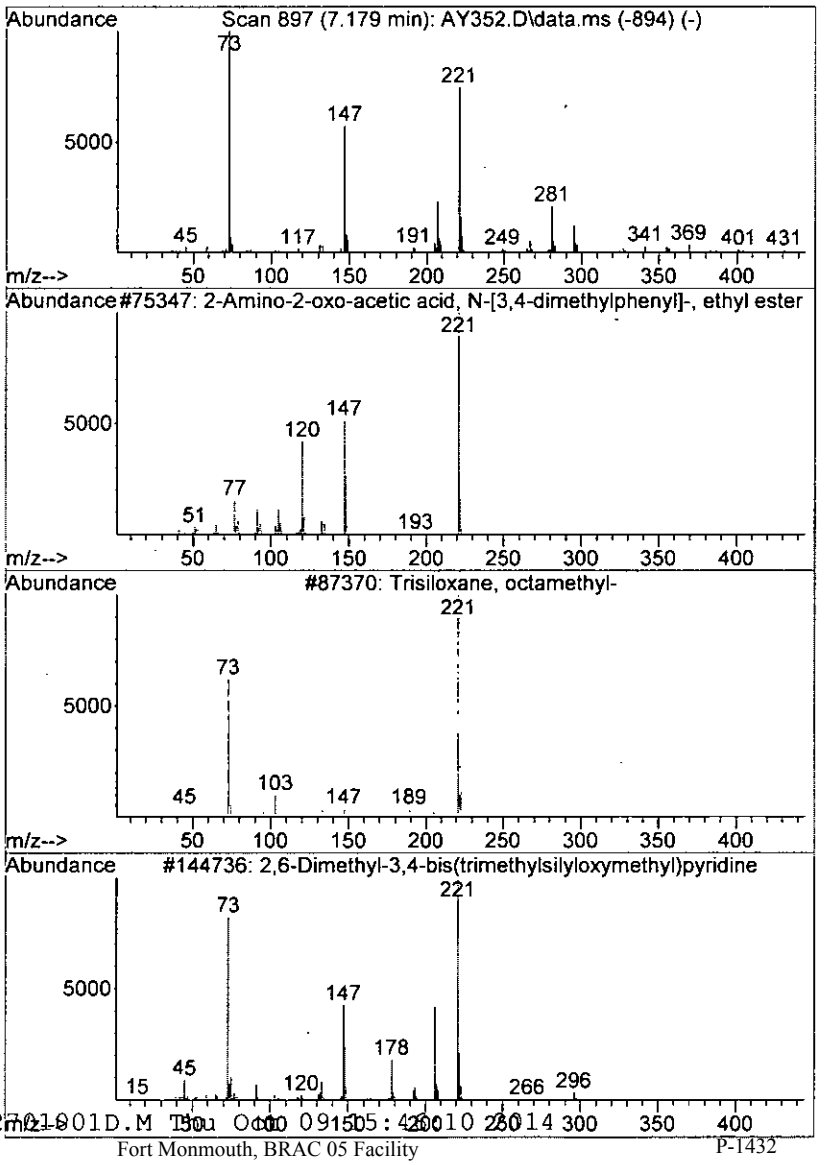
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

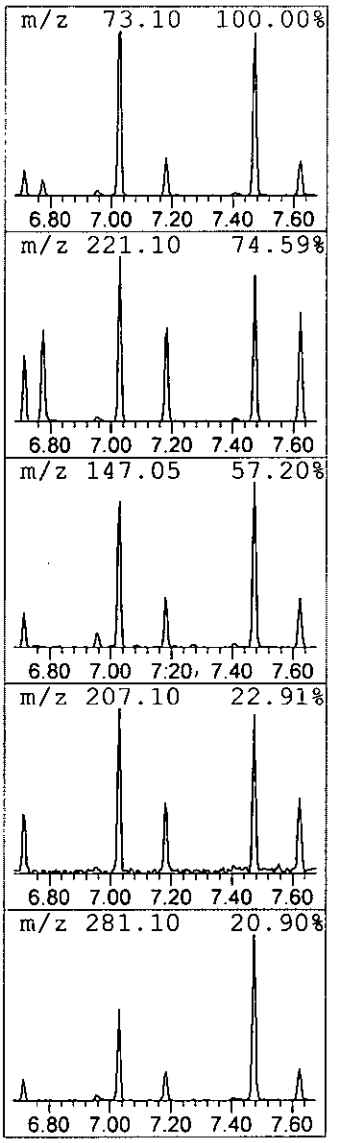
****

Peak Number 5 2-Amino-2-oxo-acetic acid, ... Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.179	5.02 ppm	47219	d10-Phenanthrene	7.275

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Amino-2-oxo-acetic acid, N-[3,...	221	C12H15NO3	024451-17-0	38
2	Trisiloxane, octamethyl-	236	C8H24O2Si3	000107-51-7	38
3	2,6-Dimethyl-3,4-bis(trimethylsi...	311	C15H29NO2Si2	1000079-52-1	38
4	Benzo[h]quinoline, 2,3,4-trimethyl-	221	C16H15N	063042-66-0	35
5	1,3-Cyclohexanedione, 2-[2-[4-(4...	401	C22H28FN3O3	339310-26-8	35





82701001D.M Thu Oct 09 15:42:10 2014 Page: 8

00385

Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

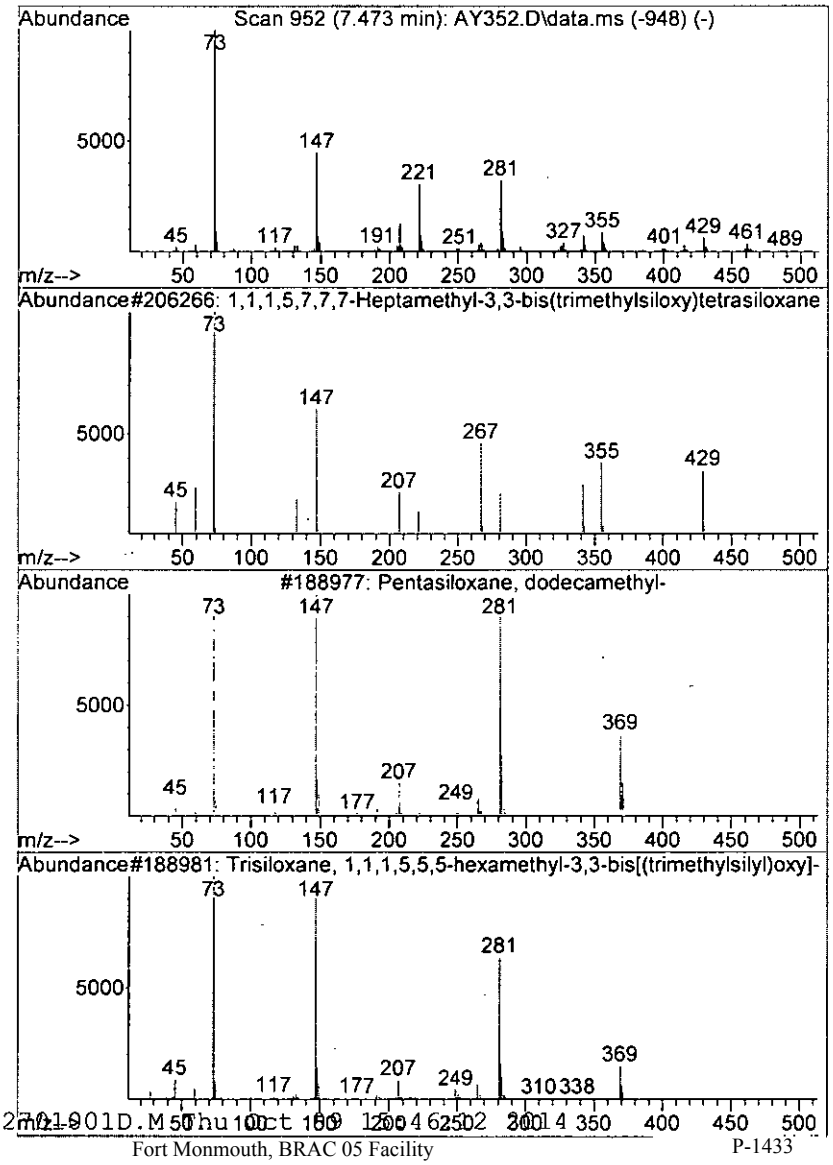
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

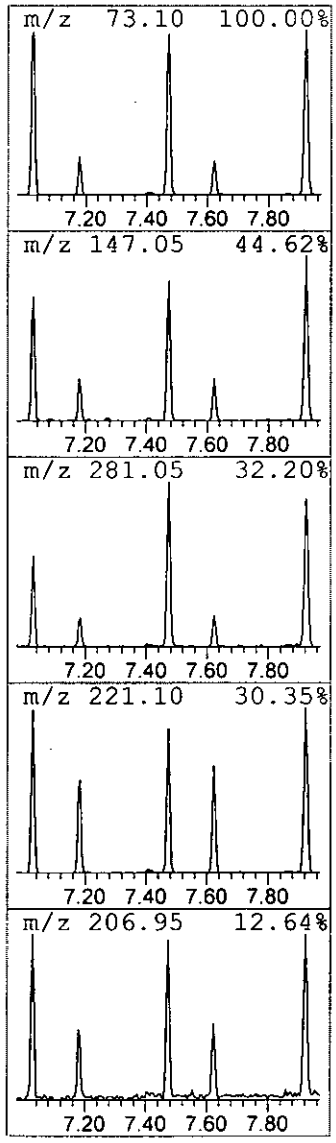
****

Peak Number 6 1,1,1,5,7,7,7-Heptamethyl-3... Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.473	17.68 ppm	166418	d10-Phenanthrene	7.275

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1,1,5,7,7,7-Heptamethyl-3,3-bi...	444	C13H40O5Si6	038147-00-1	47
2	Pentasiloxane, dodecamethyl-	384	C12H36O4Si5	000141-63-9	43
3	Trisiloxane, 1,1,1,5,5,5-hexamet...	384	C12H36O4Si5	003555-47-3	35
4	Ethanedioic acid, bis(trimethyls...	234	C8H18O4Si2	018294-04-7	35
5	1,2,5-Oxadiazole-3,4-dicarboxami...	444	C16H36N4O3Si4	1000332-01-4	35





Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

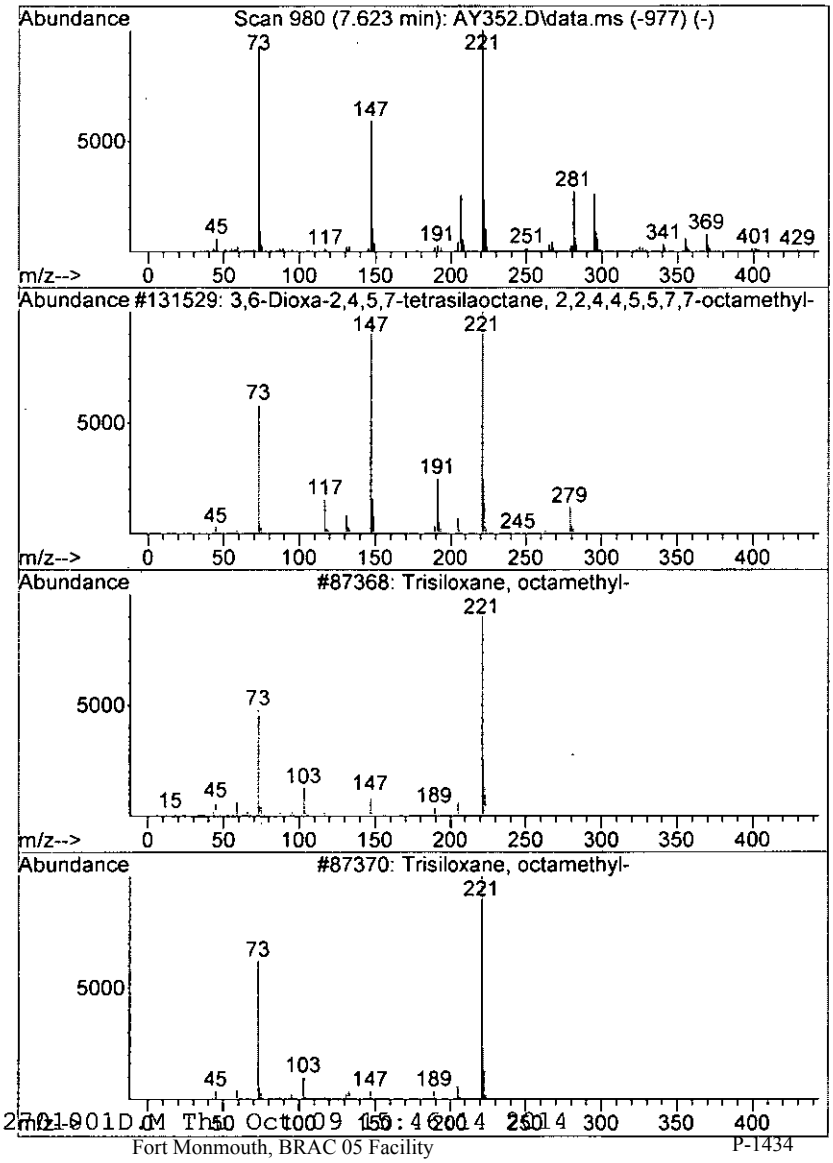
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

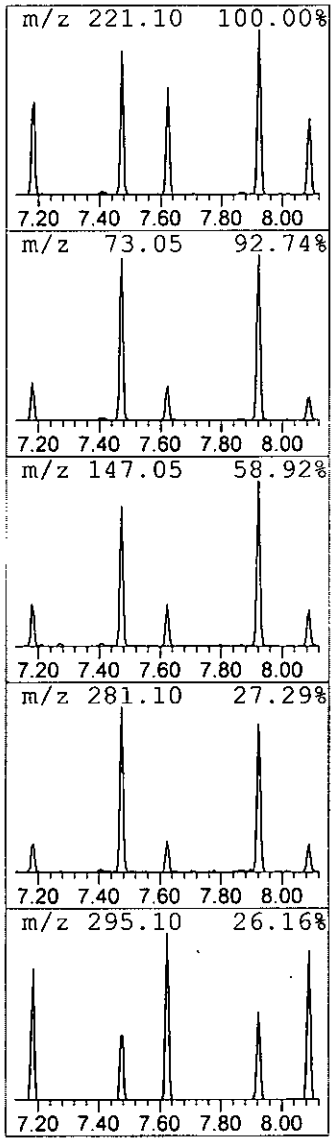
****

Peak Number 7 3,6-Dioxa-2,4,5,7-tetrasila... Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.623	5.50 ppm	51738	d10-Phenanthrene	7.275

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3,6-Dioxa-2,4,5,7-tetrasilaoctan...	294	C10H30O2Si4	004342-25-0	42
2	Trisiloxane, octamethyl-	236	C8H24O2Si3	000107-51-7	37
3	Trisiloxane, octamethyl-	236	C8H24O2Si3	000107-51-7	32
4	4-(m-Nitrophenyl)-2-thiazolamine	221	C9H7N3O2S	057493-24-0	27
5	Tris(trimethylsilyl)borate	278	C9H27BO3Si3	004325-85-3	25





Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

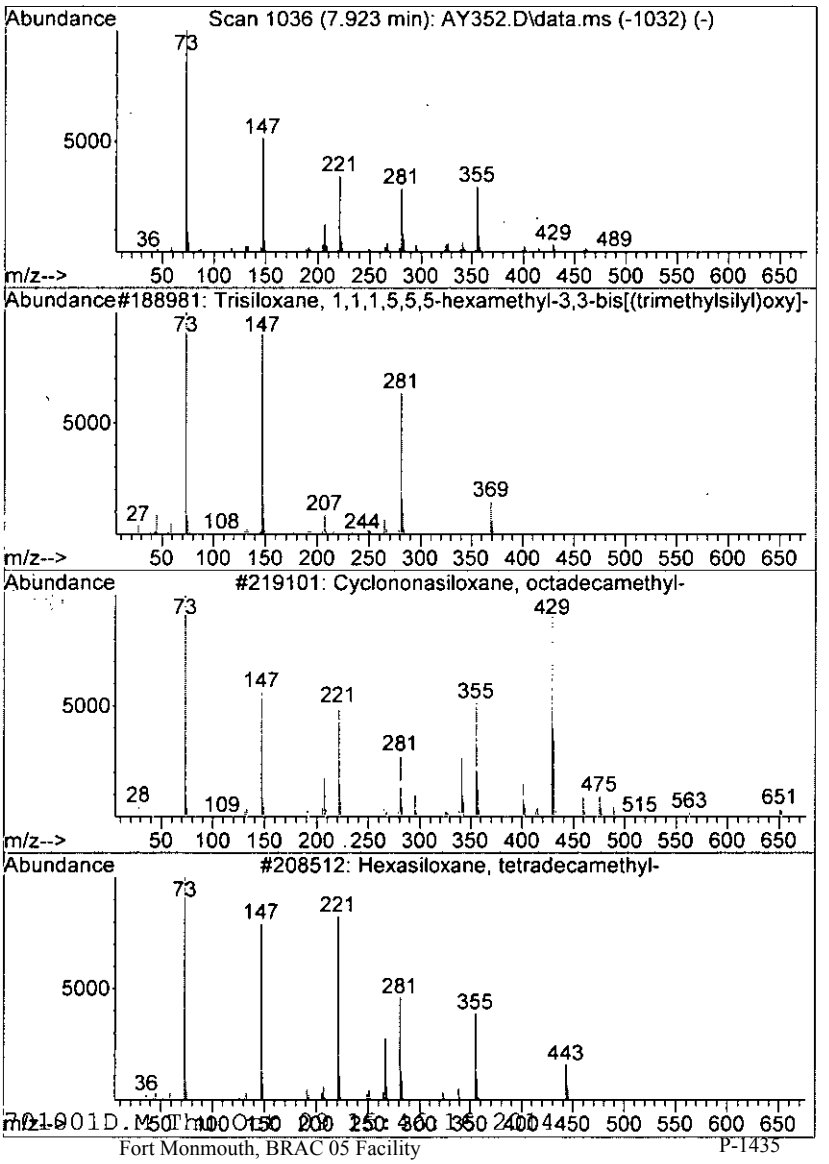
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

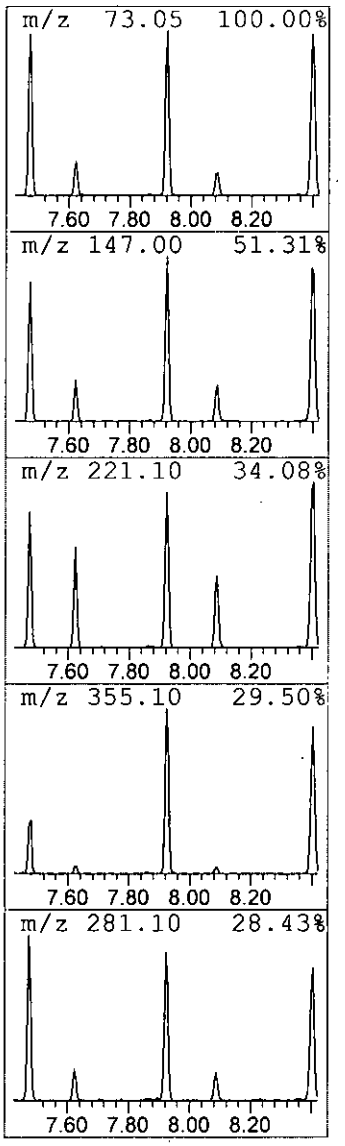
****

Peak Number 8 Trisiloxane, 1,1,1,5,5,5-he... Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.923	20.72 ppm	194977	d10-Phenanthrene	7.275

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Trisiloxane, 1,1,1,5,5,5-hexamet...	384	C12H36O4Si5	003555-47-3	43
2	Cyclononasiloxane, octadecamethyl-	666	C18H54O9Si9	000556-71-8	38
3	Hexasiloxane, tetradecamethyl-	458	C14H42O5Si6	000107-52-8	38
4	3-Isopropoxy-1,1,1,7,7,7-hexamet...	576	C18H52O7Si7	071579-69-6	36
5	Pentasiloxane, dodecamethyl-	384	C12H36O4Si5	000141-63-9	32





Library Search Compound Report

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Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

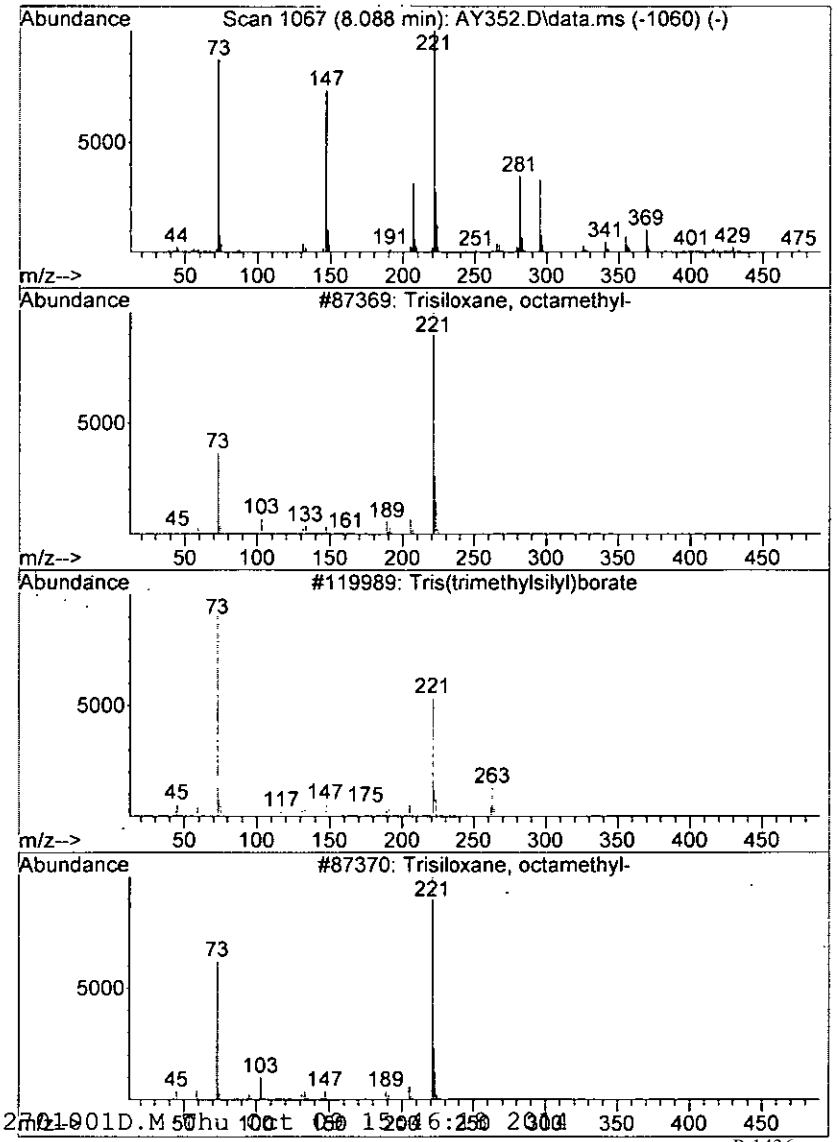
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

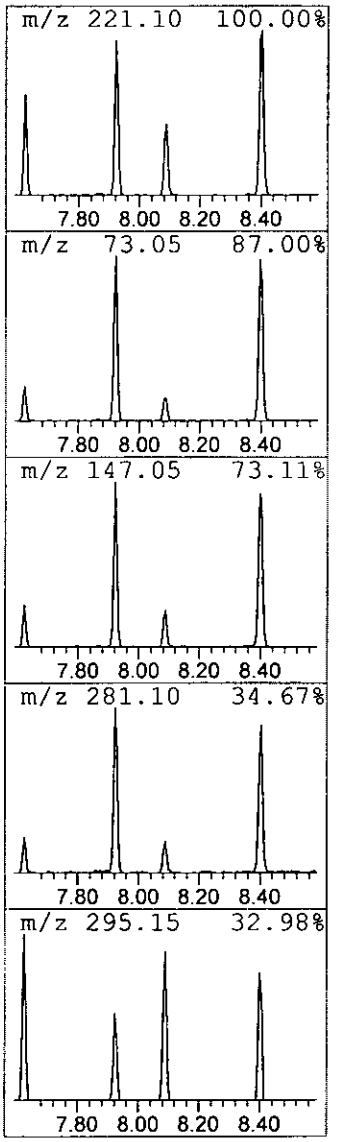
****

Peak Number 9 Trisiloxane, octamethyl- Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.088	4.96 ppm	46645	d10-Phenanthrene	7.275

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Trisiloxane, octamethyl-	236	C8H24O2Si3	000107-51-7	37
2	Tris(trimethylsilyl)borate	278	C9H27BO3Si3	004325-85-3	37
3	Trisiloxane, octamethyl-	236	C8H24O2Si3	000107-51-7	37
4	Tris(trimethylsilyl)borate	278	C9H27BO3Si3	004325-85-3	37
5	4,6-Dimethyl-2-thioxo-1,2-dihydr...	278	C14H22N2SSi	1000332-68-8	27





Library Search Compound Report

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Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

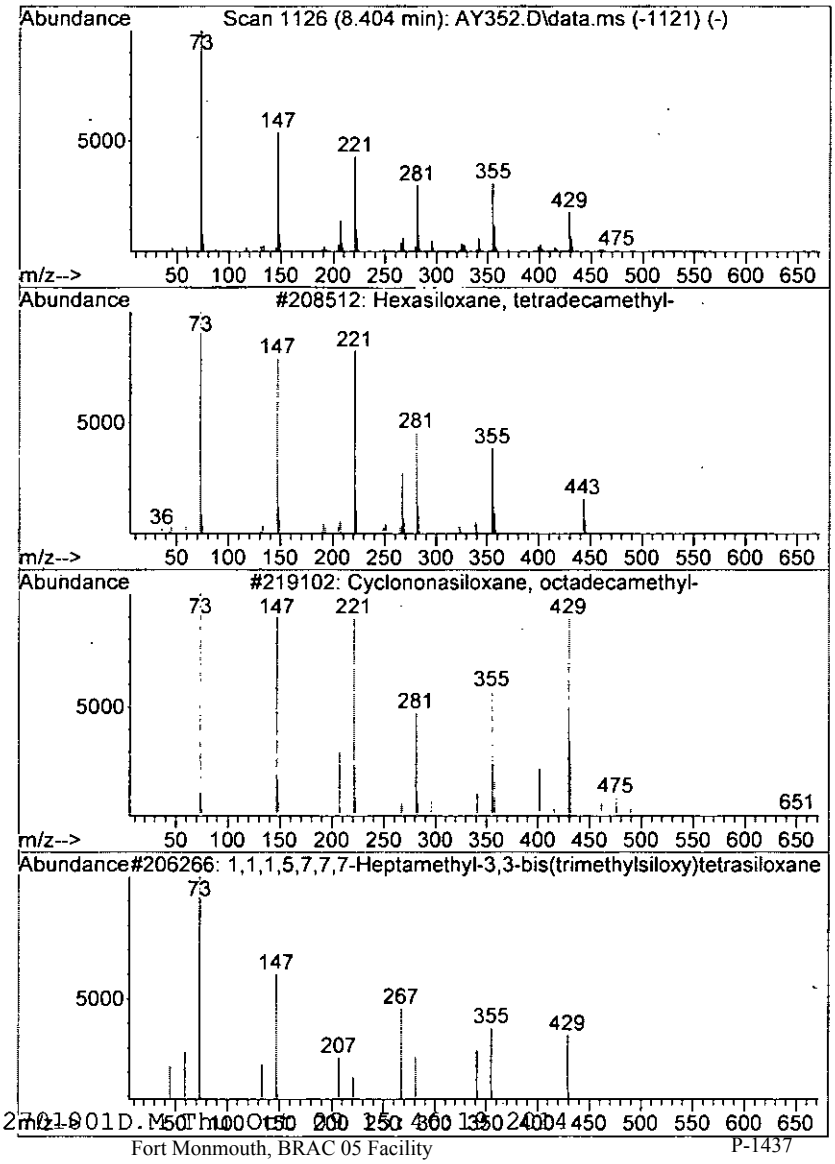
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

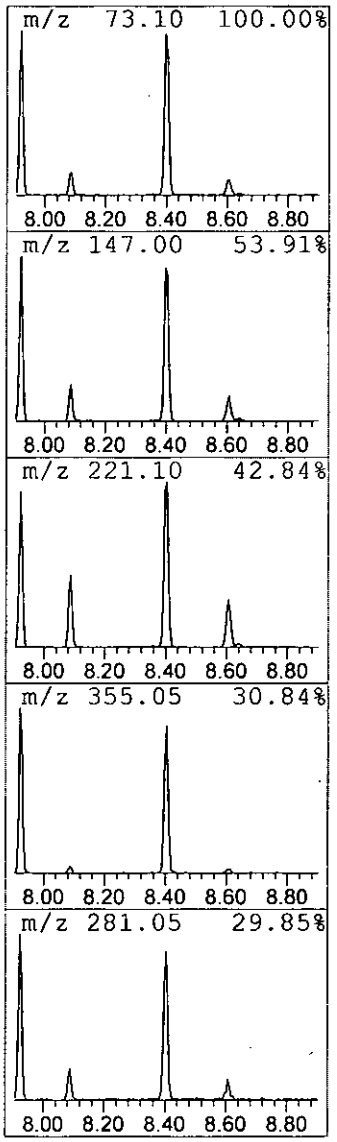
****

Peak Number 10 Hexasiloxane, tetradecamethyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.404	25.66 ppm	241549	d10-Phenanthrene	7.275

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexasiloxane, tetradecamethyl-	458	C14H42O5Si6	000107-52-8	72
2	Cyclononasiloxane, octadecamethyl-	666	C18H54O9Si9	000556-71-8	45
3	1,1,1,5,7,7,7-Heptamethyl-3,3-bi...	444	C13H40O5Si6	038147-00-1	37
4	Octasiloxane, 1,1,3,3,5,5,7,7,9,...	578	C16H50O7Si8	019095-24-0	32
5	Trisiloxane, 1,1,1,5,5,5-hexamet...	384	C12H36O4Si5	003555-47-3	25





Library Search Compound Report

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Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

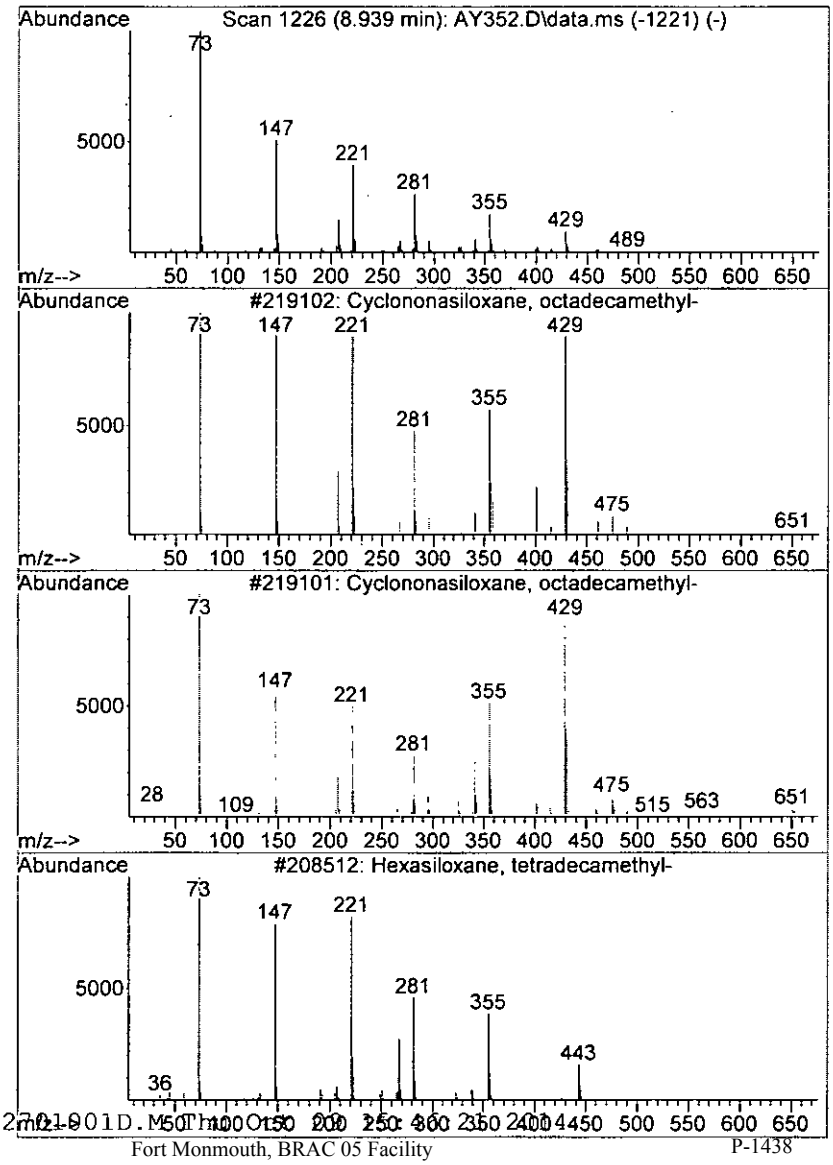
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

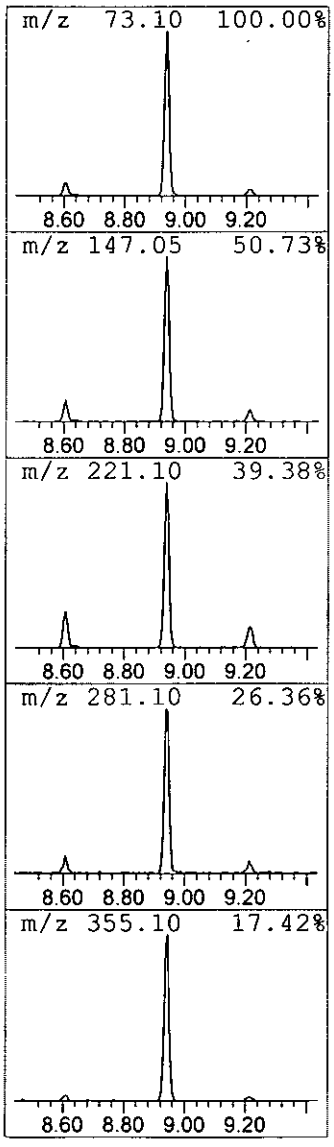
****

Peak Number 11 Cyclononasiloxane, octadeca... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.939	29.91 ppm	332662	d12-Chrysene	10.067

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclononasiloxane, octadecamethyl-	666	C18H54O9Si9	000556-71-8	87
2	Cyclononasiloxane, octadecamethyl-	666	C18H54O9Si9	000556-71-8	78
3	Hexasiloxane, tetradecamethyl-	458	C14H42O5Si6	000107-52-8	40
4	Trisiloxane, 1,1,1,5,5,5-hexamet...	384	C12H36O4Si5	003555-47-3	32
5	Octasiloxane, 1,1,3,3,5,5,7,7,9,...	578	C16H50O7Si8	019095-24-0	32





82701001D.M Thu Oct 09 08:50:14 2014

Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

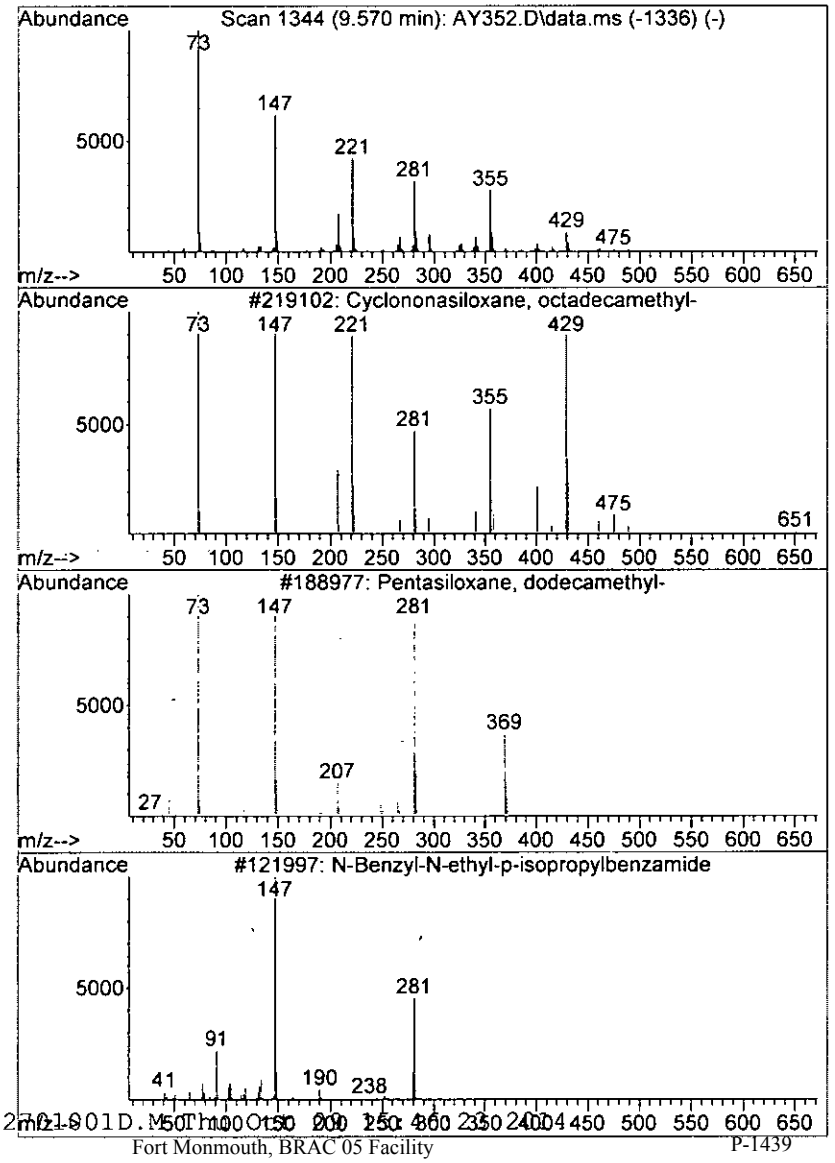
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

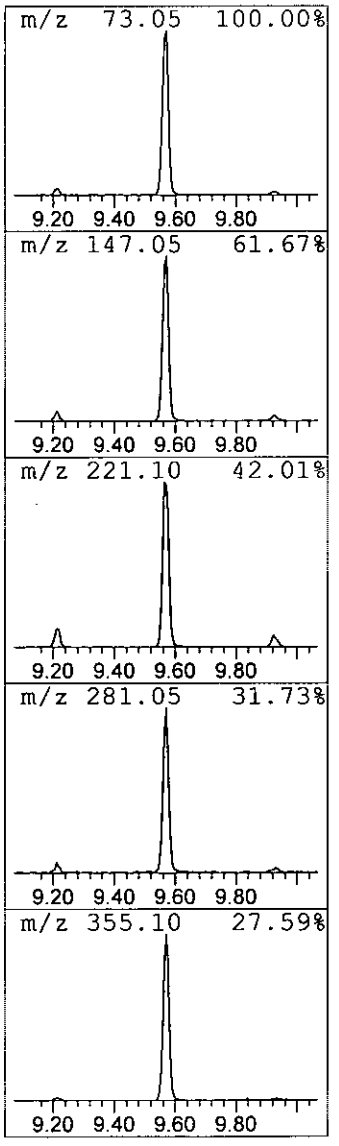
****

Peak Number 12 Cyclononasiloxane, octadeca... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.570	41.49 ppm	461444	d12-Chrysene	10.067

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclononasiloxane, octadecamethyl-	666	C18H54O9Si9	000556-71-8	59
2	Pentasiloxane, dodecamethyl-	384	C12H36O4Si5	000141-63-9	32
3	N-Benzyl-N-ethyl-p-isopropylbenz...	281	C19H23NO	015089-22-2	30
4	Hexasiloxane, tetradecamethyl-	458	C14H42O5Si6	000107-52-8	28
5	Mercaptoacetic acid, bis(trimeth...	236	C8H20O2SSi2	006398-62-5	28





Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

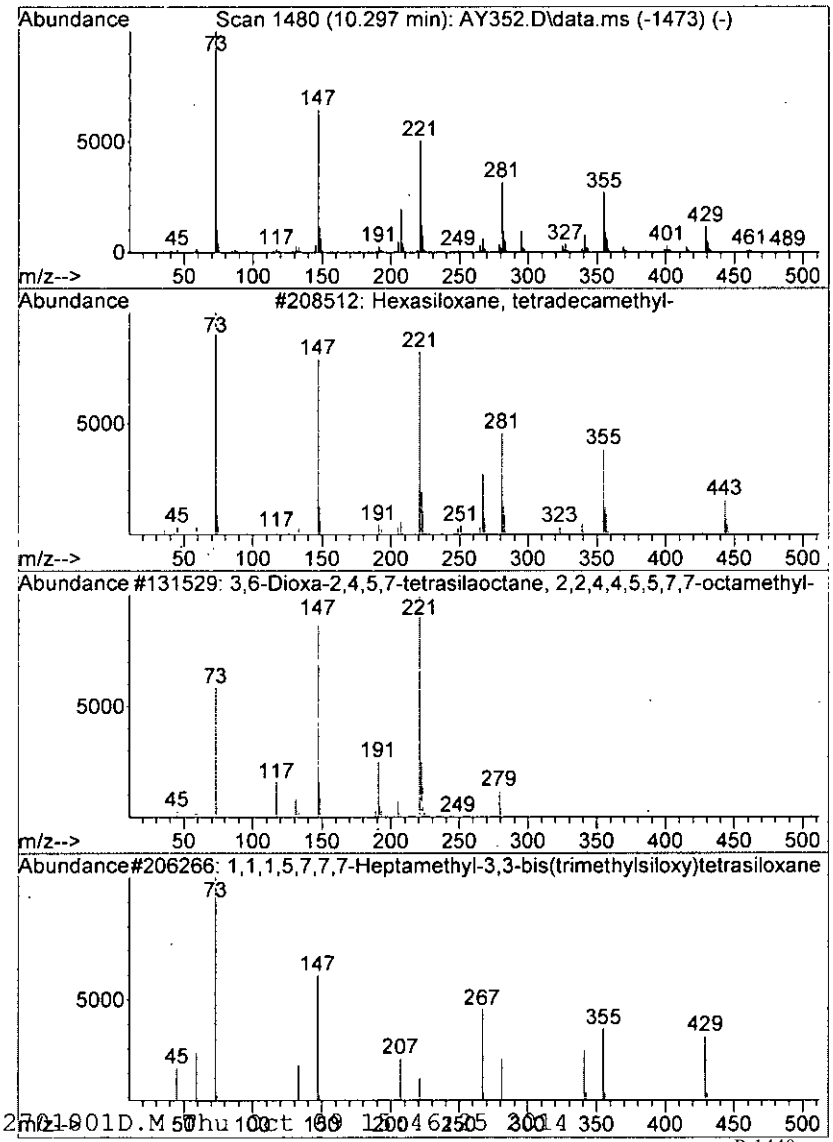
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

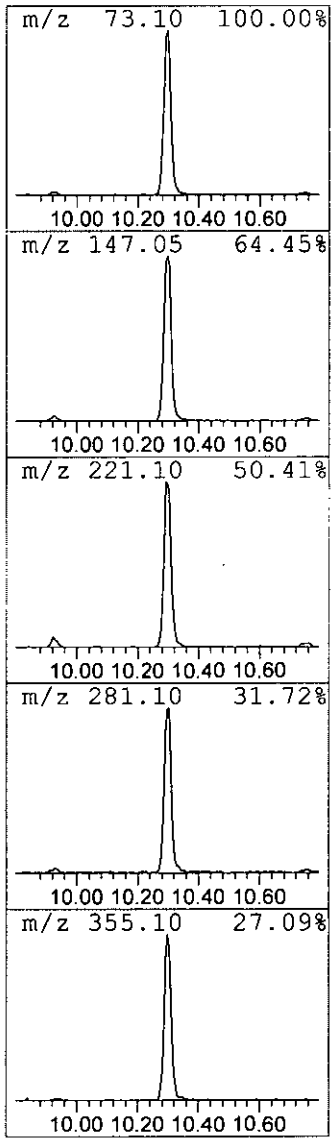
****

Peak Number 13 Hexasiloxane, tetradecamethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.297	53.75 ppm	597783	d12-Chrysene	10.067

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexasiloxane, tetradecamethyl-	458	C14H42O5Si6	000107-52-8	64
2	3,6-Dioxa-2,4,5,7-tetrasilaoctan...	294	C10H30O2Si4	004342-25-0	41
3	1,1,1,5,7,7,7-Heptamethyl-3,3-bi...	444	C13H40O5Si6	038147-00-1	37
4	N-Benzyl-N-ethyl-p-isopropylbenz...	281	C19H23NO	015089-22-2	30
5	Octasiloxane, 1,1,3,3,5,5,7,7,9,...	578	C16H50O7Si8	019095-24-0	25





82701001D.M Thu Oct 09 12:04:25 2014

Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

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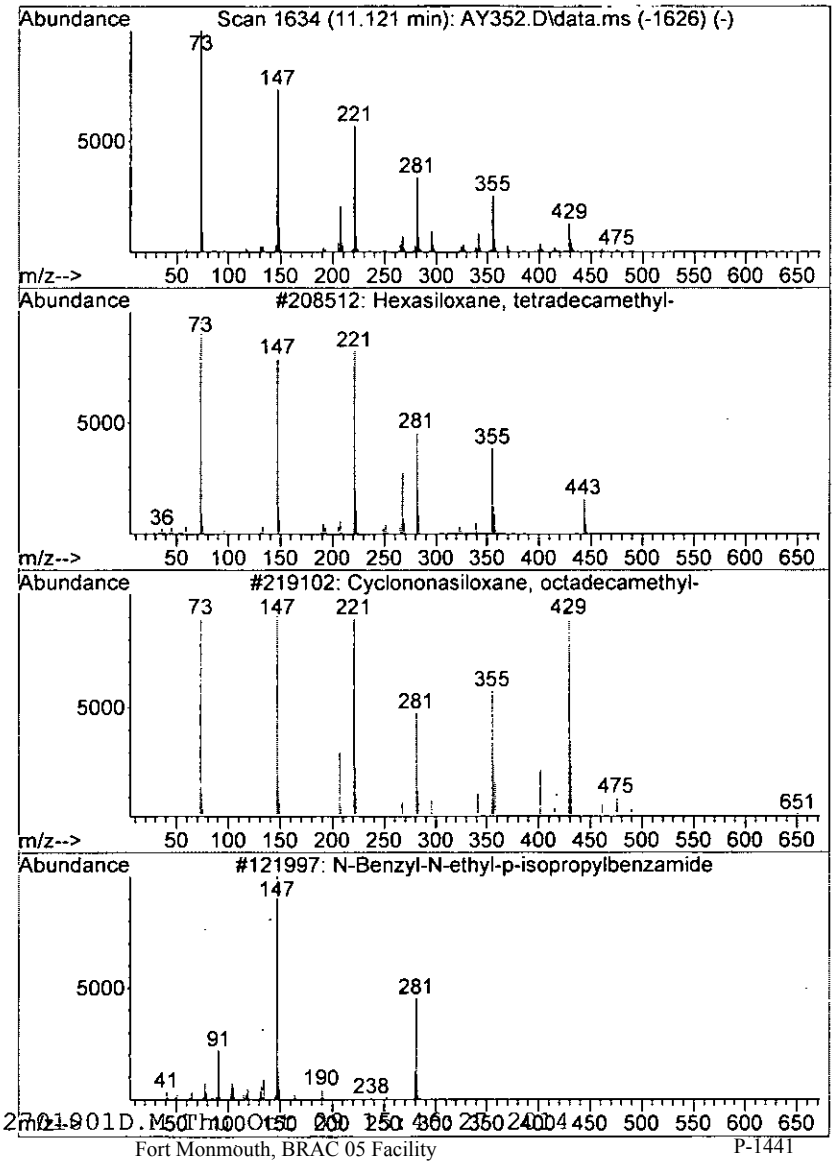
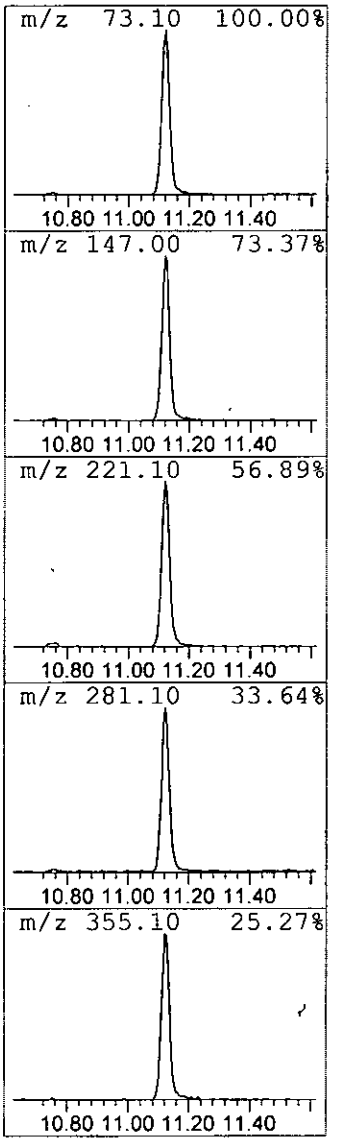
Peak Number 14 Hexasiloxane, tetradecamethyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.121	59.37 ppm	660317	d12-Chrysene	10.067

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexasiloxane, tetradecamethyl-	458	C14H42O5Si6	000107-52-8	72
2	Cyclononasiloxane, octadecamethyl-	666	C18H54O9Si9	000556-71-8	59
3	N-Benzyl-N-ethyl-p-isopropylbenz...	281	C19H23NO	015089-22-2	43
4	1,2-Benzenedicarboxylic acid, bi...	310	C14H22O4Si2	002078-22-0	25
5	1,2-Benzenedicarboxylic acid, bi...	310	C14H22O4Si2	002078-22-0	25





Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

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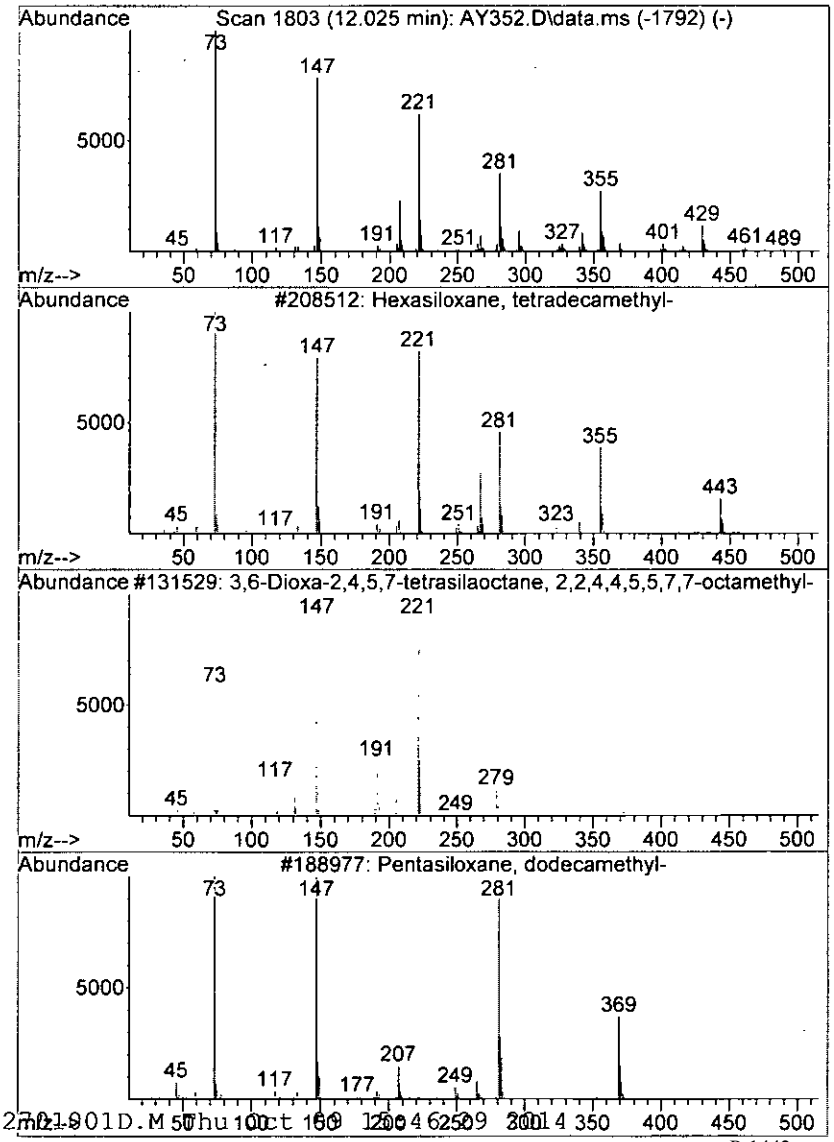
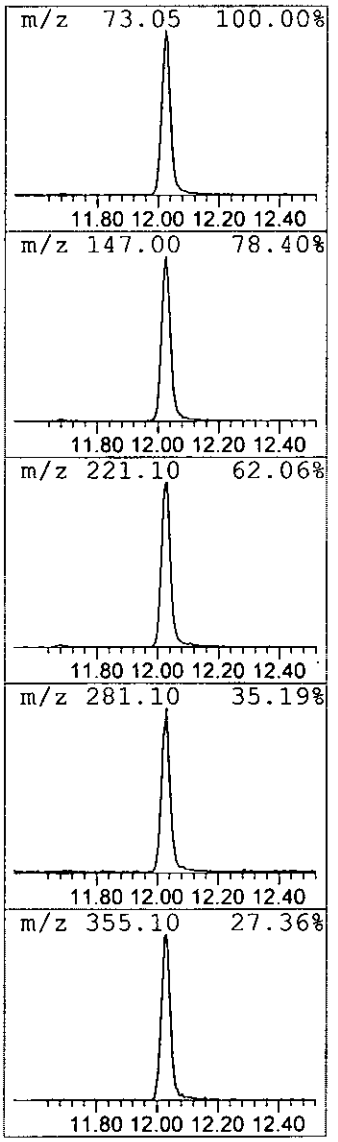
Peak Number 15 Hexasiloxane, tetradecamethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.025	62.41 ppm	699184	d12-Perylene	12.827

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexasiloxane, tetradecamethyl-	458	C14H42O5Si6	000107-52-8	74
2	3,6-Dioxa-2,4,5,7-tetrasilaoctan...	294	C10H30O2Si4	004342-25-0	49
3	Pentasiloxane, dodecamethyl-	384	C12H36O4Si5	000141-63-9	38
4	Trisiloxane, 1,1,1,5,5,5-hexamet...	384	C12H36O4Si5	003555-47-3	38
5	N-Benzyl-N-ethyl-p-isopropylbenz...	281	C19H23NO	015089-22-2	38





Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

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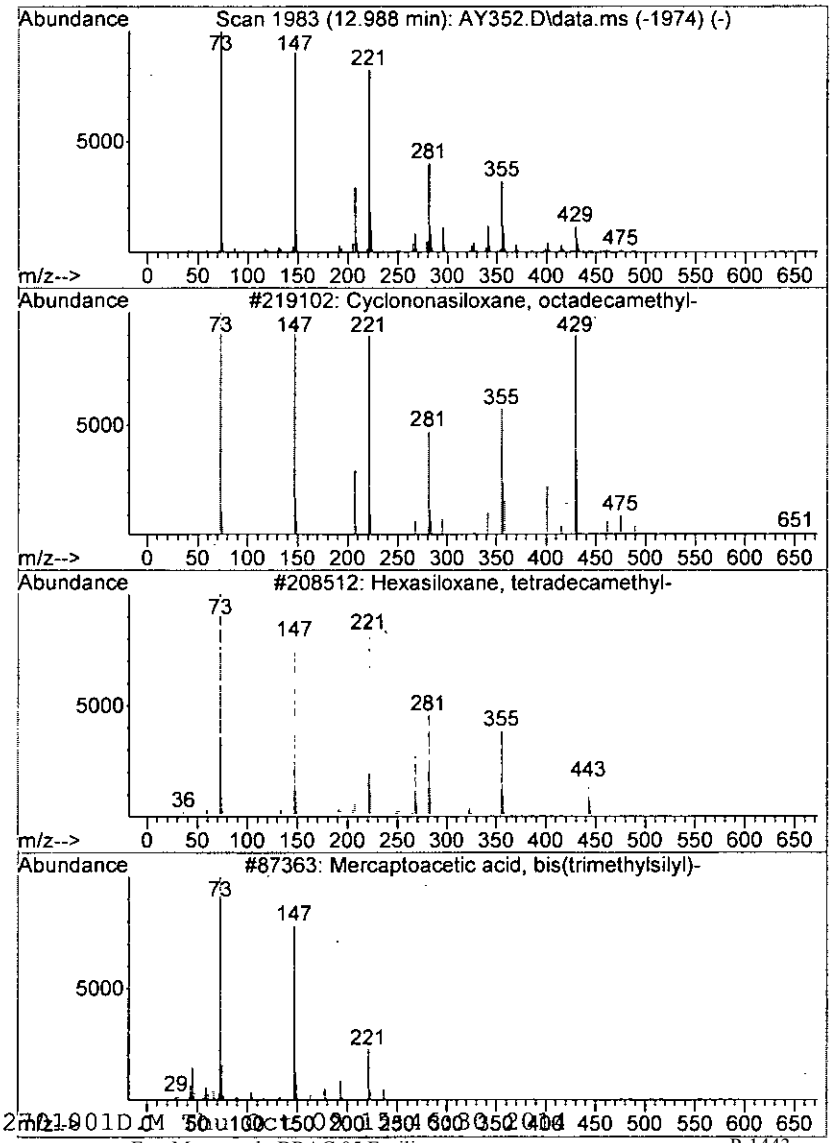
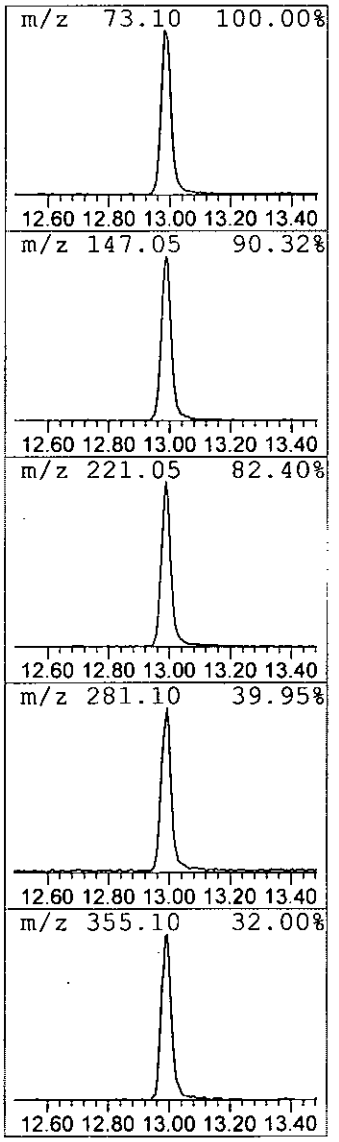
Peak Number 16 Cyclononasiloxane, octadeca... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.988	60.18 ppm	674210	d12-Perylene	12.827

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclononasiloxane, octadecamethyl-	666	C18H54O9Si9	000556-71-8	91
2	Hexasiloxane, tetradecamethyl-	458	C14H42O5Si6	000107-52-8	87
3	Mercaptoacetic acid, bis(trimeth...	236	C8H20O2SSi2	006398-62-5	38
4	3-Isopropoxy-1,1,1,7,7,7-hexamet...	576	C18H52O7Si7	071579-69-6	37
5	Pentasiloxane, dodecamethyl-	384	C12H36O4Si5	000141-63-9	35





Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

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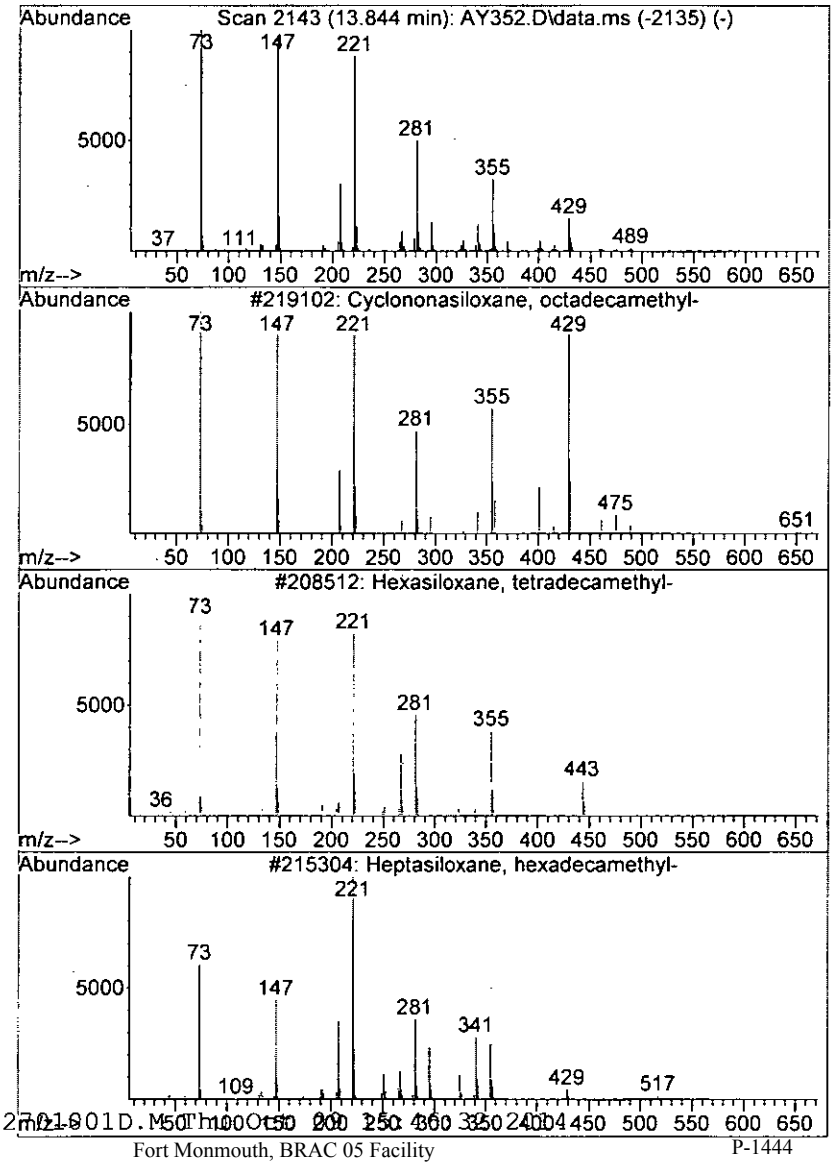
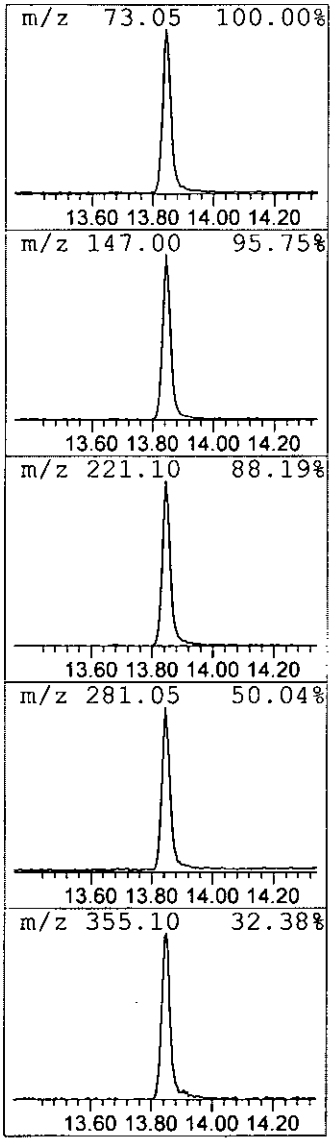
Peak Number 17 Cyclononasiloxane, octadeca... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.844	55.84 ppm	625556	d12-Perylene	12.827

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclononasiloxane, octadecamethyl-	666	C18H54O9Si9	000556-71-8	90
2	Hexasiloxane, tetradecamethyl-	458	C14H42O5Si6	000107-52-8	87
3	Heptasiloxane, hexadecamethyl-	532	C16H48O6Si7	000541-01-5	80
4	3,6-Dioxa-2,4,5,7-tetrasilaoctan...	294	C10H30O2Si4	004342-25-0	52
5	2,6-Dimethyl-3,4-bis(trimethylsi...	311	C15H29NO2Si2	1000079-52-1	30





Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

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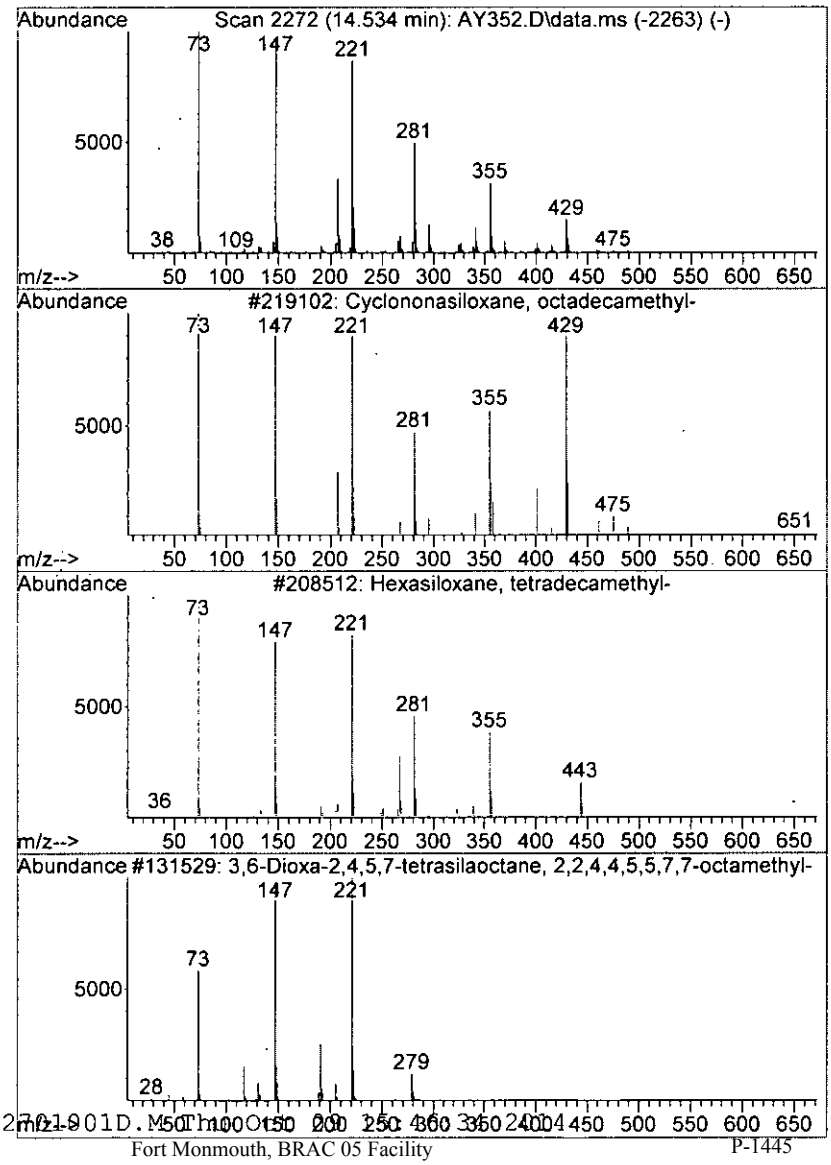
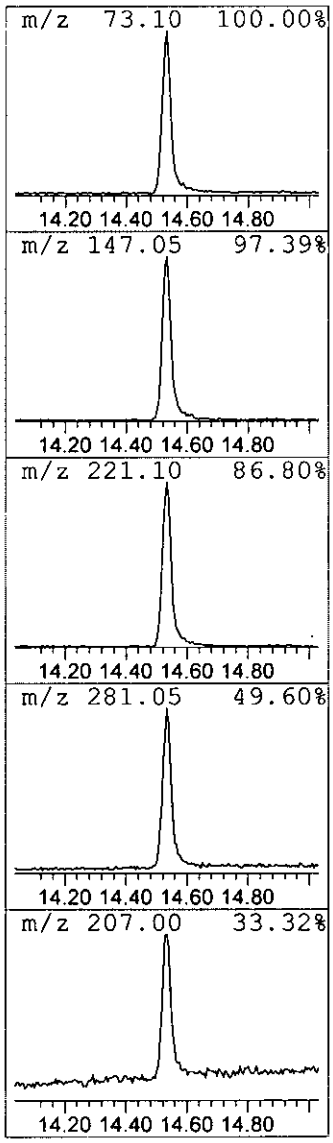
Peak Number 18 Cyclononasiloxane, octadeca... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.534	48.73 ppm	545893	d12-Perylene	12.827

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclononasiloxane, octadecamethyl-	666	C18H54O9Si9	000556-71-8	83
2	Hexasiloxane, tetradecamethyl-	458	C14H42O5Si6	000107-52-8	76
3	3,6-Dioxa-2,4,5,7-tetrasilaoctan...	294	C10H30O2Si4	004342-25-0	40
4	N-Benzyl-N-ethyl-p-isopropylbenz...	281	C19H23NO	015089-22-2	27
5	Trisiloxane, 1,1,1,5,5,5-hexamet...	384	C12H36O4Si5	003555-47-3	27





Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

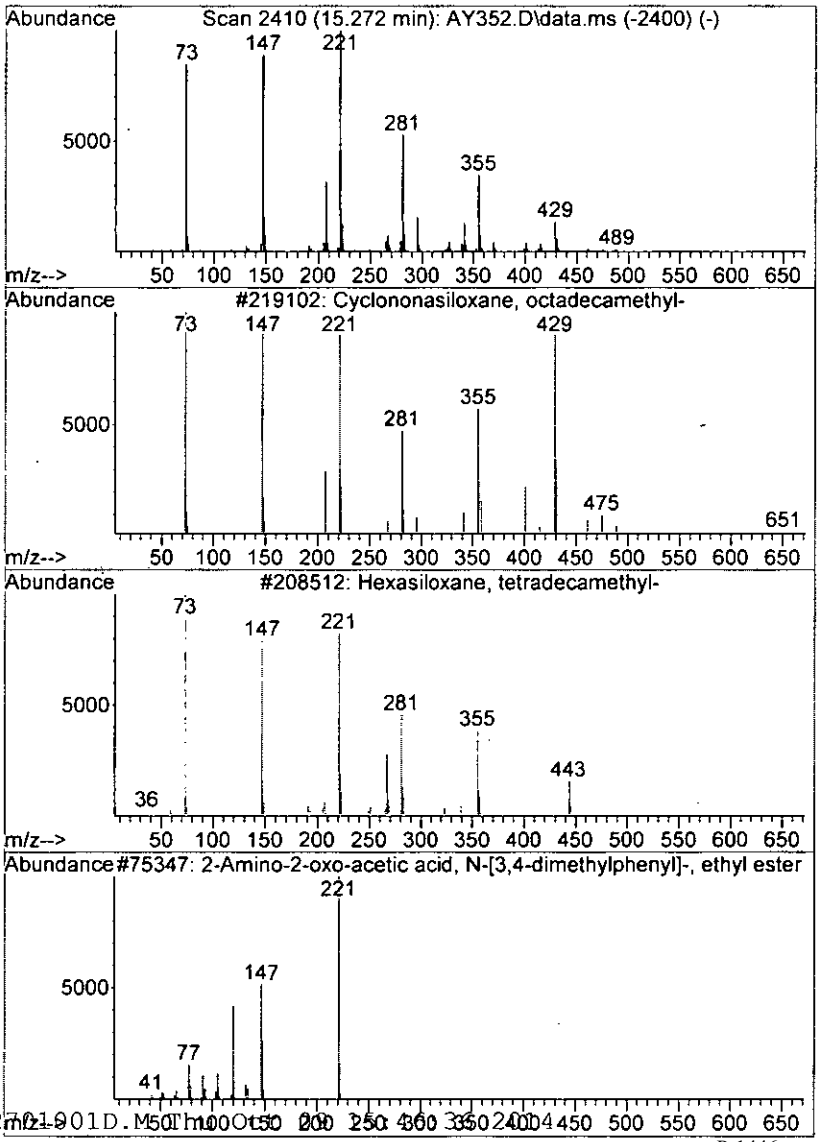
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

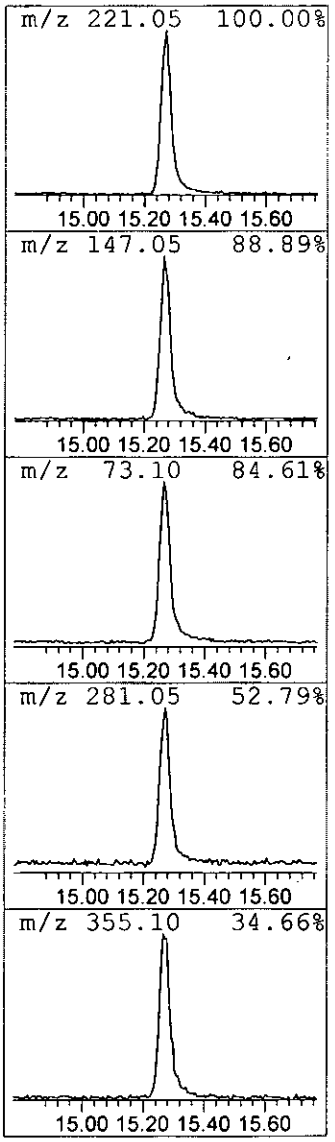
****

Peak Number 19 Cyclononasiloxane, octadeca... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.272	40.27 ppm	451156	d12-Perylene	12.827

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclononasiloxane, octadecamethyl-	666	C18H54O9Si9	000556-71-8	91
2	Hexasiloxane, tetradecamethyl-	458	C14H42O5Si6	000107-52-8	87
3	2-Amino-2-oxo-acetic acid, N-[3,...	221	C12H15NO3	024451-17-0	40
4	3,6-Dioxa-2,4,5,7-tetrasilaoctan...	294	C10H30O2Si4	004342-25-0	38
5	N-Benzyl-N-ethyl-p-isopropylbenz...	281	C19H23NO	015089-22-2	30





Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY352.D
Acq On : 8 Oct 2014 3:39 pm
Operator : Z.Miao
Sample : R1407825-001|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 7 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

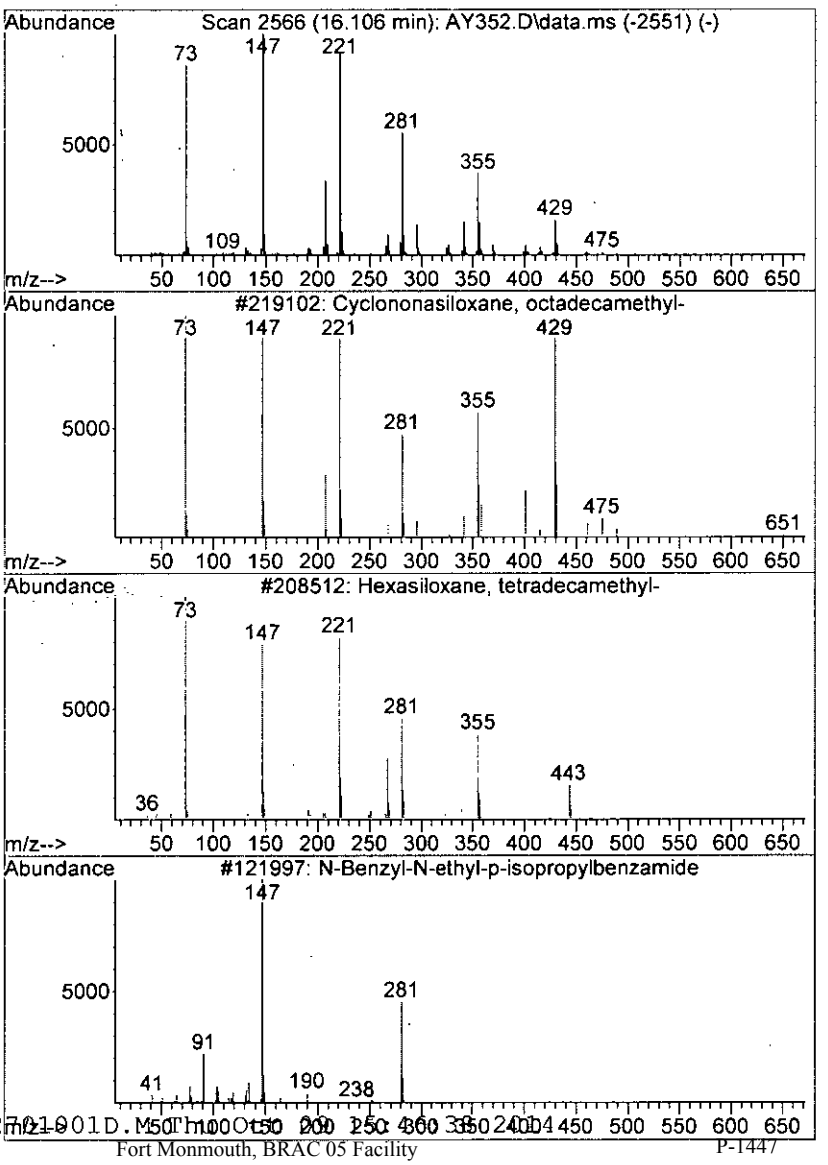
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

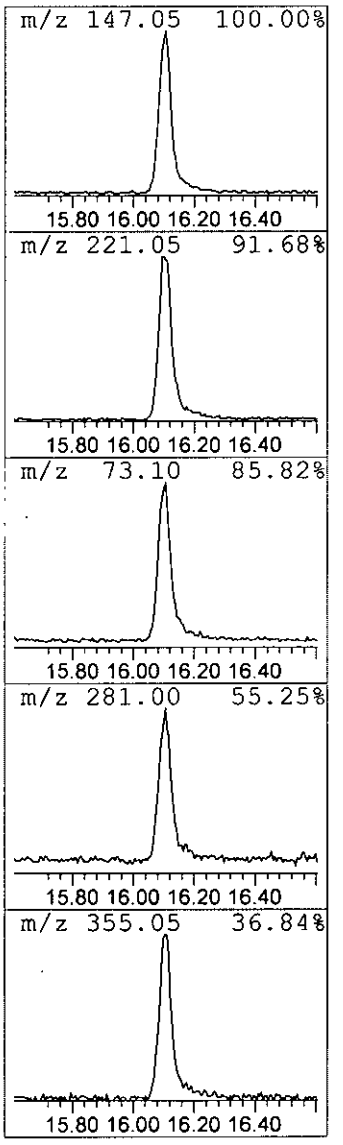
****

Peak Number 20 Cyclononasiloxane, octadeca... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.106	33.93 ppm	380146	d12-Perylene	12.827

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclononasiloxane, octadecamethyl-	666	C18H54O9Si9	000556-71-8	91
2	Hexasiloxane, tetradecamethyl-	458	C14H42O5Si6	000107-52-8	80
3	N-Benzyl-N-ethyl-p-isopropylbenz...	281	C19H23NO	015089-22-2	38
4	Trisiloxane, 1,1,1,5,5,5-hexamet...	384	C12H36O4Si5	003555-47-3	35
5	Pentasiloxane, dodecamethyl-	384	C12H36O4Si5	000141-63-9	35





Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1015
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 16:06
Sample Name:	FTMM-66-GW-886RW01-11.55	**Units:**	µg/L
Lab Code:	R1407825-005	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:		**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
	1,2-Diphenylhydrazine/Azobenzene	ND	U	11	5.3	1.1	
120-82-1	1,2,4-Trichlorobenzene	ND	U	11	5.3	1.1	
95-50-1	1,2-Dichlorobenzene	ND	U	11	5.3	1.1	
541-73-1	1,3-Dichlorobenzene	ND	U	11	5.3	1.1	
106-46-7	1,4-Dichlorobenzene	ND	U	11	5.3	1.1	
95-95-4	2,4,5-Trichlorophenol	ND	U	11	5.3	1.8	
88-06-2	2,4,6-Trichlorophenol	ND	U	11	5.3	1.4	
120-83-2	2,4-Dichlorophenol	ND	U	11	5.3	1.3	
105-67-9	2,4-Dimethylphenol	ND	U	11	5.3	1.6	
51-28-5	2,4-Dinitrophenol	ND	U	53	26	21	
121-14-2	2,4-Dinitrotoluene	ND	U	11	5.3	1.7	
606-20-2	2,6-Dinitrotoluene	ND	U	11	5.3	1.9	
91-58-7	2-Chloronaphthalene	ND	U	11	5.3	1.1	
95-57-8	2-Chlorophenol	ND	U	11	5.3	1.1	
91-57-6	2-Methylnaphthalene	ND	U	11	5.3	1.1	
95-48-7	2-Methylphenol	ND	U	11	5.3	1.1	
88-74-4	2-Nitroaniline	ND	U	53	26	9.6	
88-75-5	2-Nitrophenol	ND	U	11	5.3	1.5	
91-94-1	3,3'-Dichlorobenzidine	ND	U	11	5.3	4.7	
	3- and 4-Methylphenol Coelution	ND	U	11	11	2.1	
99-09-2	3-Nitroaniline	ND	U	53	26	8.1	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	53	26	12	
101-55-3	4-Bromophenyl Phenyl Ether	ND	U	11	5.3	2.3	
59-50-7	4-Chloro-3-methylphenol	ND	U	11	5.3	1.2	
106-47-8	4-Chloroaniline	ND	U	11	5.3	1.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	ND	U	11	5.3	1.2	
100-01-6	4-Nitroaniline	ND	U	53	26	8.2	
100-02-7	4-Nitrophenol	ND	U	53	26	6.2	
83-32-9	Acenaphthene	ND	U	11	5.3	1.1	
208-96-8	Acenaphthylene	ND	U	11	5.3	1.1	
120-12-7	Anthracene	ND	U	11	5.3	1.1	
56-55-3	Benz(a)anthracene	ND	U	11	5.3	1.1	
92-87-5	Benzidine	ND	U	110	110	95	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1015
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 16:06
Sample Name:	FTMM-66-GW-886RW01-11.55	**Units:**	µg/L
Lab Code:	R1407825-005	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY353.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
50-32-8	Benzo(a)pyrene	ND	U	11	5.3	1.1	
205-99-2	Benzo(b)fluoranthene	ND	U	11	5.3	1.1	
191-24-2	Benzo(g,h,i)perylene	ND	U	11	5.3	1.1	
207-08-9	Benzo(k)fluoranthene	ND	U	11	5.3	1.1	
100-51-6	Benzyl Alcohol	ND	U	11	5.3	1.4	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	U	11	5.3	1.1	
111-91-1	Bis(2-chloroethoxy)methane	ND	U	11	5.3	2.3	
111-44-4	Bis(2-chloroethyl) Ether	ND	U	11	5.3	1.4	
117-81-7	Bis(2-ethylhexyl) Phthalate	ND	U	11	5.3	1.3	
85-68-7	Butyl Benzyl Phthalate	ND	U	11	5.3	2.5	
86-74-8	Carbazole	ND	U	11	5.3	1.2	
218-01-9	Chrysene	ND	U	11	5.3	1.1	
84-74-2	Di-n-butyl Phthalate	ND	U	11	5.3	1.1	
117-84-0	Di-n-octyl Phthalate	ND	U	11	5.3	1.3	
53-70-3	Dibenz(a,h)anthracene	ND	U	11	5.3	1.3	
132-64-9	Dibenzofuran	ND	U	11	5.3	1.1	
84-66-2	Diethyl Phthalate	ND	U	11	5.3	1.1	
131-11-3	Dimethyl Phthalate	ND	U	11	5.3	1.1	
206-44-0	Fluoranthene	ND	U	11	5.3	1.1	
86-73-7	Fluorene	ND	U	11	5.3	1.1	
118-74-1	Hexachlorobenzene	ND	U	11	5.3	1.1	
87-68-3	Hexachlorobutadiene	ND	U	11	5.3	1.3	
77-47-4	Hexachlorocyclopentadiene	ND	U	11	5.3	1.1	
67-72-1	Hexachloroethane	ND	U	11	5.3	1.3	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	11	5.3	1.3	
78-59-1	Isophorone	ND	U	11	5.3	1.1	
621-64-7	N-Nitrosodi-n-propylamine	ND	U	11	5.3	1.4	
62-75-9	N-Nitrosodimethylamine	ND	U	11	5.3	1.1	
86-30-6	N-Nitrosodiphenylamine	ND	U	11	5.3	1.1	
91-20-3	Naphthalene	ND	U	11	5.3	1.1	
98-95-3	Nitrobenzene	ND	U	11	5.3	1.7	
87-86-5	Pentachlorophenol (PCP)	ND	U	53	26	7.3	
85-01-8	Phenanthrene	ND	U	11	5.3	1.1	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1015
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 16:06
Sample Name:	FTMM-66-GW-886RW01-11.55	**Units:**	µg/L
Lab Code:	R1407825-005	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY353.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-95-2	Phenol	ND	U	11	5.3	1.1	
129-00-0	Pyrene	ND	U	11	5.3	1.1	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	98	40-125	10/8/14 16:06	
2-Fluorobiphenyl	75	50-110	10/8/14 16:06	
2-Fluorophenol	48	20-110	10/8/14 16:06	
Nitrobenzene-d5	73	40-110	10/8/14 16:06	
Phenol-d6	31	10-115	10/8/14 16:06	
p-Terphenyl-d14	70	50-135	10/8/14 16:06	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/3/14
Sample Matrix:	Water	**Date Received:**	10/4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 1606

Tentatively Identified Compounds (TIC)
Semivolatile Organic Compounds by GC/MS

Sample Name:	FTMM-66-GW-886RW01-11.55	**Units:**	µg/L
Lab Code:	R1407825-005	**Basis:**	NA

Prep Method: EPA 3510C
Analytical Method: 8270D

CAS #	Analyte Name	RT	Result	Q
000107-52-8	Hexasiloxane, tetradecamethyl-	14.89	**7.2**	JN
	unknown	16.75	**8.2**	J

Comments:

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY353.D
Acq On : 8 Oct 2014 4:06 pm
Operator : Z.Miao
Sample : R1407825-005|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 09 15:36:56 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

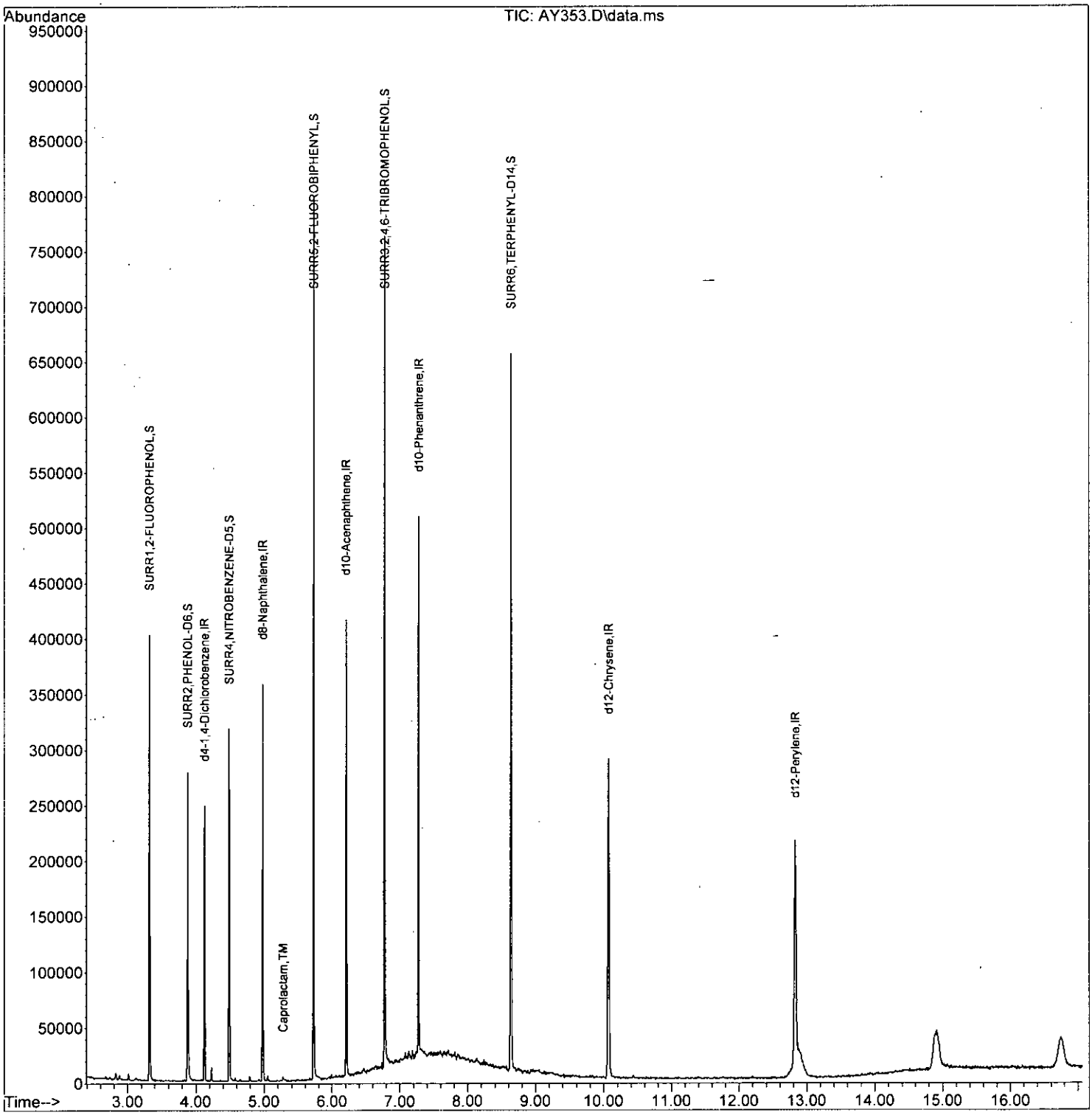
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.130	152	32629	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	131195	40.00	ppm	0.00
39) d10-Acenaphthene	6.211	164	79296	40.00	ppm	0.00
61) d10-Phenanthrene	7.275	188	146925	40.00	ppm	0.00
76) d12-Chrysene	10.073	240	151439	40.00	ppm	0.00
85) d12-Perylene	12.833	264	142652	40.00	ppm	0.00
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.323	112	96385	95.39	ppm	0.00
Spiked Amount 200.000	Range 10 - 105		Recovery = 47.70%			
7) SURR2,PHENOL-D6	3.879	99	83506	62.90	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 31.45%			
23) SURR4,NITROBENZENE-D5	4.489	82	82678	72.86	ppm	0.00
Spiked Amount 100.000	Range 37 - 117		Recovery = 72.86%			
43) SURR5,2-FLUOROBIPHENYL	5.724	172	189949	74.78	ppm	0.00
Spiked Amount 100.000	Range 39 - 119		Recovery = 74.78%			
60) SURR3,2,4,6-TRIBROMOPH...	6.778	330	77200	196.60	ppm	0.00
Spiked Amount 200.000	Range 28 - 157		Recovery = 98.30%			
79) SURR6,TERPHENYL-D14	8.639	244	209716	69.78	ppm	0.00
Spiked Amount 100.000	Range 40 - 133		Recovery = 69.78%			
Target Compounds						Qvalue
36) Caprolactam	5.275	113	374	1.16	ppm	# 53

(#) = qualifier out of range (m) = manual integration (+) = signals summed

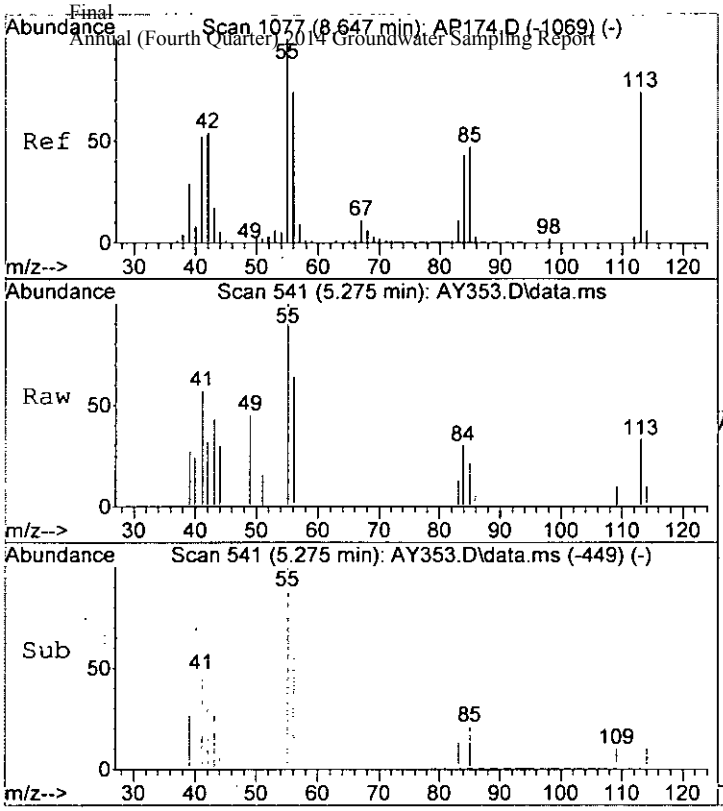
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY353.D
Acq On : 8 Oct 2014 4:06 pm
Operator : Z.Miao
Sample : R1407825-005|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 09 15:36:56 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration



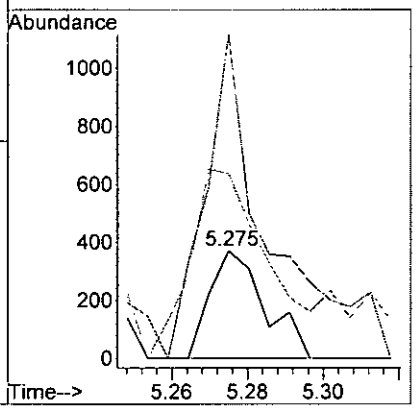
82701001D.M Thu Oct 09 15:37:38 2014 Page: 2



#36
Caprolactam
Concen: 1.16 ppm
RT: 5.275 min Scan# 541
Delta R.T. -0.005 min
Lab File: AY353.D
Acq: 8 Oct 2014 4:06 pm

Tgt Ion:113 Resp: 374

Ion	Ratio	Lower	Upper
113	100		
55	246.6	116.1	215.7#
41	109.2	61.2	113.6



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY353.D
Acq On : 8 Oct 2014 4:06 pm
Operator : Z.Miao
Sample : R1407825-005|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 8 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc
Hexasiloxane, t...	14.887	6.8	ppm	77483	6	12.833	454248	40.0
Heptasiloxane, ...	16.748	7.8	ppm	88133	6	12.833	454248	40.0

LSC Area Percent Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY353.D
Acq On : 8 Oct 2014 4:06 pm
Operator : Z.Miao
Sample : R1407825-005|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 25000 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Title : 8270 BNA ANALYSIS

Signal : TIC: AY353.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.323	172	176	185	rBV	400849	345241	54.14%	7.097%
2	3.879	277	280	291	rBV	276655	242699	38.06%	4.989%
3	4.130	323	327	331	rBV	247703	200284	31.41%	4.117%
4	4.489	391	394	400	rBV	317314	264490	41.47%	5.437%
5	4.981	482	486	490	rBV	357527	275782	43.25%	5.669%
6	5.724	621	625	628	rBV	791587	546804	85.74%	11.241%
7	6.211	713	716	720	rBV	409609	335625	52.63%	6.900%
8	6.778	818	822	828	rBV	749738	637712	100.00%	13.110%
9	7.275	911	915	921	rBV	483708	376921	59.11%	7.749%
10	8.639	1165	1170	1177	rBV	645926	599339	93.98%	12.321%
11	10.073	1430	1438	1449	rBV	288550	419658	65.81%	8.627%
12	12.827	1938	1953	1961	rBV2	209111	454248	71.23%	9.338%
13	14.887	2325	2338	2339	rBV5	31203	77483	12.15%	1.593%
14	16.748	2667	2686	2687	rBV9	26536	88133	13.82%	1.812%

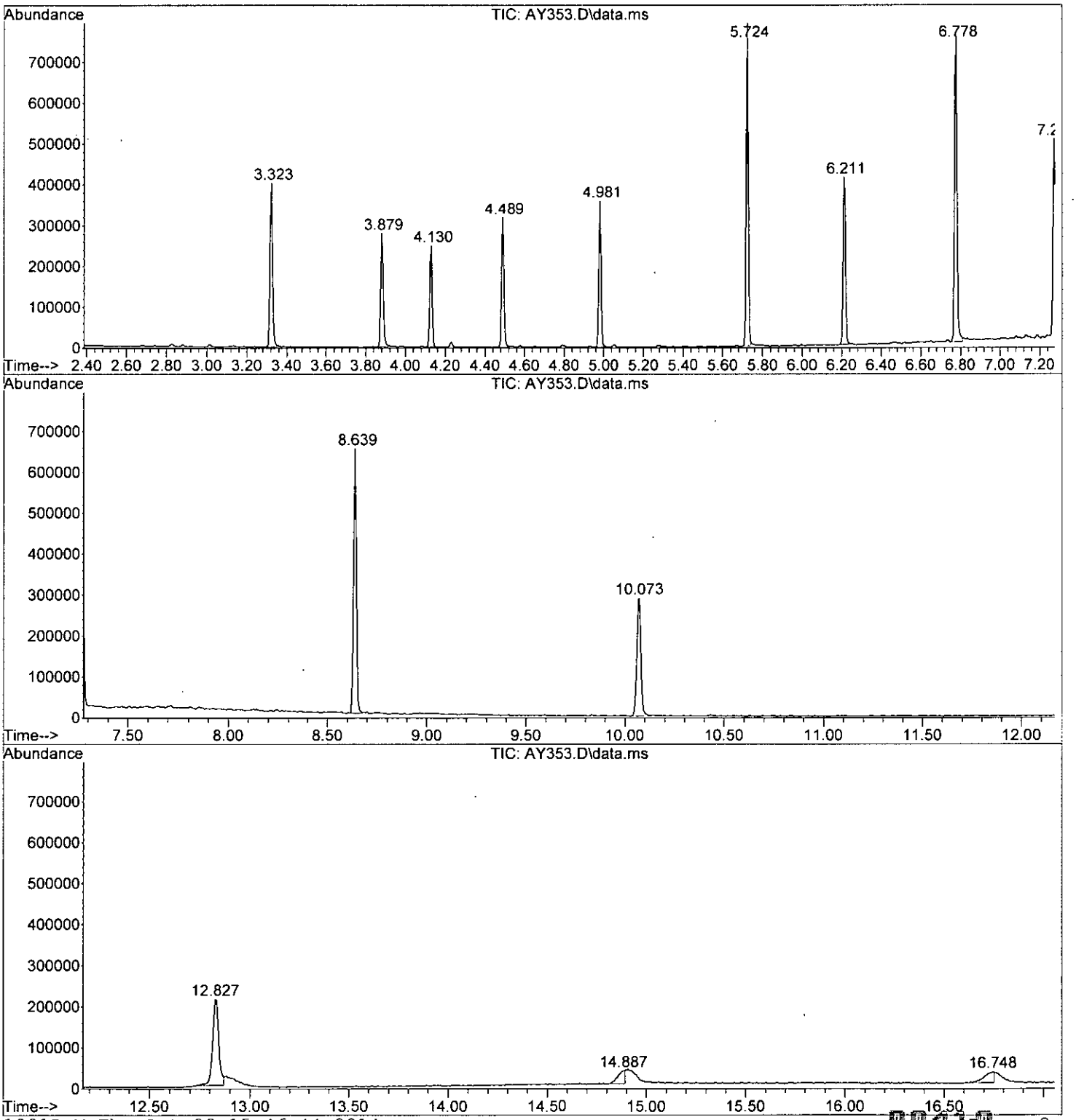
Sum of corrected areas: 4864419

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY353.D
Acq On : 8 Oct 2014 4:06 pm
Operator : Z.Miao
Sample : R1407825-005|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 8 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P



82701001D.M Thu Oct 09 15:46:44 2014 Page: 2

Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY353.D
Acq On : 8 Oct 2014 4:06 pm
Operator : Z.Miao
Sample : R1407825-005|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 8 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

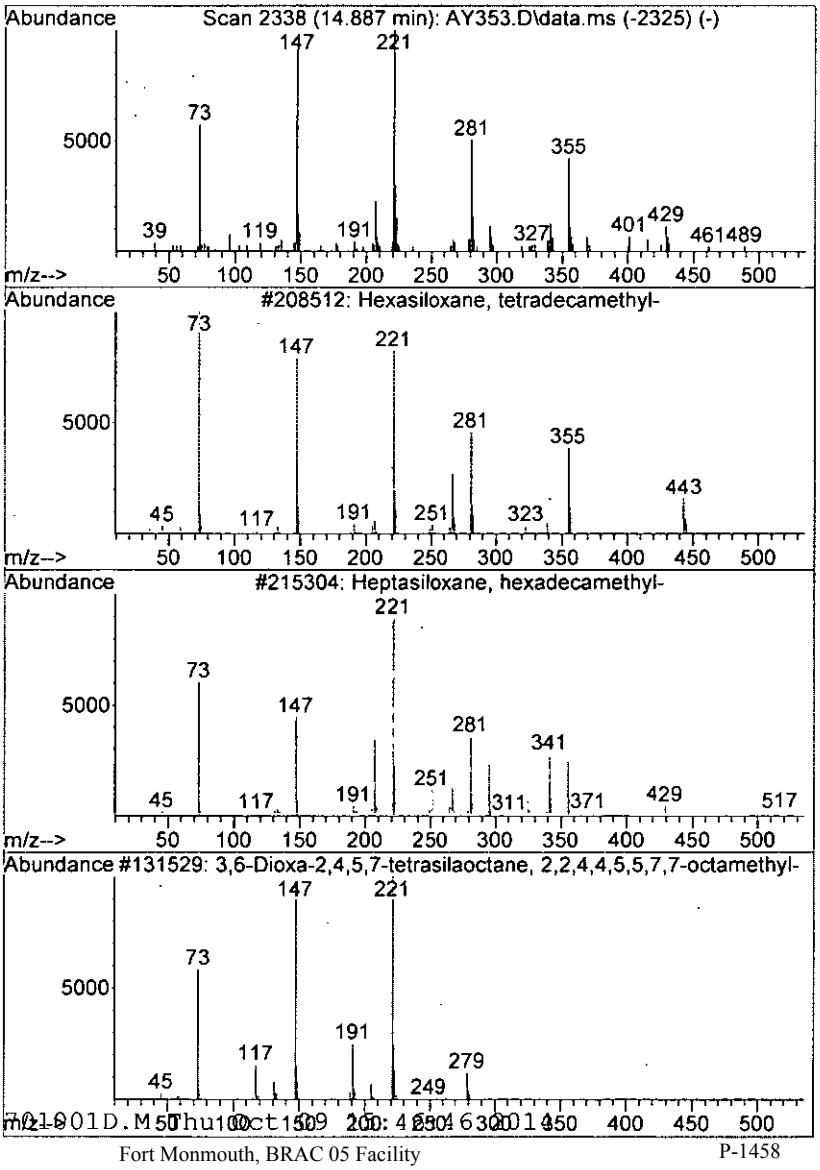
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

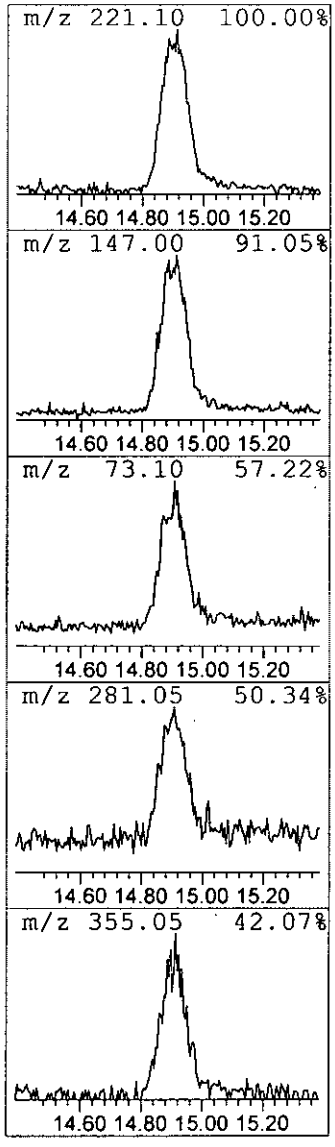
****

Peak Number 1 Hexasiloxane, tetradecamethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.887	6.82 ppm	77483	d12-Perylene	12.833

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexasiloxane, tetradecamethyl-	458	C14H42O5Si6	000107-52-8	86
2	Heptasiloxane, hexadecamethyl-	532	C16H48O6Si7	000541-01-5	72
3	3,6-Dioxa-2,4,5,7-tetrasilaoctan...	294	C10H30O2Si4	004342-25-0	47
4	N-Benzyl-N-ethyl-p-isopropylbenz...	281	C19H23NO	015089-22-2	27
5	Pentasiloxane, dodecamethyl-	384	C12H36O4Si5	000141-63-9	16





82701001D.M Thu Oct 09 20: 42: 46 2014 Page: 3

Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY353.D
Acq On : 8 Oct 2014 4:06 pm
Operator : Z.Miao
Sample : R1407825-005|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 8 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

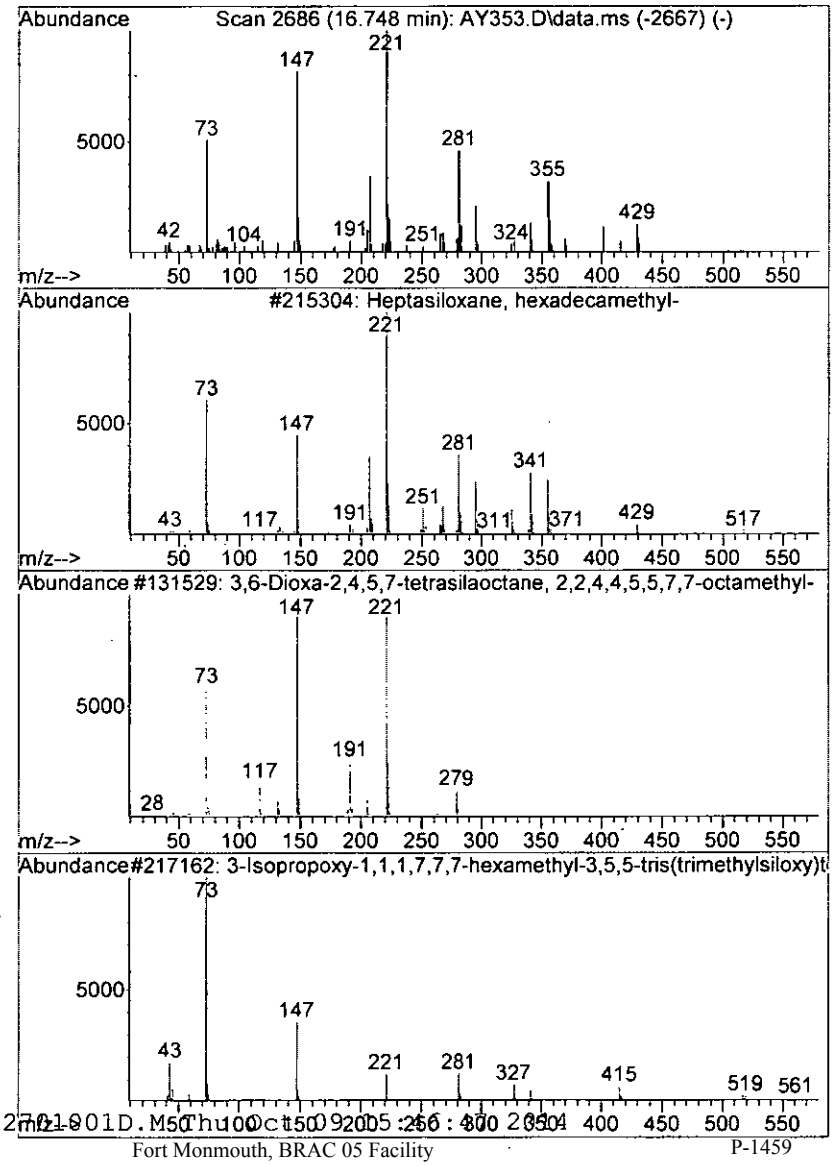
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

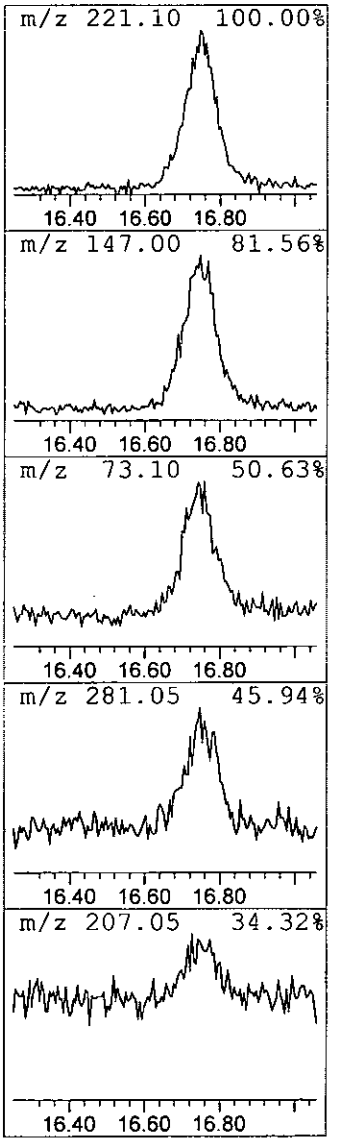
****

Peak Number 2 Heptasiloxane, hexadecamethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.748	7.76 ppm	88133	d12-Perylene	12.833

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptasiloxane, hexadecamethyl-	532	C16H48O6Si7	000541-01-5	80
2	3,6-Dioxa-2,4,5,7-tetrasilaoctan...	294	C10H30O2Si4	004342-25-0	38
3	3-Isopropoxy-1,1,1,7,7,7-hexamet...	576	C18H52O7Si7	071579-69-6	32
4	N-Benzyl-N-ethyl-p-isopropylbenz...	281	C19H23NO	015089-22-2	27
5	Trisiloxane, 1,1,1,5,5,5-hexamet...	384	C12H36O4Si5	003555-47-3	27





Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1110
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 17:25
Sample Name:	FTMM-66-GW-886RW06-10.12	**Units:**	µg/L
Lab Code:	R1407825-006	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:		**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
	1,2-Diphenylhydrazine/Azobenzene	ND	U	11	5.6	1.2	
120-82-1	1,2,4-Trichlorobenzene	ND	U	11	5.6	1.2	
95-50-1	1,2-Dichlorobenzene	ND	U	11	5.6	1.2	
541-73-1	1,3-Dichlorobenzene	ND	U	11	5.6	1.2	
106-46-7	1,4-Dichlorobenzene	ND	U	11	5.6	1.2	
95-95-4	2,4,5-Trichlorophenol	ND	U	11	5.6	2.0	
88-06-2	2,4,6-Trichlorophenol	ND	U	11	5.6	1.5	
120-83-2	2,4-Dichlorophenol	ND	U	11	5.6	1.4	
105-67-9	2,4-Dimethylphenol	ND	U	11	5.6	1.7	
51-28-5	2,4-Dinitrophenol	ND	U	56	28	22	
121-14-2	2,4-Dinitrotoluene	ND	U	11	5.6	1.8	
606-20-2	2,6-Dinitrotoluene	ND	U	11	5.6	2.0	
91-58-7	2-Chloronaphthalene	ND	U	11	5.6	1.2	
95-57-8	2-Chlorophenol	ND	U	11	5.6	1.2	
91-57-6	2-Methylnaphthalene	ND	U	11	5.6	1.2	
95-48-7	2-Methylphenol	ND	U	11	5.6	1.2	
88-74-4	2-Nitroaniline	ND	U	56	28	11	
88-75-5	2-Nitrophenol	ND	U	11	5.6	1.6	
91-94-1	3,3'-Dichlorobenzidine	ND	U	11	5.6	5.0	
	3- and 4-Methylphenol Coelution	ND	U	12	11	2.2	
99-09-2	3-Nitroaniline	ND	U	56	28	8.5	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	56	28	12	
101-55-3	4-Bromophenyl Phenyl Ether	ND	U	11	5.6	2.4	
59-50-7	4-Chloro-3-methylphenol	ND	U	11	5.6	1.3	
106-47-8	4-Chloroaniline	ND	U	11	5.6	1.6	
7005-72-3	4-Chlorophenyl Phenyl Ether	ND	U	11	5.6	1.3	
100-01-6	4-Nitroaniline	ND	U	56	28	8.7	
100-02-7	4-Nitrophenol	ND	U	56	28	6.5	
83-32-9	Acenaphthene	ND	U	11	5.6	1.2	
208-96-8	Acenaphthylene	ND	U	11	5.6	1.2	
120-12-7	Anthracene	ND	U	11	5.6	1.2	
56-55-3	Benz(a)anthracene	ND	U	11	5.6	1.2	
92-87-5	Benzidine	ND	U	120	110	100	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1110
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 17:25
Sample Name:	FTMM-66-GW-886RW06-10.12	**Units:**	µg/L
Lab Code:	R1407825-006	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY356.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
50-32-8	Benzo(a)pyrene	ND	U	11	5.6	1.2	
205-99-2	Benzo(b)fluoranthene	ND	U	11	5.6	1.2	
191-24-2	Benzo(g,h,i)perylene	ND	U	11	5.6	1.2	
207-08-9	Benzo(k)fluoranthene	ND	U	11	5.6	1.2	
100-51-6	Benzyl Alcohol	ND	U	11	5.6	1.5	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	U	11	5.6	1.2	
111-91-1	Bis(2-chloroethoxy)methane	ND	U	11	5.6	2.5	
111-44-4	Bis(2-chloroethyl) Ether	ND	U	11	5.6	1.5	
117-81-7	Bis(2-ethylhexyl) Phthalate	ND	U	11	5.6	1.4	
85-68-7	Butyl Benzyl Phthalate	ND	U	11	5.6	2.7	
86-74-8	Carbazole	ND	U	11	5.6	1.3	
218-01-9	Chrysene	ND	U	11	5.6	1.2	
84-74-2	Di-n-butyl Phthalate	ND	U	11	5.6	1.2	
117-84-0	Di-n-octyl Phthalate	ND	U	11	5.6	1.4	
53-70-3	Dibenz(a,h)anthracene	ND	U	11	5.6	1.4	
132-64-9	Dibenzofuran	ND	U	11	5.6	1.2	
84-66-2	Diethyl Phthalate	ND	U	11	5.6	1.2	
131-11-3	Dimethyl Phthalate	ND	U	11	5.6	1.2	
206-44-0	Fluoranthene	ND	U	11	5.6	1.2	
86-73-7	Fluorene	ND	U	11	5.6	1.2	
118-74-1	Hexachlorobenzene	ND	U	11	5.6	1.2	
87-68-3	Hexachlorobutadiene	ND	U	11	5.6	1.4	
77-47-4	Hexachlorocyclopentadiene	ND	U	11	5.6	1.2	
67-72-1	Hexachloroethane	ND	U	11	5.6	1.4	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	11	5.6	1.4	
78-59-1	Isophorone	ND	U	11	5.6	1.2	
621-64-7	N-Nitrosodi-n-propylamine	ND	U	11	5.6	1.5	
62-75-9	N-Nitrosodimethylamine	ND	U	11	5.6	1.2	
86-30-6	N-Nitrosodiphenylamine	ND	U	11	5.6	1.2	
91-20-3	Naphthalene	ND	U	11	5.6	1.2	
98-95-3	Nitrobenzene	ND	U	11	5.6	1.8	
87-86-5	Pentachlorophenol (PCP)	ND	U	56	28	7.7	
85-01-8	Phenanthrene	ND	U	11	5.6	1.2	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1110
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 17:25
Sample Name:	FTMM-66-GW-886RW06-10.12	**Units:**	µg/L
Lab Code:	R1407825-006	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY356.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-95-2	Phenol	ND	U	11	5.6	1.2	
129-00-0	Pyrene	ND	U	11	5.6	1.2	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	104	40-125	10/8/14 17:25	
2-Fluorobiphenyl	86	50-110	10/8/14 17:25	
2-Fluorophenol	51	20-110	10/8/14 17:25	
Nitrobenzene-d5	83	40-110	10/8/14 17:25	
Phenol-d6	33	10-115	10/8/14 17:25	
p-Terphenyl-d14	101	50-135	10/8/14 17:25	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/3/14
Sample Matrix:	Water	**Date Received:**	10/4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 1725

Tentatively Identified Compounds (TIC)
Semivolatile Organic Compounds by GC/MS

Sample Name:	FTMM-66-GW-886RW06-10.12	**Units:**	µg/L
Lab Code:	R1407825-006	**Basis:**	NA

Prep Method: EPA 3510C
Analytical Method: 8270D

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY356.D
Acq On : 8 Oct 2014 5:25 pm
Operator : Z.Miao
Sample : R1407825-006|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 09 15:40:39 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

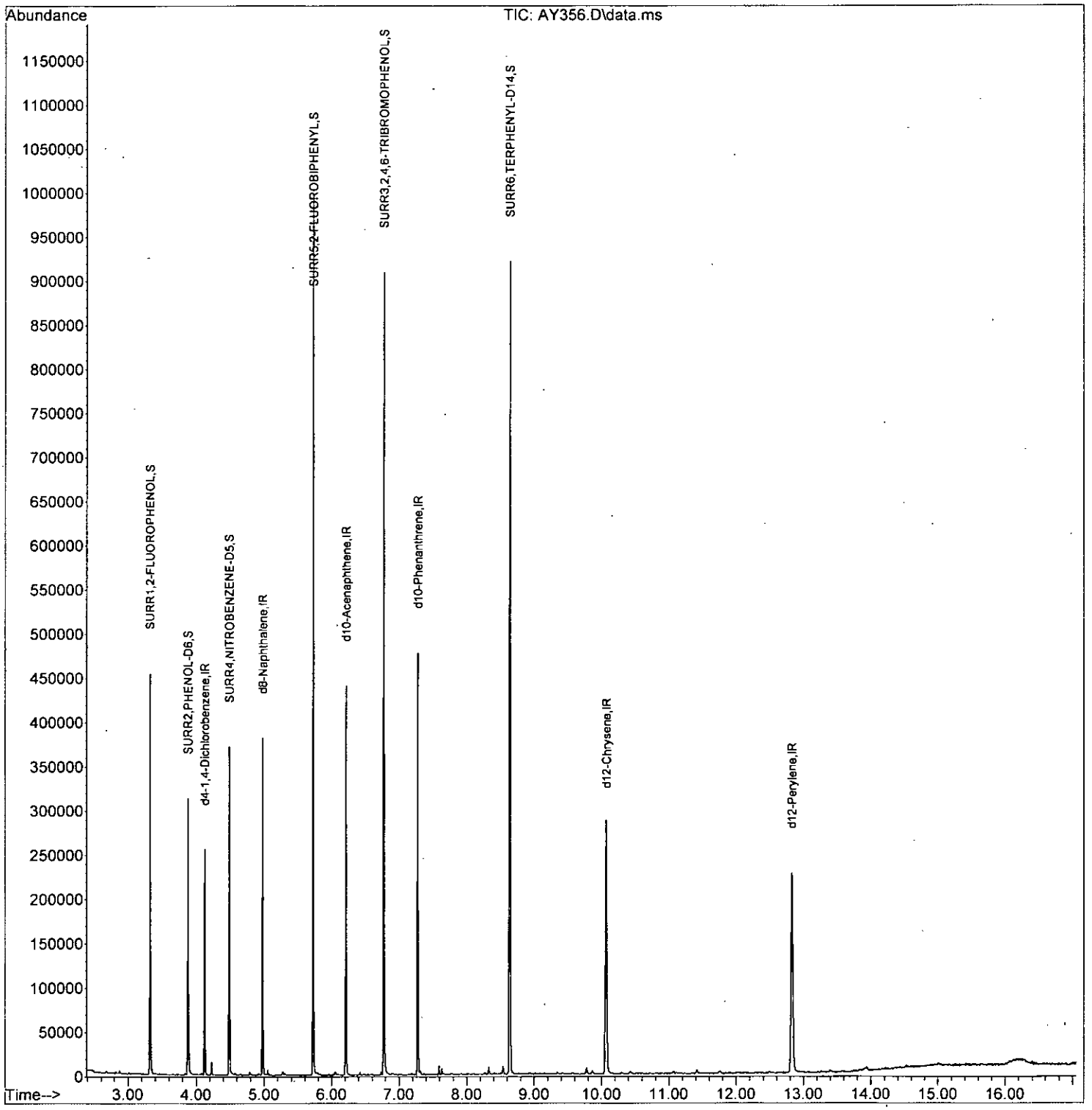
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.130	152	35154	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	138632	40.00	ppm	0.00
39) d10-Acenaphthene	6.216	164	86772	40.00	ppm	0.00
61) d10-Phenanthrene	7.275	188	146510	40.00	ppm	0.00
76) d12-Chrysene	10.073	240	154025	40.00	ppm	0.00
85) d12-Perylene	12.827	264	155244	40.00	ppm	0.00
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.323	112	110412	101.43	ppm	0.00
Spiked Amount 200.000	Range 10 - 105		Recovery = 50.71%			
7) SURR2,PHENOL-D6	3.879	99	95102	66.49	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 33.24%			
23) SURR4,NITROBENZENE-D5	4.489	82	99282	82.80	ppm	0.00
Spiked Amount 100.000	Range 37 - 117		Recovery = 82.80%			
43) SURR5,2-FLUOROBIPHENYL	5.724	172	239366	86.11	ppm	0.00
Spiked Amount 100.000	Range 39 - 119		Recovery = 86.11%			
60) SURR3,2,4,6-TRIBROMOPH...	6.778	330	89520	208.33	ppm	0.00
Spiked Amount 200.000	Range 28 - 157		Recovery = 104.16%			
79) SURR6,TERPHENYL-D14	8.639	244	308858	101.04	ppm	0.00
Spiked Amount 100.000	Range 40 - 133		Recovery = 101.04%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY356.D
Acq On : 8 Oct 2014 5:25 pm
Operator : Z.Miao
Sample : R1407825-006|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 09 15:40:39 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY356.D
Acq On : 8 Oct 2014 5:25 pm
Operator : Z.Miao
Sample : R1407825-006|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

LSC Area Percent Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY356.D
Acq On : 8 Oct 2014 5:25 pm
Operator : Z.Miao
Sample : R1407825-006|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 25000 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Title : 8270 BNA ANALYSIS

Signal : TIC: AY356.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.323	172	176	184	rVB	452041	384171	43.43%	7.195%
2	3.879	277	280	290	rBV	311843	274322	31.01%	5.137%
3	4.130	323	327	336	rVB	254876	211173	23.87%	3.955%
4	4.489	390	394	399	rBV	370154	317653	35.91%	5.949%
5	4.981	482	486	490	rBV	380757	288647	32.63%	5.406%
6	5.724	622	625	629	rBV	989230	678707	76.73%	12.711%
7	6.216	711	717	720	rBV	440008	360709	40.78%	6.755%
8	6.778	818	822	832	rBV	908490	736065	83.22%	13.785%
9	7.275	911	915	921	rBV	477272	373025	42.17%	6.986%
10	8.639	1165	1170	1175	rBV	919283	884514	100.00%	16.565%
11	10.067	1431	1437	1449	rBV	286535	414338	46.84%	7.760%
12	12.827	1945	1953	1965	rBV	224897	416369	47.07%	7.798%

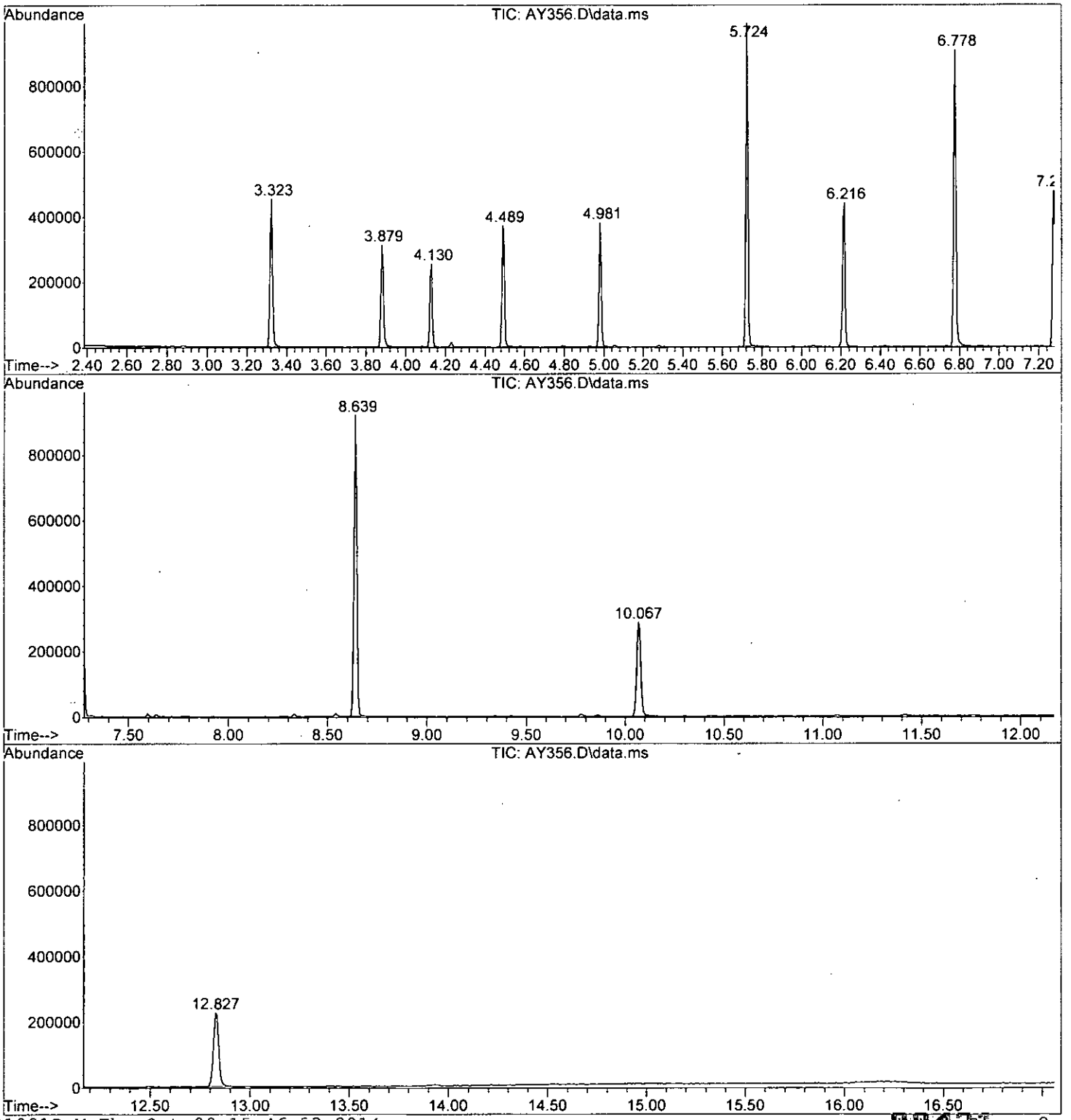
Sum of corrected areas: 5339693

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY356.D
Acq On : 8 Oct 2014 5:25 pm
Operator : Z.Miao
Sample : R1407825-006|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P



82701001D.M Thu Oct 09 15:46:53 2014 Page: 2

Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY356.D
Acq On : 8 Oct 2014 5:25 pm
Operator : Z.Miao
Sample : R1407825-006|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

No Library Search Compounds Detected
****

00422

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1200
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 17:51
Sample Name:	FTMM-66-GW-886RW106-10.12	**Units:**	µg/L
Lab Code:	R1407825-007	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:		**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
	1,2-Diphenylhydrazine/Azobenzene	ND	U	11	5.6	1.2	
120-82-1	1,2,4-Trichlorobenzene	ND	U	11	5.6	1.2	
95-50-1	1,2-Dichlorobenzene	ND	U	11	5.6	1.2	
541-73-1	1,3-Dichlorobenzene	ND	U	11	5.6	1.2	
106-46-7	1,4-Dichlorobenzene	ND	U	11	5.6	1.2	
95-95-4	2,4,5-Trichlorophenol	ND	U	11	5.6	2.0	
88-06-2	2,4,6-Trichlorophenol	ND	U	11	5.6	1.5	
120-83-2	2,4-Dichlorophenol	ND	U	11	5.6	1.4	
105-67-9	2,4-Dimethylphenol	ND	U	11	5.6	1.7	
51-28-5	2,4-Dinitrophenol	ND	U	56	28	22	
121-14-2	2,4-Dinitrotoluene	ND	U	11	5.6	1.8	
606-20-2	2,6-Dinitrotoluene	ND	U	11	5.6	2.0	
91-58-7	2-Chloronaphthalene	ND	U	11	5.6	1.2	
95-57-8	2-Chlorophenol	ND	U	11	5.6	1.2	
91-57-6	2-Methylnaphthalene	ND	U	11	5.6	1.2	
95-48-7	2-Methylphenol	ND	U	11	5.6	1.2	
88-74-4	2-Nitroaniline	ND	U	56	28	11	
88-75-5	2-Nitrophenol	ND	U	11	5.6	1.6	
91-94-1	3,3'-Dichlorobenzidine	ND	U	11	5.6	5.0	
	3- and 4-Methylphenol Coelution	ND	U	12	11	2.2	
99-09-2	3-Nitroaniline	ND	U	56	28	8.5	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	56	28	12	
101-55-3	4-Bromophenyl Phenyl Ether	ND	U	11	5.6	2.4	
59-50-7	4-Chloro-3-methylphenol	ND	U	11	5.6	1.3	
106-47-8	4-Chloroaniline	ND	U	11	5.6	1.6	
7005-72-3	4-Chlorophenyl Phenyl Ether	ND	U	11	5.6	1.3	
100-01-6	4-Nitroaniline	ND	U	56	28	8.7	
100-02-7	4-Nitrophenol	ND	U	56	28	6.5	
83-32-9	Acenaphthene	ND	U	11	5.6	1.2	
208-96-8	Acenaphthylene	ND	U	11	5.6	1.2	
120-12-7	Anthracene	ND	U	11	5.6	1.2	
56-55-3	Benz(a)anthracene	ND	U	11	5.6	1.2	
92-87-5	Benzidine	ND	U	120	110	100	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1200
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 17:51
Sample Name:	FTMM-66-GW-886RW106-10.12	**Units:**	µg/L
Lab Code:	R1407825-007	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY357.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
50-32-8	Benzo(a)pyrene	ND	U	11	5.6	1.2	
205-99-2	Benzo(b)fluoranthene	ND	U	11	5.6	1.2	
191-24-2	Benzo(g,h,i)perylene	ND	U	11	5.6	1.2	
207-08-9	Benzo(k)fluoranthene	ND	U	11	5.6	1.2	
100-51-6	Benzyl Alcohol	ND	U	11	5.6	1.5	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	U	11	5.6	1.2	
111-91-1	Bis(2-chloroethoxy)methane	ND	U	11	5.6	2.5	
111-44-4	Bis(2-chloroethyl) Ether	ND	U	11	5.6	1.5	
117-81-7	Bis(2-ethylhexyl) Phthalate	ND	U	11	5.6	1.4	
85-68-7	Butyl Benzyl Phthalate	ND	U	11	5.6	2.7	
86-74-8	Carbazole	ND	U	11	5.6	1.3	
218-01-9	Chrysene	ND	U	11	5.6	1.2	
84-74-2	Di-n-butyl Phthalate	ND	U	11	5.6	1.2	
117-84-0	Di-n-octyl Phthalate	ND	U	11	5.6	1.4	
53-70-3	Dibenz(a,h)anthracene	ND	U	11	5.6	1.4	
132-64-9	Dibenzofuran	ND	U	11	5.6	1.2	
84-66-2	Diethyl Phthalate	ND	U	11	5.6	1.2	
131-11-3	Dimethyl Phthalate	ND	U	11	5.6	1.2	
206-44-0	Fluoranthene	ND	U	11	5.6	1.2	
86-73-7	Fluorene	ND	U	11	5.6	1.2	
118-74-1	Hexachlorobenzene	ND	U	11	5.6	1.2	
87-68-3	Hexachlorobutadiene	ND	U	11	5.6	1.4	
77-47-4	Hexachlorocyclopentadiene	ND	U	11	5.6	1.2	
67-72-1	Hexachloroethane	ND	U	11	5.6	1.4	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	11	5.6	1.4	
78-59-1	Isophorone	ND	U	11	5.6	1.2	
621-64-7	N-Nitrosodi-n-propylamine	ND	U	11	5.6	1.5	
62-75-9	N-Nitrosodimethylamine	ND	U	11	5.6	1.2	
86-30-6	N-Nitrosodiphenylamine	ND	U	11	5.6	1.2	
91-20-3	Naphthalene	ND	U	11	5.6	1.2	
98-95-3	Nitrobenzene	ND	U	11	5.6	1.8	
87-86-5	Pentachlorophenol (PCP)	ND	U	56	28	7.7	
85-01-8	Phenanthrene	ND	U	11	5.6	1.2	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1200
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 17:51
Sample Name:	FTMM-66-GW-886RW106-10.12	**Units:**	µg/L
Lab Code:	R1407825-007	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY357.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-95-2	Phenol	ND	U	11	5.6	1.2	
129-00-0	Pyrene	ND	U	11	5.6	1.2	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	104	40-125	10/8/14 17:51	
2-Fluorobiphenyl	86	50-110	10/8/14 17:51	
2-Fluorophenol	49	20-110	10/8/14 17:51	
Nitrobenzene-d5	80	40-110	10/8/14 17:51	
Phenol-d6	32	10-115	10/8/14 17:51	
p-Terphenyl-d14	95	50-135	10/8/14 17:51	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/3/14
Sample Matrix:	Water	**Date Received:**	10/4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 1751

Tentatively Identified Compounds (TIC)
Semivolatile Organic Compounds by GC/MS

Sample Name:	FTMM-66-GW-886RW106-10.12	**Units:**	µg/L
Lab Code:	R1407825-007	**Basis:**	NA

Prep Method: EPA 3510C
Analytical Method: 8270D

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY357.D
Acq On : 8 Oct 2014 5:51 pm
Operator : Z.Miao
Sample : R1407825-007|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 09 15:42:05 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

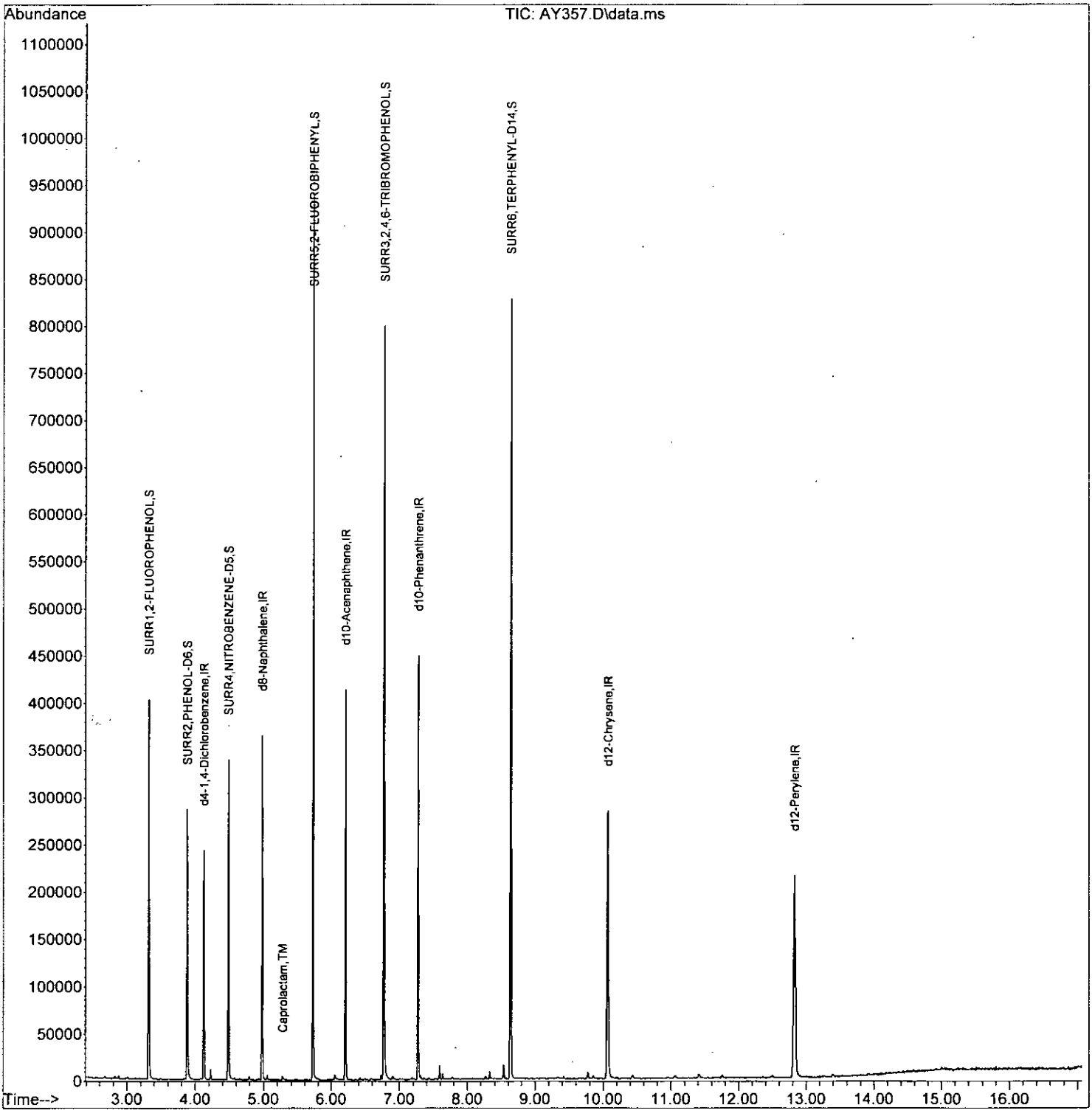
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.130	152	33234	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	131745	40.00	ppm	0.00
39) d10-Acenaphthene	6.211	164	79583	40.00	ppm	0.00
61) d10-Phenanthrene	7.275	188	142717	40.00	ppm	0.00
76) d12-Chrysene	10.073	240	152273	40.00	ppm	0.00
85) d12-Perylene	12.827	264	151058	40.00	ppm	0.00
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.323	112	100231	97.39	ppm	0.00
Spiked Amount 200.000	Range 10 - 105		Recovery = 48.70%			
7) SURR2,PHENOL-D6	3.879	99	85372	63.14	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 31.57%			
23) SURR4,NITROBENZENE-D5	4.489	82	91441	80.25	ppm	0.00
Spiked Amount 100.000	Range 37 - 117		Recovery = 80.25%			
43) SURR5,2-FLUOROBIPHENYL	5.724	172	219807	86.22	ppm	0.00
Spiked Amount 100.000	Range 39 - 119		Recovery = 86.22%			
60) SURR3,2,4,6-TRIBROMOPH...	6.778	330	82185	208.54	ppm	0.00
Spiked Amount 200.000	Range 28 - 157		Recovery = 104.27%			
79) SURR6,TERPHENYL-D14	8.639	244	287852	95.25	ppm	0.00
Spiked Amount 100.000	Range 40 - 133		Recovery = 95.25%			
Target Compounds						Qvalue
36) Caprolactam	5.280	113	513	1.58	ppm	# 63

(#) = qualifier out of range (m) = manual integration (+) = signals summed

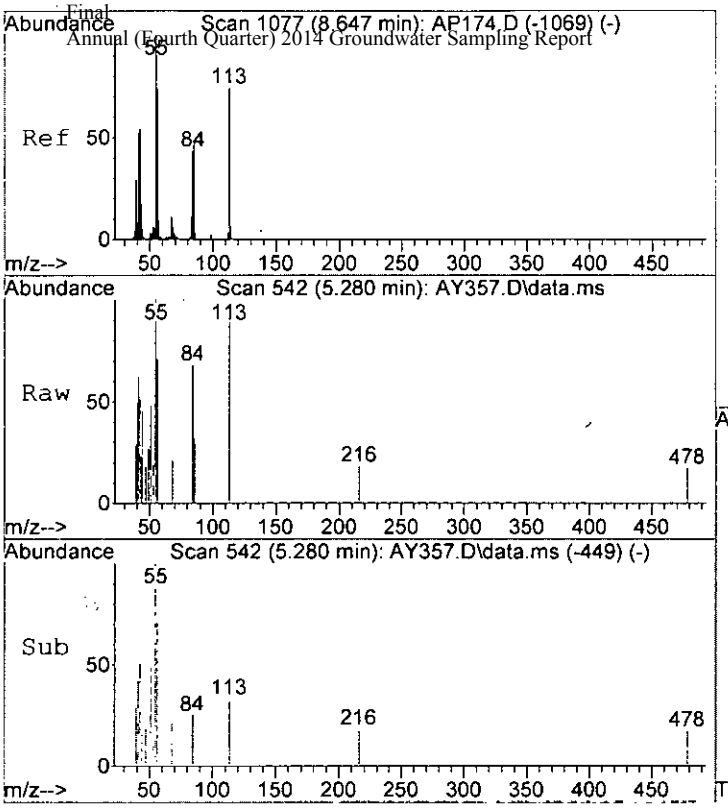
Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY357.D
Acq On : 8 Oct 2014 5:51 pm
Operator : Z.Miao
Sample : R1407825-007|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 09 15:42:05 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration



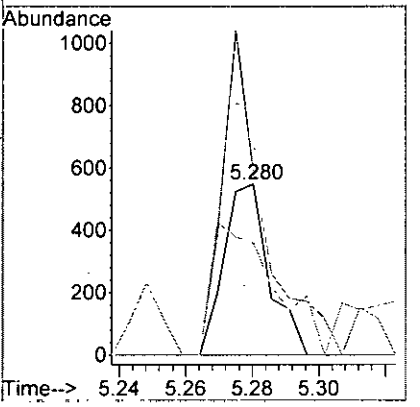
82701001D.M Thu Oct 09 15:43:07 2014 Page: 2



#36
Caprolactam
Concen: 1.58 ppm
RT: 5.280 min Scan# 542
Delta R.T. -0.000 min
Lab File: AY357.D
Acq: 8 Oct 2014 5:51 pm

Tgt Ion:113 Resp: 513

Ion	Ratio	Lower	Upper
113	100		
55	106.8	116.1	215.7#
41	65.7	61.2	113.6



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY357.D
Acq On : 8 Oct 2014 5:51 pm
Operator : Z.Miao
Sample : R1407825-007|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 12 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

LSC Area Percent Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY357.D
Acq On : 8 Oct 2014 5:51 pm
Operator : Z.Miao
Sample : R1407825-007|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 25000 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Title : 8270 BNA ANALYSIS

Signal : TIC: AY357.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.323	172	176	186	rBV	401451	355377	43.15%	7.045%
2	3.879	277	280	290	rBV	285356	249221	30.26%	4.941%
3	4.130	323	327	337	rVB	242345	202761	24.62%	4.020%
4	4.489	390	394	402	rBV	339157	295756	35.91%	5.863%
5	4.981	482	486	490	rBV	364616	273975	33.26%	5.432%
6	5.724	622	625	628	rBV	931066	628944	76.36%	12.469%
7	6.211	713	716	723	rVB	412921	339598	41.23%	6.733%
8	6.778	818	822	837	rBV	798320	688182	83.55%	13.643%
9	7.275	911	915	921	rBV	448792	359444	43.64%	7.126%
10	8.639	1165	1170	1181	rBV	826744	823641	100.00%	16.329%
11	10.073	1431	1438	1447	rBV	283063	406706	49.38%	8.063%
12	12.827	1944	1953	1966	rBV2	213711	420437	51.05%	8.335%

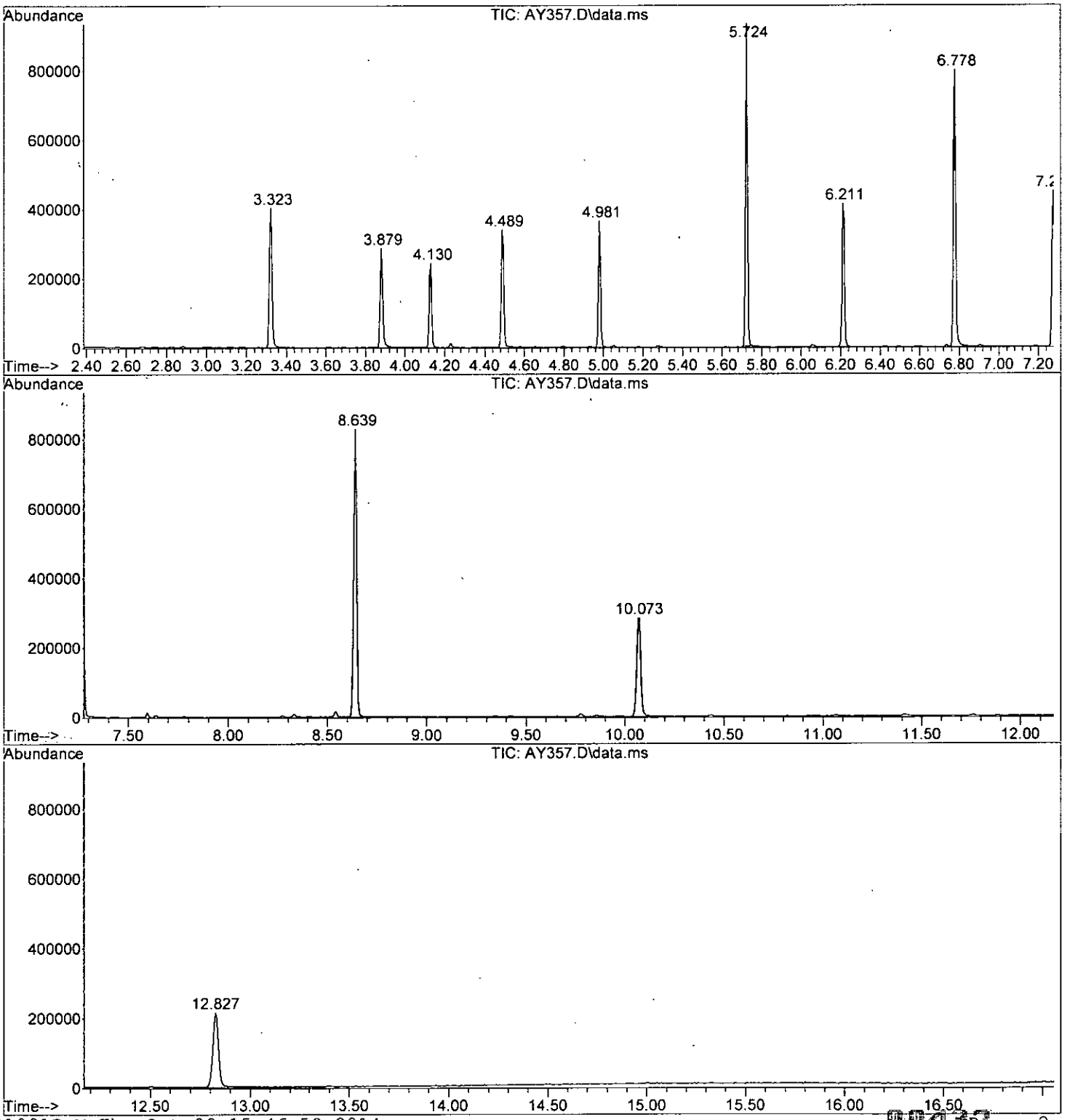
Sum of corrected areas: 5044042

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY357.D
Acq On : 8 Oct 2014 5:51 pm
Operator : Z.Miao
Sample : R1407825-007|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 12 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P



82701001D.M Thu Oct 09 15:46:59 2014 Page: 2

Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY357.D
Acq On : 8 Oct 2014 5:51 pm
Operator : Z.Miao
Sample : R1407825-007|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 12 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

No Library Search Compounds Detected
****

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1000
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 18:16
Sample Name:	FTMM-66-GW-886RW08-11.22	**Units:**	µg/L
Lab Code:	R1407825-008	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:		**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
	1,2-Diphenylhydrazine/Azobenzene	ND	U	11	5.6	1.2	
120-82-1	1,2,4-Trichlorobenzene	ND	U	11	5.6	1.2	
95-50-1	1,2-Dichlorobenzene	ND	U	11	5.6	1.2	
541-73-1	1,3-Dichlorobenzene	ND	U	11	5.6	1.2	
106-46-7	1,4-Dichlorobenzene	ND	U	11	5.6	1.2	
95-95-4	2,4,5-Trichlorophenol	ND	U	11	5.6	2.0	
88-06-2	2,4,6-Trichlorophenol	ND	U	11	5.6	1.5	
120-83-2	2,4-Dichlorophenol	ND	U	11	5.6	1.4	
105-67-9	2,4-Dimethylphenol	ND	U	11	5.6	1.7	
51-28-5	2,4-Dinitrophenol	ND	U	56	28	22	
121-14-2	2,4-Dinitrotoluene	ND	U	11	5.6	1.8	
606-20-2	2,6-Dinitrotoluene	ND	U	11	5.6	2.0	
91-58-7	2-Chloronaphthalene	ND	U	11	5.6	1.2	
95-57-8	2-Chlorophenol	ND	U	11	5.6	1.2	
91-57-6	2-Methylnaphthalene	ND	U	11	5.6	1.2	
95-48-7	2-Methylphenol	ND	U	11	5.6	1.2	
88-74-4	2-Nitroaniline	ND	U	56	28	11	
88-75-5	2-Nitrophenol	ND	U	11	5.6	1.6	
91-94-1	3,3'-Dichlorobenzidine	ND	U	11	5.6	5.0	
	3- and 4-Methylphenol Coelution	ND	U	12	11	2.2	
99-09-2	3-Nitroaniline	ND	U	56	28	8.5	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	56	28	12	
101-55-3	4-Bromophenyl Phenyl Ether	ND	U	11	5.6	2.4	
59-50-7	4-Chloro-3-methylphenol	ND	U	11	5.6	1.3	
106-47-8	4-Chloroaniline	ND	U	11	5.6	1.6	
7005-72-3	4-Chlorophenyl Phenyl Ether	ND	U	11	5.6	1.3	
100-01-6	4-Nitroaniline	ND	U	56	28	8.7	
100-02-7	4-Nitrophenol	ND	U	56	28	6.5	
83-32-9	Acenaphthene	ND	U	11	5.6	1.2	
208-96-8	Acenaphthylene	ND	U	11	5.6	1.2	
120-12-7	Anthracene	ND	U	11	5.6	1.2	
56-55-3	Benz(a)anthracene	ND	U	11	5.6	1.2	
92-87-5	Benzidine	ND	U	120	110	100	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1000
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 18:16
Sample Name:	FTMM-66-GW-886RW08-11.22	**Units:**	µg/L
Lab Code:	R1407825-008	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY358.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
50-32-8	Benzo(a)pyrene	ND	U	11	5.6	1.2	
205-99-2	Benzo(b)fluoranthene	ND	U	11	5.6	1.2	
191-24-2	Benzo(g,h,i)perylene	ND	U	11	5.6	1.2	
207-08-9	Benzo(k)fluoranthene	ND	U	11	5.6	1.2	
100-51-6	Benzyl Alcohol	ND	U	11	5.6	1.5	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	U	11	5.6	1.2	
111-91-1	Bis(2-chloroethoxy)methane	ND	U	11	5.6	2.5	
111-44-4	Bis(2-chloroethyl) Ether	ND	U	11	5.6	1.5	
117-81-7	Bis(2-ethylhexyl) Phthalate	ND	U	11	5.6	1.4	
85-68-7	Butyl Benzyl Phthalate	ND	U	11	5.6	2.7	
86-74-8	Carbazole	ND	U	11	5.6	1.3	
218-01-9	Chrysene	ND	U	11	5.6	1.2	
84-74-2	Di-n-butyl Phthalate	ND	U	11	5.6	1.2	
117-84-0	Di-n-octyl Phthalate	ND	U	11	5.6	1.4	
53-70-3	Dibenz(a,h)anthracene	ND	U	11	5.6	1.4	
132-64-9	Dibenzofuran	ND	U	11	5.6	1.2	
84-66-2	Diethyl Phthalate	ND	U	11	5.6	1.2	
131-11-3	Dimethyl Phthalate	ND	U	11	5.6	1.2	
206-44-0	Fluoranthene	ND	U	11	5.6	1.2	
86-73-7	Fluorene	ND	U	11	5.6	1.2	
118-74-1	Hexachlorobenzene	ND	U	11	5.6	1.2	
87-68-3	Hexachlorobutadiene	ND	U	11	5.6	1.4	
77-47-4	Hexachlorocyclopentadiene	ND	U	11	5.6	1.2	
67-72-1	Hexachloroethane	ND	U	11	5.6	1.4	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	11	5.6	1.4	
78-59-1	Isophorone	ND	U	11	5.6	1.2	
621-64-7	N-Nitrosodi-n-propylamine	ND	U	11	5.6	1.5	
62-75-9	N-Nitrosodimethylamine	ND	U	11	5.6	1.2	
86-30-6	N-Nitrosodiphenylamine	ND	U	11	5.6	1.2	
91-20-3	Naphthalene	ND	U	11	5.6	1.2	
98-95-3	Nitrobenzene	ND	U	11	5.6	1.8	
87-86-5	Pentachlorophenol (PCP)	ND	U	56	28	7.7	
85-01-8	Phenanthrene	ND	U	11	5.6	1.2	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1000
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 18:16
Sample Name:	FTMM-66-GW-886RW08-11.22	**Units:**	µg/L
Lab Code:	R1407825-008	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY358.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-95-2	Phenol	ND	U	11	5.6	1.2	
129-00-0	Pyrene	ND	U	11	5.6	1.2	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	116	40-125	10/8/14 18:16	
2-Fluorobiphenyl	83	50-110	10/8/14 18:16	
2-Fluorophenol	50	20-110	10/8/14 18:16	
Nitrobenzene-d5	81	40-110	10/8/14 18:16	
Phenol-d6	33	10-115	10/8/14 18:16	
p-Terphenyl-d14	82	50-135	10/8/14 18:16	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/3/14
Date Received: 10/4/14
Date Extracted: 10/7/14
Date Analyzed: 10/8/14 1816

Tentatively Identified Compounds (TIC)
Semivolatile Organic Compounds by GC/MS

Sample Name: FTMM-66-GW-886RW08-11.22
Lab Code: R1407825-008

Units: µg/L
Basis: NA

Prep Method: EPA 3510C
Analytical Method: 8270D

CAS #	Analyte Name	RT	Result	Q
	unknown	10.30	5.6	J
	unknown	11.12	6.4	J
	unknown	12.03	6.1	J
	unknown	12.98	6.0	J
	unknown	13.84	6.0	J
	unknown	14.53	6.0	J
	unknown	15.26	4.9	J
	unknown	16.10	5.4	J

Comments:

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY358.D
Acq On : 8 Oct 2014 6:16 pm
Operator : Z.Miao
Sample : R1407825-008|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 09 15:43:31 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.130	152	32383	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	130882	40.00	ppm	0.00
39) d10-Acenaphthene	6.216	164	79118	40.00	ppm	0.00
61) d10-Phenanthrene	7.275	188	151566	40.00	ppm	0.00
76) d12-Chrysene	10.067	240	159593	40.00	ppm	0.00
85) d12-Perylene	12.827	264	152605	40.00	ppm	0.00
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.323	112	99490	99.21	ppm	0.00
Spiked Amount 200.000	Range 10 - 105		Recovery = 49.60%			
7) SURR2,PHENOL-D6	3.879	99	86231	65.45	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 32.73%			
23) SURR4,NITROBENZENE-D5	4.489	82	92028	81.30	ppm	0.00
Spiked Amount 100.000	Range 37 - 117		Recovery = 81.30%			
43) SURR5,2-FLUOROBIPHENYL	5.724	172	210181	82.93	ppm	0.00
Spiked Amount 100.000	Range 39 - 119		Recovery = 82.93%			
60) SURR3,2,4,6-TRIBROMOPH...	6.778	330	90668	231.42	ppm	0.00
Spiked Amount 200.000	Range 28 - 157		Recovery = 115.71%			
79) SURR6,TERPHENYL-D14	8.639	244	258849	81.72	ppm	0.00
Spiked Amount 100.000	Range 40 - 133		Recovery = 81.72%			
Target Compounds						Qvalue

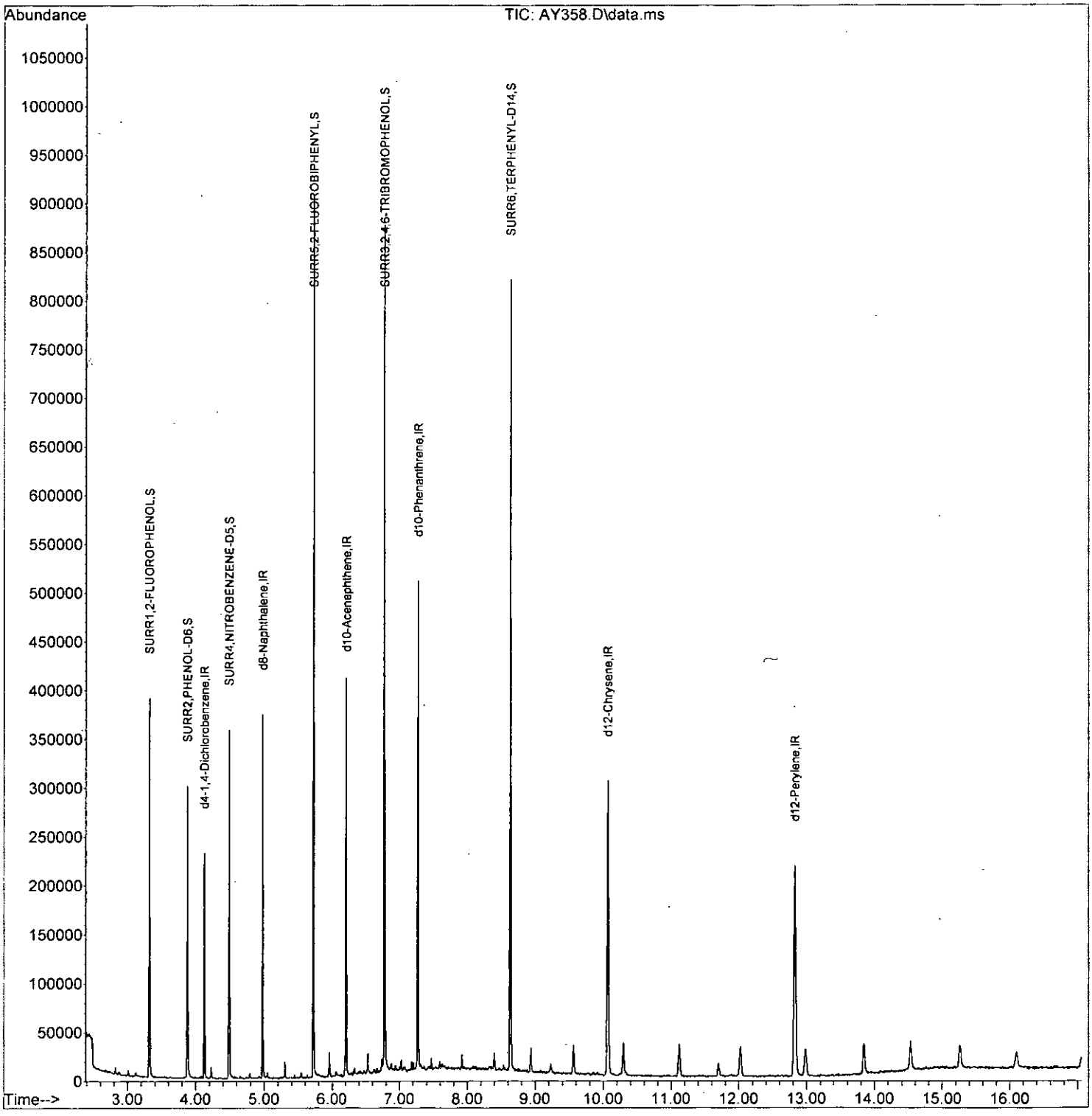
(#) = qualifier out of range (m) = manual integration (+) = signals summed

00438

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY358.D
Acq On : 8 Oct 2014 6:16 pm
Operator : Z.Miao
Sample : R1407825-008|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 09 15:43:31 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration



82701001D.M Thu Oct 09 15:44:34 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY358.D
Acq On : 8 Oct 2014 6:16 pm
Operator : Z.Miao
Sample : R1407825-008|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc
Heptasiloxane, ...	10.297	5.0	ppm	54263	5	10.067	431041	40.0
Hexasiloxane, t...	11.121	5.8	ppm	62092	5	10.067	431041	40.0
Hexasiloxane, t...	12.025	5.5	ppm	58006	6	12.827	423726	40.0
Pentasiloxane, ...	12.982	5.4	ppm	57444	6	12.827	423726	40.0
N-Benzyl-N-ethy...	13.844	5.4	ppm	57666	6	12.827	423726	40.0
Acetamide, 2-(5...	14.528	5.4	ppm	57436	6	12.827	423726	40.0
Heptasiloxane, ...	15.261	4.4	ppm	46398	6	12.827	423726	40.0
Hexasiloxane, t...	16.101	4.9	ppm	51632	6	12.827	423726	40.0

LSC Area Percent Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY358.D
Acq On : 8 Oct 2014 6:16 pm
Operator : Z.Miao
Sample : R1407825-008¦1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 25000 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Title : 8270 BNA ANALYSIS

Signal : TIC: AY358.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.323	172	176	183	rBV	386935	349836	46.19%	6.258%
2	3.879	276	280	290	rVB	297414	247443	32.67%	4.426%
3	4.130	323	327	338	rVB	230785	200791	26.51%	3.592%
4	4.489	390	394	399	rBV	356471	298744	39.44%	5.344%
5	4.981	482	486	490	rBV	372278	272712	36.00%	4.878%
6	5.724	621	625	628	rBV	900308	621347	82.03%	11.114%
7	6.211	713	716	720	rVB	401799	330708	43.66%	5.915%
8	6.778	818	822	836	rVB	866946	743972	98.22%	13.307%
9	7.275	911	915	920	rVB	497092	375046	49.51%	6.708%
10	8.639	1165	1170	1182	rVB	811558	757456	100.00%	13.549%
11	8.939	1222	1226	1231	rVB	24433	25196	3.33%	0.451%
12	9.565	1338	1343	1349	rBV2	30254	41895	5.53%	0.749%
13	10.067	1430	1437	1446	rBV	300644	431041	56.91%	7.710%
14	10.297	1475	1480	1489	rVB2	32962	54263	7.16%	0.971%
15	11.121	1627	1634	1643	rBV	33557	62092	8.20%	1.111%
16	11.699	1736	1742	1751	rBV2	14164	25816	3.41%	0.462%
17	12.025	1796	1803	1811	rVB	29984	58006	7.66%	1.038%
18	12.827	1944	1953	1967	rBV	215390	423726	55.94%	7.579%
19	12.982	1976	1982	1991	rVB3	27346	57444	7.58%	1.027%
20	13.844	2137	2143	2150	rBV3	30832	57666	7.61%	1.031%
21	14.528	2264	2271	2281	rBV4	29449	57436	7.58%	1.027%
22	15.261	2402	2408	2418	rVB5	22520	46398	6.13%	0.830%
23	16.101	2555	2565	2575	rBV8	17861	51632	6.82%	0.924%

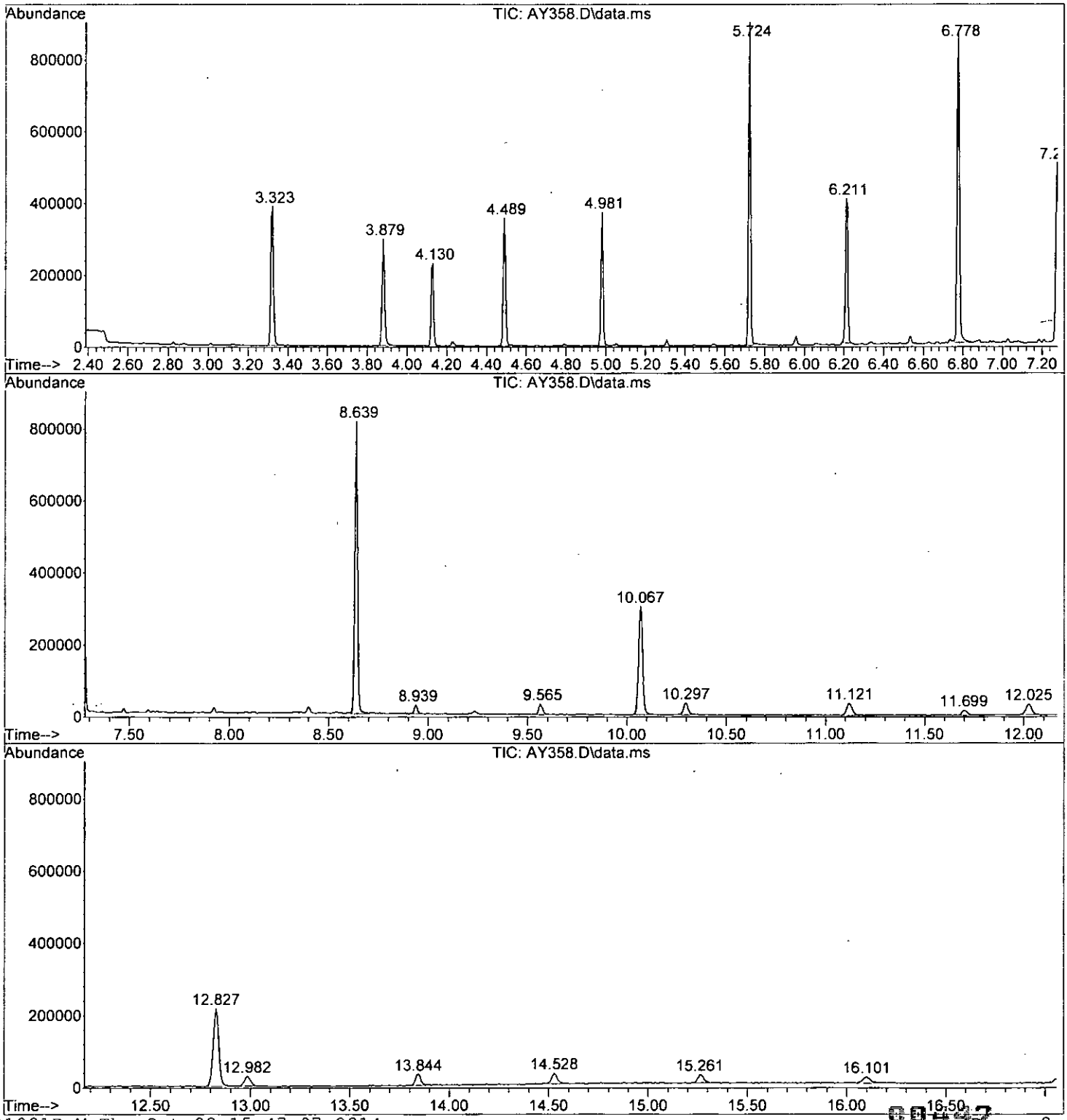
Sum of corrected areas: 5590666

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY358.D
Acq On : 8 Oct 2014 6:16 pm
Operator : Z.Miao
Sample : R1407825-008|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P



82701001D.M Thu Oct 09 15:47:07 2014 Page: 2

Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY358.D
Acq On : 8 Oct 2014 6:16 pm
Operator : Z.Miao
Sample : R1407825-008|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

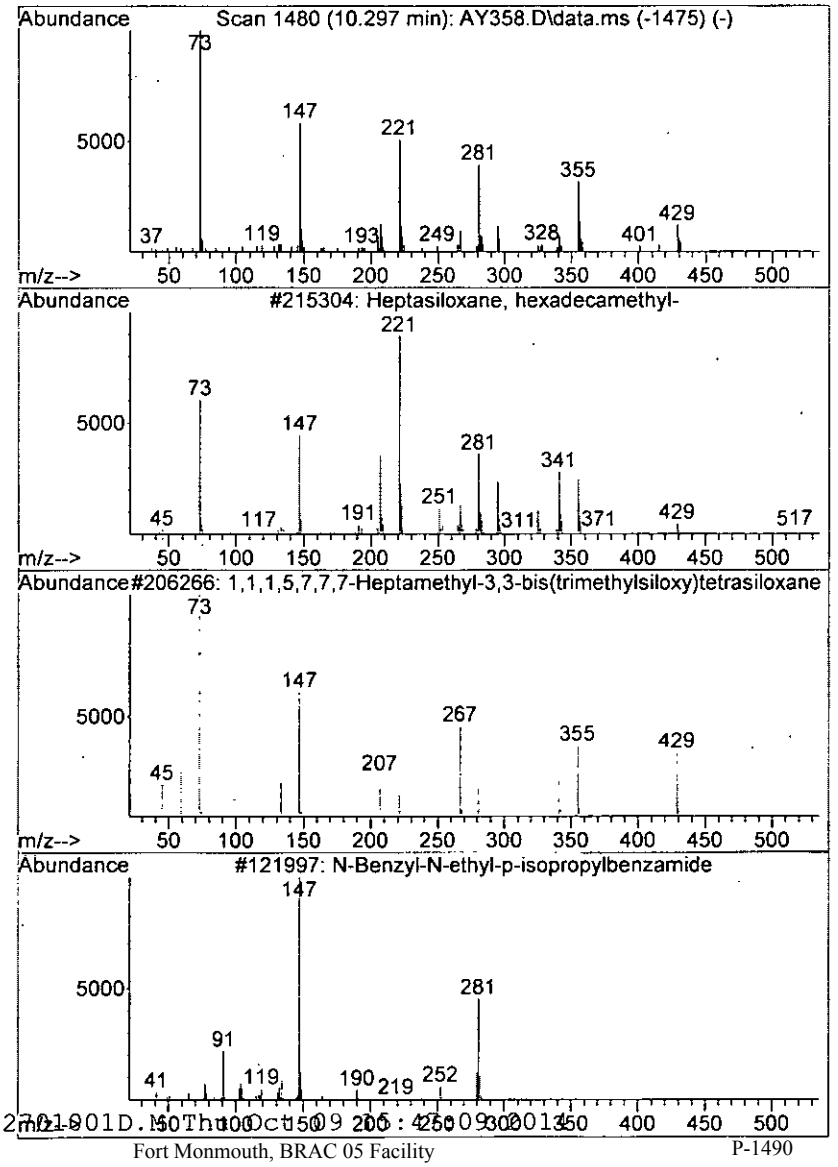
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

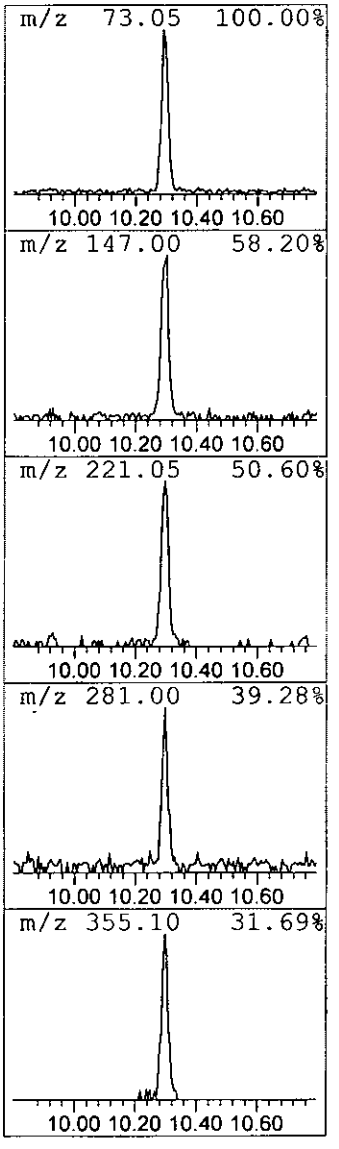
****

Peak Number 1 Heptasiloxane, hexadecamethyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.297	5.04 ppm	54263	d12-Chrysene	10.067

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptasiloxane, hexadecamethyl-	532	C16H48O6Si7	000541-01-5	72
2	1,1,1,5,7,7,7-Heptamethyl-3,3-bi...	444	C13H40O5Si6	038147-00-1	37
3	N-Benzyl-N-ethyl-p-isopropylbenz...	281	C19H23NO	015089-22-2	30
4	3,6-Dioxa-2,4,5,7-tetrasilaoctan...	294	C10H30O2Si4	004342-25-0	25
5	Piperidine, 1-(5-trifluoromethyl...	295	C15H16F3N3	1000268-74-7	25





82701001D.M Thu Oct 09 06:45:09 2014 Page: 3

Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY358.D
Acq On : 8 Oct 2014 6:16 pm
Operator : Z.Miao
Sample : R1407825-008|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

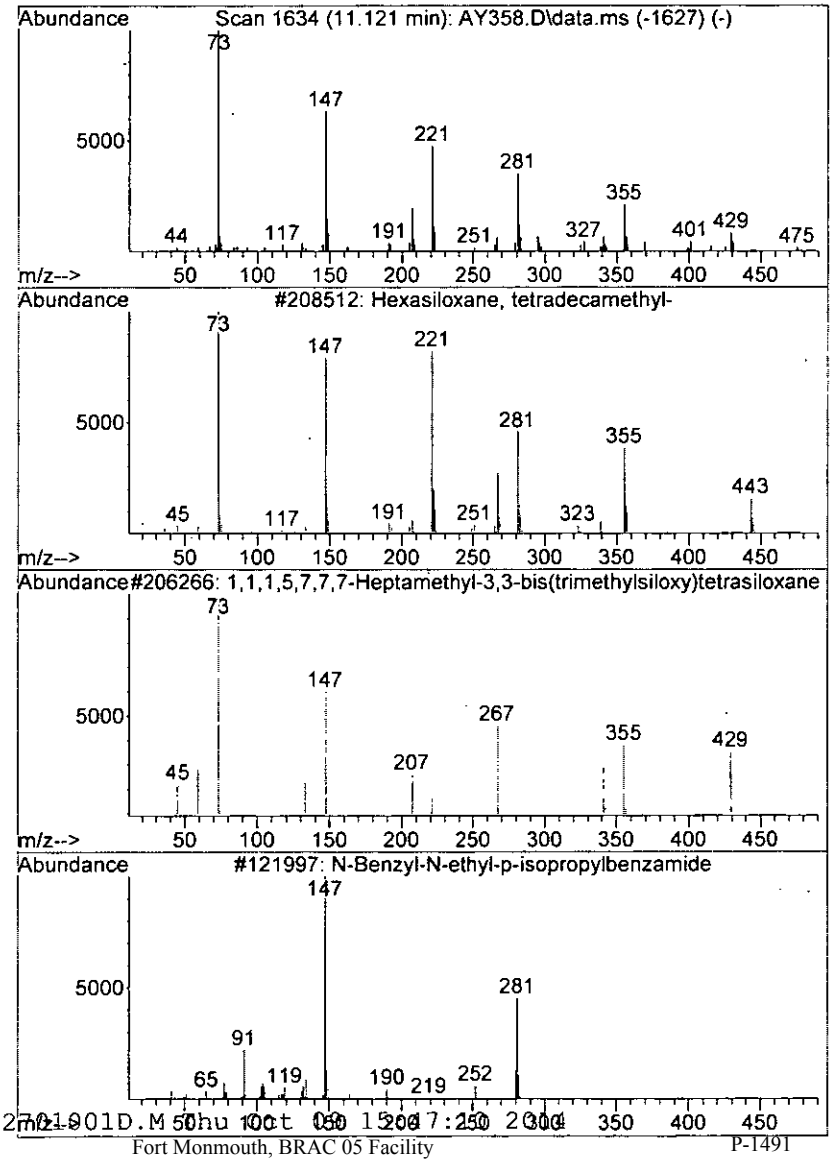
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

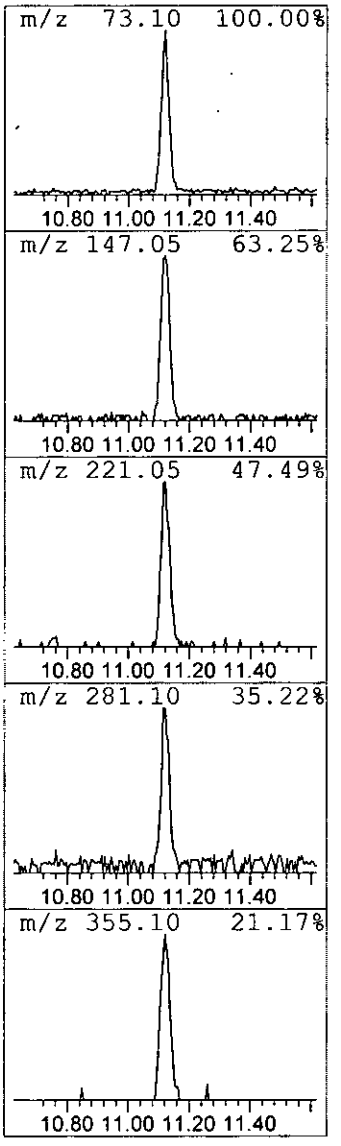
****

Peak Number 2 Hexasiloxane, tetradecamethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.121	5.76 ppm	62092	d12-Chrysene	10.067

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexasiloxane, tetradecamethyl-	458	C14H42O5Si6	000107-52-8	40
2	1,1,1,5,7,7,7-Heptamethyl-3,3-bi...	444	C13H40O5Si6	038147-00-1	37
3	N-Benzyl-N-ethyl-p-isopropylbenz...	281	C19H23NO	015089-22-2	30
4	Pentasiloxane, dodecamethyl-	384	C12H36O4Si5	000141-63-9	27
5	Trisiloxane, 1,1,1,5,5,5-hexamet...	384	C12H36O4Si5	003555-47-3	16





Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY358.D
Acq On : 8 Oct 2014 6:16 pm
Operator : Z.Miao
Sample : R1407825-008|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

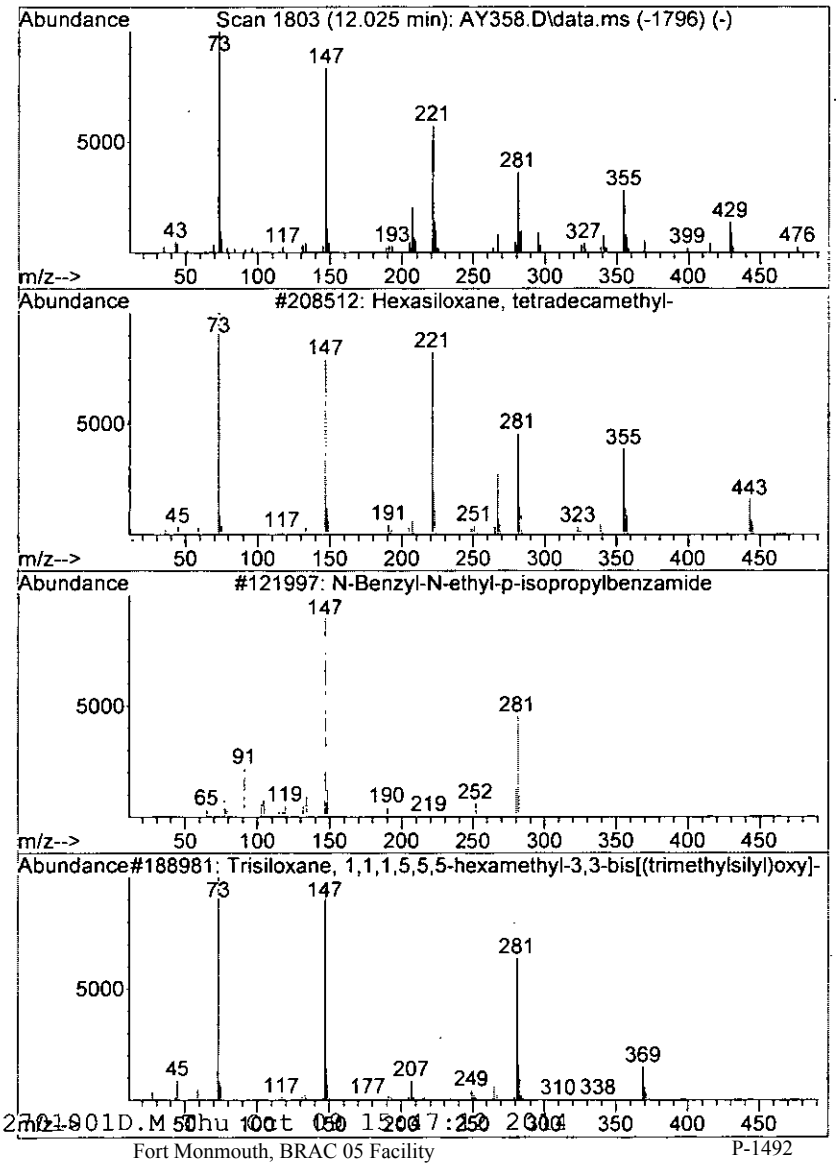
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

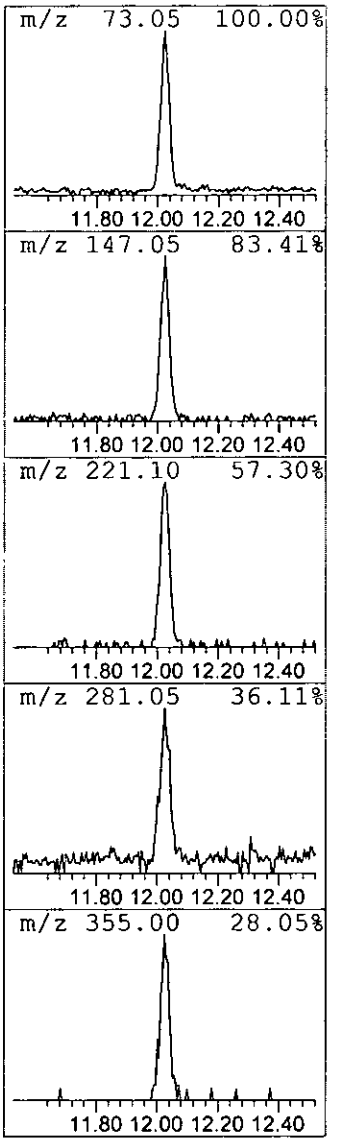
****

Peak Number 3 Hexasiloxane, tetradecamethyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.025	5.48 ppm	58006	d12-Perylene	12.827

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexasiloxane, tetradecamethyl-	458	C14H42O5Si6	000107-52-8	43
2	N-Benzyl-N-ethyl-p-isopropylbenz...	281	C19H23NO	015089-22-2	38
3	Trisiloxane, 1,1,1,5,5,5-hexamet...	384	C12H36O4Si5	003555-47-3	35
4	5-Benzofuranmethanamine, 2,3-dih...	205	C13H19NO	1000351-55-3	25
5	3-Oxa-6-thia-2,7-disilaoctane, 2...	222	C8H22OSSi2	078921-31-0	25





82701001D.M Thu Oct 09 15:17:25 2014 Page: 5

Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY358.D
Acq On : 8 Oct 2014 6:16 pm
Operator : Z.Miao
Sample : R1407825-008|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

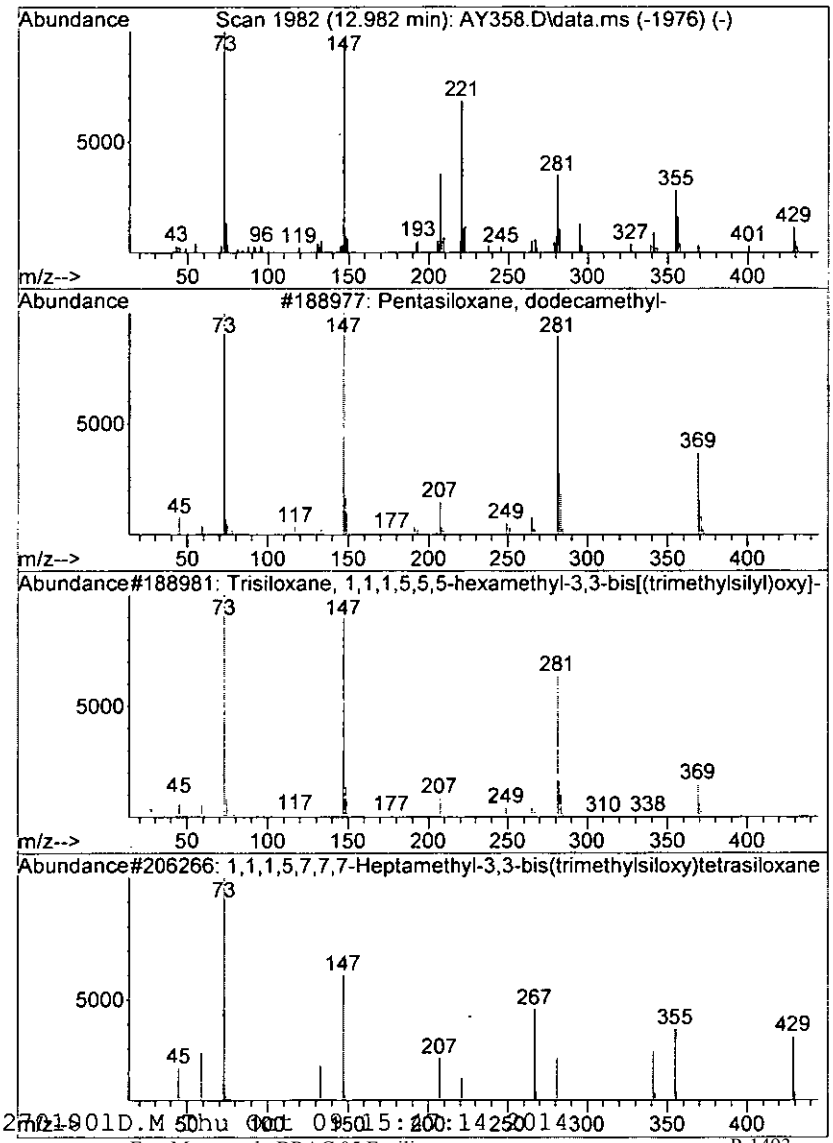
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

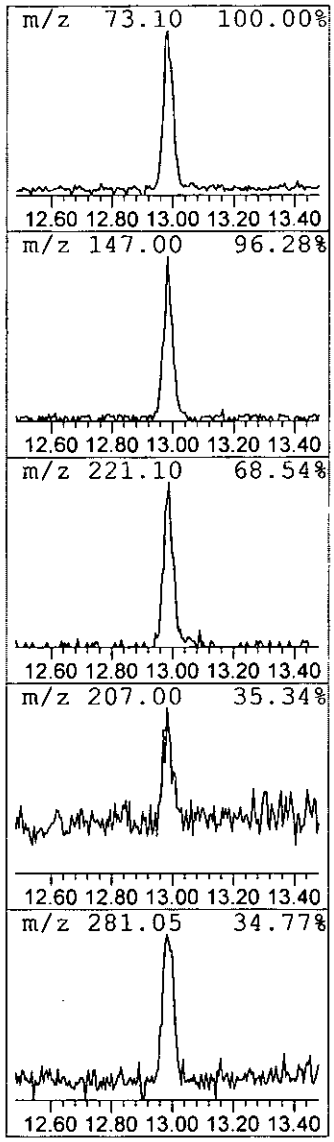
****

Peak Number 4 Pentasiloxane, dodecamethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.982	5.42 ppm	57444	d12-Perylene	12.827

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentasiloxane, dodecamethyl-	384	C12H36O4Si5	000141-63-9	32
2	Trisiloxane, 1,1,1,5,5,5-hexamet...	384	C12H36O4Si5	003555-47-3	32
3	1,1,1,5,7,7,7-Heptamethyl-3,3-bi...	444	C13H40O5Si6	038147-00-1	32
4	Piperidine, 1-(5-trifluoromethyl...	295	C15H16F3N3	1000268-74-7	25
5	1,2-Benzenedicarboxylic acid, bi...	310	C14H22O4Si2	002078-22-0	25





82701001D.M Thu Oct 09 15:20:14 2014 Page: 6

Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY358.D
Acq On : 8 Oct 2014 6:16 pm
Operator : Z.Miao
Sample : R1407825-008|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

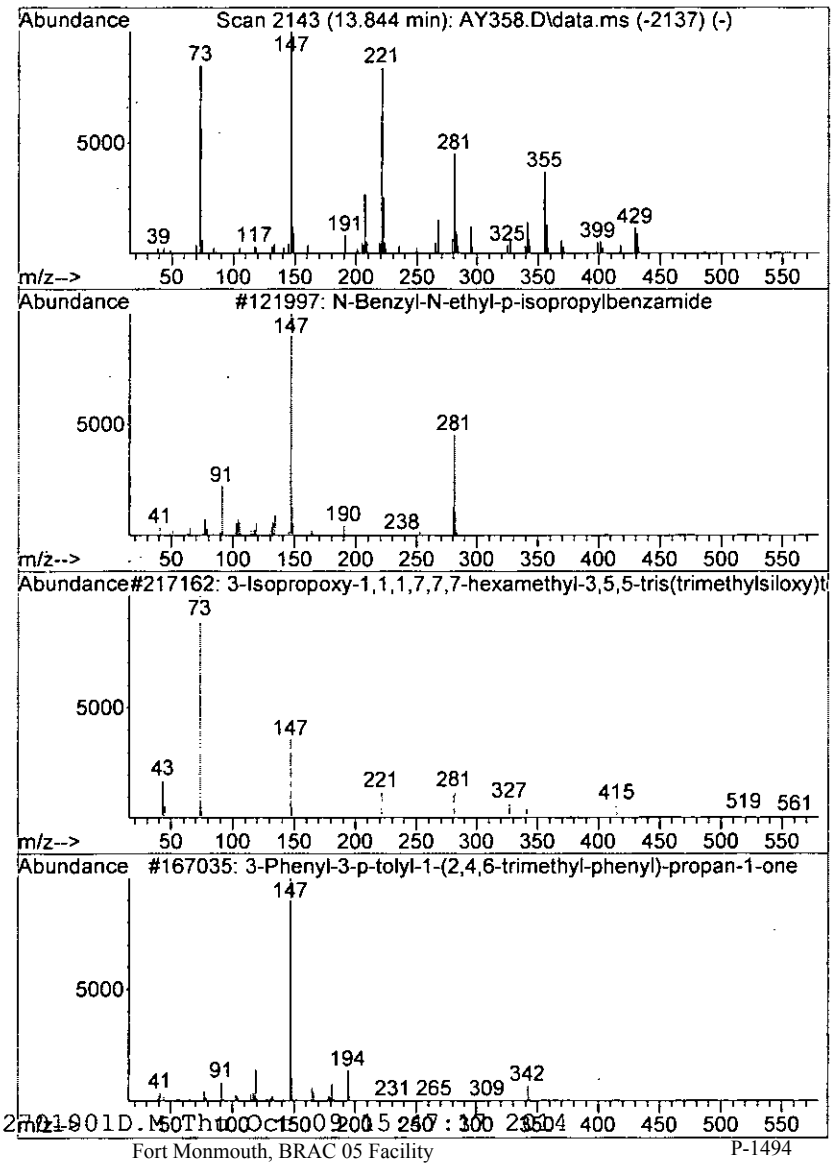
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

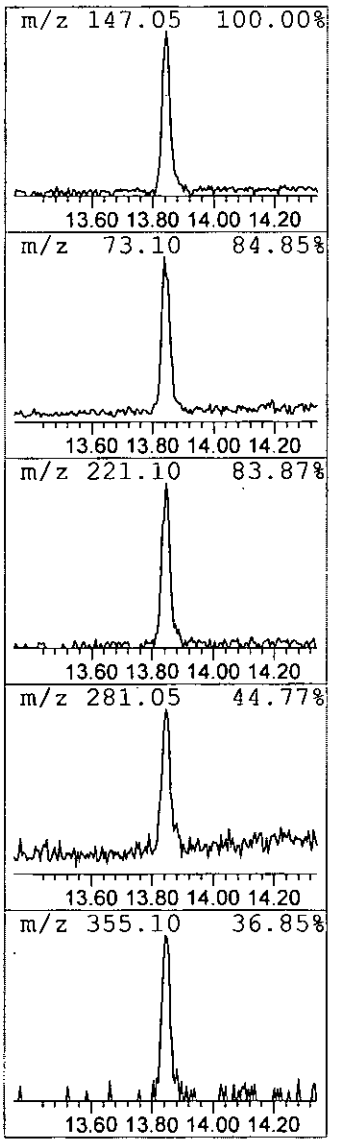
****

Peak Number 5 N-Benzyl-N-ethyl-p-isopropy... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.844	5.44 ppm	57666	d12-Perylene	12.827

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	N-Benzyl-N-ethyl-p-isopropylbenz...	281	C19H23NO	015089-22-2	30
2	3-Isopropoxy-1,1,1,7,7,7-hexamet...	576	C18H52O7Si7	071579-69-6	25
3	3-Phenyl-3-p-tolyl-1-(2,4,6-trim...	342	C25H26O	299965-61-0	18
4	Tris(trimethylsilyl)borate	278	C9H27BO3Si3	004325-85-3	16
5	Trisiloxane, 1,1,1,5,5,5-hexamet...	384	C12H36O4Si5	003555-47-3	16





Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY358.D
Acq On : 8 Oct 2014 6:16 pm
Operator : Z.Miao
Sample : R1407825-008|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

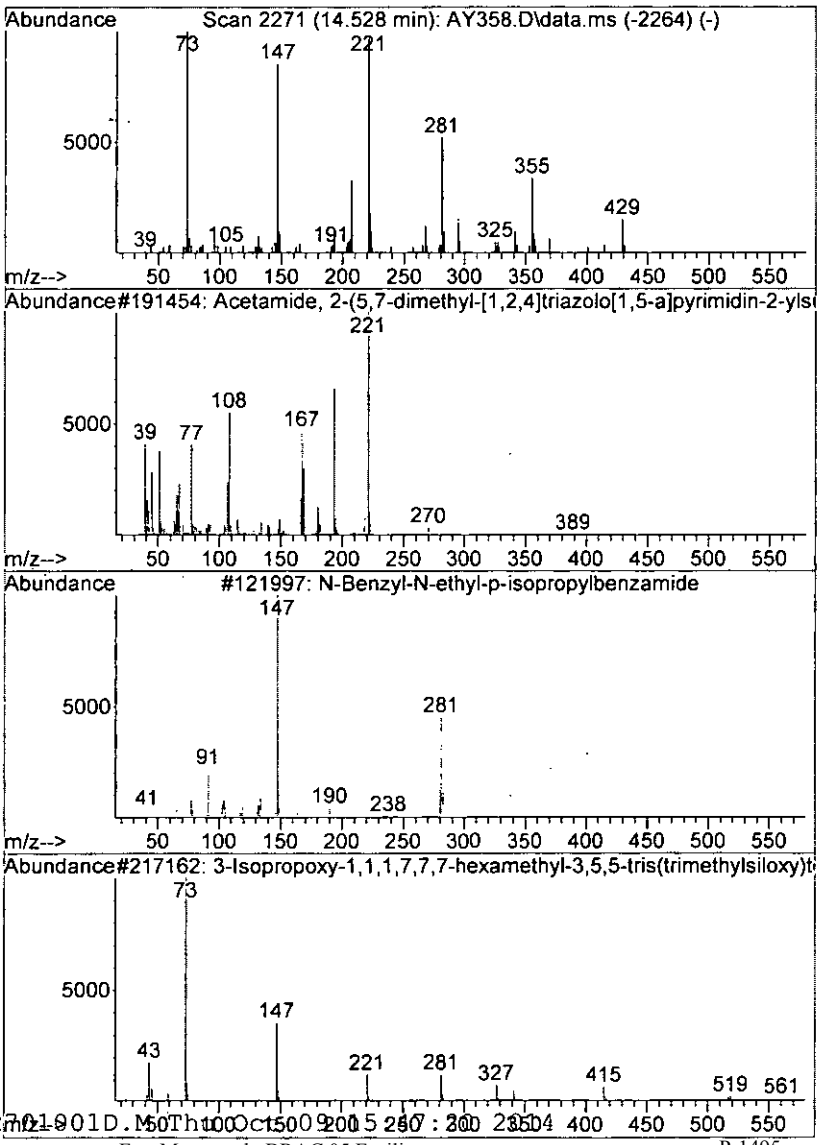
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

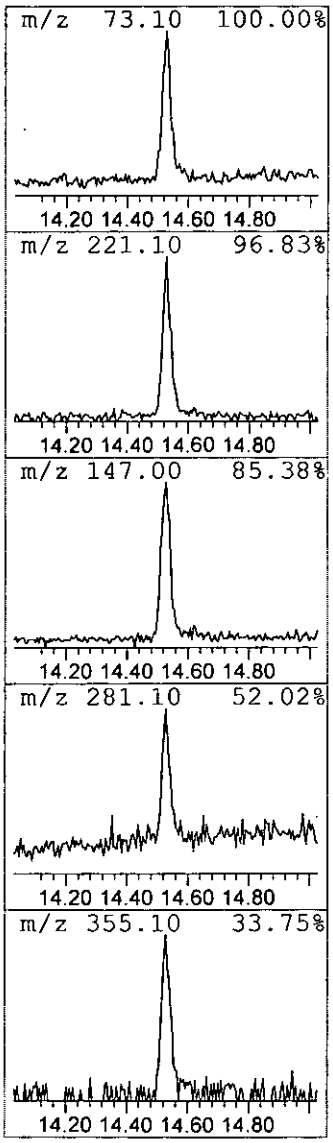
****

Peak Number 6 Acetamide, 2-(5,7-dimethyl-... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.528	5.42 ppm	57436	d12-Perylene	12.827

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetamide, 2-(5,7-dimethyl-[1,2,...	389	C21H19N5OS	1000304-63-9	35
2	N-Benzyl-N-ethyl-p-isopropylbenz...	281	C19H23NO	015089-22-2	35
3	3-Isopropoxy-1,1,1,7,7,7-hexamet...	576	C18H52O7Si7	071579-69-6	32
4	2,6-Dimethyl-3,4-bis(trimethylsi...	311	C15H29NO2Si2	1000079-52-1	27
5	3,6-Dioxa-2,4,5,7-tetrasilaoctan...	294	C10H30O2Si4	004342-25-0	22





Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY358.D
Acq On : 8 Oct 2014 6:16 pm
Operator : Z.Miao
Sample : R1407825-008|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

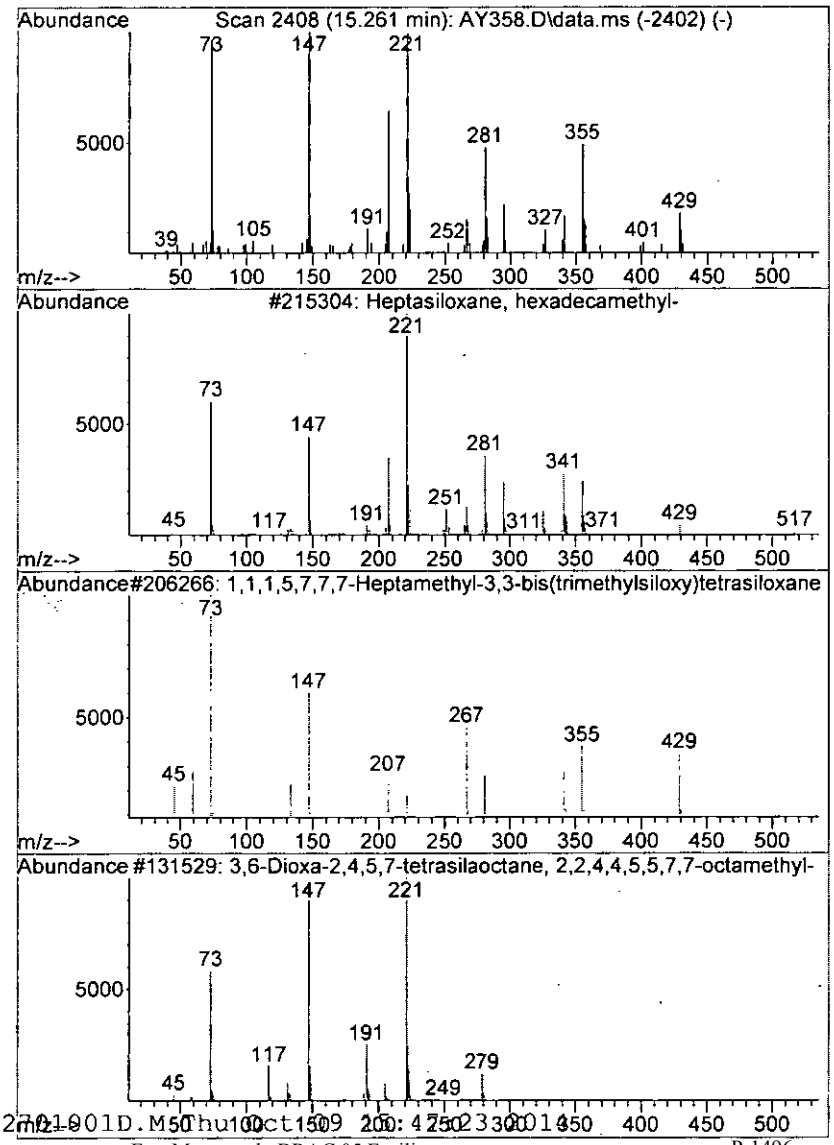
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

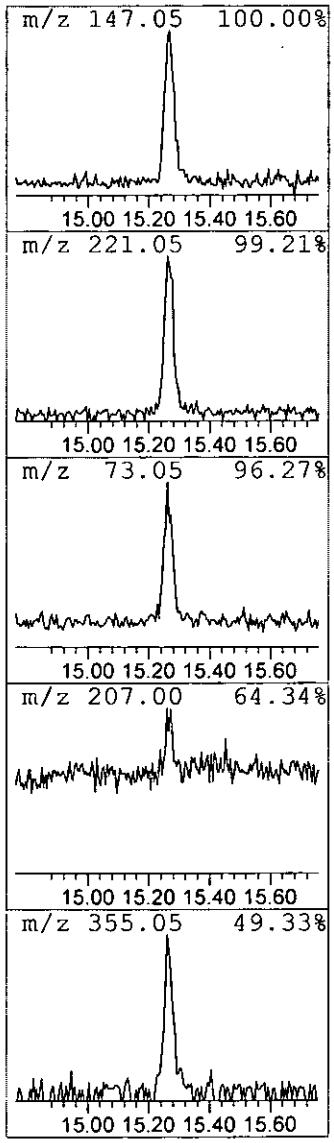
****

Peak Number 7 Heptasiloxane, hexadecamethyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.261	4.38 ppm	46398	d12-Perylene	12.827

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptasiloxane, hexadecamethyl-	532	C16H48O6Si7	000541-01-5	56
2	1,1,1,5,7,7,7-Heptamethyl-3,3-bi...	444	C13H40O5Si6	038147-00-1	37
3	3,6-Dioxa-2,4,5,7-tetrasilaoctan...	294	C10H30O2Si4	004342-25-0	32
4	Mercaptoacetic acid, bis(trimeth...	236	C8H20O2SSi2	006398-62-5	32
5	3-Oxa-6-thia-2,7-disilaoctane, 2...	222	C8H22OSSi2	078921-31-0	22





Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY358.D
Acq On : 8 Oct 2014 6:16 pm
Operator : Z.Miao
Sample : R1407825-008|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

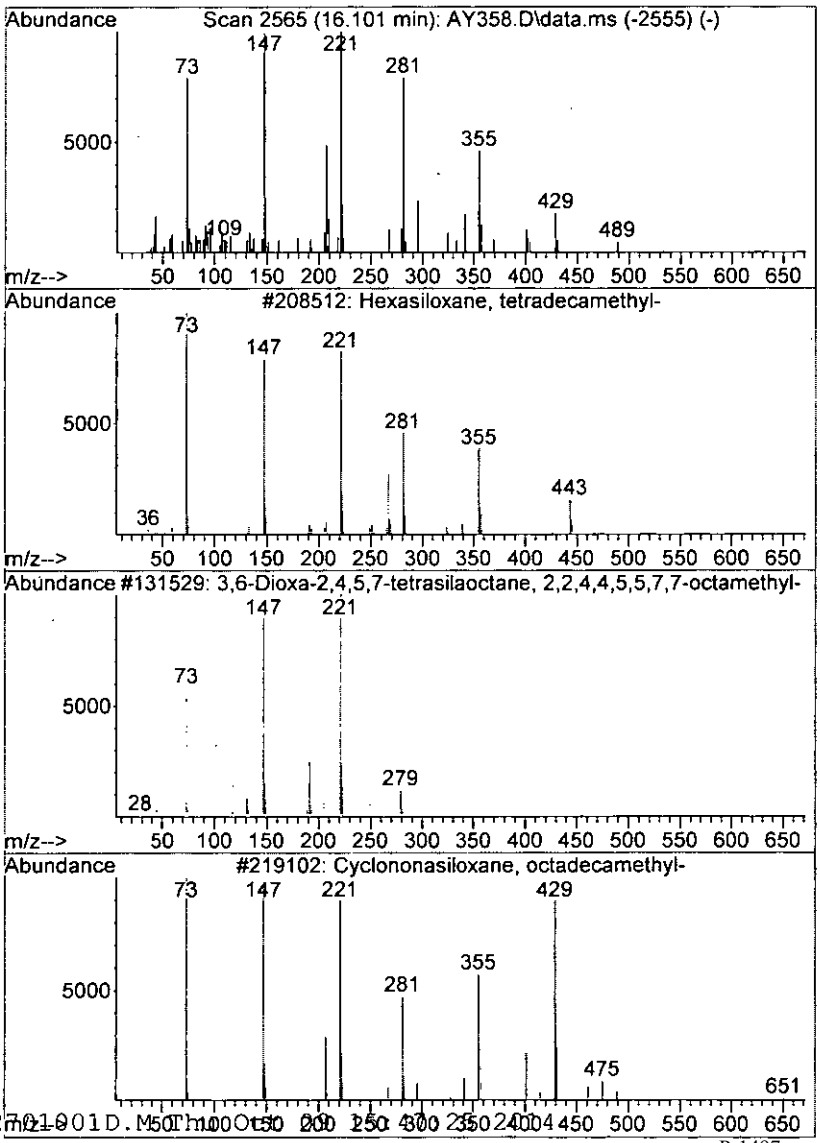
TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

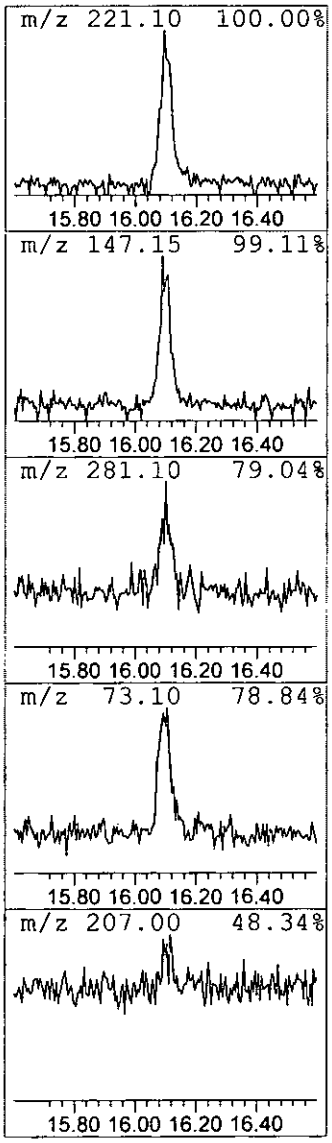
****

Peak Number 8 Hexasiloxane, tetradecamethyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.101	4.87 ppm	51632	d12-Perylene	12.827

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexasiloxane, tetradecamethyl-	458	C14H42O5Si6	000107-52-8	40
2	3,6-Dioxa-2,4,5,7-tetrasilaoctan...	294	C10H30O2Si4	004342-25-0	25
3	Cyclononasiloxane, octadecamethyl-	666	C18H54O9Si9	000556-71-8	16
4	Heptasiloxane, hexadecamethyl-	532	C16H48O6Si7	000541-01-5	14
5	Benzophenone-2,4',5-tricarboxyli...	356	C19H16O7	345651-64-1	10





82701001D.M Thu Oct 30 09:20:04 2014

ALS Environmental

SEMI-VOLATILE ORGANICS STANDARDS DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

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00451

Response Factor Report 5973D

Method Path : I:\ACQUDATA\5973D\Methods\
Method File : 82701001D.M
Title : 8270 BNA ANALYSIS
Last Update : Thu Oct 02 11:16:38 2014
Response Via : Initial Calibration

Calibration Files
5 =AY271.D 10 =AY272.D 50 =AY273.D 80 =AY274.D 100 =AY275.D 120 =AY276.D 160 =AY277.D

		Compound	5	10	50	80	100	120	160	Avg	%RSD
1)	IR	d4-1,4-Dichloroben...	----------ISTD----------								
2)	TM	Pyridine		1.194	1.248	1.267	1.287	1.353	1.270		4.57
3)	TM	N-Nitrosodimet...	0.564	0.569	0.640	0.691	0.673	0.688	0.742	0.652	10.14
4)	S	SURR1,2-FLUORO...	1.149	1.210	1.189	1.291	1.272	1.229	1.330	1.239	5.05
5)	TM	Benzaldehyde		0.519	0.485	0.457	0.407	0.394	0.452		11.55
6)	TM	Aniline	1.934	2.060	1.629	1.544	1.497	1.413	1.417	1.642	15.60
7)	S	SURR2,PHENOL-D6	1.607	1.526	1.541	1.677	1.688	1.624	1.728	1.627	4.66
8)	TMC	Phenol	1.485	1.560	1.589	1.709	1.700	1.662	1.812	1.645	6.63
9)	TM	bis(2-Clethyl)...	1.298	1.233	1.143	1.236	1.235	1.188	1.218	1.222	3.92
10)	TM	2-Chlorophenol	1.383	1.378	1.364	1.440	1.469	1.391	1.490	1.416	3.51
11)	TM	1,3-Diclbenzene	1.832	1.601	1.573	1.617	1.557	1.555	1.661	1.628	5.99
12)	TMC	1,4-Dichlorobe...	1.735	1.650	1.632	1.652	1.635	1.637	1.706	1.664	2.42
13)	TM	1,2-Diclbenzene	1.534	1.534	1.500	1.601	1.545	1.523	1.567	1.543	2.12
14)	TM	Benzyl Alcohol	1.031	1.024	1.044	1.077	1.061	1.034	1.100	1.053	2.62
15)	TM	2,2'-oxybis(1-...	1.998	1.920	1.824	1.965	1.887	1.842	1.964	1.914	3.45
16)	TM	2-Methylphenol	1.229	1.225	1.243	1.289	1.294	1.271	1.343	1.270	3.34
17)	TM	Acetophenone	1.849	1.708	1.790	1.873	1.797	1.772	1.900	1.813	3.63
18)	TMP	N-Nitroso-Di-n...	0.939	0.963	0.931	1.025	1.009	0.949	0.991	0.972	3.73
19)	TM	Hexachloroethane	0.640	0.584	0.601	0.633	0.601	0.601	0.613	0.610	3.26
20)	TM	3+4-Methylphenol	1.192	1.323	1.287	1.442	1.376	1.388	1.426	1.348	6.51
21)	T	1-Methyl-2-pyr...		0.863	0.899	0.916	0.968	0.898	0.936	0.913	3.94
22)	IR	d8-Naphthalene	----------ISTD----------								
23)	S	SURR4,NITROBEN...	0.346	0.326	0.338	0.356	0.349	0.348	0.358	0.346	3.15
24)	TM	Nitrobenzene	0.350	0.345	0.348	0.353	0.362	0.352	0.363	0.353	1.86
25)	TM	Isophorone	0.624	0.587	0.618	0.632	0.647	0.638	0.649	0.628	3.41
26)	TCM	2-Nitrophenol	0.192	0.191	0.194	0.200	0.215	0.210	0.210	0.202	4.92
27)	TM	Benzoic Acid		0.248	0.324	0.365	0.387	0.384	0.395	0.351	16.13
28)	TM	2,4-Dimethylph...	0.310	0.327	0.322	0.341	0.347	0.339	0.355	0.334	4.70
29)	TM	bis(-2-Chloroe...	0.367	0.346	0.360	0.371	0.381	0.363	0.385	0.367	3.54
30)	TCM	2,4-Dichloroph...	0.263	0.298	0.305	0.312	0.316	0.316	0.335	0.306	7.27
31)	TM	1,2,4-Trichlor...	0.335	0.351	0.359	0.359	0.359	0.366	0.369	0.357	3.14
32)	TM	Naphthalene	1.067	1.032	1.030	1.054	1.086	1.045	1.074	1.055	1.99
33)	TM	4-Chloroaniline	0.403	0.384	0.379	0.380	0.378	0.367	0.369	0.380	3.11
34)	TCM	Hexachlorobuta...	0.199	0.217	0.204	0.213	0.218	0.206	0.220	0.211	3.78
35)	TMC	4-Chloro-3-met...	0.276	0.262	0.278	0.294	0.302	0.289	0.300	0.286	5.07
36)	TM	Caprolactam		0.093	0.097	0.098	0.102	0.100	0.102	0.099	3.50
37)	TM	2-Methylnaphth...	0.730	0.706	0.702	0.750	0.746	0.721	0.743	0.728	2.64

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Response Factor Report 5973D

Method Path : I:\ACQUDATA\5973D\Methods\
Method File : 82701001D.M

38)	TM	1-Methylnaphth...	0.693	0.640	0.657	0.665	0.671	0.669	0.682	0.668	2.53	
39)	IR	d10-Acenaphthene	----------ISTD----------									
40)	TPM	Hexachlorocycl...	0.068	0.105	0.221	0.229	0.241	0.254	0.266	0.198	39.51	QA
41)	TCM	2,4,6-Trichlor...	0.372	0.352	0.374	0.393	0.389	0.403	0.417	0.386	5.59	
42)	TM	2,4,5-Trichlor...	0.415	0.408	0.398	0.398	0.415	0.432	0.440	0.415	3.85	
43)	S	SURR5,2-FLUORO...	1.292	1.271	1.221	1.276	1.253	1.303	1.353	1.281	3.24	
44)	TM	1,1'-Biphenyl	1.411	1.374	1.396	1.441	1.432	1.474	1.480	1.430	2.74	
45)	TM	2-Chloronaphth...	1.125	1.111	1.085	1.126	1.094	1.134	1.172	1.121	2.54	
46)	TM	2-Nitroaniline			0.299	0.316	0.310	0.318	0.314	0.312	2.41	
47)	TM	Acenaphthylene	1.760	1.709	1.776	1.768	1.706	1.783	1.830	1.762	2.47	
48)	TM	Dimethyl phtha...	1.291	1.243	1.202	1.223	1.189	1.206	1.219	1.225	2.78	
49)	TM	2,6-Dinitrotol...	0.243	0.267	0.285	0.296	0.283	0.289	0.293	0.279	6.68	
50)	TMC	Acenaphthene	1.119	1.161	1.127	1.141	1.124	1.180	1.178	1.147	2.25	
51)	TM	3-Nitroaniline			0.295	0.297	0.298	0.311	0.321	0.304	3.63	
52)	TPM	2,4-Dinitrophenol			0.123	0.140	0.153	0.173	0.196	0.157	18.13	
53)	TM	Dibenzofuran	1.664	1.630	1.664	1.681	1.638	1.691	1.697	1.666	1.53	
54)	TM	2,4-Dinitrotol...	0.322	0.361	0.357	0.374	0.379	0.391	0.421	0.372	8.19	
55)	TMP	4-Nitrophenol			0.178	0.200	0.209	0.218	0.222	0.205	8.49	
56)	TM	Fluorene	1.303	1.273	1.294	1.323	1.338	1.349	1.355	1.319	2.32	
57)	TM	4-Chlorophenyl...	0.698	0.649	0.656	0.664	0.676	0.682	0.689	0.673	2.63	
58)	TM	Diethylphthalate	1.111	1.179	1.090	1.121	1.122	1.178	1.227	1.147	4.23	
59)	TM	4-Nitroaniline			0.309	0.333	0.334	0.344	0.364	0.337	5.96	
60)	S	SURR3,2,4,6-TR...	0.189	0.193	0.198	0.196	0.200	0.199	0.212	0.198	3.55	
61)	IR	d10-Phenanthrene	----------ISTD----------									
62)	T	1-Phenyl-1(4-m...								0.000#	-1.00	
63)	TM	4,6-Dinitro-2-...			0.135	0.142	0.149	0.153	0.163	0.148	7.23	
64)	TM	1,2 Diphenylhy...	0.726	0.729	0.757	0.746	0.711	0.714	0.665	0.721	4.12	
65)	TCM	N-Nitrosodiphe...	0.532	0.517	0.546	0.519	0.489	0.511	0.518	0.519	3.42	
66)	TM	4-Bromophenyl-...	0.225	0.234	0.250	0.243	0.227	0.225	0.227	0.233	4.17	
67)	T	1-Phenyl-1(2,4...								0.000#	-1.00	
68)	TM	Hexachlorobenzene	0.269	0.253	0.281	0.264	0.253	0.256	0.255	0.262	4.04	
69)	TM	Atrazine	0.067	0.062	0.056	0.045	0.045	0.044	0.036	0.051	22.03	AVG
70)	TCM	Pentachlorophenol			0.120	0.142	0.141	0.149	0.160	0.142	10.37	
71)	TM	Phenanthrene	1.112	1.100	1.093	1.066	1.040	1.093	1.111	1.088	2.40	
72)	TM	Anthracene	1.127	1.072	1.120	1.145	1.108	1.159	1.156	1.127	2.72	
73)	TM	Carbazole	0.952	0.900	1.053	1.073	1.028	1.070	1.060	1.020	6.59	
74)	TM	Di-n-butylphth...	0.960	0.999	1.271	1.286	1.224	1.274	1.283	1.185	12.02	
75)	TCM	Fluoranthene	1.038	1.026	1.309	1.284	1.285	1.336	1.333	1.230	11.12	
76)	IR	d12-Chrysene	----------ISTD----------									
77)	TM	Benzidine			0.276	0.228	0.211	0.203	0.180	0.220	16.42	
78)	TM	Pyrene	1.058	1.040	1.130	1.146	1.137	1.130	1.082	1.103	3.85	
79)	S	SURR6,TERPHENY...	0.802	0.788	0.795	0.803	0.796	0.783	0.789	0.794	0.94	
80)	TM	Butyl benzyl p...	0.450	0.468	0.473	0.494	0.483	0.491	0.484	0.477	3.16	
81)	TM	3,3'-Dichlorob...	0.387	0.376	0.395	0.394	0.384	0.382	0.362	0.383	2.99	
82)	TM	Benzo(a)anthra...	1.153	1.132	1.107	1.129	1.122	1.167	1.134	1.135	1.75	

Response Factor Report 5973D

Method Path : I:\ACQUDATA\5973D\Methods\
Method File : 82701001D.M

83)	TM	Chrysene	1.152	1.134	1.084	1.086	1.091	1.087	1.063	1.099	2.86
84)	TM	bis(2-Ethylhex...	0.597	0.614	0.646	0.662	0.664	0.679	0.644	0.644	4.50
85)	IR	d12-Perylene	----------ISTD----------								
86)	TCM	Di-n-octyl pht...	1.021	1.022	1.094	1.047	1.077	1.099	1.182	1.077	5.20
87)	TM	Benzo(b)Fluora...	1.062	0.994	1.037	1.061	1.096	1.120	1.173	1.078	5.41
88)	TM	Benzo(k)fluora...	1.102	1.124	1.089	1.114	1.203	1.153	1.164	1.135	3.50
89)	TCM	Benzo(a)pyrene	1.028	0.970	1.013	1.069	1.122	1.099	1.138	1.063	5.78
90)	TM	Indeno(1,2,3-c...	0.946	0.745	0.936	1.000	1.032	1.047	1.059	0.966	11.22
91)	TM	Dibenz(a,h)ant...	1.014	0.809	0.986	1.069	1.101	1.101	1.092	1.025	10.28
92)	TM	Benzo(g,h,i)pe...	0.989	0.784	0.955	1.014	1.038	1.011	0.986	0.968	8.82

(#) = Out of Range

4504

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY274.D
Acq On : 1 Oct 2014 7:27 pm
Operator : Z.Miao
Sample : SSTD080 Inst : 5973D
Misc : 80 PPM STD 8270/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 02 10:17:24 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:17:18 2014
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	1.000	1.000	0.0	100	0.00
2	TM	Pyridine	1.270	1.248	1.7	100	0.00
3	TM	N-Nitrosodimethylamine	0.652	0.691	-6.0	100	0.00
4	S	SURR1,2-FLUOROPHENOL	1.239	1.291	-4.2	100	0.00
5	TM	Benzaldehyde	0.452	0.485	-7.3	100	0.00
6	TM	Aniline	1.642	1.544	6.0	100	0.00
7	S	SURR2,PHENOL-D6	1.627	1.677	-3.1	100	0.00
8	TMC	Phenol	1.645	1.709	-3.9	100	0.00
9	TM	bis(2-Clethyl)Ether	1.222	1.236	-1.1	100	0.00
10	TM	2-Chlorophenol	1.416	1.440	-1.7	100	0.00
11	TM	1,3-Diclbenzene	1.628	1.617	0.7	100	0.00
12	TMC	1,4-Dichlorobenzene	1.664	1.652	0.7	100	0.00
13	TM	1,2-Diclbenzene	1.543	1.601	-3.8	100	0.00
14	TM	Benzyl Alcohol	1.053	1.077	-2.3	100	0.00
15	TM	2,2'-oxybis(1-Chloropropane	1.914	1.965	-2.7	100	0.00
16	TM	2-Methylphenol	1.270	1.289	-1.5	100	0.00
17	TM	Acetophenone	1.813	1.873	-3.3	100	0.00
18	TMP	N-Nitroso-Di-n-propylamine	0.972	1.025	-5.5	100	0.00
19	TM	Hexachloroethane	0.610	0.633	-3.8	100	0.00
20	TM	3+4-Methylphenol	1.348	1.442	-7.0	100	0.00
21	T	1-Methyl-2-pyrrolidinone	0.913	0.916	-0.3	100	0.00
22	IR	d8-Naphthalene	1.000	1.000	0.0	100	0.00
23	S	SURR4,NITROBENZENE-D5	0.346	0.356	-2.9	100	0.00
24	TM	Nitrobenzene	0.353	0.353	0.0	100	0.00
25	TM	Isophorone	0.628	0.632	-0.6	100	0.00
26	TCM	2-Nitrophenol	0.202	0.200	1.0	100	0.00
27	TM	Benzoic Acid	0.351	0.365	-4.0	100	0.00
28	TM	2,4-Dimethylphenol	0.334	0.341	-2.1	100	0.00
29	TM	bis(-2-Chloroethoxy)Methane	0.367	0.371	-1.1	100	0.00
30	TCM	2,4-Dichlorophenol	0.306	0.312	-2.0	100	0.00
31	TM	1,2,4-Trichlorobenzene	0.357	0.359	-0.6	100	0.00
32	TM	Naphthalene	1.055	1.054	0.1	100	0.00
33	TM	4-Chloroaniline	0.380	0.380	0.0	100	0.00
34	TCM	Hexachlorobutadiene	0.211	0.213	-0.9	100	0.00
35	TMC	4-Chloro-3-methylphenol	0.286	0.294	-2.8	100	0.00
36	TM	Caprolactam	0.099	0.098	1.0	100	0.00
37	TM	2-Methylnaphthalene	0.728	0.750	-3.0	100	0.00
38	TM	1-Methylnaphthalene	0.668	0.665	0.4	100	0.00
39	IR	d10-Acenaphthene	1.000	1.000	0.0	100	0.00
40	TPM	Hexachlorocyclopentadiene	0.198	0.229	-15.7	100	0.00
41	TCM	2,4,6-Trichlorophenol	0.386	0.393	-1.8	100	0.00
42	TM	2,4,5-Trichlorophenol	0.415	0.398	4.1	100	0.00
43	S	SURR5,2-FLUOROBIPHENYL	1.281	1.276	0.4	100	0.00
44	TM	1,1'-Biphenyl	1.430	1.441	-0.8	100	0.00
45	TM	2-Chloronaphthalene	1.121	1.126	-0.4	100	0.00

82701001D.M Thu Oct 02 11:18:25 2014 00455 Page: 1

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973D\Data\10Oct14\
Data File : AY274.D
Acq On : 1 Oct 2014 7:27 pm
Operator : Z.Miao
Sample : SSTD080 Inst : 5973D
Misc : 80 PPM STD 8270/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 02 10:17:24 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:17:18 2014
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46	TM	2-Nitroaniline	0.312	0.316	-1.3	100	0.00
47	TM	Acenaphthylene	1.762	1.768	-0.3	100	0.00
48	TM	Dimethyl phthalate	1.225	1.223	0.2	100	0.00
49	TM	2,6-Dinitrotoluene	0.279	0.296	-6.1	100	0.00
50	TMC	Acenaphthene	1.147	1.141	0.5	100	0.00
51	TM	3-Nitroaniline	0.304	0.297	2.3	100	0.00
52	TPM	2,4-Dinitrophenol	0.157	0.140	10.8	100	0.00
53	TM	Dibenzofuran	1.666	1.681	-0.9	100	0.00
54	TM	2,4-Dinitrotoluene	0.372	0.374	-0.5	100	0.00
55	TMP	4-Nitrophenol	0.205	0.200	2.4	100	0.00
56	TM	Fluorene	1.319	1.323	-0.3	100	0.00
57	TM	4-Chlorophenyl-phenylether	0.673	0.664	1.3	100	0.00
58	TM	Diethylphthalate	1.147	1.121	2.3	100	0.00
59	TM	4-Nitroaniline	0.337	0.333	1.2	100	0.00
60	S	SURR3,2,4,6-TRIBROMOPHENOL	0.198	0.196	1.0	100	0.00
61	IR	d10-Phenanthrene	1.000	1.000	0.0	100	0.00
62	T	1-Phenyl-1(4-methyl-phenyl)	0.000	0.000#	0.0	0#	-11.43#
63	TM	4,6-Dinitro-2-methylphenol	0.148	0.142	4.1	100	0.00
64	TM	1,2 Diphenylhydrazine	0.721	0.746	-3.5	100	0.00
65	TCM	N-Nitrosodiphenylamine	0.519	0.519	0.0	100	0.00
66	TM	4-Bromophenyl-phenylether	0.233	0.243	-4.3	100	0.00
67	T	1-Phenyl-1(2,4-dimethylphen	0.000	0.000#	0.0	100	0.00
68	TM	Hexachlorobenzene	0.262	0.264	-0.8	100	0.00
69	TM	Atrazine	0.051	0.045	11.8	100	0.00
70	TCM	Pentachlorophenol	0.142	0.142	0.0	100	0.00
71	TM	Phenanthrene	1.088	1.066	2.0	100	0.00
72	TM	Anthracene	1.127	1.145	-1.6	100	0.00
73	TM	Carbazole	1.020	1.073	-5.2	100	0.00
74	TM	Di-n-butylphthalate	1.185	1.286	-8.5	100	0.00
75	TCM	Fluoranthene	1.230	1.284	-4.4	100	0.00
76	IR	d12-Chrysene	1.000	1.000	0.0	100	0.00
77	TM	Benzidine	0.220	0.228	-3.6	100	0.00
78	TM	Pyrene	1.103	1.146	-3.9	100	0.00
79	S	SURR6,TERPHENYL-D14	0.794	0.803	-1.1	100	0.00
80	TM	Butyl benzyl phthalate	0.477	0.494	-3.6	100	0.00
81	TM	3,3'-Dichlorobenzidine	0.383	0.394	-2.9	100	0.00
82	TM	Benzo(a)anthracene	1.135	1.129	0.5	100	0.00
83	TM	Chrysene	1.099	1.086	1.2	100	0.00
84	TM	bis(2-Ethylhexyl)phthalate	0.644	0.662	-2.8	100	0.00
85	IR	d12-Perylene	1.000	1.000	0.0	100	0.00
86	TCM	Di-n-octyl phthalate	1.077	1.047	2.8	100	0.00
87	TM	Benzo(b)Fluoranthene	1.078	1.061	1.6	100	0.00
88	TM	Benzo(k)fluoranthene	1.135	1.114	1.9	100	0.00
89	TCM	Benzo(a)pyrene	1.063	1.069	-0.6	100	0.00

Evaluate Continuing Calibration Report

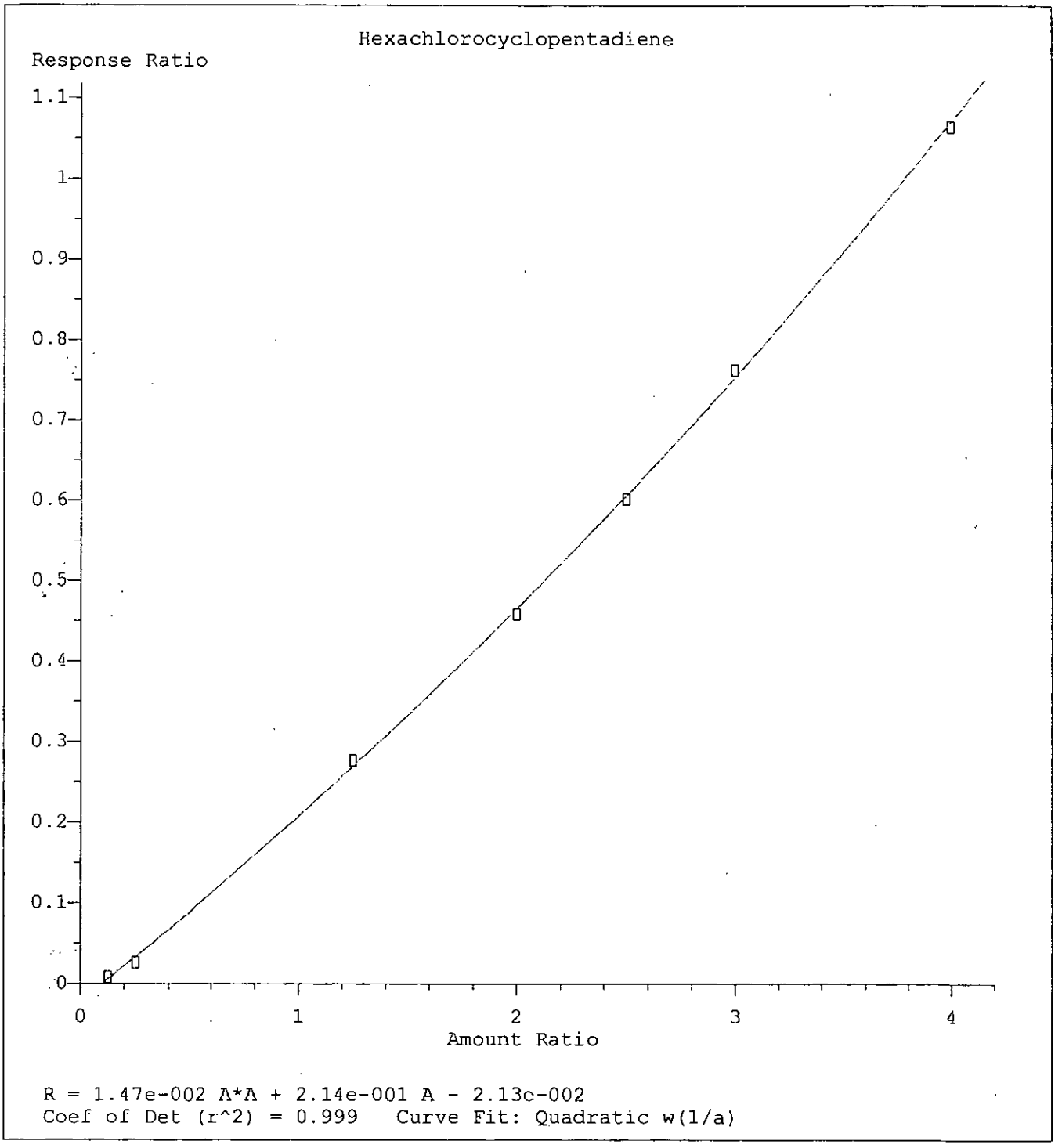
Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY274.D
Acq On : 1 Oct 2014 7:27 pm
Operator : Z.Miao
Sample : SSTD080 Inst : 5973D
Misc : 80 PPM STD 8270/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 02 10:17:24 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:17:18 2014
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
90 TM	Indeno(1,2,3-cd)Pyrene	0.966	1.000	-3.5	100	0.00
91 TM	Dibenz(a,h)anthracene	1.025	1.069	-4.3	100	0.00
92 TM	Benzo(g,h,i)perylene	0.968	1.014	-4.8	100	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0



Method Name: I:\ACQUDATA\5973D\Methods\82701001D.M
Calibration Table Last Updated: Thu Oct 02 10:33:06 2014

00458

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\141114\
Data File : AY271.D
Acq On : 1 Oct 2014 6:09 pm
Operator : Z.Miao
Sample : SSTD005 Inst : 5973D
Misc : 5.0 PPM STD 8270/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 02 10:21:46 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:21:35 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.130	152	31433	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	128815	40.00	ppm	0.00
39) d10-Acenaphthene	6.216	164	79253	40.00	ppm	0.00
61) d10-Phenanthrene	7.275	188	131789	40.00	ppm	0.00
76) d12-Chrysene	10.067	240	140218	40.00	ppm	0.00
85) d12-Perylene	12.827	264	121783	40.00	ppm	0.00
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.323	112	4515	4.68	ppm	0.00
Spiked Amount 200.000	Range 10 - 105		Recovery =	2.34%#		
7) SURR2,PHENOL-D6	3.879	99	6313	5.09	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery =	2.54%#		
23) SURR4,NITROBENZENE-D5	4.489	82	5573	4.83	ppm	0.00
Spiked Amount 100.000	Range 37 - 117		Recovery =	4.83%#		
43) SURR5,2-FLUOROBIPHENYL	5.724	172	12796	5.12	ppm	0.00
Spiked Amount 100.000	Range 39 - 119		Recovery =	5.12%#		
60) SURR3,2,4,6-TRIBROMOPH...	6.778	330	1875	4.82	ppm	0.00
Spiked Amount 200.000	Range 28 - 157		Recovery =	2.41%#		
79) SURR6,TERPHENYL-D14	8.634	244	14049	4.95	ppm	0.00
Spiked Amount 100.000	Range 40 - 133		Recovery =	4.95%#		
Target Compounds						Qvalue
2) Pyridine	2.547	79	4283	4.24	ppm	75
3) N-Nitrosodimethylamine	2.504	74	2215	4.09	ppm	92
5) Benzaldehyde	3.858	106	1869	8.11	ppm	96
6) Aniline	3.916	93	7599	5.30	ppm	55
8) Phenol	3.890	94	5836	4.60	ppm	93
9) bis(2-Clethyl)Ether	3.943	93	5101	5.41	ppm	91
10) 2-Chlorophenol	3.997	128	5433	4.99	ppm	90
11) 1,3-Diclbenzene	4.093	146	7200	5.80	ppm	94
12) 1,4-Dichlorobenzene	4.141	146	6816	5.35	ppm	96
13) 1,2-Diclbenzene	4.243	146	6026	4.95	ppm	98
14) Benzyl Alcohol	4.211	79	4050	4.98	ppm	95
15) 2,2'-oxybis(1-Chloropr...	4.286	45	7851	5.66	ppm	90
16) 2-Methylphenol	4.275	108	4828	4.89	ppm	96
17) Acetophenone	4.387	105	7264	5.13	ppm	95
18) N-Nitroso-Di-n-propyla...	4.371	70	3690	4.94	ppm	96
19) Hexachloroethane	4.462	117	2516	5.34	ppm	83
20) 3+4-Methylphenol	4.376	108	4682	4.53	ppm	99
21) 1-Methyl-2-pyrrolidinone	4.253	99	3169	4.37	ppm	84
24) Nitrobenzene	4.505	77	5639	5.01	ppm	92
25) Isophorone	4.655	82	10055	5.02	ppm	94
26) 2-Nitrophenol	4.719	139	3085	5.00	ppm	96
27) Benzoic Acid	4.778	105	3213	2.92	ppm	88
28) 2,4-Dimethylphenol	4.729	107	4984	4.65	ppm	94
29) bis(-2-Chloroethoxy)Me...	4.788	93	5912	4.97	ppm	93
30) 2,4-Dichlorophenol	4.885	162	4240	4.36	ppm	80
31) 1,2,4-Trichlorobenzene	4.938	180	5397	4.65	ppm	97
32) Naphthalene	4.997	128	17181	5.07	ppm	90
33) 4-Chloroaniline	5.029	127	6485	4.91	ppm	96

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY271.D
Acq On : 1 Oct 2014 6:09 pm
Operator : Z.Miao
Sample : SSTD005 Inst : 5973D
Misc : 5.0 PPM STD 8270/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 02 10:21:46 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:21:35 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
34)	Hexachlorobutadiene	5.066	225	3201	4.78	ppm		98
35)	4-Chloro-3-methylphenol	5.361	107	4446	5.03	ppm		87
36)	Caprolactam	5.264	113	1714	5.28	ppm		81
37)	2-Methylnaphthalene	5.473	142	11756	4.99	ppm		98
38)	1-Methylnaphthalene	5.548	142	11153	5.16	ppm		88
40)	Hexachlorocyclopentadiene	5.580	237	673	1.03	ppm		96
41)	2,4,6-Trichlorophenol	5.676	196	3683	4.86	ppm		90
42)	2,4,5-Trichlorophenol	5.708	196	4115	5.33	ppm		97
44)	1,1'-Biphenyl	5.799	154	13983	4.98	ppm		94
45)	2-Chloronaphthalene	5.821	162	11142	5.08	ppm		98
46)	2-Nitroaniline	5.890	65	3104	5.22	ppm	#	81
47)	Acenaphthylene	6.115	152	17438	5.01	ppm		96
48)	Dimethyl phthalate	6.002	163	12788	5.42	ppm		98
49)	2,6-Dinitrotoluene	6.056	165	2406	4.51	ppm		92
50)	Acenaphthene	6.238	153	11083	4.82	ppm		96
51)	3-Nitroaniline	6.184	138	2734	4.58	ppm		89
53)	Dibenzofuran	6.361	168	16487	5.00	ppm		92
54)	2,4-Dinitrotoluene	6.345	165	3193	4.66	ppm		97
55)	4-Nitrophenol	6.318	65	1194	2.73	ppm		78
56)	Fluorene	6.601	166	12912	4.97	ppm		98
57)	4-Chlorophenyl-phenyle...	6.591	204	6916	5.28	ppm		96
58)	Diethylphthalate	6.495	149	11011	4.91	ppm		97
59)	4-Nitroaniline	6.618	138	2701	3.99	ppm		86
63)	4,6-Dinitro-2-methylph...	6.639	198	925	1.96	ppm		90
64)	1,2 Diphenylhydrazine	6.703	77	11968	5.14	ppm		99
65)	N-Nitrosodiphenylamine	6.676	169	8767	5.18	ppm		95
66)	4-Bromophenyl-phenylether	6.938	248	3713	4.90	ppm	#	79
68)	Hexachlorobenzene	6.992	284	4431	5.13	ppm		95
69)	Atrazine	7.040	215	1104	4.94	ppm		87
70)	Pentachlorophenol	7.142	266	1011	1.81	ppm		86
71)	Phenanthrene	7.291	178	18318	5.17	ppm		97
72)	Anthracene	7.329	178	18572	5.02	ppm		95
73)	Carbazole	7.441	167	15686	4.54	ppm		97
74)	Di-n-butylphthalate	7.671	149	15810	4.13	ppm		98
75)	Fluoranthene	8.270	202	17100	4.20	ppm		98
77)	Benzidine	8.383	184	8790	7.74	ppm		96
78)	Pyrene	8.500	202	18551	4.75	ppm		98
80)	Butyl benzyl phthalate	9.217	149	7890	4.82	ppm		98
81)	3,3'-Dichlorobenzidine	10.009	252	6791	5.15	ppm		88
82)	Benzo(a)anthracene	10.046	228	20215	5.11	ppm		99
83)	Chrysene	10.105	228	20194	5.09	ppm		97
84)	bis(2-Ethylhexyl)phtha...	10.083	149	10463	4.90	ppm		95
86)	Di-n-octyl phthalate	11.319	149	15547	5.28	ppm		95
87)	Benzo(b)Fluoranthene	12.025	252	16167	5.04	ppm		97
88)	Benzo(k)fluoranthene	12.084	252	16775	4.85	ppm		97
89)	Benzo(a)pyrene	12.694	252	15652	4.93	ppm		92
90)	Indeno(1,2,3-cd)Pyrene	14.710	276	14397	5.00	ppm		79
91)	Dibenz(a,h)anthracene	14.758	278	15440	5.10	ppm		95
92)	Benzo(g,h,i)perylene	15.149	276	15051	5.03	ppm		95

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY271.D
Acq On : 1 Oct 2014 6:09 pm
Operator : Z.Miao
Sample : SSTD005 Inst : 5973D
Misc : 5.0 PPM STD 8270/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 02 10:21:46 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:21:35 2014
Response via : Initial Calibration

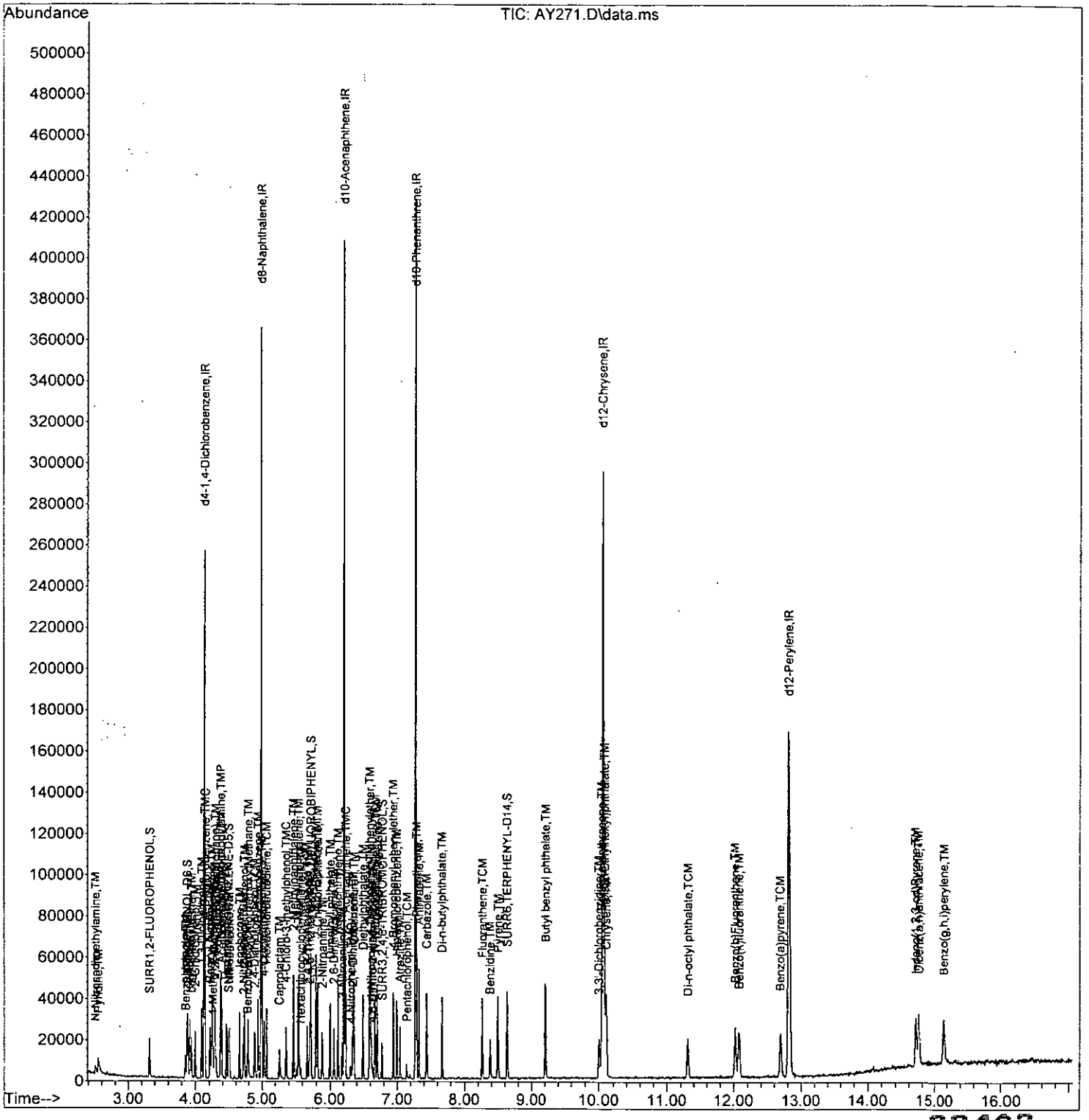
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY271.D
Acq On : 1 Oct 2014 6:09 pm
Operator : Z.Miao
Sample : SSTD005 Inst : 5973D
Misc : 5.0 PPM STD 8270/625
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 02 10:21:46 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:21:35 2014
Response via : Initial Calibration



00462

82701001D.M Thu Oct 02 10:35:57 2014 Page: 4

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\10CT14\
Data File : AY272.D
Acq On : 1 Oct 2014 6:35 pm
Operator : Z.Miao
Sample : SSTD010 Inst : 5973D
Misc : 10 PPM STD 8270/625
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 02 11:16:19 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:23:38 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.130	152	29559	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	122546	40.00	ppm	0.00
39) d10-Acenaphthene	6.216	164	75489	40.00	ppm	0.00
61) d10-Phenanthrene	7.275	188	130581	40.00	ppm	0.00
76) d12-Chrysene	10.067	240	139398	40.00	ppm	0.00
85) d12-Perylene	12.822	264	135192	40.00	ppm	0.00
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.323	112	8945	9.95	ppm	0.00
Spiked Amount 200.000	Range 10 - 105		Recovery =	4.97%#		
7) SURR2,PHENOL-D6	3.879	99	11280	9.56	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery =	4.78%#		
23) SURR4,NITROBENZENE-D5	4.489	82	10000	9.18	ppm	0.00
Spiked Amount 100.000	Range 37 - 117		Recovery =	9.18%#		
43) SURR5,2-FLUOROBIPHENYL	5.724	172	23989	10.02	ppm	0.00
Spiked Amount 100.000	Range 39 - 119		Recovery =	10.02%#		
60) SURR3,2,4,6-TRIBROMOPH...	6.778	330	3639	9.79	ppm	0.00
Spiked Amount 200.000	Range 28 - 157		Recovery =	4.89%#		
79) SURR6,TERPHENYL-D14	8.639	244	27458	9.76	ppm	0.00
Spiked Amount 100.000	Range 40 - 133		Recovery =	9.76%#		
Target Compounds						Qvalue
2) Pyridine	2.542	79	8927	9.40	ppm	93
3) N-Nitrosodimethylamine	2.499	74	4204	8.32	ppm	86
5) Benzaldehyde	3.858	106	3613	16.67	ppm	94
6) Aniline	3.917	93	15222	11.29	ppm	85
8) Phenol	3.890	94	11528	9.68	ppm	97
9) bis(2-Clethyl)Ether	3.943	93	9113	10.30	ppm	99
10) 2-Chlorophenol	3.997	128	10181	9.90	ppm	91
11) 1,3-Diclbenzene	4.093	146	11833	10.02	ppm	94
12) 1,4-Dichlorobenzene	4.141	146	12194	10.13	ppm	92
13) 1,2-Diclbenzene	4.243	146	11337	10.02	ppm	97
14) Benzyl Alcohol	4.211	79	7570	9.82	ppm	97
15) 2,2'-oxybis(1-Chloropr...	4.286	45	14191	10.77	ppm	84
16) 2-Methylphenol	4.275	108	9050	9.70	ppm	95
17) Acetophenone	4.382	105	12620	9.41	ppm	90
18) N-Nitroso-Di-n-propyla...	4.371	70	7114	10.10	ppm	94
19) Hexachloroethane	4.462	117	4313	9.58	ppm	96
20) 3+4-Methylphenol	4.377	108	9777	10.04	ppm	99
21) 1-Methyl-2-pyrrolidinone	4.237	99	6378	9.36	ppm	97
24) Nitrobenzene	4.505	77	10581	9.85	ppm	99
25) Isophorone	4.655	82	17971	9.36	ppm	99
26) 2-Nitrophenol	4.719	139	5851	9.95	ppm	95
27) Benzoic Acid	4.778	105	7592m	7.26	ppm	
28) 2,4-Dimethylphenol	4.730	107	10032	9.78	ppm	96
29) bis(-2-Chloroethoxy)Me...	4.788	93	10610	9.42	ppm	98
30) 2,4-Dichlorophenol	4.885	162	9115	9.82	ppm	94
31) 1,2,4-Trichlorobenzene	4.938	180	10742	9.84	ppm	99
32) Naphthalene	4.997	128	31619	9.81	ppm	97
33) 4-Chloroaniline	5.029	127	11775	9.33	ppm	99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\10Oct14\
Data File : AY272.D
Acq On : 1 Oct 2014 6:35 pm
Operator : Z.Miao
Sample : SSTD010 Inst : 5973D
Misc : 10 PPM STD 8270/625
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 02 11:16:19 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:23:38 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
34) Hexachlorobutadiene	5.066	225	6644	10.52	ppm		96
35) 4-Chloro-3-methylphenol	5.361	107	8026	9.30	ppm		98
36) Caprolactam	5.264	113	2837	9.19	ppm	#	66
37) 2-Methylnaphthalene	5.473	142	21636	9.66	ppm		100
38) 1-Methylnaphthalene	5.548	142	19620	9.55	ppm		99
40) Hexachlorocyclopentadiene	5.580	237	1987	3.54	ppm		98
41) 2,4,6-Trichlorophenol	5.671	196	6647	9.12	ppm		95
42) 2,4,5-Trichlorophenol	5.708	196	7691	10.24	ppm		97
44) 1,1'-Biphenyl	5.799	154	25930	9.75	ppm		98
45) 2-Chloronaphthalene	5.821	162	20970	10.01	ppm		95
46) 2-Nitroaniline	5.890	65	5482	9.68	ppm		97
47) Acenaphthylene	6.115	152	32245	9.69	ppm		99
48) Dimethyl phthalate	6.003	163	23463	10.42	ppm		99
49) 2,6-Dinitrotoluene	6.056	165	5041	10.11	ppm		92
50) Acenaphthene	6.238	153	21907	10.13	ppm		96
51) 3-Nitroaniline	6.184	138	5714	10.04	ppm		97
52) 2,4-Dinitrophenol	6.265	184	699	2.54	ppm		70
53) Dibenzofuran	6.361	168	30755	9.80	ppm		92
54) 2,4-Dinitrotoluene	6.345	165	6821	10.34	ppm		94
55) 4-Nitrophenol	6.307	65	3574	8.57	ppm		86
56) Fluorene	6.602	166	24022	9.71	ppm		97
57) 4-Chlorophenyl-phenyle...	6.591	204	12251	9.80	ppm		94
58) Diethylphthalate	6.495	149	22245	10.48	ppm		96
59) 4-Nitroaniline	6.612	138	5330	8.26	ppm		94
63) 4,6-Dinitro-2-methylph...	6.634	198	2575	5.50	ppm		75
64) 1,2 Diphenylhydrazine	6.703	77	23797	10.23	ppm		97
65) N-Nitrosodiphenylamine	6.676	169	16870	10.00	ppm		96
66) 4-Bromophenyl-phenylether	6.944	248	7647	10.13	ppm		93
68) Hexachlorobenzene	6.997	284	8260	9.64	ppm		95
69) Atrazine	7.040	215	2015	8.79	ppm	#	92
70) Pentachlorophenol	7.136	266	2320	4.19	ppm		93
71) Phenanthrene	7.292	178	35916	10.19	ppm		99
72) Anthracene	7.329	178	34986	9.46	ppm		99
73) Carbazole	7.441	167	29379	8.52	ppm		98
74) Di-n-butylphthalate	7.671	149	32625	8.52	ppm		97
75) Fluoranthene	8.265	202	33499	8.23	ppm		97
77) Benzidine	8.383	184	16934	15.00	ppm		98
78) Pyrene	8.500	202	36237	9.33	ppm		97
80) Butyl benzyl phthalate	9.217	149	16306	9.88	ppm		99
81) 3,3'-Dichlorobenzidine	10.009	252	13098	9.92	ppm		94
82) Benzo(a)anthracene	10.051	228	39465	10.00	ppm		95
83) Chrysene	10.110	228	39502	10.08	ppm		99
84) bis(2-Ethylhexyl)phtha...	10.084	149	21400	9.99	ppm		97
86) Di-n-octyl phthalate	11.314	149	34525	10.06	ppm		99
87) Benzo(b)Fluoranthene	12.025	252	33590	9.34	ppm		95
88) Benzo(k)fluoranthene	12.079	252	37975	9.83	ppm		97
89) Benzo(a)pyrene	12.699	252	32800	9.18	ppm		94
90) Indeno(1,2,3-cd)Pyrene	14.710	276	25191	7.87	ppm		94
91) Dibenz(a,h)anthracene	14.753	278	27329	8.08	ppm		94
92) Benzo(g,h,i)perylene	15.154	276	26493	8.04	ppm		97

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY272.D
Acq On : 1 Oct 2014 6:35 pm
Operator : Z.Miao
Sample : SSTD010 Inst : 5973D
Misc : 10 PPM STD 8270/625
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 02 11:16:19 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:23:38 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

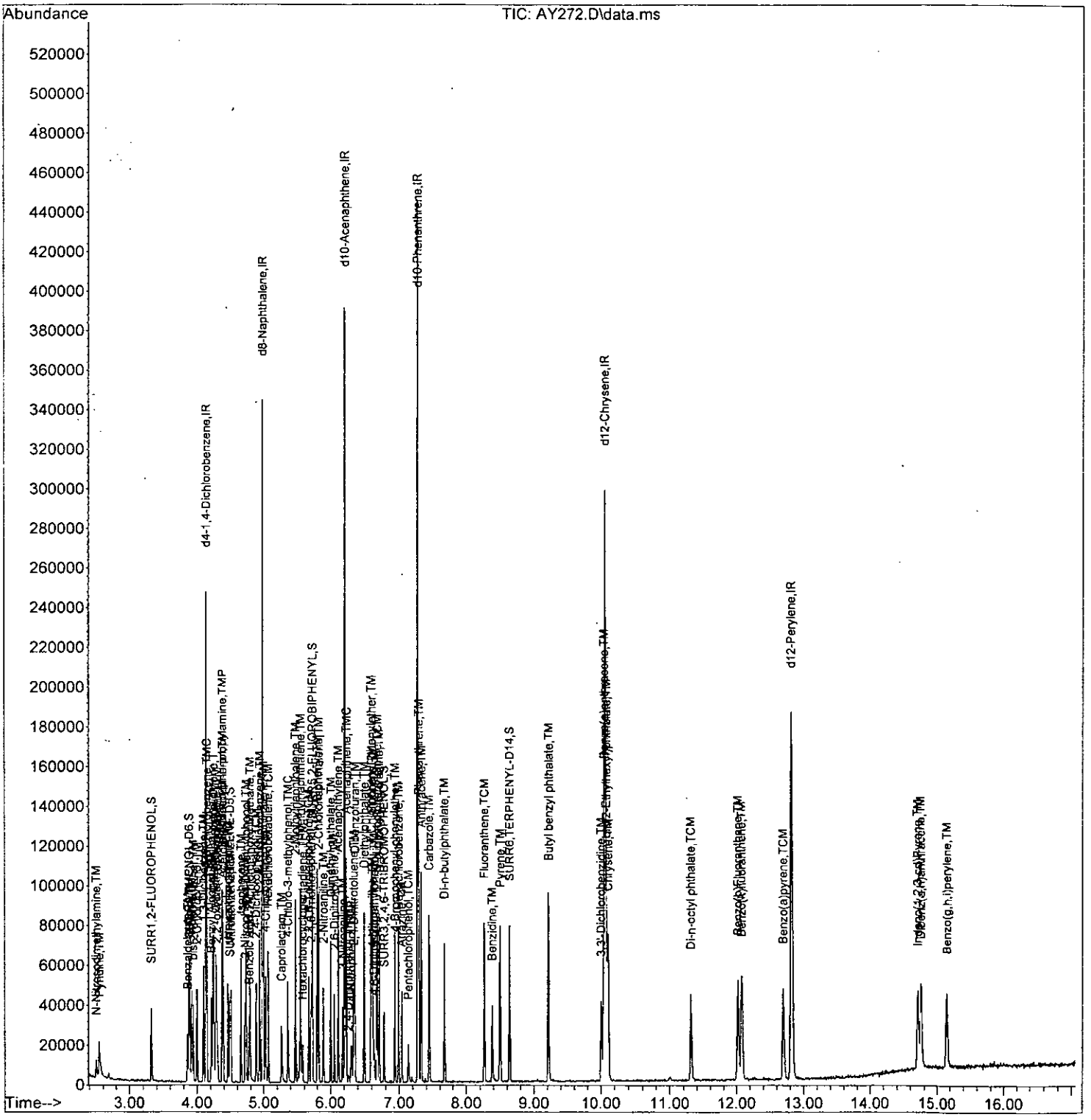
(#) = qualifier out of range (m) = manual integration (+) = signals summed

82701001D.M Thu Oct 02 11:17:16 2014 00465 Page: 3

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY272.D
Acq On : 1 Oct 2014 6:35 pm
Operator : Z.Miao
Sample : SSTD010 Inst : 5973D
Misc : 10 PPM STD 8270/625
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 02 11:16:19 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:23:38 2014
Response via : Initial Calibration

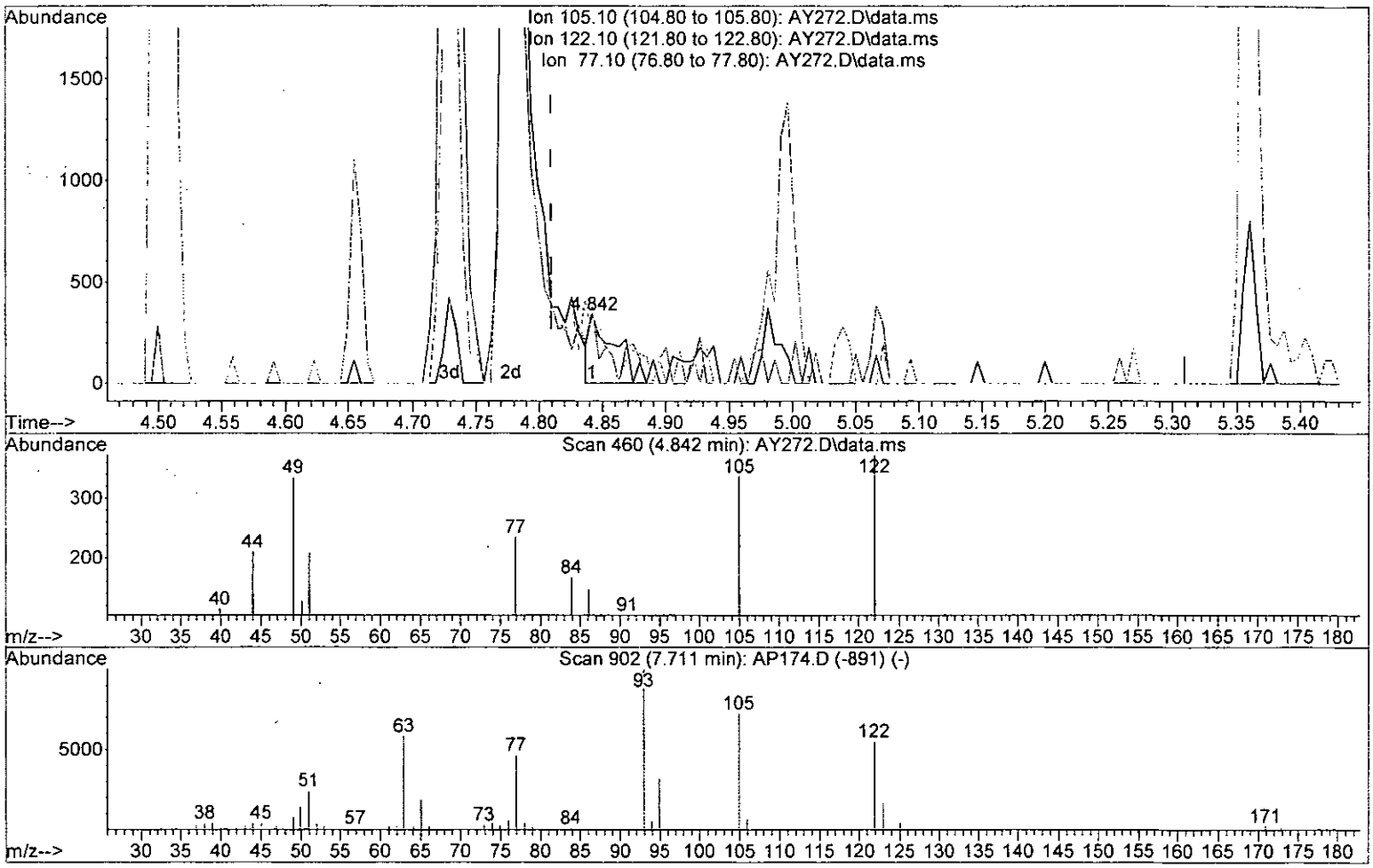


82701001D.M Thu Oct 02 11:17:18 2014 Page: 4

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\13Oct14\
Data File : AY272.D
Acq On : 1 Oct 2014 6:35 pm
Operator : Z.Miao
Sample : SSTD010 Inst : 5973D
Misc : 10 PPM STD 8270/625
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 02 10:23:46 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:23:38 2014
Response via : Initial Calibration



TIC: AY272.D\data.ms

(27) Benzoic Acid (TM)

4.842min (+0.032) 0.45 ppm

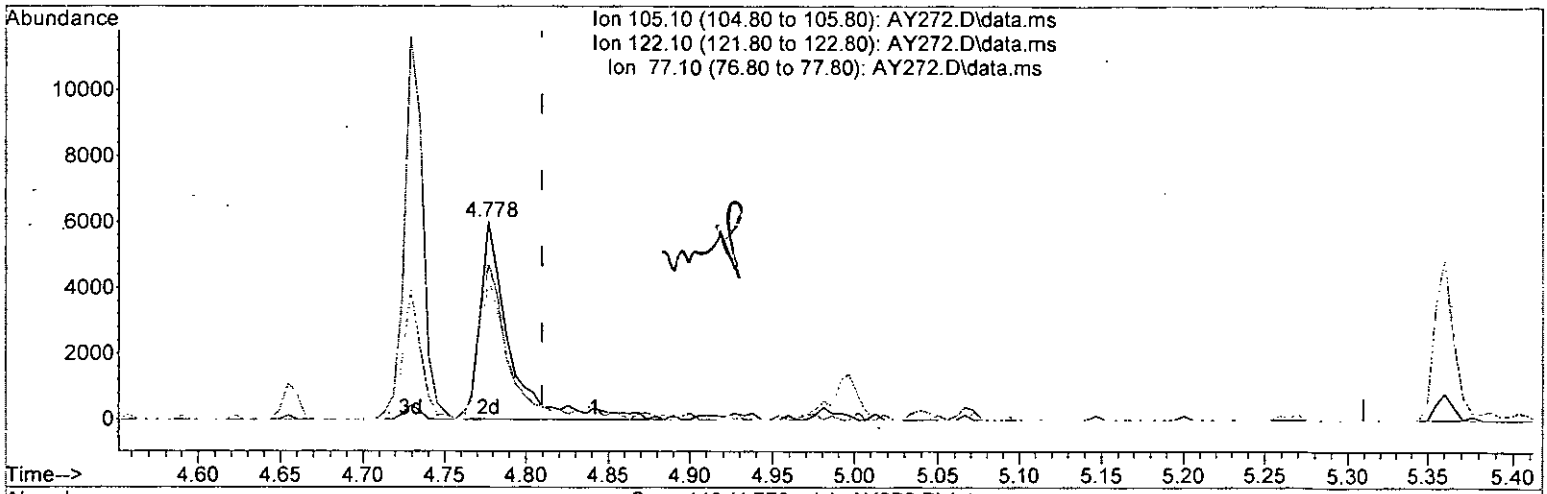
response 466

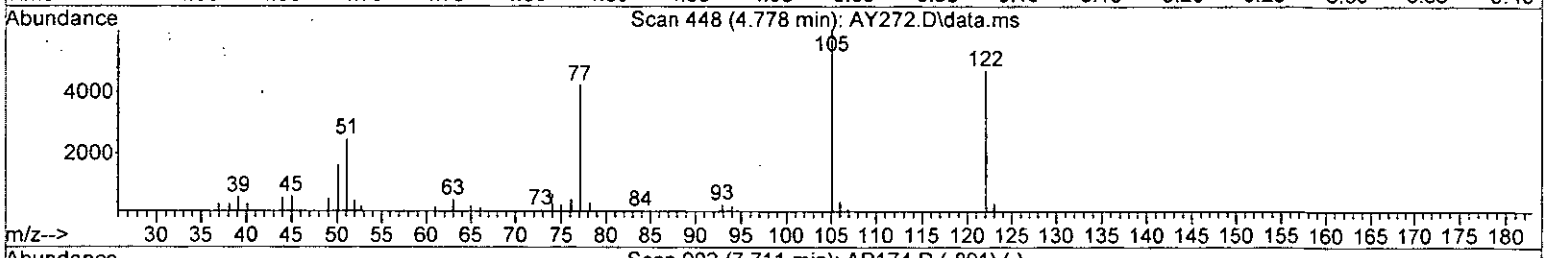
Ion	Exp%	Act%
105.10	100	100
122.10	87.00	110.39
77.10	76.20	69.44
0.00	0.00	0.00

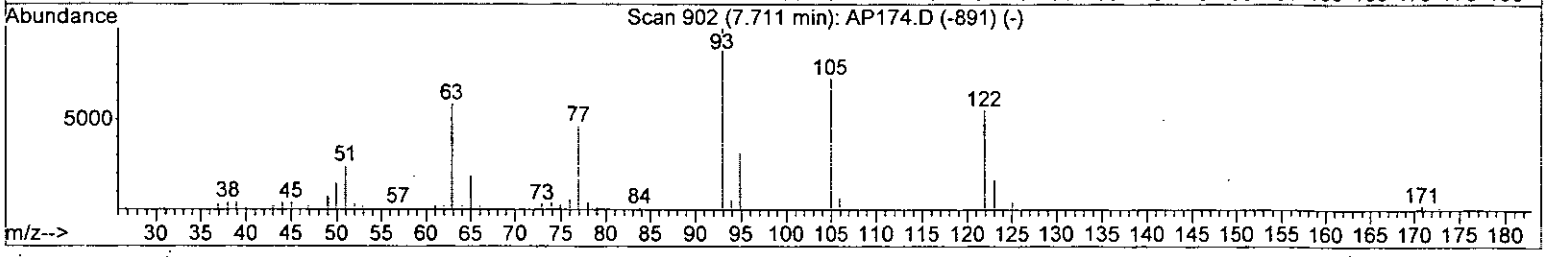
Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\10114\
Data File : AY272.D
Acq On : 1 Oct 2014 6:35 pm
Operator : Z.Miao
Sample : SSTD010 Inst : 5973D
Misc : 10 PPM STD 8270/625
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 02 10:23:46 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:23:38 2014
Response via : Initial Calibration







TIC: AY272.D\data.ms

(27) Benzoic Acid (TM)

4.778min (-0.032) 7.26 ppm m

response 7592

Ion	Exp%	Act%
105.10	100	100
122.10	87.00	78.70
77.10	76.20	70.58
0.00	0.00	0.00

10/2/14

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\101014\
Data File : AY273.D
Acq On : 1 Oct 2014 7:01 pm
Operator : Z.Miao
Sample : SSTD050 Inst : 5973D
Misc : 50 PPM STD 8270/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 02 10:25:16 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:25:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.130	152	33380	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	135743	40.00	ppm	0.00
39) d10-Acenaphthene	6.216	164	85492	40.00	ppm	0.00
61) d10-Phenanthrene	7.276	188	137638	40.00	ppm	0.00
76) d12-Chrysene	10.068	240	169800	40.00	ppm	0.00
85) d12-Perylene	12.827	264	156216	40.00	ppm	0.00
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.323	112	49626	48.86	ppm	0.00
Spiked Amount 200.000	Range 10 - 105		Recovery = 24.43%			
7) SURR2,PHENOL-D6	3.879	99	64294	48.32	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 24.16%			
23) SURR4,NITROBENZENE-D5	4.494	82	57349	48.87	ppm	0.00
Spiked Amount 100.000	Range 37 - 117		Recovery = 48.87%			
43) SURR5,2-FLUOROBIPHENYL	5.724	172	130517	48.10	ppm	0.00
Spiked Amount 100.000	Range 39 - 119		Recovery = 48.10%			
60) SURR3,2,4,6-TRIBROMOPH...	6.778	330	21152	50.16	ppm	0.00
Spiked Amount 200.000	Range 28 - 157		Recovery = 25.08%#			
79) SURR6,TERPHENYL-D14	8.639	244	168840	49.19	ppm	0.00
Spiked Amount 100.000	Range 40 - 133		Recovery = 49.19%			
Target Compounds						Qvalue
2) Pyridine	2.526	79	49814	46.47	ppm	99
3) N-Nitrosodimethylamine	2.488	74	26704	47.86	ppm	97
5) Benzaldehyde	3.858	106	21644	88.43	ppm	96
6) Aniline	3.917	93	67956	44.75	ppm	67
8) Phenol	3.890	94	66294	49.30	ppm	97
9) bis(2-Clethyl)Ether	3.943	93	47680	47.65	ppm	91
10) 2-Chlorophenol	3.997	128	56899	48.80	ppm	96
11) 1,3-Diclbenzene	4.093	146	65630	49.07	ppm	99
12) 1,4-Dichlorobenzene	4.141	146	68089	50.04	ppm	97
13) 1,2-Diclbenzene	4.243	146	62574	49.13	ppm	97
14) Benzyl Alcohol	4.211	79	43558	49.72	ppm	96
15) 2,2'-oxybis(1-Chloropr...	4.286	45	76122	50.40	ppm	93
16) 2-Methylphenol	4.280	108	51848	49.18	ppm	99
17) Acetophenone	4.387	105	74696	49.55	ppm	96
18) N-Nitroso-Di-n-propyla...	4.377	70	38845	48.69	ppm	91
19) Hexachloroethane	4.462	117	25058	49.65	ppm	98
20) 3+4-Methylphenol	4.377	108	53684	48.28	ppm	95
21) 1-Methyl-2-pyrrolidinone	4.237	99	37495	48.99	ppm	97
24) Nitrobenzene	4.505	77	59095	49.87	ppm	99
25) Isophorone	4.660	82	104863	49.57	ppm	99
26) 2-Nitrophenol	4.719	139	32917	49.64	ppm	97
27) Benzoic Acid	4.799	105	54915	53.13	ppm	98
28) 2,4-Dimethylphenol	4.730	107	54587	48.08	ppm	94
29) bis(-2-Chloroethoxy)Me...	4.788	93	61033	49.30	ppm	100
30) 2,4-Dichlorophenol	4.885	162	51755	49.86	ppm	96
31) 1,2,4-Trichlorobenzene	4.938	180	60859	50.89	ppm	99
32) Naphthalene	4.997	128	174844	49.27	ppm	100
33) 4-Chloroaniline	5.029	127	64299	46.57	ppm	100

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY273.D
Acq On : 1 Oct 2014 7:01 pm
Operator : Z.Miao
Sample : SSTD050 Inst : 5973D
Misc : 50 PPM STD 8270/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 02 10:25:16 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:25:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Hexachlorobutadiene	5.072	225	34673	49.28	ppm	98
35) 4-Chloro-3-methylphenol	5.361	107	47183	49.09	ppm	95
36) Caprolactam	5.275	113	16499	50.02	ppm	98
37) 2-Methylnaphthalene	5.473	142	119161	48.17	ppm	99
38) 1-Methylnaphthalene	5.548	142	111490	49.11	ppm	99
40) Hexachlorocyclopentadiene	5.580	237	23638	40.84	ppm	95
41) 2,4,6-Trichlorophenol	5.671	196	39961	48.42	ppm	97
42) 2,4,5-Trichlorophenol	5.708	196	42547	49.21	ppm	97
44) 1,1'-Biphenyl	5.799	154	149159	49.63	ppm	99
45) 2-Chloronaphthalene	5.821	162	115973	48.90	ppm	97
46) 2-Nitroaniline	5.890	65	31959	49.83	ppm	93
47) Acenaphthylene	6.115	152	189836	50.46	ppm	99
48) Dimethyl phthalate	6.003	163	128402	50.12	ppm	100
49) 2,6-Dinitrotoluene	6.056	165	30411	52.90	ppm	97
50) Acenaphthene	6.238	153	120430	49.13	ppm	99
51) 3-Nitroaniline	6.184	138	31482	48.84	ppm	90
52) 2,4-Dinitrophenol	6.259	184	13148	42.11	ppm	98
53) Dibenzofuran	6.361	168	177781	50.35	ppm	95
54) 2,4-Dinitrotoluene	6.345	165	38111	49.84	ppm	98
55) 4-Nitrophenol	6.302	65	19047	40.31	ppm	91
56) Fluorene	6.602	166	138265	49.83	ppm	98
57) 4-Chlorophenyl-phenyle...	6.591	204	70153	49.96	ppm	97
58) Diethylphthalate	6.495	149	116525	48.68	ppm	97
59) 4-Nitroaniline	6.618	138	32981	45.13	ppm	95
63) 4,6-Dinitro-2-methylph...	6.634	198	23211	47.07	ppm	84
64) 1,2 Diphenylhydrazine	6.703	77	130213	52.90	ppm	99
65) N-Nitrosodiphenylamine	6.676	169	94010	52.76	ppm	97
66) 4-Bromophenyl-phenylether	6.939	248	43005	54.06	ppm	91
68) Hexachlorobenzene	6.997	284	48417	53.99	ppm	95
69) Atrazine	7.046	215	9676	40.80	ppm	99
70) Pentachlorophenol	7.136	266	20648	35.37	ppm	99
71) Phenanthrene	7.292	178	188061	50.42	ppm	99
72) Anthracene	7.329	178	192721	49.27	ppm	99
73) Carbazole	7.441	167	181248	49.90	ppm	99
74) Di-n-butylphthalate	7.677	149	218746	53.71	ppm	98
75) Fluoranthene	8.270	202	225221	52.26	ppm	96
77) Benzidine	8.388	184	58593	42.60	ppm	99
78) Pyrene	8.500	202	239886	50.50	ppm	100
80) Butyl benzyl phthalate	9.217	149	100372	49.39	ppm	96
81) 3,3'-Dichlorobenzidine	10.014	252	83908	51.88	ppm	98
82) Benzo(a)anthracene	10.057	228	234934	48.62	ppm	98
83) Chrysene	10.116	228	229974	48.35	ppm	98
84) bis(2-Ethylhexyl)phtha...	10.089	149	137096	52.03	ppm	96
86) Di-n-octyl phthalate	11.319	149	213564	52.27	ppm	99
87) Benzo(b)Fluoranthene	12.030	252	202542	48.66	ppm	97
88) Benzo(k)fluoranthene	12.089	252	212651	47.53	ppm	99
89) Benzo(a)pyrene	12.704	252	197780	47.74	ppm	99
90) Indeno(1,2,3-cd)Pyrene	14.715	276	182829	50.65	ppm	95
91) Dibenz(a,h)anthracene	14.758	278	192616	50.13	ppm	96
92) Benzo(g,h,i)perylene	15.154	276	186457	50.46	ppm	97

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\DataFile14\
Data File : AY273.D
Acq On : 1 Oct 2014 7:01 pm
Operator : Z.Miao
Sample : SSTD050 Inst : 5973D
Misc : 50 PPM STD 8270/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 02 10:25:16 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:25:09 2014
Response via : Initial Calibration

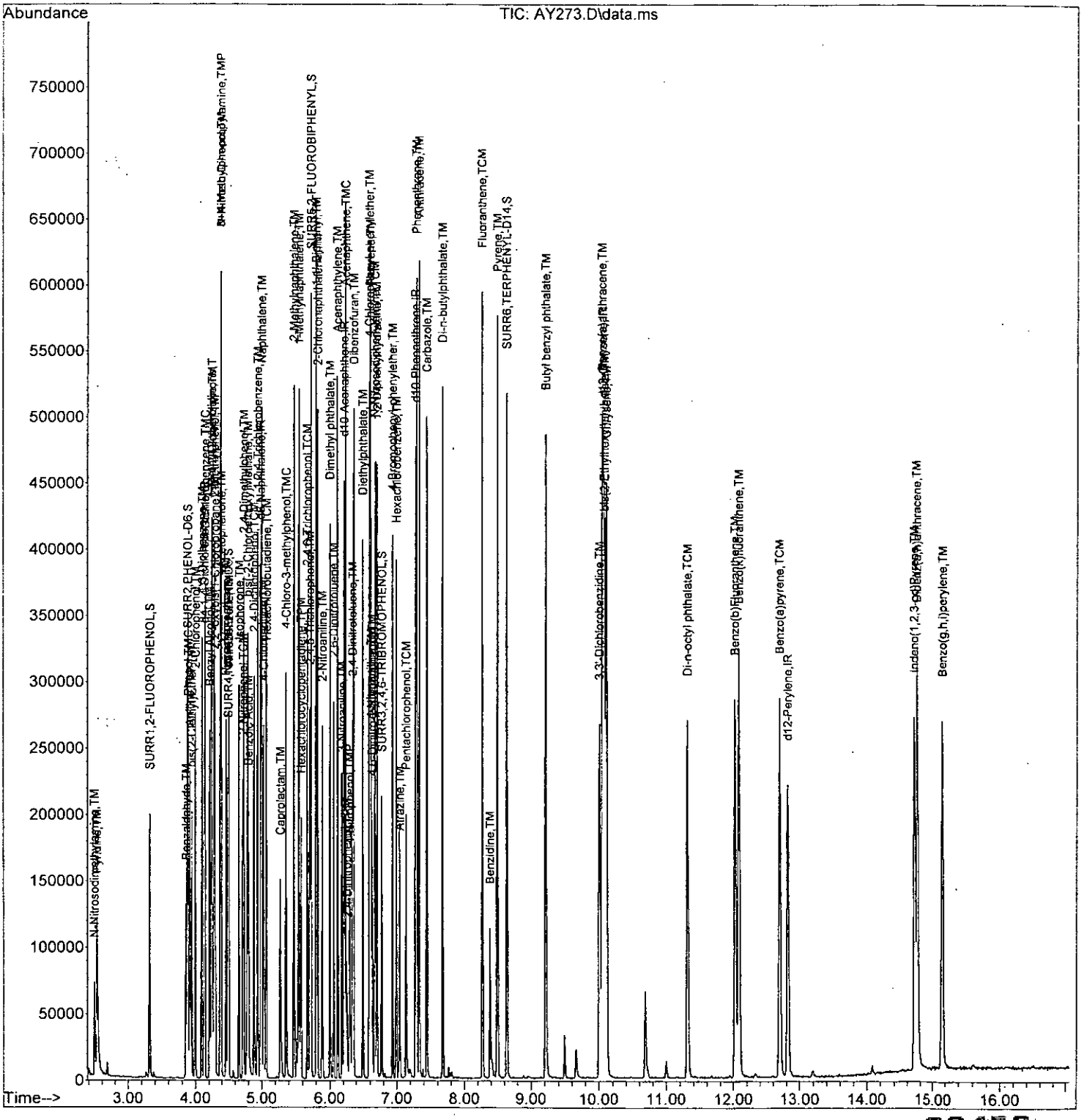
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\141001\
Data File : AY273.D
Acq On : 1 Oct 2014 7:01 pm
Operator : Z.Miao
Sample : SSTD050 Inst : 5973D
Misc : 50 PPM STD 8270/625
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 02 10:25:16 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:25:09 2014
Response via : Initial Calibration



82701001D.M Thu Oct 02 10:36:18 2014

00472

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\101014\
Data File : AY274.D
Acq On : 1 Oct 2014 7:27 pm
Operator : Z.Miao
Sample : SSTD080 Inst : 5973D
Misc : 80 PPM STD 8270/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 02 10:17:24 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:17:18 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.130	152	29804	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	124241	40.00	ppm	0.00
39) d10-Acenaphthene	6.216	164	78834	40.00	ppm	0.00
61) d10-Phenanthrene	7.275	188	129491	40.00	ppm	0.00
76) d12-Chrysene	10.073	240	156485	40.00	ppm	0.00
85) d12-Perylene	12.827	264	146998	40.00	ppm	0.00
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.323	112	76976	84.23	ppm	0.00
Spiked Amount 200.000	Range 10 - 105		Recovery = 42.12%			
7) SURR2,PHENOL-D6	3.879	99	99969	85.03	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 42.52%			
23) SURR4,NITROBENZENE-D5	4.494	82	88563	79.53	ppm	0.00
Spiked Amount 100.000	Range 37 - 117		Recovery = 79.53%			
43) SURR5,2-FLUOROBIPHENYL	5.724	172	201159	80.94	ppm	0.00
Spiked Amount 100.000	Range 39 - 119		Recovery = 80.94%			
60) SURR3,2,4,6-TRIBROMOPH...	6.778	330	30860	79.78	ppm	0.00
Spiked Amount 200.000	Range 28 - 157		Recovery = 39.89%			
79) SURR6,TERPHENYL-D14	8.639	244	251444	79.41	ppm	0.00
Spiked Amount 100.000	Range 40 - 133		Recovery = 79.41%			
Target Compounds						Qvalue
2) Pyridine	2.521	79	74396	77.73	ppm	100
3) N-Nitrosodimethylamine	2.488	74	41199	80.18	ppm	100
5) Benzaldehyde	3.858	106	28897	132.23	ppm	100
6) Aniline	3.916	93	92064	67.67	ppm	100
8) Phenol	3.890	94	101899	84.69	ppm	100
9) bis(2-Clethyl)Ether	3.943	93	73697	82.48	ppm	100
10) 2-Chlorophenol	3.997	128	85859	83.13	ppm	100
11) 1,3-Diclbenzene	4.093	146	96379	81.94	ppm	100
12) 1,4-Dichlorobenzene	4.141	146	98488	81.50	ppm	100
13) 1,2-Diclbenzene	4.243	146	95429	82.73	ppm	100
14) Benzyl Alcohol	4.211	79	64203	83.29	ppm	100
15) 2,2'-oxybis(1-Chloropr...	4.286	45	117142	89.10	ppm	100
16) 2-Methylphenol	4.280	108	76817	81.98	ppm	100
17) Acetophenone	4.387	105	111634	83.18	ppm	100
18) N-Nitroso-Di-n-propyla...	4.376	70	61091	86.21	ppm	100
19) Hexachloroethane	4.462	117	37713	84.43	ppm	100
20) 3+4-Methylphenol	4.376	108	85968	87.79	ppm	100
21) 1-Methyl-2-pyrrolidinone	4.243	99	54590	79.43	ppm	100
24) Nitrobenzene	4.505	77	87748	80.89	ppm	100
25) Isophorone	4.660	82	156990	81.23	ppm	100
26) 2-Nitrophenol	4.719	139	49705	83.57	ppm	100
27) Benzoic Acid	4.810	105	90674	85.50	ppm	100
28) 2,4-Dimethylphenol	4.729	107	84673	81.86	ppm	100
29) bis(-2-Chloroethoxy)Me...	4.788	93	92098	80.28	ppm	100
30) 2,4-Dichlorophenol	4.885	162	77560	82.73	ppm	100
31) 1,2,4-Trichlorobenzene	4.938	180	89160	79.71	ppm	100
32) Naphthalene	4.997	128	261901	80.20	ppm	100
33) 4-Chloroaniline	5.029	127	94530	74.20	ppm	100

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY274.D
Acq On : 1 Oct 2014 7:27 pm
Operator : Z.Miao
Sample : SSTD080 Inst : 5973D
Misc : 80 PPM STD 8270/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 02 10:17:24 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:17:18 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Hexachlorobutadiene	5.072	225	52993	82.11	ppm	100
35) 4-Chloro-3-methylphenol	5.361	107	73164	85.88	ppm	100
36) Caprolactam	5.280	113	24465	78.21	ppm	100
37) 2-Methylnaphthalene	5.473	142	186311	81.96	ppm	100
38) 1-Methylnaphthalene	5.548	142	165236	79.20	ppm	100
40) Hexachlorocyclopentadiene	5.580	237	36142	55.76	ppm	100
41) 2,4,6-Trichlorophenol	5.671	196	62026	82.27	ppm	100
42) 2,4,5-Trichlorophenol	5.708	196	62786	81.74	ppm	100
44) 1,1'-Biphenyl	5.799	154	227188	81.33	ppm	100
45) 2-Chloronaphthalene	5.821	162	177466	81.42	ppm	100
46) 2-Nitroaniline	5.890	65	49877	84.33	ppm	100
47) Acenaphthylene	6.115	152	278769	80.57	ppm	100
48) Dimethyl phthalate	6.002	163	192784	82.13	ppm	100
49) 2,6-Dinitrotoluene	6.056	165	46644	87.96	ppm	100
50) Acenaphthene	6.238	153	179969	78.61	ppm	100
51) 3-Nitroaniline	6.184	138	46894	78.89	ppm	100
52) 2,4-Dinitrophenol	6.259	184	22084	76.71	ppm	100
53) Dibenzofuran	6.361	168	264987	80.79	ppm	100
54) 2,4-Dinitrotoluene	6.345	165	58946	86.43	ppm	100
55) 4-Nitrophenol	6.302	65	31535	72.38	ppm	100
56) Fluorene	6.601	166	208629	80.71	ppm	100
57) 4-Chlorophenyl-phenyle...	6.591	204	104709	80.37	ppm	100
58) Diethylphthalate	6.500	149	176801	79.22	ppm	100
59) 4-Nitroaniline	6.618	138	52560	77.99	ppm	100
63) 4,6-Dinitro-2-methylph...	6.639	198	36673	79.06	ppm	100
64) 1,2 Diphenylhydrazine	6.703	77	193170	84.45	ppm	100
65) N-Nitrosodiphenylamine	6.676	169	134534	80.83	ppm	100
66) 4-Bromophenyl-phenylether	6.944	248	62838	84.33	ppm	100
68) Hexachlorobenzene	6.997	284	68373	80.59	ppm	100
69) Atrazine	7.045	215	11720	53.38	ppm	100
70) Pentachlorophenol	7.136	266	36828	67.06	ppm	100
71) Phenanthrene	7.291	178	276037	79.33	ppm	100
72) Anthracene	7.329	178	296535	81.53	ppm	100
73) Carbazole	7.447	167	277935	81.94	ppm	100
74) Di-n-butylphthalate	7.677	149	333063	88.55	ppm	100
75) Fluoranthene	8.270	202	332460	83.09	ppm	100
77) Benzidine	8.388	184	71302	56.26	ppm	100
78) Pyrene	8.500	202	358508	82.27	ppm	100
80) Butyl benzyl phthalate	9.217	149	154584	84.63	ppm	100
81) 3,3'-Dichlorobenzidine	10.014	252	123164	83.62	ppm	100
82) Benzo(a)anthracene	10.057	228	353356	80.07	ppm	100
83) Chrysene	10.116	228	339888	76.70	ppm	100
84) bis(2-Ethylhexyl)phtha...	10.089	149	207205	87.02	ppm	100
86) Di-n-octyl phthalate	11.319	149	307684	86.53	ppm	100
87) Benzo(b)Fluoranthene	12.036	252	311889	80.62	ppm	100
88) Benzo(k)fluoranthene	12.095	252	327657	78.42	ppm	100
89) Benzo(a)pyrene	12.710	252	314189	82.04	ppm	100
90) Indeno(1,2,3-cd)Pyrene	14.721	276	294105	84.54	ppm	100
91) Dibenz(a,h)anthracene	14.764	278	314342	86.02	ppm	100
92) Benzo(g,h,i)perylene	15.159	276	298084	82.59	ppm	100

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY274.D
Acq On : 1 Oct 2014 7:27 pm
Operator : Z.Miao
Sample : SSTD080 Inst : 5973D
Misc : 80 PPM STD 8270/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 02 10:17:24 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:17:18 2014
Response via : Initial Calibration

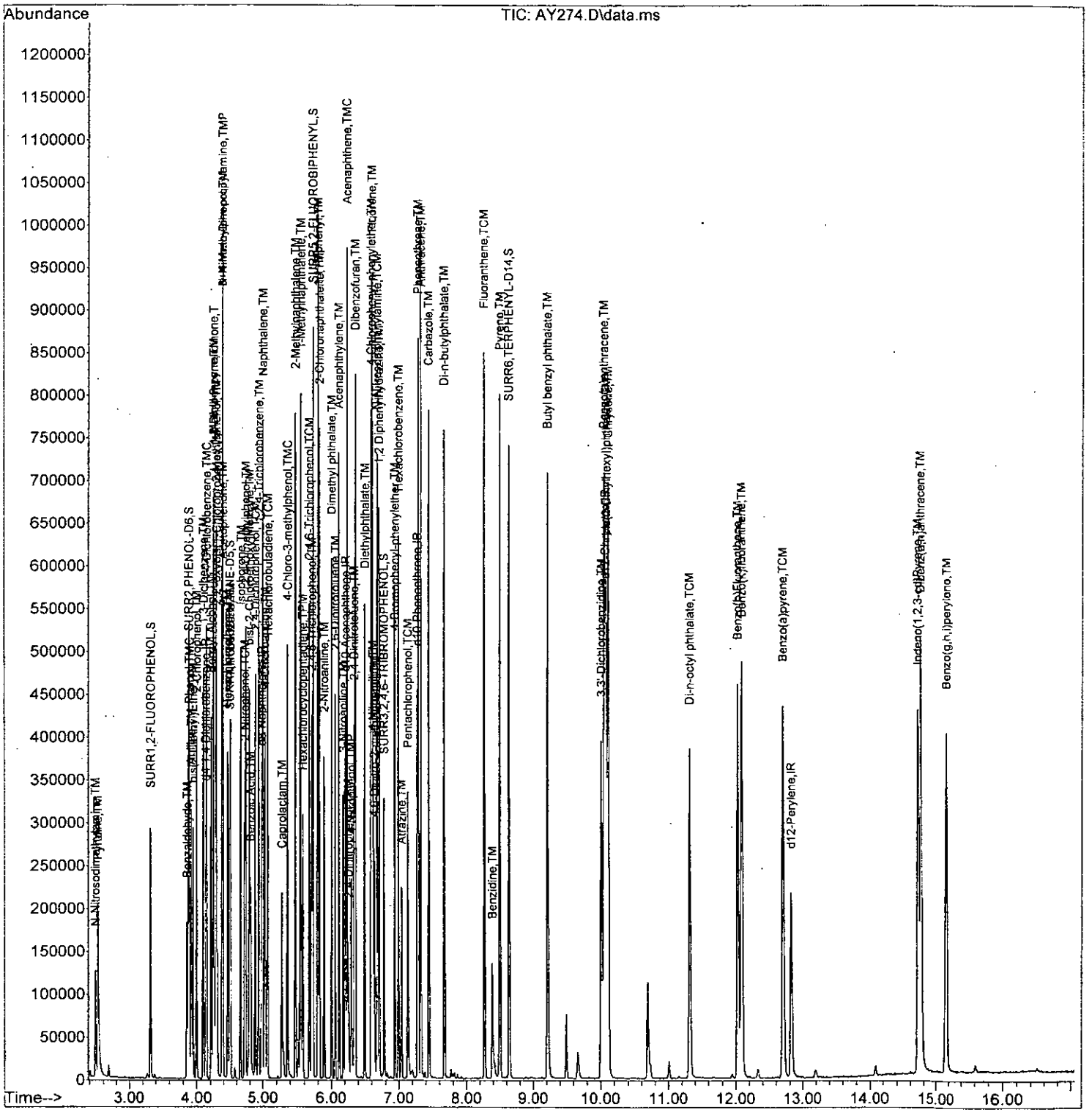
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY274.D
Acq On : 1 Oct 2014 7:27 pm
Operator : Z.Miao
Sample : SSTD080 Inst : 5973D
Misc : 80 PPM STD 8270/625
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 02 10:17:24 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:17:18 2014
Response via : Initial Calibration



82701001D.M Thu Oct 02 10:36:28 2014 Page: 4

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY275.D
Acq On : 1 Oct 2014 7:52 pm
Operator : Z.Miao
Sample : SSTD100 Inst : 5973D
Misc : 100 PPM STD 8270/625
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 02 10:27:11 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:27:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.130	152	31218	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	125356	40.00	ppm	0.00
39) d10-Acenaphthene	6.216	164	82054	40.00	ppm	0.00
61) d10-Phenanthrene	7.275	188	141375	40.00	ppm	0.00
76) d12-Chrysene	10.073	240	169734	40.00	ppm	0.00
85) d12-Perylene	12.827	264	151515	40.00	ppm	0.00
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.317	112	99238	104.03	ppm	0.00
Spiked Amount 200.000	Range 10 - 105		Recovery = 52.02%			
7) SURR2,PHENOL-D6	3.879	99	131765	105.56	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 52.78%			
23) SURR4,NITROBENZENE-D5	4.494	82	109217	101.98	ppm	0.00
Spiked Amount 100.000	Range 37 - 117		Recovery = 101.98%			
43) SURR5,2-FLUOROBIPHENYL	5.724	172	256987	98.97	ppm	0.00
Spiked Amount 100.000	Range 39 - 119		Recovery = 98.97%			
60) SURR3,2,4,6-TRIBROMOPH...	6.778	330	41029	100.27	ppm	0.00
Spiked Amount 200.000	Range 28 - 157		Recovery = 50.13%			
79) SURR6,TERPHENYL-D14	8.639	244	337904	98.19	ppm	0.00
Spiked Amount 100.000	Range 40 - 133		Recovery = 98.19%			
Target Compounds						Qvalue
2) Pyridine	2.521	79	98912	99.25	ppm	97
3) N-Nitrosodimethylamine	2.488	74	52536	101.60	ppm	97
5) Benzaldehyde	3.858	106	35702	141.03	ppm	95
6) Aniline	3.916	93	116850	83.74	ppm	96
8) Phenol	3.890	94	132670	105.31	ppm	98
9) bis(2-Clethyl)Ether	3.943	93	96424	102.62	ppm	92
10) 2-Chlorophenol	3.997	128	114641	104.88	ppm	95
11) 1,3-Diclbenzene	4.093	146	121490	96.65	ppm	95
12) 1,4-Dichlorobenzene	4.141	146	127579	99.47	ppm	94
13) 1,2-Diclbenzene	4.243	146	120588	101.21	ppm	99
14) Benzyl Alcohol	4.211	79	82784	100.54	ppm	99
15) 2,2'-oxybis(1-Chloropr...	4.286	45	147249	102.82	ppm	94
16) 2-Methylphenol	4.280	108	100985	102.17	ppm	98
17) Acetophenone	4.387	105	140215	99.20	ppm	97
18) N-Nitroso-Di-n-propyla...	4.376	70	78778	104.89	ppm	95
19) Hexachloroethane	4.462	117	46937	98.50	ppm	96
20) 3+4-Methylphenol	4.376	108	107393	103.14	ppm	94
21) 1-Methyl-2-pyrrolidinone	4.248	99	75537	105.42	ppm	97
24) Nitrobenzene	4.505	77	113294	103.41	ppm	100
25) Isophorone	4.660	82	202657	103.59	ppm	98
26) 2-Nitrophenol	4.719	139	67266	109.14	ppm	94
27) Benzoic Acid	4.815	105	121417	126.87	ppm	100
28) 2,4-Dimethylphenol	4.729	107	108761	104.18	ppm	99
29) bis(-2-Chloroethoxy)Me...	4.794	93	119443	104.31	ppm	99
30) 2,4-Dichlorophenol	4.885	162	98902	102.85	ppm	95
31) 1,2,4-Trichlorobenzene	4.938	180	112469	101.48	ppm	97
32) Naphthalene	4.997	128	340212	103.77	ppm	99
33) 4-Chloroaniline	5.029	127	118554	94.21	ppm	97

82701001D.M Thu Oct 02 10:38:02 2014

00477

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\DataSample\
Data File : AY275.D
Acq On : 1 Oct 2014 7:52 pm
Operator : Z.Miao
Sample : SSTD100 Inst : 5973D
Misc : 100 PPM STD 8270/625
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 02 10:27:11 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:27:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Hexachlorobutadiene	5.072	225	68219	104.42	ppm	100
35) 4-Chloro-3-methylphenol	5.361	107	94488	106.42	ppm	97
36) Caprolactam	5.280	113	31933	105.33	ppm	90
37) 2-Methylnaphthalene	5.478	142	233798	102.59	ppm	98
38) 1-Methylnaphthalene	5.548	142	210291	100.34	ppm	98
40) Hexachlorocyclopentadiene	5.580	237	49373	95.94	ppm	95
41) 2,4,6-Trichlorophenol	5.671	196	79736	101.31	ppm	97
42) 2,4,5-Trichlorophenol	5.708	196	85216	102.56	ppm	98
44) 1,1'-Biphenyl	5.799	154	293725	101.79	ppm	98
45) 2-Chloronaphthalene	5.821	162	224446	98.60	ppm	97
46) 2-Nitroaniline	5.890	65	63693	103.13	ppm	99
47) Acenaphthylene	6.120	152	349885	96.76	ppm	98
48) Dimethyl phthalate	6.002	163	243816	99.23	ppm	99
49) 2,6-Dinitrotoluene	6.056	165	58149	104.70	ppm	96
50) Acenaphthene	6.238	153	230617	98.05	ppm	98
51) 3-Nitroaniline	6.184	138	61072	98.76	ppm	95
52) 2,4-Dinitrophenol	6.259	184	31455	102.64	ppm	93
53) Dibenzofuran	6.361	168	336052	99.09	ppm	96
54) 2,4-Dinitrotoluene	6.345	165	77689	104.89	ppm	97
55) 4-Nitrophenol	6.302	65	42776	97.29	ppm	94
56) Fluorene	6.601	166	274538	103.41	ppm	95
57) 4-Chlorophenyl-phenyle...	6.591	204	138697	102.94	ppm	96
58) Diethylphthalate	6.500	149	230208	99.79	ppm	99
59) 4-Nitroaniline	6.623	138	68416	99.16	ppm	95
63) 4,6-Dinitro-2-methylph...	6.639	198	52655	103.19	ppm	96
64) 1,2 Diphenylhydrazine	6.703	77	251149	99.96	ppm	100
65) N-Nitrosodiphenylamine	6.676	169	172826	94.07	ppm	95
66) 4-Bromophenyl-phenylether	6.944	248	80302	98.22	ppm	98
68) Hexachlorobenzene	6.997	284	89411	97.06	ppm	98
69) Atrazine	7.045	215	15781	69.01	ppm	85
70) Pentachlorophenol	7.136	266	49701	86.47	ppm	96
71) Phenanthrene	7.291	178	367713	95.57	ppm	99
72) Anthracene	7.329	178	391650	97.70	ppm	99
73) Carbazole	7.441	167	363449	98.88	ppm	99
74) Di-n-butylphthalate	7.677	149	432476	103.18	ppm	99
75) Fluoranthene	8.270	202	454074	103.22	ppm	97
77) Benzidine	8.388	184	89618	71.18	ppm	98
78) Pyrene	8.500	202	482267	101.15	ppm	98
80) Butyl benzyl phthalate	9.217	149	204854	100.61	ppm	99
81) 3,3'-Dichlorobenzidine	10.014	252	162962	99.71	ppm	99
82) Benzo(a)anthracene	10.057	228	475965	98.60	ppm	98
83) Chrysene	10.116	228	462773	97.51	ppm	98
84) bis(2-Ethylhexyl)phtha...	10.089	149	281863	105.69	ppm	98
86) Di-n-octyl phthalate	11.319	149	408108	101.27	ppm	100
87) Benzo(b)Fluoranthene	12.041	252	414991	102.88	ppm	99
88) Benzo(k)fluoranthene	12.095	252	455562	105.60	ppm	99
89) Benzo(a)pyrene	12.710	252	424841	106.29	ppm	99
90) Indeno(1,2,3-cd)Pyrene	14.721	276	390732	111.03	ppm	100
91) Dibenz(a,h)anthracene	14.764	278	417165	111.43	ppm	97
92) Benzo(g,h,i)perylene	15.165	276	393358	110.11	ppm	95

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY275.D
Acq On : 1 Oct 2014 7:52 pm
Operator : Z.Miao
Sample : SSTD100 Inst : 5973D
Misc : 100 PPM STD 8270/625
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 02 10:27:11 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:27:04 2014
Response via : Initial Calibration

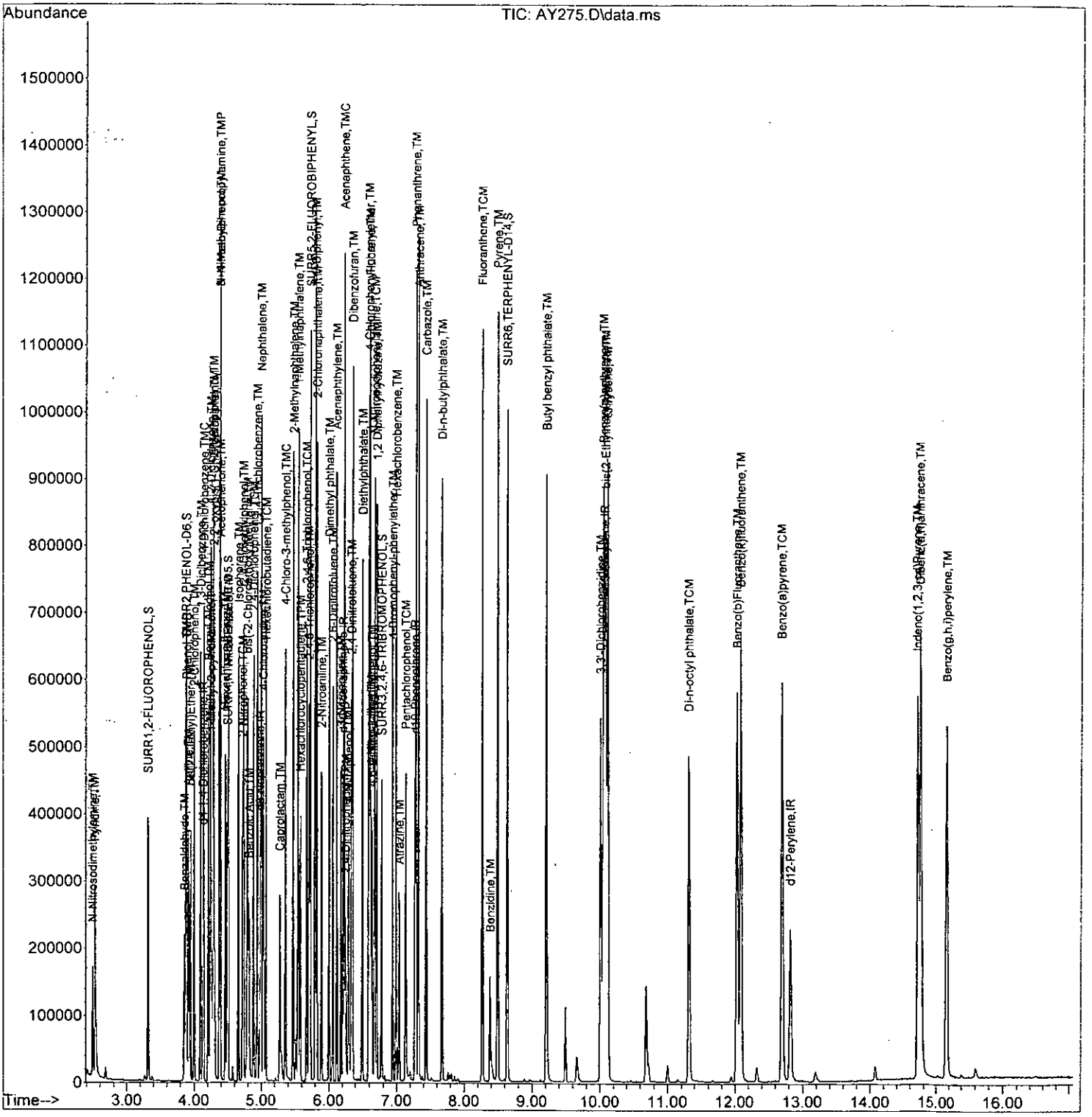
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY275.D
Acq On : 1 Oct 2014 7:52 pm
Operator : Z.Miao
Sample : SSTD100 Inst : 5973D
Misc : 100 PPM STD 8270/625
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 02 10:27:11 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:27:04 2014
Response via : Initial Calibration



82701001D.M Thu Oct 02 10:38:04 2014 00480 Page: 4

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY276.D
Acq On : 1 Oct 2014 8:18 pm
Operator : Z.Miao
Sample : SSTD120 Inst : 5973D
Misc : 120 PPM STD 8270/625
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 02 10:28:31 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:28:24 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.131	152	32674	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	128922	40.00	ppm	0.00
39) d10-Acenaphthene	6.216	164	80319	40.00	ppm	0.00
61) d10-Phenanthrene	7.276	188	136695	40.00	ppm	0.00
76) d12-Chrysene	10.073	240	166283	40.00	ppm	0.00
85) d12-Perylene	12.827	264	152781	40.00	ppm	0.00
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.323	112	120489	119.61	ppm	0.00
Spiked Amount 200.000	Range 10 - 105		Recovery = 59.81%			
7) SURR2,PHENOL-D6	3.879	99	159182	120.69	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 60.35%			
23) SURR4,NITROBENZENE-D5	4.494	82	134712	121.88	ppm	0.00
Spiked Amount 100.000	Range 37 - 117		Recovery = 121.88%#			
43) SURR5,2-FLUOROBIPHENYL	5.724	172	314085	123.84	ppm	0.00
Spiked Amount 100.000	Range 39 - 119		Recovery = 123.84%#			
60) SURR3,2,4,6-TRIBROMOPH...	6.778	330	48013	119.28	ppm	0.00
Spiked Amount 200.000	Range 28 - 157		Recovery = 59.64%			
79) SURR6,TERPHENYL-D14	8.639	244	390667	116.49	ppm	0.00
Spiked Amount 100.000	Range 40 - 133		Recovery = 116.49%			
Target Compounds						Qvalue
2) Pyridine	2.521	79	126152	121.18	ppm	98
3) N-Nitrosodimethylamine	2.488	74	67393	125.54	ppm	95
5) Benzaldehyde	3.858	106	39908	133.23	ppm	96
6) Aniline	3.917	93	138504	96.97	ppm	89
8) Phenol	3.890	94	162921	122.51	ppm	98
9) bis(2-Clethyl)Ether	3.943	93	116454	116.85	ppm	92
10) 2-Chlorophenol	3.997	128	136368	117.97	ppm	96
11) 1,3-Diclbenzene	4.093	146	152457	115.36	ppm	97
12) 1,4-Dichlorobenzene	4.141	146	160497	118.81	ppm	98
13) 1,2-Diclbenzene	4.243	146	149271	118.75	ppm	99
14) Benzyl Alcohol	4.211	79	101399	117.17	ppm	98
15) 2,2'-oxybis(1-Chloropr...	4.286	45	180515	118.44	ppm	90
16) 2-Methylphenol	4.280	108	124595	119.73	ppm	99
17) Acetophenone	4.387	105	173676	117.19	ppm	98
18) N-Nitroso-Di-n-propyla...	4.377	70	93052	116.81	ppm	98
19) Hexachloroethane	4.462	117	58944	117.65	ppm	95
20) 3+4-Methylphenol	4.377	108	136032	123.94	ppm	91
21) 1-Methyl-2-pyrrolidinone	4.248	99	88040	116.15	ppm	96
24) Nitrobenzene	4.505	77	136260	120.39	ppm	99
25) Isophorone	4.660	82	246895	122.29	ppm	98
26) 2-Nitrophenol	4.719	139	81387	126.80	ppm	98
27) Benzoic Acid	4.821	105	148567	149.76	ppm	98
28) 2,4-Dimethylphenol	4.735	107	131029	121.62	ppm	92
29) bis(-2-Chloroethoxy)Me...	4.794	93	140336	118.80	ppm	96
30) 2,4-Dichlorophenol	4.885	162	122090	123.86	ppm	99
31) 1,2,4-Trichlorobenzene	4.938	180	141681	124.17	ppm	99
32) Naphthalene	4.997	128	404348	119.43	ppm	98
33) 4-Chloroaniline	5.029	127	141854	111.37	ppm	100

00481

82701001D.M Thu Oct 02 10:38:11 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\102114\
Data File : AY276.D
Acq On : 1 Oct 2014 8:18 pm
Operator : Z.Miao
Sample : SSTD120 Inst : 5973D
Misc : 120 PPM STD 8270/625
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 02 10:28:31 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:28:24 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Hexachlorobutadiene	5.067	225	79792	117.91	ppm	94
35) 4-Chloro-3-methylphenol	5.361	107	111691	121.36	ppm	93
36) Caprolactam	5.286	113	38564	123.71	ppm	96
37) 2-Methylnaphthalene	5.478	142	278695	118.43	ppm	98
38) 1-Methylnaphthalene	5.548	142	258556	120.10	ppm	99
40) Hexachlorocyclopentadiene	5.580	237	61247	131.30	ppm	94
41) 2,4,6-Trichlorophenol	5.671	196	97077	126.11	ppm	97
42) 2,4,5-Trichlorophenol	5.708	196	103982	127.51	ppm	99
44) 1,1'-Biphenyl	5.799	154	355146	125.45	ppm	99
45) 2-Chloronaphthalene	5.821	162	273274	122.86	ppm	95
46) 2-Nitroaniline	5.896	65	76573	125.51	ppm	84
47) Acenaphthylene	6.120	152	429744	122.02	ppm	99
48) Dimethyl phthalate	6.003	163	290569	120.07	ppm	98
49) 2,6-Dinitrotoluene	6.056	165	69646	127.14	ppm	98
50) Acenaphthene	6.238	153	284353	123.85	ppm	98
51) 3-Nitroaniline	6.184	138	74830	123.36	ppm	98
52) 2,4-Dinitrophenol	6.259	184	41660	137.50	ppm	90
53) Dibenzofuran	6.361	168	407578	122.72	ppm	99
54) 2,4-Dinitrotoluene	6.345	165	94097	128.98	ppm	97
55) 4-Nitrophenol	6.302	65	52641	124.66	ppm	98
56) Fluorene	6.607	166	325090	124.67	ppm	95
57) 4-Chlorophenyl-phenyle...	6.591	204	164305	123.86	ppm	99
58) Diethylphthalate	6.500	149	283967	125.29	ppm	99
59) 4-Nitroaniline	6.623	138	82955	123.26	ppm	95
63) 4,6-Dinitro-2-methylph...	6.639	198	62642	125.90	ppm	98
64) 1,2 Diphenylhydrazine	6.703	77	292879	120.33	ppm	100
65) N-Nitrosodiphenylamine	6.676	169	209712	118.59	ppm	97
66) 4-Bromophenyl-phenylether	6.944	248	92473	116.90	ppm	98
68) Hexachlorobenzene	6.997	284	105128	118.00	ppm	99
69) Atrazine	7.046	215	18085	88.24	ppm	90
70) Pentachlorophenol	7.136	266	61084	115.60	ppm	97
71) Phenanthrene	7.292	178	448326	121.23	ppm	99
72) Anthracene	7.329	178	475211	123.33	ppm	99
73) Carbazole	7.447	167	438810	124.83	ppm	100
74) Di-n-butylphthalate	7.677	149	522410	129.36	ppm	99
75) Fluoranthene	8.270	202	547844	129.81	ppm	98
77) Benzidine	8.388	184	101383	90.30	ppm	96
78) Pyrene	8.500	202	563756	121.23	ppm	99
80) Butyl benzyl phthalate	9.217	149	244744	122.77	ppm	95
81) 3,3'-Dichlorobenzidine	10.019	252	190787	118.97	ppm	97
82) Benzo(a)anthracene	10.057	228	582203	123.48	ppm	99
83) Chrysene	10.116	228	542239	117.17	ppm	97
84) bis(2-Ethylhexyl)phtha...	10.089	149	338506	128.05	ppm	99
86) Di-n-octyl phthalate	11.319	149	503561	123.50	ppm	98
87) Benzo(b)Fluoranthene	12.041	252	513474	125.91	ppm	98
88) Benzo(k)fluoranthene	12.100	252	528331	121.12	ppm	99
89) Benzo(a)pyrene	12.715	252	503554	124.44	ppm	98
90) Indeno(1,2,3-cd)Pyrene	14.726	276	479747	133.65	ppm	97
91) Dibenz(a,h)anthracene	14.769	278	504610	131.85	ppm	96
92) Benzo(g,h,i)perylene	15.170	276	463436	127.14	ppm	97

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\1OCT14\
Data File : AY276.D
Acq On : 1 Oct 2014 8:18 pm
Operator : Z.Miao
Sample : SSTD120 Inst : 5973D
Misc : 120 PPM STD 8270/625
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 02 10:28:31 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:28:24 2014
Response via : Initial Calibration

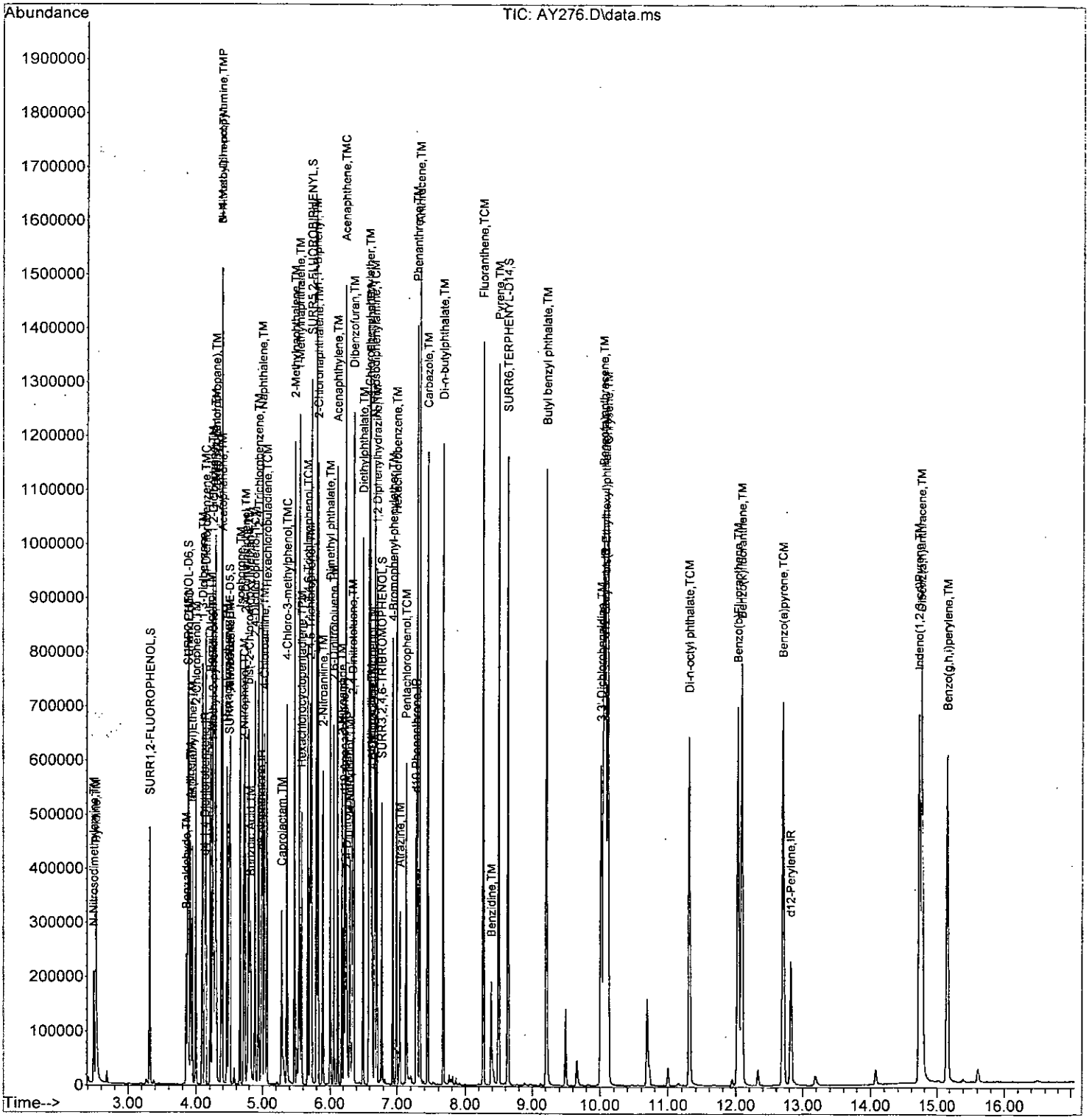
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY276.D
Acq On : 1 Oct 2014 8:18 pm
Operator : Z.Miao
Sample : SSTD120 Inst : 5973D
Misc : 120 PPM STD 8270/625
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 02 10:28:31 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:28:24 2014
Response via : Initial Calibration



82701001D.M Thu Oct 02 10:38:13 2014

00484

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\DataSet\0141\
Data File : AY277.D
Acq On : 1 Oct 2014 8:44 pm
Operator : Z.Miao
Sample : SSTD160 Inst : 5973D
Misc : 160 PPM STD 8270/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 02 10:29:50 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:29:43 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.131	152	30826	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	123767	40.00	ppm	0.00
39) d10-Acenaphthene	6.217	164	77321	40.00	ppm	0.00
61) d10-Phenanthrene	7.276	188	135726	40.00	ppm	0.00
76) d12-Chrysene	10.073	240	171749	40.00	ppm	0.00
85) d12-Perylene	12.828	264	150675	40.00	ppm	0.00
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.318	112	163935	173.18	ppm	0.00
Spiked Amount 200.000	Range 10 - 105		Recovery = 86.59%			
7) SURR2,PHENOL-D6	3.879	99	213117	171.55	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 85.78%			
23) SURR4,NITROBENZENE-D5	4.494	82	177241	166.56	ppm	0.00
Spiked Amount 100.000	Range 37 - 117		Recovery = 166.56%#			
43) SURR5,2-FLUOROBIPHENYL	5.724	172	418597	170.41	ppm	0.00
Spiked Amount 100.000	Range 39 - 119		Recovery = 170.41%#			
60) SURR3,2,4,6-TRIBROMOPH...	6.778	330	65424	170.02	ppm	0.00
Spiked Amount 200.000	Range 28 - 157		Recovery = 85.01%			
79) SURR6,TERPHENYL-D14	8.640	244	542193	157.75	ppm	0.00
Spiked Amount 100.000	Range 40 - 133		Recovery = 157.75%#			
Target Compounds						Qvalue
2) Pyridine	2.521	79	166840	171.47	ppm	97
3) N-Nitrosodimethylamine	2.489	74	91545	183.12	ppm	96
5) Benzaldehyde	3.858	106	48602	156.08	ppm	99
6) Aniline	3.922	93	174675	134.10	ppm	83
8) Phenol	3.890	94	223460	178.34	ppm	95
9) bis(2-Clethyl)Ether	3.949	93	150199	159.91	ppm	92
10) 2-Chlorophenol	4.002	128	183738	169.35	ppm	92
11) 1,3-Diclbenzene	4.093	146	204797	164.81	ppm	98
12) 1,4-Dichlorobenzene	4.141	146	210418	165.41	ppm	97
13) 1,2-Diclbenzene	4.243	146	193255	163.18	ppm	95
14) Benzyl Alcohol	4.211	79	135593	167.47	ppm	95
15) 2,2'-oxybis(1-Chloropr...	4.286	45	242133	167.21	ppm	84
16) 2-Methylphenol	4.280	108	165620	169.77	ppm	95
17) Acetophenone	4.387	105	234280	168.70	ppm	95
18) N-Nitroso-Di-n-propyla...	4.382	70	122163	163.00	ppm	95
19) Hexachloroethane	4.462	117	75583	160.97	ppm	95
20) 3+4-Methylphenol	4.382	108	175794	169.88	ppm	92
21) 1-Methyl-2-pyrrolidinone	4.254	99	115407	163.97	ppm	97
24) Nitrobenzene	4.505	77	179663	165.46	ppm	96
25) Isophorone	4.660	82	321440	165.95	ppm	96
26) 2-Nitrophenol	4.719	139	103930	167.14	ppm	96
27) Benzoic Acid	4.831	105	195753	204.14	ppm	99
28) 2,4-Dimethylphenol	4.735	107	175867	170.54	ppm	96
29) bis(-2-Chloroethoxy)Me...	4.794	93	190375	168.32	ppm	99
30) 2,4-Dichlorophenol	4.885	162	166029	175.80	ppm	99
31) 1,2,4-Trichlorobenzene	4.938	180	182611	166.08	ppm	91
32) Naphthalene	4.997	128	531549	163.51	ppm	97
33) 4-Chloroaniline	5.029	127	182658	152.55	ppm	97

00485

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\DataSam\100114\
Data File : AY277.D
Acq On : 1 Oct 2014 8:44 pm
Operator : Z.Miao
Sample : SSTD160 Inst : 5973D
Misc : 160 PPM STD 8270/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 02 10:29:50 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:29:43 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
34) Hexachlorobutadiene	5.072	225	108954	167.84	ppm		99
35) 4-Chloro-3-methylphenol	5.366	107	148636	168.89	ppm	#	27
36) Caprolactam	5.291	113	50360	169.70	ppm		97
37) 2-Methylnaphthalene	5.478	142	367802	163.26	ppm		94
38) 1-Methylnaphthalene	5.548	142	337731	163.51	ppm		99
40) Hexachlorocyclopentadiene	5.580	237	82283	197.43	ppm		95
41) 2,4,6-Trichlorophenol	5.676	196	128906	173.22	ppm		97
42) 2,4,5-Trichlorophenol	5.708	196	136157	171.53	ppm		95
44) 1,1'-Biphenyl	5.799	154	457685	166.43	ppm		95
45) 2-Chloronaphthalene	5.826	162	362395	168.09	ppm		99
46) 2-Nitroaniline	5.896	65	97167	162.89	ppm		88
47) Acenaphthylene	6.120	152	565896	166.64	ppm		99
48) Dimethyl phthalate	6.008	163	376924	160.20	ppm		99
49) 2,6-Dinitrotoluene	6.061	165	90758	169.73	ppm		87
50) Acenaphthene	6.238	153	364401	164.41	ppm		98
51) 3-Nitroaniline	6.184	138	99132	169.33	ppm		96
52) 2,4-Dinitrophenol	6.259	184	60690	204.25	ppm		84
53) Dibenzofuran	6.361	168	524749	163.56	ppm		99
54) 2,4-Dinitrotoluene	6.350	165	130093	183.81	ppm		86
55) 4-Nitrophenol	6.302	65	68600	170.43	ppm		90
56) Fluorene	6.607	166	419168	165.46	ppm		99
57) 4-Chlorophenyl-phenyle...	6.591	204	212950	165.24	ppm		98
58) Diethylphthalate	6.500	149	379504	172.63	ppm		96
59) 4-Nitroaniline	6.623	138	112584	173.92	ppm		98
63) 4,6-Dinitro-2-methylph...	6.639	198	88465	177.87	ppm		94
64) 1,2 Diphenylhydrazine	6.709	77	361009	148.05	ppm		88
65) N-Nitrosodiphenylamine	6.677	169	281213	159.84	ppm		98
66) 4-Bromophenyl-phenylether	6.944	248	123137	156.19	ppm		99
68) Hexachlorobenzene	6.997	284	138439	156.22	ppm		98
69) Atrazine	7.046	215	19473	103.12	ppm		99
70) Pentachlorophenol	7.137	266	87114	173.84	ppm		98
71) Phenanthrene	7.292	178	603326	163.96	ppm		99
72) Anthracene	7.329	178	627467	163.93	ppm		99
73) Carbazole	7.447	167	575442	165.61	ppm		99
74) Di-n-butylphthalate	7.677	149	696363	173.71	ppm		99
75) Fluoranthene	8.270	202	723503	173.13	ppm		98
77) Benzidine	8.388	184	123349	117.53	ppm		99
78) Pyrene	8.500	202	743092	155.24	ppm		99
80) Butyl benzyl phthalate	9.217	149	332193	161.51	ppm		94
81) 3,3'-Dichlorobenzidine	10.019	252	248496	149.96	ppm		94
82) Benzo(a)anthracene	10.062	228	779253	159.66	ppm		98
83) Chrysene	10.121	228	730456	153.55	ppm		99
84) bis(2-Ethylhexyl)phtha...	10.089	149	442717	160.59	ppm		96
86) Di-n-octyl phthalate	11.319	149	712219	176.76	ppm		98
87) Benzo(b)Fluoranthene	12.047	252	706886	175.18	ppm		97
88) Benzo(k)fluoranthene	12.105	252	701514	163.27	ppm		100
89) Benzo(a)pyrene	12.721	252	685780	171.63	ppm		99
90) Indeno(1,2,3-cd)Pyrene	14.732	276	638186	177.71	ppm		99
91) Dibenz(a,h)anthracene	14.774	278	658436	171.97	ppm		95
92) Benzo(g,h,i)perylene	15.176	276	594056	163.53	ppm		95

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data1001\
Data File : AY277.D
Acq On : 1 Oct 2014 8:44 pm
Operator : Z.Miao
Sample : SSTD160 Inst : 5973D
Misc : 160 PPM STD 8270/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 02 10:29:50 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:29:43 2014
Response via : Initial Calibration

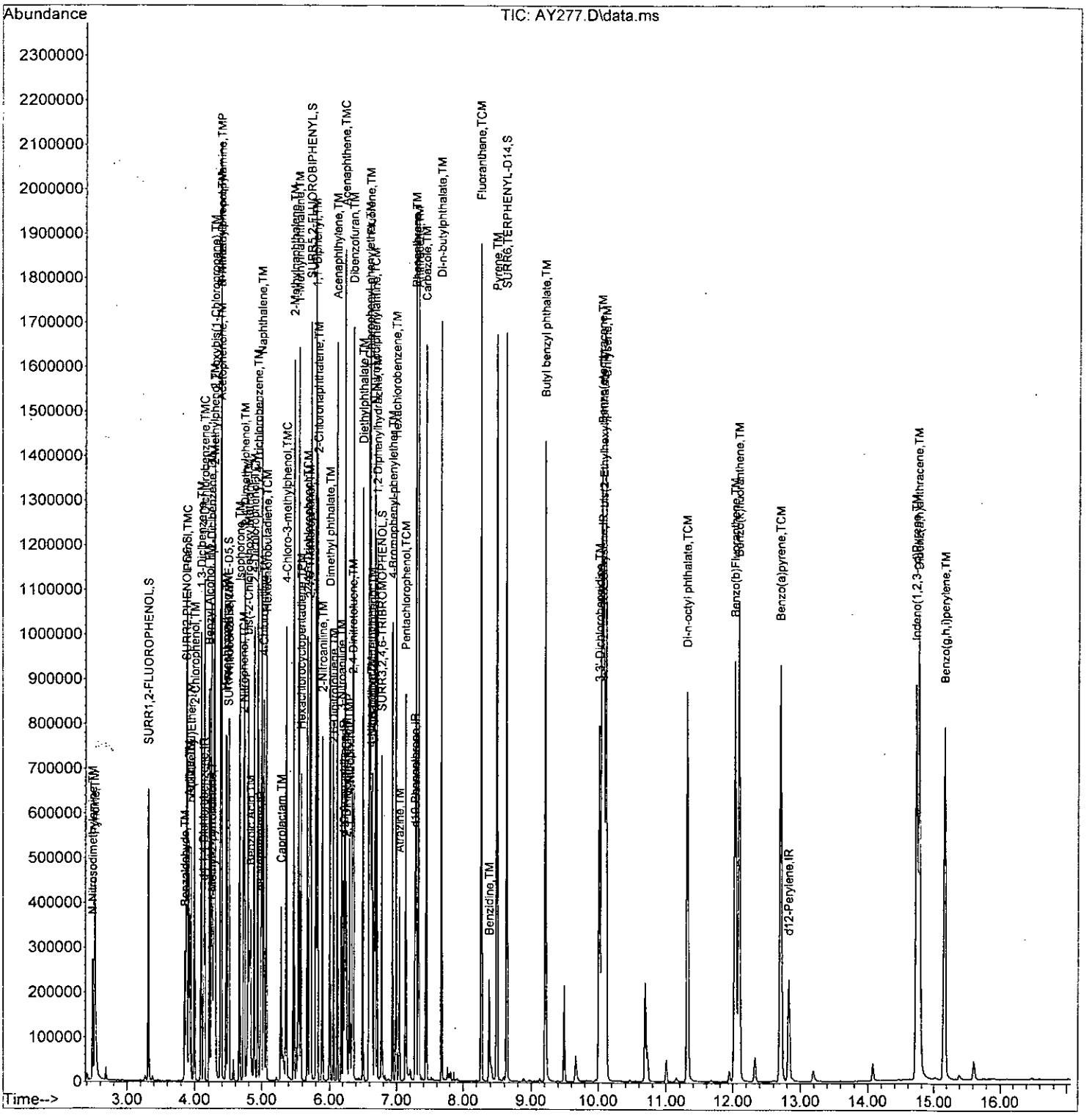
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\DATA\100114\
Data File : AY277.D
Acq On : 1 Oct 2014 8:44 pm
Operator : Z.Miao
Sample : SSTD160 Inst : 5973D
Misc : 160 PPM STD 8270/625
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Oct 02 10:29:50 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 10:29:43 2014
Response via : Initial Calibration



82701001D.M Thu Oct 02 10:38:22 2014 Page: 4

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\DataSet\100114\
Data File : AY270.D
Acq On : 1 Oct 2014 5:43 pm
Operator : Z.Miao
Sample : BLK Inst : 5973D
Misc : BLK
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 02 11:21:33 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

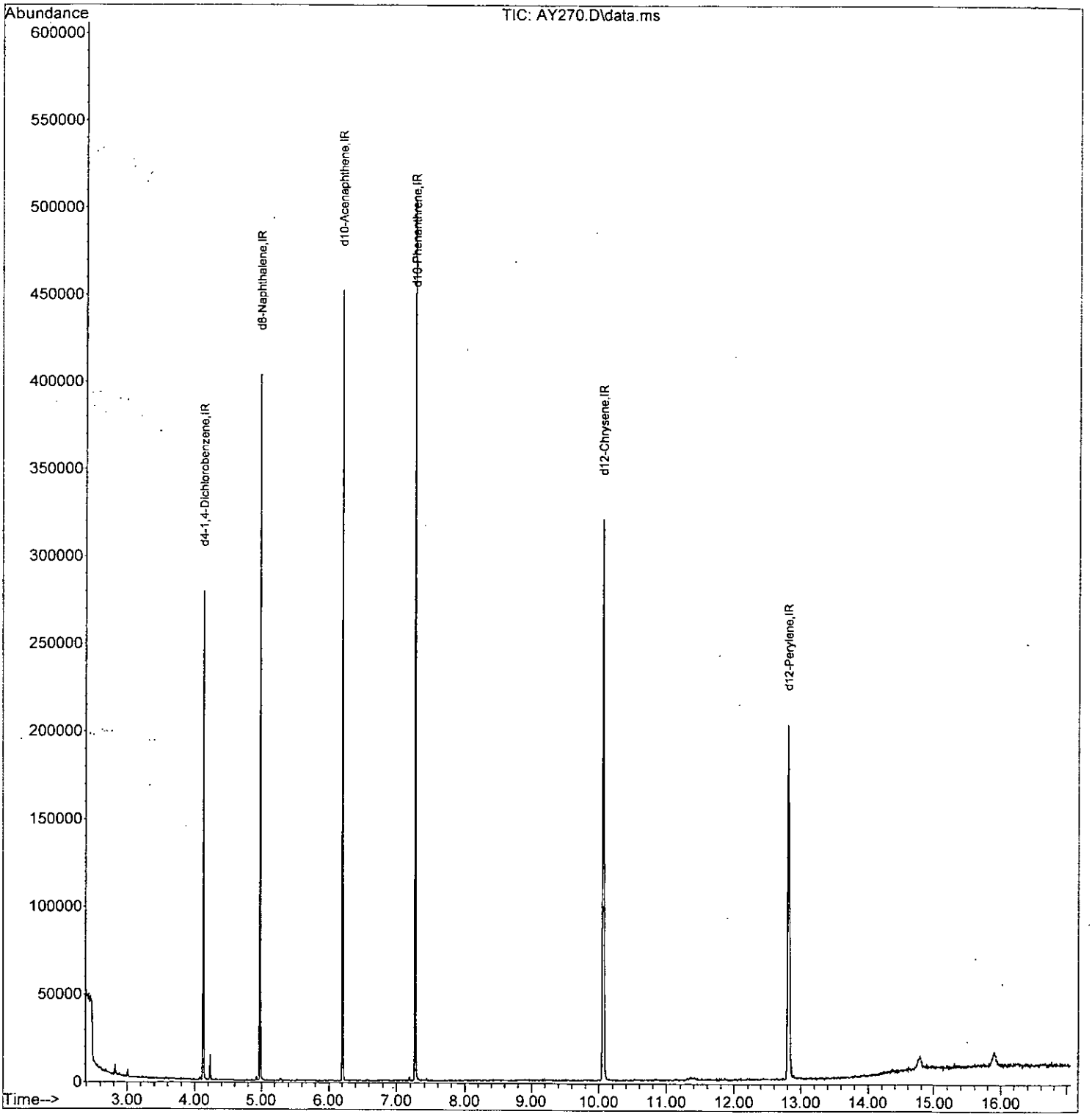
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.130	152	35882	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	142862	40.00	ppm	0.00
39) d10-Acenaphthene	6.211	164	87305	40.00	ppm	0.00
61) d10-Phenanthrene	7.275	188	160566	40.00	ppm	0.00
76) d12-Chrysene	10.067	240	160818	40.00	ppm	0.00
85) d12-Perylene	12.827	264	142864	40.00	ppm	0.00
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	0.000	112	0	0.00	ppm	
Spiked Amount 200.000	Range 10 - 105		Recovery =	0.00%#		
7) SURR2,PHENOL-D6	0.000	99	0	0.00	ppm	
Spiked Amount 200.000	Range 10 - 107		Recovery =	0.00%#		
23) SURR4,NITROBENZENE-D5	0.000	82	0	0.00	ppm	
Spiked Amount 100.000	Range 37 - 117		Recovery =	0.00%#		
43) SURR5,2-FLUOROBIPHENYL	0.000	172	0	0.00	ppm	
Spiked Amount 100.000	Range 39 - 119		Recovery =	0.00%#		
60) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 200.000	Range 28 - 157		Recovery =	0.00%#		
79) SURR6,TERPHENYL-D14	0.000	244	0	0.00	ppm	
Spiked Amount 100.000	Range 40 - 133		Recovery =	0.00%#		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\82014\
Data File : AY270.D
Acq On : 1 Oct 2014 5:43 pm
Operator : Z.Miao
Sample : BLK Inst : 5973D
Misc : BLK
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 02 11:21:33 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration



82701001D.M Thu Oct 02 11:21:44 2014 Page: 2

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973D\Data110114\
Data File : AY278.D
Acq On : 1 Oct 2014 9:10 pm
Operator : Z.Miao
Sample : ICV 1 Inst : 5973D
Misc : 80 PPM STD 8270/625 ICV 1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 02 11:22:47 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

01 #40

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	1.000	1.000	0.0	105	0.00
2	TM	Pyridine	1.270	1.291	-1.7	109	0.01
3	TM	N-Nitrosodimethylamine	0.652	0.725	-11.2	111	0.01
4	S	SURR1,2-FLUOROPHENOL	1.239	1.411	-13.9	115	0.00
5	TM	Benzaldehyde	0.452	0.000#	-100.0#	0#	-3.86#
6	TM	Aniline	1.642	1.668	-1.6	114	0.00
7	S	SURR2,PHENOL-D6	1.627	1.720	-5.7	108	0.00
8	TMC	Phenol	1.645	1.859	-13.0	115	0.00
9	TM	bis(2-Clethyl)Ether	1.222	1.296	-6.1	110	0.00
10	TM	2-Chlorophenol	1.416	1.568	-10.7	115	0.00
11	TM	1,3-Diclbenzene	1.628	1.619	0.6	106	0.00
12	TMC	1,4-Dichlorobenzene	1.664	1.694	-1.8	108	0.00
13	TM	1,2-Diclbenzene	1.543	1.630	-5.6	107	0.00
14	TM	Benzyl Alcohol	1.053	1.079	-2.5	106	0.00
15	TM	2,2'-oxybis(1-Chloropropane	1.914	2.349	-22.7#	126	0.00
16	TM	2-Methylphenol	1.270	1.331	-4.8	109	0.00
17	TM	Acetophenone	1.813	0.000#	-100.0#	0#	-4.39#
18	TMP	N-Nitroso-Di-n-propylamine	0.972	1.039	-6.9	107	0.00
19	TM	Hexachloroethane	0.610	0.655	-7.4	109	0.00
20	TM	3+4-Methylphenol	1.348	2.920	-116.6#	213#	0.00
21	T	1-Methyl-2-pyrrolidinone	0.913	0.008#	-99.1#	1#	0.00
22	IR	d8-Naphthalene	1.000	1.000	0.0	100	0.00
23	S	SURR4,NITROBENZENE-D5	0.346	0.371	-7.2	104	0.00
24	TM	Nitrobenzene	0.353	0.383	-8.5	109	0.00
25	TM	Isophorone	0.628	0.678	-8.0	108	0.00
26	TCM	2-Nitrophenol	0.202	0.224	-10.9	112	0.00
27	TM	Benzoic Acid	0.351	0.230	34.5#	63	0.00
28	TM	2,4-Dimethylphenol	0.334	0.357	-6.9	105	0.00
29	TM	bis(-2-Chloroethoxy)Methane	0.367	0.395	-7.6	107	0.00
30	TCM	2,4-Dichlorophenol	0.306	0.342	-11.8	110	0.00
31	TM	1,2,4-Trichlorobenzene	0.357	0.373	-4.5	104	0.00
32	TM	Naphthalene	1.055	1.086	-2.9	103	0.00
33	TM	4-Chloroaniline	0.380	0.277	27.1#	73	0.00
34	TCM	Hexachlorobutadiene	0.211	0.224	-6.2	105	0.00
35	TMC	4-Chloro-3-methylphenol	0.286	0.303	-5.9	103	0.00
36	TM	Caprolactam	0.099	0.000#	-100.0#	0#	-5.28#
37	TM	2-Methylnaphthalene	0.728	0.750	-3.0	100	0.00
38	TM	1-Methylnaphthalene	0.668	0.706	-5.7	106	0.00
39	IR	d10-Acenaphthene	1.000	1.000	0.0	95	0.00
40	TPM	Hexachlorocyclopentadiene	0.198	0.307	-55.1#	128	0.00
41	TCM	2,4,6-Trichlorophenol	0.386	0.419	-8.5	101	0.00
42	TM	2,4,5-Trichlorophenol	0.415	0.453	-9.2	108	0.00
43	S	SURR5,2-FLUOROBIPHENYL	1.281	1.446	-12.9	108	0.00
44	TM	1,1'-Biphenyl	1.430	0.004#	-99.7#	0#	0.00
45	TM	2-Chloronaphthalene	1.121	1.228	-9.5	104	0.00

82701001D.M Thu Oct 02 11:24:05 2014

00431

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY278.D
Acq On : 1 Oct 2014 9:10 pm
Operator : Z.Miao
Sample : ICV 1 Inst : 5973D
Misc : 80 PPM STD 8270/625 ICV 1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 02 11:22:47 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46	TM	2-Nitroaniline	0.312	0.350	-12.2	105	0.00
47	TM	Acenaphthylene	1.762	1.972	-11.9	106	0.00
48	TM	Dimethyl phthalate	1.225	1.283	-4.7	100	0.00
49	TM	2,6-Dinitrotoluene	0.279	0.312	-11.8	100	0.00
50	TMC	Acenaphthene	1.147	1.222	-6.5	102	0.00
51	TM	3-Nitroaniline	0.304	0.204	32.9#	65	0.00
52	TPM	2,4-Dinitrophenol	0.157	0.156	0.6	106	0.00
53	TM	Dibenzofuran	1.666	1.766	-6.0	100	0.00
54	TM	2,4-Dinitrotoluene	0.372	0.415	-11.6	106	0.00
55	TMP	4-Nitrophenol	0.205	0.237	-15.6	113	0.00
56	TM	Fluorene	1.319	1.414	-7.2	102	0.00
57	TM	4-Chlorophenyl-phenylether	0.673	0.720	-7.0	103	0.00
58	TM	Diethylphthalate	1.147	1.209	-5.4	103	0.00
59	TM	4-Nitroaniline	0.337	0.342	-1.5	98	0.00
60	S	SURR3,2,4,6-TRIBROMOPHENOL	0.198	0.223	-12.6	109	0.00
61	IR	d10-Phenanthrene	1.000	1.000	0.0	98	0.00
62	T	1-Phenyl-1(4-methyl-phenyl)	0.000	0.000#	0.0	0#	-11.43#
63	TM	4,6-Dinitro-2-methylphenol	0.148	0.161	-8.8	111	0.00
64	TM	1,2 Diphenylhydrazine	0.721	0.776	-7.6	102	0.00
65	TCM	N-Nitrosodiphenylamine	0.519	0.562	-8.3	106	0.00
66	TM	4-Bromophenyl-phenylether	0.233	0.249	-6.9	100	0.00
67	T	1-Phenyl-1(2,4-dimethylphen	0.000	0.000#	0.0	0#	-10.70#
68	TM	Hexachlorobenzene	0.262	0.277	-5.7	103	0.00
69	TM	Atrazine	0.051	0.000#	100.0#	0#	-7.04#
70	TCM	Pentachlorophenol	0.142	0.159	-12.0	110	0.00
71	TM	Phenanthrene	1.088	1.137	-4.5	104	0.00
72	TM	Anthracene	1.127	1.161	-3.0	99	0.00
73	TM	Carbazole	1.020	1.115	-9.3	102	0.00
74	TM	Di-n-butylphthalate	1.185	1.347	-13.7	103	0.00
75	TCM	Fluoranthene	1.230	1.377	-12.0	105	0.00
76	IR	d12-Chrysene	1.000	1.000	0.0	93	0.00
77	TM	Benzidine	0.220	0.001#	99.5#	0#	0.00
78	TM	Pyrene	1.103	1.323	-19.9	107	0.00
79	S	SURR6,TERPHENYL-D14	0.794	0.843	-6.2	97	0.00
80	TM	Butyl benzyl phthalate	0.477	0.502	-5.2	94	0.00
81	TM	3,3'-Dichlorobenzidine	0.383	0.319	16.7	75	0.00
82	TM	Benzo(a)anthracene	1.135	1.183	-4.2	97	0.00
83	TM	Chrysene	1.099	1.126	-2.5	96	0.00
84	TM	bis(2-Ethylhexyl)phthalate	0.644	0.719	-11.6	101	0.00
85	IR	d12-Perylene	1.000	1.000	0.0	84	0.00
86	TCM	Di-n-octyl phthalate	1.077	1.280	-18.8	102	0.00
87	TM	Benzo(b)Fluoranthene	1.078	1.144	-6.1	90	0.00
88	TM	Benzo(k)fluoranthene	1.135	1.124	1.0	84	0.00
89	TCM	Benzo(a)pyrene	1.063	1.131	-6.4	88	0.00

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY278.D
Acq On : 1 Oct 2014 9:10 pm
Operator : Z.Miao
Sample : ICV 1 Inst : 5973D
Misc : 80 PPM STD 8270/625 ICV 1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 02 11:22:47 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
90 TM	Indeno(1,2,3-cd)Pyrene	0.966	0.993	-2.8	83	0.00
91 TM	Dibenz(a,h)anthracene	1.025	1.087	-6.0	85	0.00
92 TM	Benzo(g,h,i)perylene	0.968	1.027	-6.1	85	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973D\Data\1001\14\
Data File : AY278.D
Acq On : 1 Oct 2014 9:10 pm
Operator : Z.Miao
Sample : ICV 1 Inst : 5973D
Misc : 80 PPM STD 8270/625 ICV 1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 02 11:22:47 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	105	0.00
2	TM	Pyridine	80.000	81.341	-1.7	109	0.01
3	TM	N-Nitrosodimethylamine	80.000	88.914	-11.1	111	0.01
4	S	SURR1,2-FLUOROPHENOL	80.000	91.102	-13.9	115	0.00
5	TM	Benzaldehyde	80.000	0.000	-100.0#	0	-3.86#
6	TM	Aniline	80.000	81.249	-1.6	114	0.00
7	S	SURR2,PHENOL-D6	80.000	84.548	-5.7	108	0.00
8	TMC	Phenol	80.000	90.405	-13.0	115	0.00
9	TM	bis(2-Clethyl)Ether	80.000	84.842	-6.1	110	0.00
10	TM	2-Chlorophenol	80.000	88.553	-10.7	115	0.00
11	TM	1,3-Diclbenzene	80.000	79.575	0.5	106	0.00
12	TMC	1,4-Dichlorobenzene	80.000	81.433	-1.8	108	0.00
13	TM	1,2-Diclbenzene	80.000	84.473	-5.6	107	0.00
14	TM	Benzyl Alcohol	80.000	81.992	-2.5	106	0.00
15	TM	2,2'-oxybis(1-Chloropropane	80.000	98.153	-22.7#	126	0.00
16	TM	2-Methylphenol	80.000	83.821	-4.8	109	0.00
17	TM	Acetophenone	80.000	0.000	-100.0#	0	-4.39#
18	TMP	N-Nitroso-Di-n-propylamine	80.000	85.511	-6.9	107	0.00
19	TM	Hexachloroethane	80.000	85.906	-7.4	109	0.00
20	TM	3+4-Methylphenol	80.000	173.351	-116.7#	213	0.00
21	T	1-Methyl-2-pyrrolidinone	80.000	0.703	-99.1#	1	0.00
22	IR	d8-Naphthalene	40.000	40.000	0.0	100	0.00
23	S	SURR4,NITROBENZENE-D5	80.000	85.699	-7.1	104	0.00
24	TM	Nitrobenzene	80.000	86.709	-8.4	109	0.00
25	TM	Isophorone	80.000	86.424	-8.0	108	0.00
26	TCM	2-Nitrophenol	80.000	88.795	-11.0	112	0.00
27	TM	Benzoic Acid	80.000	52.427	34.5#	63	0.00
28	TM	2,4-Dimethylphenol	80.000	85.524	-6.9	105	0.00
29	TM	bis(-2-Chloroethoxy)Methane	80.000	85.995	-7.5	107	0.00
30	TCM	2,4-Dichlorophenol	80.000	89.210	-11.5	110	0.00
31	TM	1,2,4-Trichlorobenzene	80.000	83.533	-4.4	104	0.00
32	TM	Naphthalene	80.000	82.293	-2.9	103	0.00
33	TM	4-Chloroaniline	80.000	58.379	27.0#	73	0.00
34	TCM	Hexachlorobutadiene	80.000	84.951	-6.2	105	0.00
35	TMC	4-Chloro-3-methylphenol	80.000	84.815	-6.0	103	0.00
36	TM	Caprolactam	80.000	0.000	-100.0#	0	-5.28#
37	TM	2-Methylnaphthalene	80.000	82.398	-3.0	100	0.00
38	TM	1-Methylnaphthalene	80.000	84.530	-5.7	106	0.00
39	IR	d10-Acenaphthene	40.000	40.000	0.0	95	0.00
40	TPM	Hexachlorocyclopentadiene	80.000	101.341	-26.7#	128	0.00
41	TCM	2,4,6-Trichlorophenol	80.000	86.971	-8.7	101	0.00
42	TM	2,4,5-Trichlorophenol	80.000	87.230	-9.0	108	0.00
43	S	SURR5,2-FLUOROBIPHENYL	80.000	90.262	-12.8	108	0.00
44	TM	1,1'-Biphenyl	80.000	0.215	-99.7#	0	-0.00
45	TM	2-Chloronaphthalene	80.000	87.623	-9.5	104	0.00

82701001D.M Thu Oct 02 11:24:16 2014

00494

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973D\Data\141001\
Data File : AY278.D
Acq On : 1 Oct 2014 9:10 pm
Operator : Z.Miao
Sample : ICV 1 Inst : 5973D
Misc : 80 PPM STD 8270/625 ICV 1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 02 11:22:47 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
46	TM	2-Nitroaniline	80.000	89.872	-12.3	105	0.00
47	TM	Acenaphthylene	80.000	89.542	-11.9	106	0.00
48	TM	Dimethyl phthalate	80.000	83.837	-4.8	100	0.00
49	TM	2,6-Dinitrotoluene	80.000	89.358	-11.7	100	0.00
50	TMC	Acenaphthene	80.000	85.192	-6.5	102	0.00
51	TM	3-Nitroaniline	80.000	53.730	32.8#	65	0.00
52	TPM	2,4-Dinitrophenol	80.000	79.543	0.6	106	0.00
53	TM	Dibenzofuran	80.000	84.761	-6.0	100	0.00
54	TM	2,4-Dinitrotoluene	80.000	89.295	-11.6	106	0.00
55	TMP	4-Nitrophenol	80.000	92.276	-15.3	113	0.00
56	TM	Fluorene	80.000	85.704	-7.1	102	0.00
57	TM	4-Chlorophenyl-phenylether	80.000	85.468	-6.8	103	0.00
58	TM	Diethylphthalate	80.000	84.316	-5.4	103	0.00
59	TM	4-Nitroaniline	80.000	81.150	-1.4	98	0.00
60	S	SURR3,2,4,6-TRIBROMOPHENOL	80.000	90.177	-12.7	109	0.00
61	IR	d10-Phenanthrene	40.000	40.000	0.0	98	0.00
62	T	1-Phenyl-1(4-methyl-phenyl)	-1.000	0.000	0.0	0	-11.43#
63	TM	4,6-Dinitro-2-methylphenol	80.000	86.834	-8.5	111	0.00
64	TM	1,2 Diphenylhydrazine	80.000	86.103	-7.6	102	0.00
65	TCM	N-Nitrosodiphenylamine	80.000	86.622	-8.3	106	0.00
66	TM	4-Bromophenyl-phenylether	80.000	85.303	-6.6	100	0.00
67	T	1-Phenyl-1(2,4-dimethylphen	-1.000	0.000	0.0	0	-10.70#
68	TM	Hexachlorobenzene	80.000	84.739	-5.9	103	0.00
69	TM	Atrazine	80.000	0.000	100.0#	0	-7.04#
70	TCM	Pentachlorophenol	80.000	89.395	-11.7	110	0.00
71	TM	Phenanthrene	80.000	83.623	-4.5	104	0.00
72	TM	Anthracene	80.000	82.466	-3.1	99	0.00
73	TM	Carbazole	80.000	87.483	-9.4	102	0.00
74	TM	Di-n-butylphthalate	80.000	90.902	-13.6	103	0.00
75	TCM	Fluoranthene	80.000	89.586	-12.0	105	0.00
76	IR	d12-Chrysene	40.000	40.000	0.0	93	0.00
77	TM	Benzidine	80.000	0.348	99.6#	0	0.00
78	TM	Pyrene	80.000	95.944	-19.9	107	0.00
79	S	SURR6,TERPHENYL-D14	80.000	84.912	-6.1	97	0.00
80	TM	Butyl benzyl phthalate	80.000	84.149	-5.2	94	0.00
81	TM	3,3'-Dichlorobenzidine	80.000	66.549	16.8	75	0.00
82	TM	Benzo(a)anthracene	80.000	83.365	-4.2	97	0.00
83	TM	Chrysene	80.000	81.952	-2.4	96	0.00
84	TM	bis(2-Ethylhexyl)phthalate	80.000	89.359	-11.7	101	0.00
85	IR	d12-Perylene	40.000	40.000	0.0	84	0.00
86	TCM	Di-n-octyl phthalate	80.000	95.023	-18.8	102	0.00
87	TM	Benzo(b)Fluoranthene	80.000	84.914	-6.1	90	0.00
88	TM	Benzo(k)fluoranthene	80.000	79.192	1.0	84	0.00
89	TCM	Benzo(a)pyrene	80.000	85.152	-6.4	88	0.00

82701001D.M Thu Oct 02 11:24:16 2014

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973D\Data\10Oct14\
Data File : AY278.D
Acq On : 1 Oct 2014 9:10 pm
Operator : Z.Miao
Sample : ICV 1 Inst : 5973D
Misc : 80 PPM STD 8270/625 ICV 1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 02 11:22:47 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
90 TM	Indeno(1,2,3-cd)Pyrene	80.000	82.234	-2.8	83	0.00
91 TM	Dibenz(a,h)anthracene	80.000	84.844	-6.1	85	0.00
92 TM	Benzo(g,h,i)perylene	80.000	84.841	-6.1	85	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY278.D
Acq On : 1 Oct 2014 9:10 pm
Operator : Z.Miao
Sample : ICV 1 Inst : 5973D
Misc : 80 PPM STD 8270/625 ICV 1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 02 11:22:47 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.131	152	31418	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	124571	40.00	ppm	0.00
39) d10-Acenaphthene	6.217	164	75019	40.00	ppm	0.00
61) d10-Phenanthrene	7.276	188	126781	40.00	ppm	0.00
76) d12-Chrysene	10.068	240	145170	40.00	ppm	0.00
85) d12-Perylene	12.822	264	122758	40.00	ppm	0.00
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.323	112	88633	91.10	ppm	0.00
Spiked Amount 200.000	Range 10 - 105		Recovery =	45.55%		
7) SURR2,PHENOL-D6	3.879	99	108073	84.55	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery =	42.27%		
23) SURR4,NITROBENZENE-D5	4.494	82	92334	85.70	ppm	0.00
Spiked Amount 100.000	Range 37 - 117		Recovery =	85.70%		
43) SURR5,2-FLUOROBIPHENYL	5.724	172	216918	90.26	ppm	0.00
Spiked Amount 100.000	Range 39 - 119		Recovery =	90.26%		
60) SURR3,2,4,6-TRIBROMOPH...	6.778	330	33500	90.18	ppm	0.00
Spiked Amount 200.000	Range 28 - 157		Recovery =	45.09%		
79) SURR6,TERPHENYL-D14	8.639	244	244641	84.91	ppm	0.00
Spiked Amount 100.000	Range 40 - 133		Recovery =	84.91%		
Target Compounds						Qvalue
2) Pyridine	2.531	79	81131	81.34	ppm	95
3) N-Nitrosodimethylamine	2.499	74	45563	88.91	ppm	97
6) Aniline	3.922	93	104786	81.25	ppm	57
8) Phenol	3.890	94	116838	90.40	ppm	93
9) bis(2-Clethyl)Ether	3.949	93	81416	84.84	ppm	93
10) 2-Chlorophenol	4.002	128	98516	88.55	ppm	90
11) 1,3-Diclbenzene	4.098	146	101758	79.58	ppm	96
12) 1,4-Dichlorobenzene	4.141	146	106427	81.43	ppm	93
13) 1,2-Diclbenzene	4.243	146	102403	84.47	ppm	99
14) Benzyl Alcohol	4.211	79	67814	81.99	ppm	98
15) 2,2'-oxybis(1-Chloropr...	4.286	45	147582	98.15	ppm	85
16) 2-Methylphenol	4.275	108	83641	83.82	ppm	97
18) N-Nitroso-Di-n-propyla...	4.377	70	65314	85.51	ppm	97
19) Hexachloroethane	4.462	117	41188	85.91	ppm	96
20) 3+4-Methylphenol	4.377	108	183483	173.35	ppm	95
24) Nitrobenzene	4.505	77	95427	86.71	ppm	97
25) Isophorone	4.660	82	168992	86.42	ppm	96
26) 2-Nitrophenol	4.719	139	55765	88.80	ppm	96
27) Benzoic Acid	4.805	105	57236	52.43	ppm	99
28) 2,4-Dimethylphenol	4.730	107	89055	85.52	ppm	96
29) bis(-2-Chloroethoxy)Me...	4.794	93	98415	86.00	ppm	96
30) 2,4-Dichlorophenol	4.885	162	85118	89.21	ppm	99
31) 1,2,4-Trichlorobenzene	4.938	180	92811	83.53	ppm	97
32) Naphthalene	4.997	128	270497	82.29	ppm	98
33) 4-Chloroaniline	5.029	127	69100	58.38	ppm	98
34) Hexachlorobutadiene	5.067	225	55835	84.95	ppm	98
35) 4-Chloro-3-methylphenol	5.355	107	75510	84.81	ppm	95
37) 2-Methylnaphthalene	5.473	142	186882	82.40	ppm	99

82701001D.M Thu Oct 02 11:23:54 2014 Page: 1

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Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY278.D
Acq On : 1 Oct 2014 9:10 pm
Operator : Z.Miao
Sample : ICV 1 Inst : 5973D
Misc : 80 PPM STD 8270/625 ICV 1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 02 11:22:47 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

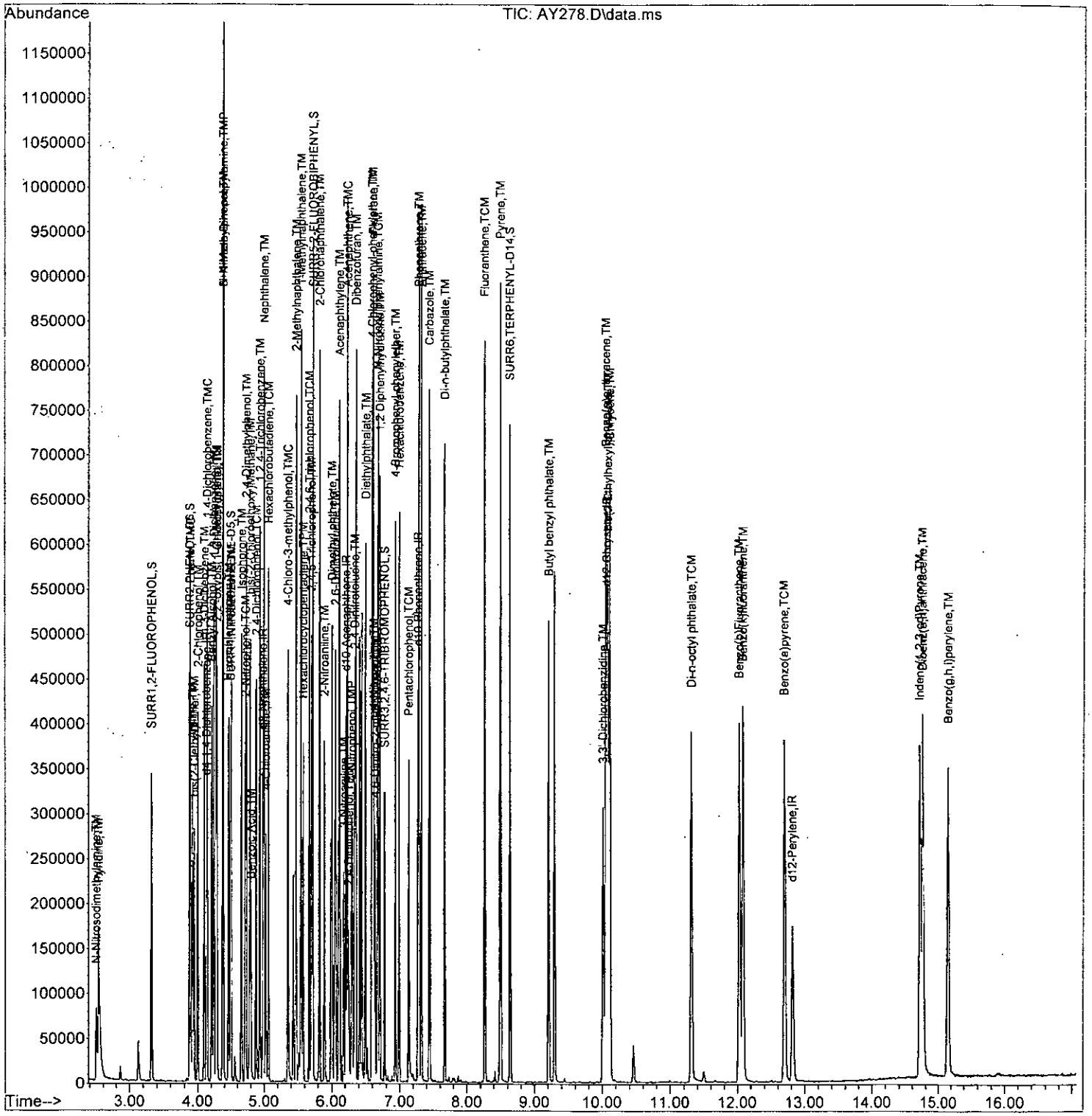
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1-Methylnaphthalene	5.548	142	175882	84.53 ppm	97
40) Hexachlorocyclopentadiene	5.580	237	46098	101.34 ppm	93
41) 2,4,6-Trichlorophenol	5.671	196	62907	86.97 ppm	98
42) 2,4,5-Trichlorophenol	5.703	196	67927	87.23 ppm	99
45) 2-Chloronaphthalene	5.821	162	184210	87.62 ppm	99
46) 2-Nitroaniline	5.890	65	52516	89.87 ppm	96
47) Acenaphthylene	6.120	152	295854	89.54 ppm	99
48) Dimethyl phthalate	6.008	163	192533	83.84 ppm	99
49) 2,6-Dinitrotoluene	6.056	165	46837	89.36 ppm	88
50) Acenaphthene	6.238	153	183295	85.19 ppm	99
51) 3-Nitroaniline	6.184	138	30650	53.73 ppm	92
52) 2,4-Dinitrophenol	6.259	184	23438	79.54 ppm	95
53) Dibenzofuran	6.361	168	264895	84.76 ppm	94
54) 2,4-Dinitrotoluene	6.345	165	62301	89.29 ppm	98
55) 4-Nitrophenol	6.302	65	35548	92.28 ppm	95
56) Fluorene	6.602	166	212080	85.70 ppm	93
57) 4-Chlorophenyl-phenyle...	6.591	204	107955	85.47 ppm	97
58) Diethylphthalate	6.500	149	181394	84.32 ppm	99
59) 4-Nitroaniline	6.618	138	51253	81.15 ppm	94
63) 4,6-Dinitro-2-methylph...	6.639	198	40799	86.83 ppm	95
64) 1,2 Diphenylhydrazine	6.703	77	196800	86.10 ppm	99
65) N-Nitrosodiphenylamine	6.677	169	142500	86.62 ppm	98
66) 4-Bromophenyl-phenylether	6.939	248	63025	85.30 ppm	91
68) Hexachlorobenzene	6.997	284	70282	84.74 ppm	99
70) Pentachlorophenol	7.137	266	40362	89.40 ppm	89
71) Phenanthrene	7.292	178	288369	83.62 ppm	99
72) Anthracene	7.329	178	294495	82.47 ppm	99
73) Carbazole	7.441	167	282710	87.48 ppm	97
74) Di-n-butylphthalate	7.677	149	341492	90.90 ppm	98
75) Fluoranthene	8.270	202	349264	89.59 ppm	97
78) Pyrene	8.500	202	384130	95.94 ppm	99
80) Butyl benzyl phthalate	9.217	149	145797	84.15 ppm	97
81) 3,3'-Dichlorobenzidine	10.014	252	92482	66.55 ppm	98
82) Benzo(a)anthracene	10.057	228	343386	83.36 ppm	99
83) Chrysene	10.116	228	326996	81.95 ppm	96
84) bis(2-Ethylhexyl)phtha...	10.089	149	208773	89.36 ppm	98
86) Di-n-octyl phthalate	11.319	149	314150	95.02 ppm	98
87) Benzo(b)Fluoranthene	12.036	252	280800	84.91 ppm	99
88) Benzo(k)fluoranthene	12.089	252	275965	79.19 ppm	98
89) Benzo(a)pyrene	12.704	252	277689	85.15 ppm	95
90) Indeno(1,2,3-cd)Pyrene	14.716	276	243894	82.23 ppm	96
91) Dibenz(a,h)anthracene	14.764	278	266825	84.84 ppm	95
92) Benzo(g,h,i)perylene	15.159	276	252061	84.84 ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY278.D
Acq On : 1 Oct 2014 9:10 pm
Operator : Z.Miao
Sample : ICV 1 Inst : 5973D
Misc : 80 PPM STD 8270/625 ICV 1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 02 11:22:47 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration



82701001D.M Thu Oct 02 11:23:56 2014 Page: 3

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY279.D
Acq On : 1 Oct 2014 9:36 pm
Operator : Z.Miao
Sample : ICV 2 Inst : 5973D
Misc : 80 PPM STD 8270/625 ICV 2
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 02 11:25:29 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	IR	d4-1,4-Dichlorobenzene	1.000	1.000	0.0	86	0.00
2	TM	Pyridine	1.270	0.000#	100.0#	0#	-2.52#
3	TM	N-Nitrosodimethylamine	0.652	0.005#	99.2#	1#	0.03
4	S	SURR1,2-FLUOROPHENOL	1.239	0.000#	100.0#	0#	-3.32#
5	TM	Benzaldehyde	0.452	0.641	-41.8#	114	0.00
6	TM	Aniline	1.642	0.000#	100.0#	0#	-3.92#
7	S	SURR2,PHENOL-D6	1.627	0.009#	99.4#	0#	0.25
8	TMC	Phenol	1.645	0.000#	100.0#	0#	-3.89#
9	TM	bis(2-Clethyl)Ether	1.222	0.000#	100.0#	0#	-3.94#
10	TM	2-Chlorophenol	1.416	0.000#	100.0#	0#	-4.00#
11	TM	1,3-Diclbenzene	1.628	0.000#	100.0#	0#	-4.09#
12	TMC	1,4-Dichlorobenzene	1.664	0.000#	100.0#	0#	-4.14#
13	TM	1,2-Diclbenzene	1.543	0.000#	100.0#	0#	-4.24#
14	TM	Benzyl Alcohol	1.053	0.000#	100.0#	0#	-4.21#
15	TM	2,2'-oxybis(1-Chloropropane	1.914	0.004#	99.8#	0#	-0.01
16	TM	2-Methylphenol	1.270	0.000#	100.0#	0#	-4.28#
17	TM	Acetophenone	1.813	2.028	-11.9	93	0.00
18	TMP	N-Nitroso-Di-n-propylamine	0.972	0.000#	100.0#	0#	-4.38#
19	TM	Hexachloroethane	0.610	0.000#	100.0#	0#	-4.46#
20	TM	3+4-Methylphenol	1.348	0.000#	100.0#	0#	-4.38#
21	T	1-Methyl-2-pyrrolidinone	0.913	0.949	-3.9	89	0.00
22	IR	d8-Naphthalene	1.000	1.000	0.0	85	0.00
23	S	SURR4,NITROBENZENE-D5	0.346	0.003#	99.1#	1#	-0.12
24	TM	Nitrobenzene	0.353	0.000#	100.0#	0#	-4.50#
25	TM	Isophorone	0.628	0.001#	99.8#	0#	0.07
26	TCM	2-Nitrophenol	0.202	0.000#	100.0#	0#	-4.72#
27	TM	Benzoic Acid	0.351	0.000#	100.0#	0#	-4.81#
28	TM	2,4-Dimethylphenol	0.334	0.000#	100.0#	0#	-4.73#
29	TM	bis(-2-Chloroethoxy)Methane	0.367	0.000#	100.0#	0#	0.02
30	TCM	2,4-Dichlorophenol	0.306	0.000#	100.0#	0#	-4.88#
31	TM	1,2,4-Trichlorobenzene	0.357	0.000#	100.0#	0#	-4.94#
32	TM	Naphthalene	1.055	0.010	99.1#	1#	-0.11
33	TM	4-Chloroaniline	0.380	0.004#	98.9#	1#	-0.15
34	TCM	Hexachlorobutadiene	0.211	0.000#	100.0#	0#	-5.07#
35	TMC	4-Chloro-3-methylphenol	0.286	0.001#	99.7#	0#	0.02
36	TM	Caprolactam	0.099	0.105	-6.1	91	-0.02
37	TM	2-Methylnaphthalene	0.728	0.000#	100.0#	0#	-5.47#
38	TM	1-Methylnaphthalene	0.668	0.000#	100.0#	0#	-5.55#
39	IR	d10-Acenaphthene	1.000	1.000	0.0	101	0.00
40	TPM	Hexachlorocyclopentadiene	0.198	0.000#	100.0#	0#	-5.58#
41	TCM	2,4,6-Trichlorophenol	0.386	0.000#	100.0#	0#	-5.67#
42	TM	2,4,5-Trichlorophenol	0.415	0.000#	100.0#	0#	-5.71#
43	S	SURR5,2-FLUOROBIPHENYL	1.281	0.001#	99.9#	0#	0.00
44	TM	1,1'-Biphenyl	1.430	1.259	12.0	88	0.00
45	TM	2-Chloronaphthalene	1.121	0.001#	99.9#	0#	0.00

82701001D.M Thu Oct 02 11:26:09 2014 00500 Page: 1

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY279.D
Acq On : 1 Oct 2014 9:36 pm
Operator : Z.Miao
Sample : ICV 2 Inst : 5973D
Misc : 80 PPM STD 8270/625 ICV 2
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 02 11:25:29 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46	TM	2-Nitroaniline	0.312	0.000#	100.0#	0#	-5.89#
47	TM	Acenaphthylene	1.762	0.002#	99.9#	0#	0.00
48	TM	Dimethyl phthalate	1.225	0.001#	99.9#	0#	0.05
49	TM	2,6-Dinitrotoluene	0.279	0.000#	100.0#	0#	-6.06#
50	TMC	Acenaphthene	1.147	0.002#	99.8#	0#	-0.01
51	TM	3-Nitroaniline	0.304	0.001#	99.7#	0#	0.16
52	TPM	2,4-Dinitrophenol	0.157	0.000#	100.0#	0#	-6.26#
53	TM	Dibenzofuran	1.666	0.003#	99.8#	0#	0.00
54	TM	2,4-Dinitrotoluene	0.372	0.000#	100.0#	0#	-6.34#
55	TMP	4-Nitrophenol	0.205	0.000#	100.0#	0#	-6.30#
56	TM	Fluorene	1.319	0.002#	99.8#	0#	0.00
57	TM	4-Chlorophenyl-phenylether	0.673	0.001#	99.9#	0#	0.00
58	TM	Diethylphthalate	1.147	0.002#	99.8#	0#	-0.01
59	TM	4-Nitroaniline	0.337	0.000#	100.0#	0#	-6.62#
60	S	SURR3,2,4,6-TRIBROMOPHENOL	0.198	0.000#	100.0#	0#	-6.78#
61	IR	d10-Phenanthrene	1.000	1.000	0.0	82	0.00
62	T	1-Phenyl-1(4-methyl-phenyl)	0.000	0.000#	0.0	0#	-11.43#
63	TM	4,6-Dinitro-2-methylphenol	0.148	0.000#	100.0#	0#	-6.64#
64	TM	1,2 Diphenylhydrazine	0.721	0.000#	100.0#	0#	-6.70#
65	TCM	N-Nitrosodiphenylamine	0.519	0.001#	99.8#	0#	0.00
66	TM	4-Bromophenyl-phenylether	0.233	0.000#	100.0#	0#	-6.94#
67	T	1-Phenyl-1(2,4-dimethylphen	0.000	0.000#	0.0	0#	-10.70#
68	TM	Hexachlorobenzene	0.262	0.000#	100.0#	0#	-7.00#
69	TM	Atrazine	0.051	0.123	-141.2#	224#	0.00
70	TCM	Pentachlorophenol	0.142	0.000#	100.0#	0#	-7.14#
71	TM	Phenanthrene	1.088	0.002#	99.8#	0#	0.00
72	TM	Anthracene	1.127	0.002#	99.8#	0#	0.00
73	TM	Carbazole	1.020	0.001#	99.9#	0#	0.00
74	TM	Di-n-butylphthalate	1.185	0.000#	100.0#	0#	-7.68#
75	TCM	Fluoranthene	1.230	0.001#	99.9#	0#	0.00
76	IR	d12-Chrysene	1.000	1.000	0.0	81	0.00
77	TM	Benzidine	0.220	0.276	-25.5#	98	0.00
78	TM	Pyrene	1.103	0.001#	99.9#	0#	0.00
79	S	SURR6,TERPHENYL-D14	0.794	0.001#	99.9#	0#	0.00
80	TM	Butyl benzyl phthalate	0.477	0.000#	100.0#	0#	-9.22#
81	TM	3,3'-Dichlorobenzidine	0.383	0.000#	100.0#	0#	-10.01#
82	TM	Benzo(a)anthracene	1.135	0.001#	99.9#	0#	0.05
83	TM	Chrysene	1.099	0.001#	99.9#	0#	0.00
84	TM	bis(2-Ethylhexyl)phthalate	0.644	0.000#	100.0#	0#	-10.09#
85	IR	d12-Perylene	1.000	1.000	0.0	79	0.00
86	TCM	Di-n-octyl phthalate	1.077	0.000#	100.0#	0#	-11.32#
87	TM	Benzo(b)Fluoranthene	1.078	0.001#	99.9#	0#	0.05
88	TM	Benzo(k)fluoranthene	1.135	0.001#	99.9#	0#	0.00
89	TCM	Benzo(a)pyrene	1.063	0.001#	99.9#	0#	0.11

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY279.D
Acq On : 1 Oct 2014 9:36 pm
Operator : Z.Miao
Sample : ICV 2 Inst : 5973D
Misc : 80 PPM STD 8270/625 ICV 2
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 02 11:25:29 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev Area%	Dev(min)
90 TM	Indeno(1,2,3-cd)Pyrene	0.966	0.000#	100.0#	0# -14.72#
91 TM	Dibenz(a,h)anthracene	1.025	0.000#	100.0#	0# -14.76#
92 TM	Benzo(g,h,i)perylene	0.968	0.000#	100.0#	0# -15.16#

(#) = Out of Range SPCC's out = 4 CCC's out = 13

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY279.D
Acq On : 1 Oct 2014 9:36 pm
Operator : Z.Miao
Sample : ICV 2 Inst : 5973D
Misc : 80 PPM STD 8270/625 ICV 2
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 02 11:25:29 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

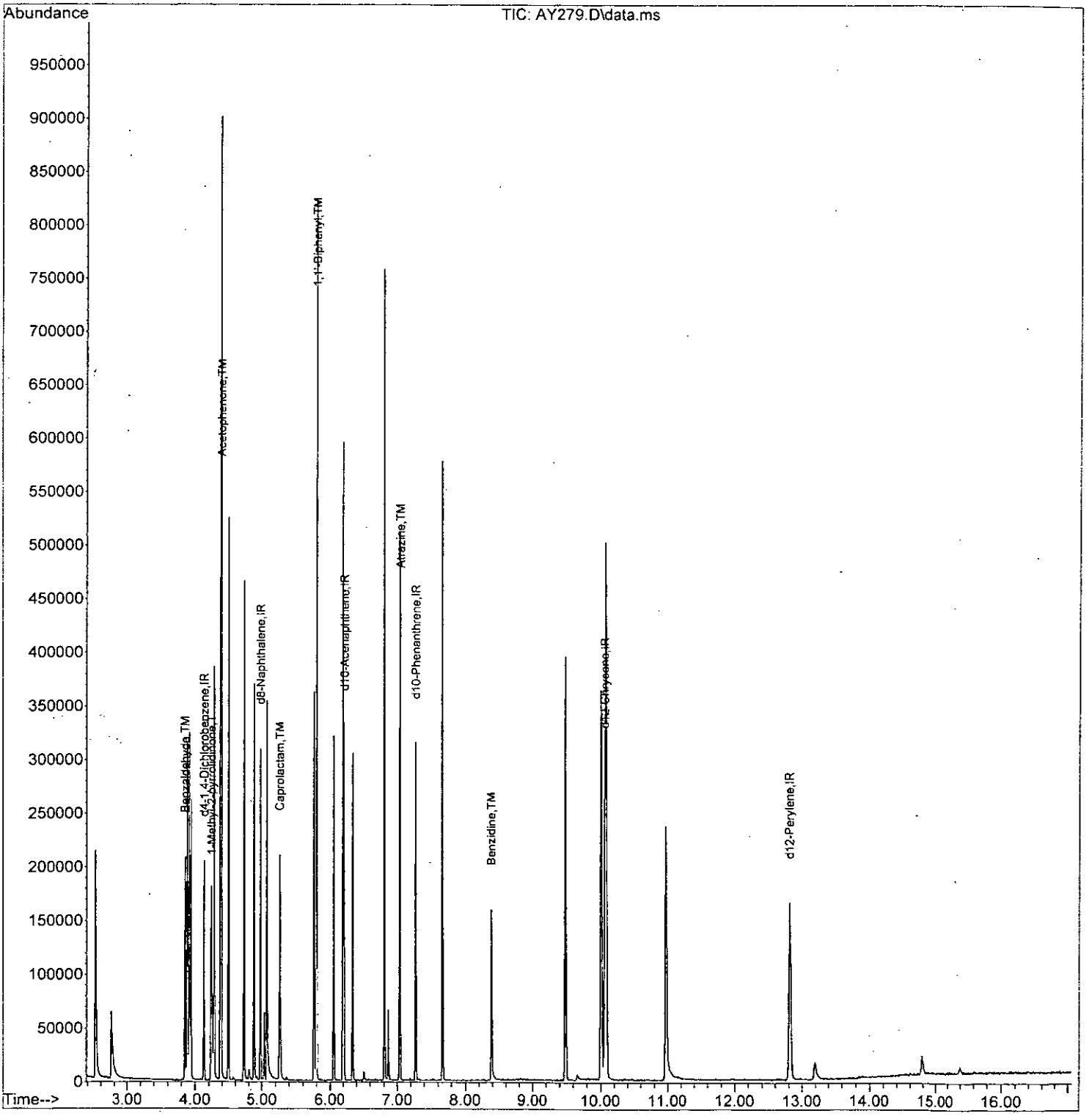
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.130	152	25629	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	106013	40.00	ppm	0.00
39) d10-Acenaphthene	6.216	164	79335	40.00	ppm	0.00
61) d10-Phenanthrene	7.275	188	106193	40.00	ppm	0.00
76) d12-Chrysene	10.067	240	126896	40.00	ppm	0.00
85) d12-Perylene	12.822	264	115846	40.00	ppm	0.00
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	0.000	112	0	0.00	ppm	
Spiked Amount 200.000	Range 10 - 105		Recovery =	0.00%#		
7) SURR2,PHENOL-D6	4.125	99	485	0.47	ppm	0.25
Spiked Amount 200.000	Range 10 - 107		Recovery =	0.23%#		
23) SURR4,NITROBENZENE-D5	4.377	82	554	0.60	ppm	-0.12
Spiked Amount 100.000	Range 37 - 117		Recovery =	0.60%#		
43) SURR5,2-FLUOROBIPHENYL	5.730	172	196	0.08	ppm	0.00
Spiked Amount 100.000	Range 39 - 119		Recovery =	0.08%#		
60) SURR3,2,4,6-TRIBROMOPH...	0.000	330	0	0.00	ppm	
Spiked Amount 200.000	Range 28 - 157		Recovery =	0.00%#		
79) SURR6,TERPHENYL-D14	8.634	244	197	0.08	ppm	0.00
Spiked Amount 100.000	Range 40 - 133		Recovery =	0.08%#		
Target Compounds						Qvalue
5) Benzaldehyde	3.852	106	32852	113.32	ppm	90
17) Acetophenone	4.387	105	103953	89.51	ppm	92
21) 1-Methyl-2-pyrrolidinone	4.237	99	48620	83.09	ppm	86
36) Caprolactam	5.264	113	22345	85.50	ppm	95
44) 1,1'-Biphenyl	5.799	154	199724	70.43	ppm	99
69) Atrazine	7.045	215	26218	194.81	ppm	91
77) Benzidine	8.383	184	70136	100.69	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY279.D
Acq On : 1 Oct 2014 9:36 pm
Operator : Z.Miao
Sample : ICV 2 Inst : 5973D
Misc : 80 PPM STD 8270/625 ICV 2
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 02 11:25:29 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration



82701001D.M Thu Oct 02 11:26:01 2014 00504 Page: 2

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY347.D
Acq On : 8 Oct 2014 12:48 pm
Operator : Z.Miao
Sample : CCV
Inst : 5973D
Misc : 80 PPM STD 8270/625
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 08 13:25:05 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

GA #40

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	
1	IR	d4-1,4-Dichlorobenzene	1.000	1.000	0.0	142	0.00	
2	TM	Pyridine	1.270	1.297	-2.1	147	0.00	
3	TM	N-Nitrosodimethylamine	0.652	0.706	-8.3	145	0.00	
4	S	SURR1,2-FLUOROPHENOL	1.239	1.203	2.9	132	0.00	
5	TM	Benzaldehyde	0.452	0.312	31.0#	91	0.00	NT
6	TM	Aniline	1.642	1.444	12.1	132	0.00	
7	S	SURR2,PHENOL-D6	1.627	1.584	2.6	134	0.00	
8	TMC	Phenol	1.645	1.705	-3.6	141	0.00	
9	TM	bis(2-Clethyl)Ether	1.222	1.105	9.6	127	0.00	
10	TM	2-Chlorophenol	1.416	1.388	2.0	136	0.00	
11	TM	1,3-Diclbenzene	1.628	1.550	4.8	136	0.00	
12	TMC	1,4-Dichlorobenzene	1.664	1.610	3.2	138	0.00	
13	TM	1,2-Diclbenzene	1.543	1.480	4.1	131	0.00	
14	TM	Benzyl Alcohol	1.053	1.069	-1.5	141	0.00	
15	TM	2,2'-oxybis(1-Chloropropane	1.914	1.876	2.0	135	0.00	
16	TM	2-Methylphenol	1.270	1.271	-0.1	140	0.00	
17	TM	Acetophenone	1.813	1.767	2.5	134	0.00	
18	TMP	N-Nitroso-Di-n-propylamine	0.972	0.954	1.9	132	0.00	
19	TM	Hexachloroethane	0.610	0.593	2.8	133	0.00	
20	TM	3+4-Methylphenol	1.348	1.358	-0.7	133	0.00	
21	T	1-Methyl-2-pyrrolidinone	0.913	0.901	1.3	139	0.00	
22	IR	d8-Naphthalene	1.000	1.000	0.0	136	0.00	
23	S	SURR4,NITROBENZENE-D5	0.346	0.344	0.6	131	0.00	
24	TM	Nitrobenzene	0.353	0.343	2.8	132	0.00	
25	TM	Isophorone	0.628	0.624	0.6	134	0.00	
26	TCM	2-Nitrophenol	0.202	0.200	1.0	135	0.00	
27	TM	Benzoic Acid	0.351	0.376	-7.1	140	0.01	
28	TM	2,4-Dimethylphenol	0.334	0.335	-0.3	133	0.00	
29	TM	bis(-2-Chloroethoxy)Methane	0.367	0.359	2.2	131	0.00	
30	TCM	2,4-Dichlorophenol	0.306	0.308	-0.7	134	0.00	
31	TM	1,2,4-Trichlorobenzene	0.357	0.361	-1.1	136	0.00	
32	TM	Naphthalene	1.055	1.027	2.7	132	0.00	
33	TM	4-Chloroaniline	0.380	0.372	2.1	133	0.00	
34	TCM	Hexachlorobutadiene	0.211	0.207	1.9	132	0.00	
35	TMC	4-Chloro-3-methylphenol	0.286	0.290	-1.4	133	0.00	
36	TM	Caprolactam	0.099	0.101	-2.0	139	0.00	
37	TM	2-Methylnaphthalene	0.728	0.705	3.2	127	0.00	
38	TM	1-Methylnaphthalene	0.668	0.675	-1.0	138	0.00	
39	IR	d10-Acenaphthene	1.000	1.000	0.0	133	0.00	
40	TPM	Hexachlorocyclopentadiene	0.198	0.230	-16.2	134	0.00	
41	TCM	2,4,6-Trichlorophenol	0.386	0.404	-4.7	137	0.00	
42	TM	2,4,5-Trichlorophenol	0.415	0.431	-3.9	144	0.00	
43	S	SURR5,2-FLUOROBIPHENYL	1.281	1.285	-0.3	134	0.00	
44	TM	1,1'-Biphenyl	1.430	1.451	-1.5	134	0.00	
45	TM	2-Chloronaphthalene	1.121	1.129	-0.7	133	0.00	

82701001D.M Thu Oct 09 15:21:25 2014

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY347.D
Acq On : 8 Oct 2014 12:48 pm
Operator : Z.Miao
Sample : CCV Inst : 5973D
Misc : 80 PPM STD 8270/625
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 08 13:25:05 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
46	TM	2-Nitroaniline	0.312	0.321	-2.9	135	0.00
47	TM	Acenaphthylene	1.762	1.784	-1.2	134	0.00
48	TM	Dimethyl phthalate	1.225	1.195	2.4	130	0.00
49	TM	2,6-Dinitrotoluene	0.279	0.287	-2.9	129	0.00
50	TMC	Acenaphthene	1.147	1.137	0.9	133	0.00
51	TM	3-Nitroaniline	0.304	0.310	-2.0	139	0.00
52	TPM	2,4-Dinitrophenol	0.157	0.171	-8.9	163	0.00
53	TM	Dibenzofuran	1.666	1.688	-1.3	134	0.00
54	TM	2,4-Dinitrotoluene	0.372	0.394	-5.9	140	0.00
55	TMP	4-Nitrophenol	0.205	0.210	-2.4	140	0.00
56	TM	Fluorene	1.319	1.346	-2.0	135	0.00
57	TM	4-Chlorophenyl-phenylether	0.673	0.695	-3.3	139	0.00
58	TM	Diethylphthalate	1.147	1.147	0.0	136	0.00
59	TM	4-Nitroaniline	0.337	0.350	-3.9	140	0.00
60	S	SURR3,2,4,6-TRIBROMOPHENOL	0.198	0.205	-3.5	140	0.00
61	IR	d10-Phenanthrene	1.000	1.000	0.0	138	0.00
62	T	1-Phenyl-1(4-methyl-phenyl)	0.000	0.000#	0.0	0#	-11.43#
63	TM	4,6-Dinitro-2-methylphenol	0.148	0.154	-4.1	150	0.00
64	TM	1,2 Diphenylhydrazine	0.721	0.706	2.1	130	0.00
65	TCM	N-Nitrosodiphenylamine	0.519	0.505	2.7	134	0.00
66	TM	4-Bromophenyl-phenylether	0.233	0.228	2.1	129	0.00
67	T	1-Phenyl-1(2,4-dimethylphen	0.000	0.000#	0.0	162	0.00
68	TM	Hexachlorobenzene	0.262	0.255	2.7	133	0.00
69	TM	Atrazine	0.051	0.045	11.8	138	0.00
70	TCM	Pentachlorophenol	0.142	0.157	-10.6	152	0.00
71	TM	Phenanthrene	1.088	1.063	2.3	137	0.00
72	TM	Anthracene	1.127	1.112	1.3	134	0.00
73	TM	Carbazole	1.020	1.076	-5.5	138	0.00
74	TM	Di-n-butylphthalate	1.185	1.291	-8.9	138	0.00
75	TCM	Fluoranthene	1.230	1.358	-10.4	146	0.00
76	IR	d12-Chrysene	1.000	1.000	0.0	142	0.00
77	TM	Benzidine	0.220	0.200	9.1	125	0.00
78	TM	Pyrene	1.103	1.107	-0.4	138	0.00
79	S	SURR6,TERPHENYL-D14	0.794	0.792	0.3	140	0.00
80	TM	Butyl benzyl phthalate	0.477	0.493	-3.4	142	0.00
81	TM	3,3'-Dichlorobenzidine	0.383	0.389	-1.6	141	0.00
82	TM	Benzo(a)anthracene	1.135	1.148	-1.1	145	0.00
83	TM	Chrysene	1.099	1.097	0.2	144	0.00
84	TM	bis(2-Ethylhexyl)phthalate	0.644	0.663	-3.0	143	0.00
85	IR	d12-Perylene	1.000	1.000	0.0	142	0.01
86	TCM	Di-n-octyl phthalate	1.077	1.074	0.3	146	0.00
87	TM	Benzo(b)Fluoranthene	1.078	1.097	-1.8	147	0.01
88	TM	Benzo(k)fluoranthene	1.135	1.116	1.7	142	0.01
89	TCM	Benzo(a)pyrene	1.063	1.089	-2.4	145	0.01

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY347.D
Acq On : 8 Oct 2014 12:48 pm
Operator : Z.Miao
Sample : CCV Inst : 5973D
Misc : 80 PPM STD 8270/625
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 08 13:25:05 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
90 TM	Indeno(1,2,3-cd)Pyrene	0.966	1.037	-7.3	147	0.01
91 TM	Dibenz(a,h)anthracene	1.025	1.064	-3.8	142	0.01
92 TM	Benzo(g,h,i)perylene	0.968	1.024	-5.8	144	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973D\Data\10CC01\
Data File : AY347.D
Acq On : 8 Oct 2014 12:48 pm
Operator : Z.Miao
Sample : CCV Inst : 5973D
Misc : 80 PPM STD 8270/625
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 08 13:25:05 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)	
1	IR	d4-1,4-Dichlorobenzene	40.000	40.000	0.0	142	0.00	
2	TM	Pyridine	80.000	81.719	-2.1	147	0.00	
3	TM	N-Nitrosodimethylamine	80.000	86.567	-8.2	145	0.00	
4	S	SURR1,2-FLUOROPHENOL	80.000	77.722	2.8	132	0.00	
5	TM	Benzaldehyde	80.000	55.179	31.0#	91	0.00	NT
6	TM	Aniline	80.000	70.342	12.1	132	0.00	
7	S	SURR2,PHENOL-D6	80.000	77.879	2.7	134	0.00	
8	TMC	Phenol	80.000	82.902	-3.6	141	0.00	
9	TM	bis(2-Clethyl)Ether	80.000	72.371	9.5	127	0.00	
10	TM	2-Chlorophenol	80.000	78.387	2.0	136	0.00	
11	TM	1,3-Diclbenzene	80.000	76.160	4.8	136	0.00	
12	TMC	1,4-Dichlorobenzene	80.000	77.392	3.3	138	0.00	
13	TM	1,2-Diclbenzene	80.000	76.721	4.1	131	0.00	
14	TM	Benzyl Alcohol	80.000	81.234	-1.5	141	0.00	
15	TM	2,2'-oxybis(1-Chloropropane	80.000	78.379	2.0	135	0.00	
16	TM	2-Methylphenol	80.000	80.049	-0.1	140	0.00	
17	TM	Acetophenone	80.000	77.992	2.5	134	0.00	
18	TMP	N-Nitroso-Di-n-propylamine	80.000	78.497	1.9	132	0.00	
19	TM	Hexachloroethane	80.000	77.679	2.9	133	0.00	
20	TM	3+4-Methylphenol	80.000	80.621	-0.8	133	0.00	
21	T	1-Methyl-2-pyrrolidinone	80.000	78.891	1.4	139	0.00	
22	IR	d8-Naphthalene	40.000	40.000	0.0	136	0.00	
23	S	SURR4,NITROBENZENE-D5	80.000	79.554	0.6	131	0.00	
24	TM	Nitrobenzene	80.000	77.654	2.9	132	0.00	
25	TM	Isophorone	80.000	79.488	0.6	134	0.00	
26	TCM	2-Nitrophenol	80.000	79.158	1.1	135	0.00	
27	TM	Benzoic Acid	80.000	85.905	-7.4	140	0.01	
28	TM	2,4-Dimethylphenol	80.000	80.124	-0.2	133	0.00	
29	TM	bis(-2-Chloroethoxy)Methane	80.000	78.103	2.4	131	0.00	
30	TCM	2,4-Dichlorophenol	80.000	80.476	-0.6	134	0.00	
31	TM	1,2,4-Trichlorobenzene	80.000	80.838	-1.0	136	0.00	
32	TM	Naphthalene	80.000	77.840	2.7	132	0.00	
33	TM	4-Chloroaniline	80.000	78.366	2.0	133	0.00	
34	TCM	Hexachlorobutadiene	80.000	78.590	1.8	132	0.00	
35	TMC	4-Chloro-3-methylphenol	80.000	81.030	-1.3	133	0.00	
36	TM	Caprolactam	80.000	81.681	-2.1	139	0.00	
37	TM	2-Methylnaphthalene	80.000	77.432	3.2	127	0.00	
38	TM	1-Methylnaphthalene	80.000	80.837	-1.0	138	0.00	
39	IR	d10-Acenaphthene	40.000	40.000	0.0	133	0.00	
40	TPM	Hexachlorocyclopentadiene	80.000	79.428	0.7	134	0.00	
41	TCM	2,4,6-Trichlorophenol	80.000	83.870	-4.8	137	0.00	
42	TM	2,4,5-Trichlorophenol	80.000	83.029	-3.8	144	0.00	
43	S	SURR5,2-FLUOROBIPHENYL	80.000	80.216	-0.3	134	0.00	
44	TM	1,1'-Biphenyl	80.000	81.192	-1.5	134	0.00	
45	TM	2-Chloronaphthalene	80.000	80.544	-0.7	133	0.00	

82701001D.M Thu Oct 09 15:21:18 2014 Page: 1

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY347.D
Acq On : 8 Oct 2014 12:48 pm
Operator : Z.Miao
Sample : CCV Inst : 5973D
Misc : 80 PPM STD 8270/625
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 08 13:25:05 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
46	TM	2-Nitroaniline	80.000	82.413	-3.0	135	0.00
47	TM	Acenaphthylene	80.000	80.998	-1.2	134	0.00
48	TM	Dimethyl phthalate	80.000	78.093	2.4	130	0.00
49	TM	2,6-Dinitrotoluene	80.000	82.165	-2.7	129	0.00
50	TMC	Acenaphthene	80.000	79.288	0.9	133	0.00
51	TM	3-Nitroaniline	80.000	81.612	-2.0	139	0.00
52	TPM	2,4-Dinitrophenol	80.000	87.260	-9.1	163	0.00
53	TM	Dibenzofuran	80.000	81.023	-1.3	134	0.00
54	TM	2,4-Dinitrotoluene	80.000	84.662	-5.8	140	0.00
55	TMP	4-Nitrophenol	80.000	81.865	-2.3	140	0.00
56	TM	Fluorene	80.000	81.589	-2.0	135	0.00
57	TM	4-Chlorophenyl-phenylether	80.000	82.570	-3.2	139	0.00
58	TM	Diethylphthalate	80.000	80.019	-0.0	136	0.00
59	TM	4-Nitroaniline	80.000	83.175	-4.0	140	0.00
60	S	SURR3,2,4,6-TRIBROMOPHENOL	80.000	82.980	-3.7	140	0.00
61	IR	d10-Phenanthrene	40.000	40.000	0.0	138	0.00
62	T	1-Phenyl-1(4-methyl-phenyl)	-1.000	0.000	0.0	0	-11.43#
63	TM	4,6-Dinitro-2-methylphenol	80.000	82.921	-3.7	150	0.00
64	TM	1,2 Diphenylhydrazine	80.000	78.271	2.2	130	0.00
65	TCM	N-Nitrosodiphenylamine	80.000	77.868	2.7	134	0.00
66	TM	4-Bromophenyl-phenylether	80.000	78.151	2.3	129	0.00
67	T	1-Phenyl-1(2,4-dimethylphen	-1.000	0.000	0.0	162	0.00
68	TM	Hexachlorobenzene	80.000	78.100	2.4	133	0.00
69	TM	Atrazine	80.000	71.586	10.5	138	0.00
70	TCM	Pentachlorophenol	80.000	88.008	-10.0	152	0.00
71	TM	Phenanthrene	80.000	78.130	2.3	137	0.00
72	TM	Anthracene	80.000	78.927	1.3	134	0.00
73	TM	Carbazole	80.000	84.458	-5.6	138	0.00
74	TM	Di-n-butylphthalate	80.000	87.140	-8.9	138	0.00
75	TCM	Fluoranthene	80.000	88.299	-10.4	146	0.00
76	IR	d12-Chrysene	40.000	40.000	0.0	142	0.00
77	TM	Benzidine	80.000	72.975	8.8	125	0.00
78	TM	Pyrene	80.000	80.252	-0.3	138	0.00
79	S	SURR6,TERPHENYL-D14	80.000	79.766	0.3	140	0.00
80	TM	Butyl benzyl phthalate	80.000	82.620	-3.3	142	0.00
81	TM	3,3'-Dichlorobenzidine	80.000	81.288	-1.6	141	0.00
82	TM	Benzo(a)anthracene	80.000	80.919	-1.1	145	0.00
83	TM	Chrysene	80.000	79.822	0.2	144	0.00
84	TM	bis(2-Ethylhexyl)phthalate	80.000	82.360	-2.9	143	0.00
85	IR	d12-Perylene	40.000	40.000	0.0	142	0.01
86	TCM	Di-n-octyl phthalate	80.000	79.752	0.3	146	0.00
87	TM	Benzo(b)Fluoranthene	80.000	81.452	-1.8	147	0.01
88	TM	Benzo(k)fluoranthene	80.000	78.619	1.7	142	0.01
89	TCM	Benzo(a)pyrene	80.000	81.983	-2.5	145	0.01

82701001D.M Thu Oct 09 15:21:18 2014 Page: 2

Evaluate Continuing Calibration Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY347.D
Acq On : 8 Oct 2014 12:48 pm
Operator : Z.Miao
Sample : CCV Inst : 5973D
Misc : 80 PPM STD 8270/625
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 08 13:25:05 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
90 TM	Indeno(1,2,3-cd)Pyrene	80.000	85.858	-7.3	147	0.01
91 TM	Dibenz(a,h)anthracene	80.000	83.101	-3.9	142	0.01
92 TM	Benzo(g,h,i)perylene	80.000	84.617	-5.8	144	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY347.D
Acq On : 8 Oct 2014 12:48 pm
Operator : Z.Miao
Sample : CCV Inst : 5973D
Misc : 80 PPM STD 8270/625
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 08 13:25:05 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.130	152	42195	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	168487	40.00	ppm	0.00
39) d10-Acenaphthene	6.216	164	104881	40.00	ppm	0.00
61) d10-Phenanthrene	7.275	188	178586	40.00	ppm	0.00
76) d12-Chrysene	10.078	240	222955	40.00	ppm	0.00
85) d12-Perylene	12.838	264	209111	40.00	ppm	0.01
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.323	112	101554	77.72	ppm	0.00
Spiked Amount 200.000	Range 10 - 105		Recovery = 38.86%			
7) SURR2,PHENOL-D6	3.879	99	133695	77.88	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 38.94%			
23) SURR4,NITROBENZENE-D5	4.489	82	115931	79.55	ppm	0.00
Spiked Amount 100.000	Range 37 - 117		Recovery = 79.55%			
43) SURR5,2-FLUOROBIPHENYL	5.724	172	269510	80.22	ppm	0.00
Spiked Amount 100.000	Range 39 - 119		Recovery = 80.22%			
60) SURR3,2,4,6-TRIBROMOPH...	6.778	330	43097	82.98	ppm	0.00
Spiked Amount 200.000	Range 28 - 157		Recovery = 41.49%			
79) SURR6,TERPHENYL-D14	8.639	244	352953	79.77	ppm	0.00
Spiked Amount 100.000	Range 40 - 133		Recovery = 79.77%			
Target Compounds						Qvalue
2) Pyridine	2.521	79	109467	81.72	ppm	98
3) N-Nitrosodimethylamine	2.488	74	59577	86.57	ppm	99
5) Benzaldehyde	3.852	106	26336	55.18	ppm	90
6) Aniline	3.917	93	121839	70.34	ppm	81
8) Phenol	3.890	94	143894	82.90	ppm	91
9) bis(2-Clethyl)Ether	3.943	93	93271	72.37	ppm	94
10) 2-Chlorophenol	3.997	128	117120	78.39	ppm	94
11) 1,3-Diclbenzene	4.093	146	130798	76.16	ppm	99
12) 1,4-Dichlorobenzene	4.141	146	135841	77.39	ppm	96
13) 1,2-Diclbenzene	4.237	146	124907	76.72	ppm	96
14) Benzyl Alcohol	4.211	79	90233	81.23	ppm	97
15) 2,2'-oxybis(1-Chloropr...	4.286	45	158275	78.38	ppm	86
16) 2-Methylphenol	4.280	108	107277	80.05	ppm	96
17) Acetophenone	4.387	105	149122	77.99	ppm	98
18) N-Nitroso-Di-n-propyla...	4.377	70	80523	78.50	ppm	97
19) Hexachloroethane	4.462	117	50019	77.68	ppm	96
20) 3+4-Methylphenol	4.377	108	114605	80.62	ppm	91
21) 1-Methyl-2-pyrrolidinone	4.248	99	76001	78.89	ppm	98
24) Nitrobenzene	4.505	77	115590	77.65	ppm	94
25) Isophorone	4.660	82	210224	79.49	ppm	97
26) 2-Nitrophenol	4.719	139	67238	79.16	ppm	97
27) Benzoic Acid	4.820	105	126847	85.91	ppm	98
28) 2,4-Dimethylphenol	4.735	107	112845	80.12	ppm	97
29) bis(-2-Chloroethoxy)Me...	4.788	93	120894	78.10	ppm	99
30) 2,4-Dichlorophenol	4.885	162	103855	80.48	ppm	99
31) 1,2,4-Trichlorobenzene	4.938	180	121480	80.84	ppm	99
32) Naphthalene	4.997	128	346061	77.84	ppm	99
33) 4-Chloroaniline	5.029	127	125458	78.37	ppm	99

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY347.D
Acq On : 8 Oct 2014 12:48 pm
Operator : Z.Miao
Sample : CCV Inst : 5973D
Misc : 80 PPM STD 8270/625
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 08 13:25:05 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
34) Hexachlorobutadiene	5.066	225	69864	78.59 ppm	98
35) 4-Chloro-3-methylphenol	5.366	107	97573	81.03 ppm	98
36) Caprolactam	5.286	113	33925	81.68 ppm	98
37) 2-Methylnaphthalene	5.473	142	237531	77.43 ppm	97
38) 1-Methylnaphthalene	5.548	142	227494	80.84 ppm	96
40) Hexachlorocyclopentadiene	5.580	237	48349	79.43 ppm	92
41) 2,4,6-Trichlorophenol	5.671	196	84812	83.87 ppm	99
42) 2,4,5-Trichlorophenol	5.708	196	90392	83.03 ppm	99
44) 1,1'-Biphenyl	5.799	154	304361	81.19 ppm	99
45) 2-Chloronaphthalene	5.821	162	236731	80.54 ppm	99
46) 2-Nitroaniline	5.896	65	67327	82.41 ppm	89
47) Acenaphthylene	6.115	152	374153	81.00 ppm	98
48) Dimethyl phthalate	6.002	163	250732	78.09 ppm	99
49) 2,6-Dinitrotoluene	6.056	165	60210	82.16 ppm	97
50) Acenaphthene	6.238	153	238498	79.29 ppm	99
51) 3-Nitroaniline	6.184	138	65087	81.61 ppm	98
52) 2,4-Dinitrophenol	6.259	184	35947	87.26 ppm	95
53) Dibenzofuran	6.361	168	354007	81.02 ppm	93
54) 2,4-Dinitrotoluene	6.345	165	82582	84.66 ppm	99
55) 4-Nitrophenol	6.307	65	44091	81.86 ppm	94
56) Fluorene	6.602	166	282265	81.59 ppm	96
57) 4-Chlorophenyl-phenyle...	6.591	204	145809	82.57 ppm	92
58) Diethylphthalate	6.500	149	240674	80.02 ppm	98
59) 4-Nitroaniline	6.623	138	73442	83.17 ppm	97
63) 4,6-Dinitro-2-methylph...	6.639	198	54880	82.92 ppm	94
64) 1,2 Diphenylhydrazine	6.703	77	252000	78.27 ppm	99
65) N-Nitrosodiphenylamine	6.676	169	180442	77.87 ppm	99
66) 4-Bromophenyl-phenylether	6.938	248	81335	78.15 ppm	91
68) Hexachlorobenzene	6.997	284	91244	78.10 ppm	97
69) Atrazine	7.045	215	16202	71.59 ppm	89
70) Pentachlorophenol	7.136	266	55972	88.01 ppm	92
71) Phenanthrene	7.292	178	379521	78.13 ppm	98
72) Anthracene	7.329	178	397029	78.93 ppm	99
73) Carbazole	7.447	167	384463	84.46 ppm	100
74) Di-n-butylphthalate	7.677	149	461124	87.14 ppm	98
75) Fluoranthene	8.270	202	484909	88.30 ppm	97
77) Benzidine	8.388	184	89312	72.98 ppm	98
78) Pyrene	8.506	202	493467	80.25 ppm	98
80) Butyl benzyl phthalate	9.217	149	219848	82.62 ppm	93
81) 3,3'-Dichlorobenzidine	10.019	252	173493	81.29 ppm	99
82) Benzo(a)anthracene	10.062	228	511904	80.92 ppm	99
83) Chrysene	10.121	228	489157	79.82 ppm	98
84) bis(2-Ethylhexyl)phtha...	10.094	149	295522	82.36 ppm	96
86) Di-n-octyl phthalate	11.324	149	449137	79.75 ppm	97
87) Benzo(b)Fluoranthene	12.046	252	458823	81.45 ppm	98
88) Benzo(k)fluoranthene	12.105	252	466689	78.62 ppm	99
89) Benzo(a)pyrene	12.720	252	455423	81.98 ppm	99
90) Indeno(1,2,3-cd)Pyrene	14.731	276	433771	85.86 ppm	96
91) Dibenz(a,h)anthracene	14.774	278	445185	83.10 ppm	94
92) Benzo(g,h,i)perylene	15.175	276	428238	84.62 ppm	98

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY347.D
Acq On : 8 Oct 2014 12:48 pm
Operator : Z.Miao
Sample : CCV Inst : 5973D
Misc : 80 PPM STD 8270/625
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 08 13:25:05 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

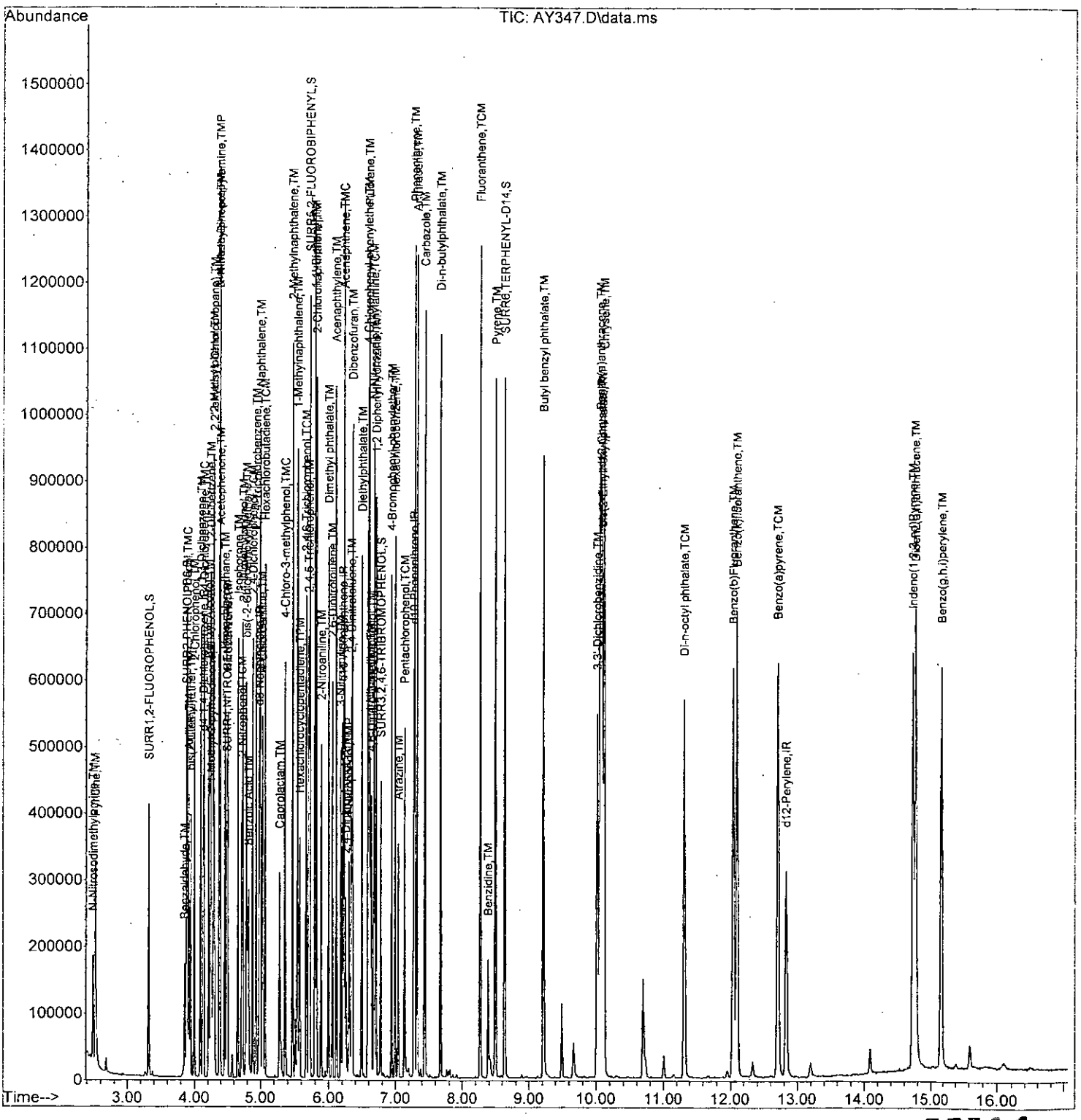
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY347.D
Acq On : 8 Oct 2014 12:48 pm
Operator : Z.Miao
Sample : CCV
Inst : 5973D
Misc : 80 PPM STD 8270/625
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 08 13:25:05 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration



82701001D.M Thu Oct 09 15:21:13 2014

00514

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY265.D
Acq On : 1 Oct 2014 3:09 pm
Operator : Z.Miao
Sample : TUNE Inst : 5973D
Misc : 50 ng DFTPP
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 02 10:05:56 2014
Quant Method : I:\ACQUDATA\5973D\METHODS\TUNE-D.M
Quant Title : TUNE CHECK
QLast Update : Tue Jun 17 14:09:29 2014
Response via : Initial Calibration

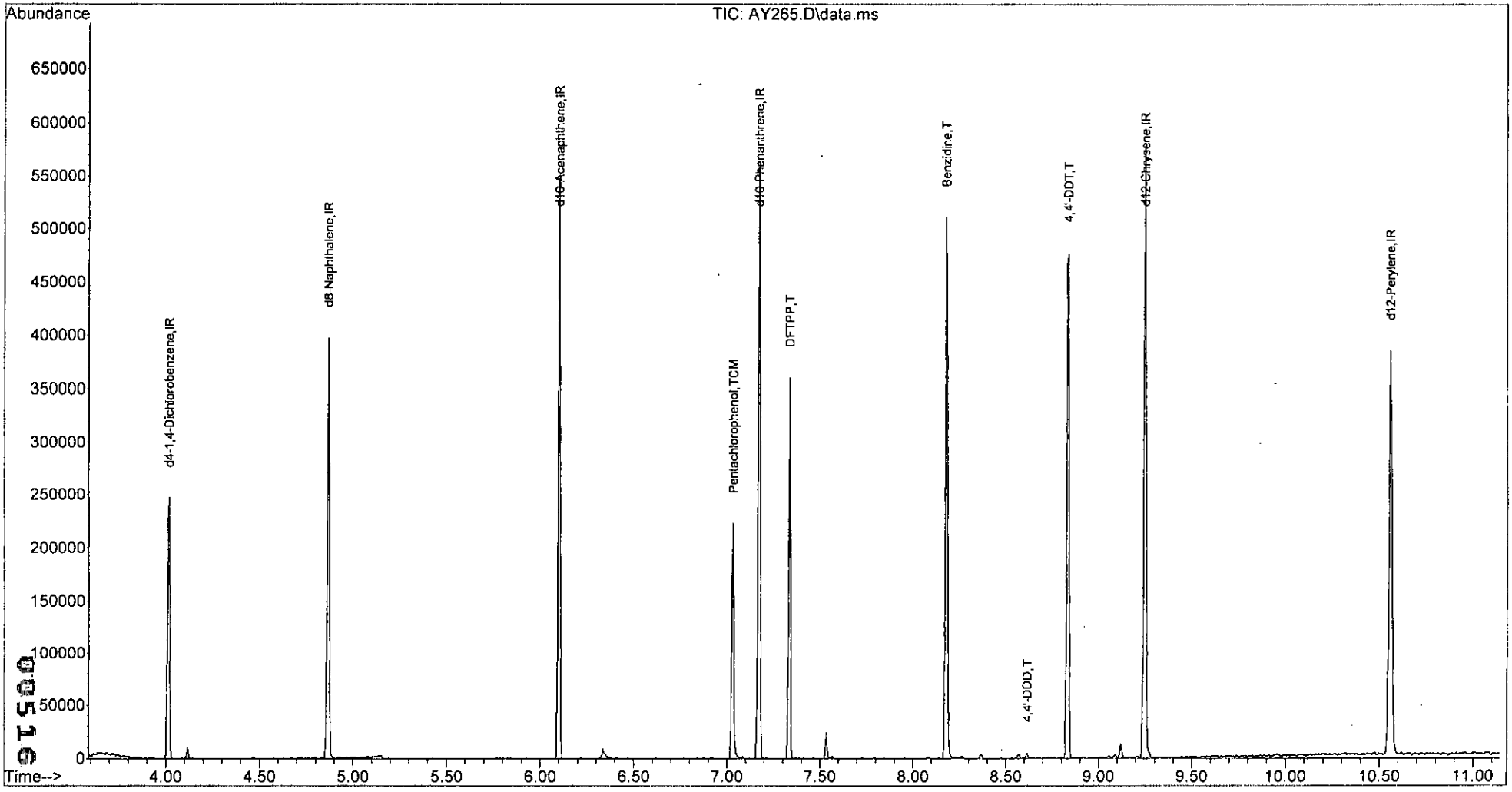
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) d4-1,4-Dichlorobenzene	4.015	152	34824	40.00	ppm		0.00
2) d8-Naphthalene	4.865	136	143989	40.00	ppm		-0.01
3) d10-Acenaphthene	6.101	164	91277	40.00	ppm		-0.01
4) d10-Phenanthrene	7.170	188	172436	40.00	ppm		0.00
7) d12-Chrysene	9.246	240	187258	40.00	ppm		0.04
12) d12-Perylene	10.556	264	160359	40.00	ppm		0.05
Target Compounds							Qvalue
5) Pentachlorophenol	7.031	266	26062	75.79	ppm		94
6) DFTPP	7.336	198	30010	53.48	ppm		87
8) Benzidine	8.176	184	184453	71.58	ppm		99
9) 4,4'-DDE	0.000		0	N.D.	d		
10) 4,4'-DDD	8.614	235	1633	0.98	ppm	#	74
11) 4,4'-DDT	8.834	235	81389	48.59	ppm		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY265.D
Acq On : 1 Oct 2014 3:09 pm
Operator : Z.Miao
Sample : TUNE Inst : 5973D
Misc : 50 ng DFTPP
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 02 10:05:56 2014
Quant Method : I:\ACQUDATA\5973D\METHODS\TUNE-D.M
Quant Title : TUNE CHECK
QLast Update : Tue Jun 17 14:09:29 2014
Response via : Initial Calibration

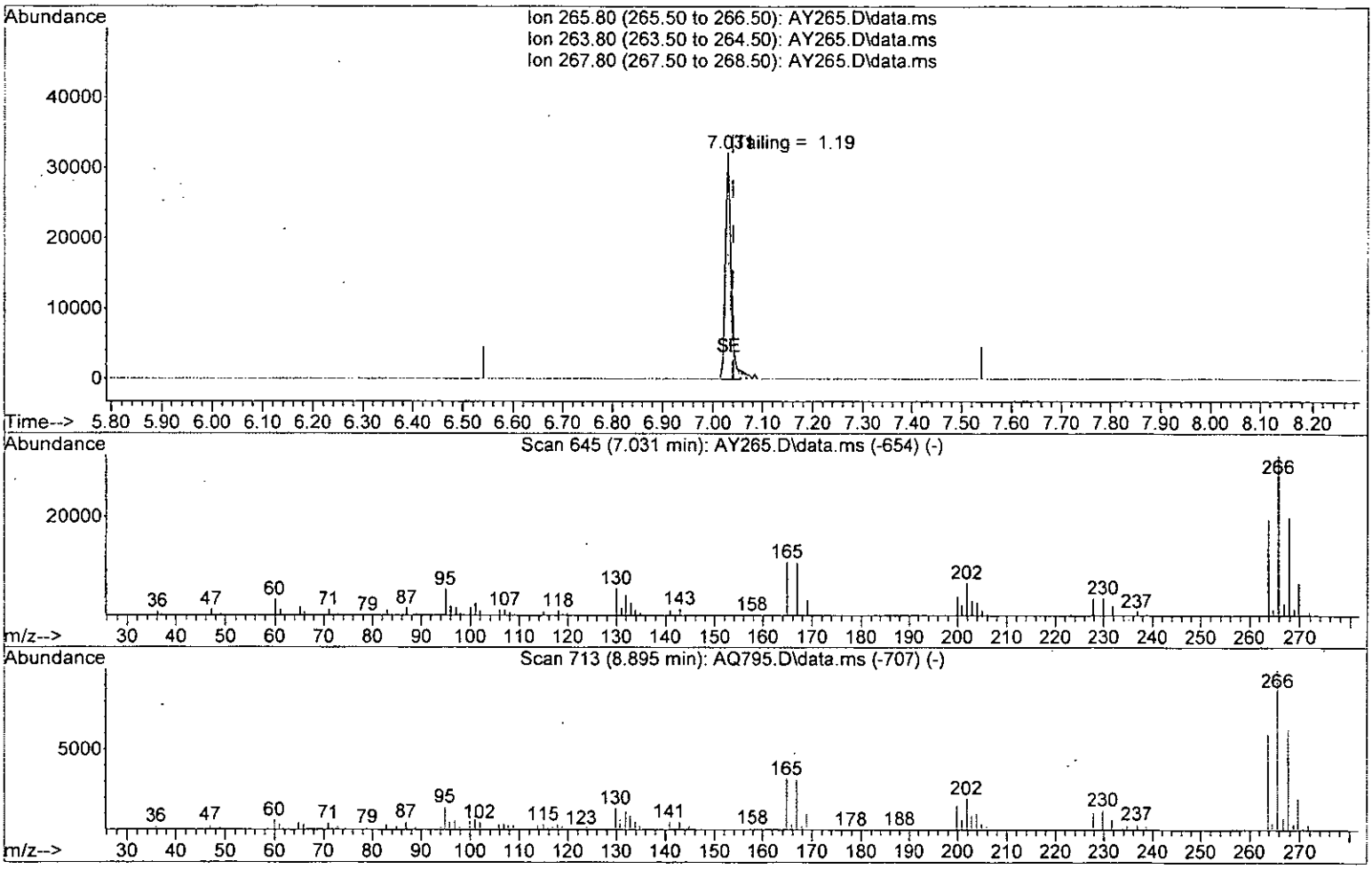


TUNE-D.M Thu Oct 02 10:06:05 2014 Page: 2

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY265.D
Acq On : 1 Oct 2014 3:09 pm
Operator : Z.Miao
Sample : TUNE Inst : 5973D
Misc : 50 ng DFTPP
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 01 15:17:33 2014
Quant Method : I:\ACQUDATA\5973D\METHODS\TUNE-D.M
Quant Title : TUNE CHECK
QLast Update : Tue Jun 17 14:09:29 2014
Response via : Initial Calibration



TIC: AY265.D\data.ms

(5) Pentachlorophenol (TCM)

7.031min (-0.010) 75.79 ppm

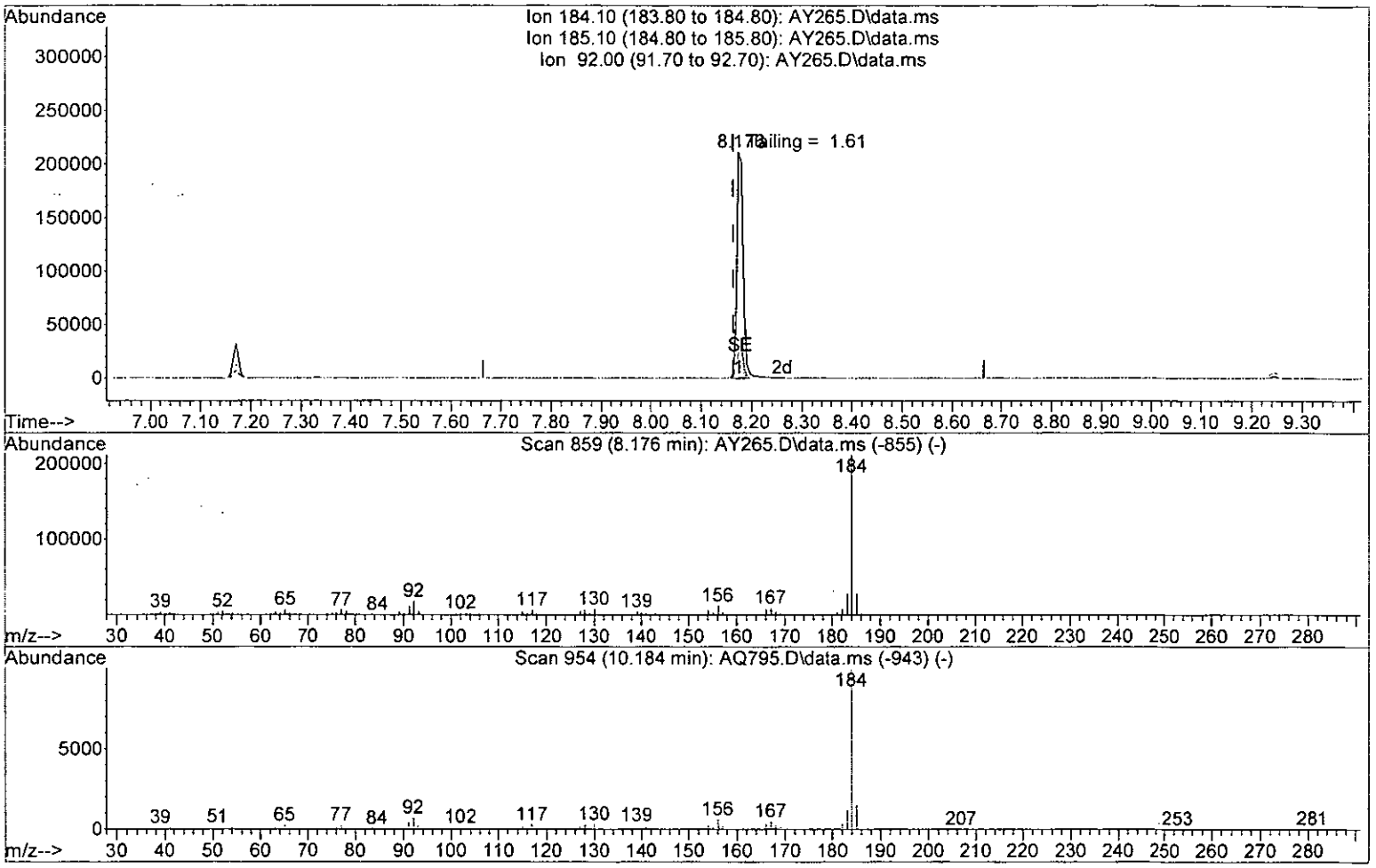
response 26062

Ion	Exp%	Act%
265.80	100	100
263.80	65.60	60.65
267.80	66.70	61.75
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\101114\
Data File : AY265.D
Acq On : 1 Oct 2014 3:09 pm
Operator : Z.Miao
Sample : TUNE Inst : 5973D
Misc : 50 ng DFTPP
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 01 15:17:33 2014
Quant Method : I:\ACQUDATA\5973D\METHODS\TUNE-D.M
Quant Title : TUNE CHECK
QLast Update : Tue Jun 17 14:09:29 2014
Response via : Initial Calibration



TIC: AY265.D\data.ms

(8) Benzidine (T)

8.176min (+0.011) 71.58 ppm

response 184453

Ion	Exp%	Act%
184.10	100	100
185.10	13.90	13.52
92.00	9.00	8.56
0.00	0.00	0.00

TUNE-D.M Thu Oct 02 10:05:53 2014 Page: 1

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY346.D
Acq On : 8 Oct 2014 12:30 pm
Operator : Z.Miao
Sample : TUNE Inst : 5973D
Misc : 50 ng DFTPP
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 08 12:42:59 2014
Quant Method : I:\ACQUDATA\5973D\METHODS\TUNE-D.M
Quant Title : TUNE CHECK
QLast Update : Tue Jun 17 14:09:29 2014
Response via : Initial Calibration

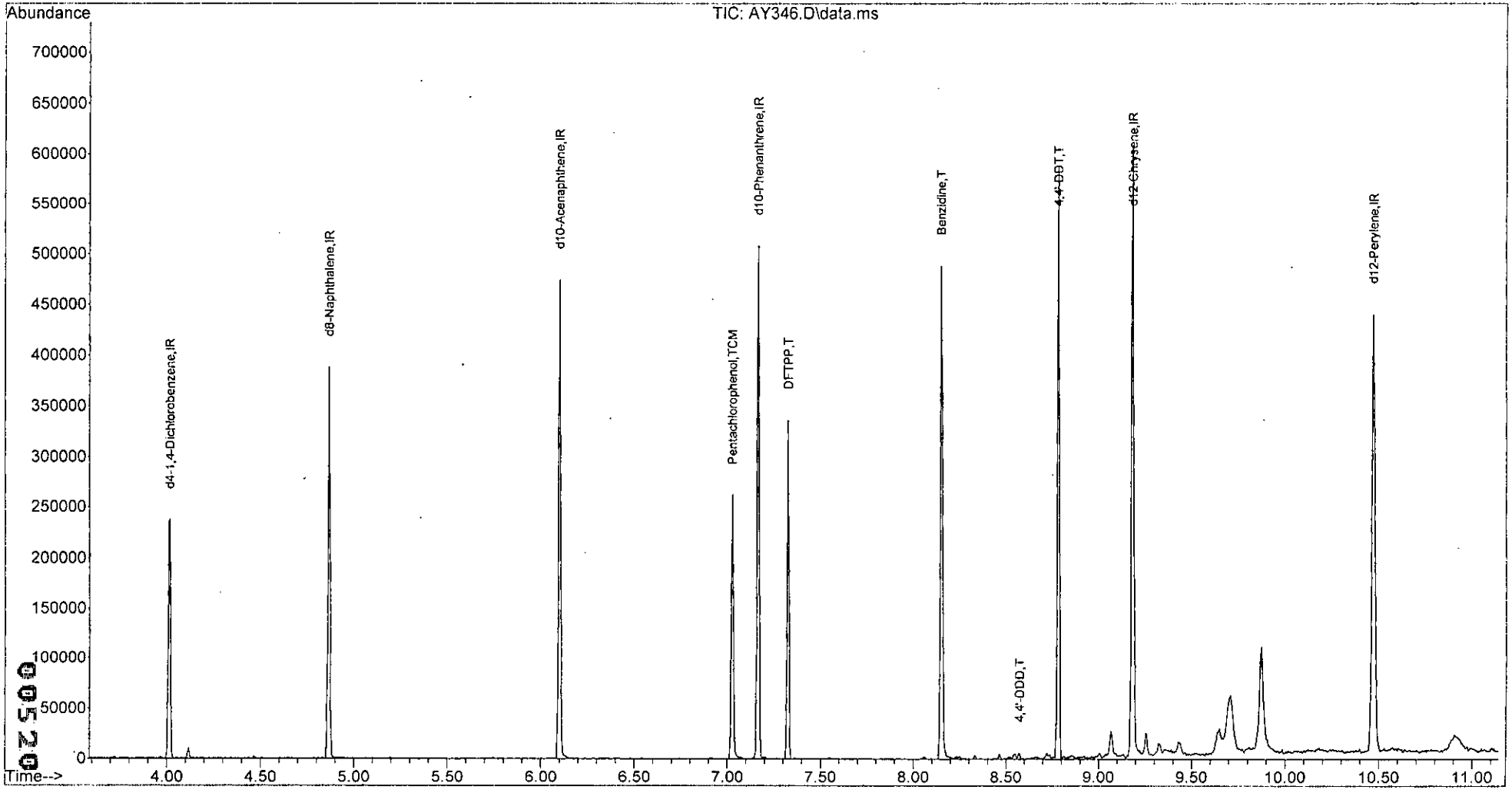
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) d4-1,4-Dichlorobenzene	4.015	152	34890	40.00 ppm	0.00
2) d8-Naphthalene	4.865	136	136684	40.00 ppm	-0.01
3) d10-Acenaphthene	6.101	164	85369	40.00 ppm	-0.01
4) d10-Phenanthrene	7.165	188	164675	40.00 ppm	-0.01
7) d12-Chrysene	9.182	240	183366	40.00 ppm	-0.02
12) d12-Perylene	10.471	264	188700	40.00 ppm	-0.03
Target Compounds					Qvalue
5) Pentachlorophenol	7.026	266	28674	87.32 ppm	96
6) DFTPP	7.326	198	27252	50.85 ppm	87
8) Benzidine	8.149	184	169654	67.24 ppm	99
9) 4,4'-DDE	0.000		0	N.D. d	
10) 4,4'-DDD	8.572	235	1613	0.98 ppm	82
11) 4,4'-DDT	8.780	235	82295	50.18 ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY346.D
Acq On : 8 Oct 2014 12:30 pm
Operator : Z.Miao
Sample : TUNE
Inst : 5973D
Misc : 50 ng DFTPP
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 08 12:42:59 2014
Quant Method : I:\ACQUDATA\5973D\METHODS\TUNE-D.M
Quant Title : TUNE CHECK
QLast Update : Tue Jun 17 14:09:29 2014
Response via : Initial Calibration

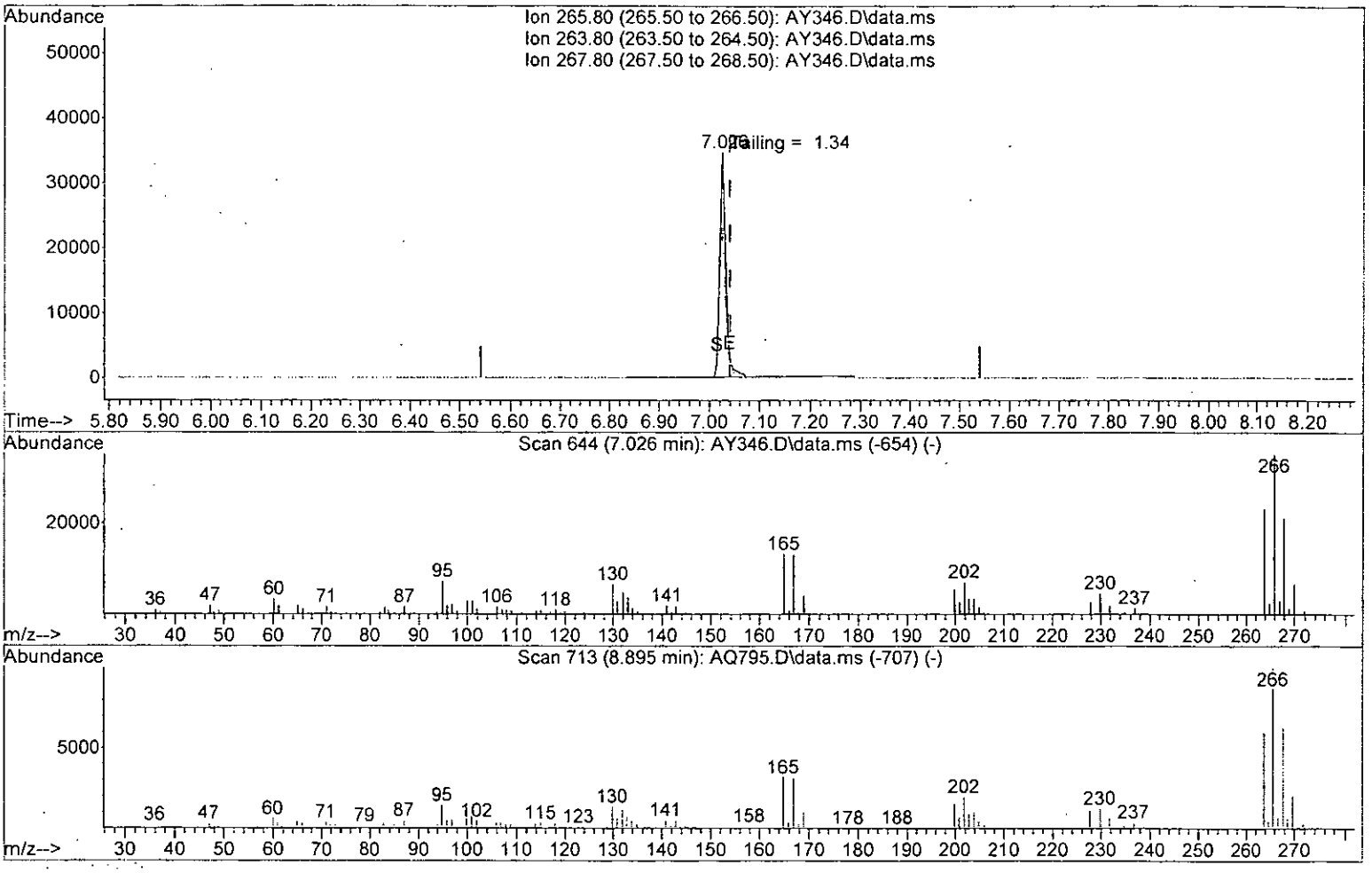


TUNE-D.M Thu Oct 09 15:19:29 2014 Page: 2

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY346.D
Acq On : 8 Oct 2014 12:30 pm
Operator : Z.Miao
Sample : TUNE Inst : 5973D
Misc : 50 ng DFTPP
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 08 12:42:59 2014
Quant Method : I:\ACQUDATA\5973D\METHODS\TUNE-D.M
Quant Title : TUNE CHECK
QLast Update : Tue Jun 17 14:09:29 2014
Response via : Initial Calibration



TIC: AY346.D\data.ms

(5) Pentachlorophenol (TCM)

7.026min (-0.015) 87.32 ppm

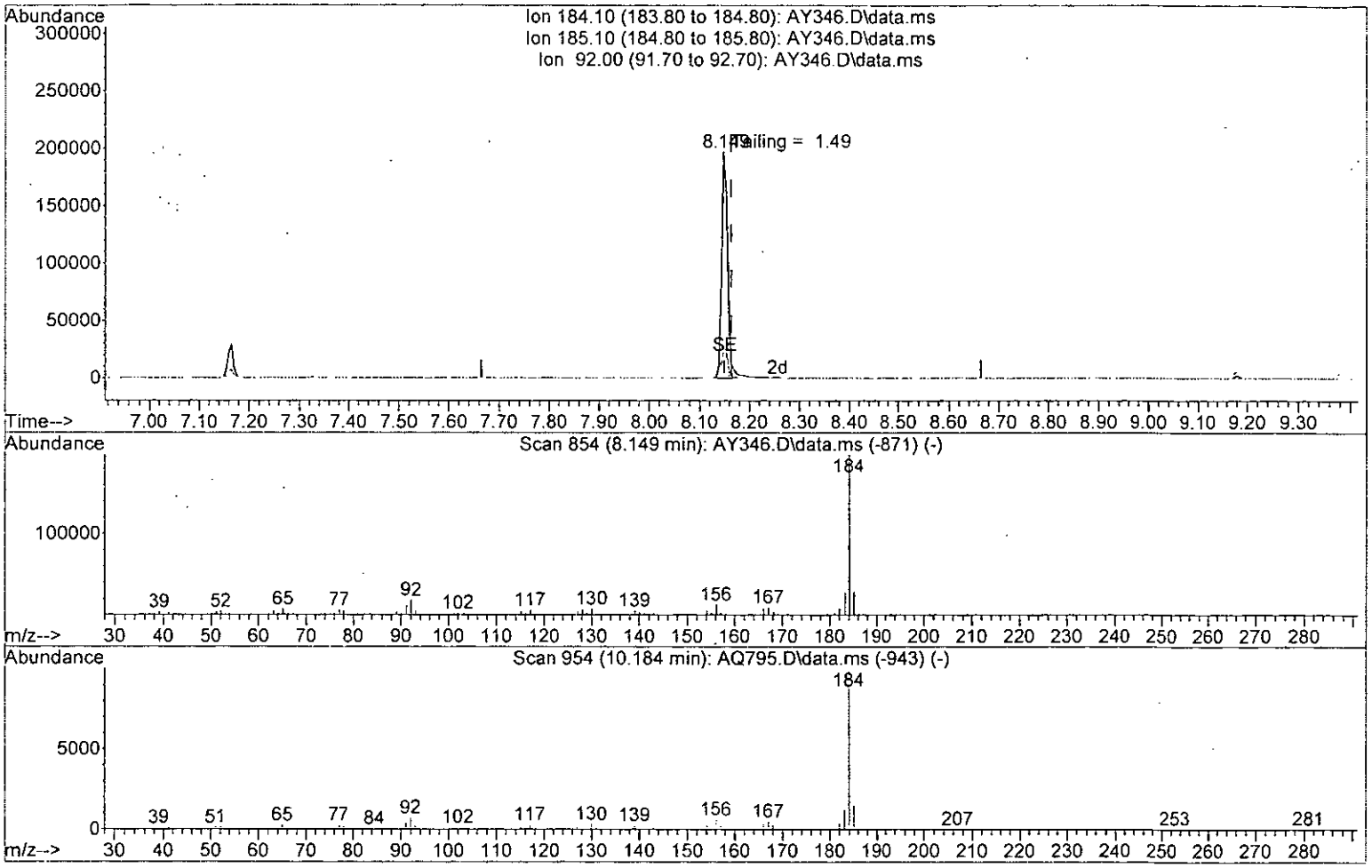
response 28674

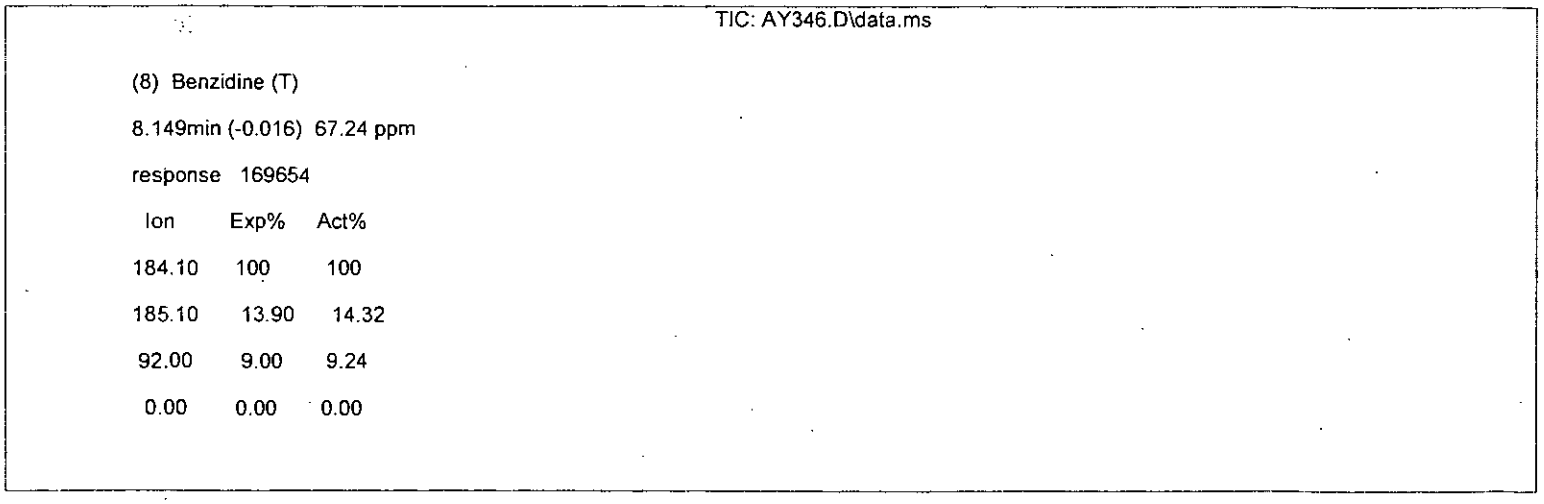
Ion	Exp%	Act%
265.80	100	100
263.80	65.60	66.38
267.80	66.70	60.67
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY346.D
Acq On : 8 Oct 2014 12:30 pm
Operator : Z.Miao
Sample : TUNE Inst : 5973D
Misc : 50 ng DFTPP
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Oct 08 12:42:59 2014
Quant Method : I:\ACQUDATA\5973D\METHODS\TUNE-D.M
Quant Title : TUNE CHECK
QLast Update : Tue Jun 17 14:09:29 2014
Response via : Initial Calibration





(8) Benzidine (T)

8.149min (-0.016) 67.24 ppm

response 169654

Ion	Exp%	Act%
184.10	100	100
185.10	13.90	14.32
92.00	9.00	9.24
0.00	0.00	0.00

TUNE-D.M Thu Oct 09 15:19:19 2014 Page: 1

00522

ALS Environmental

SEMI-VOLATILE ORGANICS
RAW QC DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

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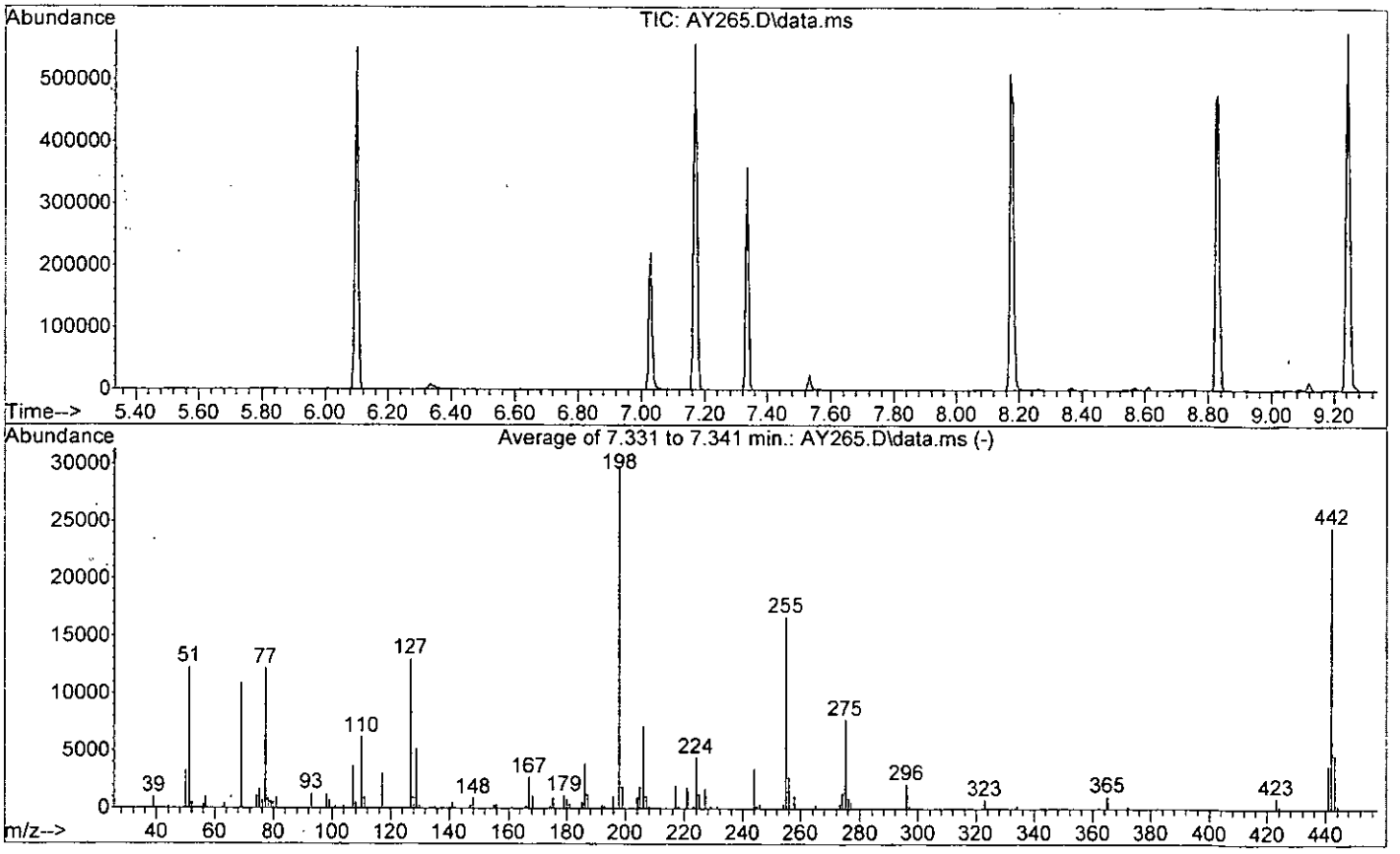
00523

Data Path : I:\ACQUDATA\5973D\DATA\100114\
Data File : AY265.D
Acq On : 1 Oct 2014 3:09 pm
Operator : Z.Miao
Sample : TUNE
Inst : 5973D
Misc : 50 ng DFTPP
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5973D\METHODS\TUNE-D.M
Title : TUNE CHECK
Last Update : Tue Jun 17 10:19:51 2014



Spectrum Information: Average of 7.331 to 7.341 min.

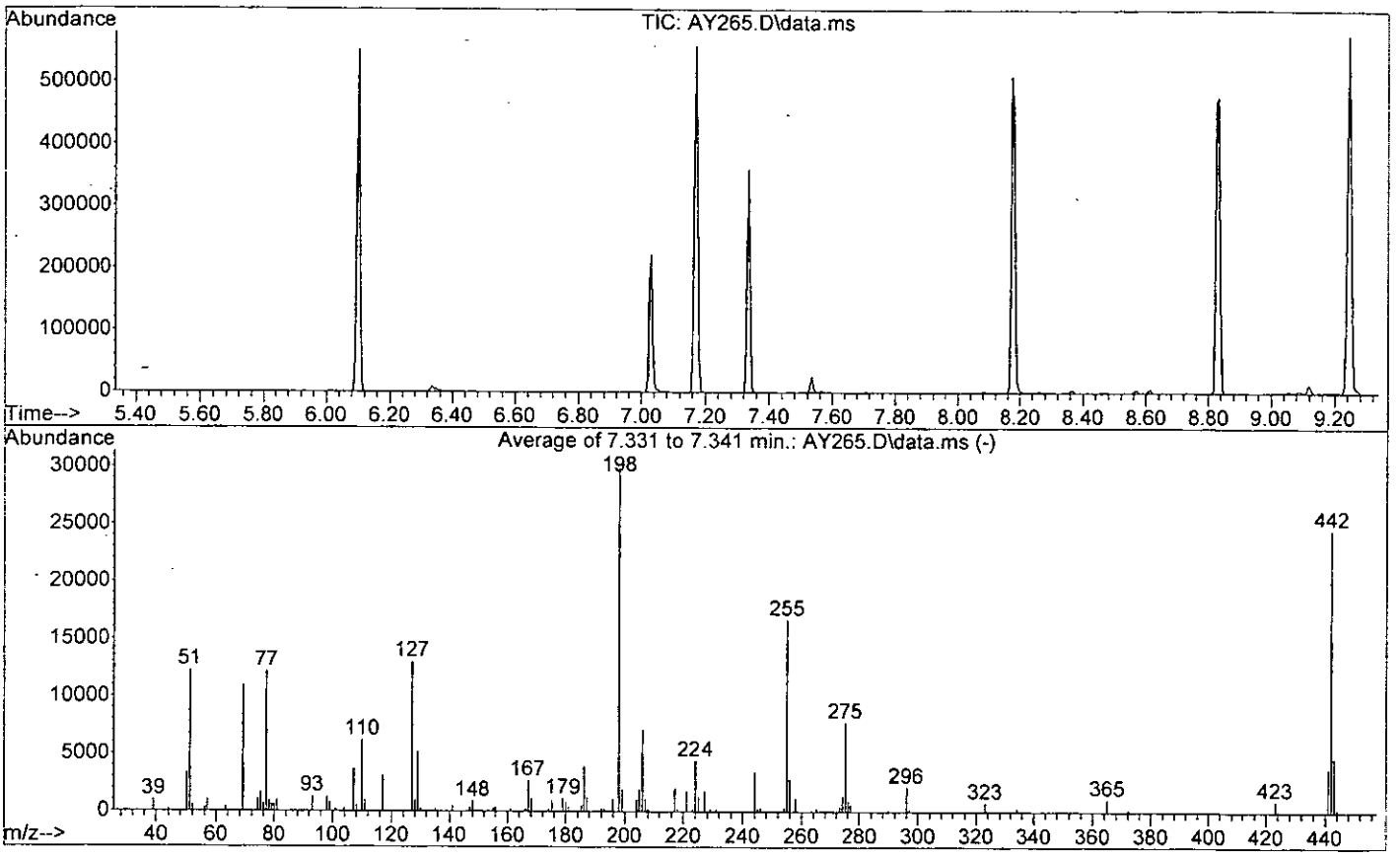
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	41.1	12240	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.0	0	PASS
127	198	10	80	43.6	12992	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	29779	PASS
199	198	5	9	6.2	1854	PASS
275	198	10	60	26.0	7735	PASS
365	198	1	500	3.5	1055	PASS
441	442	0.01	24	15.3	3748	PASS
442	442	100	100	100.0	24527	PASS
443	442	15	24	19.1	4685	PASS

DFTPP

Data Path : I:\ACQUDATA\5973D\Data\100114\
Data File : AY265.D
Acq On : 1 Oct 2014 3:09 pm
Operator : Z.Miao
Sample : TUNE
Inst : 5973D
Misc : 50 ng DFTPP
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5973D\Methods\TUNCHECK.M
Title : TUNE CHECK
Last Update : Tue Apr 01 09:41:30 2014



Spectrum Information: Average of 7.331 to 7.341 min.

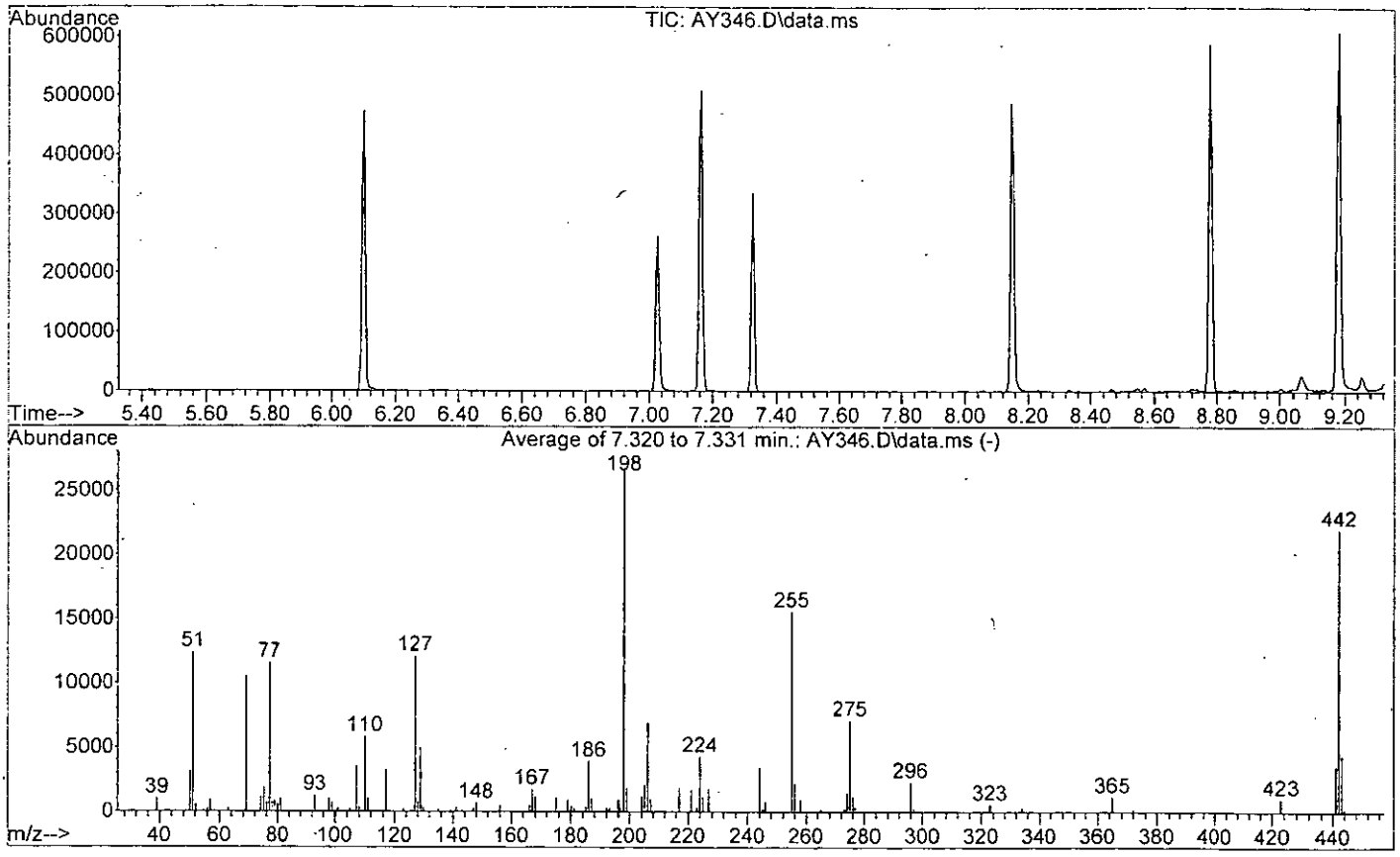
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	41.1	12240	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	36.5	10875	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	43.6	12992	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	29779	PASS
199	198	5	9	6.2	1854	PASS
275	198	10	30	26.0	7735	PASS
365	198	1	500	3.5	1055	PASS
441	443	0.01	100	80.0	3748	PASS
442	198	50	500	82.4	24527	PASS
443	442	17	23	19.1	4685	PASS

DFTPP

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY346.D
Acq On : 8 Oct 2014 12:30 pm
Operator : Z.Miao
Sample : TUNE
Inst : 5973D
Misc : 50 ng DFTPP
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : I:\ACQUDATA\5973D\METHODS\TUNE-D.M
Title : TUNE CHECK
Last Update : Tue Jun 17 10:19:51 2014



Spectrum Information: Average of 7.320 to 7.331 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	46.3	12384	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.0	0	PASS
127	198	10	80	45.2	12078	PASS
197	198	0.00	2	1.0	260	PASS
198	198	100	100	100.0	26720	PASS
199	198	5	9	6.7	1782	PASS
275	198	10	60	26.5	7079	PASS
365	198	1	500	4.3	1148	PASS
441	442	0.01	24	16.2	3546	PASS
442	442	100	100	100.0	21953	PASS
443	442	15	24	19.7	4334	PASS

TUNE-D.M Thu Oct 09 15:19:38 2014

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 14:21
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412024-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:		**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
	1,2-Diphenylhydrazine/Azobenzene	ND	U	10	5.0	1.0	
120-82-1	1,2,4-Trichlorobenzene	ND	U	10	5.0	1.0	
95-50-1	1,2-Dichlorobenzene	ND	U	10	5.0	1.0	
541-73-1	1,3-Dichlorobenzene	ND	U	10	5.0	1.0	
106-46-7	1,4-Dichlorobenzene	ND	U	10	5.0	1.0	
95-95-4	2,4,5-Trichlorophenol	ND	U	10	5.0	1.8	
88-06-2	2,4,6-Trichlorophenol	ND	U	10	5.0	1.4	
120-83-2	2,4-Dichlorophenol	ND	U	10	5.0	1.3	
105-67-9	2,4-Dimethylphenol	ND	U	10	5.0	1.5	
51-28-5	2,4-Dinitrophenol	ND	U	50	25	20	
121-14-2	2,4-Dinitrotoluene	ND	U	10	5.0	1.6	
606-20-2	2,6-Dinitrotoluene	ND	U	10	5.0	1.8	
91-58-7	2-Chloronaphthalene	ND	U	10	5.0	1.0	
95-57-8	2-Chlorophenol	ND	U	10	5.0	1.0	
91-57-6	2-Methylnaphthalene	ND	U	10	5.0	1.0	
95-48-7	2-Methylphenol	ND	U	10	5.0	1.0	
88-74-4	2-Nitroaniline	ND	U	50	25	9.1	
88-75-5	2-Nitrophenol	ND	U	10	5.0	1.4	
91-94-1	3,3'-Dichlorobenzidine	ND	U	10	5.0	4.5	
	3- and 4-Methylphenol Coelution	ND	U	11	10	2.0	
99-09-2	3-Nitroaniline	ND	U	50	25	7.7	
534-52-1	4,6-Dinitro-2-methylphenol	ND	U	50	25	11	
101-55-3	4-Bromophenyl Phenyl Ether	ND	U	10	5.0	2.2	
59-50-7	4-Chloro-3-methylphenol	ND	U	10	5.0	1.2	
106-47-8	4-Chloroaniline	ND	U	10	5.0	1.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	ND	U	10	5.0	1.2	
100-01-6	4-Nitroaniline	ND	U	50	25	7.8	
100-02-7	4-Nitrophenol	ND	U	50	25	5.9	
83-32-9	Acenaphthene	ND	U	10	5.0	1.0	
208-96-8	Acenaphthylene	ND	U	10	5.0	1.0	
120-12-7	Anthracene	ND	U	10	5.0	1.0	
56-55-3	Benz(a)anthracene	ND	U	10	5.0	1.0	
92-87-5	Benzidine	ND	U	110	100	90	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 14:21
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412024-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY349.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
50-32-8	Benzo(a)pyrene	ND	U	10	5.0	1.0	
205-99-2	Benzo(b)fluoranthene	ND	U	10	5.0	1.0	
191-24-2	Benzo(g,h,i)perylene	ND	U	10	5.0	1.0	
207-08-9	Benzo(k)fluoranthene	ND	U	10	5.0	1.0	
100-51-6	Benzyl Alcohol	ND	U	10	5.0	1.3	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	U	10	5.0	1.0	
111-91-1	Bis(2-chloroethoxy)methane	ND	U	10	5.0	2.2	
111-44-4	Bis(2-chloroethyl) Ether	ND	U	10	5.0	1.3	
117-81-7	Bis(2-ethylhexyl) Phthalate	ND	U	10	5.0	1.2	
85-68-7	Butyl Benzyl Phthalate	ND	U	10	5.0	2.4	
86-74-8	Carbazole	ND	U	10	5.0	1.1	
218-01-9	Chrysene	ND	U	10	5.0	1.0	
84-74-2	Di-n-butyl Phthalate	ND	U	10	5.0	1.0	
117-84-0	Di-n-octyl Phthalate	ND	U	10	5.0	1.2	
53-70-3	Dibenz(a,h)anthracene	ND	U	10	5.0	1.3	
132-64-9	Dibenzofuran	ND	U	10	5.0	1.0	
84-66-2	Diethyl Phthalate	ND	U	10	5.0	1.0	
131-11-3	Dimethyl Phthalate	ND	U	10	5.0	1.0	
206-44-0	Fluoranthene	ND	U	10	5.0	1.0	
86-73-7	Fluorene	ND	U	10	5.0	1.0	
118-74-1	Hexachlorobenzene	ND	U	10	5.0	1.0	
87-68-3	Hexachlorobutadiene	ND	U	10	5.0	1.3	
77-47-4	Hexachlorocyclopentadiene	ND	U	10	5.0	1.0	
67-72-1	Hexachloroethane	ND	U	10	5.0	1.2	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	U	10	5.0	1.2	
78-59-1	Isophorone	ND	U	10	5.0	1.0	
621-64-7	N-Nitrosodi-n-propylamine	ND	U	10	5.0	1.3	
62-75-9	N-Nitrosodimethylamine	ND	U	10	5.0	1.0	
86-30-6	N-Nitrosodiphenylamine	ND	U	10	5.0	1.0	
91-20-3	Naphthalene	ND	U	10	5.0	1.0	
98-95-3	Nitrobenzene	ND	U	10	5.0	1.6	
87-86-5	Pentachlorophenol (PCP)	ND	U	50	25	6.9	
85-01-8	Phenanthrene	ND	U	10	5.0	1.0	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 14:21
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412024-01	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY349.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-95-2	Phenol	ND	U	10	5.0	1.0	
129-00-0	Pyrene	ND	U	10	5.0	1.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	102	40-125	10/8/14 14:21	
2-Fluorobiphenyl	82	50-110	10/8/14 14:21	
2-Fluorophenol	47	20-110	10/8/14 14:21	
Nitrobenzene-d5	78	40-110	10/8/14 14:21	
Phenol-d6	30	10-115	10/8/14 14:21	
p-Terphenyl-d14	107	50-135	10/8/14 14:21	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 1421

Tentatively Identified Compounds (TIC)
Semivolatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1412024-01	**Basis:**	NA

Prep Method: EPA 3510C
Analytical Method: 8270D

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY349.D
Acq On : 8 Oct 2014 2:21 pm
Operator : Z.Miao
Sample : RQ1412024-01|1.0 Inst : 5973D
Misc : 8270 BLK
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 09 15:31:03 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

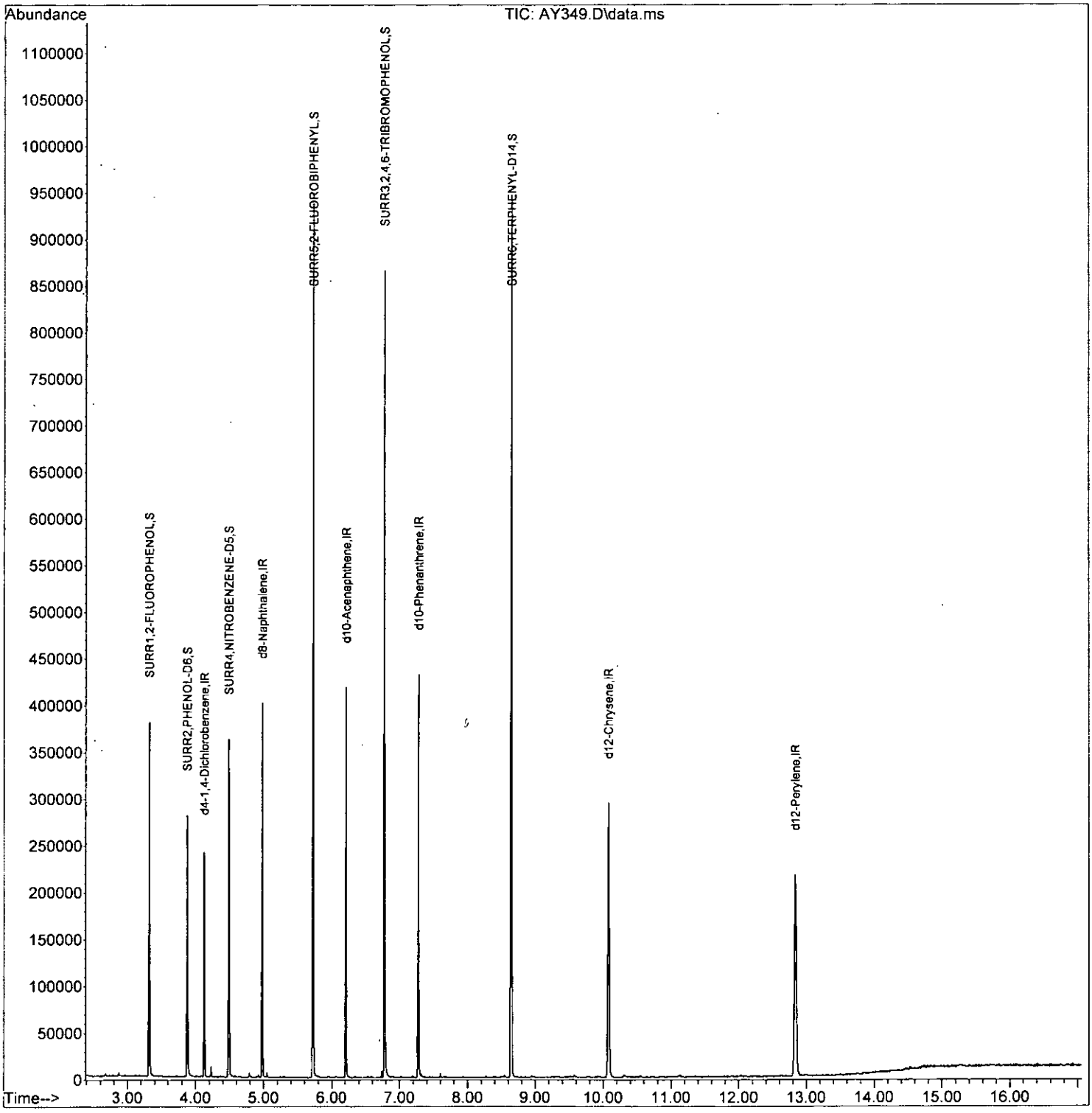
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.130	152	33525	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	137105	40.00	ppm	0.00
39) d10-Acenaphthene	6.216	164	83354	40.00	ppm	0.00
61) d10-Phenanthrene	7.281	188	142780	40.00	ppm	0.00
76) d12-Chrysene	10.078	240	154144	40.00	ppm	0.00
85) d12-Perylene	12.838	264	153406	40.00	ppm	0.01
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.323	112	96653	93.10	ppm	0.00
Spiked Amount 200.000	Range 10 - 105		Recovery = 46.55%			
7) SURR2,PHENOL-D6	3.879	99	81540	59.78	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 29.89%			
23) SURR4,NITROBENZENE-D5	4.489	82	92317	77.85	ppm	0.00
Spiked Amount 100.000	Range 37 - 117		Recovery = 77.85%			
43) SURR5,2-FLUOROBIPHENYL	5.724	172	220055	82.41	ppm	0.00
Spiked Amount 100.000	Range 39 - 119		Recovery = 82.41%			
60) SURR3,2,4,6-TRIBROMOPH...	6.778	330	84313	204.26	ppm	0.00
Spiked Amount 200.000	Range 28 - 157		Recovery = 102.13%			
79) SURR6,TERPHENYL-D14	8.650	244	328148	107.27	ppm	0.01
Spiked Amount 100.000	Range 40 - 133		Recovery = 107.27%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY349.D
Acq On : 8 Oct 2014 2:21 pm
Operator : Z.Miao
Sample : RQ1412024-01|1.0 Inst : 5973D
Misc : 8270 BLK
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 09 15:31:03 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration



82701001D.M Thu Oct 09 15:31:11 2014 00532 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY349.D
Acq On : 8 Oct 2014 2:21 pm
Operator : Z.Miao
Sample : RQ1412024-01|1.0 Inst : 5973D
Misc : 8270 BLK
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

LSC Area Percent Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY349.D
Acq On : 8 Oct 2014 2:21 pm
Operator : Z.Miao
Sample : RQ1412024-01|1.0 Inst : 5973D
Misc : 8270 BLK
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 25000 Area counts
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Title : 8270 BNA ANALYSIS

Signal : TIC: AY349.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.323	172	176	184	rVB	377516	340466	36.22%	6.625%
2	3.879	277	280	290	rBV	278332	237504	25.27%	4.621%
3	4.125	323	326	330	rBV	239415	202427	21.54%	3.939%
4	4.489	390	394	400	rBV	361268	295281	31.42%	5.746%
5	4.981	482	486	490	rBV	400670	282711	30.08%	5.501%
6	5.724	621	625	629	rBV	935710	630278	67.06%	12.264%
7	6.216	713	717	720	rBV	416965	340164	36.19%	6.619%
8	6.778	818	822	830	rBV	864123	674122	71.72%	13.117%
9	7.281	912	916	922	rBV	430498	360555	38.36%	7.016%
10	8.650	1166	1172	1181	rBV	941342	939914	100.00%	18.289%
11	10.078	1432	1439	1450	rBV	293530	415171	44.17%	8.079%
12	12.838	1946	1955	1968	rBV2	214522	420521	44.74%	8.183%

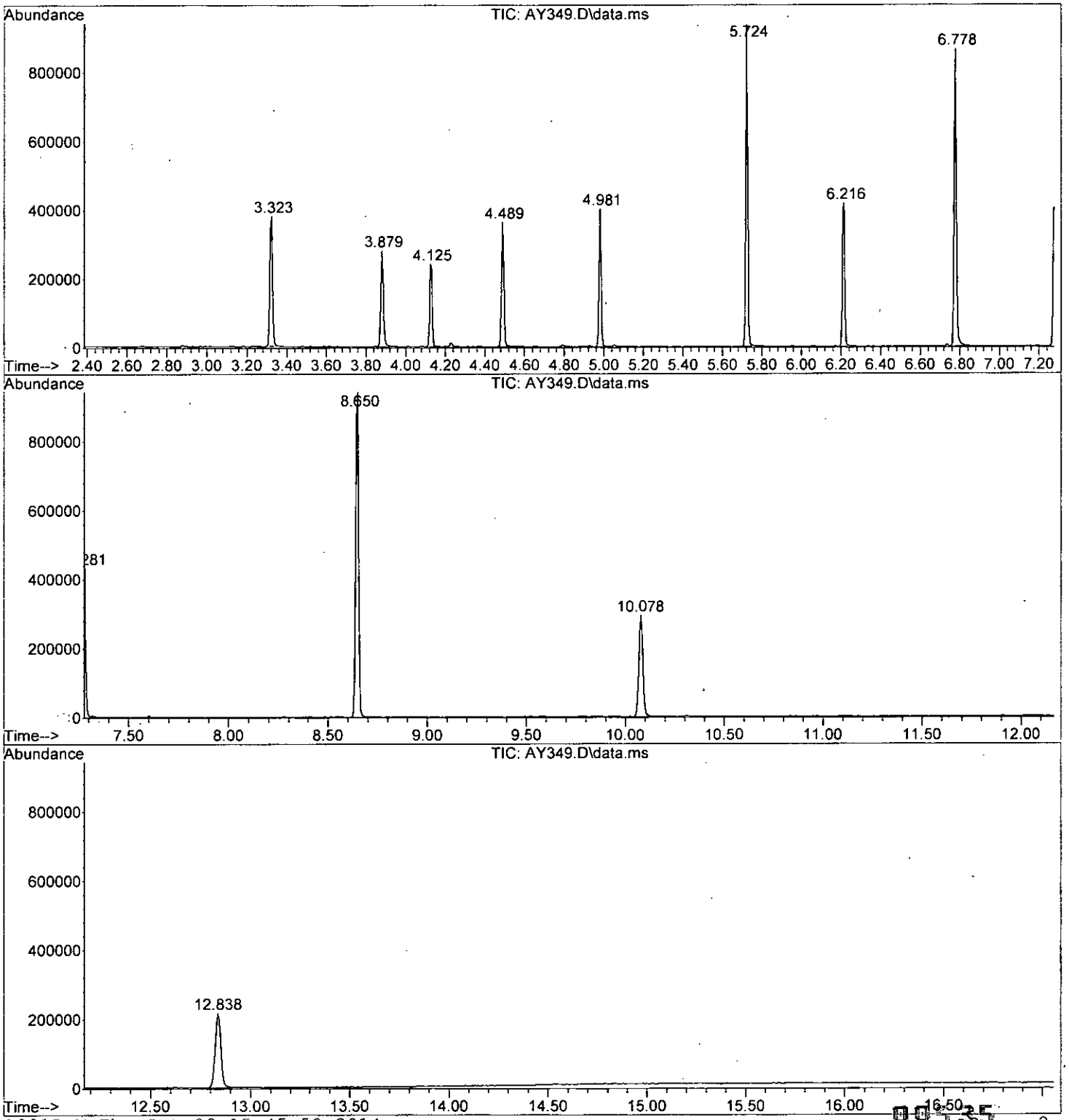
Sum of corrected areas: 5139114

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY349.D
Acq On : 8 Oct 2014 2:21 pm
Operator : Z.Miao
Sample : RQ1412024-01|1.0 Inst : 5973D
Misc : 8270 BLK
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P



82701001D.M Thu Oct 09 15:45:50 2014 Page: 2

Library Search Compound Report

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY349.D
Acq On : 8 Oct 2014 2:21 pm
Operator : Z.Miao
Sample : RQ1412024-01|1.0 Inst : 5973D
Misc : 8270 BLK
ALS Vial : 4 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: TEBINT.P

No Library Search Compounds Detected
****

00536

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 14:47
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1412024-02	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:		**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
	1,2-Diphenylhydrazine/Azobenzene	**94.2**		10	5.0	1.0	
120-82-1	1,2,4-Trichlorobenzene	**62.9**		10	5.0	1.0	
95-50-1	1,2-Dichlorobenzene	**63.0**		10	5.0	1.0	
541-73-1	1,3-Dichlorobenzene	**58.0**		10	5.0	1.0	
106-46-7	1,4-Dichlorobenzene	**58.0**		10	5.0	1.0	
95-95-4	2,4,5-Trichlorophenol	**102**		10	5.0	1.8	
88-06-2	2,4,6-Trichlorophenol	**100**		10	5.0	1.4	
120-83-2	2,4-Dichlorophenol	**103**		10	5.0	1.3	
105-67-9	2,4-Dimethylphenol	**96.4**		10	5.0	1.5	
51-28-5	2,4-Dinitrophenol	**105**		50	25	20	
121-14-2	2,4-Dinitrotoluene	**106**		10	5.0	1.6	
606-20-2	2,6-Dinitrotoluene	**107**		10	5.0	1.8	
91-58-7	2-Chloronaphthalene	**75.0**		10	5.0	1.0	
95-57-8	2-Chlorophenol	**89.5**		10	5.0	1.0	
91-57-6	2-Methylnaphthalene	**67.4**		10	5.0	1.0	
95-48-7	2-Methylphenol	**84.3**		10	5.0	1.0	
88-74-4	2-Nitroaniline	**99.9**		50	25	9.1	
88-75-5	2-Nitrophenol	**97.2**		10	5.0	1.4	
91-94-1	3,3'-Dichlorobenzidine	**88.7**		10	5.0	4.5	
	3- and 4-Methylphenol Coelution	**172**		11	10	2.0	
99-09-2	3-Nitroaniline	**82.6**		50	25	7.7	
534-52-1	4,6-Dinitro-2-methylphenol	**108**		50	25	11	
101-55-3	4-Bromophenyl Phenyl Ether	**98.9**		10	5.0	2.2	
59-50-7	4-Chloro-3-methylphenol	**106**		10	5.0	1.2	
106-47-8	4-Chloroaniline	**94.9**		10	5.0	1.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	**93.0**		10	5.0	1.2	
100-01-6	4-Nitroaniline	**100**		50	25	7.8	
100-02-7	4-Nitrophenol	**55.8**		50	25	5.9	
83-32-9	Acenaphthene	**82.9**		10	5.0	1.0	
208-96-8	Acenaphthylene	**87.5**		10	5.0	1.0	
120-12-7	Anthracene	**100**		10	5.0	1.0	
56-55-3	Benz(a)anthracene	**102**		10	5.0	1.0	
92-87-5	Benzidine	ND	U	110	100	90	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 14:47
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1412024-02	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY350.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
50-32-8	Benzo(a)pyrene	**101**		10	5.0	1.0	
205-99-2	Benzo(b)fluoranthene	**104**		10	5.0	1.0	
191-24-2	Benzo(g,h,i)perylene	**114**		10	5.0	1.0	
207-08-9	Benzo(k)fluoranthene	**94.6**		10	5.0	1.0	
100-51-6	Benzyl Alcohol	**85.9**		10	5.0	1.3	
108-60-1	2,2'-Oxybis(1-chloropropane)	**100**		10	5.0	1.0	
111-91-1	Bis(2-chloroethoxy)methane	**103**		10	5.0	2.2	
111-44-4	Bis(2-chloroethyl) Ether	**86.6**		10	5.0	1.3	
117-81-7	Bis(2-ethylhexyl) Phthalate	**116**		10	5.0	1.2	
85-68-7	Butyl Benzyl Phthalate	**111**		10	5.0	2.4	
86-74-8	Carbazole	**106**		10	5.0	1.1	
218-01-9	Chrysene	**102**		10	5.0	1.0	
84-74-2	Di-n-butyl Phthalate	**110**		10	5.0	1.0	
117-84-0	Di-n-octyl Phthalate	**109**		10	5.0	1.2	
53-70-3	Dibenz(a,h)anthracene	**112**		10	5.0	1.3	
132-64-9	Dibenzofuran	**84.9**		10	5.0	1.0	
84-66-2	Diethyl Phthalate	**107**		10	5.0	1.0	
131-11-3	Dimethyl Phthalate	**97.1**		10	5.0	1.0	
206-44-0	Fluoranthene	**108**		10	5.0	1.0	
86-73-7	Fluorene	**89.5**		10	5.0	1.0	
118-74-1	Hexachlorobenzene	**96.3**		10	5.0	1.0	
87-68-3	Hexachlorobutadiene	**59.1**		10	5.0	1.3	
77-47-4	Hexachlorocyclopentadiene	**66.2**		10	5.0	1.0	
67-72-1	Hexachloroethane	**55.2**		10	5.0	1.2	
193-39-5	Indeno(1,2,3-cd)pyrene	**111**		10	5.0	1.2	
78-59-1	Isophorone	**105**		10	5.0	1.0	
621-64-7	N-Nitrosodi-n-propylamine	**98.9**		10	5.0	1.3	
62-75-9	N-Nitrosodimethylamine	**63.0**		10	5.0	1.0	
86-30-6	N-Nitrosodiphenylamine	**104**		10	5.0	1.0	
91-20-3	Naphthalene	**69.7**		10	5.0	1.0	
98-95-3	Nitrobenzene	**96.2**		10	5.0	1.6	
87-86-5	Pentachlorophenol (PCP)	**112**		50	25	6.9	
85-01-8	Phenanthrene	**102**		10	5.0	1.0	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 14:47
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1412024-02	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY350.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-95-2	Phenol	**46.0**		10	5.0	1.0	
129-00-0	Pyrene	**117**		10	5.0	1.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	101	40-125	10/8/14 14:47	
2-Fluorobiphenyl	89	50-110	10/8/14 14:47	
2-Fluorophenol	58	20-110	10/8/14 14:47	
Nitrobenzene-d5	91	40-110	10/8/14 14:47	
Phenol-d6	40	10-115	10/8/14 14:47	
p-Terphenyl-d14	102	50-135	10/8/14 14:47	

Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY350.D
Acq On : 8 Oct 2014 2:47 pm
Operator : Z.Miao
Sample : RQ1412024-02|1.0 Inst : 5973D
Misc : 8270 LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 09 15:22:06 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.131	152	36776	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	142727	40.00	ppm	0.00
39) d10-Acenaphthene	6.216	164	93266	40.00	ppm	0.00
61) d10-Phenanthrene	7.276	188	156579	40.00	ppm	0.00
76) d12-Chrysene	10.078	240	178545	40.00	ppm	0.00
85) d12-Perylene	12.833	264	166373	40.00	ppm	0.00
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.323	112	132489	116.34	ppm	0.00
Spiked Amount 200.000	Range 10 - 105		Recovery = 58.17%			
7) SURR2,PHENOL-D6	3.879	99	119165	79.64	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 39.82%			
23) SURR4,NITROBENZENE-D5	4.494	82	111796	90.56	ppm	0.00
Spiked Amount 100.000	Range 37 - 117		Recovery = 90.56%			
43) SURR5,2-FLUOROBIPHENYL	5.724	172	265201	88.76	ppm	0.00
Spiked Amount 100.000	Range 39 - 119		Recovery = 88.76%			
60) SURR3,2,4,6-TRIBROMOPH...	6.778	330	93460	202.36	ppm	0.00
Spiked Amount 200.000	Range 28 - 157		Recovery = 101.18%			
79) SURR6,TERPHENYL-D14	8.639	244	362495	102.30	ppm	0.00
Spiked Amount 100.000	Range 40 - 133		Recovery = 102.30%			
Target Compounds						Qvalue
2) Pyridine	2.537	79	21298	18.24	ppm	96
3) N-Nitrosodimethylamine	2.494	74	37769	62.97	ppm	98
5) Benzaldehyde	3.858	106	75758	182.12	ppm	97
6) Aniline	3.917	93	108387	71.80	ppm	81
8) Phenol	3.890	94	69632	46.03	ppm	88
9) bis(2-Clethyl)Ether	3.943	93	97221	86.55	ppm	93
10) 2-Chlorophenol	3.997	128	116582	89.52	ppm	92
11) 1,3-Diclbenzene	4.093	146	86773	57.97	ppm	98
12) 1,4-Dichlorobenzene	4.141	146	88720	57.99	ppm	95
13) 1,2-Diclbenzene	4.243	146	89343	62.96	ppm	97
14) Benzyl Alcohol	4.211	79	83111	85.85	ppm	97
15) 2,2'-oxybis(1-Chloropr...	4.286	45	176821	100.47	ppm	90
16) 2-Methylphenol	4.280	108	98475	84.31	ppm	99
17) Acetophenone	4.387	105	148214	88.94	ppm	97
18) N-Nitroso-Di-n-propyla...	4.377	70	88452	98.93	ppm	97
19) Hexachloroethane	4.462	117	30967	55.18	ppm	96
20) 3+4-Methylphenol	4.377	108	213416	172.25	ppm	97
24) Nitrobenzene	4.505	77	121245	96.15	ppm	99
25) Isophorone	4.660	82	234805	104.81	ppm	99
26) 2-Nitrophenol	4.719	139	69905	97.15	ppm	97
27) Benzoic Acid	4.799	105	45439	36.33	ppm	100
28) 2,4-Dimethylphenol	4.730	107	115006	96.40	ppm	97
29) bis(-2-Chloroethoxy)Me...	4.788	93	134577	102.63	ppm	99
30) 2,4-Dichlorophenol	4.885	162	113026	103.39	ppm	98
31) 1,2,4-Trichlorobenzene	4.938	180	80111	62.93	ppm	93
32) Naphthalene	4.997	128	262526	69.71	ppm	98
33) 4-Chloroaniline	5.029	127	128734	94.93	ppm	97
34) Hexachlorobutadiene	5.067	225	44472	59.06	ppm	97

00540

Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY350.D
Acq On : 8 Oct 2014 2:47 pm
Operator : Z.Miao
Sample : RQ1412024-02|1.0 Inst : 5973D
Misc : 8270 LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 09 15:22:06 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35)	4-Chloro-3-methylphenol	5.361	107	107665	105.55	ppm		99
36)	Caprolactam	5.286	113	10084	28.66	ppm		95
37)	2-Methylnaphthalene	5.473	142	175234	67.43	ppm		99
38)	1-Methylnaphthalene	5.548	142	165447	69.40	ppm		96
40)	Hexachlorocyclopentadiene	5.580	237	34773	66.23	ppm		93
41)	2,4,6-Trichlorophenol	5.671	196	90235	100.35	ppm		97
42)	2,4,5-Trichlorophenol	5.708	196	98485	101.73	ppm		94
44)	1,1'-Biphenyl	5.799	154	211339	63.40	ppm		99
45)	2-Chloronaphthalene	5.821	162	195938	74.97	ppm		98
46)	2-Nitroaniline	5.896	65	72601	99.94	ppm		93
47)	Acenaphthylene	6.120	152	359422	87.50	ppm		100
48)	Dimethyl phthalate	6.008	163	277113	97.06	ppm		99
49)	2,6-Dinitrotoluene	6.056	165	69451	106.58	ppm		96
50)	Acenaphthene	6.238	153	221823	82.93	ppm		97
51)	3-Nitroaniline	6.184	138	58595	82.62	ppm		98
52)	2,4-Dinitrophenol	6.259	184	38512	105.13	ppm		91
53)	Dibenzofuran	6.361	168	329963	84.92	ppm		96
54)	2,4-Dinitrotoluene	6.345	165	92312	106.42	ppm		96
55)	4-Nitrophenol	6.307	65	26711	55.77	ppm		81
56)	Fluorene	6.607	166	275311	89.49	ppm		93
57)	4-Chlorophenyl-phenyle...	6.591	204	146104	93.04	ppm		97
58)	Diethylphthalate	6.500	149	287030	107.32	ppm		97
59)	4-Nitroaniline	6.623	138	78489	99.96	ppm		97
63)	4,6-Dinitro-2-methylph...	6.639	198	62510	107.72	ppm		94
64)	1,2 Diphenylhydrazine	6.703	77	265920	94.20	ppm		98
65)	N-Nitrosodiphenylamine	6.676	169	211155	103.93	ppm		95
66)	4-Bromophenyl-phenylether	6.944	248	90274	98.93	ppm		96
68)	Hexachlorobenzene	6.997	284	98626	96.28	ppm		99
69)	Atrazine	7.046	215	44118	222.33	ppm	#	92
70)	Pentachlorophenol	7.136	266	62175	111.50	ppm		97
71)	Phenanthrene	7.292	178	433873	101.87	ppm		99
72)	Anthracene	7.329	178	440911	99.97	ppm		100
73)	Carbazole	7.447	167	424557	106.37	ppm		98
74)	Di-n-butylphthalate	7.677	149	512309	110.42	ppm		99
75)	Fluoranthene	8.270	202	520751	108.15	ppm		97
77)	Benzidine	8.388	184	24307	24.80	ppm		99
78)	Pyrene	8.500	202	577588	117.30	ppm		99
80)	Butyl benzyl phthalate	9.217	149	235827	110.67	ppm		96
81)	3,3'-Dichlorobenzidine	10.019	252	151589	88.69	ppm		96
82)	Benzo(a)anthracene	10.062	228	514733	101.60	ppm		96
83)	Chrysene	10.121	228	500229	101.93	ppm		99
84)	bis(2-Ethylhexyl)phtha...	10.089	149	333531	116.07	ppm		99
86)	Di-n-octyl phthalate	11.324	149	489040	109.14	ppm		98
87)	Benzo(b)Fluoranthene	12.047	252	467511	104.31	ppm		98
88)	Benzo(k)fluoranthene	12.100	252	446562	94.55	ppm		99
89)	Benzo(a)pyrene	12.720	252	448351	101.44	ppm		98
90)	Indeno(1,2,3-cd)Pyrene	14.732	276	447364	111.30	ppm		95
91)	Dibenz(a,h)anthracene	14.774	278	476488	111.79	ppm		96
92)	Benzo(g,h,i)perylene	15.175	276	460345	114.33	ppm		95

Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY350.D
Acq On : 8 Oct 2014 2:47 pm
Operator : Z.Miao
Sample : RQ1412024-02|1.0 Inst : 5973D
Misc : 8270 LCS
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 09 15:22:06 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 15:13
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1412024-03	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:		**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
	1,2-Diphenylhydrazine/Azobenzene	**100**		10	5.0	1.0	
120-82-1	1,2,4-Trichlorobenzene	**65.5**		10	5.0	1.0	
95-50-1	1,2-Dichlorobenzene	**66.8**		10	5.0	1.0	
541-73-1	1,3-Dichlorobenzene	**61.5**		10	5.0	1.0	
106-46-7	1,4-Dichlorobenzene	**63.6**		10	5.0	1.0	
95-95-4	2,4,5-Trichlorophenol	**106**		10	5.0	1.8	
88-06-2	2,4,6-Trichlorophenol	**103**		10	5.0	1.4	
120-83-2	2,4-Dichlorophenol	**104**		10	5.0	1.3	
105-67-9	2,4-Dimethylphenol	**96.6**		10	5.0	1.5	
51-28-5	2,4-Dinitrophenol	**112**		50	25	20	
121-14-2	2,4-Dinitrotoluene	**113**		10	5.0	1.6	
606-20-2	2,6-Dinitrotoluene	**113**		10	5.0	1.8	
91-58-7	2-Chloronaphthalene	**78.9**		10	5.0	1.0	
95-57-8	2-Chlorophenol	**91.9**		10	5.0	1.0	
91-57-6	2-Methylnaphthalene	**69.0**		10	5.0	1.0	
95-48-7	2-Methylphenol	**86.1**		10	5.0	1.0	
88-74-4	2-Nitroaniline	**109**		50	25	9.1	
88-75-5	2-Nitrophenol	**101**		10	5.0	1.4	
91-94-1	3,3'-Dichlorobenzidine	**92.5**		10	5.0	4.5	
	3- and 4-Methylphenol Coelution	**170**		11	10	2.0	
99-09-2	3-Nitroaniline	**91.2**		50	25	7.7	
534-52-1	4,6-Dinitro-2-methylphenol	**113**		50	25	11	
101-55-3	4-Bromophenyl Phenyl Ether	**105**		10	5.0	2.2	
59-50-7	4-Chloro-3-methylphenol	**105**		10	5.0	1.2	
106-47-8	4-Chloroaniline	**95.9**		10	5.0	1.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	**102**		10	5.0	1.2	
100-01-6	4-Nitroaniline	**108**		50	25	7.8	
100-02-7	4-Nitrophenol	**59.7**		50	25	5.9	
83-32-9	Acenaphthene	**91.0**		10	5.0	1.0	
208-96-8	Acenaphthylene	**90.7**		10	5.0	1.0	
120-12-7	Anthracene	**103**		10	5.0	1.0	
56-55-3	Benz(a)anthracene	**104**		10	5.0	1.0	
92-87-5	Benzidine	ND	U	110	100	90	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 15:13
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1412024-03	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY351.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
50-32-8	Benzo(a)pyrene	**108**		10	5.0	1.0	
205-99-2	Benzo(b)fluoranthene	**105**		10	5.0	1.0	
191-24-2	Benzo(g,h,i)perylene	**116**		10	5.0	1.0	
207-08-9	Benzo(k)fluoranthene	**100**		10	5.0	1.0	
100-51-6	Benzyl Alcohol	**91.2**		10	5.0	1.3	
108-60-1	2,2'-Oxybis(1-chloropropane)	**107**		10	5.0	1.0	
111-91-1	Bis(2-chloroethoxy)methane	**105**		10	5.0	2.2	
111-44-4	Bis(2-chloroethyl) Ether	**93.6**		10	5.0	1.3	
117-81-7	Bis(2-ethylhexyl) Phthalate	**118**		10	5.0	1.2	
85-68-7	Butyl Benzyl Phthalate	**110**		10	5.0	2.4	
86-74-8	Carbazole	**112**		10	5.0	1.1	
218-01-9	Chrysene	**104**		10	5.0	1.0	
84-74-2	Di-n-butyl Phthalate	**116**		10	5.0	1.0	
117-84-0	Di-n-octyl Phthalate	**114**		10	5.0	1.2	
53-70-3	Dibenz(a,h)anthracene	**116**		10	5.0	1.3	
132-64-9	Dibenzofuran	**90.1**		10	5.0	1.0	
84-66-2	Diethyl Phthalate	**118**		10	5.0	1.0	
131-11-3	Dimethyl Phthalate	**106**		10	5.0	1.0	
206-44-0	Fluoranthene	**114**		10	5.0	1.0	
86-73-7	Fluorene	**96.3**		10	5.0	1.0	
118-74-1	Hexachlorobenzene	**104**		10	5.0	1.0	
87-68-3	Hexachlorobutadiene	**61.5**		10	5.0	1.3	
77-47-4	Hexachlorocyclopentadiene	**74.2**		10	5.0	1.0	
67-72-1	Hexachloroethane	**58.5**		10	5.0	1.2	
193-39-5	Indeno(1,2,3-cd)pyrene	**116**		10	5.0	1.2	
78-59-1	Isophorone	**107**		10	5.0	1.0	
621-64-7	N-Nitrosodi-n-propylamine	**104**		10	5.0	1.3	
62-75-9	N-Nitrosodimethylamine	**67.0**		10	5.0	1.0	
86-30-6	N-Nitrosodiphenylamine	**108**		10	5.0	1.0	
91-20-3	Naphthalene	**72.1**		10	5.0	1.0	
98-95-3	Nitrobenzene	**95.4**		10	5.0	1.6	
87-86-5	Pentachlorophenol (PCP)	**114**		50	25	6.9	
85-01-8	Phenanthrene	**106**		10	5.0	1.0	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 15:13
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1412024-03	**Basis:**	NA

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY351.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-95-2	Phenol	**48.0**		10	5.0	1.0	
129-00-0	Pyrene	**118**		10	5.0	1.0	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	107	40-125	10/8/14 15:13	
2-Fluorobiphenyl	95	50-110	10/8/14 15:13	
2-Fluorophenol	61	20-110	10/8/14 15:13	
Nitrobenzene-d5	92	40-110	10/8/14 15:13	
Phenol-d6	40	10-115	10/8/14 15:13	
p-Terphenyl-d14	106	50-135	10/8/14 15:13	

Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY351.D
Acq On : 8 Oct 2014 3:13 pm
Operator : Z.Miao
Sample : RQ1412024-03|1.0 Inst : 5973D
Misc : 8270 LCSD
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 09 15:22:14 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.130	152	36952	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	147860	40.00	ppm	0.00
39) d10-Acenaphthene	6.216	164	90519	40.00	ppm	0.00
61) d10-Phenanthrene	7.275	188	153906	40.00	ppm	0.00
76) d12-Chrysene	10.078	240	177718	40.00	ppm	0.00
85) d12-Perylene	12.833	264	164082	40.00	ppm	0.00
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.323	112	138711	121.22	ppm	0.00
Spiked Amount 200.000	Range 10 - 105		Recovery = 60.61%			
7) SURR2,PHENOL-D6	3.884	99	121386	80.74	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 40.37%			
23) SURR4,NITROBENZENE-D5	4.494	82	118152	92.39	ppm	0.00
Spiked Amount 100.000	Range 37 - 117		Recovery = 92.39%			
43) SURR5,2-FLUOROBIPHENYL	5.724	172	275086	94.87	ppm	0.00
Spiked Amount 100.000	Range 39 - 119		Recovery = 94.87%			
60) SURR3,2,4,6-TRIBROMOPH...	6.778	330	96070	214.32	ppm	0.00
Spiked Amount 200.000	Range 28 - 157		Recovery = 107.16%			
79) SURR6,TERPHENYL-D14	8.639	244	372343	105.57	ppm	0.00
Spiked Amount 100.000	Range 40 - 133		Recovery = 105.57%			
Target Compounds						Qvalue
2) Pyridine	2.531	79	34022	29.00	ppm	89
3) N-Nitrosodimethylamine	2.494	74	40387	67.01	ppm	97
5) Benzaldehyde	3.858	106	81246	194.38	ppm	97
6) Aniline	3.916	93	120940	79.73	ppm	77
8) Phenol	3.890	94	72993	48.02	ppm	88
9) bis(2-Clethyl)Ether	3.943	93	105673	93.63	ppm	94
10) 2-Chlorophenol	4.002	128	120290	91.93	ppm	92
11) 1,3-Diclbenzene	4.093	146	92529	61.52	ppm	96
12) 1,4-Dichlorobenzene	4.141	146	97748	63.59	ppm	97
13) 1,2-Diclbenzene	4.243	146	95305	66.84	ppm	100
14) Benzyl Alcohol	4.211	79	88733	91.22	ppm	98
15) 2,2'-oxybis(1-Chloropr...	4.285	45	188635	106.67	ppm	91
16) 2-Methylphenol	4.280	108	100997	86.06	ppm	96
17) Acetophenone	4.387	105	158258	94.51	ppm	90
18) N-Nitroso-Di-n-propyla...	4.376	70	93641	104.24	ppm	98
19) Hexachloroethane	4.462	117	32975	58.48	ppm	96
20) 3+4-Methylphenol	4.376	108	211893	170.21	ppm	99
24) Nitrobenzene	4.505	77	124648	95.42	ppm	100
25) Isophorone	4.660	82	247352	106.57	ppm	97
26) 2-Nitrophenol	4.719	139	75538	101.34	ppm	98
27) Benzoic Acid	4.799	105	45480	35.10	ppm	96
28) 2,4-Dimethylphenol	4.729	107	119449	96.64	ppm	98
29) bis(-2-Chloroethoxy)Me...	4.788	93	142656	105.02	ppm	97
30) 2,4-Dichlorophenol	4.885	162	117523	103.77	ppm	99
31) 1,2,4-Trichlorobenzene	4.938	180	86313	65.45	ppm	98
32) Naphthalene	4.997	128	281251	72.09	ppm	99
33) 4-Chloroaniline	5.029	127	134715	95.89	ppm	100
34) Hexachlorobutadiene	5.066	225	47978	61.50	ppm	94

Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY351.D
Acq On : 8 Oct 2014 3:13 pm
Operator : Z.Miao
Sample : RQ1412024-03|1.0 Inst : 5973D
Misc : 8270 LCSD
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 09 15:22:14 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) 4-Chloro-3-methylphenol	5.361	107	111196	105.23	ppm	98
36) Caprolactam	5.286	113	10794	29.61	ppm	96
37) 2-Methylnaphthalene	5.473	142	185777	69.01	ppm	98
38) 1-Methylnaphthalene	5.548	142	178562	72.30	ppm	96
40) Hexachlorocyclopentadiene	5.580	237	38553	74.23	ppm	92
41) 2,4,6-Trichlorophenol	5.671	196	89868	102.97	ppm	96
42) 2,4,5-Trichlorophenol	5.708	196	99695	106.10	ppm	97
44) 1,1'-Biphenyl	5.799	154	232724	71.93	ppm	99
45) 2-Chloronaphthalene	5.821	162	200012	78.85	ppm	98
46) 2-Nitroaniline	5.895	65	76500	108.50	ppm	91
47) Acenaphthylene	6.120	152	361423	90.66	ppm	98
48) Dimethyl phthalate	6.008	163	294562	106.30	ppm	99
49) 2,6-Dinitrotoluene	6.056	165	71249	112.66	ppm	92
50) Acenaphthene	6.238	153	236341	91.04	ppm	98
51) 3-Nitroaniline	6.184	138	62737	91.15	ppm	96
52) 2,4-Dinitrophenol	6.259	184	39913	112.26	ppm	85
53) Dibenzofuran	6.361	168	339877	90.13	ppm	96
54) 2,4-Dinitrotoluene	6.345	165	94944	112.78	ppm	93
55) 4-Nitrophenol	6.313	65	27740	59.68	ppm	87
56) Fluorene	6.607	166	287468	96.28	ppm	97
57) 4-Chlorophenyl-phenyle...	6.591	204	155545	102.06	ppm	99
58) Diethylphthalate	6.500	149	305905	117.84	ppm	98
59) 4-Nitroaniline	6.623	138	82496	108.25	ppm	97
63) 4,6-Dinitro-2-methylph...	6.639	198	64723	113.47	ppm	95
64) 1,2 Diphenylhydrazine	6.708	77	277560	100.03	ppm	91
65) N-Nitrosodiphenylamine	6.676	169	216281	108.30	ppm	97
66) 4-Bromophenyl-phenylether	6.944	248	94300	105.14	ppm	98
68) Hexachlorobenzene	6.997	284	104482	103.77	ppm	98
69) Atrazine	7.045	215	48638	249.36	ppm	95
70) Pentachlorophenol	7.136	266	62456	113.95	ppm	98
71) Phenanthrene	7.291	178	442001	105.58	ppm	99
72) Anthracene	7.329	178	447593	103.25	ppm	100
73) Carbazole	7.447	167	439279	111.98	ppm	99
74) Di-n-butylphthalate	7.677	149	527383	115.64	ppm	99
75) Fluoranthene	8.270	202	537252	113.52	ppm	97
77) Benzidine	8.388	184	35535	36.43	ppm	96
78) Pyrene	8.500	202	580311	118.40	ppm	98
80) Butyl benzyl phthalate	9.217	149	234239	110.43	ppm	93
81) 3,3'-Dichlorobenzidine	10.019	252	157288	92.45	ppm	94
82) Benzo(a)anthracene	10.062	228	524179	103.95	ppm	98
83) Chrysene	10.121	228	507834	103.96	ppm	98
84) bis(2-Ethylhexyl)phtha...	10.089	149	336870	117.78	ppm	97
86) Di-n-octyl phthalate	11.324	149	501732	113.54	ppm	98
87) Benzo(b)Fluoranthene	12.046	252	465844	105.39	ppm	99
88) Benzo(k)fluoranthene	12.100	252	468025	100.48	ppm	97
89) Benzo(a)pyrene	12.720	252	469459	107.70	ppm	98
90) Indeno(1,2,3-cd)Pyrene	14.731	276	460027	116.04	ppm	98
91) Dibenz(a,h)anthracene	14.774	278	489151	116.37	ppm	97
92) Benzo(g,h,i)perylene	15.175	276	461532	116.22	ppm	98

Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY351.D
Acq On : 8 Oct 2014 3:13 pm
Operator : Z.Miao
Sample : RQ1412024-03|1.0 Inst : 5973D
Misc : 8270 LCSD
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 09 15:22:14 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

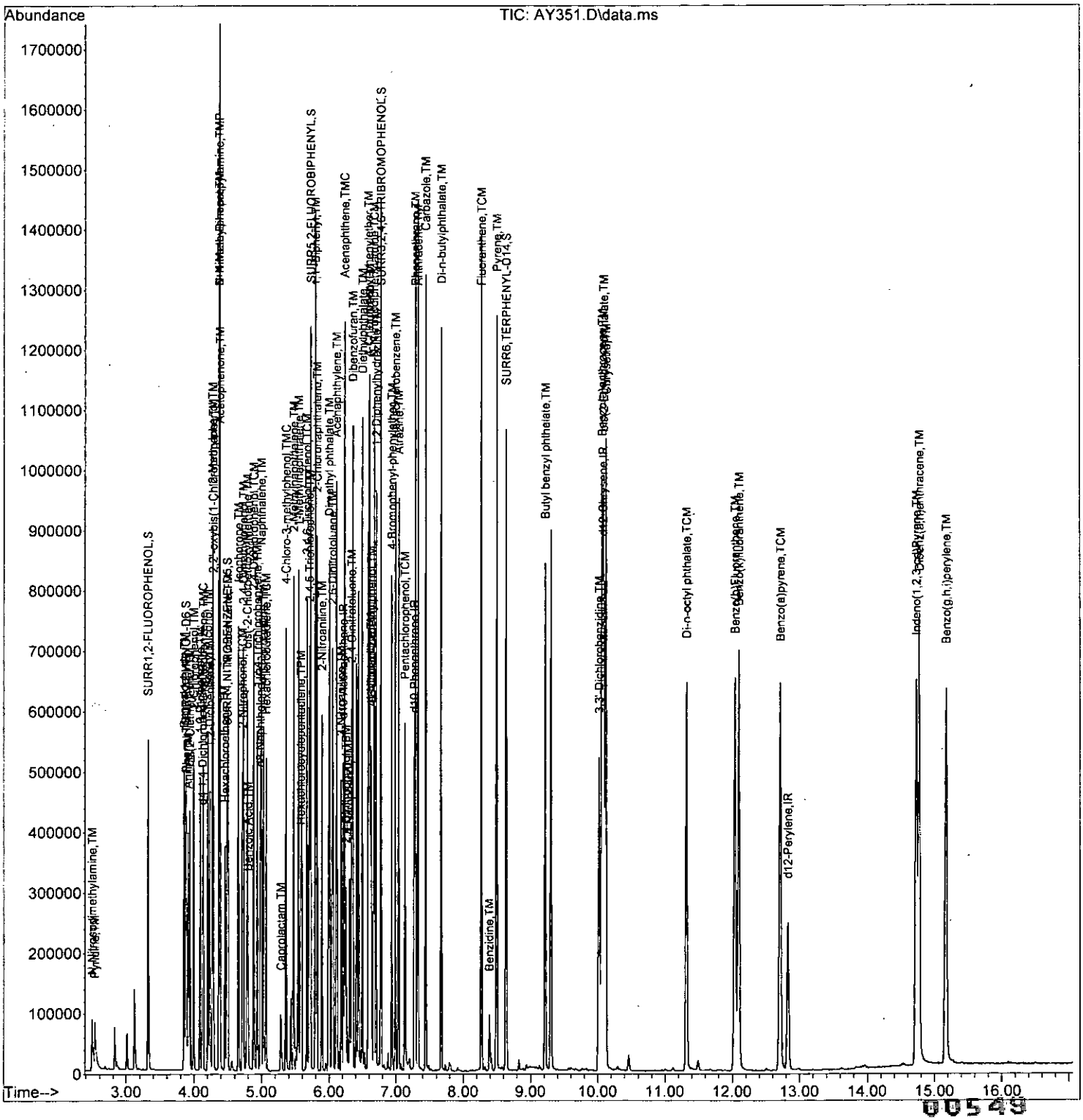
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY351.D
Acq On : 8 Oct 2014 3:13 pm
Operator : Z.Miao
Sample : RQ1412024-03|1.0 Inst : 5973D
Misc : 8270 LCSD
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 09 15:22:14 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration



00549

82701001D.M Thu Oct 09 15:22:19 2014 Page: 4

Client: Parsons Engineering Science
Project: FTMM Baseline/748810-03000
Sample Matrix: Water

Service Request: R1407825
Date Collected: 10/ 3/14 1015
Date Received: 10/ 4/14
Date Extracted: 10/7/14
Date Analyzed: 10/8/14 16:32

Sample Name: FTMM-66-GW-886RW01-11.55
Lab Code: RQ1412024-04
Run Type: Matrix Spike

Units: µg/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analytical Method: 8270D
Prep Method: EPA 3510C
Data File Name:

Analysis Lot: 415497
Extraction Lot: 219960
Instrument Name: R-MS-54
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
	1,2-Diphenylhydrazine/Azobenzene	**92.5**		11	5.6	1.2	
120-82-1	1,2,4-Trichlorobenzene	**61.0**		11	5.6	1.2	
95-50-1	1,2-Dichlorobenzene	**62.4**		11	5.6	1.2	
541-73-1	1,3-Dichlorobenzene	**57.4**		11	5.6	1.2	
106-46-7	1,4-Dichlorobenzene	**59.3**		11	5.6	1.2	
95-95-4	2,4,5-Trichlorophenol	**103**		11	5.6	2.0	
88-06-2	2,4,6-Trichlorophenol	**102**		11	5.6	1.5	
120-83-2	2,4-Dichlorophenol	**107**		11	5.6	1.4	
105-67-9	2,4-Dimethylphenol	**103**		11	5.6	1.7	
51-28-5	2,4-Dinitrophenol	**109**		56	28	22	
121-14-2	2,4-Dinitrotoluene	**103**		11	5.6	1.8	
606-20-2	2,6-Dinitrotoluene	**106**		11	5.6	2.0	
91-58-7	2-Chloronaphthalene	**82.8**		11	5.6	1.2	
95-57-8	2-Chlorophenol	**94.3**		11	5.6	1.2	
91-57-6	2-Methylnaphthalene	**74.7**		11	5.6	1.2	
95-48-7	2-Methylphenol	**90.5**		11	5.6	1.2	
88-74-4	2-Nitroaniline	**105**		56	28	11	
88-75-5	2-Nitrophenol	**98.2**		11	5.6	1.6	
91-94-1	3,3'-Dichlorobenzidine	ND	U	11	5.6	5.0	
	3- and 4-Methylphenol Coelution	**180**		12	11	2.2	
99-09-2	3-Nitroaniline	**91.5**		56	28	8.5	
534-52-1	4,6-Dinitro-2-methylphenol	**102**		56	28	12	
101-55-3	4-Bromophenyl Phenyl Ether	**99.5**		11	5.6	2.4	
59-50-7	4-Chloro-3-methylphenol	**109**		11	5.6	1.3	
106-47-8	4-Chloroaniline	**89.1**		11	5.6	1.6	
7005-72-3	4-Chlorophenyl Phenyl Ether	**94.0**		11	5.6	1.3	
100-01-6	4-Nitroaniline	**102**		56	28	8.7	
100-02-7	4-Nitrophenol	**54.8**	J	56	28	6.5	
83-32-9	Acenaphthene	**88.7**		11	5.6	1.2	
208-96-8	Acenaphthylene	**92.3**		11	5.6	1.2	
120-12-7	Anthracene	**94.4**		11	5.6	1.2	
56-55-3	Benz(a)anthracene	**96.1**		11	5.6	1.2	
92-87-5	Benzidine	ND	U	120	110	100	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1015
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 16:32
Sample Name:	FTMM-66-GW-886RW01-11.55	**Units:**	µg/L
Lab Code:	RQ1412024-04	**Basis:**	NA
Run Type:	Matrix Spike		

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY354.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
50-32-8	Benzo(a)pyrene	**92.6**		11	5.6	1.2	
205-99-2	Benzo(b)fluoranthene	**94.9**		11	5.6	1.2	
191-24-2	Benzo(g,h,i)perylene	**108**		11	5.6	1.2	
207-08-9	Benzo(k)fluoranthene	**92.9**		11	5.6	1.2	
100-51-6	Benzyl Alcohol	**98.6**		11	5.6	1.5	
108-60-1	2,2'-Oxybis(1-chloropropane)	**106**		11	5.6	1.2	
111-91-1	Bis(2-chloroethoxy)methane	**106**		11	5.6	2.5	
111-44-4	Bis(2-chloroethyl) Ether	**93.3**		11	5.6	1.5	
117-81-7	Bis(2-ethylhexyl) Phthalate	**111**		11	5.6	1.4	
85-68-7	Butyl Benzyl Phthalate	**104**		11	5.6	2.7	
86-74-8	Carbazole	**106**		11	5.6	1.3	
218-01-9	Chrysene	**95.9**		11	5.6	1.2	
84-74-2	Di-n-butyl Phthalate	**106**		11	5.6	1.2	
117-84-0	Di-n-octyl Phthalate	**105**		11	5.6	1.4	
53-70-3	Dibenz(a,h)anthracene	**105**		11	5.6	1.4	
132-64-9	Dibenzofuran	**86.6**		11	5.6	1.2	
84-66-2	Diethyl Phthalate	**102**		11	5.6	1.2	
131-11-3	Dimethyl Phthalate	**100**		11	5.6	1.2	
206-44-0	Fluoranthene	**99.7**		11	5.6	1.2	
86-73-7	Fluorene	**92.0**		11	5.6	1.2	
118-74-1	Hexachlorobenzene	**89.5**		11	5.6	1.2	
87-68-3	Hexachlorobutadiene	**54.4**		11	5.6	1.4	
77-47-4	Hexachlorocyclopentadiene	**73.7**		11	5.6	1.2	
67-72-1	Hexachloroethane	**54.7**		11	5.6	1.4	
193-39-5	Indeno(1,2,3-cd)pyrene	**102**		11	5.6	1.4	
78-59-1	Isophorone	**108**		11	5.6	1.2	
621-64-7	N-Nitrosodi-n-propylamine	106		11	5.6	1.5	
62-75-9	N-Nitrosodimethylamine	**75.0**		11	5.6	1.2	
86-30-6	N-Nitrosodiphenylamine	**86.7**		11	5.6	1.2	
91-20-3	Naphthalene	**69.9**		11	5.6	1.2	
98-95-3	Nitrobenzene	**94.5**		11	5.6	1.8	
87-86-5	Pentachlorophenol (PCP)	**111**		56	28	7.7	
85-01-8	Phenanthrene	**97.5**		11	5.6	1.2	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1015
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 16:32
Sample Name:	FTMM-66-GW-886RW01-11.55	**Units:**	µg/L
Lab Code:	RQ1412024-04	**Basis:**	NA
Run Type:	Matrix Spike		

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY354.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-95-2	Phenol	**49.5**		11	5.6	1.2	
129-00-0	Pyrene	**113**		11	5.6	1.2	

Surrogate Name	%Rec		Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	92		40-125	10/8/14 16:32	
2-Fluorobiphenyl	75		50-110	10/8/14 16:32	
2-Fluorophenol	58		20-110	10/8/14 16:32	
Nitrobenzene-d5	84		40-110	10/8/14 16:32	
Phenol-d6	40		10-115	10/8/14 16:32	
p-Terphenyl-d14	49	*	50-135	10/8/14 16:32	

Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY354.D
Acq On : 8 Oct 2014 4:32 pm
Operator : Z.Miao
Sample : RQ1412024-04|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+ MS
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 09 15:22:36 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.131	152	35142	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	141123	40.00	ppm	0.00
39) d10-Acenaphthene	6.217	164	92497	40.00	ppm	0.00
61) d10-Phenanthrene	7.276	188	152816	40.00	ppm	0.00
76) d12-Chrysene	10.073	240	166581	40.00	ppm	0.00
85) d12-Perylene	12.833	264	153852	40.00	ppm	0.00
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.328	112	126506	116.25	ppm	0.00
Spiked Amount 200.000	Range 10 - 105		Recovery = 58.13%			
7) SURR2,PHENOL-D6	3.885	99	115605	80.86	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 40.43%			
23) SURR4,NITROBENZENE-D5	4.494	82	101936	83.51	ppm	0.00
Spiked Amount 100.000	Range 37 - 117		Recovery = 83.51%			
43) SURR5,2-FLUOROBIPHENYL	5.724	172	222353	75.04	ppm	0.00
Spiked Amount 100.000	Range 39 - 119		Recovery = 75.04%			
60) SURR3,2,4,6-TRIBROMOPH...	6.778	330	84681	184.88	ppm	0.00
Spiked Amount 200.000	Range 28 - 157		Recovery = 92.44%			
79) SURR6,TERPHENYL-D14	8.639	244	162602	49.18	ppm	0.00
Spiked Amount 100.000	Range 40 - 133		Recovery = 49.18%			
Target Compounds						Qvalue
2) Pyridine	2.542	79	7048	6.32	ppm	86
3) N-Nitrosodimethylamine	2.499	74	38684	67.49	ppm	97
5) Benzaldehyde	3.858	106	65364	164.44	ppm	95
6) Aniline	3.922	93	108511	75.22	ppm	75
8) Phenol	3.890	94	64391	44.54	ppm	90
9) bis(2-Clethyl)Ether	3.943	93	90130	83.97	ppm	89
10) 2-Chlorophenol	4.002	128	105623	84.88	ppm	92
11) 1,3-Diclbenzene	4.093	146	73864	51.64	ppm	98
12) 1,4-Dichlorobenzene	4.141	146	78022	53.37	ppm	96
13) 1,2-Diclbenzene	4.243	146	76126	56.14	ppm	98
14) Benzyl Alcohol	4.211	79	82095	88.74	ppm	98
15) 2,2'-oxybis(1-Chloropr...	4.286	45	160321	95.33	ppm	91
16) 2-Methylphenol	4.280	108	90866	81.41	ppm	99
17) Acetophenone	4.387	105	139097	87.35	ppm	95
18) N-Nitroso-Di-n-propyla...	4.377	70	81718	95.65	ppm	97
19) Hexachloroethane	4.462	117	26415	49.26	ppm	97
20) 3+4-Methylphenol	4.377	108	191368	161.64	ppm	97
24) Nitrobenzene	4.505	77	106053	85.06	ppm	100
25) Isophorone	4.660	82	215621	97.34	ppm	96
26) 2-Nitrophenol	4.719	139	62861	88.35	ppm	98
27) Benzoic Acid	4.799	105	41058	33.20	ppm	98
28) 2,4-Dimethylphenol	4.735	107	109492	92.82	ppm	92
29) bis(-2-Chloroethoxy)Me...	4.794	93	124195	95.79	ppm	99
30) 2,4-Dichlorophenol	4.885	162	104159	96.36	ppm	98
31) 1,2,4-Trichlorobenzene	4.938	180	69066	54.87	ppm	92
32) Naphthalene	4.997	128	234212	62.90	ppm	99
33) 4-Chloroaniline	5.029	127	107472	80.15	ppm	99
34) Hexachlorobutadiene	5.067	225	36454	48.96	ppm	99

Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY354.D
Acq On : 8 Oct 2014 4:32 pm
Operator : Z.Miao
Sample : RQ1412024-04|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+ MS
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 09 15:22:36 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35) 4-Chloro-3-methylphenol	5.361	107	98847	98.01	ppm		98
36) Caprolactam	5.286	113	11258	32.36	ppm		85
37) 2-Methylnaphthalene	5.478	142	172659	67.20	ppm		99
38) 1-Methylnaphthalene	5.548	142	174963	74.23	ppm		94
40) Hexachlorocyclopentadiene	5.580	237	34541	66.32	ppm		94
41) 2,4,6-Trichlorophenol	5.676	196	81531	91.42	ppm		97
42) 2,4,5-Trichlorophenol	5.708	196	89043	92.74	ppm		98
44) 1,1'-Biphenyl	5.799	154	242399	73.32	ppm		98
45) 2-Chloronaphthalene	5.821	162	193270	74.56	ppm		98
46) 2-Nitroaniline	5.896	65	68043	94.44	ppm		90
47) Acenaphthylene	6.120	152	338457	83.08	ppm		97
48) Dimethyl phthalate	6.008	163	255327	90.17	ppm		99
49) 2,6-Dinitrotoluene	6.056	165	61376	94.97	ppm		94
50) Acenaphthene	6.238	153	211879	79.87	ppm		100
51) 3-Nitroaniline	6.184	138	57905	82.33	ppm		97
52) 2,4-Dinitrophenol	6.259	184	35751	98.40	ppm		83
53) Dibenzofuran	6.361	168	300429	77.97	ppm		100
54) 2,4-Dinitrotoluene	6.345	165	79398	92.30	ppm		90
55) 4-Nitrophenol	6.313	65	23410	49.29	ppm		90
56) Fluorene	6.607	166	252742	82.84	ppm		100
57) 4-Chlorophenyl-phenyle...	6.591	204	131739	84.59	ppm		97
58) Diethylphthalate	6.500	149	243372	91.75	ppm		99
59) 4-Nitroaniline	6.623	138	71485	91.80	ppm		98
63) 4,6-Dinitro-2-methylph...	6.639	198	51804	91.47	ppm		95
64) 1,2 Diphenylhydrazine	6.709	77	229272	83.22	ppm		88
65) N-Nitrosodiphenylamine	6.677	169	154751	78.04	ppm		97
66) 4-Bromophenyl-phenylether	6.944	248	79748	89.55	ppm		98
68) Hexachlorobenzene	6.997	284	80502	80.52	ppm		99
69) Atrazine	7.046	215	14750	76.16	ppm	#	85
70) Pentachlorophenol	7.137	266	54300	99.78	ppm		99
71) Phenanthrene	7.292	178	364917	87.79	ppm		99
72) Anthracene	7.329	178	365793	84.98	ppm		99
73) Carbazole	7.447	167	372459	95.62	ppm		99
74) Di-n-butylphthalate	7.677	149	431397	95.27	ppm		99
75) Fluoranthene	8.270	202	421564	89.71	ppm		98
78) Pyrene	8.500	202	465263	101.27	ppm		99
80) Butyl benzyl phthalate	9.222	149	185594	93.35	ppm		97
81) 3,3'-Dichlorobenzidine	10.019	252	2340	1.47	ppm		91
82) Benzo(a)anthracene	10.057	228	408833	86.50	ppm		98
83) Chrysene	10.121	228	395310	86.34	ppm		98
84) bis(2-Ethylhexyl)phtha...	10.089	149	267301	99.71	ppm		94
86) Di-n-octyl phthalate	11.325	149	389889	94.10	ppm		97
87) Benzo(b)Fluoranthene	12.047	252	354056	85.43	ppm		99
88) Benzo(k)fluoranthene	12.100	252	365136	83.60	ppm		99
89) Benzo(a)pyrene	12.715	252	340630	83.34	ppm		95
90) Indeno(1,2,3-cd)Pyrene	14.732	276	342651	92.18	ppm		99
91) Dibenz(a,h)anthracene	14.769	278	373688	94.81	ppm		95
92) Benzo(g,h,i)perylene	15.170	276	361501	97.09	ppm		97

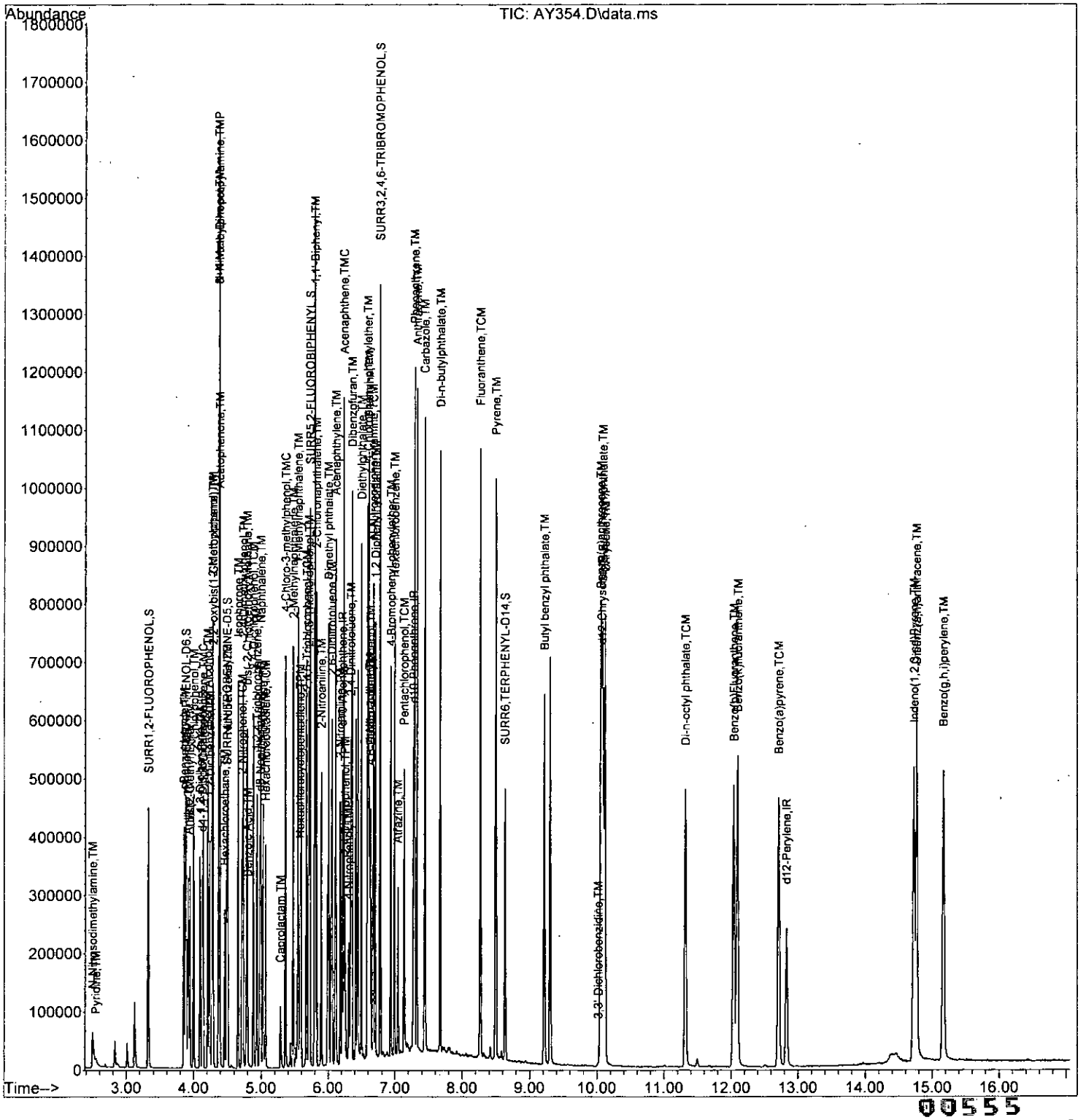
(#) = qualifier out of range (m) = manual integration (+) = signals summed

00554

Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY354.D
Acq On : 8 Oct 2014 4:32 pm
Operator : Z.Miao
Sample : RQ1412024-04|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+ MS.
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 09 15:22:36 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration



00555

82701001D.M Thu Oct 09 15:22:41 2014 Page: 3

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1015
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 16:58
Sample Name:	FTMM-66-GW-886RW01-11.55	**Units:**	µg/L
Lab Code:	RQ1412024-05	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:		**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
	1,2-Diphenylhydrazine/Azobenzene	**87.8**		11	5.3	1.1	
120-82-1	1,2,4-Trichlorobenzene	**54.4**		11	5.3	1.1	
95-50-1	1,2-Dichlorobenzene	**54.0**		11	5.3	1.1	
541-73-1	1,3-Dichlorobenzene	**50.6**		11	5.3	1.1	
106-46-7	1,4-Dichlorobenzene	**51.9**		11	5.3	1.1	
95-95-4	2,4,5-Trichlorophenol	**99.3**		11	5.3	1.8	
88-06-2	2,4,6-Trichlorophenol	**98.3**		11	5.3	1.4	
120-83-2	2,4-Dichlorophenol	**92.9**		11	5.3	1.3	
105-67-9	2,4-Dimethylphenol	**91.9**		11	5.3	1.6	
51-28-5	2,4-Dinitrophenol	**112**		53	26	21	
121-14-2	2,4-Dinitrotoluene	96.7		11	5.3	1.7	
606-20-2	2,6-Dinitrotoluene	**98.6**		11	5.3	1.9	
91-58-7	2-Chloronaphthalene	**80.2**		11	5.3	1.1	
95-57-8	2-Chlorophenol	**80.5**		11	5.3	1.1	
91-57-6	2-Methylnaphthalene	**68.9**		11	5.3	1.1	
95-48-7	2-Methylphenol	**77.7**		11	5.3	1.1	
88-74-4	2-Nitroaniline	**98.4**		53	26	9.6	
88-75-5	2-Nitrophenol	**87.7**		11	5.3	1.5	
91-94-1	3,3'-Dichlorobenzidine	ND	U	11	5.3	4.7	
	3- and 4-Methylphenol Coelution	**150**		11	11	2.1	
99-09-2	3-Nitroaniline	**81.1**		53	26	8.1	
534-52-1	4,6-Dinitro-2-methylphenol	**97.2**		53	26	12	
101-55-3	4-Bromophenyl Phenyl Ether	**91.3**		11	5.3	2.3	
59-50-7	4-Chloro-3-methylphenol	**97.4**		11	5.3	1.2	
106-47-8	4-Chloroaniline	**75.1**		11	5.3	1.5	
7005-72-3	4-Chlorophenyl Phenyl Ether	**92.3**		11	5.3	1.2	
100-01-6	4-Nitroaniline	**92.7**		53	26	8.2	
100-02-7	4-Nitrophenol	**53.4**		53	26	6.2	
83-32-9	Acenaphthene	**86.6**		11	5.3	1.1	
208-96-8	Acenaphthylene	**87.1**		11	5.3	1.1	
120-12-7	Anthracene	**87.4**		11	5.3	1.1	
56-55-3	Benz(a)anthracene	**85.2**		11	5.3	1.1	
92-87-5	Benzidine	ND	U	110	110	95	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1015
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 16:58
Sample Name:	FTMM-66-GW-886RW01-11.55	**Units:**	µg/L
Lab Code:	RQ1412024-05	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY355.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
50-32-8	Benzo(a)pyrene	**85.4**		11	5.3	1.1	
205-99-2	Benzo(b)fluoranthene	**88.6**		11	5.3	1.1	
191-24-2	Benzo(g,h,i)perylene	**97.3**		11	5.3	1.1	
207-08-9	Benzo(k)fluoranthene	**85.1**		11	5.3	1.1	
100-51-6	Benzyl Alcohol	**83.3**		11	5.3	1.4	
108-60-1	2,2'-Oxybis(1-chloropropane)	**92.7**		11	5.3	1.1	
111-91-1	Bis(2-chloroethoxy)methane	**96.9**		11	5.3	2.3	
111-44-4	Bis(2-chloroethyl) Ether	**78.9**		11	5.3	1.4	
117-81-7	Bis(2-ethylhexyl) Phthalate	**104**		11	5.3	1.3	
85-68-7	Butyl Benzyl Phthalate	**91.9**		11	5.3	2.5	
86-74-8	Carbazole	**97.0**		11	5.3	1.2	
218-01-9	Chrysene	**85.5**		11	5.3	1.1	
84-74-2	Di-n-butyl Phthalate	**97.9**		11	5.3	1.1	
117-84-0	Di-n-octyl Phthalate	**97.3**		11	5.3	1.3	
53-70-3	Dibenz(a,h)anthracene	**95.2**		11	5.3	1.3	
132-64-9	Dibenzofuran	**83.3**		11	5.3	1.1	
84-66-2	Diethyl Phthalate	**102**		11	5.3	1.1	
131-11-3	Dimethyl Phthalate	**94.9**		11	5.3	1.1	
206-44-0	Fluoranthene	**92.4**		11	5.3	1.1	
86-73-7	Fluorene	**87.0**		11	5.3	1.1	
118-74-1	Hexachlorobenzene	**86.3**		11	5.3	1.1	
87-68-3	Hexachlorobutadiene	**46.6**		11	5.3	1.3	
77-47-4	Hexachlorocyclopentadiene	**71.5**		11	5.3	1.1	
67-72-1	Hexachloroethane	**45.1**		11	5.3	1.3	
193-39-5	Indeno(1,2,3-cd)pyrene	**94.3**		11	5.3	1.3	
78-59-1	Isophorone	**97.0**		11	5.3	1.1	
621-64-7	N-Nitrosodi-n-propylamine	**91.2**		11	5.3	1.4	
62-75-9	N-Nitrosodimethylamine	**65.9**		11	5.3	1.1	
86-30-6	N-Nitrosodiphenylamine	**79.8**		11	5.3	1.1	
91-20-3	Naphthalene	**63.2**		11	5.3	1.1	
98-95-3	Nitrobenzene	**85.0**		11	5.3	1.7	
87-86-5	Pentachlorophenol (PCP)	**104**		53	26	7.3	
85-01-8	Phenanthrene	**93.4**		11	5.3	1.1	

Client:	Parsons Engineering Science	**Service Request:**	R1407825
Project:	FTMM Baseline/748810-03000	**Date Collected:**	10/ 3/14 1015
Sample Matrix:	Water	**Date Received:**	10/ 4/14
		Date Extracted:	10/7/14
		Date Analyzed:	10/8/14 16:58
Sample Name:	FTMM-66-GW-886RW01-11.55	**Units:**	µg/L
Lab Code:	RQ1412024-05	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Semivolatile Organic Compounds by GC/MS

Analytical Method:	8270D	**Analysis Lot:**	415497
Prep Method:	EPA 3510C	**Extraction Lot:**	219960
Data File Name:	I:\ACQUDATA\5973D\Data\100814\AY355.D\	**Instrument Name:**	R-MS-54
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
108-95-2	Phenol	**43.7**		11	5.3	1.1	
129-00-0	Pyrene	**99.5**		11	5.3	1.1	

Surrogate Name	%Rec		Control Limits	Date Analyzed	Q
2,4,6-Tribromophenol	95		40-125	10/8/14 16:58	
2-Fluorobiphenyl	82		50-110	10/8/14 16:58	
2-Fluorophenol	54		20-110	10/8/14 16:58	
Nitrobenzene-d5	84		40-110	10/8/14 16:58	
Phenol-d6	37		10-115	10/8/14 16:58	
p-Terphenyl-d14	46	*	50-135	10/8/14 16:58	

Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY355.D
Acq On : 8 Oct 2014 4:58 pm
Operator : Z.Miao
Sample : RQ1412024-05|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+ MSD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 09 15:22:44 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) d4-1,4-Dichlorobenzene	4.131	152	38550	40.00	ppm	0.00
22) d8-Naphthalene	4.981	136	148574	40.00	ppm	0.00
39) d10-Acenaphthene	6.217	164	92601	40.00	ppm	0.00
61) d10-Phenanthrene	7.276	188	158310	40.00	ppm	0.00
76) d12-Chrysene	10.073	240	177869	40.00	ppm	0.00
85) d12-Perylene	12.833	264	161192	40.00	ppm	0.00
System Monitoring Compounds						
4) SURR1,2-FLUOROPHENOL	3.323	112	128100	107.31	ppm	0.00
Spiked Amount 200.000	Range 10 - 105		Recovery = 53.65%			
7) SURR2,PHENOL-D6	3.885	99	116849	74.50	ppm	0.00
Spiked Amount 200.000	Range 10 - 107		Recovery = 37.25%			
23) SURR4,NITROBENZENE-D5	4.494	82	108274	84.26	ppm	0.00
Spiked Amount 100.000	Range 37 - 117		Recovery = 84.26%			
43) SURR5,2-FLUOROBIPHENYL	5.724	172	244030	82.26	ppm	0.00
Spiked Amount 100.000	Range 39 - 119		Recovery = 82.26%			
60) SURR3,2,4,6-TRIBROMOPH...	6.778	330	87240	190.25	ppm	0.00
Spiked Amount 200.000	Range 28 - 157		Recovery = 95.13%			
79) SURR6,TERPHENYL-D14	8.640	244	163830	46.41	ppm	0.00
Spiked Amount 100.000	Range 40 - 133		Recovery = 46.41%			
Target Compounds						Qvalue
2) Pyridine	2.547	79	10043	8.21	ppm	97
3) N-Nitrosodimethylamine	2.499	74	39386	62.64	ppm	92
5) Benzaldehyde	3.858	106	70130	160.83	ppm	93
6) Aniline	3.917	93	106151	67.08	ppm	87
8) Phenol	3.890	94	65762	41.47	ppm	87
9) bis(2-Clethyl)Ether	3.943	93	88261	74.96	ppm	87
10) 2-Chlorophenol	4.002	128	104409	76.49	ppm	92
11) 1,3-Diclbenzene	4.093	146	75424	48.07	ppm	94
12) 1,4-Dichlorobenzene	4.141	146	79132	49.35	ppm	98
13) 1,2-Diclbenzene	4.243	146	76317	51.31	ppm	98
14) Benzyl Alcohol	4.211	79	80349	79.17	ppm	98
15) 2,2'-oxybis(1-Chloropr...	4.286	45	162488	88.07	ppm	91
16) 2-Methylphenol	4.280	108	90432	73.86	ppm	100
17) Acetophenone	4.387	105	149142	85.38	ppm	95
18) N-Nitroso-Di-n-propyla...	4.377	70	81183	86.62	ppm	98
19) Hexachloroethane	4.462	117	25191	42.82	ppm	98
20) 3+4-Methylphenol	4.377	108	184929	142.39	ppm	99
24) Nitrobenzene	4.505	77	105995	80.75	ppm	98
25) Isophorone	4.660	82	214939	92.16	ppm	98
26) 2-Nitrophenol	4.719	139	62431	83.35	ppm	98
27) Benzoic Acid	4.799	105	40975	31.47	ppm	95
28) 2,4-Dimethylphenol	4.735	107	108466	87.34	ppm	94
29) bis(-2-Chloroethoxy)Me...	4.794	93	125703	92.09	ppm	98
30) 2,4-Dichlorophenol	4.885	162	100476	88.29	ppm	96
31) 1,2,4-Trichlorobenzene	4.938	180	68445	51.65	ppm	93
32) Naphthalene	4.997	128	235511	60.07	ppm	97
33) 4-Chloroaniline	5.029	127	100765	71.38	ppm	98
34) Hexachlorobutadiene	5.067	225	34704	44.27	ppm	95

00559

Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY355.D
Acq On : 8 Oct 2014 4:58 pm
Operator : Z.Miao
Sample : RQ1412024-05|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+ MSD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 09 15:22:44 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35)	4-Chloro-3-methylphenol	5.361	107	98294	92.57	ppm		98
36)	Caprolactam	5.286	113	11886	32.45	ppm		96
37)	2-Methylnaphthalene	5.473	142	177147	65.49	ppm		99
38)	1-Methylnaphthalene	5.548	142	169744	68.40	ppm		94
40)	Hexachlorocyclopentadiene	5.580	237	35560	67.93	ppm		94
41)	2,4,6-Trichlorophenol	5.671	196	83336	93.34	ppm		96
42)	2,4,5-Trichlorophenol	5.708	196	90690	94.35	ppm		94
44)	1,1'-Biphenyl	5.799	154	240264	72.59	ppm		100
45)	2-Chloronaphthalene	5.821	162	197735	76.20	ppm		98
46)	2-Nitroaniline	5.896	65	67425	93.48	ppm		95
47)	Acenaphthylene	6.120	152	337272	82.70	ppm		99
48)	Dimethyl phthalate	6.008	163	255657	90.19	ppm		99
49)	2,6-Dinitrotoluene	6.056	165	60600	93.66	ppm		90
50)	Acenaphthene	6.238	153	218378	82.23	ppm		97
51)	3-Nitroaniline	6.184	138	54254	77.05	ppm		97
52)	2,4-Dinitrophenol	6.259	184	38681	106.35	ppm		92
53)	Dibenzofuran	6.361	168	305377	79.16	ppm		98
54)	2,4-Dinitrotoluene	6.345	165	79140	91.89	ppm		90
55)	4-Nitrophenol	6.313	65	24137	50.76	ppm		84
56)	Fluorene	6.607	166	252449	82.65	ppm		98
57)	4-Chlorophenyl-phenyle...	6.591	204	136683	87.67	ppm		96
58)	Diethylphthalate	6.500	149	257864	97.10	ppm		98
59)	4-Nitroaniline	6.623	138	68648	88.06	ppm		98
63)	4,6-Dinitro-2-methylph...	6.639	198	54198	92.38	ppm		95
64)	1,2 Diphenylhydrazine	6.703	77	237945	83.37	ppm		99
65)	N-Nitrosodiphenylamine	6.677	169	155807	75.85	ppm		97
66)	4-Bromophenyl-phenylether	6.944	248	80013	86.73	ppm		98
68)	Hexachlorobenzene	6.997	284	84953	82.03	ppm		98
69)	Atrazine	7.046	215	13525	67.41	ppm	#	86
70)	Pentachlorophenol	7.137	266	55750	98.89	ppm		97
71)	Phenanthrene	7.292	178	381908	88.69	ppm		98
72)	Anthracene	7.329	178	370057	82.99	ppm		97
73)	Carbazole	7.447	167	371844	92.15	ppm		99
74)	Di-n-butylphthalate	7.677	149	436320	93.01	ppm		99
75)	Fluoranthene	8.270	202	427515	87.82	ppm		97
78)	Pyrene	8.500	202	463881	94.56	ppm		98
80)	Butyl benzyl phthalate	9.217	149	185306	87.29	ppm		96
81)	3,3'-Dichlorobenzidine	10.025	252	2004	1.18	ppm		76
82)	Benzo(a)anthracene	10.057	228	408615	80.96	ppm		99
83)	Chrysene	10.116	228	397247	81.26	ppm		96
84)	bis(2-Ethylhexyl)phtha...	10.089	149	283263	98.95	ppm		100
86)	Di-n-octyl phthalate	11.325	149	401219	92.42	ppm		97
87)	Benzo(b)Fluoranthene	12.041	252	365454	84.16	ppm		97
88)	Benzo(k)fluoranthene	12.100	252	369952	80.85	ppm		98
89)	Benzo(a)pyrene	12.715	252	347405	81.13	ppm		97
90)	Indeno(1,2,3-cd)Pyrene	14.732	276	348952	89.60	ppm		96
91)	Dibenz(a,h)anthracene	14.769	278	373348	90.41	ppm		93
92)	Benzo(g,h,i)perylene	15.170	276	360604	92.43	ppm		94

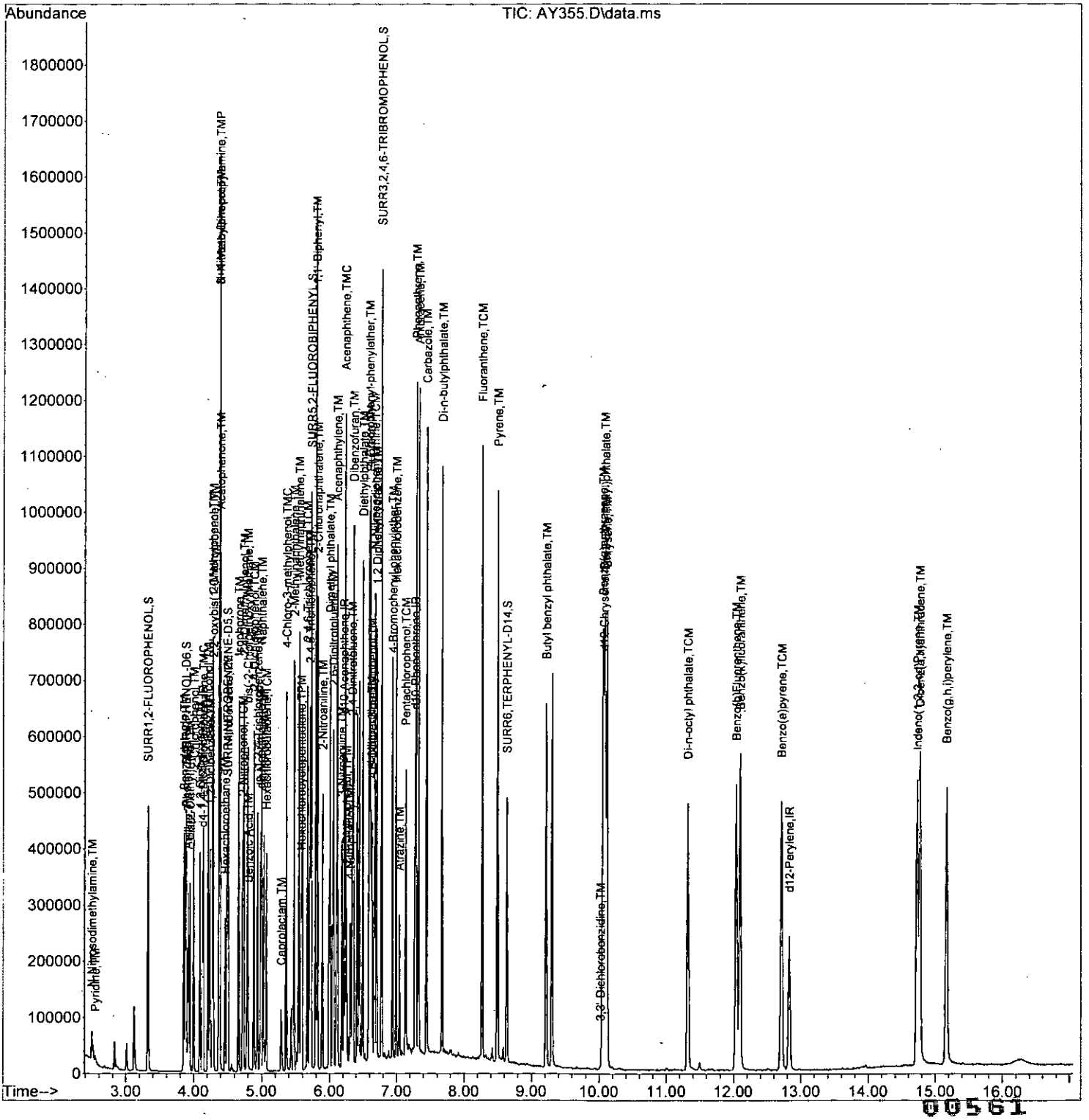
(#) = qualifier out of range (m) = manual integration (+) = signals summed

82701001D.M Thu Oct 09 15:22:48 2014 Page: 2

Quantitation Report (Not Reviewed)

Data Path : I:\ACQUDATA\5973D\Data\100814\
Data File : AY355.D
Acq On : 8 Oct 2014 4:58 pm
Operator : Z.Miao
Sample : RQ1412024-05|1.0 Inst : 5973D
Misc : PARSONS 8270.TCL+ MSD
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 09 15:22:44 2014
Quant Method : I:\ACQUDATA\5973D\Methods\82701001D.M
Quant Title : 8270 BNA ANALYSIS
QLast Update : Thu Oct 02 11:16:38 2014
Response via : Initial Calibration



00561

Preparation Information Benchsheet

Prep Run#: 219960 **Prep WorkFlow:** OrgExtAq(7) **Status:** Prepped
Team: Semivoa GCMS/DMURPHY **Prep Method:** EPA 3510C **Prep Date/Time:** 10/7/14 05:49 AM

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ1412024-01	MB		1000mL	8270D/SVO	6	x	x	1.00mL	clear-colorless	1.0000 mL/74819	
2	RQ1412024-02	LCS		1000mL	8270D/SVO	6	x	x	1.00mL	clear-colorless	1.0000 mL/75279; 1.0000 mL/74450; 1.0000 mL/74819; 1.0000 mL/74729	
3	RQ1412024-03	DLCS		1000mL	8270D/SVO	6	x	x	1.00mL	clear-colorless	1.0000 mL/74450; 1.0000 mL/74729; 1.0000 mL/75279; 1.0000 mL/74819	
4	R1407825-00[redacted]	FTMM-EB-100314	.05	900mL	8270D/SVO 99[illegible]	7	x	x	1.00mL	clear-colorless	1.0000 mL/74819	IV. 10/20. LS
5	R1407825-005	FTMM-66-GW-886RW01-11.55	.06	950mL	8270D/SVO	7	x	x	1.00mL	orange-opaque	1.0000 mL/74819	
6	RQ1412024-04	R1407825-005 MS	.05	900mL	8270D/SVO	7	x	x	1.00mL	orange-opaque	1.0000 mL/74450; 1.0000 mL/74729; 1.0000 mL/75279; 1.0000 mL/74819	
7	RQ1412024-05	R1407825-005 DMS	.09	950mL	8270D/SVO	7	x	x	1.00mL	orange-opaque	1.0000 mL/74450; 1.0000 mL/75279; 1.0000 mL/74729; 1.0000 mL/74819	
8	R1407825-006	FTMM-66-GW-886RW06-10.12	.05	900mL	8270D/SVO	7	x	x	1.00mL	yellow-opaque	1.0000 mL/74819	
9	R1407825-007	FTMM-66-GW-886RW106-10.12	.04	900mL	8270D/SVO	7	x	x	1.00mL	yellow-opaque	1.0000 mL/74819	
10	R1407825-008	FTMM-66-GW-886RW08-11.22	.01	900mL	8270D/SVO	7	x	x	1.00mL	orange-opaque	1.0000 mL/74819	

Spiking Solutions

Name:	Benzidine LCS Spike 100ppm	Inventory ID	74450	Logbook Ref:	Expires On:	11/30/2014		
Name:	8270 LCS Mix1: 100 ug/mL	Inventory ID	74729	Logbook Ref:	Expires On:	05/31/2015	Lot #:	LC07038[illegible]
Name:	Color Coded BNA Surrogate Solution 10	Inventory ID	74819	Logbook Ref:	Expires On:	05/21/2016	Lot #:	229244
Name:	OLM/SOM additionals Spike 100ppm	Inventory ID	75279	Logbook Ref:	Expires On:	12/01/2014		

Preparation Materials

Eppendorf Pipette Repeater	EXT #14 (61350)	2mL Graduated Vials	(75296)	Sulfuric Acid, 50% H2SO4	(75342)
Dichloromethane (Methylene Chloride) 99.9% MeCl2	canister (75393)	Sodium Hydroxide 50% NaOH	(72105)	Prepared Sodium Sulfate Na2SO4	(75341)

Preparation Information Benchsheet

Prep Run#: 219960
Team: Semivoa GCMS/DMURPHY

Prep WorkFlow: OrgExtAq(7)
Prep Method: EPA 3510C

Status: Prepped
Prep Date/Time: 10/7/14 05:49 AM

Preparation Steps

Step:	Extraction	Step:	Concentration	Step:	Final Volume
Started:	10/7/14 05:49	Started:	10/7/14 17:40	Started:	10/7/14 19:44
Finished:	10/7/14 13:10	Finished:	10/7/14 19:00	Finished:	10/7/14 19:44
By:	DMURPHY	By:	SGOLBERG	By:	SGOLBERG
Comments		Comments		Comments	

Comments: _____

Reviewed By: MLG Pedro Date: 10/8 Spike Witness: MPEDRO Date: _____

Chain of Custody

Relinquished By:		Date:		Extracts Examined
Received By:		Date:		Yes No

Analysis: 8270 Analyst: ZM Run Method: 8270100D1D
Date: 10/8/14 Instr. 5973-D Quant Method: 8270100D
LIMS Run#: 415497

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
1	Tune 50ng	DFTPP	Tune-D.m	AV346	YT	12:30pm
2	CCV 80 ppm	8270100D1D		47	YC	
3	CCV 80 ppm	3660-0922D		48	YO	
4	Parsons RQ2024	-01 BLK 10/7/14 8270944		49	Ym	
5		-02 LCS		50	Yle	
6		-03 LCSD		51	Yle	
7	7825-001			52	Y	
8	-005			53	Y	
9	-005 MS		RQ2024-05	54	Yle	
10	-005 MSD		-05	55	Yle	
11	-006			56	Y	
12	-007			57	Y	
13	-008			AV358	Y	

All samples = 1 mL + 10 uL Combined IS/Surr.; 74493

Primary : exp: Secondary : exp:
Primary: exp: Secondary : exp:

Runlog GCEXT_151015_4

Analysis: 8270/625 Analyst: ZM Run Method: S270100ID
Date: 10/1/14 Instr. 5973-D Quant Method: 8270100ID, 360E09220, Reg6816D
LIMS Run#: 414301

Pos.	Sample	Diln.	Stds. ID	File#	OK?	Comments
	Tune 50 ng DFTPP		Tune-D	AY261	N	73373
	CCV 80 ppm 8270080ID			62	N	
	CCV 80 ppm 8270080ID			63	N	failed.
	LCS Y5 BLS Check			64	—	
1	Tune 50 ng DFTPP		Tune-D	65	YT	Trimmed column .3:09 pm
2	CCV 80 ppm 8270080ID			66	NO	
3	CCV 80 ppm 360E09220			67	YC	
4	CCV 80 ppm 360E06616D			68	YC	
5	160			69	—	
6	BLK			70	Ym	
7	SSTD 005	8270100ID		71	Ys	#72121
8	10			72	Ys	122
9	50			73	Ys	123
10	80			74	Yc	124
11	100			75	Ys	125
12	120			76	Ys	126
13	160			77	Ys	127
14	ICV#1			78	Yc	128
15	2			79	Yc	129
16	ICV Base/Neut			80	Not	use.
17	R611748-01	BLK	10% 8270LCS	81	Ym	R7496 8270124027(360E)
18	-02	LCS		82	Yl	R7530 8270CRA.
19	-03	LCSD		83	Yl	R7543 625PPL.
20	R7614-001	8270360E		84	Y	R7544 625PPMD R7558 625PPL
21	R7652-001	8270100SP		85	Y	R7614 8270360E
22	R7496-001 Y3	8270360E Shoes		86	NO Rpt	R7652 8270100SP
23	-002			87	Y	
24	-001 SMR			88	Y	
25	R7530-006	8270CRA		89	Y	
26	-007			90	Y	
27	-008			91	Y	Rpt Y5
28	-009			92	NO	3:12Am out of window
29	R7543-001	625PPL.		93	Y	
30	R7544-001	625PPMD		94	Y	
31	R7558-001	625PPL		AY295	Y	

All samples = 1 mL + 10 uL Combined IS/Surr.; 74493

Primary : exp: Secondary : exp:
Primary: exp: Secondary : exp:

Runlog GCEXT r1 12/5/12

00565

ALS Environmental

METALS DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

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00566

METALS
COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: R1407825 SDG No.: FTMM-3-GW-M

Lab Code: _____ Case No.: _____ SAS No.: _____

SOW No.: SW846 CLP-M

Sample ID.	Lab Sample No.
FTMM-EB-100314	R1407825-001
FTMM-3-GW-M3MW02-21	R1407825-003
FTMM-3-GW-M3MW02-21D	R1407825-003D
FTMM-3-GW-M3MW02-21S	R1407825-003S
FTMM-3-GW-M3MW102-21	R1407825-004
FTMM-57-GW-108MW04-8.25	R1407825-011

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: See Attatched Case Narrative

Signature: _____ Name: Janice Saeger

Date: 10/30/14 Title: Project Manager

00567

ALS Environmental

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: Parsons Engineering Science
Project No.: R1407825
Project Name:
Matrix: WATER

Service Request: FTMM-3-GW-M3MW02-21
Date Collected: 10/3/2014
Date Received: 10/4/2014
Units: ug/L
Basis:

Sample Name: FTMM-EB-100314
Lab Code: R1407825-001

Analyte	Analysis Method	PQL	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Silver	6010C	10.0	5.0	0.385	1.0	10/08/14	10/14/14	5.0	U	
Aluminum	6010C	100	50.0	24.4	1.0	10/08/14	10/14/14	50.0	U	
Arsenic	6010C	10.0	5.0	1.4	1.0	10/08/14	10/14/14	1.5	J	
Barium	6010C	20.0	10.0	0.549	1.0	10/08/14	10/14/14	10.0	U	
Beryllium	6010C	5.0	2.5	0.169	1.0	10/08/14	10/14/14	2.5	U	
Calcium	6010C	1000	500	44.6	1.0	10/08/14	10/14/14	500	U	
Cadmium	6010C	5.0	2.5	0.071	1.0	10/08/14	10/14/14	2.5	U	
Cobalt	6010C	50.0	25.0	0.183	1.0	10/08/14	10/16/14	25.0	U	
Chromium	6010C	10.0	5.0	0.403	1.0	10/08/14	10/14/14	5.0	U	
Copper	6010C	20.0	10.0	3.0	1.0	10/08/14	10/14/14	10.0	U	
Iron	6010C	100	50.0	10.0	1.0	10/08/14	10/14/14	50.0	U	
Potassium	6010C	2000	1000	105	1.0	10/08/14	10/14/14	1000	U	
Magnesium	6010C	1000	500	5.6	1.0	10/08/14	10/14/14	16.2	J	
Manganese	6010C	10.0	5.0	0.353	1.0	10/08/14	10/14/14	0.444	J	
Mercury	7470A	0.200	0.100	0.024	1.0	10/10/14	10/10/14	0.100	U	
Sodium	6010C	1000	500	32.6	1.0	10/08/14	10/14/14	49.3	J	
Nickel	6010C	40.0	20.0	0.508	1.0	10/08/14	10/14/14	20.0	U	
Lead	6010C	5.0	2.5	0.807	1.0	10/08/14	10/14/14	2.5	U	
Antimony	6010C	60.0	30.0	2.2	1.0	10/08/14	10/14/14	30.0	U	
Selenium	6010C	10.0	10.0	2.0	1.0	10/08/14	10/16/14	10.0	U	
Thallium	6010C	10.0	10.0	1.8	1.0	10/08/14	10/14/14	10.0	U	
Vanadium	6010C	50.0	25.0	0.169	1.0	10/08/14	10/14/14	25.0	U	
Zinc	6010C	20.0	10.0	4.5	1.0	10/08/14	10/14/14	10.0	U	

% Solids: 0.0

Comments:

ALS Environmental

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Parsons Engineering Science	Service Request:	FTMM-3-GW-M3MW02-21
Project No.:	R1407825	Date Collected:	10/3/2014
Project Name:		Date Received:	10/4/2014
Matrix:	WATER	Units:	ug/L
		Basis:	

Sample Name: FTMM-3-GW-M3MW02-21 Lab Code: R1407825-003

Analyte	Analysis Method	PQL	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Silver	6010C	10.0	5.0	0.385	1.0	10/08/14	10/14/14	5.0	U	
Aluminum	6010C	100	50.0	24.4	1.0	10/08/14	10/14/14	685		
Arsenic	6010C	10.0	5.0	1.4	1.0	10/08/14	10/14/14	5.0	U	
Barium	6010C	20.0	10.0	0.549	1.0	10/08/14	10/14/14	48.6		
Beryllium	6010C	5.0	2.5	0.169	1.0	10/08/14	10/14/14	0.905	J	
Calcium	6010C	1000	500	44.6	1.0	10/08/14	10/14/14	4930		
Cadmium	6010C	5.0	2.5	0.071	1.0	10/08/14	10/14/14	0.483	J	
Cobalt	6010C	50.0	25.0	0.183	1.0	10/08/14	10/16/14	5.5	J	
Chromium	6010C	10.0	5.0	0.403	1.0	10/08/14	10/14/14	5.0	U	
Copper	6010C	20.0	10.0	3.0	1.0	10/08/14	10/14/14	10.0	U	
Iron	6010C	100	50.0	10.0	1.0	10/08/14	10/14/14	101		
Potassium	6010C	2000	1000	105	1.0	10/08/14	10/14/14	3090		
Magnesium	6010C	1000	500	5.6	1.0	10/08/14	10/14/14	10200		
Manganese	6010C	10.0	5.0	0.353	1.0	10/08/14	10/14/14	32.4		
Mercury	7470A	0.200	0.100	0.024	1.0	10/10/14	10/10/14	0.100	U	
Sodium	6010C	1000	500	32.6	1.0	10/08/14	10/14/14	12300		
Nickel	6010C	40.0	20.0	0.508	1.0	10/08/14	10/14/14	55.3		
Lead	6010C	5.0	2.5	0.807	1.0	10/08/14	10/14/14	2.5	U	
Antimony	6010C	60.0	30.0	2.2	1.0	10/08/14	10/14/14	30.0	U	
Selenium	6010C	10.0	10.0	2.0	1.0	10/08/14	10/16/14	10.0	U	
Thallium	6010C	10.0	10.0	1.8	1.0	10/08/14	10/14/14	10.0	U	
Vanadium	6010C	50.0	25.0	0.169	1.0	10/08/14	10/14/14	25.0	U	
Zinc	6010C	20.0	10.0	4.5	1.0	10/08/14	10/14/14	102		

% Solids: 0.0

Comments:

00569

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Parsons Engineering Science	**Service Request:**	FTMM-3-GW-M3MW02-21
Project No.:	R1407825	**Date Collected:**	10/3/2014
Project Name:		**Date Received:**	10/4/2014
Matrix:	WATER	**Units:**	ug/L
		Basis:	

Sample Name: FTMM-3-GW-M3MW102-21 **Lab Code:** R1407825-004

Analyte	Analysis Method	PQL	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Silver	6010C	10.0	5.0	0.385	1.0	10/08/14	10/14/14	5.0	U	
Aluminum	6010C	100	50.0	24.4	1.0	10/08/14	10/14/14	660		
Arsenic	6010C	10.0	5.0	1.4	1.0	10/08/14	10/14/14	5.0	U	
Barium	6010C	20.0	10.0	0.549	1.0	10/08/14	10/14/14	47.7		
Beryllium	6010C	5.0	2.5	0.169	1.0	10/08/14	10/14/14	0.837	J	
Calcium	6010C	1000	500	44.6	1.0	10/08/14	10/14/14	4620		
Cadmium	6010C	5.0	2.5	0.071	1.0	10/08/14	10/14/14	0.203	J	
Cobalt	6010C	50.0	25.0	0.183	1.0	10/08/14	10/16/14	4.9	J	
Chromium	6010C	10.0	5.0	0.403	1.0	10/08/14	10/14/14	5.0	U	
Copper	6010C	20.0	10.0	3.0	1.0	10/08/14	10/14/14	10.0	U	
Iron	6010C	100	50.0	10.0	1.0	10/08/14	10/14/14	97.8	J	
Potassium	6010C	2000	1000	105	1.0	10/08/14	10/14/14	2990		
Magnesium	6010C	1000	500	5.6	1.0	10/08/14	10/14/14	9910		
Manganese	6010C	10.0	5.0	0.353	1.0	10/08/14	10/14/14	31.0		
Mercury	7470A	0.200	0.100	0.024	1.0	10/10/14	10/10/14	0.100	U	
Sodium	6010C	1000	500	32.6	1.0	10/08/14	10/14/14	12200		
Nickel	6010C	40.0	20.0	0.508	1.0	10/08/14	10/14/14	50.5		
Lead	6010C	5.0	2.5	0.807	1.0	10/08/14	10/14/14	2.5	U	
Antimony	6010C	60.0	30.0	2.2	1.0	10/08/14	10/14/14	3.8	J	
Selenium	6010C	10.0	10.0	2.0	1.0	10/08/14	10/16/14	10.0	U	
Thallium	6010C	10.0	10.0	1.8	1.0	10/08/14	10/14/14	10.0	U	
Vanadium	6010C	50.0	25.0	0.169	1.0	10/08/14	10/14/14	25.0	U	
Zinc	6010C	20.0	10.0	4.5	1.0	10/08/14	10/14/14	96.8		

% Solids: 0.0

Comments:

METALS
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	Parsons Engineering Science	**Service Request:**	FTMM-3-GW-M3MW02-21
Project No.:	R1407825	**Date Collected:**	10/2/2014
Project Name:		**Date Received:**	10/4/2014
Matrix:	WATER	**Units:**	ug/L
		Basis:	

Sample Name: FTMM-57-GW-108MW04-8.25 **Lab Code:** R1407825-011

Analyte	Analysis Method	PQL	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Lead	6010C	5.0	2.5	0.807	1.0	10/08/14	10/14/14	2.5	U	

% Solids: 0.0

Comments:

METALS
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-3-GW-M3

Initial Calibration Source: PERKIN ELMER

Continuing Calibration Source: PERKIN ELMER

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Silver	500	509	102	500	506	101	505	101	P
Aluminum	10000	9770	98	10000	9460	95	9790	98	P
Arsenic	1000	996	100	1000	1000	100	993	99	P
Barium	10000	10300	103	10000	10000	100	10300	103	P
Beryllium	250	252	101	250	246	98	252	101	P
Calcium	25000	24000	96	25000	24400	98	24300	97	P
Cadmium	500	516	103	500	504	101	507	101	P
Cobalt	2500	2490	100	2500	2490	100	2510	100	P
Chromium	500	520	104	500	510	102	513	103	P
Copper	1250	1250	100	1250	1210	97	1250	100	P
Iron	5000	5100	102	5000	4920	98	5070	101	P
Potassium	25000	24500	98	25000	24700	99	24900	100	P
Magnesium	25000	25200	101	25000	24400	98	24900	100	P
Manganese	750	766	102	750	742	99	758	101	P
Mercury	3.00	2.80	93	3.00	2.77	92	2.76	92	CV
Sodium	25000	24500	98	25000	24500	98	24300	97	P
Nickel	2000	2050	102	2000	2010	100	2030	102	P
Lead	500	501	100	500	497	99	502	100	P
Antimony	5000	5000	100	5000	5000	100	4930	99	P
Selenium	500	495	99	500	500	100	509	102	P
Thallium	1000	995	100	1000	984	98	1000	100	P
Vanadium	2500	2530	101	2500	2610	104	2500	100	P
Zinc	1000	1030	103	1000	1010	101	1010	101	P

Comments:

00572

METALS
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-3-GW-M3

Initial Calibration Source: PERKIN ELMER

Continuing Calibration Source: PERKIN ELMER

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Silver				500	509	102	511	102	P
Aluminum				10000	9800	98	9640	96	P
Arsenic				1000	980	98	1000	100	P
Barium				10000	10300	103	10200	102	P
Beryllium				250	252	101	250	100	P
Calcium				25000	24300	97	24400	98	P
Cadmium				500	510	102	512	102	P
Cobalt				2500	2480	99	2520	101	P
Chromium				500	516	103	517	103	P
Copper				1250	1250	100	1230	98	P
Iron				5000	5090	102	5000	100	P
Potassium				25000	25000	100	24700	99	P
Magnesium				25000	25200	101	24800	99	P
Manganese				750	764	102	755	101	P
Mercury				3.00	2.74	91	2.70	90	CV
Sodium				25000	25000	100	24600	98	P
Nickel				2000	2040	102	2040	102	P
Lead				500	498	100	502	100	P
Antimony				5000	4930	99	5030	101	P
Selenium				500	509	102	517	103	P
Thallium				1000	994	99	993	99	P
Vanadium				2500	2510	100	2610	104	P
Zinc				1000	1020	102	1020	102	P

Comments:

00573

METALS
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-3-GW-M3

Initial Calibration Source: PERKIN ELMER

Continuing Calibration Source: PERKIN ELMER

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Silver				500	513	103	507	101	P
Aluminum				10000	9880	99	9890	99	P
Arsenic				1000	999	100	988	99	P
Barium				10000	10400	104	10500	105	P
Beryllium				250	254	102	255	102	P
Calcium				25000	24500	98	24600	98	P
Cadmium				500	517	103	515	103	P
Cobalt				2500	2480	99	2490	100	P
Chromium				500	521	104	520	104	P
Copper				1250	1260	101	1250	100	P
Iron				5000	5130	103	5160	103	P
Potassium				25000	25100	100	24800	99	P
Magnesium				25000	25400	102	25300	101	P
Manganese				750	772	103	770	103	P
Mercury				3.00	2.72	91			CV
Sodium				25000	24800	99	24700	99	P
Nickel				2000	2060	103	2050	102	P
Lead				500	506	101	507	101	P
Antimony				5000	4980	100	4910	98	P
Selenium				500	512	102	515	103	P
Thallium				1000	1010	101	1010	101	P
Vanadium				2500	2530	101	2500	100	P
Zinc				1000	1030	103	1030	103	P

Comments:

00574

METALS
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-3-GW-M3

Initial Calibration Source: PERKIN ELMER

Continuing Calibration Source: PERKIN ELMER

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Cobalt				2500	2520	101			P
Selenium				500	513	103			P

Comments:

00575

METALS
-2B-
CRDL STANDARD FOR AA AND ICP

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FTMM-3-GW-M3

AA CRDL Standard Source: ACCUSTANDARD

ICP CRDL Standard Source:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP Initial			CRDL Standard for ICP Final	
	True	Found	%R	True	Found	%R	Found	%R
Silver				10.0	9.84	98	10.11	101
Aluminum				200.0	159.14	80	214.02	107
Arsenic				20.0	20.49	102	21.22	106
Barium				200.0	207.46	104	218.67	109
Beryllium				5.0	5.09	102	5.21	104
Calcium				1000.0	875.55	88	866.47	87
Cadmium				10.0	10.65	106	10.90	109
Cobalt				50.0	52.54	105	51.38	103
Chromium				10.0	10.25	102	10.56	106
Copper				25.0	24.49	98	26.20	105
Iron				100.0	103.17	103	109.18	109
Potassium				1000.0	1012.36	101	943.30	94
Magnesium				1000.0	983.52	98	1035.42	104
Manganese				15.0	15.40	103	16.17	108
Mercury	0.200	0.171	86					
Sodium				1000.0	1030.09	103	1053.08	105
Nickel				40.0	41.02	103	41.94	105
Lead				10.0	10.27	103	10.28	103
Antimony				60.0	60.74	101	61.39	102
Selenium				10.0	9.15	92	8.78	88
Thallium				20.0	16.28	81	18.92	95
Vanadium				50.0	53.56	107	52.30	105
Zinc				20.0	19.53	98	19.96	100

Comments:

00576

METALS
-2B-
CRDL STANDARD FOR AA AND ICP

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FTMM-3-GW-M3

AA CRDL Standard Source: ACCUSTANDARD

ICP CRDL Standard Source:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Mercury	0.200	0.177	88					

Comments:

00577

METALS

-3-

BLANKS

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-3-GW-M3

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Silver	0.39	U	0.52	J	0.41	J	0.39	U	0.385	U	P
Aluminum	32.18	J	24.40	U	47.75	J	24.40	U	31.967	J	P
Arsenic	1.38	U	2.93	J	1.49	J	1.38	U	1.380	U	P
Barium	11.09	J	7.36	J	9.11	J	3.45	J	1.367	J	P
Beryllium	0.21	J	0.25	J	0.24	J	0.17	U	0.169	U	P
Calcium	44.60	U	44.60	U	44.60	U	62.24	J	44.600	U	P
Cadmium	0.61	J	0.41	J	0.53	J	0.17	J	-0.156	J	P
Cobalt	0.96	J	0.79	J	0.87	J	0.67	J	-0.519	J	P
Chromium	0.64	J	0.40	U	0.40	U	0.40	U	0.417	J	P
Copper	7.40	J	3.87	J	6.22	J	3.66	J	3.160	J	P
Iron	9.97	U	9.97	U	22.43	J	9.97	U	9.970	U	P
Potassium	105.00	U	209.86	J	121.94	J	105.00	U	107.028	J	P
Magnesium	25.29	J	25.60	J	31.12	J	19.29	J	5.630	U	P
Manganese	1.08	J	0.74	J	0.98	J	0.62	J	2.812	J	P
Mercury	0.024	U	0.024	U	0.024	U	0.024	U	0.024	U	CV
Sodium	38.19	J	140.48	J	91.70	J	128.72	J	45.317	J	P
Nickel	3.21	J	2.10	J	2.81	J	1.47	J	0.508	U	P
Lead	1.27	J	0.89	J	0.81	U	1.62	J	0.807	U	P
Antimony	5.21	J	3.78	J	3.75	J	2.15	U	3.729	J	P
Selenium	1.99	U	1.99	U	1.99	U	1.99	U	1.990	U	P
Thallium	1.84	U	1.84	U	1.84	U	1.84	U	-4.909	J	P
Vanadium	2.28	J	2.42	J	2.43	J	0.63	J	0.169	U	P
Zinc	4.47	U	4.47	U	4.47	U	4.47	U	4.470	U	P

Comments:

00578

METALS

-3-

BLANKS

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-3-GW-M3

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Silver			0.39	U	0.39	U	0.39	U			P
Aluminum			24.40	U	24.40	U	53.95	J			P
Arsenic			1.38	U	1.38	U	1.38	U			P
Barium			3.17	J	4.21	J	3.33	J			P
Beryllium			0.17	U	0.17	U	0.17	U			P
Calcium			44.60	U	44.60	U	44.60	U			P
Cadmium			0.27	J	0.31	J	0.20	J			P
Cobalt			1.25	J	0.84	J	0.90	J			P
Chromium			0.40	U	0.40	U	0.40	U			P
Copper			3.65	J	3.45	J	4.59	J			P
Iron			9.97	U	9.97	U	24.76	J			P
Potassium			105.00	U	105.00	U	105.00	U			P
Magnesium			15.44	J	26.16	J	22.96	J			P
Manganese			0.78	J	0.65	J	0.53	J			P
Mercury			0.024	U	0.024	U					CV
Sodium			72.53	J	54.95	J	49.50	J			P
Nickel			1.31	J	1.57	J	1.90	J			P
Lead			0.81	U	0.81	U	0.81	U			P
Antimony			2.15	U	2.15	U	2.86	J			P
Selenium			1.99	U	1.99	U	1.99	U			P
Thallium			1.84	U	1.84	U	1.84	U			P
Vanadium			0.45	J	0.84	J	0.48	J			P
Zinc			4.47	U	4.47	U	4.47	U			P

Comments:

00579

METALS

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BLANKS

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-3-GW-M3

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Cobalt			0.65	J							P
Selenium			1.99	U							P

Comments:

METALS

-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-3-GW-M3

ICP ID Number: Optima ICP 3 ICS Source: PERKIN ELMER

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Silver		200	-1.2	205	102			
Aluminum	250000	250000	257000.0	257000	103			
Arsenic		100	2.5	98	98			
Barium		500	3.7	522	104			
Beryllium		500	-0.3	500	100			
Calcium	250000	250000	262000.0	259000	104			
Cadmium		1000	1.3	979	98			
Cobalt		500	0.4	487	97	0.2	485	97
Chromium		500	-1.0	508	102			
Copper		500	2.4	521	104			
Iron	100000	100000	89800.0	89600	90			
Potassium			142.0	42				
Magnesium	250000	250000	260000.0	262000	105			
Manganese		500	-2.8	506	101			
Sodium			55.8	42				
Nickel		1000	-2.5	962	96			
Lead		50	0.1	51	102			
Antimony		600	0.4	633	106			
Selenium		50	-1.5	50	100	-3.2	52	104
Thallium		100	0.2	104	104			
Vanadium		500	-0.6	505	101			
Zinc		1000	5.3	971	97			

00581

METALS
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ICP INTERFERENCE CHECK SAMPLE

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-3-GW-M3

ICP ID Number: Optima ICP 3 ICS Source: PERKIN ELMER

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Silver		200				-1.9	207	104
Aluminum	250000	250000				260000.0	263000	105
Arsenic		100				-0.4	98	98
Barium		500				3.3	534	107
Beryllium		500				-0.4	509	102
Calcium	250000	250000				260000.0	261000	104
Cadmium		1000				1.0	987	99
Chromium		500				-0.7	513	103
Copper		500				1.7	535	107
Iron	100000	100000				91300.0	91800	92
Potassium						32.9	17	
Magnesium	250000	250000				265000.0	267000	107
Manganese		500				-3.3	517	103
Sodium						20.9	27	
Nickel		1000				-2.6	972	97
Lead		50				1.7	52	104
Antimony		600				-1.3	624	104
Thallium		100				2.4	108	108
Vanadium		500				1.3	494	99
Zinc		1000				5.4	980	98

00582

METALS

- 5A -

SPIKE SAMPLE RECOVERY

Client:	Parsons Engineering Science	**Service Request:**	FTMM-3-GW-M3MW02-21
Project No.:	R1407825	**Units:**	UG/L
Project Name:	NA	**Basis:**	
Matrix:	WATER	**% Solids:**	0.0

Sample Name: FTMM-3-GW-M3MW02-21S **Lab Code:** R1407825-003S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Silver	84 - 115	51.00		5.00	U	50.0	102		6010C
Aluminum	88 - 113	2640.00		685.00		2000.0	98		6010C
Arsenic	87 - 113	39.90		5.00	U	40.0	100		6010C
Barium	88 - 113	2110.00		48.60		2000.0	103		6010C
Beryllium	89 - 112	50.90		0.90	J	50.0	100		6010C
Calcium	87 - 113	7090.00		4930.00		2000.0	108		6010C
Cadmium	88 - 113	50.60		0.48	J	50.0	100		6010C
Cobalt	75 - 125	517.00		5.47	J	500.0	102		6010C
Chromium	90 - 113	210.00		5.00	U	200.0	105		6010C
Copper	86 - 114	264.00		10.00	U	250.0	106		6010C
Iron	87 - 115	1140.00		101.00		1000.0	104		6010C
Potassium	86 - 114	23000.00		3090.00		20000.0	100		6010C
Magnesium		12200.00		10200.00		2000.0	100		6010C
Manganese	90 - 114	552.00		32.40		500.0	104		6010C
Mercury	75 - 125	0.931		0.100	U	1.00	93		7470A
Sodium	87 - 115	32100.00		12300.00		20000.0	99		6010C
Nickel	88 - 113	579.00		55.30		500.0	105		6010C
Lead	86 - 113	500.00		2.50	U	500.00	100		6010C
Antimony	88 - 113	487.00		30.00	U	500.0	97		6010C
Selenium	75 - 125	995.00		10.00	U	1010.0	99		6010C
Thallium	85 - 114	1890.00		10.00	U	2000.0	94		6010C
Vanadium	90 - 111	511.00		25.00	U	500.0	102		6010C
Zinc	87 - 115	629.00		102.00		500.0	105		6010C

An empty field in the Control Limit column indicates the control limit is not applicable

METALS

- 5B -

POST SPIKE SAMPLE RECOVERY

Client: Parsons Engineering Science **Service Request:** FTMM-3-GW-M3MW02-21

Project No.: R1407825 **Units:** UG/L

Project Name: NA **Basis:**

Matrix: WATER

Sample Name: FTMM-3-GW-M3MW02-21A **Lab Code:** R1407825-003A

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Silver	80 - 120	48.60		5.00	U	50.0	97		6010C
Aluminum	80 - 120	2550.00		685.00		2000.0	93		6010C
Arsenic	80 - 120	39.70		5.00	U	40.0	99		6010C
Barium	80 - 120	2040.00		48.60		2000.0	100		6010C
Beryllium	80 - 120	49.40		0.90	J	50.0	97		6010C
Calcium	80 - 120	6870.00		4930.00		2000.0	97		6010C
Cadmium	80 - 120	49.20		0.48	J	50.0	97		6010C
Cobalt	75 - 125	491.00		5.47	J	500.0	97		6010C
Chromium	80 - 120	204.00		5.00	U	200.0	102		6010C
Copper	80 - 120	249.00		10.00	U	250.0	100		6010C
Iron	80 - 120	1110.00		101.00		1000.0	101		6010C
Potassium	80 - 120	22600.00		3090.00		20000.0	98		6010C
Magnesium	80 - 120	12000.00		10200.00		2000.0	90		6010C
Manganese	80 - 120	533.00		32.40		500.0	100		6010C
Sodium	80 - 120	31900.00		12300.00		20000.0	98		6010C
Nickel	80 - 120	566.00		55.30		500.0	102		6010C
Lead	80 - 120	490.00		2.50	U	500.0	98		6010C
Antimony	80 - 120	505.00		30.00	U	500.0	101		6010C
Selenium	75 - 125	1190.00		10.00	U	1010.0	118		6010C
Thallium	80 - 120	1860.00		10.00	U	2000.0	93		6010C
Vanadium	80 - 120	491.00		25.00	U	500.0	98		6010C
Zinc	80 - 120	611.00		102.00		500.0	102		6010C

00584

ALS Environmental

METALS

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DUPLICATES

Client: Parsons Engineering Science **Service Request:** FTMM-3-GW-M3MW02-21

Project No.: R1407825 **Units:** UG/L

Project Name: NA **Basis:**

Matrix: WATER **% Solids:** 0.0

Sample Name: FTMM-3-GW-M3MW02-21D **Lab Code:** R1407825-003D

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Silver		5.00	U	5.00	U			6010C
Aluminum	20	685.00		665.00		3		6010C
Arsenic		5.00	U	5.00	U			6010C
Barium		48.60		48.60		0		6010C
Beryllium		0.905	J	0.972	J	7		6010C
Calcium		4930.00		4960.00		1		6010C
Cadmium		0.48	J	0.44	J	9		6010C
Cobalt		5.47	J	5.81	J	6		6010C
Chromium		5.00	U	5.00	U			6010C
Copper		10.00	U	10.00	U			6010C
Iron		101.00		98.20	J	3		6010C
Potassium		3090.00		3110.00		1		6010C
Magnesium	20	10200.00		10100.00		1		6010C
Manganese		32.40		32.00		1		6010C
Mercury		0.100	U	0.100	U			7470A
Sodium	20	12300.00		12300.00		0		6010C
Nickel		55.30		54.30		2		6010C
Lead		2.50	U	2.50	U			6010C
Antimony		30.00	U	30.00	U			6010C
Selenium		10.00	U	10.00	U			6010C
Thallium		10.00	U	10.00	U			6010C
Vanadium		25.00	U	25.00	U			6010C
Zinc	20	102.00		102.00		0		6010C

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS

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LABORATORY CONTROL SAMPLE

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-3-GW-M3

Solid LCS Source: _____

Aqueous LCS Source: CPI

Analyte	Aqueous (ug/L			Solid (mg/K				
	True	Found	%R	True	Found	C	Limits	%R
Silver	50	50	100					
Aluminum	2000	1920	96					
Arsenic	40	38	95					
Barium	2000	2060	103					
Beryllium	50	50	100					
Calcium	2000	2060	103					
Cadmium	50	51	102					
Cobalt	500	503	101					
Chromium	200	211	106					
Copper	250	270	108					
Iron	1000	1040	104					
Potassium	20000	19500	98					
Magnesium	2000	2020	101					
Manganese	500	519	104					
Mercury	1.000	0.942	94					
Sodium	20000	19700	98					
Nickel	500	525	105					
Lead	500	506	101					
Antimony	500	483	97					
Selenium	1010	969	96					
Thallium	2000	1910	96					
Vanadium	500	499	100					
Zinc	500	528	106					

Comments: _____

00586

METALS

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ICP SERIAL DILUTIONS

Client: Parsons Engineering Science **Service Request:** FTMM-3-GW-M3MW02-21

Project No.: R1407825 **Units:** UG/L

Project Name:

Sample Name: FTMM-3-GW-M3MW02-21L **Lab Code:** R1407825-003L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Silver	0.39	U	1.93	U			P
Aluminum	685.00		735.00		7		P
Arsenic	1.38	U	6.90	U			P
Barium	48.60		48.20	J	1		P
Beryllium	0.90	J	0.85	U	100.0		P
Calcium	4930.00		4520.00	J	8		P
Cadmium	0.48	J	0.36	U	100.0		P
Cobalt	5.47	J	4.87	J	11		P
Chromium	0.40	U	2.02	U			P
Copper	3.02	U	15.10	U			P
Iron	101.00		95.90	J	5		P
Potassium	3090.00		3120.00	J	1		P
Magnesium	10200.00		10100.00		1		P
Manganese	32.40		32.50	J	0		P
Sodium	12300.00		12300.00		0		P
Nickel	55.30		53.40	J	3		P
Lead	0.81	U	4.04	U			P
Antimony	2.15	U	13.10	J	100.0		P
Selenium	1.99	U	9.95	U			P
Thallium	1.84	U	9.20	U			P
Vanadium	0.17	U	0.85	U			P
Zinc	102.00		105.00		3		P

00587

METALS

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DETECTION LIMITS

Client: Parsons Engineering Science **Service Request:** FTMM-3-GW-M3MW02-21

Project No.: R1407825

Project Name:

ICP/ICP-MS ID #: Optima ICP 3

GFAA ID #: **AA ID #:**

Analyte	Wave-length (nm)	Back-ground	PQL ug/L	LOD ug/L	MDL ug/L	M
Silver	328.068		10.0	5.0	0.4	P
Aluminum	308.215		100.0	50.0	24.4	P
Arsenic	188.979		10.0	5.0	1.4	P
Barium	233.527		20.0	10.0	0.5	P
Beryllium	313.107		5.0	2.5	0.2	P
Calcium	227.546		1000.0	500.0	44.6	P
Cadmium	226.502		5.0	2.5	0.1	P
Cobalt	228.616		50.0	25.0	0.2	P
Chromium	267.716		10.0	5.0	0.4	P
Copper	324.752		20.0	10.0	3.0	P
Iron	259.939		100.0	50.0	10.0	P
Potassium	766.490		2000.0	1000.0	105.0	P
Magnesium	279.077		1000.0	500.0	5.6	P
Manganese	257.610		10.0	5.0	0.4	P
Sodium	589.592		1000.0	500.0	32.6	P
Nickel	231.604		40.0	20.0	0.5	P
Lead	220.353		5.0	2.5	0.8	P
Antimony	206.836		60.0	30.0	2.2	P
Selenium	196.026		10.0	10.0	2.0	P
Thallium	190.801		10.0	10.0	1.8	P
Vanadium	292.402		50.0	25.0	0.2	P
Zinc	206.200		20.0	10.0	4.5	P

Comments:

00535

METALS

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DETECTION LIMITS

Client: Parsons Engineering Science **Service Request:** FTMM-3-GW-M3MW02-21

Project No.: R1407825

Project Name:

ICP/ICP-MS ID #:

GFAA ID #: **AA ID #:** PE FAA/CVAA

Analyte	Wave-length (nm)	Back-ground	PQL ug/L	LOD ug/L	MDL ug/L	M
Mercury	253.70		0.200	0.100	0.024	CV

Comments:

00553

METALS

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ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-3-GW-M3

ICP ID Number: Optima ICP 3 Date: 7/29/2014

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg
Aluminum	308.215	0.0000000	0.1537940	-0.4552140	0.0000000
Antimony	206.836	0.0888670	0.0000000	0.0000000	0.0000000
Arsenic	188.979	0.0000000	0.0000000	0.0000000	0.0000000
Barium	233.527	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.107	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.772	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	-0.0031273	0.0000000	0.1413190	0.0000000
Calcium	227.546	-2.8913901	0.0000000	-58.5192986	0.0000000
Chromium	267.716	0.0000000	0.0000000	-0.0457881	-0.0981711
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.752	0.0000000	0.0000000	-0.0931560	0.0000000
Iron	259.939	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	-0.1117000	0.0000000	0.0312244	0.0000000
Magnesium	279.077	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	-0.1330120	0.0000000
Molybdenum	202.031	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.026	-0.0171731	0.0000000	-0.2282150	0.0000000
Silver	328.068	0.0000000	0.0000000	-0.2758050	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.552	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.801	0.0681795	0.0095823	-0.3270760	-0.0098473
Tin	189.927	0.1167290	0.0000000	0.0000000	0.0000000
Titanium	337.279	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.402	0.0000000	0.0000000	0.0278136	0.0000000
Zinc	206.200	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

00590

METALS
-12-
ICP LINEAR RANGES (QUARTERLY)

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-3-GW-M3

ICP ID Number: Optima ICP 3 Date: 8/14/2014

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Silver	0.200	2000	P
Aluminum	0.200	500000	P
Arsenic	0.200	4000	P
Barium	0.200	20000	P
Beryllium	0.200	2000	P
Calcium	0.200	250000	P
Cadmium	0.200	2000	P
Chromium	0.200	10000	P
Copper	0.200	10000	P
Iron	0.200	100000	P
Potassium	0.200	200000	P
Magnesium	0.200	500000	P
Manganese	0.200	10000	P
Sodium	0.200	200000	P
Nickel	0.200	8000	P
Lead	0.200	10000	P
Antimony	0.200	10000	P
Thallium	0.200	4000	P
Vanadium	0.200	10000	P
Zinc	0.200	2000	P

Comments: _____

00591

METALS
-12-
ICP LINEAR RANGES (QUARTERLY)

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-3-GW-M3

ICP ID Number: Optima ICP 3 Date: 8/14/2014

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Cobalt	0.200	10000	P
Selenium	0.200	2000	P

Comments: _____

00592

METALS

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PREPARATION LOG

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-3-GW-M3MW02-

Method: P

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
LCSW	10/8/2014	50.0	50.0
PBW	10/8/2014	50.0	50.0
FTMM-EB-100314	10/8/2014	50.0	50.0
FTMM-3-GW-M3MW02-21	10/8/2014	50.0	50.0
FTMM-3-GW-M3MW02-21D	10/8/2014	50.0	50.0
FTMM-3-GW-M3MW02-21S	10/8/2014	50.0	50.0
FTMM-3-GW-M3MW102-21	10/8/2014	50.0	50.0
FTMM-57-GW-108MW04-8	10/8/2014	50.0	50.0

Comments:

METALS

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PREPARATION LOG

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: FTMM-3-GW-M3MW02-

Method: CV

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
LCSW	10/10/2014	25.0	25.0
PBW	10/10/2014	25.0	25.0
FTMM-EB-100314	10/10/2014	25.0	25.0
FTMM-3-GW-M3MW02-21	10/10/2014	25.0	25.0
FTMM-3-GW-M3MW02-21D	10/10/2014	25.0	25.0
FTMM-3-GW-M3MW02-21S	10/10/2014	25.0	25.0
FTMM-3-GW-M3MW102-21	10/10/2014	25.0	25.0

Comments:

METALS
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ANALYSIS RUN LOG

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FTMM-3-GW-M3

Instrument ID Number: Optima ICP 3 Method: P

Start Date: 10/14/2014 End Date: 10/15/2014

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Calib Blank 1	1.00	14:06		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X	
Calib Std 1	1.00	14:12			X	X	X		X		X		X		X		X		X					X	X	X	
Calib Std 2	1.00	14:18		X	X	X		X	X	X			X			X				X			X				
Calib Std 3	1.00	14:23						X		X	X			X		X			X	X		X	X		X	X	
Calib Std 4	1.00	14:29		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X	
Calib Std 5	1.00	14:35		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X	
ICV1	1.00	14:41		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X	
ICB1	1.00	14:48		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X	
ZZZZZZ	1.00	14:54																										
ZZZZZZ	1.00	15:00																										
ZZZZZZ	1.00	15:06																										
ZZZZZZ	1.00	15:12																										
ZZZZZZ	1.00	15:18																										
ZZZZZZ	1.00	15:25																										
ZZZZZZ	1.00	15:31																										
ZZZZZZ	5.00	15:37																										
ZZZZZZ	20.00	15:43																										
ZZZZZZ	5.00	15:48																										
ZZZZZZ	5.00	15:55																										
ZZZZZZ	5.00	16:01																										
ZZZZZZ	5.00	16:07																										
ZZZZZZ	5.00	16:13																										
ZZZZZZ	5.00	16:19																										
ZZZZZZ	1.00	16:25																										
ZZZZZZ	1.00	16:32																										
ZZZZZZ	1.00	16:38																										
ZZZZZZ	1.00	16:44																										
ZZZZZZ	1.00	16:50																										
ZZZZZZ	1.00	16:57																										
ZZZZZZ	1.00	17:03																										
ZZZZZZ	1.00	17:09																										
ZZZZZZ	1.00	17:16																										
ZZZZZZ	1.00	17:22																										

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

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METALS
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ANALYSIS RUN LOG

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FTMM-3-GW-M3

Instrument ID Number: Optima ICP 3 Method: P

Start Date: 10/14/2014 End Date: 10/15/2014

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	17:28																										
ZZZZZZ	1.00	17:34																										
ZZZZZZ	1.00	17:40																										
ZZZZZZ	1.00	17:46																										
ZZZZZZ	1.00	17:52																										
ZZZZZZ	1.00	17:58																										
ZZZZZZ	10.00	18:04																										
ZZZZZZ	1.00	18:10																										
ZZZZZZ	1.00	18:17																										
ZZZZZZ	1.00	18:24																										
ZZZZZZ	1.00	18:30																										
ZZZZZZ	1.00	18:36																										
ZZZZZZ	1.00	18:42																										
ZZZZZZ	1.00	18:48																										
ZZZZZZ	1.00	18:54																										
ZZZZZZ	5.00	19:00																										
ZZZZZZ	1.00	19:06																										
ZZZZZZ	1.00	19:12																										
ZZZZZZ	1.00	19:18																										
ZZZZZZ	1.00	19:25																										
CCV1	1.00	19:31		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
CCB1	1.00	19:37		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
CRDL1	1.00	19:43		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
ICS-A1	1.00	19:49		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
ICS-AB1	1.00	19:55		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
ZZZZZZ	1.00	20:02																										
ZZZZZZ	1.00	20:08																										
CCV2	1.00	20:14		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
CCB2	1.00	20:20		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
PBW	1.00	20:26		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
LCSW	1.00	20:32		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
ZZZZZZ	1.00	20:39																										
ZZZZZZ	1.00	20:45																										

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

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METALS
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ANALYSIS RUN LOG

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FTMM-3-GW-M3

Instrument ID Number: Optima ICP 3 Method: P

Start Date: 10/14/2014 End Date: 10/15/2014

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	20:51																										
ZZZZZZ	1.00	20:57																										
ZZZZZZ	5.00	21:03																										
ZZZZZZ	1.00	21:09																										
ZZZZZZ	1.00	21:15																										
ZZZZZZ	1.00	21:21																										
CCV3	1.00	21:28		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
CCB3	1.00	21:34		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
ZZZZZZ	1.00	21:40																										
ZZZZZZ	1.00	21:46																										
ZZZZZZ	1.00	21:52																										
ZZZZZZ	1.00	21:58																										
ZZZZZZ	1.00	22:04																										
ZZZZZZ	1.00	22:10																										
ZZZZZZ	5.00	22:16																										
ZZZZZZ	1.00	22:22																										
ZZZZZZ	1.00	22:28																										
ZZZZZZ	1.00	22:34																										
CCV4	1.00	22:40		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
CCB4	1.00	22:46		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
ZZZZZZ	1.00	22:53																										
FTMM-EB-100314	1.00	22:59		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
FTMM-3-GW-M3MW02-2	1.00	23:05		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
FTMM-3-GW-M3MW02-2	1.00	23:11		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
FTMM-3-GW-M3MW02-2	1.00	23:17		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
FTMM-3-GW-M3MW02-2	1.00	23:23		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
FTMM-3-GW-M3MW02-2	5.00	23:29		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
FTMM-3-GW-M3MW102-	1.00	23:35		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
FTMM-57-GW-108MW04	1.00	23:41													X													
CCV5	1.00	23:48		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
CCB5	1.00	23:54		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
CRDL2	1.00	00:00		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		
ICS-A2	1.00	00:06		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X		

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

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METALS
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ANALYSIS RUN LOG

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FTMM-3-GW-M3

Instrument ID Number: Optima ICP 3 Method: P

Start Date: 10/14/2014 End Date: 10/15/2014

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ICS-AB2	1.00	00:12		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X	
CCV6	1.00	00:18		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X	
CCB6	1.00	00:25		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X	X	X	

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

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METALS
-14-

ANALYSIS RUN LOG

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FTMM-3-GW-M3

Instrument ID Number: Optima ICP 3 Method: P

Start Date: 10/15/2014 End Date: 10/16/2014

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Calib Blank 1	1.00	14:35										X									X							
Calib Std 1	1.00	14:40										X									X							
Calib Std 2	1.00	14:48																			X							
Calib Std 3	1.00	14:54										X																
Calib Std 4	1.00	14:59										X									X							
Calib Std 5	1.00	15:05										X									X							
ICV1	1.00	15:11										X									X							
ICB1	1.00	15:17										X									X							
ZZZZZZ	1.00	15:23																										
ZZZZZZ	1.00	15:29																										
ZZZZZZ	1.00	15:35																										
ZZZZZZ	1.00	15:41																										
ZZZZZZ	1.00	15:47																										
ZZZZZZ	1.00	15:53																										
ZZZZZZ	1.00	15:59																										
ZZZZZZ	1.00	16:05																										
ZZZZZZ	1.00	16:11																										
ZZZZZZ	1.00	16:17																										
ZZZZZZ	1.00	16:23																										
ZZZZZZ	1.00	16:29																										
ZZZZZZ	1.00	16:35																										
ZZZZZZ	1.00	16:41																										
ZZZZZZ	5.00	16:47																										
ZZZZZZ	1.00	16:53																										
ZZZZZZ	1.00	16:59																										
ZZZZZZ	100.00	17:05																										
ZZZZZZ	1.00	17:11																										
ZZZZZZ	1.00	17:17																										
ZZZZZZ	1.00	17:23																										
ZZZZZZ	1.00	17:29																										
ZZZZZZ	1.00	17:35																										
ZZZZZZ	5.00	17:42																										
ZZZZZZ	1.00	17:48																										

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

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METALS
-14-

ANALYSIS RUN LOG

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FTMM-3-GW-M3

Instrument ID Number: Optima ICP 3 Method: P

Start Date: 10/15/2014 End Date: 10/16/2014

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	17:54																										
ZZZZZZ	1.00	18:00																										
ZZZZZZ	1.00	18:06																										
ZZZZZZ	1.00	18:12																										
ZZZZZZ	1.00	18:18																										
ZZZZZZ	1.00	18:24																										
ZZZZZZ	1.00	18:30																										
ZZZZZZ	1.00	18:36																										
ZZZZZZ	1.00	18:42																										
ZZZZZZ	1.00	18:49																										
ZZZZZZ	1.00	18:55																										
ZZZZZZ	5.00	19:01																										
ZZZZZZ	1.00	19:07																										
ZZZZZZ	1.00	19:13																										
ZZZZZZ	1.00	19:19																										
ZZZZZZ	1.00	19:25																										
ZZZZZZ	1.00	19:31																										
ZZZZZZ	1.00	19:37																										
ZZZZZZ	1.00	19:43																										
ZZZZZZ	1.00	19:49																										
ZZZZZZ	1.00	19:54																										
ZZZZZZ	1.00	20:00																										
ZZZZZZ	1.00	20:06																										
ZZZZZZ	1.00	20:12																										
ZZZZZZ	1.00	20:18																										
ZZZZZZ	1.00	20:24																										
ZZZZZZ	1.00	20:30																										
ZZZZZZ	1.00	20:36																										
ZZZZZZ	1.00	20:42																										
ZZZZZZ	1.00	20:48																										
ZZZZZZ	1.00	20:54																										
ZZZZZZ	1.00	21:00																										
ZZZZZZ	1.00	21:06																										

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

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METALS
-14-

ANALYSIS RUN LOG

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FTMM-3-GW-M3

Instrument ID Number: Optima ICP 3 Method: P

Start Date: 10/15/2014 End Date: 10/16/2014

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	21:12																										
ZZZZZZ	1.00	21:18																										
ZZZZZZ	1.00	21:24																										
ZZZZZZ	1.00	21:30																										
ZZZZZZ	1.00	21:36																										
ZZZZZZ	1.00	21:42																										
ZZZZZZ	1.00	21:48																										
ZZZZZZ	1.00	21:54																										
ZZZZZZ	5.00	22:01																										
ZZZZZZ	1.00	22:07																										
ZZZZZZ	1.00	22:13																										
ZZZZZZ	1.00	22:19																										
ZZZZZZ	1.00	22:25																										
ZZZZZZ	1.00	22:31																										
ZZZZZZ	1.00	22:37																										
ZZZZZZ	1.00	22:43																										
ZZZZZZ	1.00	22:49																										
ZZZZZZ	1.00	22:55																										
ZZZZZZ	1.00	23:02																										
ZZZZZZ	1.00	23:08																										
CCV1	1.00	23:14										X									X							
CCB1	1.00	23:20										X									X							
CRDL1	1.00	23:26										X									X							
ICS-A1	1.00	23:32										X									X							
ICS-AB1	1.00	23:38										X									X							
CCV2	1.00	23:44										X									X							
CCB2	1.00	23:50										X									X							
ZZZZZZ	1.00	23:56																										
ZZZZZZ	1.00	00:02																										
ZZZZZZ	1.00	00:08																										
ZZZZZZ	1.00	00:15																										
ZZZZZZ	5.00	00:21																										
ZZZZZZ	1.00	00:27																										

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

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METALS
-14-

ANALYSIS RUN LOG

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FTMM-3-GW-M3

Instrument ID Number: Optima ICP 3 Method: P

Start Date: 10/15/2014 End Date: 10/16/2014

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
PBW	1.00	00:33										X									X							
LCSW	1.00	00:39										X									X							
FTMM-EB-100314	1.00	00:45										X									X							
FTMM-3-GW-M3MW02-2	1.00	00:51										X									X							
CCV3	1.00	00:57										X									X							
CCB3	1.00	01:04										X									X							
FTMM-3-GW-M3MW02-2	1.00	01:10										X									X							
FTMM-3-GW-M3MW02-2	1.00	01:16										X									X							
FTMM-3-GW-M3MW02-2	1.00	01:22										X									X							
FTMM-3-GW-M3MW02-2	5.00	01:28										X									X							
FTMM-3-GW-M3MW102-	1.00	01:34										X									X							
ZZZZZZ	1.00	01:40																										
ZZZZZZ	5.00	01:46																										
ZZZZZZ	1.00	01:52																										
ZZZZZZ	1.00	01:58																										
ZZZZZZ	1.00	02:04																										
CCV4	1.00	02:10										X									X							
CCB4	1.00	02:17										X									X							
ZZZZZZ	1.00	02:23																										
ZZZZZZ	1.00	02:29																										
ZZZZZZ	1.00	02:35																										
ZZZZZZ	5.00	02:41																										
ZZZZZZ	1.00	02:48																										
ZZZZZZ	5.00	02:54																										
ZZZZZZ	1.00	03:00																										
ZZZZZZ	5.00	03:06																										
ZZZZZZ	1.00	03:13																										
ZZZZZZ	10.00	03:19																										
CCV5	1.00	03:25										X									X							
CCB5	1.00	03:31										X									X							
ZZZZZZ	1.00	03:37																										
ZZZZZZ	1.00	03:44																										
ZZZZZZ	1.00	03:50																										

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

00602

METALS
-14-

ANALYSIS RUN LOG

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FTMM-3-GW-M3

Instrument ID Number: Optima ICP 3 Method: P

Start Date: 10/15/2014 End Date: 10/16/2014

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	03:56																										
ZZZZZZ	1.00	04:03																										
ZZZZZZ	1.00	04:09																										
ZZZZZZ	1.00	04:15																										
CCV6	1.00	04:21										X									X							
CCB6	1.00	04:27										X									X							
CRDL2	1.00	04:33										X									X							
ICS-A2	1.00	04:39										X									X							
ICS-AB2	1.00	04:46										X									X							
CCV7	1.00	04:52										X									X							
CCB7	1.00	04:58										X									X							

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

00603

METALS
-14-

ANALYSIS RUN LOG

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FTMM-3-GW-M3

Instrument ID Number: PE FAA/CVAA Method: CV

Start Date: 10/10/2014 End Date: 10/10/2014

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Calib Blank	1.00	10:38																X									
0.2ppb std	1.00	10:40																X									
0.5ppb std	1.00	10:41																X									
1.0ppb std	1.00	10:43																X									
2.0ppb std	1.00	10:45																X									
5.0ppb std	1.00	10:46																X									
10.0ppb std	1.00	10:48																X									
ICV1	1.00	10:50																X									
ICB1	1.00	10:51																X									
CRDL1	1.00	10:53																X									
CCV1	1.00	10:54																X									
CCB1	1.00	10:56																X									
ZZZZZZ	1.00	10:58																									
ZZZZZZ	1.00	10:59																									
ZZZZZZ	1.00	11:01																									
ZZZZZZ	1.00	11:03																									
ZZZZZZ	1.00	11:04																									
ZZZZZZ	1.00	11:06																									
ZZZZZZ	1.00	11:08																									
ZZZZZZ	1.00	11:09																									
CCV2	1.00	11:11																X									
CCB2	1.00	11:12																X									
PBW	1.00	11:14																X									
LCSW	1.00	11:16																X									
FTMM-EB-100314	1.00	11:17																X									
FTMM-3-GW-M3MW02-2	1.00	11:19																X									
FTMM-3-GW-M3MW02-2	1.00	11:21																X									
FTMM-3-GW-M3MW02-2	1.00	11:22																X									
FTMM-3-GW-M3MW102-	1.00	11:24																X									
ZZZZZZ	1.00	11:26																									
ZZZZZZ	1.00	11:27																									
ZZZZZZ	1.00	11:29																									
CCV3	1.00	11:30																X									

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

00604

METALS
-14-

ANALYSIS RUN LOG

Contract: R1407825

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: FTMM-3-GW-M3

Instrument ID Number: PE FAA/CVAA Method: CV

Start Date: 10/10/2014 End Date: 10/10/2014

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB3	1.00	11:32																X								
ZZZZZZ	1.00	11:34																								
ZZZZZZ	1.00	11:35																								
ZZZZZZ	1.00	11:37																								
ZZZZZZ	1.00	11:39																								
ZZZZZZ	1.00	11:40																								
ZZZZZZ	1.00	11:42																								
ZZZZZZ	1.00	11:44																								
ZZZZZZ	1.00	11:45																								
ZZZZZZ	1.00	11:47																								
ZZZZZZ	1.00	11:49																								
CCV4	1.00	11:50																X								
CCB4	1.00	11:52																X								
ZZZZZZ	1.00	11:53																								
ZZZZZZ	1.00	11:55																								
CRDL2	1.00	11:57																X								
CCV5	1.00	11:58																X								
CCB5	1.00	12:00																X								

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

00605

Metals Cover Page

Analyst: DCB **Date:** 10/14/14 **Instrument:** Opt 3

Data File: 30ct 14A **Reviewed By:** DCB **Entered By:** DCB

Approval: CL 10/15/14

Starlims Run #	Analytes Used	Batch ID	Method	Failed Analytes	Repeats
416266	Ca Na	220161	6010		
416267	Ag Al B Cd Cr Co Fe Ca K	220481	200.7		
	Mg Mn Mo Na Ni Pb Se Zn				
416268	TAL - Se	220154	6010	Se	~~R7825-011Ca~~

Package Data:

Client Sub#	TIER	Analytes Used	Batch ID	Raw Data Copied?
R 7780	III / (IV) / ILM	Ca Na	220161	Yes / No
R 7813	III / (IV) / ILM	As Cd Pb	220154	Yes / No
R 7825-1	III / (IV) / ILM	DOD-MM TAL - Se, Co	220154	Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No

Method: DV200-6010C Opt3 Page 1 Date: 10/14/2014 2:10:04 PM

Analysis Begun

Start Time: 10/14/2014 2:06:26 PM Plasma On Time: 10/14/2014 1:24:58 PM
Logged In Analyst: alrce.metals03 Technique: ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077N6051602 Autosampler Model: AS-93plus

Sample Information File: C:\pe\Optima5300\Sample Information\ROUTINE2.sif
Batch ID: r
Results Data Set: 30ct14a
Results Library: C:\pe\Optima5300\Results\Oct14.mdb

10/14/14
DCS

Method Loaded
Method Name: DV200-6010C Opt3 Method Last Saved: 9/22/2014 7:35:33 AM
IEC File: DV072914.iec MSF File:
Method Description: 5300DV TAL Metals Method 200.7/6010C-Optima 3

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Al 308.215	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
B 249.772	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Cd 226.502	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Fe 259.939	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
K 766.490	Lin Thru 0	Peak Area	Radial	Y 371.029	Yes
Mg 279.077	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Ni 231.604	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Na 589.592	Lin Thru 0	Peak Area	Radial	Y 371.029	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Se 196.026	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Ti 337.279	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 206.200	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Ca 227.546	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Y 371.029	Yes
Al 394.401	Lin Thru 0	Peak Area	Axial	Y 371.029	No
Al 237.313	Lin Thru 0	Peak Area	Axial	Y 371.029	No

Sequence No.: 1 Autosampler Location: 1
Sample ID: Calib Blank 1 Date Collected: 10/14/2014 2:06:27 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: Calib Blank 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	6731549.1	33067.67	0.49%	1.000	mg/L
Ag 328.068†	-249.6	50.30	20.15%	[0.00]	mg/L
Al 308.215†	10812.9	17.64	0.16%	[0.00]	mg/L
As 188.979†	7.1	1.29	18.30%	[0.00]	mg/L
B 249.772†	746.9	85.95	11.51%	[0.00]	mg/L
Ba 233.527†	-463.9	6.09	1.31%	[0.00]	mg/L
Be 313.107†	-12568.9	4.32	0.03%	[0.00]	mg/L
Cd 226.502†	-198.6	6.84	3.44%	[0.00]	mg/L
Co 228.616†	-49.0	2.84	5.80%	[0.00]	mg/L
Cr 267.716†	-313.0	0.55	0.17%	[0.00]	mg/L

00607

Method: DV200-6010C Opt3 Page 2 Date: 10/14/2014 2:21:38 PM

Cu 324.752†	7807.5	6.00	0.08%	[0.00]	mg/L
Fe 259.939†	-1562.5	18.54	1.19%	[0.00]	mg/L
K 766.490†	609.6	10.44	1.71%	[0.00]	mg/L
Mg 279.077†	-3096.8	29.00	0.94%	[0.00]	mg/L
Mn 257.610†	-937.0	13.80	1.47%	[0.00]	mg/L
Mo 202.031†	19.3	0.86	4.44%	[0.00]	mg/L
Ni 231.604†	-254.3	8.13	3.20%	[0.00]	mg/L
Na 589.592†	118.8	2.27	1.91%	[0.00]	mg/L
Pb 220.353†	-27.1	3.43	12.65%	[0.00]	mg/L
Sb 206.836†	46.3	0.72	1.56%	[0.00]	mg/L
Se 196.026†	-0.6	1.32	239.53%	[0.00]	mg/L
Sn 189.927†	58.1	3.00	5.16%	[0.00]	mg/L
Ti 337.279†	236.4	25.94	10.97%	[0.00]	mg/L
Tl 190.801†	11.6	5.19	44.79%	[0.00]	mg/L
V 292.402†	62.8	11.93	19.02%	[0.00]	mg/L
Zn 206.200†	58.6	0.84	1.43%	[0.00]	mg/L
Ca 227.546†	-63.5	0.38	0.59%	[0.00]	mg/L
Sr 421.552†	150.8	0.97	0.65%	[0.00]	mg/L
Al 394.401†	170.9	29.38	17.19%	[0.00]	mg/L
Al 237.313†	141.3	9.90	7.01%	[0.00]	mg/L

Sequence No.: 2 **Autosampler Location: 9**
Sample ID: Calib Std 1 **Date Collected: 10/14/2014 2:12:23 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: Calib Std 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	6719102.8	16171.72	0.24%	0.9982	mg/L
As 188.979†	6.0	1.36	22.69%	[0.0050]	mg/L
Ba 233.527†	1695.8	1.72	0.10%	[0.0200]	mg/L
Cd 226.502†	86.5	0.95	1.09%	[0.0010]	mg/L
Co 228.616†	56.9	2.56	4.50%	[0.0030]	mg/L
Cr 267.716†	122.1	12.27	10.06%	[0.0010]	mg/L
Cu 324.752†	2542.3	30.00	1.18%	[0.0100]	mg/L
Mn 257.610†	3612.5	9.78	0.27%	[0.0100]	mg/L
Mo 202.031†	422.4	3.99	0.95%	[0.0250]	mg/L
Ni 231.604†	186.7	1.08	0.58%	[0.0050]	mg/L
Pb 220.353†	29.4	1.83	6.22%	[0.0050]	mg/L
Sb 206.836†	21.3	1.54	7.25%	[0.0100]	mg/L
Se 196.026†	5.2	1.89	36.54%	[0.0050]	mg/L
Tl 190.801†	16.7	0.80	4.82%	[0.0100]	mg/L
V 292.402†	188.9	30.66	16.23%	[0.0030]	mg/L
Zn 206.200†	282.6	0.62	0.22%	[0.0100]	mg/L

Sequence No.: 3 **Autosampler Location: 10**
Sample ID: Calib Std 2 **Date Collected: 10/14/2014 2:18:02 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: Calib Std 2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	6728928.2	33689.19	0.50%	0.9996	mg/L
Al 308.215†	1533.0	33.21	2.17%	[0.100]	mg/L
As 188.979†	13.7	1.33	9.68%	[0.0100]	mg/L
B 249.772†	20806.4	183.40	0.88%	[0.200]	mg/L
Be 313.107†	7052.9	165.35	2.34%	[0.0030]	mg/L
Cd 226.502†	331.0	0.71	0.21%	[0.005]	mg/L
Cu 324.752†	5198.6	95.08	1.83%	[0.0200]	mg/L
K 766.490†	1354.7	1.21	0.09%	[2.000]	mg/L
Mg 279.077†	10280.9	71.32	0.69%	[1.000]	mg/L
Na 589.592†	5440.5	19.03	0.35%	[1.000]	mg/L
Sb 206.836†	119.4	0.42	0.35%	[0.060]	mg/L
Se 196.026†	9.4	0.76	8.02%	[0.0100]	mg/L

00608

Method: DV200-6010C Opt3 Page 3 Date: 10/14/2014 2:33:28 PM

Sn 189.927†	2344.7	15.40	0.66%	[0.500]	mg/L
Ca 227.546†	162.4	1.93	1.19%	[1.000]	mg/L
Al 394.401†	3539.9	86.63	2.45%	[0.1000]	mg/L
Al 237.313†	582.8	2.20	0.38%	[0.1000]	mg/L

Sequence No.: 4
Sample ID: Calib Std 3
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 10/14/2014 2:23:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	6780545.7	20440.31	0.30%	1.007	mg/L
Ag 328.068†	2917.8	13.66	0.47%	[0.0100]	mg/L
B 249.772†	5826.2	25.89	0.44%	[0.0500]	mg/L
Be 313.107†	16360.7	88.28	0.54%	[0.0050]	mg/L
Co 228.616†	1272.0	2.25	0.18%	[0.050]	mg/L
Cr 267.716†	1356.4	6.24	0.46%	[0.010]	mg/L
Fe 259.939†	6437.6	7.80	0.12%	[0.1000]	mg/L
K 766.490†	373.9	34.78	9.30%	[0.5000]	mg/L
Mg 279.077†	5796.3	8.65	0.15%	[0.5000]	mg/L
Ni 231.604†	1958.5	6.68	0.34%	[0.0400]	mg/L
Na 589.592†	3116.5	55.96	1.80%	[0.5000]	mg/L
Sn 189.927†	543.7	0.12	0.02%	[0.1000]	mg/L
Ti 337.279†	32440.1	409.06	1.26%	[0.0500]	mg/L
V 292.402†	3903.1	56.39	1.44%	[0.050]	mg/L
Zn 206.200†	687.4	3.70	0.54%	[0.020]	mg/L
Ca 227.546†	90.1	1.68	1.86%	[0.5000]	mg/L
Sr 421.552†	6428.8	26.34	0.41%	[0.0500]	mg/L

Sequence No.: 5
Sample ID: Calib Std 4
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 10/14/2014 2:29:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	6735283.4	37093.22	0.55%	1.001	mg/L
Ag 328.068†	57720.5	475.32	0.82%	[0.2000]	mg/L
Al 308.215†	63095.8	1011.10	1.60%	[4.0000]	mg/L
As 188.979†	572.6	6.60	1.15%	[0.4000]	mg/L
B 249.772†	122447.8	457.08	0.37%	[1.0000]	mg/L
Ba 233.527†	397708.1	4974.18	1.25%	[4.0000]	mg/L
Be 313.107†	330460.9	4328.51	1.31%	[0.1000]	mg/L
Cd 226.502†	19177.0	79.28	0.41%	[0.2000]	mg/L
Co 228.616†	25292.0	165.25	0.65%	[1.0000]	mg/L
Cr 267.716†	26834.2	150.60	0.56%	[0.2000]	mg/L
Cu 324.752†	147884.8	2131.38	1.44%	[0.5000]	mg/L
Fe 259.939†	129426.0	1146.36	0.89%	[2.0000]	mg/L
K 766.490†	7636.2	22.30	0.29%	[10.000]	mg/L
Mg 279.077†	117432.7	1140.45	0.97%	[10.000]	mg/L
Mn 257.610†	119079.5	1067.24	0.90%	[0.3000]	mg/L
Mo 202.031†	19122.3	167.31	0.87%	[1.0000]	mg/L
Ni 231.604†	39325.8	294.12	0.75%	[0.8000]	mg/L
Na 589.592†	62175.2	261.67	0.42%	[10.000]	mg/L
Pb 220.353†	1371.3	15.00	1.09%	[0.2000]	mg/L
Sb 206.836†	4440.0	38.34	0.86%	[2.0000]	mg/L
Se 196.026†	188.7	3.29	1.75%	[0.2000]	mg/L
Sn 189.927†	10884.4	119.45	1.10%	[2.0000]	mg/L
Ti 337.279†	642045.7	4415.36	0.69%	[1.0000]	mg/L
Tl 190.801†	819.8	2.81	0.34%	[0.4000]	mg/L
V 292.402†	75992.5	622.47	0.82%	[1.0000]	mg/L
Zn 206.200†	13891.3	127.11	0.92%	[0.4000]	mg/L
Ca 227.546†	1987.4	12.61	0.63%	[10.000]	mg/L

00609

Method: DV200-6010C Opt3 Page 4 Date: 10/14/2014 2:39:40 PM

Sr 421.552†	130609.2	290.83	0.22%	[1.0000] mg/L
Al 394.401†	171925.5	2851.91	1.66%	[4.0000] mg/L
Al 237.313†	27105.1	347.41	1.28%	[4.0000] mg/L

Sequence No.: 6
Sample ID: Calib Std 5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 10/14/2014 2:35:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	6562953.9	18473.53	0.28%	0.9750	mg/L
Ag 328.068†	251711.5	3008.34	1.20%	[1.0000]	mg/L
Al 308.215†	292731.5	5227.11	1.79%	[20.000]	mg/L
As 188.979†	2503.4	0.12	0.00%	[2.0000]	mg/L
B 249.772†	543622.7	13228.16	2.43%	[5.0000]	mg/L
Ba 233.527†	1676488.2	7336.88	0.44%	[20.000]	mg/L
Be 313.107†	1434053.7	5432.21	0.38%	[0.5000]	mg/L
Cd 226.502†	81232.3	1005.72	1.24%	[1.0000]	mg/L
Co 228.616†	108677.5	1461.21	1.34%	[5.0000]	mg/L
Cr 267.716†	114580.2	1320.00	1.15%	[1.0000]	mg/L
Cu 324.752†	659236.0	12686.84	1.92%	[2.5000]	mg/L
Fe 259.939†	552668.5	7860.66	1.42%	[10.000]	mg/L
K 766.490†	33178.2	42.55	0.13%	[50.000]	mg/L
Mg 279.077†	511643.2	6474.66	1.27%	[50.000]	mg/L
Mn 257.610†	510819.6	6919.95	1.35%	[1.5000]	mg/L
Mo 202.031†	82461.3	1079.79	1.31%	[5.0000]	mg/L
Ni 231.604†	166501.0	2093.01	1.26%	[4.0000]	mg/L
Na 589.592†	272770.8	2313.73	0.85%	[50.000]	mg/L
Pb 220.353†	5959.8	3.23	0.05%	[1.0000]	mg/L
Sb 206.836†	19440.7	85.74	0.44%	[10.000]	mg/L
Se 196.026†	820.9	3.67	0.45%	[1.0000]	mg/L
Sn 189.927†	47438.0	748.86	1.58%	[10.000]	mg/L
Ti 337.279†	2767563.5	5221.47	0.19%	[5.0000]	mg/L
Tl 190.801†	3640.2	9.04	0.25%	[2.0000]	mg/L
V 292.402†	324585.9	4810.88	1.48%	[5.0000]	mg/L
Zn 206.200†	58733.9	667.67	1.14%	[2.0000]	mg/L
Ca 227.546†	9230.0	84.62	0.92%	[50.000]	mg/L
Sr 421.552†	576199.4	822.62	0.14%	[5.0000]	mg/L
Al 394.401†	808524.4	15329.14	1.90%	[20.000]	mg/L
Al 237.313†	121390.5	1929.26	1.59%	[20.000]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	253100	0.00000	0.999606	
Al 308.215	3	Lin Thru 0	0.0	14680	0.00000	0.999889	
As 188.979	4	Lin Thru 0	0.0	1259	0.00000	0.999623	
B 249.772	4	Lin Thru 0	0.0	109200	0.00000	0.999707	
Ba 233.527	3	Lin Thru 0	0.0	84420	0.00000	0.999369	
Be 313.107	4	Lin Thru 0	0.0	2885000	0.00000	0.999576	
Cd 226.502	4	Lin Thru 0	0.0	81800	0.00000	0.999407	
Co 228.616	4	Lin Thru 0	0.0	21870	0.00000	0.999510	
Cr 267.716	4	Lin Thru 0	0.0	115300	0.00000	0.999465	
Cu 324.752	4	Lin Thru 0	0.0	264900	0.00000	0.999729	
Fe 259.939	3	Lin Thru 0	0.0	55630	0.00000	0.999466	
K 766.490	4	Lin Thru 0	0.0	667.4	0.00000	0.999584	
Mg 279.077	4	Lin Thru 0	0.0	10290	0.00000	0.999601	
Mn 257.610	3	Lin Thru 0	0.0	342700	0.00000	0.999500	
Mo 202.031	3	Lin Thru 0	0.0	16590	0.00000	0.999536	
Ni 231.604	4	Lin Thru 0	0.0	41920	0.00000	0.999402	
Na 589.592	4	Lin Thru 0	0.0	5485	0.00000	0.999642	
Pb 220.353	3	Lin Thru 0	0.0	5994	0.00000	0.999587	
Sb 206.836	4	Lin Thru 0	0.0	1955	0.00000	0.999632	
Se 196.026	4	Lin Thru 0	0.0	825.6	0.00000	0.999589	
Sn 189.927	4	Lin Thru 0	0.0	4771	0.00000	0.999604	
Ti 337.279	3	Lin Thru 0	0.0	556900	0.00000	0.999532	

00610

Method: DV200-6010C Opt3 Page 5 Date: 10/14/2014 2:45:41 PM

Tl 190.801	3	Lin Thru 0	0.0	1829	0.00000	0.999709
V 292.402	4	Lin Thru 0	0.0	65340	0.00000	0.999467
Zn 206.200	4	Lin Thru 0	0.0	29570	0.00000	0.999392
Ca 227.546	4	Lin Thru 0	0.0	185.1	0.00000	0.999889
Sr 421.552	3	Lin Thru 0	0.0	115800	0.00000	0.999674
Al 394.401	3	Lin Thru 0	0.0	40520	0.00000	0.999926
Al 237.313	3	Lin Thru 0	0.0	6097	0.00000	0.999752

Sequence No.: 7
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 10/14/2014 2:41:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6659470.3	0.9893	mg/L	0.00190				0.19%
Ag 328.068†	128496.0	0.5090	mg/L	0.00070	0.5090	mg/L	0.00070	0.14%
QC value within limits for Ag 328.068 Recovery = 101.81%								
Al 308.215†	143473.8	9.772	mg/L	0.0324	9.772	mg/L	0.0324	0.33%
QC value within limits for Al 308.215 Recovery = 97.72%								
As 188.979†	1254.7	0.9965	mg/L	0.00113	0.9965	mg/L	0.00113	0.11%
QC value within limits for As 188.979 Recovery = 99.65%								
B 249.772†	275393.7	2.495	mg/L	0.0140	2.495	mg/L	0.0140	0.56%
QC value within limits for B 249.772 Recovery = 99.78%								
Ba 233.527†	870374.8	10.31	mg/L	0.016	10.31	mg/L	0.016	0.15%
QC value within limits for Ba 233.527 Recovery = 103.10%								
Be 313.107†	726745.8	0.2519	mg/L	0.00032	0.2519	mg/L	0.00032	0.13%
QC value within limits for Be 313.107 Recovery = 100.76%								
Cd 226.502†	42292.5	0.5164	mg/L	0.00349	0.5164	mg/L	0.00349	0.68%
QC value within limits for Cd 226.502 Recovery = 103.27%								
Co 228.616†	55536.8	2.539	mg/L	0.0090	2.539	mg/L	0.0090	0.35%
QC value within limits for Co 228.616 Recovery = 101.56%								
Cr 267.716†	59626.9	0.5197	mg/L	0.00118	0.5197	mg/L	0.00118	0.23%
QC value within limits for Cr 267.716 Recovery = 103.94%								
Cu 324.752†	331247.2	1.251	mg/L	0.0071	1.251	mg/L	0.0071	0.57%
QC value within limits for Cu 324.752 Recovery = 100.06%								
Fe 259.939†	283935.7	5.104	mg/L	0.0061	5.104	mg/L	0.0061	0.12%
QC value within limits for Fe 259.939 Recovery = 102.08%								
K 766.490†	16362.1	24.51	mg/L	0.091	24.51	mg/L	0.091	0.37%
QC value within limits for K 766.490 Recovery = 98.06%								
Mg 279.077†	259584.5	25.22	mg/L	0.053	25.22	mg/L	0.053	0.21%
QC value within limits for Mg 279.077 Recovery = 100.90%								
Mn 257.610†	262410.2	0.7664	mg/L	0.00090	0.7664	mg/L	0.00090	0.12%
QC value within limits for Mn 257.610 Recovery = 102.18%								
Mo 202.031†	40998.1	2.471	mg/L	0.0009	2.471	mg/L	0.0009	0.04%
QC value within limits for Mo 202.031 Recovery = 98.83%								
Ni 231.604†	86039.6	2.053	mg/L	0.0069	2.053	mg/L	0.0069	0.34%
QC value within limits for Ni 231.604 Recovery = 102.63%								
Na 589.592†	134386.0	24.50	mg/L	0.089	24.50	mg/L	0.089	0.36%
QC value within limits for Na 589.592 Recovery = 98.01%								
Pb 220.353†	2997.2	0.5009	mg/L	0.00020	0.5009	mg/L	0.00020	0.04%
QC value within limits for Pb 220.353 Recovery = 100.19%								
Sb 206.836†	9785.3	5.005	mg/L	0.0028	5.005	mg/L	0.0028	0.06%
QC value within limits for Sb 206.836 Recovery = 100.10%								
Se 196.026†	413.3	0.5019	mg/L	0.00289	0.5019	mg/L	0.00289	0.58%
QC value within limits for Se 196.026 Recovery = 100.38%								
Sn 189.927†	24537.0	5.142	mg/L	0.0186	5.142	mg/L	0.0186	0.36%
QC value within limits for Sn 189.927 Recovery = 102.85%								
Ti 337.279†	1377744.5	2.474	mg/L	0.0026	2.474	mg/L	0.0026	0.11%
QC value within limits for Ti 337.279 Recovery = 98.95%								
Tl 190.801†	1820.0	0.9946	mg/L	0.00134	0.9946	mg/L	0.00134	0.13%
QC value within limits for Tl 190.801 Recovery = 99.46%								
V 292.402†	165278.0	2.529	mg/L	0.0089	2.529	mg/L	0.0089	0.35%
QC value within limits for V 292.402 Recovery = 101.16%								
Zn 206.200†	30534.5	1.032	mg/L	0.0081	1.032	mg/L	0.0081	0.79%
QC value within limits for Zn 206.200 Recovery = 103.25%								
Ca 227.546†	4387.9	24.03	mg/L	0.031	24.03	mg/L	0.031	0.13%
QC value within limits for Ca 227.546 Recovery = 96.11%								

00611

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Sr 421.552†	274726.1	2.372 mg/L	0.0123	2.372 mg/L	0.0123	0.52%
QC value less than the lower limit for Sr 421.552 Recovery = 94.87%						
Al 394.401†	392841.4	9.694 mg/L	0.0268	9.694 mg/L	0.0268	0.28%
QC value within limits for Al 394.401 Recovery = 96.94%						
Al 237.313†	60776.9	9.969 mg/L	0.0219	9.969 mg/L	0.0219	0.22%
QC value within limits for Al 237.313 Recovery = 99.69%						

QC Failed. Continue with analysis.

Sequence No.: 8
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 10/14/2014 2:48:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6744817.0	1.002	mg/L	0.0025				0.25%
Ag 328.068†	59.0	0.0002	mg/L	0.00010	0.0002	mg/L	0.00010	40.51%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	472.4	0.0322	mg/L	0.00728	0.0322	mg/L	0.00728	22.62%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.1	0.0009	mg/L	0.00176	0.0009	mg/L	0.00176	199.61%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	4982.6	0.0456	mg/L	0.00548	0.0456	mg/L	0.00548	12.03%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	936.7	0.0111	mg/L	0.00341	0.0111	mg/L	0.00341	30.72%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	607.8	0.0002	mg/L	0.00004	0.0002	mg/L	0.00004	17.88%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	49.7	0.0006	mg/L	0.00020	0.0006	mg/L	0.00020	32.48%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	78.2	0.0036	mg/L	0.00114	0.0036	mg/L	0.00114	32.02%
QC value greater than the upper limit for Co 228.616 Recovery = Not calculated								
Cr 267.716†	73.5	0.0006	mg/L	0.00013	0.0006	mg/L	0.00013	21.04%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1959.5	0.0074	mg/L	0.00097	0.0074	mg/L	0.00097	13.14%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	444.3	0.0080	mg/L	0.00179	0.0080	mg/L	0.00179	22.45%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	50.2	0.0752	mg/L	0.04159	0.0752	mg/L	0.04159	55.33%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	260.2	0.0253	mg/L	0.00575	0.0253	mg/L	0.00575	22.74%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	369.6	0.0011	mg/L	0.00024	0.0011	mg/L	0.00024	22.53%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	44.9	0.0027	mg/L	0.00098	0.0027	mg/L	0.00098	36.04%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	134.5	0.0032	mg/L	0.00094	0.0032	mg/L	0.00094	29.35%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	209.4	0.0382	mg/L	0.00241	0.0382	mg/L	0.00241	6.32%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	7.6	0.0013	mg/L	0.00098	0.0013	mg/L	0.00098	77.08%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	10.2	0.0052	mg/L	0.00183	0.0052	mg/L	0.00183	35.02%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	3.4	0.0041	mg/L	0.00309	0.0041	mg/L	0.00309	75.85%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	84.3	0.0177	mg/L	0.00338	0.0177	mg/L	0.00338	19.10%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	1351.5	0.0024	mg/L	0.00011	0.0024	mg/L	0.00011	4.47%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	2.2	0.0012	mg/L	0.00021	0.0012	mg/L	0.00021	18.00%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	148.9	0.0023	mg/L	0.00007	0.0023	mg/L	0.00007	3.13%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	77.3	0.0026	mg/L	0.00021	0.0026	mg/L	0.00021	8.08%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	-0.3	-0.0008	mg/L	0.04259	-0.0008	mg/L	0.04259	>999.9%
QC value within limits for Ca 227.546 Recovery = Not calculated								

00612

Method: DV200-6010C Opt3 **Page 7** **Date: 10/14/2014 2:57:54 PM**

Sr 421.552†	310.1	0.0027 mg/L	0.00002	0.0027 mg/L	0.00002	0.67%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 394.401†	354.6	0.0088 mg/L	0.00012	0.0088 mg/L	0.00012	1.37%
QC value within limits for Al 394.401 Recovery = Not calculated						
Al 237.313†	56.5	0.0093 mg/L	0.00282	0.0093 mg/L	0.00282	30.46%
QC value within limits for Al 237.313 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 9
Sample ID: MRL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 10/14/2014 2:54:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6758719.2	1.004	mg/L	0.0045				0.45%
Ag 328.068†	2501.0	0.0099	mg/L	0.00003	0.0099	mg/L	0.00003	0.27%
QC value within limits for Ag 328.068 Recovery = 99.10%								
Al 308.215†	2996.5	0.2041	mg/L	0.00838	0.2041	mg/L	0.00838	4.11%
QC value within limits for Al 308.215 Recovery = 102.03%								
As 188.979†	24.6	0.0196	mg/L	0.00075	0.0196	mg/L	0.00075	3.85%
QC value within limits for As 188.979 Recovery = 97.81%								
B 249.772†	24145.4	0.2205	mg/L	0.00194	0.2205	mg/L	0.00194	0.88%
QC value within limits for B 249.772 Recovery = 110.23%								
Ba 233.527†	18007.9	0.2133	mg/L	0.00030	0.2133	mg/L	0.00030	0.14%
QC value within limits for Ba 233.527 Recovery = 106.65%								
Be 313.107†	14704.2	0.0051	mg/L	0.00003	0.0051	mg/L	0.00003	0.66%
QC value within limits for Be 313.107 Recovery = 101.94%								
Cd 226.502†	878.7	0.0107	mg/L	0.00003	0.0107	mg/L	0.00003	0.25%
QC value within limits for Cd 226.502 Recovery = 107.29%								
Co 228.616†	1143.4	0.0523	mg/L	0.00005	0.0523	mg/L	0.00005	0.09%
QC value within limits for Co 228.616 Recovery = 104.55%								
Cr 267.716†	1203.7	0.0105	mg/L	0.00005	0.0105	mg/L	0.00005	0.46%
QC value within limits for Cr 267.716 Recovery = 105.39%								
Cu 324.752†	7387.5	0.0279	mg/L	0.00033	0.0279	mg/L	0.00033	1.17%
QC value within limits for Cu 324.752 Recovery = 111.58%								
Fe 259.939†	5950.9	0.1070	mg/L	0.00044	0.1070	mg/L	0.00044	0.41%
QC value within limits for Fe 259.939 Recovery = 106.97%								
K 766.490†	631.1	0.9455	mg/L	0.02285	0.9455	mg/L	0.02285	2.42%
QC value within limits for K 766.490 Recovery = 94.55%								
Mg 279.077†	10268.6	0.9978	mg/L	0.00337	0.9978	mg/L	0.00337	0.34%
QC value within limits for Mg 279.077 Recovery = 99.78%								
Mn 257.610†	5381.4	0.0157	mg/L	0.00006	0.0157	mg/L	0.00006	0.35%
QC value within limits for Mn 257.610 Recovery = 104.78%								
Mo 202.031†	431.1	0.0260	mg/L	0.00043	0.0260	mg/L	0.00043	1.66%
QC value within limits for Mo 202.031 Recovery = 103.92%								
Ni 231.604†	1748.5	0.0417	mg/L	0.00032	0.0417	mg/L	0.00032	0.76%
QC value within limits for Ni 231.604 Recovery = 104.29%								
Na 589.592†	5551.8	1.012	mg/L	0.0033	1.012	mg/L	0.0033	0.33%
QC value within limits for Na 589.592 Recovery = 101.22%								
Pb 220.353†	63.5	0.0106	mg/L	0.00050	0.0106	mg/L	0.00050	4.68%
QC value within limits for Pb 220.353 Recovery = 106.13%								
Sb 206.836†	119.6	0.0612	mg/L	0.00084	0.0612	mg/L	0.00084	1.37%
QC value within limits for Sb 206.836 Recovery = 101.95%								
Se 196.026†	9.6	0.0116	mg/L	0.00186	0.0116	mg/L	0.00186	16.02%
QC value within limits for Se 196.026 Recovery = 116.31%								
Sn 189.927†	2555.7	0.5357	mg/L	0.00441	0.5357	mg/L	0.00441	0.82%
QC value within limits for Sn 189.927 Recovery = 107.14%								
Ti 337.279†	29242.5	0.0525	mg/L	0.00012	0.0525	mg/L	0.00012	0.23%
QC value within limits for Ti 337.279 Recovery = 105.01%								
Tl 190.801†	33.3	0.0182	mg/L	0.00206	0.0182	mg/L	0.00206	11.33%
QC value within limits for Tl 190.801 Recovery = 90.96%								
V 292.402†	3454.0	0.0529	mg/L	0.00033	0.0529	mg/L	0.00033	0.62%
QC value within limits for V 292.402 Recovery = 105.71%								
Zn 206.200†	592.6	0.0200	mg/L	0.00017	0.0200	mg/L	0.00017	0.86%
QC value within limits for Zn 206.200 Recovery = 100.20%								
Ca 227.546†	161.0	0.8767	mg/L	0.01765	0.8767	mg/L	0.01765	2.01%
QC value within limits for Ca 227.546 Recovery = 87.67%								

00613

Method: DV200-6010C Opt3 **Page 8** **Date: 10/14/2014 3:06:27 PM**

Sr 421.552†	11609.1	0.1002 mg/L	0.00055	0.1002 mg/L	0.00055	0.54%
QC value within limits for Sr 421.552 Recovery = 100.22%						
Al 394.401†	7179.1	0.1772 mg/L	0.00026	0.1772 mg/L	0.00026	0.15%
QC value within limits for Al 394.401 Recovery = 88.58%						
Al 237.313†	1173.6	0.1925 mg/L	0.00035	0.1925 mg/L	0.00035	0.18%
QC value within limits for Al 237.313 Recovery = 96.25%						

All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: ICSA **Date Collected: 10/14/2014 3:00:13 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6348843.8	0.9431	mg/L	0.00753				0.80%
Ag 328.068†	-6733.8	-0.0015	mg/L	0.00011	-0.0015	mg/L	0.00011	7.16%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	3762180.1	256.3	mg/L	0.19	256.3	mg/L	0.19	0.07%
QC value within limits for Al 308.215 Recovery = 102.51%								
As 188.979†	16.0	0.0026	mg/L	0.00296	0.0026	mg/L	0.00296	115.24%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	37974.3	-0.1208	mg/L	0.00160	-0.1208	mg/L	0.00160	1.33%
Ba 233.527†	340.6	0.0040	mg/L	0.00007	0.0040	mg/L	0.00007	1.62%
Be 313.107†	-1366.9	-0.0005	mg/L	0.00004	-0.0005	mg/L	0.00004	8.70%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	1062.6	0.0009	mg/L	0.00013	0.0009	mg/L	0.00013	14.10%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	13.7	0.0006	mg/L	0.00006	0.0006	mg/L	0.00006	8.99%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3539.7	-0.0009	mg/L	0.00039	-0.0009	mg/L	0.00039	43.29%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-1105.0	0.0043	mg/L	0.00011	0.0043	mg/L	0.00011	2.60%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	5063833.4	91.03	mg/L	0.826	91.03	mg/L	0.826	0.91%
QC value within limits for Fe 259.939 Recovery = 91.03%								
K 766.490†	14.2	0.0213	mg/L	0.04132	0.0213	mg/L	0.04132	193.79%
Mg 279.077†	2684686.0	260.9	mg/L	0.37	260.9	mg/L	0.37	0.14%
QC value within limits for Mg 279.077 Recovery = 104.35%								
Mn 257.610†	-5231.8	-0.0032	mg/L	0.00003	-0.0032	mg/L	0.00003	0.96%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	1.7	0.0001	mg/L	0.00013	0.0001	mg/L	0.00013	129.00%
Ni 231.604†	-106.4	-0.0025	mg/L	0.00023	-0.0025	mg/L	0.00023	9.13%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	-47.9	-0.0087	mg/L	0.00493	-0.0087	mg/L	0.00493	56.50%
Pb 220.353†	-151.1	0.0006	mg/L	0.00007	0.0006	mg/L	0.00007	11.34%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	44.2	-0.0002	mg/L	0.00165	-0.0002	mg/L	0.00165	923.14%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-21.8	-0.0012	mg/L	0.00145	-0.0012	mg/L	0.00145	118.29%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-138.9	-0.0590	mg/L	0.00150	-0.0590	mg/L	0.00150	2.55%
Ti 337.279†	332.3	0.0006	mg/L	0.00004	0.0006	mg/L	0.00004	6.55%
Tl 190.801†	29.2	0.0016	mg/L	0.00139	0.0016	mg/L	0.00139	88.67%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	372.2	0.0004	mg/L	0.00078	0.0004	mg/L	0.00078	179.15%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	172.6	0.0058	mg/L	0.00027	0.0058	mg/L	0.00027	4.61%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	47491.6	262.6	mg/L	0.06	262.6	mg/L	0.06	0.02%
QC value within limits for Ca 227.546 Recovery = 105.04%								
Sr 421.552†	460.7	0.0040	mg/L	0.00026	0.0040	mg/L	0.00026	6.53%
Al 394.401†	10804447.2	266.6	mg/L	0.33	266.6	mg/L	0.33	0.12%
QC value within limits for Al 394.401 Recovery = 106.65%								
Al 237.313†	1562249.3	256.2	mg/L	0.09	256.2	mg/L	0.09	0.04%
QC value within limits for Al 237.313 Recovery = 102.50%								

All analyte(s) passed QC.

00614

Method: DV200-6010C Opt3 Page 9 Date: 10/14/2014 3:16:20 PM

Sequence No.: 11
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 10/14/2014 3:06:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6297419.7	0.9355	mg/L	0.00242				0.26%
Ag 328.068†	46233.9	0.2078	mg/L	0.00054	0.2078	mg/L	0.00054	0.26%
QC value within limits for Ag 328.068 Recovery = 103.88%								
Al 308.215†	3827773.1	260.7	mg/L	1.55	260.7	mg/L	1.55	0.59%
QC value within limits for Al 308.215 Recovery = 104.30%								
As 188.979†	139.5	0.1006	mg/L	0.00028	0.1006	mg/L	0.00028	0.28%
QC value within limits for As 188.979 Recovery = 100.55%								
B 249.772†	37571.6	-0.1251	mg/L	0.00253	-0.1251	mg/L	0.00253	2.02%
Ba 233.527†	44924.0	0.5321	mg/L	0.00390	0.5321	mg/L	0.00390	0.73%
QC value within limits for Ba 233.527 Recovery = 106.42%								
Be 313.107†	1454994.8	0.5043	mg/L	0.00380	0.5043	mg/L	0.00380	0.75%
QC value within limits for Be 313.107 Recovery = 100.87%								
Cd 226.502†	81652.9	0.9862	mg/L	0.00453	0.9862	mg/L	0.00453	0.46%
QC value within limits for Cd 226.502 Recovery = 98.62%								
Co 228.616†	10548.8	0.4823	mg/L	0.00022	0.4823	mg/L	0.00022	0.05%
QC value within limits for Co 228.616 Recovery = 96.46%								
Cr 267.716†	55780.5	0.5138	mg/L	0.00325	0.5138	mg/L	0.00325	0.63%
QC value within limits for Cr 267.716 Recovery = 102.76%								
Cu 324.752†	139454.8	0.5349	mg/L	0.00156	0.5349	mg/L	0.00156	0.29%
QC value within limits for Cu 324.752 Recovery = 106.97%								
Fe 259.939†	5066062.6	91.07	mg/L	0.063	91.07	mg/L	0.063	0.07%
QC value within limits for Fe 259.939 Recovery = 91.07%								
K 766.490†	70.5	0.1057	mg/L	0.00334	0.1057	mg/L	0.00334	3.16%
Mg 279.077†	2726540.5	264.9	mg/L	2.22	264.9	mg/L	2.22	0.84%
QC value within limits for Mg 279.077 Recovery = 105.98%								
Mn 257.610†	172263.7	0.5148	mg/L	0.00276	0.5148	mg/L	0.00276	0.54%
QC value within limits for Mn 257.610 Recovery = 102.95%								
Mo 202.031†	0.8	0.0000	mg/L	0.00007	0.0000	mg/L	0.00007	149.06%
Ni 231.604†	40741.4	0.9720	mg/L	0.00282	0.9720	mg/L	0.00282	0.29%
QC value within limits for Ni 231.604 Recovery = 97.20%								
Na 589.592†	-74.8	-0.0136	mg/L	0.00065	-0.0136	mg/L	0.00065	4.79%
Pb 220.353†	158.9	0.0528	mg/L	0.00077	0.0528	mg/L	0.00077	1.46%
QC value within limits for Pb 220.353 Recovery = 105.60%								
Sb 206.836†	1273.6	0.6284	mg/L	0.00524	0.6284	mg/L	0.00524	0.83%
QC value within limits for Sb 206.836 Recovery = 104.73%								
Se 196.026†	20.2	0.0497	mg/L	0.00148	0.0497	mg/L	0.00148	2.97%
QC value within limits for Se 196.026 Recovery = 99.38%								
Sn 189.927†	-113.1	-0.0541	mg/L	0.00010	-0.0541	mg/L	0.00010	0.18%
Ti 337.279†	280.0	0.0005	mg/L	0.00004	0.0005	mg/L	0.00004	7.23%
Tl 190.801†	220.0	0.1056	mg/L	0.00059	0.1056	mg/L	0.00059	0.56%
QC value within limits for Tl 190.801 Recovery = 105.62%								
V 292.402†	33332.6	0.5048	mg/L	0.00414	0.5048	mg/L	0.00414	0.82%
QC value within limits for V 292.402 Recovery = 100.97%								
Zn 206.200†	28792.8	0.9736	mg/L	0.00443	0.9736	mg/L	0.00443	0.45%
QC value within limits for Zn 206.200 Recovery = 97.36%								
Ca 227.546†	47777.4	264.2	mg/L	0.62	264.2	mg/L	0.62	0.23%
QC value within limits for Ca 227.546 Recovery = 105.66%								
Sr 421.552†	492.5	0.0043	mg/L	0.00043	0.0043	mg/L	0.00043	10.07%
Al 394.401†	10802128.8	266.6	mg/L	0.56	266.6	mg/L	0.56	0.21%
QC value within limits for Al 394.401 Recovery = 106.62%								
Al 237.313†	1589962.8	260.8	mg/L	1.90	260.8	mg/L	1.90	0.73%
QC value within limits for Al 237.313 Recovery = 104.32%								

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 10/14/2014 3:12:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Method: DV200-6010C Opt3 Page 10 Date: 10/14/2014 3:22:55 PM

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6650396.2	0.9879	mg/L	0.00831				0.84%
Ag 328.068†	127658.9	0.5057	mg/L	0.00922	0.5057	mg/L	0.00922	1.82%
QC value within limits for Ag 328.068 Recovery = 101.14%								
Al 308.215†	142369.0	9.697	mg/L	0.2608	9.697	mg/L	0.2608	2.69%
QC value within limits for Al 308.215 Recovery = 96.97%								
As 188.979†	1249.0	0.9920	mg/L	0.00671	0.9920	mg/L	0.00671	0.68%
QC value within limits for As 188.979 Recovery = 99.20%								
B 249.772†	266021.2	2.409	mg/L	0.0315	2.409	mg/L	0.0315	1.31%
QC value within limits for B 249.772 Recovery = 96.36%								
Ba 233.527†	859845.8	10.18	mg/L	0.056	10.18	mg/L	0.056	0.55%
QC value within limits for Ba 233.527 Recovery = 101.85%								
Be 313.107†	719014.3	0.2492	mg/L	0.00113	0.2492	mg/L	0.00113	0.46%
QC value within limits for Be 313.107 Recovery = 99.69%								
Cd 226.502†	41612.0	0.5080	mg/L	0.00994	0.5080	mg/L	0.00994	1.96%
QC value within limits for Cd 226.502 Recovery = 101.61%								
Co 228.616†	54611.8	2.497	mg/L	0.0554	2.497	mg/L	0.0554	2.22%
QC value within limits for Co 228.616 Recovery = 99.87%								
Cr 267.716†	59013.2	0.5143	mg/L	0.00983	0.5143	mg/L	0.00983	1.91%
QC value within limits for Cr 267.716 Recovery = 102.87%								
Cu 324.752†	326329.2	1.232	mg/L	0.0251	1.232	mg/L	0.0251	2.04%
QC value within limits for Cu 324.752 Recovery = 98.58%								
Fe 259.939†	282239.4	5.073	mg/L	0.1205	5.073	mg/L	0.1205	2.38%
QC value within limits for Fe 259.939 Recovery = 101.47%								
K 766.490†	16378.6	24.54	mg/L	0.452	24.54	mg/L	0.452	1.84%
QC value within limits for K 766.490 Recovery = 98.16%								
Mg 279.077†	256536.6	24.93	mg/L	0.536	24.93	mg/L	0.536	2.15%
QC value within limits for Mg 279.077 Recovery = 99.71%								
Mn 257.610†	258094.7	0.7538	mg/L	0.01503	0.7538	mg/L	0.01503	1.99%
QC value within limits for Mn 257.610 Recovery = 100.50%								
Mo 202.031†	40506.2	2.441	mg/L	0.0480	2.441	mg/L	0.0480	1.97%
QC value within limits for Mo 202.031 Recovery = 97.64%								
Ni 231.604†	84822.6	2.024	mg/L	0.0408	2.024	mg/L	0.0408	2.01%
QC value within limits for Ni 231.604 Recovery = 101.18%								
Na 589.592†	135552.9	24.71	mg/L	0.204	24.71	mg/L	0.204	0.83%
QC value within limits for Na 589.592 Recovery = 98.86%								
Pb 220.353†	2972.0	0.4967	mg/L	0.00314	0.4967	mg/L	0.00314	0.63%
QC value within limits for Pb 220.353 Recovery = 99.35%								
Sb 206.836†	9585.7	4.903	mg/L	0.0320	4.903	mg/L	0.0320	0.65%
QC value within limits for Sb 206.836 Recovery = 98.06%								
Se 196.026†	406.0	0.4931	mg/L	0.00246	0.4931	mg/L	0.00246	0.50%
QC value within limits for Se 196.026 Recovery = 98.62%								
Sn 189.927†	23852.5	4.999	mg/L	0.0955	4.999	mg/L	0.0955	1.91%
QC value within limits for Sn 189.927 Recovery = 99.98%								
Ti 337.279†	1368314.9	2.457	mg/L	0.0075	2.457	mg/L	0.0075	0.31%
QC value within limits for Ti 337.279 Recovery = 98.28%								
Tl 190.801†	1805.2	0.9865	mg/L	0.00300	0.9865	mg/L	0.00300	0.30%
QC value within limits for Tl 190.801 Recovery = 98.65%								
V 292.402†	166428.2	2.547	mg/L	0.0512	2.547	mg/L	0.0512	2.01%
QC value within limits for V 292.402 Recovery = 101.87%								
Zn 206.200†	30143.6	1.019	mg/L	0.0187	1.019	mg/L	0.0187	1.84%
QC value within limits for Zn 206.200 Recovery = 101.93%								
Ca 227.546†	4396.5	24.07	mg/L	0.299	24.07	mg/L	0.299	1.24%
QC value within limits for Ca 227.546 Recovery = 96.29%								
Sr 421.552†	276052.1	2.383	mg/L	0.0299	2.383	mg/L	0.0299	1.25%
QC value within limits for Sr 421.552 Recovery = 95.33%								
Al 394.401†	390527.7	9.637	mg/L	0.2501	9.637	mg/L	0.2501	2.60%
QC value within limits for Al 394.401 Recovery = 96.37%								
Al 237.313†	60317.7	9.894	mg/L	0.2564	9.894	mg/L	0.2564	2.59%
QC value within limits for Al 237.313 Recovery = 98.94%								

All analyte(s) passed QC.

Sequence No.: 13
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 10/14/2014 3:18:56 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

00616

Method: DV200-6010C Opt3 Page 11 Date: 10/14/2014 3:28:49 PM

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6699172.3	0.9952	mg/L	0.00094				0.09%
Ag 328.068†	27.9	0.0001	mg/L	0.00011	0.0001	mg/L	0.00011	96.25%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	880.7	0.0600	mg/L	0.02018	0.0600	mg/L	0.02018	33.63%
QC value greater than the upper limit for Al 308.215 Recovery = Not calculated								
As 188.979†	1.9	0.0015	mg/L	0.00051	0.0015	mg/L	0.00051	33.36%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3721.3	0.0339	mg/L	0.00451	0.0339	mg/L	0.00451	13.29%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	422.2	0.0050	mg/L	0.00187	0.0050	mg/L	0.00187	37.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	316.1	0.0001	mg/L	0.00003	0.0001	mg/L	0.00003	27.56%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	26.3	0.0003	mg/L	0.00011	0.0003	mg/L	0.00011	33.12%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	46.8	0.0021	mg/L	0.00044	0.0021	mg/L	0.00044	20.78%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	32.9	0.0003	mg/L	0.00007	0.0003	mg/L	0.00007	25.11%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1341.5	0.0051	mg/L	0.00088	0.0051	mg/L	0.00088	17.40%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	1539.9	0.0277	mg/L	0.00556	0.0277	mg/L	0.00556	20.09%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	42.6	0.0638	mg/L	0.03438	0.0638	mg/L	0.03438	53.93%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	458.6	0.0446	mg/L	0.01439	0.0446	mg/L	0.01439	32.30%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	207.1	0.0006	mg/L	0.00017	0.0006	mg/L	0.00017	27.59%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	18.4	0.0011	mg/L	0.00048	0.0011	mg/L	0.00048	42.95%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	83.9	0.0020	mg/L	0.00052	0.0020	mg/L	0.00052	25.82%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	165.7	0.0302	mg/L	0.00450	0.0302	mg/L	0.00450	14.90%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	2.7	0.0005	mg/L	0.00060	0.0005	mg/L	0.00060	130.18%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	5.7	0.0029	mg/L	0.00065	0.0029	mg/L	0.00065	22.51%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	1.6	0.0020	mg/L	0.00167	0.0020	mg/L	0.00167	83.46%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	36.5	0.0077	mg/L	0.00196	0.0077	mg/L	0.00196	25.57%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	733.3	0.0013	mg/L	0.00045	0.0013	mg/L	0.00045	33.81%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	0.3	0.0002	mg/L	0.00171	0.0002	mg/L	0.00171	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	91.0	0.0014	mg/L	0.00074	0.0014	mg/L	0.00074	53.02%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	75.5	0.0026	mg/L	0.00032	0.0026	mg/L	0.00032	12.36%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	7.6	0.0428	mg/L	0.00999	0.0428	mg/L	0.00999	23.36%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	244.4	0.0021	mg/L	0.00008	0.0021	mg/L	0.00008	3.76%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Al 394.401†	1451.6	0.0358	mg/L	0.00901	0.0358	mg/L	0.00901	25.15%
QC value within limits for Al 394.401 Recovery = Not calculated								
Al 237.313†	198.4	0.0325	mg/L	0.01016	0.0325	mg/L	0.01016	31.21%
QC value within limits for Al 237.313 Recovery = Not calculated								

D.1004

QC Failed. Continue with analysis.

Sequence No.: 14
Sample ID: PBW-220161
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 10/14/2014 3:25:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

00617

Method: DV200-6010C Opt3 Page 12 Date: 10/14/2014 3:34:50 PM

Mean Data: PBW-220161

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6928064.7	1.029	mg/L	0.0044				0.43%
Ag 328.068†	-45.8	-0.0002	mg/L	0.00001				8.13%
Al 308.215†	-211.0	-0.0144	mg/L	0.01160				80.69%
As 188.979†	0.6	0.0005	mg/L	0.00059				131.07%
B 249.772†	1677.9	0.0153	mg/L	0.00116				7.56%
Ba 233.527†	73.6	0.0009	mg/L	0.00004				4.22%
Be 313.107†	420.3	0.0001	mg/L	0.00006				41.01%
Cd 226.502†	-6.3	-0.0001	mg/L	0.00000				5.08%
Co 228.616†	4.3	0.0002	mg/L	0.00018				92.34%
Cr 267.716†	72.6	0.0006	mg/L	0.00005				8.20%
Cu 324.752†	584.2	0.0022	mg/L	0.00069				31.42%
Fe 259.939†	595.4	0.0107	mg/L	0.00054				5.03%
K 766.490†	-1.4	-0.0021	mg/L	0.04330				>999.9%
Mg 279.077†	218.5	0.0212	mg/L	0.00195				9.16%
Mn 257.610†	891.3	0.0026	mg/L	0.00001				0.54%
Mo 202.031†	-1.1	-0.0001	mg/L	0.00015				235.40%
Ni 231.604†	14.8	0.0004	mg/L	0.00011				30.41%
Na 589.592†	-87.5	-0.0159	mg/L	0.00286				17.90%
Pb 220.353†	4.4	0.0007	mg/L	0.00128				176.21%
Sb 206.836†	4.1	0.0021	mg/L	0.00003				1.28%
Se 196.026†	1.4	0.0017	mg/L	0.00130				74.54%
Sn 189.927†	19.4	0.0041	mg/L	0.00079				19.47%
Ti 337.279†	250.7	0.0005	mg/L	0.00005				10.53%
Tl 190.801†	-7.4	-0.0040	mg/L	0.00030				7.32%
V 292.402†	-0.7	0.0000	mg/L	0.00007				662.12%
Zn 206.200†	23.5	0.0008	mg/L	0.00011				13.44%
Ca 227.546†	-1.0	-0.0048	mg/L	0.00053				11.09%
Sr 421.552†	28.1	0.0002	mg/L	0.00004				16.25%
Al 394.401†	264.1	0.0065	mg/L	0.00132				20.31%
Al 237.313†	27.8	0.0046	mg/L	0.00315				69.13%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 15
Sample ID: LCSW-220161
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 10/14/2014 3:31:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-220161

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6740011.9	1.001	mg/L	0.0114				1.14%
Ag 328.068†	12837.4	0.0510	mg/L	0.00016				0.32%
Al 308.215†	27725.6	1.889	mg/L	0.0026				0.14%
As 188.979†	48.5	0.0384	mg/L	0.00153				3.97%
B 249.772†	105807.7	0.9634	mg/L	0.01072				1.11%
Ba 233.527†	171055.1	2.026	mg/L	0.0073				0.36%
Be 313.107†	141719.1	0.0491	mg/L	0.00018				0.36%
Cd 226.502†	4145.7	0.0505	mg/L	0.00039				0.78%
Co 228.616†	11066.0	0.5059	mg/L	0.00226				0.45%
Cr 267.716†	24335.1	0.2112	mg/L	0.00121				0.57%
Cu 324.752†	71141.9	0.2686	mg/L	0.00024				0.09%
Fe 259.939†	57330.4	1.031	mg/L	0.0042				0.41%
K 766.490†	12899.8	19.33	mg/L	0.046				0.24%
Mg 279.077†	20514.5	1.993	mg/L	0.0049				0.25%
Mn 257.610†	175474.7	0.5121	mg/L	0.00213				0.42%
Mo 202.031†	8056.4	0.4855	mg/L	0.00567				1.17%
Ni 231.604†	21949.3	0.5237	mg/L	0.00253				0.48%
Na 589.592†	108123.7	19.71	mg/L	0.048				0.24%
Pb 220.353†	3018.9	0.5038	mg/L	0.00461				0.92%
Sb 206.836†	942.1	0.4818	mg/L	0.00338				0.70%
Se 196.026†	762.5	0.9239	mg/L	0.01039				1.12%
Sn 189.927†	25845.4	5.417	mg/L	0.0149				0.28%
Ti 337.279†	273909.8	0.4918	mg/L	0.00142				0.29%
Tl 190.801†	3461.8	1.893	mg/L	0.0154				0.81%
V 292.402†	34110.0	0.5219	mg/L	0.00247				0.47%

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Method: DV200-6010C Opt3 Page 13 Date: 10/14/2014 3:46:36 PM

Zn 206.200†	15578.2	0.5268	mg/L	0.00417	0.79%
Ca 227.546†	373.2	2.081	mg/L	0.0101	0.48%
Sr 421.552†	228250.4	1.971	mg/L	0.0065	0.33%
Al 394.401†	76850.8	1.896	mg/L	0.0030	0.16%
Al 237.313†	11722.0	1.923	mg/L	0.0005	0.02%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 16
Sample ID: R1407780-005 5X
Analyst:
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 40
Date Collected: 10/14/2014 3:37:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407780-005 5X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6685325.2	0.9931	mg/L	0.00117				0.12%
Ag 328.068†	-219.3	0.0002	mg/L	0.00008				54.66%
Al 308.215†	193.2	0.0125	mg/L	0.00679				54.28%
As 188.979†	1.9	0.0015	mg/L	0.00138				92.59%
B 249.772†	4353.1	0.0214	mg/L	0.00208				9.70%
Ba 233.527†	824.7	0.0098	mg/L	0.00005				0.47%
Be 313.107†	-155.6	-0.0001	mg/L	0.00003				50.82%
Cd 226.502†	36.8	-0.0001	mg/L	0.00008				109.19%
Co 228.616†	8.8	0.0004	mg/L	0.00020				50.03%
Cr 267.716†	192.6	0.0020	mg/L	0.00006				3.27%
Cu 324.752†	410.1	0.0019	mg/L	0.00016				8.53%
Fe 259.939†	206080.2	3.704	mg/L	0.0174				0.47%
K 766.490†	124.0	0.1858	mg/L	0.11008				59.26%
Mg 279.077†	12665.0	1.231	mg/L	0.0087				0.71%
Mn 257.610†	32467.6	0.0952	mg/L	0.00053				0.56%
Mo 202.031†	19.2	0.0012	mg/L	0.00001				0.86%
Ni 231.604†	123.3	0.0029	mg/L	0.00005				1.73%
Na 589.592†	785.6	0.1432	mg/L	0.00153				1.07%
Pb 220.353†	0.7	0.0000	mg/L	0.00098				>999.9%
Sb 206.836†	3.3	0.0017	mg/L	0.00017				10.09%
Se 196.026†	1.3	0.0025	mg/L	0.00181				73.05%
Sn 189.927†	-56.7	-0.0119	mg/L	0.00079				6.63%
Ti 337.279†	251.4	0.0005	mg/L	0.00007				16.22%
Tl 190.801†	-0.7	-0.0004	mg/L	0.00324				755.03%
V 292.402†	14.0	0.0000	mg/L	0.00049				>999.9%
Zn 206.200†	64.0	0.0022	mg/L	0.00002				0.97%
Ca 227.546†	3189.8	17.45	mg/L	0.052				0.30%
Sr 421.552†	9732.0	0.0840	mg/L	0.00031				0.37%
Al 394.401†	-323.8	-0.0080	mg/L	0.00005				0.67%
Al 237.313†	-7.9	-0.0013	mg/L	0.00052				40.01%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 17
Sample ID: R1407780-009 20X
Analyst:
Initial Sample Wt:
Dilution: 20X

Autosampler Location: 41
Date Collected: 10/14/2014 3:43:01 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407780-009 20X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6700944.5	0.9955	mg/L	0.00228				0.23%
Ag 328.068†	-43.1	-0.0001	mg/L	0.00017				214.61%
Al 308.215†	10.8	0.0003	mg/L	0.01160				>999.9%
As 188.979†	-0.1	-0.0001	mg/L	0.00018				310.61%
B 249.772†	2672.7	0.0226	mg/L	0.00093				4.12%
Ba 233.527†	13923.1	0.1649	mg/L	0.00164				0.99%
Be 313.107†	30.3	0.0000	mg/L	0.00009				825.21%
Cd 226.502†	4.0	0.0000	mg/L	0.00001				492.36%
Co 228.616†	1.9	0.0001	mg/L	0.00007				86.39%
Cr 267.716†	-27.0	0.0002	mg/L	0.00006				34.02%
Cu 324.752†	318.0	0.0012	mg/L	0.00041				33.61%

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Fe 259.939†	18682.8	0.3358 mg/L	0.00230	0.68%
K 766.490†	1023.2	1.533 mg/L	0.0087	0.57%
Mg 279.077†	40473.9	3.933 mg/L	0.0285	0.72%
Mn 257.610†	1314.9	0.0039 mg/L	0.00005	1.34%
Mo 202.031†	0.3	0.0000 mg/L	0.00008	505.74%
Ni 231.604†	46.7	0.0011 mg/L	0.00005	4.08%
Na 589.592†	204101.9	37.21 mg/L	0.154	0.41%
Pb 220.353†	-5.1	-0.0009 mg/L	0.00135	158.65%
Sb 206.836†	1.0	0.0005 mg/L	0.00082	152.72%
Se 196.026†	0.3	0.0005 mg/L	0.00512	>999.9%
Sn 189.927†	-23.8	-0.0050 mg/L	0.00084	16.85%
Ti 337.279†	75.8	0.0001 mg/L	0.00010	73.90%
Tl 190.801†	0.6	0.0003 mg/L	0.00143	417.28%
V 292.402†	-6.2	-0.0001 mg/L	0.00030	257.59%
Zn 206.200†	103.8	0.0035 mg/L	0.00005	1.40%
Ca 227.546†	867.8	4.707 mg/L	0.0102	0.22%
Sr 421.552†	28327.4	0.2446 mg/L	0.00100	0.41%
Al 394.401†	-159.0	-0.0039 mg/L	0.00073	18.61%
Al 237.313†	2.9	0.0005 mg/L	0.00027	57.66%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 18
Sample ID: R1407780-009 5X
Analyst:
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 42
Date Collected: 10/14/2014 3:48:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407780-009 5X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6593352.1	0.9795	mg/L	0.00118				0.12%
Ag 328.068†	-185.7	-0.0004	mg/L	0.00019				49.95%
Al 308.215†	180.6	0.0102	mg/L	0.00220				21.60%
As 188.979†	0.2	0.0002	mg/L	0.00182				>999.9%
B 249.772†	7246.5	0.0592	mg/L	0.00005				0.09%
Ba 233.527†	53245.7	0.6307	mg/L	0.00259				0.41%
Be 313.107†	-317.6	-0.0001	mg/L	0.00001				7.01%
Cd 226.502†	11.2	0.0000	mg/L	0.00000				10.35%
Co 228.616†	-3.6	-0.0002	mg/L	0.00005				32.11%
Cr 267.716†	-86.3	0.0008	mg/L	0.00013				15.33%
Cu 324.752†	300.0	0.0013	mg/L	0.00021				16.57%
Fe 259.939†	72094.8	1.296	mg/L	0.0060				0.46%
K 766.490†	4300.1	6.443	mg/L	0.0190				0.30%
Mg 279.077†	160585.5	15.60	mg/L	0.080				0.51%
Mn 257.610†	5117.9	0.0151	mg/L	0.00006				0.39%
Mo 202.031†	7.4	0.0004	mg/L	0.00002				5.53%
Ni 231.604†	194.8	0.0046	mg/L	0.00011				2.32%
Na 589.592†	807745.9	147.3	mg/L	0.69				0.47%
Pb 220.353†	-5.9	-0.0010	mg/L	0.00022				21.27%
Sb 206.836†	1.0	0.0005	mg/L	0.00003				6.43%
Se 196.026†	0.4	0.0008	mg/L	0.00197				248.20%
Sn 189.927†	-80.7	-0.0169	mg/L	0.00040				2.36%
Ti 337.279†	127.5	0.0002	mg/L	0.00001				6.06%
Tl 190.801†	0.3	0.0002	mg/L	0.00079				444.44%
V 292.402†	8.2	0.0001	mg/L	0.00003				61.54%
Zn 206.200†	307.3	0.0104	mg/L	0.00007				0.71%
Ca 227.546†	3679.5	19.95	mg/L	0.003				0.02%
Sr 421.552†	114092.0	0.9850	mg/L	0.00343				0.35%
Al 394.401†	-353.0	-0.0087	mg/L	0.00105				12.09%
Al 237.313†	34.2	0.0056	mg/L	0.00134				23.85%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 19
Sample ID: R1407780-014 5X
Analyst:
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 43
Date Collected: 10/14/2014 3:55:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

00620

Method: DV200-6010C Opt3 Page 15 Date: 10/14/2014 4:05:04 PM

Mean Data: R1407780-014 5X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6590567.9	0.9791	mg/L	0.00303				0.31%
Ag 328.068†	-127.7	-0.0004	mg/L	0.00028				74.72%
Al 308.215†	175.1	0.0108	mg/L	0.00617				56.87%
As 188.979†	0.3	0.0003	mg/L	0.00031				121.51%
B 249.772†	29764.6	0.2698	mg/L	0.00438				1.62%
Ba 233.527†	17339.5	0.2054	mg/L	0.00138				0.67%
Be 313.107†	-150.1	-0.0001	mg/L	0.00004				78.87%
Cd 226.502†	10.2	0.0001	mg/L	0.00002				29.92%
Co 228.616†	2.4	0.0001	mg/L	0.00015				141.65%
Cr 267.716†	285.0	0.0031	mg/L	0.00004				1.33%
Cu 324.752†	356.8	0.0014	mg/L	0.00015				10.88%
Fe 259.939†	25772.1	0.4633	mg/L	0.00250				0.54%
K 766.490†	7574.4	11.35	mg/L	0.015				0.13%
Mg 279.077†	65215.7	6.337	mg/L	0.0257				0.41%
Mn 257.610†	2748.4	0.0081	mg/L	0.00002				0.23%
Mo 202.031†	13.6	0.0008	mg/L	0.00007				8.53%
Ni 231.604†	223.0	0.0053	mg/L	0.00003				0.56%
Na 589.592†	770813.3	140.5	mg/L	1.61				1.15%
Pb 220.353†	-1.3	-0.0002	mg/L	0.00034				148.98%
Sb 206.836†	3.6	0.0018	mg/L	0.00013				7.28%
Se 196.026†	8.4	0.0102	mg/L	0.00915				89.39%
Sn 189.927†	-44.2	-0.0093	mg/L	0.00012				1.28%
Ti 337.279†	425.4	0.0008	mg/L	0.00000				0.18%
Tl 190.801†	-1.9	-0.0010	mg/L	0.00284				273.93%
V 292.402†	57.9	0.0009	mg/L	0.00014				16.54%
Zn 206.200†	160.8	0.0054	mg/L	0.00002				0.43%
Ca 227.546†	1763.7	9.554	mg/L	0.0451				0.47%
Sr 421.552†	53070.8	0.4582	mg/L	0.00007				0.01%
Al 394.401†	140.4	0.0035	mg/L	0.00122				35.20%
Al 237.313†	54.0	0.0089	mg/L	0.00092				10.41%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

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Sequence No.: 20
Sample ID: R1407780-015 5X
Analyst:
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 44
Date Collected: 10/14/2014 4:01:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407780-015 5X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6548944.1	0.9729	mg/L	0.00027				0.03%
Ag 328.068†	-97.9	-0.0003	mg/L	0.00018				53.85%
Al 308.215†	212.6	0.0131	mg/L	0.00039				3.02%
As 188.979†	1.5	0.0012	mg/L	0.00081				65.85%
B 249.772†	10094.1	0.0910	mg/L	0.00062				0.68%
Ba 233.527†	28144.0	0.3334	mg/L	0.00202				0.61%
Be 313.107†	-428.9	-0.0001	mg/L	0.00001				6.70%
Cd 226.502†	3.3	0.0000	mg/L	0.00002				104.93%
Co 228.616†	-3.5	-0.0002	mg/L	0.00010				65.41%
Cr 267.716†	1.3	0.0010	mg/L	0.00005				5.67%
Cu 324.752†	215.6	0.0008	mg/L	0.00015				18.06%
Fe 259.939†	9572.6	0.1721	mg/L	0.00078				0.45%
K 766.490†	3742.3	5.607	mg/L	0.0421				0.75%
Mg 279.077†	99522.5	9.671	mg/L	0.0649				0.67%
Mn 257.610†	1543.0	0.0045	mg/L	0.00004				0.99%
Mo 202.031†	5.1	0.0003	mg/L	0.00018				57.62%
Ni 231.604†	177.3	0.0042	mg/L	0.00045				10.68%
Na 589.592†	638636.9	116.4	mg/L	0.20				0.18%
Pb 220.353†	-5.5	-0.0009	mg/L	0.00029				31.81%
Sb 206.836†	3.8	0.0020	mg/L	0.00156				79.63%
Se 196.026†	2.2	0.0027	mg/L	0.00104				39.29%
Sn 189.927†	-52.4	-0.0110	mg/L	0.00001				0.08%
Ti 337.279†	127.4	0.0002	mg/L	0.00007				30.33%
Tl 190.801†	-4.7	-0.0026	mg/L	0.00048				18.82%
V 292.402†	12.2	0.0002	mg/L	0.00034				195.01%
Zn 206.200†	68.0	0.0023	mg/L	0.00001				0.65%

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Ca 227.546†	2020.0	10.92 mg/L	0.035		0.32%
Sr 421.552†	89473.6	0.7724 mg/L	0.00076		0.10%
Al 394.401†	-132.5	-0.0033 mg/L	0.00117		35.64%
Al 237.313†	34.0	0.0056 mg/L	0.00015		2.63%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 21
Sample ID: R1407780-038 5X
Analyst:
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 45
Date Collected: 10/14/2014 4:07:25 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407780-038 5X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6675805.1	0.9917	mg/L	0.00660				0.67%
Ag 328.068†	-78.6	-0.0003	mg/L	0.00002				9.16%
Al 308.215†	264.9	0.0166	mg/L	0.00873				52.49%
As 188.979†	-0.3	-0.0002	mg/L	0.00006				27.47%
B 249.772†	3541.0	0.0309	mg/L	0.00020				0.66%
Ba 233.527†	1013.1	0.0120	mg/L	0.00001				0.06%
Be 313.107†	-67.1	0.0000	mg/L	0.00005				214.03%
Cd 226.502†	0.5	0.0000	mg/L	0.00007				302.95%
Co 228.616†	-5.9	-0.0003	mg/L	0.00001				5.42%
Cr 267.716†	-40.0	0.0000	mg/L	0.00013				>999.9%
Cu 324.752†	170.4	0.0007	mg/L	0.00027				40.22%
Fe 259.939†	10981.2	0.1974	mg/L	0.00127				0.64%
K 766.490†	1026.3	1.538	mg/L	0.0596				3.88%
Mg 279.077†	36099.0	3.508	mg/L	0.0092				0.26%
Mn 257.610†	33275.6	0.0971	mg/L	0.00041				0.42%
Mo 202.031†	5.7	0.0003	mg/L	0.00015				42.74%
Ni 231.604†	23.8	0.0006	mg/L	0.00010				17.46%
Na 589.592†	125022.9	22.79	mg/L	0.082				0.36%
Pb 220.353†	4.6	0.0008	mg/L	0.00011				14.26%
Sb 206.836†	2.0	0.0010	mg/L	0.00051				50.43%
Se 196.026†	0.9	0.0012	mg/L	0.00068				57.73%
Sn 189.927†	-57.9	-0.0121	mg/L	0.00054				4.45%
Ti 337.279†	523.5	0.0009	mg/L	0.00001				1.31%
Tl 190.801†	-3.1	-0.0018	mg/L	0.00147				83.65%
V 292.402†	-6.4	-0.0001	mg/L	0.00000				4.41%
Zn 206.200†	44.4	0.0015	mg/L	0.00004				2.76%
Ca 227.546†	2032.3	10.99	mg/L	0.061				0.55%
Sr 421.552†	12121.5	0.1046	mg/L	0.00037				0.36%
Al 394.401†	466.1	0.0115	mg/L	0.00091				7.89%
Al 237.313†	119.7	0.0196	mg/L	0.00112				5.70%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 22
Sample ID: R1407780-039 5X
Analyst:
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 46
Date Collected: 10/14/2014 4:13:20 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407780-039 5X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6678548.8	0.9921	mg/L	0.02414				2.43%
Ag 328.068†	-16.7	0.0000	mg/L	0.00003				875.52%
Al 308.215†	-41.8	-0.0041	mg/L	0.02072				509.75%
As 188.979†	1.1	0.0008	mg/L	0.00157				186.93%
B 249.772†	3323.2	0.0289	mg/L	0.00091				3.14%
Ba 233.527†	1379.7	0.0163	mg/L	0.00029				1.80%
Be 313.107†	159.4	0.0001	mg/L	0.00011				204.45%
Cd 226.502†	-11.7	-0.0002	mg/L	0.00004				20.84%
Co 228.616†	-13.5	-0.0006	mg/L	0.00037				60.20%
Cr 267.716†	81.2	0.0010	mg/L	0.00000				0.23%
Cu 324.752†	52.9	0.0002	mg/L	0.00077				348.10%
Fe 259.939†	12739.1	0.2290	mg/L	0.00689				3.01%

00622

Method: DV200-6010C Opt3 Page 17 Date: 10/14/2014 4:29:57 PM

K 766.490†	1199.9	1.798	mg/L	0.0511	2.84%
Mg 279.077†	33124.2	3.219	mg/L	0.0950	2.95%
Mn 257.610†	9447.6	0.0276	mg/L	0.00070	2.54%
Mo 202.031†	6.2	0.0004	mg/L	0.00009	23.50%
Ni 231.604†	37.9	0.0009	mg/L	0.00008	8.57%
Na 589.592†	80694.1	14.71	mg/L	0.360	2.45%
Pb 220.353†	-2.3	-0.0004	mg/L	0.00121	311.48%
Sb 206.836†	3.9	0.0020	mg/L	0.00030	15.19%
Se 196.026†	0.8	0.0010	mg/L	0.00007	7.52%
Sn 189.927†	-49.5	-0.0104	mg/L	0.00017	1.63%
Ti 337.279†	488.5	0.0009	mg/L	0.00006	7.26%
Tl 190.801†	-8.2	-0.0045	mg/L	0.00010	2.29%
V 292.402†	-8.8	-0.0001	mg/L	0.00002	15.54%
Zn 206.200†	-3.0	-0.0001	mg/L	0.00007	70.22%
Ca 227.546†	1803.4	9.755	mg/L	0.2486	2.55%
Sr 421.552†	11696.9	0.1010	mg/L	0.00216	2.14%
Al 394.401†	161.7	0.0040	mg/L	0.00064	16.00%
Al 237.313†	68.4	0.0112	mg/L	0.00012	1.03%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 23
Sample ID: R1407780-039L 5X
Analyst:
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 47
Date Collected: 10/14/2014 4:19:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407780-039L 5X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6727563.1	0.9994	mg/L	0.00859				0.86%
Ag 328.068†	18.6	0.0001	mg/L	0.00007				81.84%
Al 308.215†	-430.5	-0.0296	mg/L	0.00543				18.38%
As 188.979†	-2.9	-0.0023	mg/L	0.00030				13.06%
B 249.772†	442.3	0.0037	mg/L	0.00017				4.58%
Ba 233.527†	267.1	0.0032	mg/L	0.00007				2.29%
Be 313.107†	495.7	0.0002	mg/L	0.00003				18.02%
Cd 226.502†	-13.6	-0.0002	mg/L	0.00002				11.88%
Co 228.616†	-6.8	-0.0003	mg/L	0.00024				78.10%
Cr 267.716†	45.3	0.0005	mg/L	0.00006				13.96%
Cu 324.752†	-132.2	-0.0005	mg/L	0.00041				82.46%
Fe 259.939†	2486.7	0.0447	mg/L	0.00018				0.41%
K 766.490†	249.9	0.3745	mg/L	0.00516				1.38%
Mg 279.077†	6490.4	0.6307	mg/L	0.00607				0.96%
Mn 257.610†	1871.3	0.0055	mg/L	0.00001				0.26%
Mo 202.031†	-1.9	-0.0001	mg/L	0.00011				96.04%
Ni 231.604†	-2.2	-0.0001	mg/L	0.00015				287.66%
Na 589.592†	15652.1	2.854	mg/L	0.0185				0.65%
Pb 220.353†	-2.2	-0.0004	mg/L	0.00014				38.16%
Sb 206.836†	3.7	0.0019	mg/L	0.00025				13.06%
Se 196.026†	2.2	0.0027	mg/L	0.00043				15.98%
Sn 189.927†	-17.8	-0.0037	mg/L	0.00013				3.51%
Ti 337.279†	179.4	0.0003	mg/L	0.00007				20.89%
Tl 190.801†	-8.5	-0.0047	mg/L	0.00006				1.22%
V 292.402†	4.0	0.0001	mg/L	0.00016				272.43%
Zn 206.200†	-25.9	-0.0009	mg/L	0.00002				2.35%
Ca 227.546†	344.5	1.863	mg/L	0.0147				0.79%
Sr 421.552†	2283.8	0.0197	mg/L	0.00044				2.21%
Al 394.401†	-97.6	-0.0024	mg/L	0.00080				33.20%
Al 237.313†	-2.8	-0.0005	mg/L	0.00112				244.83%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 24
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 10/14/2014 4:25:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

00623

Method: DV200-6010C Opt3 Page 18 Date: 10/14/2014 4:36:20 PM

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6615667.9	0.9828	mg/L	0.00173				0.18%
Ag 328.068†	128444.2	0.5088	mg/L	0.00084	0.5088	mg/L	0.00084	0.17%
QC value within limits for Ag 328.068 Recovery = 101.76%								
Al 308.215†	141388.8	9.630	mg/L	0.0231	9.630	mg/L	0.0231	0.24%
QC value within limits for Al 308.215 Recovery = 96.30%								
As 188.979†	1244.0	0.9880	mg/L	0.00017	0.9880	mg/L	0.00017	0.02%
QC value within limits for As 188.979 Recovery = 98.80%								
B 249.772†	264518.4	2.396	mg/L	0.0283	2.396	mg/L	0.0283	1.18%
QC value within limits for B 249.772 Recovery = 95.82%								
Ba 233.527†	848106.5	10.05	mg/L	0.019	10.05	mg/L	0.019	0.19%
QC value within limits for Ba 233.527 Recovery = 100.46%								
Be 313.107†	706377.3	0.2449	mg/L	0.00030	0.2449	mg/L	0.00030	0.12%
QC value within limits for Be 313.107 Recovery = 97.94%								
Cd 226.502†	41413.6	0.5056	mg/L	0.00085	0.5056	mg/L	0.00085	0.17%
QC value within limits for Cd 226.502 Recovery = 101.13%								
Co 228.616†	54377.4	2.486	mg/L	0.0009	2.486	mg/L	0.0009	0.04%
QC value within limits for Co 228.616 Recovery = 99.44%								
Cr 267.716†	58963.0	0.5139	mg/L	0.00184	0.5139	mg/L	0.00184	0.36%
QC value within limits for Cr 267.716 Recovery = 102.78%								
Cu 324.752†	325082.5	1.228	mg/L	0.0041	1.228	mg/L	0.0041	0.33%
QC value within limits for Cu 324.752 Recovery = 98.20%								
Fe 259.939†	277022.2	4.980	mg/L	0.0153	4.980	mg/L	0.0153	0.31%
QC value within limits for Fe 259.939 Recovery = 99.59%								
K 766.490†	16383.2	24.55	mg/L	0.040	24.55	mg/L	0.040	0.16%
QC value within limits for K 766.490 Recovery = 98.19%								
Mg 279.077†	253688.2	24.65	mg/L	0.035	24.65	mg/L	0.035	0.14%
QC value within limits for Mg 279.077 Recovery = 98.61%								
Mn 257.610†	256890.1	0.7502	mg/L	0.00148	0.7502	mg/L	0.00148	0.20%
QC value within limits for Mn 257.610 Recovery = 100.03%								
Mo 202.031†	40502.1	2.441	mg/L	0.0038	2.441	mg/L	0.0038	0.16%
QC value within limits for Mo 202.031 Recovery = 97.63%								
Ni 231.604†	84731.6	2.021	mg/L	0.0035	2.021	mg/L	0.0035	0.18%
QC value within limits for Ni 231.604 Recovery = 101.07%								
Na 589.592†	133889.2	24.41	mg/L	0.050	24.41	mg/L	0.050	0.21%
QC value within limits for Na 589.592 Recovery = 97.64%								
Pb 220.353†	2959.2	0.4946	mg/L	0.00002	0.4946	mg/L	0.00002	0.00%
QC value within limits for Pb 220.353 Recovery = 98.92%								
Sb 206.836†	9798.7	5.012	mg/L	0.0345	5.012	mg/L	0.0345	0.69%
QC value within limits for Sb 206.836 Recovery = 100.24%								
Se 196.026†	398.1	0.4835	mg/L	0.00148	0.4835	mg/L	0.00148	0.31%
QC value within limits for Se 196.026 Recovery = 96.70%								
Sn 189.927†	23761.1	4.980	mg/L	0.0166	4.980	mg/L	0.0166	0.33%
QC value within limits for Sn 189.927 Recovery = 99.59%								
Ti 337.279†	1359352.9	2.441	mg/L	0.0053	2.441	mg/L	0.0053	0.22%
QC value within limits for Ti 337.279 Recovery = 97.63%								
Tl 190.801†	1797.1	0.9821	mg/L	0.00115	0.9821	mg/L	0.00115	0.12%
QC value within limits for Tl 190.801 Recovery = 98.21%								
V 292.402†	169654.7	2.596	mg/L	0.0010	2.596	mg/L	0.0010	0.04%
QC value within limits for V 292.402 Recovery = 103.84%								
Zn 206.200†	29797.8	1.008	mg/L	0.0014	1.008	mg/L	0.0014	0.14%
QC value within limits for Zn 206.200 Recovery = 100.76%								
Ca 227.546†	4464.0	24.43	mg/L	0.040	24.43	mg/L	0.040	0.17%
QC value within limits for Ca 227.546 Recovery = 97.73%								
Sr 421.552†	270857.7	2.338	mg/L	0.0009	2.338	mg/L	0.0009	0.04%
QC value within limits for Sr 421.552 Recovery = 93.53%								
Al 394.401†	389897.8	9.621	mg/L	0.0213	9.621	mg/L	0.0213	0.22%
QC value within limits for Al 394.401 Recovery = 96.21%								
Al 237.313†	59551.0	9.768	mg/L	0.0131	9.768	mg/L	0.0131	0.13%
QC value within limits for Al 237.313 Recovery = 97.68%								

All analyte(s) passed QC.

Sequence No.: 25
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 10/14/2014 4:32:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

00624

Method: DV200-6010C Opt3 Page 19 Date: 10/14/2014 4:42:14 PM

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6705423.2	0.9961	mg/L	0.00510				0.51%
Ag 328.068†	58.6	0.0002	mg/L	0.00022	0.0002	mg/L	0.00022	92.42%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	44.1	0.0030	mg/L	0.00044	0.0030	mg/L	0.00044	14.63%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.7	0.0013	mg/L	0.00028	0.0013	mg/L	0.00028	20.55%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3111.8	0.0284	mg/L	0.00419	0.0284	mg/L	0.00419	14.71%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	576.1	0.0068	mg/L	0.00246	0.0068	mg/L	0.00246	36.11%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	612.1	0.0002	mg/L	0.00008	0.0002	mg/L	0.00008	38.24%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	35.6	0.0004	mg/L	0.00014	0.0004	mg/L	0.00014	33.07%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	49.7	0.0023	mg/L	0.00053	0.0023	mg/L	0.00053	23.55%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	35.9	0.0003	mg/L	0.00004	0.0003	mg/L	0.00004	11.71%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	931.2	0.0035	mg/L	0.00051	0.0035	mg/L	0.00051	14.47%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	439.0	0.0079	mg/L	0.00185	0.0079	mg/L	0.00185	23.42%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	57.2	0.0857	mg/L	0.01182	0.0857	mg/L	0.01182	13.80%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	164.2	0.0160	mg/L	0.00999	0.0160	mg/L	0.00999	62.59%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	234.4	0.0007	mg/L	0.00025	0.0007	mg/L	0.00025	36.27%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	23.9	0.0014	mg/L	0.00050	0.0014	mg/L	0.00050	35.08%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	76.7	0.0018	mg/L	0.00040	0.0018	mg/L	0.00040	21.67%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	273.1	0.0498	mg/L	0.00307	0.0498	mg/L	0.00307	6.17%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	6.3	0.0011	mg/L	0.00047	0.0011	mg/L	0.00047	44.29%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	8.8	0.0045	mg/L	0.00111	0.0045	mg/L	0.00111	24.71%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.6	0.0008	mg/L	0.00167	0.0008	mg/L	0.00167	222.08%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	42.2	0.0088	mg/L	0.00229	0.0088	mg/L	0.00229	25.83%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	1039.7	0.0019	mg/L	0.00074	0.0019	mg/L	0.00074	39.47%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-0.3	-0.0002	mg/L	0.00042	-0.0002	mg/L	0.00042	244.37%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	104.9	0.0016	mg/L	0.00090	0.0016	mg/L	0.00090	55.78%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	60.1	0.0020	mg/L	0.00034	0.0020	mg/L	0.00034	16.69%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	0.6	0.0036	mg/L	0.01972	0.0036	mg/L	0.01972	543.99%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	309.8	0.0027	mg/L	0.00007	0.0027	mg/L	0.00007	2.47%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Al 394.401†	284.9	0.0070	mg/L	0.00178	0.0070	mg/L	0.00178	25.29%
QC value within limits for Al 394.401 Recovery = Not calculated								
Al 237.313†	37.4	0.0061	mg/L	0.00121	0.0061	mg/L	0.00121	19.76%
QC value within limits for Al 237.313 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 26 Autosampler Location: 6
Sample ID: MRL Date Collected: 10/14/2014 4:38:40 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: MRL

00625

Method: DV200-6010C Opt3 Page 20 Date: 10/14/2014 4:48:27 PM

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6708691.8	0.9966	mg/L	0.01183				1.19%
Ag 328.068†	2679.8	0.0106	mg/L	0.00034	0.0106	mg/L	0.00034	3.20%
QC value within limits for Ag 328.068 Recovery = 106.16%								
Al 308.215†	2620.5	0.1784	mg/L	0.01294	0.1784	mg/L	0.01294	7.25%
QC value within limits for Al 308.215 Recovery = 89.22%								
As 188.979†	26.9	0.0214	mg/L	0.00067	0.0214	mg/L	0.00067	3.13%
QC value within limits for As 188.979 Recovery = 106.82%								
B 249.772†	22867.5	0.2088	mg/L	0.00405	0.2088	mg/L	0.00405	1.94%
QC value within limits for B 249.772 Recovery = 104.38%								
Ba 233.527†	17859.7	0.2115	mg/L	0.00238	0.2115	mg/L	0.00238	1.12%
QC value within limits for Ba 233.527 Recovery = 105.77%								
Be 313.107†	14814.4	0.0051	mg/L	0.00002	0.0051	mg/L	0.00002	0.47%
QC value within limits for Be 313.107 Recovery = 102.70%								
Cd 226.502†	875.8	0.0107	mg/L	0.00012	0.0107	mg/L	0.00012	1.10%
QC value within limits for Cd 226.502 Recovery = 106.93%								
Co 228.616†	1125.1	0.0514	mg/L	0.00077	0.0514	mg/L	0.00077	1.50%
QC value within limits for Co 228.616 Recovery = 102.88%								
Cr 267.716†	1171.7	0.0103	mg/L	0.00001	0.0103	mg/L	0.00001	0.06%
QC value within limits for Cr 267.716 Recovery = 102.61%								
Cu 324.752†	6727.3	0.0254	mg/L	0.00068	0.0254	mg/L	0.00068	2.67%
QC value within limits for Cu 324.752 Recovery = 101.61%								
Fe 259.939†	5927.3	0.1065	mg/L	0.00096	0.1065	mg/L	0.00096	0.90%
QC value within limits for Fe 259.939 Recovery = 106.55%								
K 766.490†	595.5	0.8923	mg/L	0.00524	0.8923	mg/L	0.00524	0.59%
QC value within limits for K 766.490 Recovery = 89.23%								
Mg 279.077†	10186.2	0.9898	mg/L	0.01578	0.9898	mg/L	0.01578	1.59%
QC value within limits for Mg 279.077 Recovery = 98.98%								
Mn 257.610†	5268.7	0.0154	mg/L	0.00020	0.0154	mg/L	0.00020	1.29%
QC value within limits for Mn 257.610 Recovery = 102.58%								
Mo 202.031†	426.3	0.0257	mg/L	0.00060	0.0257	mg/L	0.00060	2.35%
QC value within limits for Mo 202.031 Recovery = 102.75%								
Ni 231.604†	1730.7	0.0413	mg/L	0.00058	0.0413	mg/L	0.00058	1.40%
QC value within limits for Ni 231.604 Recovery = 103.23%								
Na 589.592†	5478.9	0.9989	mg/L	0.01251	0.9989	mg/L	0.01251	1.25%
QC value within limits for Na 589.592 Recovery = 99.89%								
Pb 220.353†	60.9	0.0102	mg/L	0.00063	0.0102	mg/L	0.00063	6.15%
QC value within limits for Pb 220.353 Recovery = 101.72%								
Sb 206.836†	121.4	0.0621	mg/L	0.00038	0.0621	mg/L	0.00038	0.61%
QC value within limits for Sb 206.836 Recovery = 103.50%								
Se 196.026†	9.4	0.0114	mg/L	0.00252	0.0114	mg/L	0.00252	22.13%
QC value within limits for Se 196.026 Recovery = 113.95%								
Sn 189.927†	2502.5	0.5246	mg/L	0.00703	0.5246	mg/L	0.00703	1.34%
QC value within limits for Sn 189.927 Recovery = 104.91%								
Ti 337.279†	29228.0	0.0525	mg/L	0.00076	0.0525	mg/L	0.00076	1.46%
QC value within limits for Ti 337.279 Recovery = 104.96%								
Tl 190.801†	35.2	0.0192	mg/L	0.00007	0.0192	mg/L	0.00007	0.37%
QC value within limits for Tl 190.801 Recovery = 96.24%								
V 292.402†	3561.2	0.0545	mg/L	0.00009	0.0545	mg/L	0.00009	0.16%
QC value within limits for V 292.402 Recovery = 108.99%								
Zn 206.200†	580.4	0.0196	mg/L	0.00005	0.0196	mg/L	0.00005	0.25%
QC value within limits for Zn 206.200 Recovery = 98.13%								
Ca 227.546†	166.1	0.9037	mg/L	0.02319	0.9037	mg/L	0.02319	2.57%
QC value within limits for Ca 227.546 Recovery = 90.37%								
Sr 421.552†	11340.4	0.0979	mg/L	0.00134	0.0979	mg/L	0.00134	1.37%
QC value within limits for Sr 421.552 Recovery = 97.90%								
Al 394.401†	7191.2	0.1775	mg/L	0.00176	0.1775	mg/L	0.00176	0.99%
QC value within limits for Al 394.401 Recovery = 88.73%								
Al 237.313†	1163.0	0.1908	mg/L	0.00325	0.1908	mg/L	0.00325	1.70%
QC value within limits for Al 237.313 Recovery = 95.38%								

All analyte(s) passed QC.

Sequence No.: 27
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 10/14/2014 4:44:32 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA

00626

Method: DV200-6010C Opt3 Page 21 Date: 10/14/2014 4:54:42 PM

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6332640.7	0.9407	mg/L	0.00460				0.49%
Ag 328.068†	-6435.0	-0.0008	mg/L	0.00071	-0.0008	mg/L	0.00071	84.14%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	3701167.1	252.1	mg/L	1.63	252.1	mg/L	1.63	0.64%
QC value within limits for Al 308.215 Recovery = 100.85%								
As 188.979†	15.5	0.0023	mg/L	0.00223	0.0023	mg/L	0.00223	96.22%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	36168.9	-0.1276	mg/L	0.00832	-0.1276	mg/L	0.00832	6.52%
Ba 233.527†	272.5	0.0032	mg/L	0.00008	0.0032	mg/L	0.00008	2.61%
Be 313.107†	-863.2	-0.0003	mg/L	0.00006	-0.0003	mg/L	0.00006	20.09%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	1064.5	0.0012	mg/L	0.00003	0.0012	mg/L	0.00003	2.67%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	17.4	0.0008	mg/L	0.00027	0.0008	mg/L	0.00027	33.77%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3482.2	-0.0010	mg/L	0.00000	-0.0010	mg/L	0.00000	0.25%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-1735.8	0.0017	mg/L	0.00038	0.0017	mg/L	0.00038	21.78%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	4956735.1	89.10	mg/L	0.061	89.10	mg/L	0.061	0.07%
QC value within limits for Fe 259.939 Recovery = 89.10%								
K 766.490†	-0.4	-0.0007	mg/L	0.06380	-0.0007	mg/L	0.06380	>999.9%
Mg 279.077†	2630213.0	255.6	mg/L	1.30	255.6	mg/L	1.30	0.51%
QC value within limits for Mg 279.077 Recovery = 102.23%								
Mn 257.610†	-5006.5	-0.0028	mg/L	0.00025	-0.0028	mg/L	0.00025	9.02%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	0.0	0.0000	mg/L	0.00052	0.0000	mg/L	0.00052	>999.9%
Ni 231.604†	-116.5	-0.0028	mg/L	0.00007	-0.0028	mg/L	0.00007	2.59%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	-13.8	-0.0025	mg/L	0.00223	-0.0025	mg/L	0.00223	88.83%
Pb 220.353†	-141.5	0.0018	mg/L	0.00040	0.0018	mg/L	0.00040	22.26%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	42.7	-0.0006	mg/L	0.00062	-0.0006	mg/L	0.00062	107.53%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-20.0	0.0005	mg/L	0.00225	0.0005	mg/L	0.00225	460.51%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-157.8	-0.0625	mg/L	0.00071	-0.0625	mg/L	0.00071	1.14%
Ti 337.279†	264.0	0.0005	mg/L	0.00004	0.0005	mg/L	0.00004	8.72%
Tl 190.801†	28.2	0.0012	mg/L	0.00089	0.0012	mg/L	0.00089	72.66%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	312.4	-0.0004	mg/L	0.00003	-0.0004	mg/L	0.00003	7.01%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	163.2	0.0055	mg/L	0.00009	0.0055	mg/L	0.00009	1.63%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	46853.6	259.0	mg/L	5.57	259.0	mg/L	5.57	2.15%
QC value within limits for Ca 227.546 Recovery = 103.61%								
Sr 421.552†	452.5	0.0039	mg/L	0.00013	0.0039	mg/L	0.00013	3.36%
Al 394.401†	10689659.1	263.8	mg/L	0.67	263.8	mg/L	0.67	0.25%
QC value within limits for Al 394.401 Recovery = 105.51%								
Al 237.313†	1532257.2	251.3	mg/L	1.46	251.3	mg/L	1.46	0.58%
QC value within limits for Al 237.313 Recovery = 100.53%								

All analyte(s) passed QC.

Sequence No.: 28 **Autosampler Location: 8**
Sample ID: ICSAB **Date Collected: 10/14/2014 4:50:47 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6219352.5	0.9239	mg/L	0.00203				0.22%
Ag 328.068†	46795.5	0.2098	mg/L	0.00089	0.2098	mg/L	0.00089	0.42%
QC value within limits for Ag 328.068 Recovery = 104.92%								
Al 308.215†	3797910.9	258.7	mg/L	1.15	258.7	mg/L	1.15	0.44%
QC value within limits for Al 308.215 Recovery = 103.49%								
As 188.979†	142.2	0.1028	mg/L	0.00252	0.1028	mg/L	0.00252	2.45%

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   QC value within limits for As 188.979  Recovery = 102.78%
B 249.772†          36440.1     -0.1328 mg/L       0.00059     -0.1328 mg/L       0.00059   0.44%
Ba 233.527†         44355.8      0.5254 mg/L       0.00057      0.5254 mg/L       0.00057   0.11%
   QC value within limits for Ba 233.527  Recovery = 105.08%
Be 313.107†       1450398.9      0.5028 mg/L       0.00196      0.5028 mg/L       0.00196   0.39%
   QC value within limits for Be 313.107  Recovery = 100.55%
Cd 226.502†         81587.7      0.9855 mg/L       0.00174      0.9855 mg/L       0.00174   0.18%
   QC value within limits for Cd 226.502  Recovery = 98.55%
Co 228.616†         10467.1      0.4785 mg/L       0.00164      0.4785 mg/L       0.00164   0.34%
   QC value within limits for Co 228.616  Recovery = 95.71%
Cr 267.716†         55886.7      0.5147 mg/L       0.00077      0.5147 mg/L       0.00077   0.15%
   QC value within limits for Cr 267.716  Recovery = 102.93%
Cu 324.752†        138235.8      0.5302 mg/L       0.00446      0.5302 mg/L       0.00446   0.84%
   QC value within limits for Cu 324.752  Recovery = 106.04%
Fe 259.939†       5036448.1       90.53 mg/L         0.075       90.53 mg/L         0.075   0.08%
   QC value within limits for Fe 259.939  Recovery = 90.53%
K 766.490†            55.0      0.0824 mg/L       0.01600      0.0824 mg/L       0.01600  19.42%
Mg 279.077†       2720448.7       264.4 mg/L          0.61       264.4 mg/L          0.61   0.23%
   QC value within limits for Mg 279.077  Recovery = 105.74%
Mn 257.610†        171164.6      0.5115 mg/L       0.00056      0.5115 mg/L       0.00056   0.11%
   QC value within limits for Mn 257.610  Recovery = 102.30%
Mo 202.031†             2.4      0.0001 mg/L       0.00021      0.0001 mg/L       0.00021 147.05%
Ni 231.604†         40685.7      0.9707 mg/L       0.00050      0.9707 mg/L       0.00050   0.05%
   QC value within limits for Ni 231.604  Recovery = 97.07%
Na 589.592†           -22.1     -0.0040 mg/L       0.00842     -0.0040 mg/L       0.00842 208.64%
Pb 220.353†           153.0      0.0516 mg/L       0.00186      0.0516 mg/L       0.00186   3.61%
   QC value within limits for Pb 220.353  Recovery = 103.20%
Sb 206.836†          1288.6      0.6362 mg/L       0.00120      0.6362 mg/L       0.00120   0.19%
   QC value within limits for Sb 206.836  Recovery = 106.04%
Se 196.026†           24.0       0.0542 mg/L       0.00240      0.0542 mg/L       0.00240   4.42%
   QC value within limits for Se 196.026  Recovery = 108.41%
Sn 189.927†          -128.8     -0.0572 mg/L       0.00100     -0.0572 mg/L       0.00100   1.74%
Ti 337.279†           271.2      0.0005 mg/L       0.00011      0.0005 mg/L       0.00011  22.08%
Tl 190.801†           215.4      0.1032 mg/L       0.00233      0.1032 mg/L       0.00233   2.26%
   QC value within limits for Tl 190.801  Recovery = 103.20%
V 292.402†          34065.5      0.5161 mg/L       0.00229      0.5161 mg/L       0.00229   0.44%
   QC value within limits for V 292.402  Recovery = 103.22%
Zn 206.200†         28787.6      0.9734 mg/L       0.00447      0.9734 mg/L       0.00447   0.46%
   QC value within limits for Zn 206.200  Recovery = 97.34%
Ca 227.546†         47901.5       264.8 mg/L          0.92       264.8 mg/L          0.92   0.35%
   QC value within limits for Ca 227.546  Recovery = 105.91%
Sr 421.552†           429.3      0.0037 mg/L       0.00026      0.0037 mg/L       0.00026   7.06%
Al 394.401†       10704525.9       264.2 mg/L          0.07       264.2 mg/L          0.07   0.03%
   QC value within limits for Al 394.401  Recovery = 105.66%
Al 237.313†        1576128.4       258.5 mg/L          0.49       258.5 mg/L          0.49   0.19%
   QC value within limits for Al 237.313  Recovery = 103.41%
All analyte(s) passed QC.

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Sequence No.: 29                          Autosampler Location: 13
Sample ID: HLCCV2                         Date Collected: 10/14/2014 4:57:05 PM
Analyst:                                  Data Type: Original
Initial Sample Wt:                        Initial Sample Vol:
Dilution:                                 Sample Prep Vol:

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Mean Data: HLCCV2

                  Mean Corrected          Calib                        Sample
Analyte              Intensity      Conc. Units      Std.Dev.     Conc. Units      Std.Dev.   RSD
Y 371.029          6058947.1      0.9001 mg/L       0.00416                                  0.46%
Ag 328.068†         529039.9       2.103 mg/L        0.0139      2.103 mg/L        0.0139   0.66%
   QC value within limits for Ag 328.068  Recovery = 105.13%
Al 308.215†        7635446.8       520.1 mg/L          0.72       520.1 mg/L          0.72   0.14%
   QC value within limits for Al 308.215  Recovery = 104.02%
As 188.979†           5018.9       3.967 mg/L        0.0220      3.967 mg/L        0.0220   0.55%
   QC value within limits for As 188.979  Recovery = 99.18%
B 249.772†         1121804.0       9.990 mg/L        0.1028      9.990 mg/L        0.1028   1.03%
   QC value within limits for B 249.772  Recovery = 99.90%
Ba 233.527†        3121624.6       36.98 mg/L         0.024      36.98 mg/L         0.024   0.07%
   QC value within limits for Ba 233.527  Recovery = 92.44%
Be 313.107†        2756285.2      0.9554 mg/L       0.00277      0.9554 mg/L       0.00277   0.29%
   QC value within limits for Be 313.107  Recovery = 95.54%
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Cd 226.502†	152921.8	1.865 mg/L	0.0028	1.865 mg/L	0.0028	0.15%
QC value within limits for Cd 226.502 Recovery = 93.23%						
Co 228.616†	206131.2	9.424 mg/L	0.0390	9.424 mg/L	0.0390	0.41%
QC value within limits for Co 228.616 Recovery = 94.24%						
Cr 267.716†	1094960.2	9.546 mg/L	0.0089	9.546 mg/L	0.0089	0.09%
QC value within limits for Cr 267.716 Recovery = 95.46%						
Cu 324.752†	1420144.0	5.365 mg/L	0.0439	5.365 mg/L	0.0439	0.82%
QC value within limits for Cu 324.752 Recovery = 107.30%						
Fe 259.939†	2556550.9	45.96 mg/L	0.035	45.96 mg/L	0.035	0.08%
QC value within limits for Fe 259.939 Recovery = 91.91%						
K 766.490†	113270.8	169.7 mg/L	1.14	169.7 mg/L	1.14	0.67%
QC value greater than the upper limit for K 766.490 Recovery = 113.14%						
Mg 279.077†	5241412.6	509.3 mg/L	0.86	509.3 mg/L	0.86	0.17%
QC value within limits for Mg 279.077 Recovery = 101.86%						
Mn 257.610†	3250359.6	9.490 mg/L	0.0105	9.490 mg/L	0.0105	0.11%
QC value within limits for Mn 257.610 Recovery = 94.90%						
Mo 202.031†	159257.8	9.598 mg/L	0.0220	9.598 mg/L	0.0220	0.23%
QC value within limits for Mo 202.031 Recovery = 95.98%						
Ni 231.604†	308765.0	7.366 mg/L	0.0247	7.366 mg/L	0.0247	0.33%
QC value within limits for Ni 231.604 Recovery = 92.08%						
Na 589.592†	860215.9	156.8 mg/L	0.95	156.8 mg/L	0.95	0.60%
QC value within limits for Na 589.592 Recovery = 104.56%						
Pb 220.353†	57834.3	9.705 mg/L	0.0487	9.705 mg/L	0.0487	0.50%
QC value within limits for Pb 220.353 Recovery = 97.05%						
Sb 206.836†	73.6	-0.0085 mg/L	0.00211	-0.0085 mg/L	0.00211	24.69%
Se 196.026†	1568.5	1.919 mg/L	0.0139	1.919 mg/L	0.0139	0.73%
QC value within limits for Se 196.026 Recovery = 95.96%						
Sn 189.927†	-194.9	-0.1016 mg/L	0.00007	-0.1016 mg/L	0.00007	0.07%
Ti 337.279†	5367510.8	9.638 mg/L	0.0165	9.638 mg/L	0.0165	0.17%
QC value within limits for Ti 337.279 Recovery = 96.38%						
Tl 190.801†	7136.1	3.870 mg/L	0.0224	3.870 mg/L	0.0224	0.58%
QC value within limits for Tl 190.801 Recovery = 96.75%						
V 292.402†	637510.3	9.754 mg/L	0.0645	9.754 mg/L	0.0645	0.66%
QC value within limits for V 292.402 Recovery = 97.54%						
Zn 206.200†	107230.6	3.626 mg/L	0.0125	3.626 mg/L	0.0125	0.34%
QC value within limits for Zn 206.200 Recovery = 90.65%						
Ca 227.546†	51627.6	283.1 mg/L	3.83	283.1 mg/L	3.83	1.35%
QC value greater than the upper limit for Ca 227.546 Recovery = 113.22%						
Sr 421.552†	1197147.3	10.34 mg/L	0.067	10.34 mg/L	0.067	0.65%
QC value within limits for Sr 421.552 Recovery = 103.35%						
Al 394.401†	21828833.3	538.7 mg/L	4.75	538.7 mg/L	4.75	0.88%
QC value within limits for Al 394.401 Recovery = 107.73%						
Al 237.313†	3099752.1	508.4 mg/L	1.27	508.4 mg/L	1.27	0.25%
QC value within limits for Al 237.313 Recovery = 101.69%						

QC Failed. Continue with analysis.

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Sequence No.: 30 **Autosampler Location: 2**
Sample ID: HLCCV1 **Date Collected: 10/14/2014 5:03:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: HLCCV1

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6581710.2	0.9777	mg/L	0.00778				0.80%
Ag 328.068†	253234.6	1.003	mg/L	0.0044	1.003	mg/L	0.0044	0.44%
QC value within limits for Ag 328.068 Recovery = 100.31%								
Al 308.215†	296634.2	20.20	mg/L	0.009	20.20	mg/L	0.009	0.05%
QC value within limits for Al 308.215 Recovery = 101.02%								
As 188.979†	2458.4	1.952	mg/L	0.0177	1.952	mg/L	0.0177	0.91%
QC value within limits for As 188.979 Recovery = 97.62%								
B 249.772†	546791.7	4.954	mg/L	0.0411	4.954	mg/L	0.0411	0.83%
QC value within limits for B 249.772 Recovery = 99.07%								
Ba 233.527†	1668102.3	19.76	mg/L	0.068	19.76	mg/L	0.068	0.35%
QC value within limits for Ba 233.527 Recovery = 98.79%								
Be 313.107†	1417107.3	0.4912	mg/L	0.00178	0.4912	mg/L	0.00178	0.36%
QC value within limits for Be 313.107 Recovery = 98.24%								
Cd 226.502†	81142.5	0.9907	mg/L	0.00476	0.9907	mg/L	0.00476	0.48%
QC value within limits for Cd 226.502 Recovery = 99.07%								

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Method: DV200-6010C Opt3 Page 24 Date: 10/14/2014 5:13:42 PM

Co 228.616†	108797.7	4.974 mg/L	0.0140	4.974 mg/L	0.0140	0.28%
QC value within limits for Co 228.616 Recovery = 99.48%						
Cr 267.716†	115441.6	1.006 mg/L	0.0040	1.006 mg/L	0.0040	0.39%
QC value within limits for Cr 267.716 Recovery = 100.63%						
Cu 324.752†	665695.3	2.514 mg/L	0.0045	2.514 mg/L	0.0045	0.18%
QC value within limits for Cu 324.752 Recovery = 100.55%						
Fe 259.939†	553550.0	9.950 mg/L	0.0256	9.950 mg/L	0.0256	0.26%
QC value within limits for Fe 259.939 Recovery = 99.50%						
K 766.490†	33608.3	50.35 mg/L	0.176	50.35 mg/L	0.176	0.35%
QC value within limits for K 766.490 Recovery = 100.71%						
Mg 279.077†	511417.9	49.70 mg/L	0.151	49.70 mg/L	0.151	0.30%
QC value within limits for Mg 279.077 Recovery = 99.39%						
Mn 257.610†	512207.7	1.496 mg/L	0.0042	1.496 mg/L	0.0042	0.28%
QC value within limits for Mn 257.610 Recovery = 99.73%						
Mo 202.031†	82798.5	4.990 mg/L	0.0186	4.990 mg/L	0.0186	0.37%
QC value within limits for Mo 202.031 Recovery = 99.80%						
Ni 231.604†	166977.6	3.984 mg/L	0.0235	3.984 mg/L	0.0235	0.59%
QC value within limits for Ni 231.604 Recovery = 99.59%						
Na 589.592†	267048.8	48.69 mg/L	0.034	48.69 mg/L	0.034	0.07%
QC value within limits for Na 589.592 Recovery = 97.38%						
Pb 220.353†	5938.6	0.9927 mg/L	0.01034	0.9927 mg/L	0.01034	1.04%
QC value within limits for Pb 220.353 Recovery = 99.27%						
Sb 206.836†	19308.5	9.876 mg/L	0.1011	9.876 mg/L	0.1011	1.02%
QC value within limits for Sb 206.836 Recovery = 98.76%						
Se 196.026†	795.0	0.9656 mg/L	0.01453	0.9656 mg/L	0.01453	1.50%
QC value within limits for Se 196.026 Recovery = 96.56%						
Sn 189.927†	47172.9	9.886 mg/L	0.0629	9.886 mg/L	0.0629	0.64%
QC value within limits for Sn 189.927 Recovery = 98.86%						
Ti 337.279†	2744126.7	4.927 mg/L	0.0093	4.927 mg/L	0.0093	0.19%
QC value within limits for Ti 337.279 Recovery = 98.55%						
Tl 190.801†	3614.7	1.975 mg/L	0.0243	1.975 mg/L	0.0243	1.23%
QC value within limits for Tl 190.801 Recovery = 98.77%						
V 292.402†	332602.1	5.089 mg/L	0.0252	5.089 mg/L	0.0252	0.49%
QC value within limits for V 292.402 Recovery = 101.79%						
Zn 206.200†	58707.8	1.985 mg/L	0.0172	1.985 mg/L	0.0172	0.87%
QC value within limits for Zn 206.200 Recovery = 99.26%						
Ca 227.546†	9299.4	50.87 mg/L	0.399	50.87 mg/L	0.399	0.78%
QC value within limits for Ca 227.546 Recovery = 101.74%						
Sr 421.552†	559053.6	4.826 mg/L	0.0336	4.826 mg/L	0.0336	0.70%
QC value within limits for Sr 421.552 Recovery = 96.53%						
Al 394.401†	820397.9	20.24 mg/L	0.006	20.24 mg/L	0.006	0.03%
QC value within limits for Al 394.401 Recovery = 101.22%						
Al 237.313†	122043.8	20.02 mg/L	0.003	20.02 mg/L	0.003	0.01%
QC value within limits for Al 237.313 Recovery = 100.09%						

All analyte(s) passed QC.

Sequence No.: 31
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 10/14/2014 5:09:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6669636.9	0.9908	mg/L	0.00317				0.32%
Ag 328.068†	129374.9	0.5125	mg/L	0.00042	0.5125	mg/L	0.00042	0.08%
QC value within limits for Ag 328.068 Recovery = 102.50%								
Al 308.215†	143587.4	9.780	mg/L	0.0044	9.780	mg/L	0.0044	0.04%
QC value within limits for Al 308.215 Recovery = 97.80%								
As 188.979†	1254.0	0.9959	mg/L	0.00077	0.9959	mg/L	0.00077	0.08%
QC value within limits for As 188.979 Recovery = 99.59%								
B 249.772†	278602.1	2.524	mg/L	0.0171	2.524	mg/L	0.0171	0.68%
QC value within limits for B 249.772 Recovery = 100.96%								
Ba 233.527†	866067.2	10.26	mg/L	0.007	10.26	mg/L	0.007	0.07%
QC value within limits for Ba 233.527 Recovery = 102.58%								
Be 313.107†	722812.5	0.2505	mg/L	0.00010	0.2505	mg/L	0.00010	0.04%
QC value within limits for Be 313.107 Recovery = 100.22%								
Cd 226.502†	42300.7	0.5165	mg/L	0.00170	0.5165	mg/L	0.00170	0.33%
QC value within limits for Cd 226.502 Recovery = 103.29%								

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Method: DV200-6010C Opt3 Page 25 Date: 10/14/2014 5:19:41 PM

Co 228.616†	55513.7	2.538 mg/L	0.0043	2.538 mg/L	0.0043	0.17%
QC value within limits for Co 228.616 Recovery = 101.52%						
Cr 267.716†	60088.8	0.5237 mg/L	0.00119	0.5237 mg/L	0.00119	0.23%
QC value within limits for Cr 267.716 Recovery = 104.74%						
Cu 324.752†	332268.7	1.255 mg/L	0.0005	1.255 mg/L	0.0005	0.04%
QC value within limits for Cu 324.752 Recovery = 100.37%						
Fe 259.939†	283885.9	5.103 mg/L	0.0054	5.103 mg/L	0.0054	0.11%
QC value within limits for Fe 259.939 Recovery = 102.06%						
K 766.490†	16578.1	24.84 mg/L	0.085	24.84 mg/L	0.085	0.34%
QC value within limits for K 766.490 Recovery = 99.35%						
Mg 279.077†	259309.7	25.20 mg/L	0.030	25.20 mg/L	0.030	0.12%
QC value within limits for Mg 279.077 Recovery = 100.79%						
Mn 257.610†	262183.0	0.7657 mg/L	0.00080	0.7657 mg/L	0.00080	0.10%
QC value within limits for Mn 257.610 Recovery = 102.09%						
Mo 202.031†	41052.0	2.474 mg/L	0.0043	2.474 mg/L	0.0043	0.17%
QC value within limits for Mo 202.031 Recovery = 98.96%						
Ni 231.604†	86261.1	2.058 mg/L	0.0056	2.058 mg/L	0.0056	0.27%
QC value within limits for Ni 231.604 Recovery = 102.90%						
Na 589.592†	134160.7	24.46 mg/L	0.119	24.46 mg/L	0.119	0.48%
QC value within limits for Na 589.592 Recovery = 97.84%						
Pb 220.353†	3008.0	0.5027 mg/L	0.00159	0.5027 mg/L	0.00159	0.32%
QC value within limits for Pb 220.353 Recovery = 100.55%						
Sb 206.836†	9865.0	5.046 mg/L	0.0352	5.046 mg/L	0.0352	0.70%
QC value within limits for Sb 206.836 Recovery = 100.92%						
Se 196.026†	404.1	0.4908 mg/L	0.00070	0.4908 mg/L	0.00070	0.14%
QC value within limits for Se 196.026 Recovery = 98.16%						
Sn 189.927†	24357.3	5.105 mg/L	0.0173	5.105 mg/L	0.0173	0.34%
QC value within limits for Sn 189.927 Recovery = 102.09%						
Ti 337.279†	1374847.5	2.469 mg/L	0.0008	2.469 mg/L	0.0008	0.03%
QC value within limits for Ti 337.279 Recovery = 98.75%						
Tl 190.801†	1816.2	0.9926 mg/L	0.00268	0.9926 mg/L	0.00268	0.27%
QC value within limits for Tl 190.801 Recovery = 99.26%						
V 292.402†	169503.6	2.594 mg/L	0.0043	2.594 mg/L	0.0043	0.17%
QC value within limits for V 292.402 Recovery = 103.75%						
Zn 206.200†	30679.2	1.037 mg/L	0.0036	1.037 mg/L	0.0036	0.35%
QC value within limits for Zn 206.200 Recovery = 103.74%						
Ca 227.546†	4431.8	24.26 mg/L	0.014	24.26 mg/L	0.014	0.06%
QC value within limits for Ca 227.546 Recovery = 97.06%						
Sr 421.552†	271229.3	2.342 mg/L	0.0125	2.342 mg/L	0.0125	0.53%
QC value within limits for Sr 421.552 Recovery = 93.66%						
Al 394.401†	394865.6	9.744 mg/L	0.0060	9.744 mg/L	0.0060	0.06%
QC value within limits for Al 394.401 Recovery = 97.44%						
Al 237.313†	60692.4	9.955 mg/L	0.0036	9.955 mg/L	0.0036	0.04%
QC value within limits for Al 237.313 Recovery = 99.55%						

All analyte(s) passed QC.

Sequence No.: 32 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 10/14/2014 5:16:02 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6838912.9	1.016	mg/L	0.0050				0.50%
Ag 328.068†	89.2	0.0004	mg/L	0.00021	0.0004	mg/L	0.00021	59.14%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	533.3	0.0363	mg/L	0.00137	0.0363	mg/L	0.00137	3.77%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.5	0.0012	mg/L	0.00123	0.0012	mg/L	0.00123	104.15%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	8457.3	0.0773	mg/L	0.00717	0.0773	mg/L	0.00717	9.28%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	1034.6	0.0123	mg/L	0.00361	0.0123	mg/L	0.00361	29.48%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	1004.0	0.0003	mg/L	0.00013	0.0003	mg/L	0.00013	36.20%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	49.0	0.0006	mg/L	0.00021	0.0006	mg/L	0.00021	34.55%
QC value within limits for Cd 226.502 Recovery = Not calculated								

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Co 228.616†	112.8	0.0052 mg/L	0.00100	0.0052 mg/L	0.0050U	0.00100	19.41%
QC value greater than the upper limit for Co 228.616 Recovery = Not calculated							
Cr 267.716†	153.1	0.0013 mg/L	0.00031	0.0013 mg/L	0.0050U	0.00031	23.22%
QC value greater than the upper limit for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	2776.0	0.0105 mg/L	0.00076	0.0105 mg/L	0.0200U	0.00076	7.25%
QC value greater than the upper limit for Cu 324.752 Recovery = Not calculated							
Fe 259.939†	1292.5	0.0232 mg/L	0.00304	0.0232 mg/L		0.00304	13.10%
QC value within limits for Fe 259.939 Recovery = Not calculated							
K 766.490†	112.1	0.1680 mg/L	0.00750	0.1680 mg/L		0.00750	4.46%
QC value within limits for K 766.490 Recovery = Not calculated							
Mg 279.077†	389.8	0.0379 mg/L	0.01503	0.0379 mg/L		0.01503	39.68%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	602.0	0.0018 mg/L	0.00037	0.0018 mg/L		0.00037	20.79%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	42.1	0.0025 mg/L	0.00087	0.0025 mg/L		0.00087	34.10%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni 231.604†	197.4	0.0047 mg/L	0.00079	0.0047 mg/L		0.00079	16.87%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Na 589.592†	405.0	0.0738 mg/L	0.01314	0.0738 mg/L		0.01314	17.80%
QC value within limits for Na 589.592 Recovery = Not calculated							
Pb 220.353†	14.1	0.0024 mg/L	0.00013	0.0024 mg/L		0.00013	5.69%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	9.9	0.0051 mg/L	0.00136	0.0051 mg/L		0.00136	26.81%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-0.1	-0.0002 mg/L	0.00163	-0.0002 mg/L		0.00163	939.16%
QC value within limits for Se 196.026 Recovery = Not calculated							
Sn 189.927†	59.7	0.0125 mg/L	0.00237	0.0125 mg/L		0.00237	18.93%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 337.279†	1627.4	0.0029 mg/L	0.00077	0.0029 mg/L		0.00077	26.22%
QC value within limits for Ti 337.279 Recovery = Not calculated							
Tl 190.801†	2.0	0.0011 mg/L	0.00063	0.0011 mg/L		0.00063	57.55%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 292.402†	188.3	0.0029 mg/L	0.00101	0.0029 mg/L		0.00101	34.95%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 206.200†	89.6	0.0030 mg/L	0.00049	0.0030 mg/L		0.00049	16.29%
QC value within limits for Zn 206.200 Recovery = Not calculated							
Ca 227.546†	5.9	0.0334 mg/L	0.03365	0.0334 mg/L		0.03365	100.61%
QC value within limits for Ca 227.546 Recovery = Not calculated							
Sr 421.552†	430.8	0.0037 mg/L	0.00012	0.0037 mg/L		0.00012	3.11%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Al 394.401†	1180.2	0.0291 mg/L	0.00743	0.0291 mg/L		0.00743	25.51%
QC value within limits for Al 394.401 Recovery = Not calculated							
Al 237.313†	171.9	0.0282 mg/L	0.00995	0.0282 mg/L		0.00995	35.27%
QC value within limits for Al 237.313 Recovery = Not calculated							

QC Failed. Continue with analysis.

Sequence No.: 33 **Autosampler Location: 48**
Sample ID: LCSW2 **Date Collected: 10/14/2014 5:22:18 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: LCSW2

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6879159.4	1.022	mg/L	0.0024				0.24%
Ag 328.068†	12286.9	0.0488	mg/L	0.00080				1.63%
Al 308.215†	26521.9	1.807	mg/L	0.0447				2.47%
As 188.979†	48.5	0.0385	mg/L	0.00010				0.27%
B 249.772†	103733.2	0.9446	mg/L	0.02485				2.63%
Ba 233.527†	165300.6	1.958	mg/L	0.0344				1.76%
Be 313.107†	135789.9	0.0471	mg/L	0.00072				1.52%
Cd 226.502†	3983.5	0.0486	mg/L	0.00006				0.13%
Co 228.616†	10671.1	0.4879	mg/L	0.00835				1.71%
Cr 267.716†	23425.7	0.2033	mg/L	0.00328				1.61%
Cu 324.752†	68707.7	0.2594	mg/L	0.00538				2.07%
Fe 259.939†	55326.1	0.9945	mg/L	0.01730				1.74%
K 766.490†	12414.4	18.60	mg/L	0.051				0.27%
Mg 279.077†	19873.0	1.931	mg/L	0.0373				1.93%
Mn 257.610†	168370.3	0.4914	mg/L	0.00816				1.66%

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Mo 202.031†	7691.3	0.4635	mg/L	0.00005	0.01%
Ni 231.604†	21143.8	0.5044	mg/L	0.00584	1.16%
Na 589.592†	103459.1	18.86	mg/L	0.017	0.09%
Pb 220.353†	2909.9	0.4856	mg/L	0.00095	0.20%
Sb 206.836†	896.9	0.4587	mg/L	0.00012	0.03%
Se 196.026†	724.9	0.8783	mg/L	0.00441	0.50%
Sn 189.927†	25078.9	5.257	mg/L	0.0977	1.86%
Ti 337.279†	261485.6	0.4695	mg/L	0.00805	1.72%
Tl 190.801†	3333.3	1.822	mg/L	0.0042	0.23%
V 292.402†	32153.2	0.4920	mg/L	0.00741	1.51%
Zn 206.200†	14953.5	0.5056	mg/L	0.00761	1.50%
Ca 227.546†	360.4	2.010	mg/L	0.0270	1.35%
Sr 421.552†	222894.1	1.924	mg/L	0.0012	0.06%
Al 394.401†	73964.1	1.825	mg/L	0.0368	2.02%
Al 237.313†	11324.7	1.858	mg/L	0.0251	1.35%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 34
Sample ID: LCSW3
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 10/14/2014 5:28:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW3

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6786943.7	1.008	mg/L	0.0014				0.13%
Ag 328.068†	12560.7	0.0499	mg/L	0.00039				0.78%
Al 308.215†	27619.4	1.882	mg/L	0.0171				0.91%
As 188.979†	48.4	0.0383	mg/L	0.00010				0.27%
B 249.772†	106186.0	0.9669	mg/L	0.00244				0.25%
Ba 233.527†	169652.6	2.010	mg/L	0.0048				0.24%
Be 313.107†	139632.0	0.0484	mg/L	0.00010				0.21%
Cd 226.502†	4061.1	0.0495	mg/L	0.00002				0.04%
Co 228.616†	10952.6	0.5007	mg/L	0.00216				0.43%
Cr 267.716†	23967.8	0.2080	mg/L	0.00090				0.43%
Cu 324.752†	70765.2	0.2672	mg/L	0.00248				0.93%
Fe 259.939†	56852.3	1.022	mg/L	0.0027				0.27%
K 766.490†	12716.1	19.05	mg/L	0.109				0.57%
Mg 279.077†	20363.7	1.979	mg/L	0.0113				0.57%
Mn 257.610†	173018.9	0.5050	mg/L	0.00129				0.26%
Mo 202.031†	7960.9	0.4798	mg/L	0.00066				0.14%
Ni 231.604†	21690.8	0.5175	mg/L	0.00206				0.40%
Na 589.592†	104828.6	19.11	mg/L	0.102				0.53%
Pb 220.353†	2958.2	0.4937	mg/L	0.00089				0.18%
Sb 206.836†	928.3	0.4747	mg/L	0.00093				0.20%
Se 196.026†	751.9	0.9109	mg/L	0.00428				0.47%
Sn 189.927†	25925.5	5.434	mg/L	0.0008				0.01%
Ti 337.279†	272878.5	0.4900	mg/L	0.00190				0.39%
Tl 190.801†	3398.6	1.858	mg/L	0.0008				0.04%
V 292.402†	32717.3	0.5006	mg/L	0.00264				0.53%
Zn 206.200†	15359.5	0.5194	mg/L	0.00121				0.23%
Ca 227.546†	364.6	2.034	mg/L	0.0189				0.93%
Sr 421.552†	227286.5	1.962	mg/L	0.0083				0.43%
Al 394.401†	75945.8	1.874	mg/L	0.0161				0.86%
Al 237.313†	11590.8	1.901	mg/L	0.0081				0.43%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 35
Sample ID: LCSW4
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 10/14/2014 5:34:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW4

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6840163.3	1.016	mg/L	0.0028				0.28%

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Ag 328.068†	12519.4	0.0497 mg/L	0.00053	1.08%
Al 308.215†	26992.7	1.839 mg/L	0.0305	1.66%
As 188.979†	45.7	0.0362 mg/L	0.00019	0.54%
B 249.772†	104221.1	0.9490 mg/L	0.00523	0.55%
Ba 233.527†	167296.6	1.982 mg/L	0.0215	1.08%
Be 313.107†	137340.0	0.0476 mg/L	0.00048	1.01%
Cd 226.502†	4060.2	0.0495 mg/L	0.00024	0.48%
Co 228.616†	10822.5	0.4948 mg/L	0.00586	1.18%
Cr 267.716†	23575.8	0.2046 mg/L	0.00222	1.08%
Cu 324.752†	69141.6	0.2611 mg/L	0.00347	1.33%
Fe 259.939†	55838.0	1.004 mg/L	0.0114	1.13%
K 766.490†	12629.9	18.92 mg/L	0.127	0.67%
Mg 279.077†	20038.6	1.947 mg/L	0.0190	0.97%
Mn 257.610†	170595.8	0.4979 mg/L	0.00526	1.06%
Mo 202.031†	7861.3	0.4738 mg/L	0.00187	0.40%
Ni 231.604†	21276.3	0.5076 mg/L	0.00593	1.17%
Na 589.592†	105135.1	19.17 mg/L	0.204	1.07%
Pb 220.353†	2960.7	0.4941 mg/L	0.00159	0.32%
Sb 206.836†	909.1	0.4649 mg/L	0.00304	0.65%
Se 196.026†	745.8	0.9036 mg/L	0.00658	0.73%
Sn 189.927†	25436.9	5.332 mg/L	0.0448	0.84%
Ti 337.279†	266478.5	0.4785 mg/L	0.00593	1.24%
Tl 190.801†	3398.4	1.858 mg/L	0.0078	0.42%
V 292.402†	32153.3	0.4920 mg/L	0.00394	0.80%
Zn 206.200†	15159.1	0.5126 mg/L	0.00603	1.18%
Ca 227.546†	360.3	2.010 mg/L	0.0163	0.81%
Sr 421.552†	227860.4	1.967 mg/L	0.0198	1.01%
Al 394.401†	74513.1	1.839 mg/L	0.0257	1.40%
Al 237.313†	11358.6	1.863 mg/L	0.0203	1.09%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

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Sequence No.: 36
Sample ID: PBW-220481
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 10/14/2014 5:40:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: PBW-220481

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6860005.6	1.019	mg/L	0.0068				0.67%
Ag 328.068†	10.3	0.0000	mg/L	0.00028				668.85%
Al 308.215†	347.6	0.0237	mg/L	0.01668				70.44%
As 188.979†	-0.4	-0.0003	mg/L	0.00090				268.66%
B 249.772†	2740.3	0.0251	mg/L	0.00241				9.60%
Ba 233.527†	93.3	0.0011	mg/L	0.00003				2.97%
Be 313.107†	-174.5	-0.0001	mg/L	0.00010				160.53%
Cd 226.502†	-11.9	-0.0001	mg/L	0.00002				14.43%
Co 228.616†	19.1	0.0009	mg/L	0.00025				28.90%
Cr 267.716†	92.1	0.0008	mg/L	0.00003				4.02%
Cu 324.752†	793.1	0.0030	mg/L	0.00070				23.37%
Fe 259.939†	354.2	0.0064	mg/L	0.00041				6.43%
K 766.490†	-3.2	-0.0048	mg/L	0.08267				>999.9%
Mg 279.077†	62.7	0.0061	mg/L	0.00134				21.96%
Mn 257.610†	343.9	0.0010	mg/L	0.00003				3.35%
Mo 202.031†	-0.2	0.0000	mg/L	0.00009				622.44%
Ni 231.604†	35.7	0.0009	mg/L	0.00003				2.94%
Na 589.592†	9.6	0.0018	mg/L	0.00145				82.70%
Pb 220.353†	2.8	0.0005	mg/L	0.00141				302.23%
Sb 206.836†	6.6	0.0034	mg/L	0.00065				19.36%
Se 196.026†	2.4	0.0029	mg/L C	0.00148				51.83%
Sn 189.927†	24.0	0.0050	mg/L	0.00030				5.97%
Ti 337.279†	238.5	0.0004	mg/L	0.00009				22.14%
Tl 190.801†	-2.9	-0.0016	mg/L	0.00134				85.10%
V 292.402†	-23.4	-0.0004	mg/L	0.00033				93.25%
Zn 206.200†	23.7	0.0008	mg/L	0.00012				15.07%
Ca 227.546†	-8.6	-0.0461	mg/L	0.00471				10.20%
Sr 421.552†	52.0	0.0004	mg/L	0.00025				55.76%
Al 394.401†	241.9	0.0060	mg/L	0.00121				20.30%
Al 237.313†	33.3	0.0055	mg/L	0.00116				21.24%

00634

Method: DV200-6010C Opt3 Page 29 Date: 10/14/2014 5:56:10 PM

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 37
Sample ID: LCSW-220481
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 10/14/2014 5:46:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-220481

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6938761.7	1.031	mg/L	0.0023				0.23%
Ag 328.068†	11980.4	0.0476	mg/L	0.00014				0.30%
Al 308.215†	27130.1	1.848	mg/L	0.0131				0.71%
As 188.979†	47.3	0.0375	mg/L	0.00080				2.14%
B 249.772†	102349.0	0.9318	mg/L	0.01075				1.15%
Ba 233.527†	169413.3	2.007	mg/L	0.0070				0.35%
Be 313.107†	138743.1	0.0481	mg/L	0.00015				0.31%
Cd 226.502†	4069.4	0.0496	mg/L	0.00018				0.37%
Co 228.616†	10895.0	0.4981	mg/L	0.00103				0.21%
Cr 267.716†	23764.9	0.2063	mg/L	0.00000				0.00%
Cu 324.752†	69575.3	0.2627	mg/L	0.00159				0.60%
Fe 259.939†	56448.8	1.015	mg/L	0.0045				0.45%
K 766.490†	12614.1	18.90	mg/L	0.017				0.09%
Mg 279.077†	20190.9	1.962	mg/L	0.0058				0.30%
Mn 257.610†	172351.6	0.5030	mg/L	0.00176				0.35%
Mo 202.031†	7979.2	0.4809	mg/L	0.00163				0.34%
Ni 231.604†	21447.0	0.5117	mg/L	0.00081				0.16%
Na 589.592†	104225.7	19.00	mg/L	0.046				0.24%
Pb 220.353†	2970.7	0.4958	mg/L	0.00232				0.47%
Sb 206.836†	913.5	0.4672	mg/L	0.00130				0.28%
Se 196.026†	762.5	0.9238	mg/L	0.00305				0.33%
Sn 189.927†	25104.7	5.262	mg/L	0.0184				0.35%
Ti 337.279†	268997.5	0.4830	mg/L	0.00222				0.46%
Tl 190.801†	3426.0	1.873	mg/L	0.0048				0.26%
V 292.402†	32184.2	0.4925	mg/L	0.00233				0.47%
Zn 206.200†	15133.8	0.5117	mg/L	0.00111				0.22%
Ca 227.546†	357.6	1.996	mg/L	0.0164				0.82%
Sr 421.552†	14.0	0.0001	mg/L	0.00004				33.16%
Al 394.401†	75610.3	1.866	mg/L	0.0076				0.41%
Al 237.313†	11532.8	1.892	mg/L	0.0030				0.16%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 38
Sample ID: R1407904-007
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 10/14/2014 5:52:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407904-007

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6667799.3	0.9905	mg/L	0.00647				0.65%
Ag 328.068†	-72.4	-0.0002	mg/L	0.00002				7.17%
Al 308.215†	1223.6	0.0749	mg/L	0.00323				4.31%
As 188.979†	1.4	0.0011	mg/L	0.00005				4.44%
B 249.772†	30847.8	0.2783	mg/L	0.00075				0.27%
Ba 233.527†	3911.6	0.0463	mg/L	0.00007				0.14%
Be 313.107†	-658.1	-0.0002	mg/L	0.00003				11.90%
Cd 226.502†	-5.2	-0.0001	mg/L	0.00009				99.48%
Co 228.616†	1.9	0.0001	mg/L	0.00011				132.15%
Cr 267.716†	-116.4	0.0006	mg/L	0.00003				5.46%
Cu 324.752†	22326.2	0.0843	mg/L	0.00051				0.61%
Fe 259.939†	11239.5	0.2020	mg/L	0.00120				0.59%
K 766.490†	9532.2	14.28	mg/L	0.127				0.89%
Mg 279.077†	168799.1	16.40	mg/L	0.034				0.21%
Mn 257.610†	5167.0	0.0151	mg/L	0.00001				0.04%
Mo 202.031†	36.4	0.0022	mg/L	0.00028				12.77%

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Ni 231.604†	88.4	0.0021	mg/L	0.00023	11.14%
Na 589.592†	655565.4	119.5	mg/L	1.90	1.59%
Pb 220.353†	12.3	0.0021	mg/L	0.00091	44.22%
Sb 206.836†	7.3	0.0037	mg/L	0.00095	25.76%
Se 196.026†	3.0	0.0037	mg/L	0.00225	60.52%
Sn 189.927†	-111.0	-0.0233	mg/L	0.00091	3.89%
Ti 337.279†	685.9	0.0012	mg/L	0.00038	30.88%
Tl 190.801†	-5.6	-0.0035	mg/L	0.00206	58.82%
V 292.402†	18.5	0.0003	mg/L	0.00000	0.51%
Zn 206.200†	2231.2	0.0754	mg/L	0.00019	0.25%
Ca 227.546†	11664.0	63.01	mg/L	0.021	0.03%
Sr 421.552†	73613.3	0.6355	mg/L	0.00483	0.76%
Al 394.401†	741.2	0.0183	mg/L	0.00172	9.38%
Al 237.313†	248.1	0.0407	mg/L	0.00039	0.97%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 39
Sample ID: R1407905-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 54
Date Collected: 10/14/2014 5:58:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407905-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6296985.8	0.9354	mg/L	0.00003				0.00%
Ag 328.068†	-897.1	-0.0035	mg/L	0.00004				1.10%
Al 308.215†	13643.6	0.8602	mg/L	0.01523				1.77%
As 188.979†	3.6	0.0028	mg/L	0.00309				109.73%
B 249.772†	10026.8	0.0666	mg/L	0.00177				2.65%
Ba 233.527†	15555.7	0.1843	mg/L	0.00238				1.29%
Be 313.107†	-1904.8	-0.0007	mg/L	0.00003				3.88%
Cd 226.502†	-33.3	-0.0004	mg/L	0.00005				12.79%
Co 228.616†	-1.6	-0.0001	mg/L	0.00007				98.88%
Cr 267.716†	-40.6	-0.0001	mg/L	0.00005				42.06%
Cu 324.752†	2208.7	0.0083	mg/L	0.00051				6.15%
Fe 259.939†	3433.9	0.0617	mg/L	0.00061				0.98%
K 766.490†	13466.3	20.18	mg/L	0.116				0.57%
Mg 279.077†	23758.1	2.309	mg/L	0.0200				0.86%
Mn 257.610†	5265.6	0.0154	mg/L	0.00001				0.09%
Mo 202.031†	163.8	0.0099	mg/L	0.00034				3.42%
Ni 231.604†	662.7	0.0158	mg/L	0.00014				0.88%
Na 589.592†	2608214.8	475.5	mg/L	0.23				0.05%
Pb 220.353†	-11.0	-0.0017	mg/L	0.00057				32.50%
Sb 206.836†	10.9	0.0055	mg/L	0.00066				12.05%
Se 196.026†	2.7	0.0033	mg/L	0.00084				25.53%
Sn 189.927†	-212.8	-0.0447	mg/L	0.00098				2.19%
Ti 337.279†	254.6	0.0005	mg/L	0.00002				4.47%
Tl 190.801†	8.1	-0.0005	mg/L	0.00109				210.89%
V 292.402†	157.1	0.0024	mg/L	0.00012				4.88%
Zn 206.200†	96.0	0.0032	mg/L	0.00030				9.24%
Ca 227.546†	94345.9	509.6	mg/L	6.36				1.25%
Sr 421.552†	479836.7	4.143	mg/L	0.0001				0.00%
Al 394.401†	33241.1	0.8203	mg/L	0.01343				1.64%
Al 237.313†	4738.3	0.7772	mg/L	0.00078				0.10%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 40
Sample ID: R1407923-001 10X
Analyst:
Initial Sample Wt:
Dilution: 10X

Autosampler Location: 55
Date Collected: 10/14/2014 6:04:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407923-001 10X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6325582.3	0.9397	mg/L	0.00361				0.38%
Ag 328.068†	-68.2	-0.0003	mg/L	0.00029				107.49%

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Al 308.215†	1044.6	0.0689 mg/L	0.00160	2.32%
As 188.979†	1.7	0.0013 mg/L	0.00086	64.44%
B 249.772†	3101.0	0.0275 mg/L	0.00030	1.09%
Ba 233.527†	314.3	0.0037 mg/L	0.00002	0.66%
Be 313.107†	-1114.6	-0.0004 mg/L	0.00002	4.57%
Cd 226.502†	-24.8	-0.0003 mg/L	0.00004	13.58%
Co 228.616†	-2.6	-0.0001 mg/L	0.00008	69.78%
Cr 267.716†	-33.2	0.0001 mg/L	0.00007	56.05%
Cu 324.752†	1024.3	0.0039 mg/L	0.00008	2.15%
Fe 259.939†	142.8	0.0026 mg/L	0.00015	5.82%
K 766.490†	786.6	1.179 mg/L	0.1071	9.09%
Mg 279.077†	43016.6	4.180 mg/L	0.0244	0.58%
Mn 257.610†	480.7	0.0014 mg/L	0.00002	1.12%
Mo 202.031†	14.5	0.0009 mg/L	0.00007	8.38%
Ni 231.604†	55.5	0.0013 mg/L	0.00005	3.65%
Na 589.592†	3853978.7	702.7 mg/L	11.01	1.57%
Pb 220.353†	-2.9	-0.0005 mg/L	0.00023	47.79%
Sb 206.836†	6.1	0.0031 mg/L	0.00074	23.77%
Se 196.026†	1.8	0.0022 mg/L	0.00070	32.24%
Sn 189.927†	-68.9	-0.0145 mg/L	0.00006	0.44%
Ti 337.279†	173.4	0.0003 mg/L	0.00010	32.38%
Tl 190.801†	-2.7	-0.0016 mg/L	0.00173	108.93%
V 292.402†	-23.7	-0.0004 mg/L	0.00031	83.99%
Zn 206.200†	88.1	0.0030 mg/L	0.00008	2.58%
Ca 227.546†	3135.1	16.93 mg/L	0.144	0.85%
Sr 421.552†	68524.3	0.5916 mg/L	0.00019	0.03%
Al 394.401†	-419.3	-0.0103 mg/L	0.00192	18.57%
Al 237.313†	-1.0	-0.0002 mg/L	0.00034	205.27%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 41
Sample ID: R1407949-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 56
Date Collected: 10/14/2014 6:10:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407949-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6635133.4	0.9857	mg/L	0.00103				0.10%
Ag 328.068†	-45.4	-0.0002	mg/L	0.00013				73.45%
Al 308.215†	608.9	0.0367	mg/L	0.00414				11.30%
As 188.979†	-0.2	-0.0002	mg/L	0.00243				>999.9%
B 249.772†	3560.8	0.0308	mg/L	0.00007				0.24%
Ba 233.527†	2403.3	0.0285	mg/L	0.00015				0.54%
Be 313.107†	-474.6	-0.0002	mg/L	0.00002				10.04%
Cd 226.502†	-23.3	-0.0003	mg/L	0.00004				14.67%
Co 228.616†	-12.9	-0.0006	mg/L	0.00006				10.56%
Cr 267.716†	-183.4	-0.0005	mg/L	0.00007				13.06%
Cu 324.752†	816.8	0.0031	mg/L	0.00011				3.46%
Fe 259.939†	603.0	0.0108	mg/L	0.00000				0.02%
K 766.490†	1834.4	2.748	mg/L	0.0646				2.35%
Mg 279.077†	113515.5	11.03	mg/L	0.025				0.22%
Mn 257.610†	365.2	0.0011	mg/L	0.00000				0.12%
Mo 202.031†	26.0	0.0016	mg/L	0.00004				2.49%
Ni 231.604†	-10.3	-0.0002	mg/L	0.00008				31.59%
Na 589.592†	403049.4	73.49	mg/L	0.501				0.68%
Pb 220.353†	0.8	0.0001	mg/L	0.00093				664.48%
Sb 206.836†	5.7	0.0029	mg/L	0.00064				22.24%
Se 196.026†	3.2	0.0038	mg/L	0.00220				57.45%
Sn 189.927†	-113.6	-0.0238	mg/L	0.00011				0.46%
Ti 337.279†	220.8	0.0004	mg/L	0.00007				18.44%
Tl 190.801†	-3.4	-0.0021	mg/L	0.00274				132.09%
V 292.402†	-2.0	0.0000	mg/L	0.00012				408.35%
Zn 206.200†	96.5	0.0033	mg/L	0.00003				0.90%
Ca 227.546†	6586.2	35.58	mg/L	0.194				0.55%
Sr 421.552†	22251.5	0.1921	mg/L	0.00107				0.56%
Al 394.401†	-596.8	-0.0147	mg/L	0.00199				13.51%
Al 237.313†	31.4	0.0051	mg/L	0.00072				14.05%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

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Sequence No.: 42
Sample ID: R1407954-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 10/14/2014 6:17:07 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407954-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6210725.2	0.9226	mg/L	0.00733				0.79%
Ag 328.068†	8173.2	0.0330	mg/L	0.00052				1.57%
Al 308.215†	10350616.7	705.1	mg/L	9.99				1.42%
As 188.979†	34.7	-0.0003	mg/L	0.00509				>999.9%
B 249.772†	38548.6	0.2722	mg/L	0.00221				0.81%
Ba 233.527†	6481.5	0.0768	mg/L	0.00099				1.29%
Be 313.107†	2298.2	0.0008	mg/L	0.00008				10.19%
Cd 226.502†	-144.3	0.0001	mg/L	0.00004				83.18%
Co 228.616†	44.6	0.0020	mg/L	0.00014				6.97%
Cr 267.716†	-2341.5	0.0281	mg/L	0.00024				0.84%
Cu 324.752†	26339.6	0.0997	mg/L	0.00212				2.12%
Fe 259.939†	153536.8	2.760	mg/L	0.0324				1.18%
K 766.490†	4913.7	7.362	mg/L	0.0264				0.36%
Mg 279.077†	5063814.6	492.1	mg/L	2.25				0.46%
Mn 257.610†	70525.2	0.2062	mg/L	0.00243				1.18%
Mo 202.031†	191.9	0.0116	mg/L	0.00017				1.51%
Ni 231.604†	698.0	0.0167	mg/L	0.00027				1.63%
Na 589.592†	1616557.3	294.7	mg/L	3.66				1.24%
Pb 220.353†	-229.8	0.0403	mg/L	0.00135				3.34%
Sb 206.836†	110.3	-0.0062	mg/L	0.00100				16.11%
Se 196.026†	-10.4	0.0002	mg/L	0.00029				146.55%
Sn 189.927†	25.4	-0.0770	mg/L	0.00098				1.28%
Ti 337.279†	610058.6	1.095	mg/L	0.0179				1.63%
Tl 190.801†	92.3	0.0065	mg/L	0.00158				24.26%
V 292.402†	1329.9	0.0202	mg/L	0.00015				0.73%
Zn 206.200†	4014.7	0.1358	mg/L	0.00144				1.06%
Ca 227.546†	16471.1	91.17	mg/L	1.149				1.26%
Sr 421.552†	43735.1	0.3776	mg/L	0.00377				1.00%
Al 394.401†	29983841.7	739.9	mg/L	10.84				1.47%
Al 237.313†	4263653.6	699.3	mg/L	1.87				0.27%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 43
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 10/14/2014 6:24:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6676157.4	0.9918	mg/L	0.00386				0.39%
Ag 328.068†	128523.8	0.5091	mg/L	0.00092	0.5091	mg/L	0.00092	0.18%
QC value within limits for Ag 328.068 Recovery = 101.83%								
Al 308.215†	144120.8	9.816	mg/L	0.0040	9.816	mg/L	0.0040	0.04%
QC value within limits for Al 308.215 Recovery = 98.16%								
As 188.979†	1243.3	0.9874	mg/L	0.00568	0.9874	mg/L	0.00568	0.57%
QC value within limits for As 188.979 Recovery = 98.74%								
B 249.772†	266481.6	2.413	mg/L	0.0329	2.413	mg/L	0.0329	1.36%
QC value within limits for B 249.772 Recovery = 96.53%								
Ba 233.527†	859744.0	10.18	mg/L	0.000	10.18	mg/L	0.000	0.00%
QC value within limits for Ba 233.527 Recovery = 101.84%								
Be 313.107†	718911.0	0.2492	mg/L	0.00018	0.2492	mg/L	0.00018	0.07%
QC value within limits for Be 313.107 Recovery = 99.68%								
Cd 226.502†	41891.0	0.5115	mg/L	0.00247	0.5115	mg/L	0.00247	0.48%
QC value within limits for Cd 226.502 Recovery = 102.29%								
Co 228.616†	55165.6	2.522	mg/L	0.0072	2.522	mg/L	0.0072	0.29%
QC value within limits for Co 228.616 Recovery = 100.89%								

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Cr 267.716†	59228.5	0.5162 mg/L	0.00019	0.5162 mg/L	0.00019	0.04%
QC value within limits for Cr 267.716 Recovery = 103.25%						
Cu 324.752†	329557.9	1.244 mg/L	0.0080	1.244 mg/L	0.0080	0.64%
QC value within limits for Cu 324.752 Recovery = 99.55%						
Fe 259.939†	281671.8	5.063 mg/L	0.0237	5.063 mg/L	0.0237	0.47%
QC value within limits for Fe 259.939 Recovery = 101.26%						
K 766.490†	16508.3	24.73 mg/L	0.401	24.73 mg/L	0.401	1.62%
QC value within limits for K 766.490 Recovery = 98.94%						
Mg 279.077†	259106.4	25.18 mg/L	0.069	25.18 mg/L	0.069	0.27%
QC value within limits for Mg 279.077 Recovery = 100.71%						
Mn 257.610†	260348.4	0.7603 mg/L	0.00333	0.7603 mg/L	0.00333	0.44%
QC value within limits for Mn 257.610 Recovery = 101.38%						
Mo 202.031†	40644.8	2.449 mg/L	0.0117	2.449 mg/L	0.0117	0.48%
QC value within limits for Mo 202.031 Recovery = 97.98%						
Ni 231.604†	85490.5	2.040 mg/L	0.0067	2.040 mg/L	0.0067	0.33%
QC value within limits for Ni 231.604 Recovery = 101.98%						
Na 589.592†	135525.8	24.71 mg/L	0.251	24.71 mg/L	0.251	1.02%
QC value within limits for Na 589.592 Recovery = 98.84%						
Pb 220.353†	2991.5	0.5000 mg/L	0.00230	0.5000 mg/L	0.00230	0.46%
QC value within limits for Pb 220.353 Recovery = 100.00%						
Sb 206.836†	9700.6	4.962 mg/L	0.0007	4.962 mg/L	0.0007	0.01%
QC value within limits for Sb 206.836 Recovery = 99.24%						
Se 196.026†	411.5	0.4997 mg/L	0.00115	0.4997 mg/L	0.00115	0.23%
QC value within limits for Se 196.026 Recovery = 99.94%						
Sn 189.927†	24390.6	5.112 mg/L	0.0261	5.112 mg/L	0.0261	0.51%
QC value within limits for Sn 189.927 Recovery = 102.23%						
Ti 337.279†	1367008.3	2.455 mg/L	0.0015	2.455 mg/L	0.0015	0.06%
QC value within limits for Ti 337.279 Recovery = 98.18%						
Tl 190.801†	1806.0	0.9870 mg/L	0.00338	0.9870 mg/L	0.00338	0.34%
QC value within limits for Tl 190.801 Recovery = 98.70%						
V 292.402†	165343.7	2.530 mg/L	0.0042	2.530 mg/L	0.0042	0.17%
QC value within limits for V 292.402 Recovery = 101.20%						
Zn 206.200†	30282.3	1.024 mg/L	0.0028	1.024 mg/L	0.0028	0.27%
QC value within limits for Zn 206.200 Recovery = 102.40%						
Ca 227.546†	4409.2	24.14 mg/L	0.130	24.14 mg/L	0.130	0.54%
QC value within limits for Ca 227.546 Recovery = 96.56%						
Sr 421.552†	272035.9	2.349 mg/L	0.0231	2.349 mg/L	0.0231	0.98%
QC value within limits for Sr 421.552 Recovery = 93.94%						
Al 394.401†	396591.6	9.786 mg/L	0.0038	9.786 mg/L	0.0038	0.04%
QC value within limits for Al 394.401 Recovery = 97.86%						
Al 237.313†	60992.0	10.00 mg/L	0.021	10.00 mg/L	0.021	0.21%
QC value within limits for Al 237.313 Recovery = 100.04%						

All analyte(s) passed QC.

Sequence No.: 44 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 10/14/2014 6:30:24 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6789450.4	1.009	mg/L	0.0026				0.26%
Ag 328.068†	109.9	0.0004	mg/L	0.00028	0.0004	mg/L	0.00028	64.28%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	787.2	0.0536	mg/L	0.01441	0.0536	mg/L	0.01441	26.88%
QC value greater than the upper limit for Al 308.215 Recovery = Not calculated								
As 188.979†	2.1	0.0017	mg/L	0.00008	0.0017	mg/L	0.00008	4.54%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3424.7	0.0313	mg/L	0.00434	0.0313	mg/L	0.00434	13.88%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	736.2	0.0087	mg/L	0.00312	0.0087	mg/L	0.00312	35.74%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	730.6	0.0003	mg/L	0.00007	0.0003	mg/L	0.00007	26.33%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	38.3	0.0005	mg/L	0.00020	0.0005	mg/L	0.00020	42.08%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	57.6	0.0026	mg/L	0.00085	0.0026	mg/L	0.00085	32.42%
QC value within limits for Co 228.616 Recovery = Not calculated								

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Cr 267.716†	34.4	0.0003 mg/L	0.00020	0.0003 mg/L	0.00020	65.32%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	1123.4	0.0042 mg/L	0.00074	0.0042 mg/L	0.00074	17.56%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	466.6	0.0084 mg/L	0.00182	0.0084 mg/L	0.00182	21.74%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	70.8	0.1060 mg/L	0.03642	0.1060 mg/L	0.03642	34.35%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	675.4	0.0656 mg/L	0.01352	0.0656 mg/L	0.01352	20.61%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	308.3	0.0009 mg/L	0.00027	0.0009 mg/L	0.00027	29.48%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	34.4	0.0021 mg/L	0.00086	0.0021 mg/L	0.00086	41.51%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	104.5	0.0025 mg/L	0.00077	0.0025 mg/L	0.00077	31.07%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	709.3	0.1293 mg/L	0.00794	0.1293 mg/L	0.00794	6.14%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	4.8	0.0008 mg/L	0.00009	0.0008 mg/L	0.00009	10.97%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	8.1	0.0042 mg/L	0.00121	0.0042 mg/L	0.00121	28.99%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	1.2	0.0015 mg/L	0.00095	0.0015 mg/L	0.00095	65.37%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	46.9	0.0098 mg/L	0.00265	0.0098 mg/L	0.00265	26.96%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	1344.1	0.0024 mg/L	0.00074	0.0024 mg/L	0.00074	30.70%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	3.0	0.0016 mg/L	0.00078	0.0016 mg/L	0.00078	48.28%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	142.7	0.0022 mg/L	0.00051	0.0022 mg/L	0.00051	23.35%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	64.1	0.0022 mg/L	0.00044	0.0022 mg/L	0.00044	20.34%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	2.8	0.0159 mg/L	0.00323	0.0159 mg/L	0.00323	20.34%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	377.7	0.0033 mg/L	0.00027	0.0033 mg/L	0.00027	8.36%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 394.401†	1759.5	0.0434 mg/L	0.01414	0.0434 mg/L	0.01414	32.57%
QC value within limits for Al 394.401 Recovery = Not calculated						
Al 237.313†	240.6	0.0395 mg/L	0.01254	0.0395 mg/L	0.01254	31.77%
QC value within limits for Al 237.313 Recovery = Not calculated						

QC Failed. Continue with analysis.

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Sequence No.: 45 **Autosampler Location: 58**
Sample ID: R1408025-001 **Date Collected: 10/14/2014 6:36:24 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: R1408025-001

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6317026.5	0.9384	mg/L	0.00817				0.87%
Ag 328.068†	-255.3	-0.0006	mg/L	0.00042				76.21%
Al 308.215†	11572.9	0.7744	mg/L	0.00758				0.98%
As 188.979†	3.4	0.0027	mg/L	0.00086				31.80%
B 249.772†	134832.7	1.221	mg/L	0.0010				0.08%
Ba 233.527†	14672.1	0.1738	mg/L	0.00241				1.39%
Be 313.107†	-1132.5	-0.0004	mg/L	0.00003				8.85%
Cd 226.502†	177.7	0.0019	mg/L	0.00002				1.01%
Co 228.616†	15.7	0.0007	mg/L	0.00010				14.46%
Cr 267.716†	309.2	0.0039	mg/L	0.00007				1.77%
Cu 324.752†	17150.2	0.0649	mg/L	0.00095				1.46%
Fe 259.939†	91095.3	1.637	mg/L	0.0144				0.88%
K 766.490†	222718.8	333.7	mg/L	2.81				0.84%
Mg 279.077†	115865.8	11.26	mg/L	0.103				0.91%
Mn 257.610†	93167.6	0.2721	mg/L	0.00253				0.93%
Mo 202.031†	369.6	0.0223	mg/L	0.00043				1.93%
Ni 231.604†	511.4	0.0122	mg/L	0.00002				0.17%

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Na 589.592†	2067373.1	376.9	mg/L	4.17	1.11%
Pb 220.353†	280.1	0.0468	mg/L	0.00024	0.51%
Sb 206.836†	26.2	0.0133	mg/L	0.00067	5.03%
Se 196.026†	3.1	0.0041	mg/L	0.00060	14.54%
Sn 189.927†	-134.2	-0.0282	mg/L	0.00031	1.11%
Ti 337.279†	3316.4	0.0060	mg/L	0.00017	2.93%
Tl 190.801†	3.8	0.0011	mg/L	0.00097	83.94%
V 292.402†	201.8	0.0030	mg/L	0.00004	1.42%
Zn 206.200†	6833.0	0.2311	mg/L	0.00303	1.31%
Ca 227.546†	19951.7	107.9	mg/L	0.69	0.64%
Sr 421.552†	573285.2	4.949	mg/L	0.0532	1.07%
Al 394.401†	29143.4	0.7192	mg/L	0.00163	0.23%
Al 237.313†	4151.9	0.6810	mg/L	0.00453	0.67%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 46
Sample ID: R1408025-001D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 59
Date Collected: 10/14/2014 6:42:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408025-001D

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6366667.4	0.9458	mg/L	0.00569				0.60%
Ag 328.068†	-195.3	-0.0003	mg/L	0.00024				74.76%
Al 308.215†	11440.9	0.7657	mg/L	0.01882				2.46%
As 188.979†	4.3	0.0034	mg/L	0.00087				25.54%
B 249.772†	133617.8	1.210	mg/L	0.0261				2.15%
Ba 233.527†	14457.8	0.1713	mg/L	0.00190				1.11%
Be 313.107†	-980.6	-0.0003	mg/L	0.00006				17.29%
Cd 226.502†	166.3	0.0018	mg/L	0.00002				0.87%
Co 228.616†	14.0	0.0006	mg/L	0.00014				22.44%
Cr 267.716†	488.6	0.0054	mg/L	0.00006				1.06%
Cu 324.752†	16488.3	0.0624	mg/L	0.00095				1.52%
Fe 259.939†	89896.4	1.616	mg/L	0.0237				1.47%
K 766.490†	221570.3	332.0	mg/L	4.24				1.28%
Mg 279.077†	114130.6	11.09	mg/L	0.169				1.52%
Mn 257.610†	91883.1	0.2683	mg/L	0.00352				1.31%
Mo 202.031†	361.6	0.0218	mg/L	0.00033				1.54%
Ni 231.604†	532.4	0.0127	mg/L	0.00019				1.49%
Na 589.592†	2033960.8	370.8	mg/L	4.69				1.26%
Pb 220.353†	276.2	0.0461	mg/L	0.00092				1.99%
Sb 206.836†	20.6	0.0105	mg/L	0.00004				0.35%
Se 196.026†	3.6	0.0048	mg/L	0.00152				31.91%
Sn 189.927†	-146.0	-0.0307	mg/L	0.00103				3.34%
Ti 337.279†	3891.2	0.0070	mg/L	0.00149				21.30%
Tl 190.801†	4.2	0.0014	mg/L	0.00255				182.59%
V 292.402†	184.2	0.0027	mg/L	0.00006				2.36%
Zn 206.200†	6745.3	0.2281	mg/L	0.00214				0.94%
Ca 227.546†	19642.6	106.2	mg/L	1.24				1.17%
Sr 421.552†	563287.6	4.863	mg/L	0.0658				1.35%
Al 394.401†	29418.2	0.7259	mg/L	0.01586				2.18%
Al 237.313†	4150.0	0.6807	mg/L	0.01395				2.05%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 47
Sample ID: R1408025-001S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 10/14/2014 6:48:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408025-001S

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6361834.8	0.9451	mg/L	0.00179				0.19%
Ag 328.068†	12440.8	0.0499	mg/L	0.00002				0.04%
Al 308.215†	42873.1	2.907	mg/L	0.0023				0.08%

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As 188.979†	54.8	0.0434	mg/L	0.00022	0.50%
B 249.772†	236131.3	2.144	mg/L	0.0150	0.70%
Ba 233.527†	183225.0	2.170	mg/L	0.0024	0.11%
Be 313.107†	139587.5	0.0484	mg/L	0.00012	0.25%
Cd 226.502†	4162.8	0.0505	mg/L	0.00034	0.67%
Co 228.616†	10871.2	0.4970	mg/L	0.00285	0.57%
Cr 267.716†	23754.8	0.2073	mg/L	0.00046	0.22%
Cu 324.752†	91326.8	0.3450	mg/L	0.00025	0.07%
Fe 259.939†	141929.4	2.551	mg/L	0.0040	0.16%
K 766.490†	231691.4	347.1	mg/L	1.55	0.45%
Mg 279.077†	132229.6	12.85	mg/L	0.014	0.11%
Mn 257.610†	262364.7	0.7659	mg/L	0.00169	0.22%
Mo 202.031†	8506.2	0.5126	mg/L	0.00265	0.52%
Ni 231.604†	21723.8	0.5183	mg/L	0.00144	0.28%
Na 589.592†	2118698.1	386.3	mg/L	1.05	0.27%
Pb 220.353†	3316.2	0.5535	mg/L	0.00255	0.46%
Sb 206.836†	1021.1	0.5222	mg/L	0.00446	0.85%
Se 196.026†	790.1	0.9576	mg/L	0.00584	0.61%
Sn 189.927†	24878.4	5.215	mg/L	0.0082	0.16%
Ti 337.279†	275894.9	0.4954	mg/L	0.00086	0.17%
Tl 190.801†	3617.7	1.977	mg/L	0.0110	0.56%
V 292.402†	33328.7	0.5099	mg/L	0.00126	0.25%
Zn 206.200†	21959.3	0.7425	mg/L	0.00040	0.05%
Ca 227.546†	19872.7	107.5	mg/L	0.56	0.52%
Sr 421.552†	554538.2	4.787	mg/L	0.0167	0.35%
Al 394.401†	117661.5	2.903	mg/L	0.0040	0.14%
Al 237.313†	16325.5	2.678	mg/L	0.0031	0.12%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 48 **Autosampler Location: 61**
Sample ID: R1408025-001A **Date Collected: 10/14/2014 6:54:35 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: R1408025-001A

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6358050.4	0.9445	mg/L	0.00589				0.62%
Ag 328.068†	12132.7	0.0486	mg/L	0.00085				1.74%
Al 308.215†	42215.2	2.862	mg/L	0.0558				1.95%
As 188.979†	54.2	0.0430	mg/L	0.00026				0.60%
B 249.772†	237409.5	2.156	mg/L	0.0066				0.31%
Ba 233.527†	177125.4	2.098	mg/L	0.0169				0.81%
Be 313.107†	133735.1	0.0464	mg/L	0.00018				0.38%
Cd 226.502†	4021.6	0.0488	mg/L	0.00021				0.43%
Co 228.616†	10396.9	0.4753	mg/L	0.00236				0.50%
Cr 267.716†	22938.9	0.2002	mg/L	0.00110				0.55%
Cu 324.752†	87627.4	0.3310	mg/L	0.00524				1.58%
Fe 259.939†	140973.3	2.534	mg/L	0.0174				0.69%
K 766.490†	232093.3	347.7	mg/L	1.68				0.48%
Mg 279.077†	130549.1	12.69	mg/L	0.079				0.63%
Mn 257.610†	255434.8	0.7457	mg/L	0.00514				0.69%
Mo 202.031†	8674.8	0.5228	mg/L	0.00195				0.37%
Ni 231.604†	20813.9	0.4966	mg/L	0.00314				0.63%
Na 589.592†	2101385.1	383.1	mg/L	1.78				0.46%
Pb 220.353†	3235.9	0.5401	mg/L	0.00159				0.29%
Sb 206.836†	1048.2	0.5360	mg/L	0.00164				0.31%
Se 196.026†	857.6	1.039	mg/L	0.0025				0.24%
Sn 189.927†	-135.8	-0.0288	mg/L	0.00004				0.12%
Ti 337.279†	269670.4	0.4842	mg/L	0.00415				0.86%
Tl 190.801†	3522.9	1.925	mg/L	0.0049				0.26%
V 292.402†	32356.3	0.4950	mg/L	0.00651				1.31%
Zn 206.200†	21111.7	0.7139	mg/L	0.00014				0.02%
Ca 227.546†	20101.8	108.7	mg/L	1.85				1.70%
Sr 421.552†	551298.8	4.759	mg/L	0.0239				0.50%
Al 394.401†	116167.8	2.867	mg/L	0.0429				1.50%
Al 237.313†	15967.1	2.619	mg/L	0.0335				1.28%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

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Sequence No.: 49
Sample ID: R1408025-001L
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 62
Date Collected: 10/14/2014 7:00:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408025-001L

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6565050.5	0.9753	mg/L	0.00710				0.73%
Ag 328.068†	-33.0	0.0000	mg/L	0.00016				399.33%
Al 308.215†	2075.3	0.1390	mg/L	0.01491				10.73%
As 188.979†	-0.2	-0.0002	mg/L	0.00216				>999.9%
B 249.772†	29492.3	0.2675	mg/L	0.00330				1.23%
Ba 233.527†	2858.6	0.0339	mg/L	0.00014				0.40%
Be 313.107†	-499.3	-0.0002	mg/L	0.00005				30.69%
Cd 226.502†	20.3	0.0002	mg/L	0.00000				0.65%
Co 228.616†	-8.8	-0.0004	mg/L	0.00039				96.08%
Cr 267.716†	97.6	0.0011	mg/L	0.00009				8.56%
Cu 324.752†	3464.2	0.0131	mg/L	0.00063				4.84%
Fe 259.939†	18143.7	0.3261	mg/L	0.00109				0.33%
K 766.490†	40880.6	61.25	mg/L	0.620				1.01%
Mg 279.077†	22722.0	2.208	mg/L	0.0100				0.45%
Mn 257.610†	18531.9	0.0541	mg/L	0.00026				0.49%
Mo 202.031†	84.6	0.0051	mg/L	0.00004				0.79%
Ni 231.604†	96.6	0.0023	mg/L	0.00031				13.38%
Na 589.592†	398609.7	72.68	mg/L	0.661				0.91%
Pb 220.353†	53.8	0.0090	mg/L	0.00129				14.39%
Sb 206.836†	7.2	0.0037	mg/L	0.00023				6.14%
Se 196.026†	1.9	0.0024	mg/L	0.00021				8.73%
Sn 189.927†	-64.5	-0.0135	mg/L	0.00037				2.71%
Ti 337.279†	924.2	0.0017	mg/L	0.00028				16.92%
Tl 190.801†	-2.1	-0.0013	mg/L	0.00131				101.53%
V 292.402†	20.3	0.0003	mg/L	0.00008				26.17%
Zn 206.200†	1391.7	0.0471	mg/L	0.00036				0.76%
Ca 227.546†	3471.1	18.77	mg/L	0.078				0.42%
Sr 421.552†	107017.2	0.9239	mg/L	0.00884				0.96%
Al 394.401†	4667.0	0.1152	mg/L	0.00166				1.44%
Al 237.313†	732.6	0.1202	mg/L	0.00104				0.87%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 50
Sample ID: R1408025-002
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 63
Date Collected: 10/14/2014 7:06:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408025-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6321838.9	0.9391	mg/L	0.00548				0.58%
Ag 328.068†	-798.5	-0.0030	mg/L	0.00024				7.88%
Al 308.215†	969.2	-0.0016	mg/L	0.00531				333.19%
As 188.979†	1.5	0.0012	mg/L	0.00112				95.10%
B 249.772†	24921.5	0.2013	mg/L	0.00120				0.60%
Ba 233.527†	3756.0	0.0445	mg/L	0.00025				0.55%
Be 313.107†	-920.7	-0.0003	mg/L	0.00006				18.62%
Cd 226.502†	-10.0	-0.0002	mg/L	0.00008				40.82%
Co 228.616†	-19.8	-0.0009	mg/L	0.00004				4.74%
Cr 267.716†	-962.1	-0.0036	mg/L	0.00012				3.27%
Cu 324.752†	1060.0	0.0041	mg/L	0.00001				0.36%
Fe 259.939†	29633.4	0.5327	mg/L	0.00383				0.72%
K 766.490†	4971.8	7.449	mg/L	0.0090				0.12%
Mg 279.077†	490531.6	47.67	mg/L	0.092				0.19%
Mn 257.610†	34405.3	0.1005	mg/L	0.00087				0.86%
Mo 202.031†	39.3	0.0024	mg/L	0.00005				2.10%
Ni 231.604†	-35.7	-0.0009	mg/L	0.00017				19.59%
Na 589.592†	1233206.9	224.8	mg/L	0.87				0.39%

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Pb 220.353†	-13.5	-0.0023	mg/L	0.00043	19.18%
Sb 206.836†	7.9	0.0040	mg/L	0.00116	28.82%
Se 196.026†	1.5	0.0020	mg/L	0.00077	38.96%
Sn 189.927†	-229.5	-0.0481	mg/L	0.00066	1.38%
Ti 337.279†	111.9	0.0002	mg/L	0.00006	29.67%
Tl 190.801†	8.4	0.0003	mg/L	0.00137	439.03%
V 292.402†	-14.8	-0.0003	mg/L	0.00003	11.08%
Zn 206.200†	624.3	0.0211	mg/L	0.00002	0.08%
Ca 227.546†	92514.2	499.7	mg/L	1.65	0.33%
Sr 421.552†	1044836.6	9.020	mg/L	0.0389	0.43%
Al 394.401†	132.6	0.0033	mg/L	0.00211	64.49%
Al 237.313†	210.9	0.0346	mg/L	0.00022	0.64%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 51
Sample ID: R1408037-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 64
Date Collected: 10/14/2014 7:12:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408037-001

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6773306.7	1.006	mg/L	0.0060				0.60%
Ag 328.068†	-98.8	-0.0004	mg/L	0.00031				78.61%
Al 308.215†	2172.4	0.1437	mg/L	0.00958				6.67%
As 188.979†	0.4	0.0003	mg/L	0.00108				321.11%
B 249.772†	3532.5	0.0308	mg/L	0.00165				5.37%
Ba 233.527†	1856.3	0.0220	mg/L	0.00000				0.01%
Be 313.107†	-88.2	0.0000	mg/L	0.00005				147.85%
Cd 226.502†	-14.3	-0.0002	mg/L	0.00006				35.12%
Co 228.616†	-15.1	-0.0007	mg/L	0.00011				16.47%
Cr 267.716†	-114.6	-0.0001	mg/L	0.00013				90.73%
Cu 324.752†	300.2	0.0011	mg/L	0.00053				46.42%
Fe 259.939†	18.1	0.0003	mg/L	0.00049				149.97%
K 766.490†	1139.9	1.708	mg/L	0.0104				0.61%
Mg 279.077†	89006.6	8.649	mg/L	0.1367				1.58%
Mn 257.610†	211.0	0.0006	mg/L	0.00001				0.91%
Mo 202.031†	31.4	0.0019	mg/L	0.00014				7.22%
Ni 231.604†	22.9	0.0005	mg/L	0.00002				3.14%
Na 589.592†	55416.0	10.10	mg/L	0.014				0.14%
Pb 220.353†	-1.7	-0.0003	mg/L	0.00128				478.89%
Sb 206.836†	4.4	0.0022	mg/L	0.00068				30.63%
Se 196.026†	2.4	0.0029	mg/L	0.00063				21.58%
Sn 189.927†	-106.6	-0.0224	mg/L	0.00004				0.19%
Ti 337.279†	269.3	0.0005	mg/L	0.00007				13.78%
Tl 190.801†	-6.4	-0.0037	mg/L	0.00047				12.43%
V 292.402†	3.7	0.0001	mg/L	0.00008				143.20%
Zn 206.200†	44.7	0.0015	mg/L	0.00000				0.18%
Ca 227.546†	5825.5	31.47	mg/L	0.562				1.78%
Sr 421.552†	17741.4	0.1532	mg/L	0.00033				0.22%
Al 394.401†	5763.0	0.1422	mg/L	0.00210				1.48%
Al 237.313†	972.2	0.1595	mg/L	0.00202				1.27%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 52
Sample ID: R1408069-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 65
Date Collected: 10/14/2014 7:18:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408069-001

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6757930.5	1.004	mg/L	0.0092				0.92%
Ag 328.068†	-52.1	0.0001	mg/L	0.00003				41.32%
Al 308.215†	1295.2	0.0854	mg/L	0.01535				17.97%
As 188.979†	0.9	0.0007	mg/L	0.00136				182.17%

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B 249.772†	2519.9	0.0171 mg/L	0.00061	3.55%
Ba 233.527†	1496.7	0.0177 mg/L	0.00016	0.90%
Be 313.107†	56.1	0.0000 mg/L	0.00012	598.07%
Cd 226.502†	15.4	0.0000 mg/L	0.00004	92.97%
Co 228.616†	-12.1	-0.0006 mg/L	0.00010	18.96%
Cr 267.716†	-0.2	0.0006 mg/L	0.00009	14.88%
Cu 324.752†	5936.3	0.0225 mg/L	0.00130	5.77%
Fe 259.939†	56553.7	1.017 mg/L	0.0170	1.67%
K 766.490†	1150.2	1.723 mg/L	0.0185	1.08%
Mg 279.077†	60976.8	5.925 mg/L	0.0902	1.52%
Mn 257.610†	665.0	0.0021 mg/L	0.00001	0.51%
Mo 202.031†	20.5	0.0012 mg/L	0.00010	7.94%
Ni 231.604†	2.5	0.0001 mg/L	0.00014	233.83%
Na 589.592†	110424.4	20.13 mg/L	0.019	0.09%
Pb 220.353†	-3.0	-0.0005 mg/L	0.00138	267.04%
Sb 206.836†	4.1	0.0021 mg/L	0.00022	10.74%
Se 196.026†	1.6	0.0022 mg/L	0.00299	137.78%
Sn 189.927†	-91.2	-0.0191 mg/L	0.00038	1.96%
Ti 337.279†	610.8	0.0011 mg/L	0.00005	4.35%
Tl 190.801†	-6.7	-0.0038 mg/L	0.00133	34.92%
V 292.402†	62.0	0.0009 mg/L	0.00013	14.36%
Zn 206.200†	330.1	0.0112 mg/L	0.00018	1.57%
Ca 227.546†	4427.9	23.98 mg/L	0.501	2.09%
Sr 421.552†	5760.2	0.0497 mg/L	0.00026	0.52%
Al 394.401†	3507.2	0.0865 mg/L	0.00248	2.86%
Al 237.313†	600.6	0.0985 mg/L	0.00173	1.75%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 53
Sample ID: R1408075-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 66
Date Collected: 10/14/2014 7:25:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408075-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6617571.4	0.9831	mg/L	0.01916				1.95%
Ag 328.068†	-401.7	0.0001	mg/L	0.00025				196.71%
Al 308.215†	36618.2	2.488	mg/L	0.0329				1.32%
As 188.979†	3.2	0.0025	mg/L	0.00081				32.63%
B 249.772†	26303.3	0.2077	mg/L	0.00501				2.41%
Ba 233.527†	3607.3	0.0427	mg/L	0.00053				1.24%
Be 313.107†	-366.3	-0.0001	mg/L	0.00005				40.84%
Cd 226.502†	59.2	-0.0001	mg/L	0.00001				9.46%
Co 228.616†	-3.5	-0.0002	mg/L	0.00004				27.02%
Cr 267.716†	-125.0	0.0008	mg/L	0.00002				2.61%
Cu 324.752†	12575.2	0.0480	mg/L	0.00078				1.62%
Fe 259.939†	345356.9	6.208	mg/L	0.0961				1.55%
K 766.490†	7001.1	10.49	mg/L	0.335				3.20%
Mg 279.077†	162488.0	15.79	mg/L	0.245				1.55%
Mn 257.610†	49772.9	0.1461	mg/L	0.00192				1.31%
Mo 202.031†	69.5	0.0042	mg/L	0.00012				2.82%
Ni 231.604†	230.0	0.0055	mg/L	0.00007				1.27%
Na 589.592†	916219.4	167.0	mg/L	4.94				2.96%
Pb 220.353†	7.3	0.0013	mg/L	0.00068				52.03%
Sb 206.836†	3.8	0.0017	mg/L	0.00082				47.49%
Se 196.026†	-1.2	0.0000	mg/L J	0.00127				>999.9%
Sn 189.927†	-139.4	-0.0295	mg/L	0.00080				2.70%
Ti 337.279†	33821.1	0.0607	mg/L	0.00092				1.51%
Tl 190.801†	-1.2	-0.0011	mg/L	0.00028				24.80%
V 292.402†	40.2	0.0003	mg/L	0.00005				20.09%
Zn 206.200†	2150.6	0.0727	mg/L	0.00102				1.40%
Ca 227.546†	12729.3	69.13	mg/L	0.760				1.10%
Sr 421.552†	40627.3	0.3507	mg/L	0.00801				2.29%
Al 394.401†	102295.7	2.524	mg/L	0.0253				1.00%
Al 237.313†	14767.2	2.422	mg/L	0.0326				1.35%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

00645

Method: DV200-6010C Opt3 Page 40 Date: 10/14/2014 7:37:43 PM

Sequence No.: 54
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 10/14/2014 7:31:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6675702.7	0.9917	mg/L	0.00692				0.70%
Ag 328.068†	127769.2	0.5061	mg/L	0.00287	0.5061	mg/L	0.00287	0.57%
QC value within limits for Ag 328.068 Recovery = 101.22%								
Al 308.215†	138887.6	9.460	mg/L	0.0701	9.460	mg/L	0.0701	0.74%
QC value within limits for Al 308.215 Recovery = 94.60%								
As 188.979†	1260.6	1.001	mg/L	0.0094	1.001	mg/L	0.0094	0.94%
QC value within limits for As 188.979 Recovery = 100.12%								
B 249.772†	261335.4	2.367	mg/L	0.0356	2.367	mg/L	0.0356	1.51%
QC value within limits for B 249.772 Recovery = 94.67%								
Ba 233.527†	846864.7	10.03	mg/L	0.012	10.03	mg/L	0.012	0.12%
QC value within limits for Ba 233.527 Recovery = 100.31%								
Be 313.107†	708303.8	0.2455	mg/L	0.00049	0.2455	mg/L	0.00049	0.20%
QC value within limits for Be 313.107 Recovery = 98.21%								
Cd 226.502†	41242.9	0.5036	mg/L	0.00417	0.5036	mg/L	0.00417	0.83%
QC value within limits for Cd 226.502 Recovery = 100.71%								
Co 228.616†	53867.4	2.463	mg/L	0.0130	2.463	mg/L	0.0130	0.53%
QC value within limits for Co 228.616 Recovery = 98.51%								
Cr 267.716†	58493.9	0.5098	mg/L	0.00232	0.5098	mg/L	0.00232	0.46%
QC value within limits for Cr 267.716 Recovery = 101.96%								
Cu 324.752†	320372.2	1.210	mg/L	0.0104	1.210	mg/L	0.0104	0.86%
QC value within limits for Cu 324.752 Recovery = 96.78%								
Fe 259.939†	273603.1	4.918	mg/L	0.0285	4.918	mg/L	0.0285	0.58%
QC value within limits for Fe 259.939 Recovery = 98.36%								
K 766.490†	16499.8	24.72	mg/L	0.177	24.72	mg/L	0.177	0.71%
QC value within limits for K 766.490 Recovery = 98.88%								
Mg 279.077†	251393.3	24.43	mg/L	0.165	24.43	mg/L	0.165	0.68%
QC value within limits for Mg 279.077 Recovery = 97.71%								
Mn 257.610†	254009.8	0.7418	mg/L	0.00461	0.7418	mg/L	0.00461	0.62%
QC value within limits for Mn 257.610 Recovery = 98.91%								
Mo 202.031†	40040.9	2.413	mg/L	0.0157	2.413	mg/L	0.0157	0.65%
QC value within limits for Mo 202.031 Recovery = 96.52%								
Ni 231.604†	84137.1	2.007	mg/L	0.0128	2.007	mg/L	0.0128	0.64%
QC value within limits for Ni 231.604 Recovery = 100.36%								
Na 589.592†	134266.1	24.48	mg/L	0.139	24.48	mg/L	0.139	0.57%
QC value within limits for Na 589.592 Recovery = 97.92%								
Pb 220.353†	2970.8	0.4965	mg/L	0.00428	0.4965	mg/L	0.00428	0.86%
QC value within limits for Pb 220.353 Recovery = 99.30%								
Sb 206.836†	9765.9	4.995	mg/L	0.0389	4.995	mg/L	0.0389	0.78%
QC value within limits for Sb 206.836 Recovery = 99.91%								
Se 196.026†	402.1	0.4884	mg/L	0.00034	0.4884	mg/L	0.00034	0.07%
QC value within limits for Se 196.026 Recovery = 97.67%								
Sn 189.927†	23702.7	4.967	mg/L	0.0386	4.967	mg/L	0.0386	0.78%
QC value within limits for Sn 189.927 Recovery = 99.35%								
Ti 337.279†	1357040.7	2.437	mg/L	0.0045	2.437	mg/L	0.0045	0.18%
QC value within limits for Ti 337.279 Recovery = 97.47%								
Tl 190.801†	1801.0	0.9842	mg/L	0.01082	0.9842	mg/L	0.01082	1.10%
QC value within limits for Tl 190.801 Recovery = 98.42%								
V 292.402†	170355.3	2.607	mg/L	0.0086	2.607	mg/L	0.0086	0.33%
QC value within limits for V 292.402 Recovery = 104.27%								
Zn 206.200†	29737.0	1.006	mg/L	0.0073	1.006	mg/L	0.0073	0.73%
QC value within limits for Zn 206.200 Recovery = 100.55%								
Ca 227.546†	4455.6	24.38	mg/L	0.124	24.38	mg/L	0.124	0.51%
QC value within limits for Ca 227.546 Recovery = 97.53%								
Sr 421.552†	268122.4	2.315	mg/L	0.0140	2.315	mg/L	0.0140	0.61%
QC value within limits for Sr 421.552 Recovery = 92.59%								
Al 394.401†	383830.9	9.472	mg/L	0.0662	9.472	mg/L	0.0662	0.70%
QC value within limits for Al 394.401 Recovery = 94.72%								
Al 237.313†	58657.1	9.621	mg/L	0.0490	9.621	mg/L	0.0490	0.51%
QC value within limits for Al 237.313 Recovery = 96.21%								

All analyte(s) passed QC.

00646

Method: DV200-6010C Opt3 Page 41 Date: 10/14/2014 7:43:41 PM

Sequence No.: 55
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 10/14/2014 7:37:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6766115.8	1.005	mg/L	0.0033				0.33%
Ag 328.068†	130.1	0.0005	mg/L	0.00046	0.0005	mg/L	0.00046	88.48%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	6.4	0.0004	mg/L	0.01321	0.0004	mg/L	0.01321	>999.9%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	3.7	0.0029	mg/L	0.00071	0.0029	mg/L	0.00071	24.12%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3050.9	0.0279	mg/L	0.00400	0.0279	mg/L	0.00400	14.34%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	621.0	0.0074	mg/L	0.00268	0.0074	mg/L	0.00268	36.47%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	724.6	0.0003	mg/L	0.00004	0.0003	mg/L	0.00004	14.84%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	33.6	0.0004	mg/L	0.00017	0.0004	mg/L	0.00017	42.08%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	47.7	0.0022	mg/L	0.00037	0.0022	mg/L	0.00037	17.07%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	28.4	0.0002	mg/L	0.00014	0.0002	mg/L	0.00014	57.36%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1024.3	0.0039	mg/L	0.00118	0.0039	mg/L	0.00118	30.60%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	357.1	0.0064	mg/L	0.00163	0.0064	mg/L	0.00163	25.45%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	140.1	0.2099	mg/L	0.02939	0.2099	mg/L	0.02939	14.00%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	263.4	0.0256	mg/L	0.00511	0.0256	mg/L	0.00511	19.96%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	253.8	0.0007	mg/L	0.00019	0.0007	mg/L	0.00019	25.41%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	30.3	0.0018	mg/L	0.00082	0.0018	mg/L	0.00082	44.94%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	87.9	0.0021	mg/L	0.00075	0.0021	mg/L	0.00075	35.71%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	770.5	0.1405	mg/L	0.00544	0.1405	mg/L	0.00544	3.87%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	5.3	0.0009	mg/L	0.00010	0.0009	mg/L	0.00010	10.99%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	7.4	0.0038	mg/L	0.00192	0.0038	mg/L	0.00192	50.84%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.7	0.0009	mg/L	0.00283	0.0009	mg/L	0.00283	312.10%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	39.6	0.0083	mg/L	0.00210	0.0083	mg/L	0.00210	25.23%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	1185.4	0.0021	mg/L	0.00094	0.0021	mg/L	0.00094	44.04%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	1.0	0.0005	mg/L	0.00233	0.0005	mg/L	0.00233	424.13%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	157.8	0.0024	mg/L	0.00107	0.0024	mg/L	0.00107	44.36%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	47.6	0.0016	mg/L	0.00028	0.0016	mg/L	0.00028	17.12%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	2.9	0.0163	mg/L	0.02261	0.0163	mg/L	0.02261	138.95%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	420.6	0.0036	mg/L	0.00022	0.0036	mg/L	0.00022	6.18%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Al 394.401†	319.6	0.0079	mg/L	0.00443	0.0079	mg/L	0.00443	56.18%
QC value within limits for Al 394.401 Recovery = Not calculated								
Al 237.313†	52.2	0.0086	mg/L	0.00261	0.0086	mg/L	0.00261	30.44%
QC value within limits for Al 237.313 Recovery = Not calculated								

All analyte(s) passed QC.

00647

Method: DV200-6010C Opt3 Page 42 Date: 10/14/2014 7:49:40 PM

Sequence No.: 56
Sample ID: MRL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 10/14/2014 7:43:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6839712.8	1.016	mg/L	0.0133				1.31%
Ag 328.068†	2483.4	0.0098	mg/L	0.00029	0.0098	mg/L	0.00029	2.96%
QC value within limits for Ag 328.068 Recovery = 98.39%								
Al 308.215†	2337.3	0.1591	mg/L	0.01518	0.1591	mg/L	0.01518	9.54%
QC value less than the lower limit for Al 308.215 Recovery = 79.57%								
As 188.979†	25.8	0.0205	mg/L	0.00179	0.0205	mg/L	0.00179	8.72%
QC value within limits for As 188.979 Recovery = 102.46%								
B 249.772†	22545.1	0.2058	mg/L	0.00597	0.2058	mg/L	0.00597	2.90%
QC value within limits for B 249.772 Recovery = 102.91%								
Ba 233.527†	17514.9	0.2075	mg/L	0.00524	0.2075	mg/L	0.00524	2.52%
QC value within limits for Ba 233.527 Recovery = 103.73%								
Be 313.107†	14695.5	0.0051	mg/L	0.00005	0.0051	mg/L	0.00005	1.00%
QC value within limits for Be 313.107 Recovery = 101.88%								
Cd 226.502†	872.7	0.0107	mg/L	0.00023	0.0107	mg/L	0.00023	2.16%
QC value within limits for Cd 226.502 Recovery = 106.55%								
Co 228.616†	1119.9	0.0512	mg/L	0.00084	0.0512	mg/L	0.00084	1.64%
QC value within limits for Co 228.616 Recovery = 102.41%								
Cr 267.716†	1170.3	0.0102	mg/L	0.00020	0.0102	mg/L	0.00020	1.99%
QC value within limits for Cr 267.716 Recovery = 102.48%								
Cu 324.752†	6485.9	0.0245	mg/L	0.00109	0.0245	mg/L	0.00109	4.44%
QC value within limits for Cu 324.752 Recovery = 97.97%								
Fe 259.939†	5739.2	0.1032	mg/L	0.00183	0.1032	mg/L	0.00183	1.77%
QC value within limits for Fe 259.939 Recovery = 103.17%								
K 766.490†	675.7	1.012	mg/L	0.0354	1.012	mg/L	0.0354	3.50%
QC value within limits for K 766.490 Recovery = 101.24%								
Mg 279.077†	10121.4	0.9835	mg/L	0.01239	0.9835	mg/L	0.01239	1.26%
QC value within limits for Mg 279.077 Recovery = 98.35%								
Mn 257.610†	5272.2	0.0154	mg/L	0.00026	0.0154	mg/L	0.00026	1.70%
QC value within limits for Mn 257.610 Recovery = 102.65%								
Mo 202.031†	429.7	0.0259	mg/L	0.00020	0.0259	mg/L	0.00020	0.76%
QC value within limits for Mo 202.031 Recovery = 103.58%								
Ni 231.604†	1719.5	0.0410	mg/L	0.00073	0.0410	mg/L	0.00073	1.77%
QC value within limits for Ni 231.604 Recovery = 102.56%								
Na 589.592†	5649.8	1.030	mg/L	0.0152	1.030	mg/L	0.0152	1.48%
QC value within limits for Na 589.592 Recovery = 103.01%								
Pb 220.353†	61.5	0.0103	mg/L	0.00062	0.0103	mg/L	0.00062	6.00%
QC value within limits for Pb 220.353 Recovery = 102.72%								
Sb 206.836†	118.7	0.0607	mg/L	0.00106	0.0607	mg/L	0.00106	1.75%
QC value within limits for Sb 206.836 Recovery = 101.23%								
Se 196.026†	11.1	0.0135	mg/L	0.00011	0.0135	mg/L	0.00011	0.78%
QC value greater than the upper limit for Se 196.026 Recovery = 135.09%								
Sn 189.927†	2531.2	0.5306	mg/L	0.00808	0.5306	mg/L	0.00808	1.52%
QC value within limits for Sn 189.927 Recovery = 106.11%								
Ti 337.279†	28529.6	0.0512	mg/L	0.00115	0.0512	mg/L	0.00115	2.24%
QC value within limits for Ti 337.279 Recovery = 102.45%								
Tl 190.801†	29.8	0.0163	mg/L	0.00092	0.0163	mg/L	0.00092	5.63%
QC value within limits for Tl 190.801 Recovery = 81.40%								
V 292.402†	3500.4	0.0536	mg/L	0.00127	0.0536	mg/L	0.00127	2.38%
QC value within limits for V 292.402 Recovery = 107.13%								
Zn 206.200†	577.6	0.0195	mg/L	0.00020	0.0195	mg/L	0.00020	1.02%
QC value within limits for Zn 206.200 Recovery = 97.65%								
Ca 227.546†	160.9	0.8756	mg/L	0.00064	0.8756	mg/L	0.00064	0.07%
QC value within limits for Ca 227.546 Recovery = 87.56%								
Sr 421.552†	11161.2	0.0964	mg/L	0.00091	0.0964	mg/L	0.00091	0.95%
QC value within limits for Sr 421.552 Recovery = 96.36%								
Al 394.401†	7037.8	0.1737	mg/L	0.00483	0.1737	mg/L	0.00483	2.78%
QC value within limits for Al 394.401 Recovery = 86.83%								
Al 237.313†	1158.8	0.1901	mg/L	0.00536	0.1901	mg/L	0.00536	2.82%
QC value within limits for Al 237.313 Recovery = 95.04%								

QC Failed. Continue with analysis.

00648

Method: DV200-6010C Opt3 Page 43 Date: 10/14/2014 7:59:52 PM

Sequence No.: 57
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 10/14/2014 7:49:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6358968.1	0.9447	mg/L	0.00000				0.00%
Ag 328.068†	-6571.5	-0.0012	mg/L	0.00030	-0.0012	mg/L	0.00030	25.42%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	3776853.8	257.3	mg/L	3.34	257.3	mg/L	3.34	1.30%
QC value within limits for Al 308.215 Recovery = 102.91%								
As 188.979†	15.9	0.0025	mg/L	0.00261	0.0025	mg/L	0.00261	104.50%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	36831.4	-0.1257	mg/L	0.00311	-0.1257	mg/L	0.00311	2.48%
Ba 233.527†	315.1	0.0037	mg/L	0.00014	0.0037	mg/L	0.00014	3.68%
Be 313.107†	-1009.6	-0.0003	mg/L	0.00000	-0.0003	mg/L	0.00000	0.15%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	1076.8	0.0013	mg/L	0.00002	0.0013	mg/L	0.00002	1.65%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	17.9	0.0008	mg/L	0.00032	0.0008	mg/L	0.00032	38.63%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3541.0	-0.0010	mg/L	0.00017	-0.0010	mg/L	0.00017	16.27%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-1583.5	0.0024	mg/L	0.00015	0.0024	mg/L	0.00015	6.15%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	4998266.2	89.85	mg/L	0.134	89.85	mg/L	0.134	0.15%
QC value within limits for Fe 259.939 Recovery = 89.85%								
K 766.490†	94.6	0.1418	mg/L	0.02216	0.1418	mg/L	0.02216	15.63%
Mg 279.077†	2678382.6	260.3	mg/L	2.35	260.3	mg/L	2.35	0.90%
QC value within limits for Mg 279.077 Recovery = 104.11%								
Mn 257.610†	-5060.7	-0.0028	mg/L	0.00000	-0.0028	mg/L	0.00000	0.07%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	6.2	0.0004	mg/L	0.00041	0.0004	mg/L	0.00041	109.04%
Ni 231.604†	-102.9	-0.0025	mg/L	0.00009	-0.0025	mg/L	0.00009	3.72%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	306.0	0.0558	mg/L	0.00637	0.0558	mg/L	0.00637	11.41%
Pb 220.353†	-154.6	0.0001	mg/L	0.00066	0.0001	mg/L	0.00066	486.93%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	45.5	0.0004	mg/L	0.00041	0.0004	mg/L	0.00041	105.65%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-19.7	0.0011	mg/L	0.00216	0.0011	mg/L	0.00216	194.54%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-155.9	-0.0627	mg/L	0.00195	-0.0627	mg/L	0.00195	3.11%
Ti 337.279†	301.1	0.0005	mg/L	0.00002	0.0005	mg/L	0.00002	4.47%
Tl 190.801†	26.8	0.0002	mg/L	0.00033	0.0002	mg/L	0.00033	202.32%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	297.2	-0.0006	mg/L	0.00017	-0.0006	mg/L	0.00017	25.70%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	157.7	0.0053	mg/L	0.00011	0.0053	mg/L	0.00011	2.01%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	47344.1	261.7	mg/L	1.61	261.7	mg/L	1.61	0.62%
QC value within limits for Ca 227.546 Recovery = 104.69%								
Sr 421.552†	464.8	0.0040	mg/L	0.00026	0.0040	mg/L	0.00026	6.58%
Al 394.401†	10707518.3	264.2	mg/L	0.50	264.2	mg/L	0.50	0.19%
QC value within limits for Al 394.401 Recovery = 105.69%								
Al 237.313†	1560393.9	255.9	mg/L	3.08	255.9	mg/L	3.08	1.20%
QC value within limits for Al 237.313 Recovery = 102.38%								

All analyte(s) passed QC.

Sequence No.: 58
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 10/14/2014 7:55:56 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

00649

Method: DV200-6010C Opt3 Page 44 Date: 10/14/2014 8:06:01 PM

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6357325.2	0.9444	mg/L	0.00549				0.58%
Ag 328.068†	45747.7	0.2054	mg/L	0.00073	0.2054	mg/L	0.00073	0.35%
QC value within limits for Ag 328.068 Recovery = 102.71%								
Al 308.215†	3775936.8	257.2	mg/L	1.83	257.2	mg/L	1.83	0.71%
QC value within limits for Al 308.215 Recovery = 102.89%								
As 188.979†	135.7	0.0976	mg/L	0.00045	0.0976	mg/L	0.00045	0.46%
QC value within limits for As 188.979 Recovery = 97.65%								
B 249.772†	36372.7	-0.1284	mg/L	0.00252	-0.1284	mg/L	0.00252	1.96%
Ba 233.527†	44061.4	0.5219	mg/L	0.00008	0.5219	mg/L	0.00008	0.02%
QC value within limits for Ba 233.527 Recovery = 104.38%								
Be 313.107†	1441368.0	0.4996	mg/L	0.00421	0.4996	mg/L	0.00421	0.84%
QC value within limits for Be 313.107 Recovery = 99.92%								
Cd 226.502†	81026.5	0.9787	mg/L	0.00145	0.9787	mg/L	0.00145	0.15%
QC value within limits for Cd 226.502 Recovery = 97.87%								
Co 228.616†	10470.1	0.4787	mg/L	0.00143	0.4787	mg/L	0.00143	0.30%
QC value within limits for Co 228.616 Recovery = 95.74%								
Cr 267.716†	55131.8	0.5079	mg/L	0.00063	0.5079	mg/L	0.00063	0.12%
QC value within limits for Cr 267.716 Recovery = 101.57%								
Cu 324.752†	135746.2	0.5207	mg/L	0.00097	0.5207	mg/L	0.00097	0.19%
QC value within limits for Cu 324.752 Recovery = 104.15%								
Fe 259.939†	4982538.5	89.56	mg/L	0.106	89.56	mg/L	0.106	0.12%
QC value within limits for Fe 259.939 Recovery = 89.56%								
K 766.490†	27.9	0.0417	mg/L	0.03511	0.0417	mg/L	0.03511	84.13%
Mg 279.077†	2699656.4	262.3	mg/L	2.20	262.3	mg/L	2.20	0.84%
QC value within limits for Mg 279.077 Recovery = 104.93%								
Mn 257.610†	169352.5	0.5061	mg/L	0.00054	0.5061	mg/L	0.00054	0.11%
QC value within limits for Mn 257.610 Recovery = 101.21%								
Mo 202.031†	1.3	0.0001	mg/L	0.00040	0.0001	mg/L	0.00040	519.24%
Ni 231.604†	40314.0	0.9618	mg/L	0.00227	0.9618	mg/L	0.00227	0.24%
QC value within limits for Ni 231.604 Recovery = 96.18%								
Na 589.592†	232.9	0.0425	mg/L	0.01106	0.0425	mg/L	0.01106	26.04%
Pb 220.353†	151.6	0.0512	mg/L	0.00030	0.0512	mg/L	0.00030	0.59%
QC value within limits for Pb 220.353 Recovery = 102.45%								
Sb 206.836†	1281.5	0.6328	mg/L	0.00081	0.6328	mg/L	0.00081	0.13%
QC value within limits for Sb 206.836 Recovery = 105.46%								
Se 196.026†	20.5	0.0497	mg/L	0.00127	0.0497	mg/L	0.00127	2.55%
QC value within limits for Se 196.026 Recovery = 99.40%								
Sn 189.927†	-134.4	-0.0582	mg/L	0.00049	-0.0582	mg/L	0.00049	0.84%
Ti 337.279†	306.1	0.0005	mg/L	0.00002	0.0005	mg/L	0.00002	2.91%
Tl 190.801†	216.2	0.1038	mg/L	0.00223	0.1038	mg/L	0.00223	2.15%
QC value within limits for Tl 190.801 Recovery = 103.78%								
V 292.402†	33325.5	0.5048	mg/L	0.00372	0.5048	mg/L	0.00372	0.74%
QC value within limits for V 292.402 Recovery = 100.96%								
Zn 206.200†	28730.0	0.9715	mg/L	0.00115	0.9715	mg/L	0.00115	0.12%
QC value within limits for Zn 206.200 Recovery = 97.15%								
Ca 227.546†	46895.5	259.3	mg/L	0.58	259.3	mg/L	0.58	0.22%
QC value within limits for Ca 227.546 Recovery = 103.72%								
Sr 421.552†	482.9	0.0042	mg/L	0.00004	0.0042	mg/L	0.00004	0.92%
Al 394.401†	10614078.2	261.9	mg/L	0.20	261.9	mg/L	0.20	0.07%
QC value within limits for Al 394.401 Recovery = 104.77%								
Al 237.313†	1565477.0	256.8	mg/L	1.60	256.8	mg/L	1.60	0.62%
QC value within limits for Al 237.313 Recovery = 102.71%								

All analyte(s) passed QC.

Sequence No.: 59 Autosampler Location: 13
Sample ID: HLCCV2 HLCCV2 Cup empty Date Collected: 10/14/2014 8:02:15 PM
Analyst: Analyzed & reported earlier in run Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: 10/15/14 Sample Prep Vol:
DCB

Mean Data: HLCCV2

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	16109841.1	2.393	mg/L	0.0102				0.43%
Ag 328.068†	202.9	0.0008	mg/L	0.00014	0.0008	mg/L	0.00014	17.26%
QC value less than the lower limit for Ag 328.068 Recovery = 0.04%								
Al 308.215†	-7791.3	-0.5308	mg/L	0.00516	-0.5308	mg/L	0.00516	0.97%
QC value less than the lower limit for Al 308.215 Recovery = -0.11%								

00650

Method: DV200-6010C Opt3 **Page 45** **Date: 10/14/2014 8:12:19 PM**

As 188.979†	-4.8	-0.0038 mg/L	0.00017	-0.0038 mg/L	0.00017	4.47%
QC value less than the lower limit for As 188.979 Recovery = -0.10%						
B 249.772†	-509.5	-0.0047 mg/L	0.00002	-0.0047 mg/L	0.00002	0.48%
QC value less than the lower limit for B 249.772 Recovery = -0.05%						
Ba 233.527†	275.5	0.0033 mg/L	0.00002	0.0033 mg/L	0.00002	0.50%
QC value less than the lower limit for Ba 233.527 Recovery = 0.01%						
Be 313.107†	9201.7	0.0032 mg/L	0.00000	0.0032 mg/L	0.00000	0.06%
QC value less than the lower limit for Be 313.107 Recovery = 0.32%						
Cd 226.502†	107.6	0.0013 mg/L	0.00002	0.0013 mg/L	0.00002	1.75%
QC value less than the lower limit for Cd 226.502 Recovery = 0.07%						
Co 228.616†	18.3	0.0008 mg/L	0.00007	0.0008 mg/L	0.00007	8.83%
QC value less than the lower limit for Co 228.616 Recovery = 0.01%						
Cr 267.716†	192.2	0.0017 mg/L	0.00002	0.0017 mg/L	0.00002	0.93%
QC value less than the lower limit for Cr 267.716 Recovery = 0.02%						
Cu 324.752†	-5608.6	-0.0212 mg/L	0.00014	-0.0212 mg/L	0.00014	0.66%
QC value less than the lower limit for Cu 324.752 Recovery = -0.42%						
Fe 259.939†	1214.2	0.0218 mg/L	0.00146	0.0218 mg/L	0.00146	6.67%
QC value less than the lower limit for Fe 259.939 Recovery = 0.04%						
K 766.490†	-360.2	-0.5397 mg/L	0.03938	-0.5397 mg/L	0.03938	7.30%
QC value less than the lower limit for K 766.490 Recovery = -0.36%						
Mg 279.077†	1877.9	0.1825 mg/L	0.00127	0.1825 mg/L	0.00127	0.70%
QC value less than the lower limit for Mg 279.077 Recovery = 0.04%						
Mn 257.610†	577.6	0.0017 mg/L	0.00000	0.0017 mg/L	0.00000	0.11%
QC value less than the lower limit for Mn 257.610 Recovery = 0.02%						
Mo 202.031†	-14.5	-0.0009 mg/L	0.00003	-0.0009 mg/L	0.00003	3.42%
QC value less than the lower limit for Mo 202.031 Recovery = -0.01%						
Ni 231.604†	149.5	0.0036 mg/L	0.00006	0.0036 mg/L	0.00006	1.81%
QC value less than the lower limit for Ni 231.604 Recovery = 0.04%						
Na 589.592†	-57.1	-0.0104 mg/L	0.00226	-0.0104 mg/L	0.00226	21.74%
QC value less than the lower limit for Na 589.592 Recovery = -0.01%						
Pb 220.353†	21.6	0.0035 mg/L	0.00022	0.0035 mg/L	0.00022	6.23%
QC value less than the lower limit for Pb 220.353 Recovery = 0.04%						
Sb 206.836†	-22.7	-0.0116 mg/L	0.00016	-0.0116 mg/L	0.00016	1.34%
Se 196.026†	0.8	0.0010 mg/L	0.00018	0.0010 mg/L	0.00018	18.71%
QC value less than the lower limit for Se 196.026 Recovery = 0.05%						
Sn 189.927†	-39.0	-0.0081 mg/L	0.00002	-0.0081 mg/L	0.00002	0.26%
Ti 337.279†	100.3	0.0002 mg/L	0.00002	0.0002 mg/L	0.00002	13.12%
QC value less than the lower limit for Ti 337.279 Recovery = 0.00%						
Tl 190.801†	-13.5	-0.0074 mg/L	0.00063	-0.0074 mg/L	0.00063	8.51%
QC value less than the lower limit for Tl 190.801 Recovery = -0.18%						
V 292.402†	-47.4	-0.0007 mg/L	0.00008	-0.0007 mg/L	0.00008	11.65%
QC value less than the lower limit for V 292.402 Recovery = -0.01%						
Zn 206.200†	-46.5	-0.0016 mg/L	0.00001	-0.0016 mg/L	0.00001	0.75%
QC value less than the lower limit for Zn 206.200 Recovery = -0.04%						
Ca 227.546†	43.1	0.2325 mg/L	0.01260	0.2325 mg/L	0.01260	5.42%
QC value less than the lower limit for Ca 227.546 Recovery = 0.09%						
Sr 421.552†	-87.3	-0.0008 mg/L	0.00012	-0.0008 mg/L	0.00012	15.97%
QC value less than the lower limit for Sr 421.552 Recovery = -0.01%						
Al 394.401†	33.0	0.0008 mg/L	0.00447	0.0008 mg/L	0.00447	548.25%
QC value less than the lower limit for Al 394.401 Recovery = 0.00%						
Al 237.313†	-84.9	-0.0139 mg/L	0.00302	-0.0139 mg/L	0.00302	21.66%
QC value less than the lower limit for Al 237.313 Recovery = -0.00%						
QC Failed. Continue with analysis.						

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Sequence No.: 60 **Autosampler Location: 2**
Sample ID: HLCCV1 **Date Collected: 10/14/2014 8:08:26 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: HLCCV1

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6606284.5	0.9814	mg/L	0.00781				0.80%
Ag 328.068†	253150.5	1.003	mg/L	0.0107	1.003	mg/L	0.0107	1.06%
QC value within limits for Ag 328.068 Recovery = 100.28%								
Al 308.215†	294366.5	20.05	mg/L	0.267	20.05	mg/L	0.267	1.33%
QC value within limits for Al 308.215 Recovery = 100.25%								
As 188.979†	2481.9	1.971	mg/L	0.0144	1.971	mg/L	0.0144	0.73%
QC value within limits for As 188.979 Recovery = 98.56%								

00651

Method: DV200-6010C Opt3 Page 46 Date: 10/14/2014 8:18:23 PM

B 249.772†	539500.8	4.887 mg/L	0.0193	4.887 mg/L	0.0193	0.40%
QC value within limits for B 249.772 Recovery = 97.73%						
Ba 233.527†	1670851.2	19.79 mg/L	0.019	19.79 mg/L	0.019	0.10%
QC value within limits for Ba 233.527 Recovery = 98.96%						
Be 313.107†	1431289.1	0.4961 mg/L	0.00003	0.4961 mg/L	0.00003	0.01%
QC value within limits for Be 313.107 Recovery = 99.23%						
Cd 226.502†	81683.4	0.9973 mg/L	0.01035	0.9973 mg/L	0.01035	1.04%
QC value within limits for Cd 226.502 Recovery = 99.73%						
Co 228.616†	109230.2	4.994 mg/L	0.0480	4.994 mg/L	0.0480	0.96%
QC value within limits for Co 228.616 Recovery = 99.88%						
Cr 267.716†	115329.1	1.005 mg/L	0.0096	1.005 mg/L	0.0096	0.95%
QC value within limits for Cr 267.716 Recovery = 100.53%						
Cu 324.752†	662664.0	2.502 mg/L	0.0257	2.502 mg/L	0.0257	1.03%
QC value within limits for Cu 324.752 Recovery = 100.09%						
Fe 259.939†	555949.6	9.994 mg/L	0.1104	9.994 mg/L	0.1104	1.11%
QC value within limits for Fe 259.939 Recovery = 99.94%						
K 766.490†	34033.9	50.99 mg/L	0.647	50.99 mg/L	0.647	1.27%
QC value within limits for K 766.490 Recovery = 101.98%						
Mg 279.077†	513873.8	49.93 mg/L	0.522	49.93 mg/L	0.522	1.05%
QC value within limits for Mg 279.077 Recovery = 99.87%						
Mn 257.610†	512769.4	1.498 mg/L	0.0153	1.498 mg/L	0.0153	1.02%
QC value within limits for Mn 257.610 Recovery = 99.83%						
Mo 202.031†	82793.4	4.990 mg/L	0.0524	4.990 mg/L	0.0524	1.05%
QC value within limits for Mo 202.031 Recovery = 99.79%						
Ni 231.604†	167784.6	4.003 mg/L	0.0390	4.003 mg/L	0.0390	0.97%
QC value within limits for Ni 231.604 Recovery = 100.07%						
Na 589.592†	272421.9	49.67 mg/L	0.782	49.67 mg/L	0.782	1.58%
QC value within limits for Na 589.592 Recovery = 99.34%						
Pb 220.353†	5919.5	0.9895 mg/L	0.00605	0.9895 mg/L	0.00605	0.61%
QC value within limits for Pb 220.353 Recovery = 98.95%						
Sb 206.836†	19356.2	9.901 mg/L	0.0406	9.901 mg/L	0.0406	0.41%
QC value within limits for Sb 206.836 Recovery = 99.01%						
Se 196.026†	811.2	0.9852 mg/L	0.00604	0.9852 mg/L	0.00604	0.61%
QC value within limits for Se 196.026 Recovery = 98.52%						
Sn 189.927†	47756.6	10.01 mg/L	0.097	10.01 mg/L	0.097	0.97%
QC value within limits for Sn 189.927 Recovery = 100.08%						
Ti 337.279†	2758826.6	4.954 mg/L	0.0021	4.954 mg/L	0.0021	0.04%
QC value within limits for Ti 337.279 Recovery = 99.07%						
Tl 190.801†	3610.5	1.973 mg/L	0.0087	1.973 mg/L	0.0087	0.44%
QC value within limits for Tl 190.801 Recovery = 98.65%						
V 292.402†	329473.9	5.042 mg/L	0.0544	5.042 mg/L	0.0544	1.08%
QC value within limits for V 292.402 Recovery = 100.83%						
Zn 206.200†	59116.7	1.999 mg/L	0.0198	1.999 mg/L	0.0198	0.99%
QC value within limits for Zn 206.200 Recovery = 99.95%						
Ca 227.546†	9205.1	50.36 mg/L	0.219	50.36 mg/L	0.219	0.44%
QC value within limits for Ca 227.546 Recovery = 100.73%						
Sr 421.552†	573734.8	4.953 mg/L	0.0049	4.953 mg/L	0.0049	0.10%
QC value within limits for Sr 421.552 Recovery = 99.06%						
Al 394.401†	813404.6	20.07 mg/L	0.282	20.07 mg/L	0.282	1.41%
QC value within limits for Al 394.401 Recovery = 100.36%						
Al 237.313†	121895.4	19.99 mg/L	0.234	19.99 mg/L	0.234	1.17%
QC value within limits for Al 237.313 Recovery = 99.97%						

All analyte(s) passed QC.

Sequence No.: 61 **Autosampler Location: 3**
Sample ID: CCV **Date Collected: 10/14/2014 8:14:42 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6735695.9	1.001	mg/L	0.0028				0.28%
Ag 328.068†	127397.1	0.5047	mg/L	0.00205	0.5047	mg/L	0.00205	0.41%
QC value within limits for Ag 328.068 Recovery = 100.94%								
Al 308.215†	143737.8	9.790	mg/L	0.0728	9.790	mg/L	0.0728	0.74%
QC value within limits for Al 308.215 Recovery = 97.90%								
As 188.979†	1250.6	0.9933	mg/L	0.00396	0.9933	mg/L	0.00396	0.40%
QC value within limits for As 188.979 Recovery = 99.33%								

00652

Method: DV200-6010C Opt3 Page 47 Date: 10/14/2014 8:24:25 PM

B 249.772†	270602.7	2.451 mg/L	0.0255	2.451 mg/L	0.0255	1.04%
QC value within limits for B 249.772 Recovery = 98.04%						
Ba 233.527†	869610.7	10.30 mg/L	0.009	10.30 mg/L	0.009	0.08%
QC value within limits for Ba 233.527 Recovery = 103.00%						
Be 313.107†	726622.8	0.2519 mg/L	0.00004	0.2519 mg/L	0.00004	0.02%
QC value within limits for Be 313.107 Recovery = 100.75%						
Cd 226.502†	41557.1	0.5074 mg/L	0.00157	0.5074 mg/L	0.00157	0.31%
QC value within limits for Cd 226.502 Recovery = 101.48%						
Co 228.616†	54998.0	2.514 mg/L	0.0005	2.514 mg/L	0.0005	0.02%
QC value within limits for Co 228.616 Recovery = 100.58%						
Cr 267.716†	58899.4	0.5134 mg/L	0.00029	0.5134 mg/L	0.00029	0.06%
QC value within limits for Cr 267.716 Recovery = 102.67%						
Cu 324.752†	331158.4	1.250 mg/L	0.0156	1.250 mg/L	0.0156	1.25%
QC value within limits for Cu 324.752 Recovery = 100.04%						
Fe 259.939†	281830.7	5.066 mg/L	0.0005	5.066 mg/L	0.0005	0.01%
QC value within limits for Fe 259.939 Recovery = 101.32%						
K 766.490†	16627.0	24.91 mg/L	0.176	24.91 mg/L	0.176	0.71%
QC value within limits for K 766.490 Recovery = 99.65%						
Mg 279.077†	256473.0	24.92 mg/L	0.036	24.92 mg/L	0.036	0.14%
QC value within limits for Mg 279.077 Recovery = 99.69%						
Mn 257.610†	259672.0	0.7584 mg/L	0.00049	0.7584 mg/L	0.00049	0.06%
QC value within limits for Mn 257.610 Recovery = 101.12%						
Mo 202.031†	40332.7	2.431 mg/L	0.0018	2.431 mg/L	0.0018	0.08%
QC value within limits for Mo 202.031 Recovery = 97.23%						
Ni 231.604†	84930.8	2.026 mg/L	0.0036	2.026 mg/L	0.0036	0.18%
QC value within limits for Ni 231.604 Recovery = 101.31%						
Na 589.592†	133022.2	24.25 mg/L	0.157	24.25 mg/L	0.157	0.65%
QC value within limits for Na 589.592 Recovery = 97.01%						
Pb 220.353†	3006.0	0.5024 mg/L	0.00331	0.5024 mg/L	0.00331	0.66%
QC value within limits for Pb 220.353 Recovery = 100.48%						
Sb 206.836†	9647.1	4.934 mg/L	0.0270	4.934 mg/L	0.0270	0.55%
QC value within limits for Sb 206.836 Recovery = 98.69%						
Se 196.026†	416.1	0.5053 mg/L	0.00304	0.5053 mg/L	0.00304	0.60%
QC value within limits for Se 196.026 Recovery = 101.05%						
Sn 189.927†	24181.5	5.068 mg/L	0.0179	5.068 mg/L	0.0179	0.35%
QC value within limits for Sn 189.927 Recovery = 101.36%						
Ti 337.279†	1374320.9	2.468 mg/L	0.0034	2.468 mg/L	0.0034	0.14%
QC value within limits for Ti 337.279 Recovery = 98.71%						
Tl 190.801†	1832.9	1.002 mg/L	0.0067	1.002 mg/L	0.0067	0.66%
QC value within limits for Tl 190.801 Recovery = 100.17%						
V 292.402†	163529.9	2.502 mg/L	0.0051	2.502 mg/L	0.0051	0.20%
QC value within limits for V 292.402 Recovery = 100.09%						
Zn 206.200†	29884.6	1.011 mg/L	0.0094	1.011 mg/L	0.0094	0.93%
QC value within limits for Zn 206.200 Recovery = 101.05%						
Ca 227.546†	4446.1	24.34 mg/L	0.083	24.34 mg/L	0.083	0.34%
QC value within limits for Ca 227.546 Recovery = 97.36%						
Sr 421.552†	269993.5	2.331 mg/L	0.0185	2.331 mg/L	0.0185	0.79%
QC value within limits for Sr 421.552 Recovery = 93.24%						
Al 394.401†	393981.6	9.722 mg/L	0.0632	9.722 mg/L	0.0632	0.65%
QC value within limits for Al 394.401 Recovery = 97.22%						
Al 237.313†	60436.5	9.913 mg/L	0.0646	9.913 mg/L	0.0646	0.65%
QC value within limits for Al 237.313 Recovery = 99.13%						

All analyte(s) passed QC.

Sequence No.: 62 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 10/14/2014 8:20:48 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6845068.1	1.017	mg/L	0.0087				0.85%
Ag 328.068†	102.6	0.0004	mg/L	0.00042	0.0004	mg/L	0.00042	102.49%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	700.9	0.0477	mg/L	0.00443	0.0477	mg/L	0.00443	9.27%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.9	0.0015	mg/L	0.00058	0.0015	mg/L	0.00058	39.01%
QC value within limits for As 188.979 Recovery = Not calculated								

00653

Method: DV200-6010C Opt3 Page 48 Date: 10/14/2014 8:30:24 PM

B 249.772†	6046.7	0.0552 mg/L	0.00628	0.0552 mg/L	0.00628	11.37%
QC value within limits for B 249.772 Recovery = Not calculated						
Ba 233.527†	768.8	0.0091 mg/L	0.00317	0.0091 mg/L	0.00317	34.86%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	690.1	0.0002 mg/L	0.00012	0.0002 mg/L	0.00012	51.11%
QC value within limits for Be 313.107 Recovery = Not calculated						
Cd 226.502†	43.4	0.0005 mg/L	0.00016	0.0005 mg/L	0.00016	31.19%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	72.2	0.0033 mg/L	0.00088	0.0033 mg/L	0.00088	26.54%
QC value greater than the upper limit for Co 228.616 Recovery = Not calculated						
Cr 267.716†	45.0	0.0004 mg/L	0.00015	0.0004 mg/L	0.00015	38.56%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	1647.3	0.0062 mg/L	0.00081	0.0062 mg/L	0.00081	13.02%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	1247.6	0.0224 mg/L	0.00425	0.0224 mg/L	0.00425	18.94%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	81.4	0.1219 mg/L	0.04304	0.1219 mg/L	0.04304	35.29%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	320.3	0.0311 mg/L	0.01324	0.0311 mg/L	0.01324	42.53%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	335.3	0.0010 mg/L	0.00024	0.0010 mg/L	0.00024	24.27%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	35.6	0.0021 mg/L	0.00068	0.0021 mg/L	0.00068	31.58%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	117.7	0.0028 mg/L	0.00072	0.0028 mg/L	0.00072	25.73%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	503.0	0.0917 mg/L	0.00370	0.0917 mg/L	0.00370	4.04%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	4.5	0.0008 mg/L	0.00012	0.0008 mg/L	0.00012	15.71%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	7.3	0.0037 mg/L	0.00116	0.0037 mg/L	0.00116	31.00%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.9	0.0035 mg/L	0.00025	0.0035 mg/L	0.00025	6.99%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	60.9	0.0128 mg/L	0.00263	0.0128 mg/L	0.00263	20.62%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	1331.9	0.0024 mg/L	0.00084	0.0024 mg/L	0.00084	35.24%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	3.0	0.0016 mg/L	0.00134	0.0016 mg/L	0.00134	81.38%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	158.6	0.0024 mg/L	0.00052	0.0024 mg/L	0.00052	21.42%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	68.6	0.0023 mg/L	0.00014	0.0023 mg/L	0.00014	6.18%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	4.3	0.0246 mg/L	0.02332	0.0246 mg/L	0.02332	94.87%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	428.1	0.0037 mg/L	0.00009	0.0037 mg/L	0.00009	2.41%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 394.401†	914.7	0.0226 mg/L	0.00752	0.0226 mg/L	0.00752	33.30%
QC value within limits for Al 394.401 Recovery = Not calculated						
Al 237.313†	141.1	0.0232 mg/L	0.00673	0.0232 mg/L	0.00673	29.08%
QC value within limits for Al 237.313 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 63
Sample ID: PBW-220154
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 67
Date Collected: 10/14/2014 8:26:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: PBW-220154

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6889300.4	1.023	mg/L	0.0030				0.30%
Ag 328.068†	-53.2	-0.0002	mg/L	0.00002				8.27%
Al 308.215†	469.2	0.0320	mg/L	0.01433				44.82%
As 188.979†	-0.4	-0.0003	mg/L	0.00048				153.86%
B 249.772†	3164.6	0.0289	mg/L	0.00233				8.07%
Ba 233.527†	115.4	0.0014	mg/L	0.00005				3.90%
Be 313.107†	-358.7	-0.0001	mg/L	0.00010				76.55%

00654

Method: DV200-6010C Opt3 Page 49 Date: 10/14/2014 8:39:03 PM

Cd 226.502†	-12.7	-0.0002 mg/L	0.00001	7.60%
Co 228.616†	10.7	0.0005 mg/L	0.00005	10.69%
Cr 267.716†	48.0	0.0004 mg/L	0.00004	10.19%
Cu 324.752†	837.0	0.0032 mg/L	0.00074	23.52%
Fe 259.939†	390.6	0.0070 mg/L	0.00020	2.78%
K 766.490†	71.4	0.1070 mg/L	0.08946	83.59%
Mg 279.077†	34.9	0.0034 mg/L	0.00257	75.94%
Mn 257.610†	963.4	0.0028 mg/L	0.00001	0.41%
Mo 202.031†	-2.6	-0.0002 mg/L	0.00009	56.52%
Ni 231.604†	8.2	0.0002 mg/L	0.00003	12.83%
Na 589.592†	248.6	0.0453 mg/L	0.00423	9.33%
Pb 220.353†	-2.9	-0.0005 mg/L	0.00054	111.37%
Sb 206.836†	7.3	0.0037 mg/L	0.00072	19.36%
Se 196.026†	1.4	0.0017 mg/L	0.00042	25.26%
Sn 189.927†	32.7	0.0069 mg/L	0.00185	27.05%
Ti 337.279†	281.0	0.0005 mg/L	0.00007	13.95%
Tl 190.801†	-9.0	-0.0049 mg/L	0.00298	60.80%
V 292.402†	-0.6	0.0000 mg/L	0.00010	>999.9%
Zn 206.200†	23.7	0.0008 mg/L	0.00001	1.01%
Ca 227.546†	-4.9	-0.0257 mg/L	0.01019	39.63%
Sr 421.552†	36.8	0.0003 mg/L	0.00020	62.15%
Al 394.401†	80.6	0.0020 mg/L	0.00094	47.26%
Al 237.313†	11.4	0.0019 mg/L	0.00111	59.41%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 64
Sample ID: LCSW-220154
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 68
Date Collected: 10/14/2014 8:32:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-220154

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6906066.3	1.026	mg/L	0.0098				0.95%
Ag 328.068†	12672.6	0.0504	mg/L	0.00050				1.00%
Al 308.215†	28257.9	1.925	mg/L	0.0186				0.97%
As 188.979†	48.3	0.0383	mg/L	0.00097				2.54%
B 249.772†	105592.5	0.9613	mg/L	0.00124				0.13%
Ba 233.527†	174106.0	2.062	mg/L	0.0178				0.86%
Be 313.107†	143069.5	0.0496	mg/L	0.00033				0.66%
Cd 226.502†	4161.6	0.0507	mg/L	0.00002				0.03%
Co 228.616†	11174.2	0.5109	mg/L	0.00488				0.95%
Cr 267.716†	24310.7	0.2110	mg/L	0.00130				0.62%
Cu 324.752†	71617.0	0.2704	mg/L	0.00180				0.67%
Fe 259.939†	58044.3	1.043	mg/L	0.0085				0.82%
K 766.490†	13000.8	19.48	mg/L	0.221				1.13%
Mg 279.077†	20798.6	2.021	mg/L	0.0158				0.78%
Mn 257.610†	177672.7	0.5186	mg/L	0.00425				0.82%
Mo 202.031†	8271.6	0.4985	mg/L	0.00348				0.70%
Ni 231.604†	22023.8	0.5254	mg/L	0.00466				0.89%
Na 589.592†	107965.7	19.68	mg/L	0.131				0.66%
Pb 220.353†	3030.4	0.5057	mg/L	0.00193				0.38%
Sb 206.836†	944.8	0.4832	mg/L	0.00411				0.85%
Se 196.026†	774.8	0.9388	mg/L	0.00562				0.60%
Sn 189.927†	25746.9	5.397	mg/L	0.0507				0.94%
Ti 337.279†	279699.4	0.5022	mg/L	0.00334				0.67%
Tl 190.801†	3498.5	1.913	mg/L	0.0101				0.53%
V 292.402†	32603.5	0.4989	mg/L	0.00605				1.21%
Zn 206.200†	15608.4	0.5278	mg/L	0.00524				0.99%
Ca 227.546†	369.0	2.060	mg/L	0.0114				0.56%
Sr 421.552†	35.8	0.0003	mg/L	0.00028				89.69%
Al 394.401†	77559.4	1.914	mg/L	0.0128				0.67%
Al 237.313†	11877.9	1.948	mg/L	0.0106				0.54%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 65
Sample ID: R1407813-001
Analyst:

Autosampler Location: 69
Date Collected: 10/14/2014 8:39:00 PM
Data Type: Original

00655

Method: DV200-6010C Opt3 Page 50 Date: 10/14/2014 8:49:05 PM

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol: 50 mL

Mean Data: R1407813-001

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6824918.5	1.014	mg/L	0.0015				0.15%
Ag 328.068†	-430.7	-0.0001	mg/L	0.00006				85.18%
Al 308.215†	817.3	0.0546	mg/L	0.00273				5.00%
As 188.979†	5.3	0.0042	mg/L	0.00026				6.17%
B 249.772†	11081.5	0.0720	mg/L	0.00125				1.73%
Ba 233.527†	3892.5	0.0461	mg/L	0.00004				0.09%
Be 313.107†	-145.6	-0.0001	mg/L	0.00002				46.67%
Cd 226.502†	60.0	-0.0001	mg/L	0.00002				22.05%
Co 228.616†	29.3	0.0013	mg/L	0.00001				0.68%
Cr 267.716†	-16.0	0.0007	mg/L	0.00003				3.54%
Cu 324.752†	572.3	0.0027	mg/L	0.00011				4.15%
Fe 259.939†	328606.4	5.907	mg/L	0.0515				0.87%
K 766.490†	2251.2	3.373	mg/L	0.0697				2.07%
Mg 279.077†	61835.6	6.009	mg/L	0.0508				0.84%
Mn 257.610†	22789.3	0.0673	mg/L	0.00063				0.94%
Mo 202.031†	12.9	0.0008	mg/L	0.00003				4.16%
Ni 231.604†	257.6	0.0061	mg/L	0.00001				0.14%
Na 589.592†	355769.0	64.86	mg/L	0.266				0.41%
Pb 220.353†	1.4	0.0001	mg/L	0.00072				>999.9%
Sb 206.836†	4.2	0.0021	mg/L	0.00012				5.54%
Se 196.026†	1.2	0.0028	mg/L	0.00041				14.48%
Sn 189.927†	-80.4	-0.0169	mg/L	0.00014				0.86%
Ti 337.279†	446.4	0.0008	mg/L	0.00003				3.74%
Tl 190.801†	-3.8	-0.0021	mg/L	0.00111				52.30%
V 292.402†	52.5	0.0005	mg/L	0.00021				46.42%
Zn 206.200†	206.0	0.0070	mg/L	0.00004				0.52%
Ca 227.546†	5089.0	27.83	mg/L	0.184				0.66%
Sr 421.552†	21465.2	0.1853	mg/L	0.00137				0.74%
Al 394.401†	682.6	0.0168	mg/L	0.00065				3.89%
Al 237.313†	145.9	0.0239	mg/L	0.00053				2.20%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 66 Autosampler Location: 70
Sample ID: R1407813-001D Date Collected: 10/14/2014 8:45:15 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol: 50 mL

Mean Data: R1407813-001D

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6741389.7	1.001	mg/L	0.0059				0.59%
Ag 328.068†	-395.9	0.0001	mg/L	0.00014				280.37%
Al 308.215†	1265.9	0.0852	mg/L	0.00218				2.55%
As 188.979†	5.3	0.0042	mg/L	0.00111				26.33%
B 249.772†	10018.2	0.0625	mg/L	0.00060				0.95%
Ba 233.527†	3860.3	0.0457	mg/L	0.00006				0.14%
Be 313.107†	-657.8	-0.0002	mg/L	0.00001				3.03%
Cd 226.502†	58.4	-0.0001	mg/L	0.00003				22.86%
Co 228.616†	25.2	0.0012	mg/L	0.00001				1.25%
Cr 267.716†	-17.8	0.0007	mg/L	0.00005				6.56%
Cu 324.752†	572.6	0.0027	mg/L	0.00025				9.37%
Fe 259.939†	325903.9	5.858	mg/L	0.0206				0.35%
K 766.490†	2290.3	3.432	mg/L	0.0655				1.91%
Mg 279.077†	61422.6	5.969	mg/L	0.0203				0.34%
Mn 257.610†	22540.0	0.0665	mg/L	0.00019				0.29%
Mo 202.031†	13.4	0.0008	mg/L	0.00032				40.13%
Ni 231.604†	241.3	0.0058	mg/L	0.00002				0.27%
Na 589.592†	359172.0	65.49	mg/L	0.427				0.65%
Pb 220.353†	-1.9	-0.0005	mg/L	0.00069				139.38%
Sb 206.836†	5.8	0.0030	mg/L	0.00105				35.56%
Se 196.026†	0.1	0.0014	mg/L	0.00099				69.03%
Sn 189.927†	-87.8	-0.0184	mg/L	0.00070				3.79%

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Ti 337.279†	539.3	0.0010	mg/L	0.00005	5.32%
Tl 190.801†	-5.6	-0.0031	mg/L	0.00091	29.72%
V 292.402†	46.2	0.0004	mg/L	0.00058	158.30%
Zn 206.200†	224.8	0.0076	mg/L	0.00027	3.49%
Ca 227.546†	5053.7	27.64	mg/L	0.183	0.66%
Sr 421.552†	21706.3	0.1874	mg/L	0.00207	1.10%
Al 394.401†	860.1	0.0212	mg/L	0.00087	4.09%
Al 237.313†	188.8	0.0310	mg/L	0.00035	1.15%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 67
Sample ID: R1407813-001S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 71
Date Collected: 10/14/2014 8:51:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407813-001S

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6764842.5	1.005	mg/L	0.0011				0.11%
Ag 328.068†	12252.1	0.0503	mg/L	0.00023				0.45%
Al 308.215†	30448.7	2.073	mg/L	0.0135				0.65%
As 188.979†	53.3	0.0422	mg/L	0.00032				0.75%
B 249.772†	115994.0	1.028	mg/L	0.0143				1.40%
Ba 233.527†	174299.7	2.065	mg/L	0.0301				1.46%
Be 313.107†	141460.9	0.0490	mg/L	0.00074				1.51%
Cd 226.502†	4104.5	0.0492	mg/L	0.00021				0.44%
Co 228.616†	11015.9	0.5036	mg/L	0.00845				1.68%
Cr 267.716†	23587.9	0.2056	mg/L	0.00221				1.07%
Cu 324.752†	72328.3	0.2737	mg/L	0.00158				0.58%
Fe 259.939†	381476.1	6.857	mg/L	0.0173				0.25%
K 766.490†	15608.9	23.39	mg/L	0.114				0.49%
Mg 279.077†	81838.7	7.952	mg/L	0.0919				1.16%
Mn 257.610†	196494.1	0.5743	mg/L	0.00675				1.17%
Mo 202.031†	8195.4	0.4939	mg/L	0.00656				1.33%
Ni 231.604†	21666.6	0.5169	mg/L	0.00771				1.49%
Na 589.592†	473477.5	86.33	mg/L	0.110				0.13%
Pb 220.353†	2981.5	0.4974	mg/L	0.00315				0.63%
Sb 206.836†	946.3	0.4839	mg/L	0.00019				0.04%
Se 196.026†	1336.8	1.621	mg/L	0.0018				0.11%
Sn 189.927†	25820.9	5.412	mg/L	0.1147				2.12%
Ti 337.279†	276301.1	0.4961	mg/L	0.00292				0.59%
Tl 190.801†	3492.0	1.909	mg/L	0.0030				0.16%
V 292.402†	32012.2	0.4895	mg/L	0.00505				1.03%
Zn 206.200†	15052.1	0.5090	mg/L	0.01550				3.05%
Ca 227.546†	5553.6	30.40	mg/L	0.371				1.22%
Sr 421.552†	21822.6	0.1884	mg/L	0.00115				0.61%
Al 394.401†	82418.2	2.034	mg/L	0.0084				0.41%
Al 237.313†	12177.5	1.997	mg/L	0.0042				0.21%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 68
Sample ID: R1407813-001A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 72
Date Collected: 10/14/2014 8:57:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407813-001A

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6730798.1	0.9999	mg/L	0.00332				0.33%
Ag 328.068†	11584.0	0.0476	mg/L	0.00033				0.70%
Al 308.215†	28848.3	1.964	mg/L	0.0118				0.60%
As 188.979†	50.1	0.0397	mg/L	0.00060				1.51%
B 249.772†	116687.3	1.034	mg/L	0.0001				0.01%
Ba 233.527†	167469.9	1.984	mg/L	0.0128				0.65%
Be 313.107†	136445.1	0.0473	mg/L	0.00033				0.70%
Cd 226.502†	3876.6	0.0464	mg/L	0.00007				0.15%

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Co 228.616†	10453.7	0.4779 mg/L	0.00424	0.89%
Cr 267.716†	22815.8	0.1989 mg/L	0.00100	0.50%
Cu 324.752†	67195.3	0.2543 mg/L	0.00123	0.48%
Fe 259.939†	379155.3	6.816 mg/L	0.0042	0.06%
K 766.490†	14969.1	22.43 mg/L	0.041	0.18%
Mg 279.077†	81951.4	7.963 mg/L	0.0564	0.71%
Mn 257.610†	189312.4	0.5533 mg/L	0.00369	0.67%
Mo 202.031†	8378.3	0.5049 mg/L	0.00206	0.41%
Ni 231.604†	20832.1	0.4970 mg/L	0.00435	0.88%
Na 589.592†	464381.9	84.67 mg/L	0.162	0.19%
Pb 220.353†	2833.5	0.4727 mg/L	0.00121	0.26%
Sb 206.836†	962.5	0.4922 mg/L	0.00347	0.70%
Se 196.026†	319.7	0.3888 mg/L	0.00298	0.77%
Sn 189.927†	-86.9	-0.0184 mg/L	0.00026	1.39%
Ti 337.279†	271603.4	0.4877 mg/L	0.00297	0.61%
Tl 190.801†	3316.0	1.813 mg/L	0.0050	0.28%
V 292.402†	30930.6	0.4730 mg/L	0.00290	0.61%
Zn 206.200†	14730.7	0.4981 mg/L	0.00265	0.53%
Ca 227.546†	5507.1	30.15 mg/L	0.175	0.58%
Sr 421.552†	21999.2	0.1899 mg/L	0.00054	0.28%
Al 394.401†	77898.1	1.922 mg/L	0.0128	0.67%
Al 237.313†	11583.5	1.900 mg/L	0.0163	0.86%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 69
Sample ID: R1407813-001L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 73
Date Collected: 10/14/2014 9:03:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407813-001L

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6814556.7	1.012	mg/L	0.0075				0.74%
Ag 328.068†	-73.4	0.0000	mg/L	0.00004				107.84%
Al 308.215†	559.7	0.0380	mg/L	0.02719				71.58%
As 188.979†	0.5	0.0004	mg/L	0.00001				1.95%
B 249.772†	3533.9	0.0265	mg/L	0.00231				8.71%
Ba 233.527†	798.1	0.0095	mg/L	0.00003				0.27%
Be 313.107†	-393.2	-0.0001	mg/L	0.00012				89.14%
Cd 226.502†	-6.0	-0.0002	mg/L	0.00005				22.10%
Co 228.616†	-1.3	-0.0001	mg/L	0.00001				17.49%
Cr 267.716†	9.9	0.0003	mg/L	0.00002				8.03%
Cu 324.752†	317.1	0.0013	mg/L	0.00098				74.73%
Fe 259.939†	65554.3	1.178	mg/L	0.0086				0.73%
K 766.490†	465.7	0.6978	mg/L	0.06379				9.14%
Mg 279.077†	12084.1	1.174	mg/L	0.0107				0.91%
Mn 257.610†	4545.7	0.0134	mg/L	0.00007				0.52%
Mo 202.031†	0.4	0.0000	mg/L	0.00006				258.39%
Ni 231.604†	39.8	0.0009	mg/L	0.00006				6.27%
Na 589.592†	71968.4	13.12	mg/L	0.094				0.72%
Pb 220.353†	-4.5	-0.0008	mg/L	0.00052				67.12%
Sb 206.836†	5.2	0.0027	mg/L	0.00069				25.98%
Se 196.026†	1.8	0.0024	mg/L	0.00026				10.92%
Sn 189.927†	-15.3	-0.0032	mg/L	0.00057				17.78%
Ti 337.279†	269.5	0.0005	mg/L	0.00009				19.10%
Tl 190.801†	-4.5	-0.0025	mg/L	0.00274				110.91%
V 292.402†	-0.9	-0.0001	mg/L	0.00017				212.01%
Zn 206.200†	62.0	0.0021	mg/L	0.00019				9.28%
Ca 227.546†	929.9	5.092	mg/L	0.0474				0.93%
Sr 421.552†	4248.3	0.0367	mg/L	0.00020				0.55%
Al 394.401†	-77.9	-0.0019	mg/L	0.00041				21.36%
Al 237.313†	7.6	0.0012	mg/L	0.00122				98.12%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 70
Sample ID: R1407813-009
Analyst:
Initial Sample Wt:

Autosampler Location: 74
Date Collected: 10/14/2014 9:09:42 PM
Data Type: Original
Initial Sample Vol:

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Dilution: Sample Prep Vol: 50 mL

Mean Data: R1407813-009

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6656220.2	0.9888	mg/L	0.00432				0.44%
Ag 328.068†	-591.1	-0.0002	mg/L	0.00021				83.09%
Al 308.215†	35002.4	2.381	mg/L	0.0033				0.14%
As 188.979†	7.6	0.0060	mg/L	0.00035				5.83%
B 249.772†	19691.1	0.1418	mg/L	0.00064				0.45%
Ba 233.527†	9972.4	0.1181	mg/L	0.00031				0.27%
Be 313.107†	6209.8	0.0022	mg/L	0.00002				1.02%
Cd 226.502†	131.2	0.0005	mg/L	0.00005				9.13%
Co 228.616†	399.2	0.0183	mg/L	0.00008				0.45%
Cr 267.716†	535.9	0.0062	mg/L	0.00005				0.77%
Cu 324.752†	1812.9	0.0075	mg/L	0.00015				1.96%
Fe 259.939†	420931.6	7.566	mg/L	0.0350				0.46%
K 766.490†	3666.3	5.493	mg/L	0.0932				1.70%
Mg 279.077†	128826.6	12.52	mg/L	0.046				0.37%
Mn 257.610†	314744.3	0.9194	mg/L	0.00265				0.29%
Mo 202.031†	22.7	0.0014	mg/L	0.00008				5.61%
Ni 231.604†	410.4	0.0098	mg/L	0.00004				0.44%
Na 589.592†	1876571.2	342.1	mg/L	1.90				0.56%
Pb 220.353†	11.1	0.0019	mg/L	0.00092				48.98%
Sb 206.836†	6.3	0.0030	mg/L	0.00054				17.98%
Se 196.026†	0.4	0.0022	mg/L	0.00097				43.26%
Sn 189.927†	-116.3	-0.0247	mg/L	0.00009				0.38%
Ti 337.279†	16817.9	0.0302	mg/L	0.00007				0.23%
Tl 190.801†	1.6	0.0006	mg/L	0.00077				121.32%
V 292.402†	356.4	0.0050	mg/L	0.00045				8.98%
Zn 206.200†	3282.6	0.1110	mg/L	0.00019				0.17%
Ca 227.546†	8735.9	47.64	mg/L	0.268				0.56%
Sr 421.552†	55323.5	0.4776	mg/L	0.00024				0.05%
Al 394.401†	95458.0	2.356	mg/L	0.0007				0.03%
Al 237.313†	13626.4	2.235	mg/L	0.0048				0.21%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 71
Sample ID: R1407813-010
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 75
Date Collected: 10/14/2014 9:15:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407813-010

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6944860.6	1.032	mg/L	0.0028				0.27%
Ag 328.068†	16.1	0.0001	mg/L	0.00005				69.63%
Al 308.215†	327.5	0.0223	mg/L	0.00227				10.15%
As 188.979†	-0.5	-0.0004	mg/L	0.00090				243.52%
B 249.772†	384.0	0.0035	mg/L	0.00055				15.82%
Ba 233.527†	4.1	0.0000	mg/L	0.00007				139.13%
Be 313.107†	-324.6	-0.0001	mg/L	0.00000				0.51%
Cd 226.502†	-12.6	-0.0002	mg/L	0.00002				10.28%
Co 228.616†	-7.8	-0.0004	mg/L	0.00009				24.55%
Cr 267.716†	40.7	0.0004	mg/L	0.00006				16.65%
Cu 324.752†	-143.3	-0.0005	mg/L	0.00006				11.55%
Fe 259.939†	257.5	0.0046	mg/L	0.00062				13.35%
K 766.490†	56.0	0.0839	mg/L	0.01170				13.94%
Mg 279.077†	163.7	0.0159	mg/L	0.00245				15.41%
Mn 257.610†	84.1	0.0002	mg/L	0.00004				17.72%
Mo 202.031†	-2.3	-0.0001	mg/L	0.00001				8.95%
Ni 231.604†	-23.6	-0.0006	mg/L	0.00000				0.10%
Na 589.592†	529.8	0.0966	mg/L	0.00312				3.23%
Pb 220.353†	-6.1	-0.0010	mg/L	0.00010				10.03%
Sb 206.836†	3.7	0.0019	mg/L	0.00101				52.78%
Se 196.026†	1.0	0.0013	mg/L	0.00022				17.62%
Sn 189.927†	-7.9	-0.0017	mg/L	0.00044				26.78%
Ti 337.279†	166.0	0.0003	mg/L	0.00004				13.09%

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Tl 190.801†	-8.9	-0.0048	mg/L	0.00121	24.99%
V 292.402†	-8.6	-0.0001	mg/L	0.00012	88.39%
Zn 206.200†	17.9	0.0006	mg/L	0.00001	1.86%
Ca 227.546†	-9.4	-0.0503	mg/L	0.02183	43.39%
Sr 421.552†	19.8	0.0002	mg/L	0.00005	28.01%
Al 394.401†	-37.7	-0.0009	mg/L	0.00027	29.46%
Al 237.313†	-13.7	-0.0023	mg/L	0.00058	25.76%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 72
Sample ID: R1407813-016
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 76
Date Collected: 10/14/2014 9:21:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407813-016

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6269954.7	0.9314	mg/L	0.00154				0.17%
Ag 328.068†	-1164.4	-0.0028	mg/L	0.00011				3.76%
Al 308.215†	1760.2	0.0674	mg/L	0.01204				17.87%
As 188.979†	5.9	0.0047	mg/L	0.00078				16.73%
B 249.772†	86405.6	0.7405	mg/L	0.00267				0.36%
Ba 233.527†	30808.1	0.3649	mg/L	0.00090				0.25%
Be 313.107†	-1548.1	-0.0005	mg/L	0.00003				6.16%
Cd 226.502†	54.1	-0.0002	mg/L	0.00010				40.98%
Co 228.616†	-15.9	-0.0007	mg/L	0.00004				5.30%
Cr 267.716†	-1547.9	-0.0038	mg/L	0.00001				0.37%
Cu 324.752†	516.6	0.0025	mg/L	0.00006				2.17%
Fe 259.939†	357333.0	6.423	mg/L	0.0299				0.47%
K 766.490†	22220.6	33.29	mg/L	0.255				0.77%
Mg 279.077†	979698.1	95.20	mg/L	0.190				0.20%
Mn 257.610†	262405.9	0.7665	mg/L	0.00352				0.46%
Mo 202.031†	18.1	0.0011	mg/L	0.00016				14.93%
Ni 231.604†	-70.7	-0.0017	mg/L	0.00031				18.22%
Na 589.592†	3553661.4	647.9	mg/L	0.12				0.02%
Pb 220.353†	-17.3	-0.0031	mg/L	0.00043				13.93%
Sb 206.836†	6.7	0.0034	mg/L	0.00109				31.72%
Se 196.026†	-1.7	-0.0006	mg/L	0.00061				97.13%
Sn 189.927†	-215.6	-0.0452	mg/L	0.00038				0.83%
Ti 337.279†	941.1	0.0017	mg/L	0.00002				1.46%
Tl 190.801†	2.8	-0.0012	mg/L	0.00217				177.19%
V 292.402†	99.2	0.0011	mg/L	0.00007				5.88%
Zn 206.200†	101.6	0.0034	mg/L	0.00009				2.67%
Ca 227.546†	75563.7	408.5	mg/L	1.66				0.41%
Sr 421.552†	344417.6	2.973	mg/L	0.0153				0.52%
Al 394.401†	-188.7	-0.0047	mg/L	0.00413				88.68%
Al 237.313†	98.8	0.0162	mg/L	0.00290				17.89%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 73
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 10/14/2014 9:28:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6769568.7	1.006	mg/L	0.0012				0.12%
Ag 328.068†	128430.1	0.5088	mg/L	0.00278	0.5088	mg/L	0.00278	0.55%
QC value within limits for Ag 328.068 Recovery = 101.75%								
Al 308.215†	143911.2	9.802	mg/L	0.0770	9.802	mg/L	0.0770	0.79%
QC value within limits for Al 308.215 Recovery = 98.02%								
As 188.979†	1233.6	0.9798	mg/L	0.00034	0.9798	mg/L	0.00034	0.03%
QC value within limits for As 188.979 Recovery = 97.98%								
B 249.772†	266910.8	2.417	mg/L	0.0426	2.417	mg/L	0.0426	1.76%
QC value within limits for B 249.772 Recovery = 96.68%								

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Ba 233.527†	871987.0	10.33 mg/L	0.014	10.33 mg/L	0.014	0.14%
QC value within limits for Ba 233.527 Recovery = 103.29%						
Be 313.107†	726976.4	0.2520 mg/L	0.00022	0.2520 mg/L	0.00022	0.09%
QC value within limits for Be 313.107 Recovery = 100.80%						
Cd 226.502†	41797.8	0.5103 mg/L	0.00347	0.5103 mg/L	0.00347	0.68%
QC value within limits for Cd 226.502 Recovery = 102.06%						
Co 228.616†	55388.2	2.532 mg/L	0.0143	2.532 mg/L	0.0143	0.57%
QC value within limits for Co 228.616 Recovery = 101.29%						
Cr 267.716†	59218.2	0.5161 mg/L	0.00380	0.5161 mg/L	0.00380	0.74%
QC value within limits for Cr 267.716 Recovery = 103.23%						
Cu 324.752†	331601.6	1.252 mg/L	0.0119	1.252 mg/L	0.0119	0.95%
QC value within limits for Cu 324.752 Recovery = 100.17%						
Fe 259.939†	283085.8	5.089 mg/L	0.0316	5.089 mg/L	0.0316	0.62%
QC value within limits for Fe 259.939 Recovery = 101.77%						
K 766.490†	16699.8	25.02 mg/L	0.272	25.02 mg/L	0.272	1.09%
QC value within limits for K 766.490 Recovery = 100.08%						
Mg 279.077†	258890.7	25.16 mg/L	0.155	25.16 mg/L	0.155	0.62%
QC value within limits for Mg 279.077 Recovery = 100.63%						
Mn 257.610†	261723.0	0.7644 mg/L	0.00472	0.7644 mg/L	0.00472	0.62%
QC value within limits for Mn 257.610 Recovery = 101.91%						
Mo 202.031†	40756.1	2.456 mg/L	0.0156	2.456 mg/L	0.0156	0.63%
QC value within limits for Mo 202.031 Recovery = 98.25%						
Ni 231.604†	85500.2	2.040 mg/L	0.0128	2.040 mg/L	0.0128	0.63%
QC value within limits for Ni 231.604 Recovery = 101.99%						
Na 589.592†	137371.0	25.05 mg/L	0.250	25.05 mg/L	0.250	1.00%
QC value within limits for Na 589.592 Recovery = 100.18%						
Pb 220.353†	2980.6	0.4982 mg/L	0.00065	0.4982 mg/L	0.00065	0.13%
QC value within limits for Pb 220.353 Recovery = 99.64%						
Sb 206.836†	9637.1	4.929 mg/L	0.0501	4.929 mg/L	0.0501	1.02%
QC value within limits for Sb 206.836 Recovery = 98.59%						
Se 196.026†	413.0	0.5015 mg/L	0.00056	0.5015 mg/L	0.00056	0.11%
QC value within limits for Se 196.026 Recovery = 100.31%						
Sn 189.927†	24555.7	5.146 mg/L	0.0497	5.146 mg/L	0.0497	0.97%
QC value within limits for Sn 189.927 Recovery = 102.92%						
Ti 337.279†	1380957.8	2.480 mg/L	0.0018	2.480 mg/L	0.0018	0.07%
QC value within limits for Ti 337.279 Recovery = 99.18%						
Tl 190.801†	1818.6	0.9939 mg/L	0.00001	0.9939 mg/L	0.00001	0.00%
QC value within limits for Tl 190.801 Recovery = 99.39%						
V 292.402†	163770.7	2.506 mg/L	0.0194	2.506 mg/L	0.0194	0.77%
QC value within limits for V 292.402 Recovery = 100.24%						
Zn 206.200†	30108.0	1.018 mg/L	0.0069	1.018 mg/L	0.0069	0.67%
QC value within limits for Zn 206.200 Recovery = 101.81%						
Ca 227.546†	4432.2	24.27 mg/L	0.122	24.27 mg/L	0.122	0.50%
QC value within limits for Ca 227.546 Recovery = 97.07%						
Sr 421.552†	274949.5	2.374 mg/L	0.0272	2.374 mg/L	0.0272	1.15%
QC value within limits for Sr 421.552 Recovery = 94.95%						
Al 394.401†	395313.5	9.755 mg/L	0.0954	9.755 mg/L	0.0954	0.98%
QC value within limits for Al 394.401 Recovery = 97.55%						
Al 237.313†	60826.5	9.977 mg/L	0.0534	9.977 mg/L	0.0534	0.54%
QC value within limits for Al 237.313 Recovery = 99.77%						

All analyte(s) passed QC.

Sequence No.: 74
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 10/14/2014 9:34:20 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6886089.6	1.023	mg/L	0.0059				0.58%
Ag 328.068†	-6.9	0.0000	mg/L	0.00015	0.0000	mg/L	0.00015	578.10%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	94.2	0.0064	mg/L	0.00430	0.0064	mg/L	0.00430	67.10%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	-0.7	-0.0005	mg/L	0.00049	-0.0005	mg/L	0.00049	91.74%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3450.8	0.0315	mg/L	0.00385	0.0315	mg/L	0.00385	12.20%
QC value within limits for B 249.772 Recovery = Not calculated								

00661

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Ba 233.527†	291.7	0.0035 mg/L	0.00047	0.0035 mg/L	0.00047	13.61%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	419.7	0.0001 mg/L	0.00005	0.0001 mg/L	0.00005	33.59%
QC value within limits for Be 313.107 Recovery = Not calculated						
Cd 226.502†	14.0	0.0002 mg/L	0.00010	0.0002 mg/L	0.00010	58.30%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	24.8	0.0011 mg/L	0.00002	0.0011 mg/L	0.00002	1.37%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	8.3	0.0001 mg/L	0.00004	0.0001 mg/L	0.00004	49.39%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	969.6	0.0037 mg/L	0.00037	0.0037 mg/L	0.00037	10.13%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	398.3	0.0072 mg/L	0.00058	0.0072 mg/L	0.00058	8.12%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	56.8	0.0851 mg/L	0.08667	0.0851 mg/L	0.08667	101.84%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	198.5	0.0193 mg/L	0.00331	0.0193 mg/L	0.00331	17.14%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	211.3	0.0006 mg/L	0.00007	0.0006 mg/L	0.00007	10.78%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	10.0	0.0006 mg/L	0.00001	0.0006 mg/L	0.00001	1.51%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	61.4	0.0015 mg/L	0.00028	0.0015 mg/L	0.00028	19.10%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	706.0	0.1287 mg/L	0.00889	0.1287 mg/L	0.00889	6.91%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	9.7	0.0016 mg/L	0.00012	0.0016 mg/L	0.00012	7.50%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	3.5	0.0018 mg/L	0.00000	0.0018 mg/L	0.00000	0.13%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.7	0.0009 mg/L	0.00081	0.0009 mg/L	0.00081	89.83%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	35.0	0.0073 mg/L	0.00125	0.0073 mg/L	0.00125	17.08%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	350.5	0.0006 mg/L	0.00007	0.0006 mg/L	0.00007	11.63%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	-0.0	0.0000 mg/L	0.00002	0.0000 mg/L	0.00002	145.94%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	41.4	0.0006 mg/L	0.00003	0.0006 mg/L	0.00003	5.45%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	39.4	0.0013 mg/L	0.00003	0.0013 mg/L	0.00003	1.96%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	11.4	0.0622 mg/L	0.03762	0.0622 mg/L	0.03762	60.44%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	114.8	0.0010 mg/L	0.00015	0.0010 mg/L	0.00015	14.69%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 394.401†	59.0	0.0015 mg/L	0.00171	0.0015 mg/L	0.00171	117.36%
QC value within limits for Al 394.401 Recovery = Not calculated						
Al 237.313†	5.4	0.0009 mg/L	0.00023	0.0009 mg/L	0.00023	25.75%
QC value within limits for Al 237.313 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 75
Sample ID: R1407813-017
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 77
Date Collected: 10/14/2014 9:40:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407813-017

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	5854464.0	0.8697	mg/L	0.00334				0.38%
Ag 328.068†	-956.1	-0.0021	mg/L	0.00015				7.02%
Al 308.215†	12290.4	0.7992	mg/L	0.01747				2.19%
As 188.979†	9.8	0.0078	mg/L	0.00393				50.45%
B 249.772†	82700.9	0.7129	mg/L	0.00162				0.23%
Ba 233.527†	9590.6	0.1136	mg/L	0.00140				1.23%
Be 313.107†	-1992.1	-0.0007	mg/L	0.00005				7.25%
Cd 226.502†	262.7	0.0023	mg/L	0.00009				4.01%
Co 228.616†	-5.5	-0.0003	mg/L	0.00024				95.95%

00662

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Cr 267.716†	-2915.7	-0.0014 mg/L	0.00008	5.84%
Cu 324.752†	3159.6	0.0125 mg/L	0.00025	1.99%
Fe 259.939†	344409.4	6.191 mg/L	0.0423	0.68%
K 766.490†	53648.6	80.38 mg/L	0.483	0.60%
Mg 279.077†	2476256.6	240.6 mg/L	0.54	0.22%
Mn 257.610†	129491.3	0.3787 mg/L	0.00229	0.61%
Mo 202.031†	46.8	0.0028 mg/L	0.00010	3.62%
Ni 231.604†	322.1	0.0077 mg/L	0.00001	0.17%
Na 589.592†	10304540.0	1879 mg/L	15.1	0.80%
Pb 220.353†	-7.6	-0.0014 mg/L	0.00167	122.11%
Sb 206.836†	6.6	0.0033 mg/L	0.00116	35.01%
Se 196.026†	0.3	0.0018 mg/L	0.00436	245.30%
Sn 189.927†	-187.7	-0.0394 mg/L	0.00104	2.65%
Ti 337.279†	6685.4	0.0120 mg/L	0.00021	1.76%
Tl 190.801†	8.5	0.0043 mg/L	0.00204	47.94%
V 292.402†	138.8	0.0018 mg/L	0.00002	1.08%
Zn 206.200†	6954.4	0.2352 mg/L	0.00312	1.33%
Ca 227.546†	55716.4	301.3 mg/L	3.72	1.23%
Sr 421.552†	287087.7	2.478 mg/L	0.0170	0.68%
Al 394.401†	28472.3	0.7026 mg/L	0.00757	1.08%
Al 237.313†	3907.2	0.6409 mg/L	0.00880	1.37%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 76
Sample ID: R1407813-026
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 78
Date Collected: 10/14/2014 9:46:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407813-026

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6814173.4	1.012	mg/L	0.0037				0.36%
Ag 328.068†	7.3	0.0000	mg/L	0.00004				127.15%
Al 308.215†	201.5	0.0137	mg/L	0.00465				33.90%
As 188.979†	-0.3	-0.0002	mg/L	0.00010				40.63%
B 249.772†	1160.0	0.0106	mg/L	0.00154				14.53%
Ba 233.527†	39.1	0.0005	mg/L	0.00009				20.33%
Be 313.107†	-154.5	-0.0001	mg/L	0.00003				52.26%
Cd 226.502†	-12.4	-0.0002	mg/L	0.00002				10.59%
Co 228.616†	-12.8	-0.0006	mg/L	0.00017				28.73%
Cr 267.716†	73.1	0.0006	mg/L	0.00008				11.88%
Cu 324.752†	-35.3	-0.0001	mg/L	0.00019				141.13%
Fe 259.939†	311.3	0.0056	mg/L	0.00045				8.01%
K 766.490†	229.2	0.3433	mg/L	0.03342				9.73%
Mg 279.077†	292.2	0.0284	mg/L	0.00229				8.06%
Mn 257.610†	76.3	0.0002	mg/L	0.00002				8.65%
Mo 202.031†	-5.1	-0.0003	mg/L	0.00023				73.97%
Ni 231.604†	-5.9	-0.0001	mg/L	0.00007				46.81%
Na 589.592†	3391.0	0.6183	mg/L	0.00568				0.92%
Pb 220.353†	-2.9	-0.0005	mg/L	0.00002				3.82%
Sb 206.836†	5.1	0.0026	mg/L	0.00138				52.59%
Se 196.026†	2.6	0.0031	mg/L	0.00042				13.42%
Sn 189.927†	-7.0	-0.0015	mg/L	0.00055				37.67%
Ti 337.279†	228.4	0.0004	mg/L	0.00001				1.88%
Tl 190.801†	-8.1	-0.0045	mg/L	0.00097				21.71%
V 292.402†	-17.6	-0.0003	mg/L	0.00004				14.93%
Zn 206.200†	12.0	0.0004	mg/L	0.00013				33.28%
Ca 227.546†	0.1	0.0011	mg/L	0.01925				>999.9%
Sr 421.552†	44.1	0.0004	mg/L	0.00001				3.27%
Al 394.401†	-8.8	-0.0002	mg/L	0.00056				256.66%
Al 237.313†	-13.1	-0.0022	mg/L	0.00091				42.47%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 77
Sample ID: R1407821-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 79
Date Collected: 10/14/2014 9:52:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

00663

Method: DV200-6010C Opt3 Page 58 Date: 10/14/2014 10:02:19 PM

Mean Data: R1407821-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6730675.7	0.9999	mg/L	0.00385				0.38%
Ag 328.068†	-31.6	0.0001	mg/L	0.00004				40.32%
Al 308.215†	822.0	0.0553	mg/L	0.00924				16.69%
As 188.979†	1.8	0.0014	mg/L	0.00023				16.52%
B 249.772†	2582.8	0.0192	mg/L	0.00076				3.98%
Ba 233.527†	924.5	0.0110	mg/L	0.00006				0.58%
Be 313.107†	-120.0	0.0000	mg/L	0.00006				138.62%
Cd 226.502†	-2.2	-0.0001	mg/L	0.00005				36.70%
Co 228.616†	-6.0	-0.0003	mg/L	0.00005				19.55%
Cr 267.716†	53.5	0.0006	mg/L	0.00009				13.98%
Cu 324.752†	412.4	0.0016	mg/L	0.00055				33.33%
Fe 259.939†	47534.7	0.8545	mg/L	0.00951				1.11%
K 766.490†	894.7	1.341	mg/L	0.0447				3.33%
Mg 279.077†	14120.7	1.372	mg/L	0.0158				1.15%
Mn 257.610†	491402.3	1.434	mg/L	0.0045				0.31%
Mo 202.031†	1.4	0.0001	mg/L	0.00011				130.18%
Ni 231.604†	-23.5	-0.0006	mg/L	0.00014				25.71%
Na 589.592†	47312.8	8.626	mg/L	0.0439				0.51%
Pb 220.353†	-0.5	-0.0001	mg/L	0.00036				332.65%
Sb 206.836†	3.8	0.0019	mg/L	0.00082				42.62%
Se 196.026†	1.2	0.0017	mg/L	0.00083				49.72%
Sn 189.927†	-52.0	-0.0109	mg/L	0.00033				3.02%
Ti 337.279†	349.2	0.0006	mg/L	0.00003				4.08%
Tl 190.801†	-4.4	-0.0025	mg/L	0.00060				24.19%
V 292.402†	214.4	0.0032	mg/L	0.00013				4.11%
Zn 206.200†	692.1	0.0234	mg/L	0.00016				0.68%
Ca 227.546†	1422.4	7.733	mg/L	0.0315				0.41%
Sr 421.552†	5734.8	0.0495	mg/L	0.00022				0.45%
Al 394.401†	1520.5	0.0375	mg/L	0.00114				3.04%
Al 237.313†	161.2	0.0264	mg/L	0.00116				4.40%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 78
Sample ID: R1407821-001D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 80
Date Collected: 10/14/2014 9:58:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407821-001D

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6690753.8	0.9939	mg/L	0.00550				0.55%
Ag 328.068†	-99.1	-0.0002	mg/L	0.00018				117.12%
Al 308.215†	688.7	0.0463	mg/L	0.00679				14.68%
As 188.979†	1.1	0.0009	mg/L	0.00061				70.76%
B 249.772†	2243.8	0.0161	mg/L	0.00015				0.90%
Ba 233.527†	931.8	0.0110	mg/L	0.00001				0.11%
Be 313.107†	-98.0	0.0000	mg/L	0.00005				148.31%
Cd 226.502†	-0.5	-0.0001	mg/L	0.00002				15.53%
Co 228.616†	-6.2	-0.0003	mg/L	0.00009				33.18%
Cr 267.716†	42.7	0.0005	mg/L	0.00005				8.53%
Cu 324.752†	377.5	0.0015	mg/L	0.00034				22.89%
Fe 259.939†	47124.3	0.8471	mg/L	0.00109				0.13%
K 766.490†	885.3	1.326	mg/L	0.0475				3.58%
Mg 279.077†	13938.9	1.354	mg/L	0.0021				0.16%
Mn 257.610†	493761.7	1.441	mg/L	0.0044				0.31%
Mo 202.031†	5.4	0.0003	mg/L	0.00015				46.88%
Ni 231.604†	-27.2	-0.0006	mg/L	0.00012				18.73%
Na 589.592†	46877.0	8.547	mg/L	0.0434				0.51%
Pb 220.353†	1.3	0.0002	mg/L	0.00007				36.28%
Sb 206.836†	5.2	0.0026	mg/L	0.00114				43.28%
Se 196.026†	1.5	0.0020	mg/L	0.00129				64.23%
Sn 189.927†	-46.2	-0.0097	mg/L	0.00075				7.73%
Ti 337.279†	372.7	0.0007	mg/L	0.00000				0.38%
Tl 190.801†	-4.1	-0.0023	mg/L	0.00067				28.90%

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V 292.402†	203.9	0.0031 mg/L	0.00011	3.72%
Zn 206.200†	696.2	0.0235 mg/L	0.00016	0.68%
Ca 227.546†	1433.0	7.790 mg/L	0.0151	0.19%
Sr 421.552†	5747.8	0.0496 mg/L	0.00022	0.44%
Al 394.401†	1417.3	0.0350 mg/L	0.00133	3.79%
Al 237.313†	154.6	0.0254 mg/L	0.00195	7.70%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 79
Sample ID: R1407821-001S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 81
Date Collected: 10/14/2014 10:04:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407821-001S

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6700928.5	0.9955	mg/L	0.00095				0.09%
Ag 328.068†	12849.3	0.0513	mg/L	0.00058				1.13%
Al 308.215†	28206.1	1.921	mg/L	0.0318				1.65%
As 188.979†	49.9	0.0396	mg/L	0.00089				2.26%
B 249.772†	106843.5	0.9686	mg/L	0.02198				2.27%
Ba 233.527†	170038.7	2.014	mg/L	0.0295				1.46%
Be 313.107†	140314.3	0.0486	mg/L	0.00059				1.21%
Cd 226.502†	4108.5	0.0500	mg/L	0.00006				0.13%
Co 228.616†	10923.8	0.4994	mg/L	0.00757				1.52%
Cr 267.716†	24057.2	0.2090	mg/L	0.00323				1.55%
Cu 324.752†	69775.7	0.2635	mg/L	0.00344				1.31%
Fe 259.939†	102822.0	1.848	mg/L	0.0257				1.39%
K 766.490†	14145.1	21.19	mg/L	0.261				1.23%
Mg 279.077†	34514.1	3.354	mg/L	0.0443				1.32%
Mn 257.610†	663424.5	1.936	mg/L	0.0070				0.36%
Mo 202.031†	8173.0	0.4925	mg/L	0.00712				1.45%
Ni 231.604†	21737.1	0.5186	mg/L	0.00684				1.32%
Na 589.592†	154525.6	28.17	mg/L	0.424				1.50%
Pb 220.353†	2998.9	0.5005	mg/L	0.00218				0.44%
Sb 206.836†	957.4	0.4896	mg/L	0.00020				0.04%
Se 196.026†	750.0	0.9088	mg/L	0.00305				0.34%
Sn 189.927†	25500.0	5.345	mg/L	0.0904				1.69%
Ti 337.279†	276066.8	0.4957	mg/L	0.00647				1.31%
Tl 190.801†	3443.9	1.883	mg/L	0.0001				0.01%
V 292.402†	34263.8	0.5243	mg/L	0.00815				1.55%
Zn 206.200†	15897.3	0.5376	mg/L	0.00909				1.69%
Ca 227.546†	1852.0	10.12	mg/L	0.011				0.10%
Sr 421.552†	5759.2	0.0497	mg/L	0.00073				1.48%
Al 394.401†	78137.5	1.928	mg/L	0.0251				1.30%
Al 237.313†	11828.6	1.940	mg/L	0.0288				1.48%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 80
Sample ID: R1407821-001A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 82
Date Collected: 10/14/2014 10:10:45 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407821-001A

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6668282.7	0.9906	mg/L	0.00160				0.16%
Ag 328.068†	12458.9	0.0497	mg/L	0.00040				0.81%
Al 308.215†	27924.6	1.902	mg/L	0.0116				0.61%
As 188.979†	48.2	0.0382	mg/L	0.00080				2.10%
B 249.772†	111904.2	1.015	mg/L	0.0131				1.29%
Ba 233.527†	167833.2	1.988	mg/L	0.0134				0.68%
Be 313.107†	138186.3	0.0479	mg/L	0.00021				0.43%
Cd 226.502†	4009.0	0.0488	mg/L	0.00030				0.61%
Co 228.616†	10684.4	0.4885	mg/L	0.00237				0.49%
Cr 267.716†	23981.6	0.2083	mg/L	0.00086				0.41%

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Cu 324.752†	67579.7	0.2553	mg/L	0.00185	0.73%
Fe 259.939†	101479.1	1.824	mg/L	0.0114	0.63%
K 766.490†	13755.3	20.61	mg/L	0.009	0.04%
Mg 279.077†	34025.0	3.306	mg/L	0.0143	0.43%
Mn 257.610†	646789.6	1.887	mg/L	0.0009	0.05%
Mo 202.031†	8479.6	0.5110	mg/L	0.00249	0.49%
Ni 231.604†	21457.8	0.5119	mg/L	0.00231	0.45%
Na 589.592†	152160.9	27.74	mg/L	0.111	0.40%
Pb 220.353†	2958.5	0.4937	mg/L	0.00145	0.29%
Sb 206.836†	1013.1	0.5181	mg/L	0.00311	0.60%
Se 196.026†	854.9	1.036	mg/L	0.0084	0.81%
Sn 189.927†	-54.5	-0.0116	mg/L	0.00055	4.72%
Ti 337.279†	279607.9	0.5021	mg/L	0.00245	0.49%
Tl 190.801†	3399.8	1.859	mg/L	0.0071	0.38%
V 292.402†	34218.0	0.5236	mg/L	0.00462	0.88%
Zn 206.200†	15833.6	0.5354	mg/L	0.00243	0.45%
Ca 227.546†	1798.6	9.827	mg/L	0.0391	0.40%
Sr 421.552†	5721.3	0.0494	mg/L	0.00034	0.70%
Al 394.401†	77300.0	1.907	mg/L	0.0072	0.38%
Al 237.313†	11640.3	1.909	mg/L	0.0037	0.20%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 81 **Autosampler Location: 83**
Sample ID: R1407821-001L **Date Collected: 10/14/2014 10:16:47 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: R1407821-001L

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6626462.7	0.9844	mg/L	0.00454				0.46%
Ag 328.068†	-33.5	-0.0001	mg/L	0.00009				102.65%
Al 308.215†	22.3	0.0014	mg/L	0.00445				318.87%
As 188.979†	-0.3	-0.0003	mg/L	0.00013				48.29%
B 249.772†	1723.2	0.0149	mg/L	0.00152				10.20%
Ba 233.527†	185.1	0.0022	mg/L	0.00002				0.89%
Be 313.107†	-93.5	0.0000	mg/L	0.00002				58.13%
Cd 226.502†	-13.7	-0.0002	mg/L	0.00006				31.11%
Co 228.616†	-10.2	-0.0005	mg/L	0.00004				8.82%
Cr 267.716†	26.3	0.0003	mg/L	0.00002				6.32%
Cu 324.752†	4.7	0.0000	mg/L	0.00002				61.51%
Fe 259.939†	9156.3	0.1646	mg/L	0.00080				0.48%
K 766.490†	195.3	0.2926	mg/L	0.08360				28.57%
Mg 279.077†	2696.5	0.2620	mg/L	0.00235				0.90%
Mn 257.610†	96451.8	0.2815	mg/L	0.00191				0.68%
Mo 202.031†	1.1	0.0001	mg/L	0.00003				47.85%
Ni 231.604†	-15.2	-0.0004	mg/L	0.00014				38.89%
Na 589.592†	9399.6	1.714	mg/L	0.0066				0.38%
Pb 220.353†	-5.0	-0.0008	mg/L	0.00010				12.09%
Sb 206.836†	4.6	0.0023	mg/L	0.00036				15.27%
Se 196.026†	1.6	0.0020	mg/L	0.00065				33.27%
Sn 189.927†	-8.0	-0.0017	mg/L	0.00005				3.28%
Ti 337.279†	265.4	0.0005	mg/L	0.00001				1.96%
Tl 190.801†	-5.2	-0.0029	mg/L	0.00097				34.12%
V 292.402†	35.6	0.0005	mg/L	0.00019				35.12%
Zn 206.200†	156.2	0.0053	mg/L	0.00005				1.02%
Ca 227.546†	270.4	1.470	mg/L	0.0214				1.46%
Sr 421.552†	1110.1	0.0096	mg/L	0.00024				2.48%
Al 394.401†	222.2	0.0055	mg/L	0.00094				17.11%
Al 237.313†	9.1	0.0015	mg/L	0.00140				93.88%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 82 **Autosampler Location: 84**
Sample ID: R1407821-002 **Date Collected: 10/14/2014 10:22:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

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Mean Data: R1407821-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6729819.2	0.9997	mg/L	0.00003				0.00%
Ag 328.068†	-28.0	0.0001	mg/L	0.00028				414.73%
Al 308.215†	623.7	0.0417	mg/L	0.00834				19.98%
As 188.979†	0.7	0.0005	mg/L	0.00006				12.15%
B 249.772†	2454.5	0.0190	mg/L	0.00052				2.76%
Ba 233.527†	901.8	0.0107	mg/L	0.00002				0.16%
Be 313.107†	-15.9	0.0000	mg/L	0.00003				485.99%
Cd 226.502†	-0.1	-0.0001	mg/L	0.00004				42.01%
Co 228.616†	-6.1	-0.0003	mg/L	0.00002				8.51%
Cr 267.716†	35.5	0.0005	mg/L	0.00002				5.22%
Cu 324.752†	36.5	0.0002	mg/L	0.00030				152.93%
Fe 259.939†	35885.9	0.6451	mg/L	0.00616				0.96%
K 766.490†	758.3	1.136	mg/L	0.0051				0.45%
Mg 279.077†	13876.8	1.348	mg/L	0.0141				1.05%
Mn 257.610†	420347.0	1.227	mg/L	0.0069				0.56%
Mo 202.031†	1.5	0.0001	mg/L	0.00003				29.23%
Ni 231.604†	-24.8	-0.0006	mg/L	0.00000				0.24%
Na 589.592†	45859.0	8.361	mg/L	0.0012				0.01%
Pb 220.353†	1.1	0.0002	mg/L	0.00060				361.66%
Sb 206.836†	5.2	0.0027	mg/L	0.00016				6.04%
Se 196.026†	2.3	0.0029	mg/L	0.00152				52.39%
Sn 189.927†	-52.9	-0.0111	mg/L	0.00009				0.82%
Ti 337.279†	317.6	0.0006	mg/L	0.00001				1.05%
Tl 190.801†	-3.2	-0.0018	mg/L	0.00266				147.14%
V 292.402†	186.7	0.0028	mg/L	0.00022				7.83%
Zn 206.200†	306.4	0.0104	mg/L	0.00002				0.23%
Ca 227.546†	1408.3	7.645	mg/L	0.0035				0.05%
Sr 421.552†	5254.5	0.0454	mg/L	0.00008				0.18%
Al 394.401†	1592.9	0.0393	mg/L	0.00131				3.33%
Al 237.313†	190.8	0.0313	mg/L	0.00106				3.39%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 83
Sample ID: R1407821-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 85
Date Collected: 10/14/2014 10:28:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407821-003

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6794929.5	1.009	mg/L	0.0073				0.72%
Ag 328.068†	-571.4	0.0007	mg/L	0.00008				12.50%
Al 308.215†	8345.3	0.5724	mg/L	0.00641				1.12%
As 188.979†	7.8	0.0062	mg/L	0.00166				27.01%
B 249.772†	5927.1	0.0033	mg/L	0.00044				13.31%
Ba 233.527†	1013.4	0.0120	mg/L	0.00004				0.32%
Be 313.107†	283.3	0.0001	mg/L	0.00003				32.34%
Cd 226.502†	117.9	-0.0001	mg/L	0.00006				94.03%
Co 228.616†	3.3	0.0002	mg/L	0.00020				133.13%
Cr 267.716†	209.9	0.0024	mg/L	0.00000				0.06%
Cu 324.752†	636.8	0.0034	mg/L	0.00010				2.80%
Fe 259.939†	591700.9	10.64	mg/L	0.005				0.04%
K 766.490†	992.8	1.488	mg/L	0.0000				0.00%
Mg 279.077†	12246.9	1.190	mg/L	0.0003				0.02%
Mn 257.610†	857621.5	2.504	mg/L	0.0015				0.06%
Mo 202.031†	-0.0	0.0000	mg/L	0.00001				>999.9%
Ni 231.604†	-11.6	-0.0003	mg/L	0.00011				39.06%
Na 589.592†	32980.1	6.013	mg/L	0.0045				0.08%
Pb 220.353†	11.2	0.0016	mg/L	0.00025				15.82%
Sb 206.836†	3.7	0.0018	mg/L	0.00105				57.08%
Se 196.026†	2.2	0.0051	mg/L	0.00147				29.09%
Sn 189.927†	-50.6	-0.0107	mg/L	0.00025				2.31%
Ti 337.279†	8123.8	0.0146	mg/L	0.00012				0.85%
Tl 190.801†	-3.5	-0.0017	mg/L	0.00168				100.63%
V 292.402†	3561.0	0.0539	mg/L	0.00058				1.08%

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Zn 206.200†	972.4	0.0329 mg/L	0.00011		0.34%
Ca 227.546†	1219.3	7.210 mg/L	0.0198		0.28%
Sr 421.552†	6830.7	0.0590 mg/L	0.00004		0.07%
Al 394.401†	23417.1	0.5779 mg/L	0.00248		0.43%
Al 237.313†	3429.8	0.5626 mg/L	0.00247		0.44%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 84
Sample ID: R1407821-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 86
Date Collected: 10/14/2014 10:34:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407821-004

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6768090.6	1.005	mg/L	0.0045				0.44%
Ag 328.068†	-31.2	0.0001	mg/L	0.00002				28.84%
Al 308.215†	439.3	0.0292	mg/L	0.00091				3.10%
As 188.979†	0.7	0.0005	mg/L	0.00055				100.57%
B 249.772†	1917.5	0.0137	mg/L	0.00000				0.02%
Ba 233.527†	869.3	0.0103	mg/L	0.00006				0.57%
Be 313.107†	-83.6	0.0000	mg/L	0.00002				85.46%
Cd 226.502†	2.6	-0.0001	mg/L	0.00001				7.55%
Co 228.616†	-10.7	-0.0005	mg/L	0.00016				32.12%
Cr 267.716†	45.4	0.0006	mg/L	0.00003				5.76%
Cu 324.752†	209.5	0.0009	mg/L	0.00011				13.11%
Fe 259.939†	41268.7	0.7418	mg/L	0.00236				0.32%
K 766.490†	788.2	1.181	mg/L	0.1024				8.67%
Mg 279.077†	13731.4	1.334	mg/L	0.0015				0.11%
Mn 257.610†	479956.9	1.401	mg/L	0.0022				0.15%
Mo 202.031†	5.0	0.0003	mg/L	0.00007				24.05%
Ni 231.604†	-28.0	-0.0007	mg/L	0.00001				2.01%
Na 589.592†	45290.6	8.258	mg/L	0.0814				0.99%
Pb 220.353†	-1.1	-0.0002	mg/L	0.00013				63.39%
Sb 206.836†	3.7	0.0019	mg/L	0.00036				19.29%
Se 196.026†	1.6	0.0021	mg/L	0.00038				17.78%
Sn 189.927†	-51.4	-0.0108	mg/L	0.00016				1.48%
Ti 337.279†	357.5	0.0006	mg/L	0.00003				5.22%
Tl 190.801†	-6.3	-0.0035	mg/L	0.00062				17.65%
V 292.402†	167.3	0.0025	mg/L	0.00005				1.96%
Zn 206.200†	402.6	0.0136	mg/L	0.00038				2.78%
Ca 227.546†	1395.2	7.579	mg/L	0.0384				0.51%
Sr 421.552†	5526.7	0.0477	mg/L	0.00029				0.62%
Al 394.401†	1238.7	0.0306	mg/L	0.00061				1.98%
Al 237.313†	120.7	0.0198	mg/L	0.00047				2.35%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 85
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 10/14/2014 10:40:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6695323.8	0.9946	mg/L	0.00872				0.88%
Ag 328.068†	129005.6	0.5110	mg/L	0.00548	0.5110	mg/L	0.00548	1.07%
QC value within limits for Ag 328.068 Recovery = 102.20%								
Al 308.215†	141466.1	9.635	mg/L	0.0985	9.635	mg/L	0.0985	1.02%
QC value within limits for Al 308.215 Recovery = 96.35%								
As 188.979†	1263.5	1.004	mg/L	0.0087	1.004	mg/L	0.0087	0.87%
QC value within limits for As 188.979 Recovery = 100.35%								
B 249.772†	263933.6	2.390	mg/L	0.0490	2.390	mg/L	0.0490	2.05%
QC value within limits for B 249.772 Recovery = 95.61%								
Ba 233.527†	862972.6	10.22	mg/L	0.052	10.22	mg/L	0.052	0.51%
QC value within limits for Ba 233.527 Recovery = 102.22%								

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Be 313.107†	722259.6	0.2504 mg/L	0.00130	0.2504 mg/L	0.00130	0.52%
QC value within limits for Be 313.107 Recovery = 100.14%						
Cd 226.502†	41896.5	0.5115 mg/L	0.00558	0.5115 mg/L	0.00558	1.09%
QC value within limits for Cd 226.502 Recovery = 102.31%						
Co 228.616†	54735.6	2.502 mg/L	0.0240	2.502 mg/L	0.0240	0.96%
QC value within limits for Co 228.616 Recovery = 100.10%						
Cr 267.716†	59314.0	0.5169 mg/L	0.00596	0.5169 mg/L	0.00596	1.15%
QC value within limits for Cr 267.716 Recovery = 103.39%						
Cu 324.752†	325923.1	1.231 mg/L	0.0166	1.231 mg/L	0.0166	1.35%
QC value within limits for Cu 324.752 Recovery = 98.46%						
Fe 259.939†	278311.4	5.003 mg/L	0.0539	5.003 mg/L	0.0539	1.08%
QC value within limits for Fe 259.939 Recovery = 100.06%						
K 766.490†	16502.9	24.73 mg/L	0.422	24.73 mg/L	0.422	1.71%
QC value within limits for K 766.490 Recovery = 98.90%						
Mg 279.077†	255226.8	24.80 mg/L	0.248	24.80 mg/L	0.248	1.00%
QC value within limits for Mg 279.077 Recovery = 99.20%						
Mn 257.610†	258539.8	0.7551 mg/L	0.00767	0.7551 mg/L	0.00767	1.02%
QC value within limits for Mn 257.610 Recovery = 100.67%						
Mo 202.031†	40648.2	2.450 mg/L	0.0253	2.450 mg/L	0.0253	1.03%
QC value within limits for Mo 202.031 Recovery = 97.99%						
Ni 231.604†	85521.0	2.040 mg/L	0.0199	2.040 mg/L	0.0199	0.97%
QC value within limits for Ni 231.604 Recovery = 102.02%						
Na 589.592†	134716.6	24.56 mg/L	0.308	24.56 mg/L	0.308	1.26%
QC value within limits for Na 589.592 Recovery = 98.25%						
Pb 220.353†	3005.8	0.5024 mg/L	0.00620	0.5024 mg/L	0.00620	1.23%
QC value within limits for Pb 220.353 Recovery = 100.47%						
Sb 206.836†	9831.8	5.029 mg/L	0.0719	5.029 mg/L	0.0719	1.43%
QC value within limits for Sb 206.836 Recovery = 100.58%						
Se 196.026†	407.8	0.4953 mg/L	0.00403	0.4953 mg/L	0.00403	0.81%
QC value within limits for Se 196.026 Recovery = 99.06%						
Sn 189.927†	24261.7	5.085 mg/L	0.0489	5.085 mg/L	0.0489	0.96%
QC value within limits for Sn 189.927 Recovery = 101.69%						
Ti 337.279†	1377617.5	2.474 mg/L	0.0158	2.474 mg/L	0.0158	0.64%
QC value within limits for Ti 337.279 Recovery = 98.94%						
Tl 190.801†	1817.5	0.9933 mg/L	0.00776	0.9933 mg/L	0.00776	0.78%
QC value within limits for Tl 190.801 Recovery = 99.33%						
V 292.402†	170628.3	2.611 mg/L	0.0226	2.611 mg/L	0.0226	0.87%
QC value within limits for V 292.402 Recovery = 104.44%						
Zn 206.200†	30108.1	1.018 mg/L	0.0101	1.018 mg/L	0.0101	1.00%
QC value within limits for Zn 206.200 Recovery = 101.81%						
Ca 227.546†	4460.8	24.42 mg/L	0.184	24.42 mg/L	0.184	0.76%
QC value within limits for Ca 227.546 Recovery = 97.66%						
Sr 421.552†	271275.1	2.342 mg/L	0.0303	2.342 mg/L	0.0303	1.29%
QC value within limits for Sr 421.552 Recovery = 93.68%						
Al 394.401†	389427.4	9.610 mg/L	0.0816	9.610 mg/L	0.0816	0.85%
QC value within limits for Al 394.401 Recovery = 96.10%						
Al 237.313†	59738.9	9.799 mg/L	0.1153	9.799 mg/L	0.1153	1.18%
QC value within limits for Al 237.313 Recovery = 97.99%						

All analyte(s) passed QC.

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Sequence No.: 86 **Autosampler Location: 5**
Sample ID: CCB **Date Collected: 10/14/2014 10:46:58 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6799342.1	1.010	mg/L	0.0124				1.23%
Ag 328.068†	18.7	0.0001	mg/L	0.00025	0.0001	mg/L	0.00025	327.59%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	-64.6	-0.0044	mg/L	0.01002	-0.0044	mg/L	0.01002	227.98%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.4	0.0011	mg/L	0.00193	0.0011	mg/L	0.00193	167.89%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	2378.1	0.0217	mg/L	0.00333	0.0217	mg/L	0.00333	15.29%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	267.8	0.0032	mg/L	0.00054	0.0032	mg/L	0.00054	17.10%
QC value within limits for Ba 233.527 Recovery = Not calculated								

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Be 313.107†	333.8	0.0001 mg/L	0.00008	0.0001 mg/L	0.00008	68.09%
QC value within limits for Be 313.107 Recovery = Not calculated						
Cd 226.502†	22.3	0.0003 mg/L	0.00002	0.0003 mg/L	0.00002	8.13%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	23.5	0.0011 mg/L	0.00008	0.0011 mg/L	0.00008	7.44%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	16.2	0.0001 mg/L	0.00014	0.0001 mg/L	0.00014	98.35%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	966.9	0.0037 mg/L	0.00129	0.0037 mg/L	0.00129	35.33%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	243.3	0.0044 mg/L	0.00026	0.0044 mg/L	0.00026	5.93%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	64.0	0.0960 mg/L	0.10833	0.0960 mg/L	0.10833	112.90%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	158.9	0.0154 mg/L	0.00536	0.0154 mg/L	0.00536	34.72%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	268.4	0.0008 mg/L	0.00002	0.0008 mg/L	0.00002	2.80%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	10.5	0.0006 mg/L	0.00033	0.0006 mg/L	0.00033	51.49%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	55.0	0.0013 mg/L	0.00015	0.0013 mg/L	0.00015	11.15%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	397.8	0.0725 mg/L	0.00012	0.0725 mg/L	0.00012	0.17%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	3.6	0.0006 mg/L	0.00050	0.0006 mg/L	0.00050	82.81%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	1.9	0.0010 mg/L	0.00049	0.0010 mg/L	0.00049	49.58%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.9	0.0011 mg/L	0.00055	0.0011 mg/L	0.00055	52.09%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	39.3	0.0082 mg/L	0.00222	0.0082 mg/L	0.00222	26.97%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	381.9	0.0007 mg/L	0.00006	0.0007 mg/L	0.00006	9.00%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	1.2	0.0007 mg/L	0.00015	0.0007 mg/L	0.00015	22.01%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	29.3	0.0004 mg/L	0.00044	0.0004 mg/L	0.00044	97.69%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	37.7	0.0013 mg/L	0.00018	0.0013 mg/L	0.00018	14.47%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	-2.9	-0.0155 mg/L	0.00870	-0.0155 mg/L	0.00870	56.12%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	97.0	0.0008 mg/L	0.00030	0.0008 mg/L	0.00030	36.19%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 394.401†	97.6	0.0024 mg/L	0.00043	0.0024 mg/L	0.00043	17.97%
QC value within limits for Al 394.401 Recovery = Not calculated						
Al 237.313†	15.9	0.0026 mg/L	0.00112	0.0026 mg/L	0.00112	42.84%
QC value within limits for Al 237.313 Recovery = Not calculated						

All analyte(s) passed QC.

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Sequence No.: 87
Sample ID: R1407821-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 87
Date Collected: 10/14/2014 10:53:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407821-005

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6892766.4	1.024	mg/L	0.0020				0.19%
Ag 328.068†	-40.7	0.0001	mg/L	0.00013				248.35%
Al 308.215†	514.8	0.0344	mg/L	0.00389				11.33%
As 188.979†	0.2	0.0001	mg/L	0.00064				433.09%
B 249.772†	3234.0	0.0256	mg/L	0.00099				3.85%
Ba 233.527†	942.8	0.0112	mg/L	0.00003				0.28%
Be 313.107†	140.8	0.0000	mg/L	0.00001				22.01%
Cd 226.502†	11.1	0.0000	mg/L	0.00006				231.81%
Co 228.616†	1.3	0.0001	mg/L	0.00014				222.84%
Cr 267.716†	68.0	0.0008	mg/L	0.00004				5.27%
Cu 324.752†	205.3	0.0008	mg/L	0.00002				2.69%

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Fe 259.939†	42734.1	0.7682	mg/L	0.00408	0.53%
K 766.490†	816.7	1.224	mg/L	0.0227	1.86%
Mg 279.077†	14256.8	1.385	mg/L	0.0081	0.59%
Mn 257.610†	500395.2	1.460	mg/L	0.0002	0.01%
Mo 202.031†	1.9	0.0001	mg/L	0.00019	167.39%
Ni 231.604†	-18.8	-0.0004	mg/L	0.00008	18.40%
Na 589.592†	46100.0	8.405	mg/L	0.0285	0.34%
Pb 220.353†	-6.1	-0.0010	mg/L	0.00060	57.08%
Sb 206.836†	2.0	0.0010	mg/L	0.00009	9.21%
Se 196.026†	1.7	0.0023	mg/L	0.00016	6.87%
Sn 189.927†	-50.2	-0.0105	mg/L	0.00002	0.23%
Ti 337.279†	390.0	0.0007	mg/L	0.00001	1.46%
Tl 190.801†	-8.3	-0.0046	mg/L	0.00062	13.61%
V 292.402†	176.0	0.0026	mg/L	0.00010	3.63%
Zn 206.200†	171.1	0.0058	mg/L	0.00012	2.03%
Ca 227.546†	1440.0	7.823	mg/L	0.0040	0.05%
Sr 421.552†	5725.5	0.0494	mg/L	0.00008	0.16%
Al 394.401†	1387.1	0.0342	mg/L	0.00058	1.70%
Al 237.313†	137.7	0.0226	mg/L	0.00065	2.87%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 88
Sample ID: R1407825-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 88
Date Collected: 10/14/2014 10:59:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-001

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6948818.5	1.032	mg/L	0.0017				0.17%
Ag 328.068†	-30.1	-0.0001	mg/L	0.00000				0.91%
Al 308.215†	-172.9	-0.0118	mg/L	0.00187				15.88%
As 188.979†	1.9	0.0015	mg/L	0.00157				106.69%
B 249.772†	403.3	0.0037	mg/L	0.00049				13.43%
Ba 233.527†	28.2	0.0003	mg/L	0.00008				24.32%
Be 313.107†	197.8	0.0001	mg/L	0.00002				28.20%
Cd 226.502†	-6.0	-0.0001	mg/L	0.00003				42.70%
Co 228.616†	-11.6	-0.0005	mg/L	0.00007				13.25%
Cr 267.716†	40.5	0.0004	mg/L	0.00009				24.66%
Cu 324.752†	-124.7	-0.0005	mg/L	0.00028				60.14%
Fe 259.939†	134.8	0.0024	mg/L	0.00015				6.24%
K 766.490†	-8.3	-0.0124	mg/L	0.02242				180.69%
Mg 279.077†	167.2	0.0162	mg/L	0.00152				9.33%
Mn 257.610†	152.1	0.0004	mg/L	0.00001				2.77%
Mo 202.031†	-0.0	0.0000	mg/L	0.00004				>999.9%
Ni 231.604†	-10.5	-0.0003	mg/L	0.00007				27.25%
Na 589.592†	270.6	0.0493	mg/L	0.00053				1.08%
Pb 220.353†	-6.4	-0.0011	mg/L	0.00026				24.41%
Sb 206.836†	3.2	0.0016	mg/L	0.00121				73.91%
Se 196.026†	1.6	0.0019	mg/L	0.00122				64.92%
Sn 189.927†	-1.1	-0.0002	mg/L	0.00026				111.93%
Ti 337.279†	220.5	0.0004	mg/L	0.00003				8.37%
Tl 190.801†	-6.4	-0.0035	mg/L	0.00153				43.97%
V 292.402†	-12.4	-0.0002	mg/L	0.00040				210.62%
Zn 206.200†	16.5	0.0006	mg/L	0.00017				30.01%
Ca 227.546†	-7.7	-0.0413	mg/L	0.01631				39.45%
Sr 421.552†	37.1	0.0003	mg/L	0.00031				97.95%
Al 394.401†	-17.6	-0.0004	mg/L	0.00066				152.58%
Al 237.313†	-20.6	-0.0034	mg/L	0.00050				14.79%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 89
Sample ID: R1407825-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 89
Date Collected: 10/14/2014 11:05:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

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Mean Data: R1407825-003

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6893155.8	1.024	mg/L	0.0058				0.56%
Ag 328.068†	-34.4	-0.0001	mg/L	0.00003				28.07%
Al 308.215†	10069.6	0.6853	mg/L	0.00730				1.07%
As 188.979†	0.4	0.0003	mg/L	0.00083				295.57%
B 249.772†	2315.9	0.0204	mg/L	0.00040				1.96%
Ba 233.527†	4104.9	0.0486	mg/L	0.00037				0.75%
Be 313.107†	2610.0	0.0009	mg/L	0.00004				4.87%
Cd 226.502†	40.5	0.0005	mg/L	0.00007				13.51%
Co 228.616†	116.2	0.0053	mg/L	0.00037				7.00%
Cr 267.716†	-112.7	0.0000	mg/L	0.00001				55.55%
Cu 324.752†	60.3	0.0002	mg/L	0.00015				62.10%
Fe 259.939†	5595.8	0.1006	mg/L	0.00006				0.06%
K 766.490†	2063.3	3.091	mg/L	0.0277				0.90%
Mg 279.077†	104542.1	10.16	mg/L	0.007				0.07%
Mn 257.610†	11094.7	0.0324	mg/L	0.00002				0.07%
Mo 202.031†	1.9	0.0001	mg/L	0.00005				46.06%
Ni 231.604†	2319.0	0.0553	mg/L	0.00019				0.34%
Na 589.592†	67235.8	12.26	mg/L	0.027				0.22%
Pb 220.353†	-2.6	-0.0004	mg/L	0.00102				280.60%
Sb 206.836†	3.3	0.0016	mg/L	0.00008				4.87%
Se 196.026†	2.2	0.0027	mg/L	0.00136				49.98%
Sn 189.927†	-36.9	-0.0078	mg/L	0.00008				1.07%
Ti 337.279†	603.7	0.0011	mg/L	0.00000				0.12%
Tl 190.801†	-8.7	-0.0047	mg/L	0.00034				7.20%
V 292.402†	-10.0	-0.0002	mg/L	0.00028				178.88%
Zn 206.200†	3005.6	0.1016	mg/L	0.00041				0.40%
Ca 227.546†	911.1	4.929	mg/L	0.0445				0.90%
Sr 421.552†	10292.3	0.0889	mg/L	0.00019				0.21%
Al 394.401†	27514.8	0.6790	mg/L	0.00300				0.44%
Al 237.313†	4322.1	0.7089	mg/L	0.00555				0.78%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

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Sequence No.: 90
Sample ID: R1407825-003D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 90
Date Collected: 10/14/2014 11:11:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-003D

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6924472.8	1.029	mg/L	0.0075				0.73%
Ag 328.068†	-16.8	0.0000	mg/L	0.00009				220.82%
Al 308.215†	9773.0	0.6651	mg/L	0.00037				0.06%
As 188.979†	1.3	0.0010	mg/L	0.00008				8.08%
B 249.772†	2149.4	0.0189	mg/L	0.00024				1.28%
Ba 233.527†	4098.7	0.0485	mg/L	0.00030				0.61%
Be 313.107†	2805.4	0.0010	mg/L	0.00003				2.76%
Cd 226.502†	37.2	0.0004	mg/L	0.00003				7.64%
Co 228.616†	121.8	0.0056	mg/L	0.00005				0.94%
Cr 267.716†	-112.2	0.0000	mg/L	0.00001				43.42%
Cu 324.752†	-168.8	-0.0006	mg/L	0.00006				9.10%
Fe 259.939†	5461.7	0.0982	mg/L	0.00052				0.53%
K 766.490†	2073.9	3.107	mg/L	0.0348				1.12%
Mg 279.077†	103780.8	10.08	mg/L	0.008				0.08%
Mn 257.610†	10968.7	0.0320	mg/L	0.00000				0.01%
Mo 202.031†	2.8	0.0002	mg/L	0.00012				74.13%
Ni 231.604†	2276.5	0.0543	mg/L	0.00028				0.52%
Na 589.592†	67608.3	12.33	mg/L	0.205				1.67%
Pb 220.353†	-7.0	-0.0011	mg/L	0.00048				43.98%
Sb 206.836†	1.5	0.0007	mg/L	0.00047				68.76%
Se 196.026†	1.5	0.0019	mg/L	0.00385				208.18%
Sn 189.927†	-39.9	-0.0084	mg/L	0.00034				4.08%
Ti 337.279†	623.2	0.0011	mg/L	0.00008				7.06%
Tl 190.801†	-6.8	-0.0037	mg/L	0.00129				34.65%
V 292.402†	-29.0	-0.0004	mg/L	0.00034				75.91%
Zn 206.200†	3028.3	0.1024	mg/L	0.00081				0.79%

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Ca 227.546†	916.0	4.955	mg/L	0.0510	1.03%
Sr 421.552†	10384.7	0.0897	mg/L	0.00181	2.02%
Al 394.401†	27121.8	0.6693	mg/L	0.00084	0.13%
Al 237.313†	4297.7	0.7049	mg/L	0.00213	0.30%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 91
Sample ID: R1407825-003S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 91
Date Collected: 10/14/2014 11:17:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-003S

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6808637.0	1.011	mg/L	0.0086				0.85%
Ag 328.068†	12816.5	0.0509	mg/L	0.00016				0.32%
Al 308.215†	38835.9	2.645	mg/L	0.0170				0.64%
As 188.979†	50.3	0.0399	mg/L	0.00198				4.97%
B 249.772†	110554.5	1.006	mg/L	0.0112				1.11%
Ba 233.527†	177937.0	2.108	mg/L	0.0110				0.52%
Be 313.107†	146957.2	0.0509	mg/L	0.00018				0.34%
Cd 226.502†	4151.6	0.0506	mg/L	0.00052				1.02%
Co 228.616†	11329.6	0.5180	mg/L	0.00418				0.81%
Cr 267.716†	24046.4	0.2097	mg/L	0.00070				0.33%
Cu 324.752†	69894.0	0.2639	mg/L	0.00236				0.90%
Fe 259.939†	63309.9	1.138	mg/L	0.0050				0.43%
K 766.490†	15353.2	23.00	mg/L	0.245				1.06%
Mg 279.077†	125693.7	12.21	mg/L	0.070				0.58%
Mn 257.610†	189261.5	0.5524	mg/L	0.00305				0.55%
Mo 202.031†	8090.9	0.4876	mg/L	0.00466				0.95%
Ni 231.604†	24288.8	0.5795	mg/L	0.00424				0.73%
Na 589.592†	176250.6	32.13	mg/L	0.302				0.94%
Pb 220.353†	2994.9	0.4999	mg/L	0.00449				0.90%
Sb 206.836†	952.7	0.4871	mg/L	0.00385				0.79%
Se 196.026†	786.9	0.9534	mg/L	0.01593				1.67%
Sn 189.927†	26053.6	5.461	mg/L	0.0130				0.24%
Ti 337.279†	279413.1	0.5017	mg/L	0.00271				0.54%
Tl 190.801†	3460.4	1.892	mg/L	0.0181				0.96%
V 292.402†	33425.0	0.5115	mg/L	0.00513				1.00%
Zn 206.200†	18603.8	0.6291	mg/L	0.00314				0.50%
Ca 227.546†	1299.0	7.091	mg/L	0.0327				0.46%
Sr 421.552†	10457.1	0.0903	mg/L	0.00101				1.12%
Al 394.401†	106793.9	2.635	mg/L	0.0152				0.58%
Al 237.313†	16303.0	2.674	mg/L	0.0171				0.64%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 92
Sample ID: R1407825-003A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 92
Date Collected: 10/14/2014 11:23:32 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-003A

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6862724.9	1.019	mg/L	0.0101				0.99%
Ag 328.068†	12228.7	0.0486	mg/L	0.00072				1.49%
Al 308.215†	37389.8	2.547	mg/L	0.0403				1.58%
As 188.979†	50.1	0.0397	mg/L	0.00075				1.89%
B 249.772†	113185.1	1.030	mg/L	0.0070				0.68%
Ba 233.527†	172250.0	2.040	mg/L	0.0225				1.10%
Be 313.107†	142426.9	0.0494	mg/L	0.00055				1.11%
Cd 226.502†	4038.9	0.0492	mg/L	0.00043				0.88%
Co 228.616†	10820.8	0.4947	mg/L	0.00532				1.07%
Cr 267.716†	23403.8	0.2041	mg/L	0.00233				1.14%
Cu 324.752†	65813.6	0.2485	mg/L	0.00336				1.35%
Fe 259.939†	61533.5	1.106	mg/L	0.0120				1.09%

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Method: DV200-6010C Opt3 Page 68 Date: 10/14/2014 11:39:25 PM

K 766.490†	15104.5	22.63	mg/L	0.174	0.77%
Mg 279.077†	122993.4	11.95	mg/L	0.137	1.15%
Mn 257.610†	182587.8	0.5329	mg/L	0.00590	1.11%
Mo 202.031†	8471.7	0.5105	mg/L	0.00566	1.11%
Ni 231.604†	23737.3	0.5663	mg/L	0.00737	1.30%
Na 589.592†	174701.1	31.85	mg/L	0.486	1.53%
Pb 220.353†	2935.6	0.4900	mg/L	0.00385	0.79%
Sb 206.836†	988.2	0.5053	mg/L	0.00627	1.24%
Se 196.026†	882.6	1.069	mg/L	0.0067	0.62%
Sn 189.927†	-44.4	-0.0096	mg/L	0.00004	0.38%
Ti 337.279†	277951.3	0.4991	mg/L	0.00621	1.24%
Tl 190.801†	3399.8	1.859	mg/L	0.0168	0.90%
V 292.402†	32100.0	0.4912	mg/L	0.00485	0.99%
Zn 206.200†	18078.5	0.6113	mg/L	0.00838	1.37%
Ca 227.546†	1258.5	6.870	mg/L	0.0634	0.92%
Sr 421.552†	10465.6	0.0904	mg/L	0.00114	1.26%
Al 394.401†	103173.9	2.546	mg/L	0.0321	1.26%
Al 237.313†	15728.6	2.580	mg/L	0.0272	1.05%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 93
Sample ID: R1407825-003L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 93
Date Collected: 10/14/2014 11:29:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-003L

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6851799.9	1.018	mg/L	0.0001				0.01%
Ag 328.068†	-10.2	0.0000	mg/L	0.00009				265.33%
Al 308.215†	2159.7	0.1470	mg/L	0.00129				0.88%
As 188.979†	0.2	0.0001	mg/L	0.00004				32.54%
B 249.772†	1632.2	0.0148	mg/L	0.00156				10.54%
Ba 233.527†	814.6	0.0096	mg/L	0.00002				0.20%
Be 313.107†	300.5	0.0001	mg/L	0.00002				20.50%
Cd 226.502†	-6.9	-0.0001	mg/L	0.00007				77.27%
Co 228.616†	12.6	0.0006	mg/L	0.00009				15.99%
Cr 267.716†	16.9	0.0003	mg/L	0.00004				10.99%
Cu 324.752†	45.2	0.0002	mg/L	0.00044				256.86%
Fe 259.939†	1066.8	0.0192	mg/L	0.00000				0.02%
K 766.490†	416.1	0.6234	mg/L	0.14475				23.22%
Mg 279.077†	20696.4	2.011	mg/L	0.0046				0.23%
Mn 257.610†	2227.4	0.0065	mg/L	0.00001				0.21%
Mo 202.031†	4.0	0.0002	mg/L	0.00008				31.18%
Ni 231.604†	447.8	0.0107	mg/L	0.00002				0.20%
Na 589.592†	13529.0	2.467	mg/L	0.0150				0.61%
Pb 220.353†	-4.4	-0.0007	mg/L	0.00040				56.05%
Sb 206.836†	5.2	0.0026	mg/L	0.00038				14.51%
Se 196.026†	3.0	0.0036	mg/L	0.00110				30.28%
Sn 189.927†	-2.7	-0.0006	mg/L	0.00026				45.89%
Ti 337.279†	295.4	0.0005	mg/L	0.00005				10.07%
Tl 190.801†	-3.7	-0.0020	mg/L	0.00276				135.56%
V 292.402†	-31.2	-0.0005	mg/L	0.00021				44.55%
Zn 206.200†	619.2	0.0209	mg/L	0.00010				0.46%
Ca 227.546†	167.2	0.9045	mg/L	0.01880				2.08%
Sr 421.552†	2051.1	0.0177	mg/L	0.00002				0.12%
Al 394.401†	5061.6	0.1249	mg/L	0.00104				0.83%
Al 237.313†	807.6	0.1325	mg/L	0.00017				0.13%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 94
Sample ID: R1407825-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 94
Date Collected: 10/14/2014 11:35:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-004

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Method: DV200-6010C Opt3 Page 69 Date: 10/14/2014 11:45:32 PM

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6907564.8	1.026	mg/L	0.0162				1.58%
Ag 328.068†	-25.9	-0.0001	mg/L	0.00015				193.89%
Al 308.215†	9695.4	0.6599	mg/L	0.02751				4.17%
As 188.979†	-0.6	-0.0005	mg/L	0.00156				325.98%
B 249.772†	2605.4	0.0231	mg/L	0.00097				4.22%
Ba 233.527†	4023.9	0.0477	mg/L	0.00036				0.75%
Be 313.107†	2413.3	0.0008	mg/L	0.00007				7.79%
Cd 226.502†	17.5	0.0002	mg/L	0.00012				60.56%
Co 228.616†	102.9	0.0047	mg/L	0.00020				4.21%
Cr 267.716†	-66.9	0.0004	mg/L	0.00001				1.76%
Cu 324.752†	12.1	0.0001	mg/L	0.00064				>999.9%
Fe 259.939†	5443.1	0.0978	mg/L	0.00134				1.37%
K 766.490†	1995.3	2.989	mg/L	0.0414				1.39%
Mg 279.077†	102020.7	9.914	mg/L	0.1838				1.85%
Mn 257.610†	10621.5	0.0310	mg/L	0.00055				1.76%
Mo 202.031†	4.2	0.0003	mg/L	0.00006				22.29%
Ni 231.604†	2117.2	0.0505	mg/L	0.00039				0.78%
Na 589.592†	66804.6	12.18	mg/L	0.070				0.57%
Pb 220.353†	-7.9	-0.0012	mg/L	0.00081				64.72%
Sb 206.836†	7.5	0.0038	mg/L	0.00062				16.25%
Se 196.026†	2.4	0.0029	mg/L	0.00020				7.00%
Sn 189.927†	-32.0	-0.0068	mg/L	0.00023				3.31%
Ti 337.279†	660.9	0.0012	mg/L	0.00001				0.63%
Tl 190.801†	-11.2	-0.0061	mg/L	0.00042				6.92%
V 292.402†	5.4	0.0001	mg/L	0.00038				491.46%
Zn 206.200†	2863.6	0.0968	mg/L	0.00153				1.58%
Ca 227.546†	854.8	4.625	mg/L	0.0656				1.42%
Sr 421.552†	10034.2	0.0866	mg/L	0.00106				1.22%
Al 394.401†	26261.5	0.6480	mg/L	0.01297				2.00%
Al 237.313†	4058.1	0.6656	mg/L	0.00751				1.13%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

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Sequence No.: 95
Sample ID: R1407825-011
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 95
Date Collected: 10/14/2014 11:41:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-011

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6797104.2	1.010	mg/L	0.0055				0.55%
Ag 328.068†	-125.4	-0.0004	mg/L	0.00020				52.27%
Al 308.215†	3855.6	0.2557	mg/L	0.00463				1.81%
As 188.979†	2.1	0.0017	mg/L	0.00099				59.99%
B 249.772†	4459.9	0.0364	mg/L	0.00005				0.14%
Ba 233.527†	2230.5	0.0264	mg/L	0.00002				0.06%
Be 313.107†	-314.6	-0.0001	mg/L	0.00001				7.63%
Cd 226.502†	5.7	0.0000	mg/L	0.00006				362.09%
Co 228.616†	-17.6	-0.0008	mg/L	0.00002				2.98%
Cr 267.716†	121.4	0.0014	mg/L	0.00001				0.67%
Cu 324.752†	888.6	0.0034	mg/L	0.00016				4.81%
Fe 259.939†	21412.4	0.3849	mg/L	0.00373				0.97%
K 766.490†	2322.6	3.480	mg/L	0.0281				0.81%
Mg 279.077†	34752.6	3.377	mg/L	0.0280				0.83%
Mn 257.610†	2355.2	0.0069	mg/L	0.00002				0.26%
Mo 202.031†	25.0	0.0015	mg/L	0.00004				2.67%
Ni 231.604†	8.2	0.0002	mg/L	0.00003				15.51%
Na 589.592†	31276.9	5.702	mg/L	0.0137				0.24%
Pb 220.353†	1.5	0.0003	mg/L	0.00030				110.83%
Sb 206.836†	5.4	0.0028	mg/L	0.00101				36.47%
Se 196.026†	3.3	0.0041	mg/L	0.00311				75.77%
Sn 189.927†	-132.3	-0.0278	mg/L	0.00002				0.09%
Ti 337.279†	4818.2	0.0087	mg/L	0.00013				1.46%
Tl 190.801†	-5.0	-0.0032	mg/L	0.00096				30.17%
V 292.402†	105.4	0.0016	mg/L	0.00043				26.95%
Zn 206.200†	565.0	0.0191	mg/L	0.00003				0.14%
Ca 227.546†	9629.0	52.03	mg/L	0.566				1.09%

10/15/14 DCA

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Sr 421.552†	47939.3	0.4139 mg/L	0.00136	0.33%
Al 394.401†	8829.1	0.2179 mg/L	0.00137	0.63%
Al 237.313†	1484.7	0.2435 mg/L	0.00039	0.16%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 96
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 10/14/2014 11:48:01 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6742958.9	1.002	mg/L	0.0027				0.27%
Ag 328.068†	129516.1	0.5131	mg/L	0.00102	0.5131	mg/L	0.00102	0.20%
QC value within limits for Ag 328.068 Recovery = 102.61%								
Al 308.215†	145076.3	9.881	mg/L	0.0151	9.881	mg/L	0.0151	0.15%
QC value within limits for Al 308.215 Recovery = 98.81%								
As 188.979†	1258.4	0.9994	mg/L	0.00227	0.9994	mg/L	0.00227	0.23%
QC value within limits for As 188.979 Recovery = 99.94%								
B 249.772†	269168.2	2.437	mg/L	0.0255	2.437	mg/L	0.0255	1.05%
QC value within limits for B 249.772 Recovery = 97.50%								
Ba 233.527†	878381.6	10.40	mg/L	0.031	10.40	mg/L	0.031	0.29%
QC value within limits for Ba 233.527 Recovery = 104.04%								
Be 313.107†	733111.6	0.2541	mg/L	0.00041	0.2541	mg/L	0.00041	0.16%
QC value within limits for Be 313.107 Recovery = 101.65%								
Cd 226.502†	42356.4	0.5171	mg/L	0.00147	0.5171	mg/L	0.00147	0.28%
QC value within limits for Cd 226.502 Recovery = 103.43%								
Co 228.616†	56045.2	2.562	mg/L	0.0069	2.562	mg/L	0.0069	0.27%
QC value within limits for Co 228.616 Recovery = 102.49%								
Cr 267.716†	59793.7	0.5212	mg/L	0.00224	0.5212	mg/L	0.00224	0.43%
QC value within limits for Cr 267.716 Recovery = 104.23%								
Cu 324.752†	334136.9	1.262	mg/L	0.0046	1.262	mg/L	0.0046	0.36%
QC value within limits for Cu 324.752 Recovery = 100.94%								
Fe 259.939†	285635.0	5.134	mg/L	0.0150	5.134	mg/L	0.0150	0.29%
QC value within limits for Fe 259.939 Recovery = 102.69%								
K 766.490†	16767.1	25.12	mg/L	0.103	25.12	mg/L	0.103	0.41%
QC value within limits for K 766.490 Recovery = 100.49%								
Mg 279.077†	261460.7	25.41	mg/L	0.056	25.41	mg/L	0.056	0.22%
QC value within limits for Mg 279.077 Recovery = 101.63%								
Mn 257.610†	264363.3	0.7721	mg/L	0.00206	0.7721	mg/L	0.00206	0.27%
QC value within limits for Mn 257.610 Recovery = 102.94%								
Mo 202.031†	41081.5	2.476	mg/L	0.0080	2.476	mg/L	0.0080	0.32%
QC value within limits for Mo 202.031 Recovery = 99.03%								
Ni 231.604†	86451.2	2.063	mg/L	0.0060	2.063	mg/L	0.0060	0.29%
QC value within limits for Ni 231.604 Recovery = 103.13%								
Na 589.592†	135879.0	24.77	mg/L	0.240	24.77	mg/L	0.240	0.97%
QC value within limits for Na 589.592 Recovery = 99.10%								
Pb 220.353†	3027.6	0.5060	mg/L	0.00307	0.5060	mg/L	0.00307	0.61%
QC value within limits for Pb 220.353 Recovery = 101.21%								
Sb 206.836†	9736.1	4.980	mg/L	0.0094	4.980	mg/L	0.0094	0.19%
QC value within limits for Sb 206.836 Recovery = 99.60%								
Se 196.026†	423.1	0.5139	mg/L	0.00446	0.5139	mg/L	0.00446	0.87%
QC value within limits for Se 196.026 Recovery = 102.77%								
Sn 189.927†	25031.5	5.246	mg/L	0.0300	5.246	mg/L	0.0300	0.57%
QC value within limits for Sn 189.927 Recovery = 104.92%								
Ti 337.279†	1393806.5	2.503	mg/L	0.0029	2.503	mg/L	0.0029	0.12%
QC value within limits for Ti 337.279 Recovery = 100.11%								
Tl 190.801†	1841.7	1.006	mg/L	0.0075	1.006	mg/L	0.0075	0.75%
QC value within limits for Tl 190.801 Recovery = 100.65%								
V 292.402†	165381.2	2.531	mg/L	0.0050	2.531	mg/L	0.0050	0.20%
QC value within limits for V 292.402 Recovery = 101.22%								
Zn 206.200†	30552.4	1.033	mg/L	0.0027	1.033	mg/L	0.0027	0.26%
QC value within limits for Zn 206.200 Recovery = 103.31%								
Ca 227.546†	4482.7	24.54	mg/L	0.103	24.54	mg/L	0.103	0.42%
QC value within limits for Ca 227.546 Recovery = 98.17%								
Sr 421.552†	275611.9	2.379	mg/L	0.0209	2.379	mg/L	0.0209	0.88%
QC value within limits for Sr 421.552 Recovery = 95.18%								
Al 394.401†	397995.9	9.821	mg/L	0.0005	9.821	mg/L	0.0005	0.01%

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QC value within limits for Al 394.401 Recovery = 98.21%

Al 237.313†	61395.2	10.07 mg/L	0.021	10.07 mg/L	0.021	0.21%

QC value within limits for Al 237.313 Recovery = 100.70%

All analyte(s) passed QC.

Sequence No.: 97 **Autosampler Location: 5**
Sample ID: CCB **Date Collected: 10/14/2014 11:54:16 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7015395.7	1.042	mg/L	0.0090				0.87%
Ag 328.068†	-29.0	-0.0001	mg/L	0.00014	-0.0001	mg/L	0.00014	122.16%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	231.3	0.0158	mg/L	0.00724	0.0158	mg/L	0.00724	45.94%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.5	0.0004	mg/L	0.00161	0.0004	mg/L	0.00161	424.59%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	2565.3	0.0235	mg/L	0.00338	0.0235	mg/L	0.00338	14.42%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	355.1	0.0042	mg/L	0.00119	0.0042	mg/L	0.00119	28.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	300.3	0.0001	mg/L	0.00001	0.0001	mg/L	0.00001	11.08%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	25.0	0.0003	mg/L	0.00008	0.0003	mg/L	0.00008	25.83%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	26.1	0.0012	mg/L	0.00053	0.0012	mg/L	0.00053	44.46%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	18.9	0.0002	mg/L	0.00005	0.0002	mg/L	0.00005	28.17%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	913.9	0.0035	mg/L	0.00091	0.0035	mg/L	0.00091	26.31%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	280.0	0.0050	mg/L	0.00058	0.0050	mg/L	0.00058	11.58%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	11.4	0.0171	mg/L	0.04536	0.0171	mg/L	0.04536	264.56%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	269.2	0.0262	mg/L	0.00097	0.0262	mg/L	0.00097	3.69%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	221.8	0.0006	mg/L	0.00008	0.0006	mg/L	0.00008	12.05%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	19.0	0.0011	mg/L	0.00006	0.0011	mg/L	0.00006	4.86%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	65.9	0.0016	mg/L	0.00035	0.0016	mg/L	0.00035	22.03%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	301.4	0.0550	mg/L	0.00362	0.0550	mg/L	0.00362	6.59%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	2.8	0.0005	mg/L	0.00041	0.0005	mg/L	0.00041	87.83%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	3.7	0.0019	mg/L	0.00139	0.0019	mg/L	0.00139	73.82%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.5	0.0007	mg/L	0.00113	0.0007	mg/L	0.00113	171.65%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	41.8	0.0088	mg/L	0.00195	0.0088	mg/L	0.00195	22.27%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	587.9	0.0011	mg/L	0.00021	0.0011	mg/L	0.00021	19.96%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	0.9	0.0005	mg/L	0.00198	0.0005	mg/L	0.00198	396.34%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	54.6	0.0008	mg/L	0.00037	0.0008	mg/L	0.00037	44.03%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	41.3	0.0014	mg/L	0.00009	0.0014	mg/L	0.00009	6.23%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	2.0	0.0109	mg/L	0.04340	0.0109	mg/L	0.04340	398.66%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	149.4	0.0013	mg/L	0.00015	0.0013	mg/L	0.00015	11.61%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Al 394.401†	73.7	0.0018	mg/L	0.00074	0.0018	mg/L	0.00074	40.47%

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QC value within limits for Al 394.401 Recovery = Not calculated
Al 237.313† 15.1 0.0025 mg/L 0.00137 0.0025 mg/L 0.00137 55.24%
QC value within limits for Al 237.313 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 98
Sample ID: MRL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 10/15/2014 12:00:17 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6863939.8	1.020	mg/L	0.0064				0.63%
Ag 328.068†	2552.1	0.0101	mg/L	0.00028	0.0101	mg/L	0.00028	2.74%
QC value within limits for Ag 328.068 Recovery = 101.12%								
Al 308.215†	3142.9	0.2140	mg/L	0.00778	0.2140	mg/L	0.00778	3.64%
QC value within limits for Al 308.215 Recovery = 107.01%								
As 188.979†	26.7	0.0212	mg/L	0.00005	0.0212	mg/L	0.00005	0.24%
QC value within limits for As 188.979 Recovery = 106.12%								
B 249.772†	23264.1	0.2124	mg/L	0.00459	0.2124	mg/L	0.00459	2.16%
QC value within limits for B 249.772 Recovery = 106.19%								
Ba 233.527†	18460.8	0.2187	mg/L	0.00270	0.2187	mg/L	0.00270	1.23%
QC value within limits for Ba 233.527 Recovery = 109.33%								
Be 313.107†	15016.2	0.0052	mg/L	0.00001	0.0052	mg/L	0.00001	0.23%
QC value within limits for Be 313.107 Recovery = 104.10%								
Cd 226.502†	892.6	0.0109	mg/L	0.00004	0.0109	mg/L	0.00004	0.35%
QC value within limits for Cd 226.502 Recovery = 108.98%								
Co 228.616†	1152.5	0.0527	mg/L	0.00014	0.0527	mg/L	0.00014	0.26%
QC value within limits for Co 228.616 Recovery = 105.38%								
Cr 267.716†	1205.5	0.0106	mg/L	0.00003	0.0106	mg/L	0.00003	0.29%
QC value within limits for Cr 267.716 Recovery = 105.59%								
Cu 324.752†	6938.4	0.0262	mg/L	0.00090	0.0262	mg/L	0.00090	3.45%
QC value within limits for Cu 324.752 Recovery = 104.80%								
Fe 259.939†	6073.8	0.1092	mg/L	0.00164	0.1092	mg/L	0.00164	1.50%
QC value within limits for Fe 259.939 Recovery = 109.18%								
K 766.490†	629.6	0.9433	mg/L	0.05761	0.9433	mg/L	0.05761	6.11%
QC value within limits for K 766.490 Recovery = 94.33%								
Mg 279.077†	10655.6	1.035	mg/L	0.0129	1.035	mg/L	0.0129	1.24%
QC value within limits for Mg 279.077 Recovery = 103.54%								
Mn 257.610†	5538.1	0.0162	mg/L	0.00024	0.0162	mg/L	0.00024	1.46%
QC value within limits for Mn 257.610 Recovery = 107.83%								
Mo 202.031†	436.4	0.0263	mg/L	0.00015	0.0263	mg/L	0.00015	0.56%
QC value within limits for Mo 202.031 Recovery = 105.21%								
Ni 231.604†	1758.0	0.0419	mg/L	0.00004	0.0419	mg/L	0.00004	0.08%
QC value within limits for Ni 231.604 Recovery = 104.85%								
Na 589.592†	5775.9	1.053	mg/L	0.0020	1.053	mg/L	0.0020	0.19%
QC value within limits for Na 589.592 Recovery = 105.31%								
Pb 220.353†	61.5	0.0103	mg/L	0.00012	0.0103	mg/L	0.00012	1.15%
QC value within limits for Pb 220.353 Recovery = 102.78%								
Sb 206.836†	120.0	0.0614	mg/L	0.00172	0.0614	mg/L	0.00172	2.81%
QC value within limits for Sb 206.836 Recovery = 102.32%								
Se 196.026†	9.1	0.0111	mg/L	0.00048	0.0111	mg/L	0.00048	4.33%
QC value within limits for Se 196.026 Recovery = 110.88%								
Sn 189.927†	2636.0	0.5525	mg/L	0.00256	0.5525	mg/L	0.00256	0.46%
QC value within limits for Sn 189.927 Recovery = 110.51%								
Ti 337.279†	29835.9	0.0536	mg/L	0.00079	0.0536	mg/L	0.00079	1.48%
QC value within limits for Ti 337.279 Recovery = 107.14%								
Tl 190.801†	34.6	0.0189	mg/L	0.00218	0.0189	mg/L	0.00218	11.54%
QC value within limits for Tl 190.801 Recovery = 94.61%								
V 292.402†	3418.0	0.0523	mg/L	0.00049	0.0523	mg/L	0.00049	0.94%
QC value within limits for V 292.402 Recovery = 104.60%								
Zn 206.200†	590.2	0.0200	mg/L	0.00003	0.0200	mg/L	0.00003	0.13%
QC value within limits for Zn 206.200 Recovery = 99.78%								
Ca 227.546†	159.1	0.8665	mg/L	0.01263	0.8665	mg/L	0.01263	1.46%
QC value within limits for Ca 227.546 Recovery = 86.65%								
Sr 421.552†	11693.7	0.1010	mg/L	0.00055	0.1010	mg/L	0.00055	0.54%
QC value within limits for Sr 421.552 Recovery = 100.95%								
Al 394.401†	7336.1	0.1810	mg/L	0.00196	0.1810	mg/L	0.00196	1.08%

QC value within limits for Al 394.401 Recovery = 90.51%

Al 237.313†	1196.2	0.1962	mg/L	0.00192	0.1962	mg/L	0.00192	0.98%

QC value within limits for Al 237.313 Recovery = 98.10%
All analyte(s) passed QC.

Sequence No.: 99 **Autosampler Location: 7**
Sample ID: ICSA **Date Collected: 10/15/2014 12:06:15 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6479054.0	0.9625	mg/L	0.00265				0.28%
Ag 328.068†	-6850.7	-0.0019	mg/L	0.00024	-0.0019	mg/L	0.00024	12.68%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	3821216.6	260.3	mg/L	2.71	260.3	mg/L	2.71	1.04%
QC value within limits for Al 308.215 Recovery = 104.12%								
As 188.979†	12.5	-0.0004	mg/L	0.00131	-0.0004	mg/L	0.00131	337.28%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	36641.8	-0.1346	mg/L	0.00313	-0.1346	mg/L	0.00313	2.33%
Ba 233.527†	275.3	0.0033	mg/L	0.00003	0.0033	mg/L	0.00003	0.95%
Be 313.107†	-1188.5	-0.0004	mg/L	0.00001	-0.0004	mg/L	0.00001	2.14%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	1069.1	0.0010	mg/L	0.00021	0.0010	mg/L	0.00021	21.86%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	14.9	0.0007	mg/L	0.00007	0.0007	mg/L	0.00007	9.61%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3556.3	-0.0007	mg/L	0.00029	-0.0007	mg/L	0.00029	43.97%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-1811.1	0.0017	mg/L	0.00016	0.0017	mg/L	0.00016	9.81%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	5079906.9	91.31	mg/L	0.123	91.31	mg/L	0.123	0.13%
QC value within limits for Fe 259.939 Recovery = 91.31%								
K 766.490†	22.0	0.0329	mg/L	0.06331	0.0329	mg/L	0.06331	192.34%
Mg 279.077†	2723933.1	264.7	mg/L	2.59	264.7	mg/L	2.59	0.98%
QC value within limits for Mg 279.077 Recovery = 105.88%								
Mn 257.610†	-5304.6	-0.0033	mg/L	0.00033	-0.0033	mg/L	0.00033	9.77%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	1.9	0.0001	mg/L	0.00004	0.0001	mg/L	0.00004	33.58%
Ni 231.604†	-111.0	-0.0026	mg/L	0.00015	-0.0026	mg/L	0.00015	5.68%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	114.4	0.0209	mg/L	0.00555	0.0209	mg/L	0.00555	26.59%
Pb 220.353†	-146.9	0.0017	mg/L	0.00035	0.0017	mg/L	0.00035	20.07%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	42.8	-0.0013	mg/L	0.00146	-0.0013	mg/L	0.00146	116.44%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-20.5	0.0005	mg/L	0.00424	0.0005	mg/L	0.00424	836.48%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-144.3	-0.0606	mg/L	0.00114	-0.0606	mg/L	0.00114	1.87%
Ti 337.279†	306.2	0.0005	mg/L	0.00003	0.0005	mg/L	0.00003	4.94%
Tl 190.801†	31.1	0.0024	mg/L	0.00081	0.0024	mg/L	0.00081	33.38%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	433.2	0.0013	mg/L	0.00017	0.0013	mg/L	0.00017	12.90%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	159.0	0.0054	mg/L	0.00013	0.0054	mg/L	0.00013	2.36%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	47075.8	260.4	mg/L	1.53	260.4	mg/L	1.53	0.59%
QC value within limits for Ca 227.546 Recovery = 104.15%								
Sr 421.552†	488.2	0.0042	mg/L	0.00023	0.0042	mg/L	0.00023	5.51%
Al 394.401†	10902414.2	269.0	mg/L	0.87	269.0	mg/L	0.87	0.32%
QC value within limits for Al 394.401 Recovery = 107.61%								
Al 237.313†	1588040.5	260.5	mg/L	2.59	260.5	mg/L	2.59	0.99%
QC value within limits for Al 237.313 Recovery = 104.19%								

All analyte(s) passed QC.

Sequence No.: 100 **Autosampler Location: 8**
Sample ID: ICSAB **Date Collected: 10/15/2014 12:12:31 AM**

Method: DV200-6010C Opt3 Page 74 Date: 10/15/2014 12:23:01 AM

Analyst:
Initial Sample Wt:
Dilution:

Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6421430.1	0.9539	mg/L	0.00673				0.71%
Ag 328.068†	45893.6	0.2066	mg/L	0.00200	0.2066	mg/L	0.00200	0.97%
QC value within limits for Ag 328.068 Recovery = 103.31%								
Al 308.215†	3861772.5	263.1	mg/L	0.58	263.1	mg/L	0.58	0.22%
QC value within limits for Al 308.215 Recovery = 105.23%								
As 188.979†	136.2	0.0978	mg/L	0.00047	0.0978	mg/L	0.00047	0.48%
QC value within limits for As 188.979 Recovery = 97.84%								
B 249.772†	36377.8	-0.1396	mg/L	0.00375	-0.1396	mg/L	0.00375	2.68%
Ba 233.527†	45081.4	0.5340	mg/L	0.00837	0.5340	mg/L	0.00837	1.57%
QC value within limits for Ba 233.527 Recovery = 106.80%								
Be 313.107†	1469639.5	0.5094	mg/L	0.00342	0.5094	mg/L	0.00342	0.67%
QC value within limits for Be 313.107 Recovery = 101.88%								
Cd 226.502†	81746.0	0.9872	mg/L	0.01752	0.9872	mg/L	0.01752	1.77%
QC value within limits for Cd 226.502 Recovery = 98.72%								
Co 228.616†	10708.4	0.4896	mg/L	0.00599	0.4896	mg/L	0.00599	1.22%
QC value within limits for Co 228.616 Recovery = 97.92%								
Cr 267.716†	55636.4	0.5128	mg/L	0.00695	0.5128	mg/L	0.00695	1.35%
QC value within limits for Cr 267.716 Recovery = 102.57%								
Cu 324.752†	139579.0	0.5354	mg/L	0.00171	0.5354	mg/L	0.00171	0.32%
QC value within limits for Cu 324.752 Recovery = 107.08%								
Fe 259.939†	5107100.2	91.80	mg/L	0.371	91.80	mg/L	0.371	0.40%
QC value within limits for Fe 259.939 Recovery = 91.80%								
K 766.490†	11.5	0.0172	mg/L	0.06967	0.0172	mg/L	0.06967	405.61%
Mg 279.077†	2750798.6	267.3	mg/L	1.90	267.3	mg/L	1.90	0.71%
QC value within limits for Mg 279.077 Recovery = 106.92%								
Mn 257.610†	172842.9	0.5165	mg/L	0.00748	0.5165	mg/L	0.00748	1.45%
QC value within limits for Mn 257.610 Recovery = 103.31%								
Mo 202.031†	-0.9	-0.0001	mg/L	0.00010	-0.0001	mg/L	0.00010	194.00%
Ni 231.604†	40732.2	0.9718	mg/L	0.01555	0.9718	mg/L	0.01555	1.60%
QC value within limits for Ni 231.604 Recovery = 97.18%								
Na 589.592†	145.9	0.0266	mg/L	0.00988	0.0266	mg/L	0.00988	37.14%
Pb 220.353†	153.1	0.0521	mg/L	0.00200	0.0521	mg/L	0.00200	3.83%
QC value within limits for Pb 220.353 Recovery = 104.12%								
Sb 206.836†	1265.5	0.6241	mg/L	0.00970	0.6241	mg/L	0.00970	1.55%
QC value within limits for Sb 206.836 Recovery = 104.01%								
Se 196.026†	23.6	0.0541	mg/L	0.00039	0.0541	mg/L	0.00039	0.73%
QC value within limits for Se 196.026 Recovery = 108.19%								
Sn 189.927†	-119.2	-0.0557	mg/L	0.00064	-0.0557	mg/L	0.00064	1.16%
Ti 337.279†	285.3	0.0005	mg/L	0.00002	0.0005	mg/L	0.00002	3.04%
Tl 190.801†	224.0	0.1077	mg/L	0.00101	0.1077	mg/L	0.00101	0.93%
QC value within limits for Tl 190.801 Recovery = 107.73%								
V 292.402†	32652.3	0.4944	mg/L	0.00443	0.4944	mg/L	0.00443	0.90%
QC value within limits for V 292.402 Recovery = 98.88%								
Zn 206.200†	28969.1	0.9796	mg/L	0.01825	0.9796	mg/L	0.01825	1.86%
QC value within limits for Zn 206.200 Recovery = 97.96%								
Ca 227.546†	47238.0	261.3	mg/L	1.50	261.3	mg/L	1.50	0.57%
QC value within limits for Ca 227.546 Recovery = 104.51%								
Sr 421.552†	467.7	0.0040	mg/L	0.00008	0.0040	mg/L	0.00008	1.98%
Al 394.401†	10872103.8	268.3	mg/L	1.03	268.3	mg/L	1.03	0.38%
QC value within limits for Al 394.401 Recovery = 107.31%								
Al 237.313†	1604111.1	263.1	mg/L	0.89	263.1	mg/L	0.89	0.34%
QC value within limits for Al 237.313 Recovery = 105.24%								

All analyte(s) passed QC.

Sequence No.: 101
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 10/15/2014 12:18:59 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Mean Corrected	Calib	Sample

00680

Method: DV200-6010C Opt3 Page 75 Date: 10/15/2014 12:29:05 AM

Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 371.029	6831630.6	1.015 mg/L	0.0073			0.72%
Ag 328.068†	127865.7	0.5066 mg/L	0.00084	0.5066 mg/L	0.00084	0.17%
QC value within limits for Ag 328.068 Recovery = 101.31%						
Al 308.215†	145190.3	9.889 mg/L	0.0588	9.889 mg/L	0.0588	0.59%
QC value within limits for Al 308.215 Recovery = 98.89%						
As 188.979†	1243.9	0.9879 mg/L	0.01469	0.9879 mg/L	0.01469	1.49%
QC value within limits for As 188.979 Recovery = 98.79%						
B 249.772†	266127.7	2.409 mg/L	0.0074	2.409 mg/L	0.0074	0.31%
QC value within limits for B 249.772 Recovery = 96.38%						
Ba 233.527†	884610.5	10.48 mg/L	0.020	10.48 mg/L	0.020	0.19%
QC value within limits for Ba 233.527 Recovery = 104.78%						
Be 313.107†	734345.1	0.2545 mg/L	0.00019	0.2545 mg/L	0.00019	0.07%
QC value within limits for Be 313.107 Recovery = 101.82%						
Cd 226.502†	42179.6	0.5150 mg/L	0.00080	0.5150 mg/L	0.00080	0.16%
QC value within limits for Cd 226.502 Recovery = 102.99%						
Co 228.616†	55913.4	2.556 mg/L	0.0059	2.556 mg/L	0.0059	0.23%
QC value within limits for Co 228.616 Recovery = 102.25%						
Cr 267.716†	59603.8	0.5195 mg/L	0.00048	0.5195 mg/L	0.00048	0.09%
QC value within limits for Cr 267.716 Recovery = 103.90%						
Cu 324.752†	332040.2	1.254 mg/L	0.0047	1.254 mg/L	0.0047	0.37%
QC value within limits for Cu 324.752 Recovery = 100.30%						
Fe 259.939†	287274.0	5.164 mg/L	0.0134	5.164 mg/L	0.0134	0.26%
QC value within limits for Fe 259.939 Recovery = 103.28%						
K 766.490†	16525.9	24.76 mg/L	0.324	24.76 mg/L	0.324	1.31%
QC value within limits for K 766.490 Recovery = 99.04%						
Mg 279.077†	260698.0	25.33 mg/L	0.051	25.33 mg/L	0.051	0.20%
QC value within limits for Mg 279.077 Recovery = 101.33%						
Mn 257.610†	263541.2	0.7697 mg/L	0.00128	0.7697 mg/L	0.00128	0.17%
QC value within limits for Mn 257.610 Recovery = 102.62%						
Mo 202.031†	40841.5	2.461 mg/L	0.0045	2.461 mg/L	0.0045	0.18%
QC value within limits for Mo 202.031 Recovery = 98.45%						
Ni 231.604†	86027.2	2.052 mg/L	0.0020	2.052 mg/L	0.0020	0.10%
QC value within limits for Ni 231.604 Recovery = 102.62%						
Na 589.592†	135616.5	24.73 mg/L	0.332	24.73 mg/L	0.332	1.34%
QC value within limits for Na 589.592 Recovery = 98.90%						
Pb 220.353†	3036.4	0.5075 mg/L	0.00695	0.5075 mg/L	0.00695	1.37%
QC value within limits for Pb 220.353 Recovery = 101.50%						
Sb 206.836†	9592.2	4.906 mg/L	0.0508	4.906 mg/L	0.0508	1.04%
QC value within limits for Sb 206.836 Recovery = 98.13%						
Se 196.026†	420.3	0.5105 mg/L	0.00732	0.5105 mg/L	0.00732	1.43%
QC value within limits for Se 196.026 Recovery = 102.09%						
Sn 189.927†	24679.6	5.172 mg/L	0.0123	5.172 mg/L	0.0123	0.24%
QC value within limits for Sn 189.927 Recovery = 103.44%						
Ti 337.279†	1392368.5	2.500 mg/L	0.0022	2.500 mg/L	0.0022	0.09%
QC value within limits for Ti 337.279 Recovery = 100.00%						
Tl 190.801†	1849.7	1.011 mg/L	0.0115	1.011 mg/L	0.0115	1.14%
QC value within limits for Tl 190.801 Recovery = 101.09%						
V 292.402†	163177.8	2.497 mg/L	0.0031	2.497 mg/L	0.0031	0.12%
QC value within limits for V 292.402 Recovery = 99.88%						
Zn 206.200†	30447.8	1.030 mg/L	0.0013	1.030 mg/L	0.0013	0.13%
QC value within limits for Zn 206.200 Recovery = 102.96%						
Ca 227.546†	4499.8	24.64 mg/L	0.204	24.64 mg/L	0.204	0.83%
QC value within limits for Ca 227.546 Recovery = 98.54%						
Sr 421.552†	275538.6	2.379 mg/L	0.0331	2.379 mg/L	0.0331	1.39%
QC value within limits for Sr 421.552 Recovery = 95.15%						
Al 394.401†	398709.3	9.839 mg/L	0.0656	9.839 mg/L	0.0656	0.67%
QC value within limits for Al 394.401 Recovery = 98.39%						
Al 237.313†	61368.1	10.07 mg/L	0.059	10.07 mg/L	0.059	0.59%
QC value within limits for Al 237.313 Recovery = 100.66%						

All analyte(s) passed QC.

Sequence No.: 102
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 10/15/2014 12:25:25 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Mean Corrected	Calib	Sample

00681

Method: DV200-6010C Opt3 Page 76 Date: 10/15/2014 12:35:10 AM

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	6876382.3	1.022	mg/L	0.0076				0.74%
Ag 328.068†	-5.1	0.0000	mg/L	0.00031	0.0000	mg/L	0.00031	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	791.8	0.0539	mg/L	0.00711	0.0539	mg/L	0.00711	13.18%
QC value greater than the upper limit for Al 308.215 Recovery = Not calculated								
As 188.979†	-1.1	-0.0009	mg/L	0.00021	-0.0009	mg/L	0.00021	23.16%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3197.4	0.0291	mg/L	0.00414	0.0291	mg/L	0.00414	14.21%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	281.1	0.0033	mg/L	0.00055	0.0033	mg/L	0.00055	16.46%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-158.9	-0.0001	mg/L	0.00005	-0.0001	mg/L	0.00005	94.96%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	16.5	0.0002	mg/L	0.00006	0.0002	mg/L	0.00006	32.22%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	35.0	0.0016	mg/L	0.00022	0.0016	mg/L	0.00022	13.97%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	11.1	0.0001	mg/L	0.00003	0.0001	mg/L	0.00003	26.67%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1216.2	0.0046	mg/L	0.00066	0.0046	mg/L	0.00066	14.43%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	1377.2	0.0248	mg/L	0.00102	0.0248	mg/L	0.00102	4.11%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	18.6	0.0278	mg/L	0.00189	0.0278	mg/L	0.00189	6.79%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	236.3	0.0230	mg/L	0.00181	0.0230	mg/L	0.00181	7.86%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	180.4	0.0005	mg/L	0.00001	0.0005	mg/L	0.00001	1.93%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	10.2	0.0006	mg/L	0.00003	0.0006	mg/L	0.00003	5.10%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	79.6	0.0019	mg/L	0.00048	0.0019	mg/L	0.00048	25.01%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	271.5	0.0495	mg/L	0.00624	0.0495	mg/L	0.00624	12.60%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	4.8	0.0008	mg/L	0.00094	0.0008	mg/L	0.00094	117.18%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	5.6	0.0029	mg/L	0.00064	0.0029	mg/L	0.00064	22.47%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	1.0	0.0012	mg/L	0.00032	0.0012	mg/L	0.00032	26.26%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	45.4	0.0095	mg/L	0.00167	0.0095	mg/L	0.00167	17.61%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	412.6	0.0007	mg/L	0.00009	0.0007	mg/L	0.00009	11.79%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-0.3	-0.0002	mg/L	0.00014	-0.0002	mg/L	0.00014	81.26%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	31.4	0.0005	mg/L	0.00018	0.0005	mg/L	0.00018	37.98%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	54.8	0.0019	mg/L	0.00001	0.0019	mg/L	0.00001	0.46%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	2.6	0.0155	mg/L	0.01567	0.0155	mg/L	0.01567	101.02%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	99.0	0.0009	mg/L	0.00028	0.0009	mg/L	0.00028	33.18%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Al 394.401†	620.2	0.0153	mg/L	0.00036	0.0153	mg/L	0.00036	2.33%
QC value within limits for Al 394.401 Recovery = Not calculated								
Al 237.313†	102.8	0.0169	mg/L	0.00277	0.0169	mg/L	0.00277	16.41%
QC value within limits for Al 237.313 Recovery = Not calculated								
QC Failed. Continue with analysis.								

0.100L

End for here - redigest 220437

Sequence No.: 103
Sample ID: PBT-220437
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 96
Date Collected: 10/15/2014 12:31:29 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: PBT-220437

Mean Corrected	Calib	Sample

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Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	6927153.6	1.029	mg/L	0.0052				0.50%
Ag 328.068†	63.3	0.0003	mg/L	0.00001				5.54%
Al 308.215†	665.7	0.0454	mg/L	0.00491				10.82%
As 188.979†	-0.2	-0.0002	mg/L	0.00194				>999.9%
B 249.772†	1573.9	0.0142	mg/L	0.00138				9.73%
Ba 233.527†	259.3	0.0031	mg/L	0.00009				2.80%
Be 313.107†	205.0	0.0001	mg/L	0.00003				45.17%
Cd 226.502†	1.3	0.0000	mg/L	0.00006				573.63%
Co 228.616†	33.7	0.0015	mg/L	0.00017				11.18%
Cr 267.716†	65.7	0.0006	mg/L	0.00002				4.36%
Cu 324.752†	1190.5	0.0045	mg/L	0.00087				19.37%
Fe 259.939†	1913.7	0.0344	mg/L	0.00167				4.87%
K 766.490†	29.0	0.0434	mg/L	0.05075				116.84%
Mg 279.077†	200.3	0.0195	mg/L	0.00169				8.67%
Mn 257.610†	796.1	0.0023	mg/L	0.00003				1.08%
Mo 202.031†	13.9	0.0008	mg/L	0.00004				5.23%
Ni 231.604†	92.0	0.0022	mg/L	0.00009				4.19%
Na 589.592†	342.1	0.0624	mg/L	0.00266				4.27%
Pb 220.353†	-0.5	-0.0001	mg/L	0.00050				612.34%
Sb 206.836†	7.0	0.0036	mg/L	0.00094				26.12%
Se 196.026†	1.8	0.0022	mg/L	0.00065				29.46%
Sn 189.927†	103.0	0.0216	mg/L	0.00295				13.67%
Ti 337.279†	618.4	0.0011	mg/L	0.00006				5.52%
Tl 190.801†	-7.9	-0.0043	mg/L	0.00113				26.12%
V 292.402†	16.0	0.0002	mg/L	0.00028				115.70%
Zn 206.200†	82.0	0.0028	mg/L	0.00019				6.95%
Ca 227.546†	10.9	0.0611	mg/L	0.02641				43.20%
Sr 421.552†	89.2	0.0008	mg/L	0.00006				8.40%
Al 394.401†	1296.3	0.0320	mg/L	0.00123				3.85%
Al 237.313†	202.8	0.0333	mg/L	0.00335				10.08%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 104
Sample ID: LCST 6X
Analyst:
Initial Sample Wt:
Dilution: 6X

Autosampler Location: 97
Date Collected: 10/15/2014 12:37:33 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCST 6X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6943161.4	1.031	mg/L	0.0127				1.23%
Ag 328.068†	21.3	0.0001	mg/L	0.00023				265.34%
Al 308.215†	414.3	0.0282	mg/L	0.00668				23.66%
As 188.979†	0.3	0.0003	mg/L	0.00019				67.85%
B 249.772†	548.7	0.0050	mg/L	0.00073				14.77%
Ba 233.527†	52.7	0.0006	mg/L	0.00003				5.08%
Be 313.107†	-106.1	0.0000	mg/L	0.00002				46.89%
Cd 226.502†	0.9	0.0000	mg/L	0.00004				465.12%
Co 228.616†	14.7	0.0007	mg/L	0.00003				3.88%
Cr 267.716†	2.2	0.0000	mg/L	0.00004				181.60%
Cu 324.752†	162.3	0.0006	mg/L	0.00024				39.86%
Fe 259.939†	831.3	0.0149	mg/L	0.00023				1.51%
K 766.490†	28.5	0.0427	mg/L	0.02128				49.80%
Mg 279.077†	70.5	0.0069	mg/L	0.00259				37.84%
Mn 257.610†	77.9	0.0002	mg/L	0.00002				8.34%
Mo 202.031†	-0.5	0.0000	mg/L	0.00019				580.40%
Ni 231.604†	20.4	0.0005	mg/L	0.00001				1.33%
Na 589.592†	54.7	0.0100	mg/L	0.00170				16.99%
Pb 220.353†	-5.1	-0.0009	mg/L	0.00018				20.78%
Sb 206.836†	2.5	0.0013	mg/L	0.00084				65.02%
Se 196.026†	1.3	0.0015	mg/L	0.00075				49.51%
Sn 189.927†	6.5	0.0014	mg/L	0.00028				20.58%
Ti 337.279†	90.0	0.0002	mg/L	0.00005				32.49%
Tl 190.801†	-2.3	-0.0012	mg/L	0.00038				30.64%
V 292.402†	-9.8	-0.0002	mg/L	0.00005				30.87%
Zn 206.200†	56.4	0.0019	mg/L	0.00000				0.04%
Ca 227.546†	-8.7	-0.0461	mg/L	0.00126				2.74%
Sr 421.552†	22.1	0.0002	mg/L	0.00022				116.90%

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Al 394.401†	149.5	0.0037	mg/L	0.00014	3.85%
Al 237.313†	16.6	0.0027	mg/L	0.00009	3.39%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 105
Sample ID: LCST 220437
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 98
Date Collected: 10/15/2014 12:43:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCST 220437

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6866450.8	1.020	mg/L	0.0053				0.52%
Ag 328.068†	-19.6	-0.0001	mg/L	0.00003				41.07%
Al 308.215†	462.3	0.0315	mg/L	0.01495				47.45%
As 188.979†	1.1	0.0009	mg/L	0.00007				7.83%
B 249.772†	484.2	0.0043	mg/L	0.00057				13.12%
Ba 233.527†	127.6	0.0015	mg/L	0.00006				3.75%
Be 313.107†	20.9	0.0000	mg/L	0.00006				826.86%
Cd 226.502†	-11.6	-0.0001	mg/L	0.00007				45.18%
Co 228.616†	24.6	0.0011	mg/L	0.00014				12.16%
Cr 267.716†	57.2	0.0005	mg/L	0.00003				6.22%
Cu 324.752†	451.3	0.0017	mg/L	0.00082				48.26%
Fe 259.939†	1418.8	0.0255	mg/L	0.00154				6.05%
K 766.490†	3.1	0.0047	mg/L	0.01691				361.98%
Mg 279.077†	-0.2	0.0000	mg/L	0.00075				>999.9%
Mn 257.610†	222.9	0.0007	mg/L	0.00002				3.34%
Mo 202.031†	5.0	0.0003	mg/L	0.00000				0.33%
Ni 231.604†	58.4	0.0014	mg/L	0.00003				2.18%
Na 589.592†	168.3	0.0307	mg/L	0.00274				8.93%
Pb 220.353†	-1.4	-0.0002	mg/L	0.00014				64.63%
Sb 206.836†	6.8	0.0035	mg/L	0.00057				16.37%
Se 196.026†	0.9	0.0011	mg/L	0.00123				116.61%
Sn 189.927†	81.2	0.0170	mg/L	0.00103				6.04%
Ti 337.279†	342.4	0.0006	mg/L	0.00004				7.29%
Tl 190.801†	-7.2	-0.0040	mg/L	0.00037				9.39%
V 292.402†	1.9	0.0000	mg/L	0.00036				>999.9%
Zn 206.200†	28.0	0.0009	mg/L	0.00007				7.04%
Ca 227.546†	2.7	0.0160	mg/L	0.02252				140.57%
Sr 421.552†	37.1	0.0003	mg/L	0.00003				8.05%
Al 394.401†	691.3	0.0171	mg/L	0.00061				3.60%
Al 237.313†	114.6	0.0188	mg/L	0.00009				0.47%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 106
Sample ID: LCSW-220437
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 99
Date Collected: 10/15/2014 12:49:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-220437

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6761653.6	1.004	mg/L	0.0006				0.06%
Ag 328.068†	12531.6	0.0498	mg/L	0.00074				1.48%
Al 308.215†	28439.2	1.937	mg/L	0.0261				1.35%
As 188.979†	48.7	0.0386	mg/L	0.00061				1.59%
B 249.772†	103658.6	0.9436	mg/L	0.01639				1.74%
Ba 233.527†	172081.0	2.038	mg/L	0.0207				1.02%
Be 313.107†	148049.8	0.0513	mg/L	0.00054				1.05%
Cd 226.502†	4102.3	0.0500	mg/L	0.00003				0.06%
Co 228.616†	11100.6	0.5075	mg/L	0.00670				1.32%
Cr 267.716†	24107.8	0.2093	mg/L	0.00215				1.03%
Cu 324.752†	70771.6	0.2672	mg/L	0.00296				1.11%
Fe 259.939†	58216.6	1.046	mg/L	0.0094				0.90%
K 766.490†	13155.2	19.71	mg/L	0.008				0.04%
Mg 279.077†	20517.5	1.994	mg/L	0.0198				0.99%

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Mn 257.610†	176077.3	0.5139 mg/L	0.00554		1.08%
Mo 202.031†	8017.6	0.4832 mg/L	0.00116		0.24%
Ni 231.604†	21706.2	0.5179 mg/L	0.00466		0.90%
Na 589.592†	108954.2	19.86 mg/L	0.045		0.22%
Pb 220.353†	2980.5	0.4974 mg/L	0.00121		0.24%
Sb 206.836†	938.5	0.4800 mg/L	0.00069		0.14%
Se 196.026†	8.0	0.0099 mg/L	0.00095		9.54%
Sn 189.927†	52.1	0.0107 mg/L	0.00017		1.57%
Ti 337.279†	275598.9	0.4949 mg/L	0.00530		1.07%
Tl 190.801†	3431.9	1.876 mg/L	0.0017		0.09%
V 292.402†	32265.9	0.4937 mg/L	0.00200		0.40%
Zn 206.200†	15533.2	0.5252 mg/L	0.00368		0.70%
Ca 227.546†	365.8	2.043 mg/L	0.0105		0.51%
Sr 421.552†	66.9	0.0006 mg/L	0.00015		25.27%
Al 394.401†	78154.2	1.929 mg/L	0.0204		1.06%
Al 237.313†	11903.5	1.952 mg/L	0.0200		1.02%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 107 **Autosampler Location: 100**
Sample ID: MBLK 12282-01 **Date Collected: 10/15/2014 12:55:47 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: MBLK 12282-01

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6148733.3	0.9134	mg/L	0.00238				0.26%
Ag 328.068†	-54.7	-0.0002	mg/L	0.00030				141.58%
Al 308.215†	1814.1	0.1236	mg/L	0.00233				1.88%
As 188.979†	10.3	0.0082	mg/L	0.00040				4.91%
B 249.772†	2422.5	0.0220	mg/L	0.00195				8.85%
Ba 233.527†	102.7	0.0012	mg/L	0.00004				3.35%
Be 313.107†	-1414.0	-0.0005	mg/L	0.00001				2.10%
Cd 226.502†	-34.6	-0.0004	mg/L	0.00004				9.11%
Co 228.616†	-0.2	0.0000	mg/L	0.00020				>999.9%
Cr 267.716†	237.1	0.0021	mg/L	0.00007				3.58%
Cu 324.752†	1760.2	0.0066	mg/L	0.00010				1.46%
Fe 259.939†	1451.8	0.0261	mg/L	0.00039				1.50%
K 766.490†	1062.6	1.592	mg/L	0.0111				0.70%
Mg 279.077†	-270.2	-0.0263	mg/L	0.00135				5.15%
Mn 257.610†	676.3	0.0020	mg/L	0.00000				0.15%
Mo 202.031†	8.0	0.0005	mg/L	0.00011				23.49%
Ni 231.604†	-5.3	-0.0001	mg/L	0.00002				14.79%
Na 589.592†	8553685.4	1560	mg/L	5.1				0.33%
Pb 220.353†	1.7	0.0003	mg/L	0.00001				1.68%
Sb 206.836†	8.3	0.0043	mg/L	0.00078				18.30%
Se 196.026†	2.3	0.0028	mg/L	0.00273				97.44%
Sn 189.927†	45.5	0.0095	mg/L	0.00028				2.91%
Ti 337.279†	499.3	0.0009	mg/L	0.00019				21.08%
Tl 190.801†	4.9	0.0027	mg/L	0.00060				22.41%
V 292.402†	-4.2	-0.0001	mg/L	0.00026				385.88%
Zn 206.200†	105.6	0.0036	mg/L	0.00006				1.75%
Ca 227.546†	5.3	0.0305	mg/L	0.01944				63.85%
Sr 421.552†	81.5	0.0007	mg/L	0.00001				1.46%
Al 394.401†	1558.0	0.0384	mg/L	0.00122				3.17%
Al 237.313†	201.3	0.0330	mg/L	0.00172				5.21%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 108 **Autosampler Location: 101**
Sample ID: R1407951-002 **Date Collected: 10/15/2014 1:02:00 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: R1407951-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD

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Y 371.029	6125618.2	0.9100 mg/L	0.00026	0.03%
Ag 328.068†	-1197.7	0.0014 mg/L	0.00037	26.03%
Al 308.215†	382158.1	26.04 mg/L	0.085	0.33%
As 188.979†	19.7	0.0146 mg/L	0.00076	5.23%
B 249.772†	30012.3	0.1649 mg/L	0.00083	0.50%
Ba 233.527†	77696.4	0.9203 mg/L	0.00158	0.17%
Be 313.107†	6482.5	0.0022 mg/L	0.00006	2.60%
Cd 226.502†	275.9	0.0003 mg/L	0.00003	10.30%
Co 228.616†	498.3	0.0228 mg/L	0.00023	1.01%
Cr 267.716†	2743.0	0.0275 mg/L	0.00010	0.36%
Cu 324.752†	7077.2	0.0288 mg/L	0.00045	1.57%
Fe 259.939†	1240345.1	22.30 mg/L	0.002	0.01%
K 766.490†	8747.5	13.11 mg/L	0.115	0.88%
Mg 279.077†	283419.8	27.54 mg/L	0.084	0.30%
Mn 257.610†	3644998.9	10.64 mg/L	0.000	0.00%
Mo 202.031†	28.8	0.0017 mg/L	0.00008	4.57%
Ni 231.604†	1477.3	0.0352 mg/L	0.00050	1.41%
Na 589.592†	8361125.9	1524 mg/L	2.4	0.15%
Pb 220.353†	44.0	0.0096 mg/L	0.00067	7.00%
Sb 206.836†	11.9	0.0038 mg/L	0.00114	30.21%
Se 196.026†	1.4	0.0073 mg/L	0.00014	1.87%
Sn 189.927†	12.9	-0.0003 mg/L	0.00068	203.86%
Ti 337.279†	308738.3	0.5544 mg/L	0.00117	0.21%
Tl 190.801†	18.8	0.0092 mg/L	0.00177	19.11%
V 292.402†	2380.7	0.0351 mg/L	0.00021	0.58%
Zn 206.200†	2343.4	0.0792 mg/L	0.00098	1.23%
Ca 227.546†	5542.6	31.32 mg/L	0.041	0.13%
Sr 421.552†	20137.2	0.1738 mg/L	0.00100	0.58%
Al 394.401†	1060547.6	26.17 mg/L	0.032	0.12%
Al 237.313†	142789.7	23.42 mg/L	0.008	0.03%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 109 **Autosampler Location: 102**
Sample ID: R1408007-001 **Date Collected: 10/15/2014 1:08:20 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: R1408007-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5839263.7	0.8674	mg/L	0.00755				0.87%
Ag 328.068†	-745.1	-0.0020	mg/L	0.00025				12.83%
Al 308.215†	5864.7	0.3461	mg/L	0.00674				1.95%
As 188.979†	17.0	0.0135	mg/L	0.00099				7.35%
B 249.772†	26172.7	0.2031	mg/L	0.00136				0.67%
Ba 233.527†	198724.8	2.354	mg/L	0.0010				0.04%
Be 313.107†	99.5	0.0000	mg/L	0.00003				98.91%
Cd 226.502†	159.5	0.0015	mg/L	0.00002				1.07%
Co 228.616†	254.5	0.0116	mg/L	0.00036				3.11%
Cr 267.716†	432.3	0.0058	mg/L	0.00003				0.56%
Cu 324.752†	11880.6	0.0452	mg/L	0.00022				0.49%
Fe 259.939†	196102.4	3.525	mg/L	0.0019				0.05%
K 766.490†	12907.4	19.34	mg/L	0.063				0.32%
Mg 279.077†	198581.1	19.30	mg/L	0.041				0.21%
Mn 257.610†	2368766.2	6.912	mg/L	0.0312				0.45%
Mo 202.031†	144.8	0.0087	mg/L	0.00005				0.53%
Ni 231.604†	1210.6	0.0289	mg/L	0.00026				0.90%
Na 589.592†	8460584.3	1543	mg/L	24.7				1.60%
Pb 220.353†	516.5	0.0861	mg/L	0.00215				2.50%
Sb 206.836†	11.5	0.0058	mg/L	0.00087				14.96%
Se 196.026†	4.5	0.0063	mg/L	0.00491				78.36%
Sn 189.927†	-145.5	-0.0305	mg/L	0.00020				0.66%
Ti 337.279†	1434.8	0.0026	mg/L	0.00013				5.15%
Tl 190.801†	23.7	0.0094	mg/L	0.00133				14.21%
V 292.402†	32.3	0.0003	mg/L	0.00003				9.58%
Zn 206.200†	6295.7	0.2129	mg/L	0.00224				1.05%
Ca 227.546†	74992.5	405.3	mg/L	1.10				0.27%
Sr 421.552†	343486.9	2.965	mg/L	0.0530				1.79%
Al 394.401†	12019.8	0.2966	mg/L	0.00030				0.10%

00686

Al 237.313† 1327.0 0.2177 mg/L 0.00550 2.53%
Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 110
Sample ID: R1408017-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 10/15/2014 1:14:47 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-002

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	5995270.4	0.8906	mg/L	0.00097				0.11%
Ag 328.068†	-834.2	0.0007	mg/L	0.00021				29.97%
Al 308.215†	63680.3	4.341	mg/L	0.0201				0.46%
As 188.979†	18.3	0.0143	mg/L	0.00225				15.67%
B 249.772†	10235.5	0.0232	mg/L	0.00059				2.52%
Ba 233.527†	48071.1	0.5694	mg/L	0.00053				0.09%
Be 313.107†	1404.7	0.0005	mg/L	0.00005				10.63%
Cd 226.502†	187.8	0.0003	mg/L	0.00002				7.32%
Co 228.616†	321.4	0.0147	mg/L	0.00001				0.08%
Cr 267.716†	277.1	0.0041	mg/L	0.00001				0.24%
Cu 324.752†	3621.4	0.0150	mg/L	0.00020				1.35%
Fe 259.939†	807355.7	14.51	mg/L	0.010				0.07%
K 766.490†	2993.3	4.485	mg/L	0.0651				1.45%
Mg 279.077†	105871.8	10.29	mg/L	0.002				0.02%
Mn 257.610†	2829747.4	8.259	mg/L	0.0025				0.03%
Mo 202.031†	13.7	0.0008	mg/L	0.00030				36.35%
Ni 231.604†	974.0	0.0232	mg/L	0.00007				0.30%
Na 589.592†	8346093.5	1522	mg/L	4.3				0.28%
Pb 220.353†	97.8	0.0163	mg/L	0.00002				0.11%
Sb 206.836†	7.1	0.0032	mg/L	0.00081				24.98%
Se 196.026†	4.6	0.0089	mg/L	0.00141				15.88%
Sn 189.927†	-35.2	-0.0079	mg/L	0.00012				1.48%
Ti 337.279†	45698.1	0.0821	mg/L	0.00088				1.08%
Tl 190.801†	13.6	0.0075	mg/L	0.00141				18.76%
V 292.402†	337.6	0.0043	mg/L	0.00006				1.39%
Zn 206.200†	2228.0	0.0753	mg/L	0.00035				0.47%
Ca 227.546†	3994.8	22.44	mg/L	0.167				0.74%
Sr 421.552†	16062.8	0.1387	mg/L	0.00036				0.26%
Al 394.401†	175442.0	4.329	mg/L	0.0184				0.43%
Al 237.313†	22743.1	3.730	mg/L	0.0126				0.34%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 111
Sample ID: R1408017-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 10/15/2014 1:21:02 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-004

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	5828190.0	0.8658	mg/L	0.00040				0.05%
Ag 328.068†	-772.9	0.0007	mg/L	0.00006				8.54%
Al 308.215†	7276.6	0.4996	mg/L	0.01532				3.07%
As 188.979†	20.8	0.0165	mg/L	0.00199				12.06%
B 249.772†	10555.7	0.0314	mg/L	0.00060				1.91%
Ba 233.527†	48654.2	0.5763	mg/L	0.00726				1.26%
Be 313.107†	2123.9	0.0007	mg/L	0.00005				6.99%
Cd 226.502†	133.6	-0.0003	mg/L	0.00009				33.94%
Co 228.616†	394.6	0.0180	mg/L	0.00006				0.32%
Cr 267.716†	-67.2	0.0008	mg/L	0.00004				4.58%
Cu 324.752†	1490.5	0.0069	mg/L	0.00052				7.53%
Fe 259.939†	752919.2	13.53	mg/L	0.040				0.30%
K 766.490†	3348.6	5.017	mg/L	0.0398				0.79%
Mg 279.077†	83744.8	8.138	mg/L	0.0953				1.17%
Mn 257.610†	2376382.3	6.936	mg/L	0.0193				0.28%

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Mo 202.031†	14.8	0.0009	mg/L	0.00007	8.18%
Ni 231.604†	3262.6	0.0778	mg/L	0.00036	0.46%
Na 589.592†	8465111.3	1543	mg/L	7.2	0.47%
Pb 220.353†	184.0	0.0303	mg/L	0.00047	1.55%
Sb 206.836†	9.7	0.0049	mg/L	0.00202	40.90%
Se 196.026†	1.2	0.0046	mg/L	0.00113	24.53%
Sn 189.927†	-18.8	-0.0040	mg/L	0.00092	22.94%
Ti 337.279†	2687.4	0.0048	mg/L	0.00000	0.08%
Tl 190.801†	9.0	0.0052	mg/L	0.00107	20.49%
V 292.402†	53.5	0.0000	mg/L	0.00023	643.77%
Zn 206.200†	844.9	0.0286	mg/L	0.00009	0.32%
Ca 227.546†	3071.0	17.38	mg/L	0.239	1.37%
Sr 421.552†	13276.9	0.1146	mg/L	0.00079	0.69%
Al 394.401†	16933.9	0.4179	mg/L	0.00729	1.74%
Al 237.313†	1733.4	0.2843	mg/L	0.00529	1.86%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 112
Sample ID: R1408017-006
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 10/15/2014 1:27:20 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-006

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5929997.2	0.8809	mg/L	0.00159				0.18%
Ag 328.068†	-191.1	-0.0005	mg/L	0.00006				12.68%
Al 308.215†	31987.2	2.178	mg/L	0.0183				0.84%
As 188.979†	8.0	0.0063	mg/L	0.00142				22.60%
B 249.772†	4466.7	0.0349	mg/L	0.00035				1.00%
Ba 233.527†	25625.6	0.3035	mg/L	0.00105				0.35%
Be 313.107†	135.2	0.0000	mg/L	0.00001				24.02%
Cd 226.502†	5.7	-0.0001	mg/L	0.00011				142.37%
Co 228.616†	11.9	0.0005	mg/L	0.00003				4.70%
Cr 267.716†	377.4	0.0039	mg/L	0.00004				0.98%
Cu 324.752†	4092.0	0.0155	mg/L	0.00015				0.96%
Fe 259.939†	61305.9	1.102	mg/L	0.0037				0.33%
K 766.490†	2231.9	3.344	mg/L	0.1096				3.28%
Mg 279.077†	60318.0	5.861	mg/L	0.0190				0.32%
Mn 257.610†	31630.3	0.0924	mg/L	0.00012				0.13%
Mo 202.031†	21.1	0.0013	mg/L	0.00011				8.29%
Ni 231.604†	472.9	0.0113	mg/L	0.00019				1.65%
Na 589.592†	8568056.1	1562	mg/L	8.3				0.53%
Pb 220.353†	1.3	0.0004	mg/L	0.00008				19.42%
Sb 206.836†	7.5	0.0036	mg/L	0.00076				20.88%
Se 196.026†	1.5	0.0021	mg/L	0.00459				222.45%
Sn 189.927†	-9.8	-0.0023	mg/L	0.00028				12.20%
Ti 337.279†	22923.9	0.0412	mg/L	0.00073				1.77%
Tl 190.801†	4.4	0.0022	mg/L	0.00214				96.31%
V 292.402†	154.9	0.0023	mg/L	0.00008				3.38%
Zn 206.200†	880.3	0.0298	mg/L	0.00015				0.49%
Ca 227.546†	2188.0	11.89	mg/L	0.044				0.37%
Sr 421.552†	7539.7	0.0651	mg/L	0.00029				0.45%
Al 394.401†	86953.9	2.146	mg/L	0.0153				0.71%
Al 237.313†	11569.6	1.898	mg/L	0.0211				1.11%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 113
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 10/15/2014 1:33:33 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6410285.0	0.9523	mg/L	0.00766				0.80%

00688

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Ag 328.068†	132687.0	0.5256 mg/L	0.00011	0.5256 mg/L	0.00011	0.02%
QC value within limits for Ag 328.068 Recovery = 105.12%						
Al 308.215†	145696.3	9.924 mg/L	0.0022	9.924 mg/L	0.0022	0.02%
QC value within limits for Al 308.215 Recovery = 99.24%						
As 188.979†	1278.0	1.015 mg/L	0.0135	1.015 mg/L	0.0135	1.33%
QC value within limits for As 188.979 Recovery = 101.50%						
B 249.772†	269176.4	2.437 mg/L	0.0287	2.437 mg/L	0.0287	1.18%
QC value within limits for B 249.772 Recovery = 97.50%						
Ba 233.527†	877754.4	10.40 mg/L	0.015	10.40 mg/L	0.015	0.15%
QC value within limits for Ba 233.527 Recovery = 103.97%						
Be 313.107†	739002.5	0.2562 mg/L	0.00015	0.2562 mg/L	0.00015	0.06%
QC value within limits for Be 313.107 Recovery = 102.46%						
Cd 226.502†	42661.0	0.5209 mg/L	0.00548	0.5209 mg/L	0.00548	1.05%
QC value within limits for Cd 226.502 Recovery = 104.17%						
Co 228.616†	56135.1	2.566 mg/L	0.0121	2.566 mg/L	0.0121	0.47%
QC value within limits for Co 228.616 Recovery = 102.66%						
Cr 267.716†	60815.8	0.5300 mg/L	0.00273	0.5300 mg/L	0.00273	0.52%
QC value within limits for Cr 267.716 Recovery = 106.01%						
Cu 324.752†	335813.3	1.268 mg/L	0.0012	1.268 mg/L	0.0012	0.09%
QC value within limits for Cu 324.752 Recovery = 101.44%						
Fe 259.939†	286665.5	5.153 mg/L	0.0262	5.153 mg/L	0.0262	0.51%
QC value within limits for Fe 259.939 Recovery = 103.06%						
K 766.490†	17601.0	26.37 mg/L	0.314	26.37 mg/L	0.314	1.19%
QC value within limits for K 766.490 Recovery = 105.48%						
Mg 279.077†	263095.1	25.57 mg/L	0.129	25.57 mg/L	0.129	0.50%
QC value within limits for Mg 279.077 Recovery = 102.26%						
Mn 257.610†	266053.4	0.7770 mg/L	0.00349	0.7770 mg/L	0.00349	0.45%
QC value within limits for Mn 257.610 Recovery = 103.60%						
Mo 202.031†	41576.4	2.506 mg/L	0.0125	2.506 mg/L	0.0125	0.50%
QC value within limits for Mo 202.031 Recovery = 100.22%						
Ni 231.604†	87354.4	2.084 mg/L	0.0132	2.084 mg/L	0.0132	0.63%
QC value within limits for Ni 231.604 Recovery = 104.20%						
Na 589.592†	146989.4	26.80 mg/L	0.397	26.80 mg/L	0.397	1.48%
QC value within limits for Na 589.592 Recovery = 107.20%						
Pb 220.353†	3062.5	0.5118 mg/L	0.00379	0.5118 mg/L	0.00379	0.74%
QC value within limits for Pb 220.353 Recovery = 102.37%						
Sb 206.836†	9831.7	5.029 mg/L	0.0589	5.029 mg/L	0.0589	1.17%
QC value within limits for Sb 206.836 Recovery = 100.58%						
Se 196.026†	416.6	0.5059 mg/L	0.00920	0.5059 mg/L	0.00920	1.82%
QC value within limits for Se 196.026 Recovery = 101.18%						
Sn 189.927†	24831.8	5.204 mg/L	0.0639	5.204 mg/L	0.0639	1.23%
QC value within limits for Sn 189.927 Recovery = 104.08%						
Ti 337.279†	1405395.3	2.523 mg/L	0.0012	2.523 mg/L	0.0012	0.05%
QC value within limits for Ti 337.279 Recovery = 100.94%						
Tl 190.801†	1844.0	1.008 mg/L	0.0162	1.008 mg/L	0.0162	1.61%
QC value within limits for Tl 190.801 Recovery = 100.77%						
V 292.402†	171155.7	2.619 mg/L	0.0000	2.619 mg/L	0.0000	0.00%
QC value within limits for V 292.402 Recovery = 104.76%						
Zn 206.200†	30760.5	1.040 mg/L	0.0119	1.040 mg/L	0.0119	1.14%
QC value within limits for Zn 206.200 Recovery = 104.01%						
Ca 227.546†	4518.5	24.74 mg/L	0.286	24.74 mg/L	0.286	1.16%
QC value within limits for Ca 227.546 Recovery = 98.95%						
Sr 421.552†	279108.2	2.410 mg/L	0.0346	2.410 mg/L	0.0346	1.43%
QC value within limits for Sr 421.552 Recovery = 96.38%						
Al 394.401†	399802.3	9.866 mg/L	0.0076	9.866 mg/L	0.0076	0.08%
QC value within limits for Al 394.401 Recovery = 98.66%						
Al 237.313†	61535.3	10.09 mg/L	0.005	10.09 mg/L	0.005	0.05%
QC value within limits for Al 237.313 Recovery = 100.93%						

All analyte(s) passed QC.

Sequence No.: 114
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 10/15/2014 1:39:38 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6581577.9	0.9777	mg/L	0.00181				0.19%

00689

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Ag 328.068†	43.0	0.0002 mg/L	0.00016	0.0002 mg/L	0.00016	92.83%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 308.215†	19.5	0.0013 mg/L	0.00198	0.0013 mg/L	0.00198	148.65%
QC value within limits for Al 308.215 Recovery = Not calculated						
As 188.979†	0.4	0.0003 mg/L	0.00128	0.0003 mg/L	0.00128	419.50%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.772†	2099.2	0.0192 mg/L	0.00267	0.0192 mg/L	0.00267	13.92%
QC value within limits for B 249.772 Recovery = Not calculated						
Ba 233.527†	318.1	0.0038 mg/L	0.00068	0.0038 mg/L	0.00068	18.07%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	334.5	0.0001 mg/L	0.00002	0.0001 mg/L	0.00002	13.08%
QC value within limits for Be 313.107 Recovery = Not calculated						
Cd 226.502†	10.3	0.0001 mg/L	0.00004	0.0001 mg/L	0.00004	35.60%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	20.3	0.0009 mg/L	0.00004	0.0009 mg/L	0.00004	4.28%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-6.4	-0.0001 mg/L	0.00011	-0.0001 mg/L	0.00011	206.58%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	708.3	0.0027 mg/L	0.00028	0.0027 mg/L	0.00028	10.65%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	402.2	0.0072 mg/L	0.00085	0.0072 mg/L	0.00085	11.78%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	156.6	0.2347 mg/L	0.05923	0.2347 mg/L	0.05923	25.24%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	19.3	0.0019 mg/L	0.00169	0.0019 mg/L	0.00169	89.99%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	577.5	0.0017 mg/L	0.00012	0.0017 mg/L	0.00012	6.93%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	12.9	0.0008 mg/L	0.00037	0.0008 mg/L	0.00037	46.90%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	49.8	0.0012 mg/L	0.00038	0.0012 mg/L	0.00038	31.64%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	2793.4	0.5093 mg/L	0.00026	0.5093 mg/L	0.00026	0.05%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	10.2	0.0017 mg/L	0.00014	0.0017 mg/L	0.00014	8.10%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	6.1	0.0031 mg/L	0.00069	0.0031 mg/L	0.00069	22.10%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.5	0.0007 mg/L	0.00205	0.0007 mg/L	0.00205	313.36%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	36.0	0.0075 mg/L	0.00159	0.0075 mg/L	0.00159	21.08%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	522.3	0.0009 mg/L	0.00009	0.0009 mg/L	0.00009	9.71%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	-0.4	-0.0002 mg/L	0.00045	-0.0002 mg/L	0.00045	201.80%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	57.2	0.0009 mg/L	0.00007	0.0009 mg/L	0.00007	7.44%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	41.7	0.0014 mg/L	0.00024	0.0014 mg/L	0.00024	16.76%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	1.2	0.0070 mg/L	0.00325	0.0070 mg/L	0.00325	46.25%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	114.0	0.0010 mg/L	0.00021	0.0010 mg/L	0.00021	20.89%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 394.401†	51.6	0.0013 mg/L	0.00163	0.0013 mg/L	0.00163	127.83%
QC value within limits for Al 394.401 Recovery = Not calculated						
Al 237.313†	13.8	0.0023 mg/L	0.00007	0.0023 mg/L	0.00007	3.08%
QC value within limits for Al 237.313 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 115
Sample ID: R1408017-006D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 106
Date Collected: 10/15/2014 1:45:39 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-006D

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6047714.7	0.8984	mg/L	0.00141				0.16%

00690

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Ag 328.068†	-132.5	-0.0002	mg/L	0.00011	46.66%
Al 308.215†	29934.3	2.038	mg/L	0.0141	0.69%
As 188.979†	11.1	0.0087	mg/L	0.00003	0.36%
B 249.772†	5596.9	0.0455	mg/L	0.00067	1.47%
Ba 233.527†	24585.2	0.2912	mg/L	0.00295	1.01%
Be 313.107†	256.3	0.0001	mg/L	0.00001	5.75%
Cd 226.502†	15.9	0.0001	mg/L	0.00003	58.16%
Co 228.616†	22.3	0.0010	mg/L	0.00024	23.67%
Cr 267.716†	243.3	0.0027	mg/L	0.00005	1.69%
Cu 324.752†	3585.2	0.0136	mg/L	0.00043	3.17%
Fe 259.939†	57917.8	1.041	mg/L	0.0090	0.86%
K 766.490†	1955.3	2.930	mg/L	0.0049	0.17%
Mg 279.077†	57405.4	5.578	mg/L	0.0521	0.93%
Mn 257.610†	29065.0	0.0849	mg/L	0.00082	0.97%
Mo 202.031†	27.1	0.0016	mg/L	0.00020	11.98%
Ni 231.604†	446.2	0.0106	mg/L	0.00037	3.44%
Na 589.592†	8163448.8	1488	mg/L	24.1	1.62%
Pb 220.353†	0.7	0.0003	mg/L	0.00050	155.97%
Sb 206.836†	7.8	0.0038	mg/L	0.00016	4.10%
Se 196.026†	1.2	0.0017	mg/L	0.00204	116.44%
Sn 189.927†	52.4	0.0107	mg/L	0.00260	24.16%
Ti 337.279†	21977.4	0.0395	mg/L	0.00106	2.69%
Tl 190.801†	6.4	0.0034	mg/L	0.00140	41.81%
V 292.402†	182.8	0.0027	mg/L	0.00004	1.50%
Zn 206.200†	785.6	0.0266	mg/L	0.00001	0.05%
Ca 227.546†	2090.5	11.36	mg/L	0.002	0.02%
Sr 421.552†	7214.0	0.0623	mg/L	0.00036	0.57%
Al 394.401†	81399.4	2.009	mg/L	0.0126	0.63%
Al 237.313†	10860.9	1.781	mg/L	0.0132	0.74%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 116
Sample ID: R1408017-006S 6X
Analyst:
Initial Sample Wt:
Dilution: 6X

Autosampler Location: 107
Date Collected: 10/15/2014 1:52:04 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-006S 6X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6448764.7	0.9580	mg/L	0.00825				0.86%
Ag 328.068†	428797.2	1.694	mg/L	0.0209				1.23%
Al 308.215†	4229.2	0.2879	mg/L	0.00778				2.70%
As 188.979†	2101.4	1.670	mg/L	0.0101				0.60%
B 249.772†	1014.9	0.0085	mg/L	0.00038				4.50%
Ba 233.527†	155405.3	1.841	mg/L	0.0220				1.19%
Be 313.107†	-1053.8	-0.0004	mg/L	0.00004				12.25%
Cd 226.502†	29147.9	0.3563	mg/L	0.00466				1.31%
Co 228.616†	9.9	0.0005	mg/L	0.00003				7.50%
Cr 267.716†	202396.4	1.755	mg/L	0.0218				1.24%
Cu 324.752†	587.0	0.0022	mg/L	0.00047				21.18%
Fe 259.939†	8490.8	0.1526	mg/L	0.00153				1.01%
K 766.490†	438.7	0.6573	mg/L	0.04263				6.49%
Mg 279.077†	9542.5	0.9273	mg/L	0.00707				0.76%
Mn 257.610†	4729.1	0.0138	mg/L	0.00006				0.43%
Mo 202.031†	10.1	0.0006	mg/L	0.00015				23.90%
Ni 231.604†	58.4	0.0014	mg/L	0.00011				7.72%
Na 589.592†	1301229.3	237.2	mg/L	1.51				0.64%
Pb 220.353†	10631.4	1.774	mg/L	0.0221				1.24%
Sb 206.836†	6.5	0.0033	mg/L	0.00124				37.54%
Se 196.026†	278.0	0.3368	mg/L	0.00649				1.93%
Sn 189.927†	-4.0	-0.0009	mg/L	0.00008				9.54%
Ti 337.279†	3715.7	0.0067	mg/L	0.00003				0.48%
Tl 190.801†	1.9	0.0010	mg/L	0.00142				136.58%
V 292.402†	-434.7	-0.0067	mg/L	0.00044				6.54%
Zn 206.200†	149.0	0.0050	mg/L	0.00011				2.25%
Ca 227.546†	301.1	1.636	mg/L	0.0287				1.75%
Sr 421.552†	1146.1	0.0099	mg/L	0.00030				3.03%
Al 394.401†	10604.9	0.2617	mg/L	0.00356				1.36%
Al 237.313†	1508.2	0.2474	mg/L	0.00258				1.04%

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Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 117
Sample ID: R1408017-006S
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 108
Date Collected: 10/15/2014 1:58:19 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-006S

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6096007.6	0.9056	mg/L	0.00578				0.64%
Ag 328.068†	2621580.9	10.36	mg/L	0.001				0.01%
Al 308.215†	26867.0	1.829	mg/L	0.0104				0.57%
As 188.979†	13130.6	10.43	mg/L	0.050				0.48%
B 249.772†	4639.2	0.0375	mg/L	0.00048				1.27%
Ba 233.527†	920944.2	10.91	mg/L	0.027				0.25%
Be 313.107†	-4105.3	-0.0014	mg/L	0.00001				0.64%
Cd 226.502†	167657.4	2.050	mg/L	0.0005				0.03%
Co 228.616†	62.9	0.0029	mg/L	0.00006				1.97%
Cr 267.716†	1173821.3	10.18	mg/L	0.013				0.13%
Cu 324.752†	2285.5	0.0087	mg/L	0.00008				0.94%
Fe 259.939†	49371.4	0.8875	mg/L	0.00278				0.31%
K 766.490†	1830.3	2.742	mg/L	0.0224				0.82%
Mg 279.077†	56802.5	5.520	mg/L	0.0074				0.13%
Mn 257.610†	27571.7	0.0806	mg/L	0.00030				0.37%
Mo 202.031†	67.1	0.0040	mg/L	0.00010				2.39%
Ni 231.604†	438.6	0.0105	mg/L	0.00024				2.30%
Na 589.592†	8142708.0	1485	mg/L	14.6				0.98%
Pb 220.353†	63200.4	10.54	mg/L	0.018				0.17%
Sb 206.836†	19.3	0.0097	mg/L	0.00087				8.96%
Se 196.026†	1700.8	2.060	mg/L	0.0292				1.42%
Sn 189.927†	24.4	0.0049	mg/L	0.00039				7.95%
Ti 337.279†	18532.7	0.0333	mg/L	0.00093				2.79%
Tl 190.801†	14.2	0.0076	mg/L	0.00007				0.93%
V 292.402†	-2640.3	-0.0405	mg/L	0.00023				0.56%
Zn 206.200†	646.8	0.0219	mg/L	0.00074				3.40%
Ca 227.546†	2095.3	11.37	mg/L	0.134				1.18%
Sr 421.552†	7201.9	0.0622	mg/L	0.00051				0.82%
Al 394.401†	72383.5	1.786	mg/L	0.0104				0.58%
Al 237.313†	9591.7	1.573	mg/L	0.0050				0.32%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 118
Sample ID: R1408017-006S-W
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 109
Date Collected: 10/15/2014 2:04:38 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-006S-W

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6016379.9	0.8938	mg/L	0.00737				0.82%
Ag 328.068†	11148.8	0.0445	mg/L	0.00073				1.65%
Al 308.215†	57036.3	3.884	mg/L	0.0342				0.88%
As 188.979†	66.2	0.0525	mg/L	0.00127				2.42%
B 249.772†	114887.9	1.043	mg/L	0.0111				1.07%
Ba 233.527†	202544.7	2.399	mg/L	0.0075				0.31%
Be 313.107†	146914.4	0.0509	mg/L	0.00006				0.11%
Cd 226.502†	4164.6	0.0507	mg/L	0.00050				0.99%
Co 228.616†	11349.8	0.5189	mg/L	0.00055				0.11%
Cr 267.716†	24538.3	0.2136	mg/L	0.00055				0.26%
Cu 324.752†	81961.9	0.3095	mg/L	0.00320				1.03%
Fe 259.939†	92431.3	1.662	mg/L	0.0050				0.30%
K 766.490†	18996.2	28.46	mg/L	0.485				1.70%
Mg 279.077†	77122.2	7.494	mg/L	0.0147				0.20%
Mn 257.610†	206316.6	0.6022	mg/L	0.00188				0.31%
Mo 202.031†	8115.4	0.4891	mg/L	0.00502				1.03%

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Ni 231.604†	22136.2	0.5281 mg/L	0.00087		0.16%
Na 589.592†	8260889.5	1506 mg/L	0.7		0.05%
Pb 220.353†	3130.9	0.5227 mg/L	0.00505		0.97%
Sb 206.836†	1022.0	0.5225 mg/L	0.00361		0.69%
Se 196.026†	11.3	0.0141 mg/L	0.00031		2.22%
Sn 189.927†	-9.0	-0.0023 mg/L	0.00060		25.47%
Ti 337.279†	284126.1	0.5102 mg/L	0.00191		0.37%
Tl 190.801†	3722.3	2.035 mg/L	0.0124		0.61%
V 292.402†	33164.7	0.5074 mg/L	0.00158		0.31%
Zn 206.200†	16886.0	0.5710 mg/L	0.00256		0.45%
Ca 227.546†	2555.7	13.91 mg/L	0.025		0.18%
Sr 421.552†	7266.4	0.0627 mg/L	0.00080		1.27%
Al 394.401†	156173.0	3.854 mg/L	0.0389		1.01%
Al 237.313†	20643.2	3.386 mg/L	0.0275		0.81%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 119
Sample ID: R1408017-006L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 110
Date Collected: 10/15/2014 2:10:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-006L

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6408583.9	0.9520	mg/L	0.00336				0.35%
Ag 328.068†	40.9	0.0002	mg/L	0.00003				15.40%
Al 308.215†	6285.7	0.4280	mg/L	0.01021				2.38%
As 188.979†	2.6	0.0020	mg/L	0.00019				9.15%
B 249.772†	1665.0	0.0140	mg/L	0.00107				7.61%
Ba 233.527†	5169.5	0.0612	mg/L	0.00022				0.36%
Be 313.107†	-514.5	-0.0002	mg/L	0.00003				16.90%
Cd 226.502†	4.1	0.0000	mg/L	0.00002				90.06%
Co 228.616†	1.7	0.0001	mg/L	0.00014				184.69%
Cr 267.716†	135.4	0.0013	mg/L	0.00013				9.71%
Cu 324.752†	940.2	0.0036	mg/L	0.00030				8.38%
Fe 259.939†	12446.5	0.2237	mg/L	0.00326				1.46%
K 766.490†	660.3	0.9893	mg/L	0.04544				4.59%
Mg 279.077†	12325.4	1.198	mg/L	0.0102				0.85%
Mn 257.610†	6262.2	0.0183	mg/L	0.00019				1.06%
Mo 202.031†	1.4	0.0001	mg/L	0.00012				143.32%
Ni 231.604†	79.4	0.0019	mg/L	0.00015				7.66%
Na 589.592†	1667651.3	304.1	mg/L	1.20				0.39%
Pb 220.353†	0.9	0.0002	mg/L	0.00001				3.58%
Sb 206.836†	3.2	0.0016	mg/L	0.00041				26.04%
Se 196.026†	0.5	0.0006	mg/L	0.00069				107.80%
Sn 189.927†	-17.9	-0.0038	mg/L	0.00038				9.95%
Ti 337.279†	4899.8	0.0088	mg/L	0.00006				0.71%
Tl 190.801†	1.2	0.0006	mg/L	0.00046				73.94%
V 292.402†	21.3	0.0003	mg/L	0.00001				4.06%
Zn 206.200†	219.2	0.0074	mg/L	0.00012				1.59%
Ca 227.546†	390.6	2.124	mg/L	0.0253				1.19%
Sr 421.552†	1471.1	0.0127	mg/L	0.00021				1.69%
Al 394.401†	15436.0	0.3809	mg/L	0.00504				1.32%
Al 237.313†	2215.9	0.3635	mg/L	0.00030				0.08%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 120
Sample ID: R1408017-008
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 111
Date Collected: 10/15/2014 2:17:04 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-008

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5984814.8	0.8891	mg/L	0.01003				1.13%
Ag 328.068†	34.4	0.0003	mg/L	0.00033				116.55%

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Al 308.215†	16130.4	1.096 mg/L	0.0079		0.72%
As 188.979†	15.0	0.0119 mg/L	0.00016		1.31%
B 249.772†	24109.5	0.2169 mg/L	0.00392		1.81%
Ba 233.527†	38012.7	0.4503 mg/L	0.00984		2.19%
Be 313.107†	707.2	0.0002 mg/L	0.00007		27.77%
Cd 226.502†	11.8	0.0001 mg/L	0.00009		126.90%
Co 228.616†	146.8	0.0067 mg/L	0.00005		0.69%
Cr 267.716†	107.8	0.0021 mg/L	0.00007		3.43%
Cu 324.752†	17150.2	0.0648 mg/L	0.00024		0.38%
Fe 259.939†	29215.9	0.5252 mg/L	0.00887		1.69%
K 766.490†	1560.8	2.339 mg/L	0.0161		0.69%
Mg 279.077†	124684.1	12.12 mg/L	0.264		2.18%
Mn 257.610†	1226022.2	3.577 mg/L	0.0139		0.39%
Mo 202.031†	23.8	0.0014 mg/L	0.00007		4.85%
Ni 231.604†	294.6	0.0070 mg/L	0.00008		1.17%
Na 589.592†	8418778.4	1535 mg/L	13.3		0.87%
Pb 220.353†	26.7	0.0046 mg/L	0.00095		20.87%
Sb 206.836†	4.5	0.0022 mg/L	0.00140		63.39%
Se 196.026†	2.6	0.0032 mg/L	0.00048		14.80%
Sn 189.927†	-32.3	-0.0069 mg/L	0.00017		2.39%
Ti 337.279†	8924.9	0.0160 mg/L	0.00015		0.91%
Tl 190.801†	11.1	0.0059 mg/L	0.00067		11.40%
V 292.402†	57.0	0.0008 mg/L	0.00018		21.27%
Zn 206.200†	1454.7	0.0492 mg/L	0.00017		0.35%
Ca 227.546†	4706.8	25.46 mg/L	0.008		0.03%
Sr 421.552†	12535.0	0.1082 mg/L	0.00054		0.50%
Al 394.401†	41597.9	1.026 mg/L	0.0012		0.12%
Al 237.313†	5308.4	0.8707 mg/L	0.00643		0.74%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 121
Sample ID: R1408017-010
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 112
Date Collected: 10/15/2014 2:23:22 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-010

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5931129.6	0.8811	mg/L	0.00340				0.39%
Ag 328.068†	24.3	0.0006	mg/L	0.00005				7.72%
Al 308.215†	6988.4	0.4693	mg/L	0.01388				2.96%
As 188.979†	12.8	0.0101	mg/L	0.00104				10.24%
B 249.772†	9775.9	0.0775	mg/L	0.00007				0.09%
Ba 233.527†	72213.3	0.8554	mg/L	0.01053				1.23%
Be 313.107†	2940.1	0.0010	mg/L	0.00001				1.17%
Cd 226.502†	89.8	0.0008	mg/L	0.00007				7.86%
Co 228.616†	806.0	0.0368	mg/L	0.00045				1.23%
Cr 267.716†	-79.9	0.0008	mg/L	0.00004				5.28%
Cu 324.752†	18131.5	0.0686	mg/L	0.00107				1.56%
Fe 259.939†	107307.3	1.929	mg/L	0.0235				1.22%
K 766.490†	2221.7	3.329	mg/L	0.0424				1.27%
Mg 279.077†	145807.8	14.17	mg/L	0.173				1.22%
Mn 257.610†	4050803.0	11.82	mg/L	0.032				0.27%
Mo 202.031†	22.7	0.0014	mg/L	0.00010				7.34%
Ni 231.604†	3976.3	0.0949	mg/L	0.00018				0.19%
Na 589.592†	8288621.0	1511	mg/L	3.1				0.20%
Pb 220.353†	150.5	0.0251	mg/L	0.00027				1.06%
Sb 206.836†	9.9	0.0050	mg/L	0.00078				15.56%
Se 196.026†	3.7	0.0049	mg/L	0.00460				93.62%
Sn 189.927†	-96.3	-0.0202	mg/L	0.00050				2.46%
Ti 337.279†	2772.8	0.0050	mg/L	0.00009				1.86%
Tl 190.801†	21.1	0.0111	mg/L	0.00222				19.90%
V 292.402†	-120.0	-0.0019	mg/L	0.00005				2.79%
Zn 206.200†	10757.8	0.3638	mg/L	0.00093				0.26%
Ca 227.546†	10438.6	56.50	mg/L	0.288				0.51%
Sr 421.552†	19972.4	0.1724	mg/L	0.00060				0.35%
Al 394.401†	15051.0	0.3714	mg/L	0.00264				0.71%
Al 237.313†	1266.4	0.2077	mg/L	0.00184				0.89%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

00694

Sequence No.: 122
Sample ID: R1408017-012
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 113
Date Collected: 10/15/2014 2:29:38 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-012

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6083441.7	0.9037	mg/L	0.00159				0.18%
Ag 328.068†	-114.1	-0.0003	mg/L	0.00013				39.62%
Al 308.215†	19026.2	1.294	mg/L	0.0008				0.06%
As 188.979†	6.4	0.0050	mg/L	0.00037				7.40%
B 249.772†	9334.9	0.0823	mg/L	0.00053				0.64%
Ba 233.527†	37850.8	0.4483	mg/L	0.00028				0.06%
Be 313.107†	2271.9	0.0008	mg/L	0.00002				2.79%
Cd 226.502†	4.0	0.0000	mg/L	0.00001				96.42%
Co 228.616†	13.1	0.0006	mg/L	0.00009				15.33%
Cr 267.716†	-14.4	0.0012	mg/L	0.00004				3.34%
Cu 324.752†	1913.7	0.0073	mg/L	0.00000				0.05%
Fe 259.939†	25990.3	0.4672	mg/L	0.00045				0.10%
K 766.490†	2098.8	3.145	mg/L	0.0355				1.13%
Mg 279.077†	138680.6	13.48	mg/L	0.019				0.14%
Mn 257.610†	104918.7	0.3062	mg/L	0.00016				0.05%
Mo 202.031†	13.4	0.0008	mg/L	0.00013				16.08%
Ni 231.604†	1103.5	0.0263	mg/L	0.00034				1.29%
Na 589.592†	8126767.6	1482	mg/L	2.5				0.17%
Pb 220.353†	-4.6	-0.0006	mg/L	0.00058				91.07%
Sb 206.836†	5.0	0.0024	mg/L	0.00132				54.59%
Se 196.026†	2.6	0.0033	mg/L	0.00201				60.63%
Sn 189.927†	-38.6	-0.0082	mg/L	0.00003				0.32%
Ti 337.279†	9327.4	0.0167	mg/L	0.00015				0.87%
Tl 190.801†	4.6	0.0024	mg/L	0.00074				30.80%
V 292.402†	45.7	0.0007	mg/L	0.00000				0.31%
Zn 206.200†	721.5	0.0244	mg/L	0.00038				1.55%
Ca 227.546†	3254.5	17.61	mg/L	0.110				0.63%
Sr 421.552†	14947.3	0.1290	mg/L	0.00141				1.09%
Al 394.401†	49622.9	1.225	mg/L	0.0024				0.20%
Al 237.313†	6669.6	1.094	mg/L	0.0038				0.35%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 123
Sample ID: R1408017-014
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 114
Date Collected: 10/15/2014 2:35:52 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-014

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6056158.6	0.8997	mg/L	0.00562				0.62%
Ag 328.068†	-301.9	0.0004	mg/L	0.00024				62.21%
Al 308.215†	118795.6	8.091	mg/L	0.0574				0.71%
As 188.979†	14.9	0.0115	mg/L	0.00074				6.42%
B 249.772†	8254.8	0.0464	mg/L	0.00020				0.43%
Ba 233.527†	54783.2	0.6489	mg/L	0.00539				0.83%
Be 313.107†	3132.8	0.0011	mg/L	0.00000				0.31%
Cd 226.502†	91.2	0.0003	mg/L	0.00006				17.95%
Co 228.616†	814.5	0.0372	mg/L	0.00034				0.91%
Cr 267.716†	512.4	0.0067	mg/L	0.00025				3.68%
Cu 324.752†	5518.3	0.0214	mg/L	0.00015				0.70%
Fe 259.939†	317978.7	5.716	mg/L	0.0490				0.86%
K 766.490†	3435.3	5.147	mg/L	0.0571				1.11%
Mg 279.077†	207309.9	20.14	mg/L	0.208				1.03%
Mn 257.610†	2441092.9	7.124	mg/L	0.0154				0.22%
Mo 202.031†	21.4	0.0013	mg/L	0.00013				9.85%
Ni 231.604†	1221.5	0.0291	mg/L	0.00003				0.11%

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Na 589.592†	8101078.9	1477	mg/L	7.2	0.49%
Pb 220.353†	10.7	0.0025	mg/L	0.00008	3.06%
Sb 206.836†	7.8	0.0033	mg/L	0.00031	9.53%
Se 196.026†	5.6	0.0082	mg/L	0.00457	55.85%
Sn 189.927†	-47.3	-0.0109	mg/L	0.00009	0.80%
Ti 337.279†	90653.5	0.1628	mg/L	0.00421	2.59%
Tl 190.801†	11.6	0.0059	mg/L	0.00176	29.78%
V 292.402†	602.0	0.0089	mg/L	0.00010	1.12%
Zn 206.200†	1108.2	0.0375	mg/L	0.00025	0.66%
Ca 227.546†	4878.5	26.71	mg/L	0.092	0.34%
Sr 421.552†	15335.1	0.1324	mg/L	0.00166	1.25%
Al 394.401†	329618.2	8.134	mg/L	0.0462	0.57%
Al 237.313†	43844.7	7.192	mg/L	0.0417	0.58%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 124
Sample ID: R1408017-016
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 115
Date Collected: 10/15/2014 2:42:13 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-016

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5914406.5	0.8786	mg/L	0.00479				0.54%
Ag 328.068†	-177.4	-0.0005	mg/L	0.00002				3.38%
Al 308.215†	33734.6	2.297	mg/L	0.0485				2.11%
As 188.979†	11.0	0.0086	mg/L	0.00371				43.05%
B 249.772†	3005.7	0.0228	mg/L	0.00023				0.99%
Ba 233.527†	35026.4	0.4149	mg/L	0.00426				1.03%
Be 313.107†	1397.5	0.0005	mg/L	0.00004				8.46%
Cd 226.502†	-5.4	-0.0002	mg/L	0.00002				11.20%
Co 228.616†	3.8	0.0002	mg/L	0.00020				117.27%
Cr 267.716†	138.9	0.0019	mg/L	0.00006				3.27%
Cu 324.752†	1973.7	0.0075	mg/L	0.00030				3.99%
Fe 259.939†	46714.4	0.8397	mg/L	0.00863				1.03%
K 766.490†	2228.7	3.339	mg/L	0.0742				2.22%
Mg 279.077†	65977.4	6.411	mg/L	0.0647				1.01%
Mn 257.610†	39546.2	0.1155	mg/L	0.00096				0.83%
Mo 202.031†	16.1	0.0010	mg/L	0.00028				28.69%
Ni 231.604†	434.7	0.0104	mg/L	0.00003				0.29%
Na 589.592†	8366716.9	1525	mg/L	9.0				0.59%
Pb 220.353†	-2.0	-0.0001	mg/L	0.00022				202.02%
Sb 206.836†	8.4	0.0041	mg/L	0.00068				16.66%
Se 196.026†	5.7	0.0072	mg/L	0.00164				22.94%
Sn 189.927†	-12.6	-0.0029	mg/L	0.00042				14.29%
Ti 337.279†	16128.3	0.0290	mg/L	0.00169				5.82%
Tl 190.801†	4.1	0.0021	mg/L	0.00068				33.21%
V 292.402†	114.5	0.0017	mg/L	0.00001				0.31%
Zn 206.200†	550.0	0.0186	mg/L	0.00021				1.15%
Ca 227.546†	2107.2	11.44	mg/L	0.137				1.20%
Sr 421.552†	7494.6	0.0647	mg/L	0.00088				1.36%
Al 394.401†	90456.0	2.232	mg/L	0.0372				1.67%
Al 237.313†	12011.5	1.970	mg/L	0.0273				1.38%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 125
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 10/15/2014 2:48:27 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6441781.7	0.9570	mg/L	0.00612				0.64%
Ag 328.068†	127207.6	0.5039	mg/L	0.00002	0.5039	mg/L	0.00002	0.00%

QC value within limits for Ag 328.068 Recovery = 100.78%

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Al 308.215†	140995.3	9.603 mg/L	0.0135	9.603 mg/L	0.0135	0.14%
QC value within limits for Al 308.215 Recovery = 96.03%						
As 188.979†	1194.3	0.9485 mg/L	0.00315	0.9485 mg/L	0.00315	0.33%
QC value within limits for As 188.979 Recovery = 94.85%						
B 249.772†	257416.4	2.330 mg/L	0.0172	2.330 mg/L	0.0172	0.74%
QC value within limits for B 249.772 Recovery = 93.22%						
Ba 233.527†	859711.6	10.18 mg/L	0.020	10.18 mg/L	0.020	0.20%
QC value within limits for Ba 233.527 Recovery = 101.83%						
Be 313.107†	716995.5	0.2485 mg/L	0.00073	0.2485 mg/L	0.00073	0.30%
QC value within limits for Be 313.107 Recovery = 99.41%						
Cd 226.502†	41007.8	0.5007 mg/L	0.00085	0.5007 mg/L	0.00085	0.17%
QC value within limits for Cd 226.502 Recovery = 100.13%						
Co 228.616†	54467.4	2.490 mg/L	0.0039	2.490 mg/L	0.0039	0.16%
QC value within limits for Co 228.616 Recovery = 99.61%						
Cr 267.716†	58486.4	0.5098 mg/L	0.00029	0.5098 mg/L	0.00029	0.06%
QC value within limits for Cr 267.716 Recovery = 101.95%						
Cu 324.752†	324491.9	1.225 mg/L	0.0006	1.225 mg/L	0.0006	0.05%
QC value within limits for Cu 324.752 Recovery = 98.02%						
Fe 259.939†	278806.3	5.012 mg/L	0.0029	5.012 mg/L	0.0029	0.06%
QC value within limits for Fe 259.939 Recovery = 100.23%						
K 766.490†	17562.0	26.31 mg/L	0.210	26.31 mg/L	0.210	0.80%
QC value within limits for K 766.490 Recovery = 105.25%						
Mg 279.077†	254887.1	24.77 mg/L	0.023	24.77 mg/L	0.023	0.09%
QC value within limits for Mg 279.077 Recovery = 99.07%						
Mn 257.610†	258566.9	0.7551 mg/L	0.00096	0.7551 mg/L	0.00096	0.13%
QC value within limits for Mn 257.610 Recovery = 100.68%						
Mo 202.031†	39936.8	2.407 mg/L	0.0000	2.407 mg/L	0.0000	0.00%
QC value within limits for Mo 202.031 Recovery = 96.27%						
Ni 231.604†	84061.0	2.005 mg/L	0.0001	2.005 mg/L	0.0001	0.01%
QC value within limits for Ni 231.604 Recovery = 100.27%						
Na 589.592†	146375.5	26.69 mg/L	0.198	26.69 mg/L	0.198	0.74%
QC value within limits for Na 589.592 Recovery = 106.75%						
Pb 220.353†	2935.2	0.4906 mg/L	0.00281	0.4906 mg/L	0.00281	0.57%
QC value within limits for Pb 220.353 Recovery = 98.12%						
Sb 206.836†	9236.1	4.724 mg/L	0.0299	4.724 mg/L	0.0299	0.63%
QC value within limits for Sb 206.836 Recovery = 94.49%						
Se 196.026†	401.6	0.4877 mg/L	0.00141	0.4877 mg/L	0.00141	0.29%
QC value within limits for Se 196.026 Recovery = 97.55%						
Sn 189.927†	24096.5	5.050 mg/L	0.0017	5.050 mg/L	0.0017	0.03%
QC value within limits for Sn 189.927 Recovery = 101.00%						
Ti 337.279†	1364140.9	2.449 mg/L	0.0069	2.449 mg/L	0.0069	0.28%
QC value within limits for Ti 337.279 Recovery = 97.98%						
Tl 190.801†	1776.6	0.9709 mg/L	0.00788	0.9709 mg/L	0.00788	0.81%
QC value within limits for Tl 190.801 Recovery = 97.09%						
V 292.402†	160615.1	2.458 mg/L	0.0078	2.458 mg/L	0.0078	0.32%
QC value within limits for V 292.402 Recovery = 98.31%						
Zn 206.200†	29616.4	1.001 mg/L	0.0012	1.001 mg/L	0.0012	0.12%
QC value within limits for Zn 206.200 Recovery = 100.14%						
Ca 227.546†	4338.2	23.75 mg/L	0.197	23.75 mg/L	0.197	0.83%
QC value within limits for Ca 227.546 Recovery = 95.01%						
Sr 421.552†	272736.1	2.355 mg/L	0.0171	2.355 mg/L	0.0171	0.73%
QC value within limits for Sr 421.552 Recovery = 94.18%						
Al 394.401†	385751.1	9.519 mg/L	0.0239	9.519 mg/L	0.0239	0.25%
QC value within limits for Al 394.401 Recovery = 95.19%						
Al 237.313†	59541.0	9.766 mg/L	0.0180	9.766 mg/L	0.0180	0.18%
QC value within limits for Al 237.313 Recovery = 97.66%						

All analyte(s) passed QC.

Sequence No.: 126
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 10/15/2014 2:54:33 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6651553.2	0.9881	mg/L	0.00294				0.30%
Ag 328.068†	18.1	0.0001	mg/L	0.00029	0.0001	mg/L	0.00029	391.00%
QC value within limits for Ag 328.068 Recovery = Not calculated								

00697

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Al 308.215†	-201.5	-0.0137 mg/L	0.00289	-0.0137 mg/L	0.00289	21.08%
QC value within limits for Al 308.215 Recovery = Not calculated						
As 188.979†	-1.3	-0.0011 mg/L	0.00003	-0.0011 mg/L	0.00003	3.01%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.772†	1922.4	0.0176 mg/L	0.00264	0.0176 mg/L	0.00264	15.02%
QC value within limits for B 249.772 Recovery = Not calculated						
Ba 233.527†	397.1	0.0047 mg/L	0.00114	0.0047 mg/L	0.00114	24.14%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	929.6	0.0003 mg/L	0.00002	0.0003 mg/L	0.00002	5.89%
QC value within limits for Be 313.107 Recovery = Not calculated						
Cd 226.502†	23.2	0.0003 mg/L	0.00006	0.0003 mg/L	0.00006	22.06%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	20.2	0.0009 mg/L	0.00012	0.0009 mg/L	0.00012	12.98%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	10.2	0.0001 mg/L	0.00004	0.0001 mg/L	0.00004	48.41%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	616.8	0.0023 mg/L	0.00069	0.0023 mg/L	0.00069	29.43%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	330.7	0.0059 mg/L	0.00075	0.0059 mg/L	0.00075	12.58%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	212.0	0.3176 mg/L	0.00321	0.3176 mg/L	0.00321	1.01%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	161.5	0.0157 mg/L	0.00192	0.0157 mg/L	0.00192	12.24%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	508.6	0.0015 mg/L	0.00014	0.0015 mg/L	0.00014	9.55%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	14.8	0.0009 mg/L	0.00037	0.0009 mg/L	0.00037	41.70%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	58.1	0.0014 mg/L	0.00042	0.0014 mg/L	0.00042	30.50%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	4505.1	0.8214 mg/L	0.00421	0.8214 mg/L	0.00421	0.51%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	1.8	0.0003 mg/L	0.00017	0.0003 mg/L	0.00017	56.20%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	5.5	0.0028 mg/L	0.00076	0.0028 mg/L	0.00076	26.98%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.6	0.0032 mg/L	0.00124	0.0032 mg/L	0.00124	38.50%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	35.9	0.0075 mg/L	0.00229	0.0075 mg/L	0.00229	30.44%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	670.1	0.0012 mg/L	0.00027	0.0012 mg/L	0.00027	22.44%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	-0.5	-0.0003 mg/L	0.00080	-0.0003 mg/L	0.00080	317.99%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	56.5	0.0009 mg/L	0.00003	0.0009 mg/L	0.00003	3.65%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	42.5	0.0014 mg/L	0.00012	0.0014 mg/L	0.00012	8.09%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	7.6	0.0415 mg/L	0.04304	0.0415 mg/L	0.04304	103.80%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	154.9	0.0013 mg/L	0.00018	0.0013 mg/L	0.00018	13.22%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 394.401†	139.7	0.0034 mg/L	0.00070	0.0034 mg/L	0.00070	20.36%
QC value within limits for Al 394.401 Recovery = Not calculated						
Al 237.313†	21.5	0.0035 mg/L	0.00089	0.0035 mg/L	0.00089	25.25%
QC value within limits for Al 237.313 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 127
Sample ID: R1408017-018
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 116
Date Collected: 10/15/2014 3:00:35 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408017-018

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5804693.8	0.8623	mg/L	0.00548				0.64%
Ag 328.068†	-703.5	-0.0003	mg/L	0.00007				22.51%
Al 308.215†	173337.1	11.81	mg/L	0.088				0.75%

00698

Method: DV200-6010C Opt3 Page 93 Date: 10/15/2014 3:10:36 AM

As 188.979†	12.7	0.0096 mg/L	0.00202	20.96%
B 249.772†	15335.3	0.0949 mg/L	0.00212	2.24%
Ba 233.527†	52091.7	0.6170 mg/L	0.00364	0.59%
Be 313.107†	2187.2	0.0008 mg/L	0.00004	4.94%
Cd 226.502†	95.4	-0.0001 mg/L	0.00000	5.42%
Co 228.616†	76.8	0.0035 mg/L	0.00042	12.00%
Cr 267.716†	1191.3	0.0119 mg/L	0.00006	0.54%
Cu 324.752†	8743.7	0.0338 mg/L	0.00088	2.60%
Fe 259.939†	500076.8	8.989 mg/L	0.0066	0.07%
K 766.490†	4700.0	7.042 mg/L	0.0431	0.61%
Mg 279.077†	126539.6	12.30 mg/L	0.071	0.58%
Mn 257.610†	91771.6	0.2690 mg/L	0.00168	0.62%
Mo 202.031†	27.4	0.0016 mg/L	0.00022	13.42%
Ni 231.604†	550.1	0.0131 mg/L	0.00010	0.78%
Na 589.592†	8304456.0	1514 mg/L	9.0	0.59%
Pb 220.353†	6.4	0.0021 mg/L	0.00047	22.30%
Sb 206.836†	10.8	0.0045 mg/L	0.00063	14.09%
Se 196.026†	2.6	0.0054 mg/L	0.00333	62.02%
Sn 189.927†	-29.3	-0.0075 mg/L	0.00111	14.78%
Ti 337.279†	130254.4	0.2339 mg/L	0.00084	0.36%
Tl 190.801†	10.5	0.0050 mg/L	0.00194	38.52%
V 292.402†	1090.3	0.0162 mg/L	0.00002	0.11%
Zn 206.200†	953.4	0.0322 mg/L	0.00025	0.78%
Ca 227.546†	6313.4	34.66 mg/L	0.150	0.43%
Sr 421.552†	11901.0	0.1027 mg/L	0.00010	0.10%
Al 394.401†	483956.4	11.94 mg/L	0.015	0.13%
Al 237.313†	65018.7	10.66 mg/L	0.073	0.68%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 128 **Autosampler Location: 4**
Sample ID: CCV **Date Collected: 10/15/2014 3:06:54 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6525057.0	0.9693	mg/L	0.00406				0.42%
Ag 328.068†	124896.9	0.4947	mg/L	0.00052	0.4947	mg/L	0.00052	0.10%
QC value within limits for Ag 328.068 Recovery = 98.95%								
Al 308.215†	136458.4	9.294	mg/L	0.0067	9.294	mg/L	0.0067	0.07%
QC value within limits for Al 308.215 Recovery = 92.94%								
As 188.979†	1190.7	0.9457	mg/L	0.00751	0.9457	mg/L	0.00751	0.79%
QC value within limits for As 188.979 Recovery = 94.57%								
B 249.772†	253604.2	2.296	mg/L	0.0198	2.296	mg/L	0.0198	0.86%
QC value within limits for B 249.772 Recovery = 91.85%								
Ba 233.527†	839039.0	9.938	mg/L	0.0058	9.938	mg/L	0.0058	0.06%
QC value within limits for Ba 233.527 Recovery = 99.38%								
Be 313.107†	704677.1	0.2443	mg/L	0.00015	0.2443	mg/L	0.00015	0.06%
QC value within limits for Be 313.107 Recovery = 97.71%								
Cd 226.502†	40149.2	0.4902	mg/L	0.00092	0.4902	mg/L	0.00092	0.19%
QC value within limits for Cd 226.502 Recovery = 98.04%								
Co 228.616†	53027.8	2.424	mg/L	0.0024	2.424	mg/L	0.0024	0.10%
QC value within limits for Co 228.616 Recovery = 96.98%								
Cr 267.716†	57206.3	0.4986	mg/L	0.00042	0.4986	mg/L	0.00042	0.08%
QC value within limits for Cr 267.716 Recovery = 99.72%								
Cu 324.752†	315197.1	1.190	mg/L	0.0026	1.190	mg/L	0.0026	0.22%
QC value within limits for Cu 324.752 Recovery = 95.22%								
Fe 259.939†	271103.1	4.873	mg/L	0.0035	4.873	mg/L	0.0035	0.07%
QC value within limits for Fe 259.939 Recovery = 97.46%								
K 766.490†	17073.3	25.58	mg/L	0.141	25.58	mg/L	0.141	0.55%
QC value within limits for K 766.490 Recovery = 102.32%								
Mg 279.077†	248489.2	24.15	mg/L	0.012	24.15	mg/L	0.012	0.05%
QC value within limits for Mg 279.077 Recovery = 96.58%								
Mn 257.610†	251149.5	0.7335	mg/L	0.00052	0.7335	mg/L	0.00052	0.07%
QC value within limits for Mn 257.610 Recovery = 97.80%								
Mo 202.031†	39037.5	2.353	mg/L	0.0037	2.353	mg/L	0.0037	0.16%
QC value within limits for Mo 202.031 Recovery = 94.10%								
Ni 231.604†	82196.6	1.961	mg/L	0.0029	1.961	mg/L	0.0029	0.15%

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QC value within limits for Ni 231.604 Recovery = 98.05%

Na 589.592†	140675.2	25.65 mg/L	0.159	25.65 mg/L	0.159	0.62%

QC value within limits for Na 589.592 Recovery = 102.59%

Pb 220.353†	2888.8	0.4828 mg/L	0.00470	0.4828 mg/L	0.00470	0.97%

QC value within limits for Pb 220.353 Recovery = 96.56%

Sb 206.836†	9153.7	4.682 mg/L	0.0267	4.682 mg/L	0.0267	0.57%

QC value within limits for Sb 206.836 Recovery = 93.64%

Se 196.026†	398.9	0.4844 mg/L	0.00341	0.4844 mg/L	0.00341	0.70%

QC value within limits for Se 196.026 Recovery = 96.88%

Sn 189.927†	23548.7	4.935 mg/L	0.0031	4.935 mg/L	0.0031	0.06%

QC value within limits for Sn 189.927 Recovery = 98.70%

Ti 337.279†	1337084.4	2.401 mg/L	0.0040	2.401 mg/L	0.0040	0.17%

QC value within limits for Ti 337.279 Recovery = 96.03%

Tl 190.801†	1742.9	0.9525 mg/L	0.00490	0.9525 mg/L	0.00490	0.51%

QC value within limits for Tl 190.801 Recovery = 95.25%

V 292.402†	159103.6	2.435 mg/L	0.0027	2.435 mg/L	0.0027	0.11%

QC value within limits for V 292.402 Recovery = 97.38%

Zn 206.200†	29066.0	0.9828 mg/L	0.00010	0.9828 mg/L	0.00010	0.01%

QC value within limits for Zn 206.200 Recovery = 98.28%

Ca 227.546†	4245.7	23.25 mg/L	0.068	23.25 mg/L	0.068	0.29%

QC value within limits for Ca 227.546 Recovery = 92.98%

Sr 421.552†	264153.3	2.280 mg/L	0.0149	2.280 mg/L	0.0149	0.65%

QC value within limits for Sr 421.552 Recovery = 91.22%

Al 394.401†	373592.3	9.219 mg/L	0.0009	9.219 mg/L	0.0009	0.01%

QC value within limits for Al 394.401 Recovery = 92.19%

Al 237.313†	57920.4	9.500 mg/L	0.0146	9.500 mg/L	0.0146	0.15%

QC value within limits for Al 237.313 Recovery = 95.00%

All analyte(s) passed QC.

Sequence No.: 129 **Autosampler Location: 5**
Sample ID: CCB **Date Collected: 10/15/2014 3:13:00 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6601044.2	0.9806	mg/L	0.00258				0.26%
Ag 328.068†	46.2	0.0002	mg/L	0.00010	0.0002	mg/L	0.00010	53.20%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	69.2	0.0047	mg/L	0.00668	0.0047	mg/L	0.00668	141.84%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.4	0.0003	mg/L	0.00007	0.0003	mg/L	0.00007	22.67%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	2436.9	0.0223	mg/L	0.00293	0.0223	mg/L	0.00293	13.13%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	474.4	0.0056	mg/L	0.00152	0.0056	mg/L	0.00152	27.08%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	646.6	0.0002	mg/L	0.00001	0.0002	mg/L	0.00001	2.31%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	25.5	0.0003	mg/L	0.00008	0.0003	mg/L	0.00008	26.73%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	31.9	0.0015	mg/L	0.00038	0.0015	mg/L	0.00038	26.02%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	9.1	0.0001	mg/L	0.00003	0.0001	mg/L	0.00003	41.90%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	667.3	0.0025	mg/L	0.00081	0.0025	mg/L	0.00081	32.14%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	282.3	0.0051	mg/L	0.00072	0.0051	mg/L	0.00072	14.10%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	233.2	0.3494	mg/L	0.07626	0.3494	mg/L	0.07626	21.82%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	107.1	0.0104	mg/L	0.00084	0.0104	mg/L	0.00084	8.05%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	342.7	0.0010	mg/L	0.00012	0.0010	mg/L	0.00012	12.12%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	22.4	0.0013	mg/L	0.00035	0.0013	mg/L	0.00035	26.28%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	59.9	0.0014	mg/L	0.00042	0.0014	mg/L	0.00042	29.47%

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QC value within limits for Ni 231.604 Recovery = Not calculated

Na 589.592†	3948.6	0.7199 mg/L	0.00115	0.7199 mg/L	0.00115	0.16%
QC value within limits for Na 589.592 Recovery = Not calculated							
Pb 220.353†	5.6	0.0009 mg/L	0.00026	0.0009 mg/L	0.00026	28.48%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	7.3	0.0037 mg/L	0.00060	0.0037 mg/L	0.00060	16.08%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	2.1	0.0026 mg/L	0.00310	0.0026 mg/L	0.00310	121.02%
QC value within limits for Se 196.026 Recovery = Not calculated							
Sn 189.927†	49.1	0.0103 mg/L	0.00183	0.0103 mg/L	0.00183	17.75%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 337.279†	863.8	0.0016 mg/L	0.00037	0.0016 mg/L	0.00037	23.59%
QC value within limits for Ti 337.279 Recovery = Not calculated							
Tl 190.801†	-0.5	-0.0003 mg/L	0.00178	-0.0003 mg/L	0.00178	650.66%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 292.402†	97.3	0.0015 mg/L	0.00032	0.0015 mg/L	0.00032	21.42%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 206.200†	51.1	0.0017 mg/L	0.00027	0.0017 mg/L	0.00027	15.79%
QC value within limits for Zn 206.200 Recovery = Not calculated							
Ca 227.546†	3.7	0.0201 mg/L	0.00630	0.0201 mg/L	0.00630	31.43%
QC value within limits for Ca 227.546 Recovery = Not calculated							
Sr 421.552†	202.3	0.0017 mg/L	0.00029	0.0017 mg/L	0.00029	16.50%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Al 394.401†	206.2	0.0051 mg/L	0.00239	0.0051 mg/L	0.00239	47.00%
QC value within limits for Al 394.401 Recovery = Not calculated							
Al 237.313†	28.1	0.0046 mg/L	0.00440	0.0046 mg/L	0.00440	95.67%
QC value within limits for Al 237.313 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 130 **Autosampler Location: 6**
Sample ID: MRL **Date Collected: 10/15/2014 3:19:02 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6515462.3	0.9679	mg/L	0.00081				0.08%
Ag 328.068†	2574.0	0.0102	mg/L	0.00012	0.0102	mg/L	0.00012	1.17%
QC value within limits for Ag 328.068 Recovery = 101.98%								
Al 308.215†	2615.2	0.1781	mg/L	0.00428	0.1781	mg/L	0.00428	2.40%
QC value within limits for Al 308.215 Recovery = 89.04%								
As 188.979†	25.6	0.0203	mg/L	0.00136	0.0203	mg/L	0.00136	6.71%
QC value within limits for As 188.979 Recovery = 101.68%								
B 249.772†	22460.9	0.2050	mg/L	0.00172	0.2050	mg/L	0.00172	0.84%
QC value within limits for B 249.772 Recovery = 102.52%								
Ba 233.527†	18000.2	0.2132	mg/L	0.00008	0.2132	mg/L	0.00008	0.04%
QC value within limits for Ba 233.527 Recovery = 106.61%								
Be 313.107†	15295.1	0.0053	mg/L	0.00003	0.0053	mg/L	0.00003	0.61%
QC value within limits for Be 313.107 Recovery = 106.03%								
Cd 226.502†	880.4	0.0107	mg/L	0.00006	0.0107	mg/L	0.00006	0.56%
QC value within limits for Cd 226.502 Recovery = 107.49%								
Co 228.616†	1140.4	0.0521	mg/L	0.00005	0.0521	mg/L	0.00005	0.10%
QC value within limits for Co 228.616 Recovery = 104.27%								
Cr 267.716†	1175.0	0.0103	mg/L	0.00003	0.0103	mg/L	0.00003	0.27%
QC value within limits for Cr 267.716 Recovery = 102.90%								
Cu 324.752†	6471.8	0.0244	mg/L	0.00020	0.0244	mg/L	0.00020	0.84%
QC value within limits for Cu 324.752 Recovery = 97.75%								
Fe 259.939†	5880.1	0.1057	mg/L	0.00005	0.1057	mg/L	0.00005	0.05%
QC value within limits for Fe 259.939 Recovery = 105.70%								
K 766.490†	769.4	1.153	mg/L	0.0076	1.153	mg/L	0.0076	0.66%
QC value within limits for K 766.490 Recovery = 115.28%								
Mg 279.077†	10182.6	0.9895	mg/L	0.00601	0.9895	mg/L	0.00601	0.61%
QC value within limits for Mg 279.077 Recovery = 98.95%								
Mn 257.610†	5455.2	0.0159	mg/L	0.00000	0.0159	mg/L	0.00000	0.01%
QC value within limits for Mn 257.610 Recovery = 106.21%								
Mo 202.031†	435.0	0.0262	mg/L	0.00013	0.0262	mg/L	0.00013	0.48%
QC value within limits for Mo 202.031 Recovery = 104.87%								
Ni 231.604†	1733.8	0.0414	mg/L	0.00014	0.0414	mg/L	0.00014	0.33%

QC value within limits for Ni 231.604 Recovery = 103.41%

Na 589.592†	8396.1	1.531 mg/L	0.0205	1.531 mg/L	0.0205	1.34%

QC value greater than the upper limit for Na 589.592 Recovery = 153.08%

Pb 220.353†	65.6	0.0110 mg/L	0.00038	0.0110 mg/L	0.00038	3.43%

QC value within limits for Pb 220.353 Recovery = 109.63%

Sb 206.836†	122.7	0.0628 mg/L	0.00194	0.0628 mg/L	0.00194	3.08%

QC value within limits for Sb 206.836 Recovery = 104.62%

Se 196.026†	8.9	0.0109 mg/L	0.00281	0.0109 mg/L	0.00281	25.90%

QC value within limits for Se 196.026 Recovery = 108.51%

Sn 189.927†	2593.6	0.5436 mg/L	0.00001	0.5436 mg/L	0.00001	0.00%

QC value within limits for Sn 189.927 Recovery = 108.73%

Ti 337.279†	29161.7	0.0524 mg/L	0.00005	0.0524 mg/L	0.00005	0.09%

QC value within limits for Ti 337.279 Recovery = 104.72%

Tl 190.801†	31.5	0.0172 mg/L	0.00150	0.0172 mg/L	0.00150	8.68%

QC value within limits for Tl 190.801 Recovery = 86.17%

V 292.402†	3446.7	0.0527 mg/L	0.00011	0.0527 mg/L	0.00011	0.21%

QC value within limits for V 292.402 Recovery = 105.48%

Zn 206.200†	589.8	0.0199 mg/L	0.00023	0.0199 mg/L	0.00023	1.17%

QC value within limits for Zn 206.200 Recovery = 99.71%

Ca 227.546†	156.3	0.8507 mg/L	0.02096	0.8507 mg/L	0.02096	2.46%

QC value within limits for Ca 227.546 Recovery = 85.07%

Sr 421.552†	11573.6	0.0999 mg/L	0.00026	0.0999 mg/L	0.00026	0.26%

QC value within limits for Sr 421.552 Recovery = 99.92%

Al 394.401†	7154.8	0.1766 mg/L	0.00178	0.1766 mg/L	0.00178	1.01%

QC value within limits for Al 394.401 Recovery = 88.28%

Al 237.313†	1186.7	0.1947 mg/L	0.00207	0.1947 mg/L	0.00207	1.06%

QC value within limits for Al 237.313 Recovery = 97.33%

QC Failed. Continue with analysis.

Sequence No.: 131 **Autosampler Location: 7**
Sample ID: ICSA **Date Collected: 10/15/2014 3:25:02 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6100203.3	0.9062	mg/L	0.01130				1.25%
Ag 328.068†	-6803.3	-0.0015	mg/L	0.00030	-0.0015	mg/L	0.00030	19.93%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	3830999.4	261.0	mg/L	1.50	261.0	mg/L	1.50	0.57%
QC value within limits for Al 308.215 Recovery = 104.39%								
As 188.979†	15.7	0.0021	mg/L	0.00236	0.0021	mg/L	0.00236	110.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	37543.8	-0.1298	mg/L	0.00087	-0.1298	mg/L	0.00087	0.67%
Ba 233.527†	288.3	0.0034	mg/L	0.00003	0.0034	mg/L	0.00003	0.79%
Be 313.107†	-946.6	-0.0003	mg/L	0.00007	-0.0003	mg/L	0.00007	21.27%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	1079.2	0.0010	mg/L	0.00001	0.0010	mg/L	0.00001	0.88%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	5.8	0.0003	mg/L	0.00005	0.0003	mg/L	0.00005	20.29%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3659.8	-0.0015	mg/L	0.00039	-0.0015	mg/L	0.00039	26.11%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-1874.1	0.0015	mg/L	0.00047	0.0015	mg/L	0.00047	31.13%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	5118053.8	92.00	mg/L	0.471	92.00	mg/L	0.471	0.51%
QC value within limits for Fe 259.939 Recovery = 92.00%								
K 766.490†	127.7	0.1914	mg/L	0.03282	0.1914	mg/L	0.03282	17.15%
Mg 279.077†	2728772.8	265.2	mg/L	1.68	265.2	mg/L	1.68	0.63%
QC value within limits for Mg 279.077 Recovery = 106.06%								
Mn 257.610†	-5259.2	-0.0031	mg/L	0.00025	-0.0031	mg/L	0.00025	7.93%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	1.2	0.0001	mg/L	0.00049	0.0001	mg/L	0.00049	667.99%
Ni 231.604†	-137.1	-0.0033	mg/L	0.00057	-0.0033	mg/L	0.00057	17.53%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	3281.2	0.5982	mg/L	0.00455	0.5982	mg/L	0.00455	0.76%
Pb 220.353†	-158.6	-0.0002	mg/L	0.00013	-0.0002	mg/L	0.00013	70.07%
QC value within limits for Pb 220.353 Recovery = Not calculated								

Sb 206.836†	49.2	0.0020 mg/L	0.00138	0.0020 mg/L	0.00138	69.47%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-18.4	0.0032 mg/L	0.00020	0.0032 mg/L	0.00020	6.33%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	-159.1	-0.0638 mg/L	0.00116	-0.0638 mg/L	0.00116	1.82%
Ti 337.279†	338.4	0.0006 mg/L	0.00005	0.0006 mg/L	0.00005	8.96%
Tl 190.801†	29.1	0.0013 mg/L	0.00160	0.0013 mg/L	0.00160	122.49%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	383.4	0.0005 mg/L	0.00040	0.0005 mg/L	0.00040	73.23%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	164.7	0.0056 mg/L	0.00032	0.0056 mg/L	0.00032	5.77%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	47474.3	262.6 mg/L	2.41	262.6 mg/L	2.41	0.92%
QC value within limits for Ca 227.546 Recovery = 105.03%						
Sr 421.552†	475.9	0.0041 mg/L	0.00013	0.0041 mg/L	0.00013	3.09%
Al 394.401†	10867934.8	268.2 mg/L	0.49	268.2 mg/L	0.49	0.18%
QC value within limits for Al 394.401 Recovery = 107.27%						
Al 237.313†	1589040.9	260.6 mg/L	1.50	260.6 mg/L	1.50	0.58%
QC value within limits for Al 237.313 Recovery = 104.26%						

All analyte(s) passed QC.

Sequence No.: 132
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 10/15/2014 3:31:22 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6035241.1	0.8966	mg/L	0.00157				0.17%
Ag 328.068†	46325.3	0.2087	mg/L	0.00034	0.2087	mg/L	0.00034	0.16%
QC value within limits for Ag 328.068 Recovery = 104.33%								
Al 308.215†	3865099.0	263.3	mg/L	1.63	263.3	mg/L	1.63	0.62%
QC value within limits for Al 308.215 Recovery = 105.32%								
As 188.979†	135.2	0.0970	mg/L	0.00368	0.0970	mg/L	0.00368	3.80%
QC value within limits for As 188.979 Recovery = 97.00%								
B 249.772†	37106.0	-0.1388	mg/L	0.00057	-0.1388	mg/L	0.00057	0.41%
Ba 233.527†	45203.6	0.5354	mg/L	0.00228	0.5354	mg/L	0.00228	0.43%
QC value within limits for Ba 233.527 Recovery = 107.09%								
Be 313.107†	1469194.8	0.5093	mg/L	0.00119	0.5093	mg/L	0.00119	0.23%
QC value within limits for Be 313.107 Recovery = 101.85%								
Cd 226.502†	81897.2	0.9889	mg/L	0.00089	0.9889	mg/L	0.00089	0.09%
QC value within limits for Cd 226.502 Recovery = 98.89%								
Co 228.616†	10737.5	0.4909	mg/L	0.00091	0.4909	mg/L	0.00091	0.19%
QC value within limits for Co 228.616 Recovery = 98.18%								
Cr 267.716†	56297.4	0.5186	mg/L	0.00155	0.5186	mg/L	0.00155	0.30%
QC value within limits for Cr 267.716 Recovery = 103.72%								
Cu 324.752†	138781.9	0.5325	mg/L	0.00131	0.5325	mg/L	0.00131	0.25%
QC value within limits for Cu 324.752 Recovery = 106.50%								
Fe 259.939†	5174402.9	93.01	mg/L	0.065	93.01	mg/L	0.065	0.07%
QC value within limits for Fe 259.939 Recovery = 93.01%								
K 766.490†	200.9	0.3010	mg/L	0.00277	0.3010	mg/L	0.00277	0.92%
Mg 279.077†	2748548.9	267.1	mg/L	0.92	267.1	mg/L	0.92	0.35%
QC value within limits for Mg 279.077 Recovery = 106.83%								
Mn 257.610†	173604.9	0.5189	mg/L	0.00184	0.5189	mg/L	0.00184	0.36%
QC value within limits for Mn 257.610 Recovery = 103.79%								
Mo 202.031†	-4.6	-0.0003	mg/L	0.00025	-0.0003	mg/L	0.00025	89.14%
Ni 231.604†	40883.8	0.9754	mg/L	0.00151	0.9754	mg/L	0.00151	0.16%
QC value within limits for Ni 231.604 Recovery = 97.54%								
Na 589.592†	2763.6	0.5039	mg/L	0.00340	0.5039	mg/L	0.00340	0.68%
Pb 220.353†	155.5	0.0524	mg/L	0.00249	0.0524	mg/L	0.00249	4.76%
QC value within limits for Pb 220.353 Recovery = 104.88%								
Sb 206.836†	1274.7	0.6287	mg/L	0.00611	0.6287	mg/L	0.00611	0.97%
QC value within limits for Sb 206.836 Recovery = 104.79%								
Se 196.026†	23.1	0.0538	mg/L	0.00252	0.0538	mg/L	0.00252	4.68%
QC value within limits for Se 196.026 Recovery = 107.51%								
Sn 189.927†	-135.4	-0.0591	mg/L	0.00015	-0.0591	mg/L	0.00015	0.25%
Ti 337.279†	275.2	0.0005	mg/L	0.00002	0.0005	mg/L	0.00002	4.59%
Tl 190.801†	223.5	0.1075	mg/L	0.00218	0.1075	mg/L	0.00218	2.03%

Method: DV200-6010C Opt3 Page 98 Date: 10/15/2014 3:42:22 AM

QC value within limits for Tl 190.801 Recovery = 107.46%

V 292.402†	33336.1	0.5048 mg/L	0.00073	0.5048 mg/L	0.00073	0.14%
QC value within limits for V 292.402 Recovery = 100.96%						
Zn 206.200†	29100.1	0.9840 mg/L	0.00067	0.9840 mg/L	0.00067	0.07%
QC value within limits for Zn 206.200 Recovery = 98.40%						
Ca 227.546†	47589.8	263.3 mg/L	1.49	263.3 mg/L	1.49	0.56%
QC value within limits for Ca 227.546 Recovery = 105.30%						
Sr 421.552†	476.8	0.0041 mg/L	0.00041	0.0041 mg/L	0.00041	10.07%
Al 394.401†	10927183.9	269.6 mg/L	0.67	269.6 mg/L	0.67	0.25%
QC value within limits for Al 394.401 Recovery = 107.86%						
Al 237.313†	1597959.1	262.1 mg/L	1.28	262.1 mg/L	1.28	0.49%
QC value within limits for Al 237.313 Recovery = 104.84%						

All analyte(s) passed QC.

Sequence No.: 133
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 10/15/2014 3:37:45 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6408200.1	0.9520	mg/L	0.00737				0.77%
Ag 328.068†	129611.5	0.5135	mg/L	0.01222	0.5135	mg/L	0.01222	2.38%
QC value within limits for Ag 328.068 Recovery = 102.69%								
Al 308.215†	143488.4	9.773	mg/L	0.2641	9.773	mg/L	0.2641	2.70%
QC value within limits for Al 308.215 Recovery = 97.73%								
As 188.979†	1252.6	0.9948	mg/L	0.01235	0.9948	mg/L	0.01235	1.24%
QC value within limits for As 188.979 Recovery = 99.48%								
B 249.772†	266145.8	2.410	mg/L	0.0861	2.410	mg/L	0.0861	3.57%
QC value within limits for B 249.772 Recovery = 96.38%								
Ba 233.527†	877919.4	10.40	mg/L	0.027	10.40	mg/L	0.027	0.26%
QC value within limits for Ba 233.527 Recovery = 103.99%								
Be 313.107†	738573.0	0.2560	mg/L	0.00115	0.2560	mg/L	0.00115	0.45%
QC value within limits for Be 313.107 Recovery = 102.40%								
Cd 226.502†	42619.6	0.5203	mg/L	0.01542	0.5203	mg/L	0.01542	2.96%
QC value within limits for Cd 226.502 Recovery = 104.07%								
Co 228.616†	55924.0	2.557	mg/L	0.0747	2.557	mg/L	0.0747	2.92%
QC value within limits for Co 228.616 Recovery = 102.27%								
Cr 267.716†	60391.0	0.5263	mg/L	0.01353	0.5263	mg/L	0.01353	2.57%
QC value within limits for Cr 267.716 Recovery = 105.27%								
Cu 324.752†	329046.8	1.243	mg/L	0.0355	1.243	mg/L	0.0355	2.85%
QC value within limits for Cu 324.752 Recovery = 99.40%								
Fe 259.939†	287931.8	5.176	mg/L	0.1318	5.176	mg/L	0.1318	2.55%
QC value within limits for Fe 259.939 Recovery = 103.51%								
K 766.490†	17558.1	26.31	mg/L	0.514	26.31	mg/L	0.514	1.95%
QC value within limits for K 766.490 Recovery = 105.23%								
Mg 279.077†	262015.3	25.46	mg/L	0.647	25.46	mg/L	0.647	2.54%
QC value within limits for Mg 279.077 Recovery = 101.84%								
Mn 257.610†	263936.1	0.7708	mg/L	0.02128	0.7708	mg/L	0.02128	2.76%
QC value within limits for Mn 257.610 Recovery = 102.78%								
Mo 202.031†	41038.6	2.473	mg/L	0.0668	2.473	mg/L	0.0668	2.70%
QC value within limits for Mo 202.031 Recovery = 98.93%								
Ni 231.604†	86789.0	2.071	mg/L	0.0600	2.071	mg/L	0.0600	2.90%
QC value within limits for Ni 231.604 Recovery = 103.53%								
Na 589.592†	140232.2	25.57	mg/L	0.529	25.57	mg/L	0.529	2.07%
QC value within limits for Na 589.592 Recovery = 102.27%								
Pb 220.353†	3040.3	0.5081	mg/L	0.00781	0.5081	mg/L	0.00781	1.54%
QC value within limits for Pb 220.353 Recovery = 101.63%								
Sb 206.836†	9626.2	4.924	mg/L	0.0498	4.924	mg/L	0.0498	1.01%
QC value within limits for Sb 206.836 Recovery = 98.48%								
Se 196.026†	416.0	0.5052	mg/L	0.00670	0.5052	mg/L	0.00670	1.33%
QC value within limits for Se 196.026 Recovery = 101.05%								
Sn 189.927†	24668.5	5.170	mg/L	0.1674	5.170	mg/L	0.1674	3.24%
QC value within limits for Sn 189.927 Recovery = 103.40%								
Ti 337.279†	1391982.3	2.499	mg/L	0.0075	2.499	mg/L	0.0075	0.30%
QC value within limits for Ti 337.279 Recovery = 99.98%								
Tl 190.801†	1832.4	1.001	mg/L	0.0121	1.001	mg/L	0.0121	1.21%
QC value within limits for Tl 190.801 Recovery = 100.14%								

V 292.402†	166616.3	2.550 mg/L	0.0551	2.550 mg/L	0.0551	2.16%
QC value within limits for V 292.402 Recovery = 101.98%						
Zn 206.200†	30912.6	1.045 mg/L	0.0292	1.045 mg/L	0.0292	2.79%
QC value within limits for Zn 206.200 Recovery = 104.53%						
Ca 227.546†	4431.3	24.27 mg/L	0.249	24.27 mg/L	0.249	1.03%
QC value within limits for Ca 227.546 Recovery = 97.07%						
Sr 421.552†	278803.4	2.407 mg/L	0.0533	2.407 mg/L	0.0533	2.22%
QC value within limits for Sr 421.552 Recovery = 96.28%						
Al 394.401†	390533.2	9.637 mg/L	0.2488	9.637 mg/L	0.2488	2.58%
QC value within limits for Al 394.401 Recovery = 96.37%						
Al 237.313†	61037.7	10.01 mg/L	0.266	10.01 mg/L	0.266	2.66%
QC value within limits for Al 237.313 Recovery = 100.12%						

All analyte(s) passed QC.

Sequence No.: 134 **Autosampler Location: 5**
Sample ID: CCB **Date Collected: 10/15/2014 3:44:47 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6700890.0	0.9954	mg/L	0.00476				0.48%
Ag 328.068†	23.6	0.0001	mg/L	0.00016	0.0001	mg/L	0.00016	161.43%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	264.3	0.0180	mg/L	0.00545	0.0180	mg/L	0.00545	30.28%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	0.7	0.0006	mg/L	0.00023	0.0006	mg/L	0.00023	41.15%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3050.7	0.0278	mg/L	0.00347	0.0278	mg/L	0.00347	12.48%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	377.4	0.0045	mg/L	0.00077	0.0045	mg/L	0.00077	17.30%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	705.5	0.0002	mg/L	0.00002	0.0002	mg/L	0.00002	10.03%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	19.2	0.0002	mg/L	0.00010	0.0002	mg/L	0.00010	44.38%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	44.7	0.0020	mg/L	0.00018	0.0020	mg/L	0.00018	8.92%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	16.1	0.0001	mg/L	0.00005	0.0001	mg/L	0.00005	35.97%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1149.3	0.0043	mg/L	0.00065	0.0043	mg/L	0.00065	14.92%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	1559.9	0.0280	mg/L	0.00170	0.0280	mg/L	0.00170	6.08%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	89.0	0.1333	mg/L	0.08428	0.1333	mg/L	0.08428	63.22%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	161.7	0.0157	mg/L	0.00219	0.0157	mg/L	0.00219	13.91%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	259.0	0.0008	mg/L	0.00004	0.0008	mg/L	0.00004	4.98%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	15.4	0.0009	mg/L	0.00026	0.0009	mg/L	0.00026	28.35%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	88.1	0.0021	mg/L	0.00029	0.0021	mg/L	0.00029	13.67%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	1769.8	0.3227	mg/L	0.00082	0.3227	mg/L	0.00082	0.25%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	3.2	0.0005	mg/L	0.00122	0.0005	mg/L	0.00122	228.66%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	5.0	0.0026	mg/L	0.00120	0.0026	mg/L	0.00120	46.97%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	2.7	0.0033	mg/L	0.00405	0.0033	mg/L	0.00405	123.83%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	50.8	0.0106	mg/L	0.00130	0.0106	mg/L	0.00130	12.19%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	632.9	0.0011	mg/L	0.00004	0.0011	mg/L	0.00004	3.76%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-0.9	-0.0005	mg/L	0.00044	-0.0005	mg/L	0.00044	85.49%
QC value within limits for Tl 190.801 Recovery = Not calculated								

Method: DV200-6010C Opt3 Page 100 Date: 10/15/2014 3:54:34 AM

V 292.402†	34.9	0.0005	mg/L	0.00036	0.0005	mg/L	0.00036 67.40%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 206.200†	54.8	0.0019	mg/L	0.00022	0.0019	mg/L	0.00022 11.74%
QC value within limits for Zn 206.200 Recovery = Not calculated							
Ca 227.546†	7.3	0.0412	mg/L	0.01017	0.0412	mg/L	0.01017 24.70%
QC value within limits for Ca 227.546 Recovery = Not calculated							
Sr 421.552†	140.5	0.0012	mg/L	0.00009	0.0012	mg/L	0.00009 7.83%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Al 394.401†	600.6	0.0148	mg/L	0.00177	0.0148	mg/L	0.00177 11.92%
QC value within limits for Al 394.401 Recovery = Not calculated							
Al 237.313†	96.6	0.0158	mg/L	0.00263	0.0158	mg/L	0.00263 16.63%
QC value within limits for Al 237.313 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 135
Sample ID: Sample117
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 117
Date Collected: 10/15/2014 3:50:48 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Sample117

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6557922.2	0.9742	mg/L	0.00058				0.06%
Ag 328.068†	-15.0	0.0000	mg/L	0.00030	0.0000	mg/L	0.00030	750.85%
Al 308.215†	724.4	0.0490	mg/L	0.00321	0.0490	mg/L	0.00321	6.56%
As 188.979†	2.3	0.0018	mg/L	0.00007	0.0018	mg/L	0.00007	3.73%
B 249.772†	1864.1	0.0166	mg/L	0.00088	0.0166	mg/L	0.00088	5.30%
Ba 233.527†	430.4	0.0051	mg/L	0.00005	0.0051	mg/L	0.00005	1.05%
Be 313.107†	337.0	0.0001	mg/L	0.00001	0.0001	mg/L	0.00001	8.18%
Cd 226.502†	-12.5	-0.0002	mg/L	0.00001	-0.0002	mg/L	0.00001	6.73%
Co 228.616†	8.3	0.0004	mg/L	0.00018	0.0004	mg/L	0.00018	46.97%
Cr 267.716†	32.4	0.0004	mg/L	0.00008	0.0004	mg/L	0.00008	21.44%
Cu 324.752†	634.2	0.0024	mg/L	0.00029	0.0024	mg/L	0.00029	12.12%
Fe 259.939†	3916.9	0.0704	mg/L	0.00028	0.0704	mg/L	0.00028	0.40%
K 766.490†	200.9	0.3010	mg/L	0.02823	0.3010	mg/L	0.02823	9.38%
Mg 279.077†	6953.4	0.6757	mg/L	0.00233	0.6757	mg/L	0.00233	0.35%
Mn 257.610†	2330.6	0.0068	mg/L	0.00001	0.0068	mg/L	0.00001	0.22%
Mo 202.031†	3.6	0.0002	mg/L	0.00012	0.0002	mg/L	0.00012	54.88%
Ni 231.604†	15.8	0.0004	mg/L	0.00016	0.0004	mg/L	0.00016	43.57%
Na 589.592†	15312.3	2.792	mg/L	0.0057	2.792	mg/L	0.0057	0.20%
Pb 220.353†	-3.7	-0.0006	mg/L	0.00001	-0.0006	mg/L	0.00001	1.60%
Sb 206.836†	9.0	0.0046	mg/L	0.00019	0.0046	mg/L	0.00019	4.10%
Se 196.026†	2.7	0.0033	mg/L	0.00150	0.0033	mg/L	0.00150	45.85%
Sn 189.927†	15.7	0.0033	mg/L	0.00147	0.0033	mg/L	0.00147	44.63%
Ti 337.279†	697.8	0.0013	mg/L	0.00002	0.0013	mg/L	0.00002	1.64%
Tl 190.801†	-6.4	-0.0035	mg/L	0.00099	-0.0035	mg/L	0.00099	28.39%
V 292.402†	23.9	0.0004	mg/L	0.00011	0.0004	mg/L	0.00011	29.49%
Zn 206.200†	66.5	0.0022	mg/L	0.00032	0.0022	mg/L	0.00032	14.44%
Ca 227.546†	507.8	2.747	mg/L	0.0305	2.747	mg/L	0.0305	1.11%
Sr 421.552†	1351.0	0.0117	mg/L	0.00036	0.0117	mg/L	0.00036	3.13%
Al 394.401†	1396.6	0.0345	mg/L	0.00143	0.0345	mg/L	0.00143	4.14%
Al 237.313†	264.2	0.0433	mg/L	0.00005	0.0433	mg/L	0.00005	0.12%

Metals Cover Page

Analyst: DCB **Date:** 10/15/14 **Instrument:** Opt 3

Data File: 30ct15a **Reviewed By:** DCB **Entered By:** DCB

Approval: CK 10/16/14

Starlims Run #	Analytes Used	Batch ID	Method	Failed Analytes	Repeats
416514	TAL B Sn - Ca	220599	200.7/6010		R7980-001 B K Na
					R7980-005 K
416516	Se	220459	6010	K	
416517	Co Se	220154	6010		
416518	Ag As Ba Cd Cr Cu Ni Pb Se V Zn	220635	6010 TCLP		

Package Data:

Client Sub#	TIER	Analytes Used	Batch ID	Raw Data Copied?
R 7916	III / (IV) / ILM	Cr	220599	Yes / No
✓ R 7825	III / (IV) / ILM	Co Se	220154	Yes / No
R 8047	III / (IV) / ILM	Ag As Ba Cd Cr Pb Se (Fix d.l. factor)	220635	Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No

Method: DV200-6010C Opt3 Page 1 Date: 10/15/2014 2:38:39 PM

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Analysis Begun

Start Time: 10/15/2014 2:35:02 PM
Logged In Analyst: alrce.metals03
Spectrometer Model: Optima 5300 DV, S/N 077N6051602Autosampler Model: AS-93plus
Plasma On Time: 10/15/2014 8:43:42 AM
Technique: ICP Continuous

10/15/14
DCA

Sample Information File: C:\pe\Optima5300\Sample Information\ROUTINE2.sif
Batch ID:
Results Data Set: 3Oct15a
Results Library: C:\pe\Optima5300\Results\Oct14.mdb

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Method Loaded
Method Name: DV200-6010C Opt3
IEC File: DV101514.iec
Method Last Saved: 10/15/2014 11:43:57 AM
MSF File:
Method Description: 5300DV TAL Metals Method 200.7/6010C-Optima 3

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
B 249.772	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Ba 233.527	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Be 313.107	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Cd 226.502	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Cr 267.716	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Fe 259.939	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
K 766.490	Lin Thru 0	Peak Area	Radial	Y 371.029	Yes
Mg 279.077	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Mn 257.610	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Ni 231.604	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Na 589.592	Lin Thru 0	Peak Area	Radial	Y 371.029	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Se 196.026	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Ti 337.279	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Y 371.029	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Zn 206.200	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Ca 227.546	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Y 371.029	Yes
Al 237.313	Lin Thru 0	Peak Area	Axial	Y 371.029	Yes

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Sequence No.: 1
Sample ID: Calib Blank 1
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 10/15/2014 2:35:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Blank 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	6932854.4	48200.04	0.70%	1.000	mg/L
Ag 328.068†	-330.5	60.73	18.38%	[0.00]	mg/L
As 188.979†	7.8	0.91	11.68%	[0.00]	mg/L
B 249.772†	295.6	7.70	2.60%	[0.00]	mg/L
Ba 233.527†	-590.3	5.39	0.91%	[0.00]	mg/L
Be 313.107†	-12251.3	41.38	0.34%	[0.00]	mg/L
Cd 226.502†	-216.2	3.43	1.59%	[0.00]	mg/L
Co 228.616†	-68.3	4.77	6.99%	[0.00]	mg/L
Cr 267.716†	-442.5	5.22	1.18%	[0.00]	mg/L
Cu 324.752†	7541.2	41.41	0.55%	[0.00]	mg/L
Fe 259.939†	-1830.9	2.14	0.12%	[0.00]	mg/L
K 766.490†	611.1	18.13	2.97%	[0.00]	mg/L

Method: DV200-6010C Opt3 Page 2 Date: 10/15/2014 2:54:05 PM

Mg 279.077†	-3836.1	2.75	0.07%	[0.00]	mg/L
Mn 257.610†	-1079.2	0.68	0.06%	[0.00]	mg/L
Mo 202.031†	13.8	2.47	17.92%	[0.00]	mg/L
Ni 231.604†	-310.2	9.79	3.16%	[0.00]	mg/L
Na 589.592†	125.4	14.86	11.85%	[0.00]	mg/L
Pb 220.353†	-37.4	1.08	2.88%	[0.00]	mg/L
Sb 206.836†	48.7	0.06	0.12%	[0.00]	mg/L
Se 196.026†	1.0	0.11	11.27%	[0.00]	mg/L
Sn 189.927†	3323.0	19.31	0.58%	[0.00]	mg/L
Ti 337.279†	109.5	19.34	17.66%	[0.00]	mg/L
Tl 190.801†	9.1	2.50	27.53%	[0.00]	mg/L
V 292.402†	54.2	5.70	10.53%	[0.00]	mg/L
Zn 206.200†	72.4	0.48	0.67%	[0.00]	mg/L
Ca 227.546†	-68.8	6.28	9.14%	[0.00]	mg/L
Sr 421.552†	144.8	6.16	4.25%	[0.00]	mg/L
Al 237.313†	156.2	6.02	3.85%	[0.00]	mg/L

Sequence No.: 2
Sample ID: Calib Std 1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 10/15/2014 2:40:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	7012290.8	110984.02	1.58%	1.011	mg/L
As 188.979†	6.2	0.34	5.45%	[0.0050]	mg/L
Ba 233.527†	1745.5	24.94	1.43%	[0.0200]	mg/L
Cd 226.502†	84.6	8.82	10.42%	[0.0010]	mg/L
Co 228.616†	60.6	2.25	3.71%	[0.0030]	mg/L
Cr 267.716†	135.2	2.16	1.60%	[0.0010]	mg/L
Cu 324.752†	2334.2	206.23	8.83%	[0.0100]	mg/L
Mn 257.610†	3680.8	68.39	1.86%	[0.0100]	mg/L
Mo 202.031†	428.5	9.51	2.22%	[0.0250]	mg/L
Ni 231.604†	193.7	7.59	3.92%	[0.0050]	mg/L
Pb 220.353†	36.7	4.17	11.36%	[0.0050]	mg/L
Sb 206.836†	22.0	1.00	4.57%	[0.0100]	mg/L
Se 196.026†	1.7	0.20	12.19%	[0.0050]	mg/L
Tl 190.801†	19.8	1.01	5.09%	[0.0100]	mg/L
V 292.402†	199.1	15.32	7.70%	[0.0030]	mg/L
Zn 206.200†	308.0	5.84	1.90%	[0.0100]	mg/L

Sequence No.: 3
Sample ID: Calib Std 2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 10/15/2014 2:48:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	6999674.9	47898.47	0.68%	1.010	mg/L
As 188.979†	15.8	1.31	8.30%	[0.0100]	mg/L
B 249.772†	22128.3	53.16	0.24%	[0.200]	mg/L
Be 313.107†	7557.2	40.11	0.53%	[0.0030]	mg/L
Cd 226.502†	363.0	0.09	0.02%	[0.005]	mg/L
Cu 324.752†	5055.9	5.11	0.10%	[0.0200]	mg/L
K 766.490†	936.1	15.92	1.70%	[2.000]	mg/L
Mg 279.077†	10956.6	91.31	0.83%	[1.000]	mg/L
Na 589.592†	3546.5	86.66	2.44%	[1.000]	mg/L
Sb 206.836†	120.3	0.17	0.14%	[0.060]	mg/L
Se 196.026†	8.3	1.49	17.95%	[0.0100]	mg/L
Sn 189.927†	2404.1	27.35	1.14%	[0.500]	mg/L
Ca 227.546†	160.6	2.73	1.70%	[1.000]	mg/L
Al 237.313†	598.8	0.45	0.08%	[0.1000]	mg/L

00709

Method: DV200-6010C Opt3 Page 3 Date: 10/15/2014 3:05:58 PM

Sequence No.: 4
Sample ID: Calib Std 3
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 11
Date Collected: 10/15/2014 2:54:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	7014565.7	2457.18	0.04%	1.012	mg/L
Ag 328.068†	2820.5	6.89	0.24%	[0.0100]	mg/L
B 249.772†	6038.1	5.79	0.10%	[0.0500]	mg/L
Be 313.107†	16357.0	7.89	0.05%	[0.0050]	mg/L
Co 228.616†	1249.2	4.14	0.33%	[0.050]	mg/L
Cr 267.716†	1336.9	1.24	0.09%	[0.010]	mg/L
Fe 259.939†	6372.9	13.85	0.22%	[0.1000]	mg/L
K 766.490†	256.3	8.57	3.34%	[0.5000]	mg/L
Mg 279.077†	5891.4	6.91	0.12%	[0.5000]	mg/L
Ni 231.604†	1977.5	0.60	0.03%	[0.0400]	mg/L
Na 589.592†	2011.3	42.00	2.09%	[0.5000]	mg/L
Sn 189.927†	521.5	23.83	4.57%	[0.1000]	mg/L
Ti 337.279†	31100.5	81.10	0.26%	[0.0500]	mg/L
V 292.402†	3715.9	23.38	0.63%	[0.050]	mg/L
Zn 206.200†	873.6	5.79	0.66%	[0.020]	mg/L
Ca 227.546†	88.8	5.37	6.04%	[0.5000]	mg/L
Sr 421.552†	3393.4	55.23	1.63%	[0.0500]	mg/L

Sequence No.: 5
Sample ID: Calib Std 4
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 12
Date Collected: 10/15/2014 2:59:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	7000623.9	27019.84	0.39%	1.010	mg/L
Ag 328.068†	55516.1	582.98	1.05%	[0.2000]	mg/L
As 188.979†	580.0	2.04	0.35%	[0.4000]	mg/L
B 249.772†	121199.5	181.41	0.15%	[1.0000]	mg/L
Ba 233.527†	386947.7	66.91	0.02%	[4.0000]	mg/L
Be 313.107†	331954.9	304.03	0.09%	[0.1000]	mg/L
Cd 226.502†	19501.1	94.32	0.48%	[0.2000]	mg/L
Co 228.616†	24830.2	154.06	0.62%	[1.0000]	mg/L
Cr 267.716†	26283.6	109.67	0.42%	[0.2000]	mg/L
Cu 324.752†	138823.3	1028.07	0.74%	[0.5000]	mg/L
Fe 259.939†	125009.5	829.50	0.66%	[2.0000]	mg/L
K 766.490†	5355.5	3.56	0.07%	[10.000]	mg/L
Mg 279.077†	118222.0	1015.35	0.86%	[10.000]	mg/L
Mn 257.610†	115314.4	929.61	0.81%	[0.3000]	mg/L
Mo 202.031†	18382.6	135.68	0.74%	[1.0000]	mg/L
Ni 231.604†	38941.9	262.23	0.67%	[0.8000]	mg/L
Na 589.592†	39814.2	292.62	0.73%	[10.000]	mg/L
Pb 220.353†	1379.6	3.63	0.26%	[0.2000]	mg/L
Sb 206.836†	4339.1	23.78	0.55%	[2.0000]	mg/L
Se 196.026†	193.3	0.08	0.04%	[0.2000]	mg/L
Sn 189.927†	11073.9	101.86	0.92%	[2.0000]	mg/L
Ti 337.279†	615038.6	380.58	0.06%	[1.0000]	mg/L
Tl 190.801†	786.7	1.18	0.15%	[0.4000]	mg/L
V 292.402†	73669.9	844.46	1.15%	[1.0000]	mg/L
Zn 206.200†	14790.5	83.69	0.57%	[0.4000]	mg/L
Ca 227.546†	1889.1	5.18	0.27%	[10.000]	mg/L
Sr 421.552†	67911.2	272.66	0.40%	[1.0000]	mg/L
Al 237.313†	26297.8	195.81	0.74%	[4.0000]	mg/L

Sequence No.: 6
Sample ID: Calib Std 5
Analyst:
Autosampler Location: 2
Date Collected: 10/15/2014 3:05:55 PM
Data Type: Original

00710

Method: DV200-6010C Opt3 Page 4 Date: 10/15/2014 3:11:58 PM

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: Calib Std 5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	6867558.3	27781.36	0.40%	0.9906	mg/L
Ag 328.068†	260574.9	1763.35	0.68%	[1.0000]	mg/L
As 188.979†	2701.3	8.24	0.31%	[2.0000]	mg/L
B 249.772†	579441.2	8133.30	1.40%	[5.0000]	mg/L
Ba 233.527†	1756361.0	8736.65	0.50%	[20.000]	mg/L
Be 313.107†	1530345.8	9576.09	0.63%	[0.5000]	mg/L
Cd 226.502†	89706.7	754.85	0.84%	[1.0000]	mg/L
Co 228.616†	115759.6	840.50	0.73%	[5.0000]	mg/L
Cr 267.716†	122101.2	905.74	0.74%	[1.0000]	mg/L
Cu 324.752†	667116.9	6019.54	0.90%	[2.5000]	mg/L
Fe 259.939†	579286.5	3973.16	0.69%	[10.000]	mg/L
K 766.490†	25835.4	41.06	0.16%	[50.000]	mg/L
Mg 279.077†	555572.6	4333.37	0.78%	[50.000]	mg/L
Mn 257.610†	536393.4	3777.25	0.70%	[1.5000]	mg/L
Mo 202.031†	86160.0	604.84	0.70%	[5.0000]	mg/L
Ni 231.604†	178815.6	1363.16	0.76%	[4.0000]	mg/L
Na 589.592†	192721.3	9.03	0.00%	[50.000]	mg/L
Pb 220.353†	6416.2	14.79	0.23%	[1.0000]	mg/L
Sb 206.836†	20306.3	62.59	0.31%	[10.000]	mg/L
Se 196.026†	901.5	6.08	0.67%	[1.0000]	mg/L
Sn 189.927†	52874.1	467.63	0.88%	[10.000]	mg/L
Ti 337.279†	2837309.1	15478.55	0.55%	[5.0000]	mg/L
Tl 190.801†	3772.1	13.80	0.37%	[2.0000]	mg/L
V 292.402†	342396.3	2077.08	0.61%	[5.0000]	mg/L
Zn 206.200†	67200.8	518.08	0.77%	[2.0000]	mg/L
Ca 227.546†	9498.8	13.12	0.14%	[50.000]	mg/L
Sr 421.552†	330244.1	62.18	0.02%	[5.0000]	mg/L
Al 237.313†	127367.1	1066.99	0.84%	[20.000]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	261200	0.00000	0.999921	
As 188.979	4	Lin Thru 0	0.0	1354	0.00000	0.999900	
B 249.772	4	Lin Thru 0	0.0	116100	0.00000	0.999960	
Ba 233.527	3	Lin Thru 0	0.0	88160	0.00000	0.999811	
Be 313.107	4	Lin Thru 0	0.0	3071000	0.00000	0.999868	
Cd 226.502	4	Lin Thru 0	0.0	90010	0.00000	0.999861	
Co 228.616	4	Lin Thru 0	0.0	23220	0.00000	0.999903	
Cr 267.716	4	Lin Thru 0	0.0	122500	0.00000	0.999893	
Cu 324.752	4	Lin Thru 0	0.0	267300	0.00000	0.999970	
Fe 259.939	3	Lin Thru 0	0.0	58110	0.00000	0.999885	
K 766.490	4	Lin Thru 0	0.0	517.4	0.00000	0.999969	
Mg 279.077	4	Lin Thru 0	0.0	11140	0.00000	0.999925	
Mn 257.610	3	Lin Thru 0	0.0	358600	0.00000	0.999897	
Mo 202.031	3	Lin Thru 0	0.0	17280	0.00000	0.999918	
Ni 231.604	4	Lin Thru 0	0.0	44860	0.00000	0.999854	
Na 589.592	4	Lin Thru 0	0.0	3859	0.00000	0.999979	
Pb 220.353	3	Lin Thru 0	0.0	6435	0.00000	0.999896	
Sb 206.836	4	Lin Thru 0	0.0	2036	0.00000	0.999914	
Se 196.026	4	Lin Thru 0	0.0	904.0	0.00000	0.999900	
Sn 189.927	4	Lin Thru 0	0.0	5296	0.00000	0.999949	
Ti 337.279	3	Lin Thru 0	0.0	569300	0.00000	0.999870	
Tl 190.801	3	Lin Thru 0	0.0	1889	0.00000	0.999966	
V 292.402	4	Lin Thru 0	0.0	68680	0.00000	0.999894	
Zn 206.200	4	Lin Thru 0	0.0	33730	0.00000	0.999811	
Ca 227.546	4	Lin Thru 0	0.0	189.9	0.00000	0.999995	
Sr 421.552	3	Lin Thru 0	0.0	66120	0.00000	0.999985	
Al 237.313	3	Lin Thru 0	0.0	6376	0.00000	0.999981	

Sequence No.: 7 Autosampler Location: 3
Sample ID: ICV Date Collected: 10/15/2014 3:11:56 PM
Analyst: Data Type: Original

00711

Method: DV200-6010C Opt3 Page 5 Date: 10/15/2014 3:21:31 PM

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6987384.5	1.008	mg/L	0.0034				0.33%
Ag 328.068†	129283.9	0.4963	mg/L	0.00234	0.4963	mg/L	0.00234	0.47%
QC value within limits for Ag 328.068 Recovery = 99.27%								
As 188.979†	1345.1	0.9928	mg/L	0.00653	0.9928	mg/L	0.00653	0.66%
QC value within limits for As 188.979 Recovery = 99.28%								
B 249.772†	291859.7	2.493	mg/L	0.0260	2.493	mg/L	0.0260	1.04%
QC value within limits for B 249.772 Recovery = 99.72%								
Ba 233.527†	898914.2	10.20	mg/L	0.014	10.20	mg/L	0.014	0.14%
QC value within limits for Ba 233.527 Recovery = 101.96%								
Be 313.107†	773059.3	0.2518	mg/L	0.00031	0.2518	mg/L	0.00031	0.12%
QC value within limits for Be 313.107 Recovery = 100.70%								
Cd 226.502†	45244.9	0.5020	mg/L	0.00184	0.5020	mg/L	0.00184	0.37%
QC value within limits for Cd 226.502 Recovery = 100.41%								
Co 228.616†	57872.3	2.493	mg/L	0.0121	2.493	mg/L	0.0121	0.49%
QC value within limits for Co 228.616 Recovery = 99.71%								
Cr 267.716†	61419.5	0.5043	mg/L	0.00270	0.5043	mg/L	0.00270	0.54%
QC value within limits for Cr 267.716 Recovery = 100.85%								
Cu 324.752†	328555.3	1.230	mg/L	0.0104	1.230	mg/L	0.0104	0.84%
QC value within limits for Cu 324.752 Recovery = 98.39%								
Fe 259.939†	291377.4	5.001	mg/L	0.0314	5.001	mg/L	0.0314	0.63%
QC value within limits for Fe 259.939 Recovery = 100.02%								
K 766.490†	12428.6	24.02	mg/L	0.006	24.02	mg/L	0.006	0.02%
QC value within limits for K 766.490 Recovery = 96.09%								
Mg 279.077†	277058.2	24.87	mg/L	0.125	24.87	mg/L	0.125	0.50%
QC value within limits for Mg 279.077 Recovery = 99.49%								
Mn 257.610†	269094.7	0.7511	mg/L	0.00450	0.7511	mg/L	0.00450	0.60%
QC value within limits for Mn 257.610 Recovery = 100.14%								
Mo 202.031†	42297.1	2.448	mg/L	0.0095	2.448	mg/L	0.0095	0.39%
QC value within limits for Mo 202.031 Recovery = 97.93%								
Ni 231.604†	90070.6	2.008	mg/L	0.0078	2.008	mg/L	0.0078	0.39%
QC value within limits for Ni 231.604 Recovery = 100.40%								
Na 589.592†	90030.2	23.33	mg/L	0.151	23.33	mg/L	0.151	0.65%
QC value less than the lower limit for Na 589.592 Recovery = 93.31%								
Pb 220.353†	3210.4	0.5002	mg/L	0.00242	0.5002	mg/L	0.00242	0.48%
QC value within limits for Pb 220.353 Recovery = 100.04%								
Sb 206.836†	10064.4	4.942	mg/L	0.0250	4.942	mg/L	0.0250	0.51%
QC value within limits for Sb 206.836 Recovery = 98.85%								
Se 196.026†	446.8	0.4955	mg/L	0.00418	0.4955	mg/L	0.00418	0.84%
QC value within limits for Se 196.026 Recovery = 99.10%								
Sn 189.927†	26002.0	4.910	mg/L	0.0134	4.910	mg/L	0.0134	0.27%
QC value within limits for Sn 189.927 Recovery = 98.20%								
Ti 337.279†	1424021.8	2.501	mg/L	0.0025	2.501	mg/L	0.0025	0.10%
QC value within limits for Ti 337.279 Recovery = 100.05%								
Tl 190.801†	1859.4	0.9833	mg/L	0.00808	0.9833	mg/L	0.00808	0.82%
QC value within limits for Tl 190.801 Recovery = 98.33%								
V 292.402†	169807.0	2.472	mg/L	0.0128	2.472	mg/L	0.0128	0.52%
QC value within limits for V 292.402 Recovery = 98.88%								
Zn 206.200†	33672.1	0.9983	mg/L	0.00079	0.9983	mg/L	0.00079	0.08%
QC value within limits for Zn 206.200 Recovery = 99.83%								
Ca 227.546†	4516.5	24.08	mg/L	0.137	24.08	mg/L	0.137	0.57%
QC value within limits for Ca 227.546 Recovery = 96.33%								
Sr 421.552†	148657.8	2.248	mg/L	0.0107	2.248	mg/L	0.0107	0.47%
QC value less than the lower limit for Sr 421.552 Recovery = 89.93%								
Al 237.313†	62189.8	9.746	mg/L	0.0710	9.746	mg/L	0.0710	0.73%
QC value within limits for Al 237.313 Recovery = 97.46%								

QC Failed. Continue with analysis.

Sequence No.: 8 Autosampler Location: 1
Sample ID: ICB Date Collected: 10/15/2014 3:17:57 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

00712

Method: DV200-6010C Opt3 Page . 6 Date: 10/15/2014 3:27:24 PM

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7083358.6	1.022	mg/L	0.0057				0.56%
Ag 328.068†	74.2	0.0003	mg/L	0.00021	0.0003	mg/L	0.00021	72.60%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	2.2	0.0016	mg/L	0.00144	0.0016	mg/L	0.00144	90.59%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	5832.5	0.0502	mg/L	0.00333	0.0502	mg/L	0.00333	6.63%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	424.5	0.0048	mg/L	0.00069	0.0048	mg/L	0.00069	14.40%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	280.6	0.0001	mg/L	0.00004	0.0001	mg/L	0.00004	40.61%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	17.8	0.0002	mg/L	0.00003	0.0002	mg/L	0.00003	14.36%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	22.3	0.0010	mg/L	0.00019	0.0010	mg/L	0.00019	19.55%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	30.7	0.0003	mg/L	0.00003	0.0003	mg/L	0.00003	11.84%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1128.5	0.0042	mg/L	0.00037	0.0042	mg/L	0.00037	8.86%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	471.5	0.0081	mg/L	0.00038	0.0081	mg/L	0.00038	4.65%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	63.9	0.1236	mg/L	0.02536	0.1236	mg/L	0.02536	20.52%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	59.8	0.0054	mg/L	0.00386	0.0054	mg/L	0.00386	71.85%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	226.0	0.0006	mg/L	0.00006	0.0006	mg/L	0.00006	9.48%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	24.4	0.0014	mg/L	0.00015	0.0014	mg/L	0.00015	10.35%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	34.4	0.0008	mg/L	0.00002	0.0008	mg/L	0.00002	2.20%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	129.9	0.0337	mg/L	0.01160	0.0337	mg/L	0.01160	34.45%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	6.7	0.0010	mg/L	0.00072	0.0010	mg/L	0.00072	69.11%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	11.3	0.0056	mg/L	0.00006	0.0056	mg/L	0.00006	1.15%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.8	-0.0009	mg/L	0.00068	-0.0009	mg/L	0.00068	75.60%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	103.8	0.0196	mg/L	0.00121	0.0196	mg/L	0.00121	6.16%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	765.3	0.0013	mg/L	0.00013	0.0013	mg/L	0.00013	9.32%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	6.3	0.0034	mg/L	0.00057	0.0034	mg/L	0.00057	16.84%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	71.8	0.0010	mg/L	0.00022	0.0010	mg/L	0.00022	21.51%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	25.7	0.0008	mg/L	0.00009	0.0008	mg/L	0.00009	12.43%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	-3.5	-0.0182	mg/L	0.02128	-0.0182	mg/L	0.02128	116.67%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	59.8	0.0009	mg/L	0.00050	0.0009	mg/L	0.00050	55.23%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Al 237.313†	21.3	0.0034	mg/L	0.00381	0.0034	mg/L	0.00381	113.75%
QC value within limits for Al 237.313 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: MRL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 10/15/2014 3:23:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7061559.5	1.019	mg/L	0.0074				0.73%

00713

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Ag 328.068†	2689.4	0.0103 mg/L	0.00012	0.0103 mg/L	0.00012	1.15%
QC value within limits for Ag 328.068 Recovery = 103.27%					
As 188.979†	28.8	0.0213 mg/L	0.00001	0.0213 mg/L	0.00001	0.06%
QC value within limits for As 188.979 Recovery = 106.36%					
B 249.772†	26529.6	0.2281 mg/L	0.00152	0.2281 mg/L	0.00152	0.67%
QC value within limits for B 249.772 Recovery = 114.04%					
Ba 233.527†	18662.9	0.2117 mg/L	0.00062	0.2117 mg/L	0.00062	0.29%
QC value within limits for Ba 233.527 Recovery = 105.85%					
Be 313.107†	15595.8	0.0051 mg/L	0.00003	0.0051 mg/L	0.00003	0.55%
QC value within limits for Be 313.107 Recovery = 101.58%					
Cd 226.502†	948.7	0.0105 mg/L	0.00008	0.0105 mg/L	0.00008	0.74%
QC value within limits for Cd 226.502 Recovery = 105.26%					
Co 228.616†	1189.8	0.0512 mg/L	0.00057	0.0512 mg/L	0.00057	1.11%
QC value within limits for Co 228.616 Recovery = 102.49%					
Cr 267.716†	1250.9	0.0103 mg/L	0.00006	0.0103 mg/L	0.00006	0.54%
QC value within limits for Cr 267.716 Recovery = 103.19%					
Cu 324.752†	7021.1	0.0263 mg/L	0.00032	0.0263 mg/L	0.00032	1.20%
QC value within limits for Cu 324.752 Recovery = 105.13%					
Fe 259.939†	6339.4	0.1086 mg/L	0.00024	0.1086 mg/L	0.00024	0.22%
QC value within limits for Fe 259.939 Recovery = 108.59%					
K 766.490†	439.0	0.8485 mg/L	0.00452	0.8485 mg/L	0.00452	0.53%
QC value within limits for K 766.490 Recovery = 84.85%					
Mg 279.077†	11113.5	0.9977 mg/L	0.00095	0.9977 mg/L	0.00095	0.10%
QC value within limits for Mg 279.077 Recovery = 99.77%					
Mn 257.610†	5601.4	0.0156 mg/L	0.00001	0.0156 mg/L	0.00001	0.08%
QC value within limits for Mn 257.610 Recovery = 104.23%					
Mo 202.031†	440.4	0.0255 mg/L	0.00037	0.0255 mg/L	0.00037	1.46%
QC value within limits for Mo 202.031 Recovery = 101.97%					
Ni 231.604†	1809.1	0.0403 mg/L	0.00037	0.0403 mg/L	0.00037	0.91%
QC value within limits for Ni 231.604 Recovery = 100.83%					
Na 589.592†	3614.4	0.9366 mg/L	0.00065	0.9366 mg/L	0.00065	0.07%
QC value within limits for Na 589.592 Recovery = 93.66%					
Pb 220.353†	72.4	0.0113 mg/L	0.00030	0.0113 mg/L	0.00030	2.69%
QC value within limits for Pb 220.353 Recovery = 112.87%					
Sb 206.836†	125.5	0.0616 mg/L	0.00053	0.0616 mg/L	0.00053	0.87%
QC value within limits for Sb 206.836 Recovery = 102.69%					
Se 196.026†	8.9	0.0098 mg/L	0.00168	0.0098 mg/L	0.00168	17.07%
QC value within limits for Se 196.026 Recovery = 98.17%					
Sn 189.927†	2674.7	0.5051 mg/L	0.01202	0.5051 mg/L	0.01202	2.38%
QC value within limits for Sn 189.927 Recovery = 101.01%					
Ti 337.279†	29844.6	0.0524 mg/L	0.00017	0.0524 mg/L	0.00017	0.33%
QC value within limits for Ti 337.279 Recovery = 104.85%					
Tl 190.801†	38.0	0.0201 mg/L	0.00014	0.0201 mg/L	0.00014	0.70%
QC value within limits for Tl 190.801 Recovery = 100.46%					
V 292.402†	3538.0	0.0515 mg/L	0.00034	0.0515 mg/L	0.00034	0.66%
QC value within limits for V 292.402 Recovery = 103.01%					
Zn 206.200†	645.0	0.0191 mg/L	0.00032	0.0191 mg/L	0.00032	1.70%
QC value within limits for Zn 206.200 Recovery = 95.60%					
Ca 227.546†	163.4	0.8669 mg/L	0.00156	0.8669 mg/L	0.00156	0.18%
QC value within limits for Ca 227.546 Recovery = 86.69%					
Sr 421.552†	6173.3	0.0934 mg/L	0.00069	0.0934 mg/L	0.00069	0.74%
QC value within limits for Sr 421.552 Recovery = 93.36%					
Al 237.313†	1206.9	0.1889 mg/L	0.00336	0.1889 mg/L	0.00336	1.78%
QC value within limits for Al 237.313 Recovery = 94.44%					

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 10/15/2014 3:29:45 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	6628338.9	0.9561 mg/L	0.00215			0.22%
Ag 328.068†	-6833.2	-0.0003 mg/L	0.00022	-0.0003 mg/L	0.00022	75.01%
QC value within limits for Ag 328.068 Recovery = Not calculated						
As 188.979†	14.8	0.0020 mg/L	0.00069	0.0020 mg/L	0.00069	33.62%
QC value within limits for As 188.979 Recovery = Not calculated						

00714

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B 249.772†	42006.8	-0.0174 mg/L	0.00362	-0.0174 mg/L	0.00362	20.79%
Ba 233.527†	255.1	0.0029 mg/L	0.00008	0.0029 mg/L	0.00008	2.60%
Be 313.107†	-1159.6	-0.0004 mg/L	0.00004	-0.0004 mg/L	0.00004	9.98%
QC value within limits for Be 313.107 Recovery = Not calculated						
Cd 226.502†	1060.4	0.0006 mg/L	0.00013	0.0006 mg/L	0.00013	21.44%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	10.9	0.0005 mg/L	0.00017	0.0005 mg/L	0.00017	37.09%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-3733.2	-0.0005 mg/L	0.00049	-0.0005 mg/L	0.00049	104.89%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-1790.6	0.0025 mg/L	0.00013	0.0025 mg/L	0.00013	5.22%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	5210847.5	89.53 mg/L	0.294	89.53 mg/L	0.294	0.33%
QC value within limits for Fe 259.939 Recovery = 89.53%						
K 766.490†	66.6	0.1287 mg/L	0.04588	0.1287 mg/L	0.04588	35.65%
Mg 279.077†	2888209.0	259.3 mg/L	1.05	259.3 mg/L	1.05	0.41%
QC value within limits for Mg 279.077 Recovery = 103.72%						
Mn 257.610†	-5389.4	-0.0022 mg/L	0.00006	-0.0022 mg/L	0.00006	2.82%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	4.0	0.0002 mg/L	0.00016	0.0002 mg/L	0.00016	69.73%
Ni 231.604†	-137.8	-0.0031 mg/L	0.00048	-0.0031 mg/L	0.00048	15.51%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	7.7	0.0020 mg/L	0.02065	0.0020 mg/L	0.02065	>999.9%
Pb 220.353†	-179.6	0.0028 mg/L	0.00154	0.0028 mg/L	0.00154	55.33%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	50.2	0.0023 mg/L	0.00115	0.0023 mg/L	0.00115	50.56%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-24.3	-0.0038 mg/L	0.00449	-0.0038 mg/L	0.00449	117.51%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	-269.7	-0.0509 mg/L	0.00036	-0.0509 mg/L	0.00036	0.70%
Ti 337.279†	411.1	0.0007 mg/L	0.00002	0.0007 mg/L	0.00002	3.14%
Tl 190.801†	36.7	0.0011 mg/L	0.00169	0.0011 mg/L	0.00169	156.82%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	359.5	-0.0015 mg/L	0.00062	-0.0015 mg/L	0.00062	41.88%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	168.7	0.0050 mg/L	0.00003	0.0050 mg/L	0.00003	0.55%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	47154.2	253.9 mg/L	0.31	253.9 mg/L	0.31	0.12%
QC value within limits for Ca 227.546 Recovery = 101.55%						
Sr 421.552†	255.7	0.0039 mg/L	0.00008	0.0039 mg/L	0.00008	2.04%
Al 237.313†	1616751.2	253.5 mg/L	0.78	253.5 mg/L	0.78	0.31%
QC value within limits for Al 237.313 Recovery = 101.41%						

All analyte(s) passed QC.

Sequence No.: 11 **Autosampler Location: 8**
Sample ID: ICSAB **Date Collected: 10/15/2014 3:35:43 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6606416.1	0.9529	mg/L	0.00084				0.09%
Ag 328.068†	46563.3	0.2042	mg/L	0.00154	0.2042	mg/L	0.00154	0.76%
QC value within limits for Ag 328.068 Recovery = 102.10%								
As 188.979†	149.4	0.1013	mg/L	0.00249	0.1013	mg/L	0.00249	2.45%
QC value within limits for As 188.979 Recovery = 101.34%								
B 249.772†	41233.3	-0.0254	mg/L	0.00584	-0.0254	mg/L	0.00584	23.04%
Ba 233.527†	46118.9	0.5231	mg/L	0.00679	0.5231	mg/L	0.00679	1.30%
QC value within limits for Ba 233.527 Recovery = 104.62%								
Be 313.107†	1532438.9	0.4991	mg/L	0.00005	0.4991	mg/L	0.00005	0.01%
QC value within limits for Be 313.107 Recovery = 99.81%								
Cd 226.502†	87338.8	0.9592	mg/L	0.01250	0.9592	mg/L	0.01250	1.30%
QC value within limits for Cd 226.502 Recovery = 95.92%								
Co 228.616†	11022.3	0.4748	mg/L	0.00092	0.4748	mg/L	0.00092	0.19%
QC value within limits for Co 228.616 Recovery = 94.95%								
Cr 267.716†	57572.0	0.5002	mg/L	0.00488	0.5002	mg/L	0.00488	0.98%
QC value within limits for Cr 267.716 Recovery = 100.03%								
Cu 324.752†	137725.4	0.5246	mg/L	0.00054	0.5246	mg/L	0.00054	0.10%

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QC value within limits for Cu 324.752 Recovery = 104.92%						
Fe 259.939†	5228709.0	89.84 mg/L	0.115	89.84 mg/L	0.115	0.13%
QC value within limits for Fe 259.939 Recovery = 89.84%						
K 766.490†	32.1	0.0621 mg/L	0.02895	0.0621 mg/L	0.02895	46.61%
Mg 279.077†	2888802.1	259.3 mg/L	0.01	259.3 mg/L	0.01	0.00%
QC value within limits for Mg 279.077 Recovery = 103.74%						
Mn 257.610†	175486.3	0.5022 mg/L	0.00477	0.5022 mg/L	0.00477	0.95%
QC value within limits for Mn 257.610 Recovery = 100.44%						
Mo 202.031†	4.4	0.0003 mg/L	0.00013	0.0003 mg/L	0.00013	52.25%
Ni 231.604†	42489.4	0.9472 mg/L	0.01156	0.9472 mg/L	0.01156	1.22%
QC value within limits for Ni 231.604 Recovery = 94.72%						
Na 589.592†	-46.0	-0.0119 mg/L	0.01519	-0.0119 mg/L	0.01519	127.49%
Pb 220.353†	146.8	0.0538 mg/L	0.00128	0.0538 mg/L	0.00128	2.39%
QC value within limits for Pb 220.353 Recovery = 107.51%						
Sb 206.836†	1324.0	0.6278 mg/L	0.00111	0.6278 mg/L	0.00111	0.18%
QC value within limits for Sb 206.836 Recovery = 104.63%						
Se 196.026†	23.1	0.0487 mg/L	0.00292	0.0487 mg/L	0.00292	6.01%
QC value within limits for Se 196.026 Recovery = 97.34%						
Sn 189.927†	-239.2	-0.0452 mg/L	0.00019	-0.0452 mg/L	0.00019	0.41%
Ti 337.279†	392.5	0.0007 mg/L	0.00009	0.0007 mg/L	0.00009	13.57%
Tl 190.801†	235.5	0.1061 mg/L	0.00003	0.1061 mg/L	0.00003	0.03%
QC value within limits for Tl 190.801 Recovery = 106.12%						
V 292.402†	33851.1	0.4862 mg/L	0.00453	0.4862 mg/L	0.00453	0.93%
QC value within limits for V 292.402 Recovery = 97.23%						
Zn 206.200†	31998.0	0.9486 mg/L	0.01591	0.9486 mg/L	0.01591	1.68%
QC value within limits for Zn 206.200 Recovery = 94.86%						
Ca 227.546†	48334.8	260.1 mg/L	0.55	260.1 mg/L	0.55	0.21%
QC value within limits for Ca 227.546 Recovery = 104.05%						
Sr 421.552†	245.3	0.0037 mg/L	0.00011	0.0037 mg/L	0.00011	3.08%
Al 237.313†	1628869.6	255.4 mg/L	0.77	255.4 mg/L	0.77	0.30%
QC value within limits for Al 237.313 Recovery = 102.17%						
All analyte(s) passed QC.						

Sequence No.: 12
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 10/15/2014 3:41:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6972617.6	1.006	mg/L	0.0002				0.02%
Ag 328.068†	128284.3	0.4925	mg/L	0.00245	0.4925	mg/L	0.00245	0.50%
QC value within limits for Ag 328.068 Recovery = 98.50%								
As 188.979†	1347.0	0.9942	mg/L	0.00167	0.9942	mg/L	0.00167	0.17%
QC value within limits for As 188.979 Recovery = 99.42%								
B 249.772†	283555.2	2.422	mg/L	0.0268	2.422	mg/L	0.0268	1.11%
QC value within limits for B 249.772 Recovery = 96.87%								
Ba 233.527†	878537.1	9.965	mg/L	0.0184	9.965	mg/L	0.0184	0.18%
QC value within limits for Ba 233.527 Recovery = 99.65%								
Be 313.107†	759224.3	0.2473	mg/L	0.00092	0.2473	mg/L	0.00092	0.37%
QC value within limits for Be 313.107 Recovery = 98.90%								
Cd 226.502†	44655.6	0.4955	mg/L	0.00096	0.4955	mg/L	0.00096	0.19%
QC value within limits for Cd 226.502 Recovery = 99.10%								
Co 228.616†	56684.2	2.442	mg/L	0.0077	2.442	mg/L	0.0077	0.32%
QC value within limits for Co 228.616 Recovery = 97.66%								
Cr 267.716†	60641.7	0.4979	mg/L	0.00107	0.4979	mg/L	0.00107	0.21%
QC value within limits for Cr 267.716 Recovery = 99.57%								
Cu 324.752†	320369.1	1.199	mg/L	0.0076	1.199	mg/L	0.0076	0.63%
QC value within limits for Cu 324.752 Recovery = 95.94%								
Fe 259.939†	287132.5	4.928	mg/L	0.0105	4.928	mg/L	0.0105	0.21%
QC value within limits for Fe 259.939 Recovery = 98.56%								
K 766.490†	12516.4	24.19	mg/L	0.204	24.19	mg/L	0.204	0.85%
QC value within limits for K 766.490 Recovery = 96.77%								
Mg 279.077†	273128.5	24.52	mg/L	0.028	24.52	mg/L	0.028	0.12%
QC value within limits for Mg 279.077 Recovery = 98.08%								
Mn 257.610†	263444.5	0.7353	mg/L	0.00311	0.7353	mg/L	0.00311	0.42%
QC value within limits for Mn 257.610 Recovery = 98.04%								
Mo 202.031†	41801.6	2.420	mg/L	0.0007	2.420	mg/L	0.0007	0.03%

00716

Method: DV200-6010C Opt3 **Page 10** **Date: 10/15/2014 3:51:23 PM**

QC value within limits for Mo 202.031 Recovery = 96.78%

Ni 231.604†	88703.0	1.977 mg/L	0.0061	1.977 mg/L	0.0061	0.31%

QC value within limits for Ni 231.604 Recovery = 98.87%

Na 589.592†	91723.3	23.77 mg/L	0.155	23.77 mg/L	0.155	0.65%

QC value within limits for Na 589.592 Recovery = 95.07%

Pb 220.353†	3176.5	0.4949 mg/L	0.00184	0.4949 mg/L	0.00184	0.37%

QC value within limits for Pb 220.353 Recovery = 98.98%

Sb 206.836†	10033.8	4.927 mg/L	0.0190	4.927 mg/L	0.0190	0.38%

QC value within limits for Sb 206.836 Recovery = 98.55%

Se 196.026†	444.2	0.4926 mg/L	0.00184	0.4926 mg/L	0.00184	0.37%

QC value within limits for Se 196.026 Recovery = 98.52%

Sn 189.927†	25513.3	4.818 mg/L	0.0212	4.818 mg/L	0.0212	0.44%

QC value within limits for Sn 189.927 Recovery = 96.35%

Ti 337.279†	1399257.1	2.458 mg/L	0.0007	2.458 mg/L	0.0007	0.03%

QC value within limits for Ti 337.279 Recovery = 98.31%

Tl 190.801†	1828.7	0.9671 mg/L	0.00114	0.9671 mg/L	0.00114	0.12%

QC value within limits for Tl 190.801 Recovery = 96.71%

V 292.402†	170723.8	2.485 mg/L	0.0207	2.485 mg/L	0.0207	0.83%

QC value within limits for V 292.402 Recovery = 99.42%

Zn 206.200†	33433.7	0.9912 mg/L	0.00681	0.9912 mg/L	0.00681	0.69%

QC value within limits for Zn 206.200 Recovery = 99.12%

Ca 227.546†	4458.4	23.77 mg/L	0.219	23.77 mg/L	0.219	0.92%

QC value within limits for Ca 227.546 Recovery = 95.08%

Sr 421.552†	153700.8	2.325 mg/L	0.0171	2.325 mg/L	0.0171	0.74%

QC value within limits for Sr 421.552 Recovery = 92.98%

Al 237.313†	61199.3	9.590 mg/L	0.0101	9.590 mg/L	0.0101	0.11%

QC value within limits for Al 237.313 Recovery = 95.90%

All analyte(s) passed QC.

==========

Sequence No.: 13 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 10/15/2014 3:47:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7158666.9	1.033	mg/L	0.0134				1.30%
Ag 328.068†	71.6	0.0003	mg/L	0.00002	0.0003	mg/L	0.00002	8.44%

QC value within limits for Ag 328.068 Recovery = Not calculated

As 188.979†	2.4	0.0017	mg/L	0.00177	0.0017	mg/L	0.00177	101.62%

QC value within limits for As 188.979 Recovery = Not calculated

B 249.772†	3971.0	0.0341	mg/L	0.00265	0.0341	mg/L	0.00265	7.79%

QC value within limits for B 249.772 Recovery = Not calculated

Ba 233.527†	373.4	0.0042	mg/L	0.00078	0.0042	mg/L	0.00078	18.32%

QC value within limits for Ba 233.527 Recovery = Not calculated

Be 313.107†	1091.4	0.0004	mg/L	0.00014	0.0004	mg/L	0.00014	40.35%

QC value within limits for Be 313.107 Recovery = Not calculated

Cd 226.502†	33.9	0.0004	mg/L	0.00010	0.0004	mg/L	0.00010	27.21%

QC value within limits for Cd 226.502 Recovery = Not calculated

Co 228.616†	21.2	0.0009	mg/L	0.00040	0.0009	mg/L	0.00040	44.03%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716†	34.5	0.0003	mg/L	0.00010	0.0003	mg/L	0.00010	34.67%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.752†	927.9	0.0035	mg/L	0.00017	0.0035	mg/L	0.00017	5.01%

QC value within limits for Cu 324.752 Recovery = Not calculated

Fe 259.939†	1929.3	0.0332	mg/L	0.00496	0.0332	mg/L	0.00496	14.96%

QC value within limits for Fe 259.939 Recovery = Not calculated

K 766.490†	33.9	0.0655	mg/L	0.05587	0.0655	mg/L	0.05587	85.29%

QC value within limits for K 766.490 Recovery = Not calculated

Mg 279.077†	757.2	0.0680	mg/L	0.02127	0.0680	mg/L	0.02127	31.29%

QC value within limits for Mg 279.077 Recovery = Not calculated

Mn 257.610†	196.3	0.0006	mg/L	0.00010	0.0006	mg/L	0.00010	17.82%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031†	19.4	0.0011	mg/L	0.00007	0.0011	mg/L	0.00007	6.46%

QC value within limits for Mo 202.031 Recovery = Not calculated

Ni 231.604†	44.8	0.0010	mg/L	0.00025	0.0010	mg/L	0.00025	24.67%

QC value within limits for Ni 231.604 Recovery = Not calculated

Na 589.592†	164.4	0.0426	mg/L	0.00628	0.0426	mg/L	0.00628	14.75%

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```
   QC value within limits for Na 589.592  Recovery = Not calculated
Pb 220.353†              10.2      0.0016 mg/L       0.00011      0.0016 mg/L       0.00011   6.97%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†              10.1      0.0050 mg/L       0.00029      0.0050 mg/L       0.00029   5.89%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -1.4     -0.0015 mg/L       0.00108     -0.0015 mg/L       0.00108  71.73%
   QC value within limits for Se 196.026  Recovery = Not calculated
Sn 189.927†              76.8      0.0145 mg/L       0.00902      0.0145 mg/L       0.00902  62.18%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 337.279†             667.3      0.0012 mg/L       0.00026      0.0012 mg/L       0.00026  22.11%
   QC value within limits for Ti 337.279  Recovery = Not calculated
Tl 190.801†               1.6      0.0009 mg/L       0.00127      0.0009 mg/L       0.00127 148.76%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 292.402†               93.4      0.0014 mg/L       0.00053      0.0014 mg/L       0.00053  38.73%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 206.200†              28.1      0.0008 mg/L       0.00004      0.0008 mg/L       0.00004   4.89%
   QC value within limits for Zn 206.200  Recovery = Not calculated
Ca 227.546†               5.7      0.0319 mg/L       0.00738      0.0319 mg/L       0.00738  23.15%
   QC value within limits for Ca 227.546  Recovery = Not calculated
Sr 421.552†              86.6      0.0013 mg/L       0.00017      0.0013 mg/L       0.00017  12.95%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Al 237.313†             336.7      0.0528 mg/L       0.01132      0.0528 mg/L       0.01132  21.43%
   QC value greater than the upper limit for Al 237.313  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 14 **Autosampler Location: 38**
Sample ID: PBW-220599 **Date Collected: 10/15/2014 3:53:42 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: PBW-220599

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7131632.4	1.029	mg/L	0.0050				0.49%
Ag 328.068†	67.7	0.0003	mg/L	0.00021				81.00%
As 188.979†	-0.5	-0.0004	mg/L	0.00014				37.27%
B 249.772†	2442.1	0.0210	mg/L	0.00118				5.60%
Ba 233.527†	47.5	0.0005	mg/L	0.00010				19.13%
Be 313.107†	109.7	0.0000	mg/L	0.00006				165.64%
Cd 226.502†	-11.0	-0.0001	mg/L	0.00003				22.24%
Co 228.616†	-4.1	-0.0002	mg/L	0.00004				25.45%
Cr 267.716†	105.6	0.0009	mg/L	0.00002				2.65%
Cu 324.752†	520.4	0.0019	mg/L	0.00071				36.58%
Fe 259.939†	753.5	0.0130	mg/L	0.00035				2.69%
K 766.490†	-22.4	-0.0432	mg/L	0.01636				37.86%
Mg 279.077†	181.1	0.0163	mg/L	0.00414				25.49%
Mn 257.610†	699.6	0.0020	mg/L	0.00001				0.74%
Mo 202.031†	1.4	0.0001	mg/L	0.00009				102.30%
Ni 231.604†	-5.9	-0.0001	mg/L	0.00007				56.04%
Na 589.592†	23.0	0.0060	mg/L	0.00611				102.38%
Pb 220.353†	4.2	0.0006	mg/L	0.00048				74.17%
Sb 206.836†	8.7	0.0043	mg/L	0.00022				5.21%
Se 196.026†	0.5	0.0006	mg/L	0.00088				156.14%
Sn 189.927†	-63.8	-0.0120	mg/L	0.00622				51.66%
Ti 337.279†	478.6	0.0008	mg/L	0.00002				2.21%
Tl 190.801†	-4.4	-0.0023	mg/L	0.00089				38.04%
V 292.402†	11.3	0.0002	mg/L	0.00002				10.18%
Zn 206.200†	42.6	0.0013	mg/L	0.00003				2.11%
Ca 227.546†	-4.8	-0.0246	mg/L	0.01188				48.36%
Sr 421.552†	-2.4	0.0000	mg/L	0.00015				417.46%
Al 237.313†	96.8	0.0152	mg/L	0.00011				0.72%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 15 **Autosampler Location: 39**
Sample ID: LCSW-220599 **Date Collected: 10/15/2014 3:59:37 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

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Mean Data: LCSW-220599

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7052231.6	1.017	mg/L	0.0014				0.13%
Ag 328.068†	13061.7	0.0503	mg/L	0.00077				1.54%
As 188.979†	52.8	0.0389	mg/L	0.00081				2.09%
B 249.772†	110269.7	0.9457	mg/L	0.01798				1.90%
Ba 233.527†	174704.6	1.982	mg/L	0.0200				1.01%
Be 313.107†	147322.0	0.0480	mg/L	0.00043				0.90%
Cd 226.502†	4453.2	0.0493	mg/L	0.00034				0.69%
Co 228.616†	11412.3	0.4916	mg/L	0.00498				1.01%
Cr 267.716†	25081.2	0.2051	mg/L	0.00229				1.12%
Cu 324.752†	69556.8	0.2604	mg/L	0.00484				1.86%
Fe 259.939†	58260.0	1.002	mg/L	0.0116				1.16%
K 766.490†	9893.3	19.12	mg/L	0.083				0.43%
Mg 279.077†	21824.1	1.959	mg/L	0.0306				1.56%
Mn 257.610†	178598.3	0.4982	mg/L	0.00545				1.10%
Mo 202.031†	8424.3	0.4876	mg/L	0.00801				1.64%
Ni 231.604†	22755.7	0.5073	mg/L	0.00563				1.11%
Na 589.592†	77681.3	20.13	mg/L	0.069				0.34%
Pb 220.353†	3201.0	0.4977	mg/L	0.00393				0.79%
Sb 206.836†	1005.2	0.4935	mg/L	0.00009				0.02%
Se 196.026†	838.4	0.9277	mg/L	0.00714				0.77%
Sn 189.927†	27483.8	5.190	mg/L	0.0539				1.04%
Ti 337.279†	282000.9	0.4953	mg/L	0.00619				1.25%
Tl 190.801†	3537.5	1.872	mg/L	0.0059				0.31%
V 292.402†	34541.8	0.5029	mg/L	0.00643				1.28%
Zn 206.200†	17188.4	0.5096	mg/L	0.00268				0.53%
Ca 227.546†	372.6	2.022	mg/L	0.0084				0.41%
Sr 421.552†	-20.9	-0.0003	mg/L	0.00032				100.63%
Al 237.313†	11964.5	1.876	mg/L	0.0315				1.68%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 16
Sample ID: FBLK 12412-03
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 10/15/2014 4:05:42 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: FBLK 12412-03

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7208781.0	1.040	mg/L	0.0117				1.13%
Ag 328.068†	74.5	0.0003	mg/L	0.00011				39.85%
As 188.979†	-0.0	0.0000	mg/L	0.00035				>999.9%
B 249.772†	2274.7	0.0195	mg/L	0.00170				8.69%
Ba 233.527†	67.7	0.0008	mg/L	0.00018				22.91%
Be 313.107†	354.5	0.0001	mg/L	0.00008				72.42%
Cd 226.502†	-8.9	-0.0001	mg/L	0.00001				6.44%
Co 228.616†	-7.1	-0.0003	mg/L	0.00003				10.02%
Cr 267.716†	90.3	0.0007	mg/L	0.00008				11.29%
Cu 324.752†	378.0	0.0014	mg/L	0.00036				25.11%
Fe 259.939†	702.3	0.0121	mg/L	0.00049				4.08%
K 766.490†	11.7	0.0226	mg/L	0.05483				242.72%
Mg 279.077†	194.6	0.0175	mg/L	0.00657				37.60%
Mn 257.610†	891.8	0.0025	mg/L	0.00002				0.79%
Mo 202.031†	-0.8	0.0000	mg/L	0.00012				271.00%
Ni 231.604†	-8.6	-0.0002	mg/L	0.00000				2.19%
Na 589.592†	133.8	0.0347	mg/L	0.00410				11.82%
Pb 220.353†	4.0	0.0006	mg/L	0.00016				25.38%
Sb 206.836†	5.7	0.0028	mg/L	0.00005				1.82%
Se 196.026†	1.1	0.0013	mg/L	0.00138				110.10%
Sn 189.927†	-61.2	-0.0116	mg/L	0.00607				52.45%
Ti 337.279†	474.7	0.0008	mg/L	0.00000				0.41%
Tl 190.801†	-4.2	-0.0022	mg/L	0.00162				72.20%
V 292.402†	0.9	0.0000	mg/L	0.00024				>999.9%
Zn 206.200†	18.6	0.0006	mg/L	0.00013				23.80%
Ca 227.546†	1.2	0.0068	mg/L	0.02986				437.67%

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Sr 421.552†	4.8	0.0001 mg/L	0.00042		579.69%
Al 237.313†	59.6	0.0094 mg/L	0.00030		3.21%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 17
Sample ID: R1407822-013
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 10/15/2014 4:11:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407822-013

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6724771.0	0.9700	mg/L	0.00790				0.81%
Ag 328.068†	-95.2	-0.0003	mg/L	0.00010				29.77%
As 188.979†	5.5	0.0041	mg/L	0.00119				29.38%
B 249.772†	8178.0	0.0699	mg/L	0.00066				0.95%
Ba 233.527†	8986.8	0.1019	mg/L	0.00027				0.26%
Be 313.107†	-834.2	-0.0003	mg/L	0.00002				6.43%
Cd 226.502†	-11.0	-0.0001	mg/L	0.00001				6.20%
Co 228.616†	-11.7	-0.0005	mg/L	0.00009				17.51%
Cr 267.716†	-288.5	-0.0006	mg/L	0.00013				21.06%
Cu 324.752†	2276.9	0.0085	mg/L	0.00009				1.10%
Fe 259.939†	7361.4	0.0804	mg/L	0.00042				0.52%
K 766.490†	1722.5	3.329	mg/L	0.0077				0.23%
Mg 279.077†	195116.9	17.52	mg/L	0.042				0.24%
Mn 257.610†	16388.3	0.0457	mg/L	0.00015				0.33%
Mo 202.031†	138.9	0.0080	mg/L	0.00006				0.70%
Ni 231.604†	152.2	0.0034	mg/L	0.00022				6.41%
Na 589.592†	1344963.4	348.5	mg/L	2.11				0.61%
Pb 220.353†	6.5	0.0016	mg/L	0.00032				20.13%
Sb 206.836†	9.2	0.0045	mg/L	0.00135				29.65%
Se 196.026†	1.5	0.0017	mg/L	0.00117				70.11%
Sn 189.927†	-139.8	-0.0264	mg/L	0.00428				16.20%
Ti 337.279†	675.2	0.0012	mg/L	0.00006				4.88%
Tl 190.801†	7.1	0.0023	mg/L	0.00245				106.09%
V 292.402†	37.9	0.0005	mg/L	0.00003				5.50%
Zn 206.200†	1056.1	0.0313	mg/L	0.00016				0.52%
Ca 227.546†	17715.0	93.28	mg/L	0.658				0.70%
Sr 421.552†	49109.7	0.7427	mg/L	0.00099				0.13%
Al 237.313†	142.8	-0.0034	mg/L	0.00007				1.98%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 18
Sample ID: R1407822-014
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 10/15/2014 4:17:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407822-014

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6979489.8	1.007	mg/L	0.0112				1.11%
Ag 328.068†	42.7	0.0002	mg/L	0.00018				102.54%
As 188.979†	0.5	0.0004	mg/L	0.00054				148.62%
B 249.772†	19521.4	0.1680	mg/L	0.00014				0.08%
Ba 233.527†	6278.6	0.0712	mg/L	0.00006				0.09%
Be 313.107†	-271.0	-0.0001	mg/L	0.00000				1.37%
Cd 226.502†	-9.0	-0.0001	mg/L	0.00007				70.68%
Co 228.616†	-4.3	-0.0002	mg/L	0.00004				20.25%
Cr 267.716†	-432.7	-0.0011	mg/L	0.00017				15.38%
Cu 324.752†	470.5	0.0018	mg/L	0.00004				2.39%
Fe 259.939†	2456.2	0.0186	mg/L	0.00031				1.65%
K 766.490†	2347.8	4.538	mg/L	0.0514				1.13%
Mg 279.077†	273569.8	24.56	mg/L	0.117				0.48%
Mn 257.610†	32134.1	0.0896	mg/L	0.00038				0.43%
Mo 202.031†	38.3	0.0022	mg/L	0.00020				8.95%
Ni 231.604†	35.7	0.0008	mg/L	0.00014				17.64%

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Na 589.592†	394375.8	102.2	mg/L	1.93	1.89%
Pb 220.353†	-4.9	-0.0004	mg/L	0.00019	48.13%
Sb 206.836†	6.7	0.0033	mg/L	0.00131	39.88%
Se 196.026†	1.7	0.0019	mg/L	0.00030	15.51%
Sn 189.927†	-186.1	-0.0351	mg/L	0.00590	16.79%
Ti 337.279†	441.6	0.0008	mg/L	0.00001	1.16%
Tl 190.801†	-3.0	-0.0023	mg/L	0.00128	56.18%
V 292.402†	-10.6	-0.0002	mg/L	0.00013	80.62%
Zn 206.200†	202.9	0.0060	mg/L	0.00003	0.49%
Ca 227.546†	8435.8	44.42	mg/L	0.209	0.47%
Sr 421.552†	60041.5	0.9081	mg/L	0.00096	0.11%
Al 237.313†	78.1	-0.0055	mg/L	0.00031	5.55%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 19
Sample ID: R1407822-015
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 10/15/2014 4:23:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407822-015

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6931381.3	0.9998	mg/L	0.00535				0.54%
Ag 328.068†	-127.3	-0.0005	mg/L	0.00016				34.59%
As 188.979†	2.6	0.0019	mg/L	0.00190				99.42%
B 249.772†	9652.5	0.0830	mg/L	0.00052				0.63%
Ba 233.527†	19957.3	0.2264	mg/L	0.00019				0.09%
Be 313.107†	-566.9	-0.0002	mg/L	0.00001				3.03%
Cd 226.502†	-18.7	-0.0002	mg/L	0.00000				0.72%
Co 228.616†	-26.9	-0.0012	mg/L	0.00005				4.52%
Cr 267.716†	-750.5	-0.0022	mg/L	0.00020				9.03%
Cu 324.752†	696.0	0.0026	mg/L	0.00013				5.13%
Fe 259.939†	2229.7	-0.0048	mg/L	0.00013				2.69%
K 766.490†	1482.6	2.866	mg/L	0.0642				2.24%
Mg 279.077†	437568.1	39.28	mg/L	0.318				0.81%
Mn 257.610†	5998.4	0.0167	mg/L	0.00004				0.22%
Mo 202.031†	21.4	0.0012	mg/L	0.00010				8.43%
Ni 231.604†	-57.5	-0.0013	mg/L	0.00004				3.32%
Na 589.592†	215817.4	55.92	mg/L	0.396				0.71%
Pb 220.353†	-8.2	-0.0007	mg/L	0.00049				76.07%
Sb 206.836†	5.5	0.0027	mg/L	0.00204				75.53%
Se 196.026†	-1.4	-0.0015	mg/L	0.00078				51.18%
Sn 189.927†	-164.3	-0.0310	mg/L	0.00162				5.24%
Ti 337.279†	457.1	0.0008	mg/L	0.00004				4.87%
Tl 190.801†	2.2	-0.0001	mg/L	0.00045				517.86%
V 292.402†	-2.9	0.0000	mg/L	0.00003				75.67%
Zn 206.200†	98.1	0.0029	mg/L	0.00011				3.64%
Ca 227.546†	15600.4	82.14	mg/L	0.455				0.55%
Sr 421.552†	178799.2	2.704	mg/L	0.0203				0.75%
Al 237.313†	104.3	-0.0145	mg/L	0.00254				17.55%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 20
Sample ID: R1407822-016
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 10/15/2014 4:29:42 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407822-016

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6961115.8	1.004	mg/L	0.0055				0.55%
Ag 328.068†	-87.0	-0.0003	mg/L	0.00021				72.47%
As 188.979†	1.7	0.0013	mg/L	0.00070				56.15%
B 249.772†	15635.4	0.1340	mg/L	0.00146				1.09%
Ba 233.527†	7382.9	0.0837	mg/L	0.00043				0.52%
Be 313.107†	-463.4	-0.0002	mg/L	0.00002				11.88%

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Cd 226.502†	-22.5	-0.0003 mg/L	0.00008	29.39%
Co 228.616†	-19.4	-0.0008 mg/L	0.00001	1.30%
Cr 267.716†	-841.0	-0.0022 mg/L	0.00014	6.22%
Cu 324.752†	683.9	0.0026 mg/L	0.00022	8.40%
Fe 259.939†	9369.3	0.1309 mg/L	0.00006	0.05%
K 766.490†	1498.8	2.897 mg/L	0.0057	0.20%
Mg 279.077†	516387.5	46.36 mg/L	0.058	0.13%
Mn 257.610†	26685.8	0.0744 mg/L	0.00064	0.86%
Mo 202.031†	64.5	0.0037 mg/L	0.00006	1.53%
Ni 231.604†	24.1	0.0005 mg/L	0.00014	25.40%
Na 589.592†	113710.4	29.46 mg/L	0.058	0.20%
Pb 220.353†	-0.4	0.0005 mg/L	0.00046	100.44%
Sb 206.836†	7.0	0.0034 mg/L	0.00024	7.03%
Se 196.026†	-0.7	-0.0007 mg/L	0.00248	357.56%
Sn 189.927†	-193.1	-0.0365 mg/L	0.00390	10.70%
Ti 337.279†	461.5	0.0008 mg/L	0.00000	0.42%
Tl 190.801†	-2.5	-0.0022 mg/L	0.00081	37.13%
V 292.402†	-12.1	-0.0002 mg/L	0.00009	46.34%
Zn 206.200†	172.2	0.0051 mg/L	0.00025	4.86%
Ca 227.546†	10202.9	53.73 mg/L	0.412	0.77%
Sr 421.552†	216087.9	3.268 mg/L	0.0053	0.16%
Al 237.313†	92.6	-0.0124 mg/L	0.00086	6.92%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

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Sequence No.: 21
Sample ID: R1407916-019
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 10/15/2014 4:35:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407916-019

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7212668.1	1.040	mg/L	0.0066				0.64%
Ag 328.068†	47.5	0.0002	mg/L	0.00016				89.03%
As 188.979†	0.4	0.0003	mg/L	0.00034				130.04%
B 249.772†	1075.1	0.0092	mg/L	0.00038				4.07%
Ba 233.527†	30.4	0.0003	mg/L	0.00003				9.31%
Be 313.107†	-37.9	0.0000	mg/L	0.00001				71.33%
Cd 226.502†	8.3	0.0001	mg/L	0.00006				66.52%
Co 228.616†	-7.8	-0.0003	mg/L	0.00010				29.70%
Cr 267.716†	68.0	0.0006	mg/L	0.00002				3.67%
Cu 324.752†	-89.6	-0.0003	mg/L	0.00002				5.29%
Fe 259.939†	357.9	0.0062	mg/L	0.00025				4.03%
K 766.490†	-9.9	-0.0191	mg/L	0.01243				65.11%
Mg 279.077†	129.9	0.0117	mg/L	0.00213				18.26%
Mn 257.610†	746.1	0.0021	mg/L	0.00003				1.63%
Mo 202.031†	-0.4	0.0000	mg/L	0.00001				42.95%
Ni 231.604†	-15.6	-0.0003	mg/L	0.00021				61.53%
Na 589.592†	275.5	0.0714	mg/L	0.01441				20.19%
Pb 220.353†	28.3	0.0044	mg/L	0.00067				15.29%
Sb 206.836†	5.1	0.0025	mg/L	0.00018				7.28%
Se 196.026†	-1.3	-0.0014	mg/L	0.00013				9.06%
Sn 189.927†	-65.1	-0.0123	mg/L	0.00432				35.17%
Ti 337.279†	453.8	0.0008	mg/L	0.00016				20.14%
Tl 190.801†	-3.5	-0.0018	mg/L	0.00087				47.09%
V 292.402†	-8.4	-0.0001	mg/L	0.00013				107.49%
Zn 206.200†	8.4	0.0002	mg/L	0.00001				4.94%
Ca 227.546†	-4.2	-0.0217	mg/L	0.00387				17.84%
Sr 421.552†	-12.1	-0.0002	mg/L	0.00019				101.77%
Al 237.313†	54.1	0.0085	mg/L	0.00090				10.55%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

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Sequence No.: 22
Sample ID: R1407916-020
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 10/15/2014 4:41:32 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

00722

Method: DV200-6010C Opt3 Page 16 Date: 10/15/2014 4:51:11 PM

Mean Data: R1407916-020

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7233542.7	1.043	mg/L	0.0029				0.28%
Ag 328.068†	45.6	0.0002	mg/L	0.00014				77.75%
As 188.979†	1.1	0.0008	mg/L	0.00106				132.60%
B 249.772†	7665.8	0.0660	mg/L	0.00015				0.23%
Ba 233.527†	60.0	0.0007	mg/L	0.00004				5.77%
Be 313.107†	58.2	0.0000	mg/L	0.00002				120.21%
Cd 226.502†	14.8	0.0002	mg/L	0.00016				98.84%
Co 228.616†	-3.4	-0.0001	mg/L	0.00034				229.59%
Cr 267.716†	23.0	0.0005	mg/L	0.00005				11.52%
Cu 324.752†	2313.7	0.0087	mg/L	0.00014				1.64%
Fe 259.939†	393.7	0.0065	mg/L	0.00036				5.52%
K 766.490†	1425.8	2.756	mg/L	0.0420				1.52%
Mg 279.077†	30724.2	2.758	mg/L	0.0155				0.56%
Mn 257.610†	695.4	0.0019	mg/L	0.00001				0.41%
Mo 202.031†	2.5	0.0001	mg/L	0.00002				15.63%
Ni 231.604†	-21.5	-0.0005	mg/L	0.00006				13.36%
Na 589.592†	11499.1	2.980	mg/L	0.0020				0.07%
Pb 220.353†	32.2	0.0050	mg/L	0.00013				2.67%
Sb 206.836†	4.2	0.0020	mg/L	0.00029				14.04%
Se 196.026†	-0.0	0.0000	mg/L	0.00020				416.58%
Sn 189.927†	-32.3	-0.0061	mg/L	0.00132				21.66%
Ti 337.279†	427.7	0.0008	mg/L	0.00009				12.63%
Tl 190.801†	-3.6	-0.0019	mg/L	0.00239				125.79%
V 292.402†	-2.1	0.0000	mg/L	0.00019				624.70%
Zn 206.200†	183.6	0.0054	mg/L	0.00013				2.37%
Ca 227.546†	16.0	0.0847	mg/L	0.00768				9.07%
Sr 421.552†	143.8	0.0022	mg/L	0.00032				14.62%
Al 237.313†	49.1	0.0068	mg/L	0.00079				11.74%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 23
Sample ID: R1407916-020L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 10/15/2014 4:47:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407916-020L

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7065988.4	1.019	mg/L	0.0111				1.09%
Ag 328.068†	11.0	0.0000	mg/L	0.00015				350.20%
As 188.979†	-0.2	-0.0002	mg/L	0.00163				932.31%
B 249.772†	2221.4	0.0191	mg/L	0.00024				1.23%
Ba 233.527†	24.2	0.0003	mg/L	0.00008				30.44%
Be 313.107†	-327.7	-0.0001	mg/L	0.00008				71.60%
Cd 226.502†	-6.0	-0.0001	mg/L	0.00008				116.86%
Co 228.616†	-5.0	-0.0002	mg/L	0.00030				140.89%
Cr 267.716†	-1.3	0.0000	mg/L	0.00001				12.15%
Cu 324.752†	606.2	0.0023	mg/L	0.00043				19.12%
Fe 259.939†	220.9	0.0037	mg/L	0.00044				11.82%
K 766.490†	310.7	0.6006	mg/L	0.05854				9.75%
Mg 279.077†	6371.7	0.5720	mg/L	0.00466				0.81%
Mn 257.610†	163.0	0.0005	mg/L	0.00004				8.64%
Mo 202.031†	0.2	0.0000	mg/L	0.00004				414.87%
Ni 231.604†	-16.1	-0.0004	mg/L	0.00004				11.94%
Na 589.592†	2436.4	0.6313	mg/L	0.02010				3.18%
Pb 220.353†	12.2	0.0019	mg/L	0.00049				26.03%
Sb 206.836†	4.0	0.0020	mg/L	0.00205				103.37%
Se 196.026†	1.7	0.0019	mg/L	0.00185				96.56%
Sn 189.927†	40.7	0.0077	mg/L	0.00698				90.70%
Ti 337.279†	153.1	0.0003	mg/L	0.00003				12.14%
Tl 190.801†	1.5	0.0008	mg/L	0.00072				89.45%
V 292.402†	5.4	0.0001	mg/L	0.00009				113.17%
Zn 206.200†	120.6	0.0036	mg/L	0.00012				3.34%
Ca 227.546†	3.3	0.0174	mg/L	0.02190				125.81%
Sr 421.552†	60.7	0.0009	mg/L	0.00005				5.19%

00723

Method: DV200-6010C Opt3 Page 17 Date: 10/15/2014 4:59:36 PM

Al 237.313† 0.3 -0.0001 mg/L 0.00049 342.38%
Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 24
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 10/15/2014 4:53:32 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6973950.7	1.006	mg/L	0.0021				0.20%
Ag 328.068†	130366.4	0.5005	mg/L	0.00199	0.5005	mg/L	0.00199	0.40%
QC value within limits for Ag 328.068 Recovery = 100.10%								
As 188.979†	1347.9	0.9948	mg/L	0.00089	0.9948	mg/L	0.00089	0.09%
QC value within limits for As 188.979 Recovery = 99.48%								
B 249.772†	289004.0	2.468	mg/L	0.0217	2.468	mg/L	0.0217	0.88%
QC value within limits for B 249.772 Recovery = 98.73%								
Ba 233.527†	889135.6	10.09	mg/L	0.002	10.09	mg/L	0.002	0.02%
QC value within limits for Ba 233.527 Recovery = 100.85%								
Be 313.107†	767043.9	0.2498	mg/L	0.00008	0.2498	mg/L	0.00008	0.03%
QC value within limits for Be 313.107 Recovery = 99.92%								
Cd 226.502†	45496.0	0.5048	mg/L	0.00017	0.5048	mg/L	0.00017	0.03%
QC value within limits for Cd 226.502 Recovery = 100.97%								
Co 228.616†	58171.4	2.506	mg/L	0.0050	2.506	mg/L	0.0050	0.20%
QC value within limits for Co 228.616 Recovery = 100.22%								
Cr 267.716†	61687.5	0.5065	mg/L	0.00187	0.5065	mg/L	0.00187	0.37%
QC value within limits for Cr 267.716 Recovery = 101.29%								
Cu 324.752†	329114.5	1.232	mg/L	0.0064	1.232	mg/L	0.0064	0.52%
QC value within limits for Cu 324.752 Recovery = 98.56%								
Fe 259.939†	291751.2	5.007	mg/L	0.0146	5.007	mg/L	0.0146	0.29%
QC value within limits for Fe 259.939 Recovery = 100.15%								
K 766.490†	12576.6	24.31	mg/L	0.082	24.31	mg/L	0.082	0.34%
QC value within limits for K 766.490 Recovery = 97.24%								
Mg 279.077†	278242.3	24.98	mg/L	0.051	24.98	mg/L	0.051	0.20%
QC value within limits for Mg 279.077 Recovery = 99.92%								
Mn 257.610†	269601.4	0.7525	mg/L	0.00148	0.7525	mg/L	0.00148	0.20%
QC value within limits for Mn 257.610 Recovery = 100.33%								
Mo 202.031†	42081.4	2.436	mg/L	0.0076	2.436	mg/L	0.0076	0.31%
QC value within limits for Mo 202.031 Recovery = 97.43%								
Ni 231.604†	90533.2	2.018	mg/L	0.0049	2.018	mg/L	0.0049	0.24%
QC value within limits for Ni 231.604 Recovery = 100.91%								
Na 589.592†	91701.6	23.76	mg/L	0.019	23.76	mg/L	0.019	0.08%
QC value within limits for Na 589.592 Recovery = 95.05%								
Pb 220.353†	3195.9	0.4979	mg/L	0.00140	0.4979	mg/L	0.00140	0.28%
QC value within limits for Pb 220.353 Recovery = 99.59%								
Sb 206.836†	10034.6	4.928	mg/L	0.0133	4.928	mg/L	0.0133	0.27%
QC value within limits for Sb 206.836 Recovery = 98.56%								
Se 196.026†	446.8	0.4955	mg/L	0.00180	0.4955	mg/L	0.00180	0.36%
QC value within limits for Se 196.026 Recovery = 99.11%								
Sn 189.927†	26024.3	4.914	mg/L	0.0192	4.914	mg/L	0.0192	0.39%
QC value within limits for Sn 189.927 Recovery = 98.28%								
Ti 337.279†	1411083.4	2.479	mg/L	0.0008	2.479	mg/L	0.0008	0.03%
QC value within limits for Ti 337.279 Recovery = 99.15%								
Tl 190.801†	1847.6	0.9771	mg/L	0.00650	0.9771	mg/L	0.00650	0.66%
QC value within limits for Tl 190.801 Recovery = 97.71%								
V 292.402†	171613.6	2.498	mg/L	0.0152	2.498	mg/L	0.0152	0.61%
QC value within limits for V 292.402 Recovery = 99.94%								
Zn 206.200†	33647.3	0.9975	mg/L	0.00413	0.9975	mg/L	0.00413	0.41%
QC value within limits for Zn 206.200 Recovery = 99.75%								
Ca 227.546†	4470.6	23.84	mg/L	0.001	23.84	mg/L	0.001	0.00%
QC value within limits for Ca 227.546 Recovery = 95.36%								
Sr 421.552†	152023.0	2.299	mg/L	0.0013	2.299	mg/L	0.0013	0.06%
QC value within limits for Sr 421.552 Recovery = 91.97%								
Al 237.313†	62242.8	9.754	mg/L	0.0393	9.754	mg/L	0.0393	0.40%
QC value within limits for Al 237.313 Recovery = 97.54%								

All analyte(s) passed QC.

00724

Method: DV200-6010C Opt3 Page 18 Date: 10/15/2014 5:05:28 PM

Sequence No.: 25
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 10/15/2014 4:59:33 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7079823.6	1.021	mg/L	0.0039				0.38%
Ag 328.068†	70.2	0.0003	mg/L	0.00001	0.0003	mg/L	0.00001	3.66%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	-0.0	0.0000	mg/L	0.00009	0.0000	mg/L	0.00009	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3260.0	0.0280	mg/L	0.00255	0.0280	mg/L	0.00255	9.07%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	366.5	0.0042	mg/L	0.00101	0.0042	mg/L	0.00101	24.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	324.5	0.0001	mg/L	0.00008	0.0001	mg/L	0.00008	80.20%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	11.3	0.0001	mg/L	0.00009	0.0001	mg/L	0.00009	70.13%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	23.4	0.0010	mg/L	0.00007	0.0010	mg/L	0.00007	6.46%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	21.8	0.0002	mg/L	0.00013	0.0002	mg/L	0.00013	72.54%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	678.8	0.0025	mg/L	0.00021	0.0025	mg/L	0.00021	8.12%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	454.2	0.0078	mg/L	0.00070	0.0078	mg/L	0.00070	9.00%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	41.4	0.0800	mg/L	0.12514	0.0800	mg/L	0.12514	156.36%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	130.7	0.0117	mg/L	0.00352	0.0117	mg/L	0.00352	29.99%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	174.2	0.0005	mg/L	0.00011	0.0005	mg/L	0.00011	23.23%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	24.1	0.0014	mg/L	0.00009	0.0014	mg/L	0.00009	6.81%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	40.2	0.0009	mg/L	0.00023	0.0009	mg/L	0.00023	26.01%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	187.9	0.0487	mg/L	0.00264	0.0487	mg/L	0.00264	5.42%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	5.7	0.0009	mg/L	0.00146	0.0009	mg/L	0.00146	163.79%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	8.3	0.0041	mg/L	0.00081	0.0041	mg/L	0.00081	19.68%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.5	-0.0016	mg/L	0.00038	-0.0016	mg/L	0.00038	23.34%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	105.8	0.0200	mg/L	0.00043	0.0200	mg/L	0.00043	2.17%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	739.5	0.0013	mg/L	0.00042	0.0013	mg/L	0.00042	32.65%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	4.8	0.0025	mg/L	0.00051	0.0025	mg/L	0.00051	20.21%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	75.7	0.0011	mg/L	0.00013	0.0011	mg/L	0.00013	12.02%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	17.9	0.0005	mg/L	0.00019	0.0005	mg/L	0.00019	36.57%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	-0.4	-0.0017	mg/L	0.00138	-0.0017	mg/L	0.00138	80.93%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	93.8	0.0014	mg/L	0.00032	0.0014	mg/L	0.00032	22.26%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Al 237.313†	22.4	0.0035	mg/L	0.00180	0.0035	mg/L	0.00180	51.12%
QC value within limits for Al 237.313 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 26
Sample ID: R1407980-001 100X
Analyst:
Initial Sample Wt:

Autosampler Location: 48
Date Collected: 10/15/2014 5:05:26 PM
Data Type: Original
Initial Sample Vol:

00725

Method: DV200-6010C Opt3 Page 19 Date: 10/15/2014 5:15:02 PM

Dilution: 100X Sample Prep Vol: 50 mL

Mean Data: R1407980-001 100X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6963627.5	1.004	mg/L	0.0030				0.30%
Ag 328.068†	-38.0	-0.0001	mg/L	0.00041				305.72%
As 188.979†	1.4	0.0011	mg/L	0.00066				62.29%
B 249.772†	15503.0	0.1334	mg/L	0.00108				0.81%
Ba 233.527†	726.2	0.0082	mg/L	0.00007				0.86%
Be 313.107†	-325.4	-0.0001	mg/L	0.00001				8.65%
Cd 226.502†	-6.1	-0.0001	mg/L	0.00002				28.01%
Co 228.616†	8.0	0.0003	mg/L	0.00006				17.36%
Cr 267.716†	199.4	0.0018	mg/L	0.00001				0.42%
Cu 324.752†	329.5	0.0012	mg/L	0.00008				6.49%
Fe 259.939†	2093.3	0.0354	mg/L	0.00014				0.40%
K 766.490†	2342.0	4.527	mg/L	0.0814				1.80%
Mg 279.077†	22763.5	2.044	mg/L	0.0206				1.01%
Mn 257.610†	2488.4	0.0069	mg/L	0.00000				0.04%
Mo 202.031†	2.4	0.0001	mg/L	0.00013				94.47%
Ni 231.604†	93.5	0.0021	mg/L	0.00005				2.17%
Na 589.592†	64910.4	16.82	mg/L	0.089				0.53%
Pb 220.353†	5.7	0.0009	mg/L	0.00010				11.31%
Sb 206.836†	3.1	0.0015	mg/L	0.00061				39.73%
Se 196.026†	-0.3	-0.0004	mg/L	0.00103				284.91%
Sn 189.927†	-5.8	-0.0011	mg/L	0.00053				48.86%
Ti 337.279†	829.7	0.0015	mg/L	0.00002				1.62%
Tl 190.801†	-0.3	-0.0002	mg/L	0.00078				397.64%
V 292.402†	47.7	0.0007	mg/L	0.00016				23.56%
Zn 206.200†	185.2	0.0055	mg/L	0.00012				2.14%
Ca 227.546†	185.3	0.9776	mg/L	0.04077				4.17%
Sr 421.552†	1122.6	0.0170	mg/L	0.00067				3.95%
Al 237.313†	9.8	0.0007	mg/L	0.00190				279.72%

Not used

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 27
Sample ID: R1407980-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 10/15/2014 5:11:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407980-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6885948.7	0.9932	mg/L	0.01203				1.21%
Ag 328.068†	-124.7	-0.0004	mg/L	0.00019				43.85%
As 188.979†	9.8	0.0072	mg/L	0.00230				32.01%
B 249.772†	11057.5	0.0946	mg/L	0.00156				1.65%
Ba 233.527†	3246.8	0.0368	mg/L	0.00031				0.84%
Be 313.107†	-527.6	-0.0002	mg/L	0.00004				24.42%
Cd 226.502†	-15.9	-0.0002	mg/L	0.00005				23.94%
Co 228.616†	-8.2	-0.0004	mg/L	0.00022				60.84%
Cr 267.716†	-343.0	0.0001	mg/L	0.00006				80.19%
Cu 324.752†	3110.9	0.0117	mg/L	0.00021				1.80%
Fe 259.939†	8613.1	0.0993	mg/L	0.00115				1.16%
K 766.490†	3071.4	5.937	mg/L	0.0868				1.46%
Mg 279.077†	321366.6	28.85	mg/L	0.157				0.55%
Mn 257.610†	47563.2	0.1326	mg/L	0.00066				0.49%
Mo 202.031†	42.8	0.0025	mg/L	0.00020				8.25%
Ni 231.604†	23.8	0.0005	mg/L	0.00009				17.86%
Na 589.592†	22471.7	5.823	mg/L	0.0913				1.57%
Pb 220.353†	2.0	0.0010	mg/L	0.00027				27.87%
Sb 206.836†	6.3	0.0031	mg/L	0.00031				10.11%
Se 196.026†	0.9	0.0011	mg/L	0.00038				35.02%
Sn 189.927†	-155.9	-0.0294	mg/L	0.00827				28.09%
Ti 337.279†	1963.8	0.0034	mg/L	0.00002				0.44%
Tl 190.801†	-1.3	-0.0022	mg/L	0.00071				32.67%
V 292.402†	163.5	0.0024	mg/L	0.00008				3.41%
Zn 206.200†	1474.2	0.0437	mg/L	0.00070				1.60%

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Ca 227.546†	18311.6	96.42 mg/L	0.476		0.49%
Sr 421.552†	171857.6	2.599 mg/L	0.0405		1.56%
Al 237.313†	920.2	0.1141 mg/L	0.00257		2.26%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 28
Sample ID: R1407980-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 10/15/2014 5:17:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407980-003

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6834666.6	0.9858	mg/L	0.00416				0.42%
Ag 328.068†	-405.8	-0.0016	mg/L	0.00020				13.02%
As 188.979†	5.8	0.0042	mg/L	0.00134				31.55%
B 249.772†	13809.1	0.1190	mg/L	0.00071				0.59%
Ba 233.527†	3670.2	0.0416	mg/L	0.00021				0.50%
Be 313.107†	-666.4	-0.0002	mg/L	0.00002				10.97%
Cd 226.502†	-20.8	-0.0002	mg/L	0.00001				3.13%
Co 228.616†	-16.9	-0.0007	mg/L	0.00001				1.52%
Cr 267.716†	-1445.6	-0.0037	mg/L	0.00021				5.77%
Cu 324.752†	1026.5	0.0038	mg/L	0.00019				4.89%
Fe 259.939†	-312.5	-0.1021	mg/L	0.00100				0.98%
K 766.490†	552.7	1.068	mg/L	0.0902				8.44%
Mg 279.077†	912301.7	81.90	mg/L	0.539				0.66%
Mn 257.610†	665.3	0.0019	mg/L	0.00005				2.44%
Mo 202.031†	19.1	0.0011	mg/L	0.00002				1.77%
Ni 231.604†	-21.7	-0.0005	mg/L	0.00006				11.40%
Na 589.592†	72611.8	18.82	mg/L	0.111				0.59%
Pb 220.353†	-6.2	0.0004	mg/L	0.00029				69.61%
Sb 206.836†	3.3	0.0016	mg/L	0.00017				10.14%
Se 196.026†	0.8	0.0009	mg/L	0.00065				76.09%
Sn 189.927†	-149.3	-0.0282	mg/L	0.00607				21.55%
Ti 337.279†	423.5	0.0007	mg/L	0.00004				5.23%
Tl 190.801†	0.5	-0.0026	mg/L	0.00134				52.09%
V 292.402†	-20.5	-0.0003	mg/L	0.00000				0.71%
Zn 206.200†	105.3	0.0031	mg/L	0.00002				0.76%
Ca 227.546†	35209.9	185.4	mg/L	0.67				0.36%
Sr 421.552†	233077.5	3.525	mg/L	0.0239				0.68%
Al 237.313†	97.7	-0.0521	mg/L	0.00109				2.09%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 29
Sample ID: R1407980-003D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 10/15/2014 5:23:17 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407980-003D

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6816778.8	0.9833	mg/L	0.00835				0.85%
Ag 328.068†	-314.0	-0.0012	mg/L	0.00030				25.33%
As 188.979†	3.4	0.0025	mg/L	0.00237				94.76%
B 249.772†	14115.9	0.1216	mg/L	0.00105				0.86%
Ba 233.527†	3831.5	0.0435	mg/L	0.00030				0.69%
Be 313.107†	-696.8	-0.0002	mg/L	0.00002				9.09%
Cd 226.502†	-13.9	-0.0002	mg/L	0.00001				5.60%
Co 228.616†	-16.6	-0.0007	mg/L	0.00003				3.93%
Cr 267.716†	-1515.7	-0.0038	mg/L	0.00010				2.50%
Cu 324.752†	427.0	0.0016	mg/L	0.00018				11.06%
Fe 259.939†	-241.1	-0.1063	mg/L	0.00033				0.31%
K 766.490†	588.1	1.137	mg/L	0.0485				4.27%
Mg 279.077†	959360.7	86.13	mg/L	0.341				0.40%
Mn 257.610†	679.8	0.0019	mg/L	0.00003				1.74%
Mo 202.031†	25.4	0.0015	mg/L	0.00010				6.70%

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Ni 231.604†	-14.2	-0.0003	mg/L	0.00005		16.98%
Na 589.592†	74672.4	19.35	mg/L	0.097		0.50%
Pb 220.353†	-6.3	0.0005	mg/L	0.00063		132.33%
Sb 206.836†	5.4	0.0027	mg/L	0.00056		21.03%
Se 196.026†	-1.0	-0.0011	mg/L	0.00191		167.02%
Sn 189.927†	-194.5	-0.0367	mg/L	0.00451		12.28%
Ti 337.279†	451.8	0.0008	mg/L	0.00002		1.92%
Tl 190.801†	-1.3	-0.0037	mg/L	0.00173		47.08%
V 292.402†	-22.1	-0.0003	mg/L	0.00016		49.73%
Zn 206.200†	60.1	0.0018	mg/L	0.00024		13.62%
Ca 227.546†	37193.7	195.8	mg/L	1.00		0.51%
Sr 421.552†	237776.8	3.596	mg/L	0.0371		1.03%
Al 237.313†	109.0	-0.0540	mg/L	0.00139		2.57%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 30
Sample ID: R1407980-003S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 10/15/2014 5:29:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407980-003S

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6830489.9	0.9852	mg/L	0.00029				0.03%
Ag 328.068†	13017.8	0.0501	mg/L	0.00052				1.04%
As 188.979†	59.1	0.0435	mg/L	0.00017				0.38%
B 249.772†	130274.0	1.118	mg/L	0.0198				1.77%
Ba 233.527†	179966.1	2.041	mg/L	0.0226				1.11%
Be 313.107†	147398.1	0.0480	mg/L	0.00050				1.04%
Cd 226.502†	4318.7	0.0479	mg/L	0.00006				0.13%
Co 228.616†	11149.5	0.4802	mg/L	0.00159				0.33%
Cr 267.716†	23396.5	0.1997	mg/L	0.00141				0.71%
Cu 324.752†	70131.7	0.2625	mg/L	0.00519				1.98%
Fe 259.939†	58214.7	0.8985	mg/L	0.01113				1.24%
K 766.490†	11230.4	21.71	mg/L	0.025				0.12%
Mg 279.077†	965806.7	86.71	mg/L	0.542				0.62%
Mn 257.610†	182318.4	0.5085	mg/L	0.00620				1.22%
Mo 202.031†	8629.6	0.4995	mg/L	0.00115				0.23%
Ni 231.604†	22053.4	0.4916	mg/L	0.00584				1.19%
Na 589.592†	153707.1	39.83	mg/L	0.229				0.57%
Pb 220.353†	3214.5	0.5012	mg/L	0.00214				0.43%
Sb 206.836†	1059.4	0.5202	mg/L	0.00224				0.43%
Se 196.026†	888.5	0.9831	mg/L	0.00384				0.39%
Sn 189.927†	27725.6	5.235	mg/L	0.0684				1.31%
Ti 337.279†	285990.8	0.5024	mg/L	0.00662				1.32%
Tl 190.801†	3656.0	1.932	mg/L	0.0081				0.42%
V 292.402†	34835.1	0.5071	mg/L	0.00294				0.58%
Zn 206.200†	16193.7	0.4801	mg/L	0.00287				0.60%
Ca 227.546†	37662.8	198.4	mg/L	2.66				1.34%
Sr 421.552†	233550.7	3.532	mg/L	0.0175				0.50%
Al 237.313†	12854.3	1.945	mg/L	0.0282				1.45%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 31
Sample ID: R1407980-003A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 10/15/2014 5:35:42 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407980-003A

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6857577.1	0.9891	mg/L	0.00885				0.89%
Ag 328.068†	12179.1	0.0469	mg/L	0.00028				0.60%
As 188.979†	54.9	0.0405	mg/L	0.00159				3.92%
B 249.772†	131732.0	1.131	mg/L	0.0044				0.39%
Ba 233.527†	172571.4	1.957	mg/L	0.0156				0.80%

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Be 313.107†	142220.3	0.0463 mg/L	0.00035	0.75%
Cd 226.502†	4113.1	0.0456 mg/L	0.00041	0.89%
Co 228.616†	10472.0	0.4511 mg/L	0.00376	0.83%
Cr 267.716†	22584.6	0.1927 mg/L	0.00165	0.86%
Cu 324.752†	66001.0	0.2471 mg/L	0.00111	0.45%
Fe 259.939†	55958.1	0.8661 mg/L	0.00623	0.72%
K 766.490†	10646.2	20.58 mg/L	0.186	0.90%
Mg 279.077†	917495.0	82.37 mg/L	0.044	0.05%
Mn 257.610†	174269.3	0.4861 mg/L	0.00369	0.76%
Mo 202.031†	8645.7	0.5004 mg/L	0.00415	0.83%
Ni 231.604†	21225.1	0.4732 mg/L	0.00328	0.69%
Na 589.592†	140692.1	36.46 mg/L	0.283	0.78%
Pb 220.353†	3081.1	0.4804 mg/L	0.00181	0.38%
Sb 206.836†	1046.4	0.5138 mg/L	0.00506	0.98%
Se 196.026†	1062.9	1.176 mg/L	0.0114	0.97%
Sn 189.927†	32322.7	6.103 mg/L	0.0375	0.61%
Ti 337.279†	279209.9	0.4904 mg/L	0.00372	0.76%
Tl 190.801†	3472.4	1.835 mg/L	0.0122	0.67%
V 292.402†	33174.1	0.4830 mg/L	0.00475	0.98%
Zn 206.200†	15764.1	0.4673 mg/L	0.00273	0.58%
Ca 227.546†	35273.4	185.8 mg/L	1.35	0.73%
Sr 421.552†	207888.8	3.144 mg/L	0.0256	0.82%
Al 237.313†	12264.0	1.857 mg/L	0.0173	0.93%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 32
Sample ID: R1407980-003L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 54
Date Collected: 10/15/2014 5:42:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407980-003L

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7188102.3	1.037	mg/L	0.0040				0.39%
Ag 328.068†	7.9	0.0000	mg/L	0.00013				426.49%
As 188.979†	-0.5	-0.0004	mg/L	0.00038				99.16%
B 249.772†	4411.3	0.0380	mg/L	0.00119				3.13%
Ba 233.527†	818.5	0.0093	mg/L	0.00011				1.13%
Be 313.107†	-94.1	0.0000	mg/L	0.00001				46.45%
Cd 226.502†	0.5	0.0000	mg/L	0.00000				42.54%
Co 228.616†	-4.9	-0.0002	mg/L	0.00002				10.86%
Cr 267.716†	-326.4	-0.0010	mg/L	0.00017				16.40%
Cu 324.752†	411.5	0.0015	mg/L	0.00042				27.20%
Fe 259.939†	-110.3	-0.0200	mg/L	0.00046				2.31%
K 766.490†	103.8	0.2006	mg/L	0.04257				21.22%
Mg 279.077†	183254.0	16.45	mg/L	0.030				0.18%
Mn 257.610†	233.6	0.0007	mg/L	0.00001				2.30%
Mo 202.031†	20.6	0.0012	mg/L	0.00010				7.96%
Ni 231.604†	-1.2	0.0000	mg/L	0.00016				597.54%
Na 589.592†	13645.3	3.536	mg/L	0.0494				1.40%
Pb 220.353†	0.2	0.0003	mg/L	0.00117				390.07%
Sb 206.836†	1.2	0.0006	mg/L	0.00106				187.99%
Se 196.026†	-0.7	-0.0008	mg/L	0.00138				168.73%
Sn 189.927†	-40.5	-0.0077	mg/L	0.00535				69.88%
Ti 337.279†	280.3	0.0005	mg/L	0.00004				7.22%
Tl 190.801†	6.1	0.0027	mg/L	0.00112				41.22%
V 292.402†	-23.9	-0.0003	mg/L	0.00016				46.76%
Zn 206.200†	123.9	0.0037	mg/L	0.00000				0.08%
Ca 227.546†	6544.9	34.46	mg/L	0.276				0.80%
Sr 421.552†	43601.5	0.6594	mg/L	0.00629				0.95%
Al 237.313†	13.9	-0.0108	mg/L	0.00126				11.71%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 33
Sample ID: R1407980-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 55
Date Collected: 10/15/2014 5:48:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Method: DV200-6010C Opt3 Page 23 Date: 10/15/2014 5:57:54 PM

Mean Data: R1407980-005

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6786954.1	0.9790	mg/L	0.00272				0.28%
Ag 328.068†	-920.7	-0.0025	mg/L	0.00015				5.89%
As 188.979†	4.3	0.0032	mg/L	0.00123				38.56%
B 249.772†	18666.1	0.1461	mg/L	0.00030				0.21%
Ba 233.527†	3115.1	0.0353	mg/L	0.00027				0.75%
Be 313.107†	-1354.7	-0.0004	mg/L	0.00001				3.08%
Cd 226.502†	83.9	0.0005	mg/L	0.00003				6.37%
Co 228.616†	75.8	0.0033	mg/L	0.00007				2.02%
Cr 267.716†	-840.4	0.0002	mg/L	0.00008				34.97%
Cu 324.752†	7995.6	0.0303	mg/L	0.00014				0.46%
Fe 259.939†	202241.9	3.255	mg/L	0.0038				0.12%
K 766.490†	130555.6	252.4	mg/L	3.07				1.21%
Mg 279.077†	774405.7	69.52	mg/L	0.093				0.13%
Mn 257.610†	692720.1	1.932	mg/L	0.0023				0.12%
Mo 202.031†	20.1	0.0012	mg/L	0.00003				2.52%
Ni 231.604†	772.7	0.0172	mg/L	0.00020				1.14%
Na 589.592†	511685.1	132.6	mg/L	1.53				1.16%
Pb 220.353†	-6.8	0.0016	mg/L	0.00005				3.39%
Sb 206.836†	23.0	0.0113	mg/L	0.00100				8.91%
Se 196.026†	1.2	0.0021	mg/L	0.00113				54.21%
Sn 189.927†	-144.2	-0.0272	mg/L	0.00336				12.36%
Ti 337.279†	4617.1	0.0081	mg/L	0.00074				9.14%
Tl 190.801†	12.8	-0.0002	mg/L	0.00462				>999.9%
V 292.402†	72.6	0.0008	mg/L	0.00003				3.97%
Zn 206.200†	40590.0	1.203	mg/L	0.0072				0.60%
Ca 227.546†	86796.5	457.2	mg/L	1.76				0.38%
Sr 421.552†	572835.0	8.663	mg/L	0.1089				1.26%
Al 237.313†	1407.8	0.1031	mg/L	0.00280				2.72%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 34
Sample ID: R1408085-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 56
Date Collected: 10/15/2014 5:54:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408085-003

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7171185.6	1.034	mg/L	0.0048				0.46%
Ag 328.068†	-137.7	-0.0002	mg/L	0.00013				74.01%
As 188.979†	0.9	0.0006	mg/L	0.00075				125.83%
B 249.772†	2361.8	0.0152	mg/L	0.00029				1.93%
Ba 233.527†	1241.6	0.0141	mg/L	0.00009				0.63%
Be 313.107†	120.3	0.0000	mg/L	0.00002				45.99%
Cd 226.502†	3.1	-0.0001	mg/L	0.00002				18.87%
Co 228.616†	-6.4	-0.0003	mg/L	0.00008				28.83%
Cr 267.716†	105.7	0.0010	mg/L	0.00001				1.33%
Cu 324.752†	436.0	0.0018	mg/L	0.00008				4.81%
Fe 259.939†	70526.5	1.210	mg/L	0.0041				0.34%
K 766.490†	546.5	1.056	mg/L	0.0695				6.58%
Mg 279.077†	11994.1	1.077	mg/L	0.0021				0.19%
Mn 257.610†	45729.3	0.1277	mg/L	0.00044				0.35%
Mo 202.031†	181.7	0.0105	mg/L	0.00005				0.52%
Ni 231.604†	-20.0	-0.0004	mg/L	0.00014				30.57%
Na 589.592†	27759.1	7.193	mg/L	0.0252				0.35%
Pb 220.353†	9.2	0.0016	mg/L	0.00014				9.09%
Sb 206.836†	5.5	0.0026	mg/L	0.00011				4.21%
Se 196.026†	0.4	0.0007	mg/L	0.00310				442.92%
Sn 189.927†	17.3	0.0033	mg/L	0.00412				126.35%
Ti 337.279†	3993.5	0.0070	mg/L	0.00016				2.26%
Tl 190.801†	-0.0	-0.0002	mg/L	0.00030				149.50%
V 292.402†	62.4	0.0008	mg/L	0.00039				47.40%
Zn 206.200†	292.8	0.0087	mg/L	0.00013				1.45%
Ca 227.546†	1507.9	8.009	mg/L	0.0209				0.26%

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Sr 421.552†	1659.1	0.0251 mg/L	0.00056	2.22%
Al 237.313†	7607.2	1.192 mg/L	0.0039	0.33%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 35
Sample ID: R1408086-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 10/15/2014 6:00:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408086-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6969460.3	1.005	mg/L	0.0033				0.33%
Ag 328.068†	-10.8	0.0001	mg/L	0.00009				73.57%
As 188.979†	2.2	0.0016	mg/L	0.00061				37.47%
B 249.772†	6385.7	0.0526	mg/L	0.00046				0.88%
Ba 233.527†	1781.6	0.0202	mg/L	0.00006				0.31%
Be 313.107†	-646.5	-0.0002	mg/L	0.00003				13.90%
Cd 226.502†	-7.4	-0.0002	mg/L	0.00003				21.58%
Co 228.616†	-9.9	-0.0004	mg/L	0.00017				39.69%
Cr 267.716†	86.5	0.0010	mg/L	0.00005				4.61%
Cu 324.752†	1114.6	0.0042	mg/L	0.00032				7.49%
Fe 259.939†	32529.0	0.5479	mg/L	0.00678				1.24%
K 766.490†	8139.9	15.73	mg/L	0.030				0.19%
Mg 279.077†	32970.5	2.960	mg/L	0.0305				1.03%
Mn 257.610†	18280.8	0.0511	mg/L	0.00058				1.13%
Mo 202.031†	626.1	0.0362	mg/L	0.00012				0.33%
Ni 231.604†	22.4	0.0005	mg/L	0.00013				25.38%
Na 589.592†	1038474.1	269.1	mg/L	1.92				0.71%
Pb 220.353†	4.5	0.0009	mg/L	0.00171				199.58%
Sb 206.836†	9.3	0.0045	mg/L	0.00073				16.08%
Se 196.026†	0.8	0.0010	mg/L	0.00138				140.45%
Sn 189.927†	42.0	0.0079	mg/L	0.00189				23.81%
Ti 337.279†	1814.8	0.0032	mg/L	0.00003				0.84%
Tl 190.801†	2.6	0.0010	mg/L	0.00340				349.97%
V 292.402†	131.9	0.0019	mg/L	0.00006				3.16%
Zn 206.200†	499.2	0.0148	mg/L	0.00010				0.70%
Ca 227.546†	4631.1	24.42	mg/L	0.195				0.80%
Sr 421.552†	7534.3	0.1139	mg/L	0.00021				0.18%
Al 237.313†	1785.3	0.2744	mg/L	0.00016				0.06%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 36
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 10/15/2014 6:06:20 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7076791.8	1.021	mg/L	0.0024				0.23%
Ag 328.068†	127550.3	0.4897	mg/L	0.00184	0.4897	mg/L	0.00184	0.38%
QC value within limits for Ag 328.068 Recovery = 97.94%								
As 188.979†	1323.5	0.9768	mg/L	0.00180	0.9768	mg/L	0.00180	0.18%
QC value within limits for As 188.979 Recovery = 97.68%								
B 249.772†	285568.8	2.439	mg/L	0.0226	2.439	mg/L	0.0226	0.93%
QC value within limits for B 249.772 Recovery = 97.56%								
Ba 233.527†	885809.2	10.05	mg/L	0.046	10.05	mg/L	0.046	0.46%
QC value within limits for Ba 233.527 Recovery = 100.48%								
Be 313.107†	764750.5	0.2491	mg/L	0.00178	0.2491	mg/L	0.00178	0.71%
QC value within limits for Be 313.107 Recovery = 99.62%								
Cd 226.502†	44621.1	0.4951	mg/L	0.00280	0.4951	mg/L	0.00280	0.57%
QC value within limits for Cd 226.502 Recovery = 99.02%								
Co 228.616†	57374.2	2.471	mg/L	0.0129	2.471	mg/L	0.0129	0.52%
QC value within limits for Co 228.616 Recovery = 98.85%								
Cr 267.716†	60651.7	0.4980	mg/L	0.00199	0.4980	mg/L	0.00199	0.40%

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QC value within limits for Cr 267.716 Recovery = 99.59%					
Cu 324.752†	326829.7	1.223 mg/L	0.0025	1.223 mg/L	0.0025	0.21%
QC value within limits for Cu 324.752 Recovery = 97.87%					
Fe 259.939†	290087.8	4.979 mg/L	0.0211	4.979 mg/L	0.0211	0.42%
QC value within limits for Fe 259.939 Recovery = 99.58%					
K 766.490†	12714.4	24.58 mg/L	0.167	24.58 mg/L	0.167	0.68%
QC value within limits for K 766.490 Recovery = 98.30%					
Mg 279.077†	275877.0	24.77 mg/L	0.159	24.77 mg/L	0.159	0.64%
QC value within limits for Mg 279.077 Recovery = 99.07%					
Mn 257.610†	267056.7	0.7454 mg/L	0.00313	0.7454 mg/L	0.00313	0.42%
QC value within limits for Mn 257.610 Recovery = 99.38%					
Mo 202.031†	41703.9	2.414 mg/L	0.0116	2.414 mg/L	0.0116	0.48%
QC value within limits for Mo 202.031 Recovery = 96.56%					
Ni 231.604†	89117.6	1.987 mg/L	0.0129	1.987 mg/L	0.0129	0.65%
QC value within limits for Ni 231.604 Recovery = 99.33%					
Na 589.592†	97813.9	25.35 mg/L	0.164	25.35 mg/L	0.164	0.65%
QC value within limits for Na 589.592 Recovery = 101.38%					
Pb 220.353†	3167.4	0.4935 mg/L	0.00042	0.4935 mg/L	0.00042	0.08%
QC value within limits for Pb 220.353 Recovery = 98.70%					
Sb 206.836†	9813.4	4.819 mg/L	0.0106	4.819 mg/L	0.0106	0.22%
QC value within limits for Sb 206.836 Recovery = 96.38%					
Se 196.026†	451.8	0.5010 mg/L	0.00537	0.5010 mg/L	0.00537	1.07%
QC value within limits for Se 196.026 Recovery = 100.20%					
Sn 189.927†	26121.7	4.933 mg/L	0.0328	4.933 mg/L	0.0328	0.67%
QC value within limits for Sn 189.927 Recovery = 98.65%					
Ti 337.279†	1399255.8	2.458 mg/L	0.0111	2.458 mg/L	0.0111	0.45%
QC value within limits for Ti 337.279 Recovery = 98.31%					
Tl 190.801†	1826.7	0.9660 mg/L	0.00388	0.9660 mg/L	0.00388	0.40%
QC value within limits for Tl 190.801 Recovery = 96.60%					
V 292.402†	165220.5	2.405 mg/L	0.0004	2.405 mg/L	0.0004	0.02%
QC value within limits for V 292.402 Recovery = 96.21%					
Zn 206.200†	33377.4	0.9895 mg/L	0.00679	0.9895 mg/L	0.00679	0.69%
QC value within limits for Zn 206.200 Recovery = 98.95%					
Ca 227.546†	4417.5	23.56 mg/L	0.013	23.56 mg/L	0.013	0.05%
QC value within limits for Ca 227.546 Recovery = 94.24%					
Sr 421.552†	164980.0	2.495 mg/L	0.0139	2.495 mg/L	0.0139	0.56%
QC value within limits for Sr 421.552 Recovery = 99.81%					
Al 237.313†	61663.9	9.663 mg/L	0.0350	9.663 mg/L	0.0350	0.36%
QC value within limits for Al 237.313 Recovery = 96.63%					

All analyte(s) passed QC.

Sequence No.: 37 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 10/15/2014 6:12:38 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7143006.5	1.030	mg/L	0.0087				0.84%
Ag 328.068†	113.5	0.0004	mg/L	0.00000	0.0004	mg/L	0.00000	0.51%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	1.4	0.0010	mg/L	0.00067	0.0010	mg/L	0.00067	64.35%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3141.2	0.0270	mg/L	0.00205	0.0270	mg/L	0.00205	7.58%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	487.4	0.0055	mg/L	0.00100	0.0055	mg/L	0.00100	18.09%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	172.0	0.0001	mg/L	0.00002	0.0001	mg/L	0.00002	38.38%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	18.5	0.0002	mg/L	0.00014	0.0002	mg/L	0.00014	67.09%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	27.5	0.0012	mg/L	0.00026	0.0012	mg/L	0.00026	22.27%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	63.2	0.0005	mg/L	0.00008	0.0005	mg/L	0.00008	16.00%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	836.0	0.0031	mg/L	0.00045	0.0031	mg/L	0.00045	14.43%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	381.3	0.0065	mg/L	0.00018	0.0065	mg/L	0.00018	2.79%

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QC value within limits for Fe 259.939 Recovery = Not calculated

K 766.490†	28.1	0.0543 mg/L	0.04995	0.0543 mg/L	0.04995	91.93%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	282.1	0.0253 mg/L	0.00788	0.0253 mg/L	0.00788	31.11%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	278.5	0.0008 mg/L	0.00010	0.0008 mg/L	0.00010	13.44%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	28.1	0.0016 mg/L	0.00031	0.0016 mg/L	0.00031	19.22%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	52.5	0.0012 mg/L	0.00035	0.0012 mg/L	0.00035	30.01%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	499.8	0.1295 mg/L	0.01296	0.1295 mg/L	0.01296	10.01%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	10.1	0.0016 mg/L	0.00081	0.0016 mg/L	0.00081	51.38%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	9.0	0.0044 mg/L	0.00126	0.0044 mg/L	0.00126	28.55%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.8	0.0009 mg/L	0.00029	0.0009 mg/L	0.00029	32.08%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	151.6	0.0286 mg/L	0.00689	0.0286 mg/L	0.00689	24.09%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	917.1	0.0016 mg/L	0.00038	0.0016 mg/L	0.00038	23.81%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	5.8	0.0031 mg/L	0.00068	0.0031 mg/L	0.00068	22.12%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	81.0	0.0012 mg/L	0.00040	0.0012 mg/L	0.00040	34.18%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	26.3	0.0008 mg/L	0.00001	0.0008 mg/L	0.00001	1.65%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	4.8	0.0258 mg/L	0.02523	0.0258 mg/L	0.02523	97.76%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	140.6	0.0021 mg/L	0.00012	0.0021 mg/L	0.00012	5.79%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 237.313†	33.9	0.0053 mg/L	0.00077	0.0053 mg/L	0.00077	14.53%
QC value within limits for Al 237.313 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 38
Sample ID: R1408087-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 10/15/2014 6:18:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408087-001

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7029360.3	1.014	mg/L	0.0081				0.80%
Ag 328.068†	-199.7	-0.0006	mg/L	0.00014				23.00%
As 188.979†	0.4	0.0003	mg/L	0.00073				245.66%
B 249.772†	4594.8	0.0372	mg/L	0.00088				2.37%
Ba 233.527†	3201.3	0.0363	mg/L	0.00011				0.31%
Be 313.107†	-533.7	-0.0002	mg/L	0.00003				16.22%
Cd 226.502†	-10.6	-0.0002	mg/L	0.00005				27.98%
Co 228.616†	20.4	0.0009	mg/L	0.00005				5.16%
Cr 267.716†	17.1	0.0005	mg/L	0.00001				2.62%
Cu 324.752†	1564.7	0.0059	mg/L	0.00027				4.63%
Fe 259.939†	32113.4	0.5200	mg/L	0.00208				0.40%
K 766.490†	743.0	1.436	mg/L	0.0319				2.22%
Mg 279.077†	42968.7	3.858	mg/L	0.0003				0.01%
Mn 257.610†	73051.2	0.2038	mg/L	0.00057				0.28%
Mo 202.031†	41.1	0.0024	mg/L	0.00022				9.43%
Ni 231.604†	3.1	0.0001	mg/L	0.00002				35.50%
Na 589.592†	217353.6	56.32	mg/L	0.436				0.77%
Pb 220.353†	8.7	0.0018	mg/L	0.00018				10.16%
Sb 206.836†	9.3	0.0045	mg/L	0.00035				7.74%
Se 196.026†	-2.7	-0.0028	mg/L	0.00116				41.11%
Sn 189.927†	-108.6	-0.0205	mg/L	0.00138				6.72%
Ti 337.279†	15966.7	0.0280	mg/L	0.00028				1.00%
Tl 190.801†	6.9	0.0026	mg/L	0.00218				83.98%
V 292.402†	47.5	0.0007	mg/L	0.00009				14.31%

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Zn 206.200†	394.1	0.0117	mg/L	0.00009	0.74%
Ca 227.546†	12858.8	67.74	mg/L	0.241	0.36%
Sr 421.552†	10847.0	0.1640	mg/L	0.00142	0.87%
Al 237.313†	4064.6	0.6222	mg/L	0.00428	0.69%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 39
Sample ID: R1408087-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 59
Date Collected: 10/15/2014 6:24:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408087-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7477846.6	1.079	mg/L	0.0054				0.50%
Ag 328.068†	-620.1	-0.0018	mg/L	0.00017				9.17%
As 188.979†	9.6	0.0061	mg/L	0.00062				10.10%
B 249.772†	5254.9	0.0369	mg/L	0.00017				0.47%
Ba 233.527†	9296.3	0.1054	mg/L	0.00049				0.47%
Be 313.107†	18137.7	0.0059	mg/L	0.00000				0.05%
Cd 226.502†	16.5	0.0000	mg/L	0.00005				413.68%
Co 228.616†	32.8	0.0014	mg/L	0.00010				7.25%
Cr 267.716†	202.6	0.0024	mg/L	0.00007				2.96%
Cu 324.752†	211.7	0.0010	mg/L	0.00009				8.55%
Fe 259.939†	115033.6	1.921	mg/L	0.0124				0.64%
K 766.490†	1056.6	2.042	mg/L	0.0364				1.78%
Mg 279.077†	72850.4	6.540	mg/L	0.0395				0.60%
Mn 257.610†	16958.3	0.0476	mg/L	0.00025				0.53%
Mo 202.031†	33.4	0.0019	mg/L	0.00025				12.72%
Ni 231.604†	62.5	0.0014	mg/L	0.00007				5.34%
Na 589.592†	472911.7	122.5	mg/L	1.80				1.46%
Pb 220.353†	3.7	0.0046	mg/L	0.00045				9.77%
Sb 206.836†	8.3	0.0016	mg/L	0.00020				12.41%
Se 196.026†	-1.0	-0.0003	mg/L	0.00040				150.08%
Sn 189.927†	-374.5	-0.0707	mg/L	0.00317				4.48%
Ti 337.279†	66877.1	0.1175	mg/L	0.00266				2.26%
Tl 190.801†	11.2	0.0025	mg/L	0.00015				5.95%
V 292.402†	182.2	0.0025	mg/L	0.00004				1.46%
Zn 206.200†	511.9	0.0152	mg/L	0.00000				0.00%
Ca 227.546†	22951.7	121.0	mg/L	1.08				0.89%
Sr 421.552†	38032.3	0.5752	mg/L	0.00653				1.13%
Al 237.313†	176755.7	27.69	mg/L	0.170				0.62%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 40
Sample ID: R1408087-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 10/15/2014 6:30:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408087-003

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6896992.6	0.9948	mg/L	0.00346				0.35%
Ag 328.068†	-66.1	-0.0002	mg/L	0.00014				96.51%
As 188.979†	0.8	0.0006	mg/L	0.00008				14.99%
B 249.772†	2949.3	0.0239	mg/L	0.00010				0.40%
Ba 233.527†	4549.7	0.0516	mg/L	0.00012				0.23%
Be 313.107†	-713.3	-0.0002	mg/L	0.00004				16.67%
Cd 226.502†	-18.1	-0.0002	mg/L	0.00008				34.31%
Co 228.616†	-13.7	-0.0006	mg/L	0.00003				5.47%
Cr 267.716†	16.5	0.0005	mg/L	0.00005				9.04%
Cu 324.752†	956.5	0.0036	mg/L	0.00037				10.21%
Fe 259.939†	20749.0	0.3278	mg/L	0.00222				0.68%
K 766.490†	1287.8	2.489	mg/L	0.1288				5.17%
Mg 279.077†	43462.3	3.902	mg/L	0.0357				0.91%
Mn 257.610†	5172.4	0.0145	mg/L	0.00007				0.45%

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Mo 202.031†	53.3	0.0031	mg/L	0.00017	5.67%
Ni 231.604†	-33.9	-0.0008	mg/L	0.00004	5.29%
Na 589.592†	1242067.1	321.8	mg/L	1.90	0.59%
Pb 220.353†	3.3	0.0009	mg/L	0.00006	6.63%
Sb 206.836†	6.3	0.0031	mg/L	0.00000	0.01%
Se 196.026†	0.5	0.0006	mg/L	0.00044	73.83%
Sn 189.927†	-158.2	-0.0299	mg/L	0.00269	9.01%
Ti 337.279†	8695.0	0.0153	mg/L	0.00047	3.08%
Tl 190.801†	7.5	0.0030	mg/L	0.00161	53.24%
V 292.402†	22.0	0.0003	mg/L	0.00020	68.78%
Zn 206.200†	161.4	0.0048	mg/L	0.00017	3.52%
Ca 227.546†	11509.6	60.62	mg/L	0.728	1.20%
Sr 421.552†	10050.0	0.1520	mg/L	0.00072	0.48%
Al 237.313†	1820.2	0.2715	mg/L	0.00035	0.13%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 41
Sample ID: R1408103-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 61
Date Collected: 10/15/2014 6:36:42 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408103-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6881611.3	0.9926	mg/L	0.01114				1.12%
Ag 328.068†	1753.2	0.0068	mg/L	0.00031				4.55%
As 188.979†	4.2	0.0031	mg/L	0.00078				25.28%
B 249.772†	14019.3	0.1197	mg/L	0.00020				0.17%
Ba 233.527†	7433.5	0.0843	mg/L	0.00004				0.05%
Be 313.107†	-663.6	-0.0002	mg/L	0.00002				10.97%
Cd 226.502†	39.3	0.0004	mg/L	0.00005				12.57%
Co 228.616†	-4.5	-0.0002	mg/L	0.00004				19.65%
Cr 267.716†	1459.3	0.0131	mg/L	0.00052				4.00%
Cu 324.752†	7435.3	0.0278	mg/L	0.00026				0.92%
Fe 259.939†	14295.0	0.2228	mg/L	0.00115				0.51%
K 766.490†	3221.3	6.226	mg/L	0.0864				1.39%
Mg 279.077†	132380.4	11.88	mg/L	0.055				0.46%
Mn 257.610†	11323.8	0.0316	mg/L	0.00008				0.26%
Mo 202.031†	172.9	0.0100	mg/L	0.00015				1.52%
Ni 231.604†	705.7	0.0157	mg/L	0.00007				0.47%
Na 589.592†	1148702.7	297.7	mg/L	2.52				0.85%
Pb 220.353†	25.1	0.0042	mg/L	0.00022				5.28%
Sb 206.836†	29.0	0.0142	mg/L	0.00068				4.76%
Se 196.026†	0.1	0.0002	mg/L	0.00059				284.53%
Sn 189.927†	-4.3	-0.0008	mg/L	0.00442				549.62%
Ti 337.279†	2028.2	0.0036	mg/L	0.00004				1.21%
Tl 190.801†	4.5	0.0016	mg/L	0.00109				66.14%
V 292.402†	63.2	0.0009	mg/L	0.00035				38.66%
Zn 206.200†	1451.6	0.0430	mg/L	0.00044				1.02%
Ca 227.546†	8753.5	46.10	mg/L	0.123				0.27%
Sr 421.552†	17143.7	0.2593	mg/L	0.00681				2.63%
Al 237.313†	1334.5	0.1957	mg/L	0.00152				0.77%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 42
Sample ID: R1408103-001D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 62
Date Collected: 10/15/2014 6:42:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408103-001D

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6857206.3	0.9891	mg/L	0.00239				0.24%
Ag 328.068†	2521.1	0.0097	mg/L	0.00035				3.60%
As 188.979†	6.1	0.0045	mg/L	0.00249				55.48%
B 249.772†	13982.7	0.1193	mg/L	0.00052				0.44%

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Ba 233.527†	7426.3	0.0842	mg/L	0.00004	0.05%
Be 313.107†	-771.2	-0.0003	mg/L	0.00000	0.31%
Cd 226.502†	41.8	0.0004	mg/L	0.00005	11.80%
Co 228.616†	-5.5	-0.0002	mg/L	0.00005	21.66%
Cr 267.716†	1481.0	0.0133	mg/L	0.00009	0.66%
Cu 324.752†	7569.6	0.0284	mg/L	0.00000	0.01%
Fe 259.939†	15961.9	0.2517	mg/L	0.00165	0.65%
K 766.490†	3212.0	6.209	mg/L	0.0047	0.08%
Mg 279.077†	132934.1	11.93	mg/L	0.094	0.79%
Mn 257.610†	11301.4	0.0316	mg/L	0.00002	0.06%
Mo 202.031†	173.6	0.0100	mg/L	0.00015	1.48%
Ni 231.604†	702.5	0.0157	mg/L	0.00010	0.62%
Na 589.592†	1122012.2	290.7	mg/L	0.19	0.07%
Pb 220.353†	24.0	0.0041	mg/L	0.00103	25.49%
Sb 206.836†	28.5	0.0140	mg/L	0.00027	1.92%
Se 196.026†	1.9	0.0022	mg/L	0.00100	46.12%
Sn 189.927†	-26.0	-0.0049	mg/L	0.00166	33.86%
Ti 337.279†	2955.0	0.0052	mg/L	0.00006	1.20%
Tl 190.801†	6.8	0.0029	mg/L	0.00152	53.05%
V 292.402†	52.5	0.0007	mg/L	0.00002	2.68%
Zn 206.200†	1484.6	0.0440	mg/L	0.00007	0.16%
Ca 227.546†	8662.5	45.63	mg/L	0.005	0.01%
Sr 421.552†	16520.3	0.2499	mg/L	0.00218	0.87%
Al 237.313†	1487.7	0.2198	mg/L	0.00194	0.88%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 43
Sample ID: R1408103-001S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 63
Date Collected: 10/15/2014 6:49:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408103-001S

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6861423.6	0.9897	mg/L	0.00146				0.15%
Ag 328.068†	16148.1	0.0622	mg/L	0.00067				1.07%
As 188.979†	55.9	0.0412	mg/L	0.00138				3.34%
B 249.772†	124272.4	1.065	mg/L	0.0017				0.16%
Ba 233.527†	177333.2	2.011	mg/L	0.0065				0.33%
Be 313.107†	144391.6	0.0470	mg/L	0.00005				0.10%
Cd 226.502†	4221.7	0.0467	mg/L	0.00023				0.49%
Co 228.616†	11127.9	0.4793	mg/L	0.00054				0.11%
Cr 267.716†	24976.2	0.2054	mg/L	0.00112				0.55%
Cu 324.752†	77517.5	0.2902	mg/L	0.00174				0.60%
Fe 259.939†	74156.8	1.252	mg/L	0.0050				0.40%
K 766.490†	13972.5	27.01	mg/L	0.032				0.12%
Mg 279.077†	153830.1	13.81	mg/L	0.049				0.36%
Mn 257.610†	185164.1	0.5165	mg/L	0.00187				0.36%
Mo 202.031†	8551.5	0.4950	mg/L	0.00065				0.13%
Ni 231.604†	22661.5	0.5052	mg/L	0.00122				0.24%
Na 589.592†	1239707.3	321.2	mg/L	0.84				0.26%
Pb 220.353†	3127.1	0.4865	mg/L	0.00030				0.06%
Sb 206.836†	1026.2	0.5038	mg/L	0.00074				0.15%
Se 196.026†	870.2	0.9629	mg/L	0.00257				0.27%
Sn 189.927†	29278.2	5.529	mg/L	0.0193				0.35%
Ti 337.279†	283597.6	0.4982	mg/L	0.00152				0.31%
Tl 190.801†	3534.3	1.870	mg/L	0.0027				0.15%
V 292.402†	31836.7	0.4635	mg/L	0.00269				0.58%
Zn 206.200†	18166.0	0.5386	mg/L	0.00236				0.44%
Ca 227.546†	9074.9	47.86	mg/L	0.113				0.24%
Sr 421.552†	17256.9	0.2610	mg/L	0.00060				0.23%
Al 237.313†	13802.2	2.151	mg/L	0.0100				0.47%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 44
Sample ID: R1408103-001A
Analyst:
Initial Sample Wt:

Autosampler Location: 64
Date Collected: 10/15/2014 6:55:11 PM
Data Type: Original
Initial Sample Vol:

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Dilution: Sample Prep Vol: 50 mL

Mean Data: R1408103-001A

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6753406.7	0.9741	mg/L	0.01270				1.30%
Ag 328.068†	14570.2	0.0561	mg/L	0.00042				0.74%
As 188.979†	59.7	0.0440	mg/L	0.00034				0.76%
B 249.772†	134344.7	1.152	mg/L	0.0123				1.07%
Ba 233.527†	183557.3	2.082	mg/L	0.0279				1.34%
Be 313.107†	149630.9	0.0487	mg/L	0.00054				1.10%
Cd 226.502†	4369.0	0.0484	mg/L	0.00042				0.86%
Co 228.616†	11376.9	0.4900	mg/L	0.00490				1.00%
Cr 267.716†	26018.1	0.2139	mg/L	0.00226				1.06%
Cu 324.752†	78125.0	0.2924	mg/L	0.00426				1.46%
Fe 259.939†	72608.1	1.226	mg/L	0.0184				1.50%
K 766.490†	14333.6	27.71	mg/L	0.241				0.87%
Mg 279.077†	152290.2	13.67	mg/L	0.188				1.37%
Mn 257.610†	191009.2	0.5328	mg/L	0.00719				1.35%
Mo 202.031†	8923.3	0.5165	mg/L	0.00486				0.94%
Ni 231.604†	23527.4	0.5245	mg/L	0.00614				1.17%
Na 589.592†	1198506.4	310.6	mg/L	4.16				1.34%
Pb 220.353†	3264.4	0.5078	mg/L	0.00565				1.11%
Sb 206.836†	1059.5	0.5202	mg/L	0.00436				0.84%
Se 196.026†	1047.7	1.159	mg/L	0.0094				0.81%
Sn 189.927†	31494.8	5.947	mg/L	0.0846				1.42%
Ti 337.279†	284496.1	0.4997	mg/L	0.00699				1.40%
Tl 190.801†	3674.6	1.944	mg/L	0.0209				1.07%
V 292.402†	33367.5	0.4858	mg/L	0.00802				1.65%
Zn 206.200†	18788.7	0.5570	mg/L	0.00792				1.42%
Ca 227.546†	8895.4	46.91	mg/L	0.488				1.04%
Sr 421.552†	16739.1	0.2532	mg/L	0.00337				1.33%
Al 237.313†	13818.1	2.154	mg/L	0.0373				1.73%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 45 Autosampler Location: 65
Sample ID: R1408103-001L Date Collected: 10/15/2014 7:01:23 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol: 50 mL

Mean Data: R1408103-001L

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6973350.0	1.006	mg/L	0.0076				0.75%
Ag 328.068†	444.2	0.0017	mg/L	0.00008				4.69%
As 188.979†	1.5	0.0011	mg/L	0.00155				142.46%
B 249.772†	4457.7	0.0382	mg/L	0.00052				1.36%
Ba 233.527†	1504.5	0.0171	mg/L	0.00003				0.17%
Be 313.107†	-349.0	-0.0001	mg/L	0.00006				57.03%
Cd 226.502†	10.1	0.0001	mg/L	0.00000				4.40%
Co 228.616†	-2.5	-0.0001	mg/L	0.00021				198.20%
Cr 267.716†	321.5	0.0029	mg/L	0.00002				0.86%
Cu 324.752†	1443.1	0.0054	mg/L	0.00021				3.80%
Fe 259.939†	2858.1	0.0450	mg/L	0.00016				0.37%
K 766.490†	668.4	1.292	mg/L	0.0700				5.42%
Mg 279.077†	26750.4	2.402	mg/L	0.0364				1.52%
Mn 257.610†	2348.8	0.0066	mg/L	0.00000				0.06%
Mo 202.031†	37.2	0.0022	mg/L	0.00020				9.23%
Ni 231.604†	141.8	0.0032	mg/L	0.00020				6.41%
Na 589.592†	210912.9	54.65	mg/L	0.941				1.72%
Pb 220.353†	8.4	0.0014	mg/L	0.00086				63.15%
Sb 206.836†	7.1	0.0035	mg/L	0.00013				3.86%
Se 196.026†	1.2	0.0014	mg/L	0.00025				17.75%
Sn 189.927†	-37.8	-0.0071	mg/L	0.00278				38.97%
Ti 337.279†	559.6	0.0010	mg/L	0.00005				4.80%
Tl 190.801†	2.9	0.0014	mg/L	0.00002				1.23%
V 292.402†	14.1	0.0002	mg/L	0.00020				99.59%
Zn 206.200†	399.2	0.0118	mg/L	0.00009				0.80%

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Ca 227.546†	1560.5	8.219	mg/L	0.1078	1.31%
Sr 421.552†	3057.7	0.0462	mg/L	0.00100	2.15%
Al 237.313†	236.4	0.0346	mg/L	0.00093	2.69%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 46
Sample ID: R1408103-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 66
Date Collected: 10/15/2014 7:07:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408103-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6886751.6	0.9934	mg/L	0.00221				0.22%
Ag 328.068†	5757.1	0.0222	mg/L	0.00006				0.29%
As 188.979†	2.7	0.0020	mg/L	0.00268				135.82%
B 249.772†	14267.7	0.1204	mg/L	0.00099				0.82%
Ba 233.527†	8386.7	0.0951	mg/L	0.00086				0.91%
Be 313.107†	-398.1	-0.0001	mg/L	0.00003				22.20%
Cd 226.502†	24.2	0.0002	mg/L	0.00004				20.46%
Co 228.616†	-1.7	-0.0001	mg/L	0.00029				386.63%
Cr 267.716†	2032.8	0.0178	mg/L	0.00008				0.45%
Cu 324.752†	12445.2	0.0466	mg/L	0.00094				2.01%
Fe 259.939†	35082.9	0.5805	mg/L	0.00543				0.94%
K 766.490†	3120.0	6.031	mg/L	0.0059				0.10%
Mg 279.077†	128552.7	11.54	mg/L	0.116				1.01%
Mn 257.610†	9337.8	0.0261	mg/L	0.00031				1.20%
Mo 202.031†	171.4	0.0099	mg/L	0.00005				0.46%
Ni 231.604†	690.3	0.0154	mg/L	0.00011				0.74%
Na 589.592†	1126037.8	291.8	mg/L	0.01				0.00%
Pb 220.353†	28.7	0.0048	mg/L	0.00001				0.26%
Sb 206.836†	26.5	0.0130	mg/L	0.00031				2.41%
Se 196.026†	1.8	0.0021	mg/L	0.00171				80.03%
Sn 189.927†	-71.5	-0.0135	mg/L	0.00271				20.06%
Ti 337.279†	4056.5	0.0071	mg/L	0.00010				1.39%
Tl 190.801†	2.2	0.0004	mg/L	0.00248				565.25%
V 292.402†	50.6	0.0007	mg/L	0.00019				27.09%
Zn 206.200†	1514.7	0.0449	mg/L	0.00017				0.38%
Ca 227.546†	8796.7	46.35	mg/L	0.545				1.18%
Sr 421.552†	17391.7	0.2630	mg/L	0.00024				0.09%
Al 237.313†	2321.0	0.3509	mg/L	0.00218				0.62%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 47
Sample ID: R1408104-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 67
Date Collected: 10/15/2014 7:13:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408104-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6776804.2	0.9775	mg/L	0.00587				0.60%
Ag 328.068†	2346.5	0.0090	mg/L	0.00023				2.57%
As 188.979†	4.6	0.0034	mg/L	0.00085				25.45%
B 249.772†	17230.2	0.1476	mg/L	0.00050				0.34%
Ba 233.527†	9728.7	0.1104	mg/L	0.00088				0.80%
Be 313.107†	-1065.3	-0.0003	mg/L	0.00003				8.05%
Cd 226.502†	53.2	0.0006	mg/L	0.00007				12.82%
Co 228.616†	-4.2	-0.0002	mg/L	0.00002				9.40%
Cr 267.716†	1001.2	0.0094	mg/L	0.00004				0.40%
Cu 324.752†	6061.3	0.0227	mg/L	0.00062				2.73%
Fe 259.939†	12015.7	0.1839	mg/L	0.00149				0.81%
K 766.490†	4309.2	8.329	mg/L	0.0036				0.04%
Mg 279.077†	134190.7	12.05	mg/L	0.056				0.46%
Mn 257.610†	11573.0	0.0323	mg/L	0.00008				0.24%
Mo 202.031†	177.4	0.0103	mg/L	0.00002				0.19%

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Ni 231.604†	775.0	0.0173 mg/L	0.00007	0.38%
Na 589.592†	1195232.8	309.7 mg/L	0.47	0.15%
Pb 220.353†	16.1	0.0028 mg/L	0.00074	26.26%
Sb 206.836†	27.7	0.0136 mg/L	0.00050	3.68%
Se 196.026†	1.1	0.0013 mg/L	0.00152	119.35%
Sn 189.927†	-36.1	-0.0068 mg/L	0.00309	45.42%
Ti 337.279†	2724.8	0.0048 mg/L	0.00003	0.58%
Tl 190.801†	7.4	0.0032 mg/L	0.00078	24.17%
V 292.402†	54.8	0.0008 mg/L	0.00033	41.75%
Zn 206.200†	1482.2	0.0439 mg/L	0.00027	0.60%
Ca 227.546†	8628.0	45.44 mg/L	0.088	0.19%
Sr 421.552†	16925.7	0.2560 mg/L	0.00084	0.33%
Al 237.313†	1200.7	0.1747 mg/L	0.00064	0.36%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 48 **Autosampler Location: 3**
Sample ID: CCV **Date Collected: 10/15/2014 7:19:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7021119.9	1.013	mg/L	0.0156				1.54%
Ag 328.068†	129135.2	0.4958	mg/L	0.00407	0.4958	mg/L	0.00407	0.82%
QC value within limits for Ag 328.068 Recovery = 99.15%								
As 188.979†	1340.9	0.9897	mg/L	0.01210	0.9897	mg/L	0.01210	1.22%
QC value within limits for As 188.979 Recovery = 98.97%								
B 249.772†	285398.9	2.438	mg/L	0.0036	2.438	mg/L	0.0036	0.15%
QC value within limits for B 249.772 Recovery = 97.50%								
Ba 233.527†	893130.8	10.13	mg/L	0.040	10.13	mg/L	0.040	0.39%
QC value within limits for Ba 233.527 Recovery = 101.31%								
Be 313.107†	768863.0	0.2504	mg/L	0.00096	0.2504	mg/L	0.00096	0.38%
QC value within limits for Be 313.107 Recovery = 100.16%								
Cd 226.502†	44728.6	0.4963	mg/L	0.00541	0.4963	mg/L	0.00541	1.09%
QC value within limits for Cd 226.502 Recovery = 99.26%								
Co 228.616†	57402.3	2.472	mg/L	0.0250	2.472	mg/L	0.0250	1.01%
QC value within limits for Co 228.616 Recovery = 98.90%								
Cr 267.716†	60942.1	0.5003	mg/L	0.00475	0.5003	mg/L	0.00475	0.95%
QC value within limits for Cr 267.716 Recovery = 100.07%								
Cu 324.752†	327225.7	1.225	mg/L	0.0071	1.225	mg/L	0.0071	0.58%
QC value within limits for Cu 324.752 Recovery = 97.99%								
Fe 259.939†	288441.7	4.950	mg/L	0.0393	4.950	mg/L	0.0393	0.79%
QC value within limits for Fe 259.939 Recovery = 99.01%								
K 766.490†	12621.8	24.40	mg/L	0.308	24.40	mg/L	0.308	1.26%
QC value within limits for K 766.490 Recovery = 97.59%								
Mg 279.077†	274934.7	24.68	mg/L	0.219	24.68	mg/L	0.219	0.89%
QC value within limits for Mg 279.077 Recovery = 98.73%								
Mn 257.610†	266799.6	0.7447	mg/L	0.00611	0.7447	mg/L	0.00611	0.82%
QC value within limits for Mn 257.610 Recovery = 99.29%								
Mo 202.031†	41973.0	2.430	mg/L	0.0299	2.430	mg/L	0.0299	1.23%
QC value within limits for Mo 202.031 Recovery = 97.18%								
Ni 231.604†	89351.9	1.992	mg/L	0.0194	1.992	mg/L	0.0194	0.98%
QC value within limits for Ni 231.604 Recovery = 99.60%								
Na 589.592†	90617.5	23.48	mg/L	0.340	23.48	mg/L	0.340	1.45%
QC value within limits for Na 589.592 Recovery = 93.92%								
Pb 220.353†	3186.4	0.4965	mg/L	0.00453	0.4965	mg/L	0.00453	0.91%
QC value within limits for Pb 220.353 Recovery = 99.29%								
Sb 206.836†	9997.5	4.910	mg/L	0.0650	4.910	mg/L	0.0650	1.32%
QC value within limits for Sb 206.836 Recovery = 98.19%								
Se 196.026†	449.6	0.4986	mg/L	0.00200	0.4986	mg/L	0.00200	0.40%
QC value within limits for Se 196.026 Recovery = 99.72%								
Sn 189.927†	26090.2	4.927	mg/L	0.0588	4.927	mg/L	0.0588	1.19%
QC value within limits for Sn 189.927 Recovery = 98.53%								
Ti 337.279†	1420091.7	2.494	mg/L	0.0083	2.494	mg/L	0.0083	0.33%
QC value within limits for Ti 337.279 Recovery = 99.78%								
Tl 190.801†	1839.0	0.9725	mg/L	0.01025	0.9725	mg/L	0.01025	1.05%
QC value within limits for Tl 190.801 Recovery = 97.25%								
V 292.402†	169122.6	2.462	mg/L	0.0231	2.462	mg/L	0.0231	0.94%

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QC value within limits for V 292.402 Recovery = 98.48%

Zn 206.200†	33367.3	0.9892 mg/L	0.00910	0.9892 mg/L	0.00910	0.92%

QC value within limits for Zn 206.200 Recovery = 98.92%

Ca 227.546†	4502.6	24.01 mg/L	0.374	24.01 mg/L	0.374	1.56%

QC value within limits for Ca 227.546 Recovery = 96.02%

Sr 421.552†	144400.1	2.184 mg/L	0.0302	2.184 mg/L	0.0302	1.38%

QC value less than the lower limit for Sr 421.552 Recovery = 87.36%

Al 237.313†	61758.4	9.678 mg/L	0.0674	9.678 mg/L	0.0674	0.70%

QC value within limits for Al 237.313 Recovery = 96.78%

QC Failed. Continue with analysis.

Sequence No.: 49 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 10/15/2014 7:25:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7215862.0	1.041	mg/L	0.0017				0.16%
Ag 328.068†	54.9	0.0002	mg/L	0.00020	0.0002	mg/L	0.00020	96.72%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	1.1	0.0008	mg/L	0.00220	0.0008	mg/L	0.00220	281.17%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	2650.1	0.0228	mg/L	0.00196	0.0228	mg/L	0.00196	8.58%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	310.5	0.0035	mg/L	0.00085	0.0035	mg/L	0.00085	24.24%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	456.6	0.0001	mg/L	0.00001	0.0001	mg/L	0.00001	4.43%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	13.1	0.0001	mg/L	0.00001	0.0001	mg/L	0.00001	6.92%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	16.1	0.0007	mg/L	0.00011	0.0007	mg/L	0.00011	16.23%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	33.9	0.0003	mg/L	0.00005	0.0003	mg/L	0.00005	19.09%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	641.3	0.0024	mg/L	0.00051	0.0024	mg/L	0.00051	21.41%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	244.3	0.0042	mg/L	0.00053	0.0042	mg/L	0.00053	12.57%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	102.4	0.1979	mg/L	0.05615	0.1979	mg/L	0.05615	28.37%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	220.2	0.0198	mg/L	0.00281	0.0198	mg/L	0.00281	14.20%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	197.3	0.0006	mg/L	0.00005	0.0006	mg/L	0.00005	9.38%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	15.1	0.0009	mg/L	0.00017	0.0009	mg/L	0.00017	19.09%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	34.0	0.0008	mg/L	0.00015	0.0008	mg/L	0.00015	19.34%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	1132.4	0.2934	mg/L	0.02642	0.2934	mg/L	0.02642	9.00%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	6.0	0.0009	mg/L	0.00025	0.0009	mg/L	0.00025	26.69%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	6.2	0.0031	mg/L	0.00114	0.0031	mg/L	0.00114	37.19%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.3	-0.0014	mg/L	0.00099	-0.0014	mg/L	0.00099	69.82%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	130.0	0.0246	mg/L	0.00500	0.0246	mg/L	0.00500	20.36%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	597.7	0.0010	mg/L	0.00020	0.0010	mg/L	0.00020	19.17%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	6.5	0.0034	mg/L	0.00057	0.0034	mg/L	0.00057	16.67%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	51.8	0.0008	mg/L	0.00002	0.0008	mg/L	0.00002	2.10%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	19.6	0.0006	mg/L	0.00016	0.0006	mg/L	0.00016	28.03%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	9.1	0.0483	mg/L	0.00724	0.0483	mg/L	0.00724	15.00%

QC value within limits for Ca 227.546 Recovery = Not calculated
Sr 421.552† 101.3 0.0015 mg/L 0.00035 0.0015 mg/L 0.00035 22.96%
QC value within limits for Sr 421.552 Recovery = Not calculated
Al 237.313† 1.2 0.0002 mg/L 0.00059 0.0002 mg/L 0.00059 336.98%
QC value within limits for Al 237.313 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 50
Sample ID: MRL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 10/15/2014 7:31:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	7122122.3	1.027	mg/L	0.0051				0.50%
Ag 328.068†	2694.5	0.0103	mg/L	0.00002	0.0103	mg/L	0.00002	0.15%
QC value within limits for Ag 328.068 Recovery = 103.45%								
As 188.979†	27.0	0.0199	mg/L	0.00121	0.0199	mg/L	0.00121	6.09%
QC value within limits for As 188.979 Recovery = 99.65%								
B 249.772†	25085.3	0.2156	mg/L	0.00360	0.2156	mg/L	0.00360	1.67%
QC value within limits for B 249.772 Recovery = 107.82%								
Ba 233.527†	18739.4	0.2126	mg/L	0.00315	0.2126	mg/L	0.00315	1.48%
QC value within limits for Ba 233.527 Recovery = 106.28%								
Be 313.107†	15565.7	0.0051	mg/L	0.00004	0.0051	mg/L	0.00004	0.71%
QC value within limits for Be 313.107 Recovery = 101.38%								
Cd 226.502†	954.6	0.0106	mg/L	0.00004	0.0106	mg/L	0.00004	0.39%
QC value within limits for Cd 226.502 Recovery = 105.93%								
Co 228.616†	1190.2	0.0513	mg/L	0.00040	0.0513	mg/L	0.00040	0.78%
QC value within limits for Co 228.616 Recovery = 102.53%								
Cr 267.716†	1273.0	0.0105	mg/L	0.00000	0.0105	mg/L	0.00000	0.05%
QC value within limits for Cr 267.716 Recovery = 105.00%								
Cu 324.752†	6809.8	0.0255	mg/L	0.00021	0.0255	mg/L	0.00021	0.83%
QC value within limits for Cu 324.752 Recovery = 101.96%								
Fe 259.939†	6152.2	0.1054	mg/L	0.00093	0.1054	mg/L	0.00093	0.89%
QC value within limits for Fe 259.939 Recovery = 105.38%								
K 766.490†	454.8	0.8791	mg/L	0.03671	0.8791	mg/L	0.03671	4.18%
QC value within limits for K 766.490 Recovery = 87.91%								
Mg 279.077†	11259.1	1.011	mg/L	0.0119	1.011	mg/L	0.0119	1.17%
QC value within limits for Mg 279.077 Recovery = 101.08%								
Mn 257.610†	5608.1	0.0157	mg/L	0.00017	0.0157	mg/L	0.00017	1.08%
QC value within limits for Mn 257.610 Recovery = 104.35%								
Mo 202.031†	445.7	0.0258	mg/L	0.00023	0.0258	mg/L	0.00023	0.89%
QC value within limits for Mo 202.031 Recovery = 103.18%								
Ni 231.604†	1823.9	0.0407	mg/L	0.00036	0.0407	mg/L	0.00036	0.89%
QC value within limits for Ni 231.604 Recovery = 101.65%								
Na 589.592†	4411.1	1.143	mg/L	0.0117	1.143	mg/L	0.0117	1.02%
QC value within limits for Na 589.592 Recovery = 114.30%								
Pb 220.353†	69.4	0.0108	mg/L	0.00037	0.0108	mg/L	0.00037	3.42%
QC value within limits for Pb 220.353 Recovery = 108.12%								
Sb 206.836†	126.6	0.0622	mg/L	0.00144	0.0622	mg/L	0.00144	2.31%
QC value within limits for Sb 206.836 Recovery = 103.65%								
Se 196.026†	7.7	0.0085	mg/L	0.00056	0.0085	mg/L	0.00056	6.53%
QC value within limits for Se 196.026 Recovery = 85.12%								
Sn 189.927†	2902.9	0.5481	mg/L	0.01721	0.5481	mg/L	0.01721	3.14%
QC value within limits for Sn 189.927 Recovery = 109.63%								
Ti 337.279†	29951.9	0.0526	mg/L	0.00074	0.0526	mg/L	0.00074	1.40%
QC value within limits for Ti 337.279 Recovery = 105.22%								
Tl 190.801†	39.6	0.0209	mg/L	0.00034	0.0209	mg/L	0.00034	1.64%
QC value within limits for Tl 190.801 Recovery = 104.63%								
V 292.402†	3503.9	0.0510	mg/L	0.00054	0.0510	mg/L	0.00054	1.07%
QC value within limits for V 292.402 Recovery = 102.02%								
Zn 206.200†	646.6	0.0192	mg/L	0.00030	0.0192	mg/L	0.00030	1.59%
QC value within limits for Zn 206.200 Recovery = 95.84%								
Ca 227.546†	159.2	0.8443	mg/L	0.03476	0.8443	mg/L	0.03476	4.12%
QC value within limits for Ca 227.546 Recovery = 84.43%								
Sr 421.552†	6464.8	0.0978	mg/L	0.00155	0.0978	mg/L	0.00155	1.58%
QC value within limits for Sr 421.552 Recovery = 97.77%								
Al 237.313†	1215.4	0.1902	mg/L	0.00334	0.1902	mg/L	0.00334	1.76%

QC value within limits for Al 237.313 Recovery = 95.10%
All analyte(s) passed QC.

Sequence No.: 51
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 10/15/2014 7:37:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6695880.8	0.9658	mg/L	0.00459				0.48%
Ag 328.068†	-7073.5	-0.0010	mg/L	0.00048	-0.0010	mg/L	0.00048	48.75%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	14.7	0.0019	mg/L	0.00264	0.0019	mg/L	0.00264	141.82%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	41594.7	-0.0242	mg/L	0.00067	-0.0242	mg/L	0.00067	2.79%
Ba 233.527†	259.0	0.0029	mg/L	0.00001	0.0029	mg/L	0.00001	0.28%
Be 313.107†	-1347.7	-0.0004	mg/L	0.00004	-0.0004	mg/L	0.00004	9.52%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	1071.2	0.0007	mg/L	0.00006	0.0007	mg/L	0.00006	9.11%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	6.7	0.0003	mg/L	0.00046	0.0003	mg/L	0.00046	158.33%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3754.2	-0.0004	mg/L	0.00044	-0.0004	mg/L	0.00044	107.71%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-1996.6	0.0018	mg/L	0.00028	0.0018	mg/L	0.00028	15.26%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	5255204.9	90.30	mg/L	1.080	90.30	mg/L	1.080	1.20%
QC value within limits for Fe 259.939 Recovery = 90.30%								
K 766.490†	64.0	0.1237	mg/L	0.10878	0.1237	mg/L	0.10878	87.95%
Mg 279.077†	2910362.3	261.3	mg/L	3.49	261.3	mg/L	3.49	1.34%
QC value within limits for Mg 279.077 Recovery = 104.51%								
Mn 257.610†	-5583.1	-0.0026	mg/L	0.00008	-0.0026	mg/L	0.00008	3.18%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	3.6	0.0002	mg/L	0.00028	0.0002	mg/L	0.00028	134.14%
Ni 231.604†	-145.8	-0.0032	mg/L	0.00004	-0.0032	mg/L	0.00004	1.27%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	726.4	0.1882	mg/L	0.00068	0.1882	mg/L	0.00068	0.36%
Pb 220.353†	-184.4	0.0024	mg/L	0.00031	0.0024	mg/L	0.00031	13.13%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	50.1	0.0020	mg/L	0.00242	0.0020	mg/L	0.00242	120.23%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-20.4	0.0006	mg/L	0.00463	0.0006	mg/L	0.00463	722.53%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-204.6	-0.0386	mg/L	0.00434	-0.0386	mg/L	0.00434	11.24%
Ti 337.279†	419.1	0.0007	mg/L	0.00002	0.0007	mg/L	0.00002	2.08%
Tl 190.801†	29.0	-0.0032	mg/L	0.00348	-0.0032	mg/L	0.00348	107.57%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	423.4	-0.0006	mg/L	0.00010	-0.0006	mg/L	0.00010	17.60%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	161.3	0.0048	mg/L	0.00044	0.0048	mg/L	0.00044	9.26%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	48257.6	259.7	mg/L	1.89	259.7	mg/L	1.89	0.73%
QC value within limits for Ca 227.546 Recovery = 103.90%								
Sr 421.552†	265.0	0.0040	mg/L	0.00064	0.0040	mg/L	0.00064	15.96%
Al 237.313†	1632745.4	256.0	mg/L	1.29	256.0	mg/L	1.29	0.50%
QC value within limits for Al 237.313 Recovery = 102.41%								

All analyte(s) passed QC.

Sequence No.: 52
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 10/15/2014 7:43:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

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Method: DV200-6010C Opt3 Page 36 Date: 10/15/2014 7:52:00 PM

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6764090.0	0.9757	mg/L	0.00636				0.65%
Ag 328.068†	46307.6	0.2033	mg/L	0.00052	0.2033	mg/L	0.00052	0.25%
QC value within limits for Ag 328.068 Recovery = 101.63%								
As 188.979†	151.2	0.1027	mg/L	0.00132	0.1027	mg/L	0.00132	1.28%
QC value within limits for As 188.979 Recovery = 102.75%								
B 249.772†	41110.7	-0.0271	mg/L	0.00194	-0.0271	mg/L	0.00194	7.18%
Ba 233.527†	46600.4	0.5286	mg/L	0.00230	0.5286	mg/L	0.00230	0.43%
QC value within limits for Ba 233.527 Recovery = 105.72%								
Be 313.107†	1542676.6	0.5024	mg/L	0.00124	0.5024	mg/L	0.00124	0.25%
QC value within limits for Be 313.107 Recovery = 100.48%								
Cd 226.502†	89393.7	0.9820	mg/L	0.00402	0.9820	mg/L	0.00402	0.41%
QC value within limits for Cd 226.502 Recovery = 98.20%								
Co 228.616†	11169.8	0.4811	mg/L	0.00326	0.4811	mg/L	0.00326	0.68%
QC value within limits for Co 228.616 Recovery = 96.22%								
Cr 267.716†	58206.3	0.5055	mg/L	0.00278	0.5055	mg/L	0.00278	0.55%
QC value within limits for Cr 267.716 Recovery = 101.09%								
Cu 324.752†	137303.3	0.5230	mg/L	0.00230	0.5230	mg/L	0.00230	0.44%
QC value within limits for Cu 324.752 Recovery = 104.60%								
Fe 259.939†	5237829.0	90.00	mg/L	0.018	90.00	mg/L	0.018	0.02%
QC value within limits for Fe 259.939 Recovery = 90.00%								
K 766.490†	42.0	0.0813	mg/L	0.02102	0.0813	mg/L	0.02102	25.87%
Mg 279.077†	2902924.1	260.6	mg/L	0.40	260.6	mg/L	0.40	0.15%
QC value within limits for Mg 279.077 Recovery = 104.25%								
Mn 257.610†	177491.0	0.5078	mg/L	0.00226	0.5078	mg/L	0.00226	0.45%
QC value within limits for Mn 257.610 Recovery = 101.56%								
Mo 202.031†	3.6	0.0002	mg/L	0.00016	0.0002	mg/L	0.00016	73.66%
Ni 231.604†	43130.7	0.9615	mg/L	0.00413	0.9615	mg/L	0.00413	0.43%
QC value within limits for Ni 231.604 Recovery = 96.15%								
Na 589.592†	572.8	0.1484	mg/L	0.00983	0.1484	mg/L	0.00983	6.62%
Pb 220.353†	152.1	0.0544	mg/L	0.00060	0.0544	mg/L	0.00060	1.11%
QC value within limits for Pb 220.353 Recovery = 108.74%								
Sb 206.836†	1307.2	0.6196	mg/L	0.00533	0.6196	mg/L	0.00533	0.86%
QC value within limits for Sb 206.836 Recovery = 103.27%								
Se 196.026†	23.8	0.0495	mg/L	0.00179	0.0495	mg/L	0.00179	3.61%
QC value within limits for Se 196.026 Recovery = 99.00%								
Sn 189.927†	-151.7	-0.0287	mg/L	0.00338	-0.0287	mg/L	0.00338	11.79%
Ti 337.279†	342.8	0.0006	mg/L	0.00002	0.0006	mg/L	0.00002	3.15%
Tl 190.801†	236.9	0.1071	mg/L	0.00077	0.1071	mg/L	0.00077	0.72%
QC value within limits for Tl 190.801 Recovery = 107.06%								
V 292.402†	33309.4	0.4783	mg/L	0.00135	0.4783	mg/L	0.00135	0.28%
QC value within limits for V 292.402 Recovery = 95.65%								
Zn 206.200†	32799.4	0.9724	mg/L	0.00492	0.9724	mg/L	0.00492	0.51%
QC value within limits for Zn 206.200 Recovery = 97.24%								
Ca 227.546†	47102.7	253.6	mg/L	1.67	253.6	mg/L	1.67	0.66%
QC value within limits for Ca 227.546 Recovery = 101.46%								
Sr 421.552†	236.7	0.0036	mg/L	0.00037	0.0036	mg/L	0.00037	10.45%
Al 237.313†	1619391.9	253.9	mg/L	0.16	253.9	mg/L	0.16	0.06%
QC value within limits for Al 237.313 Recovery = 101.57%								

All analyte(s) passed QC.

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Sequence No.: 53
Sample ID: HLCCV2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 10/15/2014 7:49:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: HLCCV2

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6488679.5	0.9359	mg/L	0.00410				0.44%
Ag 328.068†	537724.7	2.072	mg/L	0.0051	2.072	mg/L	0.0051	0.25%
QC value within limits for Ag 328.068 Recovery = 103.62%								
As 188.979†	5457.8	4.012	mg/L	0.0233	4.012	mg/L	0.0233	0.58%
QC value within limits for As 188.979 Recovery = 100.29%								
B 249.772†	1200728.6	10.14	mg/L	0.013	10.14	mg/L	0.013	0.13%
QC value within limits for B 249.772 Recovery = 101.39%								
Ba 233.527†	3378920.4	38.33	mg/L	0.040	38.33	mg/L	0.040	0.10%
QC value within limits for Ba 233.527 Recovery = 95.82%								

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Be 313.107†	3019201.1	0.9832 mg/L	0.00101	0.9832 mg/L	0.00101	0.10%
QC value within limits for Be 313.107 Recovery = 98.32%						
Cd 226.502†	172066.8	1.907 mg/L	0.0018	1.907 mg/L	0.0018	0.09%
QC value within limits for Cd 226.502 Recovery = 95.35%						
Co 228.616†	222805.1	9.597 mg/L	0.0041	9.597 mg/L	0.0041	0.04%
QC value within limits for Co 228.616 Recovery = 95.97%						
Cr 267.716†	1180006.8	9.689 mg/L	0.0187	9.689 mg/L	0.0187	0.19%
QC value within limits for Cr 267.716 Recovery = 96.89%						
Cu 324.752†	1423441.8	5.331 mg/L	0.0016	5.331 mg/L	0.0016	0.03%
QC value within limits for Cu 324.752 Recovery = 106.62%						
Fe 259.939†	2811026.0	48.20 mg/L	0.073	48.20 mg/L	0.073	0.15%
QC value within limits for Fe 259.939 Recovery = 96.39%						
K 766.490†	88526.2	171.1 mg/L	0.66	171.1 mg/L	0.66	0.39%
QC value greater than the upper limit for K 766.490 Recovery = 114.07%						
Mg 279.077†	5747088.7	516.0 mg/L	0.49	516.0 mg/L	0.49	0.09%
QC value within limits for Mg 279.077 Recovery = 103.19%						
Mn 257.610†	3467049.5	9.675 mg/L	0.0098	9.675 mg/L	0.0098	0.10%
QC value within limits for Mn 257.610 Recovery = 96.75%						
Mo 202.031†	166219.0	9.621 mg/L	0.0160	9.621 mg/L	0.0160	0.17%
QC value within limits for Mo 202.031 Recovery = 96.21%						
Ni 231.604†	338268.7	7.541 mg/L	0.0107	7.541 mg/L	0.0107	0.14%
QC value within limits for Ni 231.604 Recovery = 94.26%						
Na 589.592†	612472.3	158.7 mg/L	0.46	158.7 mg/L	0.46	0.29%
QC value within limits for Na 589.592 Recovery = 105.80%						
Pb 220.353†	63089.6	9.869 mg/L	0.0002	9.869 mg/L	0.0002	0.00%
QC value within limits for Pb 220.353 Recovery = 98.69%						
Sb 206.836†	65.8	-0.0124 mg/L	0.00535	-0.0124 mg/L	0.00535	43.17%
Se 196.026†	1813.8	2.024 mg/L	0.0057	2.024 mg/L	0.0057	0.28%
QC value within limits for Se 196.026 Recovery = 101.21%						
Sn 189.927†	-44.0	-0.0083 mg/L	0.00213	-0.0083 mg/L	0.00213	25.67%
Ti 337.279†	5554361.6	9.757 mg/L	0.0173	9.757 mg/L	0.0173	0.18%
QC value within limits for Ti 337.279 Recovery = 97.57%						
Tl 190.801†	7637.4	4.010 mg/L	0.0170	4.010 mg/L	0.0170	0.42%
QC value within limits for Tl 190.801 Recovery = 100.24%						
V 292.402†	645139.1	9.390 mg/L	0.0283	9.390 mg/L	0.0283	0.30%
QC value within limits for V 292.402 Recovery = 93.90%						
Zn 206.200†	127366.4	3.776 mg/L	0.0058	3.776 mg/L	0.0058	0.15%
QC value within limits for Zn 206.200 Recovery = 94.40%						
Ca 227.546†	51689.8	276.2 mg/L	0.79	276.2 mg/L	0.79	0.28%
QC value greater than the upper limit for Ca 227.546 Recovery = 110.49%						
Sr 421.552†	647176.8	9.788 mg/L	0.0298	9.788 mg/L	0.0298	0.30%
QC value within limits for Sr 421.552 Recovery = 97.88%						
Al 237.313†	3230752.5	506.5 mg/L	0.86	506.5 mg/L	0.86	0.17%
QC value within limits for Al 237.313 Recovery = 101.30%						

QC Failed. Continue with analysis.

Sequence No.: 54 **Autosampler Location: 2**
Sample ID: HLCCV1 **Date Collected: 10/15/2014 7:54:25 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: HLCCV1

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7088425.7	1.022	mg/L	0.0065				0.64%
Ag 328.068†	257575.0	0.9889	mg/L	0.00902	0.9889	mg/L	0.00902	0.91%
QC value within limits for Ag 328.068 Recovery = 98.89%								
As 188.979†	2672.7	1.972	mg/L	0.0173	1.972	mg/L	0.0173	0.88%
QC value within limits for As 188.979 Recovery = 98.62%								
B 249.772†	580655.1	4.960	mg/L	0.0559	4.960	mg/L	0.0559	1.13%
QC value within limits for B 249.772 Recovery = 99.19%								
Ba 233.527†	1782384.9	20.22	mg/L	0.016	20.22	mg/L	0.016	0.08%
QC value within limits for Ba 233.527 Recovery = 101.09%								
Be 313.107†	1554436.6	0.5062	mg/L	0.00040	0.5062	mg/L	0.00040	0.08%
QC value within limits for Be 313.107 Recovery = 101.24%								
Cd 226.502†	90416.9	1.003	mg/L	0.0077	1.003	mg/L	0.0077	0.77%
QC value within limits for Cd 226.502 Recovery = 100.33%								
Co 228.616†	116709.8	5.027	mg/L	0.0407	5.027	mg/L	0.0407	0.81%
QC value within limits for Co 228.616 Recovery = 100.54%								

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Cr 267.716†	122512.1	1.006 mg/L	0.0082	1.006 mg/L	0.0082 0.81%
QC value within limits for Cr 267.716 Recovery = 100.59%					
Cu 324.752†	663175.6	2.482 mg/L	0.0214	2.482 mg/L	0.0214 0.86%
QC value within limits for Cu 324.752 Recovery = 99.30%					
Fe 259.939†	583231.2	10.01 mg/L	0.078	10.01 mg/L	0.078 0.78%
QC value within limits for Fe 259.939 Recovery = 100.09%					
K 766.490†	26161.3	50.57 mg/L	0.524	50.57 mg/L	0.524 1.04%
QC value within limits for K 766.490 Recovery = 101.13%					
Mg 279.077†	562375.7	50.49 mg/L	0.357	50.49 mg/L	0.357 0.71%
QC value within limits for Mg 279.077 Recovery = 100.98%					
Mn 257.610†	540210.4	1.508 mg/L	0.0117	1.508 mg/L	0.0117 0.78%
QC value within limits for Mn 257.610 Recovery = 100.52%					
Mo 202.031†	85859.2	4.970 mg/L	0.0450	4.970 mg/L	0.0450 0.91%
QC value within limits for Mo 202.031 Recovery = 99.40%					
Ni 231.604†	179725.0	4.007 mg/L	0.0306	4.007 mg/L	0.0306 0.76%
QC value within limits for Ni 231.604 Recovery = 100.17%					
Na 589.592†	188838.4	48.93 mg/L	0.405	48.93 mg/L	0.405 0.83%
QC value within limits for Na 589.592 Recovery = 97.86%					
Pb 220.353†	6482.9	1.010 mg/L	0.0067	1.010 mg/L	0.0067 0.66%
QC value within limits for Pb 220.353 Recovery = 101.01%					
Sb 206.836†	19873.9	9.760 mg/L	0.0811	9.760 mg/L	0.0811 0.83%
QC value within limits for Sb 206.836 Recovery = 97.60%					
Se 196.026†	911.3	1.011 mg/L	0.0103	1.011 mg/L	0.0103 1.02%
QC value within limits for Se 196.026 Recovery = 101.05%					
Sn 189.927†	53841.5	10.17 mg/L	0.107	10.17 mg/L	0.107 1.06%
QC value within limits for Sn 189.927 Recovery = 101.67%					
Ti 337.279†	2848044.0	5.003 mg/L	0.0012	5.003 mg/L	0.0012 0.02%
QC value within limits for Ti 337.279 Recovery = 100.05%					
Tl 190.801†	3766.9	1.992 mg/L	0.0156	1.992 mg/L	0.0156 0.78%
QC value within limits for Tl 190.801 Recovery = 99.60%					
V 292.402†	333970.9	4.862 mg/L	0.0266	4.862 mg/L	0.0266 0.55%
QC value within limits for V 292.402 Recovery = 97.24%					
Zn 206.200†	68329.5	2.026 mg/L	0.0163	2.026 mg/L	0.0163 0.80%
QC value within limits for Zn 206.200 Recovery = 101.29%					
Ca 227.546†	9326.4	49.71 mg/L	0.538	49.71 mg/L	0.538 1.08%
QC value within limits for Ca 227.546 Recovery = 99.42%					
Sr 421.552†	312272.4	4.723 mg/L	0.0356	4.723 mg/L	0.0356 0.75%
QC value within limits for Sr 421.552 Recovery = 94.46%					
Al 237.313†	127537.4	19.99 mg/L	0.139	19.99 mg/L	0.139 0.70%
QC value within limits for Al 237.313 Recovery = 99.93%					

All analyte(s) passed QC.

Sequence No.: 55 **Autosampler Location: 3**
Sample ID: CCV **Date Collected: 10/15/2014 8:00:30 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7152023.7	1.032	mg/L	0.0132				1.28%
Ag 328.068†	129724.1	0.4981	mg/L	0.00806	0.4981	mg/L	0.00806	1.62%
QC value within limits for Ag 328.068 Recovery = 99.61%								
As 188.979†	1354.6	0.9997	mg/L	0.01939	0.9997	mg/L	0.01939	1.94%
QC value within limits for As 188.979 Recovery = 99.97%								
B 249.772†	297874.3	2.544	mg/L	0.0335	2.544	mg/L	0.0335	1.32%
QC value within limits for B 249.772 Recovery = 101.78%								
Ba 233.527†	911825.3	10.34	mg/L	0.082	10.34	mg/L	0.082	0.80%
QC value within limits for Ba 233.527 Recovery = 103.43%								
Be 313.107†	787612.9	0.2565	mg/L	0.00215	0.2565	mg/L	0.00215	0.84%
QC value within limits for Be 313.107 Recovery = 102.60%								
Cd 226.502†	46277.4	0.5135	mg/L	0.00850	0.5135	mg/L	0.00850	1.65%
QC value within limits for Cd 226.502 Recovery = 102.70%								
Co 228.616†	59033.9	2.543	mg/L	0.0404	2.543	mg/L	0.0404	1.59%
QC value within limits for Co 228.616 Recovery = 101.71%								
Cr 267.716†	62305.9	0.5116	mg/L	0.00772	0.5116	mg/L	0.00772	1.51%
QC value within limits for Cr 267.716 Recovery = 102.31%								
Cu 324.752†	329959.6	1.235	mg/L	0.0197	1.235	mg/L	0.0197	1.59%
QC value within limits for Cu 324.752 Recovery = 98.81%								

Fe 259.939†	296419.6	5.088 mg/L	0.0809	5.088 mg/L	0.0809	1.59%
QC value within limits for Fe 259.939 Recovery = 101.75%						
K 766.490†	12910.1	24.95 mg/L	0.174	24.95 mg/L	0.174	0.70%
QC value within limits for K 766.490 Recovery = 99.82%						
Mg 279.077†	283907.9	25.49 mg/L	0.380	25.49 mg/L	0.380	1.49%
QC value within limits for Mg 279.077 Recovery = 101.95%						
Mn 257.610†	273570.5	0.7636 mg/L	0.01237	0.7636 mg/L	0.01237	1.62%
QC value within limits for Mn 257.610 Recovery = 101.81%						
Mo 202.031†	42958.3	2.487 mg/L	0.0388	2.487 mg/L	0.0388	1.56%
QC value within limits for Mo 202.031 Recovery = 99.46%						
Ni 231.604†	91813.5	2.047 mg/L	0.0331	2.047 mg/L	0.0331	1.62%
QC value within limits for Ni 231.604 Recovery = 102.34%						
Na 589.592†	96752.3	25.07 mg/L	0.330	25.07 mg/L	0.330	1.32%
QC value within limits for Na 589.592 Recovery = 100.28%						
Pb 220.353†	3245.3	0.5056 mg/L	0.01004	0.5056 mg/L	0.01004	1.98%
QC value within limits for Pb 220.353 Recovery = 101.13%						
Sb 206.836†	9933.2	4.878 mg/L	0.0890	4.878 mg/L	0.0890	1.82%
QC value within limits for Sb 206.836 Recovery = 97.56%						
Se 196.026†	461.2	0.5114 mg/L	0.00733	0.5114 mg/L	0.00733	1.43%
QC value within limits for Se 196.026 Recovery = 102.28%						
Sn 189.927†	26778.8	5.057 mg/L	0.0959	5.057 mg/L	0.0959	1.90%
QC value within limits for Sn 189.927 Recovery = 101.13%						
Ti 337.279†	1430653.6	2.513 mg/L	0.0188	2.513 mg/L	0.0188	0.75%
QC value within limits for Ti 337.279 Recovery = 100.52%						
Tl 190.801†	1860.8	0.9840 mg/L	0.01282	0.9840 mg/L	0.01282	1.30%
QC value within limits for Tl 190.801 Recovery = 98.40%						
V 292.402†	167658.3	2.441 mg/L	0.0535	2.441 mg/L	0.0535	2.19%
QC value within limits for V 292.402 Recovery = 97.63%						
Zn 206.200†	34507.4	1.023 mg/L	0.0176	1.023 mg/L	0.0176	1.72%
QC value within limits for Zn 206.200 Recovery = 102.30%						
Ca 227.546†	4430.7	23.64 mg/L	0.396	23.64 mg/L	0.396	1.68%
QC value within limits for Ca 227.546 Recovery = 94.54%						
Sr 421.552†	163267.7	2.469 mg/L	0.0316	2.469 mg/L	0.0316	1.28%
QC value within limits for Sr 421.552 Recovery = 98.77%						
Al 237.313†	62879.6	9.854 mg/L	0.1590	9.854 mg/L	0.1590	1.61%
QC value within limits for Al 237.313 Recovery = 98.54%						

All analyte(s) passed QC.

Sequence No.: 56
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 10/15/2014 8:06:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7276225.6	1.050	mg/L	0.0088				0.83%
Ag 328.068†	102.7	0.0004	mg/L	0.00005	0.0004	mg/L	0.00005	12.76%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	1.5	0.0011	mg/L	0.00154	0.0011	mg/L	0.00154	135.10%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	7927.2	0.0682	mg/L	0.00460	0.0682	mg/L	0.00460	6.74%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	514.7	0.0058	mg/L	0.00147	0.0058	mg/L	0.00147	25.11%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	448.4	0.0001	mg/L	0.00003	0.0001	mg/L	0.00003	20.20%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	24.7	0.0003	mg/L	0.00005	0.0003	mg/L	0.00005	16.68%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	33.4	0.0014	mg/L	0.00034	0.0014	mg/L	0.00034	23.70%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	110.0	0.0009	mg/L	0.00020	0.0009	mg/L	0.00020	21.84%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1964.0	0.0074	mg/L	0.00102	0.0074	mg/L	0.00102	13.94%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	877.0	0.0151	mg/L	0.00161	0.0151	mg/L	0.00161	10.66%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	102.8	0.1986	mg/L	0.02885	0.1986	mg/L	0.02885	14.53%
QC value within limits for K 766.490 Recovery = Not calculated								

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Mg 279.077†	466.4	0.0419 mg/L	0.01440	0.0419 mg/L	0.01440	34.40%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	543.8	0.0015 mg/L	0.00020	0.0015 mg/L	0.00020	13.40%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	29.7	0.0017 mg/L	0.00023	0.0017 mg/L	0.00023	13.59%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	59.5	0.0013 mg/L	0.00003	0.0013 mg/L	0.00003	2.64%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	658.0	0.1705 mg/L	0.01335	0.1705 mg/L	0.01335	7.83%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	9.4	0.0015 mg/L	0.00004	0.0015 mg/L	0.00004	2.69%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	9.7	0.0048 mg/L	0.00016	0.0048 mg/L	0.00016	3.26%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.9	-0.0010 mg/L	0.00104	-0.0010 mg/L	0.00104	104.39%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	187.7	0.0354 mg/L	0.00811	0.0354 mg/L	0.00811	22.87%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	989.1	0.0017 mg/L	0.00042	0.0017 mg/L	0.00042	24.29%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	6.2	0.0033 mg/L	0.00099	0.0033 mg/L	0.00099	30.03%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	94.8	0.0014 mg/L	0.00064	0.0014 mg/L	0.00064	46.44%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	31.6	0.0009 mg/L	0.00016	0.0009 mg/L	0.00016	16.92%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	4.6	0.0249 mg/L	0.03527	0.0249 mg/L	0.03527	141.50%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	137.0	0.0021 mg/L	0.00002	0.0021 mg/L	0.00002	1.14%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 237.313†	189.9	0.0298 mg/L	0.00638	0.0298 mg/L	0.00638	21.42%
QC value within limits for Al 237.313 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 57
Sample ID: PBW-220474
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 68
Date Collected: 10/15/2014 8:12:42 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: PBW-220474

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7256043.9	1.047	mg/L	0.0066				0.63%
Ag 328.068†	38.1	0.0001	mg/L	0.00019				125.26%
As 188.979†	0.2	0.0002	mg/L	0.00212				>999.9%
B 249.772†	6041.8	0.0520	mg/L	0.00105				2.02%
Ba 233.527†	111.8	0.0013	mg/L	0.00019				14.80%
Be 313.107†	-91.5	0.0000	mg/L	0.00009				307.19%
Cd 226.502†	-19.6	-0.0002	mg/L	0.00006				25.81%
Co 228.616†	-6.6	-0.0003	mg/L	0.00002				5.51%
Cr 267.716†	124.1	0.0010	mg/L	0.00008				8.14%
Cu 324.752†	1219.6	0.0046	mg/L	0.00101				22.08%
Fe 259.939†	531.6	0.0092	mg/L	0.00029				3.20%
K 766.490†	41.3	0.0799	mg/L	0.02864				35.85%
Mg 279.077†	154.8	0.0139	mg/L	0.00416				29.95%
Mn 257.610†	418.9	0.0012	mg/L	0.00004				3.62%
Mo 202.031†	4.0	0.0002	mg/L	0.00008				33.44%
Ni 231.604†	-10.4	-0.0002	mg/L	0.00016				69.37%
Na 589.592†	428.1	0.1109	mg/L	0.01104				9.95%
Pb 220.353†	8.2	0.0013	mg/L	0.00012				9.02%
Sb 206.836†	11.8	0.0058	mg/L	0.00038				6.46%
Se 196.026†	-0.7	-0.0007	mg/L	0.00107				145.38%
Sn 189.927†	52.9	0.0100	mg/L	0.00415				41.57%
Ti 337.279†	491.1	0.0009	mg/L	0.00003				3.61%
Tl 190.801†	-3.3	-0.0018	mg/L	0.00025				14.27%
V 292.402†	-3.6	-0.0001	mg/L	0.00019				350.16%
Zn 206.200†	11.9	0.0004	mg/L	0.00019				54.22%
Ca 227.546†	-3.3	-0.0171	mg/L	0.03235				189.45%
Sr 421.552†	26.3	0.0004	mg/L	0.00003				8.24%

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Al 237.313†	55.3	0.0087 mg/L	0.00002		0.22%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 58
Sample ID: LCSW-220474
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 69
Date Collected: 10/15/2014 8:18:45 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-220474

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7291683.8	1.052	mg/L	0.0028				0.26%
Ag 328.068†	12740.9	0.0491	mg/L	0.00012				0.25%
As 188.979†	52.6	0.0388	mg/L	0.00042				1.10%
B 249.772†	116742.5	1.001	mg/L	0.0010				0.10%
Ba 233.527†	183392.3	2.080	mg/L	0.0027				0.13%
Be 313.107†	155119.8	0.0505	mg/L	0.00001				0.03%
Cd 226.502†	4622.6	0.0512	mg/L	0.00007				0.14%
Co 228.616†	11994.1	0.5166	mg/L	0.00015				0.03%
Cr 267.716†	25896.9	0.2117	mg/L	0.00015				0.07%
Cu 324.752†	71683.6	0.2683	mg/L	0.00203				0.76%
Fe 259.939†	60646.7	1.043	mg/L	0.0012				0.11%
K 766.490†	9894.1	19.12	mg/L	0.051				0.27%
Mg 279.077†	22841.9	2.051	mg/L	0.0063				0.30%
Mn 257.610†	185735.1	0.5181	mg/L	0.00106				0.20%
Mo 202.031†	8568.0	0.4959	mg/L	0.00235				0.47%
Ni 231.604†	23716.7	0.5287	mg/L	0.00092				0.17%
Na 589.592†	73326.5	19.00	mg/L	0.029				0.15%
Pb 220.353†	3309.9	0.5146	mg/L	0.00189				0.37%
Sb 206.836†	989.1	0.4857	mg/L	0.00051				0.10%
Se 196.026†	895.9	0.9914	mg/L	0.00030				0.03%
Sn 189.927†	28770.1	5.433	mg/L	0.0043				0.08%
Ti 337.279†	286824.6	0.5038	mg/L	0.00077				0.15%
Tl 190.801†	3630.4	1.922	mg/L	0.0013				0.07%
V 292.402†	33962.0	0.4944	mg/L	0.00414				0.84%
Zn 206.200†	18080.6	0.5360	mg/L	0.00024				0.04%
Ca 227.546†	372.4	2.023	mg/L	0.0031				0.15%
Sr 421.552†	-8.8	-0.0001	mg/L	0.00012				90.64%
Al 237.313†	12369.9	1.940	mg/L	0.0127				0.65%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 59
Sample ID: R1407866-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 70
Date Collected: 10/15/2014 8:24:54 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407866-001

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7191506.3	1.037	mg/L	0.0018				0.18%
Ag 328.068†	-140.1	-0.0004	mg/L	0.00000				1.38%
As 188.979†	-0.1	0.0000	mg/L	0.00139				>999.9%
B 249.772†	8038.8	0.0666	mg/L	0.00148				2.22%
Ba 233.527†	6720.9	0.0762	mg/L	0.00081				1.06%
Be 313.107†	-72.8	0.0000	mg/L	0.00003				112.39%
Cd 226.502†	-3.6	-0.0001	mg/L	0.00000				0.67%
Co 228.616†	-14.8	-0.0006	mg/L	0.00005				7.68%
Cr 267.716†	-241.8	-0.0003	mg/L	0.00008				23.71%
Cu 324.752†	2901.8	0.0109	mg/L	0.00027				2.49%
Fe 259.939†	35858.9	0.5794	mg/L	0.00299				0.52%
K 766.490†	705.7	1.364	mg/L	0.0779				5.71%
Mg 279.077†	180039.5	16.16	mg/L	0.121				0.75%
Mn 257.610†	4820.2	0.0135	mg/L	0.00000				0.03%
Mo 202.031†	24.6	0.0014	mg/L	0.00006				4.53%
Ni 231.604†	-30.2	-0.0007	mg/L	0.00006				8.63%
Na 589.592†	44393.1	11.50	mg/L	0.011				0.09%

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Pb 220.353†	3.0	0.0009 mg/L	0.00067		72.50%
Sb 206.836†	6.5	0.0032 mg/L	0.00024		7.59%
Se 196.026†	0.6	0.0008 mg/L	0.00251		300.69%
Sn 189.927†	-96.2	-0.0182 mg/L	0.00195		10.70%
Ti 337.279†	368.6	0.0006 mg/L	0.00002		3.39%
Tl 190.801†	5.6	0.0018 mg/L	0.00171		93.69%
V 292.402†	-15.2	-0.0003 mg/L	0.00005		20.14%
Zn 206.200†	7234.6	0.2145 mg/L	0.00130		0.61%
Ca 227.546†	14373.0	75.71 mg/L LR	0.551		0.73%
Sr 421.552†	6977.0	0.1055 mg/L	0.00045		0.43%
Al 237.313†	49.3	-0.0133 mg/L	0.00004		0.33%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 60
Sample ID: R1407866-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 71
Date Collected: 10/15/2014 8:30:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407866-002

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6949548.3	1.002	mg/L	0.0010				0.10%
Ag 328.068†	-1538.5	0.0000	mg/L	0.00021				>999.9%
As 188.979†	14.0	0.0104	mg/L	0.00130				12.55%
B 249.772†	26708.0	0.1440	mg/L	0.00144				1.00%
Ba 233.527†	82543.7	0.9363	mg/L	0.00362				0.39%
Be 313.107†	-711.8	-0.0002	mg/L	0.00003				12.48%
Cd 226.502†	196.1	-0.0005	mg/L	0.00004				7.16%
Co 228.616†	-16.1	-0.0007	mg/L	0.00020				28.93%
Cr 267.716†	-851.0	-0.0017	mg/L	0.00008				4.57%
Cu 324.752†	81.3	0.0024	mg/L	0.00012				4.83%
Fe 259.939†	1182291.1	20.25	mg/L	0.009				0.04%
K 766.490†	44914.2	86.81	mg/L LR	0.182				0.21%
Mg 279.077†	480250.3	43.12	mg/L	0.026				0.06%
Mn 257.610†	1334006.1	3.723	mg/L	0.0004				0.01%
Mo 202.031†	11.4	0.0007	mg/L	0.00005				8.08%
Ni 231.604†	-64.6	-0.0014	mg/L	0.00027				18.50%
Na 589.592†	217932.3	56.47	mg/L	0.196				0.35%
Pb 220.353†	6.7	0.0016	mg/L	0.00063				39.59%
Sb 206.836†	7.8	0.0038	mg/L	0.00059				15.42%
Se 196.026†	-4.5	-0.0006	mg/L	0.00144				254.19%
Sn 189.927†	-155.9	-0.0294	mg/L	0.00072				2.45%
Ti 337.279†	504.7	0.0009	mg/L	0.00003				2.88%
Tl 190.801†	9.9	0.0023	mg/L	0.00119				52.68%
V 292.402†	67.1	-0.0005	mg/L	0.00004				6.94%
Zn 206.200†	74.1	0.0022	mg/L	0.00011				5.16%
Ca 227.546†	36692.3	194.3	mg/L LR	0.65				0.33%
Sr 421.552†	34316.1	0.5190	mg/L	0.00110				0.21%
Al 237.313†	-354.2	-0.0886	mg/L	0.00121				1.37%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 61
Sample ID: R1407866-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 72
Date Collected: 10/15/2014 8:36:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407866-003

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7172792.9	1.035	mg/L	0.0096				0.93%
Ag 328.068†	-8.1	0.0000	mg/L	0.00003				312.88%
As 188.979†	0.2	0.0001	mg/L	0.00304				>999.9%
B 249.772†	16798.3	0.1444	mg/L	0.00102				0.70%
Ba 233.527†	3696.5	0.0419	mg/L	0.00019				0.46%
Be 313.107†	-369.2	-0.0001	mg/L	0.00002				16.06%
Cd 226.502†	-14.5	-0.0002	mg/L	0.00009				52.08%

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Co 228.616†	-17.0	-0.0007	mg/L	0.00007	8.89%
Cr 267.716†	-168.4	-0.0002	mg/L	0.00009	39.34%
Cu 324.752†	367.5	0.0014	mg/L	0.00010	7.57%
Fe 259.939†	4143.0	0.0505	mg/L	0.00028	0.55%
K 766.490†	667.4	1.290	mg/L	0.0139	1.08%
Mg 279.077†	126829.7	11.39	mg/L	0.021	0.18%
Mn 257.610†	47640.5	0.1329	mg/L	0.00037	0.28%
Mo 202.031†	32.5	0.0019	mg/L	0.00011	5.79%
Ni 231.604†	-26.8	-0.0006	mg/L	0.00020	33.11%
Na 589.592†	113071.6	29.30	mg/L	0.099	0.34%
Pb 220.353†	3.2	0.0008	mg/L	0.00036	46.96%
Sb 206.836†	6.6	0.0032	mg/L	0.00006	1.88%
Se 196.026†	-0.2	-0.0002	mg/L	0.00247	997.36%
Sn 189.927†	-49.8	-0.0094	mg/L	0.00868	92.23%
Ti 337.279†	560.8	0.0010	mg/L	0.00000	0.34%
Tl 190.801†	1.6	0.0002	mg/L	0.00070	361.72%
V 292.402†	21.6	0.0003	mg/L	0.00029	92.96%
Zn 206.200†	22.1	0.0007	mg/L	0.00012	18.23%
Ca 227.546†	7811.7	41.13	mg/L	0.164	0.40%
Sr 421.552†	31662.1	0.4789	mg/L	0.00171	0.36%
Al 237.313†	328.4	0.0389	mg/L	0.00068	1.75%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 62
Sample ID: R1407866-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 73
Date Collected: 10/15/2014 8:42:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407866-004

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7186387.5	1.037	mg/L	0.0054				0.52%
Ag 328.068†	-47.3	0.0000	mg/L	0.00053				>999.9%
As 188.979†	-0.4	-0.0003	mg/L	0.00189				585.54%
B 249.772†	9296.0	0.0769	mg/L	0.00224				2.92%
Ba 233.527†	5317.3	0.0603	mg/L	0.00069				1.14%
Be 313.107†	-124.0	0.0000	mg/L	0.00006				146.44%
Cd 226.502†	-7.9	-0.0002	mg/L	0.00001				4.79%
Co 228.616†	-13.0	-0.0006	mg/L	0.00008				14.81%
Cr 267.716†	-91.1	0.0006	mg/L	0.00004				7.24%
Cu 324.752†	346.5	0.0014	mg/L	0.00047				34.20%
Fe 259.939†	43310.6	0.7244	mg/L	0.01412				1.95%
K 766.490†	723.7	1.399	mg/L	0.0234				1.67%
Mg 279.077†	143883.8	12.92	mg/L	0.230				1.78%
Mn 257.610†	259189.7	0.7228	mg/L	0.01350				1.87%
Mo 202.031†	25.7	0.0015	mg/L	0.00003				2.02%
Ni 231.604†	-2.7	-0.0001	mg/L	0.00009				145.19%
Na 589.592†	83971.5	21.76	mg/L	0.014				0.06%
Pb 220.353†	1.8	0.0006	mg/L	0.00024				39.98%
Sb 206.836†	7.3	0.0035	mg/L	0.00034				9.71%
Se 196.026†	1.8	0.0022	mg/L	0.00090				40.86%
Sn 189.927†	-101.0	-0.0191	mg/L	0.00151				7.91%
Ti 337.279†	3453.8	0.0061	mg/L	0.00019				3.17%
Tl 190.801†	1.3	0.0000	mg/L	0.00002				104.40%
V 292.402†	48.2	0.0006	mg/L	0.00036				56.43%
Zn 206.200†	83.0	0.0025	mg/L	0.00003				1.27%
Ca 227.546†	7834.7	41.29	mg/L	0.765				1.85%
Sr 421.552†	8913.7	0.1348	mg/L	0.00051				0.38%
Al 237.313†	4111.1	0.6324	mg/L	0.01257				1.99%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 63
Sample ID: R1407866-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 74
Date Collected: 10/15/2014 8:48:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

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Mean Data: R1407866-005

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7099032.9	1.024	mg/L	0.0004				0.04%
Ag 328.068†	-108.5	-0.0004	mg/L	0.00005				11.09%
As 188.979†	2.1	0.0016	mg/L	0.00011				7.13%
B 249.772†	7694.7	0.0662	mg/L	0.00038				0.58%
Ba 233.527†	5286.9	0.0600	mg/L	0.00004				0.07%
Be 313.107†	-369.3	-0.0001	mg/L	0.00001				6.77%
Cd 226.502†	-17.6	-0.0002	mg/L	0.00000				1.48%
Co 228.616†	-16.2	-0.0007	mg/L	0.00001				1.01%
Cr 267.716†	-268.0	-0.0007	mg/L	0.00009				13.01%
Cu 324.752†	517.6	0.0019	mg/L	0.00019				9.74%
Fe 259.939†	970.3	-0.0199	mg/L	0.00009				0.44%
K 766.490†	1303.6	2.520	mg/L	0.0407				1.62%
Mg 279.077†	170849.6	15.34	mg/L	0.010				0.07%
Mn 257.610†	24235.9	0.0676	mg/L	0.00001				0.01%
Mo 202.031†	24.9	0.0014	mg/L	0.00004				2.90%
Ni 231.604†	-13.3	-0.0003	mg/L	0.00014				46.02%
Na 589.592†	71636.8	18.56	mg/L	0.075				0.41%
Pb 220.353†	4.0	0.0011	mg/L	0.00070				64.01%
Sb 206.836†	7.3	0.0036	mg/L	0.00085				23.45%
Se 196.026†	1.4	0.0016	mg/L	0.00207				131.47%
Sn 189.927†	-137.1	-0.0259	mg/L	0.00050				1.93%
Ti 337.279†	437.4	0.0008	mg/L	0.00017				22.29%
Tl 190.801†	5.2	0.0016	mg/L	0.00144				89.47%
V 292.402†	-4.7	-0.0001	mg/L	0.00007				104.64%
Zn 206.200†	53.2	0.0016	mg/L	0.00002				1.38%
Ca 227.546†	13950.7	73.46	mg/L LR	0.059				0.08%
Sr 421.552†	8906.4	0.1347	mg/L	0.00054				0.40%
Al 237.313†	149.9	0.0026	mg/L	0.00177				68.56%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 64
Sample ID: R1407866-006
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 75
Date Collected: 10/15/2014 8:54:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407866-006

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7251629.0	1.046	mg/L	0.0033				0.31%
Ag 328.068†	-117.7	-0.0004	mg/L	0.00003				5.79%
As 188.979†	1.0	0.0008	mg/L	0.00249				322.41%
B 249.772†	6935.0	0.0596	mg/L	0.00012				0.21%
Ba 233.527†	5977.8	0.0678	mg/L	0.00040				0.59%
Be 313.107†	67.7	0.0000	mg/L	0.00003				114.78%
Cd 226.502†	-17.0	-0.0002	mg/L	0.00008				40.67%
Co 228.616†	-14.5	-0.0006	mg/L	0.00015				23.87%
Cr 267.716†	-248.2	-0.0004	mg/L	0.00013				28.51%
Cu 324.752†	22.1	0.0001	mg/L	0.00007				84.25%
Fe 259.939†	1569.5	-0.0072	mg/L	0.00032				4.52%
K 766.490†	1252.5	2.421	mg/L	0.0063				0.26%
Mg 279.077†	176494.9	15.85	mg/L	0.090				0.57%
Mn 257.610†	1806.8	0.0050	mg/L	0.00002				0.35%
Mo 202.031†	21.4	0.0012	mg/L	0.00009				7.36%
Ni 231.604†	-21.7	-0.0005	mg/L	0.00007				15.03%
Na 589.592†	22916.0	5.938	mg/L	0.0379				0.64%
Pb 220.353†	1.0	0.0006	mg/L	0.00026				43.30%
Sb 206.836†	5.4	0.0026	mg/L	0.00005				1.75%
Se 196.026†	-1.6	-0.0017	mg/L	0.00193				112.63%
Sn 189.927†	-169.9	-0.0321	mg/L	0.00418				13.02%
Ti 337.279†	549.9	0.0010	mg/L	0.00009				9.51%
Tl 190.801†	-1.1	-0.0016	mg/L	0.00073				45.11%
V 292.402†	-8.0	-0.0001	mg/L	0.00002				13.49%
Zn 206.200†	36.8	0.0011	mg/L	0.00023				21.44%
Ca 227.546†	12971.4	68.30	mg/L LR	0.330				0.48%
Sr 421.552†	7812.6	0.1182	mg/L	0.00082				0.70%
Al 237.313†	200.8	0.0115	mg/L	0.00044				3.85%

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Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 65
Sample ID: R1407866-007
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 76
Date Collected: 10/15/2014 9:00:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407866-007

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	7146229.7	1.031	mg/L	0.0047				0.46%
Ag 328.068†	-66.9	-0.0003	mg/L	0.00024				96.84%
As 188.979†	0.4	0.0003	mg/L	0.00007				24.20%
B 249.772†	3139.8	0.0270	mg/L	0.00050				1.86%
Ba 233.527†	2953.2	0.0335	mg/L	0.00007				0.21%
Be 313.107†	-289.0	-0.0001	mg/L	0.00001				6.07%
Cd 226.502†	-17.7	-0.0002	mg/L	0.00005				26.49%
Co 228.616†	-22.9	-0.0010	mg/L	0.00009				8.92%
Cr 267.716†	-170.1	-0.0001	mg/L	0.00018				195.17%
Cu 324.752†	26.7	0.0001	mg/L	0.00014				134.96%
Fe 259.939†	1026.1	-0.0076	mg/L	0.00001				0.11%
K 766.490†	406.9	0.7865	mg/L	0.09207				11.71%
Mg 279.077†	145083.6	13.03	mg/L	0.012				0.09%
Mn 257.610†	603.3	0.0017	mg/L	0.00002				1.16%
Mo 202.031†	18.8	0.0011	mg/L	0.00018				16.08%
Ni 231.604†	-44.3	-0.0010	mg/L	0.00002				2.45%
Na 589.592†	34583.9	8.961	mg/L	0.0415				0.46%
Pb 220.353†	2.2	0.0007	mg/L	0.00012				17.79%
Sb 206.836†	5.1	0.0025	mg/L	0.00013				5.19%
Se 196.026†	1.2	0.0013	mg/L	0.00031				23.66%
Sn 189.927†	-34.3	-0.0065	mg/L	0.00243				37.54%
Ti 337.279†	442.9	0.0008	mg/L	0.00001				1.38%
Tl 190.801†	0.7	-0.0004	mg/L	0.00018				45.86%
V 292.402†	-0.1	0.0000	mg/L	0.00008				>999.9%
Zn 206.200†	44.5	0.0013	mg/L	0.00004				3.12%
Ca 227.546†	9516.8	50.11	mg/L	0.309				0.62%
Sr 421.552†	5767.2	0.0872	mg/L	0.00002				0.02%
Al 237.313†	146.1	0.0078	mg/L	0.00060				7.73%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 66
Sample ID: R1407866-008
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 77
Date Collected: 10/15/2014 9:06:45 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407866-008

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	7178071.4	1.035	mg/L	0.0120				1.16%
Ag 328.068†	76.7	0.0004	mg/L	0.00000				0.33%
As 188.979†	3.4	0.0025	mg/L	0.00063				25.17%
B 249.772†	12361.9	0.1047	mg/L	0.00132				1.26%
Ba 233.527†	4322.2	0.0490	mg/L	0.00052				1.07%
Be 313.107†	-187.1	-0.0001	mg/L	0.00006				105.30%
Cd 226.502†	-12.2	-0.0002	mg/L	0.00007				38.50%
Co 228.616†	-3.6	-0.0002	mg/L	0.00026				165.72%
Cr 267.716†	-72.9	0.0005	mg/L	0.00014				27.62%
Cu 324.752†	160.9	0.0006	mg/L	0.00046				70.57%
Fe 259.939†	24262.1	0.3979	mg/L	0.00329				0.83%
K 766.490†	574.7	1.111	mg/L	0.1406				12.66%
Mg 279.077†	122482.6	11.00	mg/L	0.128				1.17%
Mn 257.610†	767100.4	2.139	mg/L	0.0042				0.20%
Mo 202.031†	35.5	0.0021	mg/L	0.00016				7.76%
Ni 231.604†	-20.3	-0.0005	mg/L	0.00029				64.32%
Na 589.592†	106271.0	27.54	mg/L	0.488				1.77%
Pb 220.353†	1.5	0.0005	mg/L	0.00092				172.89%

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Sb 206.836†	7.6	0.0037 mg/L	0.00046	12.23%
Se 196.026†	0.8	0.0010 mg/L	0.00135	129.90%
Sn 189.927†	-103.7	-0.0196 mg/L	0.00750	38.30%
Ti 337.279†	3644.9	0.0064 mg/L	0.00030	4.71%
Tl 190.801†	1.0	-0.0001 mg/L	0.00132	>999.9%
V 292.402†	45.5	0.0006 mg/L	0.00018	27.95%
Zn 206.200†	40.0	0.0012 mg/L	0.00003	2.82%
Ca 227.546†	7399.2	38.98 mg/L	0.549	1.41%
Sr 421.552†	19893.0	0.3009 mg/L	0.00637	2.12%
Al 237.313†	2440.9	0.3712 mg/L	0.00489	1.32%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 67
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 10/15/2014 9:12:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7064165.3	1.019	mg/L	0.0086				0.84%
Ag 328.068†	129463.3	0.4970	mg/L	0.00003	0.4970	mg/L	0.00003	0.01%
QC value within limits for Ag 328.068 Recovery = 99.41%								
As 188.979†	1341.1	0.9897	mg/L	0.00355	0.9897	mg/L	0.00355	0.36%
QC value within limits for As 188.979 Recovery = 98.97%								
B 249.772†	287043.5	2.451	mg/L	0.0141	2.451	mg/L	0.0141	0.58%
QC value within limits for B 249.772 Recovery = 98.06%								
Ba 233.527†	900770.0	10.22	mg/L	0.002	10.22	mg/L	0.002	0.02%
QC value within limits for Ba 233.527 Recovery = 102.17%								
Be 313.107†	774806.6	0.2523	mg/L	0.00033	0.2523	mg/L	0.00033	0.13%
QC value within limits for Be 313.107 Recovery = 100.93%								
Cd 226.502†	45449.2	0.5043	mg/L	0.00004	0.5043	mg/L	0.00004	0.01%
QC value within limits for Cd 226.502 Recovery = 100.86%								
Co 228.616†	58179.0	2.506	mg/L	0.0042	2.506	mg/L	0.0042	0.17%
QC value within limits for Co 228.616 Recovery = 100.24%								
Cr 267.716†	61549.0	0.5053	mg/L	0.00073	0.5053	mg/L	0.00073	0.14%
QC value within limits for Cr 267.716 Recovery = 101.07%								
Cu 324.752†	328179.3	1.228	mg/L	0.0003	1.228	mg/L	0.0003	0.02%
QC value within limits for Cu 324.752 Recovery = 98.28%								
Fe 259.939†	292844.7	5.026	mg/L	0.0098	5.026	mg/L	0.0098	0.19%
QC value within limits for Fe 259.939 Recovery = 100.52%								
K 766.490†	12680.2	24.51	mg/L	0.307	24.51	mg/L	0.307	1.25%
QC value within limits for K 766.490 Recovery = 98.04%								
Mg 279.077†	279270.0	25.07	mg/L	0.051	25.07	mg/L	0.051	0.20%
QC value within limits for Mg 279.077 Recovery = 100.29%								
Mn 257.610†	270793.6	0.7558	mg/L	0.00153	0.7558	mg/L	0.00153	0.20%
QC value within limits for Mn 257.610 Recovery = 100.77%								
Mo 202.031†	42240.7	2.445	mg/L	0.0139	2.445	mg/L	0.0139	0.57%
QC value within limits for Mo 202.031 Recovery = 97.80%								
Ni 231.604†	90442.5	2.016	mg/L	0.0031	2.016	mg/L	0.0031	0.15%
QC value within limits for Ni 231.604 Recovery = 100.81%								
Na 589.592†	93603.8	24.25	mg/L	0.373	24.25	mg/L	0.373	1.54%
QC value within limits for Na 589.592 Recovery = 97.02%								
Pb 220.353†	3219.7	0.5017	mg/L	0.00078	0.5017	mg/L	0.00078	0.16%
QC value within limits for Pb 220.353 Recovery = 100.33%								
Sb 206.836†	9957.5	4.890	mg/L	0.0320	4.890	mg/L	0.0320	0.65%
QC value within limits for Sb 206.836 Recovery = 97.80%								
Se 196.026†	457.4	0.5072	mg/L	0.00428	0.5072	mg/L	0.00428	0.84%
QC value within limits for Se 196.026 Recovery = 101.44%								
Sn 189.927†	26422.6	4.989	mg/L	0.0239	4.989	mg/L	0.0239	0.48%
QC value within limits for Sn 189.927 Recovery = 99.79%								
Ti 337.279†	1420715.3	2.496	mg/L	0.0027	2.496	mg/L	0.0027	0.11%
QC value within limits for Ti 337.279 Recovery = 99.82%								
Tl 190.801†	1853.8	0.9804	mg/L	0.00692	0.9804	mg/L	0.00692	0.71%
QC value within limits for Tl 190.801 Recovery = 98.04%								
V 292.402†	168321.6	2.450	mg/L	0.0100	2.450	mg/L	0.0100	0.41%
QC value within limits for V 292.402 Recovery = 98.02%								
Zn 206.200†	33703.2	0.9992	mg/L	0.00316	0.9992	mg/L	0.00316	0.32%
QC value within limits for Zn 206.200 Recovery = 99.92%								

00753

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Ca 227.546†	4499.7	23.99 mg/L	0.197	23.99 mg/L	0.197	0.82%
QC value within limits for Ca 227.546 Recovery = 95.98%						
Sr 421.552†	153446.5	2.321 mg/L	0.0338	2.321 mg/L	0.0338	1.46%
QC value within limits for Sr 421.552 Recovery = 92.83%						
Al 237.313†	62322.2	9.766 mg/L	0.0158	9.766 mg/L	0.0158	0.16%
QC value within limits for Al 237.313 Recovery = 97.66%						

All analyte(s) passed QC.

Sequence No.: 68 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 10/15/2014 9:18:46 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	8264556.0	1.192	mg/L	0.2234				18.74%
Ag 328.068†	195.9	0.0008	mg/L	0.00048	0.0008	mg/L	0.00048	64.16%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	-0.8	-0.0006	mg/L	0.00223	-0.0006	mg/L	0.00223	384.80%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	2810.8	0.0242	mg/L	0.01272	0.0242	mg/L	0.01272	52.61%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	292.2	0.0033	mg/L	0.00099	0.0033	mg/L	0.00099	29.75%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	3184.4	0.0010	mg/L	0.00130	0.0010	mg/L	0.00130	124.96%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	21.6	0.0002	mg/L	0.00024	0.0002	mg/L	0.00024	99.70%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	14.1	0.0006	mg/L	0.00045	0.0006	mg/L	0.00045	74.43%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	78.7	0.0006	mg/L	0.00077	0.0006	mg/L	0.00077	119.26%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-1191.7	-0.0045	mg/L	0.01074	-0.0045	mg/L	0.01074	240.98%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	471.5	0.0081	mg/L	0.00234	0.0081	mg/L	0.00234	29.02%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	-47.1	-0.0911	mg/L	0.13431	-0.0911	mg/L	0.13431	147.48%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	588.3	0.0528	mg/L	0.06414	0.0528	mg/L	0.06414	121.44%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	414.3	0.0012	mg/L	0.00000	0.0012	mg/L	0.00000	0.22%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	9.3	0.0005	mg/L	0.00119	0.0005	mg/L	0.00119	222.33%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	51.7	0.0012	mg/L	0.00079	0.0012	mg/L	0.00079	68.83%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	294.3	0.0763	mg/L	0.02442	0.0763	mg/L	0.02442	32.02%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	15.3	0.0024	mg/L	0.00086	0.0024	mg/L	0.00086	36.05%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	2.8	0.0014	mg/L	0.00417	0.0014	mg/L	0.00417	303.14%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.1	-0.0012	mg/L	0.00311	-0.0012	mg/L	0.00311	265.70%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	1246.9	0.2355	mg/L	0.28071	0.2355	mg/L	0.28071	119.22%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	711.1	0.0012	mg/L	0.00003	0.0012	mg/L	0.00003	2.24%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	-2.8	-0.0015	mg/L	0.00519	-0.0015	mg/L	0.00519	349.21%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	59.4	0.0009	mg/L	0.00070	0.0009	mg/L	0.00070	81.60%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-21.7	-0.0006	mg/L	0.00206	-0.0006	mg/L	0.00206	320.76%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	13.9	0.0734	mg/L	0.09701	0.0734	mg/L	0.09701	132.22%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	49.4	0.0007	mg/L	0.00004	0.0007	mg/L	0.00004	5.36%
QC value within limits for Sr 421.552 Recovery = Not calculated								

00754

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Al 237.313†	-13.8	-0.0022 mg/L	0.01179	-0.0022 mg/L	0.01179	540.23%

QC value within limits for Al 237.313 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 69
Sample ID: R1407866-009
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 78
Date Collected: 10/15/2014 9:24:42 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407866-009

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7231344.8	1.043	mg/L	0.0075				0.72%
Ag 328.068†	-88.1	-0.0003	mg/L	0.00001				2.77%
As 188.979†	-1.5	-0.0011	mg/L	0.00297				265.17%
B 249.772†	3854.7	0.0332	mg/L	0.00057				1.71%
Ba 233.527†	4233.6	0.0480	mg/L	0.00051				1.05%
Be 313.107†	39.3	0.0000	mg/L	0.00001				114.35%
Cd 226.502†	-9.9	-0.0001	mg/L	0.00004				36.83%
Co 228.616†	-11.1	-0.0005	mg/L	0.00005				10.27%
Cr 267.716†	-250.6	-0.0006	mg/L	0.00006				9.36%
Cu 324.752†	170.7	0.0006	mg/L	0.00016				25.69%
Fe 259.939†	627.0	-0.0178	mg/L	0.00041				2.28%
K 766.490†	500.6	0.9676	mg/L	0.04319				4.46%
Mg 279.077†	159248.7	14.30	mg/L	0.145				1.01%
Mn 257.610†	399.8	0.0011	mg/L	0.00002				1.87%
Mo 202.031†	20.8	0.0012	mg/L	0.00007				5.54%
Ni 231.604†	-33.3	-0.0007	mg/L	0.00007				9.58%
Na 589.592†	25942.9	6.722	mg/L	0.0302				0.45%
Pb 220.353†	3.2	0.0009	mg/L	0.00115				133.23%
Sb 206.836†	9.4	0.0046	mg/L	0.00066				14.32%
Se 196.026†	-0.1	-0.0001	mg/L	0.00183				>999.9%
Sn 189.927†	-102.6	-0.0194	mg/L	0.00653				33.70%
Ti 337.279†	381.7	0.0007	mg/L	0.00001				1.23%
Tl 190.801†	3.1	0.0008	mg/L	0.00234				300.92%
V 292.402†	1.2	0.0000	mg/L	0.00011				709.44%
Zn 206.200†	22.7	0.0007	mg/L	0.00017				25.44%
Ca 227.546†	10806.2	56.90	mg/L	0.674				1.18%
Sr 421.552†	5492.5	0.0831	mg/L	0.00010				0.12%
Al 237.313†	21.9	-0.0136	mg/L	0.00093				6.87%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 70
Sample ID: R1407866-010
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 79
Date Collected: 10/15/2014 9:30:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407866-010

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7029646.7	1.014	mg/L	0.0074				0.73%
Ag 328.068†	-862.2	0.0015	mg/L	0.00034				22.34%
As 188.979†	34.3	0.0253	mg/L	0.00157				6.19%
B 249.772†	25711.8	0.1507	mg/L	0.00218				1.45%
Ba 233.527†	18413.9	0.2089	mg/L	0.00234				1.12%
Be 313.107†	-491.1	-0.0002	mg/L	0.00006				38.49%
Cd 226.502†	171.1	-0.0003	mg/L	0.00000				0.69%
Co 228.616†	93.0	0.0040	mg/L	0.00012				2.92%
Cr 267.716†	-348.8	0.0015	mg/L	0.00007				4.63%
Cu 324.752†	1933.4	0.0090	mg/L	0.00053				5.93%
Fe 259.939†	972651.7	16.67	mg/L	0.236				1.42%
K 766.490†	2561.8	4.952	mg/L	0.1144				2.31%
Mg 279.077†	396574.6	35.60	mg/L	0.479				1.34%
Mn 257.610†	7068100.2	19.71	mg/L	0.068				0.34%
Mo 202.031†	5.6	0.0003	mg/L	0.00006				19.10%
Ni 231.604†	191.5	0.0043	mg/L	0.00011				2.57%

00755

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Na 589.592†	306193.8	79.34	mg/L	0.568		0.72%
Pb 220.353†	14.8	0.0027	mg/L	0.00043		16.15%
Sb 206.836†	7.7	0.0038	mg/L	0.00079		21.00%
Se 196.026†	3.6	0.0076	mg/L	0.00431		56.71%
Sn 189.927†	-158.8	-0.0300	mg/L	0.00423		14.10%
Ti 337.279†	673.9	0.0012	mg/L	0.00015		12.79%
Tl 190.801†	28.4	0.0128	mg/L	0.00109		8.56%
V 292.402†	-185.1	-0.0039	mg/L	0.00011		2.76%
Zn 206.200†	305.6	0.0091	mg/L	0.00018		1.94%
Ca 227.546†	27699.5	146.8	mg/L	3.11		2.12%
Sr 421.552†	20806.1	0.3147	mg/L	0.00236		0.75%
Al 237.313†	-1096.5	-0.1964	mg/L	0.00040		0.21%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 71
Sample ID: R1407866-011
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 80
Date Collected: 10/15/2014 9:36:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407866-011

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7047262.4	1.017	mg/L	0.0118				1.16%
Ag 328.068†	-178.3	-0.0006	mg/L	0.00015				26.38%
As 188.979†	1.6	0.0012	mg/L	0.00220				187.51%
B 249.772†	6199.0	0.0520	mg/L	0.00101				1.94%
Ba 233.527†	34068.5	0.3864	mg/L	0.00149				0.39%
Be 313.107†	-501.1	-0.0002	mg/L	0.00001				3.13%
Cd 226.502†	-12.4	-0.0002	mg/L	0.00002				13.25%
Co 228.616†	-5.6	-0.0002	mg/L	0.00019				79.81%
Cr 267.716†	-447.9	-0.0011	mg/L	0.00003				2.70%
Cu 324.752†	290.0	0.0011	mg/L	0.00010				9.04%
Fe 259.939†	19222.7	0.2733	mg/L	0.00014				0.05%
K 766.490†	935.8	1.809	mg/L	0.0748				4.13%
Mg 279.077†	280697.3	25.20	mg/L	0.107				0.42%
Mn 257.610†	507098.2	1.414	mg/L	0.0027				0.19%
Mo 202.031†	20.3	0.0012	mg/L	0.00009				8.01%
Ni 231.604†	1.0	0.0000	mg/L	0.00046				>999.9%
Na 589.592†	54477.0	14.12	mg/L	0.015				0.10%
Pb 220.353†	-1.1	0.0005	mg/L	0.00025				45.90%
Sb 206.836†	5.4	0.0026	mg/L	0.00172				64.85%
Se 196.026†	1.2	0.0014	mg/L	0.00170				119.37%
Sn 189.927†	-153.9	-0.0291	mg/L	0.00751				25.83%
Ti 337.279†	541.0	0.0010	mg/L	0.00023				24.09%
Tl 190.801†	5.9	0.0013	mg/L	0.00135				100.18%
V 292.402†	-36.0	-0.0005	mg/L	0.00002				4.43%
Zn 206.200†	28.2	0.0008	mg/L	0.00014				17.36%
Ca 227.546†	21899.1	115.3	mg/L	0.28				0.24%
Sr 421.552†	14143.6	0.2139	mg/L	0.00094				0.44%
Al 237.313†	85.6	-0.0195	mg/L	0.00075				3.84%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 72
Sample ID: R1407866-011D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 81
Date Collected: 10/15/2014 9:42:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407866-011D

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7080536.3	1.021	mg/L	0.0024				0.23%
Ag 328.068†	-191.2	-0.0006	mg/L	0.00001				1.30%
As 188.979†	1.9	0.0014	mg/L	0.00074				53.93%
B 249.772†	5897.3	0.0493	mg/L	0.00042				0.84%
Ba 233.527†	34661.0	0.3932	mg/L	0.00067				0.17%
Be 313.107†	-452.9	-0.0001	mg/L	0.00006				44.01%

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Cd 226.502†	-12.6	-0.0002 mg/L	0.00004	20.28%
Co 228.616†	-7.5	-0.0003 mg/L	0.00005	14.80%
Cr 267.716†	-453.2	-0.0011 mg/L	0.00007	6.33%
Cu 324.752†	129.9	0.0005 mg/L	0.00020	38.74%
Fe 259.939†	20069.1	0.2869 mg/L	0.00099	0.35%
K 766.490†	965.9	1.867 mg/L	0.0206	1.11%
Mg 279.077†	285229.5	25.61 mg/L	0.012	0.05%
Mn 257.610†	512980.4	1.430 mg/L	0.0002	0.01%
Mo 202.031†	22.7	0.0013 mg/L	0.00011	8.59%
Ni 231.604†	-12.2	-0.0003 mg/L	0.00013	46.19%
Na 589.592†	56972.6	14.76 mg/L	0.077	0.52%
Pb 220.353†	1.1	0.0009 mg/L	0.00061	67.65%
Sb 206.836†	6.0	0.0030 mg/L	0.00003	1.11%
Se 196.026†	1.7	0.0020 mg/L	0.00168	83.72%
Sn 189.927†	-154.2	-0.0291 mg/L	0.00354	12.15%
Ti 337.279†	619.6	0.0011 mg/L	0.00006	5.31%
Tl 190.801†	4.6	0.0006 mg/L	0.00020	31.40%
V 292.402†	-28.9	-0.0004 mg/L	0.00000	0.43%
Zn 206.200†	65.7	0.0019 mg/L	0.00004	2.30%
Ca 227.546†	22245.8	117.1 mg/L	1.36	1.16%
Sr 421.552†	15165.0	0.2294 mg/L	0.00049	0.22%
Al 237.313†	227.3	0.0023 mg/L	0.00126	55.68%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 73
Sample ID: R1407866-011S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 82
Date Collected: 10/15/2014 9:48:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407866-011S

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7072416.4	1.020	mg/L	0.0030				0.30%
Ag 328.068†	12566.8	0.0485	mg/L	0.00004				0.08%
As 188.979†	57.2	0.0422	mg/L	0.00216				5.13%
B 249.772†	120610.1	1.033	mg/L	0.0091				0.88%
Ba 233.527†	210649.5	2.389	mg/L	0.0089				0.37%
Be 313.107†	156618.5	0.0510	mg/L	0.00008				0.15%
Cd 226.502†	4410.2	0.0488	mg/L	0.00008				0.17%
Co 228.616†	11313.0	0.4873	mg/L	0.00058				0.12%
Cr 267.716†	24857.2	0.2057	mg/L	0.00061				0.30%
Cu 324.752†	68157.0	0.2552	mg/L	0.00271				1.06%
Fe 259.939†	78807.4	1.297	mg/L	0.0039				0.30%
K 766.490†	11371.3	21.98	mg/L	0.112				0.51%
Mg 279.077†	302084.4	27.12	mg/L	0.050				0.18%
Mn 257.610†	691281.1	1.928	mg/L	0.0008				0.04%
Mo 202.031†	8484.3	0.4911	mg/L	0.00078				0.16%
Ni 231.604†	22298.2	0.4971	mg/L	0.00041				0.08%
Na 589.592†	129492.8	33.55	mg/L	0.130				0.39%
Pb 220.353†	3241.4	0.5047	mg/L	0.00079				0.16%
Sb 206.836†	1011.3	0.4966	mg/L	0.00060				0.12%
Se 196.026†	909.2	1.006	mg/L	0.0026				0.25%
Sn 189.927†	27527.9	5.198	mg/L	0.0060				0.12%
Ti 337.279†	284535.9	0.4998	mg/L	0.00175				0.35%
Tl 190.801†	3608.8	1.908	mg/L	0.0003				0.01%
V 292.402†	33861.3	0.4929	mg/L	0.00067				0.14%
Zn 206.200†	16882.7	0.5005	mg/L	0.00019				0.04%
Ca 227.546†	22602.8	119.1	mg/L	0.67				0.56%
Sr 421.552†	13922.7	0.2106	mg/L	0.00077				0.36%
Al 237.313†	12658.5	1.952	mg/L	0.0086				0.44%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 74
Sample ID: R1407866-011A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 83
Date Collected: 10/15/2014 9:54:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

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Mean Data: R1407866-011A

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7068463.2	1.020	mg/L	0.0111				1.09%
Ag 328.068†	11937.5	0.0461	mg/L	0.00042				0.91%
As 188.979†	52.5	0.0387	mg/L	0.00163				4.22%
B 249.772†	118774.3	1.018	mg/L	0.0068				0.67%
Ba 233.527†	197107.6	2.236	mg/L	0.0197				0.88%
Be 313.107†	143030.6	0.0466	mg/L	0.00038				0.82%
Cd 226.502†	4087.4	0.0452	mg/L	0.00031				0.68%
Co 228.616†	10298.1	0.4436	mg/L	0.00354				0.80%
Cr 267.716†	23138.3	0.1916	mg/L	0.00146				0.76%
Cu 324.752†	61620.9	0.2307	mg/L	0.00172				0.75%
Fe 259.939†	73532.2	1.207	mg/L	0.0100				0.83%
K 766.490†	10505.5	20.31	mg/L	0.383				1.89%
Mg 279.077†	295187.9	26.50	mg/L	0.235				0.89%
Mn 257.610†	661848.7	1.846	mg/L	0.0032				0.18%
Mo 202.031†	8390.8	0.4857	mg/L	0.00425				0.88%
Ni 231.604†	20603.0	0.4593	mg/L	0.00473				1.03%
Na 589.592†	123135.1	31.91	mg/L	0.322				1.01%
Pb 220.353†	3030.7	0.4719	mg/L	0.00435				0.92%
Sb 206.836†	1007.9	0.4949	mg/L	0.00335				0.68%
Se 196.026†	1040.8	1.152	mg/L	0.0127				1.10%
Sn 189.927†	-131.0	-0.0247	mg/L	0.00618				24.98%
Ti 337.279†	271860.4	0.4775	mg/L	0.00462				0.97%
Tl 190.801†	3350.6	1.772	mg/L	0.0141				0.80%
V 292.402†	31646.8	0.4607	mg/L	0.00512				1.11%
Zn 206.200†	15642.7	0.4637	mg/L	0.00278				0.60%
Ca 227.546†	22058.1	116.2	mg/L	0.99				0.85%
Sr 421.552†	13769.8	0.2083	mg/L	0.00220				1.05%
Al 237.313†	11688.1	1.801	mg/L	0.0182				1.01%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 75
Sample ID: R1407866-011L
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 84
Date Collected: 10/15/2014 10:01:03 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407866-011L

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7223138.2	1.042	mg/L	0.0044				0.42%
Ag 328.068†	-64.6	-0.0002	mg/L	0.00017				73.86%
As 188.979†	-0.3	-0.0002	mg/L	0.00004				18.76%
B 249.772†	2839.6	0.0242	mg/L	0.00091				3.78%
Ba 233.527†	6905.9	0.0783	mg/L	0.00061				0.78%
Be 313.107†	-107.8	0.0000	mg/L	0.00002				48.75%
Cd 226.502†	-6.1	-0.0001	mg/L	0.00005				59.23%
Co 228.616†	-2.1	-0.0001	mg/L	0.00012				139.13%
Cr 267.716†	-74.7	-0.0001	mg/L	0.00000				1.68%
Cu 324.752†	378.8	0.0014	mg/L	0.00016				11.57%
Fe 259.939†	3863.2	0.0556	mg/L	0.00017				0.31%
K 766.490†	235.2	0.4547	mg/L	0.06395				14.07%
Mg 279.077†	56444.7	5.067	mg/L	0.0153				0.30%
Mn 257.610†	102506.0	0.2858	mg/L	0.00080				0.28%
Mo 202.031†	12.5	0.0007	mg/L	0.00006				8.02%
Ni 231.604†	5.0	0.0001	mg/L	0.00001				8.55%
Na 589.592†	10962.7	2.841	mg/L	0.0213				0.75%
Pb 220.353†	3.9	0.0007	mg/L	0.00047				64.00%
Sb 206.836†	3.1	0.0015	mg/L	0.00019				12.61%
Se 196.026†	-2.1	-0.0023	mg/L	0.00132				56.11%
Sn 189.927†	-104.6	-0.0197	mg/L	0.00221				11.18%
Ti 337.279†	241.2	0.0004	mg/L	0.00000				0.79%
Tl 190.801†	6.3	0.0030	mg/L	0.00125				41.42%
V 292.402†	-2.8	0.0000	mg/L	0.00053				>999.9%
Zn 206.200†	120.3	0.0036	mg/L	0.00010				2.79%
Ca 227.546†	4123.4	21.71	mg/L	0.035				0.16%
Sr 421.552†	2875.2	0.0435	mg/L	0.00060				1.39%

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Al 237.313†	0.9	-0.0062	mg/L	0.00221	36.00%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 76
Sample ID: R1407866-012
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 85
Date Collected: 10/15/2014 10:07:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407866-012

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6975126.2	1.006	mg/L	0.0018				0.18%
Ag 328.068†	-893.5	0.0016	mg/L	0.00036				22.77%
As 188.979†	35.9	0.0265	mg/L	0.00229				8.64%
B 249.772†	25894.5	0.1497	mg/L	0.00098				0.65%
Ba 233.527†	18850.3	0.2138	mg/L	0.00090				0.42%
Be 313.107†	-683.9	-0.0002	mg/L	0.00000				2.23%
Cd 226.502†	172.4	-0.0004	mg/L	0.00000				0.15%
Co 228.616†	87.4	0.0038	mg/L	0.00010				2.59%
Cr 267.716†	-344.9	0.0016	mg/L	0.00006				3.77%
Cu 324.752†	4089.9	0.0171	mg/L	0.00023				1.35%
Fe 259.939†	1007646.1	17.27	mg/L	0.017				0.10%
K 766.490†	2634.7	5.093	mg/L	0.0434				0.85%
Mg 279.077†	406994.9	36.54	mg/L	0.147				0.40%
Mn 257.610†	7249369.3	20.22	mg/L	0.007				0.03%
Mo 202.031†	3.5	0.0002	mg/L	0.00013				61.94%
Ni 231.604†	186.8	0.0042	mg/L	0.00008				1.96%
Na 589.592†	308599.6	79.96	mg/L	0.030				0.04%
Pb 220.353†	24.3	0.0042	mg/L	0.00124				29.96%
Sb 206.836†	8.0	0.0040	mg/L	0.00000				0.05%
Se 196.026†	3.2	0.0073	mg/L	0.00074				10.12%
Sn 189.927†	-155.5	-0.0294	mg/L	0.00023				0.80%
Ti 337.279†	646.8	0.0011	mg/L	0.00008				6.71%
Tl 190.801†	32.2	0.0148	mg/L	0.00074				4.98%
V 292.402†	-185.0	-0.0040	mg/L	0.00009				2.25%
Zn 206.200†	470.0	0.0139	mg/L	0.00005				0.37%
Ca 227.546†	28444.1	150.7	mg/L	1.22				0.81%
Sr 421.552†	20519.7	0.3103	mg/L	0.00304				0.98%
Al 237.313†	-1266.1	-0.2235	mg/L	0.00540				2.41%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 77
Sample ID: R1407866-013
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 86
Date Collected: 10/15/2014 10:13:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407866-013

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6943003.4	1.001	mg/L	0.0098				0.98%
Ag 328.068†	-148.9	-0.0006	mg/L	0.00040				69.89%
As 188.979†	2.2	0.0016	mg/L	0.00357				220.71%
B 249.772†	46808.4	0.4032	mg/L	0.00048				0.12%
Ba 233.527†	7637.6	0.0866	mg/L	0.00081				0.94%
Be 313.107†	-661.6	-0.0002	mg/L	0.00001				4.27%
Cd 226.502†	-21.3	-0.0002	mg/L	0.00005				21.83%
Co 228.616†	-12.7	-0.0005	mg/L	0.00027				49.35%
Cr 267.716†	-417.5	-0.0013	mg/L	0.00001				0.71%
Cu 324.752†	540.8	0.0020	mg/L	0.00005				2.40%
Fe 259.939†	-60.2	-0.0440	mg/L	0.00039				0.89%
K 766.490†	1722.0	3.328	mg/L	0.0105				0.32%
Mg 279.077†	240822.7	21.62	mg/L	0.029				0.13%
Mn 257.610†	42363.1	0.1181	mg/L	0.00046				0.39%
Mo 202.031†	23.4	0.0014	mg/L	0.00012				9.13%
Ni 231.604†	18.6	0.0004	mg/L	0.00016				38.05%
Na 589.592†	1040859.6	269.7	mg/L	0.49				0.18%

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Pb 220.353†	-7.7	-0.0006	mg/L	0.00043	67.51%
Sb 206.836†	5.6	0.0027	mg/L	0.00016	5.81%
Se 196.026†	-1.1	-0.0013	mg/L	0.00171	135.34%
Sn 189.927†	-102.4	-0.0193	mg/L	0.00549	28.40%
Ti 337.279†	316.0	0.0006	mg/L	0.00003	6.12%
Tl 190.801†	2.9	0.0002	mg/L	0.00058	257.31%
V 292.402†	-10.7	-0.0002	mg/L	0.00006	41.15%
Zn 206.200†	42.5	0.0013	mg/L	0.00015	11.54%
Ca 227.546†	16244.7	85.53	mg/L	0.118	0.14%
Sr 421.552†	10571.9	0.1599	mg/L	0.00111	0.70%
Al 237.313†	33.2	-0.0204	mg/L	0.00026	1.26%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 78 **Autosampler Location: 87**
Sample ID: R1407866-014 **Date Collected: 10/15/2014 10:19:43 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: R1407866-014

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7142680.1	1.030	mg/L	0.0064				0.62%
Ag 328.068†	-123.6	-0.0005	mg/L	0.00005				11.28%
As 188.979†	-0.2	-0.0001	mg/L	0.00126				952.99%
B 249.772†	4521.9	0.0390	mg/L	0.00059				1.51%
Ba 233.527†	10160.7	0.1153	mg/L	0.00041				0.35%
Be 313.107†	-458.8	-0.0001	mg/L	0.00003				19.30%
Cd 226.502†	-16.8	-0.0002	mg/L	0.00005				26.86%
Co 228.616†	-15.1	-0.0007	mg/L	0.00009				13.99%
Cr 267.716†	-514.0	-0.0016	mg/L	0.00002				1.00%
Cu 324.752†	104.0	0.0004	mg/L	0.00014				35.98%
Fe 259.939†	-175.6	-0.0604	mg/L	0.00033				0.55%
K 766.490†	794.9	1.536	mg/L	0.0469				3.05%
Mg 279.077†	291940.0	26.21	mg/L	0.110				0.42%
Mn 257.610†	21342.2	0.0595	mg/L	0.00008				0.13%
Mo 202.031†	23.6	0.0014	mg/L	0.00026				19.24%
Ni 231.604†	-25.9	-0.0006	mg/L	0.00016				28.10%
Na 589.592†	73926.6	19.16	mg/L	0.117				0.61%
Pb 220.353†	-1.4	0.0005	mg/L	0.00069				134.03%
Sb 206.836†	2.3	0.0011	mg/L	0.00076				67.17%
Se 196.026†	0.8	0.0009	mg/L	0.00035				38.14%
Sn 189.927†	-173.4	-0.0327	mg/L	0.00068				2.06%
Ti 337.279†	335.0	0.0006	mg/L	0.00007				11.59%
Tl 190.801†	6.1	0.0015	mg/L	0.00013				8.46%
V 292.402†	-15.8	-0.0002	mg/L	0.00002				8.16%
Zn 206.200†	40.2	0.0012	mg/L	0.00009				7.73%
Ca 227.546†	21795.0	114.8	mg/L	0.39				0.34%
Sr 421.552†	12464.1	0.1885	mg/L	0.00069				0.36%
Al 237.313†	73.8	-0.0219	mg/L	0.00098				4.49%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 79 **Autosampler Location: 3**
Sample ID: CCV **Date Collected: 10/15/2014 10:25:41 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7150024.4	1.031	mg/L	0.0012				0.12%
Ag 328.068†	129283.3	0.4963	mg/L	0.00320	0.4963	mg/L	0.00320	0.65%
QC value within limits for Ag 328.068 Recovery = 99.27%								
As 188.979†	1342.2	0.9906	mg/L	0.00274	0.9906	mg/L	0.00274	0.28%
QC value within limits for As 188.979 Recovery = 99.06%								
B 249.772†	286552.1	2.447	mg/L	0.0375	2.447	mg/L	0.0375	1.53%
QC value within limits for B 249.772 Recovery = 97.89%								

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Ba 233.527†	892896.5	10.13 mg/L	0.004	10.13 mg/L	0.004	0.04%
QC value within limits for Ba 233.527 Recovery = 101.28%						
Be 313.107†	769757.2	0.2507 mg/L	0.00008	0.2507 mg/L	0.00008	0.03%
QC value within limits for Be 313.107 Recovery = 100.27%						
Cd 226.502†	45238.1	0.5020 mg/L	0.00203	0.5020 mg/L	0.00203	0.40%
QC value within limits for Cd 226.502 Recovery = 100.39%						
Co 228.616†	57868.6	2.493 mg/L	0.0136	2.493 mg/L	0.0136	0.55%
QC value within limits for Co 228.616 Recovery = 99.70%						
Cr 267.716†	61261.9	0.5030 mg/L	0.00242	0.5030 mg/L	0.00242	0.48%
QC value within limits for Cr 267.716 Recovery = 100.59%						
Cu 324.752†	327871.3	1.227 mg/L	0.0146	1.227 mg/L	0.0146	1.19%
QC value within limits for Cu 324.752 Recovery = 98.18%						
Fe 259.939†	290692.8	4.989 mg/L	0.0299	4.989 mg/L	0.0299	0.60%
QC value within limits for Fe 259.939 Recovery = 99.78%						
K 766.490†	12647.7	24.45 mg/L	0.099	24.45 mg/L	0.099	0.40%
QC value within limits for K 766.490 Recovery = 97.79%						
Mg 279.077†	277561.6	24.92 mg/L	0.130	24.92 mg/L	0.130	0.52%
QC value within limits for Mg 279.077 Recovery = 99.67%						
Mn 257.610†	270038.7	0.7537 mg/L	0.00419	0.7537 mg/L	0.00419	0.56%
QC value within limits for Mn 257.610 Recovery = 100.49%						
Mo 202.031†	42354.7	2.452 mg/L	0.0152	2.452 mg/L	0.0152	0.62%
QC value within limits for Mo 202.031 Recovery = 98.06%						
Ni 231.604†	90073.5	2.008 mg/L	0.0120	2.008 mg/L	0.0120	0.60%
QC value within limits for Ni 231.604 Recovery = 100.40%						
Na 589.592†	93153.1	24.14 mg/L	0.071	24.14 mg/L	0.071	0.29%
QC value within limits for Na 589.592 Recovery = 96.55%						
Pb 220.353†	3207.1	0.4997 mg/L	0.00049	0.4997 mg/L	0.00049	0.10%
QC value within limits for Pb 220.353 Recovery = 99.94%						
Sb 206.836†	9957.7	4.890 mg/L	0.0090	4.890 mg/L	0.0090	0.18%
QC value within limits for Sb 206.836 Recovery = 97.80%						
Se 196.026†	452.6	0.5019 mg/L	0.00506	0.5019 mg/L	0.00506	1.01%
QC value within limits for Se 196.026 Recovery = 100.38%						
Sn 189.927†	26291.4	4.965 mg/L	0.0052	4.965 mg/L	0.0052	0.11%
QC value within limits for Sn 189.927 Recovery = 99.29%						
Ti 337.279†	1414517.8	2.485 mg/L	0.0001	2.485 mg/L	0.0001	0.00%
QC value within limits for Ti 337.279 Recovery = 99.39%						
Tl 190.801†	1843.3	0.9748 mg/L	0.00021	0.9748 mg/L	0.00021	0.02%
QC value within limits for Tl 190.801 Recovery = 97.48%						
V 292.402†	168058.7	2.447 mg/L	0.0076	2.447 mg/L	0.0076	0.31%
QC value within limits for V 292.402 Recovery = 97.87%						
Zn 206.200†	33631.7	0.9971 mg/L	0.00127	0.9971 mg/L	0.00127	0.13%
QC value within limits for Zn 206.200 Recovery = 99.71%						
Ca 227.546†	4496.4	23.98 mg/L	0.076	23.98 mg/L	0.076	0.32%
QC value within limits for Ca 227.546 Recovery = 95.90%						
Sr 421.552†	153572.0	2.323 mg/L	0.0064	2.323 mg/L	0.0064	0.28%
QC value within limits for Sr 421.552 Recovery = 92.90%						
Al 237.313†	62085.7	9.729 mg/L	0.0853	9.729 mg/L	0.0853	0.88%
QC value within limits for Al 237.313 Recovery = 97.29%						

All analyte(s) passed QC.

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Sequence No.: 80 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 10/15/2014 10:31:50 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	16254886.8	2.345	mg/L	0.0014				0.06%
Ag 328.068†	303.4	0.0012	mg/L	0.00001	0.0012	mg/L	0.00001	1.07%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	-5.1	-0.0037	mg/L	0.00068	-0.0037	mg/L	0.00068	18.20%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	1179.9	0.0101	mg/L	0.00126	0.0101	mg/L	0.00126	12.54%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	378.0	0.0043	mg/L	0.00017	0.0043	mg/L	0.00017	3.99%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	8958.9	0.0029	mg/L	0.00000	0.0029	mg/L	0.00000	0.08%
QC value within limits for Be 313.107 Recovery = Not calculated								

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Cd 226.502†	112.0	0.0012 mg/L	0.00005	0.0012 mg/L	0.00005	3.64%
QC value greater than the upper limit for Cd 226.502 Recovery = Not calculated						
Co 228.616†	32.9	0.0014 mg/L	0.00013	0.0014 mg/L	0.00013	9.26%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	282.9	0.0023 mg/L	0.00001	0.0023 mg/L	0.00001	0.35%
QC value greater than the upper limit for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-5411.0	-0.0202 mg/L	0.00023	-0.0202 mg/L	0.00023	1.14%
QC value less than the lower limit for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	1100.9	0.0188 mg/L	0.00023	0.0188 mg/L	0.00023	1.22%
QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	-322.7	-0.6237 mg/L	0.00299	-0.6237 mg/L	0.00299	0.48%
QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	2320.6	0.2083 mg/L	0.00085	0.2083 mg/L	0.00085	0.41%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	795.6	0.0022 mg/L	0.00006	0.0022 mg/L	0.00006	2.68%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-8.4	-0.0005 mg/L	0.00004	-0.0005 mg/L	0.00004	9.04%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	184.3	0.0041 mg/L	0.00005	0.0041 mg/L	0.00005	1.25%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	30.8	0.0080 mg/L	0.01224	0.0080 mg/L	0.01224	153.17%
QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	31.7	0.0049 mg/L	0.00046	0.0049 mg/L	0.00046	9.39%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	-23.9	-0.0117 mg/L	0.00010	-0.0117 mg/L	0.00010	0.88%
QC value less than the lower limit for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.2	-0.0002 mg/L	0.00094	-0.0002 mg/L	0.00094	550.68%
QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	-127.4	-0.0240 mg/L	0.00495	-0.0240 mg/L	0.00495	20.60%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	283.6	0.0005 mg/L	0.00006	0.0005 mg/L	0.00006	11.90%
QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	-10.0	-0.0053 mg/L	0.00054	-0.0053 mg/L	0.00054	10.22%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	-33.7	-0.0005 mg/L	0.00000	-0.0005 mg/L	0.00000	0.20%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	-68.8	-0.0020 mg/L	0.00007	-0.0020 mg/L	0.00007	3.44%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	45.1	0.2387 mg/L	0.00930	0.2387 mg/L	0.00930	3.89%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	-93.7	-0.0014 mg/L	0.00003	-0.0014 mg/L	0.00003	1.91%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 237.313†	-110.3	-0.0174 mg/L	0.00017	-0.0174 mg/L	0.00017	0.99%
QC value within limits for Al 237.313 Recovery = Not calculated						

QC Failed. Continue with analysis.

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Sequence No.: 81 **Autosampler Location: 88**
Sample ID: R1407866-015 **Date Collected: 10/15/2014 10:37:50 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: R1407866-015

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7090374.9	1.023	mg/L	0.0043				0.42%
Ag 328.068†	-161.2	-0.0006	mg/L	0.00015				25.87%
As 188.979†	2.4	0.0018	mg/L	0.00169				95.09%
B 249.772†	10528.1	0.0902	mg/L	0.00114				1.27%
Ba 233.527†	23602.5	0.2677	mg/L	0.00076				0.28%
Be 313.107†	-356.6	-0.0001	mg/L	0.00001				11.63%
Cd 226.502†	-12.5	-0.0002	mg/L	0.00004				26.41%
Co 228.616†	26.1	0.0011	mg/L	0.00008				6.92%
Cr 267.716†	-608.1	-0.0014	mg/L	0.00004				3.24%
Cu 324.752†	278.3	0.0011	mg/L	0.00022				21.25%
Fe 259.939†	6279.9	0.0382	mg/L	0.00031				0.80%
K 766.490†	1082.4	2.092	mg/L	0.0222				1.06%
Mg 279.077†	403204.7	36.20	mg/L	0.048				0.13%
Mn 257.610†	1271646.4	3.546	mg/L	0.0083				0.23%
Mo 202.031†	20.6	0.0012	mg/L	0.00001				0.97%

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Ni 231.604†	102.0	0.0023 mg/L	0.00010		4.23%
Na 589.592†	94557.0	24.50 mg/L	0.006		0.02%
Pb 220.353†	4.8	0.0016 mg/L	0.00044		26.88%
Sb 206.836†	7.0	0.0034 mg/L	0.00148		43.00%
Se 196.026†	3.1	0.0034 mg/L	0.00075		21.96%
Sn 189.927†	-191.4	-0.0361 mg/L	0.00220		6.09%
Ti 337.279†	394.4	0.0007 mg/L	0.00005		6.68%
Tl 190.801†	8.9	0.0026 mg/L	0.00387		151.48%
V 292.402†	-57.4	-0.0008 mg/L	0.00001		1.37%
Zn 206.200†	113.1	0.0034 mg/L	0.00008		2.24%
Ca 227.546†	26364.1	138.8 mg/L LR	0.60		0.43%
Sr 421.552†	15949.1	0.2412 mg/L	0.00026		0.11%
Al 237.313†	-230.7	-0.0781 mg/L	0.00005		0.06%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 82
Sample ID: R1407866-016
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 89
Date Collected: 10/15/2014 10:43:54 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407866-016

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7028731.3	1.014	mg/L	0.0094				0.92%
Ag 328.068†	-191.1	-0.0007	mg/L	0.00001				1.94%
As 188.979†	0.7	0.0005	mg/L	0.00117				233.32%
B 249.772†	7888.4	0.0676	mg/L	0.00031				0.47%
Ba 233.527†	9807.8	0.1112	mg/L	0.00105				0.94%
Be 313.107†	-419.3	-0.0001	mg/L	0.00001				8.19%
Cd 226.502†	-13.3	-0.0002	mg/L	0.00009				59.93%
Co 228.616†	-14.5	-0.0006	mg/L	0.00000				0.18%
Cr 267.716†	-461.4	-0.0013	mg/L	0.00017				13.85%
Cu 324.752†	326.6	0.0012	mg/L	0.00006				4.65%
Fe 259.939†	4716.0	0.0199	mg/L	0.00063				3.17%
K 766.490†	1304.3	2.521	mg/L	0.0089				0.35%
Mg 279.077†	281219.8	25.25	mg/L	0.111				0.44%
Mn 257.610†	181300.0	0.5056	mg/L	0.00111				0.22%
Mo 202.031†	30.4	0.0018	mg/L	0.00013				7.17%
Ni 231.604†	30.2	0.0007	mg/L	0.00009				13.35%
Na 589.592†	80945.5	20.97	mg/L	0.124				0.59%
Pb 220.353†	-2.9	0.0003	mg/L	0.00110				332.32%
Sb 206.836†	8.4	0.0041	mg/L	0.00068				16.61%
Se 196.026†	0.5	0.0005	mg/L	0.00245				463.09%
Sn 189.927†	-195.5	-0.0369	mg/L	0.00509				13.80%
Ti 337.279†	1013.8	0.0018	mg/L	0.00014				7.88%
Tl 190.801†	3.1	-0.0002	mg/L	0.00103				413.79%
V 292.402†	-3.5	-0.0001	mg/L	0.00007				129.91%
Zn 206.200†	61.5	0.0018	mg/L	0.00015				8.04%
Ca 227.546†	23366.2	123.0	mg/L LR	0.13				0.10%
Sr 421.552†	11827.9	0.1789	mg/L	0.00077				0.43%
Al 237.313†	639.7	0.0655	mg/L	0.00092				1.41%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 83
Sample ID: R1407866-017
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 90
Date Collected: 10/15/2014 10:49:54 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407866-017

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6991847.6	1.009	mg/L	0.0008				0.08%
Ag 328.068†	-231.2	-0.0005	mg/L	0.00007				14.24%
As 188.979†	9.2	0.0068	mg/L	0.00033				4.81%
B 249.772†	13660.1	0.1124	mg/L	0.00042				0.37%
Ba 233.527†	16456.5	0.1867	mg/L	0.00122				0.66%

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Be 313.107†	-417.3	-0.0001 mg/L	0.00003	23.60%
Cd 226.502†	-1.7	-0.0002 mg/L	0.00009	46.58%
Co 228.616†	28.4	0.0012 mg/L	0.00004	2.90%
Cr 267.716†	-614.5	-0.0012 mg/L	0.00005	4.37%
Cu 324.752†	-42.8	0.0000 mg/L	0.00034	>999.9%
Fe 259.939†	72606.5	1.173 mg/L	0.0078	0.67%
K 766.490†	937.4	1.812 mg/L	0.0937	5.17%
Mg 279.077†	418599.7	37.58 mg/L	0.151	0.40%
Mn 257.610†	1762610.4	4.915 mg/L	0.0141	0.29%
Mo 202.031†	19.0	0.0011 mg/L	0.00007	6.69%
Ni 231.604†	105.8	0.0024 mg/L	0.00008	3.47%
Na 589.592†	121171.8	31.40 mg/L	0.299	0.95%
Pb 220.353†	1.2	0.0011 mg/L	0.00057	50.79%
Sb 206.836†	6.9	0.0034 mg/L	0.00044	12.91%
Se 196.026†	-0.6	-0.0004 mg/L	0.00054	144.85%
Sn 189.927†	-173.4	-0.0328 mg/L	0.00091	2.79%
Ti 337.279†	327.4	0.0006 mg/L	0.00002	3.81%
Tl 190.801†	7.8	0.0018 mg/L	0.00078	44.09%
V 292.402†	-80.2	-0.0013 mg/L	0.00001	0.69%
Zn 206.200†	77.2	0.0023 mg/L	0.00019	8.33%
Ca 227.546†	28862.5	152.0 mg/L LR	1.99	1.31%
Sr 421.552†	18795.4	0.2843 mg/L	0.00341	1.20%
Al 237.313†	-354.7	-0.0995 mg/L	0.00060	0.60%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 84
Sample ID: R1407866-018
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 91
Date Collected: 10/15/2014 10:55:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407866-018

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6951825.6	1.003	mg/L	0.0021				0.21%
Ag 328.068†	-256.6	-0.0006	mg/L	0.00004				7.23%
As 188.979†	7.3	0.0054	mg/L	0.00100				18.47%
B 249.772†	12753.7	0.1045	mg/L	0.00138				1.32%
Ba 233.527†	16211.9	0.1839	mg/L	0.00149				0.81%
Be 313.107†	-768.8	-0.0003	mg/L	0.00006				25.02%
Cd 226.502†	-11.2	-0.0003	mg/L	0.00008				25.85%
Co 228.616†	25.6	0.0011	mg/L	0.00004				4.07%
Cr 267.716†	-627.8	-0.0013	mg/L	0.00018				14.37%
Cu 324.752†	99.5	0.0005	mg/L	0.00042				83.74%
Fe 259.939†	73644.4	1.190	mg/L	0.0108				0.91%
K 766.490†	910.3	1.760	mg/L	0.0530				3.01%
Mg 279.077†	426082.7	38.25	mg/L	0.156				0.41%
Mn 257.610†	1877351.4	5.235	mg/L	0.0208				0.40%
Mo 202.031†	26.1	0.0015	mg/L	0.00012				8.14%
Ni 231.604†	109.8	0.0024	mg/L	0.00010				4.14%
Na 589.592†	124682.9	32.31	mg/L	0.066				0.20%
Pb 220.353†	4.3	0.0016	mg/L	0.00014				8.97%
Sb 206.836†	5.3	0.0026	mg/L	0.00037				14.31%
Se 196.026†	0.6	0.0009	mg/L	0.00074				83.41%
Sn 189.927†	-161.5	-0.0305	mg/L	0.00094				3.08%
Ti 337.279†	360.9	0.0006	mg/L	0.00007				11.51%
Tl 190.801†	10.2	0.0030	mg/L	0.00038				12.46%
V 292.402†	-85.5	-0.0013	mg/L	0.00013				9.56%
Zn 206.200†	76.3	0.0023	mg/L	0.00012				5.51%
Ca 227.546†	29252.8	154.1	mg/L LR	2.39				1.55%
Sr 421.552†	19584.3	0.2962	mg/L	0.00047				0.16%
Al 237.313†	-352.4	-0.0998	mg/L	0.00090				0.90%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 85
Sample ID: R1407866-019
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 92
Date Collected: 10/15/2014 11:02:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

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Method: DV200-6010C Opt3 Page 58 Date: 10/15/2014 11:11:58 PM

Mean Data: R1407866-019

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7051687.7	1.017	mg/L	0.0004				0.04%
Ag 328.068†	-203.3	-0.0005	mg/L	0.00010				21.19%
As 188.979†	5.5	0.0041	mg/L	0.00128				31.27%
B 249.772†	10393.1	0.0853	mg/L	0.00033				0.39%
Ba 233.527†	12923.0	0.1466	mg/L	0.00090				0.62%
Be 313.107†	-332.1	-0.0001	mg/L	0.00000				3.78%
Cd 226.502†	-9.8	-0.0002	mg/L	0.00003				13.83%
Co 228.616†	36.7	0.0016	mg/L	0.00002				0.97%
Cr 267.716†	-434.3	-0.0007	mg/L	0.00012				18.70%
Cu 324.752†	-86.3	-0.0002	mg/L	0.00017				76.52%
Fe 259.939†	57478.4	0.9265	mg/L	0.00599				0.65%
K 766.490†	1320.5	2.552	mg/L	0.1721				6.74%
Mg 279.077†	317748.8	28.53	mg/L	0.212				0.74%
Mn 257.610†	1846332.1	5.148	mg/L	0.0033				0.06%
Mo 202.031†	19.5	0.0011	mg/L	0.00008				7.29%
Ni 231.604†	48.8	0.0011	mg/L	0.00023				20.98%
Na 589.592†	88200.8	22.85	mg/L	0.063				0.27%
Pb 220.353†	5.2	0.0016	mg/L	0.00056				35.65%
Sb 206.836†	5.1	0.0025	mg/L	0.00079				31.60%
Se 196.026†	0.6	0.0008	mg/L	0.00209				252.62%
Sn 189.927†	-171.9	-0.0325	mg/L	0.00361				11.13%
Ti 337.279†	371.5	0.0007	mg/L	0.00002				3.68%
Tl 190.801†	9.3	0.0030	mg/L	0.00010				3.36%
V 292.402†	-77.1	-0.0012	mg/L	0.00005				4.17%
Zn 206.200†	65.3	0.0019	mg/L	0.00001				0.68%
Ca 227.546†	23813.8	125.4	mg/L	0.27				0.21%
Sr 421.552†	14319.4	0.2166	mg/L	0.00089				0.41%
Al 237.313†	-373.6	-0.0940	mg/L	0.00087				0.93%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 86
Sample ID: R1407866-020
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 93
Date Collected: 10/15/2014 11:08:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407866-020

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6972306.6	1.006	mg/L	0.0072				0.71%
Ag 328.068†	-194.9	-0.0001	mg/L	0.00018				239.60%
As 188.979†	8.7	0.0064	mg/L	0.00129				20.15%
B 249.772†	9830.8	0.0749	mg/L	0.00049				0.66%
Ba 233.527†	14662.7	0.1663	mg/L	0.00164				0.99%
Be 313.107†	-491.3	-0.0002	mg/L	0.00001				5.58%
Cd 226.502†	0.1	-0.0003	mg/L	0.00002				5.43%
Co 228.616†	-10.9	-0.0005	mg/L	0.00014				29.26%
Cr 267.716†	-429.6	-0.0009	mg/L	0.00001				1.52%
Cu 324.752†	-141.9	-0.0003	mg/L	0.00003				9.22%
Fe 259.939†	135016.7	2.271	mg/L	0.0188				0.83%
K 766.490†	1163.7	2.249	mg/L	0.0188				0.84%
Mg 279.077†	284427.3	25.53	mg/L	0.208				0.82%
Mn 257.610†	1461883.1	4.077	mg/L	0.0496				1.22%
Mo 202.031†	20.0	0.0012	mg/L	0.00022				19.04%
Ni 231.604†	-14.4	-0.0003	mg/L	0.00025				77.95%
Na 589.592†	76191.7	19.74	mg/L	0.136				0.69%
Pb 220.353†	-1.2	0.0004	mg/L	0.00162				393.32%
Sb 206.836†	7.3	0.0036	mg/L	0.00029				8.07%
Se 196.026†	0.7	0.0013	mg/L	0.00027				21.11%
Sn 189.927†	-134.6	-0.0254	mg/L	0.00541				21.30%
Ti 337.279†	415.0	0.0007	mg/L	0.00000				0.15%
Tl 190.801†	5.8	0.0014	mg/L	0.00045				31.57%
V 292.402†	-57.2	-0.0010	mg/L	0.00009				9.01%
Zn 206.200†	36.0	0.0011	mg/L	0.00023				21.24%
Ca 227.546†	19876.0	104.8	mg/L	0.45				0.43%

00765

Method: DV200-6010C Opt3 Page 59 Date: 10/15/2014 11:20:27 PM

Sr 421.552†	12993.7	0.1965 mg/L	0.00131		0.67%
Al 237.313†	-293.6	-0.0745 mg/L	0.00245		3.29%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 87
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 10/15/2014 11:14:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7171335.3	1.034	mg/L	0.0058				0.57%
Ag 328.068†	128162.6	0.4921	mg/L	0.00599	0.4921	mg/L	0.00599	1.22%
QC value within limits for Ag 328.068 Recovery = 98.41%								
As 188.979†	1331.1	0.9824	mg/L	0.00176	0.9824	mg/L	0.00176	0.18%
QC value within limits for As 188.979 Recovery = 98.24%								
B 249.772†	283496.9	2.421	mg/L	0.0455	2.421	mg/L	0.0455	1.88%
QC value within limits for B 249.772 Recovery = 96.84%								
Ba 233.527†	892812.0	10.13	mg/L	0.038	10.13	mg/L	0.038	0.37%
QC value within limits for Ba 233.527 Recovery = 101.27%								
Be 313.107†	769471.3	0.2506	mg/L	0.00121	0.2506	mg/L	0.00121	0.48%
QC value within limits for Be 313.107 Recovery = 100.24%								
Cd 226.502†	45078.7	0.5002	mg/L	0.00623	0.5002	mg/L	0.00623	1.25%
QC value within limits for Cd 226.502 Recovery = 100.04%								
Co 228.616†	57852.8	2.492	mg/L	0.0288	2.492	mg/L	0.0288	1.16%
QC value within limits for Co 228.616 Recovery = 99.67%								
Cr 267.716†	60906.1	0.5001	mg/L	0.00611	0.5001	mg/L	0.00611	1.22%
QC value within limits for Cr 267.716 Recovery = 100.01%								
Cu 324.752†	325945.4	1.220	mg/L	0.0160	1.220	mg/L	0.0160	1.31%
QC value within limits for Cu 324.752 Recovery = 97.61%								
Fe 259.939†	290199.2	4.981	mg/L	0.0628	4.981	mg/L	0.0628	1.26%
QC value within limits for Fe 259.939 Recovery = 99.61%								
K 766.490†	12654.6*	24.46	mg/L	0.227	24.46	mg/L	0.227	0.93%
QC value within limits for K 766.490 Recovery = 97.84%								
Mg 279.077†	277119.6	24.88	mg/L	0.327	24.88	mg/L	0.327	1.31%
QC value within limits for Mg 279.077 Recovery = 99.52%								
Mn 257.610†	269921.9	0.7534	mg/L	0.00852	0.7534	mg/L	0.00852	1.13%
QC value within limits for Mn 257.610 Recovery = 100.45%								
Mo 202.031†	42532.8	2.462	mg/L	0.0331	2.462	mg/L	0.0331	1.34%
QC value within limits for Mo 202.031 Recovery = 98.48%								
Ni 231.604†	89782.7	2.002	mg/L	0.0235	2.002	mg/L	0.0235	1.18%
QC value within limits for Ni 231.604 Recovery = 100.08%								
Na 589.592†	92165.8	23.88	mg/L	0.341	23.88	mg/L	0.341	1.43%
QC value within limits for Na 589.592 Recovery = 95.53%								
Pb 220.353†	3203.9	0.4992	mg/L	0.00313	0.4992	mg/L	0.00313	0.63%
QC value within limits for Pb 220.353 Recovery = 99.84%								
Sb 206.836†	9916.9	4.870	mg/L	0.0172	4.870	mg/L	0.0172	0.35%
QC value within limits for Sb 206.836 Recovery = 97.40%								
Se 196.026†	450.9	0.5000	mg/L	0.00151	0.5000	mg/L	0.00151	0.30%
QC value within limits for Se 196.026 Recovery = 100.01%								
Sn 189.927†	26298.8	4.966	mg/L	0.0286	4.966	mg/L	0.0286	0.58%
QC value within limits for Sn 189.927 Recovery = 99.32%								
Ti 337.279†	1416572.1	2.488	mg/L	0.0090	2.488	mg/L	0.0090	0.36%
QC value within limits for Ti 337.279 Recovery = 99.53%								
Tl 190.801†	1850.5	0.9786	mg/L	0.00113	0.9786	mg/L	0.00113	0.12%
QC value within limits for Tl 190.801 Recovery = 97.86%								
V 292.402†	167165.9	2.434	mg/L	0.0131	2.434	mg/L	0.0131	0.54%
QC value within limits for V 292.402 Recovery = 97.35%								
Zn 206.200†	33573.1	0.9953	mg/L	0.00582	0.9953	mg/L	0.00582	0.59%
QC value within limits for Zn 206.200 Recovery = 99.53%								
Ca 227.546†	4495.0	23.97	mg/L	0.018	23.97	mg/L	0.018	0.07%
QC value within limits for Ca 227.546 Recovery = 95.87%								
Sr 421.552†	152894.6	2.312	mg/L	0.0363	2.312	mg/L	0.0363	1.57%
QC value within limits for Sr 421.552 Recovery = 92.49%								
Al 237.313†	61847.5	9.692	mg/L	0.1271	9.692	mg/L	0.1271	1.31%
QC value within limits for Al 237.313 Recovery = 96.92%								

All analyte(s) passed QC.

00766

Method: DV200-6010C Opt3 Page 60 Date: 10/15/2014 11:26:30 PM

Sequence No.: 88
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 5
Date Collected: 10/15/2014 11:20:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7224736.6	1.042	mg/L	0.0020				0.19%
Ag 328.068†	84.3	0.0003	mg/L	0.00036	0.0003	mg/L	0.00036	111.92%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	1.4	0.0010	mg/L	0.00041	0.0010	mg/L	0.00041	40.39%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	2842.2	0.0245	mg/L	0.00269	0.0245	mg/L	0.00269	10.99%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	330.2	0.0037	mg/L	0.00065	0.0037	mg/L	0.00065	17.25%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	161.3	0.0001	mg/L	0.00004	0.0001	mg/L	0.00004	72.04%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	19.2	0.0002	mg/L	0.00008	0.0002	mg/L	0.00008	36.53%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	18.3	0.0008	mg/L	0.00031	0.0008	mg/L	0.00031	38.92%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	29.4	0.0002	mg/L	0.00011	0.0002	mg/L	0.00011	44.41%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	392.1	0.0015	mg/L	0.00021	0.0015	mg/L	0.00021	14.42%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	148.4	0.0026	mg/L	0.00054	0.0026	mg/L	0.00054	21.00%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	45.1	0.0872	mg/L	0.04062	0.0872	mg/L	0.04062	46.57%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	170.9	0.0153	mg/L	0.00107	0.0153	mg/L	0.00107	6.98%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	1007.9	0.0028	mg/L	0.00016	0.0028	mg/L	0.00016	5.55%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	13.7	0.0008	mg/L	0.00011	0.0008	mg/L	0.00011	13.99%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	8.6	0.0002	mg/L	0.00032	0.0002	mg/L	0.00032	169.02%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	341.0	0.0884	mg/L	0.00796	0.0884	mg/L	0.00796	9.01%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	9.0	0.0014	mg/L	0.00050	0.0014	mg/L	0.00050	35.75%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	4.6	0.0023	mg/L	0.00005	0.0023	mg/L	0.00005	2.19%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.0	0.0000	mg/L	0.00033	0.0000	mg/L	0.00033	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	584.1	0.1103	mg/L	0.00018	0.1103	mg/L	0.00018	0.16%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	595.5	0.0010	mg/L	0.00031	0.0010	mg/L	0.00031	29.72%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	7.4	0.0039	mg/L	0.00092	0.0039	mg/L	0.00092	23.53%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	66.3	0.0010	mg/L	0.00043	0.0010	mg/L	0.00043	44.39%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-35.8	-0.0011	mg/L	0.00004	-0.0011	mg/L	0.00004	3.86%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	-0.6	-0.0032	mg/L	0.01079	-0.0032	mg/L	0.01079	337.36%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	122.6	0.0019	mg/L	0.00022	0.0019	mg/L	0.00022	11.72%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Al 237.313†	6.0	0.0009	mg/L	0.00180	0.0009	mg/L	0.00180	191.22%
QC value within limits for Al 237.313 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 89
Sample ID: MRL
Analyst:
Autosampler Location: 6
Date Collected: 10/15/2014 11:26:27 PM
Data Type: Original

00767

Method: DV200-6010C Opt3 Page 61 Date: 10/15/2014 11:36:09 PM

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7098624.8	1.024	mg/L	0.0026				0.25%
Ag 328.068†	2754.3	0.0106	mg/L	0.00025	0.0106	mg/L	0.00025	2.40%
QC value within limits for Ag 328.068 Recovery = 105.74%								
As 188.979†	28.7	0.0212	mg/L	0.00076	0.0212	mg/L	0.00076	3.60%
QC value within limits for As 188.979 Recovery = 106.09%								
B 249.772†	25065.7	0.2155	mg/L	0.00240	0.2155	mg/L	0.00240	1.11%
QC value within limits for B 249.772 Recovery = 107.74%								
Ba 233.527†	19033.7	0.2159	mg/L	0.00376	0.2159	mg/L	0.00376	1.74%
QC value within limits for Ba 233.527 Recovery = 107.95%								
Be 313.107†	15980.3	0.0052	mg/L	0.00007	0.0052	mg/L	0.00007	1.30%
QC value within limits for Be 313.107 Recovery = 104.08%								
Cd 226.502†	970.1	0.0108	mg/L	0.00006	0.0108	mg/L	0.00006	0.52%
QC value within limits for Cd 226.502 Recovery = 107.65%								
Co 228.616†	1219.7	0.0525	mg/L	0.00007	0.0525	mg/L	0.00007	0.13%
QC value within limits for Co 228.616 Recovery = 105.07%								
Cr 267.716†	1282.7	0.0106	mg/L	0.00000	0.0106	mg/L	0.00000	0.04%
QC value within limits for Cr 267.716 Recovery = 105.81%								
Cu 324.752†	6748.1	0.0253	mg/L	0.00062	0.0253	mg/L	0.00062	2.47%
QC value within limits for Cu 324.752 Recovery = 101.04%								
Fe 259.939†	6195.1	0.1061	mg/L	0.00105	0.1061	mg/L	0.00105	0.99%
QC value within limits for Fe 259.939 Recovery = 106.11%								
K 766.490†	537.2	1.038	mg/L	0.0660	1.038	mg/L	0.0660	6.35%
QC value within limits for K 766.490 Recovery = 103.84%								
Mg 279.077†	11375.7	1.021	mg/L	0.0098	1.021	mg/L	0.0098	0.96%
QC value within limits for Mg 279.077 Recovery = 102.13%								
Mn 257.610†	6406.5	0.0179	mg/L	0.00022	0.0179	mg/L	0.00022	1.24%
QC value within limits for Mn 257.610 Recovery = 119.20%								
Mo 202.031†	449.5	0.0260	mg/L	0.00017	0.0260	mg/L	0.00017	0.64%
QC value within limits for Mo 202.031 Recovery = 104.08%								
Ni 231.604†	1855.8	0.0414	mg/L	0.00000	0.0414	mg/L	0.00000	0.01%
QC value within limits for Ni 231.604 Recovery = 103.43%								
Na 589.592†	3923.3	1.017	mg/L	0.0225	1.017	mg/L	0.0225	2.21%
QC value within limits for Na 589.592 Recovery = 101.66%								
Pb 220.353†	69.5	0.0108	mg/L	0.00024	0.0108	mg/L	0.00024	2.25%
QC value within limits for Pb 220.353 Recovery = 108.28%								
Sb 206.836†	128.4	0.0630	mg/L	0.00128	0.0630	mg/L	0.00128	2.04%
QC value within limits for Sb 206.836 Recovery = 105.08%								
Se 196.026†	8.3	0.0092	mg/L	0.00009	0.0092	mg/L	0.00009	1.02%
QC value within limits for Se 196.026 Recovery = 91.54%								
Sn 189.927†	2986.3	0.5639	mg/L	0.02038	0.5639	mg/L	0.02038	3.61%
QC value within limits for Sn 189.927 Recovery = 112.78%								
Ti 337.279†	30384.7	0.0534	mg/L	0.00060	0.0534	mg/L	0.00060	1.13%
QC value within limits for Ti 337.279 Recovery = 106.74%								
Tl 190.801†	39.6	0.0209	mg/L	0.00009	0.0209	mg/L	0.00009	0.43%
QC value within limits for Tl 190.801 Recovery = 104.73%								
V 292.402†	3575.2	0.0520	mg/L	0.00081	0.0520	mg/L	0.00081	1.55%
QC value within limits for V 292.402 Recovery = 104.10%								
Zn 206.200†	660.3	0.0196	mg/L	0.00029	0.0196	mg/L	0.00029	1.49%
QC value within limits for Zn 206.200 Recovery = 97.88%								
Ca 227.546†	161.7	0.8579	mg/L	0.00914	0.8579	mg/L	0.00914	1.07%
QC value within limits for Ca 227.546 Recovery = 85.79%								
Sr 421.552†	6324.3	0.0956	mg/L	0.00101	0.0956	mg/L	0.00101	1.06%
QC value within limits for Sr 421.552 Recovery = 95.65%								
Al 237.313†	1232.1	0.1928	mg/L	0.00119	0.1928	mg/L	0.00119	0.62%
QC value within limits for Al 237.313 Recovery = 96.41%								

All analyte(s) passed QC.

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Sequence No.: 90 Autosampler Location: 7
Sample ID: ICSA Date Collected: 10/15/2014 11:32:28 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

00763

Method: DV200-6010C Opt3 Page 62 Date: 10/15/2014 11:42:15 PM

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6747482.6	0.9733	mg/L	0.00588				0.60%
Ag 328.068†	-6954.8	-0.0006	mg/L	0.00046	-0.0006	mg/L	0.00046	77.42%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	14.8	0.0020	mg/L	0.00162	0.0020	mg/L	0.00162	82.21%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	40894.3	-0.0295	mg/L	0.00156	-0.0295	mg/L	0.00156	5.31%
Ba 233.527†	277.3	0.0031	mg/L	0.00010	0.0031	mg/L	0.00010	3.26%
Be 313.107†	-1263.4	-0.0004	mg/L	0.00005	-0.0004	mg/L	0.00005	11.49%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	1061.3	0.0006	mg/L	0.00008	0.0006	mg/L	0.00008	13.52%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	10.3	0.0004	mg/L	0.00022	0.0004	mg/L	0.00022	49.48%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3743.3	-0.0002	mg/L	0.00025	-0.0002	mg/L	0.00025	99.63%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-2109.1	0.0014	mg/L	0.00009	0.0014	mg/L	0.00009	6.77%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	5244810.1	90.12	mg/L	0.266	90.12	mg/L	0.266	0.29%
QC value within limits for Fe 259.939 Recovery = 90.12%								
K 766.490†	91.0	0.1759	mg/L	0.03847	0.1759	mg/L	0.03847	21.87%
Mg 279.077†	2919369.7	262.1	mg/L	0.83	262.1	mg/L	0.83	0.32%
QC value within limits for Mg 279.077 Recovery = 104.84%								
Mn 257.610†	-4899.9	-0.0008	mg/L	0.00028	-0.0008	mg/L	0.00028	36.39%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	8.7	0.0005	mg/L	0.00006	0.0005	mg/L	0.00006	11.13%
Ni 231.604†	-145.1	-0.0032	mg/L	0.00007	-0.0032	mg/L	0.00007	2.12%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	325.8	0.0844	mg/L	0.01660	0.0844	mg/L	0.01660	19.67%
Pb 220.353†	-181.9	0.0026	mg/L	0.00022	0.0026	mg/L	0.00022	8.33%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	50.9	0.0025	mg/L	0.00291	0.0025	mg/L	0.00291	116.47%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-22.3	-0.0015	mg/L	0.00256	-0.0015	mg/L	0.00256	172.32%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-218.8	-0.0413	mg/L	0.00554	-0.0413	mg/L	0.00554	13.40%
Ti 337.279†	423.6	0.0007	mg/L	0.00001	0.0007	mg/L	0.00001	0.86%
Tl 190.801†	35.4	0.0003	mg/L	0.00215	0.0003	mg/L	0.00215	684.19%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	378.1	-0.0012	mg/L	0.00043	-0.0012	mg/L	0.00043	34.32%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	160.0	0.0047	mg/L	0.00017	0.0047	mg/L	0.00017	3.55%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	47209.5	254.2	mg/L	1.99	254.2	mg/L	1.99	0.78%
QC value within limits for Ca 227.546 Recovery = 101.68%								
Sr 421.552†	250.0	0.0038	mg/L	0.00017	0.0038	mg/L	0.00017	4.39%
Al 237.313†	1625898.0	255.0	mg/L	0.66	255.0	mg/L	0.66	0.26%
QC value within limits for Al 237.313 Recovery = 101.98%								

All analyte(s) passed QC.

Sequence No.: 91 Autosampler Location: 8
Sample ID: ICSAB Date Collected: 10/15/2014 11:38:34 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6726007.8	0.9702	mg/L	0.00012				0.01%
Ag 328.068†	46801.1	0.2056	mg/L	0.00189	0.2056	mg/L	0.00189	0.92%
QC value within limits for Ag 328.068 Recovery = 102.79%								
As 188.979†	151.1	0.1025	mg/L	0.00218	0.1025	mg/L	0.00218	2.13%
QC value within limits for As 188.979 Recovery = 102.52%								
B 249.772†	40831.5	-0.0358	mg/L	0.00174	-0.0358	mg/L	0.00174	4.87%
Ba 233.527†	47351.9	0.5371	mg/L	0.00407	0.5371	mg/L	0.00407	0.76%
QC value within limits for Ba 233.527 Recovery = 107.42%								
Be 313.107†	1570390.3	0.5114	mg/L	0.00113	0.5114	mg/L	0.00113	0.22%

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QC value within limits for Be 313.107 Recovery = 102.28%						
Cd 226.502†	90507.2	0.9942 mg/L	0.00333	0.9942 mg/L	0.00333	0.33%
QC value within limits for Cd 226.502 Recovery = 99.42%						
Co 228.616†	11315.0	0.4874 mg/L	0.00026	0.4874 mg/L	0.00026	0.05%
QC value within limits for Co 228.616 Recovery = 97.47%						
Cr 267.716†	59083.1	0.5132 mg/L	0.00227	0.5132 mg/L	0.00227	0.44%
QC value within limits for Cr 267.716 Recovery = 102.63%						
Cu 324.752†	139580.7	0.5317 mg/L	0.00928	0.5317 mg/L	0.00928	1.75%
QC value within limits for Cu 324.752 Recovery = 106.34%						
Fe 259.939†	5324818.5	91.49 mg/L	0.227	91.49 mg/L	0.227	0.25%
QC value within limits for Fe 259.939 Recovery = 91.49%						
K 766.490†	78.1	0.1510 mg/L	0.01301	0.1510 mg/L	0.01301	8.62%
Mg 279.077†	2952958.0	265.1 mg/L	0.76	265.1 mg/L	0.76	0.29%
QC value within limits for Mg 279.077 Recovery = 106.04%						
Mn 257.610†	180859.2	0.5174 mg/L	0.00368	0.5174 mg/L	0.00368	0.71%
QC value within limits for Mn 257.610 Recovery = 103.48%						
Mo 202.031†	2.3	0.0001 mg/L	0.00014	0.0001 mg/L	0.00014	103.20%
Ni 231.604†	43755.1	0.9754 mg/L	0.00574	0.9754 mg/L	0.00574	0.59%
QC value within limits for Ni 231.604 Recovery = 97.54%						
Na 589.592†	261.6	0.0678 mg/L	0.00514	0.0678 mg/L	0.00514	7.58%
Pb 220.353†	152.4	0.0550 mg/L	0.00043	0.0550 mg/L	0.00043	0.77%
QC value within limits for Pb 220.353 Recovery = 110.01%						
Sb 206.836†	1319.2	0.6251 mg/L	0.00036	0.6251 mg/L	0.00036	0.06%
QC value within limits for Sb 206.836 Recovery = 104.18%						
Se 196.026†	23.9	0.0500 mg/L	0.00076	0.0500 mg/L	0.00076	1.53%
QC value within limits for Se 196.026 Recovery = 99.97%						
Sn 189.927†	-172.8	-0.0326 mg/L	0.00033	-0.0326 mg/L	0.00033	1.01%
Ti 337.279†	332.8	0.0006 mg/L	0.00000	0.0006 mg/L	0.00000	0.55%
Tl 190.801†	237.1	0.1068 mg/L	0.00010	0.1068 mg/L	0.00010	0.09%
QC value within limits for Tl 190.801 Recovery = 106.78%						
V 292.402†	33661.3	0.4833 mg/L	0.00327	0.4833 mg/L	0.00327	0.68%
QC value within limits for V 292.402 Recovery = 96.65%						
Zn 206.200†	33119.7	0.9819 mg/L	0.00255	0.9819 mg/L	0.00255	0.26%
QC value within limits for Zn 206.200 Recovery = 98.19%						
Ca 227.546†	48017.7	258.6 mg/L	3.83	258.6 mg/L	3.83	1.48%
QC value within limits for Ca 227.546 Recovery = 103.42%						
Sr 421.552†	241.4	0.0037 mg/L	0.00021	0.0037 mg/L	0.00021	5.78%
Al 237.313†	1650064.5	258.7 mg/L	0.24	258.7 mg/L	0.24	0.09%
QC value within limits for Al 237.313 Recovery = 103.50%						
All analyte(s) passed QC.						

Sequence No.: 92 **Autosampler Location: 4**
Sample ID: CCV **Date Collected: 10/15/2014 11:44:39 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7053435.8	1.017	mg/L	0.0076				0.75%
Ag 328.068†	128764.3	0.4944	mg/L	0.00194	0.4944	mg/L	0.00194	0.39%
QC value within limits for Ag 328.068 Recovery = 98.87%								
As 188.979†	1344.7	0.9924	mg/L	0.01854	0.9924	mg/L	0.01854	1.87%
QC value within limits for As 188.979 Recovery = 99.24%								
B 249.772†	285816.9	2.441	mg/L	0.0064	2.441	mg/L	0.0064	0.26%
QC value within limits for B 249.772 Recovery = 97.63%								
Ba 233.527†	896384.2	10.17	mg/L	0.032	10.17	mg/L	0.032	0.31%
QC value within limits for Ba 233.527 Recovery = 101.68%								
Be 313.107†	776858.2	0.2530	mg/L	0.00142	0.2530	mg/L	0.00142	0.56%
QC value within limits for Be 313.107 Recovery = 101.20%								
Cd 226.502†	45499.2	0.5049	mg/L	0.00210	0.5049	mg/L	0.00210	0.42%
QC value within limits for Cd 226.502 Recovery = 100.97%								
Co 228.616†	58201.7	2.507	mg/L	0.0106	2.507	mg/L	0.0106	0.42%
QC value within limits for Co 228.616 Recovery = 100.28%								
Cr 267.716†	61284.9	0.5032	mg/L	0.00188	0.5032	mg/L	0.00188	0.37%
QC value within limits for Cr 267.716 Recovery = 100.64%								
Cu 324.752†	326949.5	1.224	mg/L	0.0046	1.224	mg/L	0.0046	0.38%
QC value within limits for Cu 324.752 Recovery = 97.91%								
Fe 259.939†	293684.1	5.041	mg/L	0.0308	5.041	mg/L	0.0308	0.61%

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QC value within limits for Fe 259.939 Recovery = 100.81%

K 766.490†	12713.9	24.57 mg/L	0.021	24.57 mg/L	0.021	0.09%

QC value within limits for K 766.490 Recovery = 98.30%

Mg 279.077†	280080.5	25.14 mg/L	0.169	25.14 mg/L	0.169	0.67%

QC value within limits for Mg 279.077 Recovery = 100.58%

Mn 257.610†	270227.0	0.7542 mg/L	0.00349	0.7542 mg/L	0.00349	0.46%

QC value within limits for Mn 257.610 Recovery = 100.56%

Mo 202.031†	42628.4	2.467 mg/L	0.0125	2.467 mg/L	0.0125	0.51%

QC value within limits for Mo 202.031 Recovery = 98.70%

Ni 231.604†	90387.1	2.015 mg/L	0.0095	2.015 mg/L	0.0095	0.47%

QC value within limits for Ni 231.604 Recovery = 100.75%

Na 589.592†	92838.5	24.06 mg/L	0.145	24.06 mg/L	0.145	0.60%

QC value within limits for Na 589.592 Recovery = 96.23%

Pb 220.353†	3217.4	0.5013 mg/L	0.00784	0.5013 mg/L	0.00784	1.56%

QC value within limits for Pb 220.353 Recovery = 100.26%

Sb 206.836†	9911.2	4.867 mg/L	0.0742	4.867 mg/L	0.0742	1.53%

QC value within limits for Sb 206.836 Recovery = 97.34%

Se 196.026†	459.3	0.5093 mg/L	0.00935	0.5093 mg/L	0.00935	1.84%

QC value within limits for Se 196.026 Recovery = 101.86%

Sn 189.927†	26445.8	4.994 mg/L	0.0829	4.994 mg/L	0.0829	1.66%

QC value within limits for Sn 189.927 Recovery = 99.87%

Ti 337.279†	1422263.0	2.498 mg/L	0.0089	2.498 mg/L	0.0089	0.36%

QC value within limits for Ti 337.279 Recovery = 99.93%

Tl 190.801†	1847.8	0.9772 mg/L	0.01376	0.9772 mg/L	0.01376	1.41%

QC value within limits for Tl 190.801 Recovery = 97.72%

V 292.402†	166817.8	2.429 mg/L	0.0106	2.429 mg/L	0.0106	0.44%

QC value within limits for V 292.402 Recovery = 97.14%

Zn 206.200†	34127.6	1.012 mg/L	0.0158	1.012 mg/L	0.0158	1.56%

QC value within limits for Zn 206.200 Recovery = 101.18%

Ca 227.546†	4453.8	23.75 mg/L	0.326	23.75 mg/L	0.326	1.37%

QC value within limits for Ca 227.546 Recovery = 95.02%

Sr 421.552†	153274.2	2.318 mg/L	0.0115	2.318 mg/L	0.0115	0.50%

QC value within limits for Sr 421.552 Recovery = 92.72%

Al 237.313†	62510.9	9.796 mg/L	0.0453	9.796 mg/L	0.0453	0.46%

QC value within limits for Al 237.313 Recovery = 97.96%

All analyte(s) passed QC.

Sequence No.: 93
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 10/15/2014 11:50:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7240648.3	1.044	mg/L	0.0037				0.36%
Ag 328.068†	112.9	0.0004	mg/L	0.00023	0.0004	mg/L	0.00023	52.63%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	1.4	0.0010	mg/L	0.00021	0.0010	mg/L	0.00021	20.15%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3152.7	0.0270	mg/L	0.00301	0.0270	mg/L	0.00301	11.12%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	311.1	0.0035	mg/L	0.00047	0.0035	mg/L	0.00047	13.43%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	678.0	0.0002	mg/L	0.00007	0.0002	mg/L	0.00007	32.38%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	27.9	0.0003	mg/L	0.00007	0.0003	mg/L	0.00007	23.86%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	20.2	0.0009	mg/L	0.00024	0.0009	mg/L	0.00024	27.20%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	26.0	0.0002	mg/L	0.00006	0.0002	mg/L	0.00006	27.60%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	525.2	0.0020	mg/L	0.00002	0.0020	mg/L	0.00002	1.20%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	1820.7	0.0313	mg/L	0.00887	0.0313	mg/L	0.00887	28.32%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	69.2	0.1337	mg/L	0.02941	0.1337	mg/L	0.02941	22.00%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	913.8	0.0820	mg/L	0.01561	0.0820	mg/L	0.01561	19.03%

00771

QC value within limits for Mg 279.077 Recovery = Not calculated

Mn 257.610†	483.0	0.0014 mg/L	0.00008	0.0014 mg/L	0.00008	5.93%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031†	11.5	0.0007 mg/L	0.00013	0.0007 mg/L	0.00013	19.10%

QC value within limits for Mo 202.031 Recovery = Not calculated

Ni 231.604†	24.2	0.0005 mg/L	0.00019	0.0005 mg/L	0.00019	35.92%

QC value within limits for Ni 231.604 Recovery = Not calculated

Na 589.592†	198.4	0.0514 mg/L	0.00529	0.0514 mg/L	0.00529	10.28%

QC value within limits for Na 589.592 Recovery = Not calculated

Pb 220.353†	7.4	0.0012 mg/L	0.00101	0.0012 mg/L	0.00101	87.83%

QC value within limits for Pb 220.353 Recovery = Not calculated

Sb 206.836†	6.5	0.0032 mg/L	0.00078	0.0032 mg/L	0.00078	24.27%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026†	-0.9	-0.0010 mg/L	0.00100	-0.0010 mg/L	0.00100	97.22%

QC value within limits for Se 196.026 Recovery = Not calculated

Sn 189.927†	564.8	0.1067 mg/L	0.00207	0.1067 mg/L	0.00207	1.94%

QC value within limits for Sn 189.927 Recovery = Not calculated

Ti 337.279†	499.2	0.0009 mg/L	0.00012	0.0009 mg/L	0.00012	14.05%

QC value within limits for Ti 337.279 Recovery = Not calculated

Tl 190.801†	4.4	0.0023 mg/L	0.00156	0.0023 mg/L	0.00156	66.49%

QC value within limits for Tl 190.801 Recovery = Not calculated

V 292.402†	49.8	0.0007 mg/L	0.00012	0.0007 mg/L	0.00012	16.17%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 206.200†	-28.6	-0.0008 mg/L	0.00008	-0.0008 mg/L	0.00008	9.57%

QC value within limits for Zn 206.200 Recovery = Not calculated

Ca 227.546†	5.4	0.0304 mg/L	0.04311	0.0304 mg/L	0.04311	141.69%

QC value within limits for Ca 227.546 Recovery = Not calculated

Sr 421.552†	72.3	0.0011 mg/L	0.00016	0.0011 mg/L	0.00016	14.21%

QC value within limits for Sr 421.552 Recovery = Not calculated

Al 237.313†	373.4	0.0586 mg/L	0.02090	0.0586 mg/L	0.02090	35.68%

0.1000

QC value greater than the upper limit for Al 237.313 Recovery = Not calculated
QC Failed. Continue with analysis.

==========

Sequence No.: 94
Sample ID: PBS-220459
Analyst:
Initial Sample Wt: 1 g
Dilution:

Autosampler Location: 94
Date Collected: 10/15/2014 11:56:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 100 mL

Mean Data: PBS-220459

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7229713.7	1.043	mg/L	0.0105				1.01%
Ag 328.068†	100.8	0.0004	mg/L	0.00001				3.22%
As 188.979†	0.3	0.0003	mg/L	0.00105				413.64%
B 249.772†	2028.7	0.0174	mg/L	0.00135				7.79%
Ba 233.527†	198.8	0.0023	mg/L	0.00005				2.04%
Be 313.107†	25.8	0.0000	mg/L	0.00003				352.42%
Cd 226.502†	-31.4	-0.0004	mg/L	0.00004				12.77%
Co 228.616†	-16.3	-0.0007	mg/L	0.00008				10.99%
Cr 267.716†	300.8	0.0025	mg/L	0.00002				0.87%
Cu 324.752†	584.1	0.0022	mg/L	0.00045				20.40%
Fe 259.939†	1571.9	0.0270	mg/L	0.00020				0.74%
K 766.490†	38.5	0.0745	mg/L	0.11006				147.80%
Mg 279.077†	547.9	0.0492	mg/L	0.00402				8.18%
Mn 257.610†	2239.7	0.0062	mg/L	0.00005				0.85%
Mo 202.031†	-0.4	0.0000	mg/L	0.00018				720.79%
Ni 231.604†	5.7	0.0001	mg/L	0.00018				140.65%
Na 589.592†	2433.6	0.6306	mg/L	0.00644				1.02%
Pb 220.353†	4.8	0.0008	mg/L	0.00010				13.69%
Sb 206.836†	14.9	0.0073	mg/L	0.00061				8.30%
Se 196.026†	-0.7	-0.0008	mg/L	0.00117				149.22%
Sn 189.927†	7.6	0.0014	mg/L	0.00461				320.05%
Ti 337.279†	603.9	0.0011	mg/L	0.00004				3.32%
Tl 190.801†	-4.3	-0.0023	mg/L	0.00072				31.63%
V 292.402†	-6.2	-0.0001	mg/L	0.00014				145.81%
Zn 206.200†	85.9	0.0025	mg/L	0.00000				0.13%
Ca 227.546†	17.7	0.0946	mg/L	0.01197				12.66%
Sr 421.552†	27.8	0.0004	mg/L	0.00061				144.62%
Al 237.313†	243.3	0.0382	mg/L	0.00101				2.65%

00772

Method: DV200-6010C Opt3 Page 66 Date: 10/16/2014 12:12:38 AM

Sample conc. not calculated. Nominal Wt. AND Initial Wt. required OR sample units incorrect.

Sequence No.: 95
Sample ID: LCSS-220459
Analyst:
Initial Sample Wt: 1 g
Dilution:

Autosampler Location: 95
Date Collected: 10/16/2014 12:02:49 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 100 mL

Mean Data: LCSS-220459

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7113339.7	1.026	mg/L	0.0064				0.62%
Ag 328.068†	12510.6	0.0482	mg/L	0.00028				0.58%
As 188.979†	46.4	0.0342	mg/L	0.00186				5.45%
B 249.772†	105940.1	0.9083	mg/L	0.01480				1.63%
Ba 233.527†	175365.4	1.989	mg/L	0.0196				0.99%
Be 313.107†	145531.2	0.0474	mg/L	0.00044				0.93%
Cd 226.502†	4270.9	0.0473	mg/L	0.00022				0.48%
Co 228.616†	11389.4	0.4906	mg/L	0.00490				1.00%
Cr 267.716†	26609.2	0.2175	mg/L	0.00301				1.38%
Cu 324.752†	69907.0	0.2617	mg/L	0.00324				1.24%
Fe 259.939†	59227.8	1.018	mg/L	0.0108				1.06%
K 766.490†	9495.4	18.35	mg/L	0.269				1.47%
Mg 279.077†	21766.1	1.954	mg/L	0.0159				0.82%
Mn 257.610†	180902.7	0.5046	mg/L	0.00475				0.94%
Mo 202.031†	8183.6	0.4737	mg/L	0.00518				1.09%
Ni 231.604†	22494.0	0.5015	mg/L	0.00544				1.09%
Na 589.592†	71195.8	18.45	mg/L	0.306				1.66%
Pb 220.353†	3083.4	0.4794	mg/L	0.00256				0.53%
Sb 206.836†	917.2	0.4504	mg/L	0.00174				0.39%
Se 196.026†	789.7	0.8738	mg/L	0.00489				0.56%
Sn 189.927†	27206.3	5.137	mg/L	0.0665				1.29%
Ti 337.279†	278363.9	0.4890	mg/L	0.00589				1.20%
Tl 190.801†	3376.5	1.787	mg/L	0.0073				0.41%
V 292.402†	32901.9	0.4790	mg/L	0.00486				1.01%
Zn 206.200†	16899.7	0.5010	mg/L	0.00385				0.77%
Ca 227.546†	374.2	2.031	mg/L	0.0486				2.39%
Sr 421.552†	119131.5	1.802	mg/L	0.0283				1.57%
Al 237.313†	12005.7	1.883	mg/L	0.0222				1.18%

Sample conc. not calculated. Nominal Wt. AND Initial Wt. required OR sample units incorrect.

Sequence No.: 96
Sample ID: R1407870-001
Analyst:
Initial Sample Wt: 1.03 g
Dilution:

Autosampler Location: 96
Date Collected: 10/16/2014 12:08:54 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 100 mL

Mean Data: R1407870-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6185706.0	0.8922	mg/L	0.00180				0.20%
Ag 328.068†	394.9	0.0056	mg/L	0.00013				2.38%
As 188.979†	612.9	0.4518	mg/L	0.00534				1.18%
B 249.772†	618024.5	5.265	mg/L	0.0587				1.12%
Ba 233.527†	9599.4	0.1089	mg/L	0.00016				0.15%
Be 313.107†	1952.9	0.0006	mg/L	0.00001				1.51%
Cd 226.502†	-101.3	-0.0029	mg/L	0.00007				2.25%
Co 228.616†	129.3	0.0056	mg/L	0.00003				0.62%
Cr 267.716†	76679.1	0.6297	mg/L	0.00280				0.44%
Cu 324.752†	8676091.6	32.46	mg/L	0.016				0.05%
Fe 259.939†	816131.8	12.96	mg/L	0.115				0.89%
K 766.490†	1577.5	3.049	mg/L	0.0888				2.91%
Mg 279.077†	323576.0	29.05	mg/L	0.262				0.90%
Mn 257.610†	74379.7	0.2094	mg/L	0.00197				0.94%
Mo 202.031†	148.7	0.0086	mg/L	0.00007				0.81%
Ni 231.604†	11266.0	0.2512	mg/L	0.00023				0.09%
Na 589.592†	74594.1	19.33	mg/L	0.031				0.16%
Pb 220.353†	8103.7	1.273	mg/L	0.0017				0.14%

00773

Method: DV200-6010C Opt3 Page 67 Date: 10/16/2014 12:24:51 AM

Sb 206.836†	37.6	0.0166 mg/L	0.00095		5.72%
Se 196.026†	21.2	0.0268 mg/L	0.00367		13.73%
Sn 189.927†	6013.7	1.136 mg/L	0.0046		0.40%
Ti 337.279†	805395.3	1.415 mg/L	0.0127		0.90%
Tl 190.801†	23.3	-0.0237 mg/L	0.00184		7.76%
V 292.402†	1451.8	0.0201 mg/L	0.00004		0.21%
Zn 206.200†	3586.6	0.1063 mg/L	0.00020		0.19%
Ca 227.546†	430965.8	2270 mg/L	19.8		0.87%
Sr 421.552†	102676.4	1.553 mg/L	0.0033		0.21%
Al 237.313†	133869.9	20.51 mg/L	0.170		0.83%

Sample conc. not calculated. Nominal Wt. AND Initial Wt. required OR sample units incorrect.

Sequence No.: 97
Sample ID: R1408043-001
Analyst:
Initial Sample Wt: 1 g
Dilution:

Autosampler Location: 97
Date Collected: 10/16/2014 12:15:02 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 100 mL

Mean Data: R1408043-001

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6870870.0	0.9911	mg/L	0.00228				0.23%
Ag 328.068†	-24853.2	-0.0084	mg/L	0.00019				2.20%
As 188.979†	36.9	0.0269	mg/L	0.00154				5.72%
B 249.772†	183088.5	0.3053	mg/L	0.00026				0.09%
Ba 233.527†	408583.5	4.635	mg/L	0.0360				0.78%
Be 313.107†	870.7	0.0003	mg/L	0.00002				6.07%
Cd 226.502†	4632.7	0.0112	mg/L	0.00032				2.82%
Co 228.616†	282.9	0.0122	mg/L	0.00013				1.09%
Cr 267.716†	38433.5	0.3287	mg/L	0.00250				0.76%
Cu 324.752†	531777.0	2.021	mg/L	0.0057				0.28%
Fe 259.939†	17474720.6	300.7	mg/L	2.25				0.75%
K 766.490†	990.7	1.915	mg/L	0.0357				1.87%
Mg 279.077†	76097.5	6.832	mg/L	0.0492				0.72%
Mn 257.610†	753867.6	2.145	mg/L	0.0158				0.74%
Mo 202.031†	1031.5	0.0597	mg/L	0.00008				0.14%
Ni 231.604†	2859.7	0.0638	mg/L	0.00024				0.37%
Na 589.592†	5849.2	1.516	mg/L	0.0063				0.41%
Pb 220.353†	887.6	0.1296	mg/L	0.00003				0.02%
Sb 206.836†	56.3	0.0266	mg/L	0.00148				5.58%
Se 196.026†	-57.4	0.0019	mg/L	0.00063				32.44%
Sn 189.927†	587.8	0.1110	mg/L	0.00526				4.74%
Ti 337.279†	62543.7	0.1099	mg/L	0.00077				0.70%
Tl 190.801†	-15.4	-0.0091	mg/L	0.00038				4.12%
V 292.402†	4071.2	0.0368	mg/L	0.00062				1.69%
Zn 206.200†	83202.7	2.467	mg/L	0.0149				0.60%
Ca 227.546†	4366.7	39.44	mg/L	0.384				0.97%
Sr 421.552†	11203.1	0.1694	mg/L	0.00039				0.23%
Al 237.313†	73378.1	11.84	mg/L	0.115				0.97%

Sample conc. not calculated. Nominal Wt. AND Initial Wt. required OR sample units incorrect.

Sequence No.: 98
Sample ID: R1408043-001L
Analyst:
Initial Sample Wt: 1 g
Dilution:

Autosampler Location: 98
Date Collected: 10/16/2014 12:21:13 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 100 mL

Mean Data: R1408043-001L

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7007193.9	1.011	mg/L	0.0011				0.11%
Ag 328.068†	-5098.0	0.0035	mg/L	0.00024				7.08%
As 188.979†	8.1	0.0059	mg/L	0.00098				16.53%
B 249.772†	39849.6	0.0064	mg/L	0.00312				48.52%
Ba 233.527†	83844.1	0.9510	mg/L	0.00527				0.55%
Be 313.107†	38.5	0.0000	mg/L	0.00000				28.02%
Cd 226.502†	910.7	-0.0005	mg/L	0.00012				22.43%
Co 228.616†	50.6	0.0022	mg/L	0.00033				15.09%

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Cr 267.716†	7890.0	0.0683	mg/L	0.00001	0.02%
Cu 324.752†	106518.3	0.4067	mg/L	0.00133	0.33%
Fe 259.939†	4628131.3	79.65	mg/L	0.180	0.23%
K 766.490†	247.8	0.4789	mg/L	0.01172	2.45%
Mg 279.077†	15863.5	1.424	mg/L	0.0050	0.35%
Mn 257.610†	155030.4	0.4437	mg/L	0.00217	0.49%
Mo 202.031†	209.0	0.0121	mg/L	0.00003	0.25%
Ni 231.604†	598.2	0.0133	mg/L	0.00001	0.08%
Na 589.592†	1436.1	0.3721	mg/L	0.01139	3.06%
Pb 220.353†	177.9	0.0253	mg/L	0.00040	1.59%
Sb 206.836†	10.8	0.0051	mg/L	0.00048	9.34%
Se 196.026†	-11.5	0.0045	mg/L	0.00081	17.88%
Sn 189.927†	134.2	0.0253	mg/L	0.00005	0.21%
Ti 337.279†	12879.5	0.0226	mg/L	0.00026	1.17%
Tl 190.801†	-3.8	-0.0022	mg/L	0.00029	13.32%
V 292.402†	836.3	0.0062	mg/L	0.00014	2.32%
Zn 206.200†	17489.6	0.5185	mg/L	0.00627	1.21%
Ca 227.546†	893.6	9.059	mg/L	0.0524	0.58%
Sr 421.552†	2453.7	0.0371	mg/L	0.00089	2.39%
Al 237.313†	14793.9	2.408	mg/L	0.0040	0.17%

Sample conc. not calculated. Nominal Wt. AND Initial Wt. required OR sample units incorrect.

Sequence No.: 99
Sample ID: R1407980-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 99
Date Collected: 10/16/2014 12:27:15 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407980-001

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6185715.5	0.8922	mg/L	0.00055				0.06%
Ag 328.068†	-437.4	-0.0007	mg/L	0.00009				12.95%
As 188.979†	69.2	0.0511	mg/L	0.00010				0.20%
B 249.772†	1479418.6	12.73	mg/L	0.047				0.37%
Ba 233.527†	70489.4	0.7996	mg/L	0.00281				0.35%
Be 313.107†	-1970.2	-0.0006	mg/L	0.00002				3.59%
Cd 226.502†	16.3	-0.0003	mg/L	0.00007				25.87%
Co 228.616†	871.5	0.0375	mg/L	0.00006				0.17%
Cr 267.716†	20250.6	0.1866	mg/L	0.00075				0.40%
Cu 324.752†	14875.8	0.0560	mg/L	0.00287				5.13%
Fe 259.939†	191120.1	3.203	mg/L	0.0048				0.15%
K 766.490†	333077.2	643.8	mg/L	3.55				0.55%
Mg 279.077†	2357311.4	211.6	mg/L	0.21				0.10%
Mn 257.610†	246737.0	0.6885	mg/L	0.00112				0.16%
Mo 202.031†	169.5	0.0098	mg/L	0.00024				2.41%
Ni 231.604†	8198.8	0.1828	mg/L	0.00026				0.14%
Na 589.592†	8227972.7	2132	mg/L	19.3				0.91%
Pb 220.353†	9.5	0.0032	mg/L	0.00168				52.31%
Sb 206.836†	13.6	0.0066	mg/L	0.00058				8.79%
Se 196.026†	3.1	0.0041	mg/L	0.00325				78.55%
Sn 189.927†	144.1	0.0272	mg/L	0.00270				9.93%
Ti 337.279†	70813.9	0.1244	mg/L	0.00024				0.19%
Tl 190.801†	9.9	0.0031	mg/L	0.00070				22.76%
V 292.402†	2445.6	0.0354	mg/L	0.00063				1.79%
Zn 206.200†	1988.0	0.0589	mg/L	0.00036				0.61%
Ca 227.546†	25999.8	137.1	mg/L	0.17				0.12%
Sr 421.552†	132560.9	2.005	mg/L	0.0040				0.20%
Al 237.313†	1872.8	0.1969	mg/L	0.00124				0.63%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 100
Sample ID: PBW-220154
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 100
Date Collected: 10/16/2014 12:33:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: PBW-220154

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Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7111131.4	1.026	mg/L	0.0050				0.49%
Ag 328.068†	56.6	0.0002	mg/L	0.00004				18.07%
As 188.979†	0.2	0.0001	mg/L	0.00005				39.90%
B 249.772†	11630.2	0.1001	mg/L	0.00880				8.79%
Ba 233.527†	42.2	0.0005	mg/L	0.00011				23.38%
Be 313.107†	-277.8	-0.0001	mg/L	0.00003				34.99%
Cd 226.502†	-30.0	-0.0003	mg/L	0.00001				3.67%
Co 228.616†	-12.1	-0.0005	mg/L	0.00004				7.94%
Cr 267.716†	47.7	0.0004	mg/L	0.00006				14.44%
Cu 324.752†	4428.9	0.0166	mg/L	0.00112				6.73%
Fe 259.939†	668.1	0.0115	mg/L	0.00065				5.65%
K 766.490†	886.7	1.714	mg/L	0.0183				1.07%
Mg 279.077†	156.2	0.0140	mg/L	0.00731				52.15%
Mn 257.610†	1244.8	0.0035	mg/L	0.00001				0.22%
Mo 202.031†	1.3	0.0001	mg/L	0.00009				125.92%
Ni 231.604†	-30.2	-0.0007	mg/L	0.00029				42.87%
Na 589.592†	4745.3	1.230	mg/L	0.0041				0.33%
Pb 220.353†	10.7	0.0017	mg/L	0.00096				57.66%
Sb 206.836†	7.6	0.0038	mg/L	0.00008				2.10%
Se 196.026†	-0.7	-0.0008	mg/L	0.00009				10.63%
Sn 189.927†	13.7	0.0026	mg/L	0.00455				176.38%
Ti 337.279†	249.6	0.0004	mg/L	0.00004				8.12%
Tl 190.801†	-0.9	-0.0005	mg/L	0.00357				722.96%
V 292.402†	-11.7	-0.0002	mg/L	0.00013				74.92%
Zn 206.200†	11.8	0.0003	mg/L	0.00014				39.21%
Ca 227.546†	-8.2	-0.0428	mg/L	0.05248				122.63%
Sr 421.552†	6.3	0.0001	mg/L	0.00015				161.93%
Al 237.313†	4.1	0.0007	mg/L	0.00289				434.10%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 101
Sample ID: LCSW-220154
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 10/16/2014 12:39:37 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-220154

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7099196.4	1.024	mg/L	0.0001				0.01%
Ag 328.068†	12970.1	0.0499	mg/L	0.00066				1.31%
As 188.979†	54.3	0.0400	mg/L	0.00115				2.87%
B 249.772†	117807.8	1.011	mg/L	0.0124				1.22%
Ba 233.527†	178777.5	2.028	mg/L	0.0307				1.52%
Be 313.107†	154855.2	0.0504	mg/L	0.00006				0.12%
Cd 226.502†	4571.3	0.0507	mg/L	0.00017				0.33%
Co 228.616†	11670.6	0.5027	mg/L	0.00871				1.73%
Cr 267.716†	25391.6	0.2076	mg/L	0.00306				1.47%
Cu 324.752†	72946.4	0.2730	mg/L	0.00309				1.13%
Fe 259.939†	59551.9	1.024	mg/L	0.0151				1.47%
K 766.490†	10382.2	20.07	mg/L	0.008				0.04%
Mg 279.077†	22481.8	2.018	mg/L	0.0321				1.59%
Mn 257.610†	182318.7	0.5085	mg/L	0.00760				1.49%
Mo 202.031†	8356.1	0.4837	mg/L	0.00755				1.56%
Ni 231.604†	23160.6	0.5163	mg/L	0.00790				1.53%
Na 589.592†	75722.8	19.62	mg/L	0.099				0.50%
Pb 220.353†	3277.6	0.5096	mg/L	0.00228				0.45%
Sb 206.836†	979.1	0.4807	mg/L	0.00215				0.45%
Se 196.026†	875.6	0.9689	mg/L	0.00078				0.08%
Sn 189.927†	28080.8	5.302	mg/L	0.1084				2.04%
Ti 337.279†	282970.9	0.4971	mg/L	0.00677				1.36%
Tl 190.801†	3571.7	1.890	mg/L	0.0038				0.20%
V 292.402†	33037.4	0.4810	mg/L	0.00564				1.17%
Zn 206.200†	17599.3	0.5218	mg/L	0.00900				1.73%
Ca 227.546†	369.7	2.008	mg/L	0.0324				1.61%
Sr 421.552†	-9.1	-0.0001	mg/L	0.00081				591.46%
Al 237.313†	12112.9	1.900	mg/L	0.0229				1.20%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 102
Sample ID: R1407825-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 102
Date Collected: 10/16/2014 12:45:50 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-001

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7136764.6	1.029	mg/L	0.0002				0.02%
Ag 328.068†	-29.9	-0.0001	mg/L	0.00044				393.23%
As 188.979†	-0.1	-0.0001	mg/L	0.00078				>999.9%
B 249.772†	5738.4	0.0494	mg/L	0.00292				5.92%
Ba 233.527†	43.9	0.0005	mg/L	0.00002				5.00%
Be 313.107†	-76.3	0.0000	mg/L	0.00002				75.85%
Cd 226.502†	-14.6	-0.0002	mg/L	0.00004				22.73%
Co 228.616†	-7.8	-0.0003	mg/L	0.00003				8.32%
Cr 267.716†	71.0	0.0006	mg/L	0.00004				7.34%
Cu 324.752†	1895.7	0.0071	mg/L	0.00015				2.17%
Fe 259.939†	552.4	0.0095	mg/L	0.00005				0.54%
K 766.490†	217.9	0.4212	mg/L	0.02397				5.69%
Mg 279.077†	105.3	0.0095	mg/L	0.00091				9.62%
Mn 257.610†	306.7	0.0009	mg/L	0.00002				2.68%
Mo 202.031†	2.6	0.0002	mg/L	0.00017				111.42%
Ni 231.604†	-24.5	-0.0005	mg/L	0.00005				8.94%
Na 589.592†	1330.8	0.3448	mg/L	0.00619				1.79%
Pb 220.353†	7.5	0.0012	mg/L	0.00021				17.98%
Sb 206.836†	9.8	0.0048	mg/L	0.00050				10.29%
Se 196.026†	0.9	0.0010	mg/L	0.00022				22.92%
Sn 189.927†	12.1	0.0023	mg/L	0.00058				25.43%
Ti 337.279†	314.6	0.0006	mg/L	0.00003				5.65%
Tl 190.801†	0.9	0.0005	mg/L	0.00126				253.40%
V 292.402†	-17.6	-0.0003	mg/L	0.00015				58.40%
Zn 206.200†	3.9	0.0001	mg/L	0.00001				9.28%
Ca 227.546†	-0.1	-0.0003	mg/L	0.01854				>999.9%
Sr 421.552†	-16.5	-0.0002	mg/L	0.00013				53.96%
Al 237.313†	-11.2	-0.0017	mg/L	0.00075				43.11%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 103
Sample ID: R1407825-003
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 10/16/2014 12:51:49 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-003

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7177530.4	1.035	mg/L	0.0042				0.40%
Ag 328.068†	-49.5	-0.0002	mg/L	0.00001				4.86%
As 188.979†	2.1	0.0015	mg/L	0.00123				79.44%
B 249.772†	6310.7	0.0539	mg/L	0.00183				3.40%
Ba 233.527†	4358.1	0.0494	mg/L	0.00035				0.71%
Be 313.107†	2906.5	0.0009	mg/L	0.00005				5.55%
Cd 226.502†	33.4	0.0004	mg/L	0.00006				15.61%
Co 228.616†	126.9	0.0055	mg/L	0.00006				1.04%
Cr 267.716†	-86.7	0.0003	mg/L	0.00013				43.26%
Cu 324.752†	1334.6	0.0050	mg/L	0.00026				5.15%
Fe 259.939†	6037.4	0.1006	mg/L	0.00080				0.79%
K 766.490†	1679.6	3.247	mg/L	0.0363				1.12%
Mg 279.077†	113024.2	10.15	mg/L	0.063				0.62%
Mn 257.610†	11696.2	0.0326	mg/L	0.00019				0.60%
Mo 202.031†	7.1	0.0004	mg/L	0.00002				3.78%
Ni 231.604†	2474.0	0.0552	mg/L	0.00055				1.00%
Na 589.592†	48459.0	12.56	mg/L	0.006				0.05%
Pb 220.353†	6.3	0.0011	mg/L	0.00139				122.16%
Sb 206.836†	5.4	0.0026	mg/L	0.00068				26.19%

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Se 196.026†	1.1	0.0012 mg/L	0.00207	169.51%
Sn 189.927†	74.4	0.0141 mg/L	0.00577	41.08%
Ti 337.279†	692.7	0.0012 mg/L	0.00001	1.13%
Tl 190.801†	-2.0	-0.0012 mg/L	0.00108	92.80%
V 292.402†	2.4	0.0000 mg/L	0.00009	324.19%
Zn 206.200†	3426.7	0.1016 mg/L	0.00132	1.30%
Ca 227.546†	905.1	4.773 mg/L	0.0237	0.50%
Sr 421.552†	5999.4	0.0907 mg/L	0.00042	0.46%
Al 237.313†	4461.6	0.6954 mg/L	0.01182	1.70%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 104 **Autosampler Location: 4**
Sample ID: CCV **Date Collected: 10/16/2014 12:57:52 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7003395.0	1.010	mg/L	0.0050				0.49%
Ag 328.068†	127488.0	0.4895	mg/L	0.00052	0.4895	mg/L	0.00052	0.11%
QC value within limits for Ag 328.068 Recovery = 97.89%								
As 188.979†	1319.5	0.9738	mg/L	0.00193	0.9738	mg/L	0.00193	0.20%
QC value within limits for As 188.979 Recovery = 97.38%								
B 249.772†	286754.6	2.449	mg/L	0.0151	2.449	mg/L	0.0151	0.62%
QC value within limits for B 249.772 Recovery = 97.96%								
Ba 233.527†	894221.9	10.14	mg/L	0.008	10.14	mg/L	0.008	0.08%
QC value within limits for Ba 233.527 Recovery = 101.43%								
Be 313.107†	775669.0	0.2526	mg/L	0.00026	0.2526	mg/L	0.00026	0.10%
QC value within limits for Be 313.107 Recovery = 101.04%								
Cd 226.502†	44853.2	0.4977	mg/L	0.00054	0.4977	mg/L	0.00054	0.11%
QC value within limits for Cd 226.502 Recovery = 99.54%								
Co 228.616†	57633.6	2.482	mg/L	0.0032	2.482	mg/L	0.0032	0.13%
QC value within limits for Co 228.616 Recovery = 99.30%								
Cr 267.716†	60652.3	0.4980	mg/L	0.00034	0.4980	mg/L	0.00034	0.07%
QC value within limits for Cr 267.716 Recovery = 99.60%								
Cu 324.752†	326012.7	1.220	mg/L	0.0024	1.220	mg/L	0.0024	0.20%
QC value within limits for Cu 324.752 Recovery = 97.63%								
Fe 259.939†	290515.8	4.986	mg/L	0.0127	4.986	mg/L	0.0127	0.26%
QC value within limits for Fe 259.939 Recovery = 99.73%								
K 766.490†	12850.7	24.84	mg/L	0.019	24.84	mg/L	0.019	0.08%
QC value within limits for K 766.490 Recovery = 99.36%								
Mg 279.077†	277612.6	24.92	mg/L	0.041	24.92	mg/L	0.041	0.17%
QC value within limits for Mg 279.077 Recovery = 99.69%								
Mn 257.610†	267611.6	0.7469	mg/L	0.00210	0.7469	mg/L	0.00210	0.28%
QC value within limits for Mn 257.610 Recovery = 99.59%								
Mo 202.031†	42009.2	2.432	mg/L	0.0023	2.432	mg/L	0.0023	0.10%
QC value within limits for Mo 202.031 Recovery = 97.26%								
Ni 231.604†	89260.1	1.990	mg/L	0.0033	1.990	mg/L	0.0033	0.17%
QC value within limits for Ni 231.604 Recovery = 99.49%								
Na 589.592†	91452.9	23.70	mg/L	0.037	23.70	mg/L	0.037	0.16%
QC value within limits for Na 589.592 Recovery = 94.79%								
Pb 220.353†	3195.4	0.4978	mg/L	0.00316	0.4978	mg/L	0.00316	0.63%
QC value within limits for Pb 220.353 Recovery = 99.57%								
Sb 206.836†	9714.3	4.770	mg/L	0.0183	4.770	mg/L	0.0183	0.38%
QC value within limits for Sb 206.836 Recovery = 95.41%								
Se 196.026†	459.1	0.5090	mg/L	0.00592	0.5090	mg/L	0.00592	1.16%
QC value within limits for Se 196.026 Recovery = 101.81%								
Sn 189.927†	27014.8	5.101	mg/L	0.0418	5.101	mg/L	0.0418	0.82%
QC value within limits for Sn 189.927 Recovery = 102.02%								
Ti 337.279†	1415568.7	2.487	mg/L	0.0017	2.487	mg/L	0.0017	0.07%
QC value within limits for Ti 337.279 Recovery = 99.46%								
Tl 190.801†	1823.7	0.9645	mg/L	0.00321	0.9645	mg/L	0.00321	0.33%
QC value within limits for Tl 190.801 Recovery = 96.45%								
V 292.402†	162076.2	2.360	mg/L	0.0012	2.360	mg/L	0.0012	0.05%
QC value within limits for V 292.402 Recovery = 94.38%								
Zn 206.200†	33809.3	1.002	mg/L	0.0064	1.002	mg/L	0.0064	0.64%
QC value within limits for Zn 206.200 Recovery = 100.23%								
Ca 227.546†	4365.7	23.29	mg/L	0.121	23.29	mg/L	0.121	0.52%

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QC value within limits for Ca 227.546 Recovery = 93.15%

Sr 421.552†	147480.2	2.230 mg/L	0.0003	2.230 mg/L	0.0003	0.01%

QC value less than the lower limit for Sr 421.552 Recovery = 89.22%

Al 237.313†	61533.6	9.643 mg/L	0.0112	9.643 mg/L	0.0112	0.12%

QC value within limits for Al 237.313 Recovery = 96.43%

QC Failed. Continue with analysis.

Sequence No.: 105
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 10/16/2014 1:04:00 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7021957.1	1.013	mg/L	0.0057				0.57%
Ag 328.068†	103.9	0.0004	mg/L	0.00009	0.0004	mg/L	0.00009	23.48%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	2.4	0.0018	mg/L	0.00007	0.0018	mg/L	0.00007	4.13%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	4740.0	0.0408	mg/L	0.00327	0.0408	mg/L	0.00327	8.01%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	320.6	0.0036	mg/L	0.00083	0.0036	mg/L	0.00083	22.93%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-2.0	0.0000	mg/L	0.00000	0.0000	mg/L	0.00000	521.17%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	10.4	0.0001	mg/L	0.00000	0.0001	mg/L	0.00000	4.09%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	15.5	0.0007	mg/L	0.00039	0.0007	mg/L	0.00039	58.48%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	23.8	0.0002	mg/L	0.00000	0.0002	mg/L	0.00000	1.34%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	1378.8	0.0052	mg/L	0.00062	0.0052	mg/L	0.00062	11.94%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	687.0	0.0118	mg/L	0.00111	0.0118	mg/L	0.00111	9.38%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	141.7	0.2738	mg/L	0.05012	0.2738	mg/L	0.05012	18.31%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	59.9	0.0054	mg/L	0.00090	0.0054	mg/L	0.00090	16.71%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	291.4	0.0008	mg/L	0.00006	0.0008	mg/L	0.00006	7.69%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	11.9	0.0007	mg/L	0.00021	0.0007	mg/L	0.00021	30.77%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	1.4	0.0000	mg/L	0.00016	0.0000	mg/L	0.00016	510.47%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	911.5	0.2362	mg/L	0.00573	0.2362	mg/L	0.00573	2.43%
QC value within limits for Na 589.592 Recovery = Not calculated								
Pb 220.353†	4.0	0.0006	mg/L	0.00061	0.0006	mg/L	0.00061	97.40%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	7.2	0.0036	mg/L	0.00155	0.0036	mg/L	0.00155	43.55%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.1	-0.0001	mg/L	0.00078	-0.0001	mg/L	0.00078	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	678.6	0.1281	mg/L	0.01089	0.1281	mg/L	0.01089	8.50%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	586.8	0.0010	mg/L	0.00025	0.0010	mg/L	0.00025	24.28%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	4.6	0.0024	mg/L	0.00230	0.0024	mg/L	0.00230	95.42%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	72.9	0.0011	mg/L	0.00049	0.0011	mg/L	0.00049	46.57%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-34.9	-0.0010	mg/L	0.00009	-0.0010	mg/L	0.00009	8.84%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	0.9	0.0052	mg/L	0.03812	0.0052	mg/L	0.03812	738.30%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Sr 421.552†	71.6	0.0011	mg/L	0.00072	0.0011	mg/L	0.00072	66.50%
QC value within limits for Sr 421.552 Recovery = Not calculated								
Al 237.313†	21.4	0.0034	mg/L	0.00201	0.0034	mg/L	0.00201	59.63%

QC value within limits for Al 237.313 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 106
Sample ID: R1407825-003D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 104
Date Collected: 10/16/2014 1:10:02 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-003D

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7283753.8	1.051	mg/L	0.0039				0.37%
Ag 328.068†	-18.4	0.0000	mg/L	0.00013				317.48%
As 188.979†	1.3	0.0010	mg/L	0.00064				66.32%
B 249.772†	5403.0	0.0461	mg/L	0.00161				3.48%
Ba 233.527†	4369.4	0.0496	mg/L	0.00018				0.36%
Be 313.107†	2954.1	0.0010	mg/L	0.00001				1.22%
Cd 226.502†	41.8	0.0005	mg/L	0.00007				14.83%
Co 228.616†	134.8	0.0058	mg/L	0.00016				2.70%
Cr 267.716†	-93.8	0.0003	mg/L	0.00006				25.55%
Cu 324.752†	978.1	0.0037	mg/L	0.00007				1.89%
Fe 259.939†	6029.4	0.1005	mg/L	0.00123				1.23%
K 766.490†	1674.2	3.236	mg/L	0.0997				3.08%
Mg 279.077†	113358.5	10.18	mg/L	0.075				0.74%
Mn 257.610†	11628.6	0.0324	mg/L	0.00022				0.67%
Mo 202.031†	5.9	0.0003	mg/L	0.00020				57.75%
Ni 231.604†	2413.8	0.0538	mg/L	0.00010				0.19%
Na 589.592†	46284.4	11.99	mg/L	0.079				0.66%
Pb 220.353†	9.6	0.0017	mg/L	0.00006				3.35%
Sb 206.836†	6.5	0.0031	mg/L	0.00120				38.27%
Se 196.026†	-0.4	-0.0004	mg/L	0.00099				236.24%
Sn 189.927†	49.8	0.0094	mg/L	0.00091				9.64%
Ti 337.279†	754.5	0.0013	mg/L	0.00003				1.98%
Tl 190.801†	-0.0	-0.0001	mg/L	0.00334				>999.9%
V 292.402†	1.2	0.0000	mg/L	0.00019				>999.9%
Zn 206.200†	3413.4	0.1012	mg/L	0.00044				0.43%
Ca 227.546†	896.8	4.729	mg/L	0.0295				0.62%
Sr 421.552†	5696.5	0.0862	mg/L	0.00099				1.15%
Al 237.313†	4492.5	0.7002	mg/L	0.00607				0.87%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 107
Sample ID: R1407825-003S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 10/16/2014 1:16:02 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-003S

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7089848.5	1.023	mg/L	0.0007				0.07%
Ag 328.068†	13087.2	0.0504	mg/L	0.00055				1.08%
As 188.979†	51.2	0.0377	mg/L	0.00121				3.21%
B 249.772†	119757.4	1.027	mg/L	0.0114				1.11%
Ba 233.527†	187106.9	2.122	mg/L	0.0144				0.68%
Be 313.107†	158232.0	0.0515	mg/L	0.00022				0.43%
Cd 226.502†	4565.6	0.0506	mg/L	0.00002				0.04%
Co 228.616†	11991.5	0.5165	mg/L	0.00350				0.68%
Cr 267.716†	25165.1	0.2068	mg/L	0.00102				0.49%
Cu 324.752†	71027.9	0.2659	mg/L	0.00183				0.69%
Fe 259.939†	66356.5	1.138	mg/L	0.0060				0.53%
K 766.490†	11857.1	22.92	mg/L	0.037				0.16%
Mg 279.077†	137317.3	12.33	mg/L	0.084				0.68%
Mn 257.610†	197743.8	0.5516	mg/L	0.00360				0.65%
Mo 202.031†	8412.6	0.4869	mg/L	0.00132				0.27%
Ni 231.604†	25843.7	0.5761	mg/L	0.00386				0.67%
Na 589.592†	120752.7	31.29	mg/L	0.053				0.17%

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Pb 220.353†	3248.4	0.5052 mg/L	0.00005		0.01%
Sb 206.836†	980.5	0.4813 mg/L	0.00018		0.04%
Se 196.026†	898.8	0.9946 mg/L	0.00441		0.44%
Sn 189.927†	28894.6	5.456 mg/L	0.0472		0.86%
Ti 337.279†	284710.9	0.5001 mg/L	0.00347		0.69%
Tl 190.801†	3580.6	1.895 mg/L	0.0027		0.14%
V 292.402†	33169.0	0.4829 mg/L	0.00242		0.50%
Zn 206.200†	21031.7	0.6235 mg/L	0.00401		0.64%
Ca 227.546†	1294.6	6.886 mg/L	0.0443		0.64%
Sr 421.552†	5715.9	0.0864 mg/L	0.00059		0.68%
Al 237.313†	16928.5	2.651 mg/L	0.0066		0.25%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 108
Sample ID: R1407825-003A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 106
Date Collected: 10/16/2014 1:22:05 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-003A

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7089985.7	1.023	mg/L	0.0051				0.50%
Ag 328.068†	12293.9	0.0474	mg/L	0.00028				0.60%
As 188.979†	51.5	0.0379	mg/L	0.00096				2.52%
B 249.772†	121717.9	1.044	mg/L	0.0102				0.98%
Ba 233.527†	179672.6	2.038	mg/L	0.0110				0.54%
Be 313.107†	152502.3	0.0497	mg/L	0.00030				0.61%
Cd 226.502†	4325.4	0.0479	mg/L	0.00032				0.66%
Co 228.616†	11392.0	0.4907	mg/L	0.00474				0.97%
Cr 267.716†	24196.2	0.1989	mg/L	0.00109				0.55%
Cu 324.752†	66266.6	0.2481	mg/L	0.00187				0.75%
Fe 259.939†	64014.3	1.097	mg/L	0.0047				0.43%
K 766.490†	11478.1	22.19	mg/L	0.111				0.50%
Mg 279.077†	136742.7	12.28	mg/L	0.069				0.56%
Mn 257.610†	189839.6	0.5295	mg/L	0.00270				0.51%
Mo 202.031†	5.6	0.0003	mg/L	0.00024				74.97%
Ni 231.604†	24983.5	0.5570	mg/L	0.00098				0.18%
Na 589.592†	118557.8	30.72	mg/L	0.155				0.50%
Pb 220.353†	3117.6	0.4849	mg/L	0.00482				0.99%
Sb 206.836†	7.2	0.0033	mg/L	0.00051				15.32%
Se 196.026†	1071.7	1.186	mg/L	0.0069				0.58%
Sn 189.927†	127.6	0.0241	mg/L	0.00546				22.67%
Ti 337.279†	781.8	0.0014	mg/L	0.00004				2.93%
Tl 190.801†	3435.0	1.818	mg/L	0.0155				0.85%
V 292.402†	31540.3	0.4592	mg/L	0.00036				0.08%
Zn 206.200†	20283.8	0.6013	mg/L	0.00243				0.40%
Ca 227.546†	1263.6	6.721	mg/L	0.0155				0.23%
Sr 421.552†	5704.1	0.0863	mg/L	0.00037				0.43%
Al 237.313†	16350.6	2.560	mg/L	0.0131				0.51%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 109
Sample ID: R1407825-003L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 107
Date Collected: 10/16/2014 1:28:07 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-003L

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7038160.9	1.015	mg/L	0.0064				0.63%
Ag 328.068†	-51.6	-0.0002	mg/L	0.00015				80.53%
As 188.979†	0.0	0.0000	mg/L	0.00097				>999.9%
B 249.772†	3204.5	0.0275	mg/L	0.00163				5.93%
Ba 233.527†	913.7	0.0104	mg/L	0.00001				0.13%
Be 313.107†	92.0	0.0000	mg/L	0.00002				68.59%
Cd 226.502†	1.8	0.0000	mg/L	0.00006				367.57%

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Co 228.616†	22.6	0.0010 mg/L	0.00004	4.54%
Cr 267.716†	-6.4	0.0002 mg/L	0.00007	46.72%
Cu 324.752†	711.2	0.0027 mg/L	0.00005	1.72%
Fe 259.939†	1435.7	0.0241 mg/L	0.00016	0.66%
K 766.490†	407.2	0.7870 mg/L	0.01562	1.98%
Mg 279.077†	23141.6	2.078 mg/L	0.0096	0.46%
Mn 257.610†	2566.8	0.0072 mg/L	0.00003	0.48%
Mo 202.031†	0.2	0.0000 mg/L	0.00004	250.94%
Ni 231.604†	503.9	0.0112 mg/L	0.00002	0.20%
Na 589.592†	9636.3	2.497 mg/L	0.0032	0.13%
Pb 220.353†	5.6	0.0009 mg/L	0.00013	14.39%
Sb 206.836†	6.7	0.0033 mg/L	0.00027	8.15%
Se 196.026†	-1.2	-0.0014 mg/L	0.00057	42.55%
Sn 189.927†	102.2	0.0193 mg/L	0.00426	22.07%
Ti 337.279†	269.9	0.0005 mg/L	0.00008	16.75%
Tl 190.801†	3.4	0.0018 mg/L	0.00012	6.90%
V 292.402†	-18.1	-0.0003 mg/L	0.00027	103.05%
Zn 206.200†	828.1	0.0246 mg/L	0.00019	0.76%
Ca 227.546†	171.7	0.9059 mg/L	0.00375	0.41%
Sr 421.552†	1156.1	0.0175 mg/L	0.00041	2.35%
Al 237.313†	886.8	0.1382 mg/L	0.00056	0.40%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 110
Sample ID: R1407825-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 10/16/2014 1:34:14 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1407825-004

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7132755.5	1.029	mg/L	0.0025				0.24%
Ag 328.068†	29.5	0.0001	mg/L	0.00000				1.21%
As 188.979†	2.1	0.0015	mg/L	0.00051				33.57%
B 249.772†	4074.4	0.0347	mg/L	0.00111				3.21%
Ba 233.527†	4308.3	0.0489	mg/L	0.00003				0.07%
Be 313.107†	2774.9	0.0009	mg/L	0.00000				0.19%
Cd 226.502†	21.3	0.0002	mg/L	0.00008				35.86%
Co 228.616†	114.8	0.0049	mg/L	0.00007				1.43%
Cr 267.716†	-40.7	0.0007	mg/L	0.00002				3.08%
Cu 324.752†	577.2	0.0022	mg/L	0.00036				16.67%
Fe 259.939†	5856.9	0.0977	mg/L	0.00064				0.65%
K 766.490†	1574.5	3.043	mg/L	0.0132				0.43%
Mg 279.077†	110712.9	9.939	mg/L	0.0135				0.14%
Mn 257.610†	11154.9	0.0311	mg/L	0.00023				0.74%
Mo 202.031†	4.2	0.0002	mg/L	0.00016				65.85%
Ni 231.604†	2270.8	0.0506	mg/L	0.00001				0.01%
Na 589.592†	45583.5	11.81	mg/L	0.034				0.28%
Pb 220.353†	0.3	0.0002	mg/L	0.00002				8.48%
Sb 206.836†	10.5	0.0051	mg/L	0.00098				19.23%
Se 196.026†	0.3	0.0004	mg/L	0.00006				14.49%
Sn 189.927†	77.2	0.0146	mg/L	0.00160				10.99%
Ti 337.279†	757.7	0.0013	mg/L	0.00002				1.84%
Tl 190.801†	-2.3	-0.0013	mg/L	0.00054				41.77%
V 292.402†	-0.2	0.0000	mg/L	0.00012				>999.9%
Zn 206.200†	3269.0	0.0969	mg/L	0.00091				0.94%
Ca 227.546†	847.4	4.469	mg/L	0.0007				0.02%
Sr 421.552†	5490.2	0.0830	mg/L	0.00024				0.28%
Al 237.313†	4279.3	0.6669	mg/L	0.00083				0.12%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 111
Sample ID: PBT-220635
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 109
Date Collected: 10/16/2014 1:40:14 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

00782

Method: DV200-6010C Opt3 Page 76 Date: 10/16/2014 1:49:56 AM

Mean Data: PBT-220635

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6935282.1	1.000	mg/L	0.0024				0.24%
Ag 328.068†	28.1	0.0001	mg/L	0.00032				281.66%
As 188.979†	1.5	0.0011	mg/L	0.00006				5.13%
B 249.772†	1368.2	0.0117	mg/L	0.00040				3.41%
Ba 233.527†	12.4	0.0001	mg/L	0.00007				52.48%
Be 313.107†	-129.0	0.0000	mg/L	0.00002				39.24%
Cd 226.502†	-22.7	-0.0003	mg/L	0.00002				9.69%
Co 228.616†	-5.2	-0.0002	mg/L	0.00022				98.73%
Cr 267.716†	74.0	0.0006	mg/L	0.00013				21.11%
Cu 324.752†	1796.9	0.0067	mg/L	0.00073				10.79%
Fe 259.939†	1184.0	0.0204	mg/L	0.00018				0.87%
K 766.490†	38.8	0.0750	mg/L	0.06423				85.64%
Mg 279.077†	-4.6	-0.0004	mg/L	0.00041				99.39%
Mn 257.610†	1536.3	0.0043	mg/L	0.00010				2.39%
Mo 202.031†	10.2	0.0006	mg/L	0.00013				21.88%
Ni 231.604†	2.4	0.0001	mg/L	0.00007				125.50%
Na 589.592†	623.8	0.1616	mg/L	0.00906				5.60%
Pb 220.353†	5.0	0.0008	mg/L	0.00005				6.60%
Sb 206.836†	10.0	0.0049	mg/L	0.00021				4.24%
Se 196.026†	0.2	0.0002	mg/L	0.00051				212.60%
Sn 189.927†	39.8	0.0075	mg/L	0.00673				89.42%
Ti 337.279†	409.1	0.0007	mg/L	0.00002				3.06%
Tl 190.801†	-2.2	-0.0012	mg/L	0.00083				69.92%
V 292.402†	-3.2	0.0000	mg/L	0.00012				245.98%
Zn 206.200†	99.6	0.0030	mg/L	0.00007				2.46%
Ca 227.546†	-0.1	0.0003	mg/L	0.00500				>999.9%
Sr 421.552†	6.3	0.0001	mg/L	0.00034				359.72%
Al 237.313†	51.5	0.0081	mg/L	0.00038				4.65%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

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Sequence No.: 112
Sample ID: LCST 6X
Analyst:
Initial Sample Wt:
Dilution: 5X 6X CE 10/16/14

Autosampler Location: 110
Date Collected: 10/16/2014 1:46:19 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCST 6X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7072492.4	1.020	mg/L	0.0049				0.48%
Ag 328.068†	223429.1	0.8553	mg/L	0.00742				0.87%
As 188.979†	1088.5	0.8036	mg/L	0.00393				0.49%
B 249.772†	792.9	0.0068	mg/L	0.00040				5.83%
Ba 233.527†	79022.2	0.8963	mg/L	0.01222				1.36%
Be 313.107†	-566.2	-0.0002	mg/L	0.00002				9.49%
Cd 226.502†	15630.2	0.1737	mg/L	0.00374				2.15%
Co 228.616†	1.2	0.0001	mg/L	0.00006				110.12%
Cr 267.716†	107242.0	0.8757	mg/L	0.01454				1.66%
Cu 324.752†	488.2	0.0018	mg/L	0.00002				1.35%
Fe 259.939†	613.2	0.0106	mg/L	0.00004				0.40%
K 766.490†	76.6	0.1481	mg/L	0.05204				35.14%
Mg 279.077†	106.8	0.0096	mg/L	0.00318				33.13%
Mn 257.610†	384.6	0.0011	mg/L	0.00004				4.01%
Mo 202.031†	0.9	0.0001	mg/L	0.00028				523.36%
Ni 231.604†	-0.6	0.0000	mg/L	0.00013				>999.9%
Na 589.592†	460.7	0.1194	mg/L	0.00059				0.50%
Pb 220.353†	5487.2	0.8528	mg/L	0.00636				0.75%
Sb 206.836†	5.4	0.0027	mg/L	0.00032				12.04%
Se 196.026†	153.8	0.1701	mg/L	0.00247				1.45%
Sn 189.927†	86.2	0.0163	mg/L	0.00113				6.94%
Ti 337.279†	177.8	0.0003	mg/L	0.00002				5.81%
Tl 190.801†	5.3	0.0028	mg/L	0.00136				48.64%
V 292.402†	-250.7	-0.0037	mg/L	0.00013				3.62%
Zn 206.200†	162.7	0.0048	mg/L	0.00016				3.21%
Ca 227.546†	0.8	0.0046	mg/L	0.00990				215.22%
Sr 421.552†	36.7	0.0006	mg/L	0.00065				117.65%
Al 237.313†	-17.0	-0.0027	mg/L	0.00172				64.70%

00783

Method: DV200-6010C Opt3 Page 77 Date: 10/16/2014 2:02:15 AM

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 113
Sample ID: LCST-220635
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 111
Date Collected: 10/16/2014 1:52:30 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCST-220635

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7000530.9	1.010	mg/L	0.0050				0.49%
Ag 328.068†	1308468.2	5.009	mg/L	0.0108				0.22%
As 188.979†	6270.6	4.629	mg/L	0.0119				0.26%
B 249.772†	763.5	0.0065	mg/L	0.00023				3.55%
Ba 233.527†	464754.2	5.272	mg/L	0.0337				0.64%
Be 313.107†	-2286.4	-0.0007	mg/L	0.00001				0.84%
Cd 226.502†	91418.1	1.016	mg/L	0.0034				0.34%
Co 228.616†	24.8	0.0011	mg/L	0.00008				7.42%
Cr 267.716†	632011.0	5.161	mg/L	0.0342				0.66%
Cu 324.752†	1428.2	0.0053	mg/L	0.00014				2.62%
Fe 259.939†	1195.7	0.0206	mg/L	0.00009				0.41%
K 766.490†	37.1	0.0716	mg/L	0.04238				59.18%
Mg 279.077†	47.8	0.0043	mg/L	0.00072				16.81%
Mn 257.610†	1078.7	0.0030	mg/L	0.00003				0.93%
Mo 202.031†	31.2	0.0018	mg/L	0.00009				4.73%
Ni 231.604†	11.4	0.0003	mg/L	0.00001				4.71%
Na 589.592†	446.7	0.1157	mg/L	0.00855				7.39%
Pb 220.353†	32839.7	5.104	mg/L	0.0276				0.54%
Sb 206.836†	15.7	0.0077	mg/L	0.00071				9.26%
Se 196.026†	870.8	0.9633	mg/L	0.00639				0.66%
Sn 189.927†	61.6	0.0116	mg/L	0.00229				19.72%
Ti 337.279†	408.8	0.0007	mg/L	0.00001				1.87%
Tl 190.801†	3.9	0.0021	mg/L	0.00061				29.29%
V 292.402†	-1560.0	-0.0227	mg/L	0.00004				0.15%
Zn 206.200†	98.4	0.0029	mg/L	0.00032				11.04%
Ca 227.546†	-7.2	-0.0366	mg/L	0.02141				58.50%
Sr 421.552†	10.5	0.0002	mg/L	0.00033				206.09%
Al 237.313†	14.9	0.0024	mg/L	0.00071				30.24%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 114
Sample ID: LCSW-220635
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 112
Date Collected: 10/16/2014 1:58:36 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: LCSW-220635

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7096011.7	1.024	mg/L	0.0012				0.12%
Ag 328.068†	13009.6	0.0501	mg/L	0.00035				0.71%
As 188.979†	52.2	0.0385	mg/L	0.00081				2.09%
B 249.772†	110429.9	0.9469	mg/L	0.01057				1.12%
Ba 233.527†	179072.1	2.031	mg/L	0.0053				0.26%
Be 313.107†	155910.1	0.0508	mg/L	0.00007				0.15%
Cd 226.502†	4421.4	0.0490	mg/L	0.00002				0.04%
Co 228.616†	11622.3	0.5006	mg/L	0.00175				0.35%
Cr 267.716†	25155.9	0.2057	mg/L	0.00053				0.26%
Cu 324.752†	70998.5	0.2658	mg/L	0.00298				1.12%
Fe 259.939†	59945.4	1.031	mg/L	0.0013				0.13%
K 766.490†	9796.3	18.94	mg/L	0.190				1.00%
Mg 279.077†	22299.2	2.002	mg/L	0.0055				0.27%
Mn 257.610†	182519.2	0.5091	mg/L	0.00164				0.32%
Mo 202.031†	8456.2	0.4895	mg/L	0.00264				0.54%
Ni 231.604†	22893.8	0.5104	mg/L	0.00013				0.02%
Na 589.592†	71342.6	18.49	mg/L	0.161				0.87%
Pb 220.353†	3167.8	0.4925	mg/L	0.00008				0.02%

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Method: DV200-6010C Opt3 Page 78 Date: 10/16/2014 2:14:42 AM

Sb 206.836†	972.3	0.4774 mg/L	0.00040		0.08%
Se 196.026†	9.0	0.0102 mg/L	0.00248		24.23%
Sn 189.927†	-19.6	-0.0037 mg/L	0.00143		38.73%
Ti 337.279†	287111.7	0.5043 mg/L	0.00272		0.54%
Tl 190.801†	3494.0	1.849 mg/L	0.0026		0.14%
V 292.402†	32401.0	0.4717 mg/L	0.00231		0.49%
Zn 206.200†	17141.2	0.5082 mg/L	0.00181		0.36%
Ca 227.546†	357.0	1.941 mg/L	0.0204		1.05%
Sr 421.552†	5.1	0.0001 mg/L	0.00053		690.09%
Al 237.313†	12181.5	1.911 mg/L	0.0101		0.53%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 115 **Autosampler Location: 113**
Sample ID: MBLK 12359-01 **Date Collected: 10/16/2014 2:04:40 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: MBLK 12359-01

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6396390.3	0.9226	mg/L	0.00850				0.92%
Ag 328.068†	62.5	0.0002	mg/L	0.00013				51.50%
As 188.979†	9.7	0.0072	mg/L	0.00057				7.93%
B 249.772†	7504.3	0.0645	mg/L	0.00075				1.16%
Ba 233.527†	605.1	0.0069	mg/L	0.00006				0.95%
Be 313.107†	-1149.6	-0.0004	mg/L	0.00002				5.89%
Cd 226.502†	-32.6	-0.0004	mg/L	0.00002				4.76%
Co 228.616†	-3.2	-0.0001	mg/L	0.00003				20.00%
Cr 267.716†	291.9	0.0024	mg/L	0.00008				3.15%
Cu 324.752†	4124.8	0.0154	mg/L	0.00079				5.10%
Fe 259.939†	1661.2	0.0283	mg/L	0.00048				1.69%
K 766.490†	1324.4	2.560	mg/L	0.1187				4.64%
Mg 279.077†	678.9	0.0609	mg/L	0.00291				4.77%
Mn 257.610†	1740.5	0.0049	mg/L	0.00013				2.73%
Mo 202.031†	15.2	0.0009	mg/L	0.00016				18.65%
Ni 231.604†	-15.4	-0.0003	mg/L	0.00003				7.27%
Na 589.592†	6011994.6	1558	mg/L	15.8				1.01%
Pb 220.353†	6.0	0.0009	mg/L	0.00077				83.20%
Sb 206.836†	11.6	0.0057	mg/L	0.00008				1.32%
Se 196.026†	1.0	0.0011	mg/L	0.00356				330.71%
Sn 189.927†	145.0	0.0274	mg/L	0.00644				23.51%
Ti 337.279†	516.5	0.0009	mg/L	0.00003				3.14%
Tl 190.801†	8.6	0.0046	mg/L	0.00086				18.93%
V 292.402†	7.2	0.0001	mg/L	0.00021				203.62%
Zn 206.200†	225.2	0.0067	mg/L	0.00011				1.59%
Ca 227.546†	127.7	0.6739	mg/L	0.00370				0.55%
Sr 421.552†	73.7	0.0011	mg/L	0.00046				40.90%
Al 237.313†	142.9	0.0223	mg/L	0.00061				2.72%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 116 **Autosampler Location: 4**
Sample ID: CCV **Date Collected: 10/16/2014 2:10:56 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6948525.9	1.002	mg/L	0.0049				0.49%
Ag 328.068†	130147.4	0.4997	mg/L	0.00242	0.4997	mg/L	0.00242	0.48%
QC value within limits for Ag 328.068 Recovery = 99.94%								
As 188.979†	1324.0	0.9772	mg/L	0.00591	0.9772	mg/L	0.00591	0.61%
QC value within limits for As 188.979 Recovery = 97.72%								
B 249.772†	291745.0	2.492	mg/L	0.0004	2.492	mg/L	0.0004	0.02%
QC value within limits for B 249.772 Recovery = 99.66%								
Ba 233.527†	898761.8	10.19	mg/L	0.002	10.19	mg/L	0.002	0.02%

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Method: DV200-6010C Opt3 Page 79 Date: 10/16/2014 2:20:43 AM

QC value within limits for Ba 233.527 Recovery = 101.95%

Be 313.107†	782424.8	0.2548 mg/L	0.00007	0.2548 mg/L	0.00007	0.03%

QC value within limits for Be 313.107 Recovery = 101.92%

Cd 226.502†	45397.5	0.5037 mg/L	0.00384	0.5037 mg/L	0.00384	0.76%

QC value within limits for Cd 226.502 Recovery = 100.75%

Co 228.616†	58612.9	2.525 mg/L	0.0170	2.525 mg/L	0.0170	0.67%

QC value within limits for Co 228.616 Recovery = 100.98%

Cr 267.716†	61584.2	0.5057 mg/L	0.00211	0.5057 mg/L	0.00211	0.42%

QC value within limits for Cr 267.716 Recovery = 101.13%

Cu 324.752†	335039.6	1.254 mg/L	0.0050	1.254 mg/L	0.0050	0.40%

QC value within limits for Cu 324.752 Recovery = 100.33%

Fe 259.939†	296608.6	5.091 mg/L	0.0316	5.091 mg/L	0.0316	0.62%

QC value within limits for Fe 259.939 Recovery = 101.82%

K 766.490†	13211.5	25.54 mg/L	0.019	25.54 mg/L	0.019	0.07%

QC value within limits for K 766.490 Recovery = 102.15%

Mg 279.077†	282817.0	25.39 mg/L	0.171	25.39 mg/L	0.171	0.67%

QC value within limits for Mg 279.077 Recovery = 101.56%

Mn 257.610†	272535.7	0.7607 mg/L	0.00501	0.7607 mg/L	0.00501	0.66%

QC value within limits for Mn 257.610 Recovery = 101.42%

Mo 202.031†	42747.9	2.474 mg/L	0.0148	2.474 mg/L	0.0148	0.60%

QC value within limits for Mo 202.031 Recovery = 98.98%

Ni 231.604†	90569.0	2.019 mg/L	0.0109	2.019 mg/L	0.0109	0.54%

QC value within limits for Ni 231.604 Recovery = 100.95%

Na 589.592†	99562.7	25.80 mg/L	0.156	25.80 mg/L	0.156	0.60%

QC value within limits for Na 589.592 Recovery = 103.19%

Pb 220.353†	3202.7	0.4990 mg/L	0.00410	0.4990 mg/L	0.00410	0.82%

QC value within limits for Pb 220.353 Recovery = 99.80%

Sb 206.836†	9745.1	4.786 mg/L	0.0221	4.786 mg/L	0.0221	0.46%

QC value within limits for Sb 206.836 Recovery = 95.71%

Se 196.026†	466.1	0.5168 mg/L	0.00225	0.5168 mg/L	0.00225	0.44%

QC value within limits for Se 196.026 Recovery = 103.37%

Sn 189.927†	27027.5	5.104 mg/L	0.0359	5.104 mg/L	0.0359	0.70%

QC value within limits for Sn 189.927 Recovery = 102.07%

Ti 337.279†	1429580.1	2.511 mg/L	0.0016	2.511 mg/L	0.0016	0.06%

QC value within limits for Ti 337.279 Recovery = 100.45%

Tl 190.801†	1846.1	0.9763 mg/L	0.00368	0.9763 mg/L	0.00368	0.38%

QC value within limits for Tl 190.801 Recovery = 97.63%

V 292.402†	162830.7	2.370 mg/L	0.0090	2.370 mg/L	0.0090	0.38%

QC value within limits for V 292.402 Recovery = 94.82%

Zn 206.200†	33658.8	0.9979 mg/L	0.00689	0.9979 mg/L	0.00689	0.69%

QC value within limits for Zn 206.200 Recovery = 99.79%

Ca 227.546†	4422.2	23.59 mg/L	0.064	23.59 mg/L	0.064	0.27%

QC value within limits for Ca 227.546 Recovery = 94.36%

Sr 421.552†	155470.5	2.351 mg/L	0.0131	2.351 mg/L	0.0131	0.56%

QC value within limits for Sr 421.552 Recovery = 94.05%

Al 237.313†	63111.8	9.890 mg/L	0.0598	9.890 mg/L	0.0598	0.60%

QC value within limits for Al 237.313 Recovery = 98.90%

All analyte(s) passed QC.

Sequence No.: 117
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 10/16/2014 2:17:05 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	7121984.4	1.027	mg/L	0.0043				0.42%
Ag 328.068†	120.2	0.0005	mg/L	0.00004	0.0005	mg/L	0.00004	8.98%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	2.9	0.0021	mg/L	0.00001	0.0021	mg/L	0.00001	0.31%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	3261.6	0.0281	mg/L	0.00259	0.0281	mg/L	0.00259	9.22%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	433.2	0.0049	mg/L	0.00130	0.0049	mg/L	0.00130	26.52%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	438.7	0.0001	mg/L	0.00002	0.0001	mg/L	0.00002	10.78%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	18.1	0.0002	mg/L	0.00005	0.0002	mg/L	0.00005	25.14%

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QC value within limits for Cd 226.502 Recovery = Not calculated

Co 228.616†	29.1	0.0013	mg/L	0.00024	0.0013	mg/L	0.00024 19.19%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	43.3	0.0004	mg/L	0.00007	0.0004	mg/L	0.00007 19.23%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	532.6	0.0020	mg/L	0.00046	0.0020	mg/L	0.00046 22.91%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 259.939†	585.1	0.0101	mg/L	0.00060	0.0101	mg/L	0.00060 5.92%
QC value within limits for Fe 259.939 Recovery = Not calculated							
K 766.490†	219.8	0.4248	mg/L	0.04776	0.4248	mg/L	0.04776 11.24%
QC value within limits for K 766.490 Recovery = Not calculated							
Mg 279.077†	211.5	0.0190	mg/L	0.00378	0.0190	mg/L	0.00378 19.88%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	264.9	0.0007	mg/L	0.00013	0.0007	mg/L	0.00013 17.74%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	18.0	0.0010	mg/L	0.00039	0.0010	mg/L	0.00039 37.76%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni 231.604†	20.0	0.0004	mg/L	0.00027	0.0004	mg/L	0.00027 60.27%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Na 589.592†	2452.9	0.6356	mg/L	0.00797	0.6356	mg/L	0.00797 1.25%
QC value within limits for Na 589.592 Recovery = Not calculated							
Pb 220.353†	6.2	0.0010	mg/L	0.00076	0.0010	mg/L	0.00076 79.68%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	5.5	0.0027	mg/L	0.00100	0.0027	mg/L	0.00100 37.10%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-0.2	-0.0002	mg/L	0.00121	-0.0002	mg/L	0.00121 634.35%
QC value within limits for Se 196.026 Recovery = Not calculated							
Sn 189.927†	567.0	0.1071	mg/L	0.00326	0.1071	mg/L	0.00326 3.04%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 337.279†	775.2	0.0014	mg/L	0.00031	0.0014	mg/L	0.00031 22.41%
QC value within limits for Ti 337.279 Recovery = Not calculated							
Tl 190.801†	4.9	0.0026	mg/L	0.00026	0.0026	mg/L	0.00026 9.98%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 292.402†	65.2	0.0009	mg/L	0.00033	0.0009	mg/L	0.00033 34.78%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 206.200†	-34.0	-0.0010	mg/L	0.00022	-0.0010	mg/L	0.00022 21.53%
QC value within limits for Zn 206.200 Recovery = Not calculated							
Ca 227.546†	-5.5	-0.0282	mg/L	0.00507	-0.0282	mg/L	0.00507 17.96%
QC value within limits for Ca 227.546 Recovery = Not calculated							
Sr 421.552†	118.2	0.0018	mg/L	0.00012	0.0018	mg/L	0.00012 6.79%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Al 237.313†	15.0	0.0024	mg/L	0.00115	0.0024	mg/L	0.00115 48.43%
QC value within limits for Al 237.313 Recovery = Not calculated							

All analyte(s) passed QC.

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Sequence No.: 118 **Autosampler Location: 114**
Sample ID: R1408047-001 **Date Collected: 10/16/2014 2:23:08 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol: 50 mL**

Mean Data: R1408047-001

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6384602.5	0.9209	mg/L	0.00547				0.59%
Ag 328.068†	-85.1	0.0000	mg/L	0.00001				24.55%
As 188.979†	9.4	0.0069	mg/L	0.00004				0.63%
B 249.772†	13414.9	0.1101	mg/L	0.00194				1.76%
Ba 233.527†	16424.9	0.1863	mg/L	0.00168				0.90%
Be 313.107†	-371.0	-0.0001	mg/L	0.00004				34.33%
Cd 226.502†	-14.1	-0.0003	mg/L	0.00012				36.38%
Co 228.616†	544.6	0.0235	mg/L	0.00035				1.48%
Cr 267.716†	786.3	0.0066	mg/L	0.00005				0.70%
Cu 324.752†	13577.8	0.0509	mg/L	0.00118				2.32%
Fe 259.939†	74525.1	1.275	mg/L	0.0103				0.81%
K 766.490†	2155.1	4.166	mg/L	0.0649				1.56%
Mg 279.077†	15355.6	1.379	mg/L	0.0119				0.87%
Mn 257.610†	362442.3	1.011	mg/L	0.0082				0.81%
Mo 202.031†	21.6	0.0013	mg/L	0.00007				5.32%
Ni 231.604†	1051.6	0.0234	mg/L	0.00012				0.50%

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Na 589.592†	5932740.6	1537	mg/L	10.0	0.65%
Pb 220.353†	31.6	0.0050	mg/L	0.00100	19.84%
Sb 206.836†	12.8	0.0062	mg/L	0.00111	17.86%
Se 196.026†	3.6	0.0043	mg/L	0.00144	33.59%
Sn 189.927†	47.1	0.0089	mg/L	0.00721	81.10%
Ti 337.279†	6868.6	0.0121	mg/L	0.00005	0.44%
Tl 190.801†	12.4	0.0063	mg/L	0.00018	2.87%
V 292.402†	14.4	0.0001	mg/L	0.00002	17.28%
Zn 206.200†	1407.1	0.0417	mg/L	0.00033	0.79%
Ca 227.546†	2876.2	15.22	mg/L	0.159	1.05%
Sr 421.552†	7477.8	0.1131	mg/L	0.00079	0.70%
Al 237.313†	3880.4	0.6063	mg/L	0.00629	1.04%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 119
Sample ID: R1408047-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 115
Date Collected: 10/16/2014 2:29:26 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408047-002

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6275262.7	0.9051	mg/L	0.00176				0.19%
Ag 328.068†	-213.2	-0.0001	mg/L	0.00017				307.97%
As 188.979†	10.4	0.0076	mg/L	0.00047				6.15%
B 249.772†	13913.4	0.1087	mg/L	0.00045				0.42%
Ba 233.527†	15398.0	0.1747	mg/L	0.00015				0.08%
Be 313.107†	-545.9	-0.0002	mg/L	0.00003				15.94%
Cd 226.502†	1.1	-0.0003	mg/L	0.00007				21.49%
Co 228.616†	427.5	0.0184	mg/L	0.00017				0.94%
Cr 267.716†	1339.9	0.0112	mg/L	0.00010				0.87%
Cu 324.752†	6131.1	0.0232	mg/L	0.00061				2.62%
Fe 259.939†	153296.8	2.632	mg/L	0.0018				0.07%
K 766.490†	2087.5	4.035	mg/L	0.0183				0.45%
Mg 279.077†	14815.1	1.330	mg/L	0.0003				0.03%
Mn 257.610†	290646.9	0.8108	mg/L	0.00037				0.05%
Mo 202.031†	33.2	0.0019	mg/L	0.00016				8.28%
Ni 231.604†	1577.9	0.0352	mg/L	0.00002				0.05%
Na 589.592†	5969805.9	1547	mg/L	1.6				0.10%
Pb 220.353†	32.3	0.0051	mg/L	0.00002				0.30%
Sb 206.836†	12.3	0.0060	mg/L	0.00062				10.30%
Se 196.026†	1.8	0.0026	mg/L	0.00246				94.85%
Sn 189.927†	83.8	0.0158	mg/L	0.00128				8.08%
Ti 337.279†	9285.2	0.0163	mg/L	0.00118				7.24%
Tl 190.801†	11.5	0.0058	mg/L	0.00014				2.46%
V 292.402†	43.1	0.0004	mg/L	0.00005				10.61%
Zn 206.200†	1096.6	0.0325	mg/L	0.00006				0.19%
Ca 227.546†	2516.2	13.39	mg/L	0.087				0.65%
Sr 421.552†	6311.5	0.0955	mg/L	0.00144				1.50%
Al 237.313†	5085.6	0.7973	mg/L	0.01399				1.76%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 120
Sample ID: R1408047-002D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 116
Date Collected: 10/16/2014 2:35:39 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408047-002D

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6227861.6	0.8983	mg/L	0.00152				0.17%
Ag 328.068†	-197.3	0.0000	mg/L	0.00000				7.75%
As 188.979†	9.2	0.0068	mg/L	0.00064				9.48%
B 249.772†	13493.2	0.1050	mg/L	0.00003				0.03%
Ba 233.527†	15528.5	0.1761	mg/L	0.00013				0.07%
Be 313.107†	-431.8	-0.0001	mg/L	0.00001				5.27%

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Cd 226.502†	-0.0	-0.0004	mg/L	0.00000	1.35%
Co 228.616†	432.1	0.0186	mg/L	0.00006	0.30%
Cr 267.716†	1346.9	0.0113	mg/L	0.00009	0.81%
Cu 324.752†	4303.4	0.0164	mg/L	0.00017	1.06%
Fe 259.939†	154559.6	2.653	mg/L	0.0028	0.10%
K 766.490†	2242.9	4.335	mg/L	0.0926	2.14%
Mg 279.077†	14890.4	1.337	mg/L	0.0056	0.42%
Mn 257.610†	293286.1	0.8182	mg/L	0.00063	0.08%
Mo 202.031†	27.3	0.0016	mg/L	0.00013	7.96%
Ni 231.604†	1610.7	0.0359	mg/L	0.00017	0.47%
Na 589.592†	5892432.3	1527	mg/L	3.0	0.20%
Pb 220.353†	28.9	0.0046	mg/L	0.00091	19.81%
Sb 206.836†	12.1	0.0059	mg/L	0.00031	5.17%
Se 196.026†	0.3	0.0010	mg/L	0.00073	75.77%
Sn 189.927†	63.0	0.0119	mg/L	0.00954	80.28%
Ti 337.279†	8464.4	0.0149	mg/L	0.00168	11.31%
Tl 190.801†	11.6	0.0059	mg/L	0.00131	22.22%
V 292.402†	57.6	0.0006	mg/L	0.00016	25.45%
Zn 206.200†	1098.6	0.0326	mg/L	0.00012	0.36%
Ca 227.546†	2544.5	13.54	mg/L	0.103	0.76%
Sr 421.552†	5915.6	0.0895	mg/L	0.00065	0.73%
Al 237.313†	4997.8	0.7835	mg/L	0.00390	0.50%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 121
Sample ID: R1408047-002S 6X
Analyst:
Initial Sample Wt:
Dilution: ~~5X~~ 10X CE 10/16/14

Autosampler Location: 117
Date Collected: 10/16/2014 2:41:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408047-002S 6X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6658750.7	0.9605	mg/L	0.00176				0.18%
Ag 328.068†	221612.1	0.8485	mg/L	0.00348				0.41%
As 188.979†	1129.7	0.8340	mg/L	0.00517				0.62%
B 249.772†	2602.3	0.0205	mg/L	0.00028				1.37%
Ba 233.527†	81363.0	0.9229	mg/L	0.00127				0.14%
Be 313.107†	-1084.3	-0.0004	mg/L	0.00004				10.75%
Cd 226.502†	15782.7	0.1753	mg/L	0.00015				0.08%
Co 228.616†	74.6	0.0032	mg/L	0.00015				4.65%
Cr 267.716†	105859.3	0.8645	mg/L	0.00044				0.05%
Cu 324.752†	1008.2	0.0038	mg/L	0.00046				11.92%
Fe 259.939†	26230.6	0.4505	mg/L	0.00161				0.36%
K 766.490†	783.9	1.515	mg/L	0.0207				1.36%
Mg 279.077†	2471.0	0.2218	mg/L	0.00194				0.88%
Mn 257.610†	49334.3	0.1376	mg/L	0.00012				0.09%
Mo 202.031†	7.5	0.0004	mg/L	0.00001				2.81%
Ni 231.604†	272.7	0.0061	mg/L	0.00002				0.32%
Na 589.592†	899268.6	233.0	mg/L	0.89				0.38%
Pb 220.353†	5667.1	0.8807	mg/L	0.00013				0.01%
Sb 206.836†	6.1	0.0030	mg/L	0.00090				30.10%
Se 196.026†	159.1	0.1761	mg/L	0.00135				0.76%
Sn 189.927†	80.7	0.0152	mg/L	0.00178				11.67%
Ti 337.279†	1156.3	0.0020	mg/L	0.00010				4.75%
Tl 190.801†	9.3	0.0049	mg/L	0.00059				12.10%
V 292.402†	-258.2	-0.0038	mg/L	0.00009				2.48%
Zn 206.200†	340.4	0.0101	mg/L	0.00027				2.68%
Ca 227.546†	373.8	1.993	mg/L	0.0241				1.21%
Sr 421.552†	947.7	0.0143	mg/L	0.00009				0.66%
Al 237.313†	779.0	0.1222	mg/L	0.00075				0.62%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 122
Sample ID: R1408047-002S
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 118
Date Collected: 10/16/2014 2:48:02 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

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Method: DV200-6010C Opt3 Page 83 Date: 10/16/2014 2:58:10 AM

Mean Data: R1408047-002S

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6291712.1	0.9075	mg/L	0.00862				0.95%
Ag 328.068†	1338202.3	5.123	mg/L	0.0013				0.02%
As 188.979†	6714.2	4.957	mg/L	0.0176				0.35%
B 249.772†	12465.3	0.0965	mg/L	0.00047				0.48%
Ba 233.527†	480346.6	5.449	mg/L	0.0256				0.47%
Be 313.107†	-2594.6	-0.0008	mg/L	0.00002				2.29%
Cd 226.502†	90176.1	1.002	mg/L	0.0059				0.59%
Co 228.616†	446.7	0.0192	mg/L	0.00022				1.14%
Cr 267.716†	610446.3	4.985	mg/L	0.0205				0.41%
Cu 324.752†	3829.9	0.0146	mg/L	0.00029				2.00%
Fe 259.939†	149360.8	2.564	mg/L	0.0145				0.56%
K 766.490†	2010.6	3.886	mg/L	0.0014				0.04%
Mg 279.077†	14438.8	1.296	mg/L	0.0079				0.61%
Mn 257.610†	285298.5	0.7959	mg/L	0.00493				0.62%
Mo 202.031†	49.0	0.0028	mg/L	0.00010				3.40%
Ni 231.604†	1576.1	0.0351	mg/L	0.00031				0.89%
Na 589.592†	5693607.3	1475	mg/L	22.3				1.51%
Pb 220.353†	33231.3	5.164	mg/L	0.0302				0.59%
Sb 206.836†	14.4	0.0070	mg/L	0.00078				11.13%
Se 196.026†	919.9	1.018	mg/L	0.0063				0.62%
Sn 189.927†	128.1	0.0242	mg/L	0.00563				23.28%
Ti 337.279†	7607.5	0.0134	mg/L	0.00248				18.58%
Tl 190.801†	15.7	0.0081	mg/L	0.00216				26.82%
V 292.402†	-1444.7	-0.0212	mg/L	0.00001				0.04%
Zn 206.200†	981.0	0.0291	mg/L	0.00090				3.09%
Ca 227.546†	2505.9	13.34	mg/L	0.031				0.23%
Sr 421.552†	5847.8	0.0884	mg/L	0.00239				2.70%
Al 237.313†	4782.8	0.7497	mg/L	0.01408				1.88%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 123
Sample ID: R1408047-002A 6X
Analyst:
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 119
Date Collected: 10/16/2014 2:54:21 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408047-002A 6X

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6722733.2	0.9697	mg/L	0.00591				0.61%
Ag 328.068†	217677.2	0.8334	mg/L	0.00543				0.65%
As 188.979†	1098.7	0.8112	mg/L	0.00127				0.16%
B 249.772†	2272.9	0.0177	mg/L	0.00013				0.76%
Ba 233.527†	80017.5	0.9076	mg/L	0.00730				0.80%
Be 313.107†	-931.1	-0.0003	mg/L	0.00002				6.46%
Cd 226.502†	15600.0	0.1733	mg/L	0.00159				0.92%
Co 228.616†	70.6	0.0030	mg/L	0.00000				0.14%
Cr 267.716†	104229.4	0.8512	mg/L	0.00659				0.77%
Cu 324.752†	835.1	0.0032	mg/L	0.00004				1.18%
Fe 259.939†	25696.4	0.4413	mg/L	0.00282				0.64%
K 766.490†	677.7	1.310	mg/L	0.0152				1.16%
Mg 279.077†	2391.6	0.2147	mg/L	0.00173				0.81%
Mn 257.610†	48466.5	0.1352	mg/L	0.00111				0.82%
Mo 202.031†	5.7	0.0003	mg/L	0.00007				20.05%
Ni 231.604†	270.1	0.0060	mg/L	0.00030				4.95%
Na 589.592†	875097.3	226.8	mg/L	2.64				1.16%
Pb 220.353†	5525.8	0.8588	mg/L	0.00030				0.04%
Sb 206.836†	7.2	0.0035	mg/L	0.00019				5.47%
Se 196.026†	154.7	0.1712	mg/L	0.00315				1.84%
Sn 189.927†	113.1	0.0214	mg/L	0.00083				3.88%
Ti 337.279†	1421.1	0.0025	mg/L	0.00044				17.67%
Tl 190.801†	2.6	0.0013	mg/L	0.00069				51.90%
V 292.402†	-254.8	-0.0037	mg/L	0.00003				0.81%
Zn 206.200†	372.5	0.0110	mg/L	0.00058				5.24%
Ca 227.546†	365.2	1.947	mg/L	0.0188				0.96%
Sr 421.552†	899.0	0.0136	mg/L	0.00022				1.62%

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Al 237.313†	749.7	0.1176 mg/L	0.00055		0.47%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 124
Sample ID: R1408047-002A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 120
Date Collected: 10/16/2014 3:00:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408047-002A

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6245987.8	0.9009	mg/L	0.00706				0.78%
Ag 328.068†	1342258.0	5.139	mg/L	0.0111				0.22%
As 188.979†	6789.7	5.013	mg/L	0.0500				1.00%
B 249.772†	12484.0	0.0966	mg/L	0.00083				0.86%
Ba 233.527†	479540.8	5.439	mg/L	0.0089				0.16%
Be 313.107†	-2888.7	-0.0009	mg/L	0.00001				0.99%
Cd 226.502†	91225.3	1.013	mg/L	0.0144				1.42%
Co 228.616†	449.7	0.0194	mg/L	0.00018				0.92%
Cr 267.716†	610405.5	4.985	mg/L	0.0049				0.10%
Cu 324.752†	3794.3	0.0145	mg/L	0.00010				0.69%
Fe 259.939†	150978.9	2.592	mg/L	0.0298				1.15%
K 766.490†	1979.3	3.826	mg/L	0.0556				1.45%
Mg 279.077†	14615.3	1.312	mg/L	0.0030				0.23%
Mn 257.610†	288398.9	0.8045	mg/L	0.00956				1.19%
Mo 202.031†	50.4	0.0029	mg/L	0.00020				6.92%
Ni 231.604†	1581.3	0.0353	mg/L	0.00043				1.23%
Na 589.592†	5927700.6	1536	mg/L	24.6				1.60%
Pb 220.353†	33729.1	5.242	mg/L	0.0729				1.39%
Sb 206.836†	15.7	0.0077	mg/L	0.00096				12.56%
Se 196.026†	933.3	1.033	mg/L	0.0089				0.86%
Sn 189.927†	151.6	0.0286	mg/L	0.00700				24.45%
Ti 337.279†	7207.4	0.0127	mg/L	0.00082				6.50%
Tl 190.801†	18.5	0.0096	mg/L	0.00041				4.27%
V 292.402†	-1497.5	-0.0220	mg/L	0.00070				3.18%
Zn 206.200†	1036.0	0.0307	mg/L	0.00133				4.35%
Ca 227.546†	2503.2	13.32	mg/L	0.189				1.42%
Sr 421.552†	6146.5	0.0930	mg/L	0.00164				1.77%
Al 237.313†	4817.1	0.7551	mg/L	0.00366				0.48%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 125
Sample ID: R1408047-002L
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 121
Date Collected: 10/16/2014 3:06:50 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408047-002L

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6781494.9	0.9782	mg/L	0.00880				0.90%
Ag 328.068†	301.4	0.0013	mg/L	0.00022				16.43%
As 188.979†	7.6	0.0056	mg/L	0.00005				0.96%
B 249.772†	2605.5	0.0202	mg/L	0.00034				1.70%
Ba 233.527†	3059.2	0.0347	mg/L	0.00033				0.96%
Be 313.107†	-555.6	-0.0002	mg/L	0.00010				54.58%
Cd 226.502†	4.5	0.0000	mg/L	0.00003				145.84%
Co 228.616†	79.3	0.0034	mg/L	0.00009				2.50%
Cr 267.716†	330.9	0.0028	mg/L	0.00015				5.41%
Cu 324.752†	1139.5	0.0043	mg/L	0.00064				14.78%
Fe 259.939†	31213.3	0.5360	mg/L	0.00048				0.09%
K 766.490†	723.0	1.397	mg/L	0.0605				4.33%
Mg 279.077†	2951.9	0.2650	mg/L	0.00135				0.51%
Mn 257.610†	58724.1	0.1638	mg/L	0.00033				0.20%
Mo 202.031†	1.7	0.0001	mg/L	0.00004				39.96%
Ni 231.604†	323.6	0.0072	mg/L	0.00002				0.27%
Na 589.592†	1055368.6	273.5	mg/L	2.02				0.74%

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Pb 220.353†	10.9	0.0017 mg/L	0.00040		23.22%
Sb 206.836†	3.3	0.0016 mg/L	0.00043		26.94%
Se 196.026†	0.7	0.0009 mg/L	0.00137		148.68%
Sn 189.927†	-31.7	-0.0060 mg/L	0.00484		80.83%
Ti 337.279†	1966.9	0.0035 mg/L	0.00024		6.84%
Tl 190.801†	-0.3	-0.0002 mg/L	0.00018		88.71%
V 292.402†	15.3	0.0002 mg/L	0.00021		117.35%
Zn 206.200†	380.0	0.0113 mg/L	0.00003		0.27%
Ca 227.546†	446.2	2.379 mg/L	0.0285		1.20%
Sr 421.552†	1072.4	0.0162 mg/L	0.00025		1.54%
Al 237.313†	989.5	0.1552 mg/L	0.00186		1.20%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 126
Sample ID: R1408071-001 ICS
Analyst:
Initial Sample Wt: 10/16/14
Dilution: 10X CK 10/16/14 SCS

Autosampler Location: 122
Date Collected: 10/16/2014 3:13:10 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408071-001 ICS

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6777723.8	0.9776	mg/L	0.00941				0.96%
Ag 328.068†	-274.2	0.0010	mg/L	0.00029				29.61%
As 188.979†	4.0	0.0030	mg/L	0.00119				39.82%
B 249.772†	14385.2	0.0941	mg/L	0.00016				0.17%
Ba 233.527†	7526.8	0.0854	mg/L	0.00023				0.27%
Be 313.107†	-534.3	-0.0002	mg/L	0.00002				13.11%
Cd 226.502†	703.9	0.0069	mg/L	0.00012				1.81%
Co 228.616†	270.6	0.0117	mg/L	0.00009				0.76%
Cr 267.716†	-2.7	0.0004	mg/L	0.00008				18.35%
Cu 324.752†	268.4	0.0017	mg/L	0.00016				9.50%
Fe 259.939†	410371.5	7.048	mg/L	0.0421				0.60%
K 766.490†	866.6	1.675	mg/L	0.0283				1.69%
Mg 279.077†	12119.9	1.088	mg/L	0.0071				0.65%
Mn 257.610†	174231.6	0.4868	mg/L	0.00290				0.60%
Mo 202.031†	-2.4	-0.0001	mg/L	0.00025				180.07%
Ni 231.604†	3570.6	0.0796	mg/L	0.00099				1.24%
Na 589.592†	609944.4	158.0	mg/L	1.40				0.88%
Pb 220.353†	45.5	0.0070	mg/L	0.00145				20.75%
Sb 206.836†	13.1	0.0064	mg/L	0.00047				7.34%
Se 196.026†	-0.7	0.0007	mg/L	0.00136				182.55%
Sn 189.927†	-70.1	-0.0132	mg/L	0.01046				79.05%
Ti 337.279†	161.6	0.0003	mg/L	0.00004				15.02%
Tl 190.801†	8.0	0.0038	mg/L	0.00092				24.24%
V 292.402†	43.8	0.0001	mg/L	0.00043				387.97%
Zn 206.200†	852660.6	25.28	mg/L	0.222				0.88%
Ca 227.546†	5569.5	29.71	mg/L	0.088				0.30%
Sr 421.552†	6972.8	0.1055	mg/L	0.00061				0.58%
Al 237.313†	-35.4	-0.0043	mg/L	0.00054				12.64%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 127
Sample ID: R1408071-001 ~~10X~~
Analyst:
Initial Sample Wt: 10/16/14
Dilution: ~~10X~~ CK 10/16/14 SCS

Autosampler Location: 123
Date Collected: 10/16/2014 3:19:27 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408071-001 ~~10X~~

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5996610.7	0.8650	mg/L	0.00348				0.40%
Ag 328.068†	-4863.7	-0.0002	mg/L	0.00023				111.28%
As 188.979†	15.8	0.0116	mg/L	0.00155				13.33%
B 249.772†	143829.0	0.9690	mg/L	0.01757				1.81%
Ba 233.527†	73441.9	0.8330	mg/L	0.00769				0.92%
Be 313.107†	-1966.9	-0.0006	mg/L	0.00002				2.56%
Cd 226.502†	6613.3	0.0649	mg/L	0.00007				0.11%

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Co 228.616†	2682.7	0.1156 mg/L	0.00092	0.79%
Cr 267.716†	-142.1	0.0029 mg/L	0.00009	3.23%
Cu 324.752†	1410.1	0.0118 mg/L	0.00090	7.60%
Fe 259.939†	3709893.8	63.68 mg/L	0.232	0.36%
K 766.490†	6539.5	12.64 mg/L	0.008	0.06%
Mg 279.077†	117180.2	10.52 mg/L	0.068	0.65%
Mn 257.610†	1671794.2	4.671 mg/L	0.0145	0.31%
Mo 202.031†	74.8	0.0043 mg/L	0.00035	8.18%
Ni 231.604†	33979.7	0.7575 mg/L	0.00607	0.80%
Na 589.592†	6614937.5	1714 mg/L	8.7	0.50%
Pb 220.353†	399.8	0.0619 mg/L	0.00024	0.39%
Sb 206.836†	75.6	0.0371 mg/L	0.00207	5.56%
Se 196.026†	-9.7	0.0031 mg/L	0.00247	79.88%
Sn 189.927†	-67.9	-0.0128 mg/L	0.00303	23.65%
Ti 337.279†	1090.4	0.0019 mg/L	0.00012	6.46%
Tl 190.801†	35.2	0.0133 mg/L	0.00275	20.57%
V 292.402†	273.0	-0.0008 mg/L	0.00009	11.63%
Zn 206.200†	6146794.6	182.2 mg/L	1.80	0.99%
Ca 227.546†	65461.9	348.2 mg/L	6.11	1.75%
Sr 421.552†	74382.9	1.125 mg/L	0.0001	0.01%
Al 237.313†	-262.6	-0.0468 mg/L	0.00692	14.78%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 128 **Autosampler Location: 4**
Sample ID: CCV **Date Collected: 10/16/2014 3:25:48 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6925279.5	0.9989	mg/L	0.00004				0.00%
Ag 328.068†	127826.4	0.4908	mg/L	0.00368	0.4908	mg/L	0.00368	0.75%
QC value within limits for Ag 328.068 Recovery = 98.16%								
As 188.979†	1288.8	0.9512	mg/L	0.00032	0.9512	mg/L	0.00032	0.03%
QC value within limits for As 188.979 Recovery = 95.12%								
B 249.772†	284294.5	2.428	mg/L	0.0056	2.428	mg/L	0.0056	0.23%
QC value within limits for B 249.772 Recovery = 97.11%								
Ba 233.527†	902743.6	10.24	mg/L	0.012	10.24	mg/L	0.012	0.12%
QC value within limits for Ba 233.527 Recovery = 102.40%								
Be 313.107†	783727.9	0.2552	mg/L	0.00033	0.2552	mg/L	0.00033	0.13%
QC value within limits for Be 313.107 Recovery = 102.09%								
Cd 226.502†	44481.7	0.4936	mg/L	0.00481	0.4936	mg/L	0.00481	0.98%
QC value within limits for Cd 226.502 Recovery = 98.71%								
Co 228.616†	57701.3	2.485	mg/L	0.0193	2.485	mg/L	0.0193	0.78%
QC value within limits for Co 228.616 Recovery = 99.41%								
Cr 267.716†	60314.3	0.4952	mg/L	0.00410	0.4952	mg/L	0.00410	0.83%
QC value within limits for Cr 267.716 Recovery = 99.05%								
Cu 324.752†	328302.7	1.229	mg/L	0.0054	1.229	mg/L	0.0054	0.44%
QC value within limits for Cu 324.752 Recovery = 98.31%								
Fe 259.939†	292480.0	5.020	mg/L	0.0404	5.020	mg/L	0.0404	0.80%
QC value within limits for Fe 259.939 Recovery = 100.40%								
K 766.490†	13315.9	25.74	mg/L	0.008	25.74	mg/L	0.008	0.03%
QC value within limits for K 766.490 Recovery = 102.95%								
Mg 279.077†	278424.2	25.00	mg/L	0.221	25.00	mg/L	0.221	0.88%
QC value within limits for Mg 279.077 Recovery = 99.98%								
Mn 257.610†	268774.0	0.7502	mg/L	0.00661	0.7502	mg/L	0.00661	0.88%
QC value within limits for Mn 257.610 Recovery = 100.02%								
Mo 202.031†	41807.5	2.420	mg/L	0.0230	2.420	mg/L	0.0230	0.95%
QC value within limits for Mo 202.031 Recovery = 96.80%								
Ni 231.604†	88777.1	1.979	mg/L	0.0186	1.979	mg/L	0.0186	0.94%
QC value within limits for Ni 231.604 Recovery = 98.96%								
Na 589.592†	102831.3	26.65	mg/L	0.086	26.65	mg/L	0.086	0.32%
QC value within limits for Na 589.592 Recovery = 106.58%								
Pb 220.353†	3179.5	0.4954	mg/L	0.00050	0.4954	mg/L	0.00050	0.10%
QC value within limits for Pb 220.353 Recovery = 99.08%								
Sb 206.836†	9496.9	4.664	mg/L	0.0086	4.664	mg/L	0.0086	0.18%
QC value within limits for Sb 206.836 Recovery = 93.27%								
Se 196.026†	462.0	0.5123	mg/L	0.00012	0.5123	mg/L	0.00012	0.02%

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QC value within limits for Se 196.026 Recovery = 102.46%

Sn 189.927†	26882.6	5.076 mg/L	0.0001	5.076 mg/L	0.0001	0.00%

QC value within limits for Sn 189.927 Recovery = 101.52%

Ti 337.279†	1426526.2	2.506 mg/L	0.0026	2.506 mg/L	0.0026	0.10%

QC value within limits for Ti 337.279 Recovery = 100.23%

Tl 190.801†	1817.4	0.9611 mg/L	0.00339	0.9611 mg/L	0.00339	0.35%

QC value within limits for Tl 190.801 Recovery = 96.11%

V 292.402†	157959.0	2.300 mg/L	0.0290	2.300 mg/L	0.0290	1.26%

QC value within limits for V 292.402 Recovery = 91.98%

Zn 206.200†	34641.9	1.027 mg/L	0.0084	1.027 mg/L	0.0084	0.82%

QC value within limits for Zn 206.200 Recovery = 102.70%

Ca 227.546†	4341.4	23.16 mg/L	0.033	23.16 mg/L	0.033	0.14%

QC value within limits for Ca 227.546 Recovery = 92.64%

Sr 421.552†	148962.0	2.253 mg/L	0.0108	2.253 mg/L	0.0108	0.48%

QC value within limits for Sr 421.552 Recovery = 90.12%

Al 237.313†	62050.4	9.724 mg/L	0.0562	9.724 mg/L	0.0562	0.58%

QC value within limits for Al 237.313 Recovery = 97.24%

All analyte(s) passed QC.

Sequence No.: 129 **Autosampler Location: 5**
Sample ID: CCB **Date Collected: 10/16/2014 3:31:56 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6919793.7	0.9981	mg/L	0.00509				0.51%
Ag 328.068†	140.4	0.0005	mg/L	0.00014	0.0005	mg/L	0.00014	25.25%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	1.7	0.0013	mg/L	0.00100	0.0013	mg/L	0.00100	78.85%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	2952.6	0.0254	mg/L	0.00308	0.0254	mg/L	0.00308	12.14%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	422.8	0.0048	mg/L	0.00127	0.0048	mg/L	0.00127	26.46%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-126.0	0.0000	mg/L	0.00001	0.0000	mg/L	0.00001	30.79%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	15.9	0.0002	mg/L	0.00014	0.0002	mg/L	0.00014	80.93%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	19.6	0.0008	mg/L	0.00045	0.0008	mg/L	0.00045	52.77%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	11.6	0.0001	mg/L	0.00002	0.0001	mg/L	0.00002	17.64%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	836.6	0.0031	mg/L	0.00048	0.0031	mg/L	0.00048	15.27%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	716.5	0.0123	mg/L	0.00251	0.0123	mg/L	0.00251	20.32%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	341.1	0.6594	mg/L	0.07995	0.6594	mg/L	0.07995	12.12%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	68.8	0.0062	mg/L	0.00101	0.0062	mg/L	0.00101	16.31%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	373.0	0.0010	mg/L	0.00023	0.0010	mg/L	0.00023	22.55%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	21.6	0.0012	mg/L	0.00052	0.0012	mg/L	0.00052	41.37%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	7.3	0.0002	mg/L	0.00025	0.0002	mg/L	0.00025	150.76%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	5784.5	1.499	mg/L	0.0110	1.499	mg/L	0.0110	0.74%
QC value greater than the upper limit for Na 589.592 Recovery = Not calculated								
Pb 220.353†	9.5	0.0015	mg/L	0.00081	0.0015	mg/L	0.00081	55.27%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	11.3	0.0055	mg/L	0.00018	0.0055	mg/L	0.00018	3.32%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.2	-0.0002	mg/L	0.00427	-0.0002	mg/L	0.00427	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	613.7	0.1159	mg/L	0.00467	0.1159	mg/L	0.00467	4.03%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	737.5	0.0013	mg/L	0.00028	0.0013	mg/L	0.00028	21.61%

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QC value within limits for Ti 337.279 Recovery = Not calculated

Tl 190.801†	5.3	0.0028 mg/L	0.00135	0.0028 mg/L	0.00135	48.26%

QC value within limits for Tl 190.801 Recovery = Not calculated

V 292.402†	65.2	0.0009 mg/L	0.00002	0.0009 mg/L	0.00002	1.67%

QC value within limits for V 292.402 Recovery = Not calculated

Zn 206.200†	509.4	0.0151 mg/L	0.00541	0.0151 mg/L	0.00541	35.79%

0.02UL

QC value greater than the upper limit for Zn 206.200 Recovery = Not calculated

Ca 227.546†	-0.0	0.0005 mg/L	0.01443	0.0005 mg/L	0.01443	>999.9%

QC value within limits for Ca 227.546 Recovery = Not calculated

Sr 421.552†	125.8	0.0019 mg/L	0.00020	0.0019 mg/L	0.00020	10.69%

QC value within limits for Sr 421.552 Recovery = Not calculated

Al 237.313†	20.5	0.0032 mg/L	0.00178	0.0032 mg/L	0.00178	55.16%

QC value within limits for Al 237.313 Recovery = Not calculated

QC Failed. Continue with analysis.

Sequence No.: 130
Sample ID: R1408080-002
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 124
Date Collected: 10/16/2014 3:37:59 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408080-002

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6308553.9	0.9100	mg/L	0.00055				0.06%
Ag 328.068†	-2196.2	0.0013	mg/L	0.00036				28.24%
As 188.979†	22.9	0.0168	mg/L	0.00150				8.90%
B 249.772†	33061.6	0.1429	mg/L	0.00296				2.07%
Ba 233.527†	56644.4	0.6425	mg/L	0.00511				0.79%
Be 313.107†	2681.5	0.0009	mg/L	0.00000				0.13%
Cd 226.502†	424.5	0.0002	mg/L	0.00004				16.13%
Co 228.616†	460.1	0.0198	mg/L	0.00017				0.85%
Cr 267.716†	213.8	0.0041	mg/L	0.00004				1.10%
Cu 324.752†	3283.7	0.0157	mg/L	0.00084				5.32%
Fe 259.939†	1949163.6	33.52	mg/L	0.047				0.14%
K 766.490†	2345.0	4.533	mg/L	0.0562				1.24%
Mg 279.077†	85645.5	7.689	mg/L	0.0556				0.72%
Mn 257.610†	1733938.3	4.840	mg/L	0.0077				0.16%
Mo 202.031†	32.7	0.0019	mg/L	0.00018				9.26%
Ni 231.604†	722.9	0.0161	mg/L	0.00002				0.10%
Na 589.592†	5863384.6	1519	mg/L	0.9				0.06%
Pb 220.353†	261.5	0.0401	mg/L	0.00062				1.55%
Sb 206.836†	14.7	0.0070	mg/L	0.00083				11.86%
Se 196.026†	-0.1	0.0072	mg/L	0.00072				9.97%
Sn 189.927†	24.0	0.0045	mg/L	0.00368				81.19%
Ti 337.279†	35093.4	0.0616	mg/L	0.00336				5.46%
Tl 190.801†	20.7	0.0101	mg/L	0.00351				34.72%
V 292.402†	416.8	0.0036	mg/L	0.00009				2.63%
Zn 206.200†	3543.3	0.1050	mg/L	0.00058				0.55%
Ca 227.546†	8650.6	47.39	mg/L	0.126				0.27%
Sr 421.552†	9705.6	0.1468	mg/L	0.00007				0.05%
Al 237.313†	14791.1	2.345	mg/L	0.0145				0.62%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 131
Sample ID: R1408080-004
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 125
Date Collected: 10/16/2014 3:44:18 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408080-004

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6234537.9	0.8993	mg/L	0.00017				0.02%
Ag 328.068†	117.3	0.0006	mg/L	0.00004				7.34%
As 188.979†	18.2	0.0134	mg/L	0.00045				3.36%
B 249.772†	6679.5	0.0560	mg/L	0.00008				0.15%
Ba 233.527†	72013.0	0.8168	mg/L	0.00014				0.02%

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Be 313.107†	2841.9	0.0009 mg/L	0.00000	0.07%
Cd 226.502†	4.6	0.0000 mg/L	0.00007	>999.9%
Co 228.616†	261.8	0.0113 mg/L	0.00006	0.57%
Cr 267.716†	76.6	0.0014 mg/L	0.00005	3.96%
Cu 324.752†	10616.8	0.0398 mg/L	0.00027	0.68%
Fe 259.939†	21144.7	0.3467 mg/L	0.00076	0.22%
K 766.490†	2320.9	4.486 mg/L	0.1981	4.42%
Mg 279.077†	80996.4	7.272 mg/L	0.0001	0.00%
Mn 257.610†	1609460.2	4.488 mg/L	0.0002	0.00%
Mo 202.031†	19.4	0.0011 mg/L	0.00018	16.23%
Ni 231.604†	510.5	0.0114 mg/L	0.00013	1.13%
Na 589.592†	5884647.8	1525 mg/L	10.4	0.68%
Pb 220.353†	39.1	0.0063 mg/L	0.00032	4.98%
Sb 206.836†	12.0	0.0059 mg/L	0.00042	7.18%
Se 196.026†	1.5	0.0018 mg/L	0.00093	52.13%
Sn 189.927†	2.0	0.0004 mg/L	0.00217	569.92%
Ti 337.279†	4215.1	0.0074 mg/L	0.00140	18.96%
Tl 190.801†	19.0	0.0095 mg/L	0.00201	21.18%
V 292.402†	3.0	0.0000 mg/L	0.00004	260.55%
Zn 206.200†	1133.9	0.0336 mg/L	0.00017	0.51%
Ca 227.546†	6554.8	34.53 mg/L	0.036	0.11%
Sr 421.552†	7509.2	0.1136 mg/L	0.00152	1.34%
Al 237.313†	2807.8	0.4309 mg/L	0.00085	0.20%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 132
Sample ID: R1408080-008
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 126
Date Collected: 10/16/2014 3:50:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408080-008

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6237880.7	0.8998	mg/L	0.00278				0.31%
Ag 328.068†	-37.3	0.0003	mg/L	0.00004				13.79%
As 188.979†	10.7	0.0078	mg/L	0.00202				25.74%
B 249.772†	13296.2	0.1087	mg/L	0.00081				0.74%
Ba 233.527†	35986.8	0.4082	mg/L	0.00330				0.81%
Be 313.107†	891.8	0.0003	mg/L	0.00004				15.01%
Cd 226.502†	19.7	0.0000	mg/L	0.00001				36.54%
Co 228.616†	223.1	0.0096	mg/L	0.00024				2.51%
Cr 267.716†	-13.6	0.0009	mg/L	0.00017				18.24%
Cu 324.752†	4094.8	0.0155	mg/L	0.00051				3.31%
Fe 259.939†	80237.5	1.362	mg/L	0.0121				0.89%
K 766.490†	2618.5	5.061	mg/L	0.0473				0.93%
Mg 279.077†	109858.5	9.863	mg/L	0.0699				0.71%
Mn 257.610†	2565085.5	7.153	mg/L	0.0008				0.01%
Mo 202.031†	16.1	0.0009	mg/L	0.00019				20.65%
Ni 231.604†	185.8	0.0041	mg/L	0.00011				2.70%
Na 589.592†	5998607.1	1554	mg/L	27.6				1.77%
Pb 220.353†	41.0	0.0066	mg/L	0.00086				12.89%
Sb 206.836†	11.3	0.0055	mg/L	0.00101				18.36%
Se 196.026†	2.2	0.0027	mg/L	0.00008				2.77%
Sn 189.927†	14.2	0.0027	mg/L	0.00457				170.83%
Ti 337.279†	8265.1	0.0145	mg/L	0.00079				5.45%
Tl 190.801†	18.5	0.0092	mg/L	0.00003				0.31%
V 292.402†	-25.3	-0.0005	mg/L	0.00003				5.38%
Zn 206.200†	720.0	0.0213	mg/L	0.00029				1.36%
Ca 227.546†	7115.2	37.54	mg/L	0.329				0.88%
Sr 421.552†	8019.4	0.1213	mg/L	0.00010				0.08%
Al 237.313†	3861.1	0.5957	mg/L	0.01256				2.11%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 133
Sample ID: R1408080-010
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 127
Date Collected: 10/16/2014 3:56:49 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

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Method: DV200-6010C Opt3 Page 90 Date: 10/16/2014 4:06:57 AM

Mean Data: R1408080-010

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6298331.6	0.9085	mg/L	0.00361				0.40%
Ag 328.068†	-63.4	-0.0001	mg/L	0.00023				166.36%
As 188.979†	9.5	0.0070	mg/L	0.00405				57.70%
B 249.772†	6419.2	0.0537	mg/L	0.00043				0.79%
Ba 233.527†	36512.1	0.4142	mg/L	0.00256				0.62%
Be 313.107†	1301.5	0.0004	mg/L	0.00003				7.77%
Cd 226.502†	6.6	0.0000	mg/L	0.00003				121.67%
Co 228.616†	-5.4	-0.0002	mg/L	0.00009				40.52%
Cr 267.716†	-31.4	0.0008	mg/L	0.00018				22.97%
Cu 324.752†	4445.7	0.0167	mg/L	0.00055				3.29%
Fe 259.939†	21633.0	0.3616	mg/L	0.00384				1.06%
K 766.490†	3072.9	5.940	mg/L	0.1062				1.79%
Mg 279.077†	116105.0	10.42	mg/L	0.058				0.56%
Mn 257.610†	33030.4	0.0922	mg/L	0.00043				0.46%
Mo 202.031†	17.7	0.0010	mg/L	0.00030				29.59%
Ni 231.604†	407.0	0.0091	mg/L	0.00005				0.59%
Na 589.592†	5946595.4	1541	mg/L	8.5				0.55%
Pb 220.353†	64.7	0.0103	mg/L	0.00041				3.96%
Sb 206.836†	9.3	0.0045	mg/L	0.00118				26.14%
Se 196.026†	1.6	0.0019	mg/L	0.00202				107.14%
Sn 189.927†	25.5	0.0048	mg/L	0.00138				28.58%
Ti 337.279†	8969.4	0.0158	mg/L	0.00109				6.94%
Tl 190.801†	6.3	0.0030	mg/L	0.00127				43.07%
V 292.402†	62.2	0.0009	mg/L	0.00013				14.45%
Zn 206.200†	3124.1	0.0926	mg/L	0.00016				0.17%
Ca 227.546†	3825.0	20.16	mg/L	0.018				0.09%
Sr 421.552†	6862.8	0.1038	mg/L	0.00066				0.64%
Al 237.313†	5402.1	0.8398	mg/L	0.00753				0.90%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 134
Sample ID: R1408080-012
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 128
Date Collected: 10/16/2014 4:03:06 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408080-012

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6394524.5	0.9224	mg/L	0.00792				0.86%
Ag 328.068†	-97.6	-0.0002	mg/L	0.00025				133.51%
As 188.979†	12.7	0.0093	mg/L	0.00024				2.59%
B 249.772†	6903.2	0.0567	mg/L	0.00066				1.16%
Ba 233.527†	39777.9	0.4512	mg/L	0.00028				0.06%
Be 313.107†	1433.4	0.0005	mg/L	0.00002				5.19%
Cd 226.502†	43.3	0.0004	mg/L	0.00003				8.78%
Co 228.616†	-7.5	-0.0003	mg/L	0.00039				121.80%
Cr 267.716†	-21.0	0.0009	mg/L	0.00004				3.97%
Cu 324.752†	3150.9	0.0119	mg/L	0.00029				2.46%
Fe 259.939†	38130.4	0.6396	mg/L	0.00034				0.05%
K 766.490†	3137.2	6.064	mg/L	0.0610				1.01%
Mg 279.077†	117659.5	10.56	mg/L	0.001				0.01%
Mn 257.610†	30204.7	0.0843	mg/L	0.00015				0.18%
Mo 202.031†	27.6	0.0016	mg/L	0.00018				11.53%
Ni 231.604†	367.5	0.0082	mg/L	0.00021				2.55%
Na 589.592†	5988858.4	1552	mg/L	6.7				0.43%
Pb 220.353†	1.8	0.0006	mg/L	0.00084				136.35%
Sb 206.836†	9.8	0.0047	mg/L	0.00136				28.91%
Se 196.026†	1.2	0.0014	mg/L	0.00000				0.24%
Sn 189.927†	27.5	0.0052	mg/L	0.00720				138.52%
Ti 337.279†	14321.4	0.0252	mg/L	0.00004				0.17%
Tl 190.801†	14.2	0.0070	mg/L	0.00012				1.67%
V 292.402†	98.6	0.0014	mg/L	0.00011				7.67%
Zn 206.200†	1498.8	0.0444	mg/L	0.00042				0.95%
Ca 227.546†	6211.7	32.75	mg/L	0.340				1.04%

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Sr 421.552†	7619.4	0.1152 mg/L	0.00140		1.21%
Al 237.313†	7308.2	1.136 mg/L	0.0150		1.32%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 135
Sample ID: R1408080-014
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 129
Date Collected: 10/16/2014 4:09:21 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408080-014

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6309858.1	0.9101	mg/L	0.00339				0.37%
Ag 328.068†	-170.3	-0.0006	mg/L	0.00031				54.55%
As 188.979†	10.7	0.0079	mg/L	0.00058				7.33%
B 249.772†	6677.3	0.0564	mg/L	0.00006				0.10%
Ba 233.527†	63596.0	0.7214	mg/L	0.00115				0.16%
Be 313.107†	1990.2	0.0006	mg/L	0.00001				0.85%
Cd 226.502†	-21.8	-0.0003	mg/L	0.00011				38.51%
Co 228.616†	-12.5	-0.0005	mg/L	0.00011				21.26%
Cr 267.716†	-11.9	0.0020	mg/L	0.00003				1.36%
Cu 324.752†	1783.5	0.0067	mg/L	0.00009				1.33%
Fe 259.939†	15670.4	0.2542	mg/L	0.00089				0.35%
K 766.490†	2250.4	4.350	mg/L	0.0526				1.21%
Mg 279.077†	233191.7	20.94	mg/L	0.050				0.24%
Mn 257.610†	17286.6	0.0482	mg/L	0.00034				0.70%
Mo 202.031†	27.2	0.0016	mg/L	0.00007				4.32%
Ni 231.604†	564.2	0.0126	mg/L	0.00008				0.63%
Na 589.592†	5711657.0	1480	mg/L	8.5				0.57%
Pb 220.353†	3.9	0.0009	mg/L	0.00002				2.25%
Sb 206.836†	12.1	0.0059	mg/L	0.00002				0.38%
Se 196.026†	4.6	0.0052	mg/L	0.00072				13.81%
Sn 189.927†	54.8	0.0104	mg/L	0.00111				10.69%
Ti 337.279†	6488.2	0.0114	mg/L	0.00139				12.17%
Tl 190.801†	9.2	0.0044	mg/L	0.00009				2.04%
V 292.402†	48.8	0.0007	mg/L	0.00001				1.16%
Zn 206.200†	591.6	0.0175	mg/L	0.00006				0.32%
Ca 227.546†	5317.5	28.01	mg/L	0.093				0.33%
Sr 421.552†	9944.9	0.1504	mg/L	0.00001				0.01%
Al 237.313†	3855.7	0.5919	mg/L	0.00197				0.33%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 136
Sample ID: R1408080-016
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 130
Date Collected: 10/16/2014 4:15:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol: 50 mL

Mean Data: R1408080-016

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Y 371.029	6362070.7	0.9177	mg/L	0.00601				0.65%
Ag 328.068†	-77.4	-0.0002	mg/L	0.00008				39.00%
As 188.979†	14.2	0.0105	mg/L	0.00240				22.90%
B 249.772†	8141.1	0.0687	mg/L	0.00045				0.66%
Ba 233.527†	39782.1	0.4512	mg/L	0.00157				0.35%
Be 313.107†	200.7	0.0001	mg/L	0.00000				6.38%
Cd 226.502†	40.6	0.0004	mg/L	0.00011				25.86%
Co 228.616†	25.3	0.0011	mg/L	0.00022				20.49%
Cr 267.716†	-102.6	0.0005	mg/L	0.00005				10.34%
Cu 324.752†	1786.8	0.0067	mg/L	0.00025				3.70%
Fe 259.939†	20098.7	0.3309	mg/L	0.00165				0.50%
K 766.490†	2529.6	4.889	mg/L	0.0467				0.95%
Mg 279.077†	145994.0	13.11	mg/L	0.049				0.37%
Mn 257.610†	696168.7	1.941	mg/L	0.0011				0.06%
Mo 202.031†	19.0	0.0011	mg/L	0.00002				1.68%
Ni 231.604†	470.5	0.0105	mg/L	0.00034				3.25%

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Na 589.592†	5741346.9	1488 mg/L	19.9		1.34%
Pb 220.353†	6.5	0.0013 mg/L	0.00013		9.93%
Sb 206.836†	7.1	0.0034 mg/L	0.00043		12.53%
Se 196.026†	2.6	0.0030 mg/L	0.00204		68.59%
Sn 189.927†	4.5	0.0009 mg/L	0.00604		708.69%
Ti 337.279†	7899.5	0.0139 mg/L	0.00033		2.35%
Tl 190.801†	11.8	0.0058 mg/L	0.00157		27.35%
V 292.402†	45.2	0.0006 mg/L	0.00004		6.71%
Zn 206.200†	1802.3	0.0534 mg/L	0.00053		1.00%
Ca 227.546†	5458.3	28.76 mg/L	0.246		0.85%
Sr 421.552†	11306.5	0.1710 mg/L	0.00033		0.19%
Al 237.313†	4109.8	0.6343 mg/L	0.00508		0.80%

Sample conc. not calculated. Sample Prep. Vol. AND Initial Vol. required OR sample units incorrect.

Sequence No.: 137
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 10/16/2014 4:21:50 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	6900407.5	0.9953	mg/L	0.01141				1.15%
Ag 328.068†	128567.4	0.4936	mg/L	0.00249	0.4936	mg/L	0.00249	0.50%
QC value within limits for Ag 328.068 Recovery = 98.72%								
As 188.979†	1288.4	0.9508	mg/L	0.01209	0.9508	mg/L	0.01209	1.27%
QC value within limits for As 188.979 Recovery = 95.08%								
B 249.772†	285343.2	2.437	mg/L	0.0006	2.437	mg/L	0.0006	0.02%
QC value within limits for B 249.772 Recovery = 97.47%								
Ba 233.527†	911366.8	10.34	mg/L	0.009	10.34	mg/L	0.009	0.09%
QC value within limits for Ba 233.527 Recovery = 103.38%								
Be 313.107†	789000.8	0.2569	mg/L	0.00020	0.2569	mg/L	0.00020	0.08%
QC value within limits for Be 313.107 Recovery = 102.78%								
Cd 226.502†	44469.0	0.4934	mg/L	0.00614	0.4934	mg/L	0.00614	1.24%
QC value within limits for Cd 226.502 Recovery = 98.68%								
Co 228.616†	57885.2	2.493	mg/L	0.0245	2.493	mg/L	0.0245	0.98%
QC value within limits for Co 228.616 Recovery = 99.73%								
Cr 267.716†	60587.2	0.4975	mg/L	0.00493	0.4975	mg/L	0.00493	0.99%
QC value within limits for Cr 267.716 Recovery = 99.50%								
Cu 324.752†	332881.8	1.246	mg/L	0.0008	1.246	mg/L	0.0008	0.07%
QC value within limits for Cu 324.752 Recovery = 99.68%								
Fe 259.939†	294017.8	5.047	mg/L	0.0441	5.047	mg/L	0.0441	0.87%
QC value within limits for Fe 259.939 Recovery = 100.93%								
K 766.490†	13627.1	26.34	mg/L	0.376	26.34	mg/L	0.376	1.43%
QC value within limits for K 766.490 Recovery = 105.36%								
Mg 279.077†	279657.6	25.11	mg/L	0.257	25.11	mg/L	0.257	1.02%
QC value within limits for Mg 279.077 Recovery = 100.43%								
Mn 257.610†	270433.4	0.7548	mg/L	0.00690	0.7548	mg/L	0.00690	0.91%
QC value within limits for Mn 257.610 Recovery = 100.64%								
Mo 202.031†	42012.2	2.432	mg/L	0.0209	2.432	mg/L	0.0209	0.86%
QC value within limits for Mo 202.031 Recovery = 97.27%								
Ni 231.604†	89007.9	1.984	mg/L	0.0184	1.984	mg/L	0.0184	0.93%
QC value within limits for Ni 231.604 Recovery = 99.21%								
Na 589.592†	109772.4	28.44	mg/L	0.373	28.44	mg/L	0.373	1.31%
QC value greater than the upper limit for Na 589.592 Recovery = 113.78%								
Pb 220.353†	3186.6	0.4965	mg/L	0.00621	0.4965	mg/L	0.00621	1.25%
QC value within limits for Pb 220.353 Recovery = 99.30%								
Sb 206.836†	9518.9	4.674	mg/L	0.0547	4.674	mg/L	0.0547	1.17%
QC value within limits for Sb 206.836 Recovery = 93.49%								
Se 196.026†	464.2	0.5148	mg/L	0.00316	0.5148	mg/L	0.00316	0.61%
QC value within limits for Se 196.026 Recovery = 102.95%								
Sn 189.927†	27140.4	5.125	mg/L	0.0624	5.125	mg/L	0.0624	1.22%
QC value within limits for Sn 189.927 Recovery = 102.50%								
Ti 337.279†	1441851.6	2.533	mg/L	0.0038	2.533	mg/L	0.0038	0.15%
QC value within limits for Ti 337.279 Recovery = 101.31%								
Tl 190.801†	1827.0	0.9662	mg/L	0.01325	0.9662	mg/L	0.01325	1.37%
QC value within limits for Tl 190.801 Recovery = 96.62%								
V 292.402†	158185.8	2.303	mg/L	0.0190	2.303	mg/L	0.0190	0.82%
QC value within limits for V 292.402 Recovery = 92.11%								

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Zn 206.200†	33478.4	0.9925 mg/L	0.01107	0.9925 mg/L	0.01107	1.11%
QC value within limits for Zn 206.200 Recovery = 99.25%						
Ca 227.546†	4389.2	23.41 mg/L	0.260	23.41 mg/L	0.260	1.11%
QC value within limits for Ca 227.546 Recovery = 93.66%						
Sr 421.552†	148933.6	2.252 mg/L	0.0286	2.252 mg/L	0.0286	1.27%
QC value within limits for Sr 421.552 Recovery = 90.10%						
Al 237.313†	62619.2	9.813 mg/L	0.0634	9.813 mg/L	0.0634	0.65%
QC value within limits for Al 237.313 Recovery = 98.13%						

QC Failed. Continue with analysis.

Sequence No.: 138
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 10/16/2014 4:27:56 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7067698.2	1.019	mg/L	0.0043				0.42%
Ag 328.068†	96.3	0.0004	mg/L	0.00030	0.0004	mg/L	0.00030	80.40%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	0.9	0.0007	mg/L	0.00003	0.0007	mg/L	0.00003	3.89%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	2205.2	0.0190	mg/L	0.00218	0.0190	mg/L	0.00218	11.48%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	402.9	0.0046	mg/L	0.00087	0.0046	mg/L	0.00087	19.02%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	344.3	0.0001	mg/L	0.00003	0.0001	mg/L	0.00003	29.21%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	17.5	0.0002	mg/L	0.00005	0.0002	mg/L	0.00005	26.62%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	20.9	0.0009	mg/L	0.00031	0.0009	mg/L	0.00031	34.97%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	22.1	0.0002	mg/L	0.00007	0.0002	mg/L	0.00007	36.08%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	235.4	0.0009	mg/L	0.00046	0.0009	mg/L	0.00046	52.48%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	462.2	0.0080	mg/L	0.00042	0.0080	mg/L	0.00042	5.26%
QC value within limits for Fe 259.939 Recovery = Not calculated								
K 766.490†	404.0	0.7809	mg/L	0.01633	0.7809	mg/L	0.01633	2.09%
QC value within limits for K 766.490 Recovery = Not calculated								
Mg 279.077†	186.3	0.0167	mg/L	0.00200	0.0167	mg/L	0.00200	11.97%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	387.8	0.0011	mg/L	0.00009	0.0011	mg/L	0.00009	8.52%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	19.8	0.0011	mg/L	0.00011	0.0011	mg/L	0.00011	9.26%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	11.1	0.0002	mg/L	0.00026	0.0002	mg/L	0.00026	105.28%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	9004.1	2.333	mg/L	0.0012	2.333	mg/L	0.0012	0.05%
QC value greater than the upper limit for Na 589.592 Recovery = Not calculated								
Pb 220.353†	8.5	0.0013	mg/L	0.00129	0.0013	mg/L	0.00129	97.98%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	6.3	0.0031	mg/L	0.00076	0.0031	mg/L	0.00076	24.34%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.4	0.0005	mg/L	0.00074	0.0005	mg/L	0.00074	160.30%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	596.8	0.1127	mg/L	0.00176	0.1127	mg/L	0.00176	1.56%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 337.279†	719.2	0.0013	mg/L	0.00034	0.0013	mg/L	0.00034	26.85%
QC value within limits for Ti 337.279 Recovery = Not calculated								
Tl 190.801†	4.5	0.0024	mg/L	0.00051	0.0024	mg/L	0.00051	21.52%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	64.8	0.0009	mg/L	0.00017	0.0009	mg/L	0.00017	18.08%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	-26.9	-0.0008	mg/L	0.00023	-0.0008	mg/L	0.00023	29.49%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	-4.6	-0.0236	mg/L	0.03819	-0.0236	mg/L	0.03819	161.95%
QC value within limits for Ca 227.546 Recovery = Not calculated								

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Sr 421.552†	102.7	0.0016 mg/L	0.00025	0.0016 mg/L	0.00025	16.25%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 237.313†	20.2	0.0032 mg/L	0.00181	0.0032 mg/L	0.00181	57.15%
QC value within limits for Al 237.313 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 139
Sample ID: MRL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 10/16/2014 4:33:57 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7085375.2	1.022	mg/L	0.0020				0.20%
Ag 328.068†	2650.0	0.0102	mg/L	0.00008	0.0102	mg/L	0.00008	0.82%
QC value within limits for Ag 328.068 Recovery = 101.77%								
As 188.979†	27.9	0.0206	mg/L	0.00056	0.0206	mg/L	0.00056	2.70%
QC value within limits for As 188.979 Recovery = 102.89%								
B 249.772†	24381.5	0.2096	mg/L	0.00095	0.2096	mg/L	0.00095	0.45%
QC value within limits for B 249.772 Recovery = 104.78%								
Ba 233.527†	18882.1	0.2142	mg/L	0.00050	0.2142	mg/L	0.00050	0.23%
QC value within limits for Ba 233.527 Recovery = 107.09%								
Be 313.107†	15951.2	0.0052	mg/L	0.00003	0.0052	mg/L	0.00003	0.58%
QC value within limits for Be 313.107 Recovery = 103.89%								
Cd 226.502†	947.9	0.0105	mg/L	0.00006	0.0105	mg/L	0.00006	0.55%
QC value within limits for Cd 226.502 Recovery = 105.18%								
Co 228.616†	1192.9	0.0514	mg/L	0.00007	0.0514	mg/L	0.00007	0.13%
QC value within limits for Co 228.616 Recovery = 102.76%								
Cr 267.716†	1290.1	0.0106	mg/L	0.00018	0.0106	mg/L	0.00018	1.70%
QC value within limits for Cr 267.716 Recovery = 106.41%								
Cu 324.752†	6545.1	0.0245	mg/L	0.00019	0.0245	mg/L	0.00019	0.77%
QC value within limits for Cu 324.752 Recovery = 98.00%								
Fe 259.939†	6488.0	0.1112	mg/L	0.00123	0.1112	mg/L	0.00123	1.10%
QC value within limits for Fe 259.939 Recovery = 111.17%								
K 766.490†	798.4	1.543	mg/L	0.0883	1.543	mg/L	0.0883	5.72%
QC value greater than the upper limit for K 766.490 Recovery = 154.33%								
Mg 279.077†	11342.6	1.018	mg/L	0.0065	1.018	mg/L	0.0065	0.64%
QC value within limits for Mg 279.077 Recovery = 101.83%								
Mn 257.610†	5875.0	0.0164	mg/L	0.00017	0.0164	mg/L	0.00017	1.06%
QC value within limits for Mn 257.610 Recovery = 109.32%								
Mo 202.031†	435.0	0.0252	mg/L	0.00007	0.0252	mg/L	0.00007	0.29%
QC value within limits for Mo 202.031 Recovery = 100.73%								
Ni 231.604†	1811.3	0.0404	mg/L	0.00024	0.0404	mg/L	0.00024	0.61%
QC value within limits for Ni 231.604 Recovery = 100.95%								
Na 589.592†	10097.2	2.616	mg/L	0.0108	2.616	mg/L	0.0108	0.41%
QC value greater than the upper limit for Na 589.592 Recovery = 261.64%								
Pb 220.353†	69.8	0.0109	mg/L	0.00057	0.0109	mg/L	0.00057	5.19%
QC value within limits for Pb 220.353 Recovery = 108.83%								
Sb 206.836†	122.6	0.0602	mg/L	0.00053	0.0602	mg/L	0.00053	0.88%
QC value within limits for Sb 206.836 Recovery = 100.36%								
Se 196.026†	7.9	0.0088	mg/L	0.00074	0.0088	mg/L	0.00074	8.48%
QC value within limits for Se 196.026 Recovery = 87.75%								
Sn 189.927†	2866.2	0.5412	mg/L	0.00351	0.5412	mg/L	0.00351	0.65%
QC value within limits for Sn 189.927 Recovery = 108.24%								
Ti 337.279†	29901.1	0.0525	mg/L	0.00006	0.0525	mg/L	0.00006	0.11%
QC value within limits for Ti 337.279 Recovery = 105.05%								
Tl 190.801†	40.8	0.0216	mg/L	0.00050	0.0216	mg/L	0.00050	2.32%
QC value within limits for Tl 190.801 Recovery = 107.90%								
V 292.402†	3279.5	0.0477	mg/L	0.00007	0.0477	mg/L	0.00007	0.15%
QC value within limits for V 292.402 Recovery = 95.49%								
Zn 206.200†	649.4	0.0193	mg/L	0.00029	0.0193	mg/L	0.00029	1.51%
QC value within limits for Zn 206.200 Recovery = 96.26%								
Ca 227.546†	153.9	0.8172	mg/L	0.01045	0.8172	mg/L	0.01045	1.28%
QC value within limits for Ca 227.546 Recovery = 81.72%								
Sr 421.552†	5913.9	0.0894	mg/L	0.00043	0.0894	mg/L	0.00043	0.48%
QC value within limits for Sr 421.552 Recovery = 89.44%								
Al 237.313†	1232.2	0.1929	mg/L	0.00066	0.1929	mg/L	0.00066	0.34%
QC value within limits for Al 237.313 Recovery = 96.43%								

Method: DV200-6010C Opt3 Page 95 Date: 10/16/2014 4:49:44 AM

QC Failed. Continue with analysis.

Sequence No.: 140
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 10/16/2014 4:39:55 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	6575345.5	0.9484	mg/L	0.00826				0.87%
Ag 328.068†	-7267.5	-0.0013	mg/L	0.00049	-0.0013	mg/L	0.00049	37.06%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	15.0	0.0020	mg/L	0.00289	0.0020	mg/L	0.00289	143.60%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	40719.8	-0.0376	mg/L	0.00171	-0.0376	mg/L	0.00171	4.53%
Ba 233.527†	284.4	0.0032	mg/L	0.00001	0.0032	mg/L	0.00001	0.35%
Be 313.107†	-1279.5	-0.0004	mg/L	0.00005	-0.0004	mg/L	0.00005	11.06%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	1054.8	0.0003	mg/L	0.00013	0.0003	mg/L	0.00013	45.92%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	4.5	0.0002	mg/L	0.00026	0.0002	mg/L	0.00026	132.84%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-3825.1	-0.0005	mg/L	0.00016	-0.0005	mg/L	0.00016	34.35%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	-2219.1	0.0011	mg/L	0.00011	0.0011	mg/L	0.00011	9.69%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 259.939†	5336566.8	91.70	mg/L	0.673	91.70	mg/L	0.673	0.73%
QC value within limits for Fe 259.939 Recovery = 91.70%								
K 766.490†	426.5	0.8245	mg/L	0.02522	0.8245	mg/L	0.02522	3.06%
Mg 279.077†	2960009.0	265.7	mg/L	2.03	265.7	mg/L	2.03	0.76%
QC value within limits for Mg 279.077 Recovery = 106.30%								
Mn 257.610†	-5578.5	-0.0024	mg/L	0.00007	-0.0024	mg/L	0.00007	2.77%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	8.4	0.0005	mg/L	0.00021	0.0005	mg/L	0.00021	42.90%
Ni 231.604†	-148.7	-0.0033	mg/L	0.00005	-0.0033	mg/L	0.00005	1.65%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Na 589.592†	7978.3	2.067	mg/L	0.0174	2.067	mg/L	0.0174	0.84%
Pb 220.353†	-175.7	0.0039	mg/L	0.00055	0.0039	mg/L	0.00055	14.26%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	49.3	0.0014	mg/L	0.00082	0.0014	mg/L	0.00082	57.21%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-24.2	-0.0032	mg/L	0.00028	-0.0032	mg/L	0.00028	8.90%
QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.927†	-154.1	-0.0291	mg/L	0.00279	-0.0291	mg/L	0.00279	9.58%
Ti 337.279†	430.0	0.0008	mg/L	0.00010	0.0008	mg/L	0.00010	12.73%
Tl 190.801†	36.5	0.0008	mg/L	0.00131	0.0008	mg/L	0.00131	173.11%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	486.3	0.0002	mg/L	0.00070	0.0002	mg/L	0.00070	323.50%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	156.3	0.0046	mg/L	0.00029	0.0046	mg/L	0.00029	6.18%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Ca 227.546†	46502.0	250.6	mg/L	4.02	250.6	mg/L	4.02	1.60%
QC value within limits for Ca 227.546 Recovery = 100.23%								
Sr 421.552†	243.1	0.0037	mg/L	0.00004	0.0037	mg/L	0.00004	1.09%
Al 237.313†	1645748.1	258.1	mg/L	2.25	258.1	mg/L	2.25	0.87%
QC value within limits for Al 237.313 Recovery = 103.23%								

All analyte(s) passed QC.

Sequence No.: 141
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 10/16/2014 4:46:01 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD

Method: DV200-6010C Opt3 Page 96 Date: 10/16/2014 4:55:49 AM

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	6651450.9	0.9594	mg/L	0.00364				0.38%
Ag 328.068†	46048.6	0.2028	mg/L	0.00183	0.2028	mg/L	0.00183	0.90%
QC value within limits for Ag 328.068 Recovery = 101.40%								
As 188.979†	145.0	0.0980	mg/L	0.00024	0.0980	mg/L	0.00024	0.25%
QC value within limits for As 188.979 Recovery = 97.97%								
B 249.772†	40245.0	-0.0423	mg/L	0.00401	-0.0423	mg/L	0.00401	9.50%
Ba 233.527†	47431.5	0.5380	mg/L	0.00672	0.5380	mg/L	0.00672	1.25%
QC value within limits for Ba 233.527 Recovery = 107.60%								
Be 313.107†	1577137.3	0.5136	mg/L	0.00208	0.5136	mg/L	0.00208	0.41%
QC value within limits for Be 313.107 Recovery = 102.72%								
Cd 226.502†	89670.0	0.9848	mg/L	0.01304	0.9848	mg/L	0.01304	1.32%
QC value within limits for Cd 226.502 Recovery = 98.48%								
Co 228.616†	11260.5	0.4850	mg/L	0.00271	0.4850	mg/L	0.00271	0.56%
QC value within limits for Co 228.616 Recovery = 97.00%								
Cr 267.716†	58649.0	0.5097	mg/L	0.00593	0.5097	mg/L	0.00593	1.16%
QC value within limits for Cr 267.716 Recovery = 101.94%								
Cu 324.752†	139882.1	0.5329	mg/L	0.00810	0.5329	mg/L	0.00810	1.52%
QC value within limits for Cu 324.752 Recovery = 106.57%								
Fe 259.939†	5343886.6	91.83	mg/L	0.151	91.83	mg/L	0.151	0.16%
QC value within limits for Fe 259.939 Recovery = 91.83%								
K 766.490†	354.1	0.6845	mg/L	0.02305	0.6845	mg/L	0.02305	3.37%
Mg 279.077†	2960724.8	265.8	mg/L	0.62	265.8	mg/L	0.62	0.23%
QC value within limits for Mg 279.077 Recovery = 106.32%								
Mn 257.610†	180633.5	0.5168	mg/L	0.00652	0.5168	mg/L	0.00652	1.26%
QC value within limits for Mn 257.610 Recovery = 103.37%								
Mo 202.031†	2.3	0.0001	mg/L	0.00010	0.0001	mg/L	0.00010	72.48%
Ni 231.604†	42886.5	0.9561	mg/L	0.00486	0.9561	mg/L	0.00486	0.51%
QC value within limits for Ni 231.604 Recovery = 95.61%								
Na 589.592†	6556.4	1.699	mg/L	0.0129	1.699	mg/L	0.0129	0.76%
Pb 220.353†	169.2	0.0575	mg/L	0.00035	0.0575	mg/L	0.00035	0.60%
QC value within limits for Pb 220.353 Recovery = 115.01%								
Sb 206.836†	1251.3	0.5918	mg/L	0.00491	0.5918	mg/L	0.00491	0.83%
QC value within limits for Sb 206.836 Recovery = 98.63%								
Se 196.026†	26.0	0.0524	mg/L	0.00094	0.0524	mg/L	0.00094	1.80%
QC value within limits for Se 196.026 Recovery = 104.74%								
Sn 189.927†	-145.8	-0.0275	mg/L	0.00166	-0.0275	mg/L	0.00166	6.04%
Ti 337.279†	346.4	0.0006	mg/L	0.00001	0.0006	mg/L	0.00001	1.48%
Tl 190.801†	237.6	0.1072	mg/L	0.00191	0.1072	mg/L	0.00191	1.78%
QC value within limits for Tl 190.801 Recovery = 107.20%								
V 292.402†	31831.4	0.4566	mg/L	0.00323	0.4566	mg/L	0.00323	0.71%
QC value within limits for V 292.402 Recovery = 91.32%								
Zn 206.200†	32786.3	0.9720	mg/L	0.00520	0.9720	mg/L	0.00520	0.53%
QC value within limits for Zn 206.200 Recovery = 97.20%								
Ca 227.546†	46523.7	250.7	mg/L	3.27	250.7	mg/L	3.27	1.31%
QC value within limits for Ca 227.546 Recovery = 100.28%								
Sr 421.552†	262.9	0.0040	mg/L	0.00019	0.0040	mg/L	0.00019	4.71%
Al 237.313†	1646763.0	258.2	mg/L	0.36	258.2	mg/L	0.36	0.14%
QC value within limits for Al 237.313 Recovery = 103.29%								
All analyte(s) passed QC.								

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Sequence No.: 142 **Autosampler Location: 4**
Sample ID: CCV **Date Collected: 10/16/2014 4:52:06 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	7012347.4	1.011	mg/L	0.0042				0.42%
Ag 328.068†	128342.8	0.4928	mg/L	0.00705	0.4928	mg/L	0.00705	1.43%
QC value within limits for Ag 328.068 Recovery = 98.56%								
As 188.979†	1293.4	0.9545	mg/L	0.00551	0.9545	mg/L	0.00551	0.58%
QC value within limits for As 188.979 Recovery = 95.45%								
B 249.772†	286371.8	2.445	mg/L	0.0232	2.445	mg/L	0.0232	0.95%
QC value within limits for B 249.772 Recovery = 97.81%								
Ba 233.527†	907018.2	10.29	mg/L	0.023	10.29	mg/L	0.023	0.22%
QC value within limits for Ba 233.527 Recovery = 102.88%								
Be 313.107†	787221.5	0.2564	mg/L	0.00047	0.2564	mg/L	0.00047	0.18%

QC value within limits for Be 313.107 Recovery = 102.55%

Cd 226.502†	45555.8	0.5055 mg/L	0.00721	0.5055 mg/L	0.00721	1.43%
QC value within limits for Cd 226.502 Recovery = 101.10%						
Co 228.616†	58615.8	2.525 mg/L	0.0358	2.525 mg/L	0.0358	1.42%
QC value within limits for Co 228.616 Recovery = 100.99%						
Cr 267.716†	61433.1	0.5044 mg/L	0.00804	0.5044 mg/L	0.00804	1.59%
QC value within limits for Cr 267.716 Recovery = 100.89%						
Cu 324.752†	328521.2	1.230 mg/L	0.0172	1.230 mg/L	0.0172	1.40%
QC value within limits for Cu 324.752 Recovery = 98.38%						
Fe 259.939†	297596.9	5.108 mg/L	0.0703	5.108 mg/L	0.0703	1.38%
QC value within limits for Fe 259.939 Recovery = 102.17%						
K 766.490†	13126.5	25.37 mg/L	0.152	25.37 mg/L	0.152	0.60%
QC value within limits for K 766.490 Recovery = 101.49%						
Mg 279.077†	283604.6	25.46 mg/L	0.339	25.46 mg/L	0.339	1.33%
QC value within limits for Mg 279.077 Recovery = 101.84%						
Mn 257.610†	272638.4	0.7610 mg/L	0.01078	0.7610 mg/L	0.01078	1.42%
QC value within limits for Mn 257.610 Recovery = 101.46%						
Mo 202.031†	42418.1	2.455 mg/L	0.0364	2.455 mg/L	0.0364	1.48%
QC value within limits for Mo 202.031 Recovery = 98.21%						
Ni 231.604†	90501.5	2.018 mg/L	0.0289	2.018 mg/L	0.0289	1.43%
QC value within limits for Ni 231.604 Recovery = 100.88%						
Na 589.592†	97077.8	25.15 mg/L	0.104	25.15 mg/L	0.104	0.41%
QC value within limits for Na 589.592 Recovery = 100.62%						
Pb 220.353†	3194.1	0.4977 mg/L	0.00396	0.4977 mg/L	0.00396	0.79%
QC value within limits for Pb 220.353 Recovery = 99.54%						
Sb 206.836†	9489.0	4.660 mg/L	0.0328	4.660 mg/L	0.0328	0.70%
QC value within limits for Sb 206.836 Recovery = 93.20%						
Se 196.026†	462.8	0.5132 mg/L	0.00558	0.5132 mg/L	0.00558	1.09%
QC value within limits for Se 196.026 Recovery = 102.63%						
Sn 189.927†	26826.8	5.066 mg/L	0.0350	5.066 mg/L	0.0350	0.69%
QC value within limits for Sn 189.927 Recovery = 101.31%						
Ti 337.279†	1427007.4	2.507 mg/L	0.0025	2.507 mg/L	0.0025	0.10%
QC value within limits for Ti 337.279 Recovery = 100.26%						
Tl 190.801†	1830.9	0.9683 mg/L	0.00683	0.9683 mg/L	0.00683	0.71%
QC value within limits for Tl 190.801 Recovery = 96.83%						
V 292.402†	159623.5	2.324 mg/L	0.0370	2.324 mg/L	0.0370	1.59%
QC value within limits for V 292.402 Recovery = 92.95%						
Zn 206.200†	33943.3	1.006 mg/L	0.0087	1.006 mg/L	0.0087	0.87%
QC value within limits for Zn 206.200 Recovery = 100.63%						
Ca 227.546†	4325.5	23.08 mg/L	0.079	23.08 mg/L	0.079	0.34%
QC value within limits for Ca 227.546 Recovery = 92.33%						
Sr 421.552†	150856.0	2.282 mg/L	0.0113	2.282 mg/L	0.0113	0.50%
QC value within limits for Sr 421.552 Recovery = 91.26%						
Al 237.313†	62898.9	9.857 mg/L	0.1731	9.857 mg/L	0.1731	1.76%
QC value within limits for Al 237.313 Recovery = 98.57%						

All analyte(s) passed QC.

Sequence No.: 143
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 10/16/2014 4:58:12 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7133416.1	1.029	mg/L	0.0098				0.95%
Ag 328.068†	72.6	0.0003	mg/L	0.00034	0.0003	mg/L	0.00034	118.82%
QC value within limits for Ag 328.068 Recovery = Not calculated								
As 188.979†	2.7	0.0020	mg/L	0.00226	0.0020	mg/L	0.00226	115.25%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.772†	2791.4	0.0239	mg/L	0.00269	0.0239	mg/L	0.00269	11.24%
QC value within limits for B 249.772 Recovery = Not calculated								
Ba 233.527†	334.2	0.0038	mg/L	0.00041	0.0038	mg/L	0.00041	10.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	478.4	0.0002	mg/L	0.00001	0.0002	mg/L	0.00001	3.45%
QC value within limits for Be 313.107 Recovery = Not calculated								
Cd 226.502†	27.4	0.0003	mg/L	0.00001	0.0003	mg/L	0.00001	4.37%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	15.1	0.0007	mg/L	0.00013	0.0007	mg/L	0.00013	19.48%

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	QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	20.3	0.0002 mg/L	0.00016	0.0002 mg/L	0.00016	91.67%	
	QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	441.6	0.0017 mg/L	0.00049	0.0017 mg/L	0.00049	29.75%	
	QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 259.939†	1815.0	0.0312 mg/L	0.00820	0.0312 mg/L	0.00820	26.26%	
	QC value within limits for Fe 259.939 Recovery = Not calculated						
K 766.490†	221.0	0.4271 mg/L	0.01091	0.4271 mg/L	0.01091	2.55%	
	QC value within limits for K 766.490 Recovery = Not calculated						
Mg 279.077†	644.1	0.0578 mg/L	0.01696	0.0578 mg/L	0.01696	29.32%	
	QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	286.5	0.0008 mg/L	0.00002	0.0008 mg/L	0.00002	1.94%	
	QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	17.4	0.0010 mg/L	0.00033	0.0010 mg/L	0.00033	32.80%	
	QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	7.7	0.0002 mg/L	0.00006	0.0002 mg/L	0.00006	35.38%	
	QC value within limits for Ni 231.604 Recovery = Not calculated						
Na 589.592†	3652.0	0.9463 mg/L	0.00543	0.9463 mg/L	0.00543	0.57%	
	QC value within limits for Na 589.592 Recovery = Not calculated						
Pb 220.353†	8.1	0.0013 mg/L	0.00038	0.0013 mg/L	0.00038	30.00%	
	QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	8.0	0.0039 mg/L	0.00040	0.0039 mg/L	0.00040	10.21%	
	QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.3	-0.0003 mg/L	0.00202	-0.0003 mg/L	0.00202	709.35%	
	QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.927†	613.4	0.1158 mg/L	0.00869	0.1158 mg/L	0.00869	7.50%	
	QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 337.279†	568.2	0.0010 mg/L	0.00016	0.0010 mg/L	0.00016	15.70%	
	QC value within limits for Ti 337.279 Recovery = Not calculated						
Tl 190.801†	5.7	0.0030 mg/L	0.00079	0.0030 mg/L	0.00079	26.37%	
	QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	54.1	0.0008 mg/L	0.00021	0.0008 mg/L	0.00021	26.38%	
	QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	-25.4	-0.0008 mg/L	0.00007	-0.0008 mg/L	0.00007	8.83%	
	QC value within limits for Zn 206.200 Recovery = Not calculated						
Ca 227.546†	4.2	0.0242 mg/L	0.01676	0.0242 mg/L	0.01676	69.31%	
	QC value within limits for Ca 227.546 Recovery = Not calculated						
Sr 421.552†	73.7	0.0011 mg/L	0.00013	0.0011 mg/L	0.00013	11.87%	
	QC value within limits for Sr 421.552 Recovery = Not calculated						
Al 237.313†	330.2	0.0518 mg/L	0.01946	0.0518 mg/L	0.01946	37.57%	
	QC value greater than the upper limit for Al 237.313 Recovery = Not calculated						
QC Failed. Continue with analysis.							

0.1000U

Sequence No.: 144 **Autosampler Location: 131**
Sample ID: Sample131 **Date Collected: 10/16/2014 5:04:16 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: Sample131

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	7073549.3	1.020	mg/L	0.0045				0.45%
Ag 328.068†	84.0	0.0003	mg/L	0.00023	0.0003	mg/L	0.00023	69.21%
As 188.979†	-1.6	-0.0012	mg/L	0.00190	-0.0012	mg/L	0.00190	161.31%
B 249.772†	1709.2	0.0146	mg/L	0.00087	0.0146	mg/L	0.00087	5.99%
Ba 233.527†	226.4	0.0026	mg/L	0.00003	0.0026	mg/L	0.00003	1.03%
Be 313.107†	-76.2	0.0000	mg/L	0.00002	0.0000	mg/L	0.00002	68.06%
Cd 226.502†	-16.1	-0.0002	mg/L	0.00005	-0.0002	mg/L	0.00005	26.19%
Co 228.616†	-7.3	-0.0003	mg/L	0.00043	-0.0003	mg/L	0.00043	136.22%
Cr 267.716†	47.1	0.0004	mg/L	0.00001	0.0004	mg/L	0.00001	2.83%
Cu 324.752†	372.0	0.0014	mg/L	0.00042	0.0014	mg/L	0.00042	30.16%
Fe 259.939†	2005.9	0.0340	mg/L	0.00091	0.0340	mg/L	0.00091	2.67%
K 766.490†	230.8	0.4462	mg/L	0.09786	0.4462	mg/L	0.09786	21.93%
Mg 279.077†	3162.3	0.2839	mg/L	0.02282	0.2839	mg/L	0.02282	8.04%
Mn 257.610†	1246.5	0.0035	mg/L	0.00010	0.0035	mg/L	0.00010	2.75%
Mo 202.031†	4.3	0.0002	mg/L	0.00002	0.0002	mg/L	0.00002	8.76%
Ni 231.604†	2.5	0.0001	mg/L	0.00011	0.0001	mg/L	0.00011	205.79%
Na 589.592†	7588.8	1.966	mg/L	0.0300	1.966	mg/L	0.0300	1.53%
Pb 220.353†	7.0	0.0011	mg/L	0.00058	0.0011	mg/L	0.00058	52.99%

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Sb 206.836†	9.0	0.0044 mg/L	0.00091	0.0044 mg/L	0.00091	20.56%
Se 196.026†	1.0	0.0011 mg/L	0.00135	0.0011 mg/L	0.00135	121.67%
Sn 189.927†	48.6	0.0092 mg/L	0.00228	0.0092 mg/L	0.00228	24.86%
Ti 337.279†	467.5	0.0008 mg/L	0.00007	0.0008 mg/L	0.00007	8.72%
Tl 190.801†	-0.8	-0.0005 mg/L	0.00047	-0.0005 mg/L	0.00047	102.56%
V 292.402†	18.6	0.0003 mg/L	0.00001	0.0003 mg/L	0.00001	5.13%
Zn 206.200†	133.0	0.0039 mg/L	0.00017	0.0039 mg/L	0.00017	4.35%
Ca 227.546†	190.9	1.007 mg/L	0.0046	1.007 mg/L	0.0046	0.46%
Sr 421.552†	327.9	0.0050 mg/L	0.00022	0.0050 mg/L	0.00022	4.35%
Al 237.313†	123.7	0.0191 mg/L	0.00128	0.0191 mg/L	0.00128	6.69%

Metals Cover Page

Analyst: CSW | David C Bond Date: 10/10/14 Instrument: ICPMS 2

Data File: Oct-10c Reviewed By: CSW Entered By: CSW

Approval: TC 10/10/14 (CLS for TC 10/27/14)

Starlims Run #	Analytes Used	Batch ID	Method	Failed Analytes	Repeats
415674	Hg	220311	7470		
415675	Hg	220312	7470 Hg TLP		

Package Data:

Client Sub#	TIER	Analytes Used	Batch ID	Raw Data Copied?
R7825	III / IV / ILM	Hg	220311	Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No
	III / IV / ILM			Yes / No

Method: Hg 7470-7471 Page 1 Date: 10/10/2014 10:41:27 AM

OCB
C7

Analysis Begun

Logged In Analyst: ALRCE Metals01 Technique: AA FIMS-MHS
Spectrometer: FIMS-100, S/N B050-9550 Autosampler: S10

Sample Information File: C:\Users\Public\PerkinElmer\AA\Data\Sample Information\Routine3.sif
Batch ID:
Results Data Set: OCT-10W
Results Library: C:\Users\Public\PerkinElmer\AA\Data\Results\OCT14.mdb

10/10/14

Method Loaded
Method Name: Hg 7470-7471 Method Last Saved: 7/31/2013 1:59:02 PM
Method Description: Hg 7470/7471

Sequence No.: 1 Autosampler Location:
Sample ID: Manual FIAS Cycle Date Collected: 10/10/2014 10:34:22 AM
Analyst: Data Type: Original
User canceled analysis.

Analysis Begun

Logged In Analyst: ALRCE Metals01 Technique: AA FIMS-MHS
Spectrometer: FIMS-100, S/N B050-9550 Autosampler: S10

Sample Information File: C:\Users\Public\PerkinElmer\AA\Data\Sample Information\Routine3.sif
Batch ID:
Results Data Set: OCT-10W
Results Library: C:\Users\Public\PerkinElmer\AA\Data\Results\OCT14.mdb

Sequence No.: 1 Autosampler Location: 1
Sample ID: Calib Blank Date Collected: 10/10/2014 10:37:20 AM
Analyst: Data Type: Original

Replicate Data: Calib Blank Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0000	-0.0007	0.0000	10:38:10 AM	Yes
2		[0.00]	0.0000	-0.0013	0.0000	10:38:39 AM	Yes
Mean:		[0.00]	0.0000				
SD:		0.0000	0.0000				
%RSD:		0.00%	121.23				

Auto-zero performed.

Sequence No.: 2 Autosampler Location: 2
Sample ID: 0.2ppb std Date Collected: 10/10/2014 10:38:57 AM
Analyst: Data Type: Original

Replicate Data: 0.2ppb std Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0014	0.0045	0.0014	10:39:47 AM	Yes
2		[0.2]	0.0013	0.0040	0.0014	10:40:16 AM	Yes
Mean:		[0.2]	0.0014				
SD:		0.000	0.0000				
%RSD:		0.00%	1.98				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00681 Intercept: 0.00000

Sequence No.: 3 Autosampler Location: 3
Sample ID: 0.5ppb std Date Collected: 10/10/2014 10:40:35 AM
Analyst: Data Type: Original

00808

Replicate Data: 0.5ppb std — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0038	0.0140	0.0038	10:41:25 AM	Yes
2		[0.5]	0.0038	0.0140	0.0038	10:41:56 AM	Yes
Mean:		[0.5]	0.0038				
SD:		0.000	0.0000				
%RSD:		0.00%	0.40				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.995360 Slope: 0.00753 Intercept: 0.00000

Sequence No.: 4 — Autosampler Location: 4
Sample ID: 1.0ppb std — Date Collected: 10/10/2014 10:42:15 AM
Analyst: — Data Type: Original

Replicate Data: 1.0ppb std — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[1.0]	0.0072	0.0266	0.0072	10:43:05 AM	Yes
2		[1.0]	0.0071	0.0269	0.0071	10:43:34 AM	Yes
Mean:		[1.0]	0.0072				
SD:		0.000	0.0000				
%RSD:		0.00%	0.53				

Standard number 3 applied. [1.0]
Correlation Coef.: 0.998437 Slope: 0.00724 Intercept: 0.00000

Sequence No.: 5 — Autosampler Location: 5
Sample ID: 2.0ppb std — Date Collected: 10/10/2014 10:43:54 AM
Analyst: — Data Type: Original

Replicate Data: 2.0ppb std — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0146	0.0568	0.0146	10:44:45 AM	Yes
2		[2.0]	0.0146	0.0559	0.0146	10:45:13 AM	Yes
Mean:		[2.0]	0.0146				
SD:		0.000	0.0000				
%RSD:		0.00%	0.05				

Standard number 4 applied. [2.0]
Correlation Coef.: 0.999711 Slope: 0.00729 Intercept: 0.00000

Sequence No.: 6 — Autosampler Location: 6
Sample ID: 5.0ppb std — Date Collected: 10/10/2014 10:45:33 AM
Analyst: — Data Type: Original

Replicate Data: 5.0ppb std — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0389	0.1522	0.0389	10:46:22 AM	Yes
2		[5.0]	0.0386	0.1496	0.0386	10:46:51 AM	Yes
Mean:		[5.0]	0.0387				
SD:		0.000	0.0002				
%RSD:		0.00%	0.57				

Standard number 5 applied. [5.0]
Correlation Coef.: 0.999456 Slope: 0.00767 Intercept: 0.00000

Sequence No.: 7 — Autosampler Location: 7
Sample ID: 10.0ppb std — Date Collected: 10/10/2014 10:47:09 AM
Analyst: — Data Type: Original

Replicate Data: 10.0ppb std — Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

1	[10.0]	0.0773	0.3056	0.0773	10:47:58 AM	Yes
2	[10.0]	0.0781	0.3055	0.0782	10:48:29 AM	Yes
Mean:	[10.0]	0.0777				
SD:	0.000	0.0006				
%RSD:	0.00%	0.80				

Standard number 6 applied. [10.0]
Correlation Coef.: 0.999856 Slope: 0.00775 Intercept: 0.00000
The calibration curve may not be linear.

Calibration data for Hg 253.7 **Equation: Linear Through Zero**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	0.000	0.00	121.23
0.2ppb std	0.0014	0.2	0.176	0.00	1.98
0.5ppb std	0.0038	0.5	0.493	0.00	0.40
1.0ppb std	0.0072	1.0	0.924	0.00	0.53
2.0ppb std	0.0146	2.0	1.885	0.00	0.05
5.0ppb std	0.0387	5.0	4.997	0.00	0.57
10.0ppb std	0.0777	10.0	10.031	0.00	0.80

Correlation Coef.: 0.999856 Slope: 0.00775 Intercept: 0.00000

Sequence No.: 8 **Autosampler Location: 8**
Sample ID: ICV **Date Collected: 10/10/2014 10:48:47 AM**
Analyst: **Data Type: Original**

Replicate Data: ICV **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.797	2.797	0.0217	0.0832	0.0217	10:49:37 AM	Yes
2	2.801	2.801	0.0217	0.0837	0.0217	10:50:06 AM	Yes
Mean:	2.799	2.799	0.0217				
SD:	0.0023	0.0023	0.0000				
%RSD:	0.08%	0.08%	0.08				

QC value less than the lower limit for Hg 253.7 Recovery = 93.30%
QC Failed. Continue with analysis.

Sequence No.: 9 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 10/10/2014 10:50:25 AM**
Analyst: **Data Type: Original**

Replicate Data: ICB **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.007	-0.007	-0.0001	-0.0024	-0.0000	10:51:14 AM	Yes
2	0.006	0.006	0.0000	-0.0010	0.0001	10:51:43 AM	Yes
Mean:	-0.001	-0.001	-0.0000				
SD:	0.0089	0.0089	0.0001				
%RSD:	>999.9%	>999.9%	>999.9%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 2**
Sample ID: MRL **Date Collected: 10/10/2014 10:52:01 AM**
Analyst: **Data Type: Original**

Replicate Data: MRL **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.168	0.168	0.0013	0.0034	0.0013	10:52:50 AM	Yes
2	0.175	0.175	0.0014	0.0046	0.0014	10:53:19 AM	Yes
Mean:	0.171	0.171	0.0013				
SD:	0.0055	0.0055	0.0000				
%RSD:	3.22%	3.22%	3.22				

QC value within limits for Hg 253.7 Recovery = 85.72%

00810

All analyte(s) passed QC.

Sequence No.: 11 Autosampler Location: 8
Sample ID: CCV Date Collected: 10/10/2014 10:53:40 AM
Analyst: Data Type: Original

Replicate Data: CCV Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.768	2.768	0.0214	0.0833	0.0215	10:54:29 AM	Yes
2	2.769	2.769	0.0215	0.0735	0.0215	10:54:58 AM	Yes
Mean:	2.769	2.769	0.0214				
SD:	0.0009	0.0009	0.0000				
%RSD:	0.03%	0.03%	0.03				

QC value within limits for Hg 253.7 Recovery = 92.29%
All analyte(s) passed QC.

Sequence No.: 12 Autosampler Location: 1
Sample ID: CCB Date Collected: 10/10/2014 10:55:17 AM
Analyst: Data Type: Original

Replicate Data: CCB Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	-0.0004	0.0000	10:56:06 AM	Yes
2	0.002	0.002	0.0000	-0.0005	0.0000	10:56:35 AM	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.0011	0.0011	0.0000				
%RSD:	113.34%	113.34%	113.34				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 13 Autosampler Location: 38
Sample ID: PBT-220312 Date Collected: 10/10/2014 10:56:53 AM
Analyst: Data Type: Original

Replicate Data: PBT-220312 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	-0.0005	0.0000	10:57:43 AM	Yes
2	0.000	0.000	0.0000	-0.0007	0.0000	10:58:12 AM	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.0004	0.0004	0.0000				
%RSD:	58.48%	58.48%	58.48				

Sequence No.: 14 Autosampler Location: 39
Sample ID: LCST-220312 Date Collected: 10/10/2014 10:58:31 AM
Analyst: Data Type: Original

Replicate Data: LCST-220312 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.916	0.916	0.0071	0.0273	0.0071	10:59:21 AM	Yes
2	0.921	0.921	0.0071	0.0275	0.0072	10:59:50 AM	Yes
Mean:	0.919	0.919	0.0071				
SD:	0.0034	0.0034	0.0000				
%RSD:	0.37%	0.37%	0.37				

Sequence No.: 15 Autosampler Location: 40
Sample ID: MBLK 12175-01 Date Collected: 10/10/2014 11:00:09 AM
Analyst: Data Type: Original

Replicate Data: MBLK 12175-01 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	-0.0003	0.0000	11:00:59 AM	Yes
2	0.002	0.002	0.0000	-0.0005	0.0000	11:01:29 AM	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.0000	0.0000	0.0000				
%RSD:	0.02%	0.02%	0.02				

Sequence No.: 16 Autosampler Location: 41
Sample ID: R1407868-001 Date Collected: 10/10/2014 11:01:49 AM
Analyst: Data Type: Original

Replicate Data: R1407868-001 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	-0.0001	0.0000	11:02:38 AM	Yes
2	-0.007	-0.007	-0.0001	-0.0011	-0.0000	11:03:07 AM	Yes
Mean:	-0.002	-0.002	-0.0000				
SD:	0.0063	0.0063	0.0000				
%RSD:	280.04%	280.04%	280.04				

Sequence No.: 17 Autosampler Location: 42
Sample ID: R1407915-001 Date Collected: 10/10/2014 11:03:26 AM
Analyst: Data Type: Original

Replicate Data: R1407915-001 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0000	0.0002	0.0000	11:04:16 AM	Yes
2	0.005	0.005	0.0000	-0.0005	0.0001	11:04:44 AM	Yes
Mean:	0.004	0.004	0.0000				
SD:	0.0009	0.0009	0.0000				
%RSD:	21.37%	21.37%	21.37				

Sequence No.: 18 Autosampler Location: 43
Sample ID: R1407915-001D Date Collected: 10/10/2014 11:05:03 AM
Analyst: Data Type: Original

Replicate Data: R1407915-001D Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.007	0.007	0.0001	-0.0001	0.0001	11:05:53 AM	Yes
2	0.006	0.006	0.0000	0.0002	0.0001	11:06:22 AM	Yes
Mean:	0.006	0.006	0.0000				
SD:	0.0002	0.0002	0.0000				
%RSD:	3.64%	3.64%	3.64				

Sequence No.: 19 Autosampler Location: 44
Sample ID: R1407915-001S Date Collected: 10/10/2014 11:06:42 AM
Analyst: Data Type: Original

Replicate Data: R1407915-001S Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.924	0.924	0.0072	0.0287	0.0072	11:07:31 AM	Yes
2	0.931	0.931	0.0072	0.0292	0.0072	11:08:00 AM	Yes
Mean:	0.928	0.928	0.0072				
SD:	0.0044	0.0044	0.0000				
%RSD:	0.47%	0.47%	0.47				

Sequence No.: 20 Autosampler Location: 2
Sample ID: MRL Date Collected: 10/10/2014 11:08:19 AM

Analyst: Data Type: Original

Replicate Data: MRL Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.173	0.173	0.0013	0.0052	0.0014	11:09:10 AM	Yes
2	0.178	0.178	0.0014	0.0054	0.0014	11:09:39 AM	Yes
Mean:	0.176	0.176	0.0014				
SD:	0.0038	0.0038	0.0000				
%RSD:	2.14%	2.14%	2.14				

QC value within limits for Hg 253.7 Recovery = 87.78%
All analyte(s) passed QC.

==========

Sequence No.: 21 Autosampler Location: 8
Sample ID: CCV Date Collected: 10/10/2014 11:09:58 AM
Analyst: Data Type: Original

Replicate Data: CCV Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.754	2.754	0.0213	0.0849	0.0214	11:10:47 AM	Yes
2	2.767	2.767	0.0214	0.0854	0.0215	11:11:16 AM	Yes
Mean:	2.761	2.761	0.0214				
SD:	0.0092	0.0092	0.0001				
%RSD:	0.33%	0.33%	0.33				

QC value within limits for Hg 253.7 Recovery = 92.03%
All analyte(s) passed QC.

==========

Sequence No.: 22 Autosampler Location: 1
Sample ID: CCB Date Collected: 10/10/2014 11:11:35 AM
Analyst: Data Type: Original

Replicate Data: CCB Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.005	0.005	0.0000	-0.0001	0.0001	11:12:24 AM	Yes
2	0.001	0.001	0.0000	-0.0002	0.0000	11:12:53 AM	Yes
Mean:	0.003	0.003	0.0000				
SD:	0.0024	0.0024	0.0000				
%RSD:	75.46%	75.46%	75.46				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 23 Autosampler Location: 45
Sample ID: PBW-220311 Date Collected: 10/10/2014 11:13:11 AM
Analyst: Data Type: Original

Replicate Data: PBW-220311 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	-0.0000	-0.0005	-0.0000	11:14:01 AM	Yes
2	0.002	0.002	0.0000	0.0000	0.0000	11:14:30 AM	Yes
Mean:	-0.001	-0.001	-0.0000				
SD:	0.0039	0.0039	0.0000				
%RSD:	613.95%	613.95%	613.95				

==========

Sequence No.: 24 Autosampler Location: 46
Sample ID: LCSW-220311 Date Collected: 10/10/2014 11:14:49 AM
Analyst: Data Type: Original

Replicate Data: LCSW-220311 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

00813

1	0.942	0.942	0.0073	0.0282	0.0073	11:15:39 AM	Yes
2	0.942	0.942	0.0073	0.0284	0.0073	11:16:10 AM	Yes
Mean:	0.942	0.942	0.0073				
SD:	0.0002	0.0002	0.0000				
%RSD:	0.02%	0.02%	0.02				

Sequence No.: 25
Sample ID: R1407825-001
Analyst:
Autosampler Location: 47
Date Collected: 10/10/2014 11:16:30 AM
Data Type: Original

Replicate Data: R1407825-001 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0000	-0.0001	0.0000	11:17:20 AM	Yes
2	0.006	0.006	0.0000	0.0003	0.0001	11:17:49 AM	Yes
Mean:	0.005	0.005	0.0000				
SD:	0.0017	0.0017	0.0000				
%RSD:	34.83%	34.83%	34.83				

Sequence No.: 26
Sample ID: R1407825-003
Analyst:
Autosampler Location: 48
Date Collected: 10/10/2014 11:18:09 AM
Data Type: Original

Replicate Data: R1407825-003 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.002	-0.002	-0.0000	-0.0005	0.0000	11:18:59 AM	Yes
2	-0.002	-0.002	-0.0000	-0.0005	0.0000	11:19:28 AM	Yes
Mean:	-0.002	-0.002	-0.0000				
SD:	0.0001	0.0001	0.0000				
%RSD:	3.80%	3.80%	3.80				

Sequence No.: 27
Sample ID: R1407825-003D
Analyst:
Autosampler Location: 49
Date Collected: 10/10/2014 11:19:47 AM
Data Type: Original

Replicate Data: R1407825-003D Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	-0.0000	-0.0009	-0.0000	11:20:38 AM	Yes
2	0.001	0.001	0.0000	-0.0005	0.0000	11:21:07 AM	Yes
Mean:	-0.001	-0.001	-0.0000				
SD:	0.0036	0.0036	0.0000				
%RSD:	278.83%	278.83%	278.83				

Sequence No.: 28
Sample ID: R1407825-003S
Analyst:
Autosampler Location: 50
Date Collected: 10/10/2014 11:21:27 AM
Data Type: Original

Replicate Data: R1407825-003S Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.933	0.933	0.0072	0.0285	0.0072	11:22:17 AM	Yes
2	0.929	0.929	0.0072	0.0276	0.0072	11:22:46 AM	Yes
Mean:	0.931	0.931	0.0072				
SD:	0.0033	0.0033	0.0000				
%RSD:	0.36%	0.36%	0.36				

Sequence No.: 29
Sample ID: R1407825-004
Analyst:
Autosampler Location: 51
Date Collected: 10/10/2014 11:23:05 AM
Data Type: Original

Replicate Data: R1407825-004 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	-0.0000	-0.0007	-0.0000	11:23:55 AM	Yes
2	0.001	0.001	0.0000	-0.0008	0.0000	11:24:25 AM	Yes
Mean:	-0.001	-0.001	-0.0000				
SD:	0.0028	0.0028	0.0000				
%RSD:	360.41%	360.41%	360.41				

Sequence No.: 30 Autosampler Location: 52
Sample ID: R1407829-001 Date Collected: 10/10/2014 11:24:45 AM
Analyst: Data Type: Original

Replicate Data: R1407829-001 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.075	0.075	0.0006	0.0013	0.0006	11:25:34 AM	Yes
2	0.080	0.080	0.0006	0.0017	0.0006	11:26:03 AM	Yes
Mean:	0.077	0.077	0.0006				
SD:	0.0036	0.0036	0.0000				
%RSD:	4.71%	4.71%	4.71				

Sequence No.: 31 Autosampler Location: 53
Sample ID: R1407829-002 Date Collected: 10/10/2014 11:26:22 AM
Analyst: Data Type: Original

Replicate Data: R1407829-002 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.603	4.603	0.0357	0.1417	0.0357	11:27:12 AM	Yes
2	4.653	4.653	0.0360	0.1423	0.0361	11:27:41 AM	Yes
Mean:	4.628	4.628	0.0359				
SD:	0.0354	0.0354	0.0003				
%RSD:	0.76%	0.76%	0.76				

Sequence No.: 32 Autosampler Location: 54
Sample ID: R1407829-003 Date Collected: 10/10/2014 11:28:00 AM
Analyst: Data Type: Original

Replicate Data: R1407829-003 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.376	2.376	0.0184	0.0731	0.0184	11:28:50 AM	Yes
2	2.385	2.385	0.0185	0.0729	0.0185	11:29:18 AM	Yes
Mean:	2.381	2.381	0.0184				
SD:	0.0063	0.0063	0.0000				
%RSD:	0.26%	0.26%	0.26				

Sequence No.: 33 Autosampler Location: 8
Sample ID: CCV Date Collected: 10/10/2014 11:29:38 AM
Analyst: Data Type: Original

Replicate Data: CCV Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.734	2.734	0.0212	0.0836	0.0212	11:30:27 AM	Yes
2	2.746	2.746	0.0213	0.0832	0.0213	11:30:56 AM	Yes
Mean:	2.740	2.740	0.0212				
SD:	0.0088	0.0088	0.0001				
%RSD:	0.32%	0.32%	0.32				

QC value within limits for Hg 253.7 Recovery = 91.32%
All analyte(s) passed QC.

00815

Sequence No.: 34
Sample ID: CCB
Analyst:
Autosampler Location: 1
Date Collected: 10/10/2014 11:31:15 AM
Data Type: Original

Replicate Data: CCB
Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.002	-0.002	-0.0000	-0.0012	0.0000	11:32:06 AM	Yes
2	0.013	0.013	0.0001	0.0008	0.0001	11:32:34 AM	Yes
Mean:	0.006	0.006	0.0000				
SD:	0.0110	0.0110	0.0001				
%RSD:	199.46%	199.46%	199.46				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 35
Sample ID: R1407829-004
Analyst:
Autosampler Location: 55
Date Collected: 10/10/2014 11:32:53 AM
Data Type: Original

Replicate Data: R1407829-004
Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.913	0.913	0.0071	0.0284	0.0071	11:33:42 AM	Yes
2	0.913	0.913	0.0071	0.0283	0.0071	11:34:11 AM	Yes
Mean:	0.913	0.913	0.0071				
SD:	0.0001	0.0001	0.0000				
%RSD:	0.02%	0.02%	0.02				

Sequence No.: 36
Sample ID: R1407829-005
Analyst:
Autosampler Location: 56
Date Collected: 10/10/2014 11:34:31 AM
Data Type: Original

Replicate Data: R1407829-005
Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.284	3.284	0.0254	0.1021	0.0255	11:35:20 AM	Yes
2	3.287	3.287	0.0255	0.1027	0.0255	11:35:49 AM	Yes
Mean:	3.285	3.285	0.0254				
SD:	0.0019	0.0019	0.0000				
%RSD:	0.06%	0.06%	0.06				

Sequence No.: 37
Sample ID: R1407829-006
Analyst:
Autosampler Location: 57
Date Collected: 10/10/2014 11:36:08 AM
Data Type: Original

Replicate Data: R1407829-006
Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.067	0.067	0.0005	0.0040	0.0005	11:36:59 AM	Yes
2	0.065	0.065	0.0005	0.0037	0.0005	11:37:28 AM	Yes
Mean:	0.066	0.066	0.0005				
SD:	0.0012	0.0012	0.0000				
%RSD:	1.82%	1.82%	1.82				

Sequence No.: 38
Sample ID: R1407829-007
Analyst:
Autosampler Location: 58
Date Collected: 10/10/2014 11:37:47 AM
Data Type: Original

Replicate Data: R1407829-007
Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.068	0.068	0.0005	0.0047	0.0005	11:38:37 AM	Yes
2	0.055	0.055	0.0004	0.0035	0.0004	11:39:06 AM	Yes

Mean:	0.062	0.062	0.0005
SD:	0.0090	0.0090	0.0001
%RSD:	14.65%	14.65%	14.65

Sequence No.: 39
Sample ID: R1407829-008
Analyst:
Autosampler Location: 59
Date Collected: 10/10/2014 11:39:27 AM
Data Type: Original

Replicate Data: R1407829-008 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.093	0.093	0.0007	0.0051	0.0007	11:40:17 AM	Yes
2	0.086	0.086	0.0007	0.0042	0.0007	11:40:46 AM	Yes
Mean:	0.090	0.090	0.0007				
SD:	0.0047	0.0047	0.0000				
%RSD:	5.27%	5.27%	5.27				

Sequence No.: 40
Sample ID: R1407829-009
Analyst:
Autosampler Location: 60
Date Collected: 10/10/2014 11:41:06 AM
Data Type: Original

Replicate Data: R1407829-009 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.355	0.355	0.0027	0.0122	0.0028	11:41:57 AM	Yes
2	0.350	0.350	0.0027	0.0125	0.0027	11:42:25 AM	Yes
Mean:	0.353	0.353	0.0027				
SD:	0.0032	0.0032	0.0000				
%RSD:	0.91%	0.91%	0.91				

Sequence No.: 41
Sample ID: R1407829-010
Analyst:
Autosampler Location: 61
Date Collected: 10/10/2014 11:42:45 AM
Data Type: Original

Replicate Data: R1407829-010 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.109	0.109	0.0008	0.0031	0.0009	11:43:36 AM	Yes
2	0.110	0.110	0.0009	0.0038	0.0009	11:44:04 AM	Yes
Mean:	0.110	0.110	0.0008				
SD:	0.0004	0.0004	0.0000				
%RSD:	0.39%	0.39%	0.39				

Sequence No.: 42
Sample ID: R1407829-011
Analyst:
Autosampler Location: 62
Date Collected: 10/10/2014 11:44:24 AM
Data Type: Original

Replicate Data: R1407829-011 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.263	0.263	0.0020	0.0087	0.0021	11:45:14 AM	Yes
2	0.261	0.261	0.0020	0.0081	0.0020	11:45:43 AM	Yes
Mean:	0.262	0.262	0.0020				
SD:	0.0020	0.0020	0.0000				
%RSD:	0.76%	0.76%	0.76				

Sequence No.: 43
Sample ID: R1407829-011D
Analyst:
Autosampler Location: 63
Date Collected: 10/10/2014 11:46:02 AM
Data Type: Original

Replicate Data: R1407829-011D Analyte: Hg 253.7

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak

#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.296	1.296	0.0100	0.0420	0.0101	11:46:52 AM	Yes
2	1.306	1.306	0.0101	0.0422	0.0101	11:47:22 AM	Yes
Mean:	1.301	1.301	0.0101				
SD:	0.0065	0.0065	0.0001				
%RSD:	0.50%	0.50%	0.50				

Sequence No.: 44 — **Autosampler Location: 64**
Sample ID: R1407829-011S — **Date Collected: 10/10/2014 11:47:42 AM**
Analyst: — **Data Type: Original**

Replicate Data: R1407829-011S — **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.265	1.265	0.0098	0.0419	0.0098	11:48:32 AM	Yes
2	1.249	1.249	0.0097	0.0403	0.0097	11:49:01 AM	Yes
Mean:	1.257	1.257	0.0097				
SD:	0.0114	0.0114	0.0001				
%RSD:	0.91%	0.91%	0.91				

Sequence No.: 45 — **Autosampler Location: 8**
Sample ID: CCV — **Date Collected: 10/10/2014 11:49:21 AM**
Analyst: — **Data Type: Original**

Replicate Data: CCV — **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.712	2.712	0.0210	0.0866	0.0210	11:50:10 AM	Yes
2	2.682	2.682	0.0208	0.0852	0.0208	11:50:39 AM	Yes
Mean:	2.697	2.697	0.0209				
SD:	0.0207	0.0207	0.0002				
%RSD:	0.77%	0.77%	0.77				

QC value less than the lower limit for Hg 253.7 Recovery = 89.90%
QC Failed. Continue with analysis.

Sequence No.: 46 — **Autosampler Location: 1**
Sample ID: CCB — **Date Collected: 10/10/2014 11:50:58 AM**
Analyst: — **Data Type: Original**

Replicate Data: CCB — **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.013	0.013	0.0001	0.0011	0.0001	11:51:47 AM	Yes
2	0.021	0.021	0.0002	0.0012	0.0002	11:52:16 AM	Yes
Mean:	0.017	0.017	0.0001				
SD:	0.0055	0.0055	0.0000				
%RSD:	32.90%	32.90%	32.90				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 47 — **Autosampler Location: 65**
Sample ID: R1407829-012 — **Date Collected: 10/10/2014 11:52:34 AM**
Analyst: — **Data Type: Original**

Replicate Data: R1407829-012 — **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	26.26	26.26	0.2034	0.8776	0.2035	11:53:24 AM	Yes
	Sample concentration is greater than that of the highest standard.						
2	26.52	26.52	0.2055	0.8819	0.2055	11:53:53 AM	Yes
	Sample concentration is greater than that of the highest standard.						
Mean:	26.39	26.39	0.2044				
SD:	0.186	0.186	0.0014				
%RSD:	0.70%	0.70%	0.70				

Sample concentration is greater than that of the highest standard.

Sequence No.: 48 **Autosampler Location: 66**
Sample ID: R1407829-013 **Date Collected: 10/10/2014 11:54:14 AM**
Analyst: **Data Type: Original**

Replicate Data: R1407829-013 **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.109	0.109	0.0008	0.0028	0.0009	11:55:04 AM	Yes
2	0.128	0.128	0.0010	0.0037	0.0010	11:55:33 AM	Yes
Mean:	0.118	0.118	0.0009				
SD:	0.0136	0.0136	0.0001				
%RSD:	11.45%	11.45%	11.45				

Sequence No.: 49 **Autosampler Location: 2**
Sample ID: MRL **Date Collected: 10/10/2014 11:55:52 AM**
Analyst: **Data Type: Original**

Replicate Data: MRL **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.174	0.174	0.0013	0.0053	0.0014	11:56:42 AM	Yes
2	0.181	0.181	0.0014	0.0060	0.0014	11:57:11 AM	Yes
Mean:	0.177	0.177	0.0014				
SD:	0.0051	0.0051	0.0000				
%RSD:	2.85%	2.85%	2.85				

QC value within limits for Hg 253.7 Recovery = 88.70%
All analyte(s) passed QC.

Sequence No.: 50 **Autosampler Location: 8**
Sample ID: CCV **Date Collected: 10/10/2014 11:57:30 AM**
Analyst: **Data Type: Original**

Replicate Data: CCV **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.711	2.711	0.0210	0.0862	0.0210	11:58:20 AM	Yes
2	2.729	2.729	0.0211	0.0869	0.0212	11:58:49 AM	Yes
Mean:	2.720	2.720	0.0211				
SD:	0.0129	0.0129	0.0001				
%RSD:	0.48%	0.48%	0.48				

QC value within limits for Hg 253.7 Recovery = 90.66%
All analyte(s) passed QC.

Sequence No.: 51 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 10/10/2014 11:59:08 AM**
Analyst: **Data Type: Original**

Replicate Data: CCB **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.008	0.008	0.0001	0.0000	0.0001	11:59:57 AM	Yes
2	0.013	0.013	0.0001	0.0003	0.0001	12:00:26 PM	Yes
Mean:	0.011	0.011	0.0001				
SD:	0.0036	0.0036	0.0000				
%RSD:	33.14%	33.14%	33.14				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 52 **Autosampler Location: 67**
Sample ID: Sample067 **Date Collected: 10/10/2014 12:00:44 PM**
Analyst: **Data Type: Original**

Replicate Data: Sample067 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	-0.0000	-0.0003	-0.0000	12:01:37 PM	Yes
2	-0.002	-0.002	-0.0000	-0.0004	0.0000	12:02:06 PM	Yes
Mean:	-0.002	-0.002	-0.0000				
SD:	0.0001	0.0001	0.0000				
%RSD:	4.99%	4.99%	4.99				

Analysis Begun

Logged In Analyst: ALRCE Metals01 Technique: AA FIMS-MHS
Spectrometer: FIMS-100, S/N B050-9550 Autosampler: S10

Sample Information File: C:\Users\Public\PerkinElmer\AA\Data\Sample Information\Routine3.sif
Batch ID:
Results Data Set: OCT-10W
Results Library: C:\Users\Public\PerkinElmer\AA\Data\Results\OCT14.mdb

Sequence No.: 1 Autosampler Location: 8
Sample ID: ICV Date Collected: 10/10/2014 12:31:33 PM
Analyst: Data Type: Original
User canceled analysis.

Analysis Begun

Logged In Analyst: ALRCE Metals01 Technique: AA FIMS-MHS
Spectrometer: FIMS-100, S/N B050-9550 Autosampler: S10

Sample Information File: C:\Users\Public\PerkinElmer\AA\Data\Sample Information\Routine3.sif
Batch ID:
Results Data Set: OCT-10W
Results Library: C:\Users\Public\PerkinElmer\AA\Data\Results\OCT14.mdb

Sequence No.: 45 Autosampler Location: 67
Sample ID: Sample067 Date Collected: 10/10/2014 12:42:11 PM
Analyst: Data Type: Original
User canceled analysis.

Analysis Begun

Logged In Analyst: ALRCE Metals01 Technique: AA FIMS-MHS
Spectrometer: FIMS-100, S/N B050-9550 Autosampler: S10

Sample Information File: C:\Users\Public\PerkinElmer\AA\Data\Sample Information\Routine3.sif
Batch ID:
Results Data Set: OCT-10W
Results Library: C:\Users\Public\PerkinElmer\AA\Data\Results\OCT14.mdb

Sequence No.: 40 Autosampler Location: 65
Sample ID: R1407829-012 SY Date Collected: 10/10/2014 12:42:30 PM
Analyst: Data Type: Original

Replicate Data: R1407829-012 SY Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	6.172	6.172	0.0478	0.1936	0.0478	12:43:19 PM	Yes
2	6.138	6.138	0.0475	0.1942	0.0476	12:43:48 PM	Yes
Mean:	6.155	6.155	0.0477				
SD:	0.0241	0.0241	0.0002				
%RSD:	0.39%	0.39%	0.39				

10/10/14

Sequence No.: 41 Autosampler Location: 66
Sample ID: R1407829-013 Date Collected: 10/10/2014 12:44:07 PM
Analyst: Data Type: Original

Replicate Data: R1407829-013 Analyte: Hg 253.7

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.136	0.136	0.0011	0.0045	0.0011	12:44:57 PM	Yes
2	0.170	0.170	0.0013	0.0055	0.0013	12:45:26 PM	Yes

accidentally rescheduled QD 8221 already reported

Mean:	0.153	0.153	0.0012
SD:	0.0241	0.0241	0.0002
%RSD:	15.71%	15.71%	15.71

Sequence No.: 42 — **Autosampler Location: 2**
Sample ID: MRL — **Date Collected: 10/10/2014 12:45:47 PM**
Analyst: — **Data Type: Original**

Replicate Data: MRL — **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.186	0.186	0.0014	0.0059	0.0015	12:46:36 PM	Yes
2	0.174	0.174	0.0013	0.0050	0.0014	12:47:05 PM	Yes
Mean:	0.180	0.180	0.0014				
SD:	0.0082	0.0082	0.0001				
%RSD:	4.58%	4.58%	4.58				

QC value within limits for Hg 253.7 Recovery = 89.89%
All analyte(s) passed QC.

Sequence No.: 43 — **Autosampler Location: 8**
Sample ID: CCV — **Date Collected: 10/10/2014 12:47:24 PM**
Analyst: — **Data Type: Original**

Replicate Data: CCV — **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.918	2.918	0.0226	0.0921	0.0226	12:48:13 PM	Yes
2	2.925	2.925	0.0227	0.0915	0.0227	12:48:42 PM	Yes
Mean:	2.921	2.921	0.0226				
SD:	0.0048	0.0048	0.0000				
%RSD:	0.16%	0.16%	0.16				

QC value within limits for Hg 253.7 Recovery = 97.38%
All analyte(s) passed QC.

Sequence No.: 44 — **Autosampler Location: 1**
Sample ID: CCB — **Date Collected: 10/10/2014 12:49:01 PM**
Analyst: — **Data Type: Original**

Replicate Data: CCB — **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.018	0.018	0.0001	0.0006	0.0002	12:49:50 PM	Yes
2	0.020	0.020	0.0002	0.0014	0.0002	12:50:19 PM	Yes
Mean:	0.019	0.019	0.0001				
SD:	0.0009	0.0009	0.0000				
%RSD:	4.99%	4.99%	4.99				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 45 — **Autosampler Location: 67**
Sample ID: Sample067 — **Date Collected: 10/10/2014 12:50:37 PM**
Analyst: — **Data Type: Original**

Replicate Data: Sample067 — **Analyte: Hg 253.7**

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.012	0.012	0.0001	0.0007	0.0001	12:51:27 PM	Yes
2	0.008	0.008	0.0001	0.0007	0.0001	12:51:56 PM	Yes
Mean:	0.010	0.010	0.0001				
SD:	0.0023	0.0023	0.0000				
%RSD:	23.24%	23.24%	23.24				

Preparation Information Benchsheet

Prep Run#: 220154 **Prep WorkFlow:** MetDigAqICP **Status:** Prepped
Team: Metals/CWINKSTERN **Prep Method:** EPA 3010A **Prep Date/Time:** 10/8/14 03:04 PM

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ1412130-01	MB		50mL	6010C/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		HB #7 well = A5 temp = 95C correction factor =-0.2C corrected temp = 94.8C
2	RQ1412130-02	LCS		50mL	6010C/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.0500 mL/74566; 0.5000 mL/73573; 0.2500 mL/74428; 0.5000 mL/73574	
3	R1407813-001	FTMM-8-GW-697MW01-16.45	.06	50mL	6010C/Pb T	<2			50.00mL	Colorless-Clear		Tier IV
4	RQ1412130-07	R1407813-001 DUP	.06	50mL	6010C/Pb T	<2			50.00mL			
5	RQ1412130-08	R1407813-001 MS	.06	50mL	6010C/Pb T	<2			50.00mL		0.2500 mL/74428; 0.5000 mL/73573; 0.5000 mL/73574; 0.0500 mL/74566	
6	R1407813-009	FTMM-56-GW-80MW02-8.10	.01	50mL	6010C/As T, Cd T, Pb T	<2			50.00mL	Colorless-Clear		
7	R1407813-010	FTMM-EB-100114-01	.04	50mL	6010C/As T, Cd T, Pb T	<2			50.00mL	Colorless-Clear		
8	R1407813-016	FTMM-8-GW-M8MW17-10.90	.01	50mL	6010C/Pb T	<2			50.00mL	Colorless-Clear		
9	R1407813-017	FTMM-8-GW-M8MW21-14.31	.01	50mL	6010C/Pb T	<2			50.00mL	Colorless-Clear		
10	R1407813-026	FTMM-EB-100214	.06	50mL	6010C/Pb T	<2			50.00mL	Colorless-Clear		
11	R1407821-001	CalvFLTSINF1014	.04	50mL	6010C/Fe T, Mn T	<2			50.00mL	Colorless-Clear		
12	RQ1412130-03	R1407821-001 DUP	.04	50mL	6010C/Fe T, Mn T	<2			50.00mL	Colorless-Clear		
13	RQ1412130-04	R1407821-001 MS	.04	50mL	6010C/Fe T, Mn T	<2			50.00mL	Colorless-Clear	0.0500 mL/74566; 0.2500 mL/74428; 0.5000 mL/73573; 0.5000 mL/73574	
14	R1407821-002	CalvFLTSEW1-1014	.04	50mL	6010C/Fe T, Mn T	<2			50.00mL	Colorless-Clear		
15	R1407821-003	CalvFLTSEW2-1014	.04	50mL	6010C/Fe T, Mn T	<2			50.00mL	Colorless-Clear		
16	R1407821-004	CalvFLTSEFF-1014	.04	50mL	6010C/Fe T, Mn T	<2			50.00mL	Colorless-Clear		
17	R1407821-005	CalvEFFDUP-1014	.04	50mL	6010C/Fe T, Mn T	<2			50.00mL	Colorless-Clear		
18	R1407825-001	FTMM-EB-100314	.06	50mL	6010C/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		Tier IV
19	R1407825-003	FTMM-3-GW-M3MW02-2	.06	50mL	6010C/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		

Preparation Information Benchsheet

Prep Run#: 220154 **Prep WorkFlow:** MetDigAqICP **Status:** Prepped

Team: Metals/CWINKSTERN **Prep Method:** EPA 3010A **Prep Date/Time:** 10/8/14 03:04 PM

20	RQ1412130-05	R1407825-003 DUP	.06	50mL	6010C/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		
21	RQ1412130-06	R1407825-003 MS	.06	50mL	6010C/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear	0.5000 mL/73573; 0.2500 mL/74428; 0.5000 mL/73574; 0.0500 mL/74566	
22	R1407825-004	FTMM-3-GW-M3MW102-21	.04	50mL	6010C/Ag T, Al T, As T, Ba T, Be T, Ca T, Cd T, Co T, Cr T, Cu T, Fe T, K T, Mg T, Mn T, Na T, Ni T, Pb T, Sb T, Se T, Tl T, V T, Zn T	<2			50.00mL	Colorless-Clear		Tier IV
23	R1407825-011	FTMM-57-GW-108MW04 8.25	.01	50mL	6010C/Pb T	<2			50.00mL	Colorless-Clear		

Spiking Solutions

Name:	Custom LCS STD A Metals	Inventory ID	73573	Logbook Ref:	M5280039BB	Expires On:	08/04/2015	Lot #:	14D125
Name:	Custom LCS STD B Metals	Inventory ID	73574	Logbook Ref:	M5280039CC	Expires On:	08/04/2015	Lot #:	14D123
Name:	Tin 1000 ug/mL Sn	Inventory ID	74428	Logbook Ref:	M5280040H	Expires On:	02/22/2016	Lot #:	13H086
Name:	Selenium 1000 ug/mL Se	Inventory ID	74566	Logbook Ref:	M5280040P	Expires On:	03/03/2016	Lot #:	1408440

Preparation Materials

1:1 HCl Metals Grade M5280039X (63957) Hot Block Cups 50 mL Lot 1404096 (75494) Nitric Acid Metals Grade HNO3 M5280040W (74716)
Thermometer 293 (12952)

Preparation Steps

Step: Digestion
Started: 10/8/14 15:04
Finished: 10/9/14 08:16
By: DBOND
Comments

Comments: _____

Reviewed By: DB Date: 10/9/14 Spike Witness: TCHRIST Date: _____

Preparation Information Benchsheet

Prep Run#: 220154
Team: Metals/CWINKSTERN
Prep WorkFlow: MetDigAqICP
Prep Method: EPA 3010A
Status: Prepped
Prep Date/Time: 10/8/14 03:04 PM

Chain of Custody

Relinquished By:	DR	Date:	10/9/14	Extracts Examined
Received By:	R-AOI	Date:	10/9/14	Yes No

Preparation Information Benchsheet

Prep Run#: 220311
Team: Metals/CWINKSTERN

Prep WorkFlow: HgDigAq
Prep Method: Method

Status: Prepped
Prep Date/Time: 10/10/14 05:30 AM

#	Lab Code	Client ID	B#	Amt. Ext.	Method /Test	pH	AE	BN	Final Vol	Sample Desc. (Initial/Final)	SpikeAmt./Inv. ID	Comments
1	RQ1412222-01	MB		25mL	7470A/Hg T				25.00mL	Colorless-Clear		HB #6 well = E1 temp =95C /95C correction factor = -0.2C corrected temp = 94.8C/94.8C
2	RQ1412222-02	LCS		25mL	7470A/Hg T				25.00mL	Colorless-Clear	0.2500 mL/75596	
3	R1407825-001	FTMM-EB-100314	.06	25mL	7470A/Hg T				25.00mL	Colorless-Clear		TIER IV
4	R1407825-003	FTMM-3-GW-M3MW02-21	.06	25mL	7470A/Hg T				25.00mL	Colorless-Clear		
5	RQ1412222-03	R1407825-003 DUP	.06	25mL	7470A/Hg T				25.00mL	Colorless-Clear		
6	RQ1412222-04	R1407825-003 MS	.06	25mL	7470A/Hg T				25.00mL	Colorless-Clear	0.2500 mL/75596	
7	R1407825-004	FTMM-3-GW-M3MW102-21	.04	25mL	7470A/Hg T				25.00mL	Colorless-Clear		
8	R1407829-001	OBA-9AR-1014	.06	25mL	7470A/Hg T				25.00mL	Colorless-Clear		
9	R1407829-002	Influent-1014	.06	25mL	7470A/Hg T				25.00mL	Colorless-Clear		
10	R1407829-003	GAC-SP1-1014	.06	25mL	7470A/Hg T				25.00mL	Colorless-Clear		
11	R1407829-004	GAC-SP4-1014	.06	25mL	7470A/Hg T				25.00mL	Colorless-Clear		
12	R1407829-005	GAC-SP3-1014	.06	25mL	7470A/Hg T				25.00mL	Colorless-Clear		
13	R1407829-006	RW5-1014	.06	25mL	7470A/Hg T				25.00mL	Colorless-Clear		
14	R1407829-007	RW5D-1014	.06	25mL	7470A/Hg T				25.00mL	Colorless-Clear		
15	R1407829-008	PR12-1014	.06	25mL	7470A/Hg T				25.00mL	Colorless-Clear		
16	R1407829-009	RW4-1014	.06	25mL	7470A/Hg T				25.00mL	Colorless-Clear		
17	R1407829-010	RW3-1014	.06	25mL	7470A/Hg T				25.00mL	Colorless-Clear		
18	R1407829-011	RW2-1014	.17	25mL	7470A/Hg T				25.00mL	Colorless-Clear		
19	RQ1412222-05	R1407829-011 MS	.17	25mL	7470A/Hg T				25.00mL	Colorless-Clear	0.2500 mL/75596	
20	RQ1412222-06	R1407829-011 DMS	.17	25mL	7470A/Hg T				25.00mL	Colorless-Clear	0.2500 mL/75596	
21	R1407829-012	RW1-1014	.06	25mL	7470A/Hg T				25.00mL	Colorless-Clear		
22	R1407829-013	PR4-1014	.06	25mL	7470A/Hg T				25.00mL	Colorless-Clear		

Spiking Solutions

Name: Mercury LCSW Metals Hg Inventory ID 75596 Logbook Ref: M6810022D Expires On: 10/10/2014

Preparation Information Benchsheet

Prep Run#: 220311
Team: Metals/CWINKSTERN

Prep WorkFlow: HgDigAq
Prep Method: Method

Status: Prepped
Prep Date/Time: 10/10/14 05:30 AM

Preparation Materials

Hot Block Cups	50 mL Lot 1404096 (75494)	Sulfuric Acid Reagent Grade H2SO4	M5280026S (53233)	Hydrochloric Acid (HCl) Metals Grade	M5280040Y (74718)
Nitric Acid Metals Grade HNO3	M5280040W (74716)	Hydroxylamine Hydrochloride Reagent Grade	M5280037J (69037)	Potassium Permanganate RG KMnO4	M5280038S (72202)
Potassium Persulfate RG K2S2O8	M5280037BB (70162)	Sodium Chloride Reagent Grade NaCl	M5280038K (71757)	Stannous Chloride SnCl2	M5280033p (63338)
Thermometer	293 (12952)				

Preparation Steps

Step: Digestion
Started: 10/10/14 05:30
Finished: 10/10/14 07:30
By: CWINKSTERN
Comments

Comments: _____

Reviewed By: Tracy Christ Date: 10/10/14

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

OPTIMA 3,4,5 CALIBRATION STANDARD #1 (Standard is prepared weekly or as necessary)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Cal Std. I	AL	m6880002B	20.0	1.00	1000	0.020	2%HNO3	DCB 10/13/14	A	10/13/14 m52800402	m52800404	10/24/14	m26 mLS
Int.	AS		5.00			0.0050	5%HCl		B				
	CD		1.00			0.0010			C				
	CO		3.00			0.0030			D				
	CR		1.00			0.0010			E				
	NI		5.00			0.0050			F				
	PB		5.00			0.0050			G				
	SE		5.00			0.0050			H				
	V		3.00			0.0030			I				
Cal Std. I	CA	m52800388	5000	0.100		0.500			J				
	K		5000			BELOW			K				
	MG		5000			0.500			L				
	NA		5000			0.500			M				
Single Element	BA	m52800364	1000	0.020		0.020			N				
	CU	m52800400	1000	0.010		0.010			O				
	K	m52800294	10000	0.150		2.00			P				
	MN	m52800376	1000	0.010		0.010			Q				
	MO	m52800384	1000	0.025		0.025			R				
	SB	m52800376	1000	0.010		0.010			S				
	TL	m52800302	1000	0.010		0.010			T				
	ZN	m52800347	1000	0.010		0.010			U				
	P	———	1000	0.100		0.100			V				
									W				
									X				
									Y				
									Z				

0288

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OPTIMA 3,4,5 CALIBRATION STANDARD #2
(Standard is prepared weekly or as necessary)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Single Element	AL	m52800306L	1000	0.100	1000	0.100	2%HNO3 5%HCl	DCB 10/2/14	A	m52800406D	m52800386X	10/9/14	m23 m25
	AS	m52800377FF	1000	0.010		0.010		DCB 10/10/14	B	m52800406D	m52800406Y	10/17/14	m23 m25
	B	m52800355A	1000	0.200		0.200			C				
	BE (1/10)	m52800376G	100	0.030		0.003			D				
	CA	m52800325J	10000	0.100		1.00			E				
	CD (1/10)	m52800406N	100	0.050		0.005			F				
	CU	m52800400	1000	0.020		0.020			G				
	K	m52800299X	10000	0.200		2.00			H				
	MG	m52800366T	10000	0.100		1.00			I				
	NA	m52800406m	10000	0.100		1.00			J				
	SB	m52800376	1000	0.060		0.060			K				
	SE	m52800406P	1000	0.010		0.010			L				
	SN	m52800346F	1000	0.500		0.500			M				
									N				
									O				
									P				
									Q				
									R				
									S				
									T				
									U				
									V				
									W				
									X				
									Y				
									Z				

00829

OPTIMA 3/4/5 CALIBRATION STANDARD #5 / HLCCV1 (Standard is prepared weekly or as necessary)

(CALIBRATION STANDARD #3 IS A 1/100 DILUTION OF THIS STANDARD)
(CALIBRATION STANDARD #4 IS A 1/5 DILUTION OF THIS STANDARD)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Cal Std 1	CA	m52800 35C	5000	5.00	500	50.0	2%HNO3 5%HCl	DCB 9/24/14	A	m52800 39Y	m52800 39Y	10/1/14	m26 m21
	MG		5000			50.0		DCB 10/1/14	B	m52800 40B	m52800 39Y	10/8/14	m26 m23
	K		5000			50.0		DCB 10/9/14	C	m52800 40B	m52800 40Y	10/16/14	m26 m23
	NA		5000			50.0			D				
Cal Std 2	AG	m52800 39A	100	5.00		1.00			E				
	CR		100			1.00			F				
	MN		150			1.50			G				
	NI		400			4.00			H				
	ZN		200			2.00			I				
Cal Std 3	AL	m52800 37B	2000	5.00		20.0			J				
	BA		2000			20.0			K				
	BE		50			0.500			L				
	CO		500			5.00			M				
	CU		250			2.50			N				
	FE		1000			10.0			O				
	V		500			5.00			P				
Cal Std 4	AS	m52800 37C	100	10.00		2.00			Q				
	CD		50			1.00			R				
	PB		50			1.00			S				
	SE		50			1.00			T				
	TL		100			2.00			U				
Single Metals	SB	m52800 37G	1000	5.00		10.0			V				
	SN	m52800 34F	1000	5.00		10.0			W				
	B	m52800 35A	1000	2.50		5.00			X				
	MO	m52800 38X	1000	2.50		5.00			Y				
	TI	m52800 34BB	1000	2.50		5.00			Z				
	SR	m52800 37D	1000	2.50		5.00			AA				
	P	—	1000	5.00		10.0			BB				

0830

OPTIMA 3/4/5 ICV/CCV (Standard is prepared daily)
(ICV FOR ILM5.3 IS A ½ DILUTION OF THIS STANDARD)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix
Cal Std 1	CA	m52800386	5000	1.00	200	25.0	2%HNO3
	MG		5000			25.0	5%HCl
	K		5000			25.0	
	NA		5000			25.0	
Cal Std 2	AG	m52800388	100	1.00		0.500	
	CR		100			0.500	
	MN		150			0.750	
	NI		400			2.00	
	ZN		200			1.00	
Cal Std 3	AL	m52800388H	2000	1.00		10.0	
	BA		2000			10.0	
	BE		50			0.250	
	CO		500			2.50	
	CU		250			1.25	
	FE		1000			5.00	
	V		500			2.50	
Cal Std 4	AS	m52800396	100	2.00		1.00	
	CD		50			0.500	
	PB		50			0.500	
	SE		50			0.500	
	TL		100			1.00	
Single Metals	SB	m52800377N	1000	1.00		5.00	
	SN	m52800404H	1000	1.00		5.00	
	B	m52800316	1000	0.500		2.50	
	MO	m52800311	1000	0.500		2.50	
	TI	m52800311K	1000	0.500		2.50	
	SR	m52800381	1000	0.500		2.50	
	P	———	1000	1.00		5.00	

Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Pipet ID
DCB 9/28/14	A	m52800398V	m52800398X	m26 m23
DCB 9/26/14	B	m52800396V	m52800396X	m26 m23
DCB 9/30/14	C	m52800400W	m52800398X	m26 m23
DCB 10/1/14	D	m52800400W	m52800398X	m26 m23
DCB 10/2/14	E	m52800400W	m52800398X	m26 m23
DCB 10/3/14	F	m52800400W	m52800398X	m26 m23
DCB 10/6/14	G	m52800400W	m52800400Y	m26 m23
DCB 10/7/14	H	m52800400W	m52800400Y	m26 m23
DCB 10/8/14	I	m52800400W	m52800400Y	m26 m23
DCB 10/9/14	J	m52800400W	m52800400Y	m26 m23
DCB 10/10/14	K	m52800400W	m52800400Y	m26 m23
CBs 10/12/14	L	m52800400W	m52800400Y	m26 m23
DCB 10/13/14	M	m52800400W	m52800400Y	m26 m23
DCB 10/14/14	N	m52800400W	m52800400Y	m26 m23
DCB 10/15/14	O	m52800400W	m52800400Y	m26 m23
	P			
	Q			
	R			
	S			
	T			
	U			
	V			
	W			
	X			
	Y			
	Z			
	AA			
	BB			

T-1800

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OPTIMA 3/4 HLCCV2 (Standard is prepared every 2 weeks or as necessary)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Cal Std 2	AG	MS28C0394A	100	2.00	100	2.00	2%HNO3 5%HCl	TC 10/3/14	A	MS28U040W	MS28U038X	10/17/14	M23 M26
	CR		100			Below		DeB 10/15/14	B	MS28U040U	MS28U040Y	10/29/14	M23 M26
	MN		150			Below			C				
	NI		400			8.00			D				
	ZN		200			4.00			E				
Cal Std 3	AL	MS28U 37B	2000	2.00		Below			F				
	BA		2000			40.0			G				
	BE		50			1.00			H				
	CO, V		500			10.0			I				
	CU		250			5.00			J				
	FE		1000			Below			K				
Cal Std 4	AS, TL	MS28U 40K	100	4.00		4.00			L				
	CD, SE		50			2.00			M				
	PB		50			Below			N				
Single Metals	B	MS28U 35A	1000	1.00		10.0			O				
	MO	38X	1000	1.00		10.0			P				
	TI	34BB	1000	1.00		10.0			Q				
	SR	37P	1000	1.00		10.0			R				
	CA	32J	10000	2.50		250			S				
	MG	36T	10000	5.00		500			T				
	NA	~~37W~~ 40M	10000	1.50		150			U				
	CR	31E	1000	0.800		10.0			V				
	FE	400	10000	0.300		50			W				
	AL	37H	10000	4.60		500			X				
	MN	37F	1000	0.700		10.00			Y				
	PB	34AA	1000	0.800		10.0			Z				
	K	29K	10000	1.50		150			AA				

0832

OPTIMA 3/4/5 MRL (Standard is prepared every 6 months or as needed)

	Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot#	Hydrochloric Acid Lot #	Expiration Date	Pipet ID.
Cal Std 1	CA	m52800 35C	5000	0.200	1000	1.00	2%HNO3 5%HCl	DCB 9/22/14	A	m52800 39Y	m52800 39X	3/22/15	m25
	MG		5000			1.00		DCB 10/9/14	B	m52800 40D	m52800 40Y	4/9/15	m25
	K		5000			1.00			C				
	NA		5000			1.00			D				
Cal Std 2	AG	m52800 39A	100	0.100		0.0100			E				
	CR		100			0.0100			F				
	MN		150			0.0150			G				
	NI		400			0.0400			H				
	ZN		200			0.0200			I				
Cal Std 3	AL	m52800 37B	2000	0.100		0.200			J				
	BA		2000			0.200			K				
	BE		50			0.0050			L				
	CO		500			0.0500			M				
	CU		250			0.0250			N				
	FE		1000			0.100			O				
	V		500			0.0500			P				
Cal Std 4	AS	m52800 39C	100	0.200		0.0200			Q				
	CD		50			0.0100			R				
	PB		50			0.0100			S				
	SE		50			0.0100			T				
	TL		100			0.0200			U				
Single Metals	B	m52800 35A	1000	0.200		0.200			V				
	MO	m52800 38X	1000	0.025		0.0250			W				
	SN	m52800 34F	1000	0.500		0.500			X				
	TI	m52800 34DD	1000	0.050		0.0500			Y				
	SB	m52800 37G	1000	0.060		0.0600			Z				
	SR	m52800 37D	1000	0.100		0.100			AA				
	P	—	1000	0.100		0.100			BB				

E803

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OPTIMA 3 & 5 ICSA STANDARD (Standard is prepared every 6 months or as necessary)

Element	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	ID Letter	Nitric Acid Lot #	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Int. A Sol'n	MS280039AA	Multi	50	1000	Multi	5% HCL	TC 9/25/14	A	MS280035V	MS280040X	3/25/14	—
AL		5000			250	2%HNO3		B				
CA		5000			250			C				
FE		2000			100			D				
MG		5000			250			E				
								F				
								G				
								H				
								I				
								J				
								K				
								L				
								M				
								N				
								O				
								P				
								Q				
								R				
								S				
								T				
								U				
								V				

OPTIMA 3 & 5 ICSAB STANDARD (Standard is prepared every 6 months or as necessary)

Element	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	ID Letter	Nitric Acid Lot #	Hydrochloric Acid Lot #	Expiration Date	Pipet ID
Int. A Sol'n	M528c039AA	Multi	25	500	Multi	5 % HCl	CJW 9/23/14	A	M528c044w	M528c040n	3/23/15	—
AL		5000			250	2%HNO3	DCB 10/7/14	B	M528040ws	M528c40y	4/7/15	—
CA		5000			250			C				
FE		2000			100			D				
MG		5000			250			E				
Int. B Sol'n	M528c04CG	Multi	5		Multi			F				
AG		20			0.200			G				
BA		50			0.500			H				
BE		50			0.500			I				
CD		100			1.00			J				
CO		50			0.500			K				
CR		50			0.500			L				
CU		50			0.500			M				
MN		50			0.500			N				
NI		100			1.00			O				
PB		5			0.0500			P				
V		50			0.500			Q				
ZN		100			1.00			R				
AS		10			0.100			S				
SB		60			0.600			T				
SE		5			0.0500			U				
TL		10			0.100			V				

00835

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OPTIMA 3/4 INTERNAL STANDARD (ADDED ON-LINE)

Metal	ALS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Hydro-chloric Acid Lot #	Expiration Date	Pipet ID
Y	m528003 9F	10000	2.0	2000	10.0	5 % HCl 2%HNO3	TC 9/19/14	A	m528003 9V	m528003 9X	3/19/15	m26
CS	m528003 9E	10000	2.0		10.0		DCB 9/25/14	B	m528003 9V	m528003 9X	3/25/15	m26
							TC 9/26/14	C	m528003 9V	m528003 9X TC 9/26/14	~~3/26~~ 3/26/15	m26
							TC 9/27/14	D	m528003 9V	m528003 9X	3/27/15	m26
							DCB 10/1/14	E	m528004 0W	m528003 9X	4/1/15 10/6/14 DCB	m26
							DCB 10/6/14	F	m528004 0W	m528003 9X	4/6/15	m26
							DCB 10/6/14	G	m528004 0W	m528003 9X	4/6/15	m26
							DCB 10/10/14	H	m528004 0W	m528004 0Y	4/10/15	m26
							DCB 10/12/14	I	m528004 0W	m528004 0Y	4/12/15	m28
							DCB 10/15/14	J	m528004 0W	m528004 0Y	4/15/15	m26
								K				
								L				
								M				
								N				
								O				
								P				
								Q				
								R				
								S				
								T				
								V				

9800

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MERCURY CALIBRATION / CRDL STANDARDS

Standard	CAS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Expiration Date	Pipet ID
Hg Cal Stk A	MS2600305	1000	1.00	100	10	0.5%HNO3	CJW 10/7/14	A	MS2600404CW	10/14/14	M26

(PREPARED DAILY)

Standard	CAS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Pipet ID
Hg Cal StkB	Hg Cal Stk A	10.0	1.00	100	0.100	0.5%HNO3	CJW 10/7/14	B	MS2600404CW	M26
							CJW 10/8/14	C	MS2600404CW	M26
							CJW 10/9/14	D	MS2600404CW	M26
								E		
								F		
								G		
								H		

(PREPARED WITH EACH RUN)

CCV Standard (ppb)	CAS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Pipet ID
0.200	Hg Cal Stk B	0.100	0.200	100	0.200	0.5%HNO3	CJW 10/7/14	I	MS2600404CW	
0.500			0.500		0.500		CJW 10/8/14	J	MS2600404CW	
1.00			1.00		1.00		CJW 10/9/14	K	MS2600404CW	
2.00			2.00		2.00			L		
5.00			5.00		5.00			M		
10.0			10.0		10.0			N		
CRA			0.200		0.200			O		

00837

MERCURY CCV / LCSW / MS STANDARDS

Standard	CAS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Expiration Date	Pipet ID
Hg CCV Stk A	MS2600302 CJW 10/7/14	1000	1.00	100	10	0.5%HNO3	CJW 10/7/14	A	MS2600402	10/14/14	M28

(PREPARED DAILY)

Standard	CAS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppm)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Pipet ID
Hg CCV StkB	Hg CCV Stk A	10.0	1.00	100	0.100	0.5%HNO3	CJW 10/7/14	B	MS2600402	M26
							CJW 10/8/14	C	MS2600402	M26
							CJW 10/9/14	D	MS2600402	M26
								E		
								F		
								G		
								H		

(PREPARED WITH EACH RUN)

CCV Standard (ppb)	CAS Lot #	Conc. (ppm)	Vol. (mls)	Final Vol. (mls)	Final Conc. (ppb)	Matrix	Analyst/ Date	Letter ID	Nitric Acid Lot #	Pipet ID
3.00	Hg CCV Stk B	0.100	3.00	100	3.00	0.5%HNO3	CJW 10/7/14	I	MS2600402	—
LCSW / MS			1.00		1.00		CJW 10/8/14	J	MS2600402	—
							CJW 10/9/14	K	MS2600402	—
								L		
								M		
								N		
								O		

00838

ALS Environmental
ALS Group USA, Corp
1565 Jefferson Rd, Building 300, Suite 360
Rochester, NY 14623
T: 585-288-5380
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January 14, 2015

Analytical Report for Service Request No: R1410303

Sandra de las Fuentes
Parsons, Inc.
8000 Centre Park Drive, Suite 200
Austin, TX 78754

Laboratory Results for: FTMM 4Q GW/748810-03000

Dear Sandra:

Enclosed are the results of the sample(s) submitted to our laboratory on December 20, 2014. For your reference, these analyses have been assigned our service request number **R1410303.**

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Janice Jaeger
Project Manager

CASE NARRATIVE

Client:	Parsons Engineering Science	**Service Request No.:**	R1410303
Project:	FTMM 4Q GW	**Project No.:**	748810-03000
Sample Matrix:	Water	**Date Received:**	12/20/14

General Comments

The DOD QSM 4.1 requires detections reported to the Method Detection Limit (MDL). Values greater than the MDL and less than the Limit of Quantitation (LOQ) were flagged as estimates (J). Values less than the MDL and Limit of Detection (LOD) were reported as non-detect (ND). The LOD for each analyte is verified quarterly by the laboratory using procedures defined in DOD Quality Systems Manual Version 4.1.

Sample Receipt

Samples were collected on 12/18/14 and received in good condition at cooler temperatures of 0.2-2.3 °C as noted on the cooler receipt and preservation check form. The samples were stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the batching form for a cross-reference between Client ID and ALS Job #.

Volatile Organics

Twenty water samples were analyzed for TCL Volatile organics by SW-846 method 5030/8260C. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

Library Searches against the NBS/EPA library were conducted on all samples. The 20 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

All Tuning criteria for BFB were and within QC limits.

Internal Standard Areas were within QC limits.

All the initial calibration criteria were met for all analytes. All Continuing Calibration Verification (CCV) standards were within 20% Difference (D) except 2,2-Dichloropropane, 1,1,2,2-Tetrachloroethane, Bromomethane and Dichlorodifluoromethane on the 12/30/14 CCV and Bromomethane and Dichlorodifluoromethane on the 12/31/14 CCV. No data was affected.

Various compounds for FTMM-53-GW-699RW05-10 and FTMM-22-GW-CW1MW281-33.74 have been flagged with an "E" as being outside the calibration range of the instrument. The samples were repeated at dilutions and both sets of data have been reported out.

All surrogate standard recoveries were within acceptance limits for all samples.

The Blank Spike (LCS) recoveries were all acceptable.

A Matrix Spike/Matrix spike duplicate (MS/MSD) was performed on FTMM-53-GW-699MW06-10.2 as requested and various other locations. All outlying QC has been flagged with an "*".

The Method Blanks associated with these samples were free of contamination except the 12/31/14 blank had a low level detection for 1,2,4-Trichlorobenzene. No data was affected.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #:	748810-03000	Batch Complete: Yes	Date Revised:
Submission:	R1410303	Diskette Requested: No	Date Due: 1/15/15
Client:	Parsons Engineering Science	Date: 12/22/14	Protocol: SW846
Client Rep:	JJAEGER	Custody Seal: Present/Absent:	Shipping No.:
Project:	FTMM 4Q GW	Chain of Custody: Present/Absent:	SDG #: FTMM-53-GW-699MW01-7.5

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1410303-001	FTMM-53-GW-699MW01-7.5	Water	8260C	12/18/14	12/20/14			
R1410303-002	FTMM-53-GW-699RW05-10	Water	8260C	12/18/14	12/20/14			
R1410303-003	FTMM-53-GW-699RW11-5.3	Water	8260C	12/18/14	12/20/14			
R1410303-004QC	FTMM-53-GW-699MW06-10.2	Water	8260C	12/18/14	12/20/14			
R1410303-005	FTMM-53-GW-699MW106-10.2 DUP	Water	8260C	12/18/14	12/20/14			
R1410303-006	FTMM-53-GW-699MW09-7.75	Water	8260C	12/18/14	12/20/14			
R1410303-007	FTMM-53-GW-699MW16-.7.5	Water	8260C	12/18/14	12/20/14			
R1410303-008	FTMM-53-GW-699RW03-8.2	Water	8260C	12/18/14	12/20/14			
R1410303-009	FTMM-53-GW-699MW04-8.0	Water	8260C	12/18/14	12/20/14			
R1410303-010	FTMM-68-GW-565MW01-11.99	Water	8260C	12/18/14	12/20/14			
R1410303-011	FTMM-68-GW-565MW01D-22.31	Water	8260C	12/18/14	12/20/14			
R1410303-012	FTMM-22-GW-CWMW29-10.85	Water	8260C	12/18/14	12/20/14			
R1410303-013	FTMM-22-GW-CW1MW281-33.74	Water	8260C	12/18/14	12/20/14			
R1410303-014	FTMM-22-GW-CW1MW28-11.21	Water	8260C	12/18/14	12/20/14			
R1410303-015	FTMM-22-GW-CW1MW27-12.63	Water	8260C	12/18/14	12/20/14			
R1410303-016	FTMM-22-GW-CW1MW31-16.4	Water	8260C	12/18/14	12/20/14			
R1410303-017	FTMM-22-GW-CW1MW37-11.78	Water	8260C	12/18/14	12/20/14			
R1410303-018	FTMM-54-GW-296MW06-5.07	Water	8260C	12/18/14	12/20/14			
R1410303-019	FTMM-54-GW-296MW06-10.1	Water	8260C	12/18/14	12/20/14			
R1410303-020	FTMM-53-GW-296MW04-6.35	Water	8260C	12/18/14	12/20/14			

50000

Folder Comments: DoD reporting

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH ilac-MRA

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to
http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

20658

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 5

Project Name: FTMM 4Q GW	Project Number: 744510-0300
Project Manager: Cris Grill	Report CC:
Company/Address: 100 High St. Boston, MA 02210	
Phone #: (617) 449-1583	Email: cris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: Nicholas C. Watson

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GCAMS VOAs • 8260 • 624 • CLP	GCAMS SVOAs • 8270 • 625	GC VOAs • 8021 • 601/602	PESTICIDES • 8081 • 608	PCBs • 8082 • 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
FTMM-53-GW-699MW01-7.5		12/18/14	0953	GW	3	X							
FTMM-53-GW-699RW05-10			1006	GW	3	X							
FTMM-53-GW-699RW11-5.3			0944	GW	3	X							
FTMM-53-GW-699MW06-10.8			0936	GW	3	X							
FTMM-53-GW-699MW06-MS-10.8			0936	GW	3	X							
FTMM-53-GW-699MW06-MSD-10.8			0936	GW	3	X							
FTMM-53-GW-699MW06-10.8			0945	GW	3	X							
FTMM-53-GW-699MW09-7.75			0942	GW	3	X							
FTMM-53-GW-699MW16-7.5			1000	GW	3	X							
FTMM-53-GW-699RW03-8.7			0930	GW	3	X							
FTMM-53-GW-699MW04-8.0			1015	GW	3	X							

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED New Jersey

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
Standard
REQUESTED REPORT DATE

REPORT REQUIREMENTS
___ I. Results Only
___ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
___ III. Results + QC and Calibration Summaries
___ IV. Data Validation Report with Raw Data
Edata ___ Yes ___ No

INVOICE INFORMATION
PO #
BILL TO:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	
Printed Name: Chris Watson	Printed Name: J. Sevin	Printed Name	Printed Name	Printed Name	
Firm: PARSONS	Firm: ALS	Firm	Firm	Firm	
Date/Time: 12/19/14 1100	Date/Time: 12/24/14 1615	Date/Time	Date/Time	Date/Time	

R1410303 5
Parsons, Inc.
FTMM 4Q GW

Distribution: White - Lab Copy; Yellow - Return to Originator

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

20660

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 2 OF 5

Project Name: FTMM 4Q GW	Project Number: 746810-03000
Project Manager: Cris Grill	Report CC:
Company/Address: 100 High St, Boston, MA 02210	
Phone #: (617) 449-6583	Email: cris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: D. Lorizos, C. Watson

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE: 1

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GCMS VOAs ○ 8260 ○ 624 ○ CLP	GCMS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
FTMM-66-GW-566MW01-11.99		12/18/14	1036	GW	3	X							
FTMM-65-GW-566MW01D-33.31		"	1088	GW	3	X							
FTMM-33-GW-GWMW29-10.85			1330	GW	3	X							
FTMM-33-GW-GWMW28D-33.79			1338	GW	3	X							
FTMM-33-GW-GWMW28-11.01			1315	GW	3	X							
FTMM-33-GW-GWMW27-12.62			1350	GW	3	X							
FTMM-33-GW-GWMW31-16.4			1344	GW	3	X							
FTMM-33-GW-GWMW37-11.78			1337	GW	3	X							
FTMM-54-GW-356MW06-5.07			1614	GW	3	X							
FTMM-54-GW-356MW06-10.1			1615	GW	3	X							
FTMM-54-GW-346MW04-6.25		↓	1615	GW	3	X							

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED New Jersey

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
Standard
REQUESTED REPORT DATE

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
Edata ____ Yes ____ No

INVOICE INFORMATION
PO #
BILL TO:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature:	Signature:	Signature:	Signature:	Signature:	Signature:
Printed Name: Chris Watson	Printed Name: J. Sealand	Printed Name:	Printed Name:	Printed Name:	
Firm: PARSONS	Firm: ALS	Firm:	Firm:	Firm:	
Date/Time: 12/19/14 1100	Date/Time: 12/20/14 1015	Date/Time:	Date/Time:	Date/Time:	

R1410303 5
Parsons, Inc.
FTMM 4Q GW

Distribution: White - Lab Copy; Yellow - Return to Originator

Cooler Receipt and Preservation Check Form

Project/Client Parsons Folder Number R14-10303

Cooler received on 12/20 by: JM

COURIER: ALS (UPS) FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y) N	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y (N) NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	ALS/ROC CLIENT
4	Circle: **Wet Ice Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 12/20 Time: 1026 ID: IR#3 (IR#4) From: Temp Blank Sample Bottle

Observed Temp (°C)	0.3	2.4					
Correction Factor (°C)	-0.1	-0.1					
Corrected Temp (°C)	0.2	2.3					
Within 0-6°C?	(Y) N	(Y) N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: A002 by JM on 12/20 at 1020
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: JMN 12/22

Cooler Breakdown: Date: 12/22/14 Time: 1425 by: _____

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct containers used for the tests indicated? (YES) NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	4114050	11/15				

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Bottle lot numbers: 4-258-004

Other Comments:

PC Secondary Review: JMN 5/26/14

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0953
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 03:06
Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1410303-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\I22914\A5195.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0953
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 03:06
Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1410303-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5195.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0953
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 03:06
Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1410303-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5195.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	12/30/14 03:06	
Dibromofluoromethane	99	85-115	12/30/14 03:06	
Toluene-d8	107	85-120	12/30/14 03:06	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 0306

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1410303-001	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14 1008
Date Received: 12/20/14
Date Analyzed: 12/30/14 03:35

Sample Name: FTMM-53-GW-699RW05-10
Lab Code: R1410303-002

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\122914\A5196.D\

Analysis Lot: 427294
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**200**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**69**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**1.3**	**J**	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**1.9**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

ALS Group USA, Corp. dba ALS Environmental
Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1008
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 03:35
Sample Name:	FTMM-53-GW-699RW05-10	**Units:**	µg/L
Lab Code:	R1410303-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5196.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	**120**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**7.7**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**71**		5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**6.8**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**330**		10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**9.7**		5.0	1.0	0.20	
95-47-6	o-Xylene	**280**	E	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**1.2**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.28**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1008
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 03:35
Sample Name:	FTMM-53-GW-699RW05-10	**Units:**	µg/L
Lab Code:	R1410303-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5196.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	12/30/14 03:35	
Dibromofluoromethane	99	85-115	12/30/14 03:35	
Toluene-d8	107	85-120	12/30/14 03:35	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/30/14 0335

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW05-10
Lab Code: R1410303-002

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000078-78-4	Butane, 2-methyl-	1.66	**44.9**	JN
000109-66-0	Pentane	1.81	**16.1**	JN
000107-83-5	Pentane, 2-methyl-	2.46	**41.2**	JN
000109-67-1	1-Pentene	2.51	**15.7**	JN
000096-14-0	Pentane, 3-methyl-	2.67	**26.0**	JN
000096-37-7	Cyclopentane, methyl-	3.56	**78.5**	JN
000108-87-2	Cyclohexane, methyl-	6.21	**16.8**	JN
000620-14-4	Benzene, 1-ethyl-3-methyl-	10.18	**96.7**	JN
000622-96-8	Benzene, 1-ethyl-4-methyl-	10.20	**52.5**	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.41	**127.2**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.90	**156.4**	JN
000611-15-4	Benzene, 1-ethenyl-2-methyl-	11.06	**138.0**	JN
000535-77-3	Benzene, 1-methyl-3-(1-methylethyl	11.13	**19.9**	JN
001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	11.33	**17.4**	JN
000099-87-6	Benzene, 1-methyl-4-(1-methylethyl	11.41	**32.7**	JN
000767-58-8	Indan, 1-methyl-	11.49	**24.9**	JN
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	11.68	**21.6**	JN
000527-53-7	Benzene, 1,2,3,5-tetramethyl-	11.71	**30.7**	JN
000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	11.89	**19.3**	JN
002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	11.99	**56.1**	JN

Comments:

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14 1008
Date Received: 12/20/14
Date Analyzed: 12/30/14 10:28

Sample Name: FTMM-53-GW-699RW05-10
Lab Code: R1410303-002
Run Type: Dilution

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\122914\A5210.D\

Analysis Lot: 427294
Instrument Name: R-MS-10
Dilution Factor: 2.5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	13	2.5	0.55	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	13	2.5	0.90	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	13	2.5	0.63	
79-00-5	1,1,2-Trichloroethane	ND	U	13	2.5	0.86	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	13	2.5	0.50	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	13	2.5	1.5	
563-58-6	1,1-Dichloropropene	ND	U	13	2.5	0.73	
87-61-6	1,2,3-Trichlorobenzene	ND	U	13	2.5	2.1	
96-18-4	1,2,3-Trichloropropane	ND	U	13	2.5	1.8	
120-82-1	1,2,4-Trichlorobenzene	ND	U	13	2.5	0.58	
95-63-6	1,2,4-Trimethylbenzene	**310**	D	13	2.5	0.50	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	13	2.5	1.9	
106-93-4	1,2-Dibromoethane	ND	U	13	2.5	0.60	
95-50-1	1,2-Dichlorobenzene	ND	U	13	2.5	0.53	
107-06-2	1,2-Dichloroethane	ND	U	13	2.5	0.90	
78-87-5	1,2-Dichloropropane	ND	U	13	2.5	0.50	
108-67-8	1,3,5-Trimethylbenzene	**63**	D	13	2.5	0.50	
541-73-1	1,3-Dichlorobenzene	ND	U	13	2.5	0.50	
142-28-9	1,3-Dichloropropane	ND	U	13	2.5	0.68	
106-46-7	1,4-Dichlorobenzene	ND	U	13	2.5	0.50	
594-20-7	2,2-Dichloropropane	ND	U	13	2.5	0.68	
78-93-3	2-Butanone (MEK)	ND	U	13	2.5	2.1	
95-49-8	2-Chlorotoluene	ND	U	13	2.5	0.50	
591-78-6	2-Hexanone	ND	U	13	13	4.2	
75-65-0	tert-Butyl Alcohol	ND	U	250	50	27	
106-43-4	4-Chlorotoluene	ND	U	13	2.5	0.60	
99-87-6	p-Isopropyltoluene	**1.2**	DJ	13	2.5	0.50	
108-10-1	4-Methyl-2-pentanone	ND	U	13	2.5	1.7	
67-64-1	Acetone	ND	U	13	13	3.1	
71-43-2	Benzene	**1.9**	DJ	13	2.5	0.50	
108-86-1	Bromobenzene	ND	U	13	2.5	0.71	
74-97-5	Bromochloromethane	ND	U	13	2.5	0.80	
75-27-4	Bromodichloromethane	ND	U	13	2.5	0.80	
75-25-2	Bromoform	ND	U	13	2.5	1.1	
74-83-9	Bromomethane	ND	U	13	2.5	0.73	

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14 1008
Date Received: 12/20/14
Date Analyzed: 12/30/14 10:28

Sample Name: FTMM-53-GW-699RW05-10
Lab Code: R1410303-002
Run Type: Dilution

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\122914\A5210.D\

Analysis Lot: 427294
Instrument Name: R-MS-10
Dilution Factor: 2.5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	13	2.5	1.2	
108-90-7	Chlorobenzene	ND	U	13	2.5	0.73	
75-00-3	Chloroethane	ND	U	13	2.5	0.60	
67-66-3	Chloroform	ND	U	13	2.5	0.63	
74-87-3	Chloromethane	ND	U	13	2.5	0.53	
124-48-1	Dibromochloromethane	ND	U	13	2.5	0.78	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	13	2.5	1.2	
75-09-2	Methylene Chloride	ND	U	13	2.5	1.5	
100-41-4	Ethylbenzene	**110**	D	13	2.5	0.50	
87-68-3	Hexachlorobutadiene	ND	U	13	2.5	1.6	
98-82-8	Isopropylbenzene (Cumene)	**6.7**	DJ	13	2.5	0.50	
1634-04-4	Methyl tert-Butyl Ether	ND	U	13	2.5	0.73	
91-20-3	Naphthalene	**67**	D	13	2.5	0.50	
100-42-5	Styrene	ND	U	13	2.5	0.50	
127-18-4	Tetrachloroethene (PCE)	ND	U	13	2.5	0.75	
108-88-3	Toluene	**6.2**	DJ	13	2.5	0.50	
79-01-6	Trichloroethene (TCE)	ND	U	13	2.5	0.55	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	13	2.5	0.50	
75-01-4	Vinyl Chloride	ND	U	13	2.5	0.80	
156-59-2	cis-1,2-Dichloroethene	ND	U	13	2.5	0.75	
10061-01-5	cis-1,3-Dichloropropene	ND	U	13	2.5	0.60	
179601-23-1	m,p-Xylenes	**350**	D	25	5.0	0.83	
104-51-8	n-Butylbenzene	ND	U	13	2.5	0.53	
103-65-1	n-Propylbenzene	**8.8**	DJ	13	2.5	0.50	
95-47-6	o-Xylene	**290**	D	13	2.5	0.50	
135-98-8	sec-Butylbenzene	**1.1**	DJ	13	2.5	0.68	
98-06-6	tert-Butylbenzene	ND	U	13	2.5	0.50	
156-60-5	trans-1,2-Dichloroethene	ND	U	13	2.5	0.83	
10061-02-6	trans-1,3-Dichloropropene	ND	U	13	2.5	0.50	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1008
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 10:28
Sample Name:	FTMM-53-GW-699RW05-10	**Units:**	µg/L
Lab Code:	R1410303-002	**Basis:**	NA
Run Type:	Dilution		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5210.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2.5

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	75-120	12/30/14 10:28	
Dibromofluoromethane	98	85-115	12/30/14 10:28	
Toluene-d8	107	85-120	12/30/14 10:28	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/30/14 1028

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW05-10DL
Lab Code: R1410303-002
Run Type: Dilution

Analytical Method: 8260C

Units: µg/L
Basis: NA

CAS #	Analyte Name	RT	Result	Q
000078-78-4	Butane, 2-methyl-	1.66	**54.2**	JN
000109-66-0	Pentane	1.81	**19.8**	JN
000107-83-5	Pentane, 2-methyl-	2.46	**48.9**	JN
	unknown	2.51	**18.3**	J
000096-14-0	Pentane, 3-methyl-	2.67	**30.7**	JN
000096-37-7	Cyclopentane, methyl-	3.56	**88.7**	JN
000108-87-2	Cyclohexane, methyl-	6.21	**14.8**	JN
000620-14-4	Benzene, 1-ethyl-3-methyl-	10.18	**89.9**	JN
000622-96-8	Benzene, 1-ethyl-4-methyl-	10.20	**50.1**	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.41	**121.0**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.90	**152.4**	JN
	unknown	11.06	**130.2**	J
000535-77-3	Benzene, 1-methyl-3-(1-methylethyl)-	11.13	**18.1**	JN
001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	11.33	**15.3**	JN
000099-87-6	Benzene, 1-methyl-4-(1-methylethyl)-	11.41	**30.1**	JN
000767-58-8	Indan, 1-methyl-	11.49	**22.7**	JN
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	11.68	**19.4**	JN
000527-53-7	Benzene, 1,2,3,5-tetramethyl-	11.71	**28.3**	JN
000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	11.89	**19.0**	JN
002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	11.99	**52.4**	JN

Comments:

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14 0948
Date Received: 12/20/14
Date Analyzed: 12/31/14 13:41

Sample Name: FTMM-53-GW-699RW11-5.3
Lab Code: R1410303-003

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\123114\A5264.D\

Analysis Lot: 427678
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**28**		5.0	5.0	1.3	
71-43-2	Benzene	**3.0**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0948
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 13:41
Sample Name:	FTMM-53-GW-699RW11-5.3	**Units:**	µg/L
Lab Code:	R1410303-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5264.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**1.3**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.98**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**0.28**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**0.60**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.30**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0948
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 13:41
Sample Name:	FTMM-53-GW-699RW11-5.3	**Units:**	µg/L
Lab Code:	R1410303-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5264.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	12/31/14 13:41	
Dibromofluoromethane	99	85-115	12/31/14 13:41	
Toluene-d8	107	85-120	12/31/14 13:41	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/31/14 1341

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW11-5.3
Lab Code: R1410303-003

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000079-29-8	Butane, 2,3-dimethyl-	2.44	**11.5**	JN
	unknown	2.67	**6.6**	J
000565-59-3	Pentane, 2,3-dimethyl-	4.53	**7.4**	JN
000637-50-3	Benzene, 1-propenyl-	11.06	**7.9**	JN
000767-58-8	Indan, 1-methyl-	11.49	**13.7**	JN
000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	11.89	**9.3**	JN
027133-93-3	2,3-Dihydro-1-methylindene	11.99	**20.5**	JN

Comments:

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14 0936
Date Received: 12/20/14
Date Analyzed: 12/31/14 14:11

Sample Name: FTMM-53-GW-699MW06-10.2
Lab Code: R1410303-004

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\123114\A5265.D\

Analysis Lot: 427678
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	2.2	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0936
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 14:11
Sample Name:	FTMM-53-GW-699MW06-10.2	**Units:**	µg/L
Lab Code:	R1410303-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5265.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0936
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 14:11
Sample Name:	FTMM-53-GW-699MW06-10.2	**Units:**	µg/L
Lab Code:	R1410303-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5265.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	12/31/14 14:11	
Dibromofluoromethane	101	85-115	12/31/14 14:11	
Toluene-d8	108	85-120	12/31/14 14:11	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 1411

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW06-10.2	**Units:**	µg/L
Lab Code:	R1410303-004	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0945
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 14:40
Sample Name:	FTMM-53-GW-699MW106-10.2	**Units:**	µg/L
Lab Code:	R1410303-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5266.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.0**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14 0945
Date Received: 12/20/14
Date Analyzed: 12/31/14 14:40

Sample Name: FTMM-53-GW-699MW106-10.2
Lab Code: R1410303-005

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\123114\A5266.D\

Analysis Lot: 427678
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0945
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 14:40
Sample Name:	FTMM-53-GW-699MW106-10.2	**Units:**	µg/L
Lab Code:	R1410303-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5266.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	75-120	12/31/14 14:40	
Dibromofluoromethane	100	85-115	12/31/14 14:40	
Toluene-d8	108	85-120	12/31/14 14:40	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 1440

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW106-10.2	**Units:**	µg/L
Lab Code:	R1410303-005	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0942
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 05:33
Sample Name:	FTMM-53-GW-699MW09-7.75	**Units:**	µg/L
Lab Code:	R1410303-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5200.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.8**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14 0942
Date Received: 12/20/14
Date Analyzed: 12/30/14 05:33

Sample Name: FTMM-53-GW-699MW09-7.75
Lab Code: R1410303-006

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\122914\A5200.D\

Analysis Lot: 427294
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	0.58	J	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0942
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 05:33
Sample Name:	FTMM-53-GW-699MW09-7.75	**Units:**	µg/L
Lab Code:	R1410303-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5200.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	12/30/14 05:33	
Dibromofluoromethane	101	85-115	12/30/14 05:33	
Toluene-d8	106	85-120	12/30/14 05:33	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 0533

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW09-7.75	**Units:**	µg/L
Lab Code:	R1410303-006	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14 1000
Date Received: 12/20/14
Date Analyzed: 12/30/14 06:02

Sample Name: FTMM-53-GW-699MW16-.7.5
Lab Code: R1410303-007

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\122914\A5201.D\

Analysis Lot: 427294
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.0**	**J**	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1000
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 06:02
Sample Name:	FTMM-53-GW-699MW16-.7.5	**Units:**	µg/L
Lab Code:	R1410303-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5201.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**7.8**		5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**0.89**	J	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-I,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1000
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 06:02
Sample Name:	FTMM-53-GW-699MW16-.7.5	**Units:**	µg/L
Lab Code:	R1410303-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5201.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	12/30/14 06:02	
Dibromofluoromethane	102	85-115	12/30/14 06:02	
Toluene-d8	107	85-120	12/30/14 06:02	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 0602

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW16-.7.5	**Units:**	µg/L
Lab Code:	R1410303-007	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0930
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 06:32
Sample Name:	FTMM-53-GW-699RW03-8.2	**Units:**	µg/L
Lab Code:	R1410303-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5202.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**3.0**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**0.26**	J	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**0.29**	J	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0930
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 06:32
Sample Name:	FTMM-53-GW-699RW03-8.2	**Units:**	µg/L
Lab Code:	R1410303-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5202.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	**0.58**	**J**	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**0.37**	**J**	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**0.45**	**J**	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**0.38**	**J**	5.0	1.0	0.20	
95-47-6	o-Xylene	**0.86**	**J**	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0930
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 06:32
Sample Name:	FTMM-53-GW-699RW03-8.2	**Units:**	µg/L
Lab Code:	R1410303-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5202.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	12/30/14 06:32	
Dibromofluoromethane	99	85-115	12/30/14 06:32	
Toluene-d8	107	85-120	12/30/14 06:32	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 0632

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699RW03-8.2	**Units:**	µg/L
Lab Code:	R1410303-008	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000079-29-8	Butane, 2,3-dimethyl-	2.44	**9.1**	JN
000096-14-0	Pentane, 3-methyl-	2.67	**6.9**	JN

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1015
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 07:01
Sample Name:	FTMM-53-GW-699MW04-8.0	**Units:**	µg/L
Lab Code:	R1410303-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5203.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**4.6**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**3.0**	J	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**8.4**		5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1015
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 07:01
Sample Name:	FTMM-53-GW-699MW04-8.0	**Units:**	µg/L
Lab Code:	R1410303-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5203.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	0.25	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	0.52	J	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1015
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 07:01
Sample Name:	FTMM-53-GW-699MW04-8.0	**Units:**	µg/L
Lab Code:	R1410303-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5203.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	12/30/14 07:01	
Dibromofluoromethane	100	85-115	12/30/14 07:01	
Toluene-d8	107	85-120	12/30/14 07:01	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 0701

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW04-8.0	**Units:**	µg/L
Lab Code:	R1410303-009	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1036
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 15:10
Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1410303-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5267.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	10	2.0	0.44	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	10	2.0	0.72	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	10	2.0	0.50	
79-00-5	1,1,2-Trichloroethane	ND	U	10	2.0	0.68	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	10	2.0	0.40	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	10	2.0	1.2	
563-58-6	1,1-Dichloropropene	ND	U	10	2.0	0.58	
87-61-6	1,2,3-Trichlorobenzene	ND	U	10	2.0	1.7	
96-18-4	1,2,3-Trichloropropane	ND	U	10	2.0	1.4	
120-82-1	1,2,4-Trichlorobenzene	ND	U	10	2.0	0.46	
95-63-6	1,2,4-Trimethylbenzene	ND	U	10	2.0	0.40	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	10	2.0	1.5	
106-93-4	1,2-Dibromoethane	ND	U	10	2.0	0.48	
95-50-1	1,2-Dichlorobenzene	ND	U	10	2.0	0.42	
107-06-2	1,2-Dichloroethane	ND	U	10	2.0	0.72	
78-87-5	1,2-Dichloropropane	ND	U	10	2.0	0.40	
108-67-8	1,3,5-Trimethylbenzene	ND	U	10	2.0	0.40	
541-73-1	1,3-Dichlorobenzene	ND	U	10	2.0	0.40	
142-28-9	1,3-Dichloropropane	ND	U	10	2.0	0.54	
106-46-7	1,4-Dichlorobenzene	ND	U	10	2.0	0.40	
594-20-7	2,2-Dichloropropane	ND	U	10	2.0	0.54	
78-93-3	2-Butanone (MEK)	ND	U	10	2.0	1.7	
95-49-8	2-Chlorotoluene	ND	U	10	2.0	0.40	
591-78-6	2-Hexanone	ND	U	10	10	3.4	
75-65-0	tert-Butyl Alcohol	ND	U	200	40	22	
106-43-4	4-Chlorotoluene	ND	U	10	2.0	0.48	
99-87-6	p-Isopropyltoluene	ND	U	10	2.0	0.40	
108-10-1	4-Methyl-2-pentanone	ND	U	10	2.0	1.4	
67-64-1	Acetone	ND	U	10	10	2.5	
71-43-2	Benzene	ND	U	10	2.0	0.40	
108-86-1	Bromobenzene	ND	U	10	2.0	0.56	
74-97-5	Bromochloromethane	ND	U	10	2.0	0.64	
75-27-4	Bromodichloromethane	ND	U	10	2.0	0.64	
75-25-2	Bromoform	ND	U	10	2.0	0.84	
74-83-9	Bromomethane	ND	U	10	2.0	0.58	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1036
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 15:10
Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1410303-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5267.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	10	2.0	0.90	
108-90-7	Chlorobenzene	ND	U	10	2.0	0.58	
75-00-3	Chloroethane	ND	U	10	2.0	0.48	
67-66-3	Chloroform	ND	U	10	2.0	0.50	
74-87-3	Chloromethane	ND	U	10	2.0	0.42	
124-48-1	Dibromochloromethane	ND	U	10	2.0	0.62	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	10	2.0	0.92	
75-09-2	Methylene Chloride	ND	U	10	2.0	1.2	
100-41-4	Ethylbenzene	ND	U	10	2.0	0.40	
87-68-3	Hexachlorobutadiene	ND	U	10	2.0	1.3	
98-82-8	Isopropylbenzene (Cumene)	ND	U	10	2.0	0.40	
1634-04-4	Methyl tert-Butyl Ether	ND	U	10	2.0	0.58	
91-20-3	Naphthalene	ND	U	10	2.0	0.40	
100-42-5	Styrene	ND	U	10	2.0	0.40	
127-18-4	Tetrachloroethene (PCE)	**180**		10	2.0	0.60	
108-88-3	Toluene	ND	U	10	2.0	0.40	
79-01-6	Trichloroethene (TCE)	**86**		10	2.0	0.44	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	10	2.0	0.40	
75-01-4	Vinyl Chloride	**1.3**	J	10	2.0	0.64	
156-59-2	cis-1,2-Dichloroethene	**110**		10	2.0	0.60	
10061-01-5	cis-1,3-Dichloropropene	ND	U	10	2.0	0.48	
179601-23-1	m,p-Xylenes	ND	U	20	4.0	0.66	
104-51-8	n-Butylbenzene	ND	U	10	2.0	0.42	
103-65-1	n-Propylbenzene	ND	U	10	2.0	0.40	
95-47-6	o-Xylene	ND	U	10	2.0	0.40	
135-98-8	sec-Butylbenzene	ND	U	10	2.0	0.54	
98-06-6	tert-Butylbenzene	ND	U	10	2.0	0.40	
156-60-5	trans-1,2-Dichloroethene	**0.78**	J	10	2.0	0.66	
10061-02-6	trans-1,3-Dichloropropene	ND	U	10	2.0	0.40	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1036
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 15:10
Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1410303-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5267.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	12/31/14 15:10	
Dibromofluoromethane	100	85-115	12/31/14 15:10	
Toluene-d8	108	85-120	12/31/14 15:10	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 1510

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1410303-010	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14 1028
Date Received: 12/20/14
Date Analyzed: 12/31/14 15:40

Sample Name: FTMM-68-GW-565MW01D-22.31
Lab Code: R1410303-011

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\123114\A5268.D\

Analysis Lot: 427678
Instrument Name: R-MS-10
Dilution Factor: 20

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	100	20	4.4	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	100	20	7.2	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	100	20	5.0	
79-00-5	1,1,2-Trichloroethane	ND	U	100	20	6.9	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	100	20	4.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	100	20	12	
563-58-6	1,1-Dichloropropene	ND	U	100	20	5.8	
87-61-6	1,2,3-Trichlorobenzene	ND	U	100	20	17	
96-18-4	1,2,3-Trichloropropane	ND	U	100	20	14	
120-82-1	1,2,4-Trichlorobenzene	ND	U	100	20	4.7	
95-63-6	1,2,4-Trimethylbenzene	ND	U	100	20	4.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	100	20	15	
106-93-4	1,2-Dibromoethane	ND	U	100	20	4.8	
95-50-1	1,2-Dichlorobenzene	ND	U	100	20	4.2	
107-06-2	1,2-Dichloroethane	ND	U	100	20	7.2	
78-87-5	1,2-Dichloropropane	ND	U	100	20	4.0	
108-67-8	1,3,5-Trimethylbenzene	ND	U	100	20	4.0	
541-73-1	1,3-Dichlorobenzene	ND	U	100	20	4.0	
142-28-9	1,3-Dichloropropane	ND	U	100	20	5.4	
106-46-7	1,4-Dichlorobenzene	ND	U	100	20	4.0	
594-20-7	2,2-Dichloropropane	ND	U	100	20	5.4	
78-93-3	2-Butanone (MEK)	ND	U	100	20	17	
95-49-8	2-Chlorotoluene	ND	U	100	20	4.0	
591-78-6	2-Hexanone	ND	U	100	100	34	
75-65-0	tert-Butyl Alcohol	ND	U	2000	400	220	
106-43-4	4-Chlorotoluene	ND	U	100	20	4.8	
99-87-6	p-Isopropyltoluene	ND	U	100	20	4.0	
108-10-1	4-Methyl-2-pentanone	ND	U	100	20	14	
67-64-1	Acetone	ND	U	100	100	25	
71-43-2	Benzene	ND	U	100	20	4.0	
108-86-1	Bromobenzene	ND	U	100	20	5.7	
74-97-5	Bromochloromethane	ND	U	100	20	6.4	
75-27-4	Bromodichloromethane	ND	U	100	20	6.4	
75-25-2	Bromoform	ND	U	100	20	8.4	
74-83-9	Bromomethane	ND	U	100	20	5.8	

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14 1028
Date Received: 12/20/14
Date Analyzed: 12/31/14 15:40

Sample Name: FTMM-68-GW-565MW01D-22.31
Lab Code: R1410303-011

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\123114\A5268.D\

Analysis Lot: 427678
Instrument Name: R-MS-10
Dilution Factor: 20

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	100	20	9.0	
108-90-7	Chlorobenzene	ND	U	100	20	5.8	
75-00-3	Chloroethane	ND	U	100	20	4.8	
67-66-3	Chloroform	ND	U	100	20	5.0	
74-87-3	Chloromethane	ND	U	100	20	4.2	
124-48-1	Dibromochloromethane	ND	U	100	20	6.2	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	100	20	9.3	
75-09-2	Methylene Chloride	ND	U	100	20	12	
100-41-4	Ethylbenzene	ND	U	100	20	4.0	
87-68-3	Hexachlorobutadiene	ND	U	100	20	13	
98-82-8	Isopropylbenzene (Cumene)	ND	U	100	20	4.0	
1634-04-4	Methyl tert-Butyl Ether	ND	U	100	20	5.8	
91-20-3	Naphthalene	ND	U	100	20	4.0	
100-42-5	Styrene	ND	U	100	20	4.0	
127-18-4	Tetrachloroethene (PCE)	**2400**		100	20	6.0	
108-88-3	Toluene	ND	U	100	20	4.0	
79-01-6	Trichloroethene (TCE)	**41**	J	100	20	4.4	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	100	20	4.0	
75-01-4	Vinyl Chloride	ND	U	100	20	6.4	
156-59-2	cis-1,2-Dichloroethene	**49**	J	100	20	6.0	
10061-01-5	cis-1,3-Dichloropropene	ND	U	100	20	4.8	
179601-23-1	m,p-Xylenes	ND	U	200	40	6.7	
104-51-8	n-Butylbenzene	ND	U	100	20	4.2	
103-65-1	n-Propylbenzene	ND	U	100	20	4.0	
95-47-6	o-Xylene	ND	U	100	20	4.0	
135-98-8	sec-Butylbenzene	ND	U	100	20	5.4	
98-06-6	tert-Butylbenzene	ND	U	100	20	4.0	
156-60-5	trans-1,2-Dichloroethene	ND	U	100	20	6.7	
10061-02-6	trans-1,3-Dichloropropene	ND	U	100	20	4.0	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1028
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 15:40
Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1410303-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5268.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	20

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	12/31/14 15:40	
Dibromofluoromethane	98	85-115	12/31/14 15:40	
Toluene-d8	108	85-120	12/31/14 15:40	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 1540

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1410303-011	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1330
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 08:29
Sample Name:	FTMM-22-GW-CWMW29-10.85	**Units:**	µg/L
Lab Code:	R1410303-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5206.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.1**	**J**	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1330
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 08:29
Sample Name:	FTMM-22-GW-CWMW29-10.85	**Units:**	µg/L
Lab Code:	R1410303-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5206.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**4.7**	**J**	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**0.83**	**J**	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1330
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 08:29
Sample Name:	FTMM-22-GW-CWMW29-10.85	**Units:**	µg/L
Lab Code:	R1410303-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5206.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	12/30/14 08:29	
Dibromofluoromethane	98	85-115	12/30/14 08:29	
Toluene-d8	106	85-120	12/30/14 08:29	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 0829

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CWMW29-10.85	**Units:**	µg/L
Lab Code:	R1410303-012	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1322
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 08:59
Sample Name:	FTMM-22-GW-CW1MW281-33.74	**Units:**	µg/L
Lab Code:	R1410303-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5207.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**0.82**	J	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1322
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 08:59
Sample Name:	FTMM-22-GW-CW1MW281-33.74	**Units:**	µg/L
Lab Code:	R1410303-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5207.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**330**	E	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**1.8**	J	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**23**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1322
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 08:59
Sample Name:	FTMM-22-GW-CW1MW281-33.74	**Units:**	µg/L
Lab Code:	R1410303-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5207.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	12/30/14 08:59	
Dibromofluoromethane	99	85-115	12/30/14 08:59	
Toluene-d8	108	85-120	12/30/14 08:59	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 0859

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW281-33.74	**Units:**	µg/L
Lab Code:	R1410303-013	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1322
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 16:09
Sample Name:	FTMM-22-GW-CW1MW281-33.74	**Units:**	µg/L
Lab Code:	R1410303-013	**Basis:**	NA
Run Type:	Dilution		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5269.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	25	5.0	1.1	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	25	5.0	1.8	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	25	5.0	1.3	
79-00-5	1,1,2-Trichloroethane	ND	U	25	5.0	1.8	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	25	5.0	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	25	5.0	2.9	
563-58-6	1,1-Dichloropropene	ND	U	25	5.0	1.5	
87-61-6	1,2,3-Trichlorobenzene	ND	U	25	5.0	4.1	
96-18-4	1,2,3-Trichloropropane	ND	U	25	5.0	3.5	
120-82-1	1,2,4-Trichlorobenzene	ND	U	25	5.0	1.2	
95-63-6	1,2,4-Trimethylbenzene	ND	U	25	5.0	1.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	25	5.0	3.7	
106-93-4	1,2-Dibromoethane	ND	U	25	5.0	1.2	
95-50-1	1,2-Dichlorobenzene	ND	U	25	5.0	1.1	
107-06-2	1,2-Dichloroethane	ND	U	25	5.0	1.8	
78-87-5	1,2-Dichloropropane	ND	U	25	5.0	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	U	25	5.0	1.0	
541-73-1	1,3-Dichlorobenzene	ND	U	25	5.0	1.0	
142-28-9	1,3-Dichloropropane	ND	U	25	5.0	1.4	
106-46-7	1,4-Dichlorobenzene	ND	U	25	5.0	1.0	
594-20-7	2,2-Dichloropropane	ND	U	25	5.0	1.4	
78-93-3	2-Butanone (MEK)	ND	U	25	5.0	4.1	
95-49-8	2-Chlorotoluene	ND	U	25	5.0	1.0	
591-78-6	2-Hexanone	ND	U	25	25	8.3	
75-65-0	tert-Butyl Alcohol	ND	U	500	100	54	
106-43-4	4-Chlorotoluene	ND	U	25	5.0	1.2	
99-87-6	p-Isopropyltoluene	ND	U	25	5.0	1.0	
108-10-1	4-Methyl-2-pentanone	ND	U	25	5.0	3.4	
67-64-1	Acetone	ND	U	25	25	6.2	
71-43-2	Benzene	ND	U	25	5.0	1.0	
108-86-1	Bromobenzene	ND	U	25	5.0	1.5	
74-97-5	Bromochloromethane	ND	U	25	5.0	1.6	
75-27-4	Bromodichloromethane	ND	U	25	5.0	1.6	
75-25-2	Bromoform	ND	U	25	5.0	2.1	
74-83-9	Bromomethane	ND	U	25	5.0	1.5	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1322
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 16:09
Sample Name:	FTMM-22-GW-CW1MW281-33.74	**Units:**	µg/L
Lab Code:	R1410303-013	**Basis:**	NA
Run Type:	Dilution		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5269.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	25	5.0	2.3	
108-90-7	Chlorobenzene	ND	U	25	5.0	1.5	
75-00-3	Chloroethane	ND	U	25	5.0	1.2	
67-66-3	Chloroform	ND	U	25	5.0	1.3	
74-87-3	Chloromethane	ND	U	25	5.0	1.1	
124-48-1	Dibromochloromethane	ND	U	25	5.0	1.6	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	25	5.0	2.4	
75-09-2	Methylene Chloride	ND	U	25	5.0	3.0	
100-41-4	Ethylbenzene	ND	U	25	5.0	1.0	
87-68-3	Hexachlorobutadiene	ND	U	25	5.0	3.1	
98-82-8	Isopropylbenzene (Cumene)	ND	U	25	5.0	1.0	
1634-04-4	Methyl tert-Butyl Ether	ND	U	25	5.0	1.5	
91-20-3	Naphthalene	ND	U	25	5.0	1.0	
100-42-5	Styrene	ND	U	25	5.0	1.0	
127-18-4	Tetrachloroethene (PCE)	**1.5**	DJ	25	5.0	1.5	
108-88-3	Toluene	ND	U	25	5.0	1.0	
79-01-6	Trichloroethene (TCE)	**300**	D	25	5.0	1.1	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	25	5.0	1.0	
75-01-4	Vinyl Chloride	**1.7**	DJ	25	5.0	1.6	
156-59-2	cis-1,2-Dichloroethene	**22**	DJ	25	5.0	1.5	
10061-01-5	cis-1,3-Dichloropropene	ND	U	25	5.0	1.2	
179601-23-1	m,p-Xylenes	ND	U	50	10	1.7	
104-51-8	n-Butylbenzene	ND	U	25	5.0	1.1	
103-65-1	n-Propylbenzene	ND	U	25	5.0	1.0	
95-47-6	o-Xylene	ND	U	25	5.0	1.0	
135-98-8	sec-Butylbenzene	ND	U	25	5.0	1.4	
98-06-6	tert-Butylbenzene	ND	U	25	5.0	1.0	
156-60-5	trans-1,2-Dichloroethene	ND	U	25	5.0	1.7	
10061-02-6	trans-1,3-Dichloropropene	ND	U	25	5.0	1.0	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1322
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 16:09
Sample Name:	FTMM-22-GW-CW1MW281-33.74	**Units:**	µg/L
Lab Code:	R1410303-013	**Basis:**	NA
Run Type:	Dilution		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5269.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	5

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	12/31/14 16:09	
Dibromofluoromethane	97	85-115	12/31/14 16:09	
Toluene-d8	108	85-120	12/31/14 16:09	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 1609

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW281-33.74DL	**Units:**	µg/L
Lab Code:	R1410303-013	**Basis:**	NA
Run Type:	Dilution		
Analytical Method:	8260C		

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1315
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 09:28
Sample Name:	FTMM-22-GW-CW1MW28-11.21	**Units:**	µg/L
Lab Code:	R1410303-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5208.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.9**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1315
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 09:28
Sample Name:	FTMM-22-GW-CW1MW28-11.21	**Units:**	µg/L
Lab Code:	R1410303-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5208.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**4.6**	J	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1315
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 09:28
Sample Name:	FTMM-22-GW-CW1MW28-11.21	**Units:**	µg/L
Lab Code:	R1410303-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5208.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	12/30/14 09:28	
Dibromofluoromethane	100	85-115	12/30/14 09:28	
Toluene-d8	106	85-120	12/30/14 09:28	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 0928

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW28-11.21	**Units:**	µg/L
Lab Code:	R1410303-014	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1350
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 09:58
Sample Name:	FTMM-22-GW-CW1MW27-12.63	**Units:**	µg/L
Lab Code:	R1410303-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5209.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.8**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1350
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 09:58
Sample Name:	FTMM-22-GW-CW1MW27-12.63	**Units:**	µg/L
Lab Code:	R1410303-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5209.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	0.68	J	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1350
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 09:58
Sample Name:	FTMM-22-GW-CW1MW27-12.63	**Units:**	µg/L
Lab Code:	R1410303-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5209.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	12/30/14 09:58	
Dibromofluoromethane	98	85-115	12/30/14 09:58	
Toluene-d8	105	85-120	12/30/14 09:58	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 0958

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW27-12.63	**Units:**	µg/L
Lab Code:	R1410303-015	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1344
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 16:39
Sample Name:	FTMM-22-GW-CW1MW31-16.4	**Units:**	µg/L
Lab Code:	R1410303-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5270.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1344
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 16:39
Sample Name:	FTMM-22-GW-CW1MW31-16.4	**Units:**	µg/L
Lab Code:	R1410303-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5270.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	4.4	J	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1344
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 16:39
Sample Name:	FTMM-22-GW-CW1MW31-16.4	**Units:**	µg/L
Lab Code:	R1410303-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5270.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	12/31/14 16:39	
Dibromofluoromethane	100	85-115	12/31/14 16:39	
Toluene-d8	107	85-120	12/31/14 16:39	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 1639

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW31-16.4	**Units:**	µg/L
Lab Code:	R1410303-016	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1337
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 17:08
Sample Name:	FTMM-22-GW-CW1MW37-11.78	**Units:**	µg/L
Lab Code:	R1410303-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5271.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1337
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 17:08
Sample Name:	FTMM-22-GW-CW1MW37-11.78	**Units:**	µg/L
Lab Code:	R1410303-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5271.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**0.23**	J	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1337
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 17:08
Sample Name:	FTMM-22-GW-CW1MW37-11.78	**Units:**	µg/L
Lab Code:	R1410303-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5271.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	75-120	12/31/14 17:08	
Dibromofluoromethane	99	85-115	12/31/14 17:08	
Toluene-d8	108	85-120	12/31/14 17:08	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 1708

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW37-11.78	**Units:**	µg/L
Lab Code:	R1410303-017	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1614
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 17:38
Sample Name:	FTMM-54-GW-296MW06-5.07	**Units:**	µg/L
Lab Code:	R1410303-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5272.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	1.9	J	5.0	5.0	1.3	
71-43-2	Benzene	1.6	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1614
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 17:38
Sample Name:	FTMM-54-GW-296MW06-5.07	**Units:**	µg/L
Lab Code:	R1410303-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5272.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**0.34**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.37**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1614
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 17:38
Sample Name:	FTMM-54-GW-296MW06-5.07	**Units:**	µg/L
Lab Code:	R1410303-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5272.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	12/31/14 17:38	
Dibromofluoromethane	99	85-115	12/31/14 17:38	
Toluene-d8	107	85-120	12/31/14 17:38	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 1738

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-54-GW-296MW06-5.07	**Units:**	µg/L
Lab Code:	R1410303-018	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000496-11-7	Indane	11.06	6.9	JN

Comments:

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1615
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 18:08
Sample Name:	FTMM-54-GW-296MW06-10.1	**Units:**	µg/L
Lab Code:	R1410303-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5273.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**15**		5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1615
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 18:08
Sample Name:	FTMM-54-GW-296MW06-10.1	**Units:**	µg/L
Lab Code:	R1410303-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5273.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	**0.20**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	0.76	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.66**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.26**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**0.51**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	**0.22**	J	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1615
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 18:08
Sample Name:	FTMM-54-GW-296MW06-10.1	**Units:**	µg/L
Lab Code:	R1410303-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5273.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	12/31/14 18:08	
Dibromofluoromethane	101	85-115	12/31/14 18:08	
Toluene-d8	108	85-120	12/31/14 18:08	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 1808

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-54-GW-296MW06-10.1	**Units:**	µg/L
Lab Code:	R1410303-019	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000496-11-7	Indane	11.06	**24.3**	JN

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1615
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 18:37
Sample Name:	FTMM-54-GW-296MW04-6.35	**Units:**	µg/L
Lab Code:	R1410303-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5274.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.0**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1615
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 18:37
Sample Name:	FTMM-54-GW-296MW04-6.35	**Units:**	µg/L
Lab Code:	R1410303-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5274.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylhenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1615
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 18:37
Sample Name:	FTMM-54-GW-296MW04-6.35	**Units:**	µg/L
Lab Code:	R1410303-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5274.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	12/31/14 18:37	
Dibromofluoromethane	100	85-115	12/31/14 18:37	
Toluene-d8	108	85-120	12/31/14 18:37	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/31/14 1837

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-54-GW-296MW04-6.35
Lab Code: R1410303-020

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/30/14 02:36
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1500158-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5194.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: NA
Date Received: NA
Date Analyzed: 12/30/14 02:36

Sample Name: Method Blank
Lab Code: RQ1500158-01

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\122914\A5194.D\

Analysis Lot: 427294
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/30/14 02:36
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1500158-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\I22914\A5194.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	12/30/14 02:36	
Dibromofluoromethane	100	85-115	12/30/14 02:36	
Toluene-d8	109	85-120	12/30/14 02:36	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: NA
Date Received: NA
Date Analyzed: 12/30/14 0236

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1500158-01

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: NA
Date Received: NA
Date Analyzed: 12/31/14 13:11

Sample Name: Method Blank
Lab Code: RQ1500199-04

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\123114\A5263.D\

Analysis Lot: 427678
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	0.24	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/31/14 13:11
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1500199-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5263.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/31/14 13:11
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1500199-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5263.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	12/31/14 13:11	
Dibromofluoromethane	100	85-115	12/31/14 13:11	
Toluene-d8	109	85-120	12/31/14 13:11	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/31/14 1311

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1500199-04	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/30/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW05-10
Lab Code: R1410303-002

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-53-GW-699RW05-10MS Matrix Spike RQ1500158-05				FTMM-53-GW-699RW05-10D MS Duplicate Matrix Spike RQ1500158-06					
Analyte Name	Sample Result	Result	Spike Amount	% Rec		Result	Spike Amount	% Rec		% Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND	121	125	97		117	125	94		80 - 130	3	30
1,1,1-Trichloroethane (TCA)	ND	123	125	99		120	125	96		65 - 130	2	30
1,1,2,2-Tetrachloroethane	ND	118	125	94		117	125	94		65 - 130	<1	30
1,1,2-Trichloroethane	ND	121	125	97		114	125	91		75 - 125	6	30
1,1-Dichloroethane (1,1-DCA)	ND	130	125	104		125	125	100		70 - 135	4	30
1,1-Dichloroethene (1,1-DCE)	ND	129	125	103		125	125	100		70 - 130	3	30
1,1-Dichloropropene	ND	125	125	100		119	125	95		75 - 130	5	30
1,2,3-Trichlorobenzene	ND	119	125	95		121	125	97		75 - 125	2	30
1,2,3-Trichloropropane	ND	112	125	89		114	125	91		75 - 125	2	30
1,2,4-Trichlorobenzene	ND	124	125	99		124	125	99		65 - 135	<1	30
1,2,4-Trimethylbenzene	310	370	125	45	*	366	125	41	*	75 - 130	1	30
1,2-Dibromo-3-chloropropane (DBC	ND	109	125	87		114	125	91		50 - 130	5	30
1,2-Dibromoethane	ND	125	125	100		121	125	97		80 - 120	3	30
1,2-Dichlorobenzene	ND	126	125	101		124	125	99		70 - 120	2	30
1,2-Dichloroethane	ND	124	125	99		121	125	97		70 - 130	2	30
1,2-Dichloropropane	ND	133	125	106		130	125	104		75 - 125	2	30
1,3,5-Trimethylbenzene	63	198	125	108		195	125	106		75 - 130	1	30
1,3-Dichlorobenzene	ND	125	125	100		123	125	99		75 - 125	1	30
1,3-Dichloropropane	ND	124	125	99		122	125	98		75 - 125	1	30
1,4-Dichlorobenzene	ND	125	125	100		123	125	98		75 - 125	2	30
2,2-Dichloropropane	ND	124	125	99		120	125	96		70 - 135	3	30
2-Butanone (MEK)	ND	129	125	103		125	125	100		30 - 150	3	30
2-Chlorotoluene	ND	150	125	120		147	125	117		75 - 125	2	30
2-Hexanone	ND	117	125	93		111	125	89		55 - 130	5	30
tert-Butyl Alcohol	ND	2180	2500	87		2150	2500	86		50 - 150	2	30
4-Chlorotoluene	ND	143	125	114		141	125	113		75 - 130	1	30
p-Isopropyltoluene	1.2	140	125	111		139	125	111		75 - 130	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/30/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW05-10
Lab Code: R1410303-002

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-53-GW-699RW05-10MS Matrix Spike RQ1500158-05			FTMM-53-GW-699RW05-10DMS Duplicate Matrix Spike RQ1500158-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
4-Methyl-2-pentanone	ND	117	125	94	116	125	92	60 - 135	2	30
Acetone	ND	160	125	128	158	125	126	40 - 140	1	30
Benzene	1.9	132	125	104	127	125	100	80 - 120	4	30
Bromobenzene	ND	122	125	98	119	125	95	75 - 125	3	30
Bromochloromethane	ND	124	125	99	120	125	96	65 - 130	3	30
Bromodichloromethane	ND	123	125	98	119	125	95	75 - 120	3	30
Bromoform	ND	114	125	91	111	125	89	70 - 130	3	30
Bromomethane	ND	70.4	125	56	75.6	125	60	30 - 145	7	30
Carbon Tetrachloride	ND	121	125	97	115	125	92	65 - 140	5	30
Chlorobenzene	ND	131	125	104	127	125	102	80 - 120	2	30
Chloroethane	ND	140	125	112	134	125	107	60 - 135	5	30
Chloroform	ND	126	125	101	124	125	99	65 - 135	2	30
Chloromethane	ND	140	125	112	135	125	108	40 - 125	3	30
Dibromochloromethane	ND	116	125	93	115	125	92	60 - 135	<1	30
Dichlorodifluoromethane (CFC 12)	ND	136	125	109	130	125	104	30 - 155	5	30
Methylene Chloride	ND	127	125	102	121	125	97	55 - 140	4	30
Ethylbenzene	110	235	125	102	226	125	95	75 - 125	4	30
Hexachlorobutadiene	ND	112	125	89	110	125	88	50 - 140	1	30
Isopropylbenzene (Cumene)	6.7	150	125	115	143	125	109	75 - 125	5	30
Methyl tert-Butyl Ether	ND	123	125	98	119	125	95	65 - 125	3	30
Naphthalene	67	195	125	103	195	125	102	55 - 140	<1	30
Styrene	ND	151	125	120	145	125	116	65 - 135	4	30
Tetrachloroethene (PCE)	ND	125	125	100	121	125	97	45 - 150	3	30
Toluene	6.2	140	125	107	135	125	103	75 - 120	3	30
Trichloroethene (TCE)	ND	128	125	102	123	125	98	70 - 125	4	30
Trichlorofluoromethane (CFC 11)	ND	141	125	113	135	125	108	60 - 145	4	30
Vinyl Chloride	ND	140	125	112	130	125	104	50 - 145	7	30

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Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/30/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW05-10
Lab Code: R1410303-002

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-53-GW-699RW05-10MS Matrix Spike RQ1500158-05			FTMM-53-GW-699RW05-10DMS Duplicate Matrix Spike RQ1500158-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
cis-1,2-Dichloroethene	ND	128	125	102	123	125	98	70 - 125	4	30
cis-1,3-Dichloropropene	ND	118	125	95	116	125	93	70 - 130	2	30
m,p-Xylenes	350	611	250	104	587	250	95	75 - 130	4	30
n-Butylbenzene	ND	145	125	116	141	125	113	70 - 135	2	30
n-Propylbenzene	8.8	149	125	112	145	125	109	70 - 130	2	30
o-Xylene	290	425	125	106	413	125	96	80 - 120	3	30
sec-Butylbenzene	1.1	139	125	110	137	125	109	70 - 125	1	30
tert-Butylbenzene	ND	132	125	106	128	125	103	70 - 130	3	30
trans-1,2-Dichloroethene	ND	130	125	104	125	125	100	60 - 140	4	30
trans-1,3-Dichloropropene	ND	119	125	95	116	125	93	55 - 140	2	30

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Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/31/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW06-10.2
Lab Code: R1410303-004

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-53-GW-699MW06-10.2 MS Matrix Spike RQ1500199-05			FTMM-53-GW-699MW06-10.2 DMS Duplicate Matrix Spike RQ1500199-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	ND	46.8	50.0	94	48.6	50.0	97	80 - 130	4	30
1,1,1-Trichloroethane (TCA)	ND	49.1	50.0	98	51.2	50.0	102	65 - 130	4	30
1,1,2,2-Tetrachloroethane	ND	45.6	50.0	91	45.6	50.0	91	65 - 130	<1	30
1,1,2-Trichloroethane	ND	45.4	50.0	91	46.6	50.0	93	75 - 125	3	30
1,1-Dichloroethane (1,1-DCA)	ND	52.6	50.0	105	53.6	50.0	107	70 - 135	2	30
1,1-Dichloroethene (1,1-DCE)	ND	51.9	50.0	104	52.5	50.0	105	70 - 130	1	30
1,1-Dichloropropene	ND	48.8	50.0	98	51.1	50.0	102	75 - 130	5	30
1,2,3-Trichlorobenzene	ND	45.0	50.0	90	48.2	50.0	96	75 - 125	7	30
1,2,3-Trichloropropane	ND	40.8	50.0	82	42.9	50.0	86	75 - 125	5	30
1,2,4-Trichlorobenzene	ND	47.2	50.0	94	49.3	50.0	99	65 - 135	4	30
1,2,4-Trimethylbenzene	ND	50.6	50.0	101	51.9	50.0	104	75 - 130	3	30
1,2-Dibromo-3-chloropropane (DBC	ND	39.9	50.0	80	41.0	50.0	82	50 - 130	3	30
1,2-Dibromoethane	ND	46.4	50.0	93	48.2	50.0	96	80 - 120	4	30
1,2-Dichlorobenzene	ND	47.6	50.0	95	48.8	50.0	98	70 - 120	3	30
1,2-Dichloroethane	ND	48.0	50.0	96	49.5	50.0	99	70 - 130	3	30
1,2-Dichloropropane	ND	53.7	50.0	107	54.4	50.0	109	75 - 125	1	30
1,3,5-Trimethylbenzene	ND	51.4	50.0	103	52.7	50.0	105	75 - 130	3	30
1,3-Dichlorobenzene	ND	47.1	50.0	94	49.3	50.0	98	75 - 125	5	30
1,3-Dichloropropane	ND	46.9	50.0	94	50.1	50.0	100	75 - 125	6	30
1,4-Dichlorobenzene	ND	47.8	50.0	96	48.6	50.0	97	75 - 125	2	30
2,2-Dichloropropane	ND	43.2	50.0	86	44.6	50.0	89	70 - 135	3	30
2-Butanone (MEK)	ND	50.7	50.0	101	51.0	50.0	102	30 - 150	<1	30
2-Chlorotoluene	ND	50.0	50.0	100	52.4	50.0	105	75 - 125	5	30
2-Hexanone	ND	44.2	50.0	88	48.4	50.0	97	55 - 130	9	30
tert-Butyl Alcohol	ND	797	1000	80	835	1000	83	50 - 150	5	30
4-Chlorotoluene	ND	51.3	50.0	103	53.4	50.0	107	75 - 130	4	30
p-Isopropyltoluene	ND	53.6	50.0	107	54.8	50.0	110	75 - 130	2	30

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Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/31/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW06-10.2
Lab Code: R1410303-004

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-53-GW-699MW06-10.2 MS Matrix Spike RQ1500199-05			FTMM-53-GW-699MW06-10.2 DMS Duplicate Matrix Spike RQ1500199-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
4-Methyl-2-pentanone	ND	45.5	50.0	91	47.9	50.0	96	60 - 135	5	30
Acetone	2.2	42.7	50.0	81	46.1	50.0	88	40 - 140	8	30
Benzene	ND	51.6	50.0	103	53.5	50.0	107	80 - 120	4	30
Bromobenzene	ND	46.3	50.0	93	47.6	50.0	95	75 - 125	3	30
Bromochloromethane	ND	49.3	50.0	99	49.9	50.0	100	65 - 130	1	30
Bromodichloromethane	ND	48.2	50.0	96	50.3	50.0	100	75 - 120	4	30
Bromoform	ND	42.1	50.0	84	42.9	50.0	86	70 - 130	2	30
Bromomethane	ND	31.7	50.0	63	37.1	50.0	74	30 - 145	16	30
Carbon Tetrachloride	ND	47.1	50.0	94	49.5	50.0	99	65 - 140	5	30
Chlorobenzene	ND	50.9	50.0	102	52.9	50.0	106	80 - 120	4	30
Chloroethane	ND	58.5	50.0	117	60.1	50.0	120	60 - 135	3	30
Chloroform	ND	49.8	50.0	100	51.4	50.0	103	65 - 135	3	30
Chloromethane	ND	58.1	50.0	116	58.8	50.0	118	40 - 125	1	30
Dibromochloromethane	ND	43.8	50.0	88	46.2	50.0	92	60 - 135	5	30
Dichlorodifluoromethane (CFC 12)	ND	54.2	50.0	108	55.8	50.0	112	30 - 155	3	30
Methylene Chloride	ND	49.5	50.0	99	50.8	50.0	102	55 - 140	3	30
Ethylbenzene	ND	46.5	50.0	93	48.1	50.0	96	75 - 125	3	30
Hexachlorobutadiene	ND	41.8	50.0	84	45.2	50.0	90	50 - 140	8	30
Isopropylbenzene (Cumene)	ND	55.4	50.0	111	56.6	50.0	113	75 - 125	2	30
Methyl tert-Butyl Ether	ND	47.1	50.0	94	47.5	50.0	95	65 - 125	<1	30
Naphthalene	ND	47.1	50.0	94	48.9	50.0	98	55 - 140	4	30
Styrene	ND	50.8	50.0	102	52.9	50.0	106	65 - 135	4	30
Tetrachloroethene (PCE)	ND	48.4	50.0	97	50.9	50.0	102	45 - 150	5	30
Toluene	ND	52.7	50.0	105	54.5	50.0	109	75 - 120	3	30
Trichloroethene (TCE)	ND	51.3	50.0	103	52.2	50.0	104	70 - 125	2	30
Trichlorofluoromethane (CFC 11)	ND	56.7	50.0	113	58.7	50.0	117	60 - 145	3	30
Vinyl Chloride	ND	57.2	50.0	114	58.9	50.0	118	50 - 145	3	30

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Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/31/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW06-10.2
Lab Code: R1410303-004

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-53-GW-699MW06-10.2 MS Matrix Spike RQ1500199-05			FTMM-53-GW-699MW06-10.2 DMS Duplicate Matrix Spike RQ1500199-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
cis-1,2-Dichloroethene	ND	50.3	50.0	100	51.6	50.0	103	70 - 125	3	30
cis-1,3-Dichloropropene	ND	45.4	50.0	91	47.2	50.0	94	70 - 130	4	30
m,p-Xylenes	ND	106	100	106	110	100	110	75 - 130	4	30
n-Butylbenzene	ND	53.1	50.0	106	55.0	50.0	110	70 - 135	4	30
n-Propylbenzene	ND	54.7	50.0	109	56.9	50.0	114	70 - 130	4	30
o-Xylene	ND	50.5	50.0	101	50.7	50.0	101	80 - 120	<1	30
sec-Butylbenzene	ND	53.7	50.0	107	55.3	50.0	111	70 - 125	3	30
tert-Butylbenzene	ND	50.9	50.0	102	52.7	50.0	105	70 - 130	4	30
trans-1,2-Dichloroethene	ND	51.6	50.0	103	53.7	50.0	107	60 - 140	4	30
trans-1,3-Dichloropropene	ND	44.9	50.0	90	46.7	50.0	93	55 - 140	4	30

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Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Analyzed: 12/30/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 427294

Analyte Name	Lab Control Sample RQ1500158-02 Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	18.0	20.0	90	80 - 130
1,1,1-Trichloroethane (TCA)	18.0	20.0	90	65 - 130
1,1,2,2-Tetrachloroethane	16.5	20.0	82	65 - 130
1,1,2-Trichloroethane	18.7	20.0	93	75 - 125
1,1-Dichloroethane (1,1-DCA)	18.9	20.0	95	70 - 135
1,1-Dichloroethene (1,1-DCE)	18.4	20.0	92	70 - 130
1,1-Dichloropropene	17.8	20.0	89	75 - 130
1,2,3-Trichlorobenzene	19.7	20.0	99	75 - 125
1,2,3-Trichloropropane	18.0	20.0	90	75 - 125
1,2,4-Trichlorobenzene	20.1	20.0	101	65 - 135
1,2,4-Trimethylbenzene	19.6	20.0	98	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	17.3	20.0	87	50 - 130
1,2-Dibromoethane	19.1	20.0	95	80 - 120
1,2-Dichlorobenzene	19.4	20.0	97	70 - 120
1,2-Dichloroethane	19.1	20.0	95	70 - 130
1,2-Dichloropropane	19.9	20.0	99	75 - 125
1,3,5-Trimethylbenzene	19.7	20.0	98	75 - 130
1,3-Dichlorobenzene	18.8	20.0	94	75 - 125
1,3-Dichloropropane	19.5	20.0	98	75 - 125
1,4-Dichlorobenzene	19.0	20.0	95	75 - 125
2,2-Dichloropropane	14.6	20.0	73	70 - 135
2-Butanone (MEK)	20.6	20.0	103	30 - 150
2-Chlorotoluene	19.2	20.0	96	75 - 125
2-Hexanone	19.9	20.0	99	55 - 130
tert-Butyl Alcohol	368	400	92	50 - 150
4-Chlorotoluene	20.1	20.0	100	75 - 130
p-Isopropyltoluene	19.6	20.0	98	75 - 130
4-Methyl-2-pentanone	18.5	20.0	92	60 - 135
Acetone	21.9	20.0	109	40 - 140
Benzene	19.1	20.0	96	80 - 120
Bromobenzene	19.2	20.0	96	75 - 125
Bromochloromethane	18.9	20.0	94	65 - 130
Bromodichloromethane	18.9	20.0	95	75 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Analyzed: 12/30/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 427294

Lab Control Sample
RQ1500158-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromoform	18.0	20.0	90	70 - 130
Bromomethane	13.8	20.0	69	30 - 145
Carbon Tetrachloride	16.9	20.0	84	65 - 140
Chlorobenzene	19.6	20.0	98	80 - 120
Chloroethane	20.0	20.0	100	60 - 135
Chloroform	18.8	20.0	94	65 - 135
Chloromethane	20.8	20.0	104	40 - 125
Dibromochloromethane	18.0	20.0	90	60 - 135
Dichlorodifluoromethane (CFC 12)	19.2	20.0	96	30 - 155
Methylene Chloride	19.4	20.0	97	55 - 140
Ethylbenzene	17.0	20.0	85	75 - 125
Hexachlorobutadiene	17.4	20.0	87	50 - 140
Isopropylbenzene (Cumene)	20.0	20.0	100	75 - 125
Methyl tert-Butyl Ether	19.1	20.0	95	65 - 125
Naphthalene	20.9	20.0	104	55 - 140
Styrene	20.2	20.0	101	65 - 135
Tetrachloroethene (PCE)	17.8	20.0	89	45 - 150
Toluene	19.5	20.0	98	75 - 120
Trichloroethene (TCE)	20.2	20.0	101	70 - 125
Trichlorofluoromethane (CFC 11)	19.6	20.0	98	60 - 145
Vinyl Chloride	19.8	20.0	99	50 - 145
cis-1,2-Dichloroethene	18.8	20.0	94	70 - 125
cis-1,3-Dichloropropene	17.6	20.0	88	70 - 130
m,p-Xylenes	39.8	40.0	100	75 - 130
n-Butylbenzene	19.7	20.0	99	70 - 135
n-Propylbenzene	20.7	20.0	104	70 - 130
o-Xylene	18.6	20.0	93	80 - 120
sec-Butylbenzene	19.5	20.0	98	70 - 125
tert-Butylbenzene	18.8	20.0	94	70 - 130
trans-1,2-Dichloroethene	19.0	20.0	95	60 - 140
trans-1,3-Dichloropropene	17.5	20.0	87	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Analyzed: 12/31/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 427678

Lab Control Sample
RQ1500199-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	18.9	20.0	94	80 - 130
1,1,1-Trichloroethane (TCA)	18.9	20.0	94	65 - 130
1,1,2,2-Tetrachloroethane	19.0	20.0	95	65 - 130
1,1,2-Trichloroethane	19.4	20.0	97	75 - 125
1,1-Dichloroethane (1,1-DCA)	20.5	20.0	102	70 - 135
1,1-Dichloroethene (1,1-DCE)	19.5	20.0	98	70 - 130
1,1-Dichloropropene	18.3	20.0	92	75 - 130
1,2,3-Trichlorobenzene	21.0	20.0	105	75 - 125
1,2,3-Trichloropropane	18.0	20.0	90	75 - 125
1,2,4-Trichlorobenzene	20.9	20.0	104	65 - 135
1,2,4-Trimethylbenzene	20.4	20.0	102	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	16.3	20.0	81	50 - 130
1,2-Dibromoethane	19.7	20.0	99	80 - 120
1,2-Dichlorobenzene	19.8	20.0	99	70 - 120
1,2-Dichloroethane	19.8	20.0	99	70 - 130
1,2-Dichloropropane	21.6	20.0	108	75 - 125
1,3,5-Trimethylbenzene	20.6	20.0	103	75 - 130
1,3-Dichlorobenzene	19.5	20.0	98	75 - 125
1,3-Dichloropropane	19.4	20.0	97	75 - 125
1,4-Dichlorobenzene	19.3	20.0	97	75 - 125
2,2-Dichloropropane	18.6	20.0	93	70 - 135
2-Butanone (MEK)	19.2	20.0	96	30 - 150
2-Chlorotoluene	20.1	20.0	100	75 - 125
2-Hexanone	16.2	20.0	81	55 - 130
tert-Butyl Alcohol	364	400	91	50 - 150
4-Chlorotoluene	20.7	20.0	103	75 - 130
p-Isopropyltoluene	21.3	20.0	107	75 - 130
4-Methyl-2-pentanone	17.6	20.0	88	60 - 135
Acetone	16.2	20.0	81	40 - 140
Benzene	20.1	20.0	100	80 - 120
Bromobenzene	19.5	20.0	98	75 - 125
Bromochloromethane	19.6	20.0	98	65 - 130
Bromodichloromethane	19.6	20.0	98	75 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Analyzed: 12/31/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 427678

Lab Control Sample
RQ1500199-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromoform	17.4	20.0	87	70 - 130
Bromomethane	12.5	20.0	62	30 - 145
Carbon Tetrachloride	17.6	20.0	88	65 - 140
Chlorobenzene	20.3	20.0	102	80 - 120
Chloroethane	22.9	20.0	114	60 - 135
Chloroform	19.9	20.0	100	65 - 135
Chloromethane	22.4	20.0	112	40 - 125
Dibromochloromethane	17.9	20.0	90	60 - 135
Dichlorodifluoromethane (CFC 12)	21.1	20.0	105	30 - 155
Methylene Chloride	20.1	20.0	101	55 - 140
Ethylbenzene	17.8	20.0	89	75 - 125
Hexachlorobutadiene	20.6	20.0	103	50 - 140
Isopropylbenzene (Cumene)	21.3	20.0	106	75 - 125
Methyl tert-Butyl Ether	19.2	20.0	96	65 - 125
Naphthalene	21.0	20.0	105	55 - 140
Styrene	20.7	20.0	103	65 - 135
Tetrachloroethene (PCE)	18.3	20.0	91	45 - 150
Toluene	20.6	20.0	103	75 - 120
Trichloroethene (TCE)	19.6	20.0	98	70 - 125
Trichlorofluoromethane (CFC 11)	21.5	20.0	108	60 - 145
Vinyl Chloride	21.5	20.0	107	50 - 145
cis-1,2-Dichloroethene	20.0	20.0	100	70 - 125
cis-1,3-Dichloropropene	18.6	20.0	93	70 - 130
m,p-Xylenes	42.1	40.0	105	75 - 130
n-Butylbenzene	21.7	20.0	108	70 - 135
n-Propylbenzene	21.6	20.0	108	70 - 130
o-Xylene	19.8	20.0	99	80 - 120
sec-Butylbenzene	21.2	20.0	106	70 - 125
tert-Butylbenzene	20.0	20.0	100	70 - 130
trans-1,2-Dichloroethene	20.3	20.0	102	60 - 140
trans-1,3-Dichloropropene	18.4	20.0	92	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Environmental
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January 14, 2015

Analytical Report for Service Request No: R1410303

Sandra de las Fuentes
Parsons, Inc.
8000 Centre Park Drive, Suite 200
Austin, TX 78754

Laboratory Results for: FTMM 4Q GW/748810-03000

Dear Sandra:

Enclosed are the results of the sample(s) submitted to our laboratory on December 20, 2014. For your reference, these analyses have been assigned our service request number **R1410303**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Janice Jaeger
Project Manager

Parsons, Inc.
R1410303

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SDG NARRATIVE

ALS Environmental - Rochester, NY
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CASE NARRATIVE

Client:	Parsons Engineering Science	**Service Request No.:**	R1410303
Project:	FTMM 4Q GW	**Project No.:**	748810-03000
Sample Matrix:	Water	**Date Received:**	12/20/14

General Comments

The DOD QSM 4.1 requires detections reported to the Method Detection Limit (MDL). Values greater than the MDL and less than the Limit of Quantitation (LOQ) were flagged as estimates (J). Values less than the MDL and Limit of Detection (LOD) were reported as non-detect (ND). The LOD for each analyte is verified quarterly by the laboratory using procedures defined in DOD Quality Systems Manual Version 4.1.

Sample Receipt

Samples were collected on 12/18/14 and received in good condition at cooler temperatures of 0.2-2.3 °C as noted on the cooler receipt and preservation check form. The samples were stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the batching form for a cross-reference between Client ID and ALS Job #.

Volatile Organics

Twenty water samples were analyzed for TCL Volatile organics by SW-846 method 5030/8260C. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

Library Searches against the NBS/EPA library were conducted on all samples. The 20 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

All Tuning criteria for BFB were and within QC limits.

Internal Standard Areas were within QC limits.

All the initial calibration criteria were met for all analytes. All Continuing Calibration Verification (CCV) standards were within 20% Difference (D) except 2,2-Dichloropropane, 1,1,2,2-Tetrachloroethane, Bromomethane and Dichlorodifluoromethane on the 12/30/14 CCV and Bromomethane and Dichlorodifluoromethane on the 12/31/14 CCV. No data was affected.

Various compounds for FTMM-53-GW-699RW05-10 and FTMM-22-GW-CW1MW281-33.74 have been flagged with an "E" as being outside the calibration range of the instrument. The samples were repeated at dilutions and both sets of data have been reported out.

All surrogate standard recoveries were within acceptance limits for all samples.

The Blank Spike (LCS) recoveries were all acceptable.

A Matrix Spike/Matrix spike duplicate (MS/MSD) was performed on FTMM-53-GW-699MW06-10.2 as requested and various other locations. All outlying QC has been flagged with an "*".

The Method Blanks associated with these samples were free of contamination except the 12/31/14 blank had a low level detection for 1,2,4-Trichlorobenzene. No data was affected.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

00003

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 748810-03000	Batch Complete: Yes	Date Revised:
Submission: R1410303	Diskette Requested: No	Date Due: 1/15/15
Client: Parsons Engineering Science	Date: 12/22/14	Protocol: SW846
Client Rep: JJAEGER	Custody Seal: Present/Absent:	Shipping No.:
Project: FTMM 4Q GW	Chain of Custody: Present/Absent:	SDG #: FTMM-53-GW-699MW01-7.5

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1410303-001	FTMM-53-GW-699MW01-7.5	Water	8260C	12/18/14	12/20/14			
R1410303-002	FTMM-53-GW-699RW05-10	Water	8260C	12/18/14	12/20/14			
R1410303-003	FTMM-53-GW-699RW11-5.3	Water	8260C	12/18/14	12/20/14			
R1410303-004QC	FTMM-53-GW-699MW06-10.2	Water	8260C	12/18/14	12/20/14			
R1410303-005	FTMM-53-GW-699MW106-10.2 DUP	Water	8260C	12/18/14	12/20/14			
R1410303-006	FTMM-53-GW-699MW09-7.75	Water	8260C	12/18/14	12/20/14			
R1410303-007	FTMM-53-GW-699MW16-.7.5	Water	8260C	12/18/14	12/20/14			
R1410303-008	FTMM-53-GW-699RW03-8.2	Water	8260C	12/18/14	12/20/14			
R1410303-009	FTMM-53-GW-699MW04-8.0	Water	8260C	12/18/14	12/20/14			
R1410303-010	FTMM-68-GW-565MW01-11.99	Water	8260C	12/18/14	12/20/14			
R1410303-011	FTMM-68-GW-565MW01D-22.31	Water	8260C	12/18/14	12/20/14			
R1410303-012	FTMM-22-GW-CWMW29-10.85	Water	8260C	12/18/14	12/20/14			
R1410303-013	FTMM-22-GW-CW1MW281-33.74	Water	8260C	12/18/14	12/20/14			
R1410303-014	FTMM-22-GW-CW1MW28-11.21	Water	8260C	12/18/14	12/20/14			
R1410303-015	FTMM-22-GW-CW1MW27-12.63	Water	8260C	12/18/14	12/20/14			
R1410303-016	FTMM-22-GW-CW1MW31-16.4	Water	8260C	12/18/14	12/20/14			
R1410303-017	FTMM-22-GW-CW1MW37-11.78	Water	8260C	12/18/14	12/20/14			
R1410303-018	FTMM-54-GW-296MW06-5.07	Water	8260C	12/18/14	12/20/14			
R1410303-019	FTMM-54-GW-296MW06-10.1	Water	8260C	12/18/14	12/20/14			
R1410303-020	FTMM-53-GW-296MW04-6.35	Water	8260C	12/18/14	12/20/14			

Folder Comments: DoD reporting

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REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

\+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH NELAC

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

ALS Environmental

CHAINS OF CUSTODY

ALS Environmental - Rochester, NY
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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

20658

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Project Name: FTMM 4Q GW	Project Number: 744810 - 03000
Project Manager: Cris Grill	Report CC:
Company/Address: 100 High St. Boston, MA 02210	
Phone #: (617) 449 - 1583	Email: cris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: Nicholas C. Watson

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1

Preservative Key: 0. NONE; 1. HCL; 2. HNO_3; 3. H_2SO_4; 4. NaOH; 5. Zn. Acetate; 6. MeOH; 7. $NaHSO_4$; 8. Other _____

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GCMS VOAs ○ 8260 ○ 624 ○ CLP	REMARKS/ ALTERNATE DESCRIPTION
FTMM-53-GW-699MW01-7.5		12/19/14	0953	GW	3	X	
FTMM-53-GW-699RW05-10			1006	GW	3	X	
FTMM-53-GW-699RW11-5.3			0944	GW	3	X	
FTMM-53-GW-699MW06-10.2			0936	GW	3	X	
FTMM-53-GW-699MW06-MS-10.2			0936	GW	3	X	
FTMM-53-GW-699MW06-MSD-10.2			0936	GW	3	X	
FTMM-53-GW-699MW06-10.2			0945	GW	3	X	
FTMM-53-GW-699MW09-7.75			0942	GW	3	X	
FTMM-53-GW-699MW16-7.5			1000	GW	3	X	
FTMM-53-GW-699RW03-5.2			0930	GW	3	X	
FTMM-53-GW-699MW04-8.0			1015	GW	3	X	

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
Standard
REQUESTED REPORT DATE
_____

REPORT REQUIREMENTS
_____ I. Results Only
_____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
_____ III. Results + QC and Calibration Summaries
_____ IV. Data Validation Report with Raw Data
Edata _____ Yes _____ No

INVOICE INFORMATION
PO #
BILL TO:

STATE WHERE SAMPLES WERE COLLECTED New Jersey

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	
Printed Name: Chris Watson	Printed Name: J Severa	Printed Name	Printed Name	Printed Name	
Firm: PARSONS	Firm: ALS	Firm	Firm	Firm	
Date/Time: 12/19/14 1100	Date/Time: 12/20/14 1615	Date/Time	Date/Time	Date/Time	

R1410303 5
Parsons, Inc.
FTMM 4Q GW

Distribution: White - Lab Copy; Yellow - Return to Originator

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

20660

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Project Name: FTMM 4Q GW	Project Number: 748810-03000
Project Manager: Cris Grill	Report CC:
Company/Address: 100 High St, Boston, MA 02210	
Phone #: (617) 449-1583	Email: cris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: D. Lotzos, C. Watson

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1

Preservative Key: 0. NONE; 1. HCL; 2. HNO_3; 3. H_2SO_4; 4. NaOH; 5. Zn. Acetate; 6. MeOH; 7. $NaHSO_4$; 8. Other _____

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GCAMS VOAs ◦ 8260 ◦ 624 ◦ CLP	GCAMS SVOAs ◦ 8270 ◦ 625	GC VOAs ◦ 8021 ◦ 601/602	PESTICIDES ◦ 8081 ◦ 608	PCBs ◦ 8082 ◦ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
FTMM-68-GW-565MW01-11.99		12/18/14	1036	GW	3	X							
FTMM-64-GW-565MW01D-33.31			1088	GW	3	X							
FTMM-33-GW-GWMW39-10.85			1330	GW	3	X							
FTMM-33-GW-GWMW28I-33.74			1328	GW	3	X							
FTMM-33-GW-GWMW28-11.31			1315	GW	3	X							
FTMM-33-GW-GWMW27-12.63			1350	GW	3	X							
FTMM-33-GW-GWMW31-6.4			1344	GW	3	X							
FTMM-33-GW-GWMW37-11.78			1337	GW	3	X							
FTMM-54-GW-256MW06-5.07			1614	GW	3	X							
FTMM-54-GW-256MW06-10.01			1615	GW	3	X							
FTMM-54-GW-296MW04-6.35		↓	1615	GW	3	X							

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED: New Jersey

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
Standard
REQUESTED REPORT DATE

REPORT REQUIREMENTS
_____ I. Results Only
_____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
_____ III. Results + QC and Calibration Summaries
_____ IV. Data Validation Report with Raw Data
Edata _____ Yes _____ No

INVOICE INFORMATION
PO #
BILL TO:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature:	Signature:	Signature:	Signature:	Signature:	Signature:
Printed Name: Chris Watson	Printed Name: J. Sendel	Printed Name:	Printed Name:	Printed Name:	
Firm: PARSONS	Firm: ALS	Firm:	Firm:	Firm:	
Date/Time: 12/19/14 1100	Date/Time: 12/20/14 1615	Date/Time:	Date/Time:	Date/Time:	

Distribution: White - Lab Copy; Yellow - Return to Originator

R1410303 5
Parsons, Inc.
FTMM 4Q GW

R1410303
Parsons, Inc.
FTMM 4Q GW

Cooler Receipt and Preservation Check Form

Project/Client Parsons Folder Number R14-10303.

Cooler received on 12/20 by: JM COURIER: ALS (UPS) FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y) N	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y (N) NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	ALS/ROC CLIENT
4	Circle: **Wet Ice Dry Ice Gel packs** present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 12/20 Time: 1020 ID: IR#3 (IR#4) From: Temp Blank Sample Bottle

Observed Temp (°C)	0.3	2.4					
Correction Factor (°C)	-0.1	-0.1					
Corrected Temp (°C)	0.2	2.3					
Within 0-6°C?	(Y) N	(Y) N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: AWL by JM on 12/20 at 1020
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: JMN 12/22

Cooler Breakdown: Date: 12/22/14 Time: 1425 by: (initials illegible)

1. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct containers used for the tests indicated? (YES) NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	411050	11/5				

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 4-258-004
Other Comments:

PC Secondary Review: JMN 5/26/14

*significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4Q GW/748810-03000

Service Request: R1410303

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1410303-001.01					
	8260C				
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
		12/29/14	1518	In Lab / FNAEGLER	
		12/29/14	1520	R-001-S10 / BWOJTASIEWICZ	
R1410303-001.02					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-001.03					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-002.01					
	8260C				
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
		12/29/14	1518	In Lab / FNAEGLER	
		12/29/14	1520	R-001-S10 / BWOJTASIEWICZ	
R1410303-002.02					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-002.03					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-003.01					
	8260C				
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
		12/29/14	1518	In Lab / FNAEGLER	
		12/29/14	1520	R-001-S10 / BWOJTASIEWICZ	
		12/30/14	1722	In Lab / FNAEGLER	
		12/30/14	1724	R-001-S10 / FNAEGLER	
		12/31/14	1507	In Lab / FNAEGLER	
		12/31/14	1510	R-001-S10 / FNAEGLER	
R1410303-003.02					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-003.03					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-004.01					

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4Q GW/748810-03000

Service Request: R1410303

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-004.02					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-004.03					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-004.04					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-004.05					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-004.06					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-004.07					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-004.08					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-004.09					
	8260C				
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
		12/29/14	1518	In Lab / FNAEGLER	
		12/29/14	1520	R-001-S10 / BWOJTASIEWICZ	
		12/30/14	1722	In Lab / FNAEGLER	
		12/30/14	1724	R-001-S10 / FNAEGLER	
		12/31/14	1507	In Lab / FNAEGLER	
		12/31/14	1510	R-001-S10 / FNAEGLER	
R1410303-005.01					
	8260C				
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
		12/29/14	1518	In Lab / FNAEGLER	
		12/29/14	1520	R-001-S10 / BWOJTASIEWICZ	
		12/30/14	1722	In Lab / FNAEGLER	
		12/30/14	1724	R-001-S10 / FNAEGLER	

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4Q GW/748810-03000

Service Request: R1410303

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		12/31/14	1507	In Lab / FNAEGLER	
		12/31/14	1510	R-001-S10 / FNAEGLER	
R1410303-005.02					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-005.03					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-006.01					
	8260C				
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
		12/29/14	1518	In Lab / FNAEGLER	
		12/29/14	1520	R-001-S10 / BWOJTASIEWICZ	
R1410303-006.02					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-006.03					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-007.01					
	8260C				
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
		12/29/14	1518	In Lab / FNAEGLER	
		12/29/14	1520	R-001-S10 / BWOJTASIEWICZ	
R1410303-007.02					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-007.03					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-008.01					
	8260C				
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
		12/29/14	1518	In Lab / FNAEGLER	
		12/29/14	1520	R-001-S10 / BWOJTASIEWICZ	
R1410303-008.02					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	

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ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4Q GW/748810-03000

Service Request: R1410303

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1410303-008.03					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-009.01					
	8260C				
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
		12/29/14	1518	In Lab / FNAEGLER	
		12/29/14	1520	R-001-S10 / BWOJTASIEWICZ	
R1410303-009.02					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-009.03					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-010.01					
	8260C				
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
		12/29/14	1518	In Lab / FNAEGLER	
		12/29/14	1520	R-001-S10 / BWOJTASIEWICZ	
		12/30/14	1723	In Lab / FNAEGLER	
		12/30/14	1724	R-001-S10 / FNAEGLER	
		12/31/14	1507	In Lab / FNAEGLER	
		12/31/14	1510	R-001-S10 / FNAEGLER	
R1410303-010.02					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-010.03					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-011.01					
	8260C				
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
		12/29/14	1518	In Lab / FNAEGLER	
		12/29/14	1520	R-001-S10 / BWOJTASIEWICZ	
		12/30/14	1723	In Lab / FNAEGLER	
		12/30/14	1724	R-001-S10 / FNAEGLER	
		12/31/14	1507	In Lab / FNAEGLER	
		12/31/14	1510	R-001-S10 / FNAEGLER	

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ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4Q GW/748810-03000

Service Request: R1410303

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1410303-011.02					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-011.03					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-012.01					
	8260C				
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
		12/29/14	1518	In Lab / FNAEGLER	
		12/29/14	1520	R-001-S10 / BWOJTASIEWICZ	
R1410303-012.02					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-012.03					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-013.01					
	8260C				
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
		12/29/14	1518	In Lab / FNAEGLER	
		12/29/14	1520	R-001-S10 / BWOJTASIEWICZ	
		12/30/14	1723	In Lab / FNAEGLER	
		12/30/14	1724	R-001-S10 / FNAEGLER	
		12/31/14	1507	In Lab / FNAEGLER	
		12/31/14	1510	R-001-S10 / FNAEGLER	
R1410303-013.02					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-013.03					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-014.01					
	8260C				
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
		12/29/14	1518	In Lab / FNAEGLER	
		12/29/14	1521	R-001-S10 / BWOJTASIEWICZ	
R1410303-014.02					

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4Q GW/748810-03000

Service Request: R1410303

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-014.03					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-015.01					
	8260C				
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
		12/29/14	1518	In Lab / FNAEGLER	
		12/29/14	1521	R-001-S10 / BWOJTASIEWICZ	
R1410303-015.02					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-015.03					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-016.01					
	8260C				
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
		12/29/14	1521	R-001-S10 / BWOJTASIEWICZ	
		12/30/14	1722	In Lab / FNAEGLER	
		12/30/14	1724	R-001-S10 / FNAEGLER	
		12/31/14	1507	In Lab / FNAEGLER	
		12/31/14	1510	R-001-S10 / FNAEGLER	
R1410303-016.02					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-016.03					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-017.01					
	8260C				
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
		12/29/14	1521	R-001-S10 / BWOJTASIEWICZ	
		12/30/14	1722	In Lab / FNAEGLER	
		12/30/14	1724	R-001-S10 / FNAEGLER	
		12/31/14	1507	In Lab / FNAEGLER	
		12/31/14	1510	R-001-S10 / FNAEGLER	

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ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4Q GW/748810-03000

Service Request: R1410303

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1410303-017.02					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-017.03					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-018.01					
	8260C				
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
		12/29/14	1521	R-001-S10 / BWOJTASIEWICZ	
		12/30/14	1722	In Lab / FNAEGLER	
		12/30/14	1724	R-001-S10 / FNAEGLER	
		12/31/14	1507	In Lab / FNAEGLER	
		12/31/14	1510	R-001-S10 / FNAEGLER	
R1410303-018.02					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-018.03					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-019.01					
	8260C				
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
		12/29/14	1521	R-001-S10 / BWOJTASIEWICZ	
		12/30/14	1722	In Lab / FNAEGLER	
		12/30/14	1724	R-001-S10 / FNAEGLER	
		12/31/14	1507	In Lab / FNAEGLER	
		12/31/14	1510	R-001-S10 / FNAEGLER	
R1410303-019.02					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-019.03					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-020.01					
	8260C				
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
		12/29/14	1521	R-001-S10 / BWOJTASIEWICZ	
		12/30/14	1722	In Lab / FNAEGLER	

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ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4Q GW/748810-03000

Service Request: R1410303

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		12/30/14	1724	R-001-S10 / FNAEGLER	
		12/31/14	1507	In Lab / FNAEGLER	
		12/31/14	1510	R-001-S10 / FNAEGLER	
R1410303-020.02					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	
R1410303-020.03					
		12/22/14	1422	SMO / GLAFORCE	
		12/22/14	1422	R-001 / GLAFORCE	

ALS Environmental

VOLATILE ORGANICS QC SUMMARY

ALS Environmental - Rochester, NY
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Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

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Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/30/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW05-10
Lab Code: R1410303-002

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-53-GW-699RW05-10MS Matrix Spike RQ1500158-05				FTMM-53-GW-699RW05-10D MS Duplicate Matrix Spike RQ1500158-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**		**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	ND	121	125	97		117	125	94		80 - 130	3	30
1,1,1-Trichloroethane (TCA)	ND	123	125	99		120	125	96		65 - 130	2	30
1,1,2,2-Tetrachloroethane	ND	118	125	94		117	125	94		65 - 130	<1	30
1,1,2-Trichloroethane	ND	121	125	97		114	125	91		75 - 125	6	30
1,1-Dichloroethane (1,1-DCA)	ND	130	125	104		125	125	100		70 - 135	4	30
1,1-Dichloroethene (1,1-DCE)	ND	129	125	103		125	125	100		70 - 130	3	30
1,1-Dichloropropene	ND	125	125	100		119	125	95		75 - 130	5	30
1,2,3-Trichlorobenzene	ND	119	125	95		121	125	97		75 - 125	2	30
1,2,3-Trichloropropane	ND	112	125	89		114	125	91		75 - 125	2	30
1,2,4-Trichlorobenzene	ND	124	125	99		124	125	99		65 - 135	<1	30
1,2,4-Trimethylbenzene	310	370	125	45	*	366	125	41	*	75 - 130	1	30
1,2-Dibromo-3-chloropropane (DBC	ND	109	125	87		114	125	91		50 - 130	5	30
1,2-Dibromoethane	ND	125	125	100		121	125	97		80 - 120	3	30
1,2-Dichlorobenzene	ND	126	125	101		124	125	99		70 - 120	2	30
1,2-Dichloroethane	ND	124	125	99		121	125	97		70 - 130	2	30
1,2-Dichloropropane	ND	133	125	106		130	125	104		75 - 125	2	30
1,3,5-Trimethylbenzene	63	198	125	108		195	125	106		75 - 130	1	30
1,3-Dichlorobenzene	ND	125	125	100		123	125	99		75 - 125	1	30
1,3-Dichloropropane	ND	124	125	99		122	125	98		75 - 125	1	30
1,4-Dichlorobenzene	ND	125	125	100		123	125	98		75 - 125	2	30
2,2-Dichloropropane	ND	124	125	99		120	125	96		70 - 135	3	30
2-Butanone (MEK)	ND	129	125	103		125	125	100		30 - 150	3	30
2-Chlorotoluene	ND	150	125	120		147	125	117		75 - 125	2	30
2-Hexanone	ND	117	125	93		111	125	89		55 - 130	5	30
tert-Butyl Alcohol	ND	2180	2500	87		2150	2500	86		50 - 150	2	30
4-Chlorotoluene	ND	143	125	114		141	125	113		75 - 130	1	30
p-Isopropyltoluene	1.2	140	125	111		139	125	111		75 - 130	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/30/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW05-10
Lab Code: R1410303-002

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-53-GW-699RW05-10MS Matrix Spike RQ1500158-05			FTMM-53-GW-699RW05-10DMS Duplicate Matrix Spike RQ1500158-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
4-Methyl-2-pentanone	ND	117	125	94	116	125	92	60 - 135	2	30
Acetone	ND	160	125	128	158	125	126	40 - 140	1	30
Benzene	1.9	132	125	104	127	125	100	80 - 120	4	30
Bromobenzene	ND	122	125	98	119	125	95	75 - 125	3	30
Bromochloromethane	ND	124	125	99	120	125	96	65 - 130	3	30
Bromodichloromethane	ND	123	125	98	119	125	95	75 - 120	3	30
Bromoform	ND	114	125	91	111	125	89	70 - 130	3	30
Bromomethane	ND	70.4	125	56	75.6	125	60	30 - 145	7	30
Carbon Tetrachloride	ND	121	125	97	115	125	92	65 - 140	5	30
Chlorobenzene	ND	131	125	104	127	125	102	80 - 120	2	30
Chloroethane	ND	140	125	112	134	125	107	60 - 135	5	30
Chloroform	ND	126	125	101	124	125	99	65 - 135	2	30
Chloromethane	ND	140	125	112	135	125	108	40 - 125	3	30
Dibromochloromethane	ND	116	125	93	115	125	92	60 - 135	<1	30
Dichlorodifluoromethane (CFC 12)	ND	136	125	109	130	125	104	30 - 155	5	30
Methylene Chloride	ND	127	125	102	121	125	97	55 - 140	4	30
Ethylbenzene	110	235	125	102	226	125	95	75 - 125	4	30
Hexachlorobutadiene	ND	112	125	89	110	125	88	50 - 140	1	30
Isopropylbenzene (Cumene)	6.7	150	125	115	143	125	109	75 - 125	5	30
Methyl tert-Butyl Ether	ND	123	125	98	119	125	95	65 - 125	3	30
Naphthalene	67	195	125	103	195	125	102	55 - 140	<1	30
Styrene	ND	151	125	120	145	125	116	65 - 135	4	30
Tetrachloroethene (PCE)	ND	125	125	100	121	125	97	45 - 150	3	30
Toluene	6.2	140	125	107	135	125	103	75 - 120	3	30
Trichloroethene (TCE)	ND	128	125	102	123	125	98	70 - 125	4	30
Trichlorofluoromethane (CFC 11)	ND	141	125	113	135	125	108	60 - 145	4	30
Vinyl Chloride	ND	140	125	112	130	125	104	50 - 145	7	30

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Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/30/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW05-10
Lab Code: R1410303-002

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-53-GW-699RW05-10MS Matrix Spike RQ1500158-05			FTMM-53-GW-699RW05-10DMS Duplicate Matrix Spike RQ1500158-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
cis-1,2-Dichloroethene	ND	128	125	102	123	125	98	70 - 125	4	30
cis-1,3-Dichloropropene	ND	118	125	95	116	125	93	70 - 130	2	30
m,p-Xylenes	350	611	250	104	587	250	95	75 - 130	4	30
n-Butylbenzene	ND	145	125	116	141	125	113	70 - 135	2	30
n-Propylbenzene	8.8	149	125	112	145	125	109	70 - 130	2	30
o-Xylene	290	425	125	106	413	125	96	80 - 120	3	30
sec-Butylbenzene	1.1	139	125	110	137	125	109	70 - 125	1	30
tert-Butylbenzene	ND	132	125	106	128	125	103	70 - 130	3	30
trans-1,2-Dichloroethene	ND	130	125	104	125	125	100	60 - 140	4	30
trans-1,3-Dichloropropene	ND	119	125	95	116	125	93	55 - 140	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/31/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW06-10.2
Lab Code: R1410303-004

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-53-GW-699MW06-10.2 MS Matrix Spike RQ1500199-05			FTMM-53-GW-699MW06-10.2 DMS Duplicate Matrix Spike RQ1500199-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	ND	46.8	50.0	94	48.6	50.0	97	80 - 130	4	30
1,1,1-Trichloroethane (TCA)	ND	49.1	50.0	98	51.2	50.0	102	65 - 130	4	30
1,1,2,2-Tetrachloroethane	ND	45.6	50.0	91	45.6	50.0	91	65 - 130	<1	30
1,1,2-Trichloroethane	ND	45.4	50.0	91	46.6	50.0	93	75 - 125	3	30
1,1-Dichloroethane (1,1-DCA)	ND	52.6	50.0	105	53.6	50.0	107	70 - 135	2	30
1,1-Dichloroethene (1,1-DCE)	ND	51.9	50.0	104	52.5	50.0	105	70 - 130	1	30
1,1-Dichloropropene	ND	48.8	50.0	98	51.1	50.0	102	75 - 130	5	30
1,2,3-Trichlorobenzene	ND	45.0	50.0	90	48.2	50.0	96	75 - 125	7	30
1,2,3-Trichloropropane	ND	40.8	50.0	82	42.9	50.0	86	75 - 125	5	30
1,2,4-Trichlorobenzene	ND	47.2	50.0	94	49.3	50.0	99	65 - 135	4	30
1,2,4-Trimethylbenzene	ND	50.6	50.0	101	51.9	50.0	104	75 - 130	3	30
1,2-Dibromo-3-chloropropane (DBC	ND	39.9	50.0	80	41.0	50.0	82	50 - 130	3	30
1,2-Dibromoethane	ND	46.4	50.0	93	48.2	50.0	96	80 - 120	4	30
1,2-Dichlorobenzene	ND	47.6	50.0	95	48.8	50.0	98	70 - 120	3	30
1,2-Dichloroethane	ND	48.0	50.0	96	49.5	50.0	99	70 - 130	3	30
1,2-Dichloropropane	ND	53.7	50.0	107	54.4	50.0	109	75 - 125	1	30
1,3,5-Trimethylbenzene	ND	51.4	50.0	103	52.7	50.0	105	75 - 130	3	30
1,3-Dichlorobenzene	ND	47.1	50.0	94	49.3	50.0	98	75 - 125	5	30
1,3-Dichloropropane	ND	46.9	50.0	94	50.1	50.0	100	75 - 125	6	30
1,4-Dichlorobenzene	ND	47.8	50.0	96	48.6	50.0	97	75 - 125	2	30
2,2-Dichloropropane	ND	43.2	50.0	86	44.6	50.0	89	70 - 135	3	30
2-Butanone (MEK)	ND	50.7	50.0	101	51.0	50.0	102	30 - 150	<1	30
2-Chlorotoluene	ND	50.0	50.0	100	52.4	50.0	105	75 - 125	5	30
2-Hexanone	ND	44.2	50.0	88	48.4	50.0	97	55 - 130	9	30
tert-Butyl Alcohol	ND	797	1000	80	835	1000	83	50 - 150	5	30
4-Chlorotoluene	ND	51.3	50.0	103	53.4	50.0	107	75 - 130	4	30
p-Isopropyltoluene	ND	53.6	50.0	107	54.8	50.0	110	75 - 130	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/31/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW06-10.2
Lab Code: R1410303-004

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-53-GW-699MW06-10.2 MS Matrix Spike RQ1500199-05			FTMM-53-GW-699MW06-10.2 DMS Duplicate Matrix Spike RQ1500199-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
4-Methyl-2-pentanone	ND	45.5	50.0	91	47.9	50.0	96	60 - 135	5	30
Acetone	2.2	42.7	50.0	81	46.1	50.0	88	40 - 140	8	30
Benzene	ND	51.6	50.0	103	53.5	50.0	107	80 - 120	4	30
Bromobenzene	ND	46.3	50.0	93	47.6	50.0	95	75 - 125	3	30
Bromochloromethane	ND	49.3	50.0	99	49.9	50.0	100	65 - 130	1	30
Bromodichloromethane	ND	48.2	50.0	96	50.3	50.0	100	75 - 120	4	30
Bromoform	ND	42.1	50.0	84	42.9	50.0	86	70 - 130	2	30
Bromomethane	ND	31.7	50.0	63	37.1	50.0	74	30 - 145	16	30
Carbon Tetrachloride	ND	47.1	50.0	94	49.5	50.0	99	65 - 140	5	30
Chlorobenzene	ND	50.9	50.0	102	52.9	50.0	106	80 - 120	4	30
Chloroethane	ND	58.5	50.0	117	60.1	50.0	120	60 - 135	3	30
Chloroform	ND	49.8	50.0	100	51.4	50.0	103	65 - 135	3	30
Chloromethane	ND	58.1	50.0	116	58.8	50.0	118	40 - 125	1	30
Dibromochloromethane	ND	43.8	50.0	88	46.2	50.0	92	60 - 135	5	30
Dichlorodifluoromethane (CFC 12)	ND	54.2	50.0	108	55.8	50.0	112	30 - 155	3	30
Methylene Chloride	ND	49.5	50.0	99	50.8	50.0	102	55 - 140	3	30
Ethylbenzene	ND	46.5	50.0	93	48.1	50.0	96	75 - 125	3	30
Hexachlorobutadiene	ND	41.8	50.0	84	45.2	50.0	90	50 - 140	8	30
Isopropylbenzene (Cumene)	ND	55.4	50.0	111	56.6	50.0	113	75 - 125	2	30
Methyl tert-Butyl Ether	ND	47.1	50.0	94	47.5	50.0	95	65 - 125	<1	30
Naphthalene	ND	47.1	50.0	94	48.9	50.0	98	55 - 140	4	30
Styrene	ND	50.8	50.0	102	52.9	50.0	106	65 - 135	4	30
Tetrachloroethene (PCE)	ND	48.4	50.0	97	50.9	50.0	102	45 - 150	5	30
Toluene	ND	52.7	50.0	105	54.5	50.0	109	75 - 120	3	30
Trichloroethene (TCE)	ND	51.3	50.0	103	52.2	50.0	104	70 - 125	2	30
Trichlorofluoromethane (CFC 11)	ND	56.7	50.0	113	58.7	50.0	117	60 - 145	3	30
Vinyl Chloride	ND	57.2	50.0	114	58.9	50.0	118	50 - 145	3	30

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Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/31/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW06-10.2
Lab Code: R1410303-004

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-53-GW-699MW06-10.2 MS Matrix Spike RQ1500199-05			FTMM-53-GW-699MW06-10.2 DMS Duplicate Matrix Spike RQ1500199-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
cis-1,2-Dichloroethene	ND	50.3	50.0	100	51.6	50.0	103	70 - 125	3	30
cis-1,3-Dichloropropene	ND	45.4	50.0	91	47.2	50.0	94	70 - 130	4	30
m,p-Xylenes	ND	106	100	106	110	100	110	75 - 130	4	30
n-Butylbenzene	ND	53.1	50.0	106	55.0	50.0	110	70 - 135	4	30
n-Propylbenzene	ND	54.7	50.0	109	56.9	50.0	114	70 - 130	4	30
o-Xylene	ND	50.5	50.0	101	50.7	50.0	101	80 - 120	<1	30
sec-Butylbenzene	ND	53.7	50.0	107	55.3	50.0	111	70 - 125	3	30
tert-Butylbenzene	ND	50.9	50.0	102	52.7	50.0	105	70 - 130	4	30
trans-1,2-Dichloroethene	ND	51.6	50.0	103	53.7	50.0	107	60 - 140	4	30
trans-1,3-Dichloropropene	ND	44.9	50.0	90	46.7	50.0	93	55 - 140	4	30

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Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Analyzed: 12/30/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 427294

Lab Control Sample
RQ1500158-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	18.0	20.0	90	80 - 130
1,1,1-Trichloroethane (TCA)	18.0	20.0	90	65 - 130
1,1,2,2-Tetrachloroethane	16.5	20.0	82	65 - 130
1,1,2-Trichloroethane	18.7	20.0	93	75 - 125
1,1-Dichloroethane (1,1-DCA)	18.9	20.0	95	70 - 135
1,1-Dichloroethene (1,1-DCE)	18.4	20.0	92	70 - 130
1,1-Dichloropropene	17.8	20.0	89	75 - 130
1,2,3-Trichlorobenzene	19.7	20.0	99	75 - 125
1,2,3-Trichloropropane	18.0	20.0	90	75 - 125
1,2,4-Trichlorobenzene	20.1	20.0	101	65 - 135
1,2,4-Trimethylbenzene	19.6	20.0	98	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	17.3	20.0	87	50 - 130
1,2-Dibromoethane	19.1	20.0	95	80 - 120
1,2-Dichlorobenzene	19.4	20.0	97	70 - 120
1,2-Dichloroethane	19.1	20.0	95	70 - 130
1,2-Dichloropropane	19.9	20.0	99	75 - 125
1,3,5-Trimethylbenzene	19.7	20.0	98	75 - 130
1,3-Dichlorobenzene	18.8	20.0	94	75 - 125
1,3-Dichloropropane	19.5	20.0	98	75 - 125
1,4-Dichlorobenzene	19.0	20.0	95	75 - 125
2,2-Dichloropropane	14.6	20.0	73	70 - 135
2-Butanone (MEK)	20.6	20.0	103	30 - 150
2-Chlorotoluene	19.2	20.0	96	75 - 125
2-Hexanone	19.9	20.0	99	55 - 130
tert-Butyl Alcohol	368	400	92	50 - 150
4-Chlorotoluene	20.1	20.0	100	75 - 130
p-Isopropyltoluene	19.6	20.0	98	75 - 130
4-Methyl-2-pentanone	18.5	20.0	92	60 - 135
Acetone	21.9	20.0	109	40 - 140
Benzene	19.1	20.0	96	80 - 120
Bromobenzene	19.2	20.0	96	75 - 125
Bromochloromethane	18.9	20.0	94	65 - 130
Bromodichloromethane	18.9	20.0	95	75 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Analyzed: 12/30/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 427294

Analyte Name	Lab Control Sample RQ1500158-02 Result	Spike Amount	% Rec	% Rec Limits
Bromoform	18.0	20.0	90	70 - 130
Bromomethane	13.8	20.0	69	30 - 145
Carbon Tetrachloride	16.9	20.0	84	65 - 140
Chlorobenzene	19.6	20.0	98	80 - 120
Chloroethane	20.0	20.0	100	60 - 135
Chloroform	18.8	20.0	94	65 - 135
Chloromethane	20.8	20.0	104	40 - 125
Dibromochloromethane	18.0	20.0	90	60 - 135
Dichlorodifluoromethane (CFC 12)	19.2	20.0	96	30 - 155
Methylene Chloride	19.4	20.0	97	55 - 140
Ethylbenzene	17.0	20.0	85	75 - 125
Hexachlorobutadiene	17.4	20.0	87	50 - 140
Isopropylbenzene (Cumene)	20.0	20.0	100	75 - 125
Methyl tert-Butyl Ether	19.1	20.0	95	65 - 125
Naphthalene	20.9	20.0	104	55 - 140
Styrene	20.2	20.0	101	65 - 135
Tetrachloroethene (PCE)	17.8	20.0	89	45 - 150
Toluene	19.5	20.0	98	75 - 120
Trichloroethene (TCE)	20.2	20.0	101	70 - 125
Trichlorofluoromethane (CFC 11)	19.6	20.0	98	60 - 145
Vinyl Chloride	19.8	20.0	99	50 - 145
cis-1,2-Dichloroethene	18.8	20.0	94	70 - 125
cis-1,3-Dichloropropene	17.6	20.0	88	70 - 130
m,p-Xylenes	39.8	40.0	100	75 - 130
n-Butylbenzene	19.7	20.0	99	70 - 135
n-Propylbenzene	20.7	20.0	104	70 - 130
o-Xylene	18.6	20.0	93	80 - 120
sec-Butylbenzene	19.5	20.0	98	70 - 125
tert-Butylbenzene	18.8	20.0	94	70 - 130
trans-1,2-Dichloroethene	19.0	20.0	95	60 - 140
trans-1,3-Dichloropropene	17.5	20.0	87	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Analyzed: 12/31/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 427678

Lab Control Sample
RQ1500199-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	18.9	20.0	94	80 - 130
1,1,1-Trichloroethane (TCA)	18.9	20.0	94	65 - 130
1,1,2,2-Tetrachloroethane	19.0	20.0	95	65 - 130
1,1,2-Trichloroethane	19.4	20.0	97	75 - 125
1,1-Dichloroethane (1,1-DCA)	20.5	20.0	102	70 - 135
1,1-Dichloroethene (1,1-DCE)	19.5	20.0	98	70 - 130
1,1-Dichloropropene	18.3	20.0	92	75 - 130
1,2,3-Trichlorobenzene	21.0	20.0	105	75 - 125
1,2,3-Trichloropropane	18.0	20.0	90	75 - 125
1,2,4-Trichlorobenzene	20.9	20.0	104	65 - 135
1,2,4-Trimethylbenzene	20.4	20.0	102	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	16.3	20.0	81	50 - 130
1,2-Dibromoethane	19.7	20.0	99	80 - 120
1,2-Dichlorobenzene	19.8	20.0	99	70 - 120
1,2-Dichloroethane	19.8	20.0	99	70 - 130
1,2-Dichloropropane	21.6	20.0	108	75 - 125
1,3,5-Trimethylbenzene	20.6	20.0	103	75 - 130
1,3-Dichlorobenzene	19.5	20.0	98	75 - 125
1,3-Dichloropropane	19.4	20.0	97	75 - 125
1,4-Dichlorobenzene	19.3	20.0	97	75 - 125
2,2-Dichloropropane	18.6	20.0	93	70 - 135
2-Butanone (MEK)	19.2	20.0	96	30 - 150
2-Chlorotoluene	20.1	20.0	100	75 - 125
2-Hexanone	16.2	20.0	81	55 - 130
tert-Butyl Alcohol	364	400	91	50 - 150
4-Chlorotoluene	20.7	20.0	103	75 - 130
p-Isopropyltoluene	21.3	20.0	107	75 - 130
4-Methyl-2-pentanone	17.6	20.0	88	60 - 135
Acetone	16.2	20.0	81	40 - 140
Benzene	20.1	20.0	100	80 - 120
Bromobenzene	19.5	20.0	98	75 - 125
Bromochloromethane	19.6	20.0	98	65 - 130
Bromodichloromethane	19.6	20.0	98	75 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Analyzed: 12/31/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 427678

Lab Control Sample
RQ1500199-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Bromoform	17.4	20.0	87	70 - 130
Bromomethane	12.5	20.0	62	30 - 145
Carbon Tetrachloride	17.6	20.0	88	65 - 140
Chlorobenzene	20.3	20.0	102	80 - 120
Chloroethane	22.9	20.0	114	60 - 135
Chloroform	19.9	20.0	100	65 - 135
Chloromethane	22.4	20.0	112	40 - 125
Dibromochloromethane	17.9	20.0	90	60 - 135
Dichlorodifluoromethane (CFC 12)	21.1	20.0	105	30 - 155
Methylene Chloride	20.1	20.0	101	55 - 140
Ethylbenzene	17.8	20.0	89	75 - 125
Hexachlorobutadiene	20.6	20.0	103	50 - 140
Isopropylbenzene (Cumene)	21.3	20.0	106	75 - 125
Methyl tert-Butyl Ether	19.2	20.0	96	65 - 125
Naphthalene	21.0	20.0	105	55 - 140
Styrene	20.7	20.0	103	65 - 135
Tetrachloroethene (PCE)	18.3	20.0	91	45 - 150
Toluene	20.6	20.0	103	75 - 120
Trichloroethene (TCE)	19.6	20.0	98	70 - 125
Trichlorofluoromethane (CFC 11)	21.5	20.0	108	60 - 145
Vinyl Chloride	21.5	20.0	107	50 - 145
cis-1,2-Dichloroethene	20.0	20.0	100	70 - 125
cis-1,3-Dichloropropene	18.6	20.0	93	70 - 130
m,p-Xylenes	42.1	40.0	105	75 - 130
n-Butylbenzene	21.7	20.0	108	70 - 135
n-Propylbenzene	21.6	20.0	108	70 - 130
o-Xylene	19.8	20.0	99	80 - 120
sec-Butylbenzene	21.2	20.0	106	70 - 125
tert-Butylbenzene	20.0	20.0	100	70 - 130
trans-1,2-Dichloroethene	20.3	20.0	102	60 - 140
trans-1,3-Dichloropropene	18.4	20.0	92	55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Analyzed: 12/30/14 02:36

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1500158-01
Instrument ID: R-MS-10
File ID: I:\ACQUDATA\msvoa10\data\122914\A5194.D\

Analytical Method: 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1500158-02	I:\ACQUDATA\msvoa10\data\122914\A5192.D\	12/30/14 01:37
FTMM-53-GW-699MW01-7.5	R1410303-001	I:\ACQUDATA\msvoa10\data\122914\A5195.D\	12/30/14 03:06
FTMM-53-GW-699RW05-10	R1410303-002	I:\ACQUDATA\msvoa10\data\122914\A5196.D\	12/30/14 03:35
FTMM-53-GW-699MW09-7.75	R1410303-006	I:\ACQUDATA\msvoa10\data\122914\A5200.D\	12/30/14 05:33
FTMM-53-GW-699MW16-.7.5	R1410303-007	I:\ACQUDATA\msvoa10\data\122914\A5201.D\	12/30/14 06:02
FTMM-53-GW-699RW03-8.2	R1410303-008	I:\ACQUDATA\msvoa10\data\122914\A5202.D\	12/30/14 06:32
FTMM-53-GW-699MW04-8.0	R1410303-009	I:\ACQUDATA\msvoa10\data\122914\A5203.D\	12/30/14 07:01
FTMM-22-GW-CWMW29-10.85	R1410303-012	I:\ACQUDATA\msvoa10\data\122914\A5206.D\	12/30/14 08:29
FTMM-22-GW-CW1MW281-33.74	R1410303-013	I:\ACQUDATA\msvoa10\data\122914\A5207.D\	12/30/14 08:59
FTMM-22-GW-CW1MW28-11.21	R1410303-014	I:\ACQUDATA\msvoa10\data\122914\A5208.D\	12/30/14 09:28
FTMM-22-GW-CW1MW27-12.63	R1410303-015	I:\ACQUDATA\msvoa10\data\122914\A5209.D\	12/30/14 09:58
FTMM-53-GW-699RW05-10DL	R1410303-002	I:\ACQUDATA\msvoa10\data\122914\A5210.D\	12/30/14 10:28
FTMM-53-GW-699RW05-10MS	RQ1500158-05	I:\ACQUDATA\msvoa10\data\122914\A5211.D\	12/30/14 10:57
FTMM-53-GW-699RW05-10DMS	RQ1500158-06	I:\ACQUDATA\msvoa10\data\122914\A5212.D\	12/30/14 11:27

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Analyzed: 12/31/14 13:11

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1500199-04
Instrument ID: R-MS-10
File ID: I:\ACQUDATA\msvoa10\data\123114\A5263.D\

Analytical Method: 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1500199-03	I:\ACQUDATA\msvoa10\data\123114\A5261.D\	12/31/14 12:02
FTMM-53-GW-699RW11-5.3	R1410303-003	I:\ACQUDATA\msvoa10\data\123114\A5264.D\	12/31/14 13:41
FTMM-53-GW-699MW06-10.2	R1410303-004	I:\ACQUDATA\msvoa10\data\123114\A5265.D\	12/31/14 14:11
FTMM-53-GW-699MW106-10.2	R1410303-005	I:\ACQUDATA\msvoa10\data\123114\A5266.D\	12/31/14 14:40
FTMM-68-GW-565MW01-11.99	R1410303-010	I:\ACQUDATA\msvoa10\data\123114\A5267.D\	12/31/14 15:10
FTMM-68-GW-565MW01D-22.31	R1410303-011	I:\ACQUDATA\msvoa10\data\123114\A5268.D\	12/31/14 15:40
FTMM-22-GW-CW1MW281-33.74DL	R1410303-013	I:\ACQUDATA\msvoa10\data\123114\A5269.D\	12/31/14 16:09
FTMM-22-GW-CW1MW31-16.4	R1410303-016	I:\ACQUDATA\msvoa10\data\123114\A5270.D\	12/31/14 16:39
FTMM-22-GW-CW1MW37-11.78	R1410303-017	I:\ACQUDATA\msvoa10\data\123114\A5271.D\	12/31/14 17:08
FTMM-54-GW-296MW06-5.07	R1410303-018	I:\ACQUDATA\msvoa10\data\123114\A5272.D\	12/31/14 17:38
FTMM-54-GW-296MW06-10.1	R1410303-019	I:\ACQUDATA\msvoa10\data\123114\A5273.D\	12/31/14 18:08
FTMM-54-GW-296MW04-6.35	R1410303-020	I:\ACQUDATA\msvoa10\data\123114\A5274.D\	12/31/14 18:37
FTMM-53-GW-699MW06-10.2MS	RQ1500199-05	I:\ACQUDATA\msvoa10\data\123114\A5278.D\	12/31/14 20:36
FTMM-53-GW-699MW06-10.2DMS	RQ1500199-06	I:\ACQUDATA\msvoa10\data\123114\A5279.D\	12/31/14 21:05

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410303
Date Analyzed: 12/15/14 08:35

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\121514\A4876.D\
Instrument ID: R-MS-10

Analytical Method: 8260C
Analysis Lot:

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	20.1	93080	Pass
75	95	30	60	48.0	222272	Pass
95	95	100	100	100.0	462805	Pass
96	95	5	9	6.4	29400	Pass
173	174	0	2	1.0	4031	Pass
174	95	50	120	85.1	394048	Pass
175	174	5	9	7.8	30872	Pass
176	174	95	101	99.5	391915	Pass
177	176	5	9	6.5	25464	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Initial CalibrationICAL	0.5 ppb	I:\ACQUDATA\msvoa10\data\121514\A4878.D\	12/15/14 13:27	
Initial CalibrationICAL	1.0 ppb	I:\ACQUDATA\msvoa10\data\121514\A4879.D\	12/15/14 13:56	
Initial CalibrationICAL	2.0 ppb	I:\ACQUDATA\msvoa10\data\121514\A4880.D\	12/15/14 14:26	
Initial CalibrationICAL	5.0 ppb	I:\ACQUDATA\msvoa10\data\121514\A4881.D\	12/15/14 14:56	
Initial CalibrationICAL	20 ppb	I:\ACQUDATA\msvoa10\data\121514\A4882.D\	12/15/14 15:29	
Initial CalibrationICAL	50 ppb	I:\ACQUDATA\msvoa10\data\121514\A4883.D\	12/15/14 15:59	
Initial CalibrationICAL	100 ppb	I:\ACQUDATA\msvoa10\data\121514\A4884.D\	12/15/14 16:29	
Initial CalibrationICAL	150 ppb	I:\ACQUDATA\msvoa10\data\121514\A4885.D\	12/15/14 17:28	
Initial CalibrationICAL	200 ppb	I:\ACQUDATA\msvoa10\data\121514\A4886.D\	12/15/14 16:58	

```
Data Path : I:\ACQUDATA\msvoa10\data\121514\
Data File : A4876.D
Acq On    : 15 Dec 2014  11:44 am
Operator  : F.NAEGLER
Sample    : TUNE
Misc      :
ALS Vial  : 1   Sample Multiplier: 1

Integration File: CPD4.P

Method    : I:\ACQUDATA\MSVOA10\METHODS\T121514.M
Title     : 8260B WATERS
Last Update  : Wed Sep 27 14:33:13 2006
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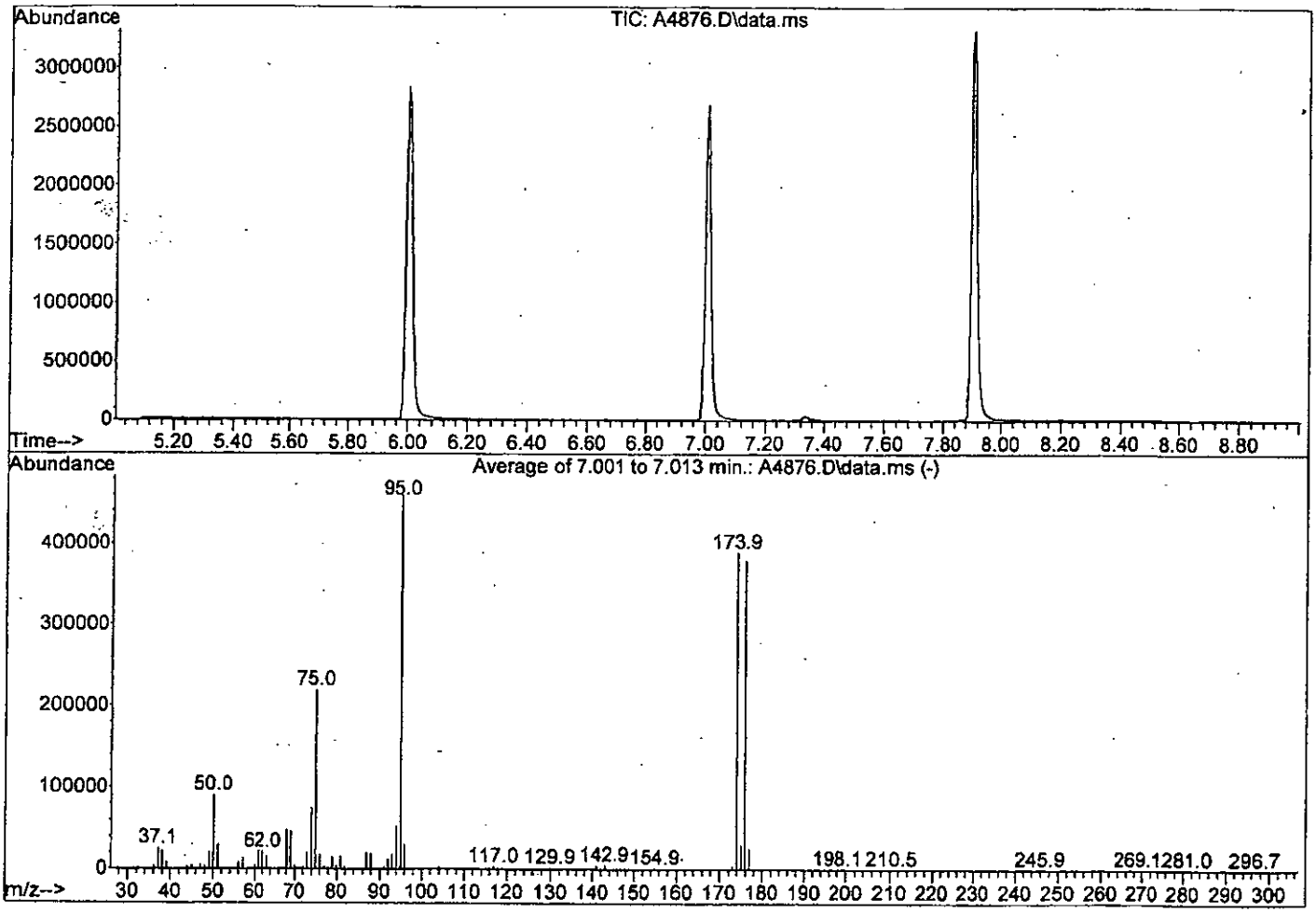
FJ 12/16/14



AutoFind: Scans 314, 315, 316; Background Corrected with Scan 309

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.6	89920	PASS
75	95	30	60	47.7	219200	PASS
95	95	100	100	100.0	459216	PASS
96	95	5	9	6.5	29821	PASS
173	174	0.00	2	1.0	3744	PASS
174	95	50	120	84.8	389291	PASS
175	174	5	9	7.5	29211	PASS
176	174	95	101	97.4	379115	PASS
177	176	5	9	6.7	25235	PASS

'121514.M Mon Dec 15 11:51:08 2014 MSVO10

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Service Request: R1410303
Date Analyzed: 12/30/14 00:42

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\122914\A5190.D\
Instrument ID: R-MS-10
Analytical Method: 8260C
Analysis Lot: 427294

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	21.00	97506	Pass
75	95	30	60	48.93	227157	Pass
95	95	100	100	100.00	464277	Pass
96	95	5	9	6.71	31155	Pass
173	174	0	2	1.21	4899	Pass
174	95	50	120	86.95	403691	Pass
175	174	5	9	7.29	29448	Pass
176	174	95	101	97.98	395541	Pass
177	176	5	9	6.66	26331	Pass

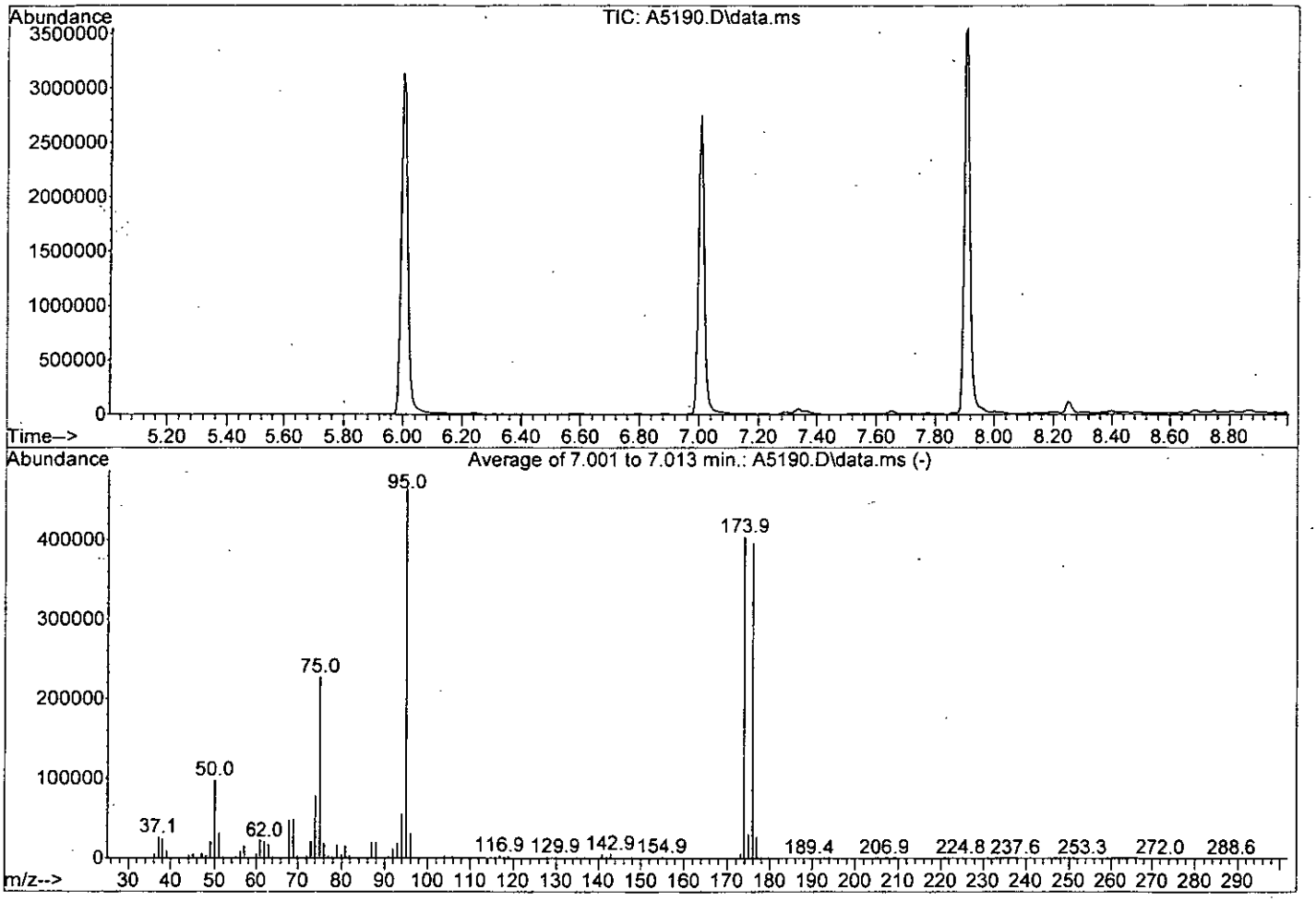
Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1500158-04	I:\ACQUDATA\msvoa10\data\122914\A5191.D\	12/30/14 01:08	
Lab Control Sample	RQ1500158-02	I:\ACQUDATA\msvoa10\data\122914\A5192.D\	12/30/14 01:37	
Method Blank	RQ1500158-01	I:\ACQUDATA\msvoa10\data\122914\A5194.D\	12/30/14 02:36	
FTMM-53-GW-699MW01-7.5	R1410303-001	I:\ACQUDATA\msvoa10\data\122914\A5195.D\	12/30/14 03:06	
FTMM-53-GW-699RW05-10	R1410303-002	I:\ACQUDATA\msvoa10\data\122914\A5196.D\	12/30/14 03:35	
FTMM-53-GW-699MW09-7.75	R1410303-006	I:\ACQUDATA\msvoa10\data\122914\A5200.D\	12/30/14 05:33	
FTMM-53-GW-699MW16-.7.5	R1410303-007	I:\ACQUDATA\msvoa10\data\122914\A5201.D\	12/30/14 06:02	
FTMM-53-GW-699RW03-8.2	R1410303-008	I:\ACQUDATA\msvoa10\data\122914\A5202.D\	12/30/14 06:32	
FTMM-53-GW-699MW04-8.0	R1410303-009	I:\ACQUDATA\msvoa10\data\122914\A5203.D\	12/30/14 07:01	
FTMM-22-GW-CWMW29-10.85	R1410303-012	I:\ACQUDATA\msvoa10\data\122914\A5206.D\	12/30/14 08:29	
FTMM-22-GW-CW1MW281-33.74	R1410303-013	I:\ACQUDATA\msvoa10\data\122914\A5207.D\	12/30/14 08:59	
FTMM-22-GW-CW1MW28-11.21	R1410303-014	I:\ACQUDATA\msvoa10\data\122914\A5208.D\	12/30/14 09:28	
FTMM-22-GW-CW1MW27-12.63	R1410303-015	I:\ACQUDATA\msvoa10\data\122914\A5209.D\	12/30/14 09:58	
FTMM-53-GW-699RW05-10DL	R1410303-002	I:\ACQUDATA\msvoa10\data\122914\A5210.D\	12/30/14 10:28	
FTMM-53-GW-699RW05-10MS	RQ1500158-05	I:\ACQUDATA\msvoa10\data\122914\A5211.D\	12/30/14 10:57	
FTMM-53-GW-699RW05-10DMS	RQ1500158-06	I:\ACQUDATA\msvoa10\data\122914\A5212.D\	12/30/14 11:27	

Data Path : I:\ACQUDATA\MSVOA10\data\122914\
Data File : A5190.D
Acq On : 30 Dec 2014 12:42 am
Operator : F.Naegler
Sample : TUNE
Misc :
ALS Vial : 25 Sample Multiplier: 1

FU 1/6/15

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\T121514.M
Title : 8260B WATERS
Last Update : Wed Sep 27 14:33:13 2006



AutoFind: Scans 314, 315, 316; Background Corrected with Scan 309

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.0	97506	PASS
75	95	30	60	48.9	227157	PASS
95	95	100	100	100.0	464277	PASS
96	95	5	9	6.7	31155	PASS
173	174	0.00	2	1.2	4899	PASS
174	95	50	120	87.0	403691	PASS
175	174	5	9	7.3	29448	PASS
176	174	95	101	98.0	395541	PASS
177	176	5	9	6.7	26331	PASS

T121514.M Tue Dec 30 09:03:14 2014 MSVO10

00034

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410303
Date Analyzed: 12/31/14 10:25

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\123114\A5258.D\
Instrument ID: R-MS-10

Analytical Method: 8260C
Analysis Lot: 427678

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	21.60	111631	Pass
75	95	30	60	49.65	256640	Pass
95	95	100	100	100.00	516864	Pass
96	95	5	9	6.47	33424	Pass
173	174	0	2	1.52	7154	Pass
174	95	50	120	90.85	469568	Pass
175	174	5	9	7.48	35112	Pass
176	174	95	101	95.47	448320	Pass
177	176	5	9	5.97	26768	Pass

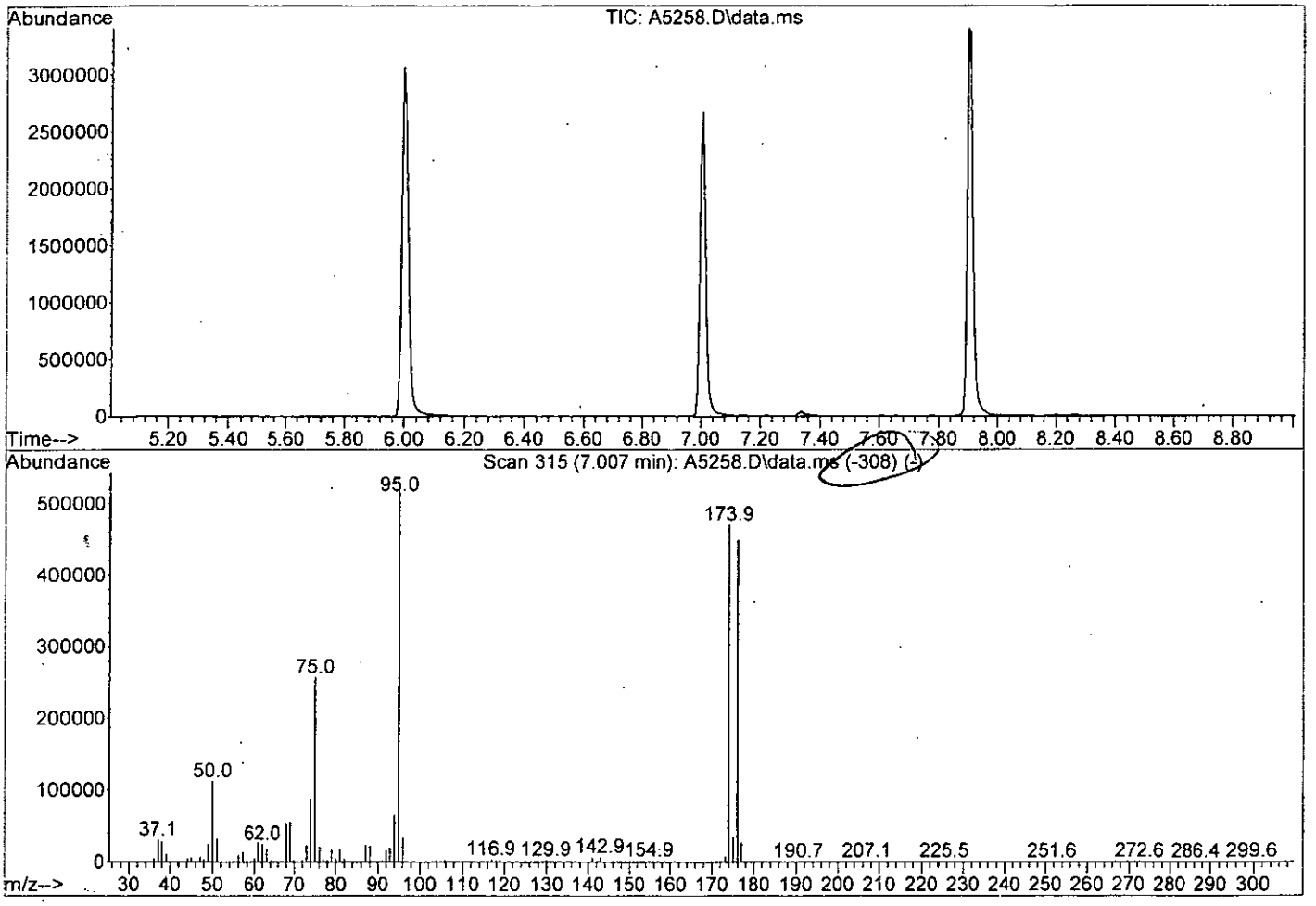
Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1500199-02	I:\ACQUDATA\msvoa10\data\123114\A5260.D\	12/31/14 11:21	
Lab Control Sample	RQ1500199-03	I:\ACQUDATA\msvoa10\data\123114\A5261.D\	12/31/14 12:02	
Method Blank	RQ1500199-04	I:\ACQUDATA\msvoa10\data\123114\A5263.D\	12/31/14 13:11	
FTMM-53-GW-699RW11-5.3	R1410303-003	I:\ACQUDATA\msvoa10\data\123114\A5264.D\	12/31/14 13:41	
FTMM-53-GW-699MW06-10.2	R1410303-004	I:\ACQUDATA\msvoa10\data\123114\A5265.D\	12/31/14 14:11	
FTMM-53-GW-699MW106-10.2	R1410303-005	I:\ACQUDATA\msvoa10\data\123114\A5266.D\	12/31/14 14:40	
FTMM-68-GW-565MW01-11.99	R1410303-010	I:\ACQUDATA\msvoa10\data\123114\A5267.D\	12/31/14 15:10	
FTMM-68-GW-565MW01D-22.31	R1410303-011	I:\ACQUDATA\msvoa10\data\123114\A5268.D\	12/31/14 15:40	
FTMM-22-GW-CW1MW281-33.74DL	R1410303-013	I:\ACQUDATA\msvoa10\data\123114\A5269.D\	12/31/14 16:09	
FTMM-22-GW-CW1MW31-16.4	R1410303-016	I:\ACQUDATA\msvoa10\data\123114\A5270.D\	12/31/14 16:39	
FTMM-22-GW-CW1MW37-11.78	R1410303-017	I:\ACQUDATA\msvoa10\data\123114\A5271.D\	12/31/14 17:08	
FTMM-54-GW-296MW06-5.07	R1410303-018	I:\ACQUDATA\msvoa10\data\123114\A5272.D\	12/31/14 17:38	
FTMM-54-GW-296MW06-10.1	R1410303-019	I:\ACQUDATA\msvoa10\data\123114\A5273.D\	12/31/14 18:08	
FTMM-54-GW-296MW04-6.35	R1410303-020	I:\ACQUDATA\msvoa10\data\123114\A5274.D\	12/31/14 18:37	
FTMM-53-GW-699MW06-10.2MS	RQ1500199-05	I:\ACQUDATA\msvoa10\data\123114\A5278.D\	12/31/14 20:36	
FTMM-53-GW-699MW06-10.2DMS	RQ1500199-06	I:\ACQUDATA\msvoa10\data\123114\A5279.D\	12/31/14 21:05	

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5258.D
Acq On : 31 Dec 2014 10:25 am
Operator : F.Naegler
Sample : TUNE
Misc :
ALS Vial : 1 Sample Multiplier: 1

FJ 12/31/14

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\T121514.M
Title : 8260B WATERS
Last Update : Wed Sep 27 14:33:13 2006



Spectrum Information: Scan 315

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.6	111631	PASS
75	95	30	60	49.7	256640	PASS
95	95	100	100	100.0	516864	PASS
96	95	5	9	6.5	33424	PASS
173	174	0.00	2	1.5	7154	PASS
174	95	50	120	90.8	469568	PASS
175	174	5	9	7.5	35112	PASS
176	174	95	101	95.5	448320	PASS
177	176	5	9	6.0	26768	PASS

T121514.M Wed Dec 31 10:35:42 2014 MSVO10

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410303
Date Analyzed: 12/30/14 01:08

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\122914\A5191.D\
Instrument ID: R-MS-10
Analytical Method: 8260C

Lab Code: RQ1500158-04
Analysis Lot: 427294
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
Results ==>		765,939	10.83	1,496,395	5.61	1,367,148	8.84
Upper Limit ==>		1,531,878	11.33	2,992,790	6.11	2,734,296	9.34
Lower Limit ==>		382,970	10.33	748,198	5.11	683,574	8.34
ICAL Result ==>		707,736	10.83	1,388,269	5.61	1,267,944	8.84
Associated Analyses							
Lab Control Sample	RQ1500158-02	735,477	10.84	1,497,538	5.61	1,354,520	8.84
Method Blank	RQ1500158-01	705,846	10.83	1,429,877	5.61	1,318,441	8.84
FTMM-53-GW-699MW01-7.5	R1410303-001	661,491	10.83	1,444,567	5.61	1,320,178	8.84
FTMM-53-GW-699RW05-10	R1410303-002	752,864	10.84	1,477,394	5.61	1,353,115	8.84
FTMM-53-GW-699MW09-7.75	R1410303-006	683,313	10.83	1,444,757	5.61	1,315,444	8.84
FTMM-53-GW-699MW16-.7.5	R1410303-007	672,688	10.84	1,413,523	5.61	1,304,016	8.84
FTMM-53-GW-699RW03-8.2	R1410303-008	700,042	10.83	1,446,165	5.61	1,320,278	8.84
FTMM-53-GW-699MW04-8.0	R1410303-009	697,186	10.83	1,442,674	5.61	1,316,566	8.84
FTMM-22-GW-CWMW29-10.85	R1410303-012	665,397	10.83	1,429,618	5.61	1,303,652	8.84
FTMM-22-GW-CW1MW281-33.74	R1410303-013	692,757	10.83	1,431,447	5.61	1,311,149	8.84
FTMM-22-GW-CW1MW28-11.21	R1410303-014	673,093	10.83	1,432,334	5.61	1,319,615	8.84
FTMM-22-GW-CW1MW27-12.63	R1410303-015	675,578	10.83	1,435,940	5.61	1,303,171	8.84
FTMM-53-GW-699RW05-10	R1410303-002	712,012	10.83	1,433,899	5.61	1,304,819	8.84
FTMM-53-GW-699RW05-10MS	RQ1500158-05	769,432	10.83	1,484,045	5.61	1,354,053	8.84
FTMM-53-GW-699RW05-10DMS	RQ1500158-06	769,177	10.83	1,514,875	5.61	1,378,731	8.84

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410303
Date Analyzed: 12/30/14 01:08

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\122914\A5191.D\
Instrument ID: R-MS-10
Analytical Method: 8260C

Lab Code: RQ1500158-04
Analysis Lot: 427294
Signal ID:

		Pentafluorobenzene	
		Area	RT
	Results ==>	1,054,386	4.41
	Upper Limit ==>	2,108,772	4.91
	Lower Limit ==>	527,193	3.91
	ICAL Result ==>	960,900	4.41
Associated Analyses			
Lab Control Sample	RQ1500158-02	1,031,487	4.41
Method Blank	RQ1500158-01	997,630	4.41
FTMM-53-GW-699MW01-7.5	R1410303-001	1,004,853	4.41
FTMM-53-GW-699RW05-10	R1410303-002	1,016,625	4.41
FTMM-53-GW-699MW09-7.75	R1410303-006	1,008,104	4.41
FTMM-53-GW-699MW16-.7.5	R1410303-007	989,146	4.41
FTMM-53-GW-699RW03-8.2	R1410303-008	1,008,627	4.41
FTMM-53-GW-699MW04-8.0	R1410303-009	1,007,862	4.41
FTMM-22-GW-CWMW29-10.85	R1410303-012	989,250	4.41
FTMM-22-GW-CW1MW281-33.74	R1410303-013	990,755	4.41
FTMM-22-GW-CW1MW28-11.21	R1410303-014	988,534	4.41
FTMM-22-GW-CW1MW27-12.63	R1410303-015	989,839	4.41
FTMM-53-GW-699RW05-10	R1410303-002	996,745	4.40
FTMM-53-GW-699RW05-10MS	RQ1500158-05	1,025,022	4.41
FTMM-53-GW-699RW05-10DMS	RQ1500158-06	1,042,011	4.41

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410303
Date Analyzed: 12/31/14 11:21

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\123114\A5260.D\
Instrument ID: R-MS-10
Analytical Method: 8260C

Lab Code: RQ1500199-02
Analysis Lot: 427678
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
	Results ==>	732,862	10.84	1,462,734	5.61	1,334,757	8.84
	Upper Limit ==>	1,465,724	11.34	2,925,468	6.11	2,669,514	9.34
	Lower Limit ==>	366,431	10.34	731,367	5.11	667,379	8.34
	ICAL Result ==>	707,736	10.83	1,388,269	5.61	1,267,944	8.84
Associated Analyses							
Lab Control Sample	RQ1500199-03	737,056	10.83	1,439,513	5.60	1,319,080	8.84
Method Blank	RQ1500199-04	674,595	10.83	1,367,162	5.61	1,264,253	8.84
FTMM-53-GW-699RW11-5.3	R1410303-003	646,844	10.83	1,413,152	5.61	1,299,452	8.84
FTMM-53-GW-699MW06-10.2	R1410303-004	652,801	10.84	1,393,550	5.61	1,292,380	8.84
FTMM-53-GW-699MW106-10.2	R1410303-005	656,402	10.83	1,357,884	5.61	1,258,697	8.84
FTMM-68-GW-565MW01-11.99	R1410303-010	646,468	10.83	1,381,550	5.61	1,306,378	8.84
FTMM-68-GW-565MW01D-22.31	R1410303-011	658,938	10.84	1,386,405	5.61	1,279,383	8.84
FTMM-22-GW-CW1MW281-33.74	R1410303-013	649,393	10.84	1,381,264	5.61	1,271,095	8.84
FTMM-22-GW-CW1MW31-16.4	R1410303-016	652,965	10.83	1,375,191	5.61	1,263,238	8.84
FTMM-22-GW-CW1MW37-11.78	R1410303-017	649,451	10.83	1,360,837	5.61	1,265,632	8.84
FTMM-54-GW-296MW06-5.07	R1410303-018	652,970	10.83	1,395,200	5.61	1,281,405	8.84
FTMM-54-GW-296MW06-10.1	R1410303-019	679,415	10.84	1,384,305	5.61	1,272,814	8.84
FTMM-54-GW-296MW04-6.35	R1410303-020	664,488	10.83	1,379,841	5.61	1,267,203	8.84
FTMM-53-GW-699MW06-10.2MS	RQ1500199-05	739,250	10.83	1,419,547	5.61	1,307,529	8.84
FTMM-53-GW-699MW06-10.2DMS	RQ1500199-06	745,469	10.83	1,483,869	5.61	1,350,170	8.84

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410303
Date Analyzed: 12/31/14 11:21

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa10\data\123114\A5260.D\
Instrument ID: R-MS-10
Analytical Method: 8260C

Lab Code: RQ1500199-02
Analysis Lot: 427678
Signal ID:

		Pentafluorobenzene	
		Area	RT
	Results ==>	1,009,712	4.41
	Upper Limit ==>	2,019,424	4.91
	Lower Limit ==>	504,856	3.91
	ICAL Result ==>	960,900	4.41
Associated Analyses			
Lab Control Sample	RQ1500199-03	992,398	4.40
Method Blank	RQ1500199-04	953,196	4.41
FTMM-53-GW-699RW11-5.3	R1410303-003	980,357	4.41
FTMM-53-GW-699MW06-10.2	R1410303-004	960,580	4.41
FTMM-53-GW-699MW106-10.2	R1410303-005	951,063	4.41
FTMM-68-GW-565MW01-11.99	R1410303-010	959,676	4.41
FTMM-68-GW-565MW01D-22.31	R1410303-011	943,045	4.41
FTMM-22-GW-CW1MW281-33.74	R1410303-013	950,840	4.41
FTMM-22-GW-CW1MW31-16.4	R1410303-016	938,151	4.41
FTMM-22-GW-CW1MW37-11.78	R1410303-017	937,062	4.41
FTMM-54-GW-296MW06-5.07	R1410303-018	949,355	4.41
FTMM-54-GW-296MW06-10.1	R1410303-019	951,244	4.41
FTMM-54-GW-296MW04-6.35	R1410303-020	961,428	4.41
FTMM-53-GW-699MW06-10.2MS	RQ1500199-05	967,637	4.41
FTMM-53-GW-699MW06-10.2DMS	RQ1500199-06	1,019,641	4.41

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Environmental

VOLATILE ORGANICS SAMPLE DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0953
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 03:06
Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1410303-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5195.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0953
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 03:06
Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1410303-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5195.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0953
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 03:06
Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1410303-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5195.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	12/30/14 03:06	
Dibromofluoromethane	99	85-115	12/30/14 03:06	
Toluene-d8	107	85-120	12/30/14 03:06	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 0306

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW01-7.5	**Units:**	µg/L
Lab Code:	R1410303-001	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-001|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5195.D Vial: 30
Acq On : 30 Dec 2014 3:06 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 14:30:36 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	1004853	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1444567	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1320178	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	661491	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	447810	49.28	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.56%			
48) surr1,1,2-dichloroetha...	4.854	65	458267	49.66	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 99.32%			
65) SURR3,Toluene-d8	7.427	98	1703207	53.57	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.14%			
70) SURR2,BFB	9.878	95	659526	49.71	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.42%			
Target Compounds						Qvalue
12) Acrolein	1.922	56	303	Below Cal		83
15) Acetone	2.129	43	1795	1.06	ug/L	91
116) Hexachlorobt	12.329	225	1371	0.25	ug/L #	43

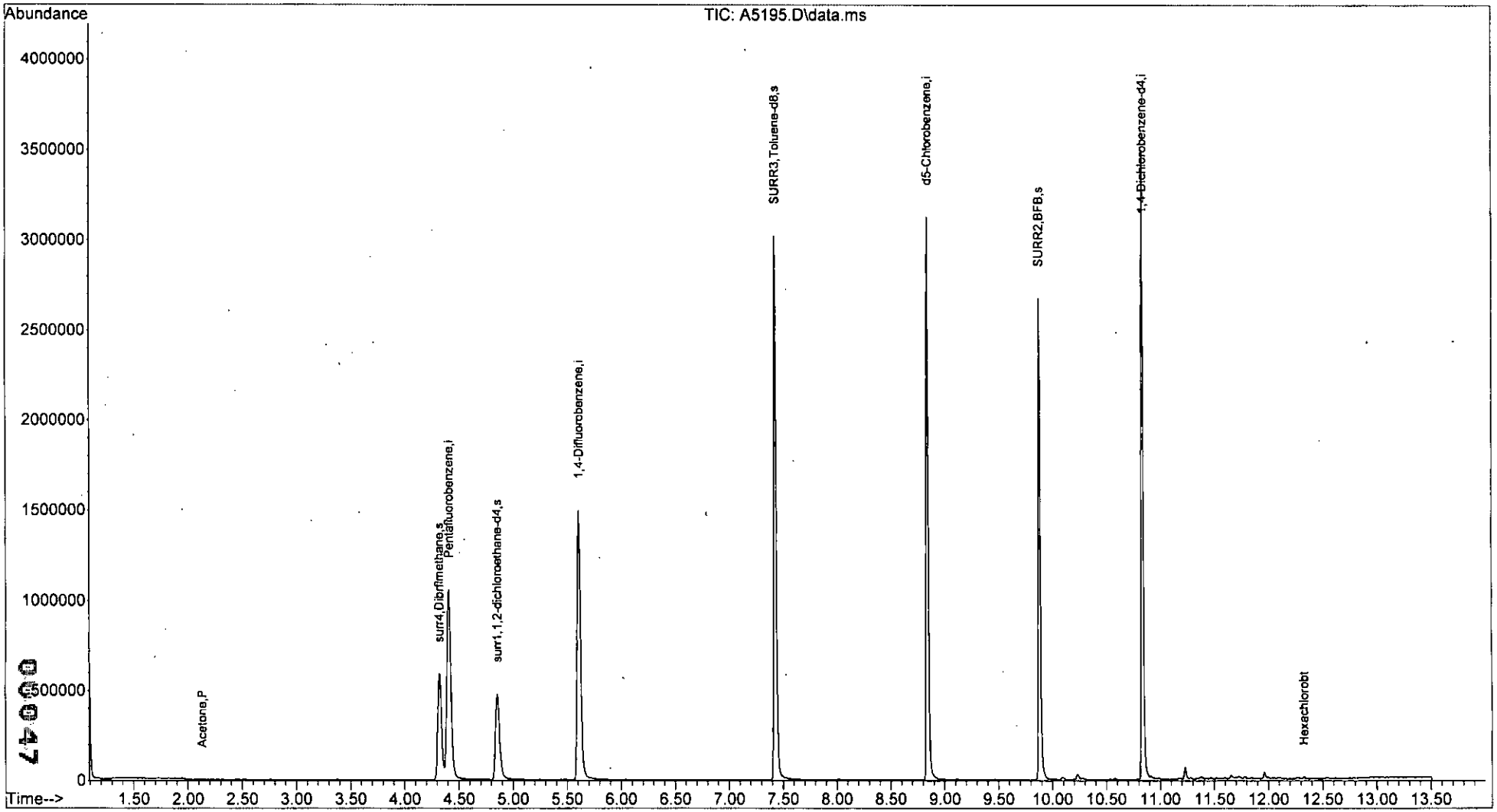
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FV 1/6/15

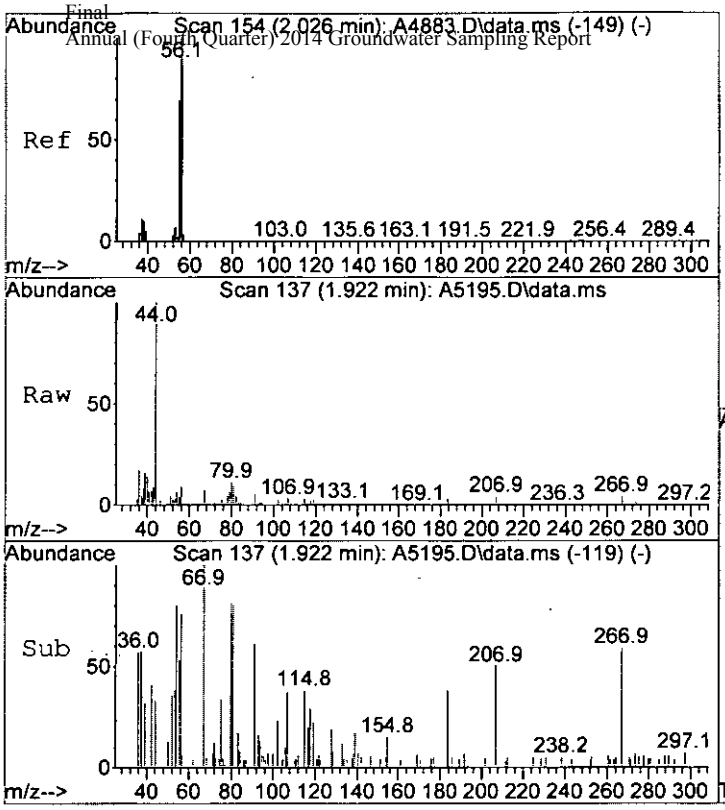
Quantitation Report (QT Reviewed)

Sample : R1410303-001|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5195.D Vial: 30
Acq On : 30 Dec 2014 3:06 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 14:30:36 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



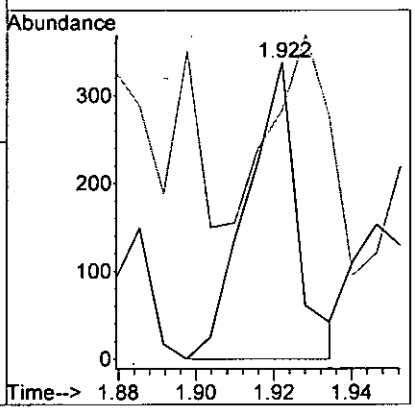
W121514.M Tue Jan 06 14:31:31 2015 MSVO10

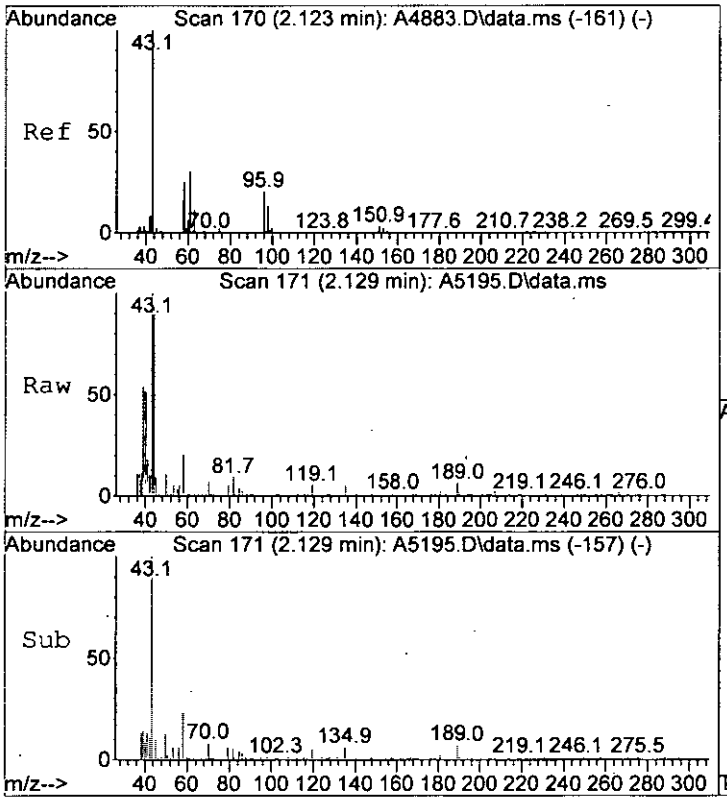


#12
Acrolein
Concen: Below Cal
RT: 1.922 min Scan# 137
Delta R.T. -0.097 min
Lab File: A5195.D
Acq: 30 Dec 2014 3:06 am

Tgt Ion: 56 Resp: 303

Ion	Ratio	Lower	Upper
56	100		
55	83.7	49.6	89.6

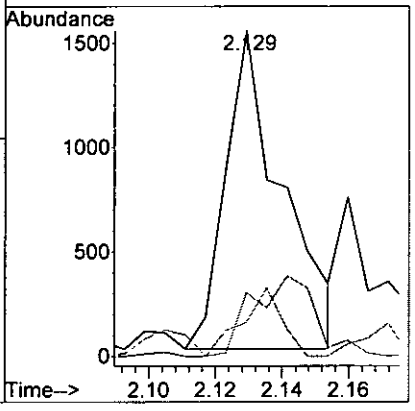


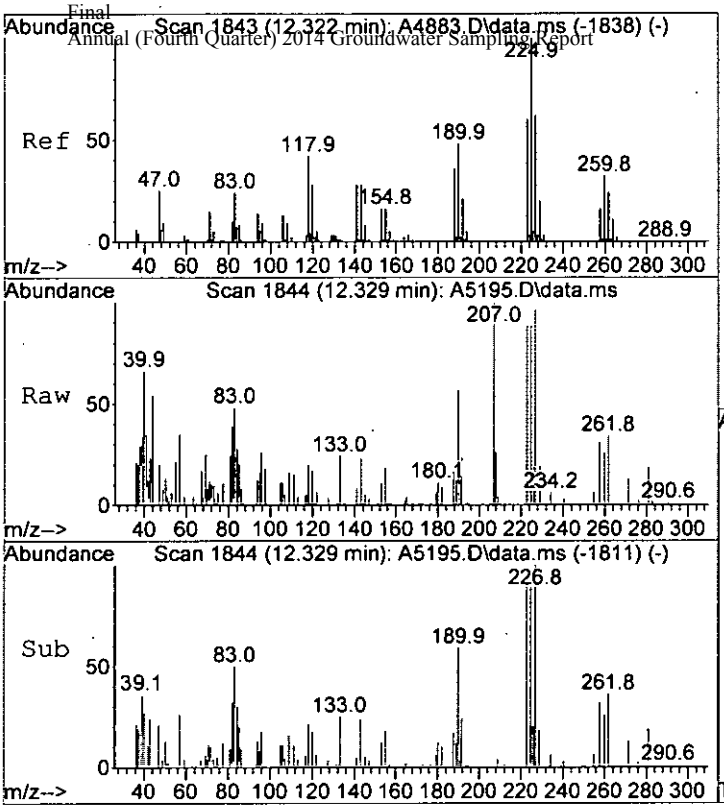


#15
Acetone
Concen: 1.06 ug/L
RT: 2.129 min Scan# 171
Delta R.T. 0.012 min
Lab File: A5195.D
Acq: 30 Dec 2014 3:06 am

Tgt Ion: 43 Resp: 1795

Ion	Ratio	Lower	Upper
43	100		
58	19.6	5.3	45.3
42	10.3	0.0	29.0

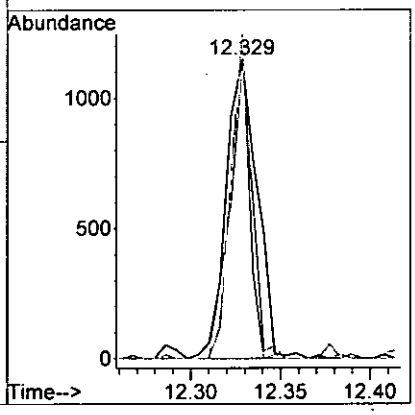




#116
Hexachlorobt
Concen: 0.25 ug/L
RT: 12.329 min Scan# 1844
Delta R.T. 0.006 min
Lab File: A5195.D
Acq: 30 Dec 2014 3:06 am

Tgt Ion:225 Resp: 1371

Ion	Ratio	Lower	Upper
225	100		
223	99.4	40.4	80.4#
227	109.3	42.0	82.0#



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5195.D
Acq On : 30 Dec 2014 3:06 am
Operator : F.Naegler
Sample : R1410303-001|1.0
Misc : PARSONS 11603 T4
ALS Vial : 30 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5195.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	521	531	538	rBV	590922	1465991	32.18%	5.803%
2	4.409	538	545	569	rVB	1050727	2792793	61.30%	11.055%
3	4.854	610	618	637	rBV	474714	1273756	27.96%	5.042%
4	5.610	734	742	757	rBV	1492912	3327403	73.03%	13.171%
5	7.427	1035	1040	1055	rBV	3015539	4555993	100.00%	18.034%
6	8.841	1267	1272	1287	rBV	3124197	4170079	91.53%	16.506%
7	9.878	1438	1442	1455	rBV	2667037	3344494	73.41%	13.238%
8	10.835	1594	1599	1610	rBV	3491894	4247832	93.24%	16.814%
9	11.231	1660	1664	1669	rBV	63512	85454	1.88%	0.338%

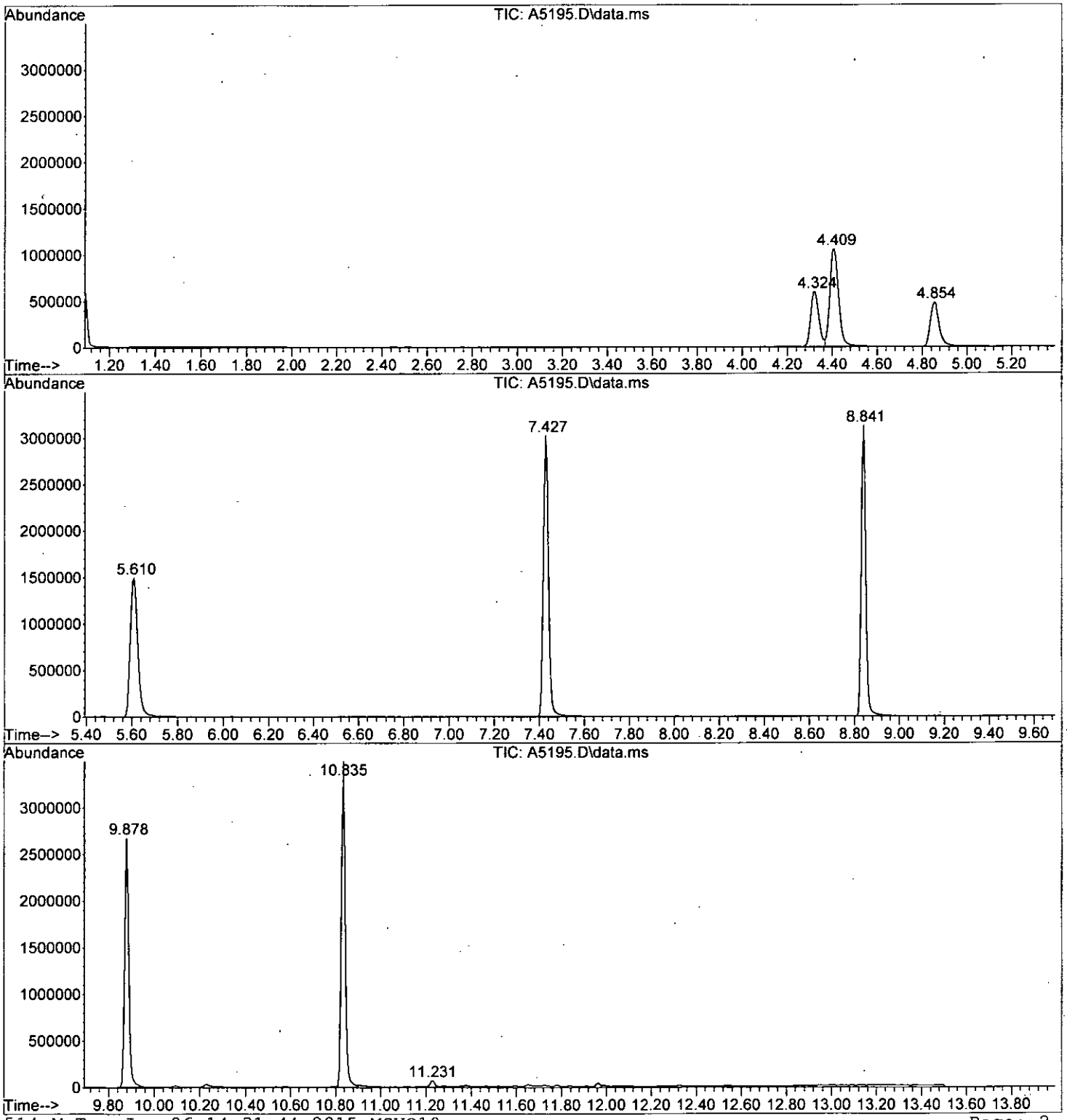
Sum of corrected areas: 25263795

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5195.D
Acq On : 30 Dec 2014 3:06 am
Operator : F.Naegler
Sample : R1410303-001|1.0
Misc : PARSONS 11603 T4
ALS Vial : 30 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W121514.M Tue Jan 06 14:31:44 2015 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\122914\\
Data File : A5195.D
Acq On : 30 Dec 2014 3:06 amm
Operator : F.Naeglerr
Sample : R1410303-001|1.0
Misc : PARSONS 11603 T44
ALS Vial : 30 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1008
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 03:35
Sample Name:	FTMM-53-GW-699RW05-10	**Units:**	µg/L
Lab Code:	R1410303-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5196.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane.(1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**200**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**69**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**1.3**	J	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**1.9**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1008
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 03:35
Sample Name:	FTMM-53-GW-699RW05-10	**Units:**	µg/L
Lab Code:	R1410303-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5196.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	**120**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	7.7		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**71**		5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**6.8**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**330**		10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**9.7**		5.0	1.0	0.20	
95-47-6	o-Xylene	**280**	E	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**1.2**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.28**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1008
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 03:35
Sample Name:	FTMM-53-GW-699RW05-10	**Units:**	µg/L
Lab Code:	R1410303-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5196.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	12/30/14 03:35	
Dibromofluoromethane	99	85-115	12/30/14 03:35	
Toluene-d8	107	85-120	12/30/14 03:35	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/30/14 0335

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW05-10
Lab Code: R1410303-002

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000078-78-4	Butane, 2-methyl-	1.66	**44.9**	JN
000109-66-0	Pentane	1.81	**16.1**	JN
000107-83-5	Pentane, 2-methyl-	2.46	**41.2**	JN
000109-67-1	1-Pentene	2.51	**15.7**	JN
000096-14-0	Pentane, 3-methyl-	2.67	**26.0**	JN
000096-37-7	Cyclopentane, methyl-	3.56	**78.5**	JN
000108-87-2	Cyclohexane, methyl-	6.21	**16.8**	JN
000620-14-4	Benzene, 1-ethyl-3-methyl-	10.18	**96.7**	JN
000622-96-8	Benzene, 1-ethyl-4-methyl-	10.20	**52.5**	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.41	**127.2**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.90	**156.4**	JN
000611-15-4	Benzene, 1-ethenyl-2-methyl-	11.06	**138.0**	JN
000535-77-3	Benzene, 1-methyl-3-(1-methylethyl	11.13	**19.9**	JN
001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	11.33	**17.4**	JN
000099-87-6	Benzene, 1-methyl-4-(1-methylethyl	11.41	**32.7**	JN
000767-58-8	Indan, 1-methyl-	11.49	**24.9**	JN
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	11.68	**21.6**	JN
000527-53-7	Benzene, 1,2,3,5-tetramethyl-	11.71	**30.7**	JN
000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	11.89	**19.3**	JN
002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	11.99	**56.1**	JN

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-002|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5196.D Vial: 31
Acq On : 30 Dec 2014 3:35 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 14:36:06 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	1016625	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1477394	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1353115	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	752864	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.318	113	461088	49.61	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.22%				
48) surr1,1,2-dichloroetha...	4.854	65	472532	50.07	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 100.14%				
65) SURR3,Toluene-d8	7.427	98	1745132	53.67	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.34%				
70) SURR2,BFB	9.878	95	691567	50.97	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.94%				
Target Compounds							Qvalue
12) Acrolein	2.007	56	489	Below Cal		#	1
49) Benzene	4.964	78	68458	1.93	ug/L		97
66) Toluene	7.500	91	255186	6.78	ug/L		99
82) Ethylbenzene	8.976	106	1668890	122.83	ug/L	#	63
83) (m+p)Xylene	9.085	106	5181499	326.10	ug/L	#	59
84) o-Xylene	9.433	106	4680287	281.85	ug/L	#	40 E
88) Isopropylbenzene	9.756	105	292131	7.65	ug/L		98
95) n-Propylbenzene	10.103	91	441232	9.66	ug/L		96
99) 1,3,5-Trimethylbenzene	10.250	105	2343202	69.46	ug/L		99
100) tert-Butylbenzene	10.518	119	8071	0.28	ug/L		89
101) 1,2,4-Trimethylbenzene	10.561	105	6933926	199.23	ug/L	#	43
103) sec-Butylbenzene	10.701	105	47319	1.22	ug/L		99
104) p-Isopropyltoluene	10.817	119	45019	1.34	ug/L		99
117) Naphthalen	12.371	128	1502006	71.00	ug/L		100

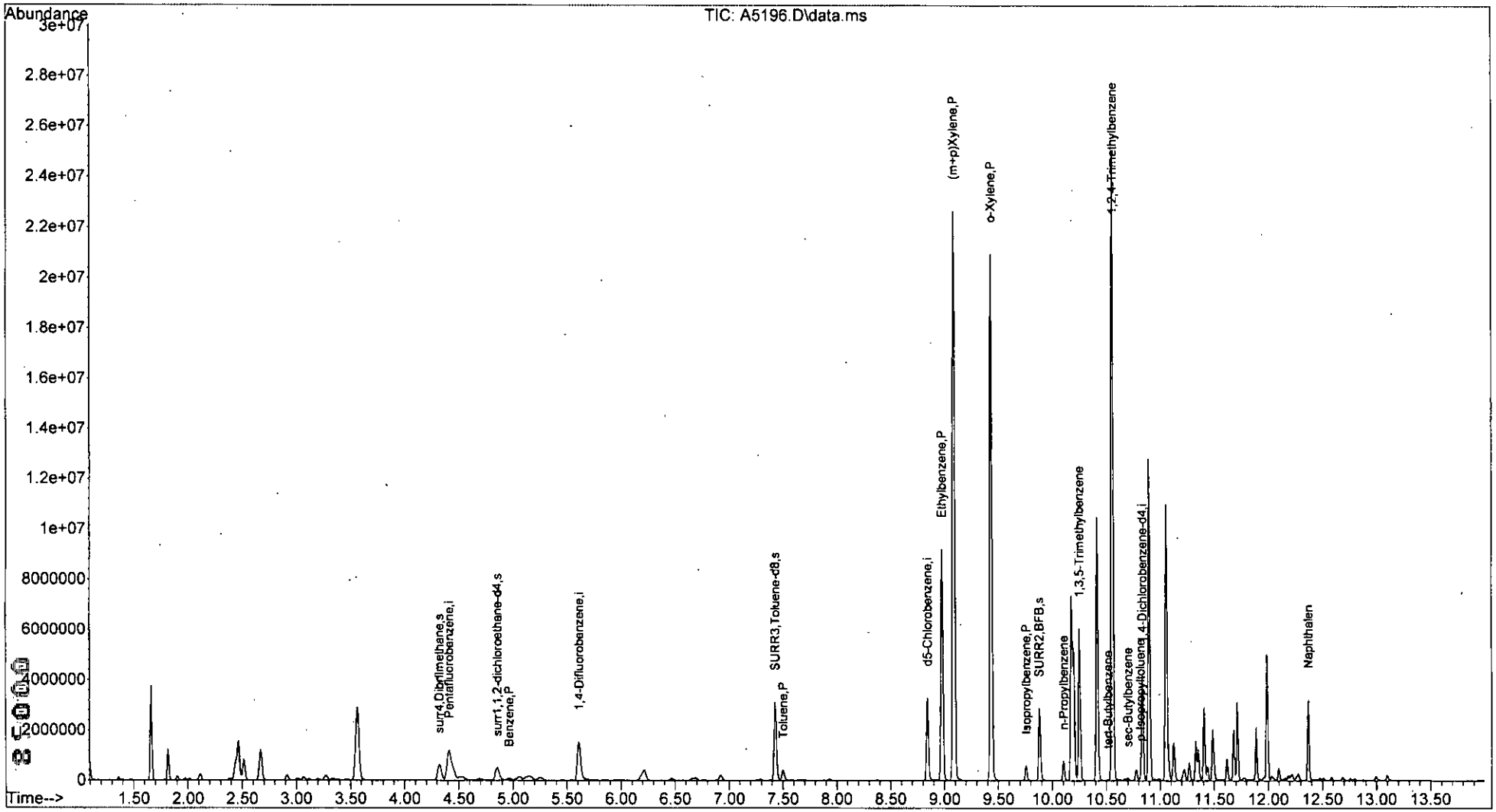
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FJ 1/6/15
KR 1/6/15

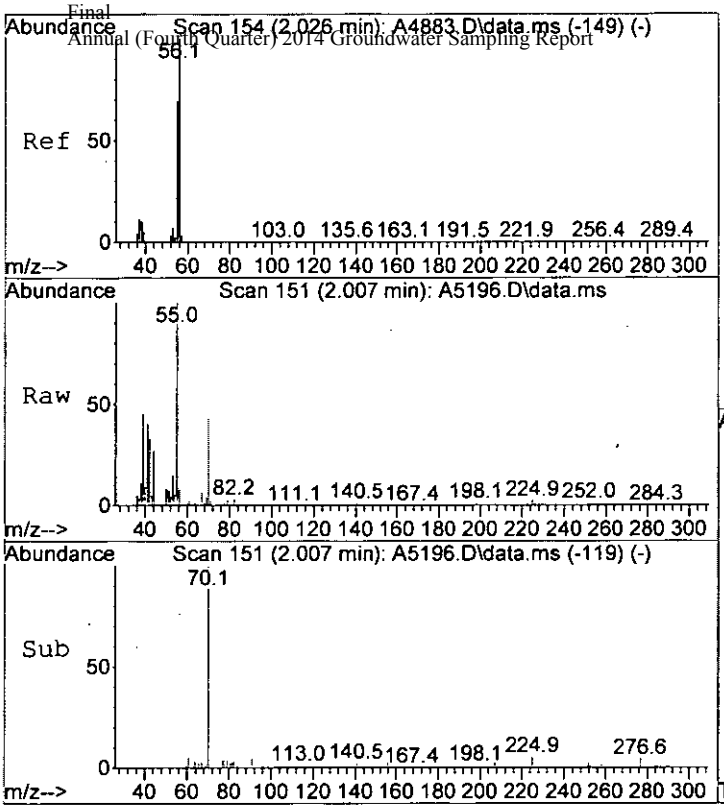
Quantitation Report (QT Reviewed)

Sample : R1410303-002|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5196.D Vial: 31
Acq On : 30 Dec 2014 3:35 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 14:36:06 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



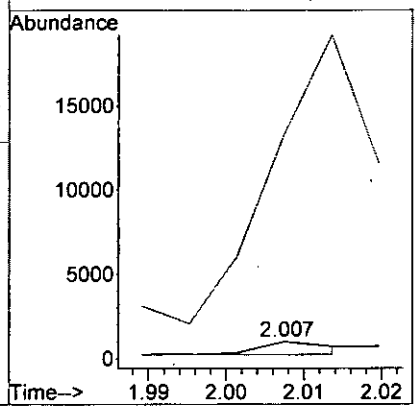
W121514.M Tue Jan 06 14:36:18 2015 MSVO10

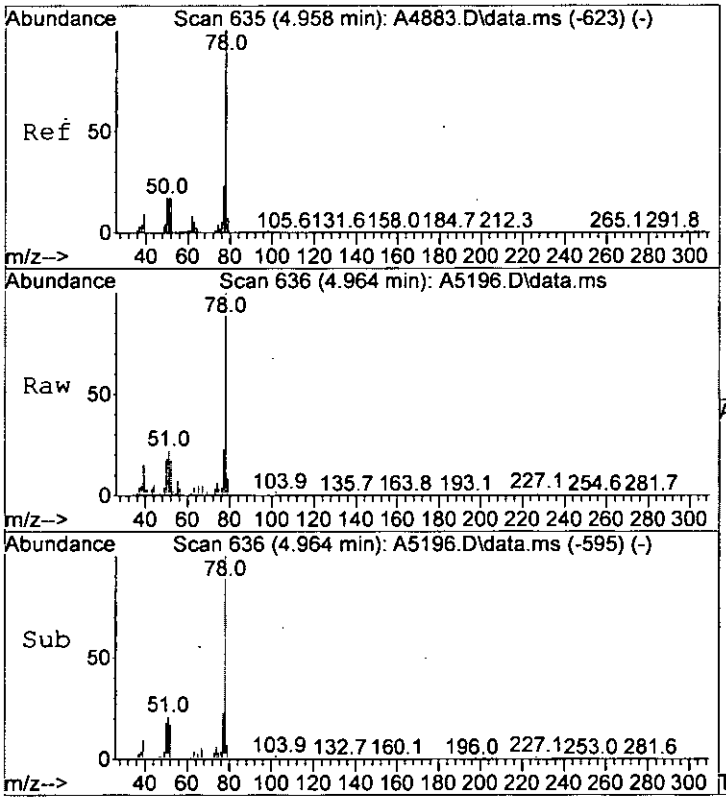


#12
Acrolein
Concen: Below Cal
RT: 2.007 min Scan# 151
Delta R.T. -0.012 min
Lab File: A5196.D
Acq: 30 Dec 2014 3:35 am

Tgt Ion: 56 Resp: 489

Ion	Ratio	Lower	Upper
56	100		
55	1325.7	49.6	89.6#

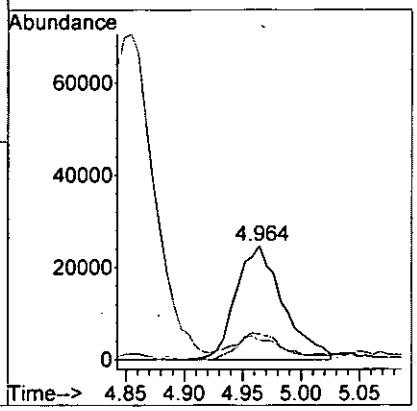


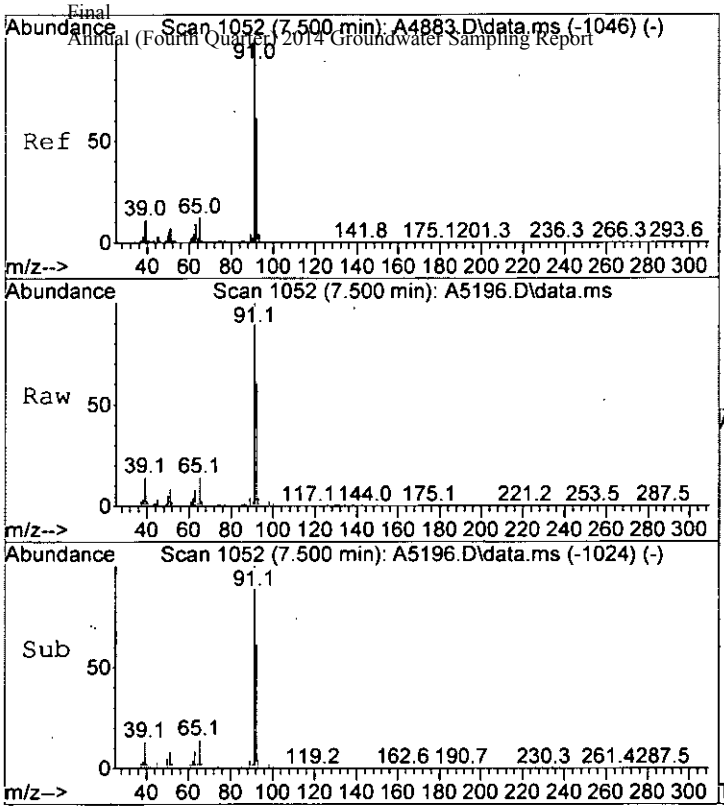


#49
Benzene
Concen: 1.93 ug/L
RT: 4.964 min Scan# 636
Delta R.T. 0.006 min
Lab File: A5196.D
Acq: 30 Dec 2014 3:35 am

Tgt Ion: 78 Resp: 68458

Ion	Ratio	Lower	Upper
78	100		
51	22.2	0.0	40.0
52	16.8	0.0	37.0

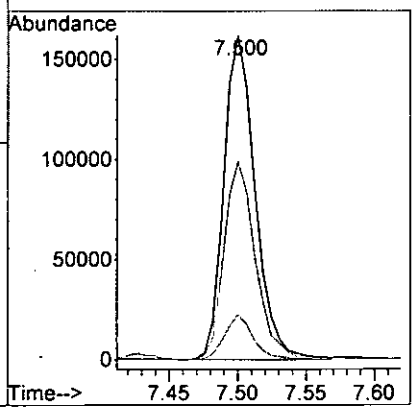


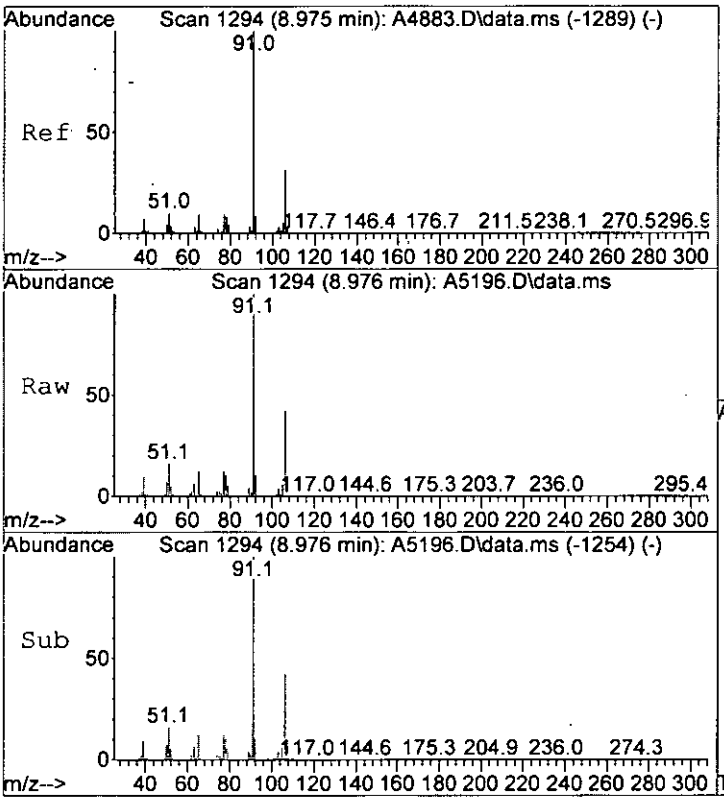


#66
Toluene
Concen: 6.78 ug/L
RT: 7.500 min Scan# 1052
Delta R.T. 0.000 min
Lab File: A5196.D
Acq: 30 Dec 2014 3:35 am

Tgt Ion: 91 Resp: 255186

Ion	Ratio	Lower	Upper
91	100		
92	61.0	40.7	80.7
65	13.8	0.0	32.3

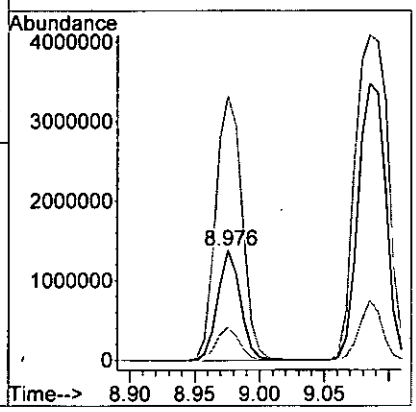




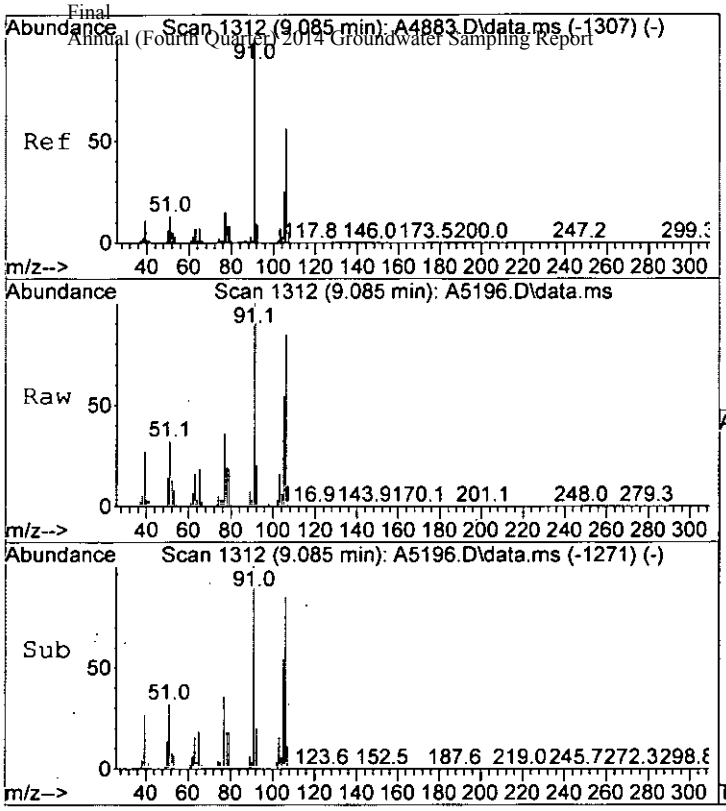
#82
Ethylbenzene
Concen: 122.83 ug/L
RT: 8.976 min Scan# 1294
Delta R.T. -0.006 min
Lab File: A5196.D
Acq: 30 Dec 2014 3:35 am

Tgt Ion:106 Resp: 1668890

Ion	Ratio	Lower	Upper
106	100		
91	240.2	302.6	342.6#
65	29.9	11.0	51.0



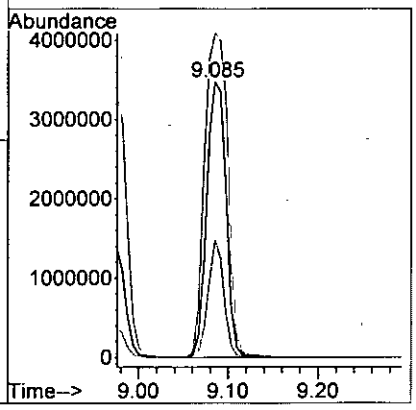
A5196.D W121514.M Tue Jan 06 14:36:21 2015 MSVO10 Page 4

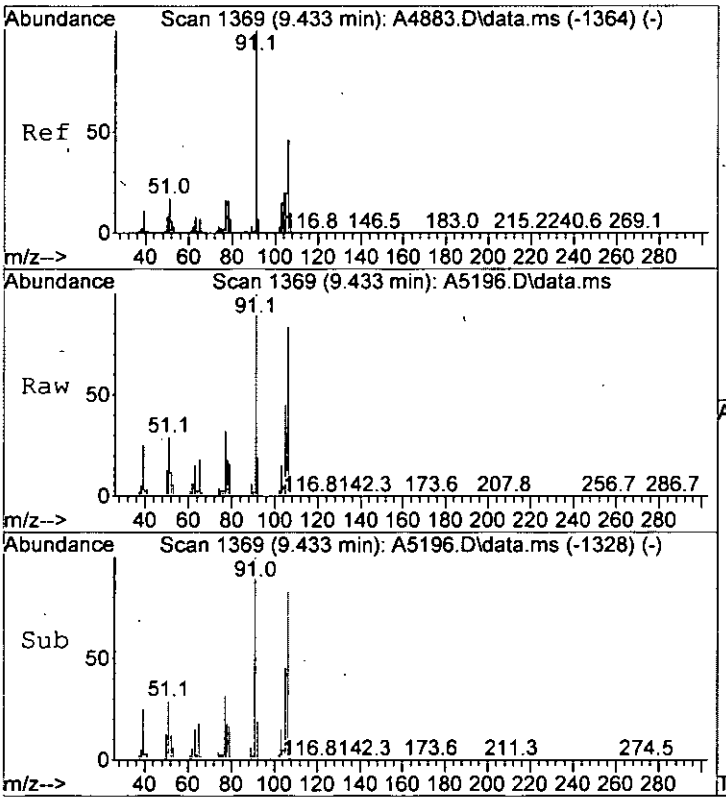


#83
(m+p)Xylene
Concen: 326.10 ug/L
RT: 9.085 min Scan# 1312
Delta R.T. 0.000 min
Lab File: A5196.D
Acq: 30 Dec 2014 3:35 am

Tgt Ion:106 Resp: 5181499

Ion	Ratio	Lower	Upper
106	100		
91	117.6	157.2	197.2#
77	42.6	7.2	47.2

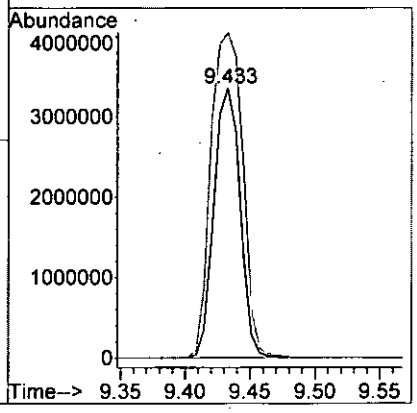




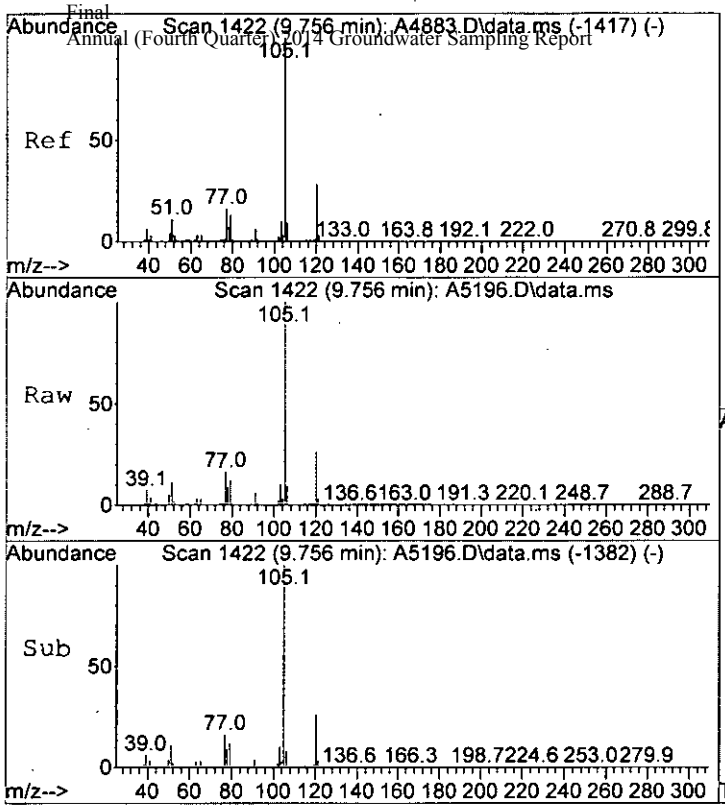
#84
o-Xylene
Concen: 281.85 ug/L
RT: 9.433 min Scan# 1369
Delta R.T. 0.000 min
Lab File: A5196.D
Acq: 30 Dec 2014 3:35 am

Tgt Ion:106 Resp: 4680287

Ion	Ratio	Lower	Upper
106	100		
91	120.7	195.3	235.3#



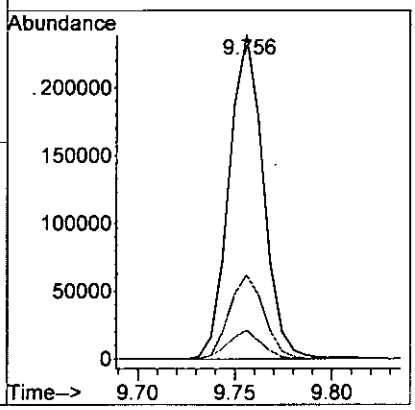
A5196.D W121514.M Tue Jan 06 14:36:22 2015 MSVO10 Page 5

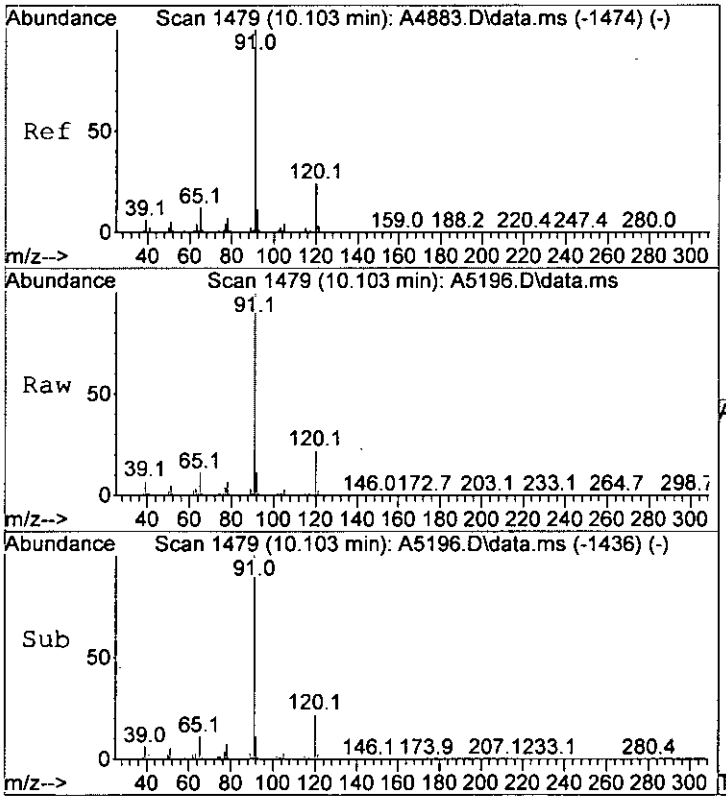


#88
Isopropylbenzene
Concen: 7.65 ug/L
RT: 9.756 min Scan# 1422
Delta R.T. 0.000 min
Lab File: A5196.D
Acq: 30 Dec 2014 3:35 am

Tgt Ion:105 Resp: 292131

Ion	Ratio	Lower	Upper
105	100		
120	26.0	7.6	47.6
106	8.9	0.0	29.1

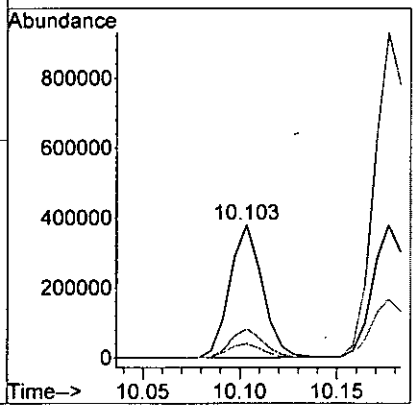


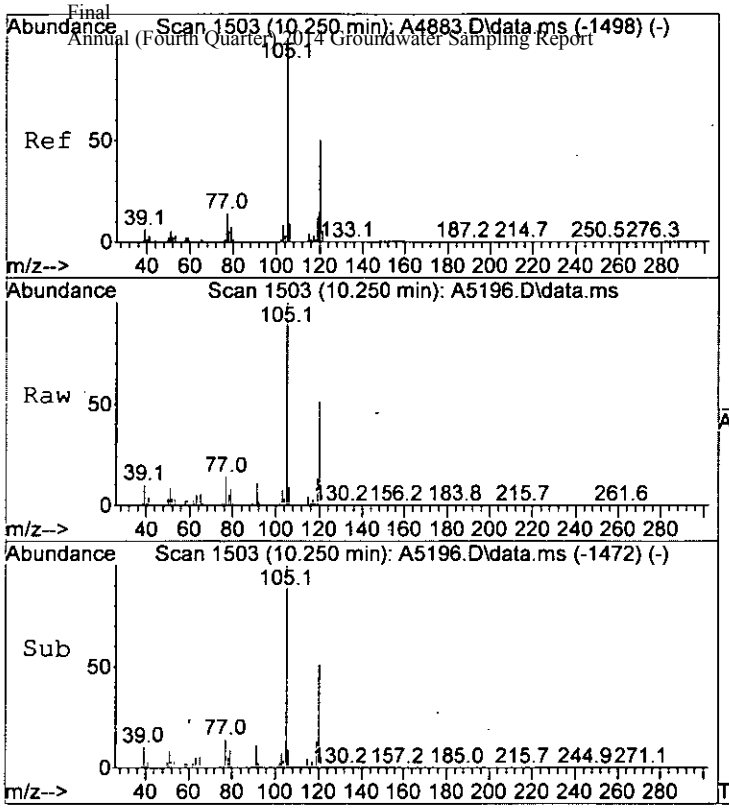


#95
n-Propylbenzene
Concen: 9.66 ug/L
RT: 10.103 min Scan# 1479
Delta R.T. 0.000 min
Lab File: A5196.D
Acq: 30 Dec 2014 3:35 am

Tgt Ion: 91 Resp: 441232

Ion	Ratio	Lower	Upper
91	100		
120	21.6	3.9	43.9
65	10.6	0.0	31.6

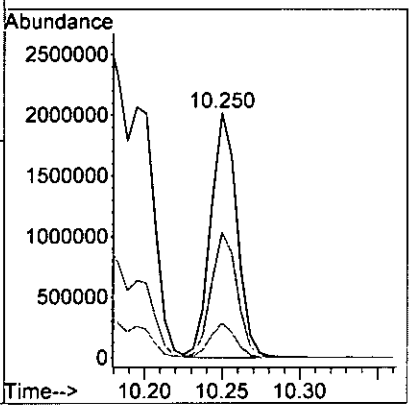


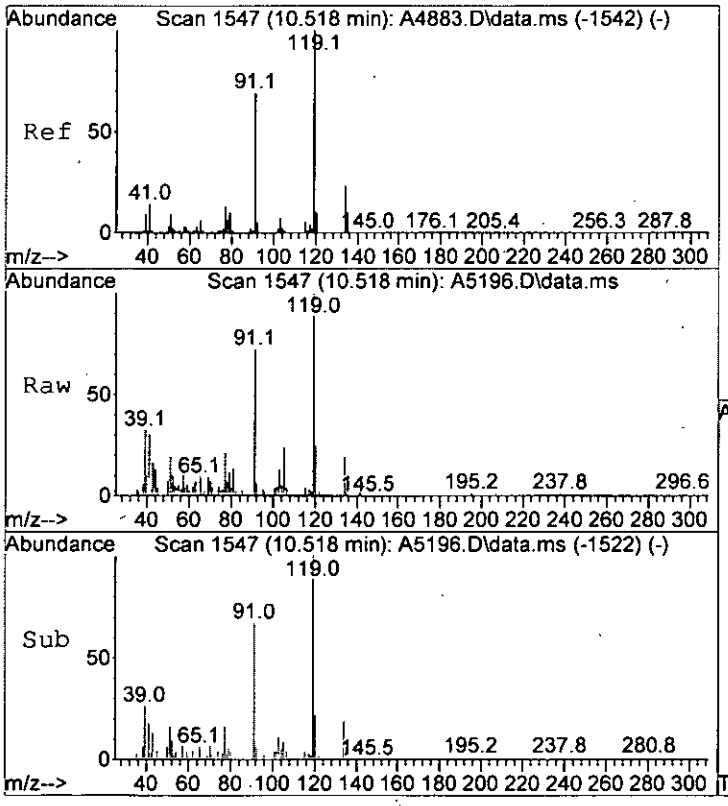


#99
1,3,5-Trimethylbenzene
Concen: 69.46 ug/L
RT: 10.250 min Scan# 1503
Delta R.T. -0.006 min
Lab File: A5196.D
Acq: 30 Dec 2014 3:35 am

Tgt Ion:105 Resp: 2343202

Ion	Ratio	Lower	Upper
105	100		
120	51.0	29.9	69.9
77	13.9	0.0	34.1

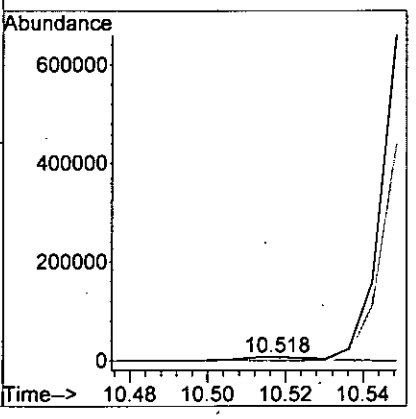


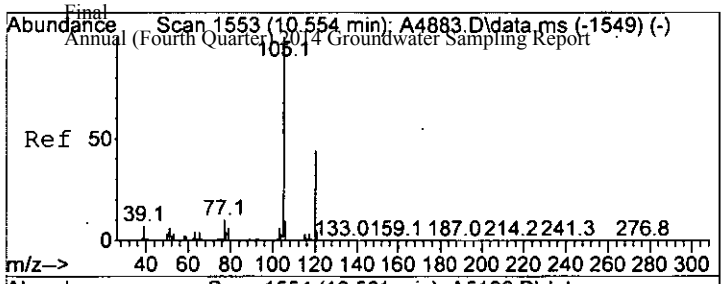


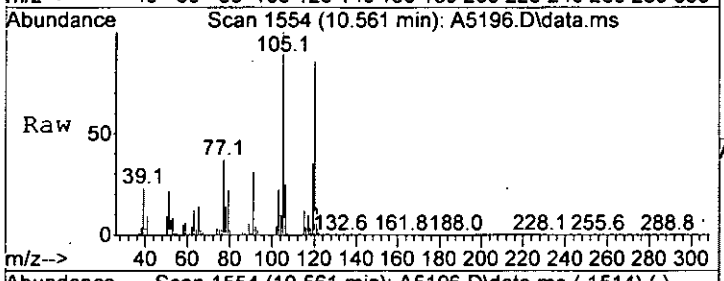
#100
tert-Butylbenzene
Concen: 0.28 ug/L
RT: 10.518 min Scan# 1547
Delta R.T. 0.000 min
Lab File: A5196.D
Acq: 30 Dec 2014 3:35 am

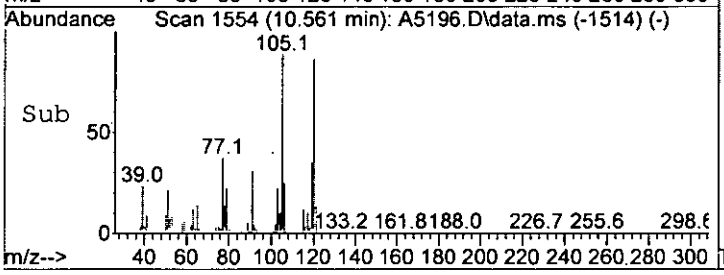
Tgt Ion:119 Resp: 8071

Ion	Ratio	Lower	Upper
119	100		
134	19.0	3.4	43.4
103	13.2	0.0	26.7





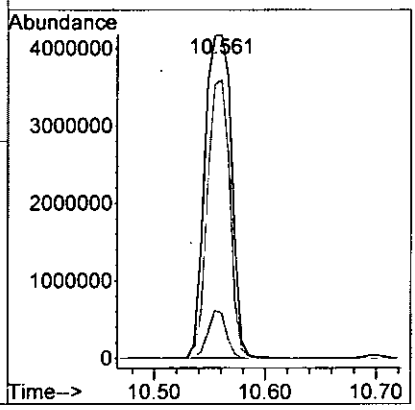


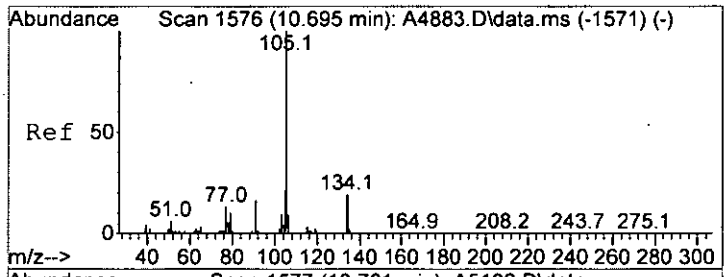


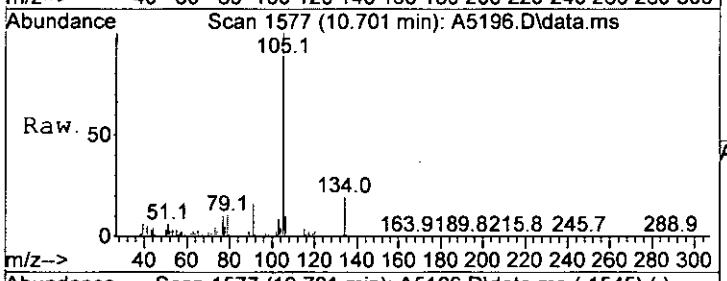
#101
1,2,4-Trimethylbenzene
Concen: 199.23 ug/L
RT: 10.561 min Scan# 1554
Delta R.T. 0.000 min
Lab File: A5196.D
Acq: 30 Dec 2014 3:35 am

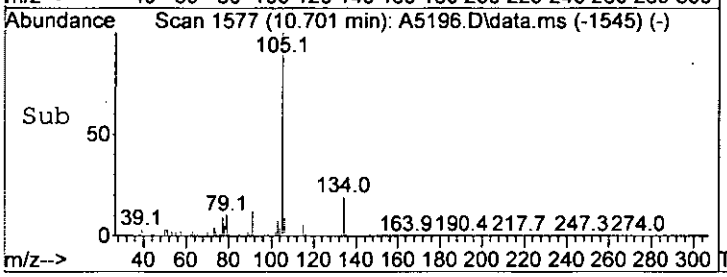
Tgt Ion:105 Resp: 6933926

Ion	Ratio	Lower	Upper
105	100		
120	86.0	26.3	66.3#
65	14.0	0.0	24.8





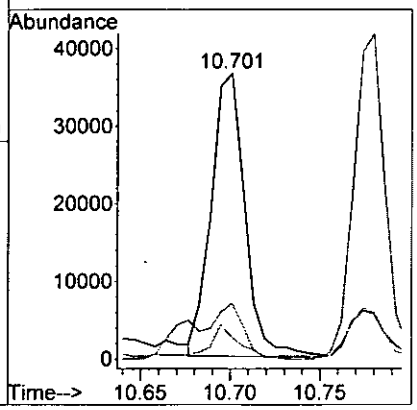


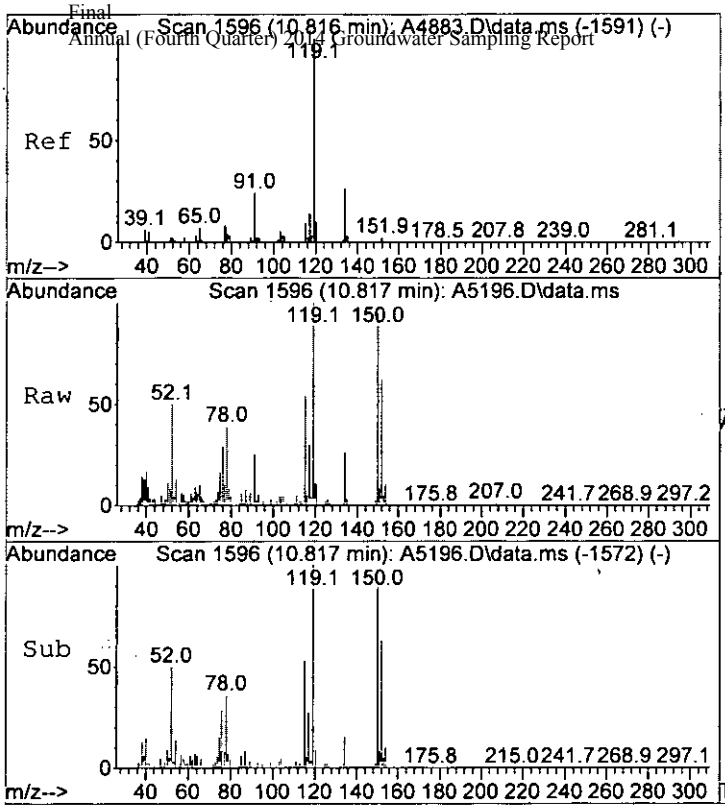


#103
sec-Butylbenzene
Concen: 1.22 ug/L
RT: 10.701 min Scan# 1577
Delta R.T. 0.000 min
Lab File: A5196.D
Acq: 30 Dec 2014 3:35 am

Tgt Ion:105 Resp: 47319

Ion	Ratio	Lower	Upper
105	100		
134	19.4	0.0	39.1
103	7.5	0.0	28.6

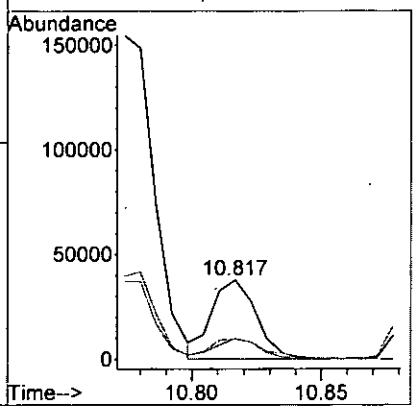


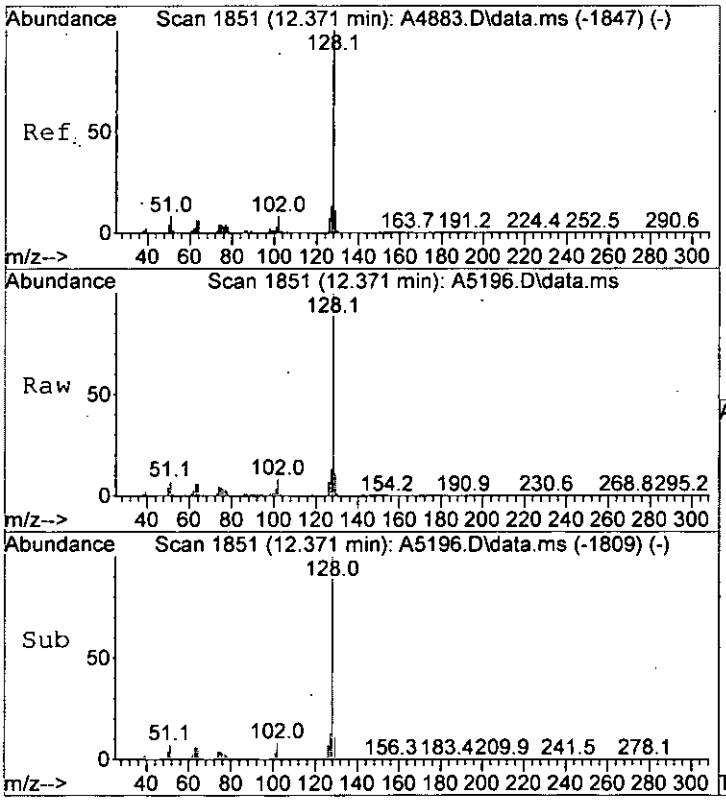


#104
p-Isopropyltoluene
Concen: 1.34 ug/L
RT: 10.817 min Scan# 1596
Delta R.T. 0.000 min
Lab File: A5196.D
Acq: 30 Dec 2014 3:35 am

Tgt Ion:119 Resp: 45019

Ion	Ratio	Lower	Upper
119	100		
134	26.0	5.9	45.9
91	25.4	4.2	44.2

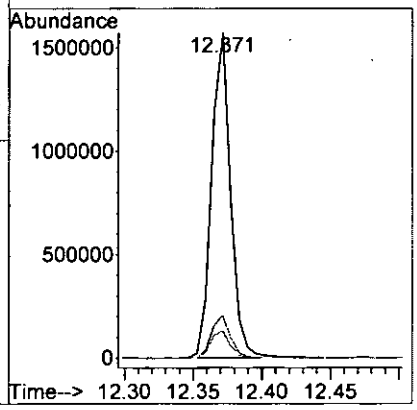




#117
Naphthalen
Concen: 71.00 ug/L
RT: 12.371 min Scan# 1851
Delta R.T. 0.000 min
Lab File: A5196.D
Acq: 30 Dec 2014 3:35 am

Tgt Ion:128 Resp: 1502006

Ion	Ratio	Lower	Upper
128	100		
127	13.0	0.0	33.2
102	8.4	0.0	28.4



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5196.D
Acq On : 30 Dec 2014 3:35 am
Operator : F.Naegler
Sample : R1410303-002|1.0
Misc : PARSONS 11603 T4
ALS Vial : 31 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5196.D\data.ms

FJ 1/6/15

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.660	90	94	99	rBV	3732738	3721684	11.58%	1.501%
2	1.812	116	119	124	rVB	1216780	1334461	4.15%	0.538%
3	2.111	161	168	178	rVB	234473	378246	1.18%	0.153%
4	2.465	216	226	230	rBV	1523675	3411476	10.61%	1.376%
5	2.513	230	234	243	rVB	829168	1301495	4.05%	0.525%
6	2.666	252	259	270	rBV	1205779	2153642	6.70%	0.868%
7	2.910	293	299	309	rBV	192015	343030	1.07%	0.138%
8	3.269	352	358	364	rBV2	173696	349753	1.09%	0.141%
9	3.562	396	406	433	rVB	2913953	6508003	20.25%	2.624%
10	4.318	517	530	537	rBV2	609760	1518044	4.72%	0.612%
11	4.409	537	545	559	rVV2	1193225	4143161	12.89%	1.671%
12	4.525	559	564	579	rVB5	142525	479313	1.49%	0.193%
13	4.854	610	618	629	rBV	491046	1277251	3.97%	0.515%
14	5.062	643	652	657	rBV3	113297	322817	1.00%	0.130%
15	5.251	676	683	696	rVB4	106215	323351	1.01%	0.130%
16	5.610	734	742	767	rBV	1526511	3553287	11.05%	1.433%
17	6.208	827	840	857	rBV3	406074	1194193	3.72%	0.482%
18	6.921	945	957	964	rBV2	210233	402450	1.25%	0.162%
19	7.427	1035	1040	1048	rBV	3099428	4631097	14.41%	1.868%
20	7.500	1048	1052	1065	rVB	405852	644154	2.00%	0.260%
21	8.841	1267	1272	1281	rBV	3287558	4255690	13.24%	1.716%
22	8.976	1289	1294	1306	rBV	9194710	11757717	36.58%	4.741%
23	9.085	1306	1312	1327	rVB	22630402	31181488	97.01%	12.574%
24	9.433	1364	1369	1386	rVB	20937820	28002762	87.12%	11.292%
25	9.756	1417	1422	1429	rVB	591526	725506	2.26%	0.293%
26	9.878	1438	1442	1452	rBV	2852528	3482079	10.83%	1.404%
27	10.103	1475	1479	1486	rVB	765225	889037	2.77%	0.359%
28	10.177	1486	1491	1493	rVV	7359989	9396193	29.23%	3.789%
29	10.195	1493	1494	1499	rVV	5282311	5106269	15.89%	2.059%
30	10.250	1499	1503	1517	rVB	6047080	6979180	21.71%	2.814%
31	10.414	1525	1530	1541	rBV	10469079	12361330	38.46%	4.985%
32	10.555	1549	1553	1561	rVB	25010478	32143157	100.00%	12.962%
33	10.774	1584	1589	1593	rBV	433488	546958	1.70%	0.221%
34	10.835	1593	1599	1604	rVV	4218451	4859165	15.12%	1.960%
35	10.896	1604	1609	1615	rVV	12769667	15194998	47.27%	6.128%

W121514.M Tue Jan 06 14:36:46 2015 MSVO10 Page: 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5196.D
Acq On : 30 Dec 2014 3:35 am
Operator : F.Naegler
Sample : R1410303-002|1.0
Misc : PARSONS 11603 T4
ALS Vial : 31 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

36	11.054	1630	1635	1642	rBV	10986778	13408627	41.72%	5.407%
37	11.128	1642	1647	1653	rVB2	1496024	1930506	6.01%	0.778%
38	11.225	1656	1663	1666	rBV3	423528	667324	2.08%	0.269%
39	11.268	1666	1670	1676	rVB	695230	749510	2.33%	0.302%
40	11.329	1676	1680	1682	rBV	1560873	1694422	5.27%	0.683%
41	11.353	1682	1684	1689	rVV	1222061	1190849	3.70%	0.480%
42	11.408	1689	1693	1696	rVV	2901584	3177693	9.89%	1.281%
43	11.439	1696	1698	1702	rVV	528422	497275	1.55%	0.201%
44	11.487	1702	1706	1713	rVB2	2017544	2415990	7.52%	0.974%
45	11.615	1723	1727	1731	rBV	829744	885415	2.75%	0.357%
46	11.682	1731	1738	1740	rVV	1994790	2100827	6.54%	0.847%
47	11.713	1740	1743	1749	rVB	3082267	2985567	9.29%	1.204%
48	11.890	1768	1772	1776	rBV	2074280	1876870	5.84%	0.757%
49	11.987	1784	1788	1793	rVB2	4973686	5448826	16.95%	2.197%
50	12.097	1802	1806	1811	rVB2	485872	536603	1.67%	0.216%
51	12.280	1830	1836	1840	rVB2	254311	439396	1.37%	0.177%
52	12.371	1847	1851	1858	rVB	3189445	3100879	9.65%	1.250%

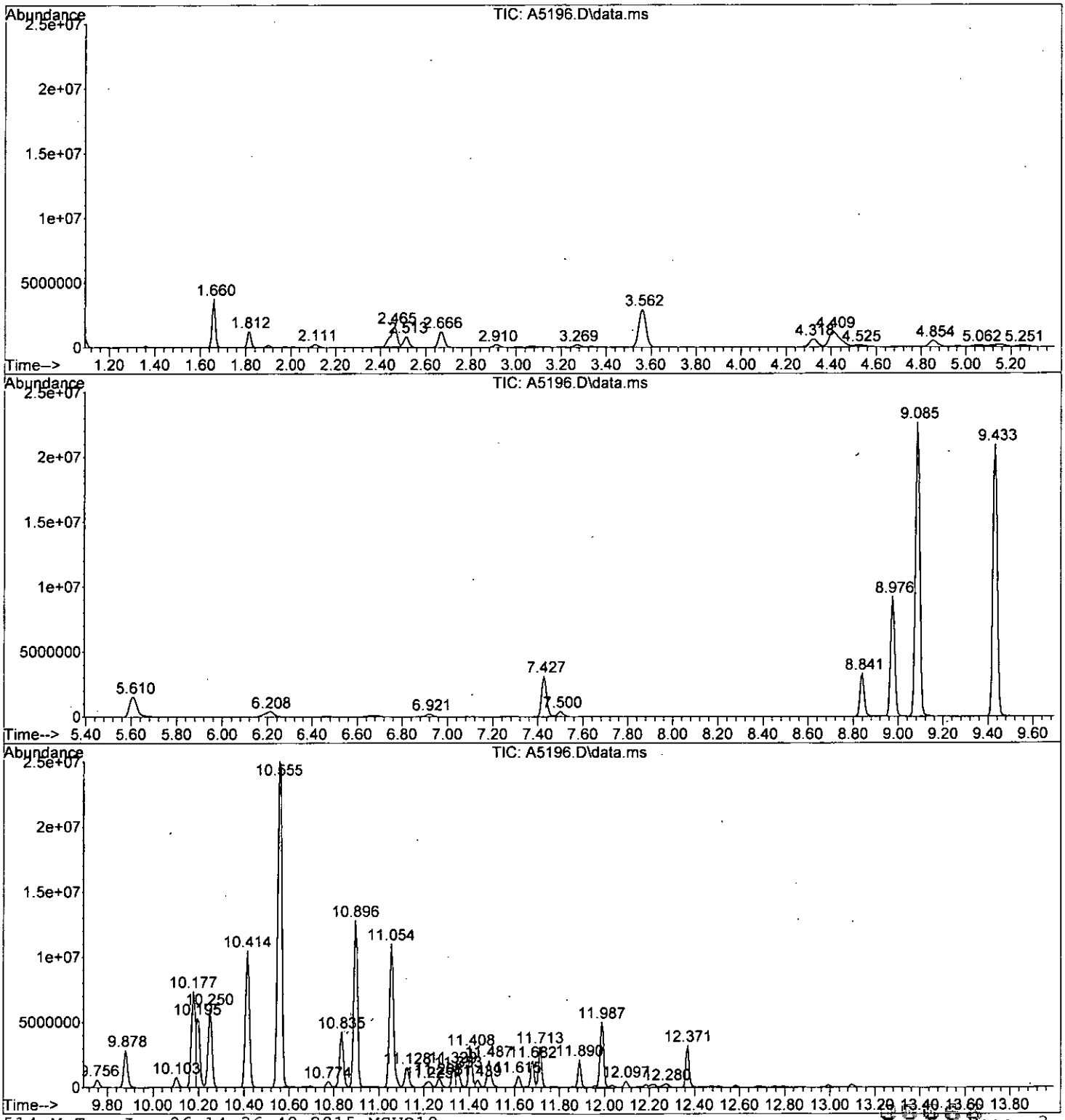
Sum of corrected areas: 247979016

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5196.D
Acq On : 30 Dec 2014 3:35 am
Operator : F.Naegler
Sample : R1410303-002|1.0
Misc : PARSONS 11603 T4
ALS Vial : 31 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W121514.M Tue Jan 06 14:36:48 2015 MSVO10 Page: 3

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5196.D
Acq On : 30 Dec 2014 3:35 am
Operator : F.Naegler
Sample : R1410303-002|1.0
Misc : PARSONS 11603 T4
ALS Vial : 31 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

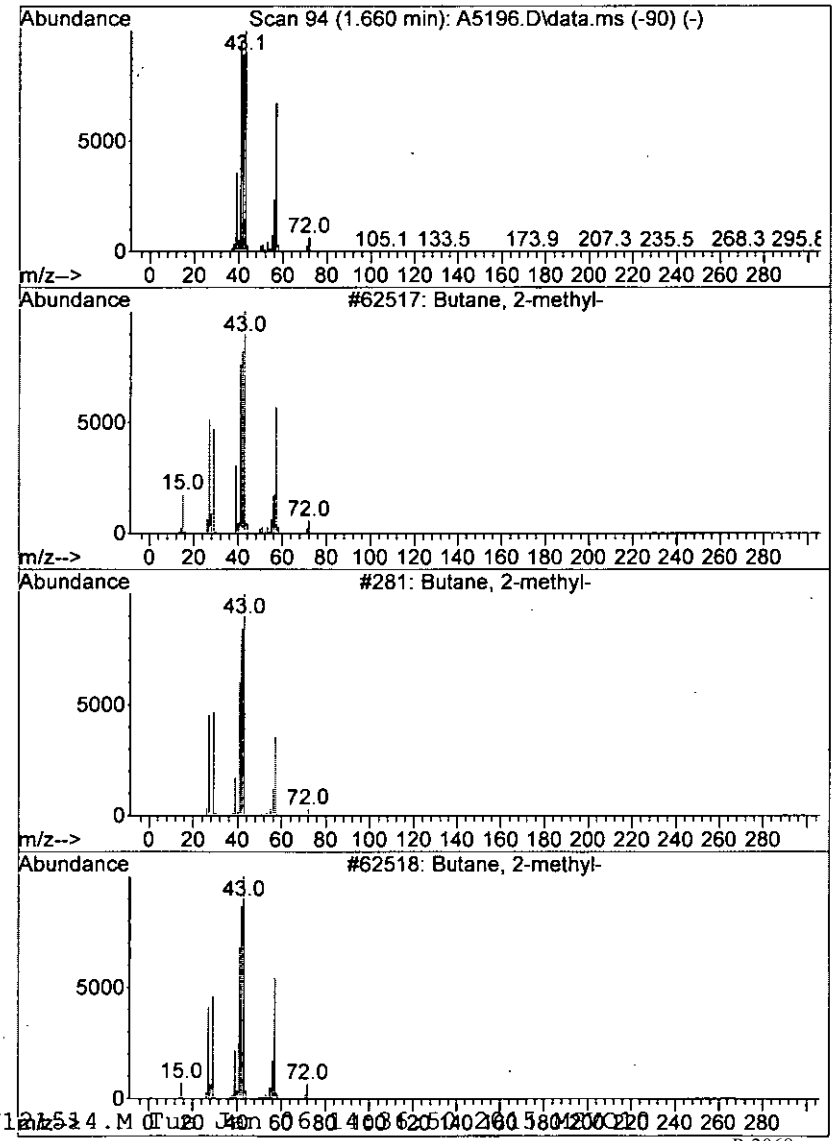
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

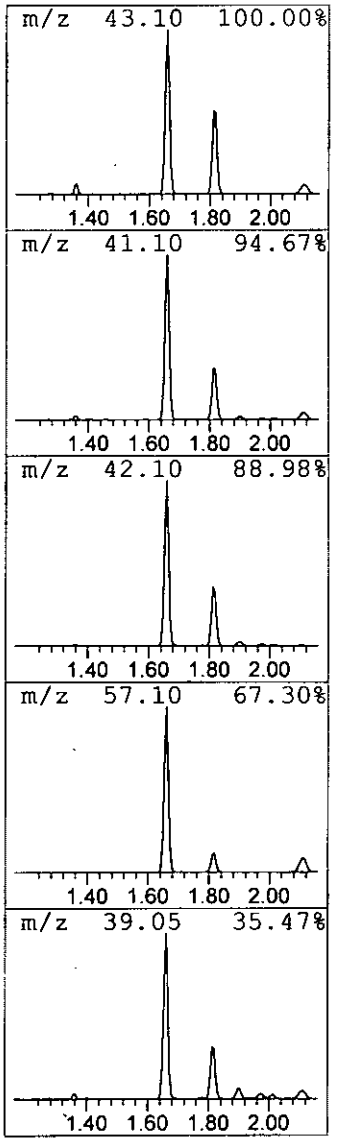
****

Peak Number 1 Butane, 2-methyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.660	44.91 ug/L	3721680	Pentafluorobenzene	4.409

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2-methyl-	72	C5H12	000078-78-4	86
2	Butane, 2-methyl-	72	C5H12	000078-78-4	80
3	Butane, 2-methyl-	72	C5H12	000078-78-4	72
4	3-Buten-1-ol	72	C4H8O	000627-27-0	47
5	3-Buten-1-ol	72	C4H8O	000627-27-0	9





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5196.D
Acq On : 30 Dec 2014 3:35 am
Operator : F.Naegler
Sample : R1410303-002|1.0
Misc : PARSONS 11603 T4
ALS Vial : 31 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

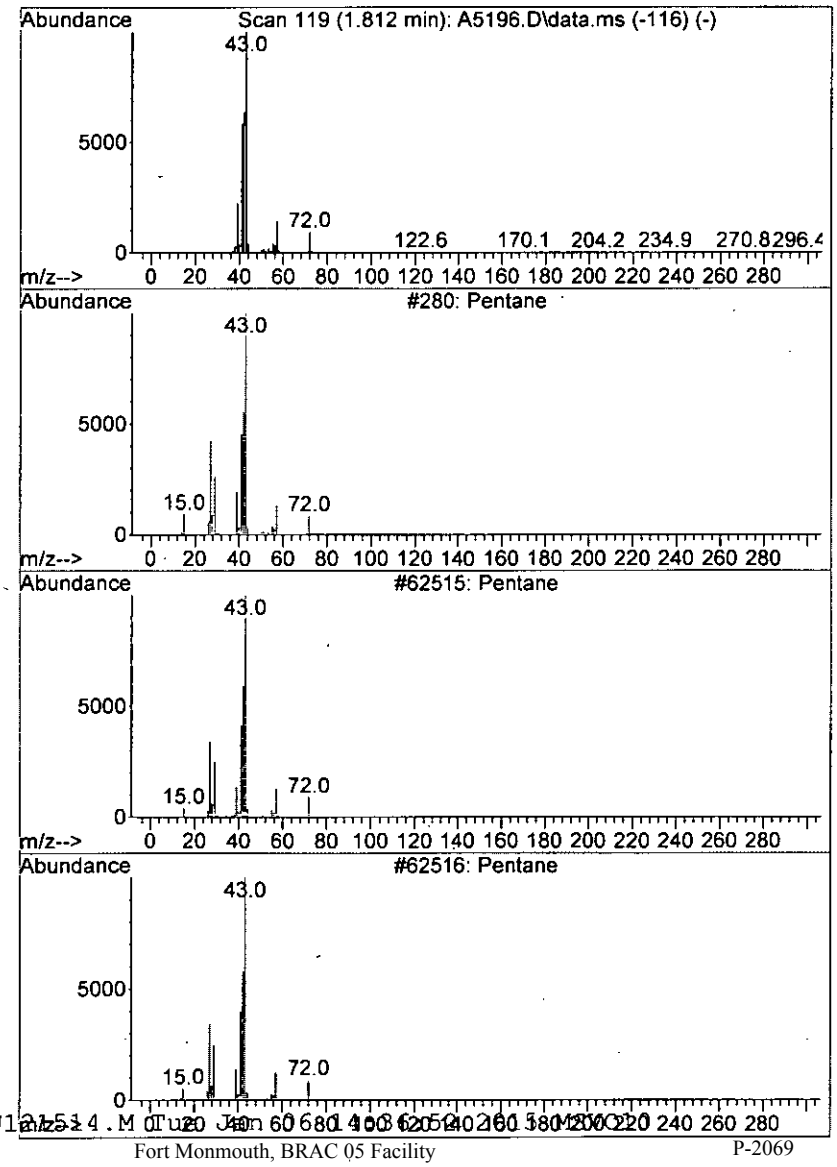
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

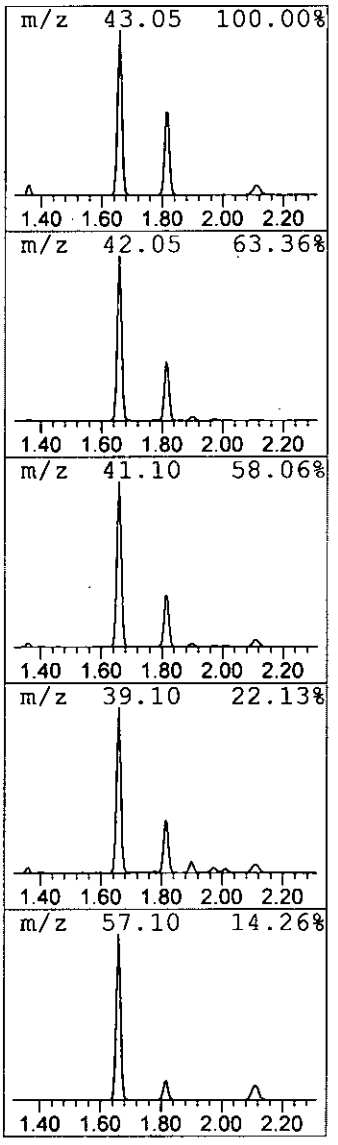
****

Peak Number 2 Pentane Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.812	16.10 ug/L	1334460	Pentafluorobenzene	4.409

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	90
2	Pentane	72	C5H12	000109-66-0	86
3	Pentane	72	C5H12	000109-66-0	86
4	Butane, 2-methyl-	72	C5H12	000078-78-4	80
5	Oxirane, ethyl-	72	C4H8O	000106-88-7	47





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5196.D
Acq On : 30 Dec 2014 3:35 am
Operator : F.Naegler
Sample : R1410303-002|1.0
Misc : PARSONS 11603 T4
ALS Vial : 31 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

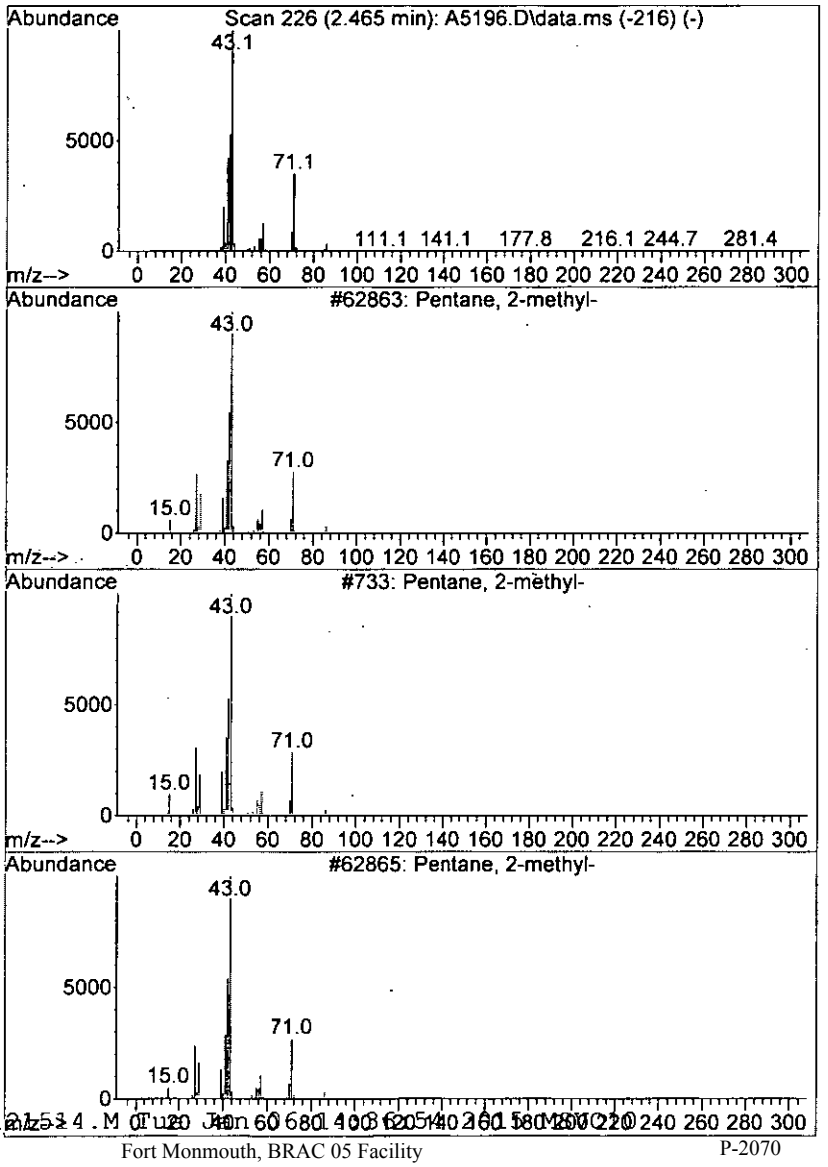
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

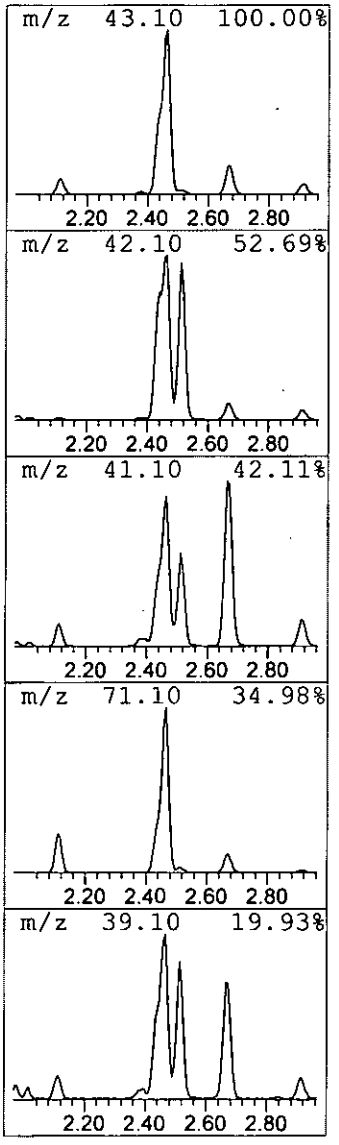
****

Peak Number 3 Pentane, 2-methyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.465	41.17 ug/L	3411480	Pentafluorobenzene	4.409

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
3	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
4	Pentane, 2-methyl-	86	C6H14	000107-83-5	86
5	Pentane, 2-methyl-	86	C6H14	000107-83-5	50





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5196.D
Acq On : 30 Dec 2014 3:35 am
Operator : F.Naegler
Sample : R1410303-002|1.0
Misc : PARSONS 11603 T4
ALS Vial : 31 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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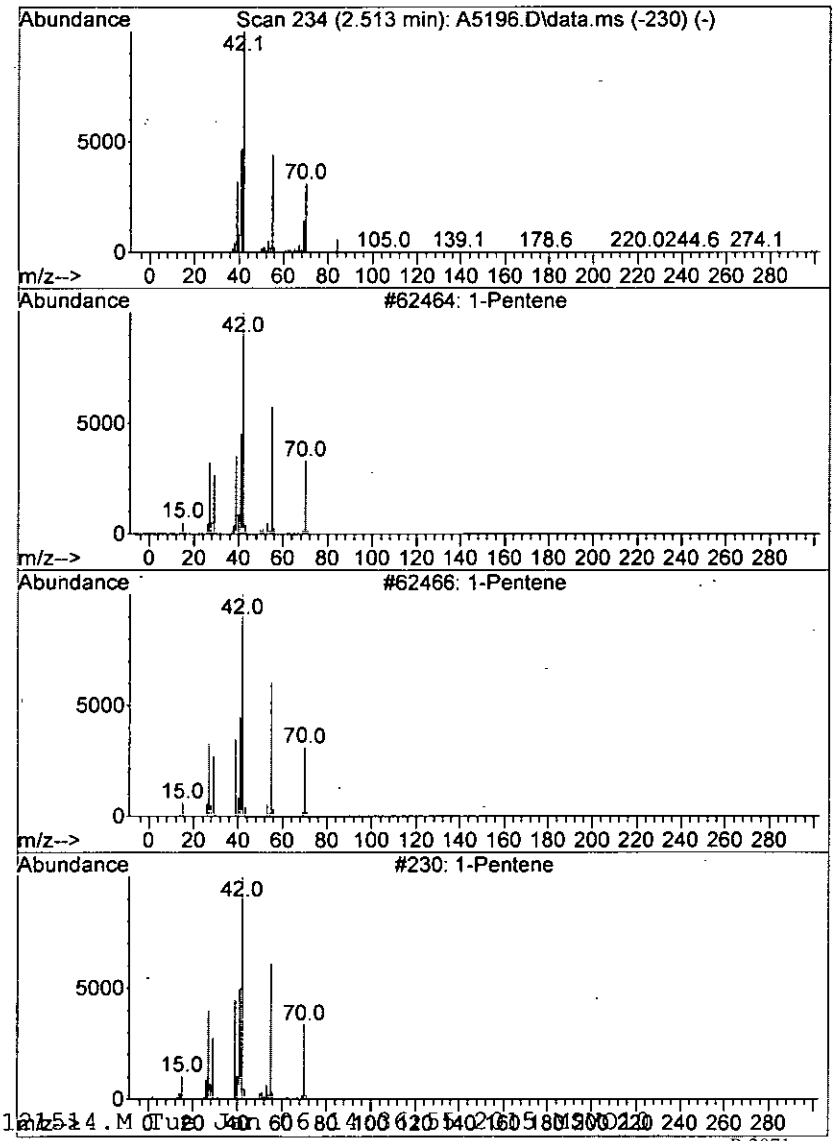
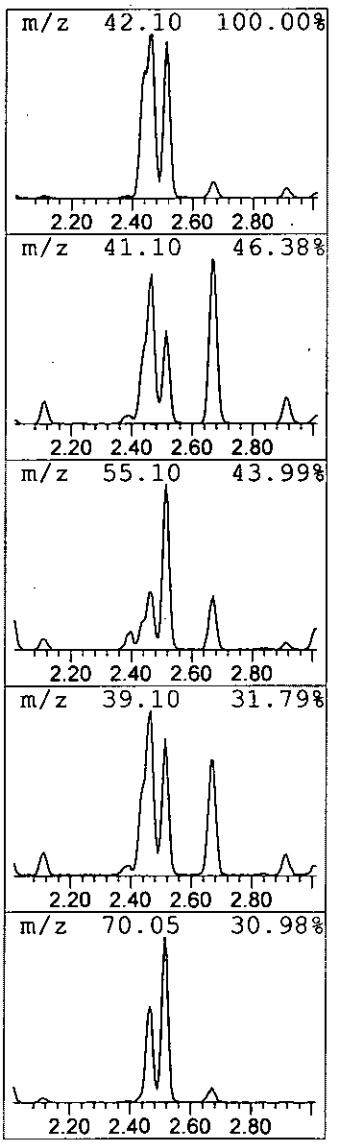
Peak Number 4 1-Pentene Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.513	15.71 ug/L	1301500	Pentafluorobenzene	4.409

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Pentene	70	C5H10	000109-67-1	86
2	1-Pentene	70	C5H10	000109-67-1	80
3	1-Pentene	70	C5H10	000109-67-1	80
4	Cyclopentane	70	C5H10	000287-92-3	72
5	1-Pentene	70	C5H10	000109-67-1	47





Library Search Compound Report

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Acq On : 30 Dec 2014 3:35 am
Operator : F.Naegler
Sample : R1410303-002|1.0
Misc : PARSONS 11603 T4
ALS Vial : 31 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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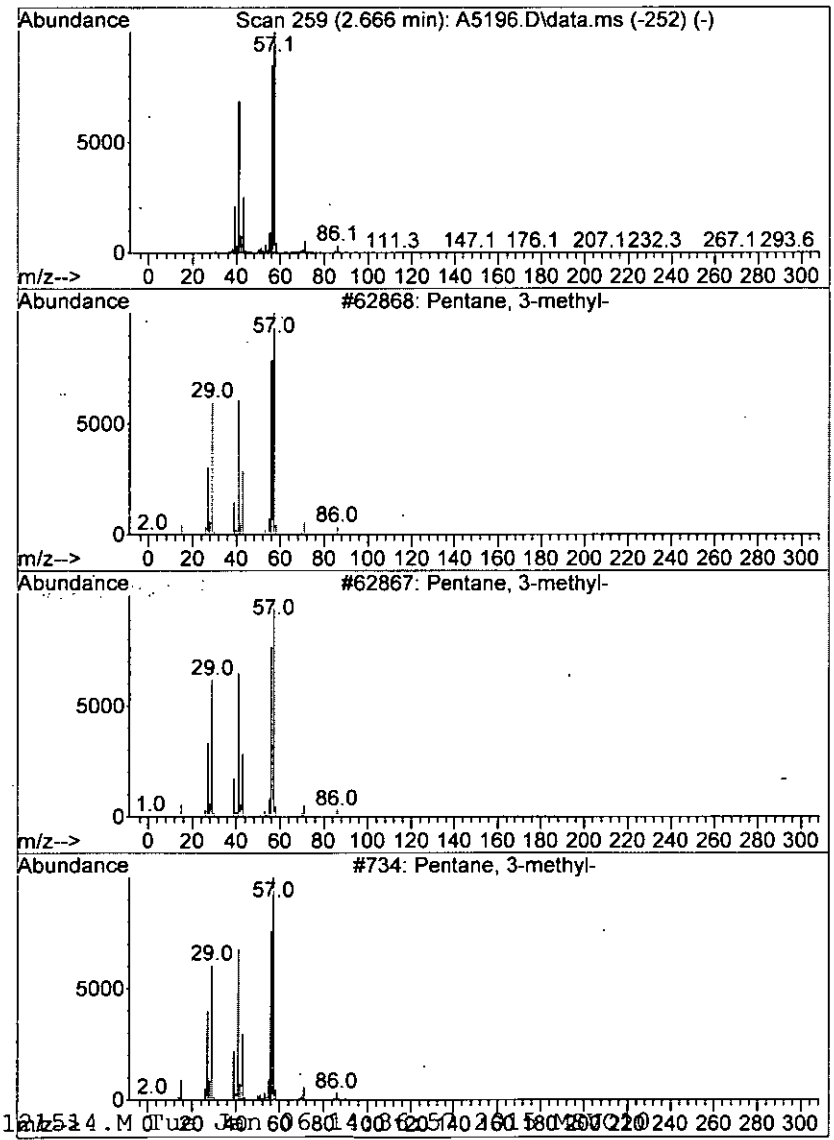
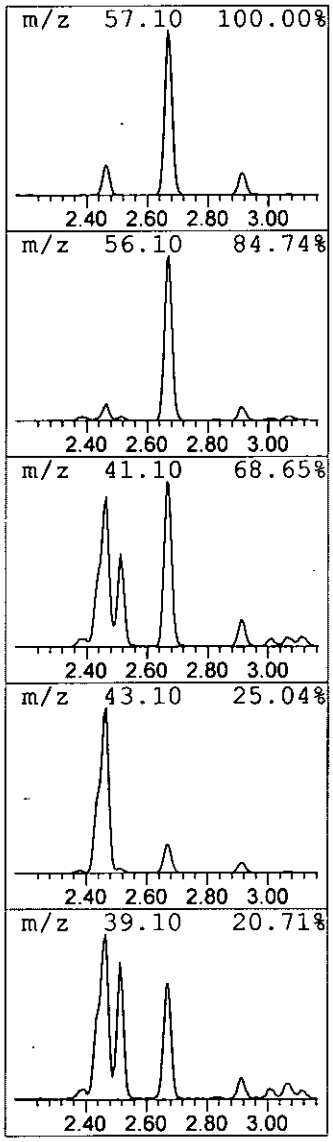
Peak Number 5 Pentane, 3-methyl- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.666	25.99 ug/L	2153640	Pentafluorobenzene	4.409

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	91
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	91
3	Pentane, 3-methyl-	86	C6H14	000096-14-0	90
4	Hexane, 2,2,3-trimethyl-	128	C9H20	016747-25-4	43
5	Hexane, 3,4-dimethyl-	114	C8H18	000583-48-2	43





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Misc : PARSONS 11603 T4
ALS Vial : 31 Sample Multiplier: 1

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Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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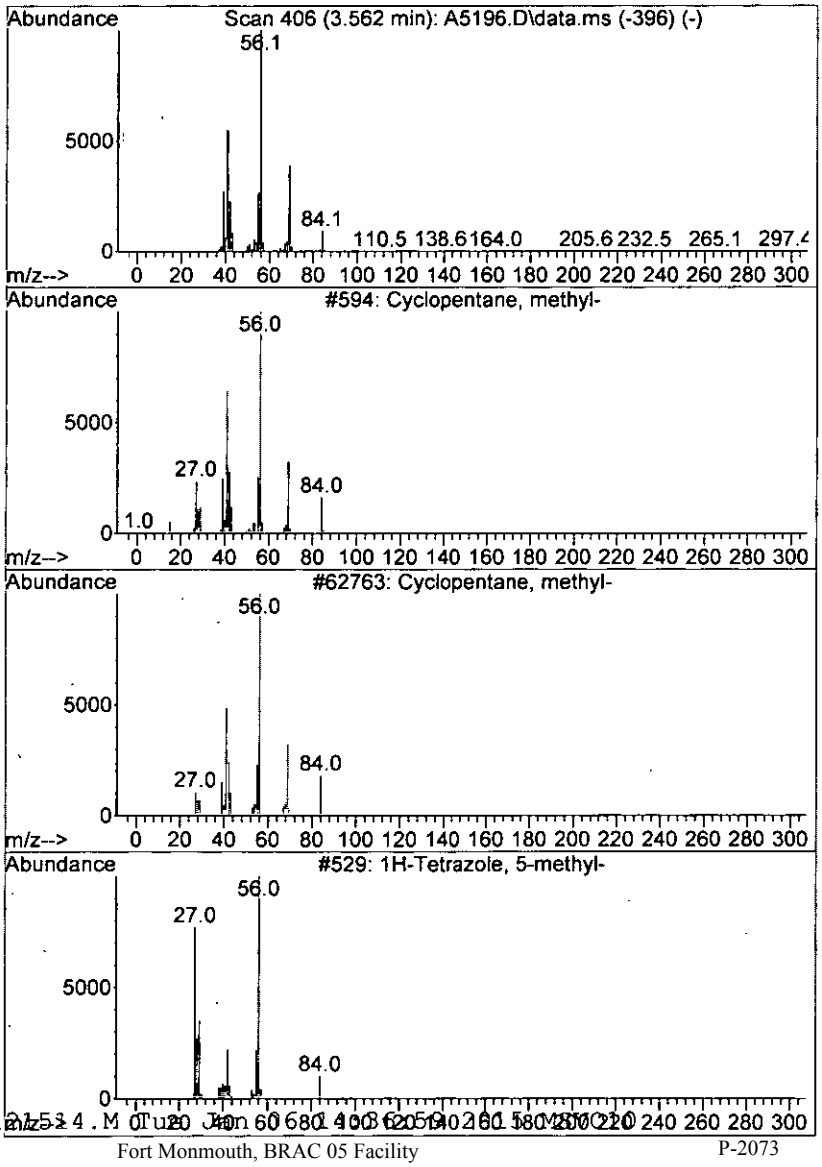
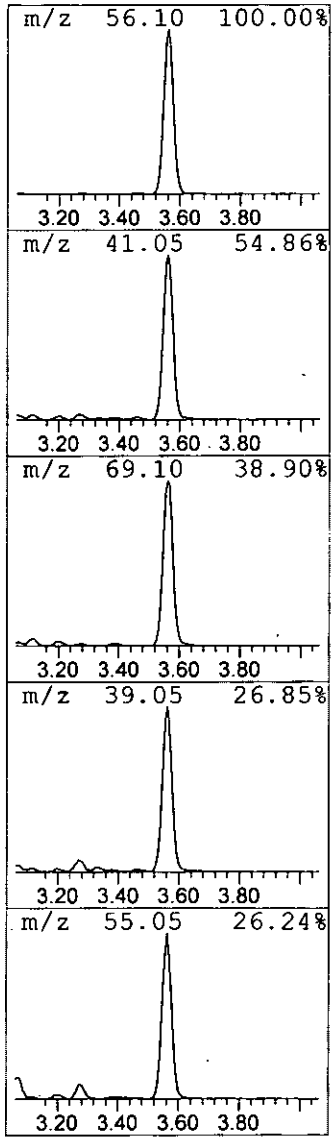
Peak Number 6 Cyclopentane, methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.562	78.54 ug/L	6508000	Pentafluorobenzene	4.409

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, methyl-	84	C6H12	000096-37-7	91
2	Cyclopentane, methyl-	84	C6H12	000096-37-7	78
3	1H-Tetrazole, 5-methyl-	84	C2H4N4	004076-36-2	72
4	Cyclobutane, ethyl-	84	C6H12	004806-61-5	64
5	1-Pentene, 2-methyl-	84	C6H12	000763-29-1	56





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ALS Vial : 31 Sample Multiplier: 1

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Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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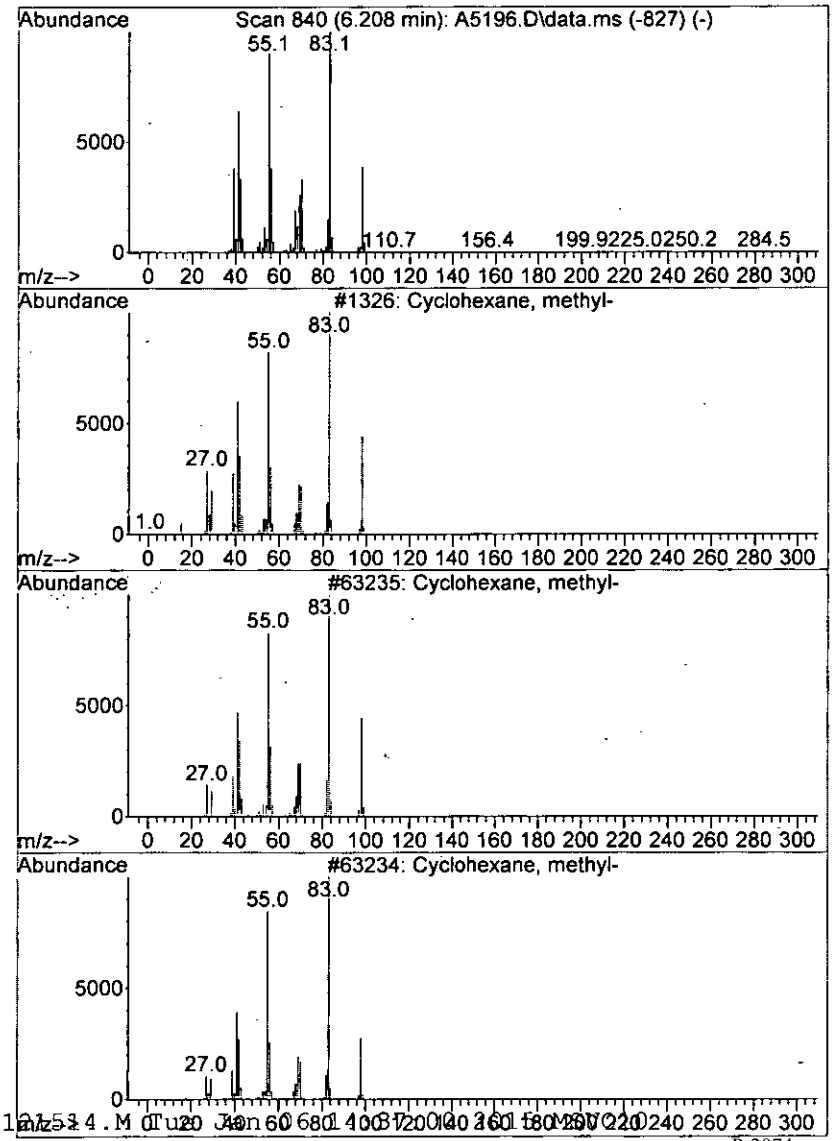
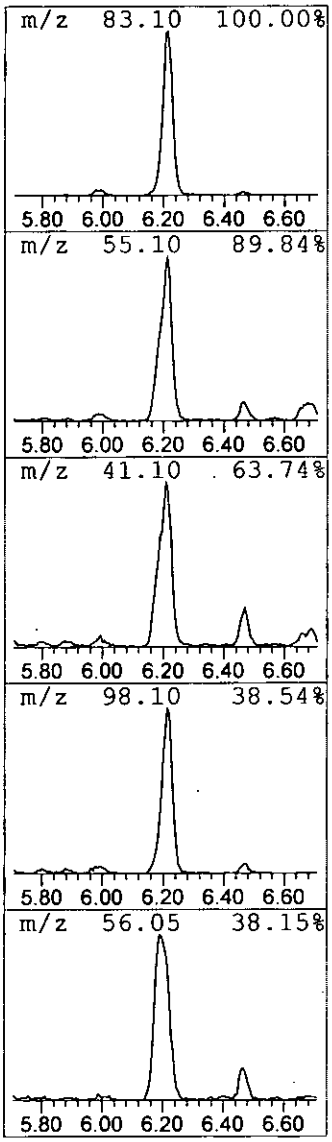
Peak Number 7 Cyclohexane, methyl- Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.208	16.80 ug/L	1194190	1,4-Difluorobenzene	5.610

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, methyl-	98	C7H14	000108-87-2	94
2	Cyclohexane, methyl-	98	C7H14	000108-87-2	94
3	Cyclohexane, methyl-	98	C7H14	000108-87-2	91
4	Cyclohexane, methyl-	98	C7H14	000108-87-2	87
5	Cycloheptane	98	C7H14	000291-64-5	58





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ALS Vial : 31 Sample Multiplier: 1

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Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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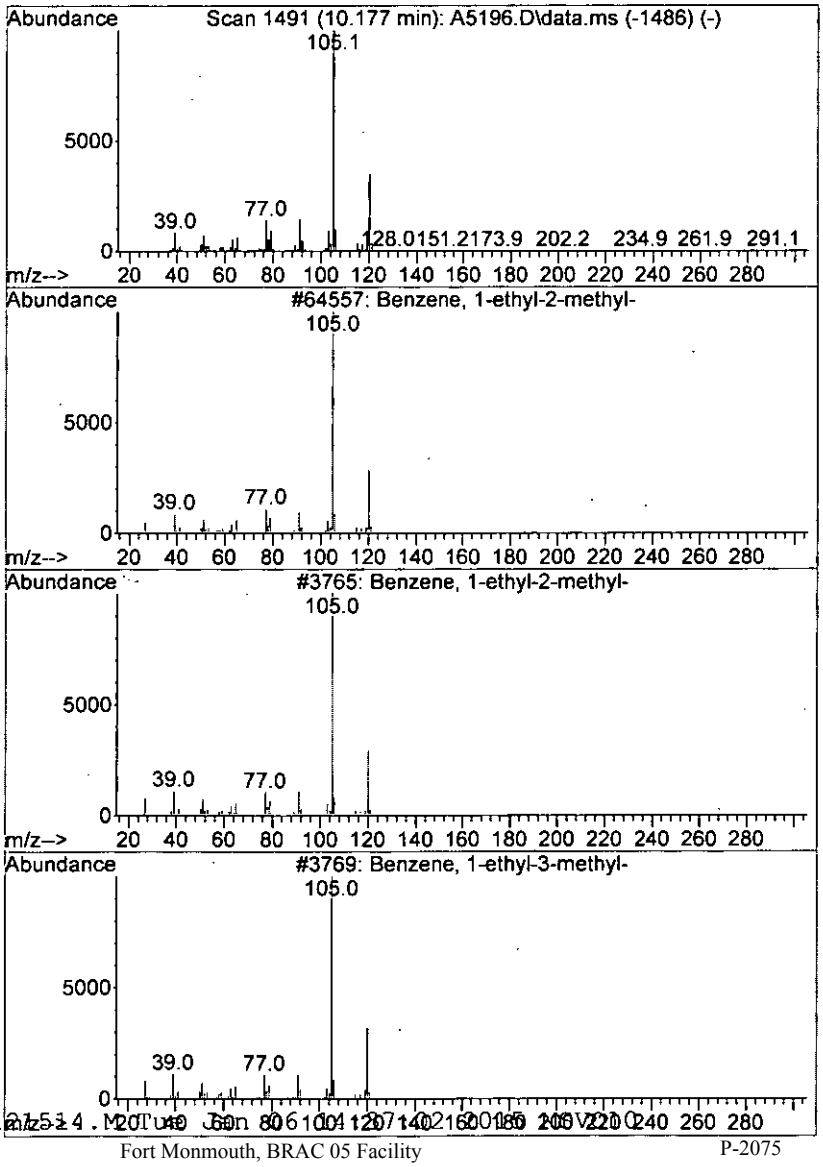
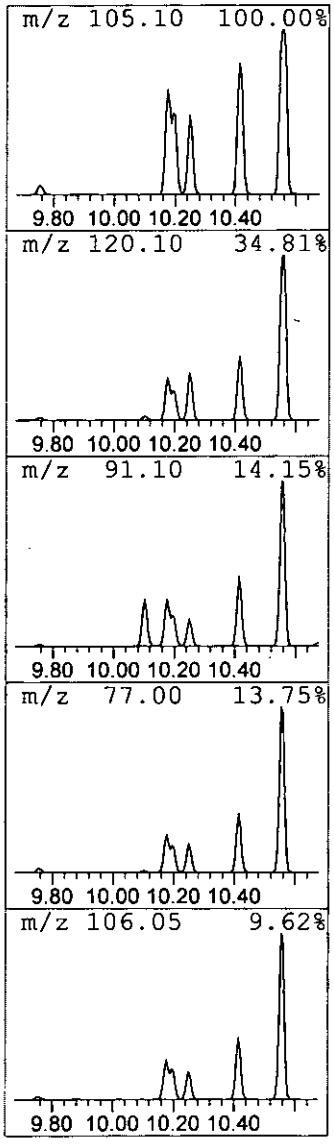
Peak Number 8 Benzene, 1-ethyl-2-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.177	96.69 ug/L	9396190	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
3	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	94
4	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	94
5	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94





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ALS Vial : 31 Sample Multiplier: 1

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Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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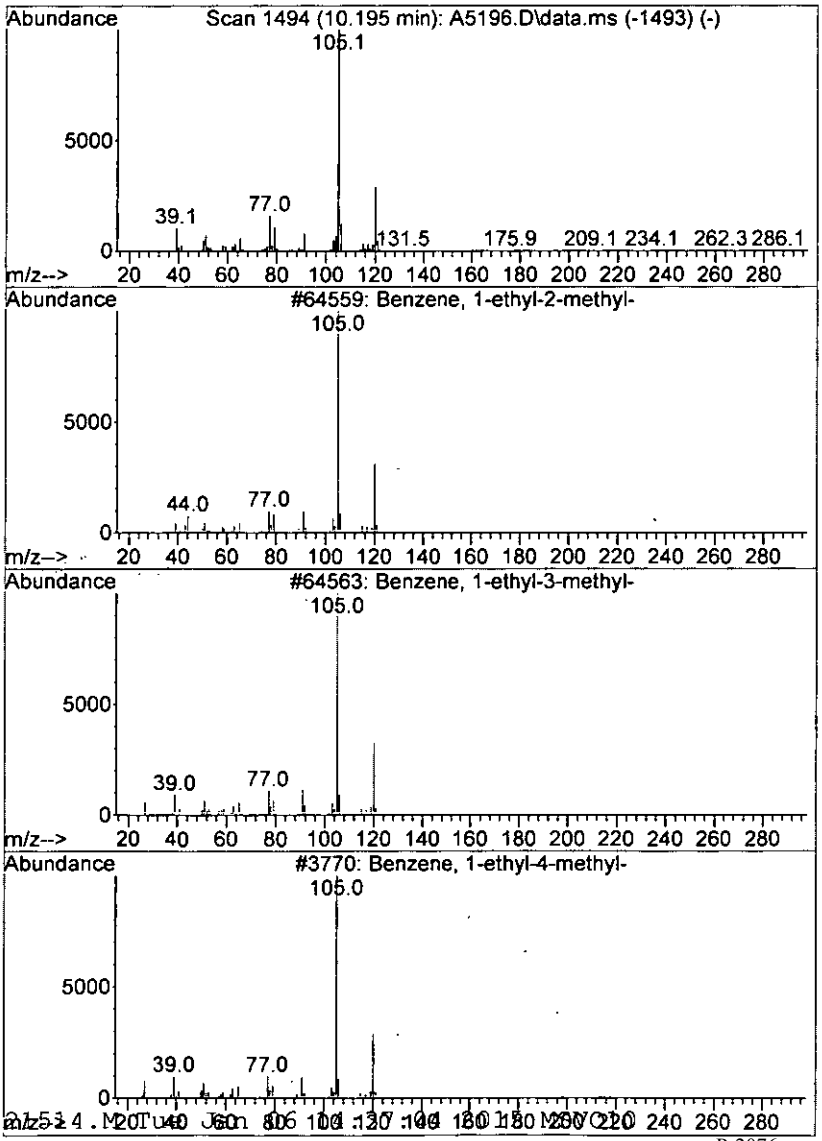
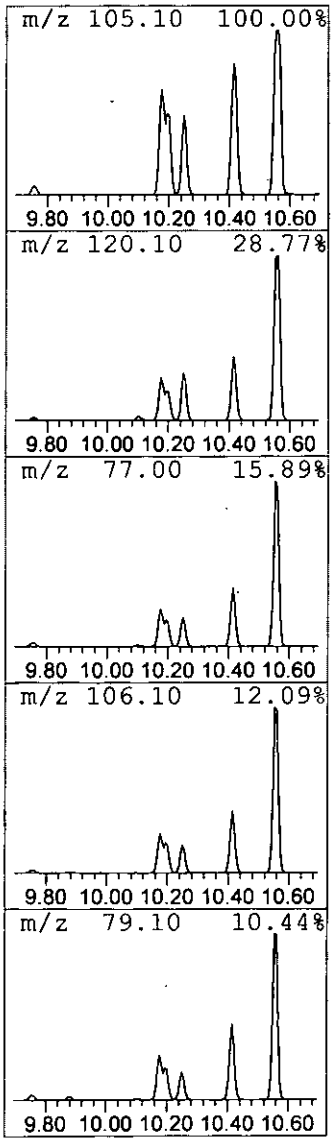
Peak Number 9 Benzene, 1-ethyl-2-methyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.195	52.54 ug/L	5106270	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	91
2	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	91
3	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	90
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	90
5	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	87





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ALS Vial : 31 Sample Multiplier: 1

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Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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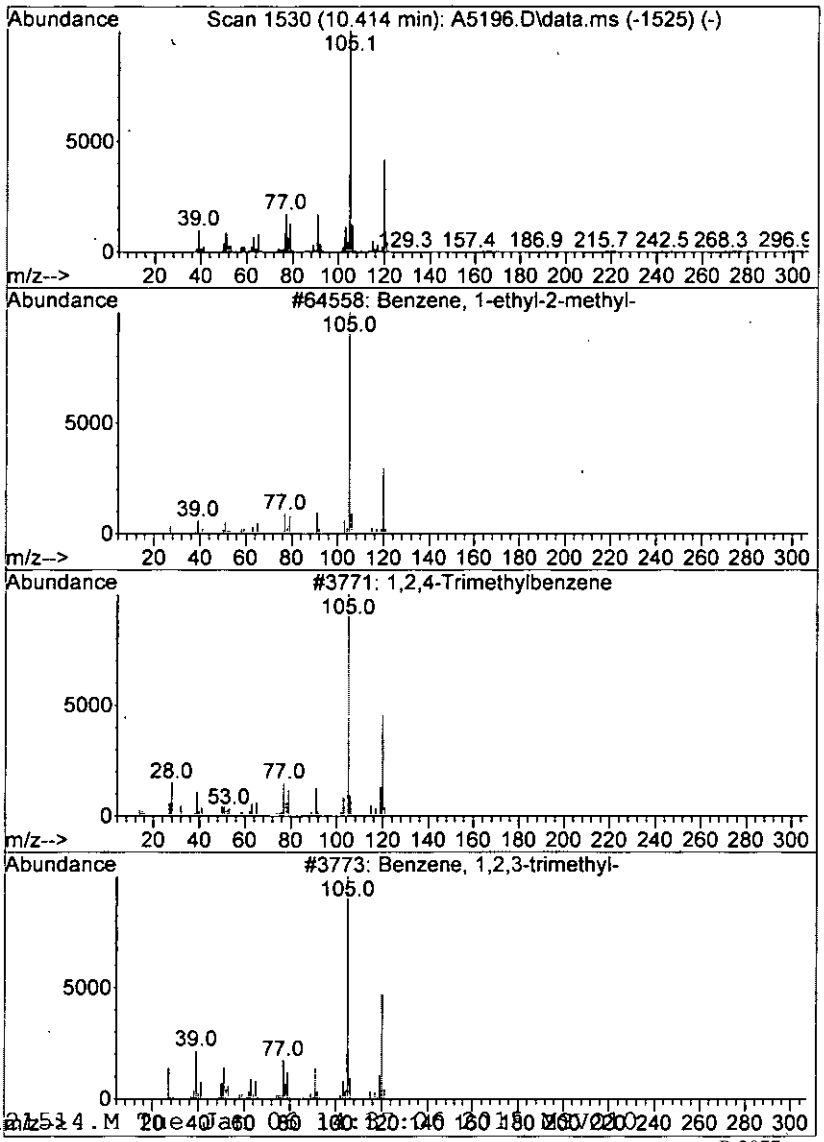
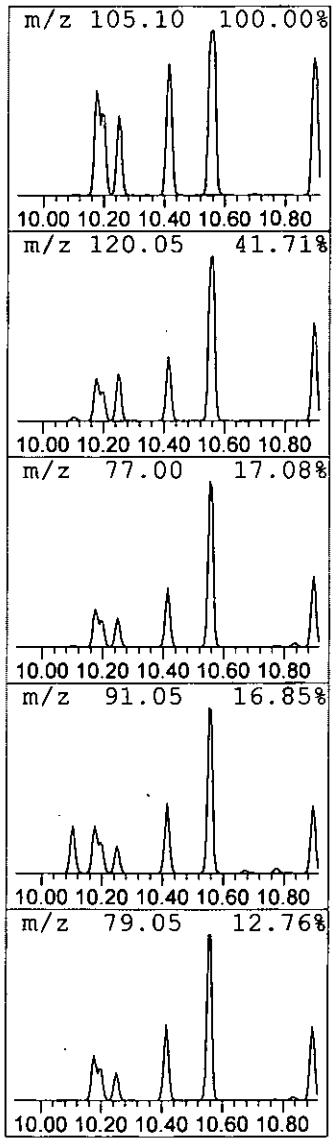
Peak Number 10 Benzene, 1-ethyl-2-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.414	127.20 ug/L	12361300	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2	1,2,4-Trimethylbenzene	120	C9H12	000095-36-3	93
3	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	91
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	91
5	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	91





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Sample : R1410303-002|1.0
Misc : PARSONS 11603 T4
ALS Vial : 31 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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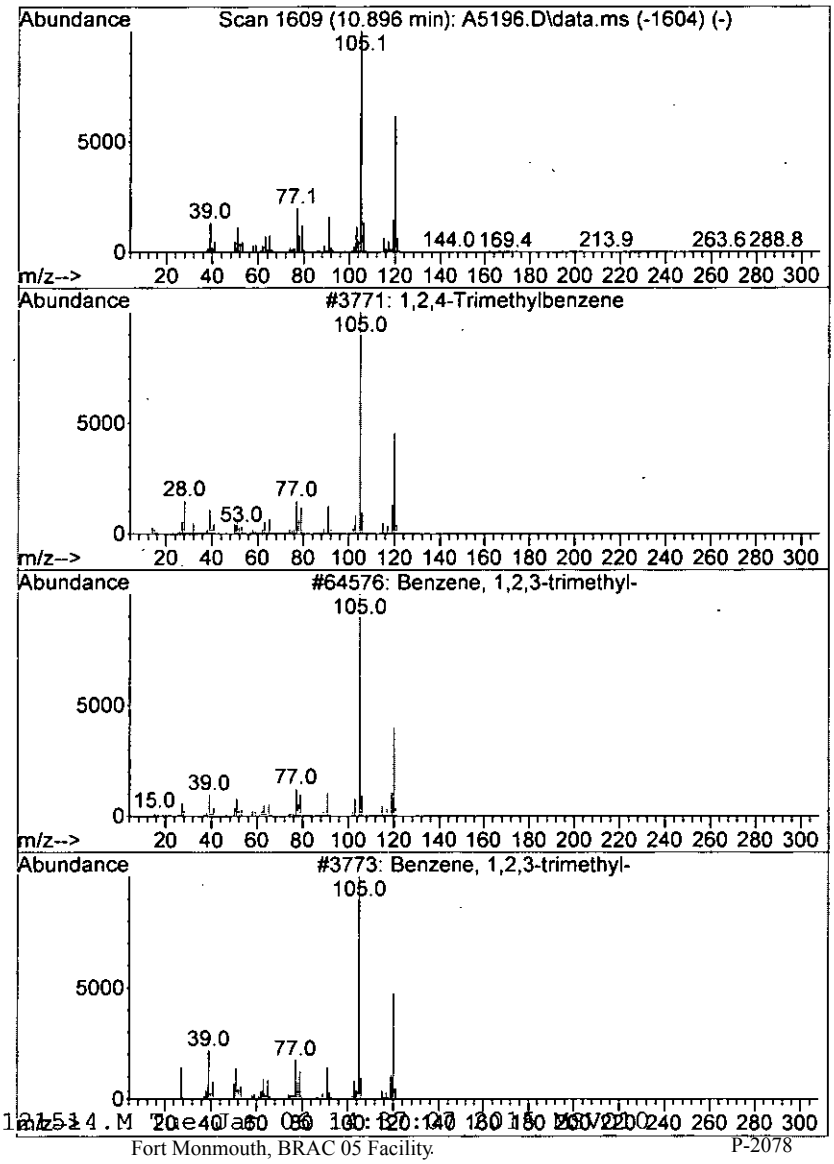
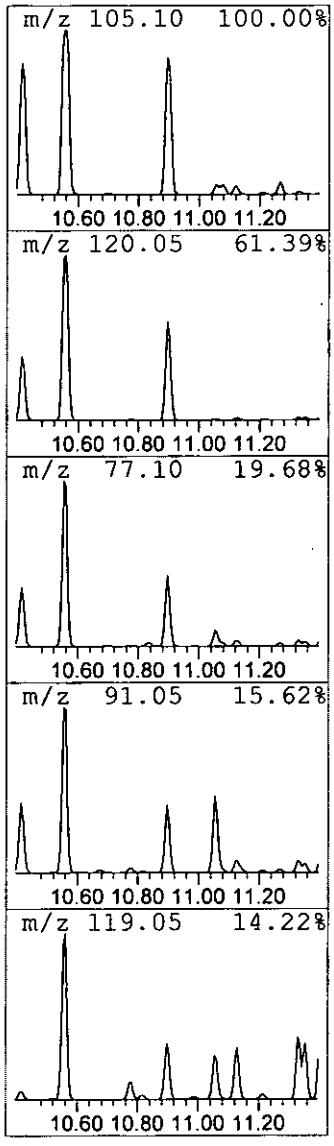
Peak Number 11 1,2,4-Trimethylbenzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.896	156.35 ug/L	15195000	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,2,4-Trimethylbenzene	120	C9H12	000095-36-3	96
2	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95
3	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	94
4	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	93
5	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	93





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Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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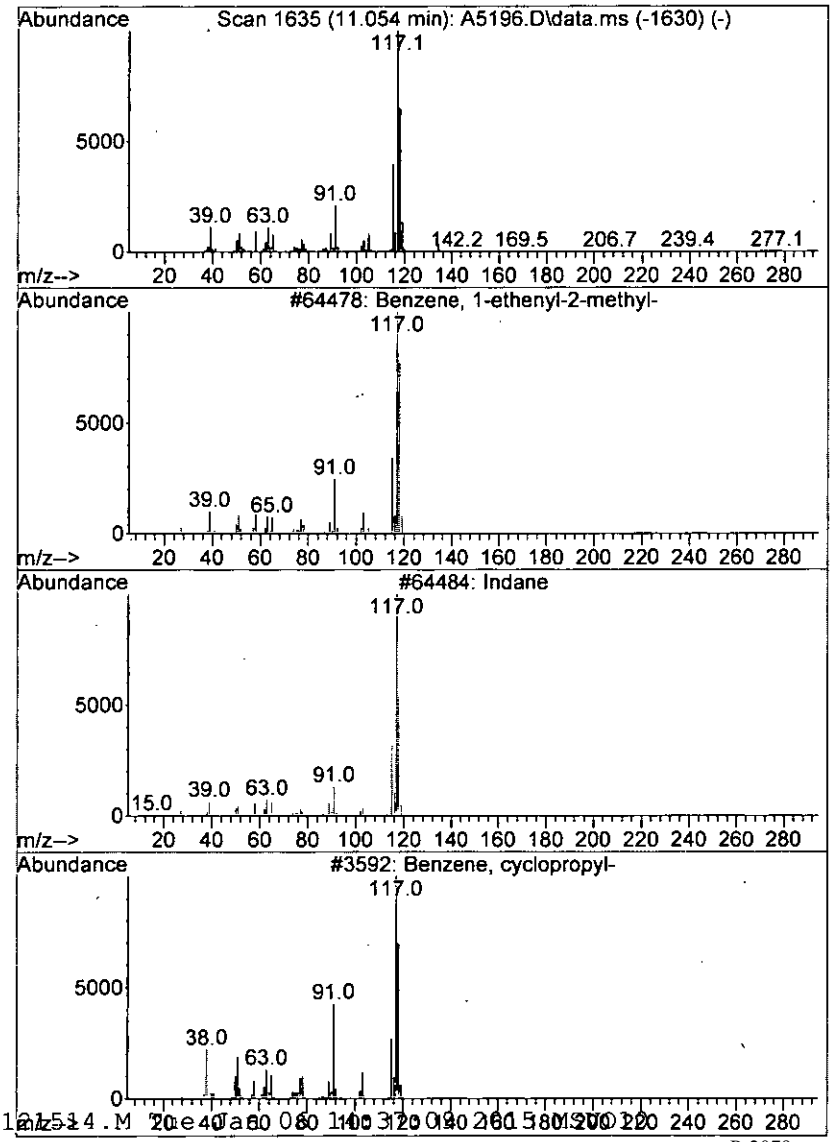
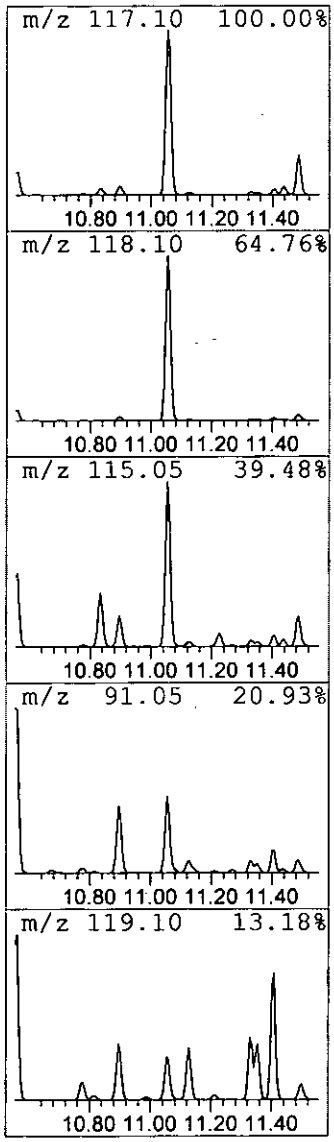
Peak Number 12 Benzene, 1-ethenyl-2-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.055	137.97 ug/L	13408600	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethenyl-2-methyl-	118	C9H10	000611-15-4	86
2	Indane	118	C9H10	000496-11-7	76
3	Benzene, cyclopropyl-	118	C9H10	000873-49-4	68
4	Indane	118	C9H10	000496-11-7	59
5	Benzene, 2-propenyl-	118	C9H10	000300-57-2	58





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ALS Vial : 31 Sample Multiplier: 1

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Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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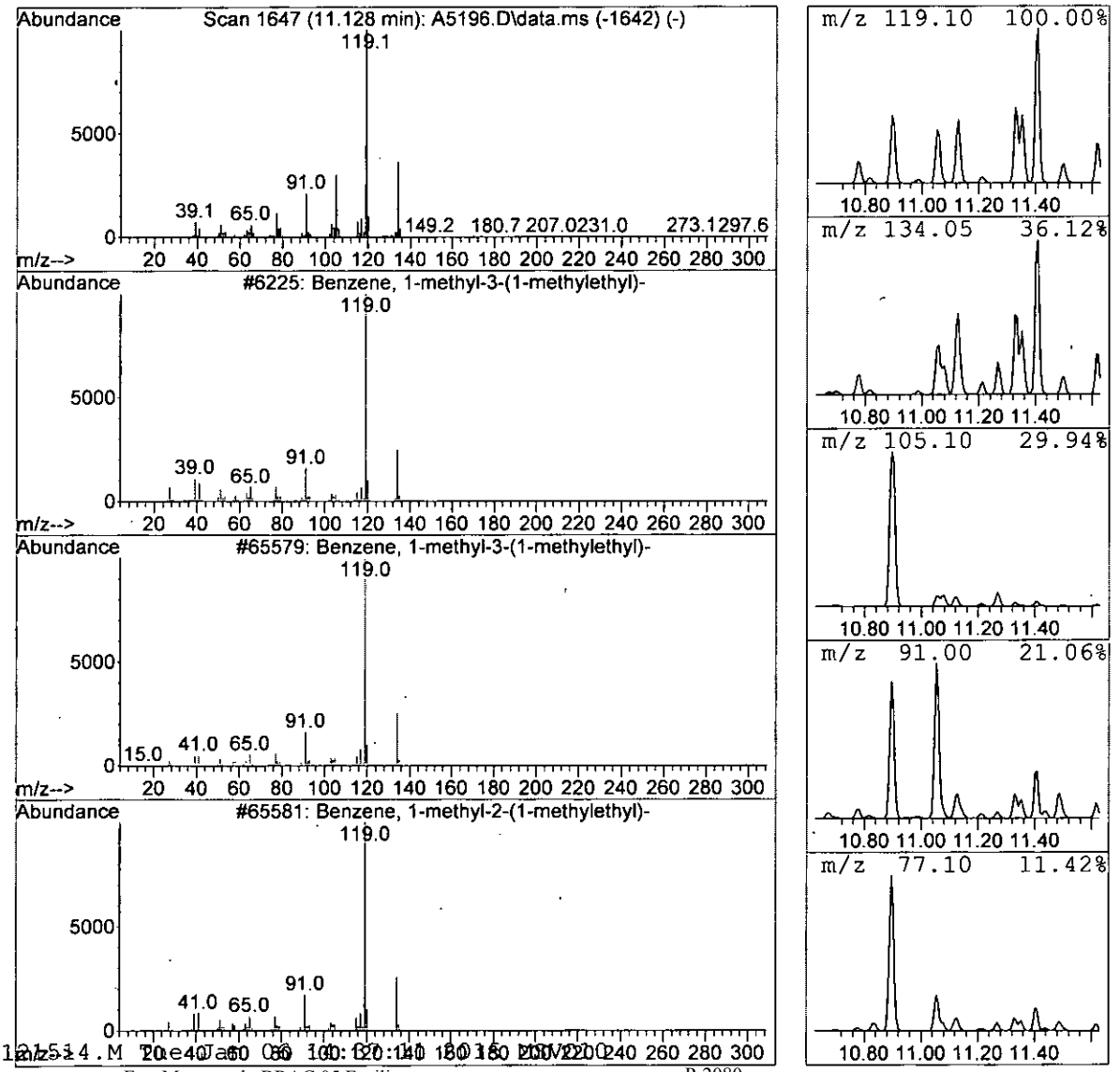
Peak Number 13 Benzene, 1-methyl-3-(1-meth... Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
11:128	19.86 ug/L	1930510	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	95
2	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	95
3	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
4	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
5	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	95



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TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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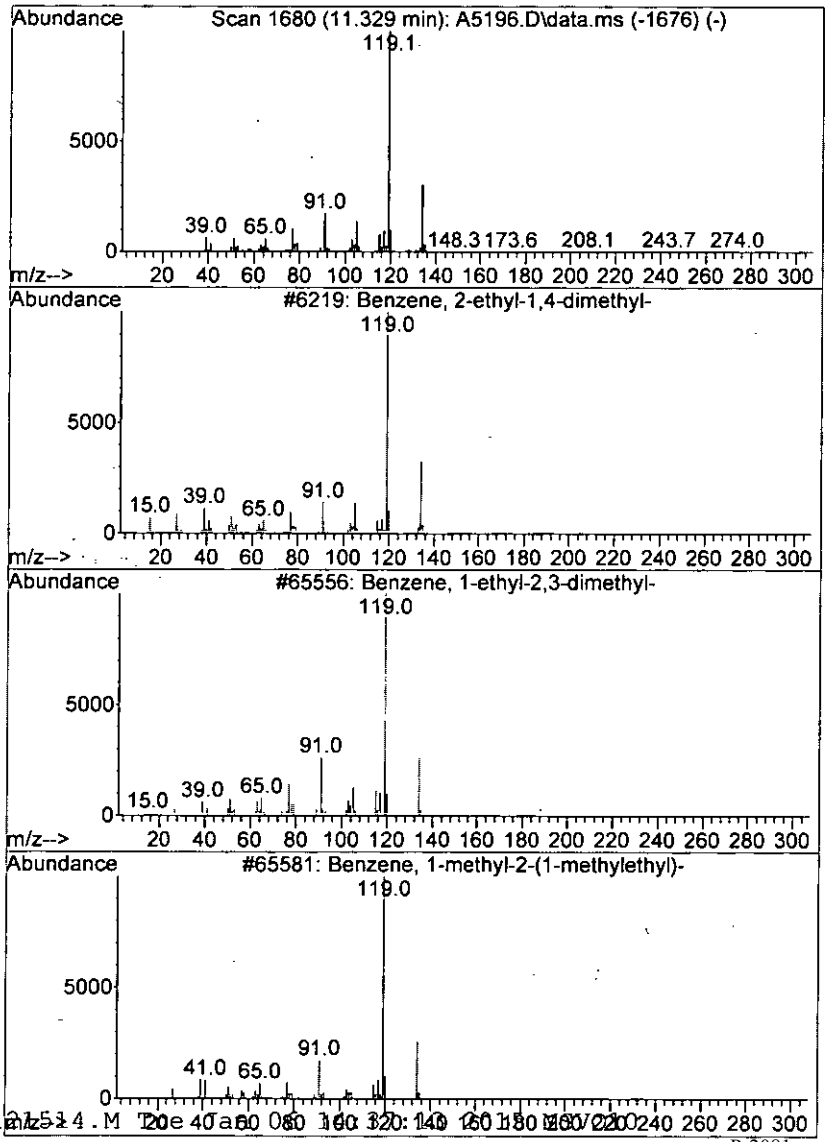
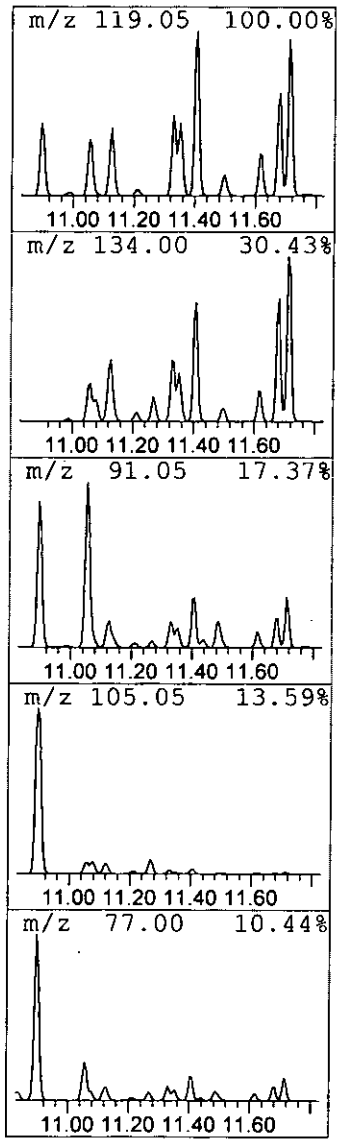
Peak Number 14 Benzene, 2-ethyl-1,4-dimethyl- Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.329	17.44 ug/L	1694420	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	97
2	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	96
3	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
4	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	95
5	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95





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TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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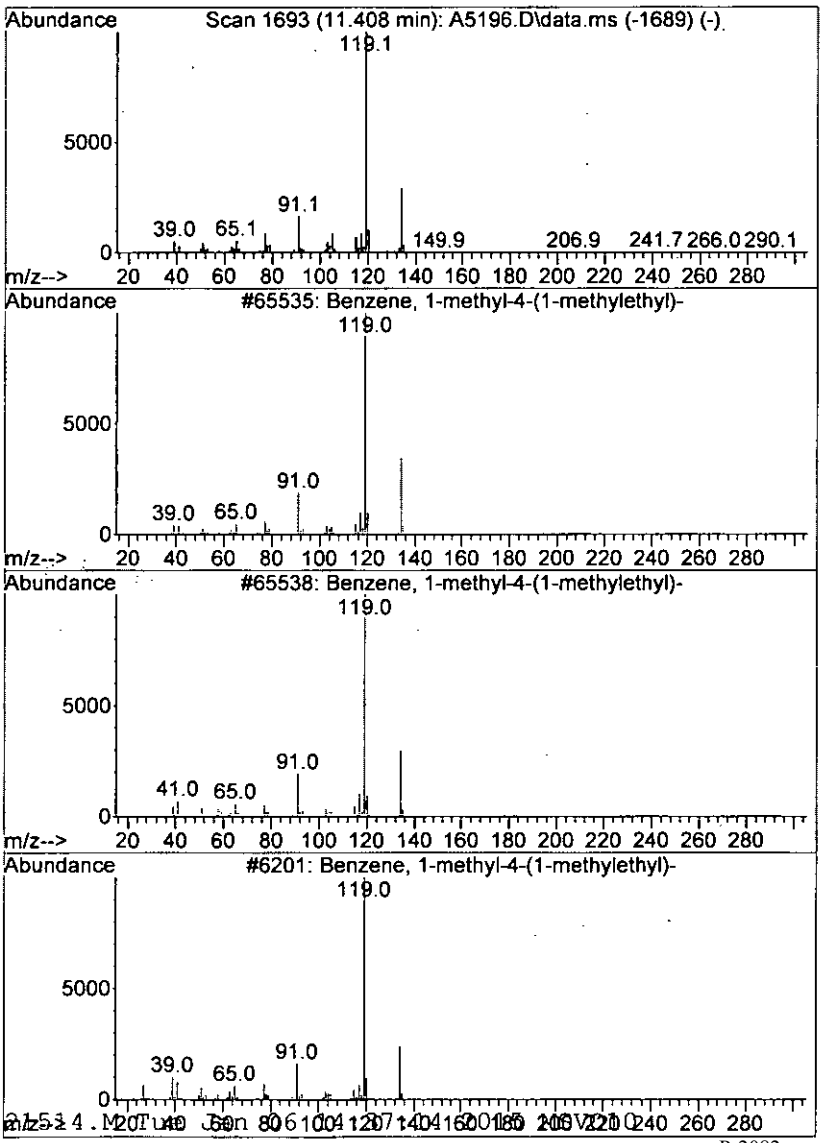
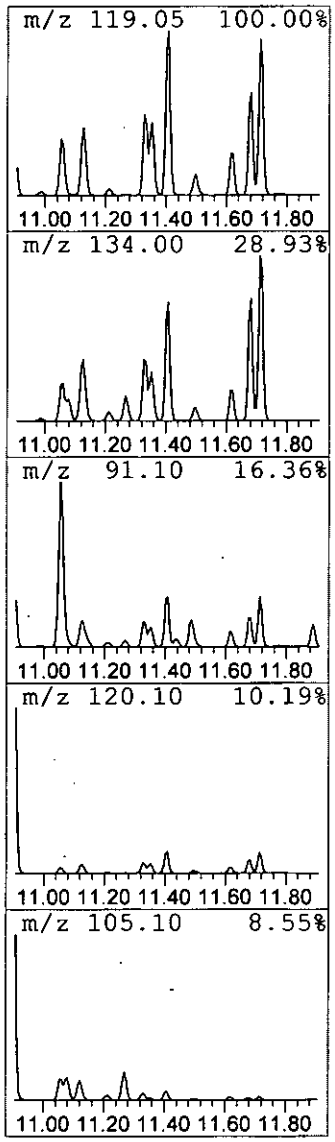
Peak Number 15 Benzene, 1-methyl-4-(1-meth... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.408	32.70 ug/L	3177690	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	97
2	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	95
3	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	95
4	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	95
5	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5196.D
Acq On : 30 Dec 2014 3:35 am
Operator : F.Naegler
Sample : R1410303-002|1.0
Misc : PARSONS 11603 T4
ALS Vial : 31 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

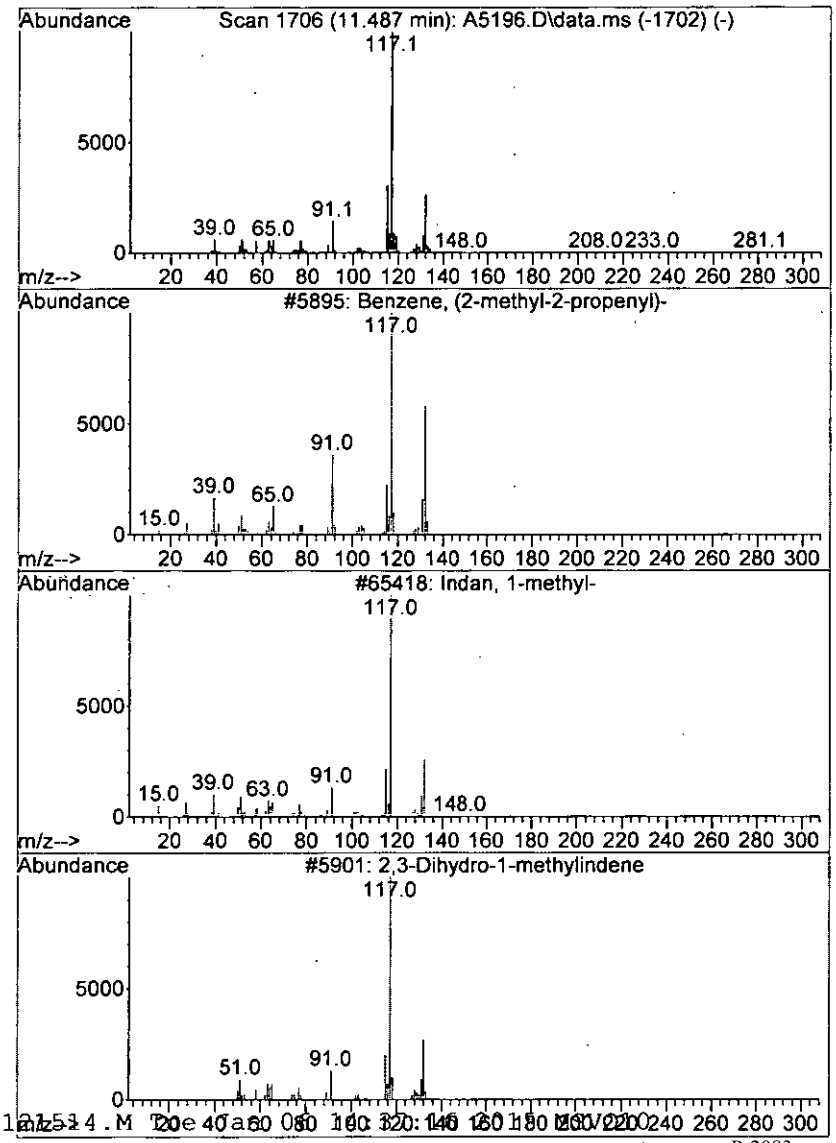
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

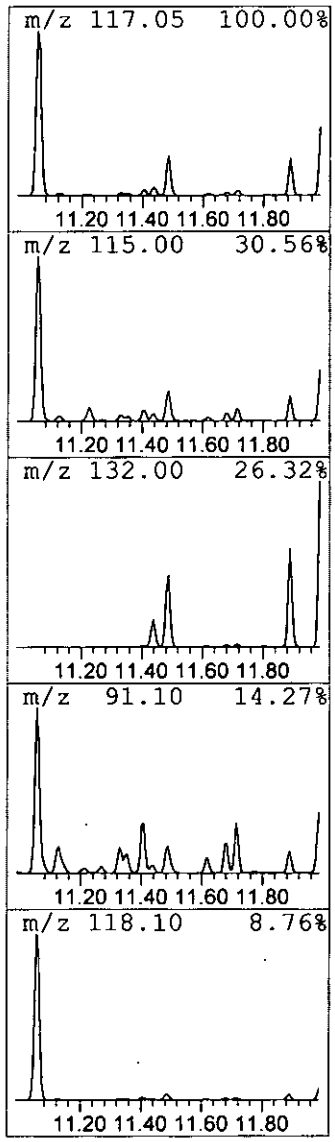
****

Peak Number 16 Benzene, (2-methyl-2-propen... Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.487	24.86 ug/L	2415990	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, (2-methyl-2-propenyl)-	132	C10H12	003290-53-7	87
2	Indan, 1-methyl-	132	C10H12	000767-58-8	87
3	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	87
4	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	87
5	Indan, 1-methyl-	132	C10H12	000767-58-8	87





Library Search Compound Report

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Data File : A5196.D
Acq On : 30 Dec 2014 3:35 am
Operator : F.Naegler
Sample : R1410303-002|1.0
Misc : PARSONS 11603 T4
ALS Vial : 31 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

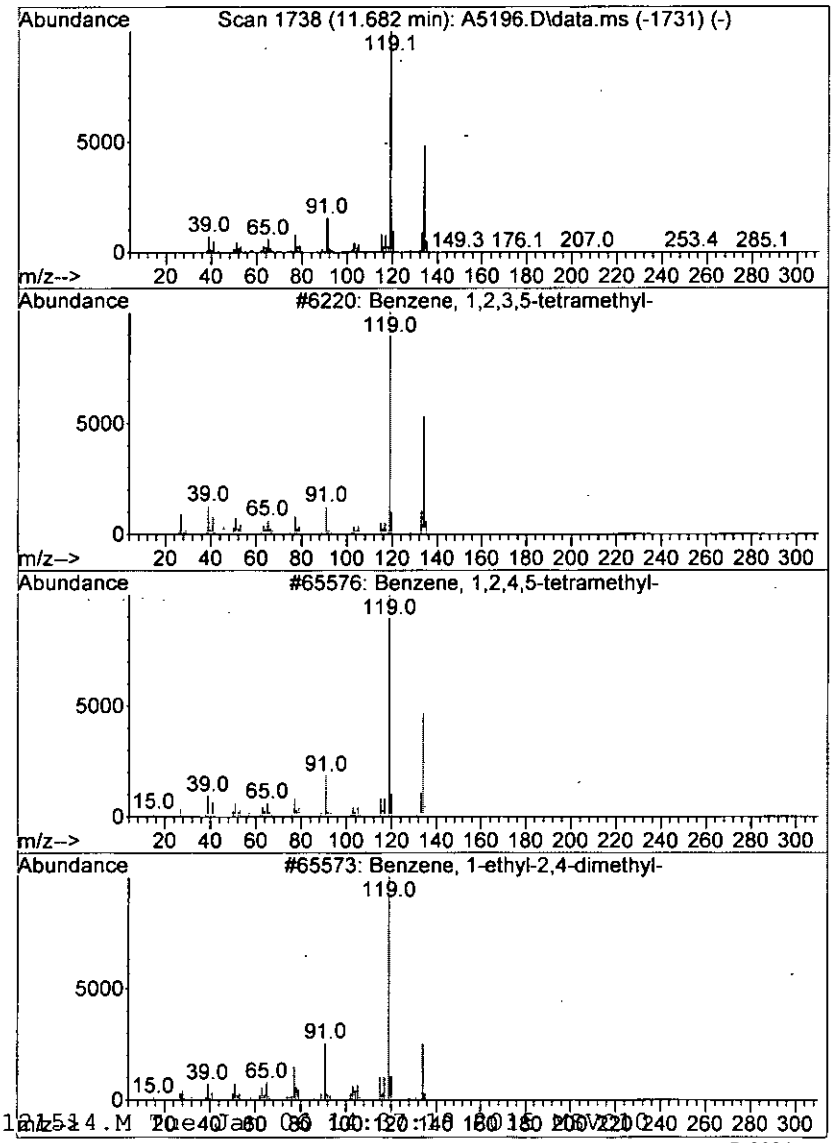
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

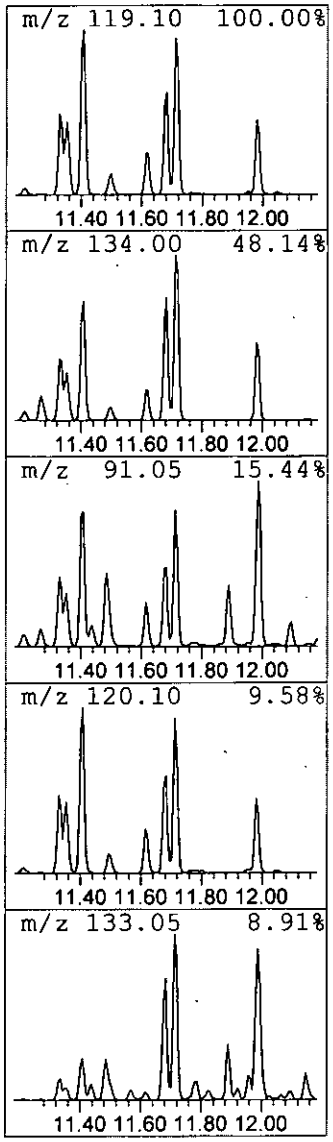
****

Peak Number 17 Benzene, 1,2,3,5-tetramethyl- Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.682	21.62 ug/L	2100830	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	97
2	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	97
3	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14	000874-41-9	96
4	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
5	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5196.D
Acq On : 30 Dec 2014 3:35 am
Operator : F.Naegler
Sample : R1410303-002|1.0
Misc : PARSONS 11603 T4
ALS Vial : 31 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

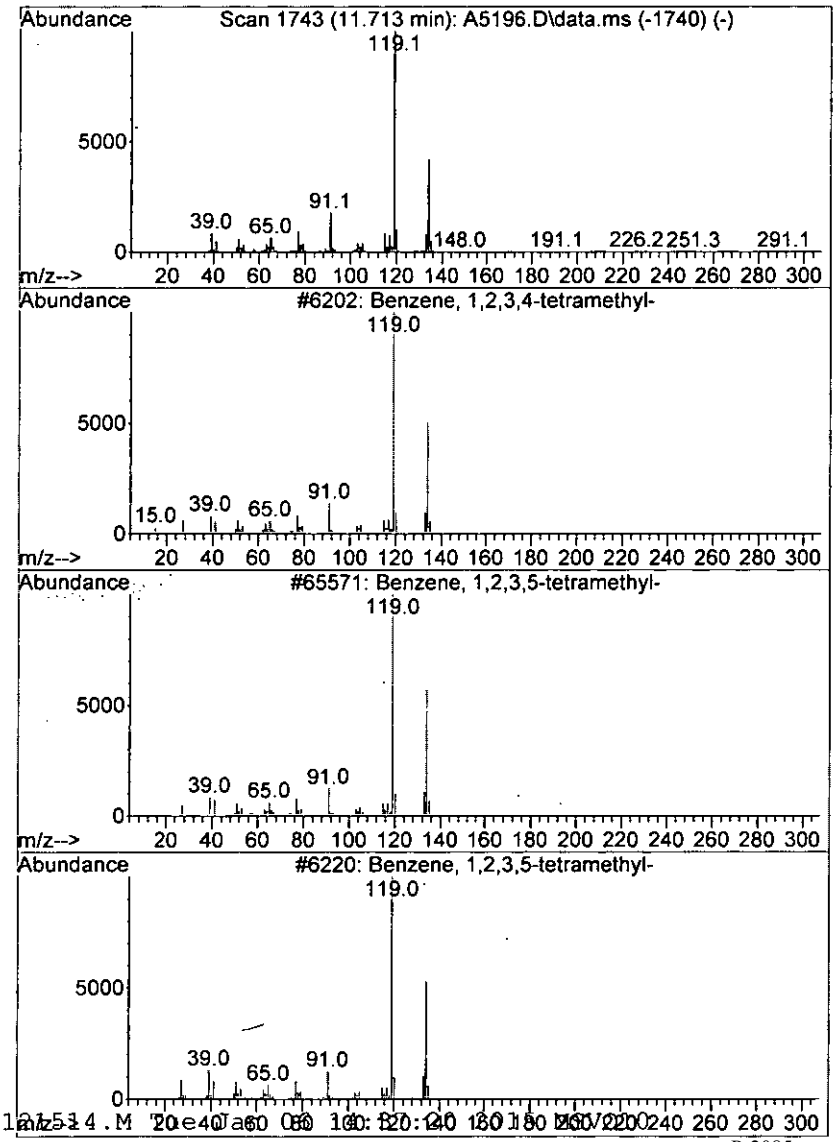
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

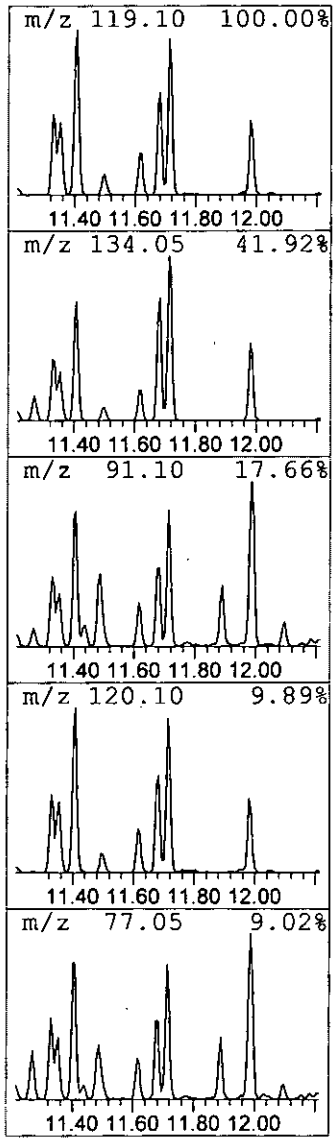
****

Peak Number 18 Benzene, 1,2,3,4-tetramethyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.713	30.72 ug/L	2985570	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
2	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	95
3	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	95
4	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	95
5	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	95





Library Search Compound Report

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Data File : A5196.D
Acq On : 30 Dec 2014 3:35 am
Operator : F.Naegler
Sample : R1410303-002|1.0
Misc : PARSONS 11603 T4
ALS Vial : 31 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

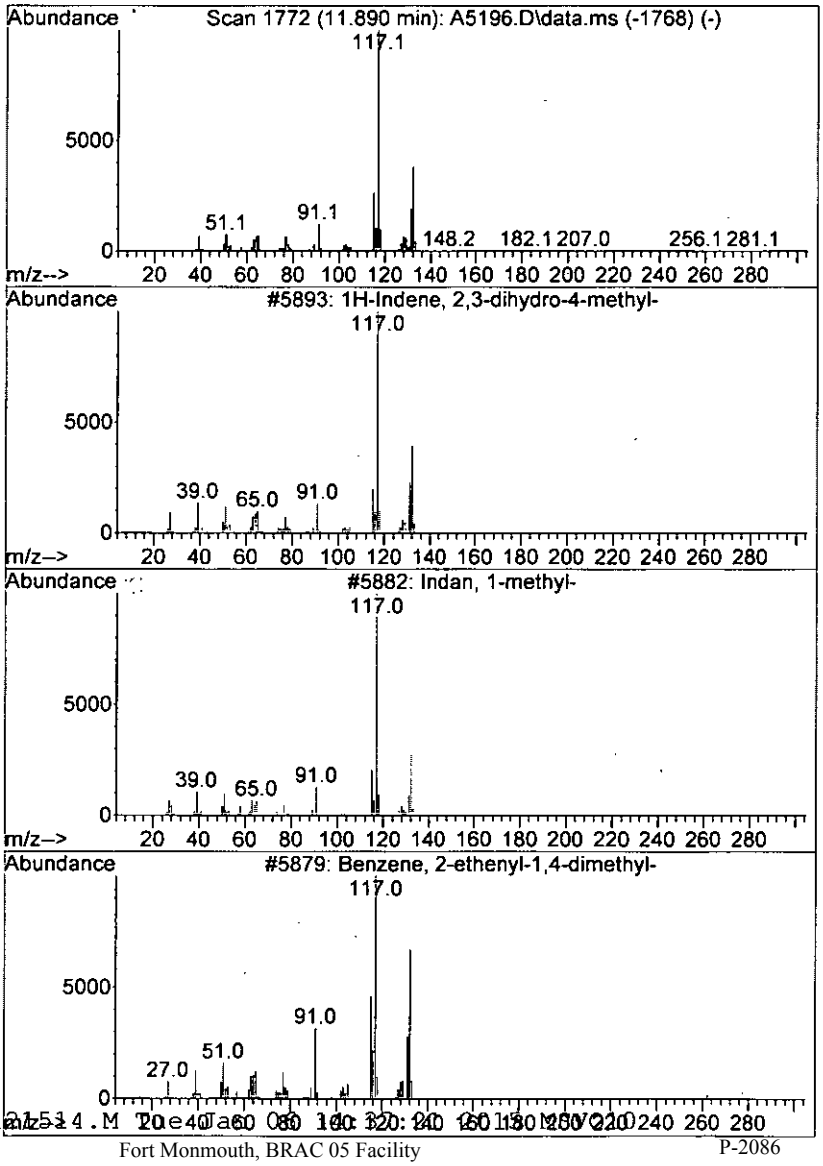
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

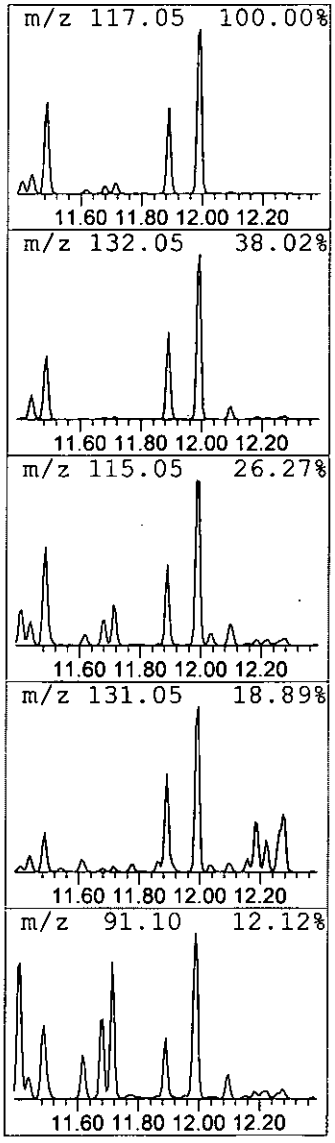
****

Peak Number 19 1H-Indene, 2,3-dihydro-4-me... Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.890	19.31 ug/L	1876870	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	95
2	Indan, 1-methyl-	132	C10H12	000767-58-8	94
3	Benzene, 2-ethenyl-1,4-dimethyl-	132	C10H12	002039-89-6	91
4	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	90
5	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	90





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5196.D
Acq On : 30 Dec 2014 3:35 am
Operator : F.Naegler
Sample : R1410303-002|1.0
Misc : PARSONS 11603 T4
ALS Vial : 31 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

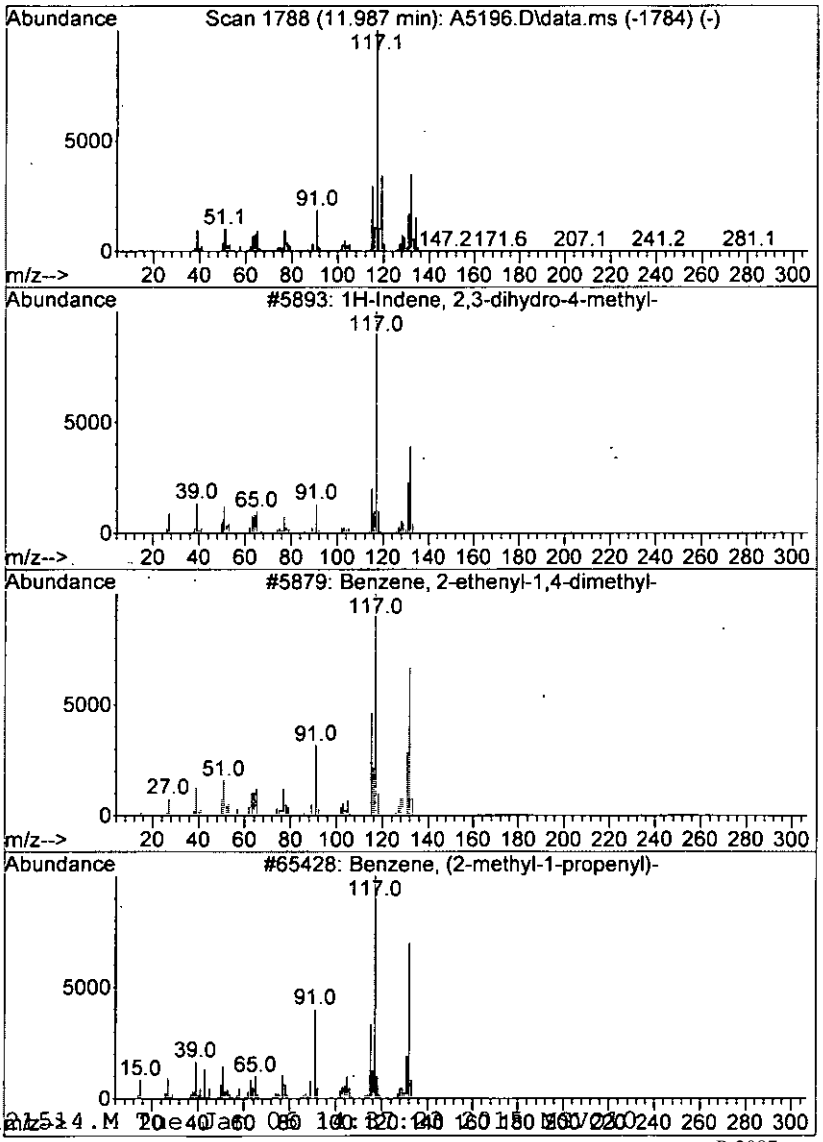
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

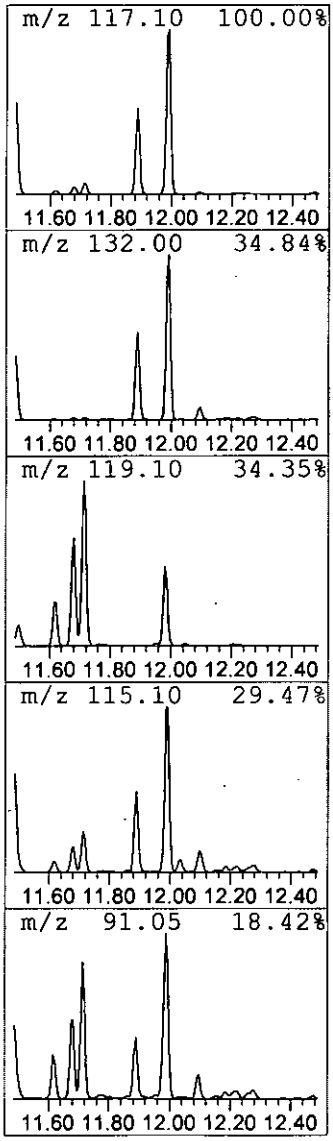
****

Peak Number 20 1H-Indene, 2,3-dihydro-4-me... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.987	56.07 ug/L	5448830	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	93
2	Benzene, 2-ethenyl-1,4-dimethyl-	132	C10H12	002039-89-6	90
3	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	87
4	Benzene, 1-methyl-2-(2-propenyl)-	132	C10H12	001587-04-8	81
5	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	81





Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1008
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 10:28
Sample Name:	FTMM-53-GW-699RW05-10	**Units:**	µg/L
Lab Code:	R1410303-002	**Basis:**	NA
Run Type:	Dilution		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5210.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2.5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	13	2.5	0.55	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	13	2.5	0.90	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	13	2.5	0.63	
79-00-5	1,1,2-Trichloroethane	ND	U	13	2.5	0.86	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	13	2.5	0.50	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	13	2.5	1.5	
563-58-6	1,1-Dichloropropene	ND	U	13	2.5	0.73	
87-61-6	1,2,3-Trichlorobenzene	ND	**U**	13	2.5	2.1	
96-18-4	1,2,3-Trichloropropane	ND	U	13	2.5	1.8	
120-82-1	1,2,4-Trichlorobenzene	ND	U	13	2.5	0.58	
95-63-6	1,2,4-Trimethylbenzene	**310**	D	13	2.5	0.50	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	13	2.5	1.9	
106-93-4	1,2-Dibromoethane	ND	U	13	2.5	0.60	
95-50-1	1,2-Dichlorobenzene	ND	U	13	2.5	0.53	
107-06-2	1,2-Dichloroethane	ND	U	13	2.5	0.90	
78-87-5	1,2-Dichloropropane	ND	U	13	2.5	0.50	
108-67-8	1,3,5-Trimethylbenzene	**63**	D	13	2.5	0.50	
541-73-1	1,3-Dichlorobenzene	ND	U	13	2.5	0.50	
142-28-9	1,3-Dichloropropane	ND	U	13	2.5	0.68	
106-46-7	1,4-Dichlorobenzene	ND	U	13	2.5	0.50	
594-20-7	2,2-Dichloropropane	ND	U	13	2.5	0.68	
78-93-3	2-Butanone (MEK)	ND	U	13	2.5	2.1	
95-49-8	2-Chlorotoluene	ND	U	13	2.5	0.50	
591-78-6	2-Hexanone	ND	U	13	13	4.2	
75-65-0	tert-Butyl Alcohol	ND	U	250	50	27	
106-43-4	4-Chlorotoluene	ND	U	13	2.5	0.60	
99-87-6	p-Isopropyltoluene	**1.2**	DJ	13	2.5	0.50	
108-10-1	4-Methyl-2-pentanone	ND	U	13	2.5	1.7	
67-64-1	Acetone	ND	U	13	13	3.1	
71-43-2	Benzene	**1.9**	DJ	13	2.5	0.50	
108-86-1	Bromobenzene	ND	U	13	2.5	0.71	
74-97-5	Bromochloromethane	ND	U	13	2.5	0.80	
75-27-4	Bromodichloromethane	ND	U	13	2.5	0.80	
75-25-2	Bromoform	ND	U	13	2.5	1.1	
74-83-9	Bromomethane	ND	U	13	2.5	0.73	

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14 1008
Date Received: 12/20/14
Date Analyzed: 12/30/14 10:28

Sample Name: FTMM-53-GW-699RW05-10
Lab Code: R1410303-002
Run Type: Dilution

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\122914\A5210.D\

Analysis Lot: 427294
Instrument Name: R-MS-10
Dilution Factor: 2.5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	13	2.5	1.2	
108-90-7	Chlorobenzene	ND	U	13	2.5	0.73	
75-00-3	Chloroethane	ND	U	13	2.5	0.60	
67-66-3	Chloroform	ND	U	13	2.5	0.63	
74-87-3	Chloromethane	ND	U	13	2.5	0.53	
124-48-1	Dibromochloromethane	ND	U	13	2.5	0.78	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	13	2.5	1.2	
75-09-2	Methylene Chloride	ND	U	13	2.5	1.5	
100-41-4	Ethylbenzene	**110**	D	13	2.5	0.50	
87-68-3	Hexachlorobutadiene	ND	U	13	2.5	1.6	
98-82-8	Isopropylbenzene (Cumene)	**6.7**	DJ	13	2.5	0.50	
1634-04-4	Methyl tert-Butyl Ether	ND	U	13	2.5	0.73	
91-20-3	Naphthalene	**67**	D	13	2.5	0.50	
100-42-5	Styrene	ND	U	13	2.5	0.50	
127-18-4	Tetrachloroethene (PCE)	ND	U	13	2.5	0.75	
108-88-3	Toluene	**6.2**	DJ	13	2.5	0.50	
79-01-6	Trichloroethene (TCE)	ND	U	13	2.5	0.55	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	13	2.5	0.50	
75-01-4	Vinyl Chloride	ND	U	13	2.5	0.80	
156-59-2	cis-1,2-Dichloroethene	ND	U	13	2.5	0.75	
10061-01-5	cis-1,3-Dichloropropene	ND	U	13	2.5	0.60	
179601-23-1	m,p-Xylenes	**350**	D	25	5.0	0.83	
104-51-8	n-Butylbenzene	ND	U	13	2.5	0.53	
103-65-1	n-Propylbenzene	**8.8**	DJ	13	2.5	0.50	
95-47-6	o-Xylene	**290**	D	13	2.5	0.50	
135-98-8	sec-Butylbenzene	**1.1**	DJ	13	2.5	0.68	
98-06-6	tert-Butylbenzene	ND	U	13	2.5	0.50	
156-60-5	trans-1,2-Dichloroethene	ND	U	13	2.5	0.83	
10061-02-6	trans-1,3-Dichloropropene	ND	U	13	2.5	0.50	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1008
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 10:28
Sample Name:	FTMM-53-GW-699RW05-10	**Units:**	µg/L
Lab Code:	R1410303-002	**Basis:**	NA
Run Type:	Dilution		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5210.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2.5

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	75-120	12/30/14 10:28	
Dibromofluoromethane	98	85-115	12/30/14 10:28	
Toluene-d8	107	85-120	12/30/14 10:28	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/30/14 1028

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW05-10DL
Lab Code: R1410303-002
Run Type: Dilution

Analytical Method: 8260C

Units: µg/L
Basis: NA

CAS #	Analyte Name	RT	Result	Q
000078-78-4	Butane, 2-methyl-	1.66	**54.2**	JN
000109-66-0	Pentane	1.81	**19.8**	JN
000107-83-5	Pentane, 2-methyl-	2.46	**48.9**	JN
	unknown	2.51	**18.3**	J
000096-14-0	Pentane, 3-methyl-	2.67	**30.7**	JN
000096-37-7	Cyclopentane, methyl-	3.56	**88.7**	JN
000108-87-2	Cyclohexane, methyl-	6.21	**14.8**	JN
000620-14-4	Benzene, 1-ethyl-3-methyl-	10.18	**89.9**	JN
000622-96-8	Benzene, 1-ethyl-4-methyl-	10.20	**50.1**	JN
000611-14-3	Benzene, 1-ethyl-2-methyl-	10.41	**121.0**	JN
000526-73-8	Benzene, 1,2,3-trimethyl-	10.90	**152.4**	JN
	unknown	11.06	**130.2**	J
000535-77-3	Benzene, 1-methyl-3-(1-methylethyl)-	11.13	**18.1**	JN
001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	11.33	**15.3**	JN
000099-87-6	Benzene, 1-methyl-4-(1-methylethyl)-	11.41	**30.1**	JN
000767-58-8	Indan, 1-methyl-	11.49	**22.7**	JN
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	11.68	**19.4**	JN
000527-53-7	Benzene, 1,2,3,5-tetramethyl-	11.71	**28.3**	JN
000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	11.89	**19.0**	JN
002039-89-6	Benzene, 2-ethenyl-1,4-dimethyl-	11.99	**52.4**	JN

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-002|2.5
Data File : I:\ACQUDATA\msvoa10\data\122914\A5210.D Vial: 45
Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

DL

Quant Time: Jan 06 15:12:25 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

FW 1/6/15

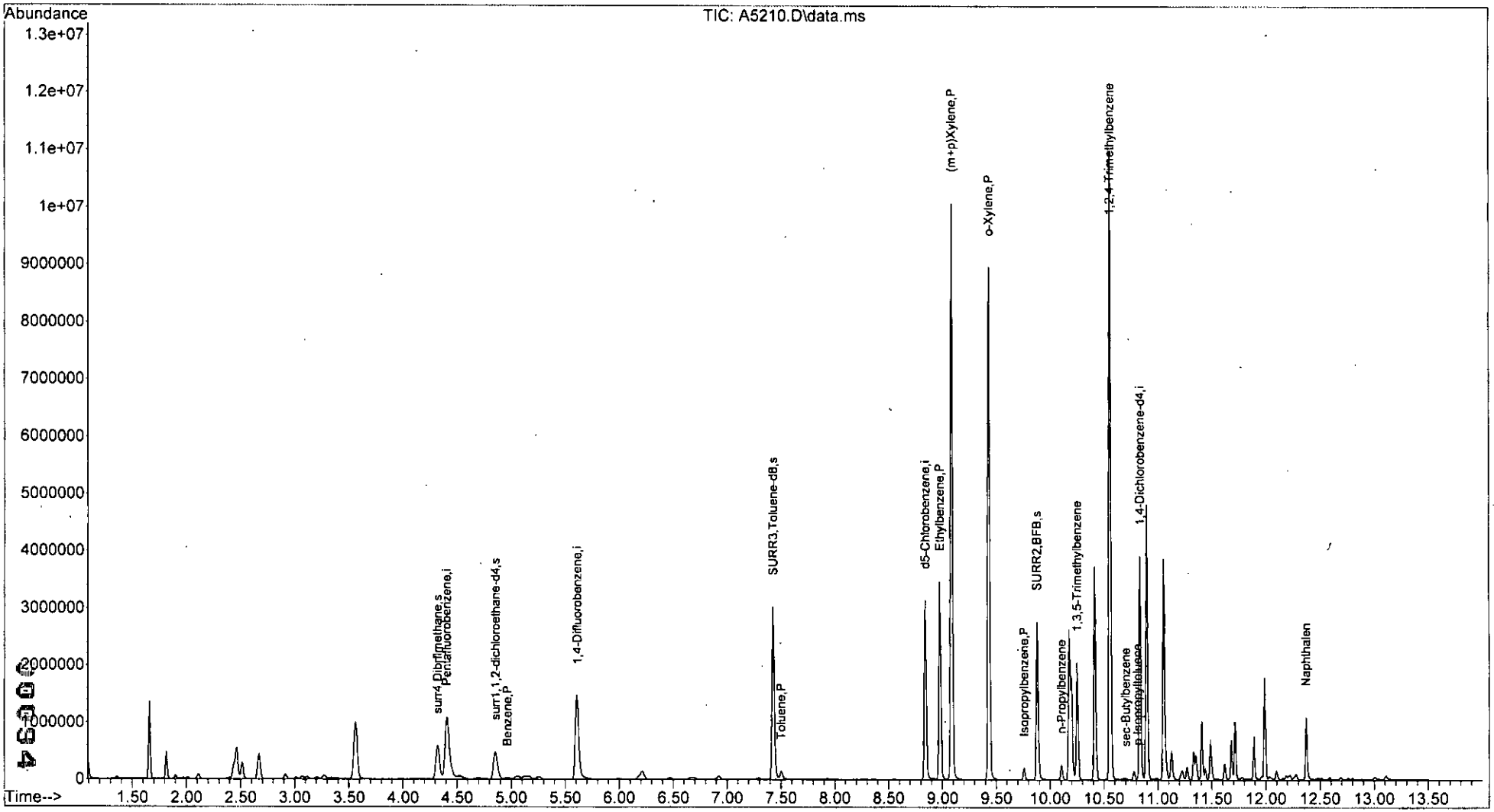
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.403	168	996745	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1433899	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1304819	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	712012	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.318	113	443043	49.12	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.24%				
48) surr1,1,2-dichloroetha...	4.854	65	454768	49.64	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 99.28%				
65) SURR3,Toluene-d8	7.427	98	1684571	53.38	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 106.76%				
70) SURR2,BFB	9.878	95	665536	50.54	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.08%				
Target Compounds							Qvalue
12) Acrolein	1.946	56	204	Below Cal			80
49) Benzene	4.964	78	25611	0.74	ug/L		83
66) Toluene	7.500	91	90429	2.47	ug/L		92
82) Ethylbenzene	8.976	106	561781	42.88	ug/L		99
83) (m+p)Xylene	9.085	106	2148903	140.25	ug/L		96
84) o-Xylene	9.433	106	1874513	117.06	ug/L	#	81
88) Isopropylbenzene	9.756	105	98646	2.68	ug/L		99
95) n-Propylbenzene	10.103	91	151359	3.51	ug/L		99
99) 1,3,5-Trimethylbenzene	10.250	105	806159	25.27	ug/L		98
101) 1,2,4-Trimethylbenzene	10.555	105	4141858	125.84	ug/L		84
103) sec-Butylbenzene	10.701	105	15556	0.43	ug/L		94
104) p-Isopropyltoluene	10.811	119	15018	0.47	ug/L		92
117) Naphthalen	12.371	128	535379	26.76	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

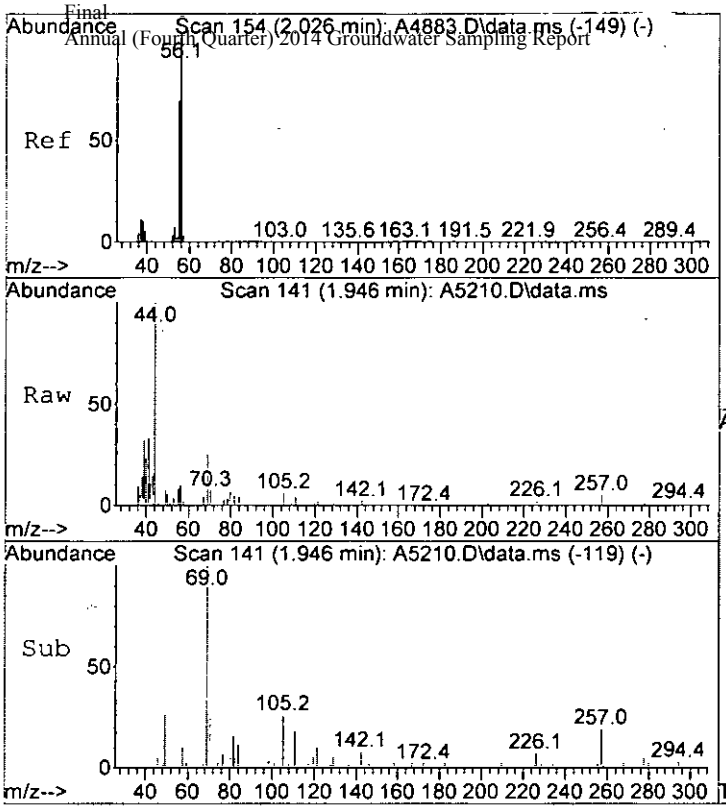
\Quantitation Report (QT Reviewed)

Sample : R1410303-002|2.5
Data File : I:\ACQUDATA\msvoa10\data\122914\A5210.D Vial: 45
Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 15:12:25 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



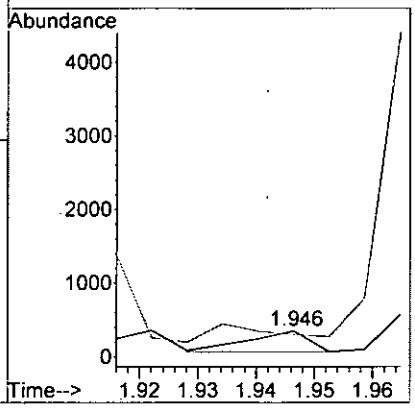
W121514.M Tue Jan 06 15:12:36 2015 MSVO10

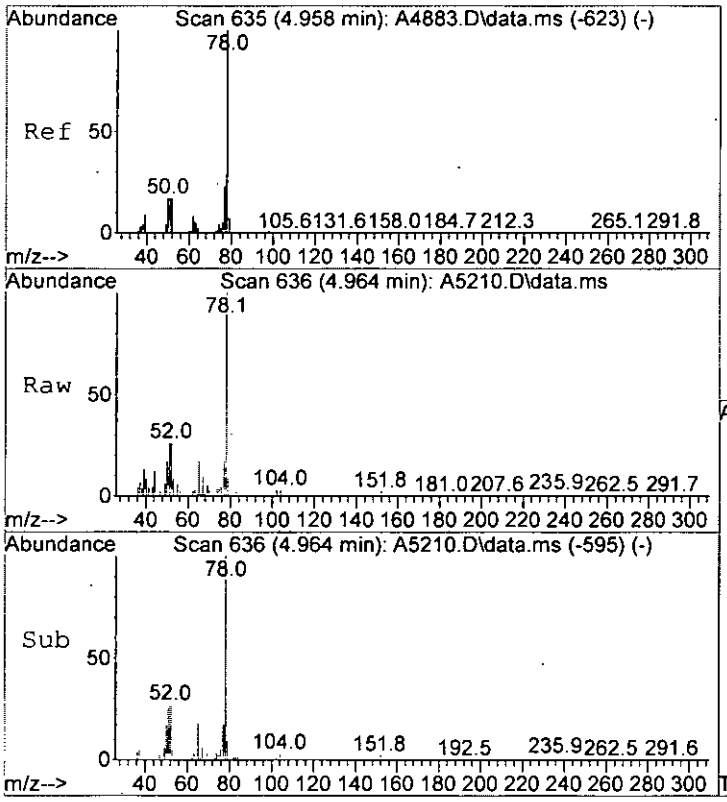


#12
Acrolein
Concen: Below Cal
RT: 1.946 min Scan# 141
Delta R.T. -0.073 min
Lab File: A5210.D
Acq: 30 Dec 2014 10:28 am

Tgt Ion: 56 Resp: 204

Ion	Ratio	Lower	Upper
56	100		
55	85.8	49.6	89.6

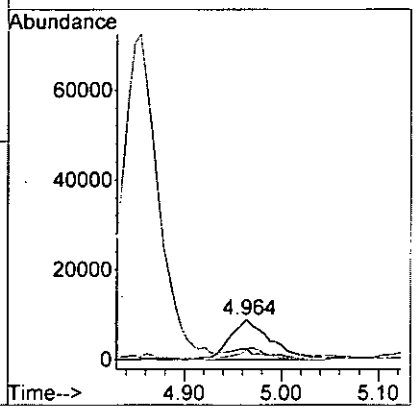


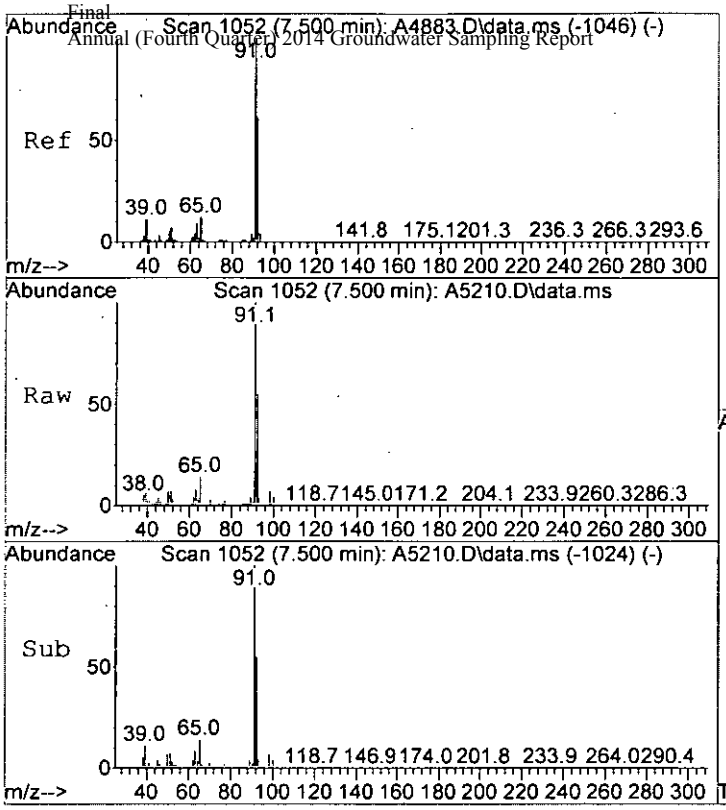


#49
Benzene
Concen: 0.74 ug/L
RT: 4.964 min Scan# 636
Delta R.T. 0.006 min
Lab File: A5210.D
Acq: 30 Dec 2014 10:28 am

Tgt Ion: 78 Resp: 25611

Ion	Ratio	Lower	Upper
78	100		
51	26.1	0.0	40.0
52	26.2	0.0	37.0

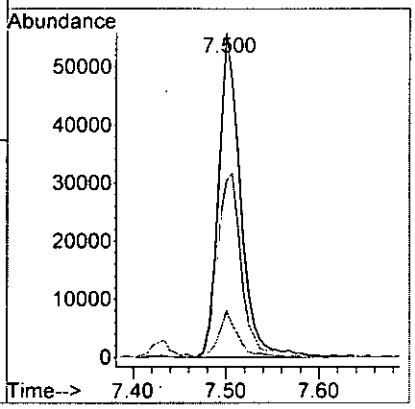


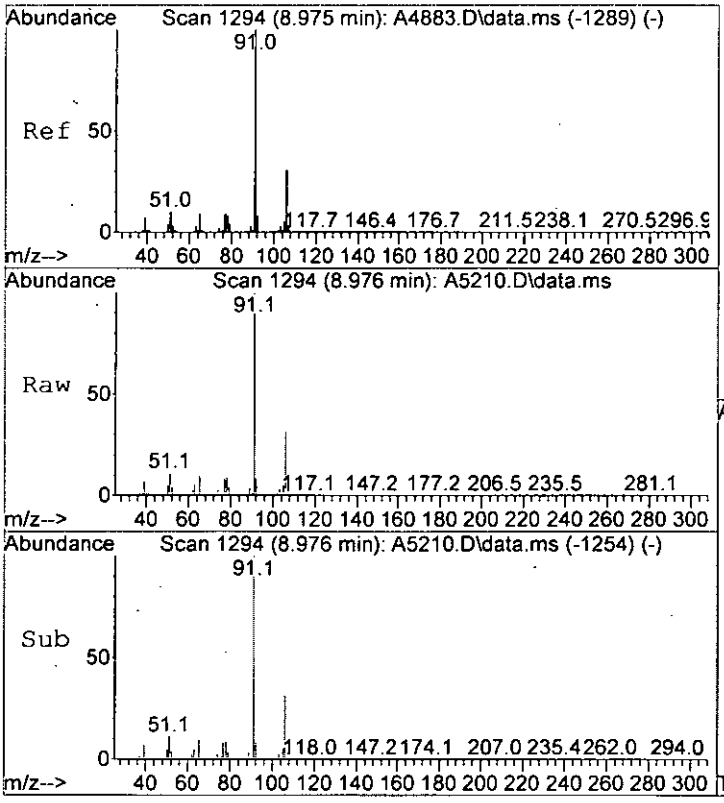


#66
Toluene
Concen: 2.47 ug/L
RT: 7.500 min Scan# 1052
Delta R.T. 0.000 min
Lab File: A5210.D
Acq: 30 Dec 2014 10:28 am

Tgt Ion: 91 Resp: 90429

Ion	Ratio	Lower	Upper
91	100		
92	54.5	40.7	80.7
65	14.3	0.0	32.3

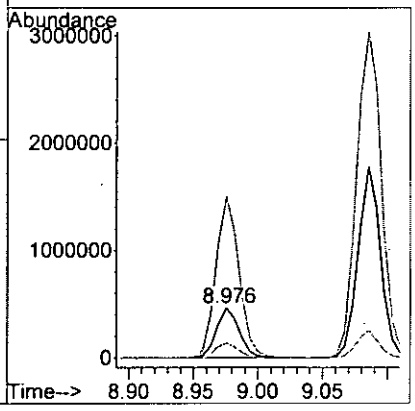


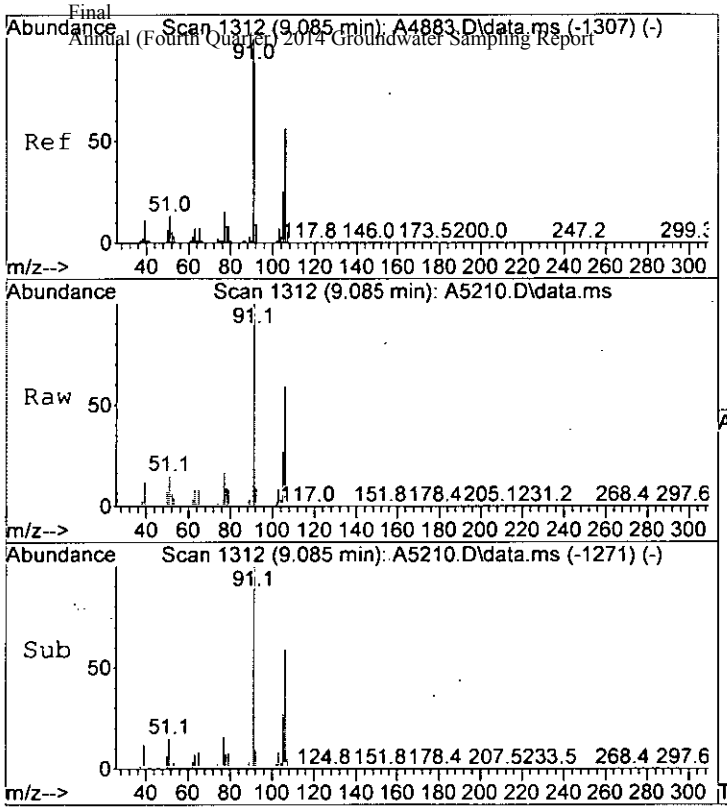


#82
Ethylbenzene
Concen: 42.88 ug/L
RT: 8.976 min Scan# 1294
Delta R.T. -0.006 min
Lab File: A5210.D
Acq: 30 Dec 2014 10:28 am

Tgt Ion:106 Resp: 561781

Ion	Ratio	Lower	Upper
106	100		
91	324.9	302.6	342.6
65	28.8	11.0	51.0

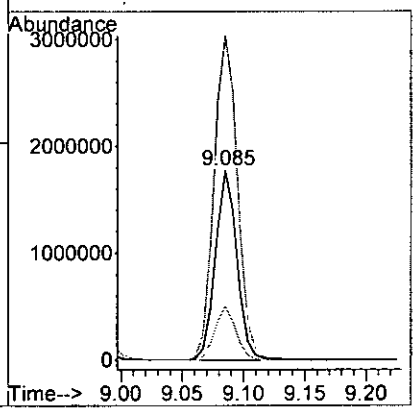


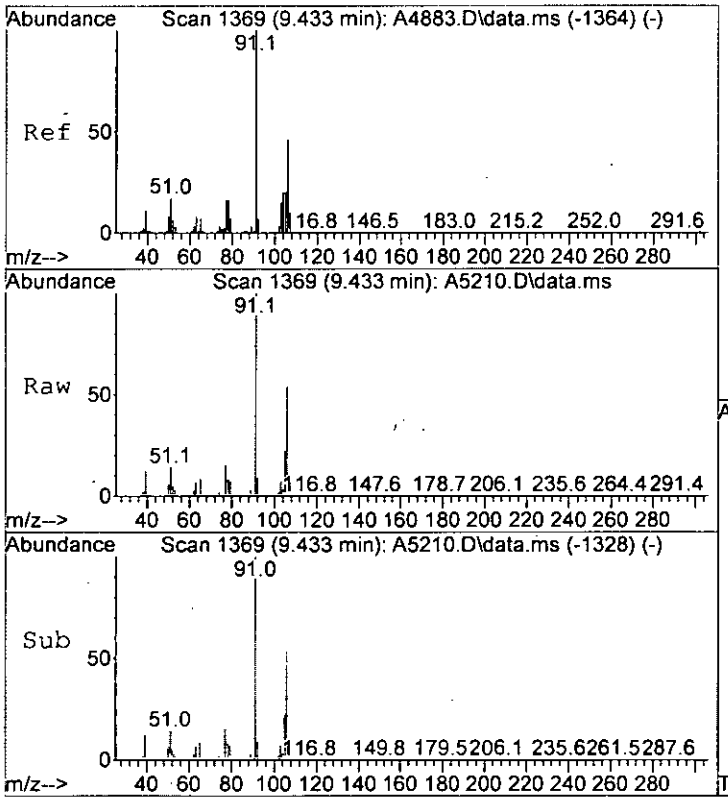


#83
(m+p)Xylene
Concen: 140.25 ug/L
RT: 9.085 min Scan# 1312
Delta R.T. 0.000 min
Lab File: A5210.D
Acq: 30 Dec 2014 10:28 am

Tgt Ion:106 Resp: 2148903

Ion	Ratio	Lower	Upper
106	100		
91	170.7	157.2	197.2
77	28.3	7.2	47.2

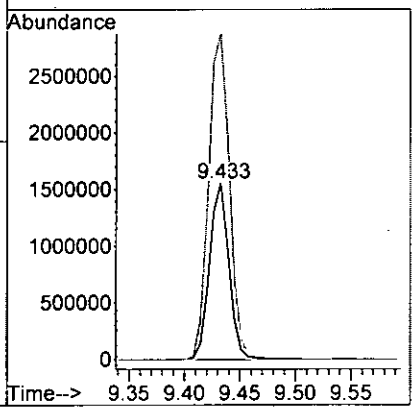


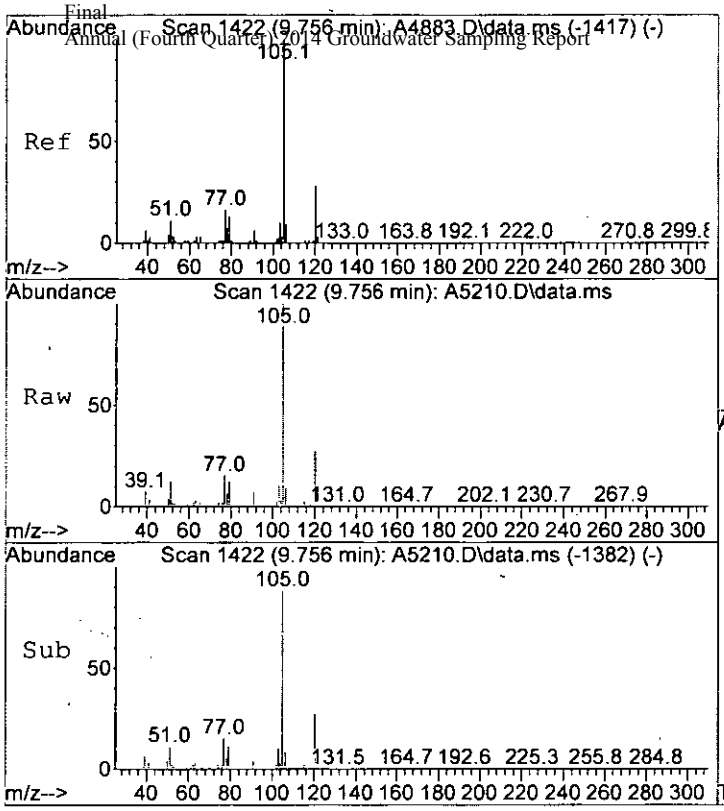


#84
o-Xylene
Concen: 117.06 ug/L
RT: 9.433 min Scan# 1369
Delta R.T. 0.000 min
Lab File: A5210.D
Acq: 30 Dec 2014 10:28 am

Tgt Ion:106 Resp: 1874513

Ion	Ratio	Lower	Upper
106	100		
91	184.9	195.3	235.3#

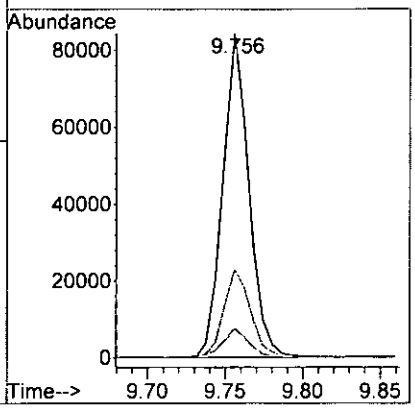


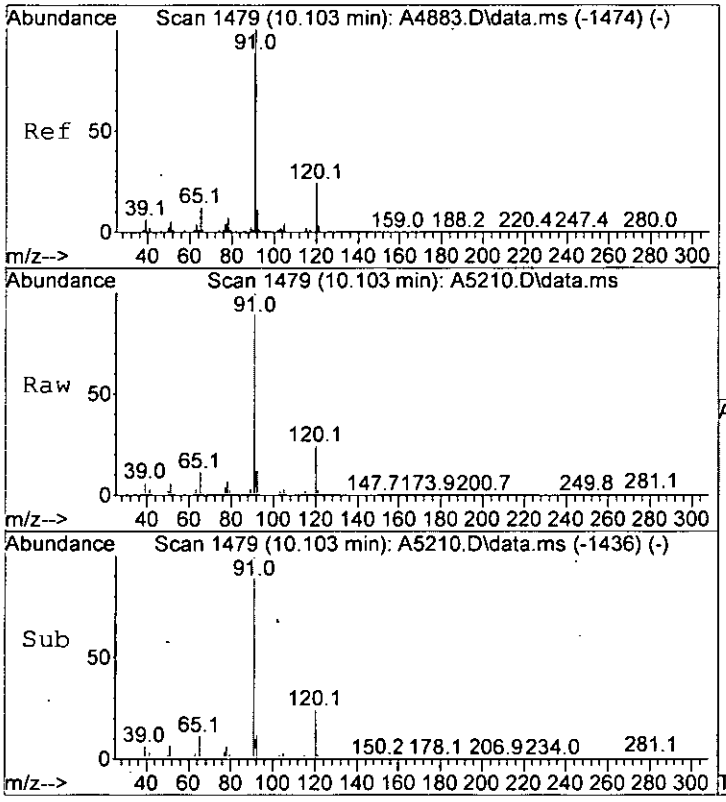


#88
Isopropylbenzene
Concen: 2.68 ug/L
RT: 9.756 min Scan# 1422
Delta R.T. 0.000 min
Lab File: A5210.D
Acq: 30 Dec 2014 10:28 am

Tgt Ion:105 Resp: 98646

Ion	Ratio	Lower	Upper
105	100		
120	27.3	7.6	47.6
106	9.0	0.0	29.1

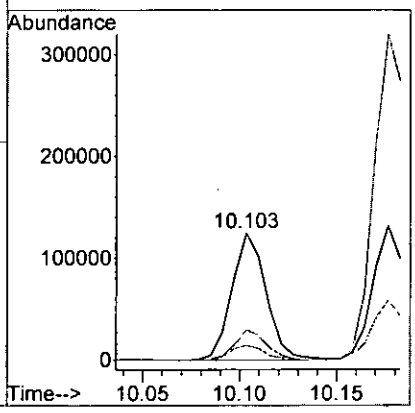


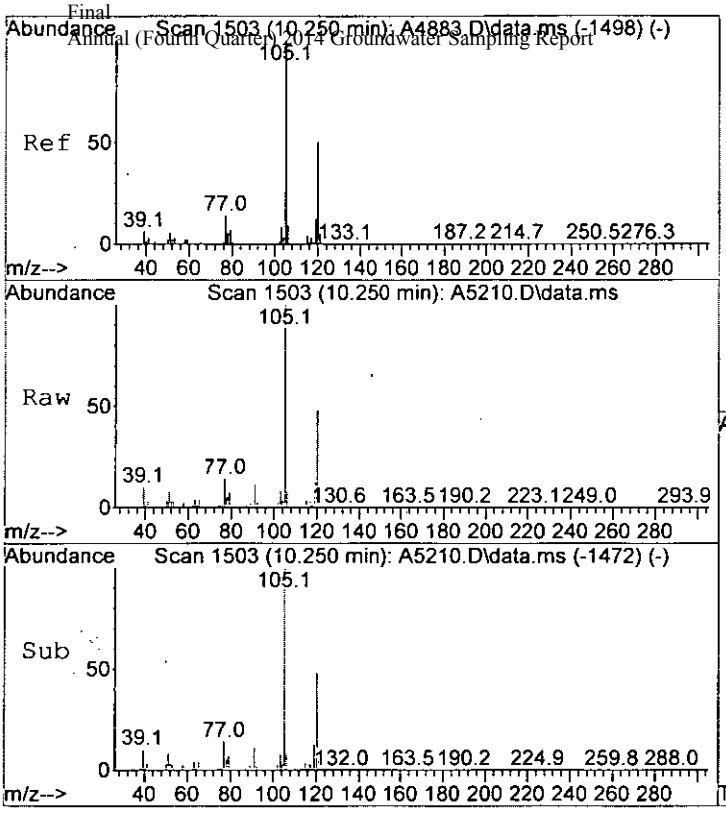


#95
n-Propylbenzene
Concen: 3.51 ug/L
RT: 10.103 min Scan# 1479
Delta R.T. 0.000 min
Lab File: A5210.D
Acq: 30 Dec 2014 10:28 am

Tgt Ion: 91 Resp: 151359

Ion	Ratio	Lower	Upper
91	100		
120	23.6	3.9	43.9
65	11.4	0.0	31.6

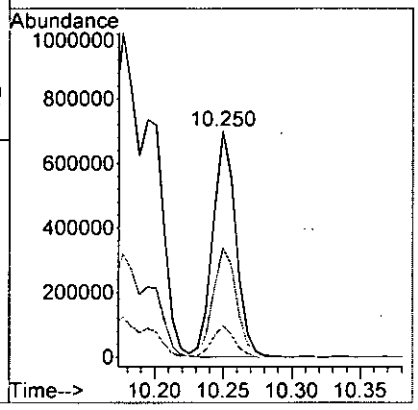


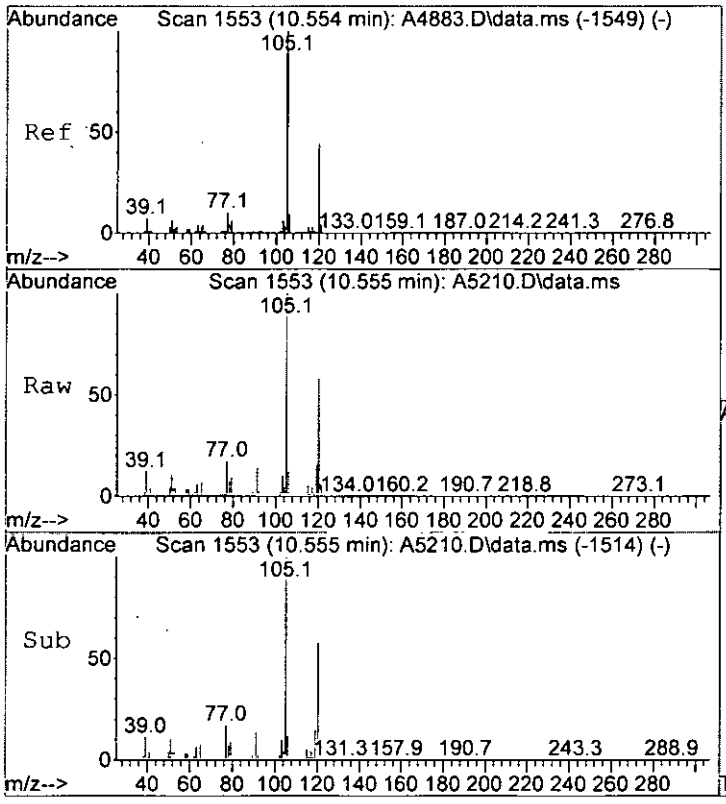


#99
1,3,5-Trimethylbenzene
Concen: 25.27 ug/L
RT: 10.250 min Scan# 1503
Delta R.T. -0.006 min
Lab File: A5210.D
Acq: 30 Dec 2014 10:28 am

Tgt Ion:105 Resp: 806159

Ion	Ratio	Lower	Upper
105	100		
120	48.3	29.9	69.9
77	13.8	0.0	34.1

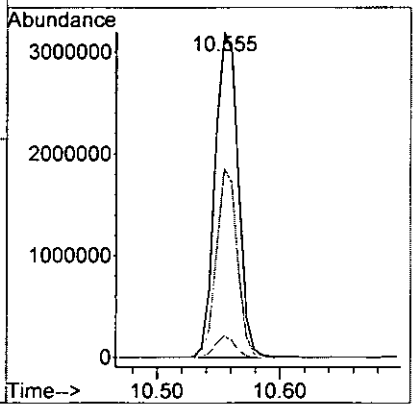


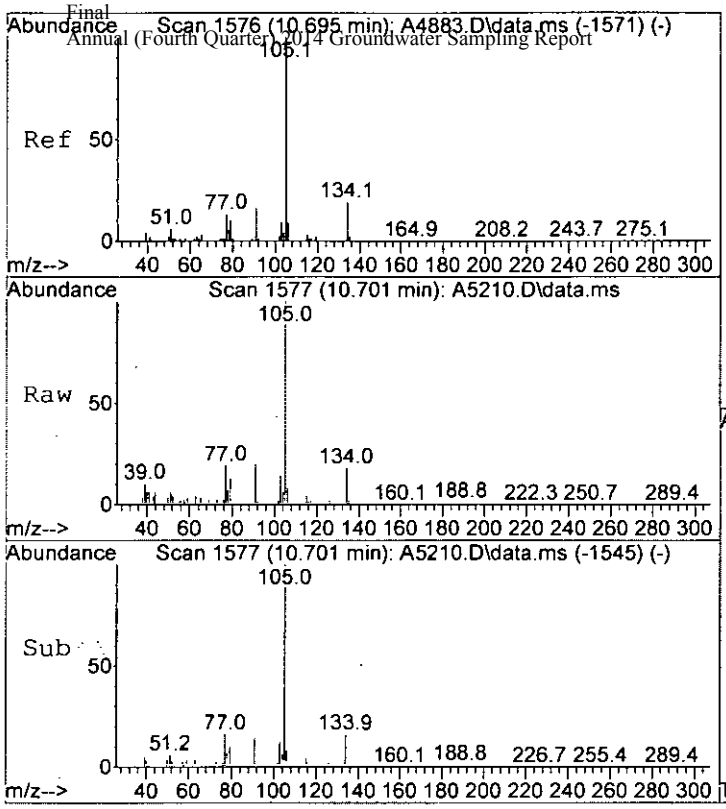


#101
1,2,4-Trimethylbenzene
Concen: 125.84 ug/L
RT: 10.555 min Scan# 1553
Delta R.T. -0.006 min
Lab File: A5210.D
Acq: 30 Dec 2014 10:28 am

Tgt Ion:105 Resp: 4141858

Ion	Ratio	Lower	Upper
105	100		
120	57.9	26.3	66.3
65	6.6	0.0	24.8

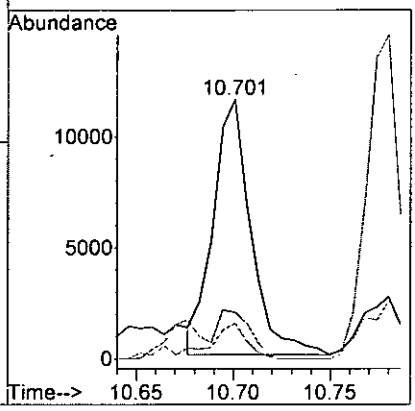


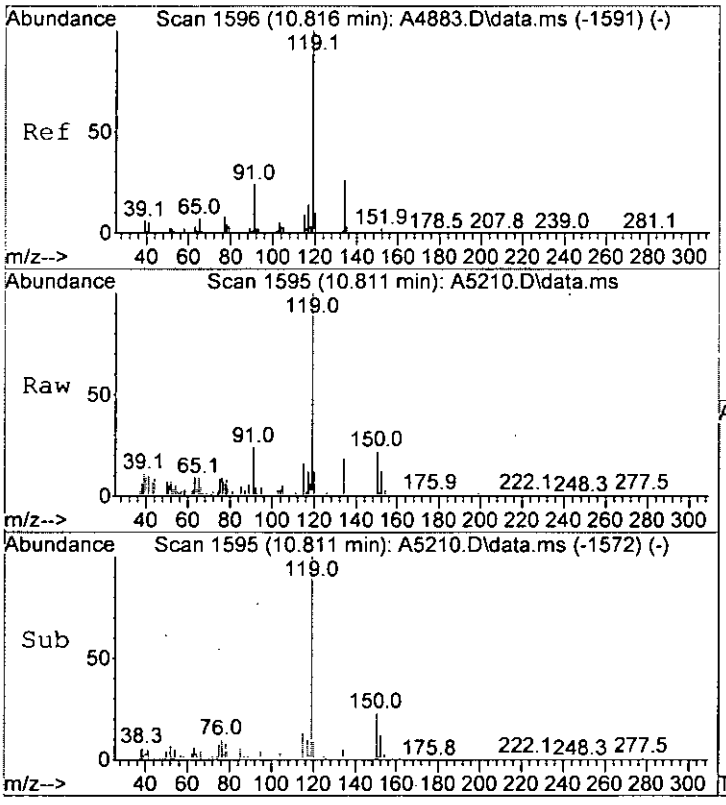


#103
sec-Butylbenzene
Concen: 0.43 ug/L
RT: 10.701 min Scan# 1577
Delta R.T. 0.000 min
Lab File: A5210.D
Acq: 30 Dec 2014 10:28 am

Tgt Ion:105 Resp: 15556

Ion	Ratio	Lower	Upper
105	100		
134	17.9	0.0	39.1
103	13.6	0.0	28.6

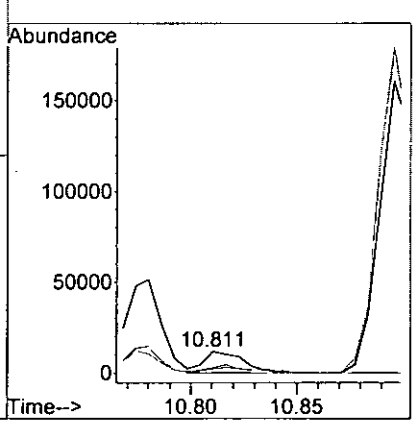


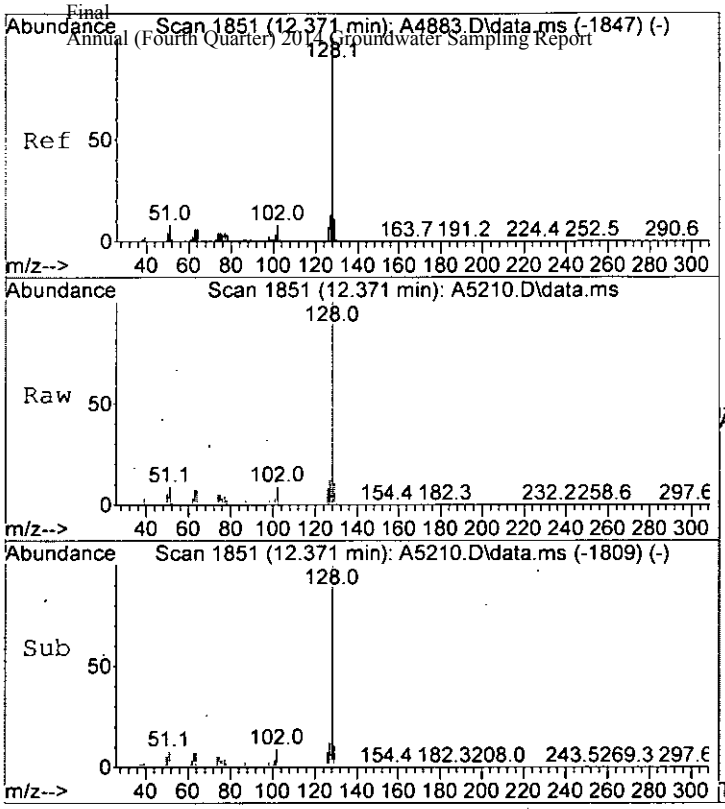


#104
p-Isopropyltoluene
Concen: 0.47 ug/L
RT: 10.811 min Scan# 1595
Delta R.T. -0.006 min
Lab File: A5210.D
Acq: 30 Dec 2014 10:28 am

Tgt Ion:119 Resp: 15018

Ion	Ratio	Lower	Upper
119	100		
134	18.4	5.9	45.9
91	23.5	4.2	44.2

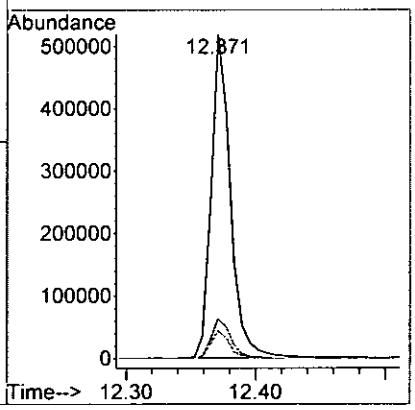




#117
Naphthalen
Concen: 26.76 ug/L
RT: 12.371 min Scan# 1851
Delta R.T. 0.000 min
Lab File: A5210.D
Acq: 30 Dec 2014 10:28 am

Tgt Ion:128 Resp: 535379

Ion	Ratio	Lower	Upper
128	100		
127	12.4	0.0	33.2
102	8.6	0.0	28.4



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5210.D
Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5210.D\data.ms

FW 1/6/15

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.660	89	94	99	rBV	1348733	1373060	10.49%	1.272%
2	1.812	115	119	124	rVB	468495	500810	3.83%	0.464%
3	2.465	216	226	230	rBV	533417	1237609	9.45%	1.147%
4	2.513	230	234	244	rVB	289898	462686	3.53%	0.429%
5	2.672	253	260	269	rVB	432856	777266	5.94%	0.720%
6	2.910	292	299	307	rBV	76745	133421	1.02%	0.124%
7	3.562	397	406	420	rBV	997942	2246666	17.16%	2.082%
8	4.318	515	530	538	rBV	591716	1478925	11.30%	1.370%
9	4.403	538	544	559	rVV	1076483	3165640	24.18%	2.933%
10	4.519	559	563	577	rVB7	49722	173036	1.32%	0.160%
11	4.854	610	618	631	rBV	474604	1235831	9.44%	1.145%
12	5.153	657	667	675	rVV6	50080	211877	1.62%	0.196%
13	5.604	734	741	767	rBV	1467678	3393175	25.92%	3.144%
14	6.214	829	841	850	rBV5	137127	401062	3.06%	0.372%
15	7.427	1035	1040	1048	rBV	3017036	4507187	34.43%	4.176%
16	7.500	1048	1052	1064	rVB	145100	251413	1.92%	0.233%
17	8.841	1267	1272	1281	rBV	3140354	4103348	31.34%	3.802%
18	8.976	1289	1294	1307	rBV	3455212	4252750	32.49%	3.941%
19	9.085	1307	1312	1329	rVB	10069962	12477092	95.31%	11.562%
20	9.433	1364	1369	1386	rVB	8960342	11197905	85.54%	10.376%
21	9.756	1417	1422	1434	rVB	208701	253292	1.93%	0.235%
22	9.878	1438	1442	1452	rVV	2757681	3355428	25.63%	3.109%
23	10.103	1471	1479	1486	rBV	259317	318638	2.43%	0.295%
24	10.177	1486	1491	1493	rVV	2629046	3277287	25.03%	3.037%
25	10.195	1493	1494	1499	rVV	1823893	1827975	13.96%	1.694%
26	10.250	1499	1503	1516	rVB	2052406	2401194	18.34%	2.225%
27	10.414	1525	1530	1540	rBV	3733263	4412275	33.70%	4.089%
28	10.555	1548	1553	1562	rBV	10977410	13091265	100.00%	12.131%
29	10.780	1585	1590	1593	rBV	144911	186424	1.42%	0.173%
30	10.835	1593	1599	1604	rVV	3910308	4558984	34.82%	4.224%
31	10.896	1604	1609	1616	rVB	4813934	5558094	42.46%	5.150%
32	11.054	1630	1635	1643	rBV	3868426	4747444	36.26%	4.399%
33	11.128	1643	1647	1657	rVB2	500704	659940	5.04%	0.612%
34	11.225	1657	1663	1667	rBV3	156546	258718	1.98%	0.240%
35	11.268	1667	1670	1675	rVB	222113	251923	1.92%	0.233%

W121514.M Tue Jan 06 15:13:05 2015 MSVO10 Page: 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5210.D
Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

36	11.329	1676	1680	1682	rBV	495094	556726	4.25%	0.516%
37	11.353	1682	1684	1689	rVV	420166	429054	3.28%	0.398%
38	11.408	1689	1693	1696	rVV	1010868	1097022	8.38%	1.017%
39	11.439	1696	1698	1702	rVV	189673	182495	1.39%	0.169%
40	11.487	1702	1706	1713	rVB2	683548	826990	6.32%	0.766%
41	11.621	1723	1728	1731	rBV	275032	303406	2.32%	0.281%
42	11.682	1734	1738	1740	rVV	684437	708190	5.41%	0.656%
43	11.713	1740	1743	1749	rVB	1005233	1031741	7.88%	0.956%
44	11.890	1769	1772	1780	rVB	746493	693662	5.30%	0.643%
45	11.987	1784	1788	1793	rVB2	1765714	1908871	14.58%	1.769%
46	12.097	1803	1806	1812	rVB2	152336	183311	1.40%	0.170%
47	12.280	1830	1836	1842	rVB2	92176	160394	1.23%	0.149%
48	12.371	1847	1851	1858	rBV	1080860	1097294	8.38%	1.017%

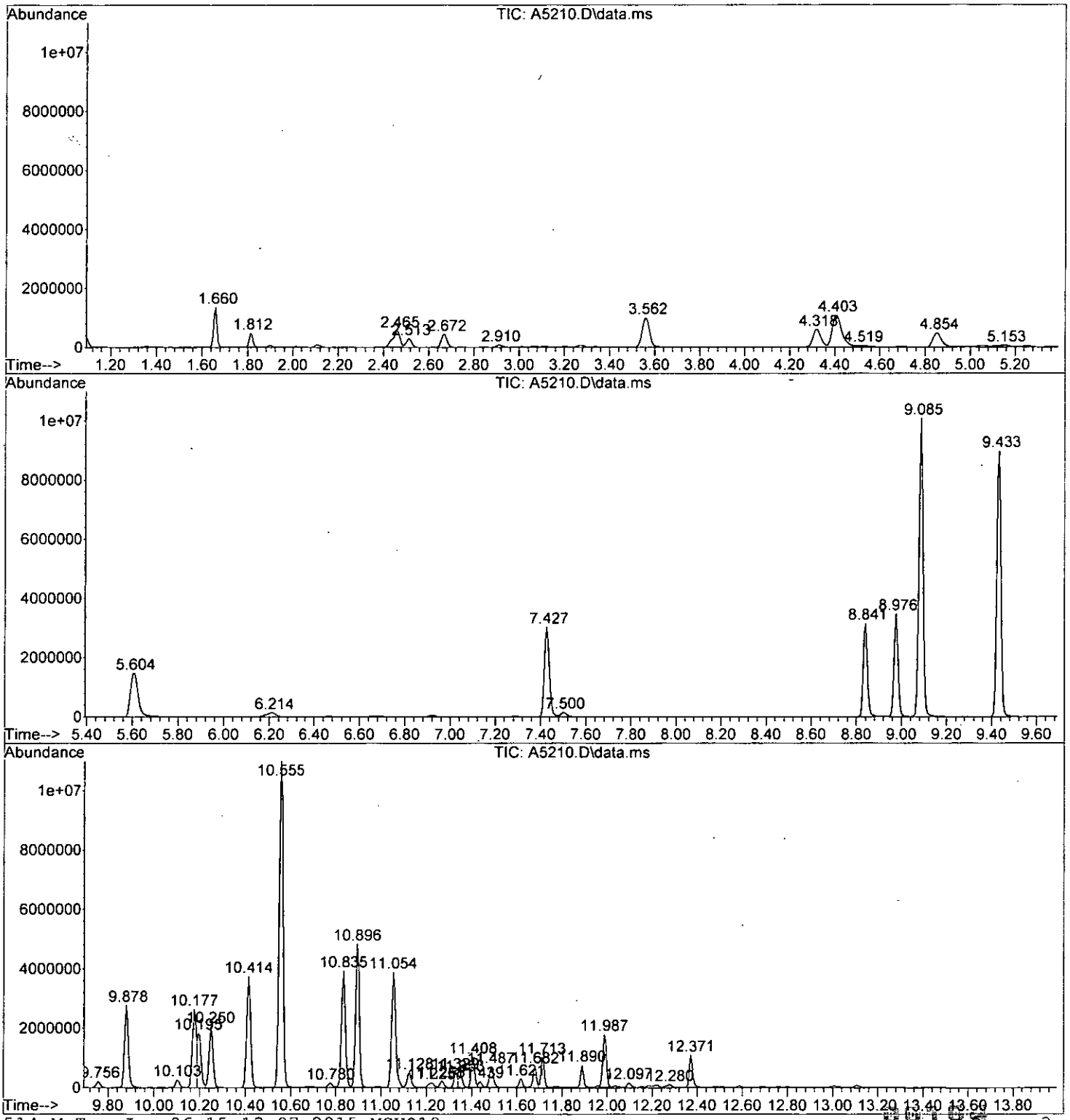
Sum of corrected areas: 107918796

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5210.D
Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W121514.M Tue Jan 06 15:13:07 2015 MSVO10 Page: 3

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
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Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

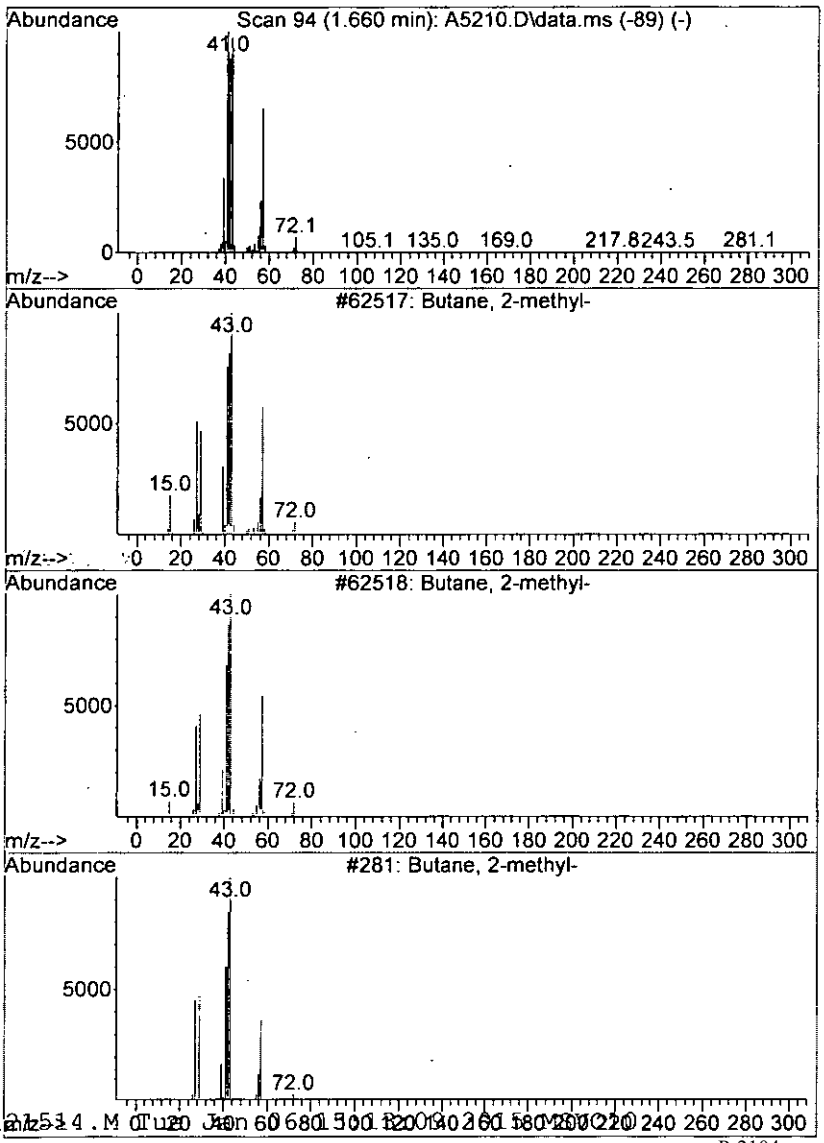
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

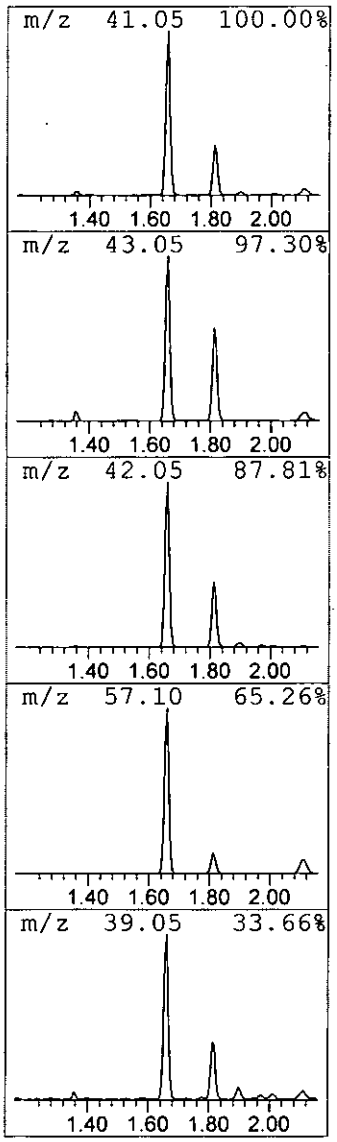
****

Peak Number 1 Butane, 2-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.660	21.69 ug/L	1373060	Pentafluorobenzene	4.403

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2-methyl-	72	C5H12	000078-78-4	86
2	Butane, 2-methyl-	72	C5H12	000078-78-4	86
3	Butane, 2-methyl-	72	C5H12	000078-78-4	80
4	3-Buten-1-ol	72	C4H8O	000627-27-0	47
5	3-Buten-1-ol	72	C4H8O	000627-27-0	9





Library Search Compound Report

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Data File : A5210.D
Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

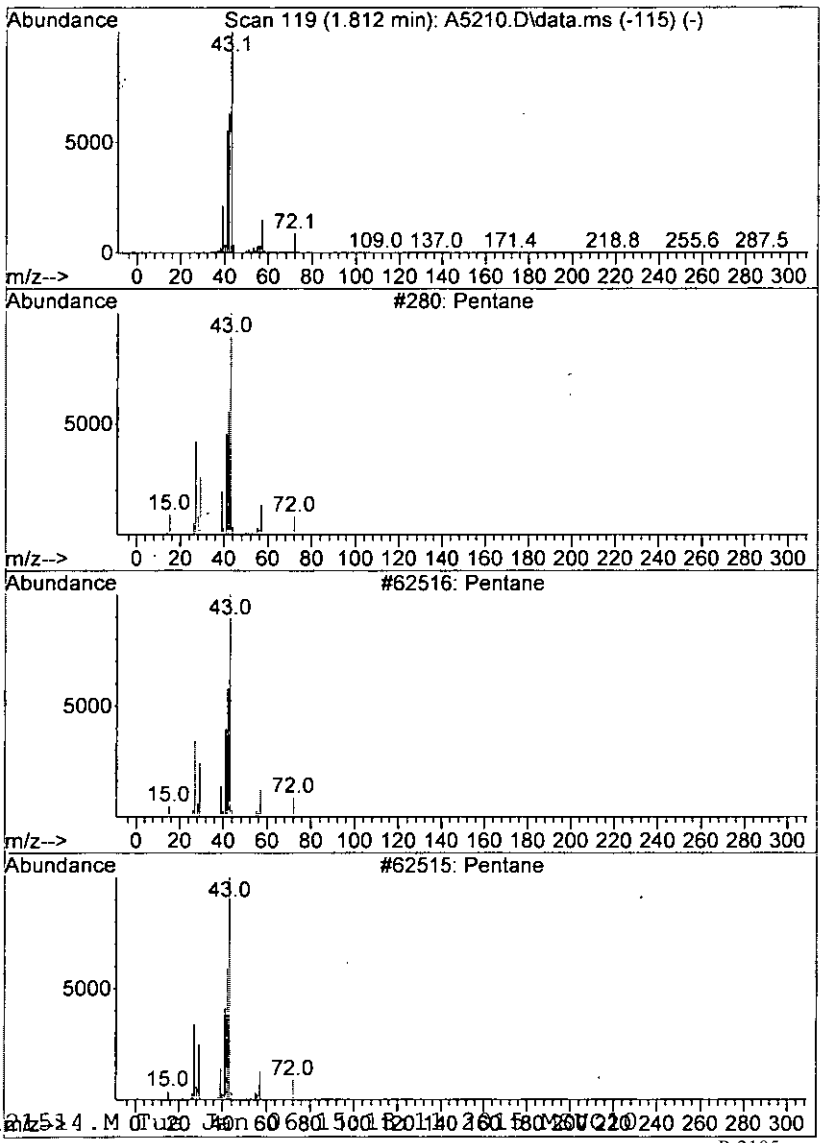
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

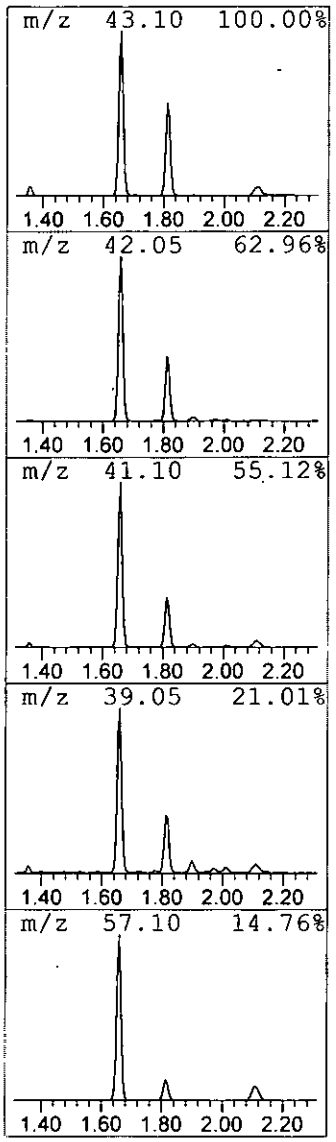
****

Peak Number 2 Pentane Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.812	7.91 ug/L	500810	Pentafluorobenzene	4.403

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	90
2	Pentane	72	C5H12	000109-66-0	86
3	Pentane	72	C5H12	000109-66-0	86
4	Butane, 2-methyl-	72	C5H12	000078-78-4	36
5	Oxirane, ethyl-	72	C4H8O	000106-88-7	32





Library Search Compound Report

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Data File : A5210.D
Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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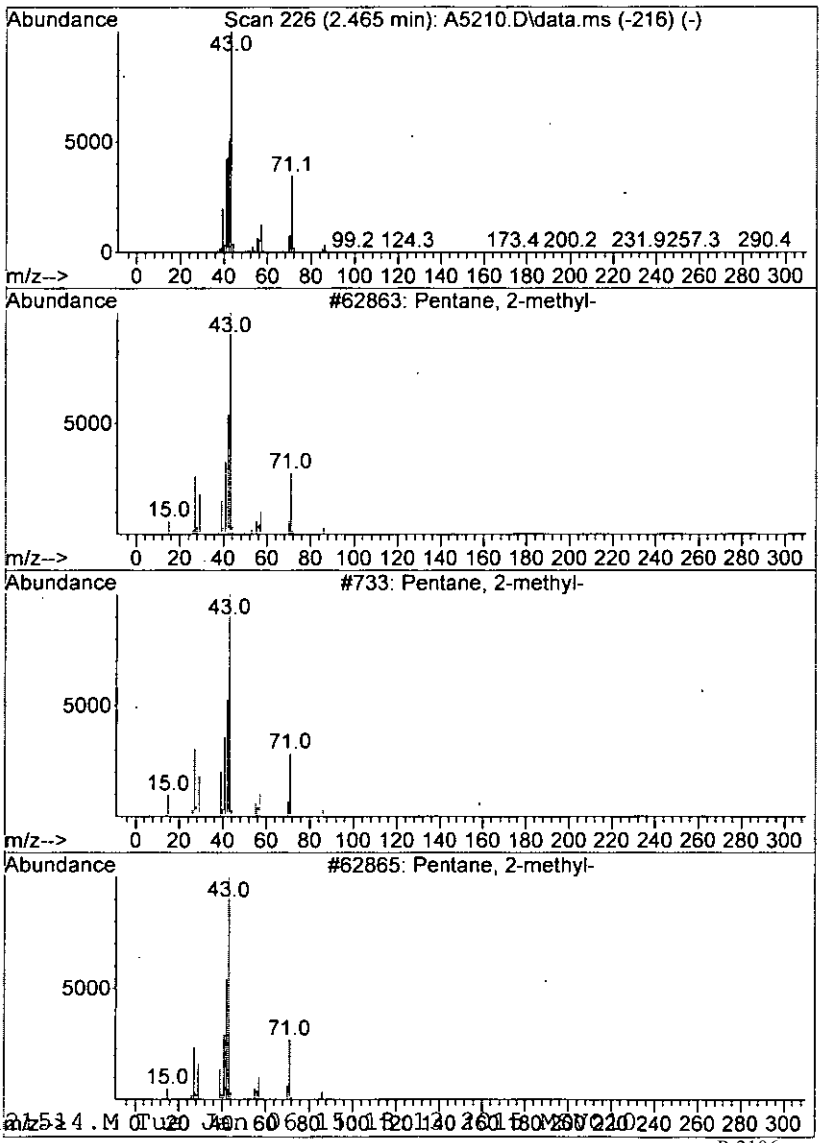
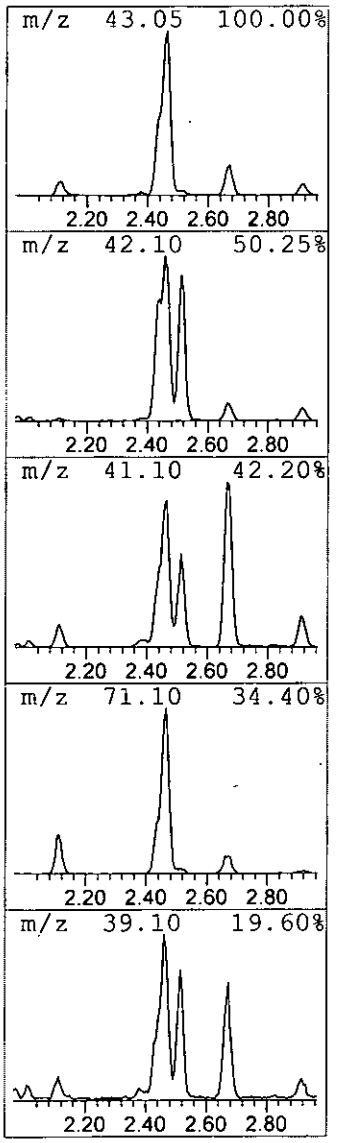
Peak Number 3 Pentane, 2-methyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.465	19.55 ug/L	1237610	Pentafluorobenzene	4.403

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
3	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
4	Pentane, 2-methyl-	86	C6H14	000107-83-5	83
5	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	53





Library Search Compound Report

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Acq On    : 30 Dec 2014  10:28 am
Operator  : F.Naegler
Sample    : R1410303-002|2.5
Misc      : PARSONS 11603 T4
ALS Vial  : 45   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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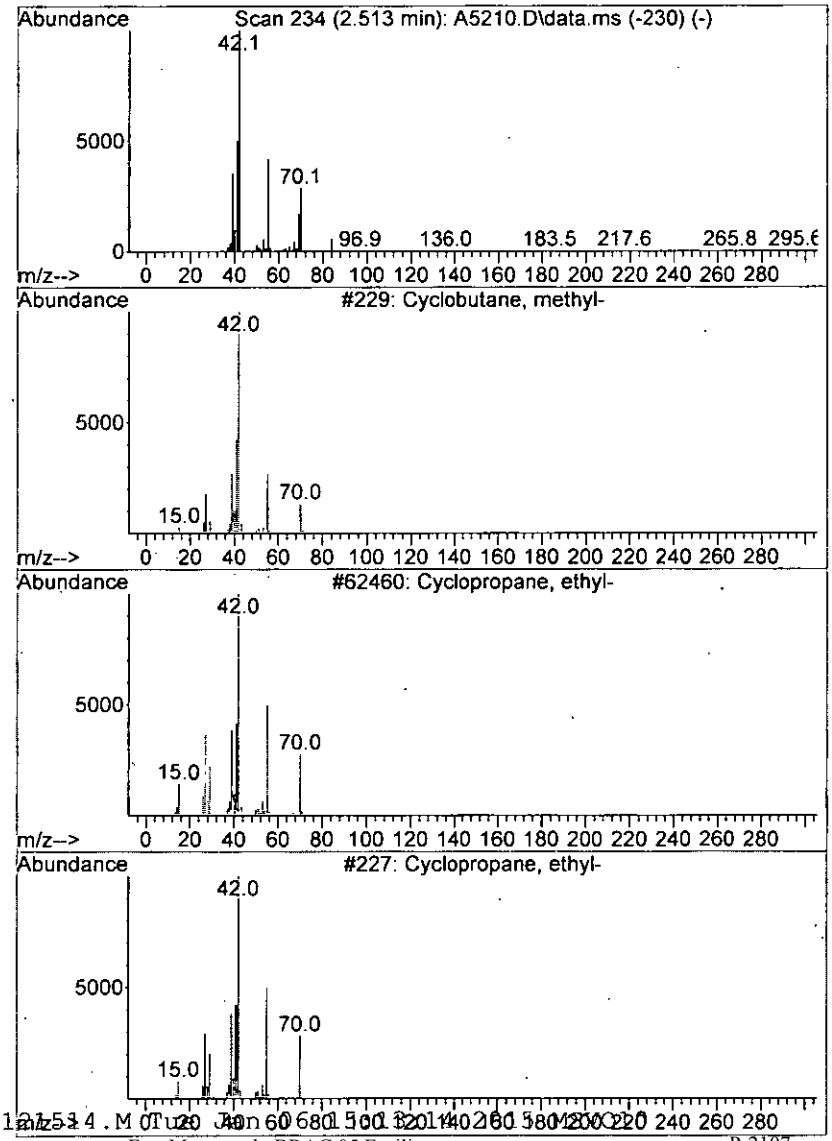
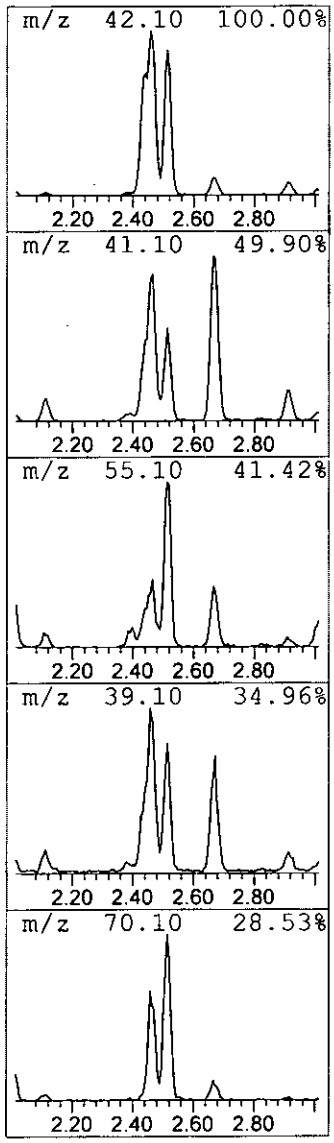
Peak Number 4 Cyclobutane, methyl- Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.513	7.31 ug/L	462686	Pentafluorobenzene	4.403

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
* 1	Cyclobutane, methyl-	70	C5H10	000598-61-8	80
2	Cyclopropane, ethyl-	70	C5H10	001191-96-4	64
UNK 3	Cyclopropane, ethyl-	70	C5H10	001191-96-4	64
4	1-Pentene	70	C5H10	000109-67-1	50
5	1-Pentene	70	C5H10	000109-67-1	43





W121514.M Tue Jan 06 10:32:14 2015 Page: 7

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5210.D
Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

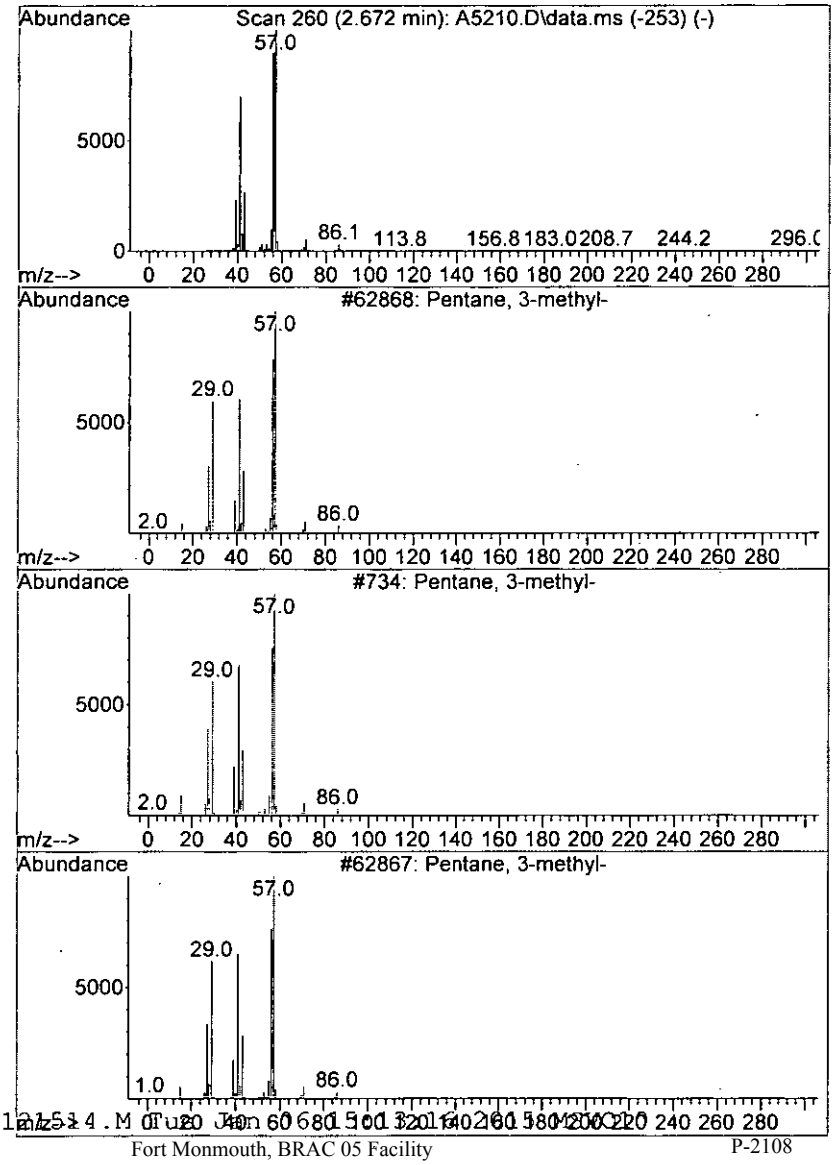
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

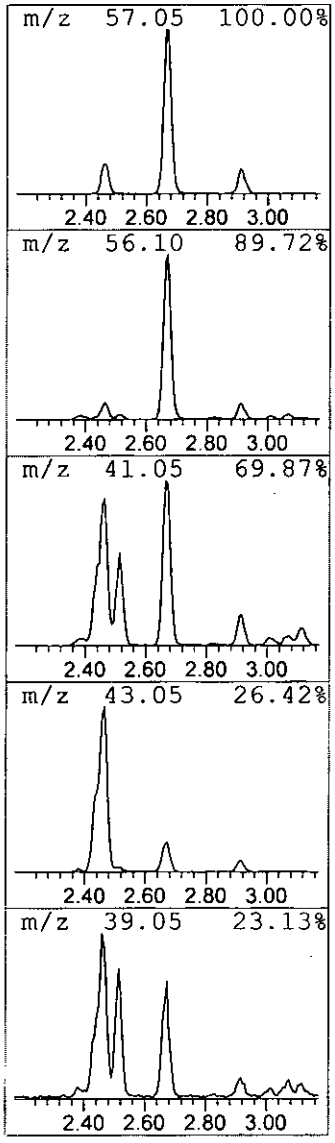
****

Peak Number 5 Pentane, 3-methyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.672	12.28 ug/L	777266	Pentafluorobenzene	4.403

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	91
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	90
3	Pentane, 3-methyl-	86	C6H14	000096-14-0	90
4	Hexane, 2,2,3-trimethyl-	128	C9H20	016747-25-4	56
5	Pentane, 3-ethyl-2,2-dimethyl-	128	C9H20	016747-32-3	40





Library Search Compound Report

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Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

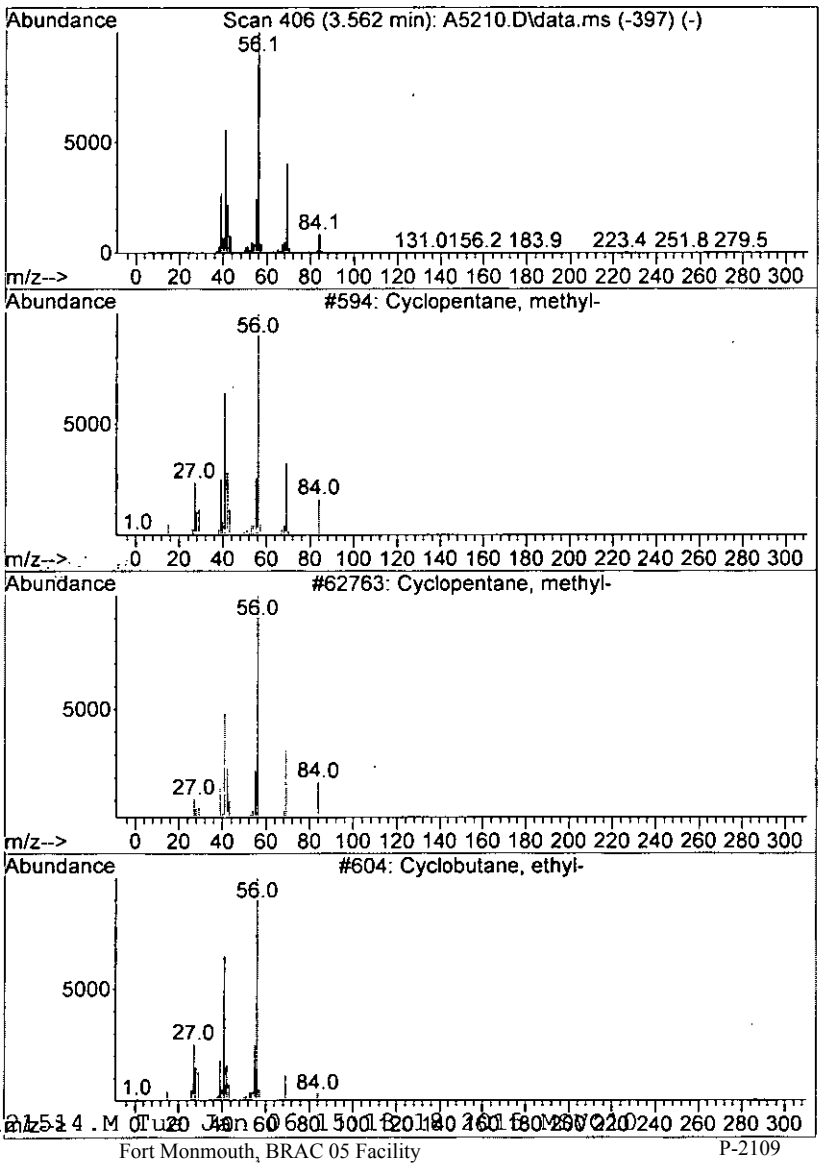
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

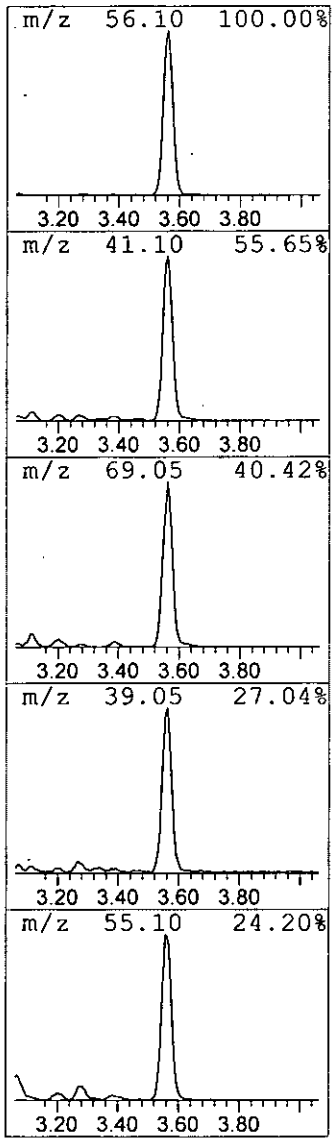
****

Peak Number 6 Cyclopentane, methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.562	35.49 ug/L	2246670	Pentafluorobenzene	4.403

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, methyl-	84	C6H12	000096-37-7	91
2	Cyclopentane, methyl-	84	C6H12	000096-37-7	78
3	Cyclobutane, ethyl-	84	C6H12	004806-61-5	72
4	Cyclopropane, (1-methylethyl)-	84	C6H12	003638-35-5	64
5	Cyclohexane	84	C6H12	000110-82-7	47





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Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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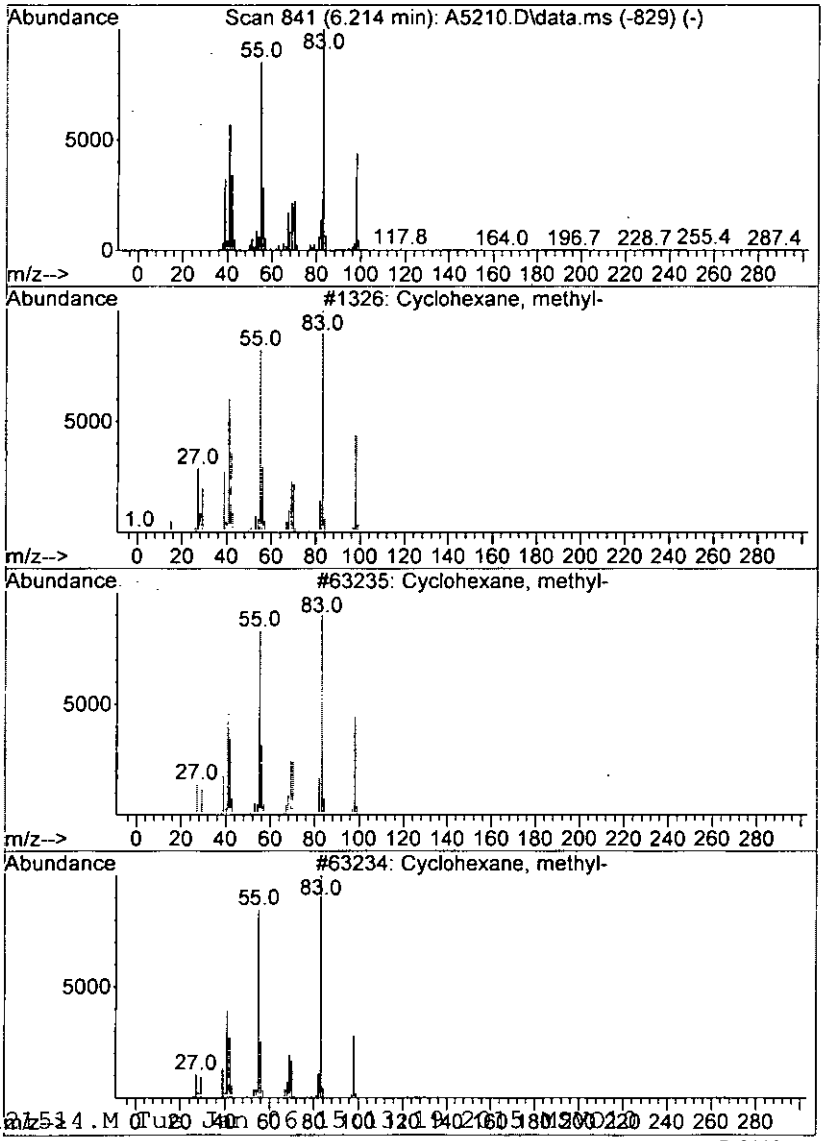
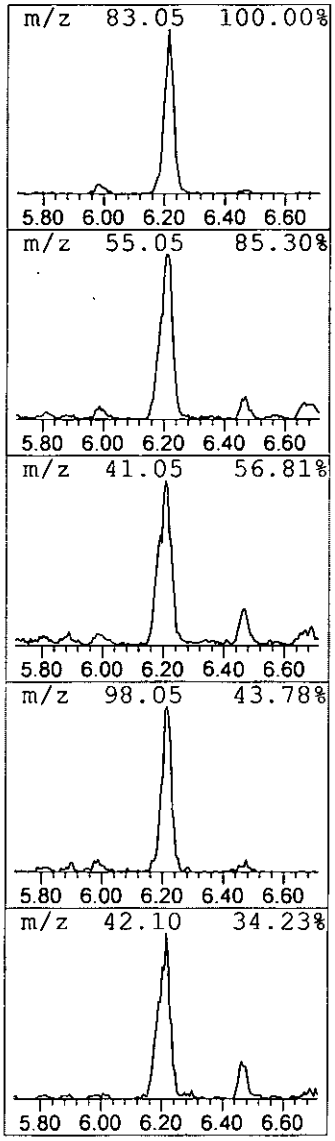
Peak Number 7 Cyclohexane, methyl- Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.214	5.91 ug/L	401062	1,4-Difluorobenzene	5.610

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, methyl-	98	C7H14	000108-87-2	97
2	Cyclohexane, methyl-	98	C7H14	000108-87-2	97
3	Cyclohexane, methyl-	98	C7H14	000108-87-2	94
4	Cyclohexane, methyl-	98	C7H14	000108-87-2	90
5	2-Pentene, 3,4-dimethyl-, (Z)-	98	C7H14	004914-91-4	64





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Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

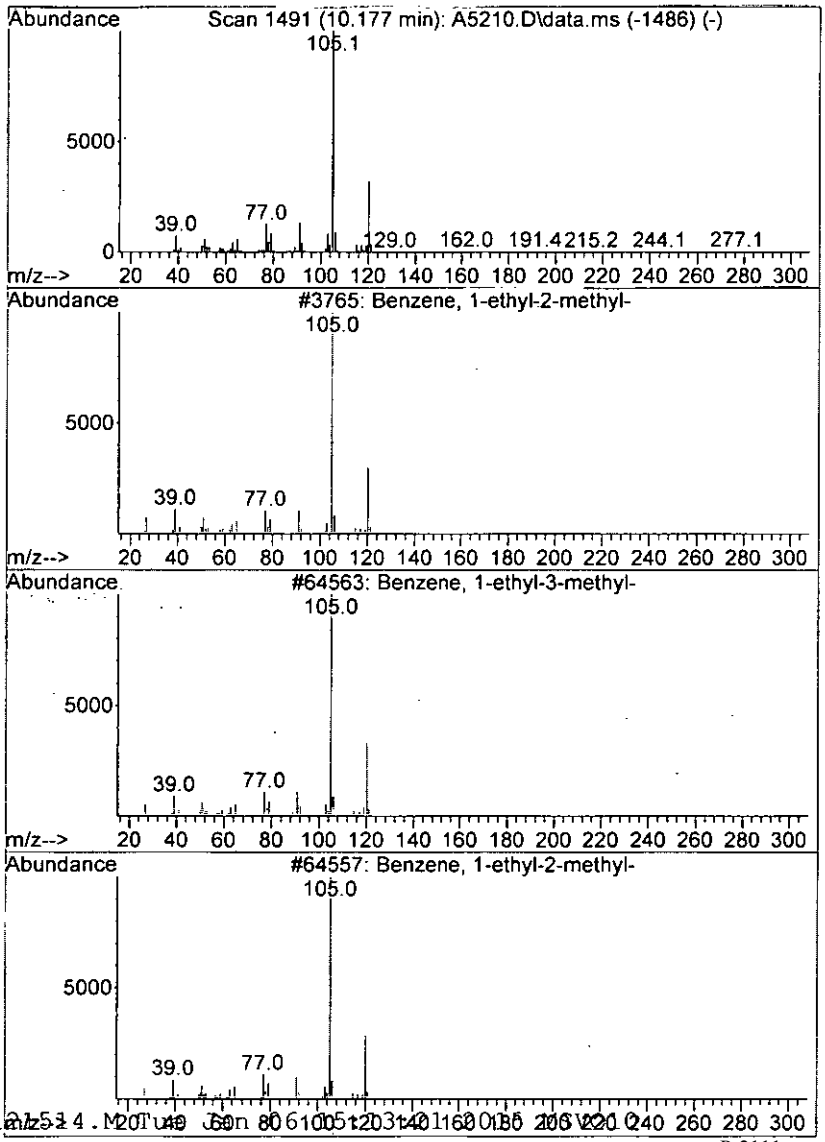
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

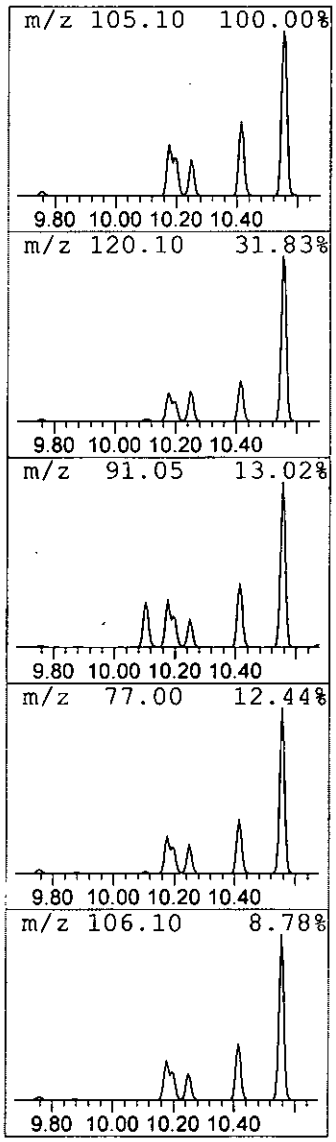
****

Peak Number 8 Benzene, 1-ethyl-2-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.177	35.94 ug/L	3277290	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	95
3	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
4	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
5	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	94





Library Search Compound Report

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Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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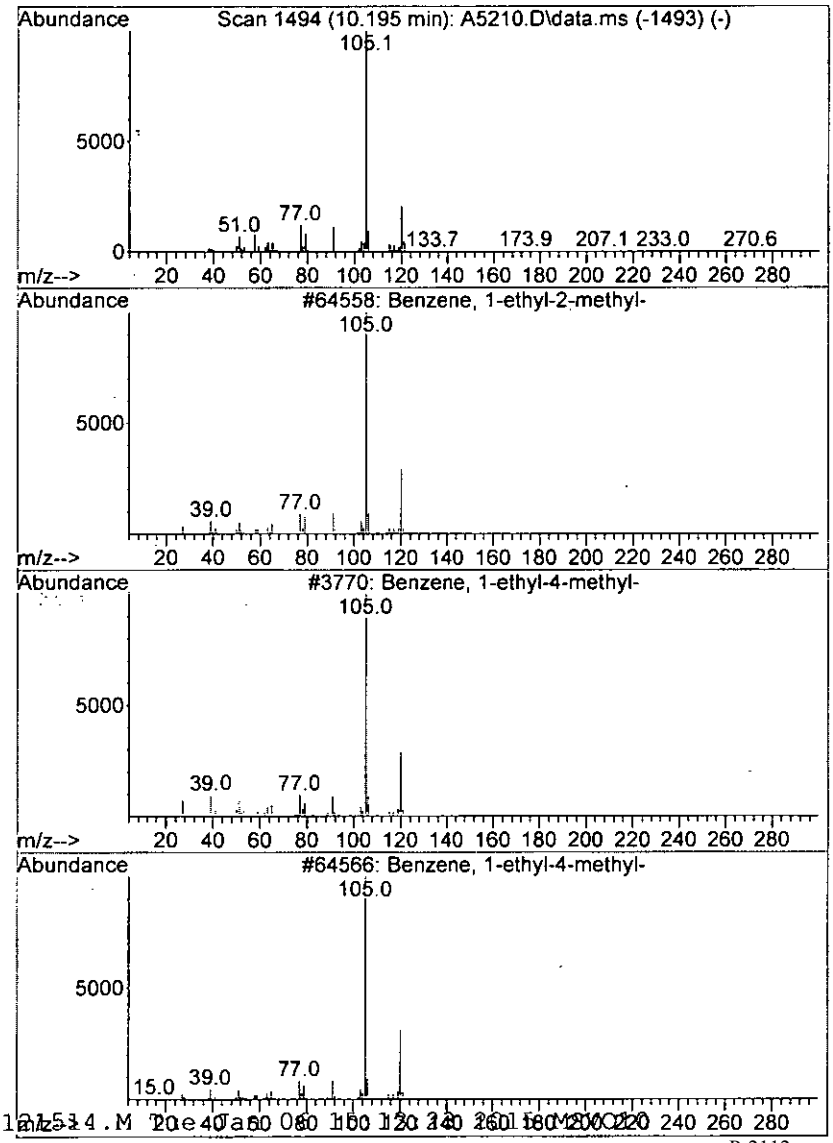
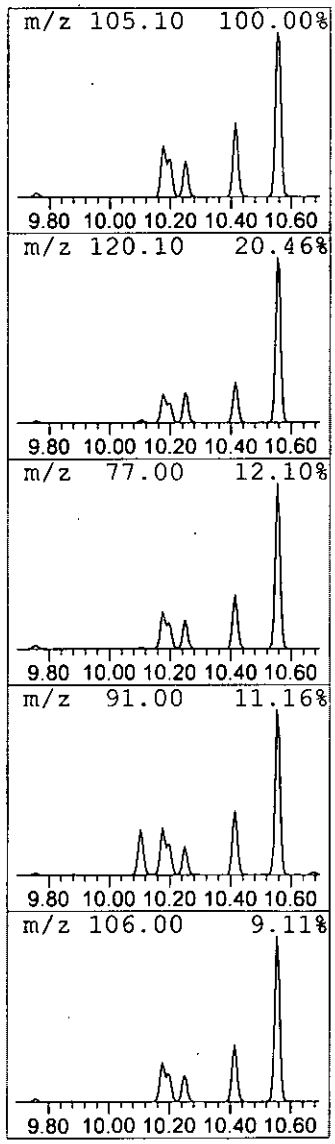
Peak Number 9 Benzene, 1-ethyl-2-methyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.195	20.05 ug/L	1827980	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	91
2	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	91
3	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	91
4	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	90
5	Benzene, 1,2,4-trimethyl-	120	C9H12	000095-63-6	90





Library Search Compound Report

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Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

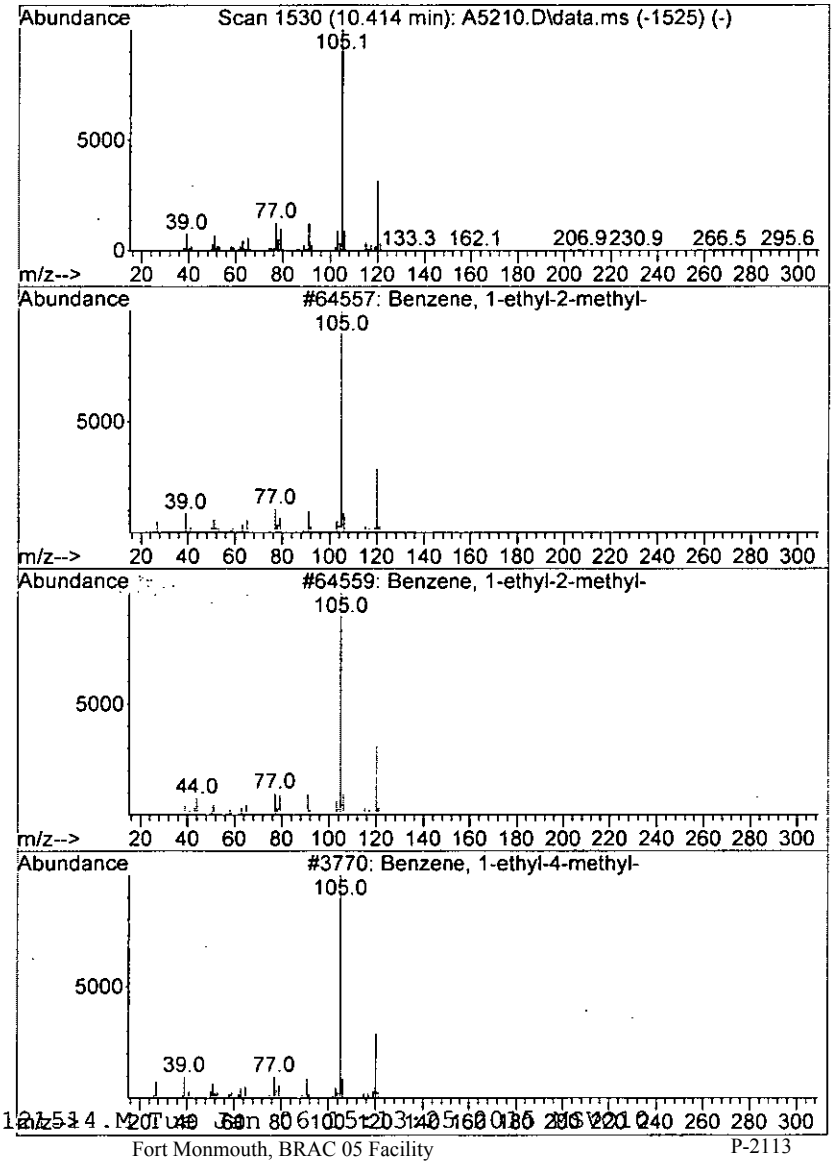
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

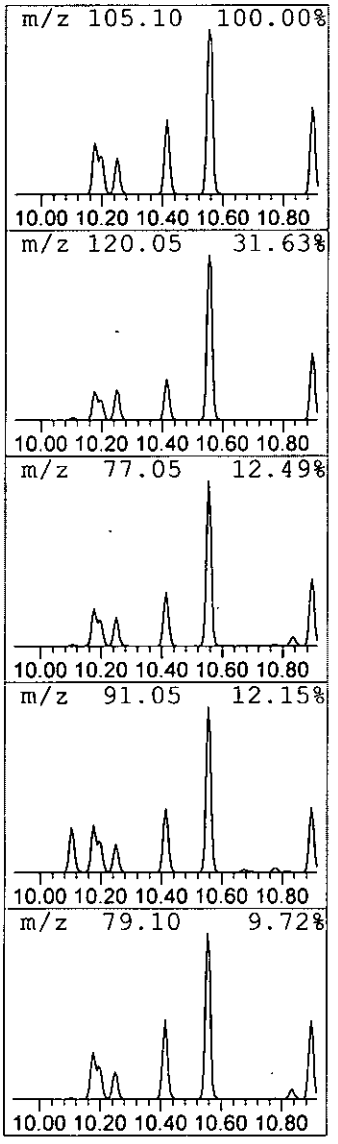
****

Peak Number 10 Benzene, 1-ethyl-2-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.414	48.39 ug/L	4412280	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
2	Benzene, 1-ethyl-2-methyl-	120	C9H12	000611-14-3	95
3	Benzene, 1-ethyl-4-methyl-	120	C9H12	000622-96-8	94
4	1,2,4-Trimethylbenzene	120	C9H12	000095-36-3	94
5	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	91





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Data File : A5210.D
Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

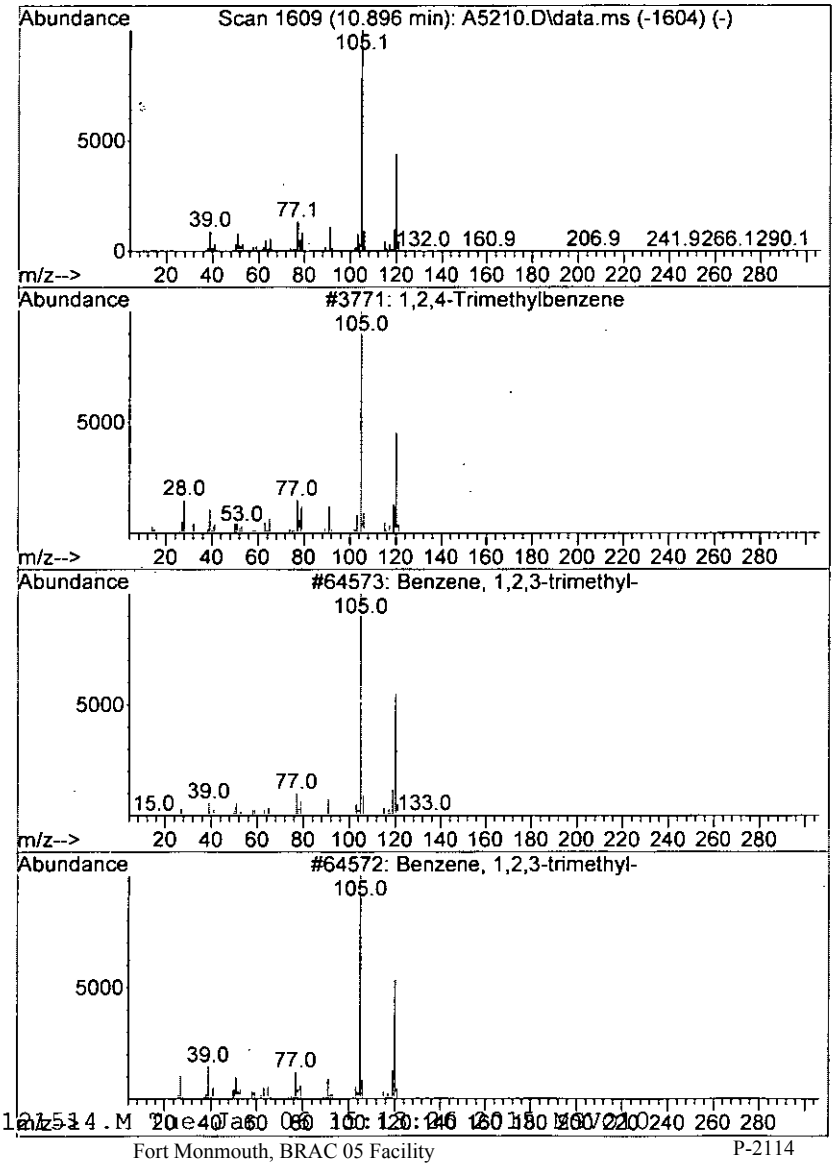
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

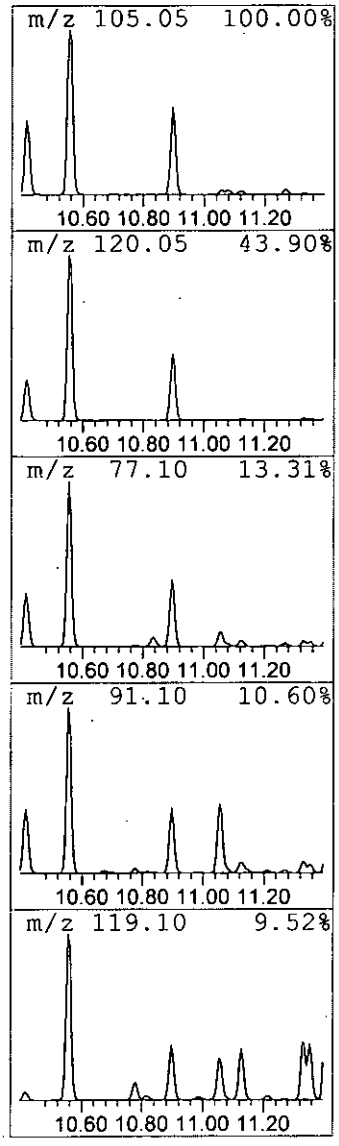
****

Peak Number 11 1,2,4-Trimethylbenzene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.896	60.96 ug/L	5558090	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,2,4-Trimethylbenzene	120	C9H12	000095-36-3	97
2	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95
3	Benzene, 1,2,3-trimethyl-	120	C9H12	000526-73-8	95
4	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	94
5	Benzene, 1-ethyl-3-methyl-	120	C9H12	000620-14-4	94





Library Search Compound Report

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Data File : A5210.D
Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

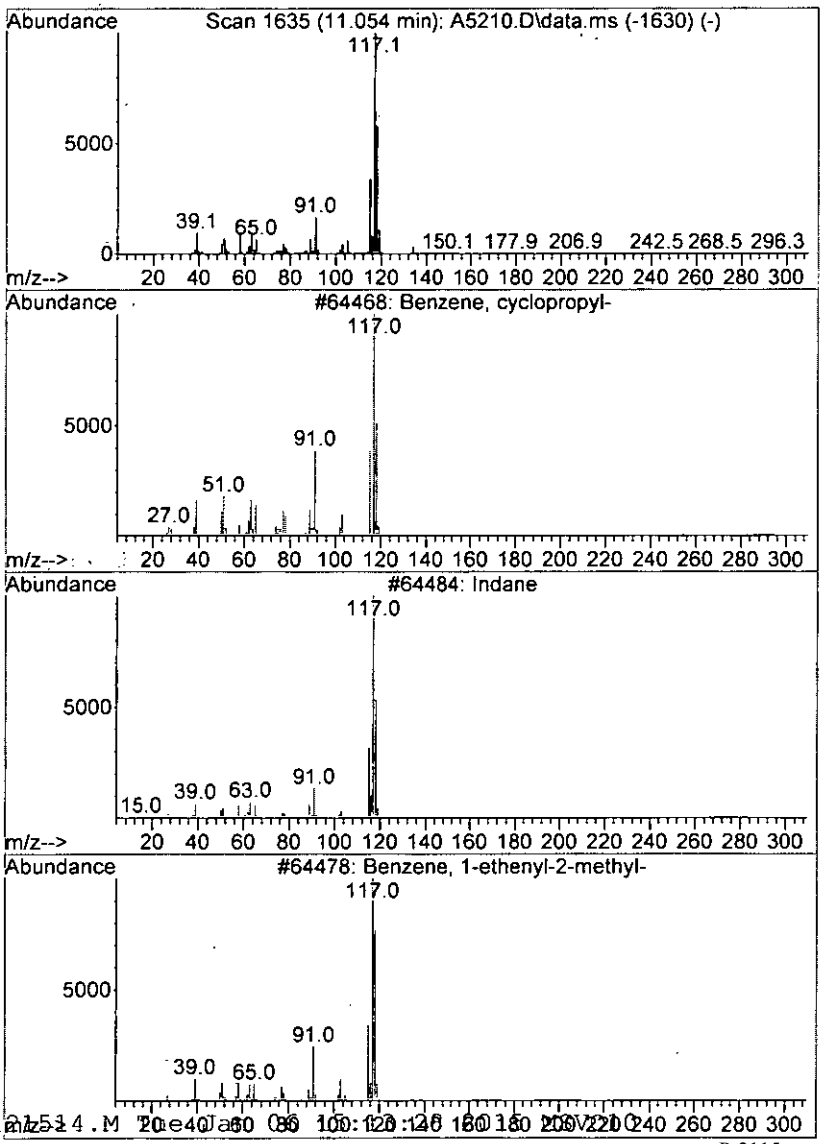
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

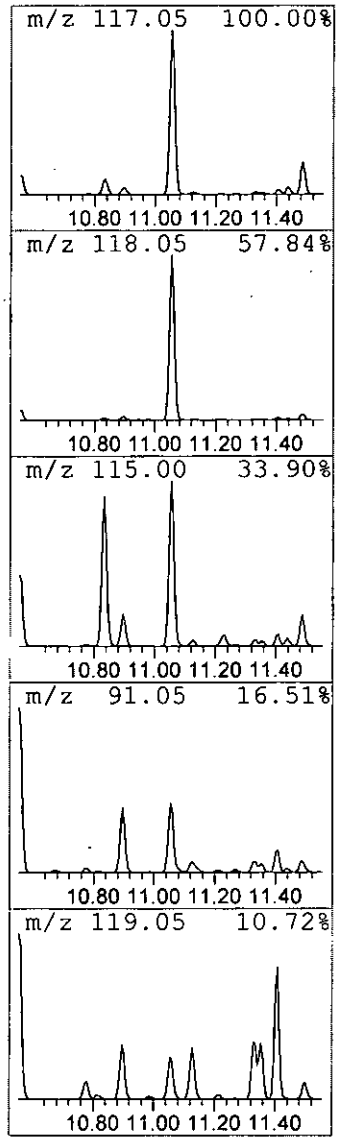
****

Peak Number 12 Benzene, cyclopropyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.055	52.07 ug/L	4747440	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
* 1	Benzene, cyclopropyl-	118	C9H10	000873-49-4	81
2	Indane	118	C9H10	000496-11-7	81
3	Benzene, 1-ethenyl-2-methyl-	118	C9H10	000611-15-4	74
4	Benzene, 2-propenyl-	118	C9H10	000300-57-2	72
5	Benzene, 1-propenyl-	118	C9H10	000637-50-3	64





Library Search Compound Report

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Data File : A5210.D
Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

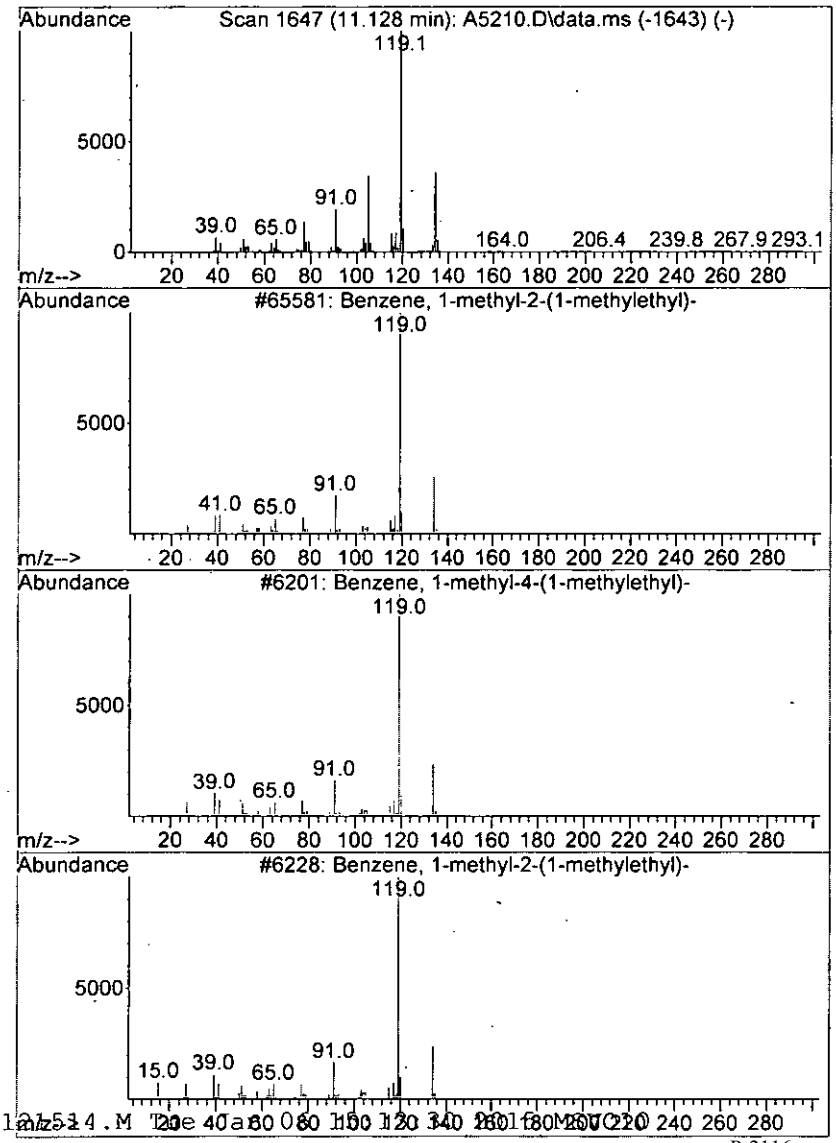
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

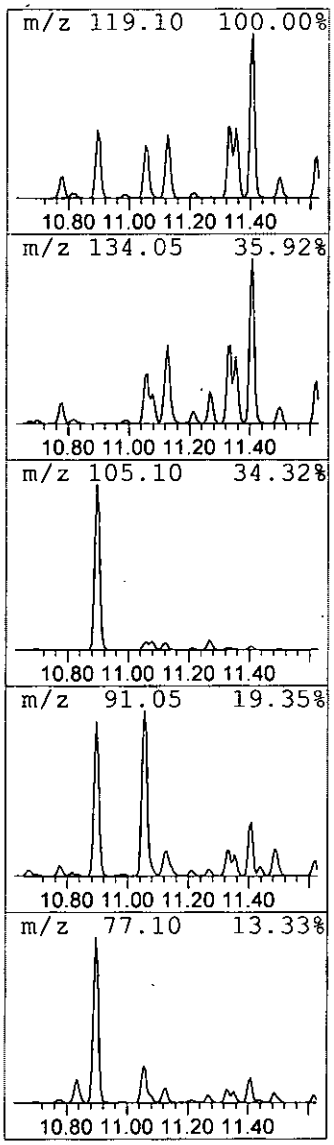
****

Peak Number 13 Benzene, 1-methyl-2-(1-meth... Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.128	7.24 ug/L	659940	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
2	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	95
3	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
4	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	94
5	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	94





W121514.M Tue Jan 06 08:15:10 2015 M2007220

Library Search Compound Report

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Data File : A5210.D
Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

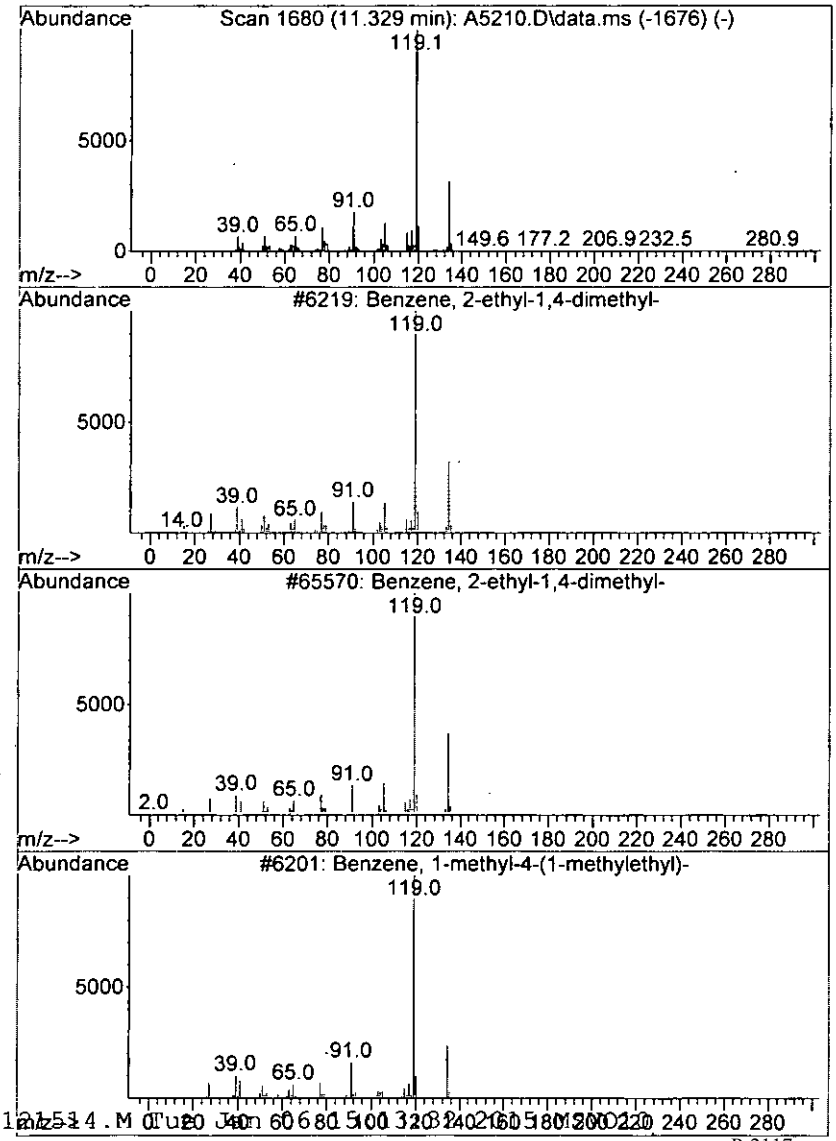
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

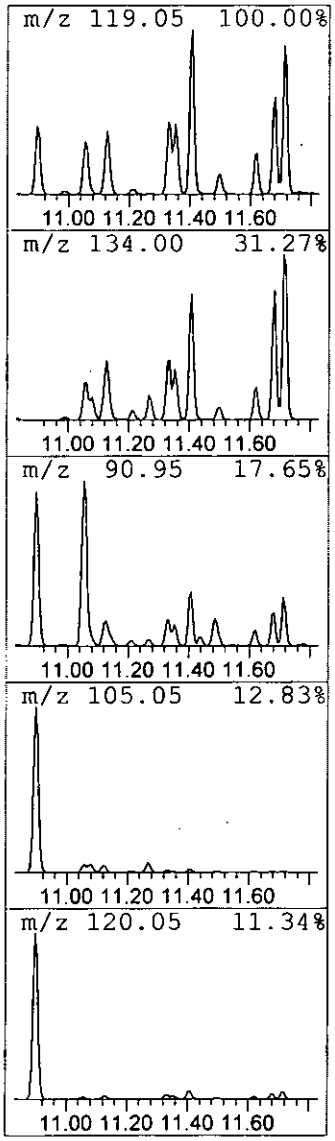
****

Peak Number 14 Benzene, 2-ethyl-1,4-dimethyl- Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.329	6.11 ug/L	556726	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	97
2	Benzene, 2-ethyl-1,4-dimethyl-	134	C10H14	001758-88-9	95
3	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	95
4	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
5	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5210.D
Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

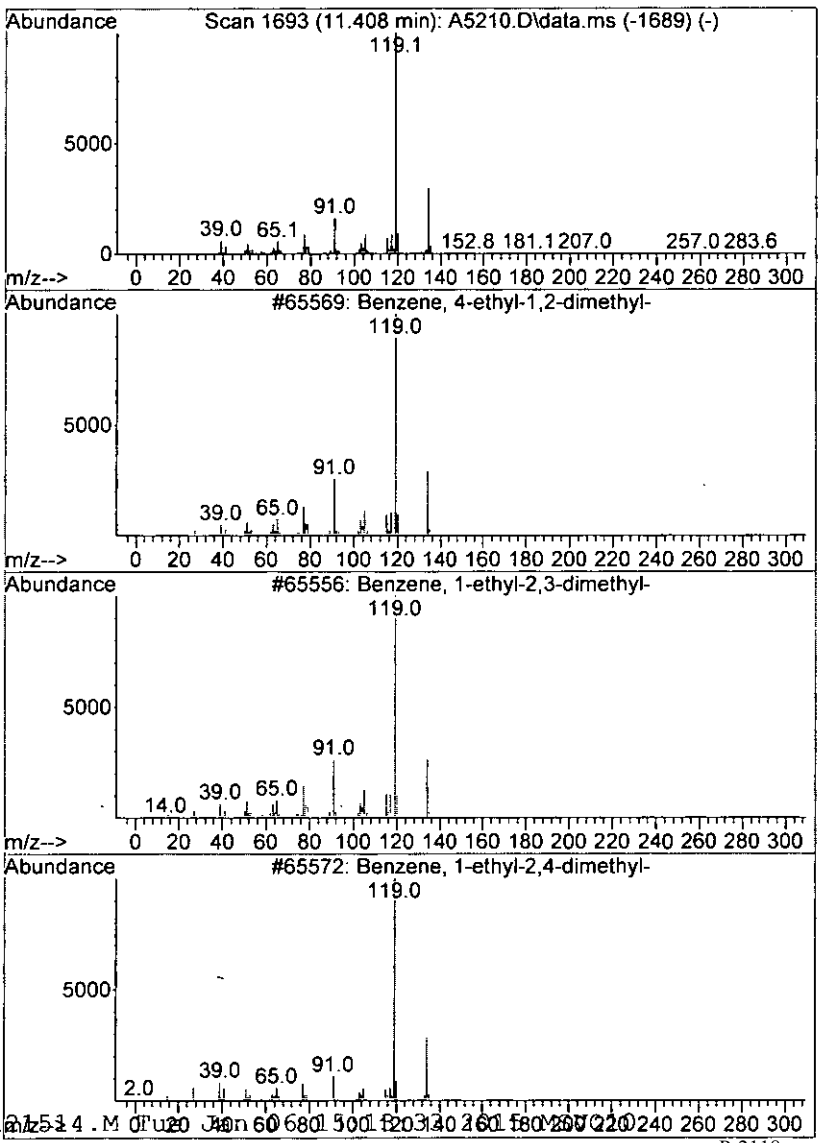
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

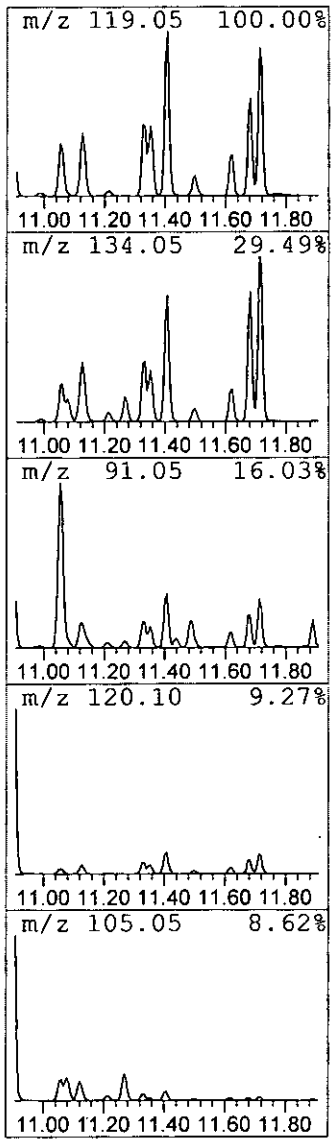
****

Peak Number 15 Benzene, 4-ethyl-1,2-dimethyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.408	12.03 ug/L	1097020	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	95
2	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	95
3	Benzene, 1-ethyl-2,4-dimethyl-	134	C10H14	000874-41-9	94
4	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14	002870-04-4	94
5	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	94





Library Search Compound Report

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Data File : A5210.D
Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

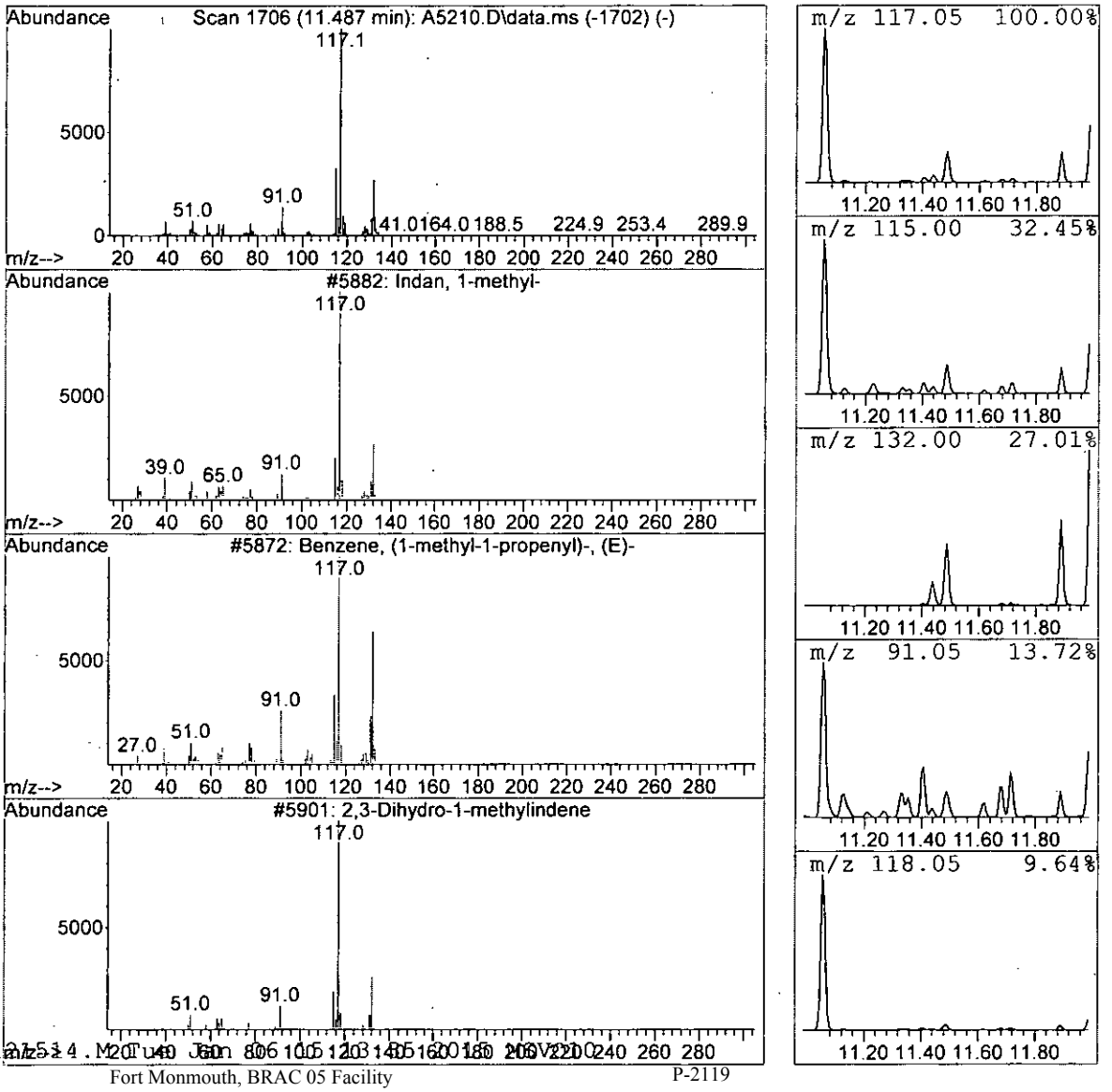
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****

Peak Number 16 Indan, 1-methyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.487	9.07 ug/L	826990	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indan, 1-methyl-	132	C10H12	000767-58-8	90
2	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	87
3	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	87
4	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	83
5	Benzene, 1-methyl-2-(2-propenyl)-	132	C10H12	001587-04-8	83



Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5210.D
Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

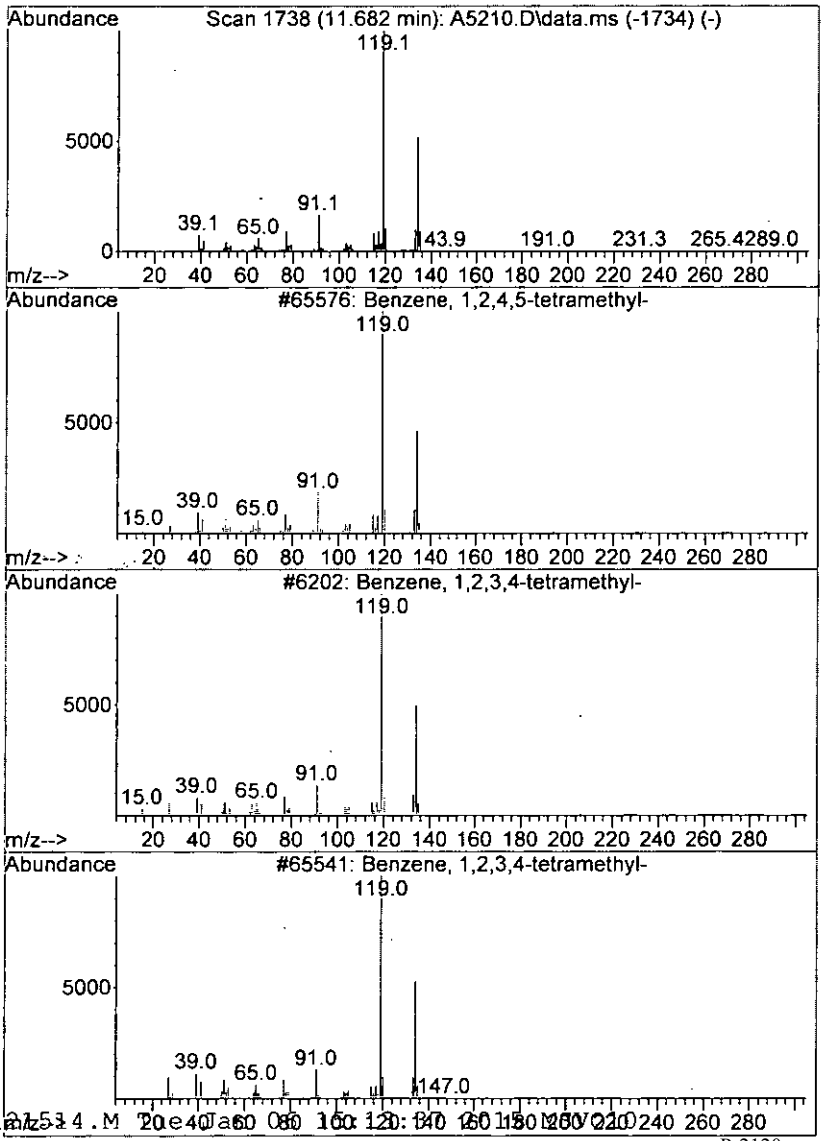
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

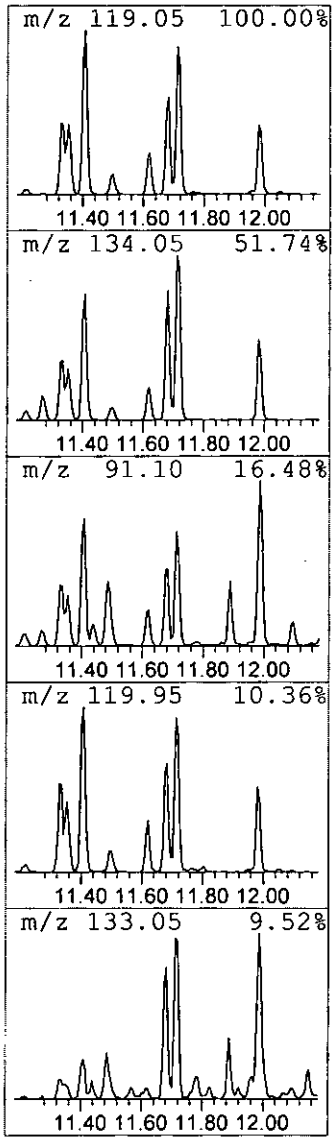
****

Peak Number 17 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.682	7.77 ug/L	708190	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	97
2	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
3	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
4	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
5	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	95





W121514.M 20 Dec 2014 10:28 am

Library Search Compound Report

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Data File : A5210.D
Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

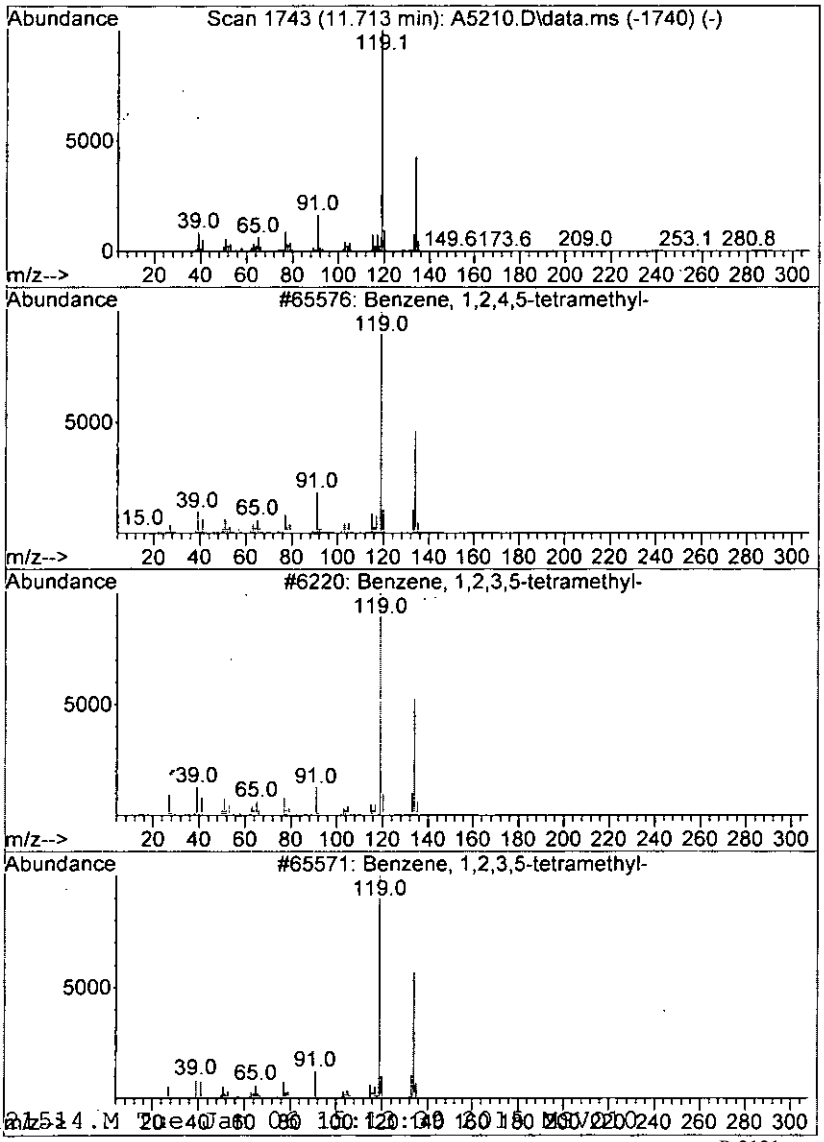
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

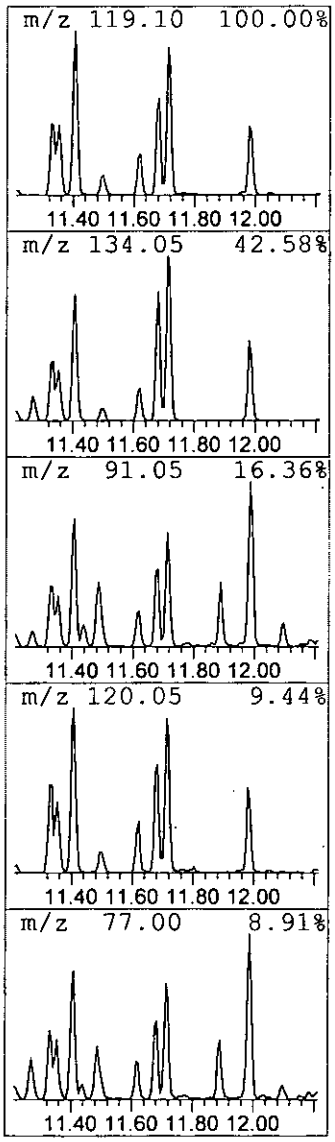
****

Peak Number 18 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.713	11.32 ug/L	1031740	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	97
2	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	97
3	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	95
4	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
5	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	95





Library Search Compound Report

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Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

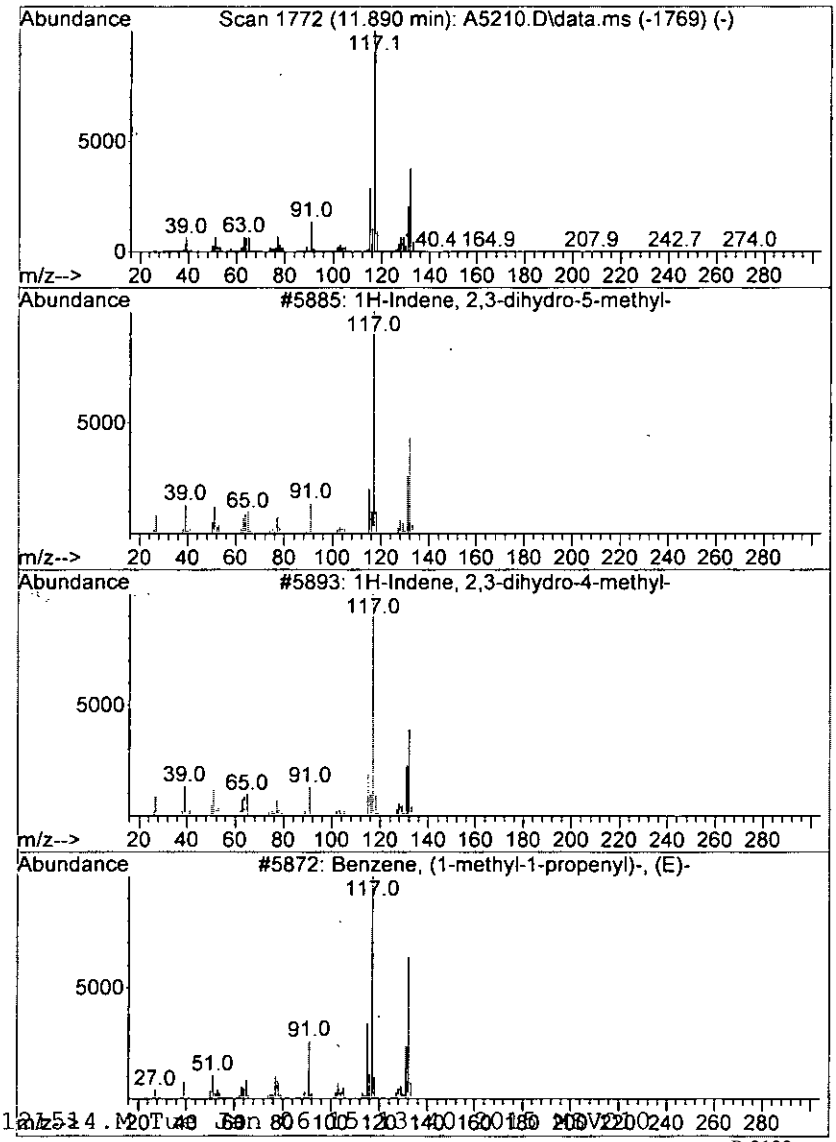
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

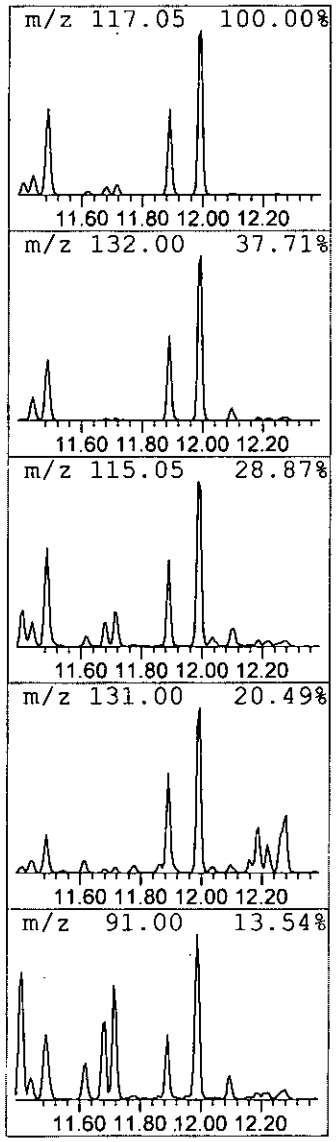
****

Peak Number 19 1H-Indene, 2,3-dihydro-5-me... Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.890	7.61 ug/L	693662	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	87
2	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	87
3	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	87
4	Indan, 1-methyl-	132	C10H12	000767-58-8	83
5	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	81





W121514.M Tue Jan 06 10:51:20 2015 V2.0

Library Search Compound Report

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Acq On : 30 Dec 2014 10:28 am
Operator : F.Naegler
Sample : R1410303-002|2.5
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

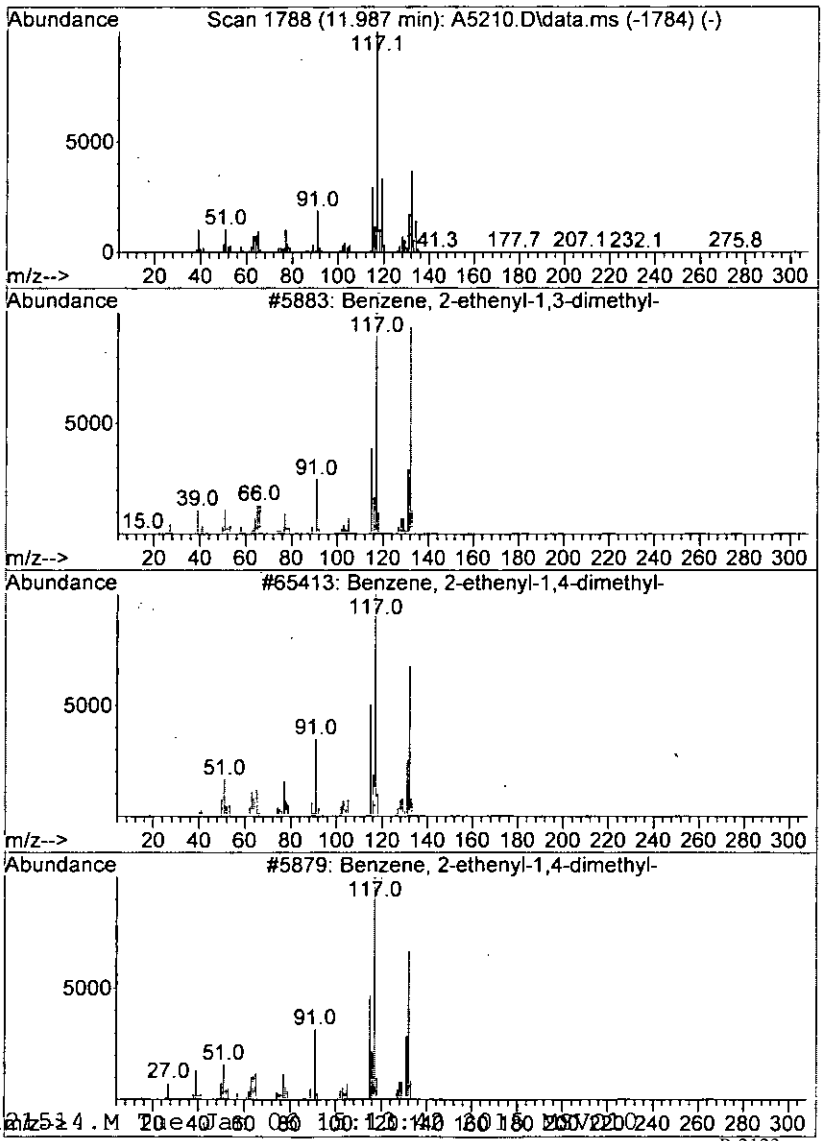
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

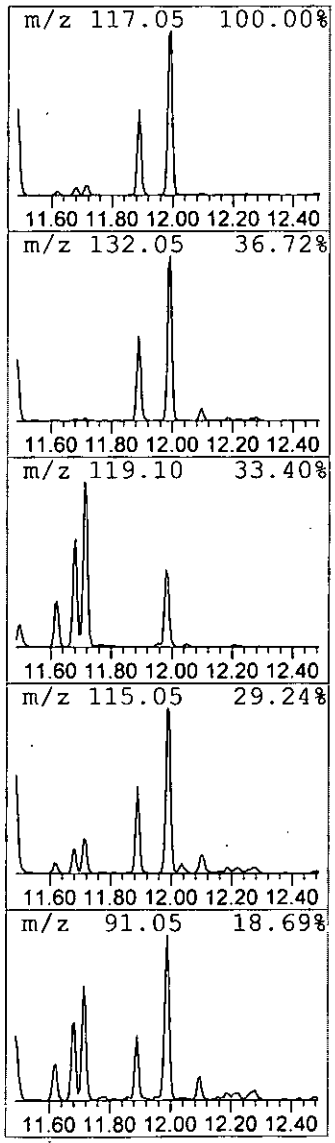
****

Peak Number 20 Benzene, 2-ethenyl-1,3-dime... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.987	20.94 ug/L	1908870	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 2-ethenyl-1,3-dimethyl-	132	C10H12	002039-90-9	95
2	Benzene, 2-ethenyl-1,4-dimethyl-	132	C10H12	002039-89-6	95
3	Benzene, 2-ethenyl-1,4-dimethyl-	132	C10H12	002039-89-6	95
4	Indan, 1-methyl-	132	C10H12	000767-58-8	94
5	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	87





Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0948
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 13:41
Sample Name:	FTMM-53-GW-699RW11-5.3	**Units:**	µg/L
Lab Code:	R1410303-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5264.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**28**		5.0	5.0	1.3	
71-43-2	Benzene	**3.0**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0948
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 13:41
Sample Name:	FTMM-53-GW-699RW11-5.3	**Units:**	µg/L
Lab Code:	R1410303-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5264.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**1.3**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.98**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**0.28**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**0.60**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.30**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0948
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 13:41
Sample Name:	FTMM-53-GW-699RW11-5.3	**Units:**	µg/L
Lab Code:	R1410303-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5264.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	12/31/14 13:41	
Dibromofluoromethane	99	85-115	12/31/14 13:41	
Toluene-d8	107	85-120	12/31/14 13:41	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/31/14 1341

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699RW11-5.3
Lab Code: R1410303-003

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000079-29-8	Butane, 2,3-dimethyl-	2.44	**11.5**	JN
	unknown	2.67	**6.6**	J
000565-59-3	Pentane, 2,3-dimethyl-	4.53	**7.4**	JN
000637-50-3	Benzene, 1-propenyl-	11.06	**7.9**	JN
000767-58-8	Indan, 1-methyl-	11.49	**13.7**	JN
000824-22-6	1H-Indene, 2,3-dihydro-4-methyl-	11.89	**9.3**	JN
027133-93-3	2,3-Dihydro-1-methylindene	11.99	**20.5**	JN

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-003|1.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5264.D Vial: 6
Acq On : 31 Dec 2014 1:41 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 11:32:36 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Qvalue	
Internal Standards								
1) Pentafluorobenzene	4.409	168	980357	50.00	ug/L	0.00		
43) 1,4-Difluorobenzene	5.610	114	1413152	50.00	ug/L	0.00		
71) d5-Chlorobenzene	8.841	117	1299452	50.00	ug/L	0.00		
91) 1,4-Dichlorobenzene-d4	10.835	152	646844	50.00	ug/L	0.00		
System Monitoring Compounds								
45) surr4,Dibrflmethane	4.324	113	441026	49.61	ug/L	0.00		
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.22%					
48) surr1,1,2-dichloroetha...	4.854	65	449627	49.80	ug/L	0.00		
Spiked Amount 50.000	Range 78 - 122		Recovery = 99.60%					
65) SURR3,Toluene-d8	7.427	98	1670270	53.71	ug/L	0.00		
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.42%					
70) SURR2,BFB	9.878	95	645350	49.73	ug/L	0.00		
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.46%					
Target Compounds							Qvalue	
15) Acetone	2.111	43	46286	27.96	ug/L	#	67	
44) Cyclohexane	4.446	41	29902	3.29	ug/L		94	— NT
49) Benzene	4.952	78	103169	3.04	ug/L		97	✓
55) Methylcyclohexane	6.195	55	22798	2.03	ug/L	#	34	NT
83) (m+p)Xylene	9.097	106	4521	0.30	ug/L	#	75	
88) Isopropylbenzene	9.756	105	45850	1.25	ug/L		94	
95) n-Propylbenzene	10.109	91	10804	0.28	ug/L		93	
100) tert-Butylbenzene	10.518	119	7433	0.30	ug/L		86	
103) sec-Butylbenzene	10.701	105	19925	0.60	ug/L		95	
112) Trielution Dichlorotol...	11.810	125	4163	0.30	ug/L		71	— NT
114) Coelution Dichlorotoluene	12.072	125	3937	0.27	ug/L	#	72	— NT
116) Hexachlorobt	12.328	225	1188	0.22	ug/L	#	71	
117) Naphthalen	12.389	128	17870	0.98	ug/L		89	
118) 1,2,3-Tcibenzene	12.517	180	2198	0.25	ug/L	#	62	
119) 2,4,5-Trichlorotoluene	12.932	159	3043	0.55	ug/L		87	- NT
120) 2,3,6-Trichlorotoluene	12.932	159	3043	0.50	ug/L		89	- NT

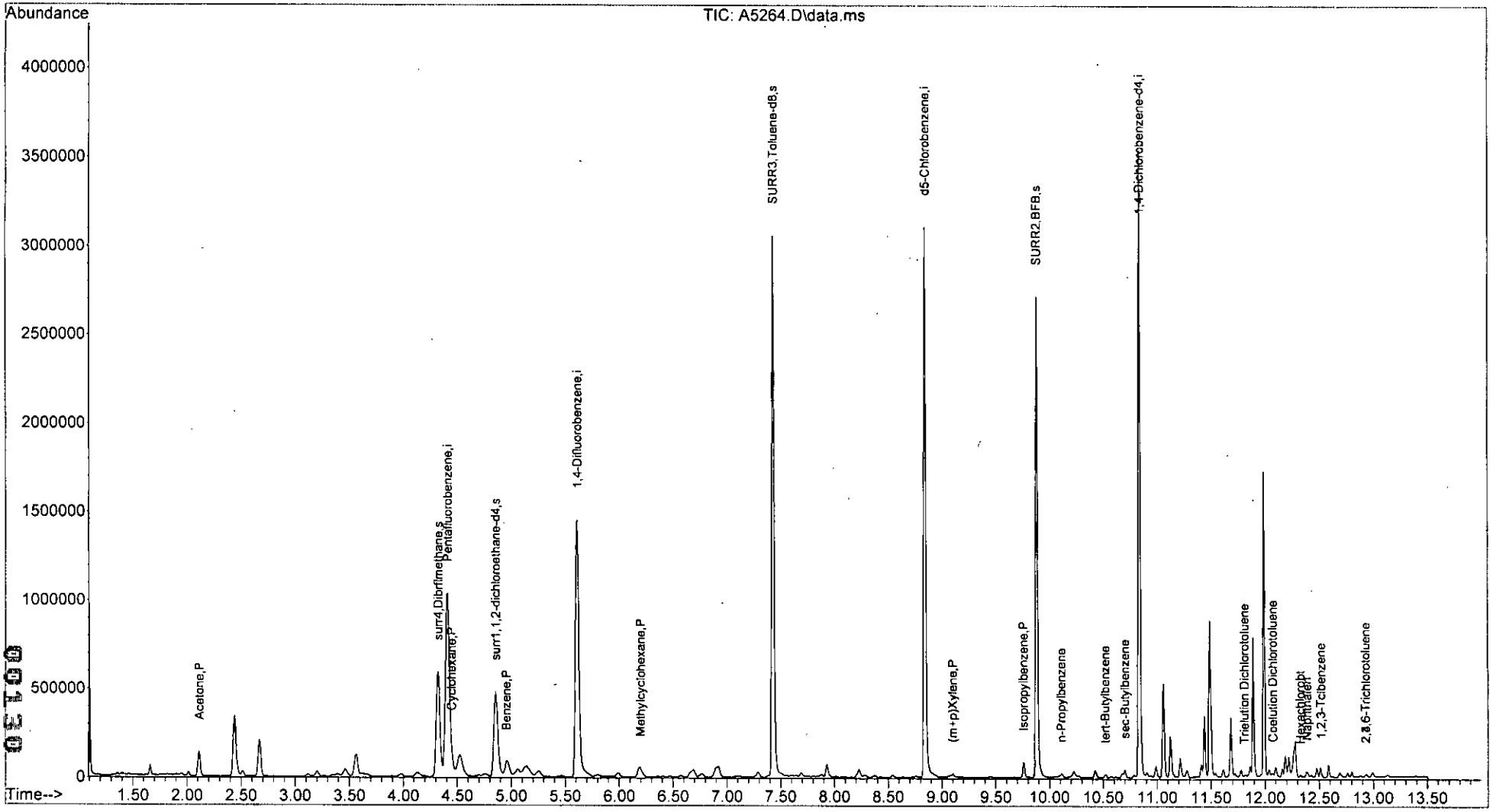
(#) = qualifier out of range (m) = manual integration (+) = signals summed

BA 1/7

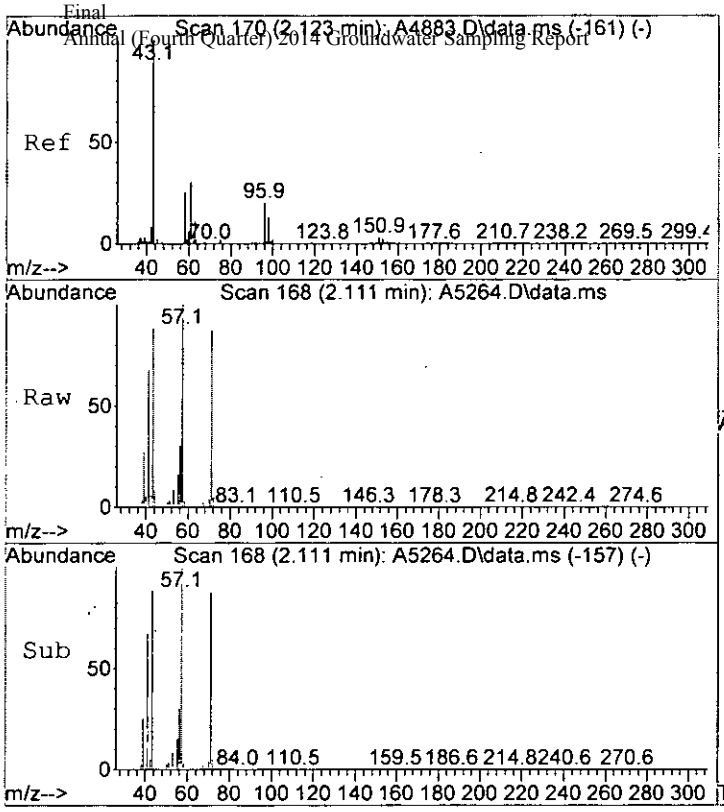
Quantitation Report (QT Reviewed)

Sample : R1410303-003|1.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5264.D Vial: 6
Acq On : 31 Dec 2014 1:41 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 11:32:36 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



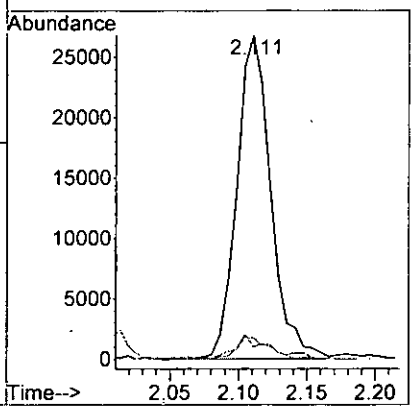
W121514.M Wed Jan 07 11:36:25 2015 MSVO10

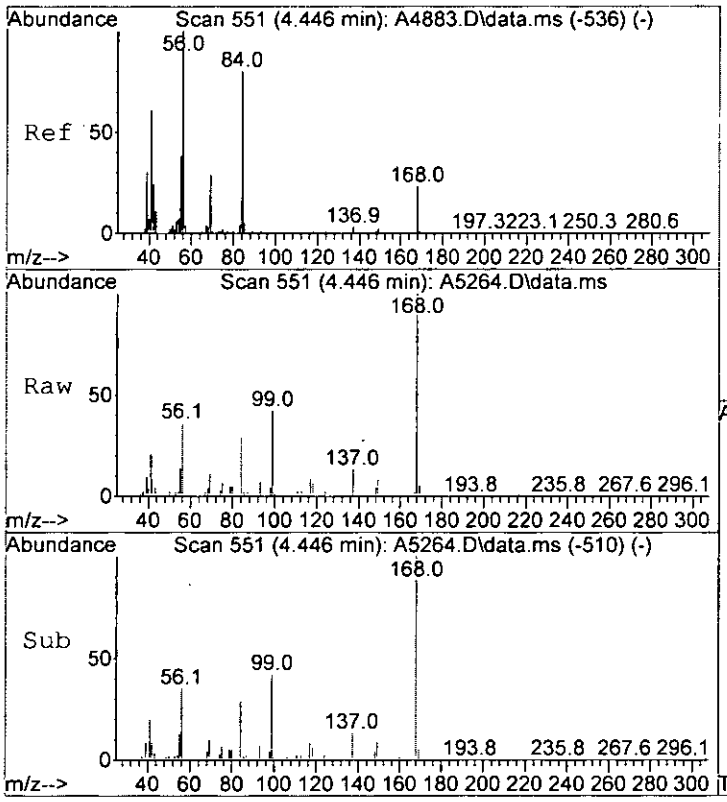


#15
Acetone
Concen: 27.96 ug/L
RT: 2.111 min Scan# 168
Delta R.T. -0.006 min
Lab File: A5264.D
Acq: 31 Dec 2014 1:41 pm

Tgt Ion: 43 Resp: 46286

Ion	Ratio	Lower	Upper
43	100		
58	3.7	5.3	45.3#
42	6.4	0.0	29.0

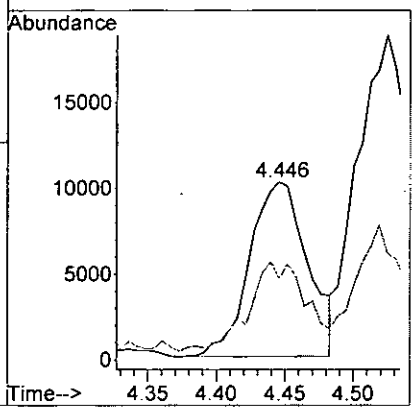


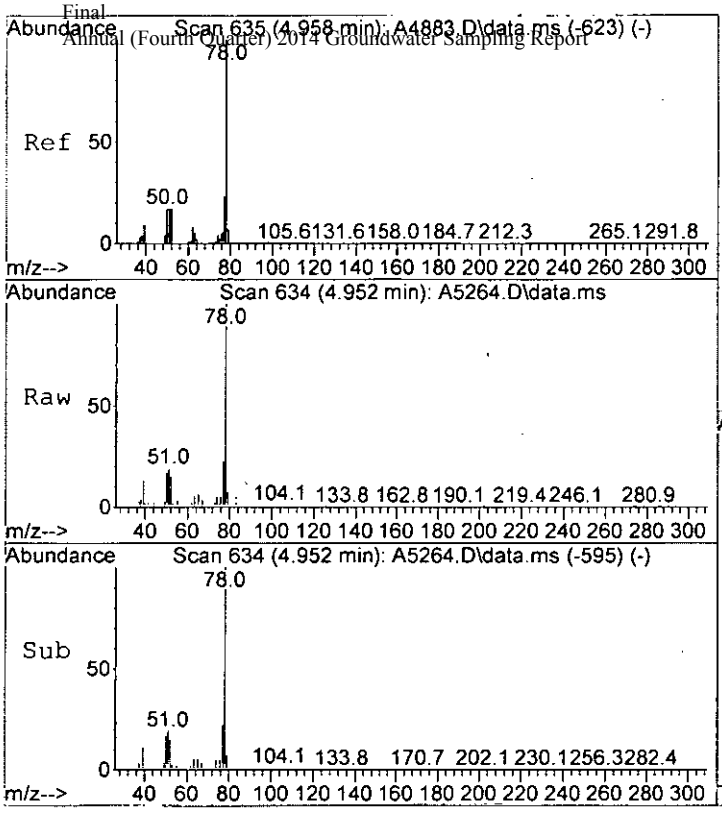


#44
Cyclohexane
Concen: 3.29 ug/L
RT: 4.446 min Scan# 551
Delta R.T. 0.001 min
Lab File: A5264.D
Acq: 31 Dec 2014 1:41 pm

Tgt Ion: 41 Resp: 29902

Ion	Ratio	Lower	Upper
41	100		
39	45.6	29.7	69.7

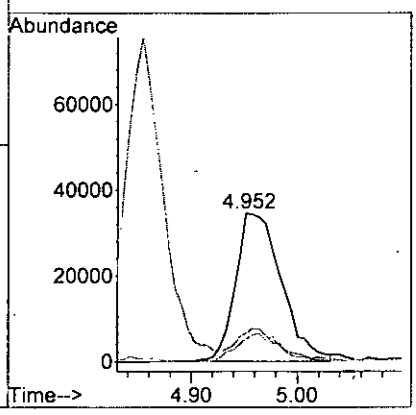


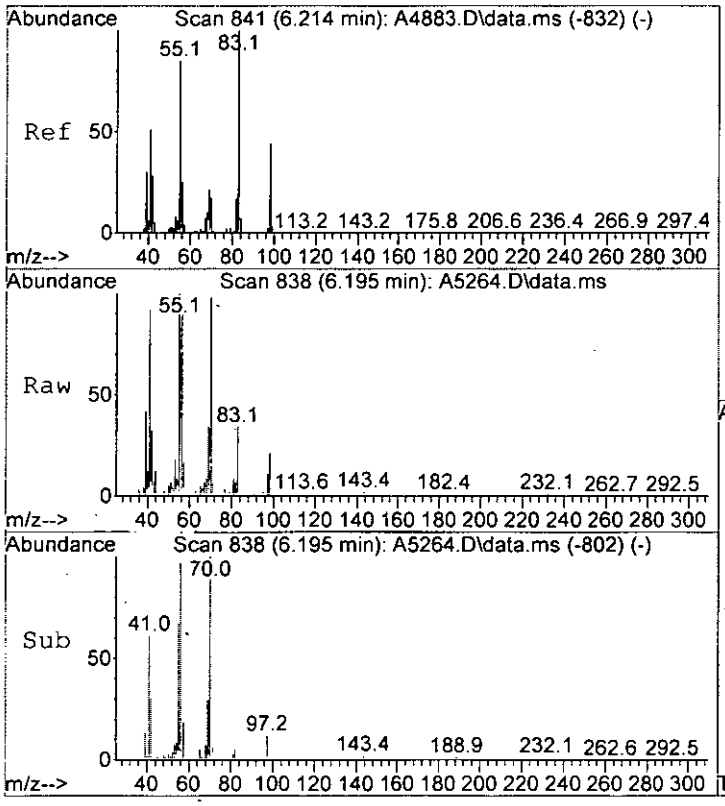


#49
Benzene
Concen: 3.04 ug/L
RT: 4.952 min Scan# 634
Delta R.T. -0.006 min
Lab File: A5264.D
Acq: 31 Dec 2014 1:41 pm

Tgt Ion: 78 Resp: 103169

Ion	Ratio	Lower	Upper
78	100		
51	19.2	0.0	40.0
52	15.0	0.0	37.0

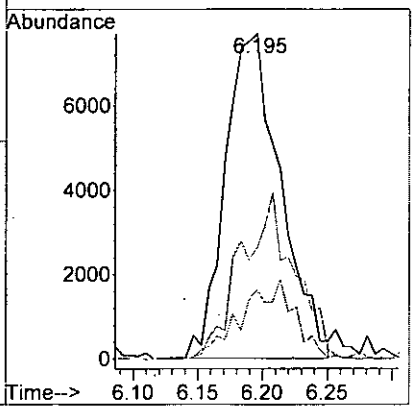


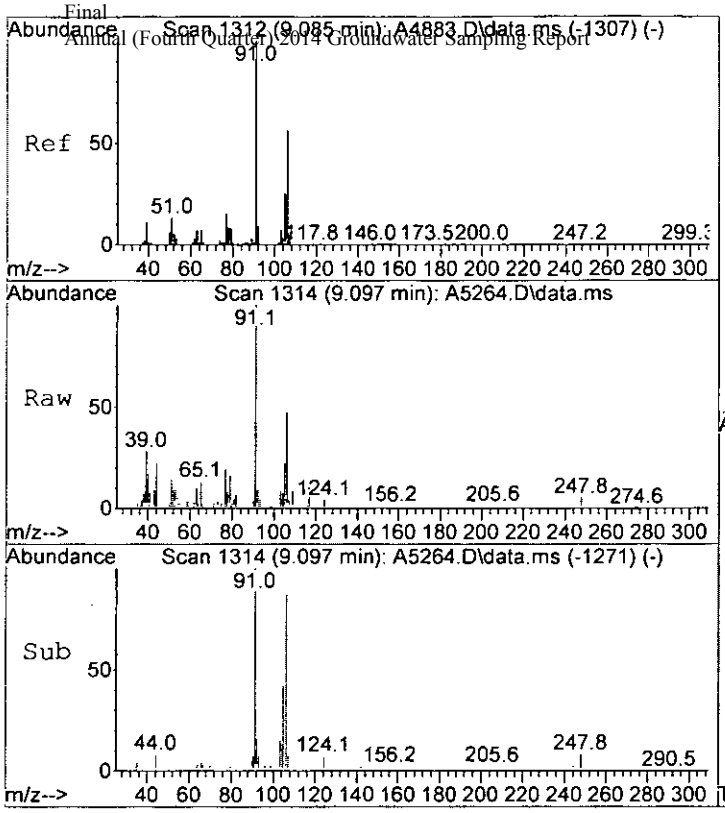


#55
Methylcyclohexane
Concen: 2.03 ug/L
RT: 6.195 min Scan# 838
Delta R.T. -0.018 min
Lab File: A5264.D
Acq: 31 Dec 2014 1:41 pm

Tgt Ion: 55 Resp: 22798

Ion	Ratio	Lower	Upper
55	100		
83	34.0	97.7	137.7#
98	21.3	32.0	72.0#

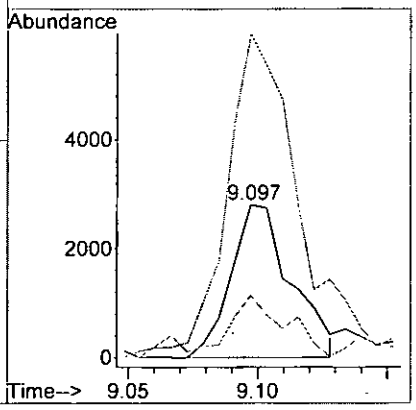


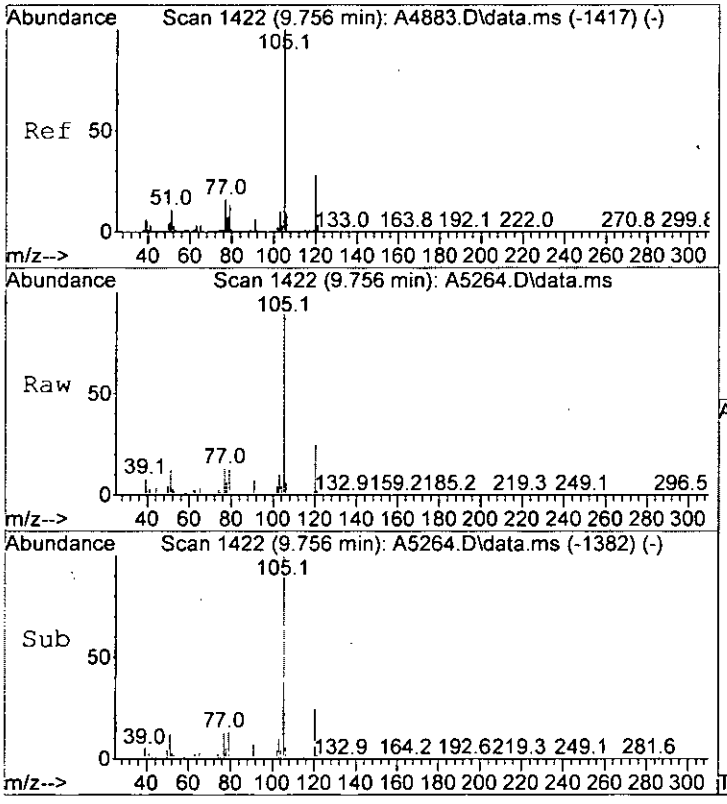


#83
(m+p)Xylene
Concen: 0.30 ug/L
RT: 9.097 min Scan# 1314
Delta R.T. 0.012 min
Lab File: A5264.D
Acq: 31 Dec 2014 1:41 pm

Tgt Ion:106 Resp: 4521

Ion	Ratio	Lower	Upper
106	100		
91	211.8	157.2	197.2#
77	40.4	7.2	47.2

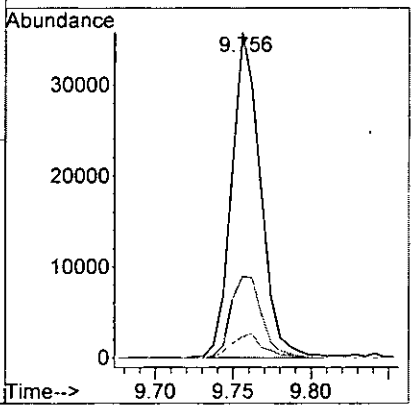


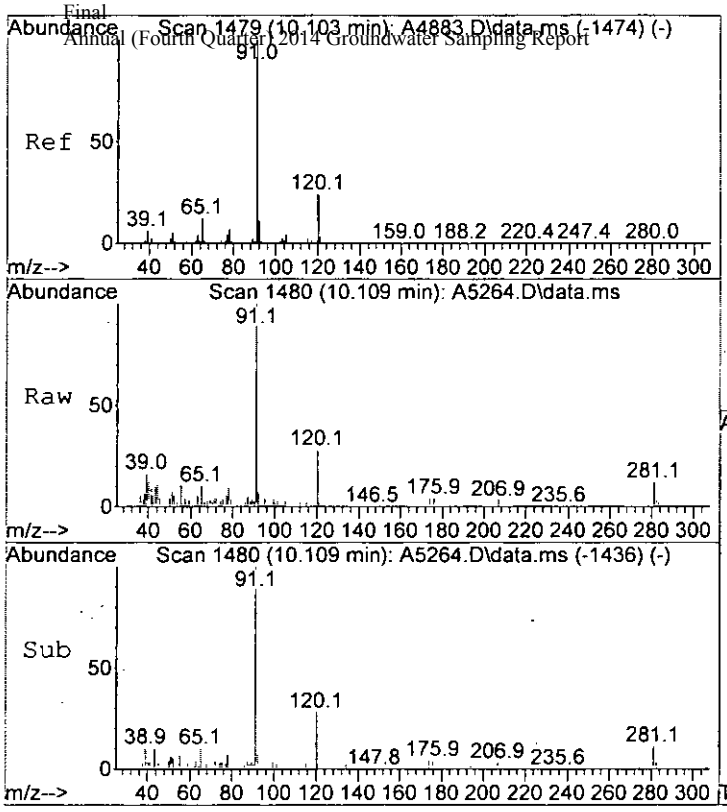


#88
Isopropylbenzene
Concen: 1.25 ug/L
RT: 9.756 min Scan# 1422
Delta R.T. -0.000 min
Lab File: A5264.D
Acq: 31 Dec 2014 1:41 pm

Tgt Ion:105 Resp: 45850

Ion	Ratio	Lower	Upper
105	100		
120	24.8	7.6	47.6
106	6.3	0.0	29.1

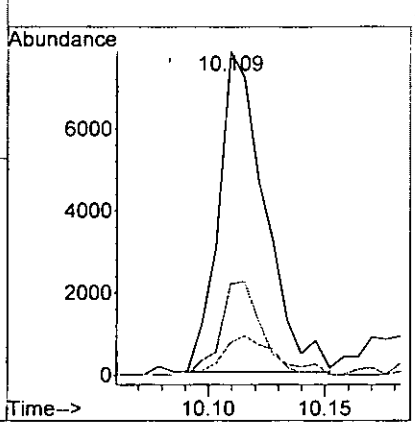


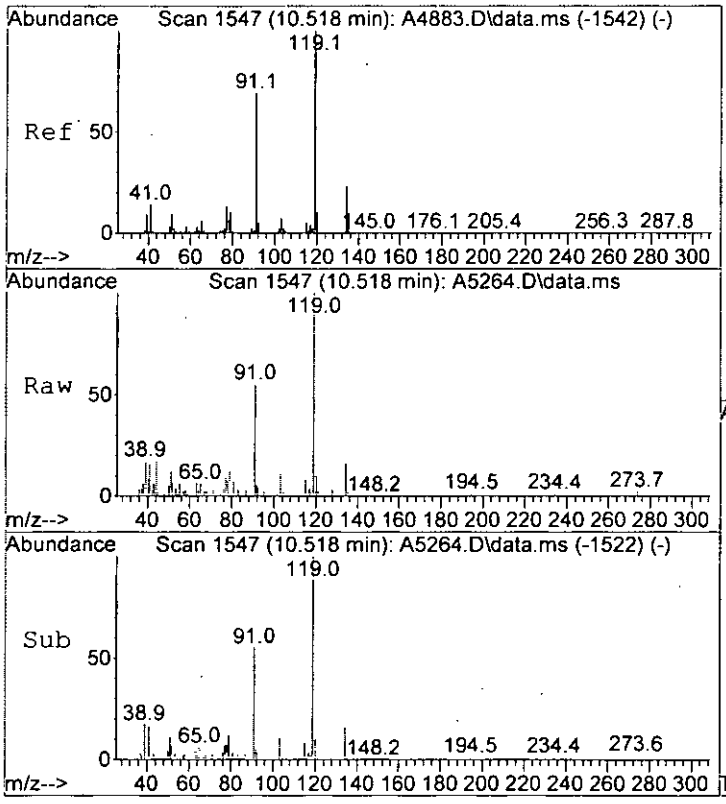


#95
n-Propylbenzene
Concen: 0.28 ug/L
RT: 10.109 min Scan# 1480
Delta R.T. 0.006 min
Lab File: A5264.D
Acq: 31 Dec 2014 1:41 pm

Tgt Ion: 91 Resp: 10804

Ion	Ratio	Lower	Upper
91	100		
120	28.1	3.9	43.9
65	9.9	0.0	31.6

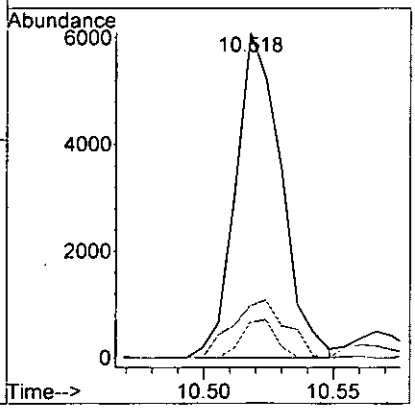


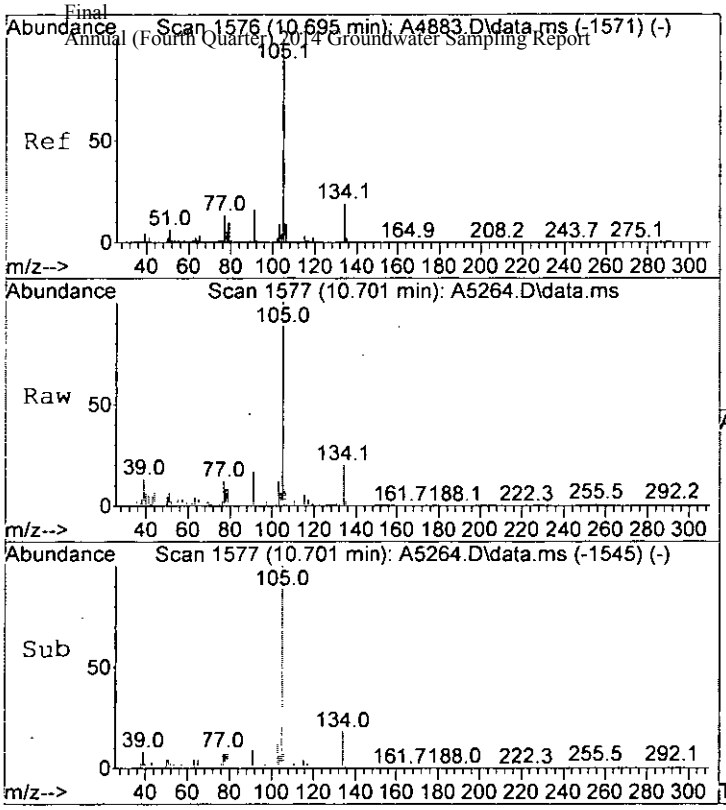


#100
tert-Butylbenzene
Concen: 0.30 ug/L
RT: 10.518 min Scan# 1547
Delta R.T. -0.000 min
Lab File: A5264.D
Acq: 31 Dec 2014 1:41 pm

Tgt Ion:119 Resp: 7433

Ion	Ratio	Lower	Upper
119	100		
134	16.0	3.4	43.4
103	10.8	0.0	26.7

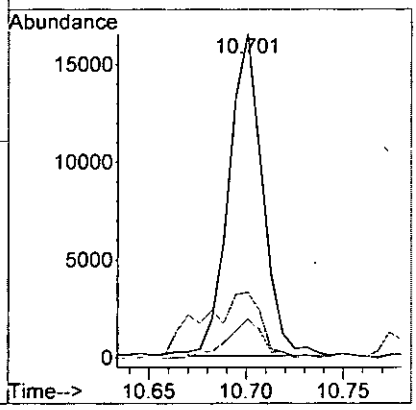


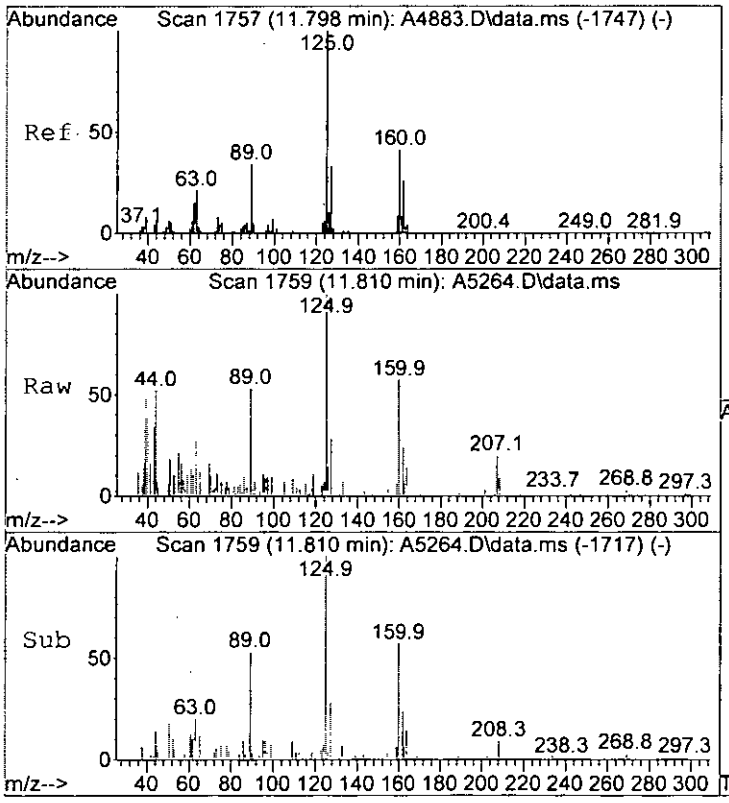


#103
sec-Butylbenzene
Concen: 0.60 ug/L
RT: 10.701 min Scan# 1577
Delta R.T. -0.000 min
Lab File: A5264.D
Acq: 31 Dec 2014 1:41 pm

Tgt Ion:105 Resp: 19925

Ion	Ratio	Lower	Upper
105	100		
134	20.2	0.0	39.1
103	11.9	0.0	28.6

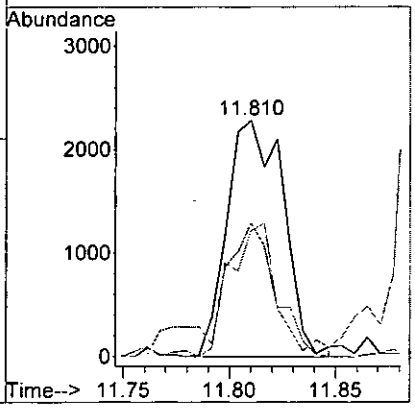


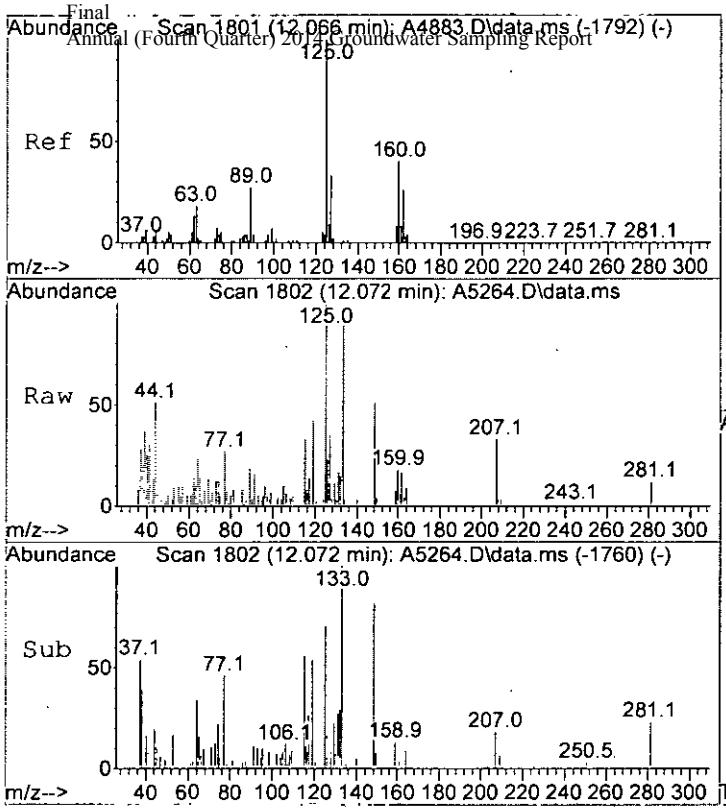


#112
Trielution Dichlorotoluene
Concen: 0.30 ug/L
RT: 11.810 min Scan# 1759
Delta R.T. 0.006 min
Lab File: A5264.D
Acq: 31 Dec 2014 1:41 pm

Tgt Ion:125 Resp: 4163

Ion	Ratio	Lower	Upper
125	100		
160	56.6	21.1	61.1
89	53.3	14.2	54.2

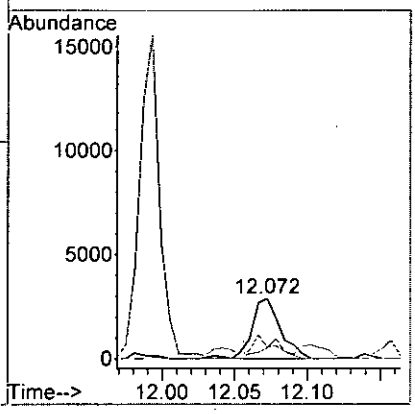


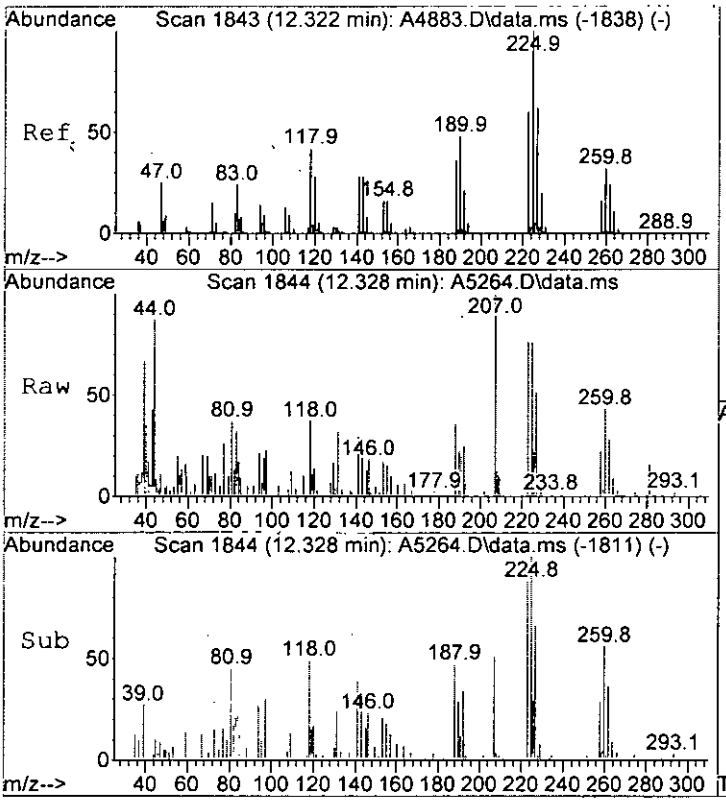


#114
Coelution Dichlorotoluene
Concen: 0.27 ug/L
RT: 12.072 min Scan# 1802
Delta R.T. 0.006 min
Lab File: A5264.D
Acq: 31 Dec 2014 1:41 pm

Tgt Ion:125 Resp: 3937

Ion	Ratio	Lower	Upper
125	100		
160	17.7	19.7	59.7#
89	18.6	7.0	47.0

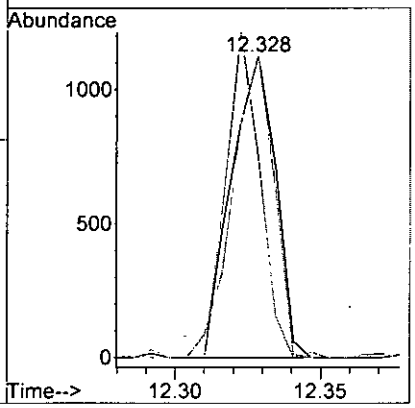


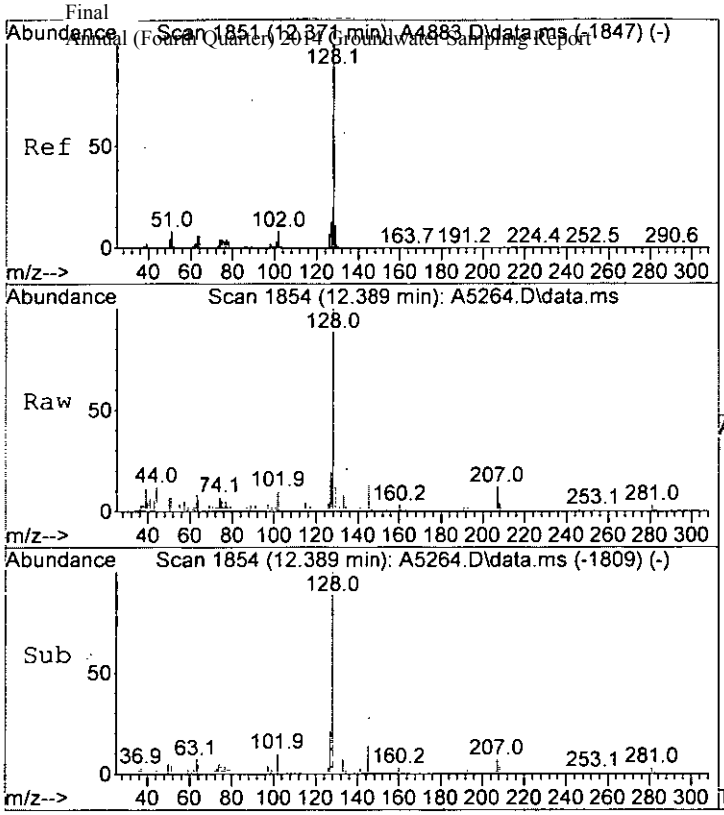


#116
Hexachlorobt
Concen: 0.22 ug/L
RT: 12.328 min Scan# 1844
Delta R.T. 0.006 min
Lab File: A5264.D
Acq: 31 Dec 2014 1:41 pm

Tgt Ion:225 Resp: 1188

Ion	Ratio	Lower	Upper
225	100		
223	100.2	40.4	80.4#
227	66.8	42.0	82.0

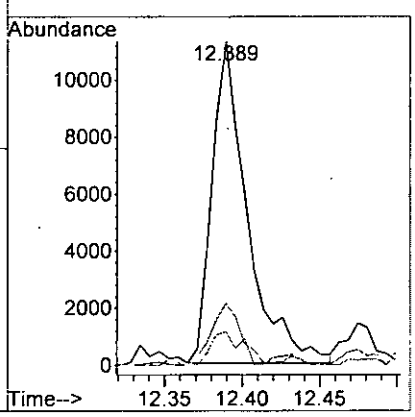


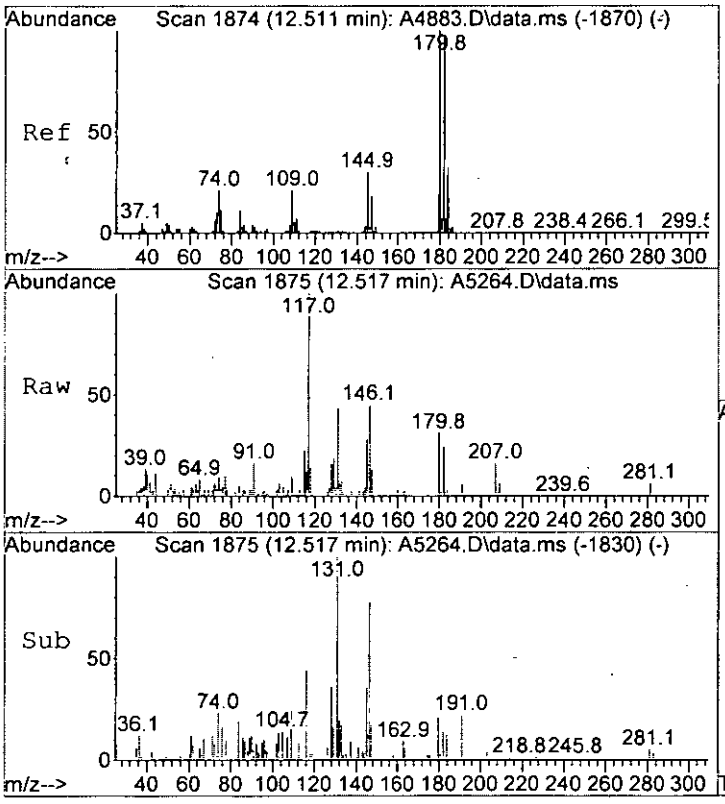


#117
Naphthalen
Concen: 0.98 ug/L
RT: 12.389 min Scan# 1854
Delta R.T. 0.018 min
Lab File: A5264.D
Acq: 31 Dec 2014 1:41 pm

Tgt Ion:128 Resp: 17870

Ion	Ratio	Lower	Upper
128	100		
127	18.9	0.0	33.2
102	10.3	0.0	28.4

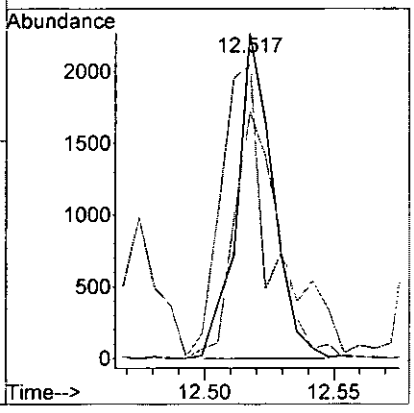


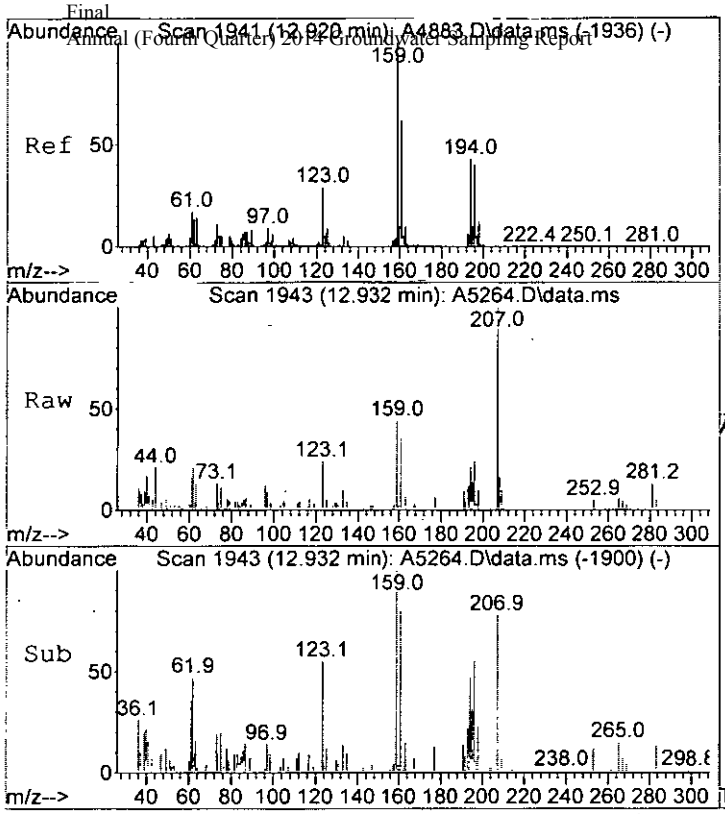


#118
1,2,3-Tclbenzene
Concen: 0.25 ug/L
RT: 12.517 min Scan# 1875
Delta R.T. 0.006 min
Lab File: A5264.D
Acq: 31 Dec 2014 1:41 pm

Tgt Ion:180 Resp: 2198

Ion	Ratio	Lower	Upper
180	100		
182	81.2	75.6	115.6
145	90.2	9.7	49.7#

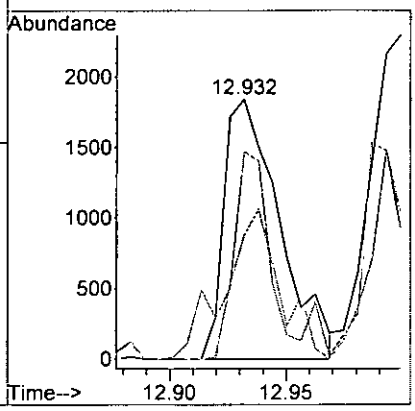


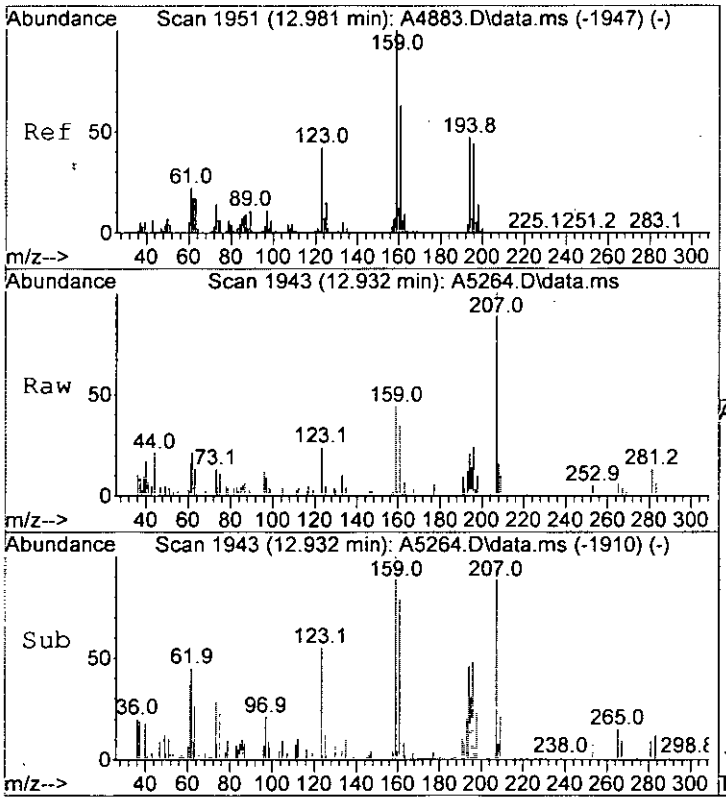


#119
2,4,5-Trichlorotoluene
Concen: 0.55 ug/L
RT: 12.932 min Scan# 1943
Delta R.T. 0.012 min
Lab File: A5264.D
Acq: 31 Dec 2014 1:41 pm

Tgt Ion:159 Resp: 3043

Ion	Ratio	Lower	Upper
159	100		
161	76.8	42.0	82.0
194	45.8	23.5	63.5

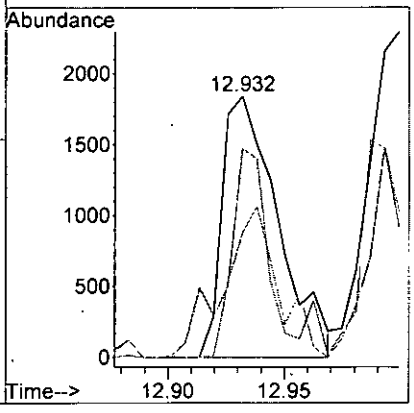




#120
2,3,6-Trichlorotoluene
Concen: 0.50 ug/L
RT: 12.932 min Scan# 1943
Delta R.T. -0.049 min
Lab File: A5264.D
Acq: 31 Dec 2014 1:41 pm

Tgt Ion:159 Resp: 3043

Ion	Ratio	Lower	Upper
159	100		
161	76.8	42.8	82.8
194	45.8	27.3	67.3



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5264.D
Acq On : 31 Dec 2014 1:41 pm
Operator : F.Naegler
Sample : R1410303-003|1.0
Misc : PARSONS 11603 T4
ALS Vial : 6 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5264.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.660	90	94	97	rBV	57944	61202	1.35%	0.171%
2	2.111	162	168	176	rBV	139442	225763	4.99%	0.632%
3	2.440	214	222	230	rBV	341902	664352	14.69%	1.860%
4	2.513	230	234	240	rVB3	27959	48668	1.08%	0.136%
5	2.672	252	260	267	rBV	207386	379830	8.40%	1.063%
6	3.202	341	347	353	rBV4	28106	55095	1.22%	0.154%
7	3.458	384	389	399	rVB3	37169	85128	1.88%	0.238%
8	3.568	399	407	412	rBV2	120478	269947	5.97%	0.756%
9	4.129	488	499	500	rBV7	22703	45348	1.00%	0.127%
10	4.324	521	531	538	rBV	591543	1444073	31.93%	4.043%
11	4.409	538	545	557	rVV	1034086	2877266	63.61%	8.055%
12	4.525	557	564	583	rVB3	121659	425961	9.42%	1.193%
13	4.854	610	618	629	rBV	478339	1239950	27.41%	3.471%
14	4.958	629	635	644	rVV2	90685	262548	5.80%	0.735%
15	5.055	644	651	656	rVV3	43209	127664	2.82%	0.357%
16	5.141	658	665	677	rVV7	60182	248706	5.50%	0.696%
17	5.251	677	683	696	rVB6	32951	97307	2.15%	0.272%
18	5.610	734	742	766	rBV	1452072	3374879	74.61%	9.449%
19	5.988	798	804	815	rVB5	20471	52008	1.15%	0.146%
20	6.189	828	837	849	rBV5	57558	157985	3.49%	0.442%
21	6.689	906	919	926	rBV3	41283	137554	3.04%	0.385%
22	6.903	943	954	955	rBV2	56389	112415	2.49%	0.315%
23	7.287	1008	1017	1025	rVB4	30672	70968	1.57%	0.199%
24	7.427	1035	1040	1060	rVB	3048287	4523215	100.00%	12.664%
25	7.927	1118	1122	1131	rVB	73092	116876	2.58%	0.327%
26	8.226	1163	1171	1176	rBV3	45135	89515	1.98%	0.251%
27	8.841	1267	1272	1282	rBV	3104609	4139998	91.53%	11.591%
28	9.756	1418	1422	1428	rBV	85158	114794	2.54%	0.321%
29	9.878	1438	1442	1460	rVB	2710743	3332906	73.68%	9.331%
30	10.225	1493	1499	1503	rBV4	31537	52004	1.15%	0.146%
31	10.420	1527	1531	1539	rBV2	42130	64148	1.42%	0.180%
32	10.835	1594	1599	1608	rBV	3528251	4141398	91.56%	11.595%
33	10.987	1620	1624	1631	rVB	63546	82797	1.83%	0.232%
34	11.060	1631	1636	1642	rVV	529224	653260	14.44%	1.829%
35	11.121	1642	1646	1655	rVV	229881	304535	6.73%	0.853%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5264.D
Acq On : 31 Dec 2014 1:41 pm
Operator : F.Naegler
Sample : R1410303-003|1.0
Misc : PARSONS 11603 T4
ALS Vial : 6 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

36	11.213	1657	1661	1667	rVV	109627	149110	3.30%	0.417%
37	11.274	1667	1671	1677	rVB3	42153	62052	1.37%	0.174%
38	11.408	1690	1693	1695	rBV	64454	73050	1.62%	0.205%
39	11.438	1695	1698	1702	rVV	336770	344669	7.62%	0.965%
40	11.487	1702	1706	1713	rVV2	874474	1132344	25.03%	3.170%
41	11.609	1722	1726	1731	rVB2	41492	53706	1.19%	0.150%
42	11.682	1731	1738	1742	rBV2	335185	374668	8.28%	1.049%
43	11.859	1762	1767	1769	rVV3	54303	63772	1.41%	0.179%
44	11.889	1769	1772	1779	rVB	785517	768795	17.00%	2.152%
45	11.993	1785	1789	1794	rVB	1711150	1699384	37.57%	4.758%
46	12.097	1803	1806	1813	rVB2	52737	67418	1.49%	0.189%
47	12.188	1818	1821	1824	rVV	118057	148156	3.28%	0.415%
48	12.219	1824	1826	1829	rVV2	110174	117571	2.60%	0.329%
49	12.280	1829	1836	1841	rVB	202408	343233	7.59%	0.961%
50	12.383	1850	1853	1859	rBV2	30023	50371	1.11%	0.141%
51	12.475	1865	1868	1871	rBV2	49537	51018	1.13%	0.143%
52	12.511	1871	1874	1882	rVB4	57418	65532	1.45%	0.183%
53	12.584	1882	1886	1890	rBV	68149	73488	1.62%	0.206%

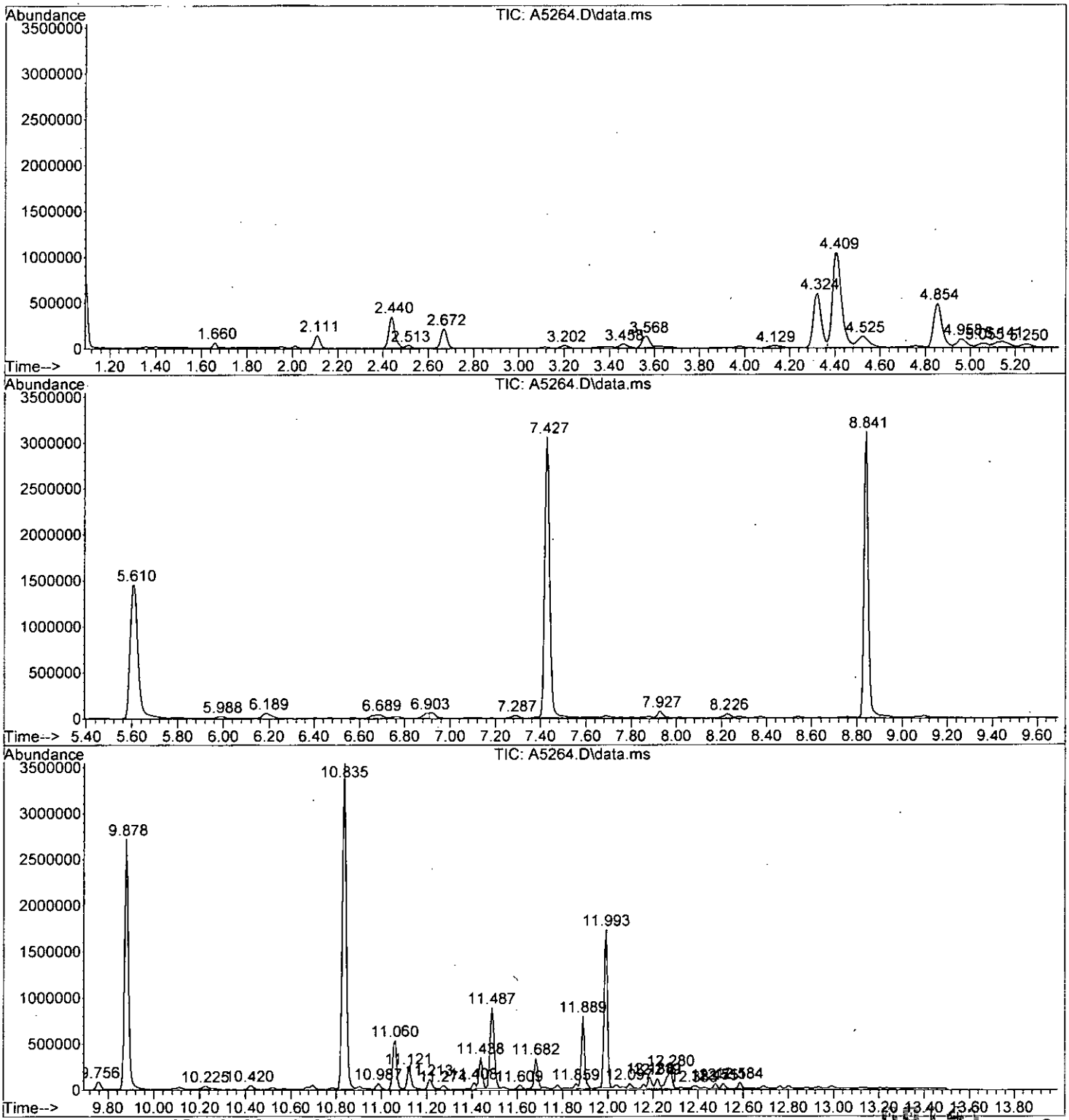
Sum of corrected areas: 35718400

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5264.D
Acq On : 31 Dec 2014 1:41 pm
Operator : F.Naegler
Sample : R1410303-003|1.0
Misc : PARSONS 11603 T4
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5264.D
Acq On : 31 Dec 2014 1:41 pm
Operator : F.Naegler
Sample : R1410303-003|1.0
Misc : PARSONS 11603 T4
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

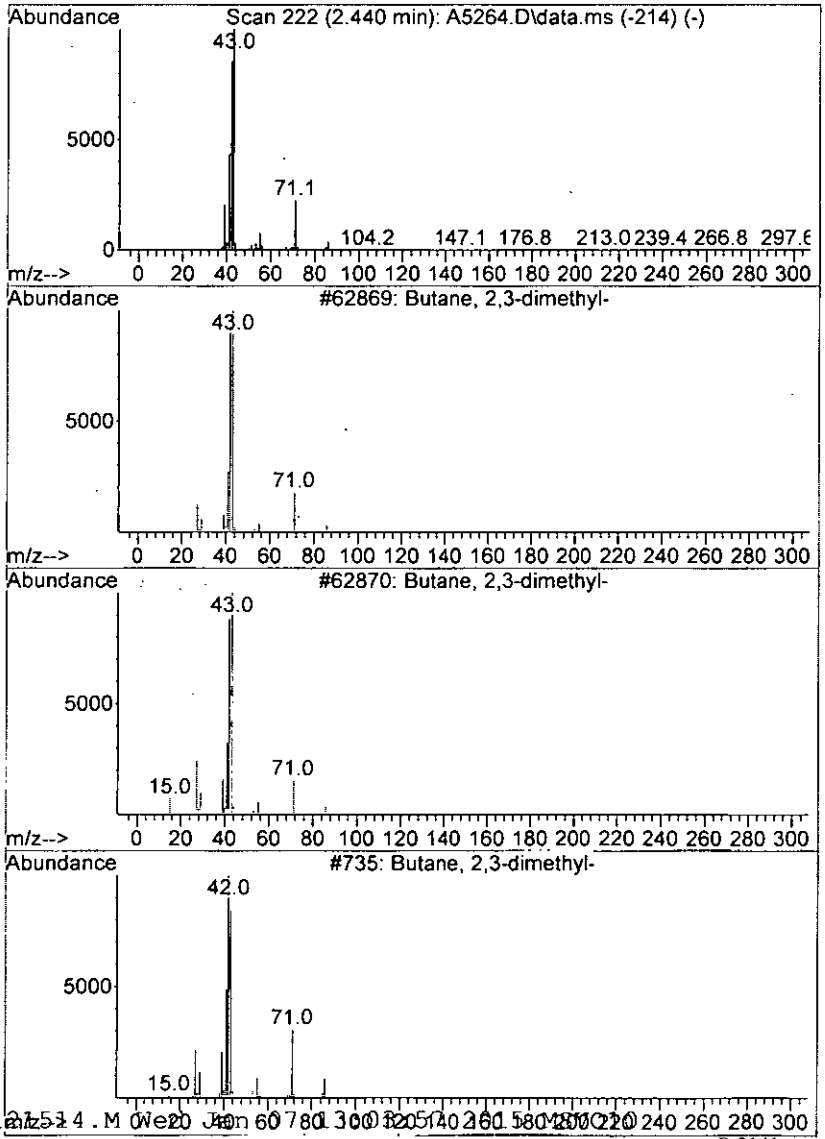
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

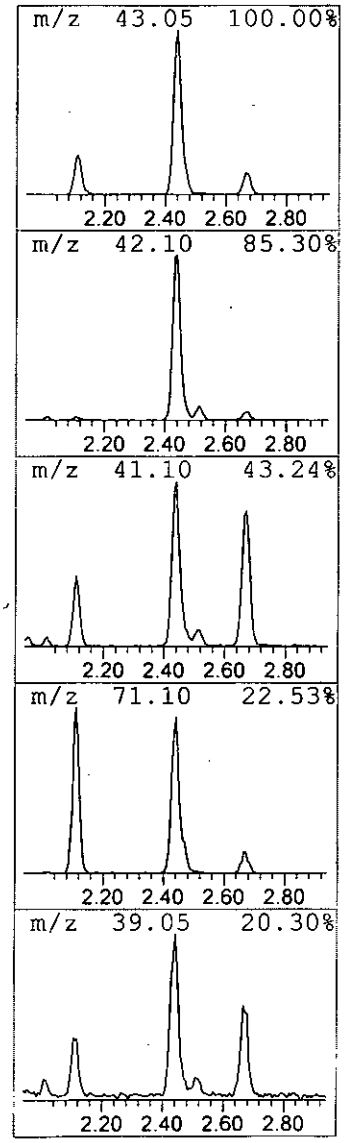
****

Peak Number 1 Butane, 2,3-dimethyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.440	11.54 ug/L	664352	Pentafluorobenzene	4.409

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	86
2	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	86
3	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	72
4	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	72
5	Pentane, 2-methyl-	86	C6H14	000107-83-5	47





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Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5264.D
Acq On    : 31 Dec 2014    1:41 pm
Operator  : F.Naegler
Sample    : R1410303-003|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 6   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge

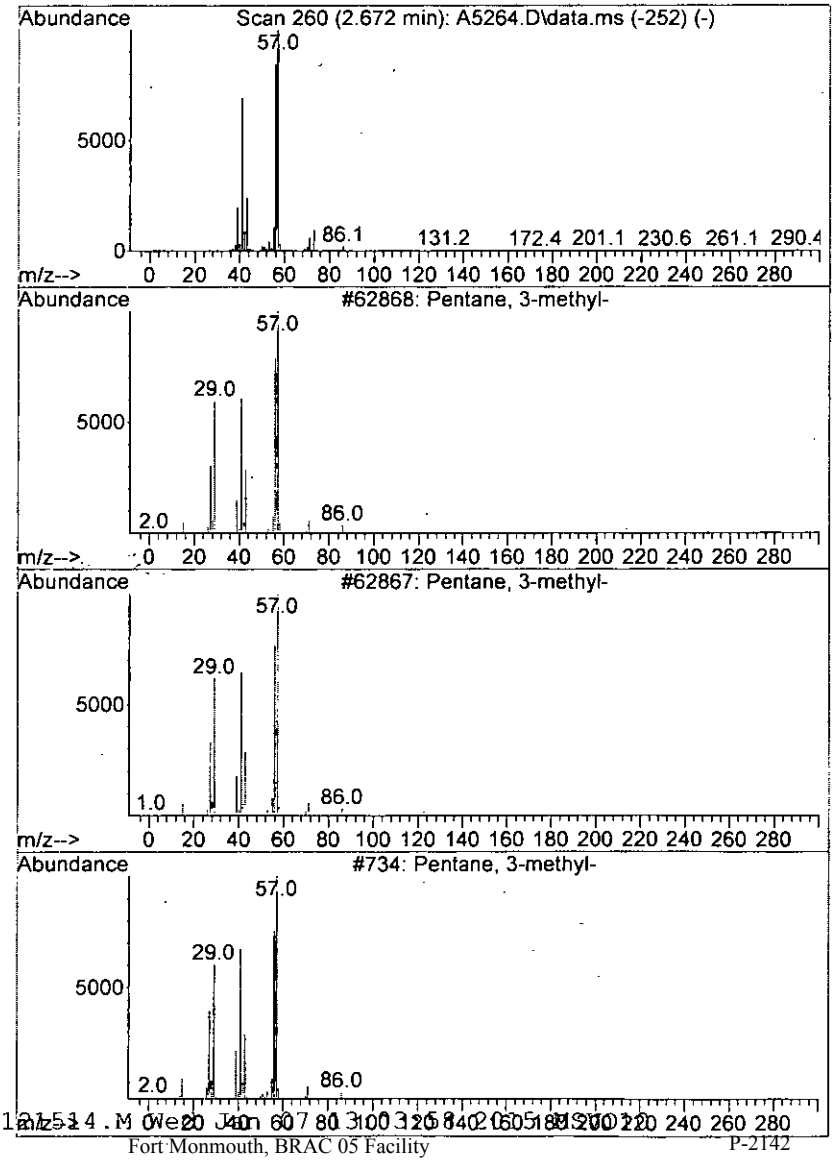
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

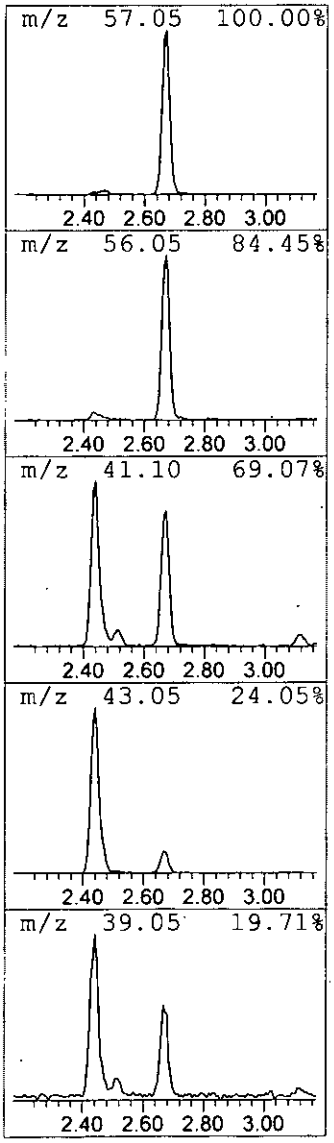
****

Peak Number 2 Pentane, 3-methyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.672	6.60 ug/L	379830	Pentafluorobenzene	4.409

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	72
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	56
3	Pentane, 3-methyl-	86	C6H14	000096-14-0	56
4	Hexane, 3,4-dimethyl-	114	C8H18	000583-48-2	39
5	Oxirane, 2-methyl-3-(1-methyleth...	100	C6H12O	001192-31-0	38





W121514.M Wed Jan 07 10:32:58 2015

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Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5264.D
Acq On    : 31 Dec 2014    1:41 pm
Operator  : F.Naegler
Sample    : R1410303-003|1.0
Misc      : PARSONS. 11603 T4
ALS Vial  : 6   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge

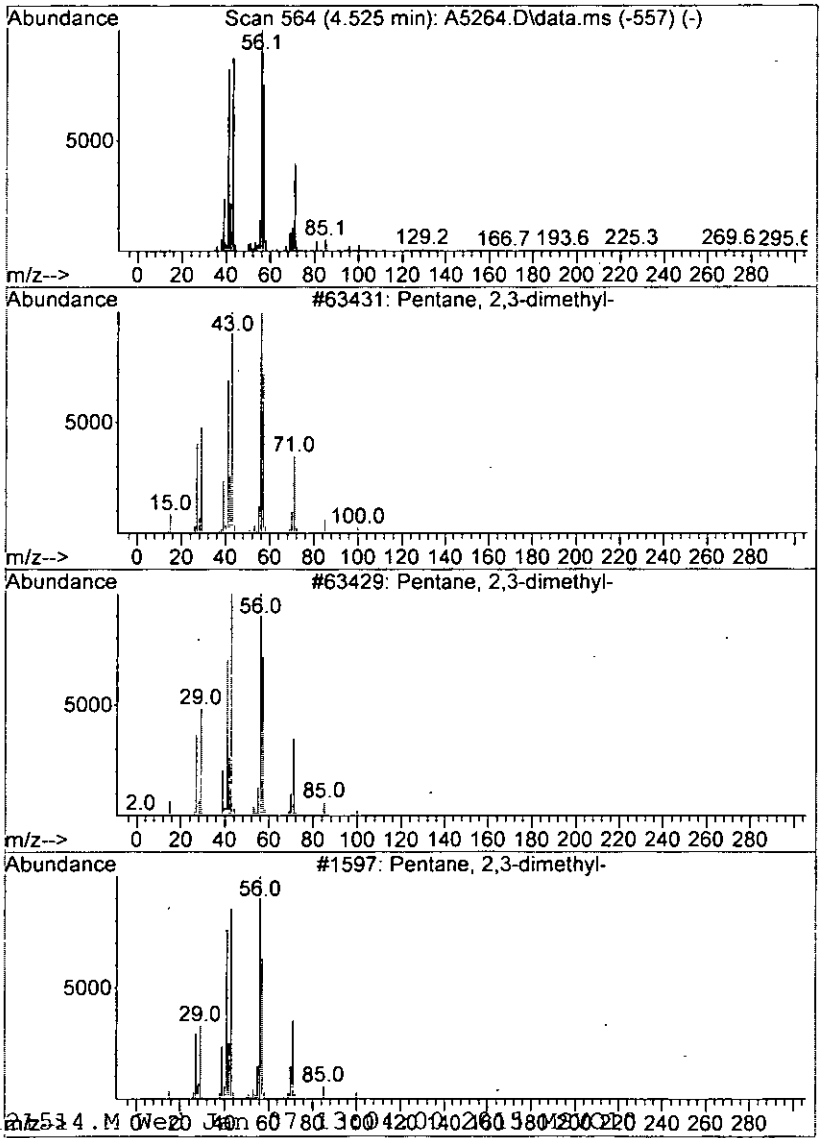
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

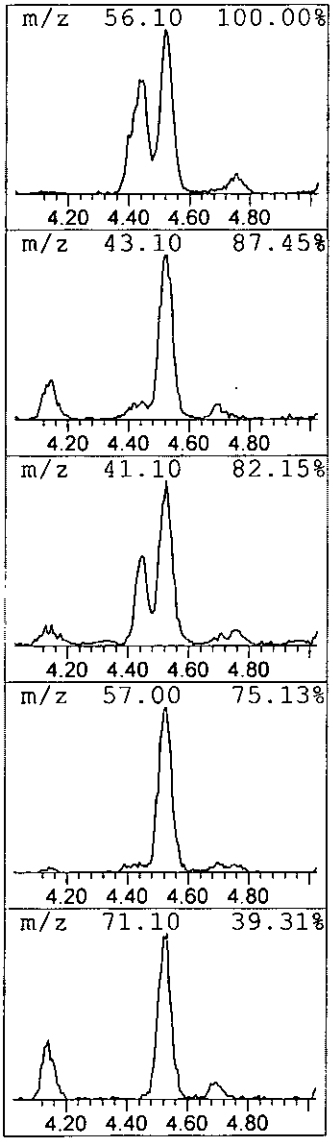
****

Peak Number 3 Pentane, 2,3-dimethyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.525	7.40 ug/L	425961	Pentafluorobenzene	4.409

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	91
2	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	91
3	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	90
4	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	90
5	Pentane, 2,3-dimethyl-	100	C7H16	000565-59-3	78





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Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5264.D
Acq On    : 31 Dec 2014    1:41 pm
Operator  : F.Naegler
Sample    : R1410303-003|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 6   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge

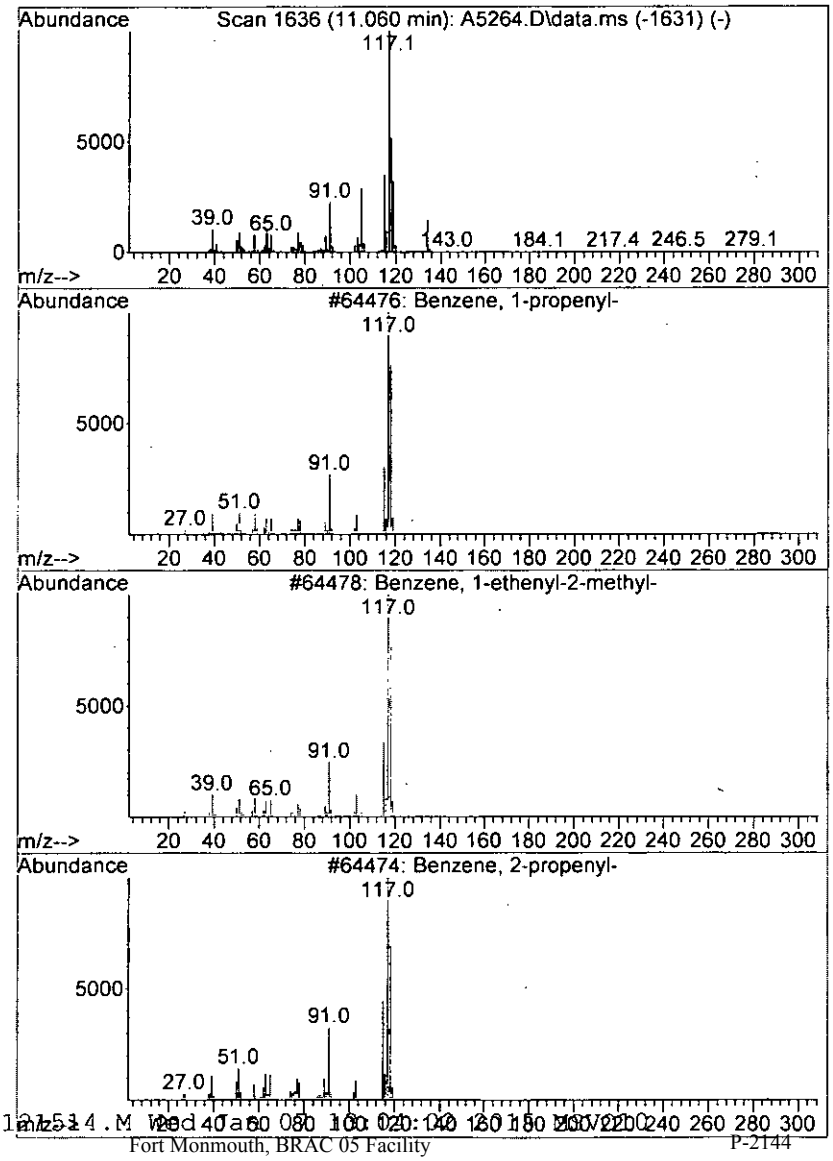
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

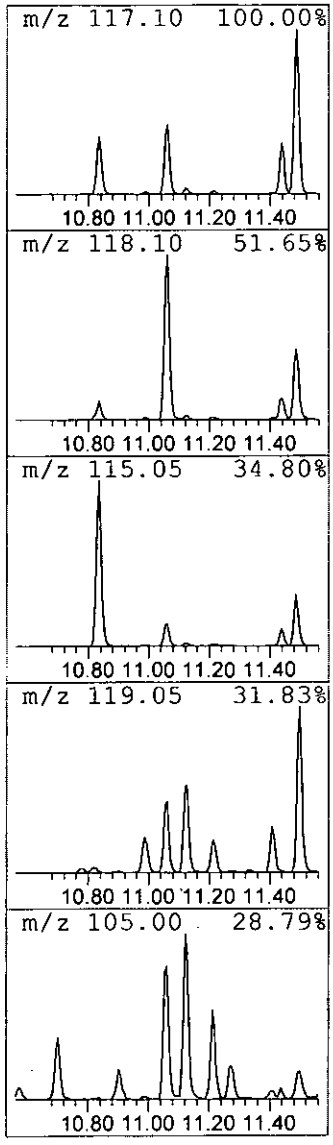
****

Peak Number 4 Benzene, 1-propenyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.060	7.89 ug/L	653260	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-propenyl-	118	C9H10	000637-50-3	91
2	Benzene, 1-ethenyl-2-methyl-	118	C9H10	000611-15-4	91
3	Benzene, 2-propenyl-	118	C9H10	000300-57-2	64
4	Indane	118	C9H10	000496-11-7	64
5	Benzene, 2-propenyl-	118	C9H10	000300-57-2	64





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5264.D
Acq On : 31 Dec 2014 1:41 pm
Operator : F.Naegler
Sample : R1410303-003|1.0
Misc : PARSONS 11603 T4
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

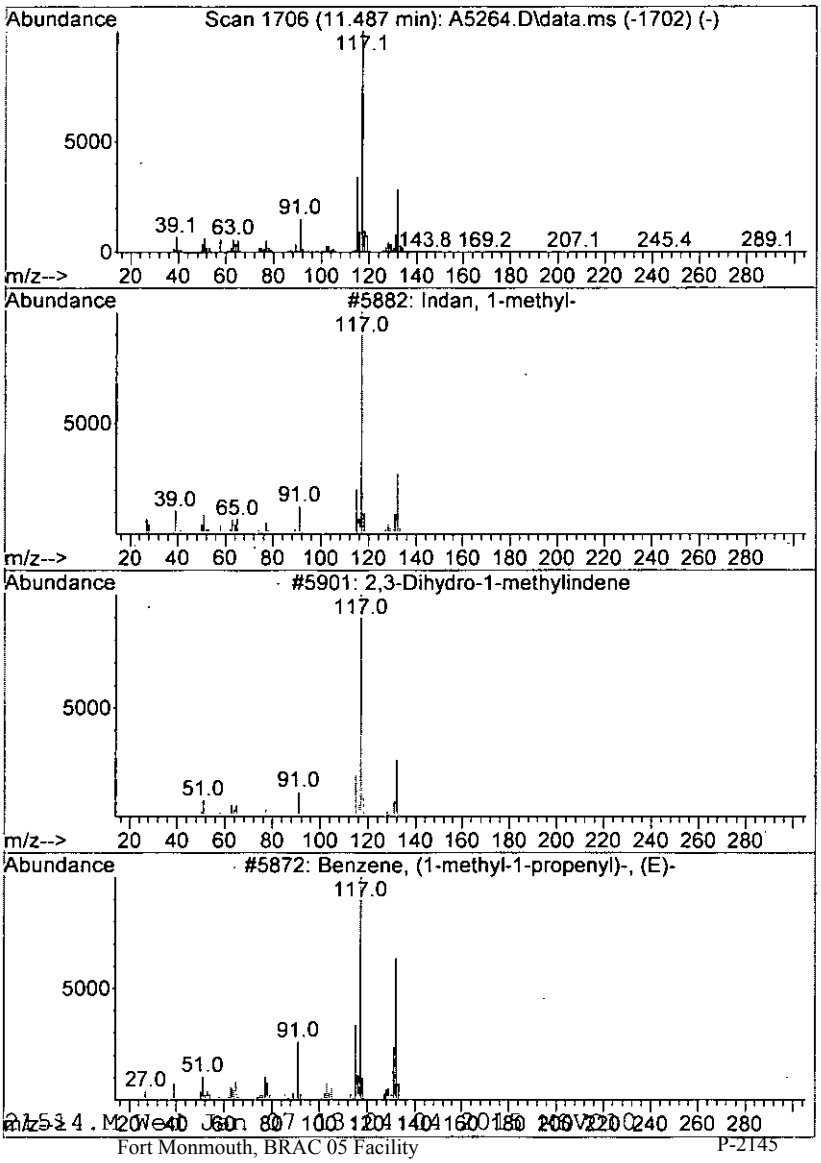
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

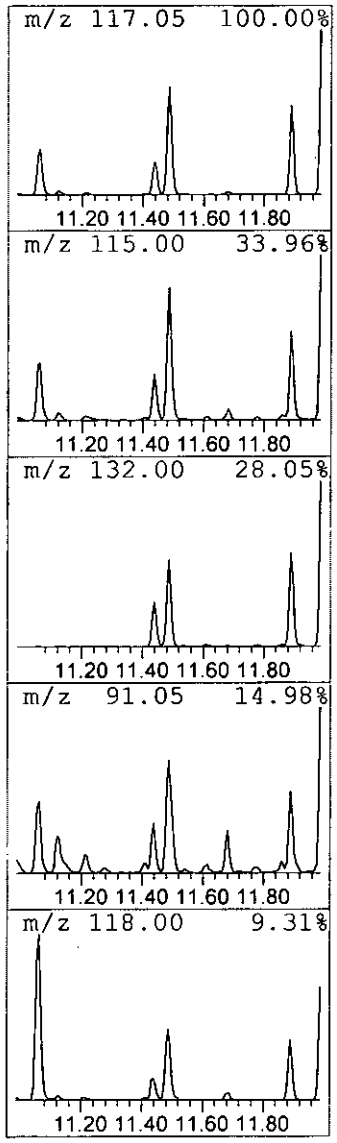
****

Peak Number 5 Indan, 1-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.487	13.67 ug/L	1132340	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indan, 1-methyl-	132	C10H12	000767-58-8	87
2	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	87
3	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	80
4	Indan, 1-methyl-	132	C10H12	000767-58-8	80
5	Benzene, (2-methyl-2-propenyl)-	132	C10H12	003290-53-7	78





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5264.D
Acq On : 31 Dec 2014 1:41 pm
Operator : F.Naegler
Sample : R1410303-003|1.0
Misc : PARSONS 11603 T4
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

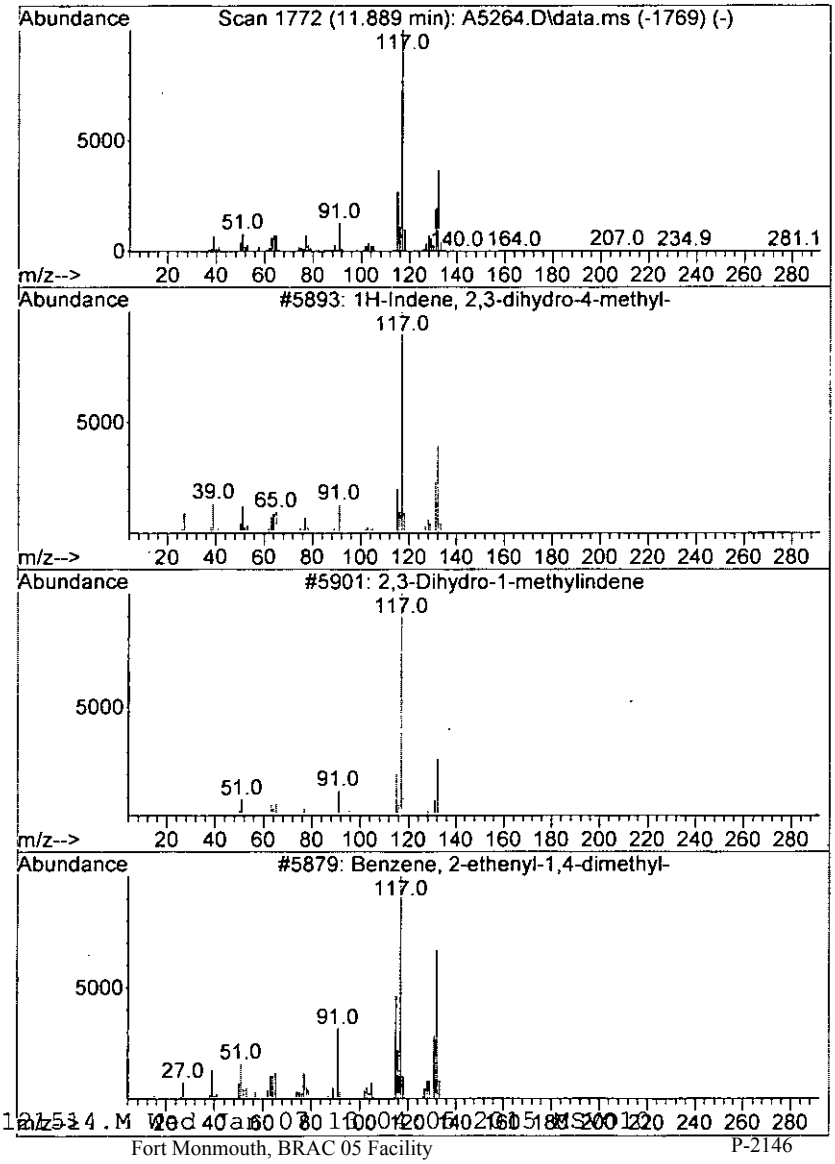
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

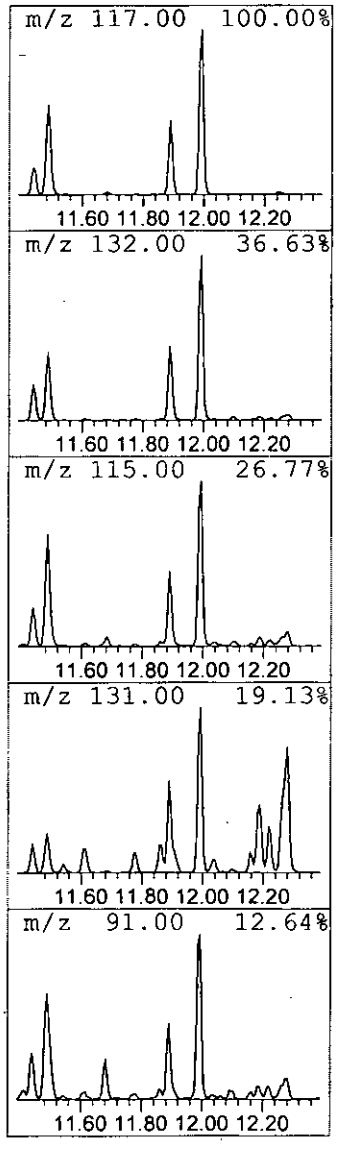
****

Peak Number 6 1H-Indene, 2,3-dihydro-4-me... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.890	9.28 ug/L	768795	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	95
2	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	94
3	Benzene, 2-ethenyl-1,4-dimethyl-	132	C10H12	002039-89-6	92
4	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	87
5	Benzene, 1-methyl-2-(2-propenyl)-	132	C10H12	001587-04-8	83





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5264.D
Acq On : 31 Dec 2014 1:41 pm
Operator : F.Naegler
Sample : R1410303-003|1.0
Misc : PARSONS 11603 T4
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

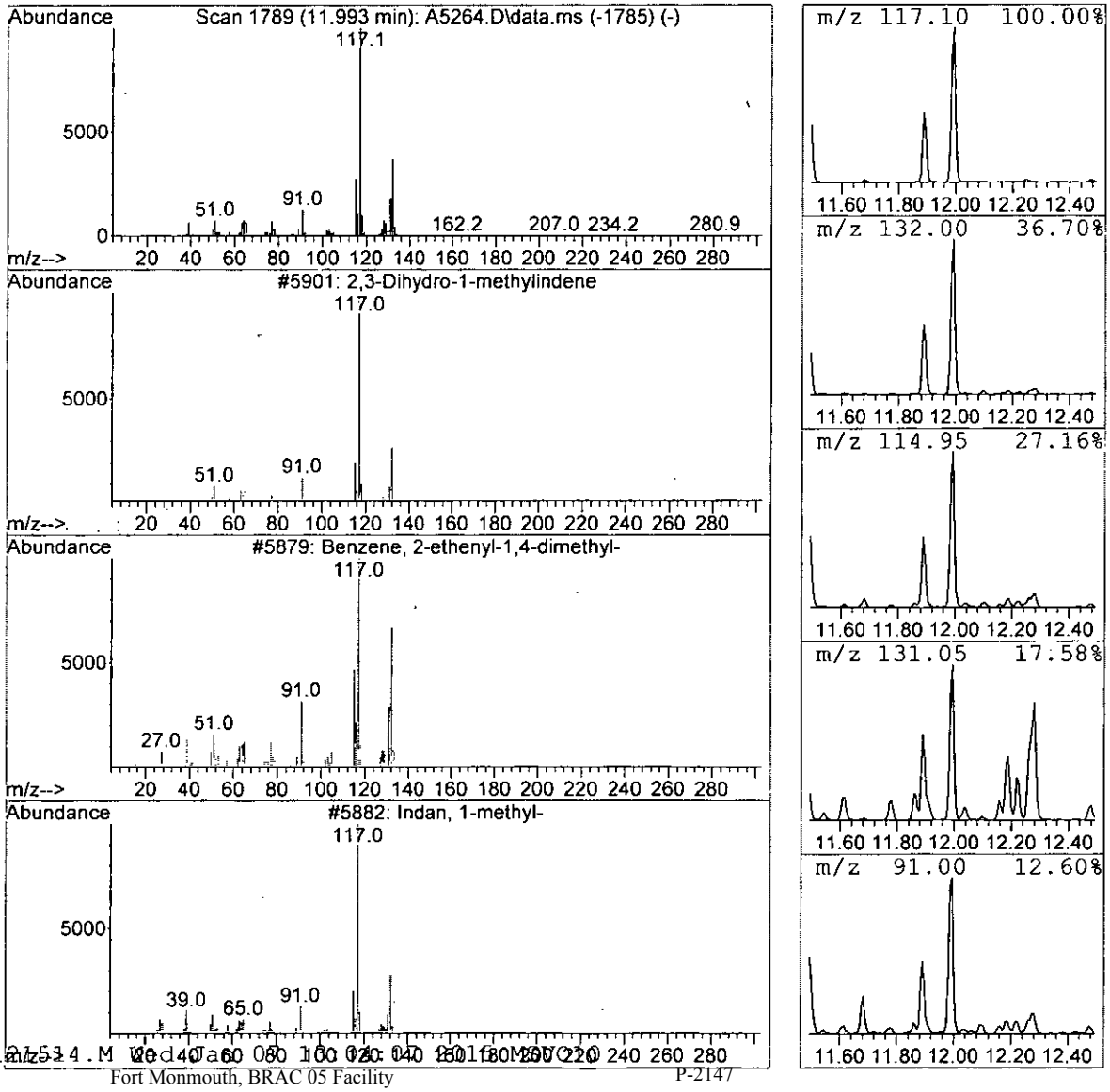
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****

Peak Number 7 2,3-Dihydro-1-methylindene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.993	20.52 ug/L	1699380	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	96
2	Benzene, 2-ethenyl-1,4-dimethyl-	132	C10H12	002039-89-6	96
3	Indan, 1-methyl-	132	C10H12	000767-58-8	91
4	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	90
5	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	90



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5264.D
Acq On : 31 Dec 2014 1:41 pm
Operator : F.Naegler
Sample : R1410303-003|1.0
Misc : PARSONS 11603 T4
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane, 2,3-dim...	2.440	11.5	ug/L	664352	1	4.409	2877270	50.0
Pentane, 3-methyl-	2.672	6.6	ug/L	379830	1	4.409	2877270	50.0
Pentane, 2,3-di...	4.525	7.4	ug/L	425961	1	4.409	2877270	50.0
Benzene, 1-prop...	11.060	7.9	ug/L	653260	4	10.835	4141400	50.0
Indan, 1-methyl-	11.487	13.7	ug/L	1132340	4	10.835	4141400	50.0
1H-Indene, 2,3-...	11.890	9.3	ug/L	768795	4	10.835	4141400	50.0
2,3-Dihydro-1-m...	11.993	20.5	ug/L	1699380	4	10.835	4141400	50.0

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0936
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 14:11
Sample Name:	FTMM-53-GW-699MW06-10.2	**Units:**	µg/L
Lab Code:	R1410303-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5265.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.2**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0936
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 14:11
Sample Name:	FTMM-53-GW-699MW06-10.2	**Units:**	µg/L
Lab Code:	R1410303-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5265.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0936
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 14:11
Sample Name:	FTMM-53-GW-699MW06-10.2	**Units:**	µg/L
Lab Code:	R1410303-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5265.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	12/31/14 14:11	
Dibromofluoromethane	101	85-115	12/31/14 14:11	
Toluene-d8	108	85-120	12/31/14 14:11	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 1411

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW06-10.2	**Units:**	µg/L
Lab Code:	R1410303-004	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-004|1.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5265.D Vial: 7
Acq On : 31 Dec 2014 2:11 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 11:35:24 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	960580	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1393550	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1292380	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	652801	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.324	113	441164	50.33	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.66%				
48) surr1,1,2-dichloroetha...	4.854	65	448340	50.36	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 100.72%				
65) SURR3,Toluene-d8	7.427	98	1651113	53.84	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.68%				
70) SURR2,BFB	9.878	95	634379	49.57	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.14%				
Target Compounds							Qvalue
15) Acetone	2.135	43	3524	2.17	ug/L		76
118) 1,2,3-Tclbenzene	12.536	180	1806	0.21	ug/L	#	65
119) 2,4,5-Trichlorotoluene	~~12.950~~	~~159~~	~~1635m~~	~~0.29~~	~~ug/L~~		- NT Qdded For TIC NT
120) 2,3,6-Trichlorotoluene	~~12.999~~	~~159~~	~~1865~~	~~0.31~~	ug/L	#	85 -NT

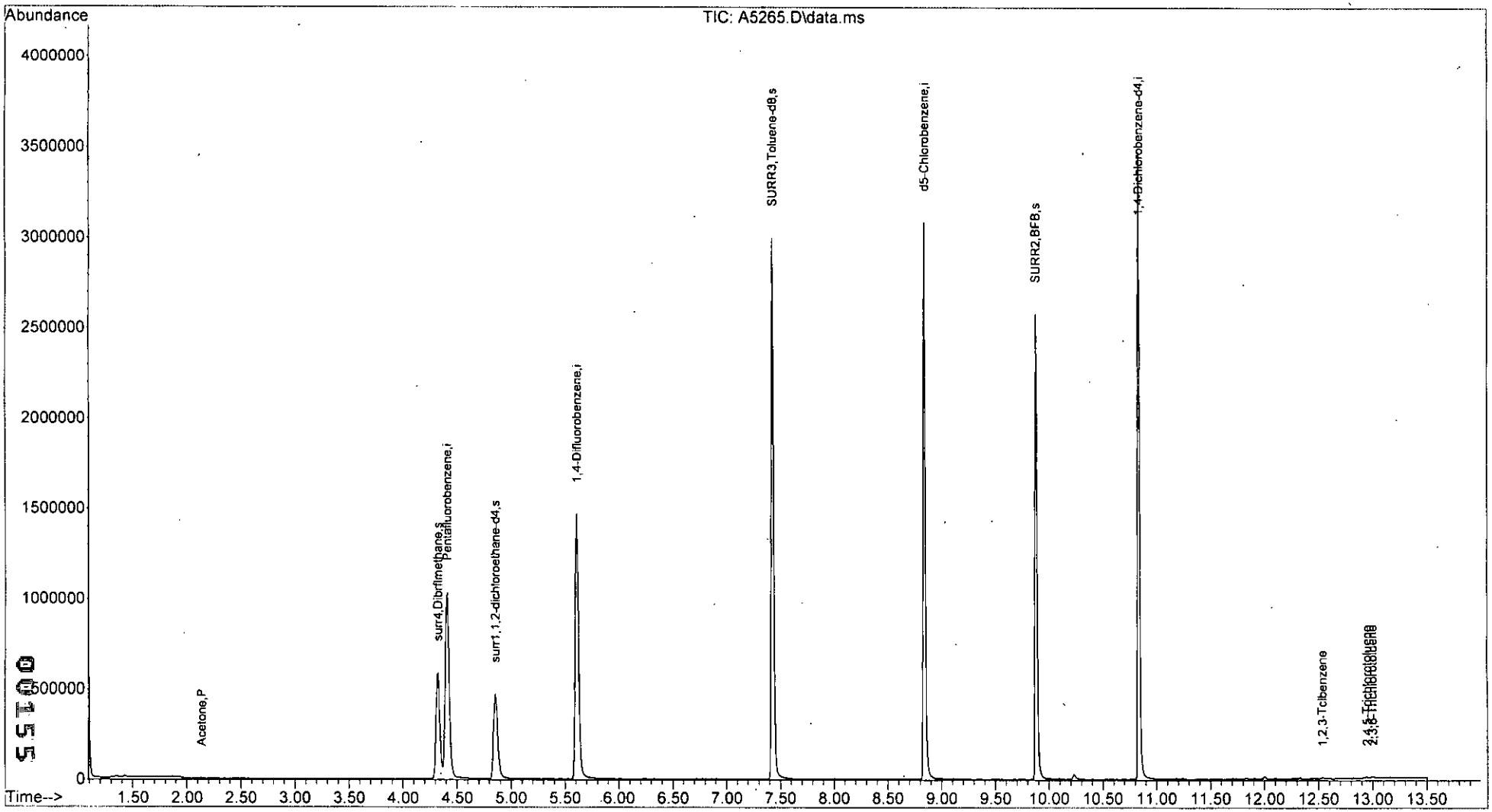
(#) = qualifier out of range (m) = manual integration (+) = signals summed

BA 1/7

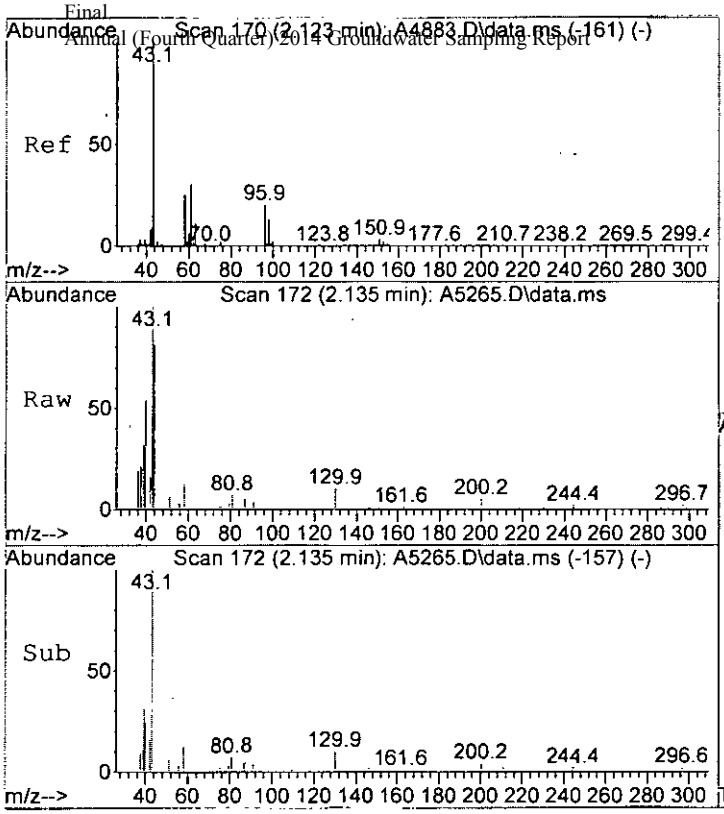
Quantitation Report (QT Reviewed)

Sample : R1410303-004|1.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5265.D Vial: 7
Acq On : 31 Dec 2014 2:11 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 11:35:24 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



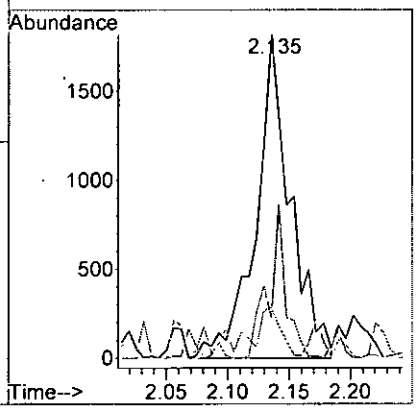
W121514.M Wed Jan 07 11:36:09 2015 MSVO10

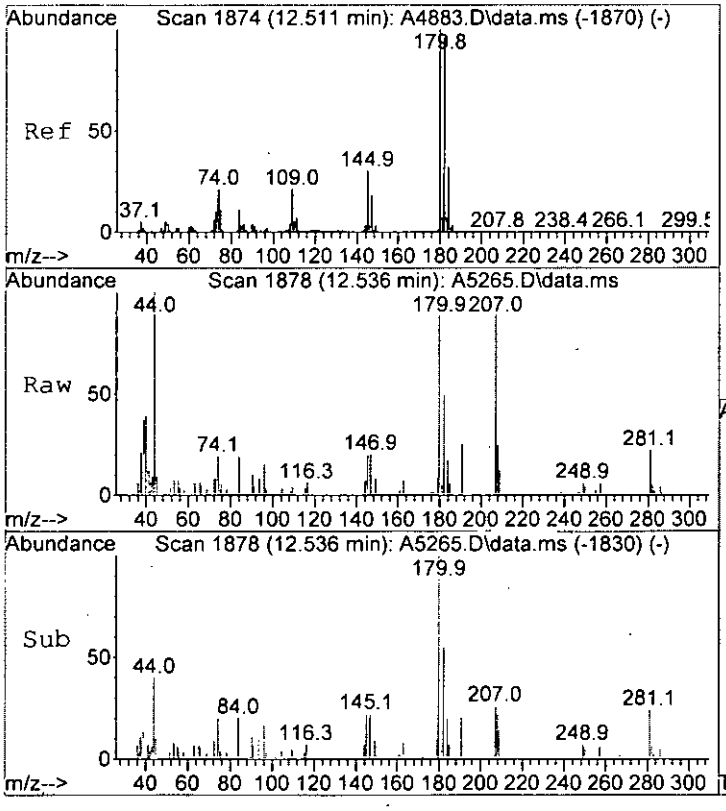


#15
Acetone
Concen: 2.17 ug/L
RT: 2.135 min Scan# 172
Delta R.T. 0.018 min
Lab File: A5265.D
Acq: 31 Dec 2014 2:11 pm

Tgt Ion: 43 Resp: 3524

Ion	Ratio	Lower	Upper
43	100		
58	12.4	5.3	45.3
42	15.7	0.0	29.0

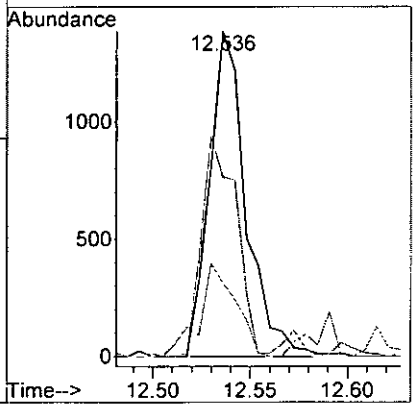


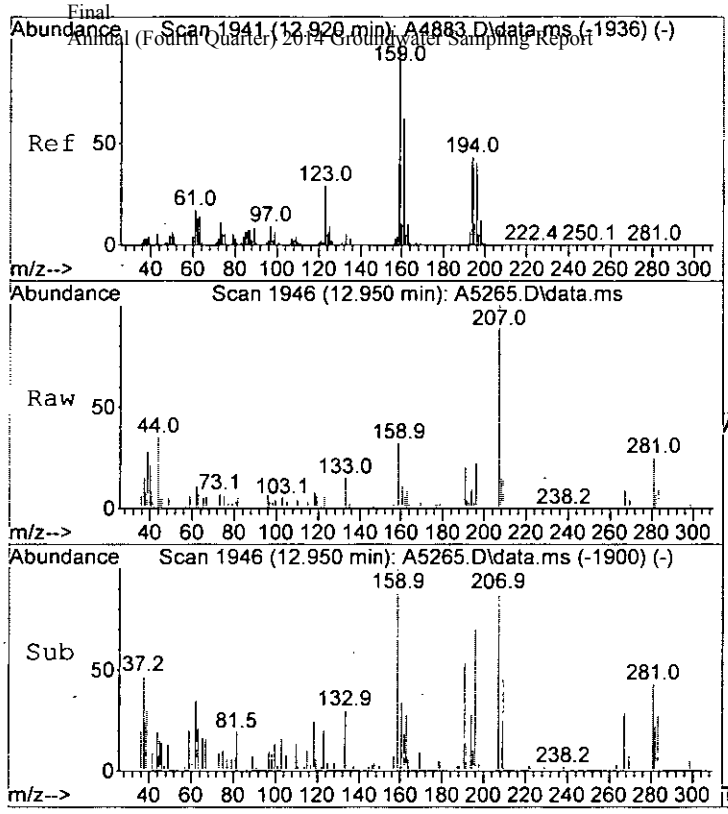


#118
1,2,3-Tclbenzene
Concen: 0.21 ug/L
RT: 12.536 min Scan# 1878
Delta R.T. 0.025 min
Lab File: A5265.D
Acq: 31 Dec 2014 2:11 pm

Tgt Ion:180 Resp: 1806

Ion	Ratio	Lower	Upper
180	100		
182	55.2	75.6	115.6#
145	22.8	9.7	49.7

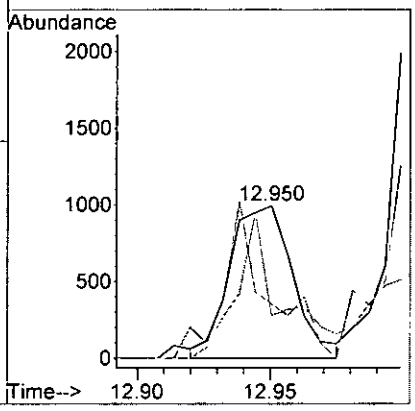


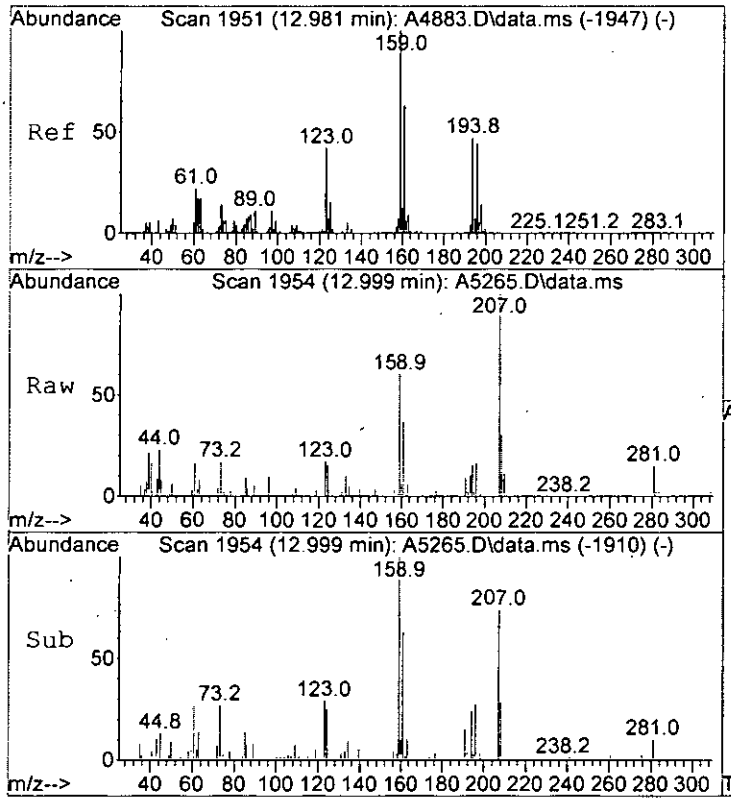


#119
2,4,5-Trichlorotoluene
Concen: 0.29 ug/L m
RT: 12.950 min Scan# 1946
Delta R.T. 0.031 min
Lab File: A5265.D
Acq: 31 Dec 2014 2:11 pm

Tgt Ion:159 Resp: 1635

Ion	Ratio	Lower	Upper
159	100		
161	35.8	42.0	82.0#
194	27.9	23.5	63.5

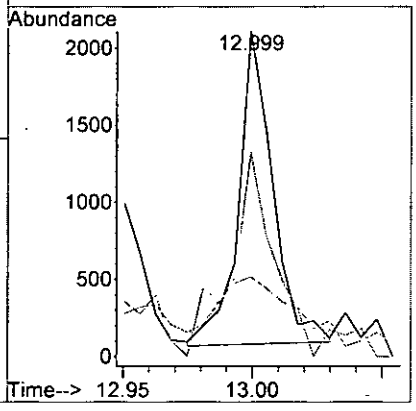




#120
2,3,6-Trichlorotoluene
Concen: 0.31 ug/L
RT: 12.999 min Scan# 1954
Delta R.T. 0.018 min
Lab File: A5265.D
Acq: 31 Dec 2014 2:11 pm

Tgt Ion:159 Resp: 1865

Ion	Ratio	Lower	Upper
159	100		
161	62.6	42.8	82.8
194	24.4	27.3	67.3#



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5265.D
Acq On : 31 Dec 2014 2:11 pm
Operator : F.Naegler
Sample : R1410303-004|1.0
Misc : PARSONS 11603 T4
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5265.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	521	531	538	rBV	586593	1435639	32.13%	5.815%
2	4.409	538	545	561	rVB	1024369	2643725	59.17%	10.708%
3	4.854	610	618	634	rBV2	468410	1256297	28.12%	5.089%
4	5.610	735	742	760	rBV	1465994	3271967	73.23%	13.253%
5	7.427	1034	1040	1055	rBV	2994147	4468208	100.00%	18.098%
6	8.841	1267	1272	1288	rBV	3079298	4104539	91.86%	16.625%
7	9.878	1438	1442	1456	rBV	2570963	3255961	72.87%	13.188%
8	10.225	1495	1499	1506	rBV2	27890	51459	1.15%	0.208%
9	10.835	1594	1599	1617	rBV	3468094	4201032	94.02%	17.016%

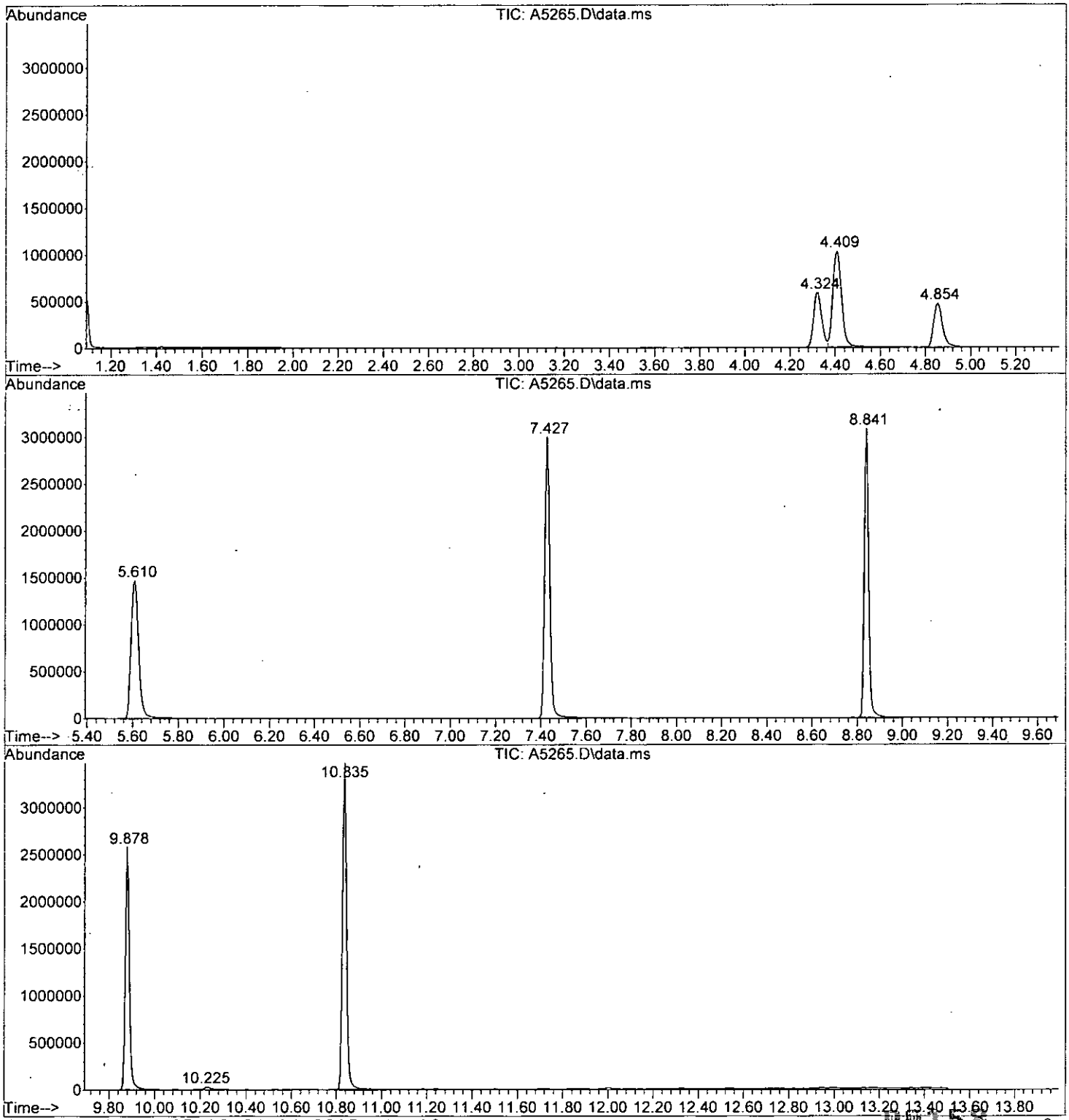
Sum of corrected areas: 24688827

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5265.D
Acq On    : 31 Dec 2014    2:11 pm
Operator  : F.Naegler
Sample    : R1410303-004|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 7   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```



W121514.M Wed Jan 07 13:04:14 2015 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\123114\\
Data File : A5265.D
Acq On : 31 Dec 2014 2:11 pmm
Operator : F.Naeglerr
Sample : R1410303-004|1.0
Misc : PARSONS 11603 T44
ALS Vial : 7 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0945
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 14:40
Sample Name:	FTMM-53-GW-699MW106-10.2	**Units:**	µg/L
Lab Code:	R1410303-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5266.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.0**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0945
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 14:40
Sample Name:	FTMM-53-GW-699MW106-10.2	**Units:**	µg/L
Lab Code:	R1410303-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5266.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0945
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 14:40
Sample Name:	FTMM-53-GW-699MW106-10.2	**Units:**	µg/L
Lab Code:	R1410303-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5266.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	75-120	12/31/14 14:40	
Dibromofluoromethane	100	85-115	12/31/14 14:40	
Toluene-d8	108	85-120	12/31/14 14:40	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/31/14 1440

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW106-10.2
Lab Code: R1410303-005

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-005|1.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5266.D Vial: 8
Acq On : 31 Dec 2014 2:40 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 11:37:38 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	951063	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1357884	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1258697	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	656402	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	428414	50.16	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.32%			
48) surr1,1,2-dichloroetha...	4.854	65	440375	50.76	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 101.52%			
65) SURR3,Toluene-d8	7.427	98	1615732	54.07	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 108.14%			
70) SURR2,BFB	9.878	95	627393	50.31	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.62%			
Target Compounds						Qvalue
12) Acrolein	2.001	56	255	Below Cal		78
15) Acetone	2.135	43	3192	1.99	ug/L	73

(#) = qualifier out of range (m) = manual integration (+) = signals summed

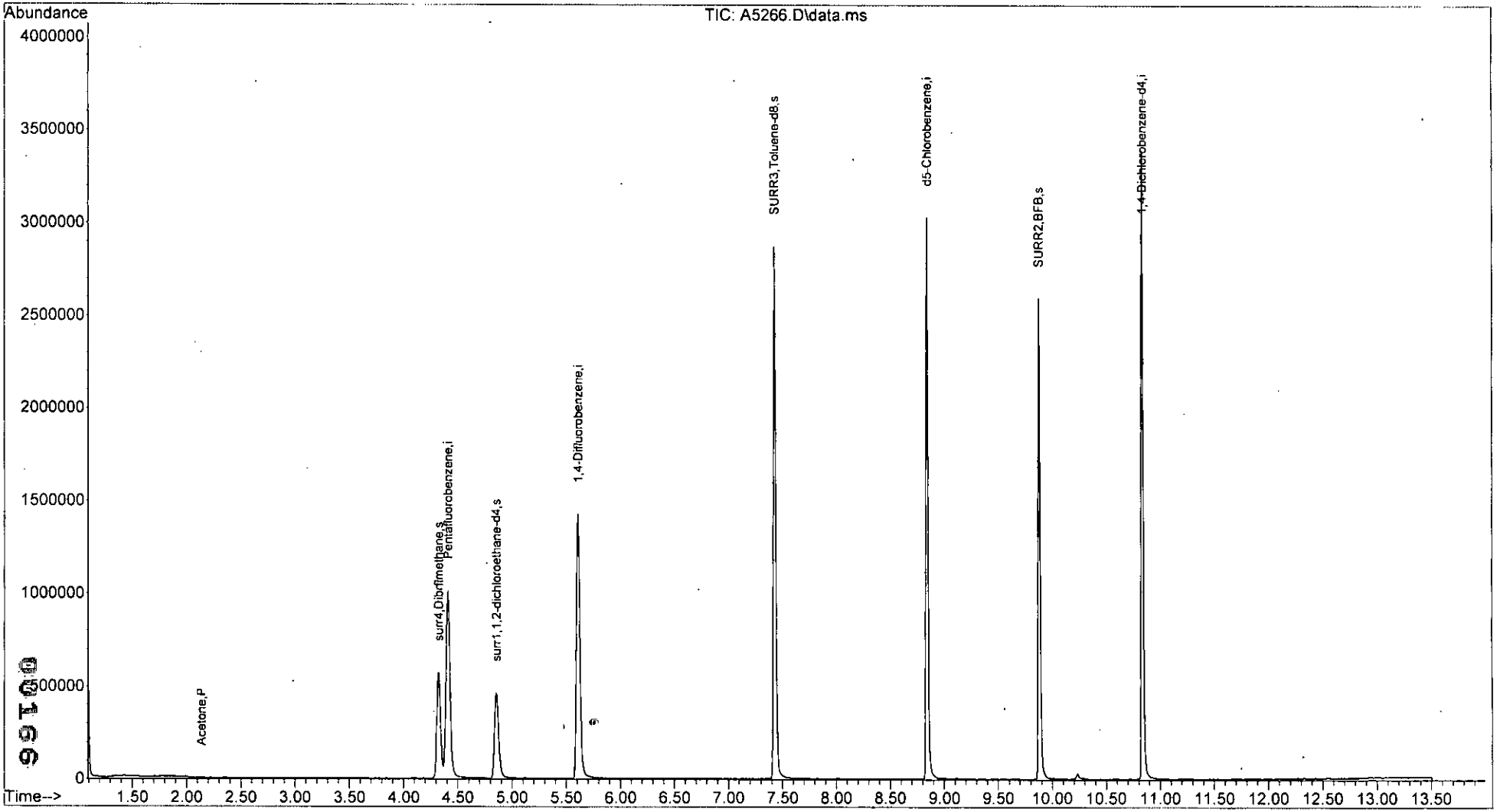
BA 1/7

00165

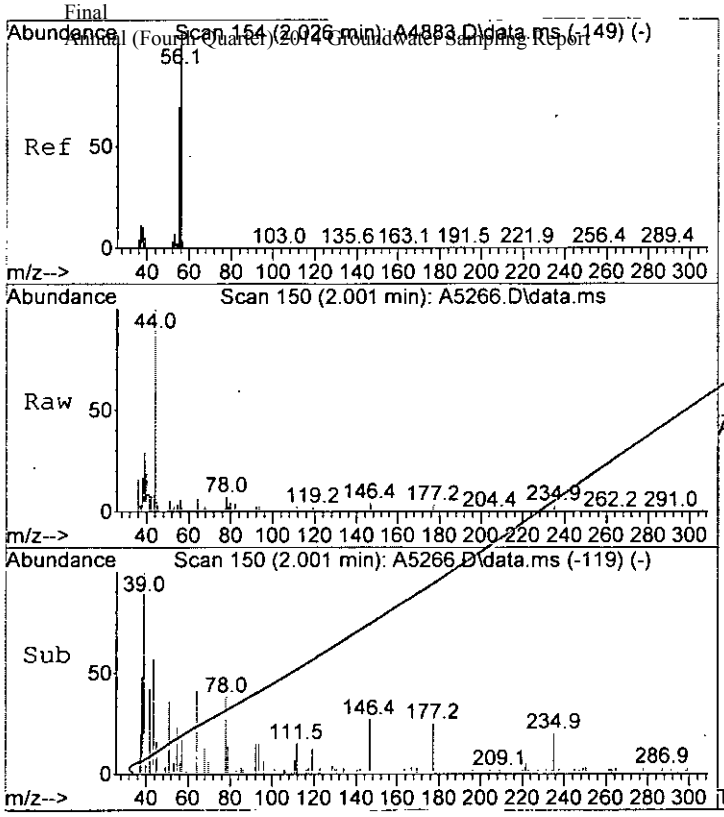
Quantitation Report (QT Reviewed)

Sample : R1410303-005|1.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5266.D Vial: 8
Acq On : 31 Dec 2014 2:40 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 11:37:38 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



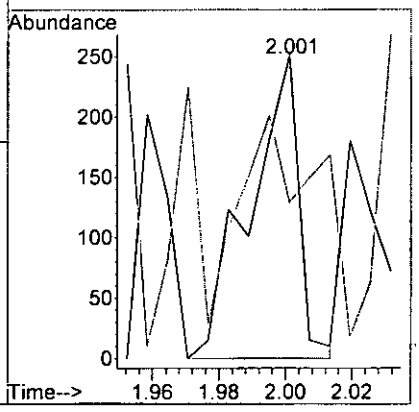
W121514.M Wed Jan 07 11:37:52 2015 MSVO10

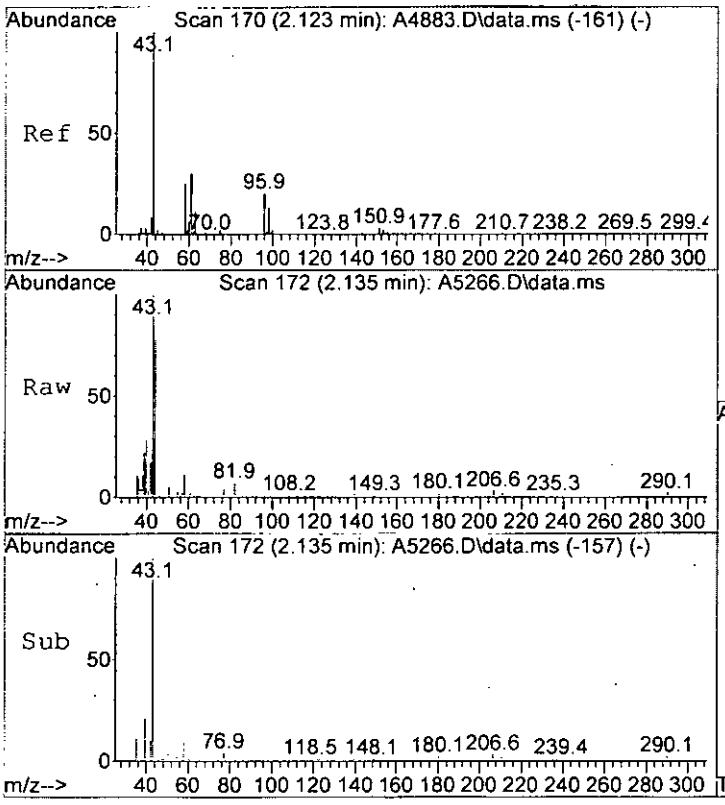


#12
Acrolein
Concen: Below Cal
RT: 2.001 min Scan# 150
Delta R.T. -0.018 min
Lab File: A5266.D
Acq: 31 Dec 2014 2:40 pm

Tgt Ion: 56 Resp: 255

Ion	Ratio	Lower	Upper
56	100		
55	51.4	49.6	89.6

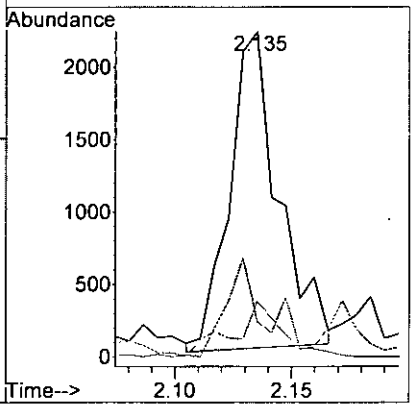




#15
Acetone
Concen: 1.99 ug/L
RT: 2.135 min Scan# 172
Delta R.T. 0.018 min
Lab File: A5266.D
Acq: 31 Dec 2014 2:40 pm

Tgt Ion: 43 Resp: 3192

Ion	Ratio	Lower	Upper
43	100		
58	10.8	5.3	45.3
42	17.1	0.0	29.0



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5266.D
Acq On : 31 Dec 2014 2:40 pm
Operator : F.Naegler
Sample : R1410303-005|1.0
Misc : PARSONS 11603 T4
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5266.D\data.ms

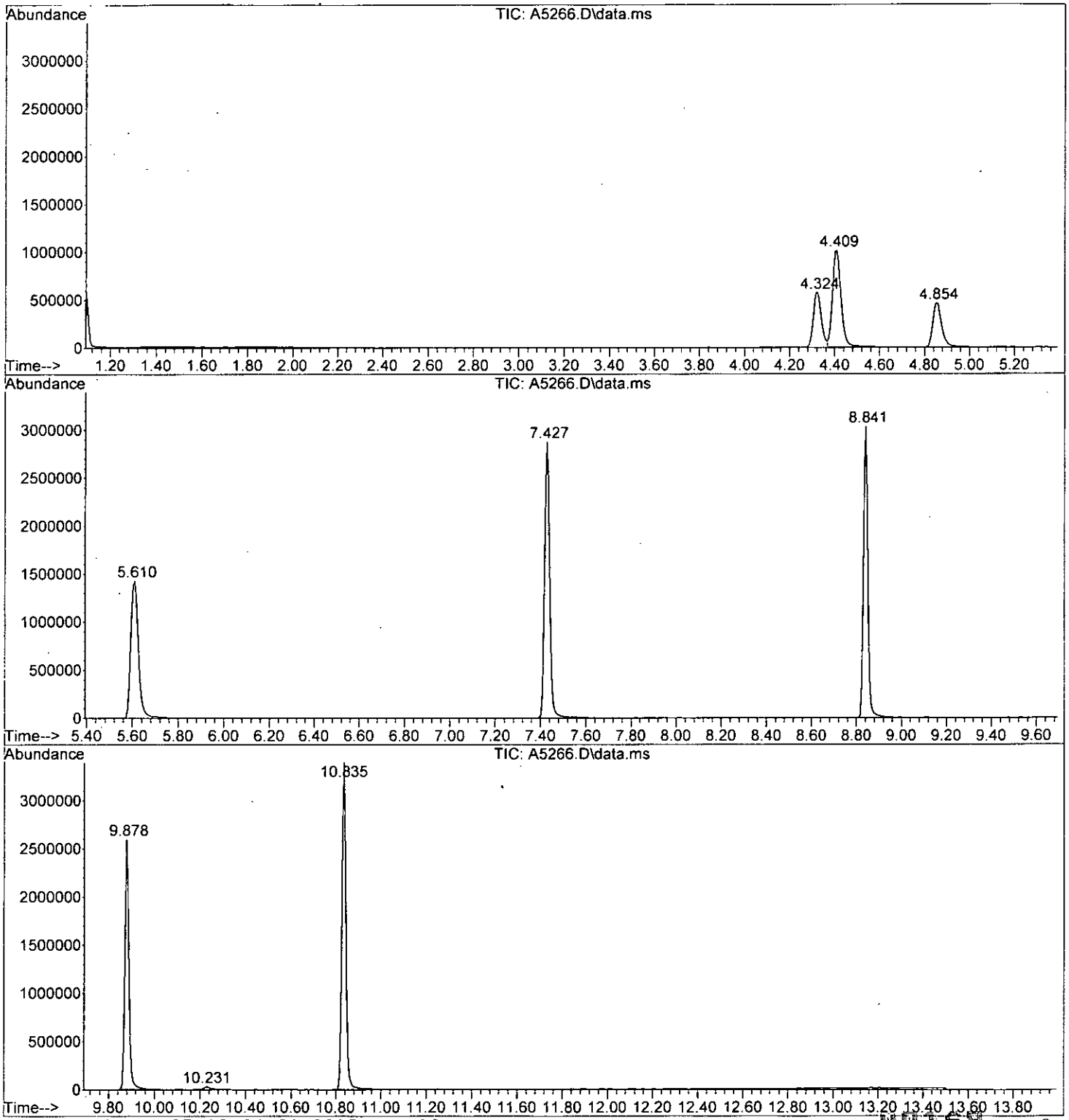
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	522	531	538	rBV	568660	1403203	32.17%	5.760%
2	4.409	538	545	567	rVB	1008326	2636174	60.44%	10.821%
3	4.854	609	618	638	rBV	457431	1233184	28.27%	5.062%
4	5.610	735	742	755	rBV	1423465	3184573	73.01%	13.072%
5	7.427	1035	1040	1057	rBV	2868106	4361836	100.00%	17.905%
6	8.841	1267	1272	1292	rBV	3027744	4038920	92.60%	16.579%
7	9.878	1438	1442	1460	rVB	2590413	3252691	74.57%	13.352%
8	10.231	1495	1500	1506	rBV3	28223	47912	1.10%	0.197%
9	10.835	1594	1599	1612	rBV	3386691	4203057	96.36%	17.253%

Sum of corrected areas: 24361550

```
Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5266.D
Acq On    : 31 Dec 2014   2:40 pm
Operator  : F.Naegler
Sample    : R1410303-005|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 8   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```



W121514.M Wed Jan 07 13:04:21 2015 MSVO10

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\123114\\
Data File : A5266.D
Acq On : 31 Dec 2014 2:40 pmm
Operator : F.Naeglerr
Sample : R1410303-005|1.0
Misc : PARSONS 11603 T44
ALS Vial : 8 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14 0942
Date Received: 12/20/14
Date Analyzed: 12/30/14 05:33

Sample Name: FTMM-53-GW-699MW09-7.75
Lab Code: R1410303-006

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\122914\A5200.D\

Analysis Lot: 427294
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.8**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0942
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 05:33
Sample Name:	FTMM-53-GW-699MW09-7.75	**Units:**	µg/L
Lab Code:	R1410303-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5200.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	0.58	J	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0942
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 05:33
Sample Name:	FTMM-53-GW-699MW09-7.75	**Units:**	µg/L
Lab Code:	R1410303-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5200.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	12/30/14 05:33	
Dibromofluoromethane	101	85-115	12/30/14 05:33	
Toluene-d8	106	85-120	12/30/14 05:33	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/30/14 0533

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-53-GW-699MW09-7.75
Lab Code: R1410303-006

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-006|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5200.D Vial: 35
Acq On : 30 Dec 2014 5:33 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 14:48:33 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	1008104	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1444757	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1315444	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	683313	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	457177	50.30	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.60%			
48) surr1,1,2-dichloroetha...	4.854	65	461213	49.97	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 99.94%			
65) SURR3,Toluene-d8	7.427	98	1689784	53.15	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 106.30%			
70) SURR2,BFB	9.878	95	663462	50.00	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.00%			
Target Compounds						Qvalue
12) Acrolein	1.928	56	313	Below Cal	#	15
15) Acetone	2.129	43	3098	1.82	ug/L	85
25) Methyl-t-Butyl Ether	2.660	73	12417	0.58	ug/L	96

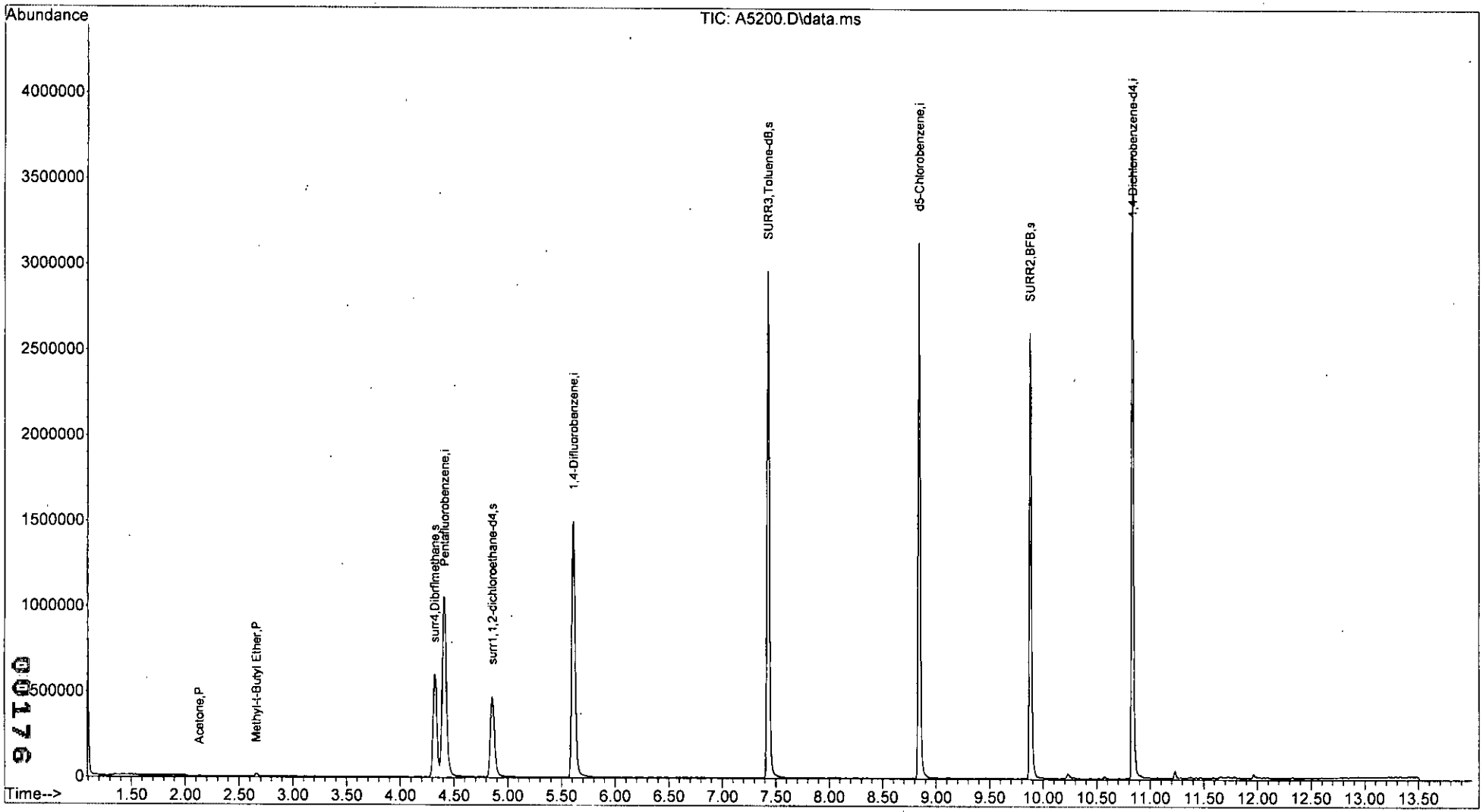
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FJ
1/6/15

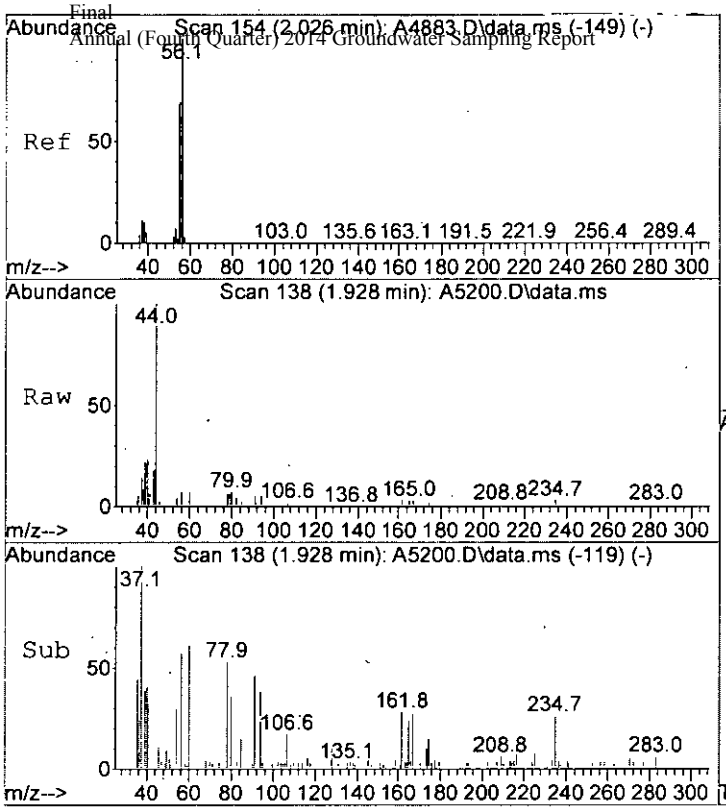
Quantitation Report (QT Reviewed)

Sample : R1410303-006|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5200.D Vial: 35
Acq On : 30 Dec 2014 5:33 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 14:48:33 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



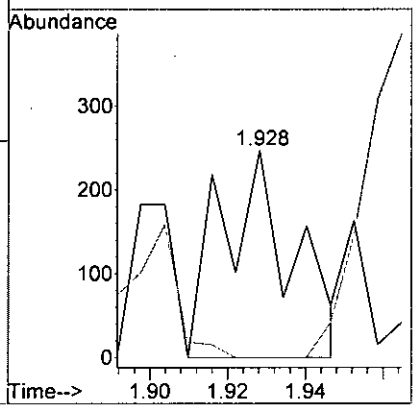
W121514.M Tue Jan 06 14:48:45 2015 MSVO10

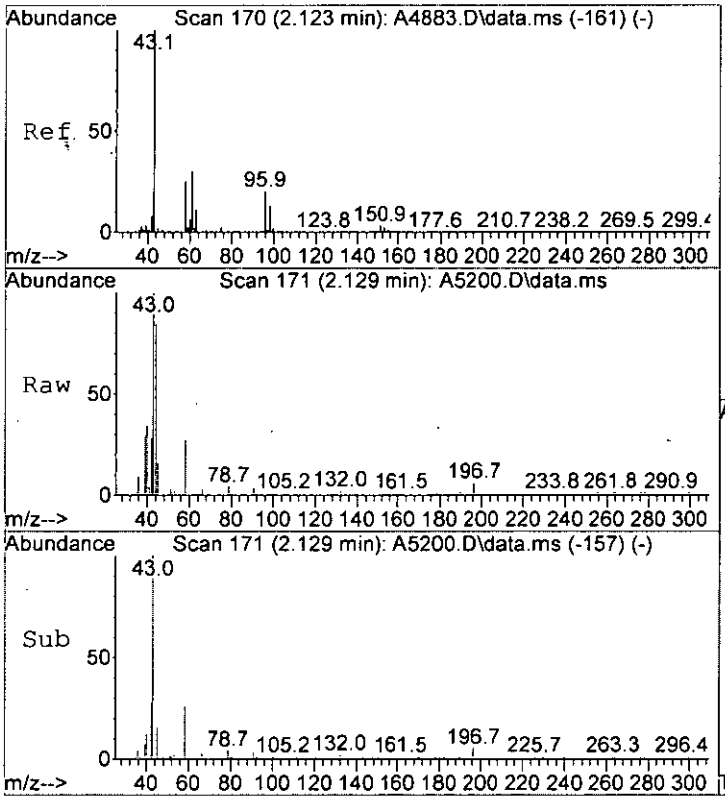


#12
Acrolein
Concen: Below Cal
RT: 1.928 min Scan# 138
Delta R.T. -0.091 min
Lab File: A5200.D
Acq: 30 Dec 2014 5:33 am

Tgt Ion: 56 Resp: 313

Ion	Ratio	Lower	Upper
56	100		
55	0.0	49.6	89.6#

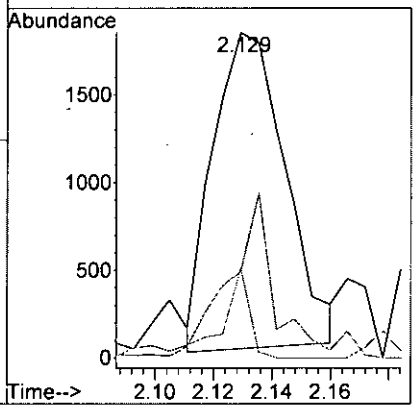


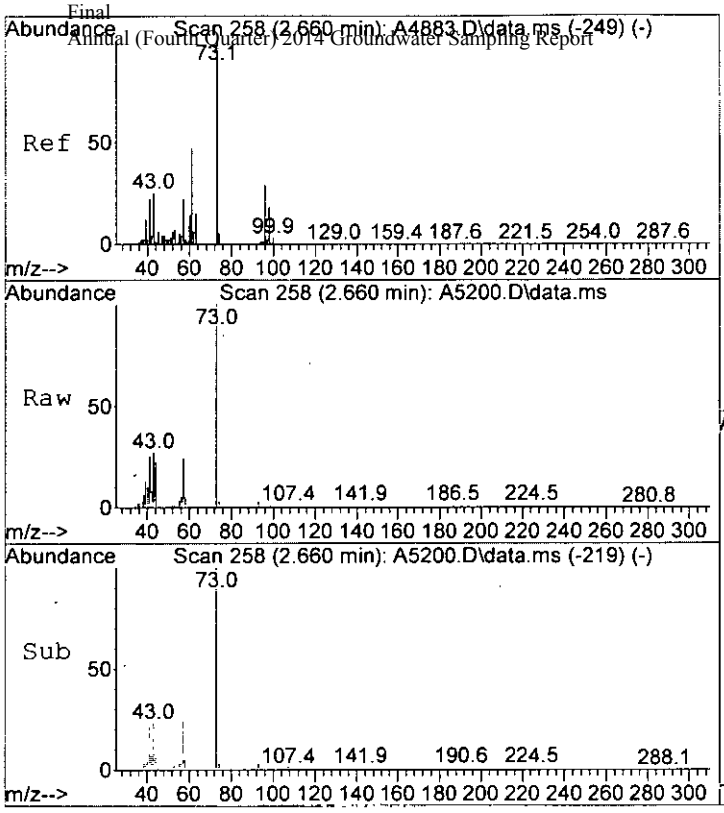


#15
Acetone
Concen: 1.82 ug/L
RT: 2.129 min Scan# 171
Delta R.T. 0.012 min
Lab File: A5200.D
Acq: 30 Dec 2014 5:33 am

Tgt Ion: 43 Resp: 3098

Ion	Ratio	Lower	Upper
43	100		
58	26.5	5.3	45.3
42	27.6	0.0	29.0

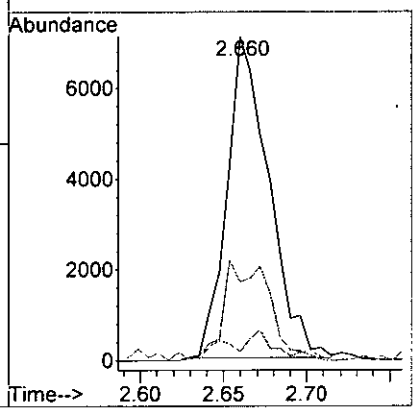




#25
Methyl-t-Butyl Ether
Concen: 0.58 ug/L
RT: 2.660 min Scan# 258
Delta R.T. 0.000 min
Lab File: A5200.D
Acq: 30 Dec 2014 5:33 am

Tgt Ion: 73 Resp: 12417

Ion	Ratio	Lower	Upper
73	100		
57	24.3	2.5	42.5
55	2.8	0.0	24.9



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5200.D
Acq On : 30 Dec 2014 5:33 am
Operator : F.Naegler
Sample : R1410303-006|1.0
Misc : PARSONS 11603 T4
ALS Vial : 35 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5200.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.318	521	530	538	rBV	599908	1487046	32.53%	5.826%
2	4.403	538	544	563	rVB	1047979	2829021	61.89%	11.085%
3	4.854	609	618	637	rBV	470841	1274457	27.88%	4.994%
4	5.610	734	742	757	rBV	1497725	3365819	73.64%	13.188%
5	7.427	1035	1040	1061	rBV	2962944	4570814	100.00%	17.909%
6	8.841	1267	1272	1290	rBV	3132073	4168486	91.20%	16.333%
7	9.878	1438	1442	1454	rBV	2605604	3338644	73.04%	13.081%
8	10.231	1495	1500	1507	rBV3	26089	47333	1.04%	0.185%
9	10.835	1594	1599	1610	rBV	3653371	4386061	95.96%	17.185%
10	11.231	1660	1664	1669	rBV	46014	54607	1.19%	0.214%

Sum of corrected areas: 25522288

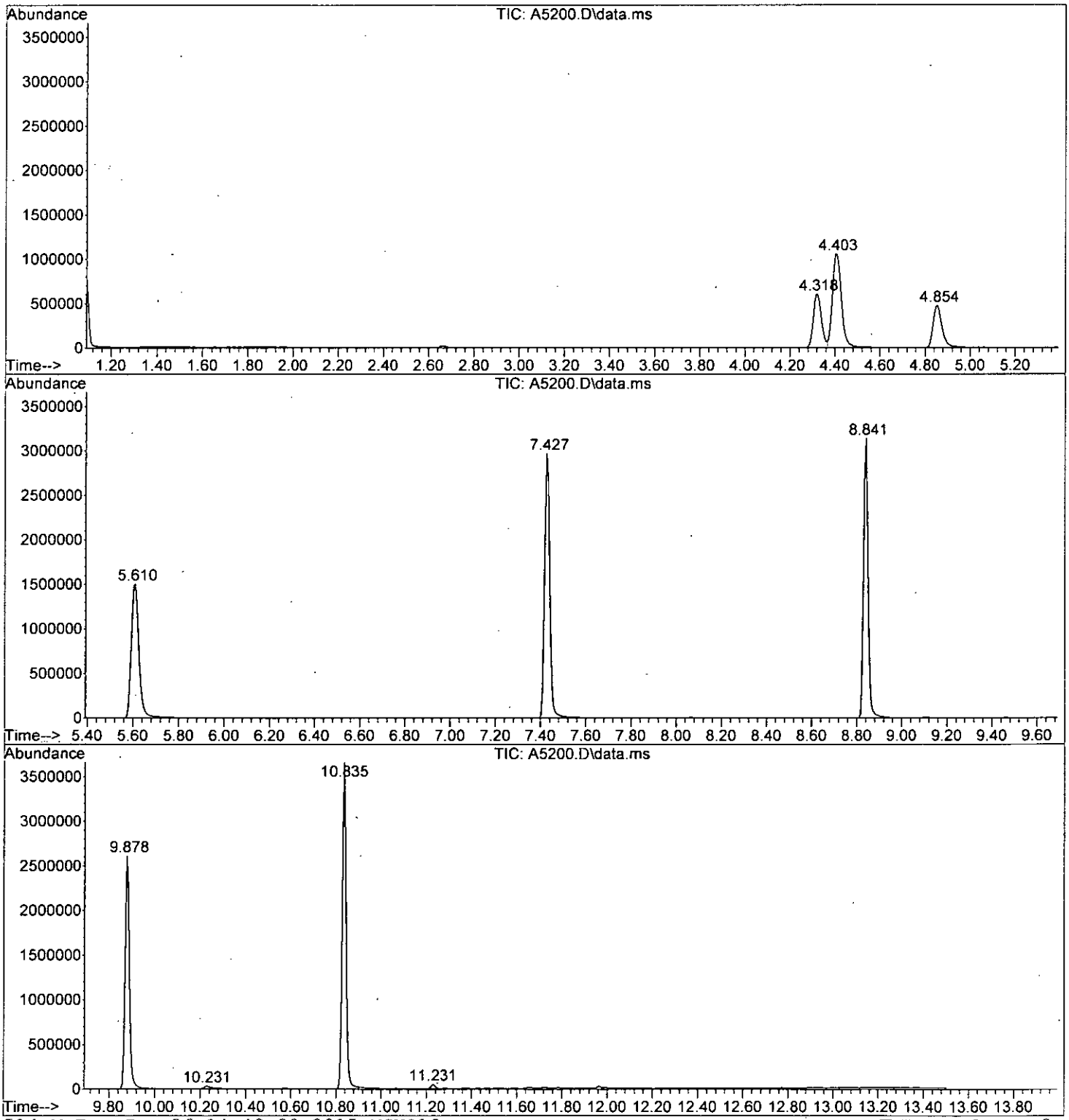
W121514.M Tue Jan 06 14:48:58 2015 MSVO10 Page: 1

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5200.D
Acq On : 30 Dec 2014 5:33 am
Operator : F.Naegler
Sample : R1410303-006|1.0
Misc : PARSONS 11603 T4
ALS Vial : 35 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W121514.M Tue Jan 06 14:49:00 2015 MSVO10

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\122914\\
Data File : A5200.D
Acq On : 30 Dec 2014 5:33 amm
Operator : F.Naeglerr
Sample : R1410303-006|1.0
Misc : PARSONS 11603 T44
ALS Vial : 35 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1000
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 06:02
Sample Name:	FTMM-53-GW-699MW16-.7.5	**Units:**	µg/L
Lab Code:	R1410303-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5201.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.0**	**J**	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1000
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 06:02
Sample Name:	FTMM-53-GW-699MW16-.7.5	**Units:**	µg/L
Lab Code:	R1410303-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5201.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	**7.8**		5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**0.89**	J	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1000
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 06:02
Sample Name:	FTMM-53-GW-699MW16-.7.5	**Units:**	µg/L
Lab Code:	R1410303-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5201.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	12/30/14 06:02	
Dibromofluoromethane	102	85-115	12/30/14 06:02	
Toluene-d8	107	85-120	12/30/14 06:02	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 0602

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW16-.7.5	**Units:**	µg/L
Lab Code:	R1410303-007	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-007|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5201.D Vial: 36
Acq On : 30 Dec 2014 6:02 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 14:50:27 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	989146	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1413523	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.842	117	1304016	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	672688	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	452502	50.89	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.78%			
48) surr1,1,2-dichloroetha...	4.854	65	458713	50.80	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 101.60%			
65) SURR3,Toluene-d8	7.427	98	1668575	53.64	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.28%			
70) SURR2,BFB	9.878	95	652381	50.25	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.50%			
Target Compounds						Qvalue
15) Acetone	2.136	43	3379	2.02	ug/L	94
40) Chloroform	4.099	83	125984	7.81	ug/L	99
72) Tetrachloroethene	8.061	164	6972	0.89	ug/L	86

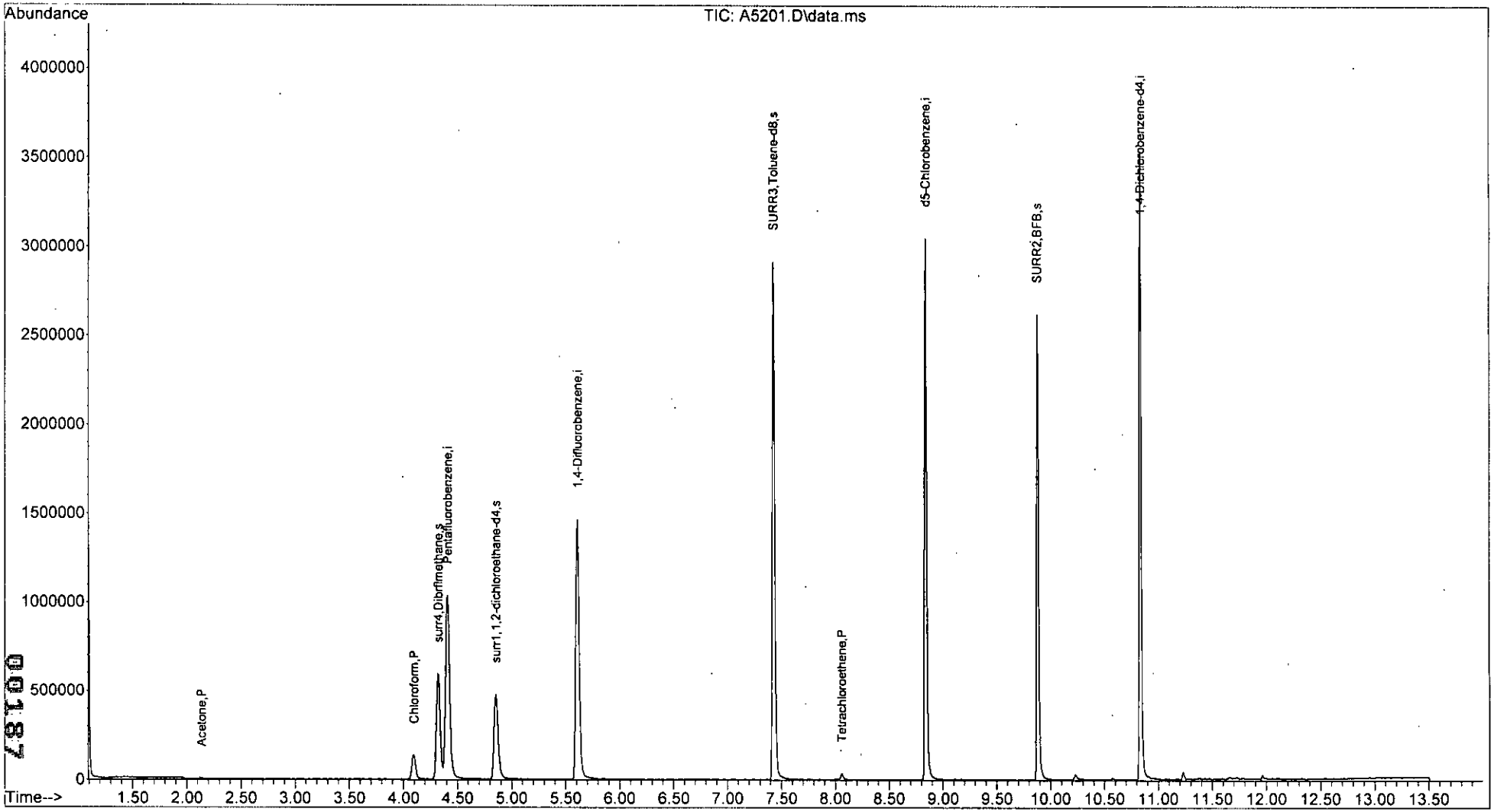
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FV
1/6/15

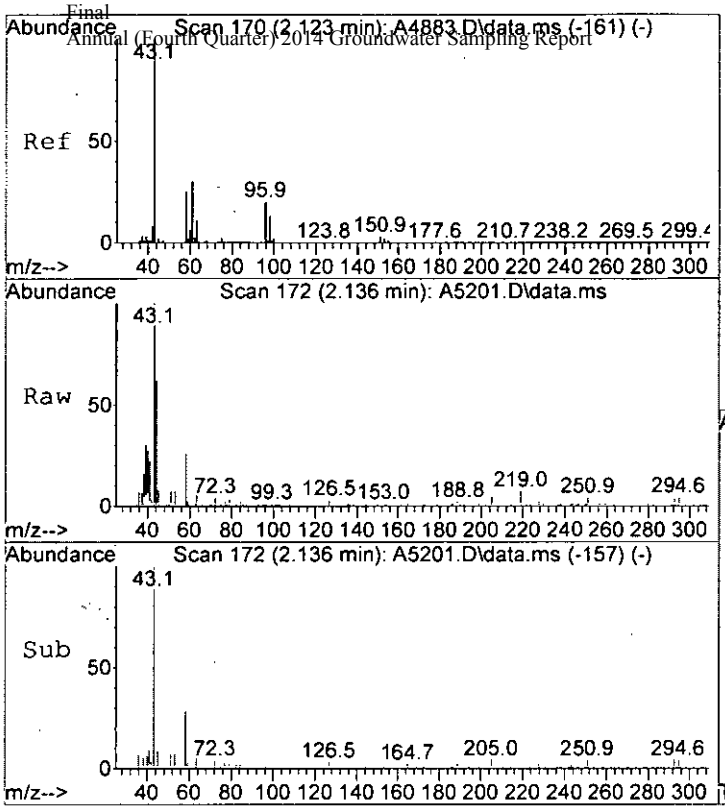
Quantitation Report (QT Reviewed)

Sample : R1410303-007|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5201.D Vial: 36
Acq On : 30 Dec 2014 6:02 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 14:50:27 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



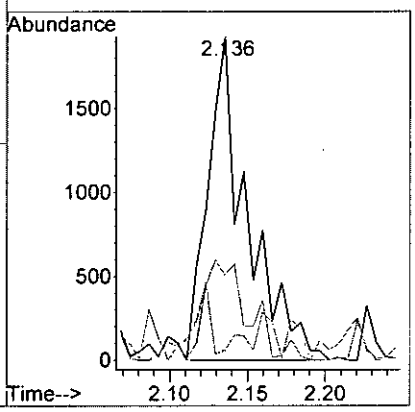
W121514.M Tue Jan 06 14:50:39 2015 MSVO10

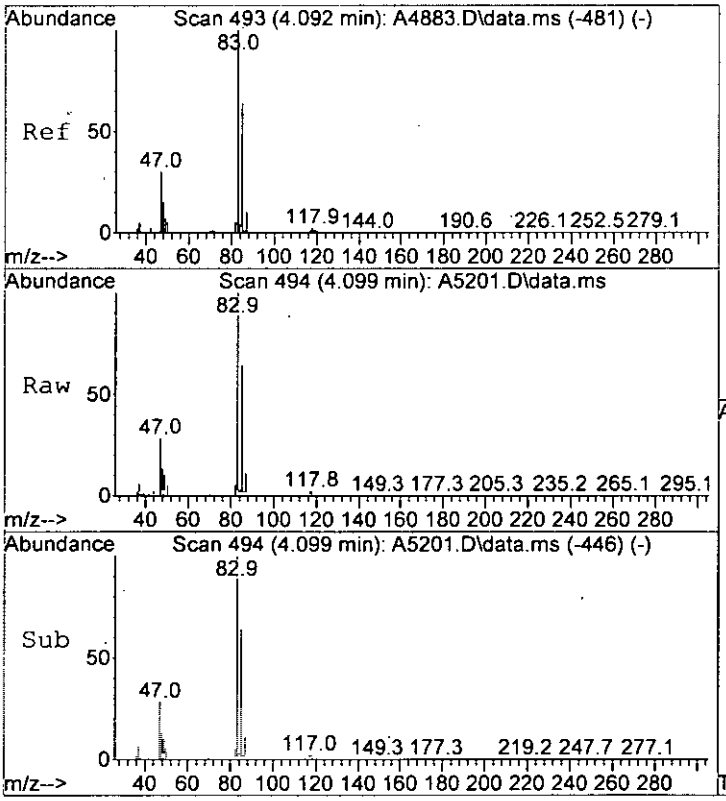


#15
Acetone
Concen: 2.02 ug/L
RT: 2.136 min Scan# 172
Delta R.T. 0.019 min
Lab File: A5201.D
Acq: 30 Dec 2014 6:02 am

Tgt Ion: 43 Resp: 3379

Ion	Ratio	Lower	Upper
43	100		
58	26.3	5.3	45.3
42	3.1	0.0	29.0

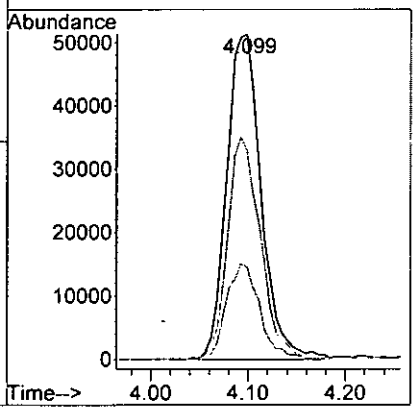


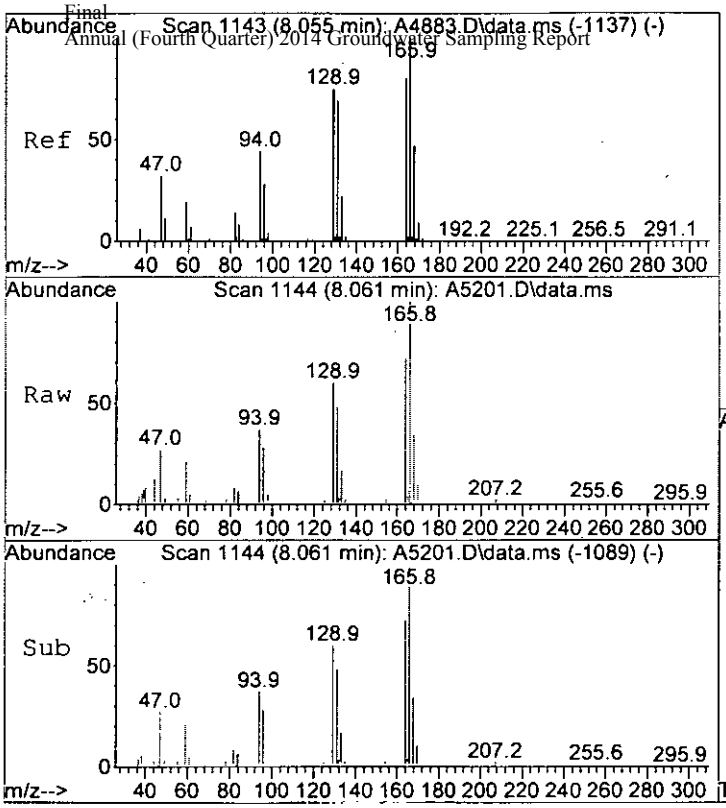


#40
Chloroform
Concen: 7.81 ug/L
RT: 4.099 min Scan# 494
Delta R.T. 0.006 min
Lab File: A5201.D
Acq: 30 Dec 2014 6:02 am

Tgt Ion: 83 Resp: 125984

Ion	Ratio	Lower	Upper
83	100		
85	64.2	44.0	84.0
47	28.4	10.2	50.2

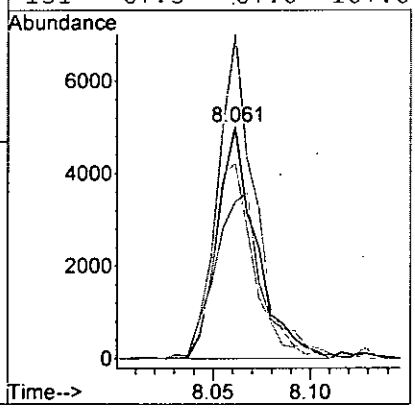




#72
Tetrachloroethene
Concen: 0.89 ug/L
RT: 8.061 min Scan# 1144
Delta R.T. 0.006 min
Lab File: A5201.D
Acq: 30 Dec 2014 6:02 am

Tgt Ion:164 Resp: 6972

Ion	Ratio	Lower	Upper
164	100		
166	139.7	105.5	145.5
129	83.9	73.7	113.7
131	67.5	67.0	107.0



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5201.D
Acq On : 30 Dec 2014 6:02 am
Operator : F.Naegler
Sample : R1410303-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 36 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5201.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.092	483	493	504	rBV	140706	340471	7.57%	1.332%
2	4.318	521	530	538	rBV	594205	1465527	32.56%	5.732%
3	4.409	538	545	566	rVB	1030295	2768988	61.53%	10.830%
4	4.854	610	618	633	rBV2	476011	1268209	28.18%	4.960%
5	5.610	735	742	757	rBV	1459944	3252283	72.27%	12.721%
6	7.427	1035	1040	1063	rBV	2911780	4500329	100.00%	17.602%
7	8.061	1138	1144	1152	rVB2	35044	55260	1.23%	0.216%
8	8.842	1267	1272	1289	rBV	3045891	4117907	91.50%	16.106%
9	9.878	1438	1442	1458	rBV	2618096	3344503	74.32%	13.081%
10	10.232	1496	1500	1515	rVB3	30633	60003	1.33%	0.235%
11	10.835	1594	1599	1609	rBV	3536182	4332319	96.27%	16.945%
12	11.231	1660	1664	1670	rBV	45280	61207	1.36%	0.239%

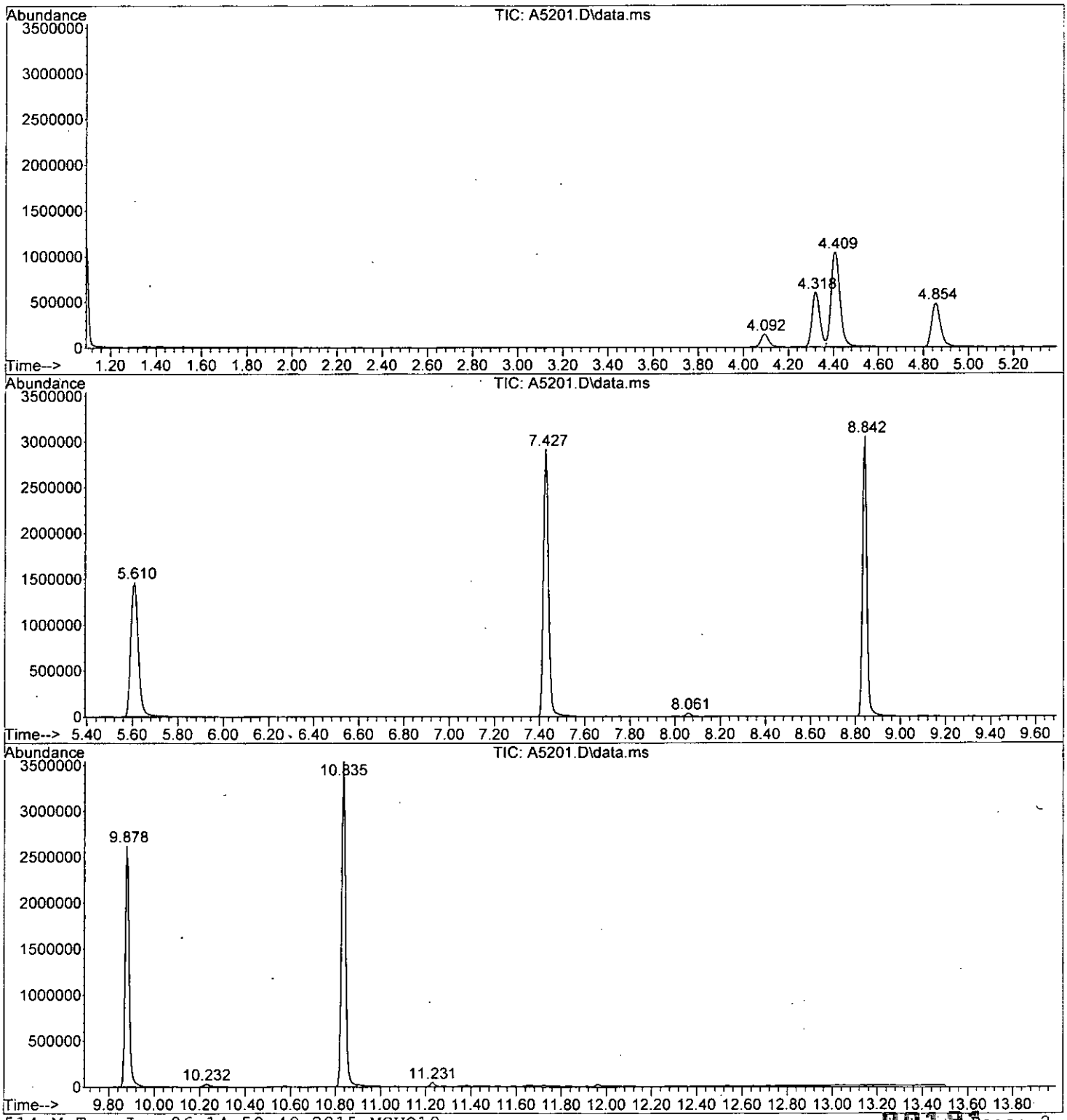
Sum of corrected areas: 25567006

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5201.D
Acq On : 30 Dec 2014 6:02 am
Operator : F.Naegler
Sample : R1410303-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 36 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W121514.M Tue Jan 06 14:50:49 2015 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\122914\\
Data File : A5201.D
Acq On : 30 Dec 2014 6:02 amm
Operator : F.Naeglerr
Sample : R1410303-007|1.0
Misc : PARSONS 11603 T44
ALS Vial : 36 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

00192

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0930
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 06:32
Sample Name:	FTMM-53-GW-699RW03-8.2	**Units:**	µg/L
Lab Code:	R1410303-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5202.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**3.0**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**0.26**	J	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**0.29**	J	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0930
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 06:32
Sample Name:	FTMM-53-GW-699RW03-8.2	**Units:**	µg/L
Lab Code:	R1410303-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5202.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	**0.58**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	0.37	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**0.45**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**0.38**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	**0.86**	J	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0930
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 06:32
Sample Name:	FTMM-53-GW-699RW03-8.2	**Units:**	µg/L
Lab Code:	R1410303-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5202.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	12/30/14 06:32	
Dibromofluoromethane	99	85-115	12/30/14 06:32	
Toluene-d8	107	85-120	12/30/14 06:32	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 0632

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699RW03-8.2	**Units:**	µg/L
Lab Code:	R1410303-008	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000079-29-8	Butane, 2,3-dimethyl-	2.44	**9.1**	JN
000096-14-0	Pentane, 3-methyl-	2.67	**6.9**	JN

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-008|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5202.D Vial: 37
Acq On : 30 Dec 2014 6:32 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 14:53:29 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	1008627	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1446165	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1320278	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	700042	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	450513	49.52	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.04%			
48) surr1,1,2-dichloroetha...	4.854	65	453489	49.09	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 98.18%			
65) SURR3,Toluene-d8	7.427	98	1702038	53.48	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 106.96%			
70) SURR2,BFB	9.878	95	660348	49.72	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.44%			
Target Compounds						Qvalue
12) Acrolein	1.977	56	271	Below Cal	#	19
82) Ethylbenzene	8.988	106	7713	0.58	ug/L #	90
83) (m+p)Xylene	9.097	106	7028	0.45	ug/L #	83
84) o-Xylene	9.439	106	13866	0.86	ug/L	88
88) Isopropylbenzene	9.762	105	13650	0.37	ug/L	96
95) n-Propylbenzene	10.109	91	16221	0.38	ug/L	95
99) 1,3,5-Trimethylbenzene	10.256	105	8141	0.26	ug/L	83
101) 1,2,4-Trimethylbenzene	10.561	105	95958	2.97	ug/L	99
104) p-Isopropyltoluene	10.817	119	9053	0.29	ug/L	99

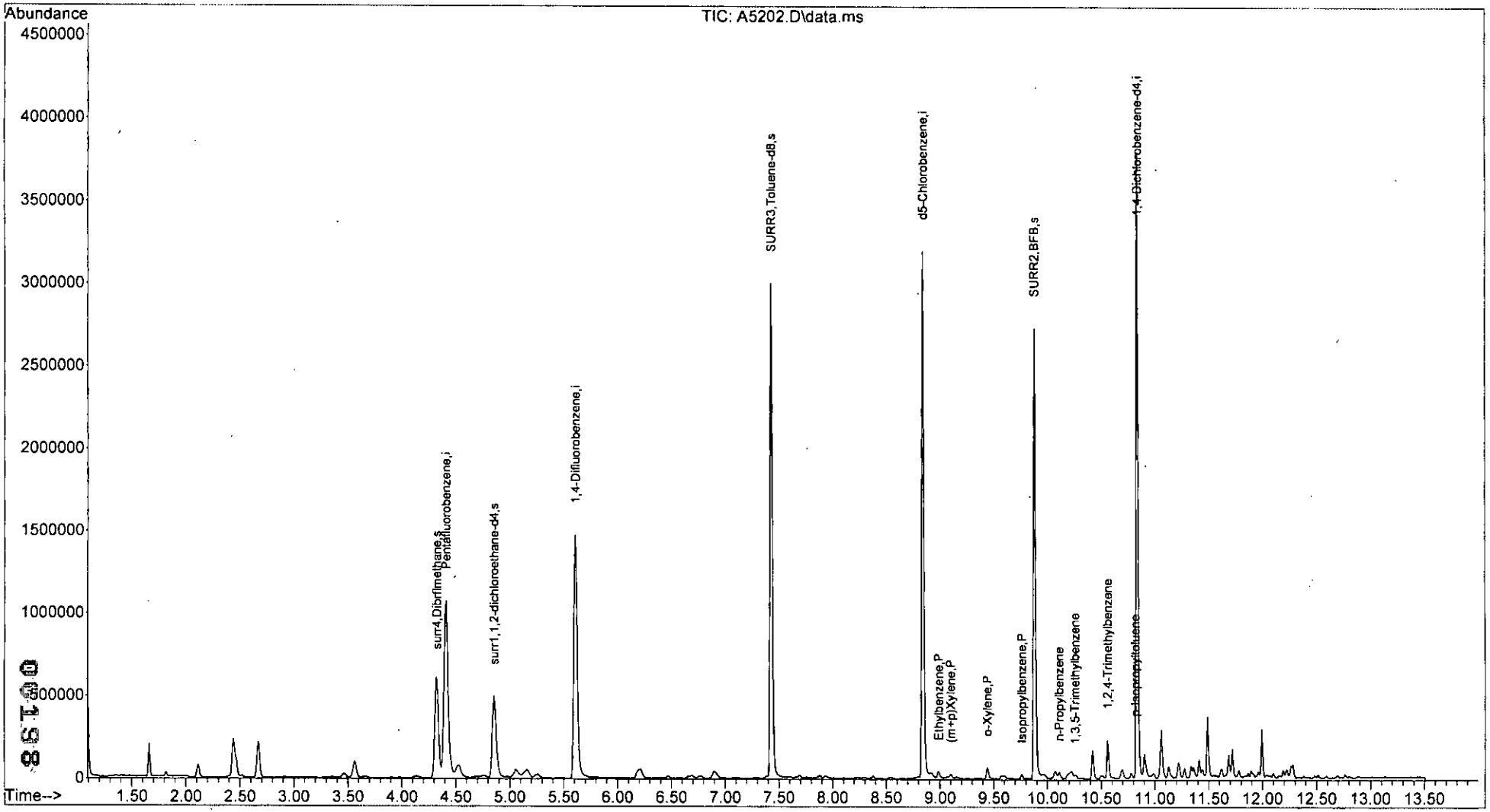
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FJ
1/6/15

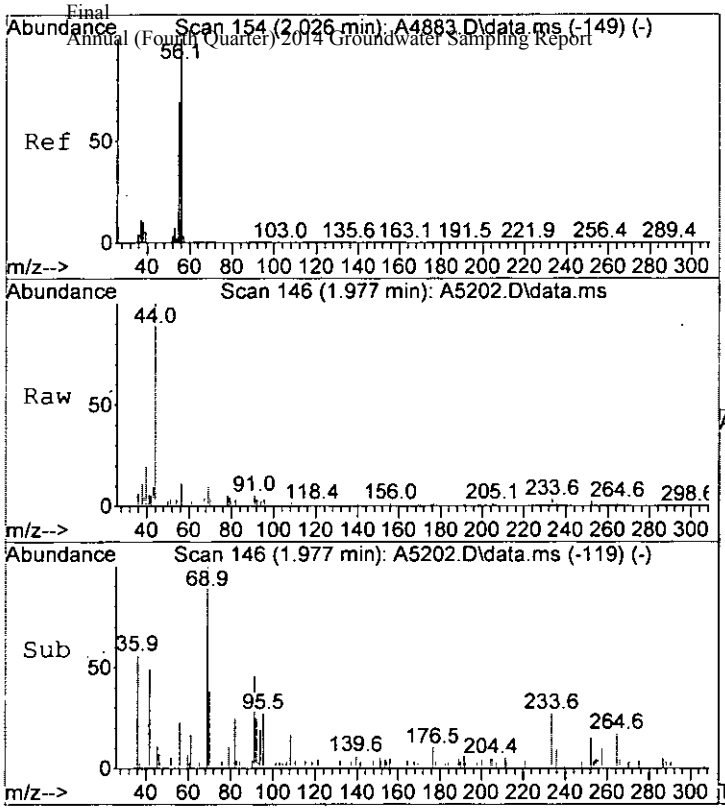
Quantitation Report (QT Reviewed)

Sample : R1410303-008|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5202.D Vial: 37
Acq On : 30 Dec 2014 6:32 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 14:53:29 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



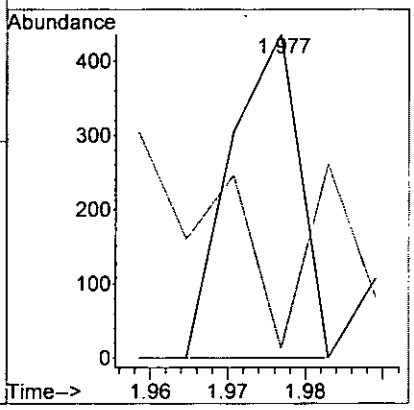
W121514.M Tue Jan 06 14:53:48 2015 MSVO10

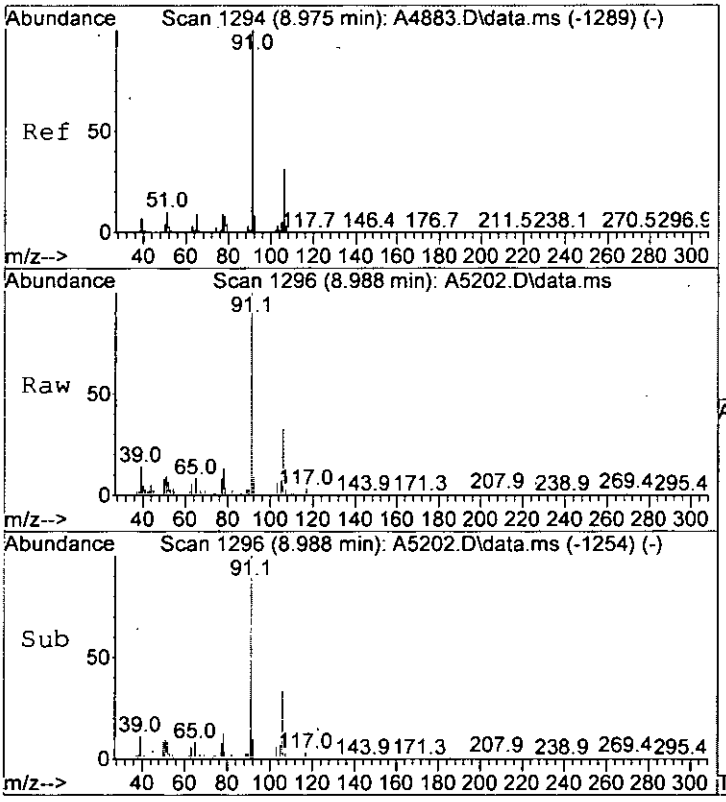


#12
Acrolein
Concen: Below Cal
RT: 1.977 min Scan# 146
Delta R.T. -0.042 min
Lab File: A5202.D
Acq: 30 Dec 2014 6:32 am

Tgt Ion: 56 Resp: 271

Ion	Ratio	Lower	Upper
56	100		
55	3.0	49.6	89.6#

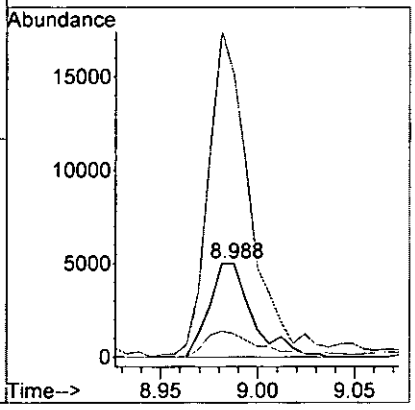


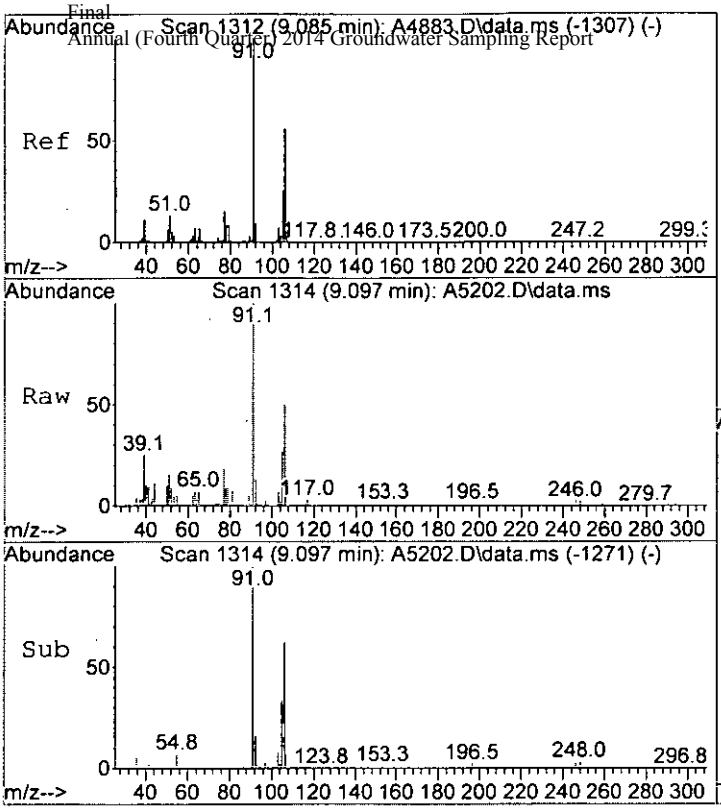


#82
Ethylbenzene
Concen: 0.58 ug/L
RT: 8.988 min Scan# 1296
Delta R.T. 0.006 min
Lab File: A5202.D
Acq: 30 Dec 2014 6:32 am

Tgt Ion:106 Resp: 7713

Ion	Ratio	Lower	Upper
106	100		
91	302.2	302.6	342.6#
65	24.7	11.0	51.0

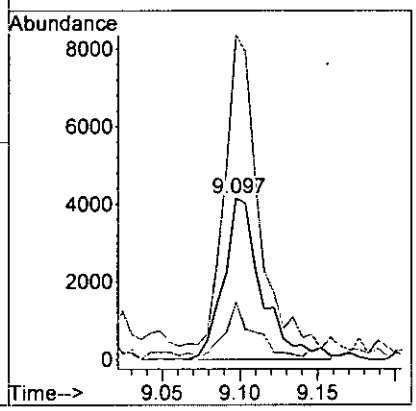


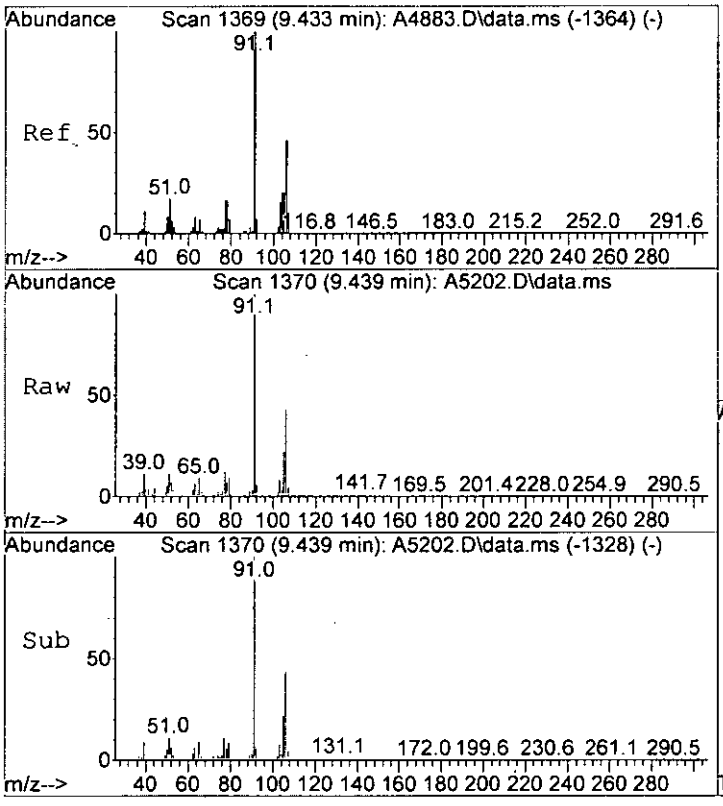


#83
(m+p)Xylene
Concen: 0.45 ug/L
RT: 9.097 min Scan# 1314
Delta R.T. 0.012 min
Lab File: A5202.D
Acq: 30 Dec 2014 6:32 am

Tgt Ion:106 Resp: 7028

Ion	Ratio	Lower	Upper
106	100		
91	201.3	157.2	197.2#
77	35.3	7.2	47.2

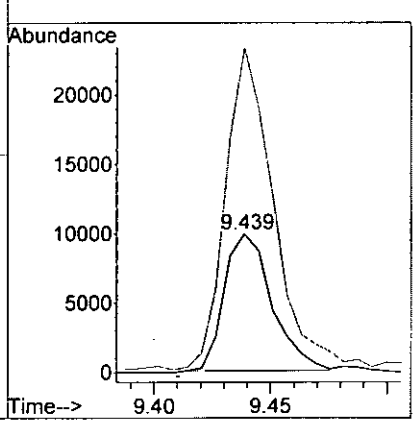


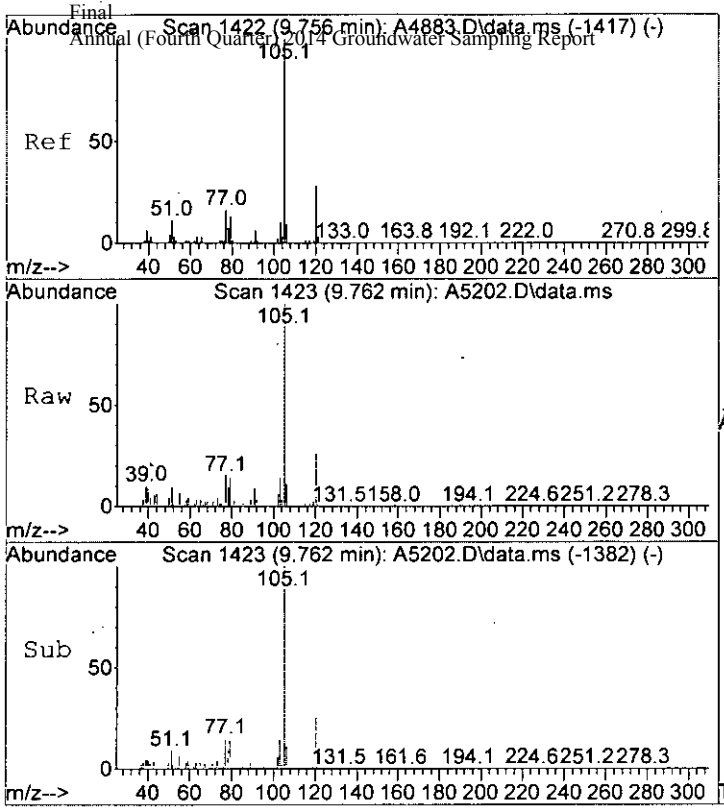


#84
o-Xylene
Concen: 0.86 ug/L
RT: 9.439 min Scan# 1370
Delta R.T. 0.006 min
Lab File: A5202.D
Acq: 30 Dec 2014 6:32 am

Tgt Ion:106 Resp: 13866

Ion	Ratio	Lower	Upper
106	100		
91	235.0	195.3	235.3

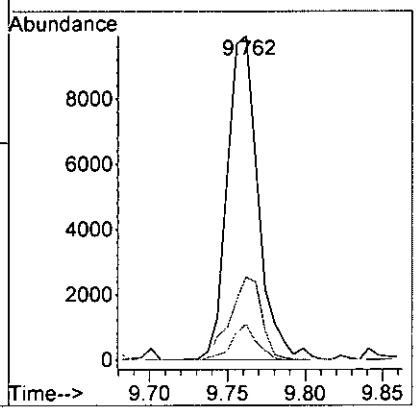


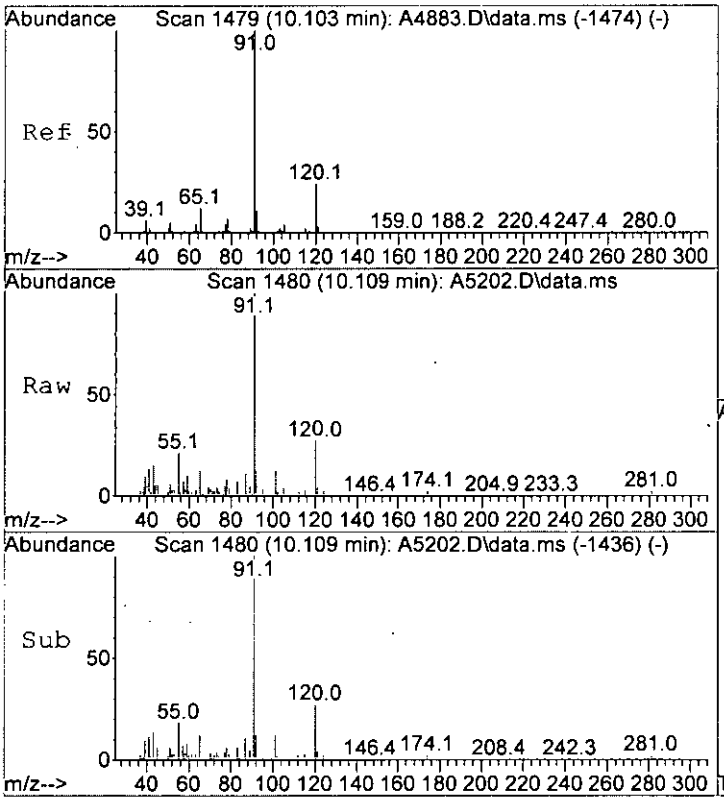


#88
Isopropylbenzene
Concen: 0.37 ug/L
RT: 9.762 min Scan# 1423
Delta R.T. 0.006 min
Lab File: A5202.D
Acq: 30 Dec 2014 6:32 am

Tgt Ion:105 Resp: 13650

Ion	Ratio	Lower	Upper
105	100		
120	25.5	7.6	47.6
106	10.8	0.0	29.1

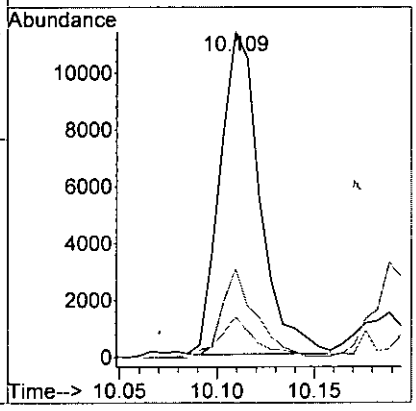


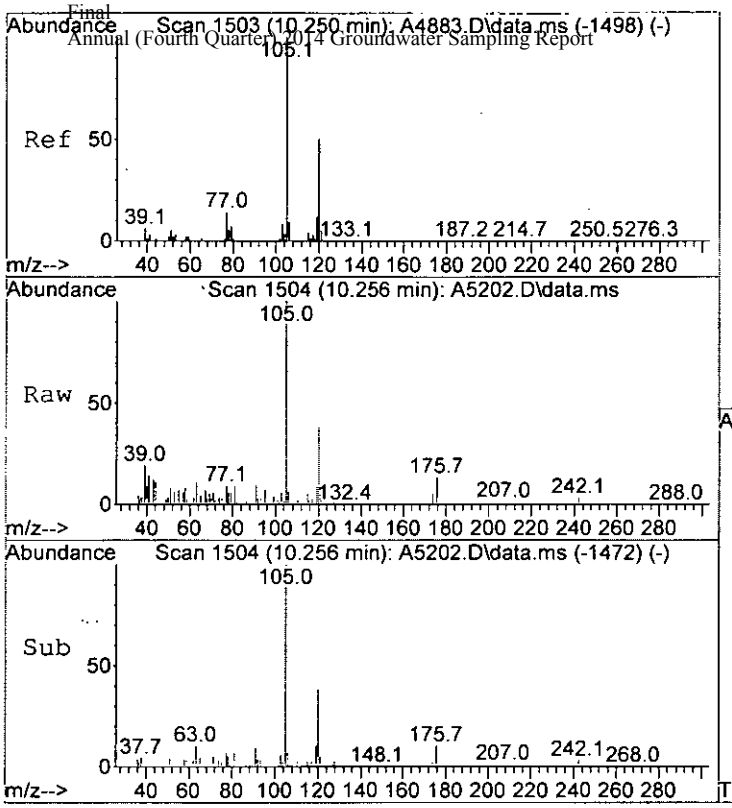


#95
n-Propylbenzene
Concen: 0.38 ug/L
RT: 10.109 min Scan# 1480
Delta R.T. 0.006 min
Lab File: A5202.D
Acq: 30 Dec 2014 6:32 am

Tgt Ion: 91 Resp: 16221

Ion	Ratio	Lower	Upper
91	100		
120	26.9	3.9	43.9
65	12.3	0.0	31.6

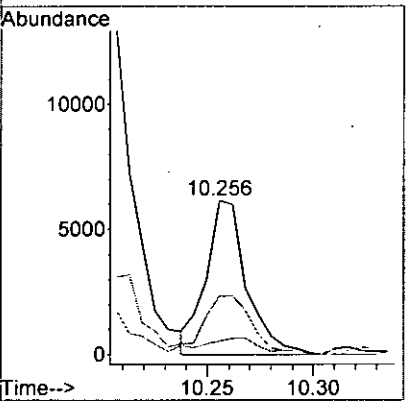


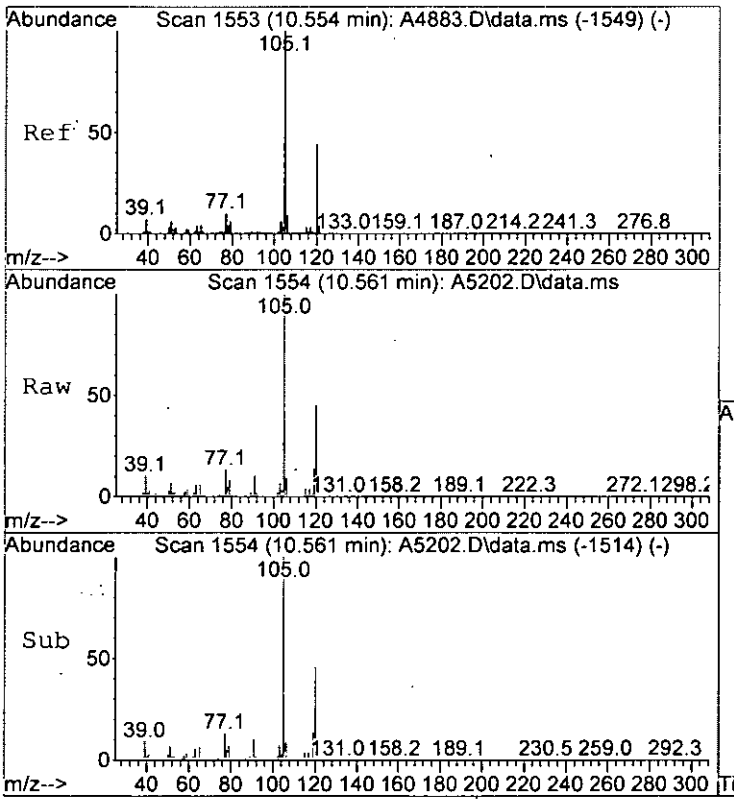


#99
1,3,5-Trimethylbenzene
Concen: 0.26 ug/L
RT: 10.256 min Scan# 1504
Delta R.T. 0.000 min
Lab File: A5202.D
Acq: 30 Dec 2014 6:32 am

Tgt Ion:105 Resp: 8141

Ion	Ratio	Lower	Upper
105	100		
120	37.6	29.9	69.9
77	8.7	0.0	34.1

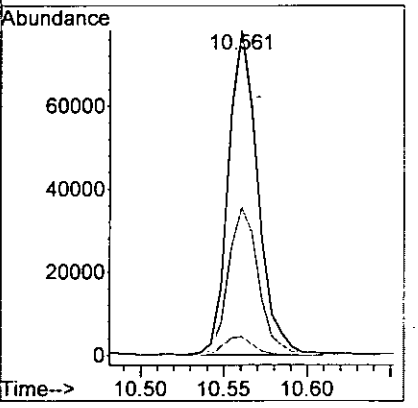


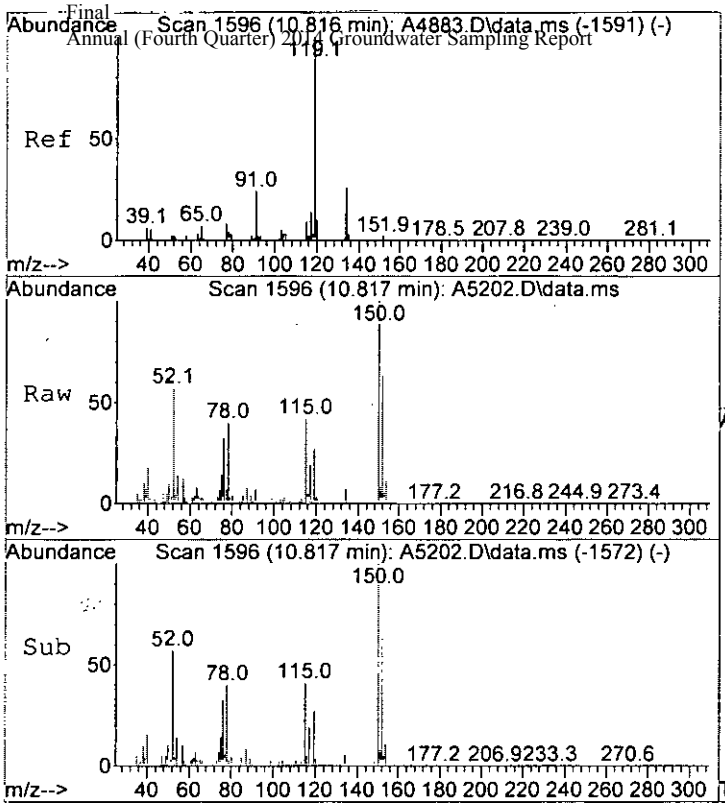


#101
1,2,4-Trimethylbenzene
Concen: 2.97 ug/L
RT: 10.561 min Scan# 1554
Delta R.T. 0.000 min
Lab File: A5202.D
Acq: 30 Dec 2014 6:32 am

Tgt Ion:105 Resp: 95958

Ion	Ratio	Lower	Upper
105	100		
120	45.5	26.3	66.3
65	5.7	0.0	24.8

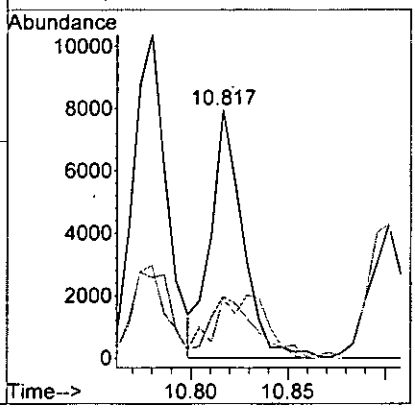




#104
p-Isopropyltoluene
Concen: 0.29 ug/L
RT: 10.817 min Scan# 1596
Delta R.T. 0.000 min
Lab File: A5202.D
Acq: 30 Dec 2014 6:32 am

Tgt Ion:119 Resp: 9053

Ion	Ratio	Lower	Upper
119	100		
134	24.7	5.9	45.9
91	24.0	4.2	44.2



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5202.D
Acq On : 30 Dec 2014 6:32 am
Operator : F.Naegler
Sample : R1410303-008|1.0
Misc : PARSONS 11603 T4
ALS Vial : 37 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5202.D\data.ms

FN 1/6/15

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.660	90	94	99	rBV	198941	206104	4.56%	0.653%
2	2.111	162	168	175	rVB2	78616	128186	2.84%	0.406%
3	2.440	216	222	231	rBV	226932	526368	11.66%	1.667%
4	2.672	251	260	268	rBV	216596	399025	8.84%	1.263%
5	3.464	383	390	398	rVB4	24303	57524	1.27%	0.182%
6	3.562	398	406	415	rBV	100422	220348	4.88%	0.698%
7	4.318	521	530	538	rBV2	605505	1471693	32.59%	4.660%
8	4.409	538	545	557	rVV	1070445	2883652	63.86%	9.131%
9	4.519	558	563	577	rVB5	73875	245199	5.43%	0.776%
10	4.854	610	618	633	rBV	491169	1258578	27.87%	3.985%
11	5.049	643	650	659	rBV4	45526	141246	3.13%	0.447%
12	5.153	660	667	676	rVV6	46857	155371	3.44%	0.492%
13	5.257	676	684	692	rVB4	22268	65628	1.45%	0.208%
14	5.610	734	742	757	rBV	1476501	3351145	74.21%	10.611%
15	6.202	829	839	840	rBV2	51979	120872	2.68%	0.383%
16	6.891	946	952	965	rBV5	42870	123532	2.74%	0.391%
17	7.427	1035	1040	1058	rVB	2991255	4515687	100.00%	14.298%
18	8.841	1267	1272	1282	rBV	3187669	4145342	91.80%	13.126%
19	8.915	1282	1284	1291	rVV5	29783	50604	1.12%	0.160%
20	8.982	1291	1295	1301	rVB	40210	59519	1.32%	0.188%
21	9.439	1365	1370	1380	rBV	68670	105538	2.34%	0.334%
22	9.878	1438	1442	1452	rBV	2727095	3393093	75.14%	10.744%
23	10.073	1467	1474	1477	rBV3	43965	75975	1.68%	0.241%
24	10.109	1477	1480	1487	rVB	34862	52878	1.17%	0.167%
25	10.219	1489	1498	1502	rBV4	40376	117289	2.60%	0.371%
26	10.420	1526	1531	1539	rBV	172522	224317	4.97%	0.710%
27	10.506	1539	1545	1550	rBV7	19385	45675	1.01%	0.145%
28	10.561	1550	1554	1560	rBV	227852	282891	6.26%	0.896%
29	10.695	1570	1576	1583	rBV5	53208	96657	2.14%	0.306%
30	10.835	1594	1599	1606	rBV	3786865	4456434	98.69%	14.111%
31	10.902	1606	1610	1618	rVB2	135914	216425	4.79%	0.685%
32	11.060	1629	1636	1643	rBV2	292034	413584	9.16%	1.310%
33	11.128	1643	1647	1655	rVB	67025	101898	2.26%	0.323%
34	11.219	1658	1662	1667	rBV3	93506	139437	3.09%	0.442%
35	11.274	1667	1671	1676	rVB	57000	68736	1.52%	0.218%

W121514.M Tue Jan 06 14:54:19 2015 MSVO10 Page: 1

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5202.D
Acq On : 30 Dec 2014 6:32 am
Operator : F.Naegler
Sample : R1410303-008|1.0
Misc : PARSONS 11603 T4
ALS Vial : 37 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

36	11.335	1677	1681	1683	rBV	69395	86537	1.92%	0.274%
37	11.359	1683	1685	1690	rVB	52594	55807	1.24%	0.177%
38	11.408	1690	1693	1696	rBV	100629	113378	2.51%	0.359%
39	11.487	1702	1706	1713	rVB	362697	421871	9.34%	1.336%
40	11.615	1722	1727	1731	rBV4	48800	70990	1.57%	0.225%
41	11.682	1731	1738	1741	rVV	134708	171778	3.80%	0.544%
42	11.719	1741	1744	1749	rVV	167627	185791	4.11%	0.588%
43	11.780	1750	1754	1760	rVB4	39688	52741	1.17%	0.167%
44	11.993	1785	1789	1793	rVB2	286907	285359	6.32%	0.904%
45	12.225	1823	1827	1830	rVV2	45638	68027	1.51%	0.215%
46	12.261	1830	1833	1835	rVV2	70668	92336	2.04%	0.292%
47	12.280	1835	1836	1841	rVB2	80393	60811	1.35%	0.193%

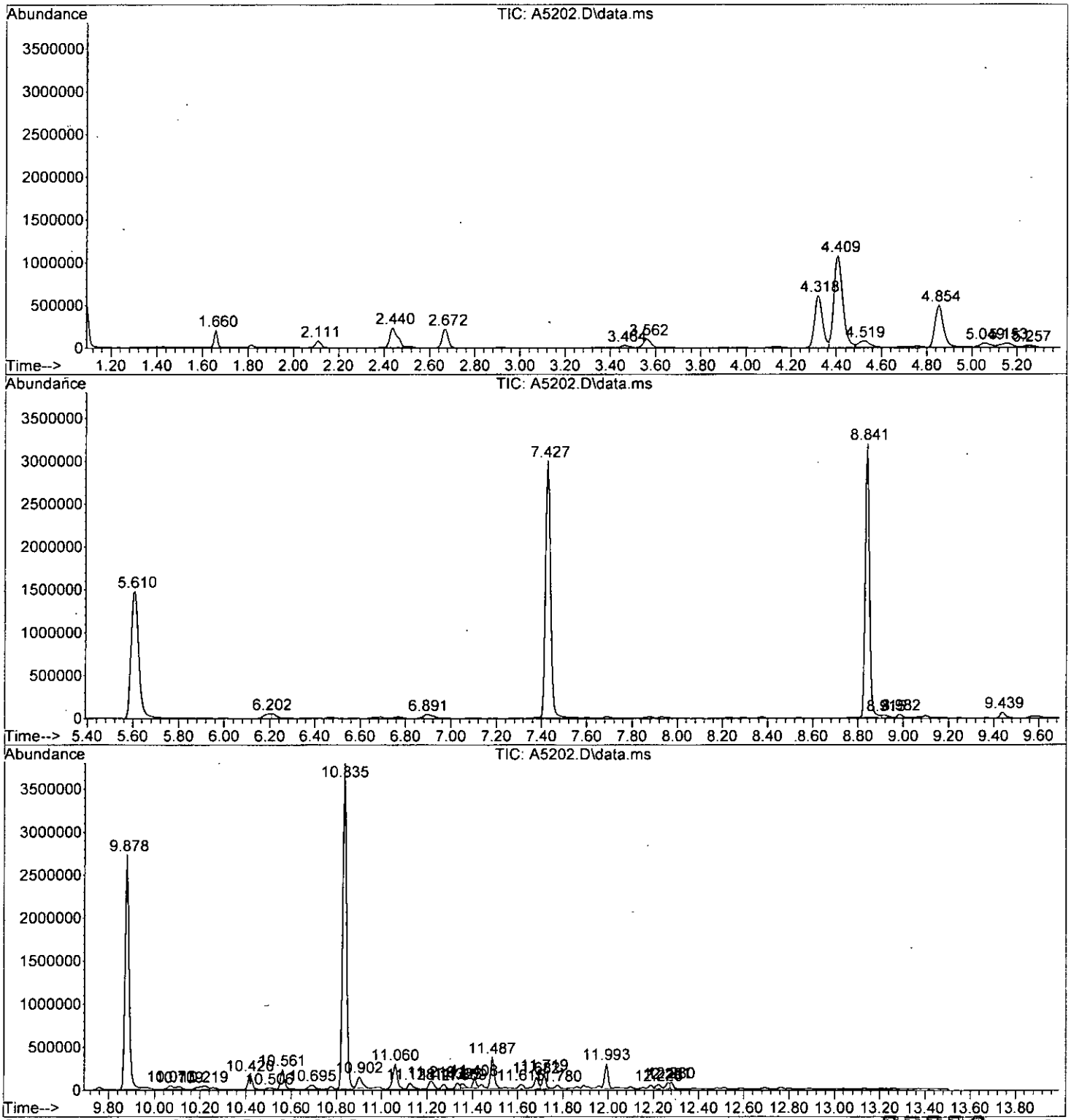
Sum of corrected areas: 31581876

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5202.D
Acq On : 30 Dec 2014 6:32 am
Operator : F.Naegler
Sample : R1410303-008|1.0
Misc : PARSONS 11603 T4
ALS Vial : 37 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5202.D
Acq On : 30 Dec 2014 6:32 am
Operator : F.Naegler
Sample : R1410303-008|1.0
Misc : PARSONS 11603 T4
ALS Vial : 37 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

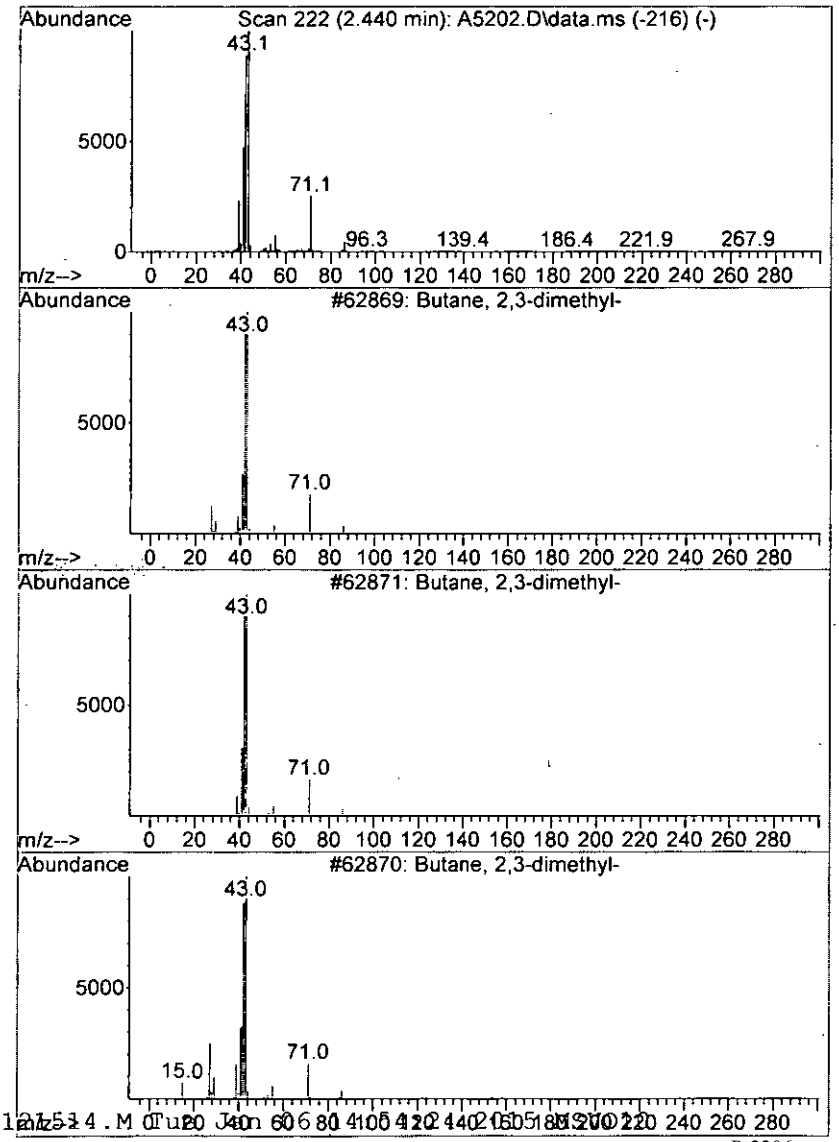
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

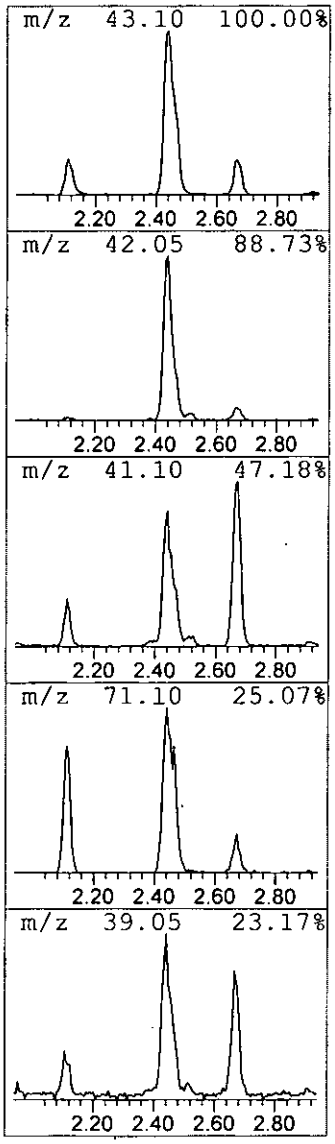
****

Peak Number 1 Butane, 2,3-dimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.440	9.13 ug/L	526368	Pentafluorobenzene	4.409

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	86
2	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	72
3	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	72
4	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	56
5	Pentane, 2-methyl-	86	C6H14	000107-83-5	47





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5202.D
Acq On : 30 Dec 2014 6:32 am
Operator : F.Naegler
Sample : R1410303-008|1.0
Misc : PARSONS 11603 T4
ALS Vial : 37 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

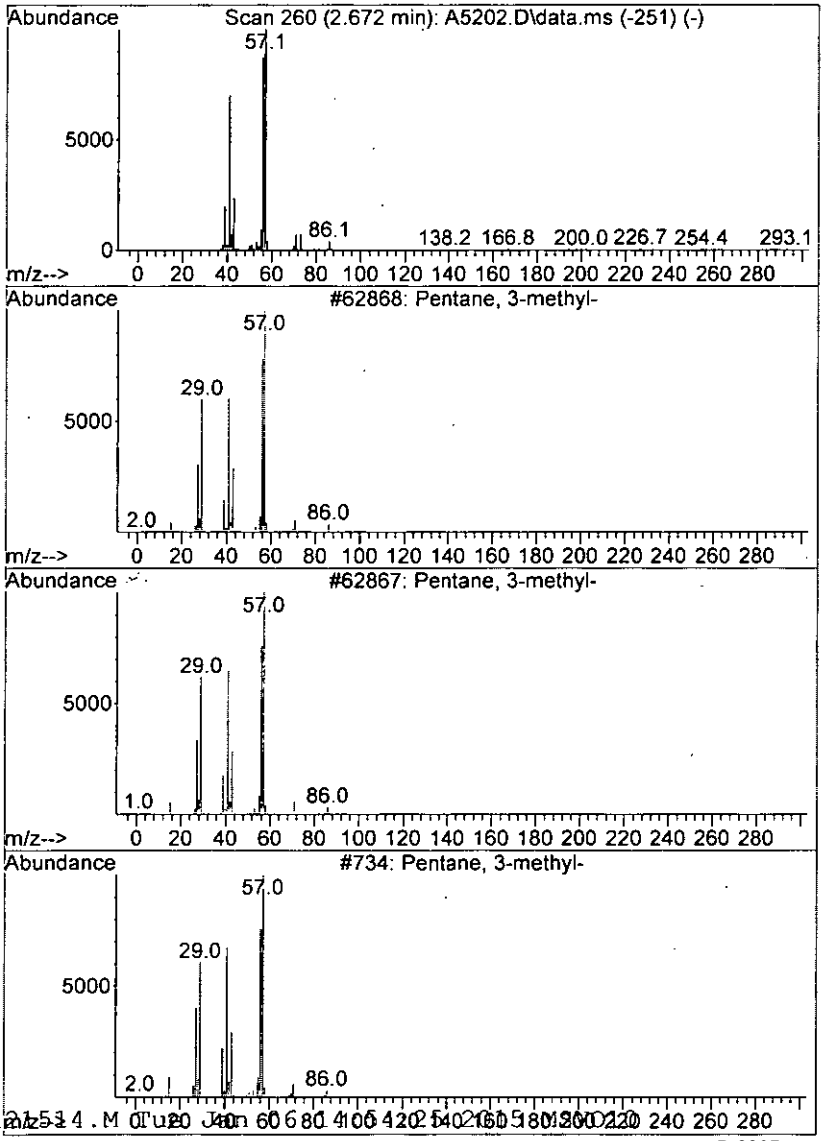
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

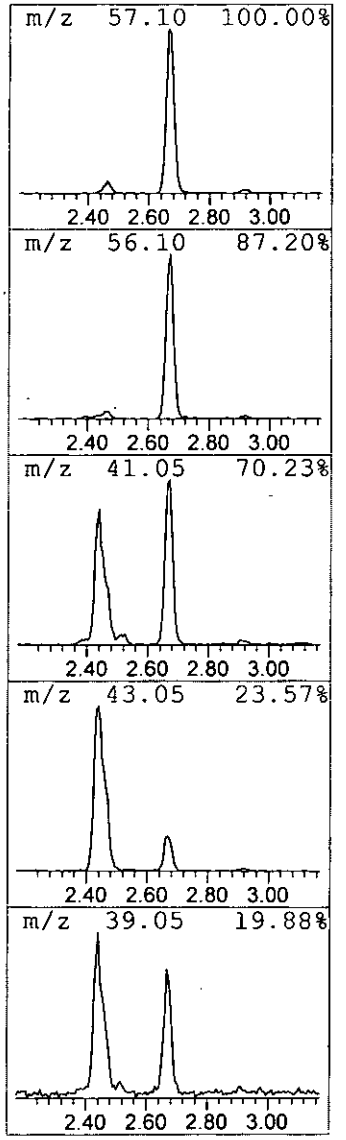
****

Peak Number 2 Pentane, 3-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.672	6.92 ug/L	399025	Pentafluorobenzene	4.409

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	91
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	90
3	Pentane, 3-methyl-	86	C6H14	000096-14-0	90
4	Oxirane, (1-methylethyl)-	86	C5H10O	001438-14-8	45
5	Oxetane, 3,3-dimethyl-	86	C5H10O	006921-35-3	42





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5202.D
Acq On : 30 Dec 2014 6:32 am
Operator : F.Naegler
Sample : R1410303-008|1.0
Misc : PARSONS 11603 T4
ALS Vial : 37 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane, 2,3-dim...	2.440	9.1	ug/L	526368	1	4.409	2883650	50.0
Pentane, 3-methyl-	2.672	6.9	ug/L	399025	1	4.409	2883650	50.0

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14 1015
Date Received: 12/20/14
Date Analyzed: 12/30/14 07:01

Sample Name: FTMM-53-GW-699MW04-8.0
Lab Code: R1410303-009

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\122914\A5203.D\

Analysis Lot: 427294
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**4.6**	J	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**3.0**	J	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**8.4**		5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1015
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 07:01
Sample Name:	FTMM-53-GW-699MW04-8.0	**Units:**	µg/L
Lab Code:	R1410303-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5203.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.25**	**J**	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	**0.52**	**J**	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1015
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 07:01
Sample Name:	FTMM-53-GW-699MW04-8.0	**Units:**	µg/L
Lab Code:	R1410303-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5203.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	12/30/14 07:01	
Dibromofluoromethane	100	85-115	12/30/14 07:01	
Toluene-d8	107	85-120	12/30/14 07:01	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 0701

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-53-GW-699MW04-8.0	**Units:**	µg/L
Lab Code:	R1410303-009	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-009|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5203.D Vial: 38
Acq On : 30 Dec 2014 7:01 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 14:57:25 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	1007862	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1442674	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1316566	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	697186	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	455235	50.16	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.32%			
48) surr1,1,2-dichloroetha...	4.854	65	459203	49.82	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 99.64%			
65) SURR3,Toluene-d8	7.427	98	1698148	53.49	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 106.98%			
70) SURR2,BFB	9.878	95	649562	49.03	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.06%			
Target Compounds						Qvalue
12) Acrolein	2.038	56	360	Below Cal	#	64
15) Acetone	2.117	43	14226	8.36	ug/L	85
83) (m+p)Xylene	9.103	106	4623m	0.30	ug/L	
84) o-Xylene	9.445	106	8434	0.52	ug/L	91
99) 1,3,5-Trimethylbenzene	10.256	105	94121	3.01	ug/L	98
101) 1,2,4-Trimethylbenzene	10.561	105	147417	4.57	ug/L	97
117) Naphthalen	12.408	128	4868	0.25	ug/L	95

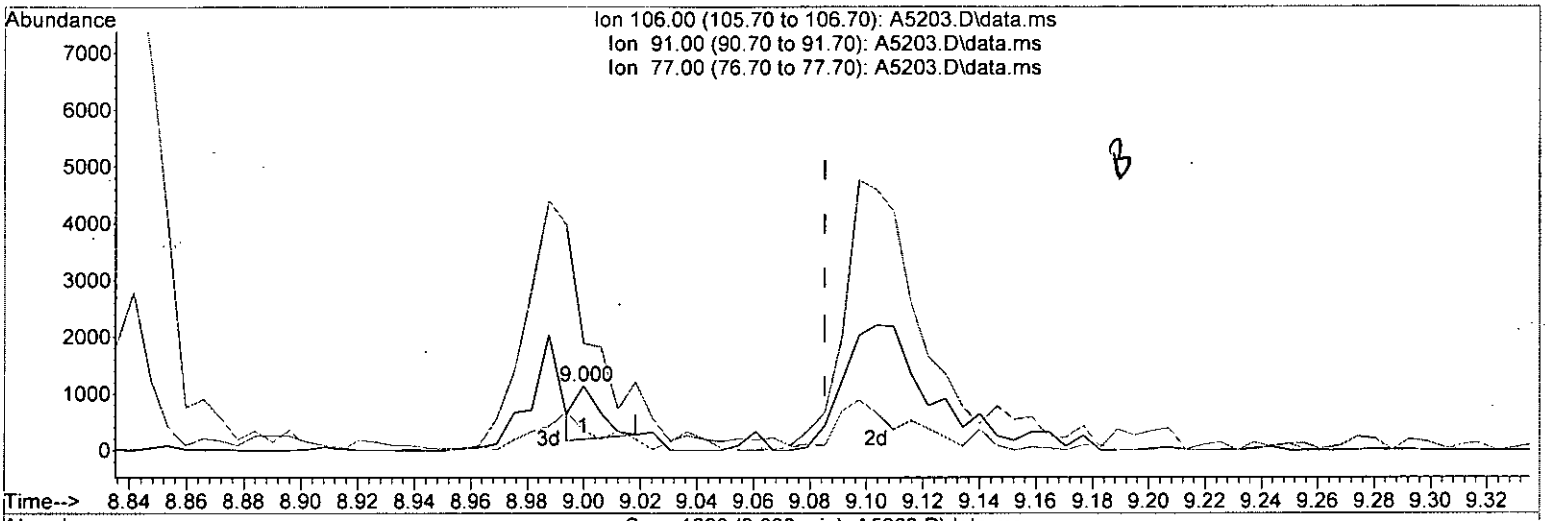
(#) = qualifier out of range (m) = manual integration (+) = signals summed

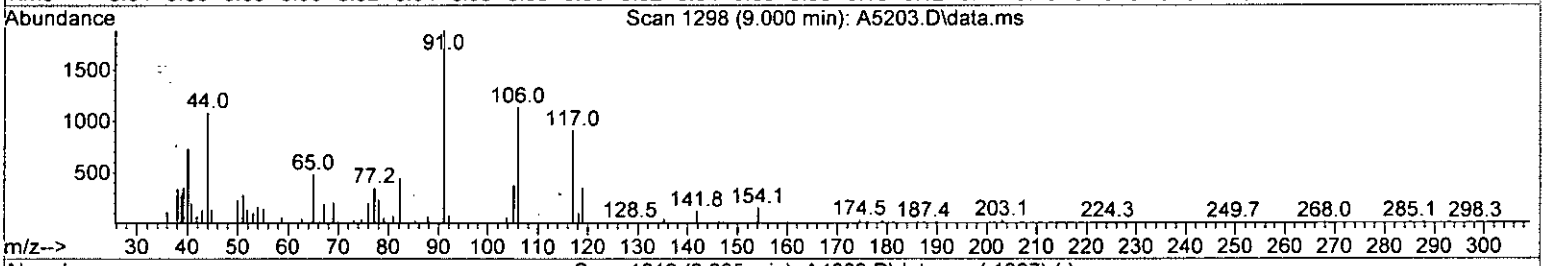
FJ 1/6/15
KR 1/6/15

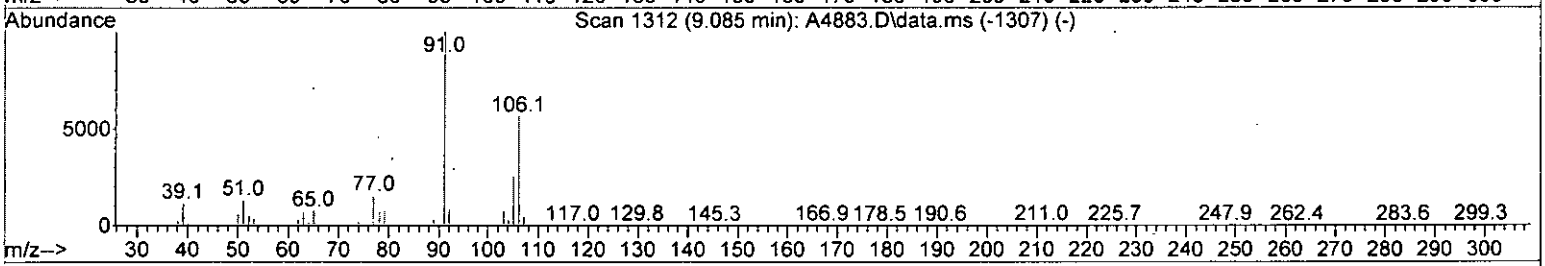
Quantitation Report (Qedit)

Sample : R1410303-009|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5203.D Vial: 38
Acq On : 30 Dec 2014 7:01 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Dec 30 07:14:45 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration







TIC: A5203.D\data.ms

(83) (m+p)Xylene (P)

9.000min (-0.085) 0.04 ug/L

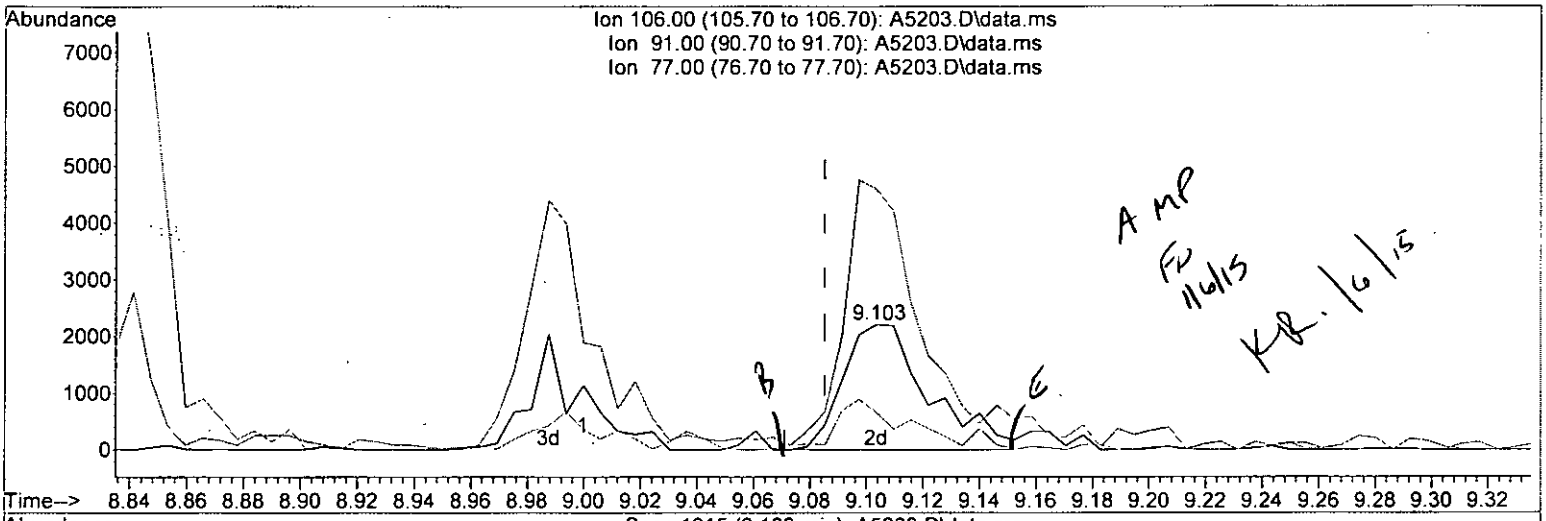
response 552

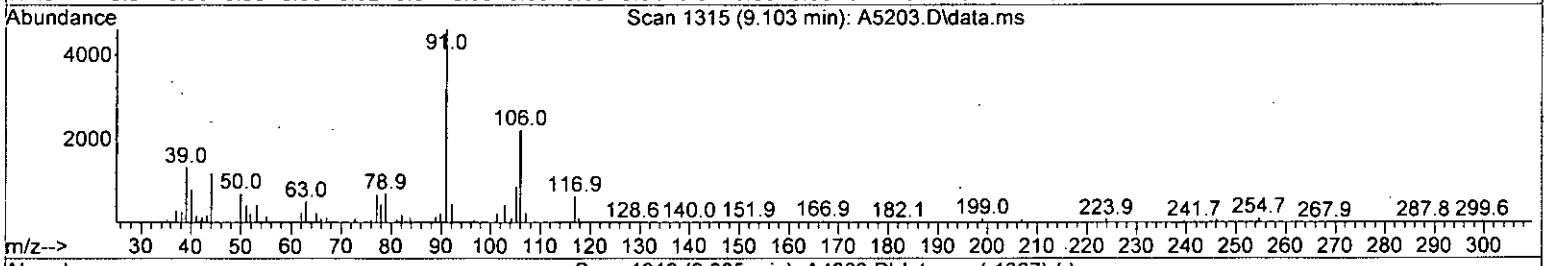
Ion	Exp%	Act%
106.00	100	100
91.00	177.20	166.52
77.00	27.20	31.01
0.00	0.00	0.00

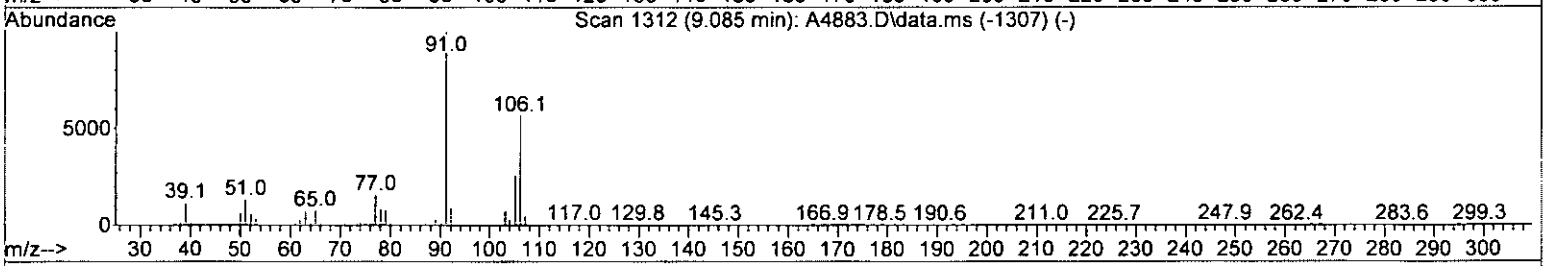
Quantitation Report (Qedit)

Sample : R1410303-009|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5203.D Vial: 38
Acq On : 30 Dec 2014 7:01 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Dec 30 07:14:45 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration







TIC: A5203.D\data.ms

(83) (m+p)Xylene (P)

9.103min (+0.018) 0.30 ug/L m

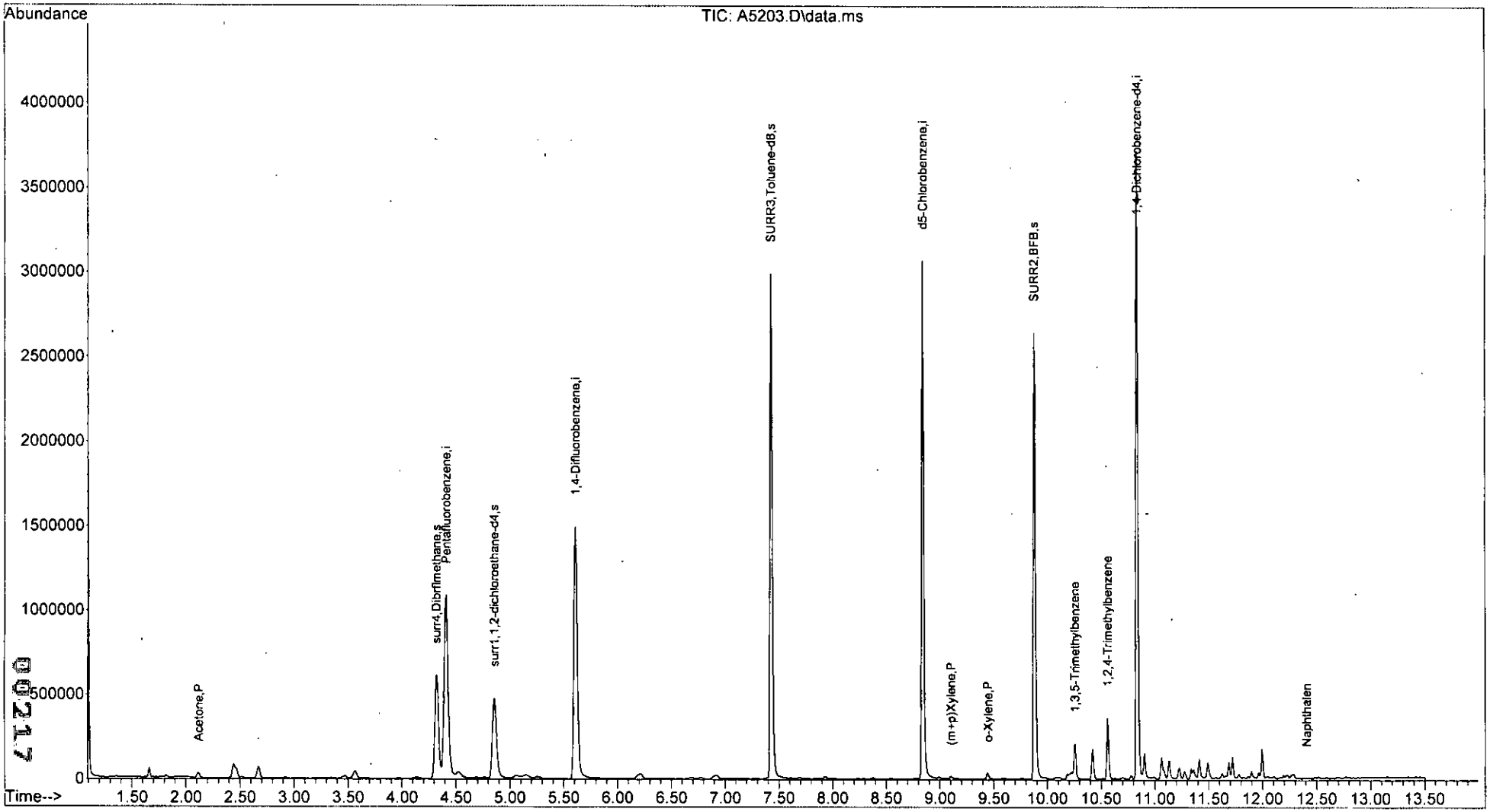
response 4623

Ion	Exp%	Act%
106.00	100	100
91.00	177.20	208.49#
77.00	27.20	30.32
0.00	0.00	0.00

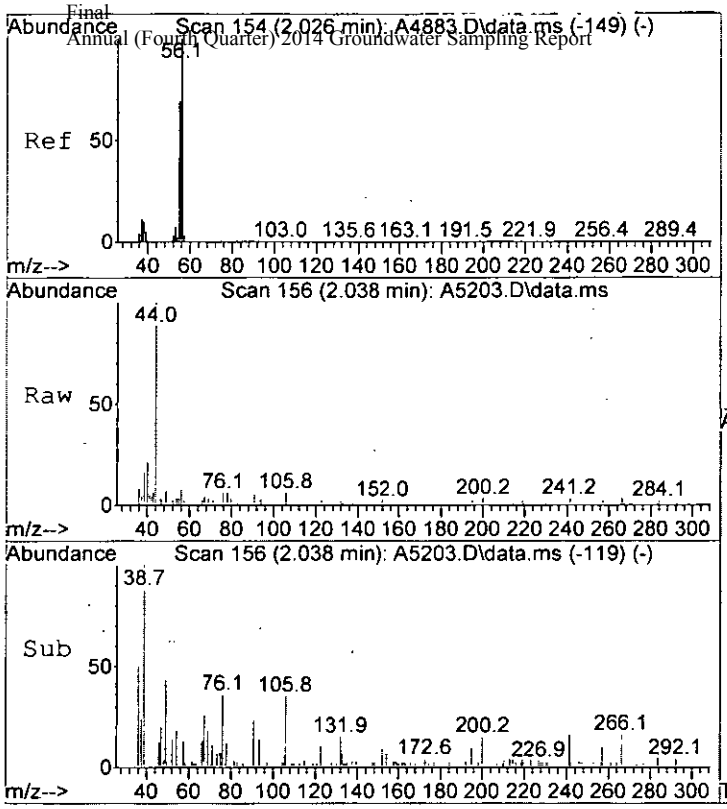
Quantitation Report (QT Reviewed)

Sample : R1410303-009|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5203.D Vial: 38
Acq On : 30 Dec 2014 7:01 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 14:57:25 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



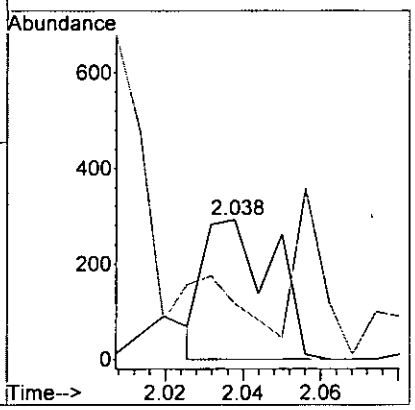
W121514.M Tue Jan 06 14:57:37 2015 MSVO10

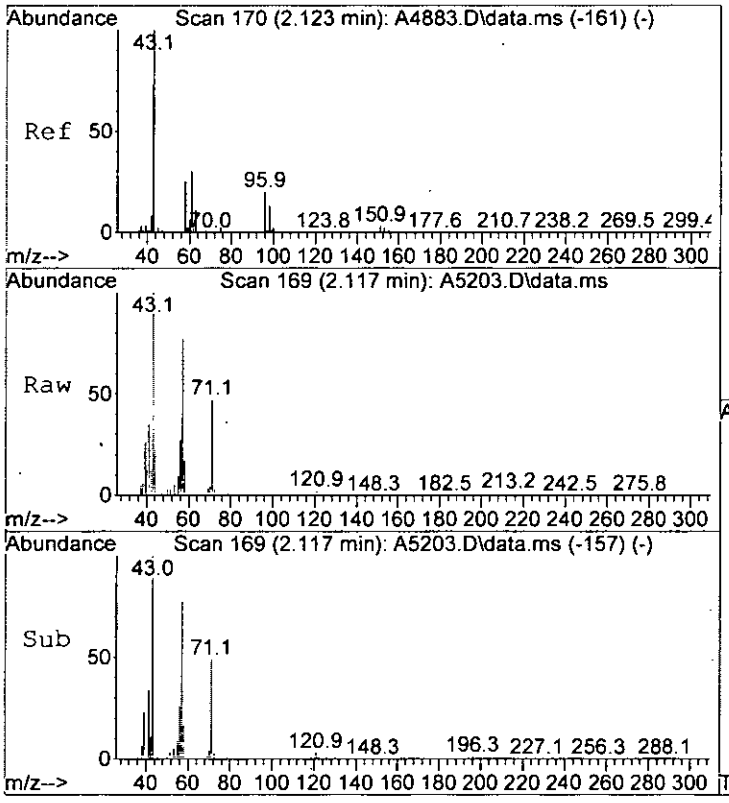


#12
Acrolein
Concen: Below Cal
RT: 2.038 min Scan# 156
Delta R.T. 0.019 min
Lab File: A5203.D
Acq: 30 Dec 2014 7:01 am

Tgt Ion: 56 Resp: 360

Ion	Ratio	Lower	Upper
56	100		
55	40.1	49.6	89.6#

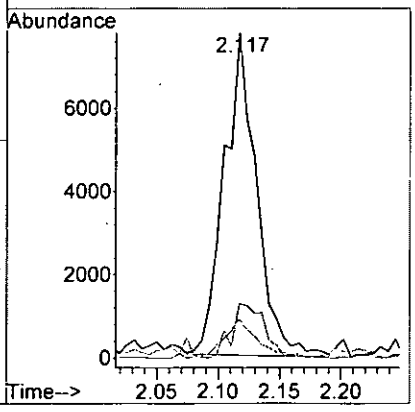


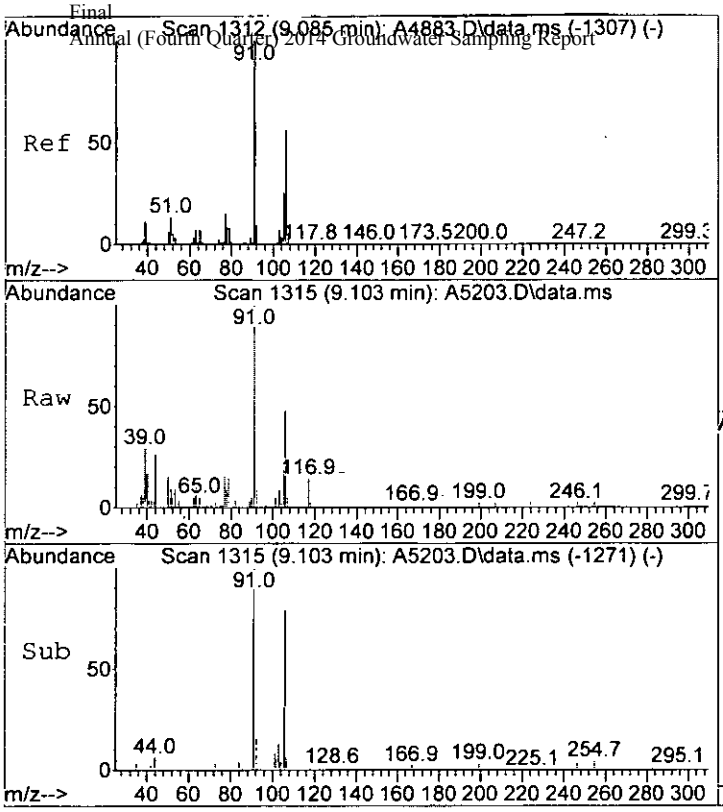


#15
Acetone
Concen: 8.36 ug/L
RT: 2.117 min Scan# 169
Delta R.T. 0.000 min
Lab File: A5203.D
Acq: 30 Dec 2014 7:01 am

Tgt Ion: 43 Resp: 14226

Ion	Ratio	Lower	Upper
43	100		
58	16.6	5.3	45.3
42	12.0	0.0	29.0

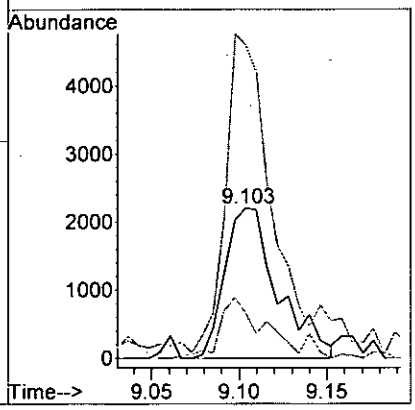


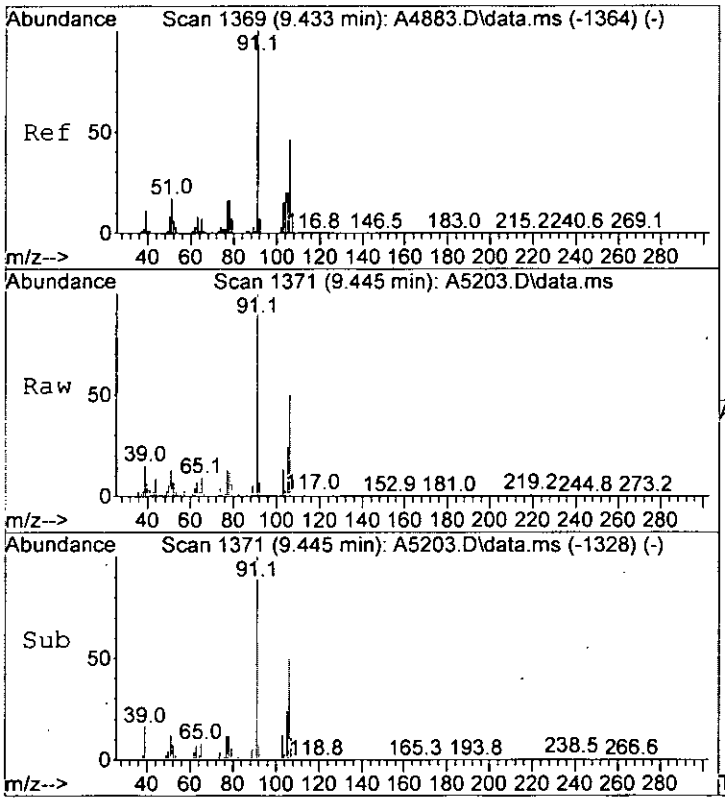


#83
(m+p)Xylene
Concen: 0.30 ug/L m
RT: 9.103 min Scan# 1315
Delta R.T. 0.018 min
Lab File: A5203.D
Acq: 30 Dec 2014 7:01 am

Tgt Ion:106 Resp: 4623

Ion	Ratio	Lower	Upper
106	100		
91	208.5	157.2	197.2#
77	30.3	7.2	47.2

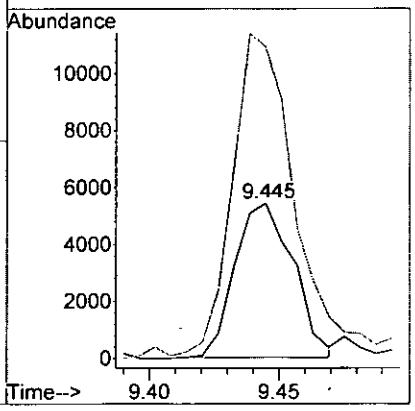


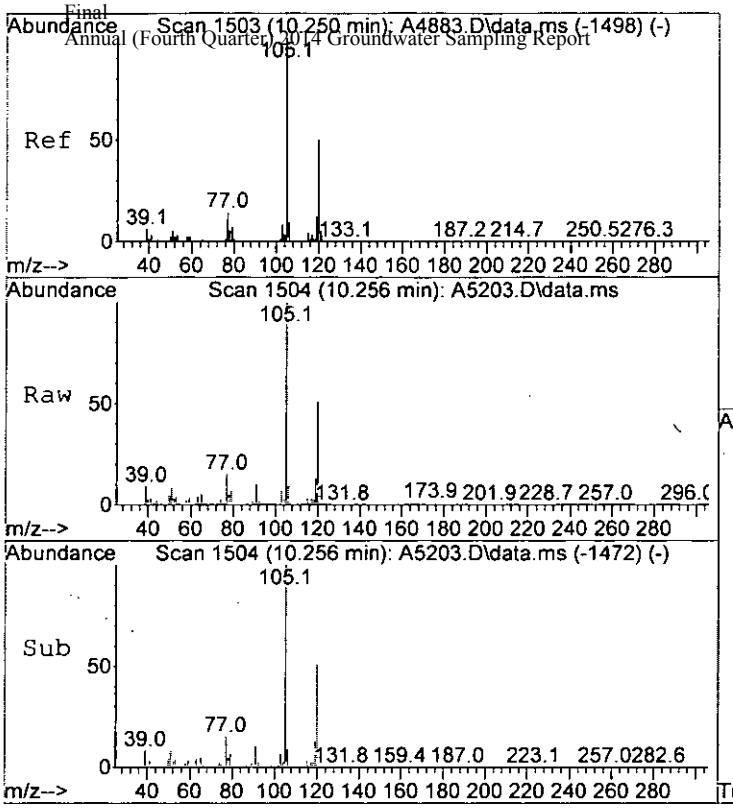


#84
o-Xylene
Concen: 0.52 ug/L
RT: 9.445 min Scan# 1371
Delta R.T. 0.012 min
Lab File: A5203.D
Acq: 30 Dec 2014 7:01 am

Tgt Ion:106 Resp: 8434

Ion	Ratio	Lower	Upper
106	100		
91	200.6	195.3	235.3

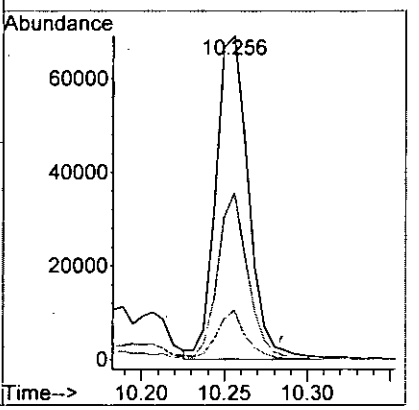


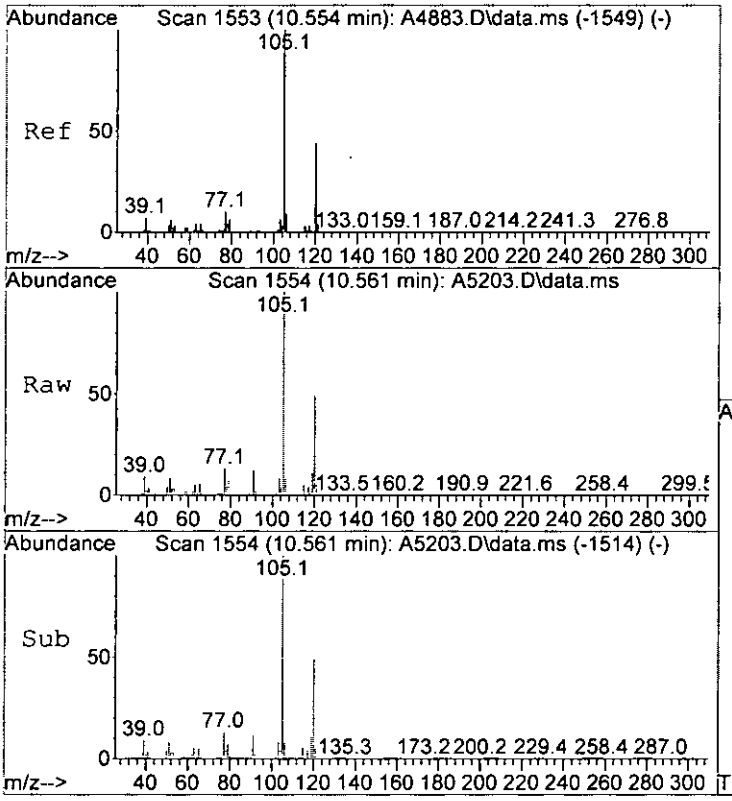


#99
1,3,5-Trimethylbenzene
Concen: 3.01 ug/L
RT: 10.256 min Scan# 1504
Delta R.T. 0.000 min
Lab File: A5203.D
Acq: 30 Dec 2014 7:01 am

Tgt Ion:105 Resp: 94121

Ion	Ratio	Lower	Upper
105	100		
120	51.5	29.9	69.9
77	15.2	0.0	34.1

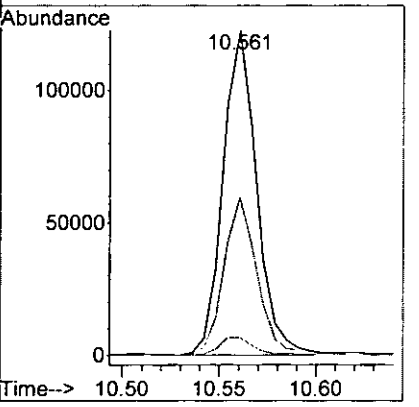


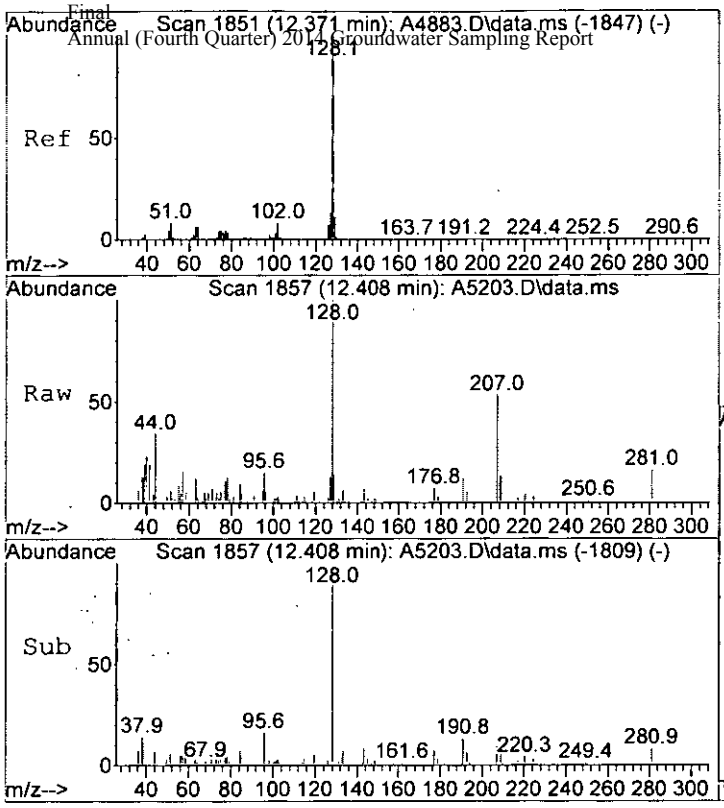


#101
1,2,4-Trimethylbenzene
Concen: 4.57 ug/L
RT: 10.561 min Scan# 1554
Delta R.T. 0.000 min
Lab File: A5203.D
Acq: 30 Dec 2014 7:01 am

Tgt Ion:105 Resp: 147417

Ion	Ratio	Lower	Upper
105	100		
120	48.5	26.3	66.3
65	5.4	0.0	24.8

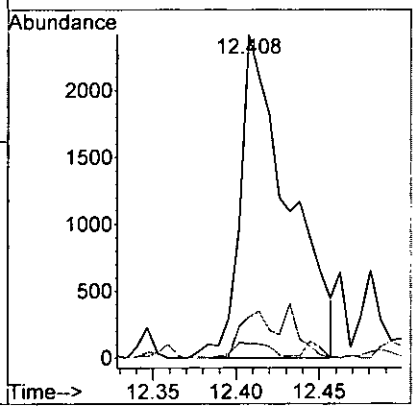




#117
Naphthalen
Concen: 0.25 ug/L
RT: 12.408 min Scan# 1857
Delta R.T. 0.037 min
Lab File: A5203.D
Acq: 30 Dec 2014 7:01 am

Tgt Ion:128 Resp: 4868

Ion	Ratio	Lower	Upper
128	100		
127	12.6	0.0	33.2
102	4.4	0.0	28.4



A5203.D W121514.M Tue Jan 06 14:57:42 2015 MSVO10

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5203.D
Acq On : 30 Dec 2014 7:01 am
Operator : F.Naegler
Sample : R1410303-009|1.0
Misc : PARSONS 11603 T4
ALS Vial : 38 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5203.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.660	90	94	98	rVB	56242	55485	1.22%	0.192%
2	2.111	163	168	177	rVB3	30517	55547	1.22%	0.192%
3	2.440	208	222	231	rBV2	81896	226954	4.98%	0.786%
4	2.672	253	260	270	rBV2	68087	131897	2.90%	0.457%
5	3.568	399	407	414	rVB3	41087	94164	2.07%	0.326%
6	4.318	519	530	538	rBV	611476	1489637	32.70%	5.158%
7	4.409	538	545	558	rVV	1078384	2823911	61.99%	9.777%
8	4.519	558	563	571	rVB6	27177	78258	1.72%	0.271%
9	4.854	610	618	635	rBV	471686	1260431	27.67%	4.364%
10	5.147	661	666	676	rVB9	18537	61423	1.35%	0.213%
11	5.610	734	742	765	rBV	1491632	3390076	74.42%	11.737%
12	6.214	829	841	851	rBV7	28467	96301	2.11%	0.333%
13	6.921	946	957	964	rBV9	19617	67079	1.47%	0.232%
14	7.427	1035	1040	1056	rBV	2985365	4555518	100.00%	15.773%
15	8.841	1267	1272	1288	rBV	3064709	4163589	91.40%	14.416%
16	9.439	1366	1370	1378	rBV	36137	55449	1.22%	0.192%
17	9.878	1438	1442	1455	rBV	2637641	3349021	73.52%	11.595%
18	10.256	1500	1504	1514	rVB	210443	296102	6.50%	1.025%
19	10.420	1526	1531	1540	rBV	179241	234178	5.14%	0.811%
20	10.561	1549	1554	1561	rVB	361292	431339	9.47%	1.493%
21	10.835	1594	1599	1606	rBV	3713071	4413679	96.89%	15.281%
22	10.902	1606	1610	1616	rVB	143348	187375	4.11%	0.649%
23	11.060	1632	1636	1643	rBV2	127364	204547	4.49%	0.708%
24	11.127	1643	1647	1655	rVV	104439	145535	3.19%	0.504%
25	11.225	1658	1663	1668	rVV2	64057	92262	2.03%	0.319%
26	11.274	1668	1671	1676	rVB	45413	59236	1.30%	0.205%
27	11.335	1677	1681	1683	rBV	59539	67713	1.49%	0.234%
28	11.359	1683	1685	1690	rVV	51615	65395	1.44%	0.226%
29	11.408	1690	1693	1701	rVV	118450	154671	3.40%	0.536%
30	11.487	1702	1706	1713	rVB2	92621	131205	2.88%	0.454%
31	11.682	1735	1738	1741	rBV	83662	90698	1.99%	0.314%
32	11.719	1741	1744	1750	rVB	121944	132369	2.91%	0.458%
33	11.896	1770	1773	1780	rVB	40901	46871	1.03%	0.162%
34	11.993	1786	1789	1793	rVB	168715	174672	3.83%	0.605%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5203.D
Acq On : 30 Dec 2014 7:01 am
Operator : F.Naegler
Sample : R1410303-009|1.0
Misc : PARSONS 11603 T4
ALS Vial : 38 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

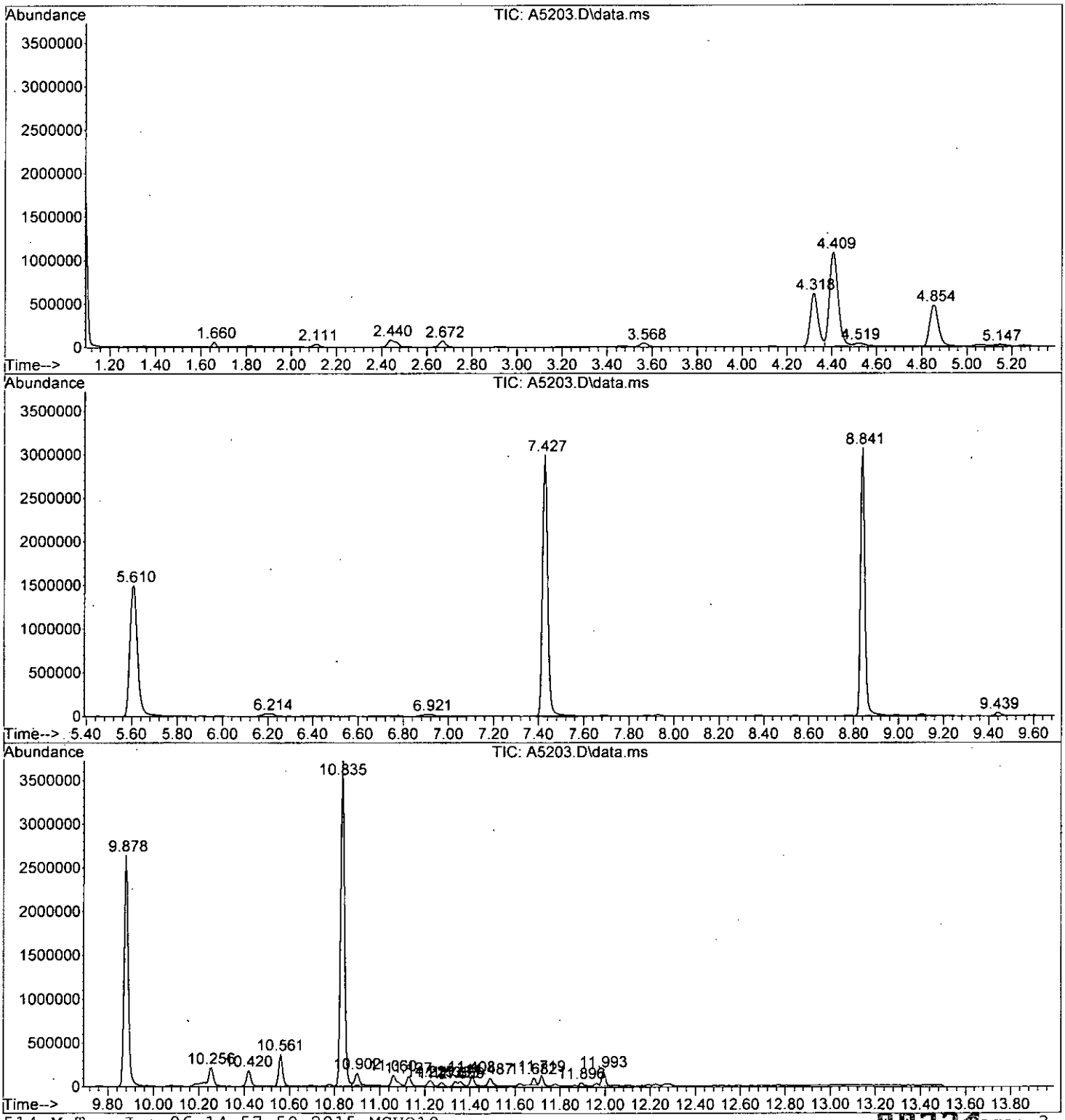
Sum of corrected areas: 28882587

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5203.D
Acq On : 30 Dec 2014 7:01 am
Operator : F.Naegler
Sample : R1410303-009|1.0
Misc : PARSONS 11603 T4
ALS Vial : 38 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W121514.M Tue Jan 06 14:57:50 2015 MSVO10 Page: 3

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\122914\\
Data File : A5203.D
Acq On : 30 Dec 2014 7:01 amm
Operator : F.Naeglerr
Sample : R1410303-009|1.0
Misc : PARSONS 11603 T44
ALS Vial : 38 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1036
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 15:10
Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1410303-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5267.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	10	2.0	0.44	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	10	2.0	0.72	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	10	2.0	0.50	
79-00-5	1,1,2-Trichloroethane	ND	U	10	2.0	0.68	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	10	2.0	0.40	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	10	2.0	1.2	
563-58-6	1,1-Dichloropropene	ND	U	10	2.0	0.58	
87-61-6	1,2,3-Trichlorobenzene	ND	U	10	2.0	1.7	
96-18-4	1,2,3-Trichloropropane	ND	U	10	2.0	1.4	
120-82-1	1,2,4-Trichlorobenzene	ND	U	10	2.0	0.46	
95-63-6	1,2,4-Trimethylbenzene	ND	U	10	2.0	0.40	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	10	2.0	1.5	
106-93-4	1,2-Dibromoethane	ND	U	10	2.0	0.48	
95-50-1	1,2-Dichlorobenzene	ND	U	10	2.0	0.42	
107-06-2	1,2-Dichloroethane	ND	U	10	2.0	0.72	
78-87-5	1,2-Dichloropropane	ND	U	10	2.0	0.40	
108-67-8	1,3,5-Trimethylbenzene	ND	U	10	2.0	0.40	
541-73-1	1,3-Dichlorobenzene	ND	U	10	2.0	0.40	
142-28-9	1,3-Dichloropropane	ND	U	10	2.0	0.54	
106-46-7	1,4-Dichlorobenzene	ND	U	10	2.0	0.40	
594-20-7	2,2-Dichloropropane	ND	U	10	2.0	0.54	
78-93-3	2-Butanone (MEK)	ND	U	10	2.0	1.7	
95-49-8	2-Chlorotoluene	ND	U	10	2.0	0.40	
591-78-6	2-Hexanone	ND	U	10	10	3.4	
75-65-0	tert-Butyl Alcohol	ND	U	200	40	22	
106-43-4	4-Chlorotoluene	ND	U	10	2.0	0.48	
99-87-6	p-Isopropyltoluene	ND	U	10	2.0	0.40	
108-10-1	4-Methyl-2-pentanone	ND	U	10	2.0	1.4	
67-64-1	Acetone	ND	U	10	10	2.5	
71-43-2	Benzene	ND	U	10	2.0	0.40	
108-86-1	Bromobenzene	ND	U	10	2.0	0.56	
74-97-5	Bromochloromethane	ND	U	10	2.0	0.64	
75-27-4	Bromodichloromethane	ND	U	10	2.0	0.64	
75-25-2	Bromoform	ND	U	10	2.0	0.84	
74-83-9	Bromomethane	ND	U	10	2.0	0.58	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1036
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 15:10
Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1410303-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5267.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	10	2.0	0.90	
108-90-7	Chlorobenzene	ND	U	10	2.0	0.58	
75-00-3	Chloroethane	ND	U	10	2.0	0.48	
67-66-3	Chloroform	ND	U	10	2.0	0.50	
74-87-3	Chloromethane	ND	U	10	2.0	0.42	
124-48-1	Dibromochloromethane	ND	U	10	2.0	0.62	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	10	2.0	0.92	
75-09-2	Methylene Chloride	ND	U	10	2.0	1.2	
100-41-4	Ethylbenzene	ND	U	10	2.0	0.40	
87-68-3	Hexachlorobutadiene	ND	U	10	2.0	1.3	
98-82-8	Isopropylbenzene (Cumene)	ND	U	10	2.0	0.40	
1634-04-4	Methyl tert-Butyl Ether	ND	U	10	2.0	0.58	
91-20-3	Naphthalene	ND	U	10	2.0	0.40	
100-42-5	Styrene	ND	U	10	2.0	0.40	
127-18-4	Tetrachloroethene (PCE)	**180**		10	2.0	0.60	
108-88-3	Toluene	ND	U	10	2.0	0.40	
79-01-6	Trichloroethene (TCE)	**86**		10	2.0	0.44	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	10	2.0	0.40	
75-01-4	Vinyl Chloride	**1.3**	J	10	2.0	0.64	
156-59-2	cis-1,2-Dichloroethene	**110**		10	2.0	0.60	
10061-01-5	cis-1,3-Dichloropropene	ND	U	10	2.0	0.48	
179601-23-1	m,p-Xylenes	ND	U	20	4.0	0.66	
104-51-8	n-Butylbenzene	ND	U	10	2.0	0.42	
103-65-1	n-Propylbenzene	ND	U	10	2.0	0.40	
95-47-6	o-Xylene	ND	U	10	2.0	0.40	
135-98-8	sec-Butylbenzene	ND	U	10	2.0	0.54	
98-06-6	tert-Butylbenzene	ND	U	10	2.0	0.40	
156-60-5	trans-1,2-Dichloroethene	**0.78**	J	10	2.0	0.66	
10061-02-6	trans-1,3-Dichloropropene	ND	U	10	2.0	0.40	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1036
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 15:10
Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1410303-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5267.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	12/31/14 15:10	
Dibromofluoromethane	100	85-115	12/31/14 15:10	
Toluene-d8	108	85-120	12/31/14 15:10	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 1510

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-68-GW-565MW01-11.99	**Units:**	µg/L
Lab Code:	R1410303-010	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-010|2.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5267.D Vial: 9
Acq On : 31 Dec 2014 3:10 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 11:42:28 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	959676	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1381550	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1306378	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	646468	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	435567	50.12	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.24%			
48) surr1,1,2-dichloroetha...	4.854	65	441839	50.06	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 100.12%			
65) SURR3,Toluene-d8	7.427	98	1639798	53.93	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.86%			
70) SURR2,BFB	9.878	95	637485	50.24	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.48%			
Target Compounds						Qvalue
4) Vinyl Chloride	1.361	62	7325	0.64	ug/L	92
26) trans-1,2-Dichloroethene	2.678	96	3306	0.39	ug/L #	75
34) cis-1,2-Dichloroethene	3.678	96	511996	55.05	ug/L	87
54) Trichloroethene	5.970	130	391575	43.18	ug/L	97
72) Tetrachloroethene	8.055	164	716301	91.22	ug/L	97

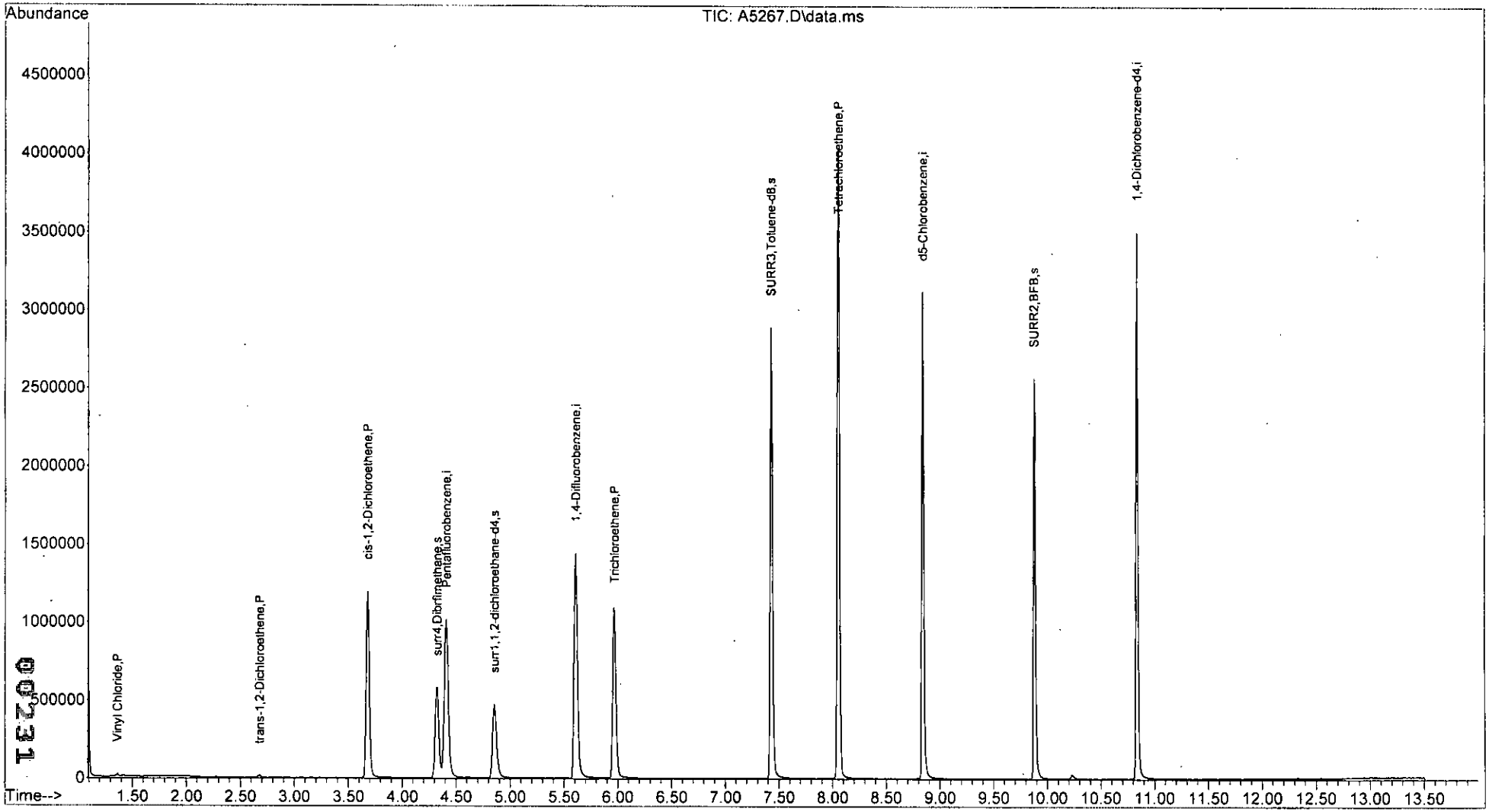
(#) = qualifier out of range (m) = manual integration (+) = signals summed

BA1/7

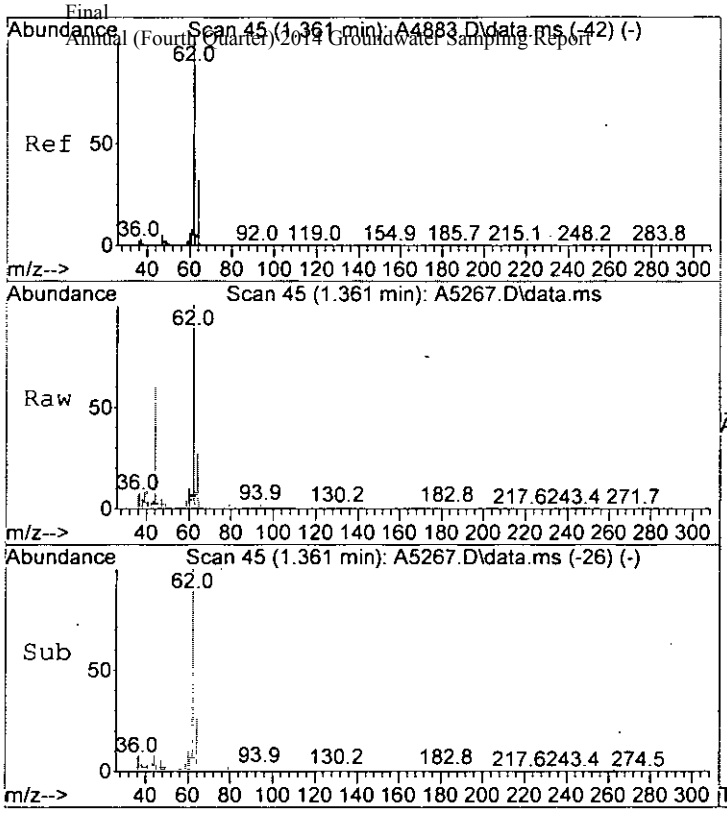
Quantitation Report (QT Reviewed)

Sample : R1410303-010|2.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5267.D Vial: 9
Acq On : 31 Dec 2014 3:10 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 11:42:28 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



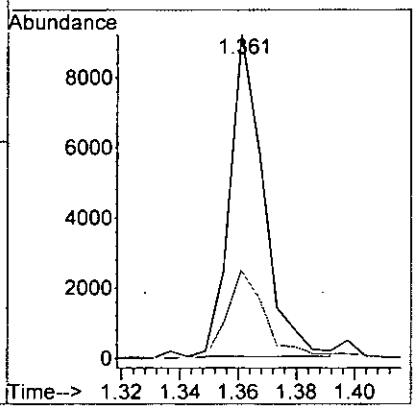
W121514.M Wed Jan 07 11:43:27 2015 MSVO10

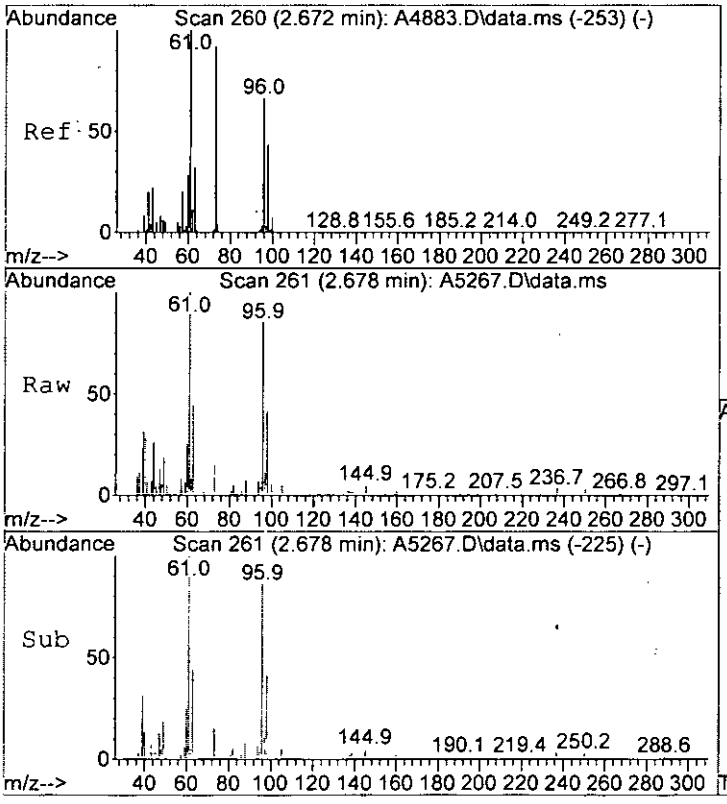


#4
Vinyl Chloride
Concen: 0.64 ug/L
RT: 1.361 min Scan# 45
Delta R.T. -0.000 min
Lab File: A5267.D
Acq: 31 Dec 2014 3:10 pm

Tgt Ion: 62 Resp: 7325

Ion	Ratio	Lower	Upper
62	100		
64	27.1	11.7	51.7

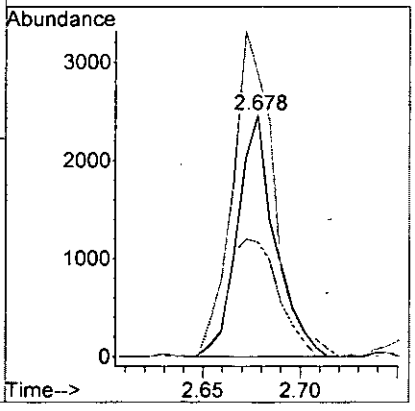


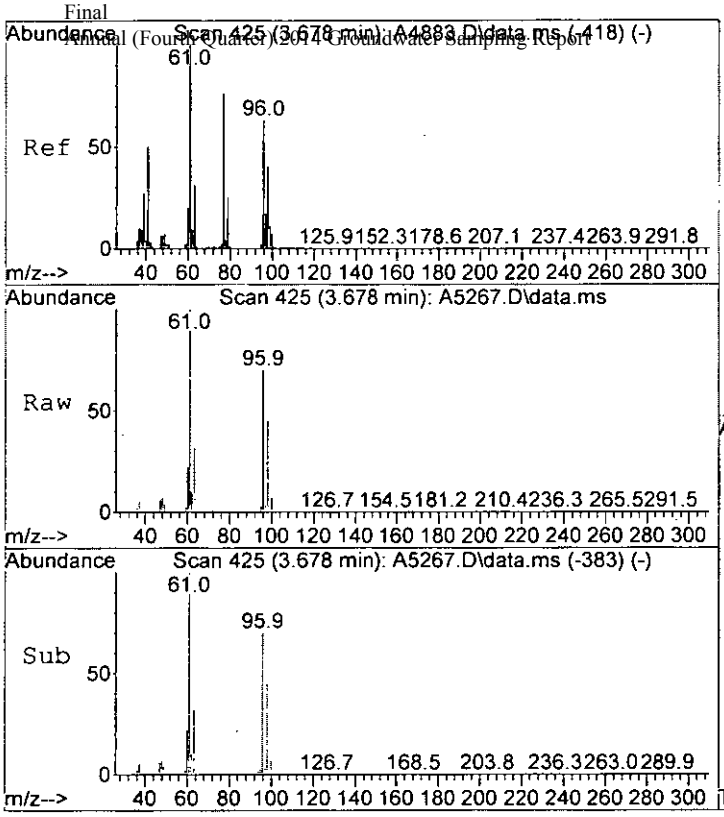


#26
trans-1,2-Dichloroethene
Concen: 0.39 ug/L
RT: 2.678 min Scan# 261
Delta R.T. 0.012 min
Lab File: A5267.D
Acq: 31 Dec 2014 3:10 pm

Tgt Ion: 96 Resp: 3306

Ion	Ratio	Lower	Upper
96	100		
98	47.4	44.8	84.8
61	117.1	130.9	170.9#

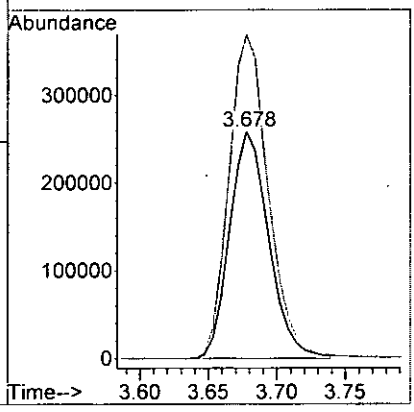


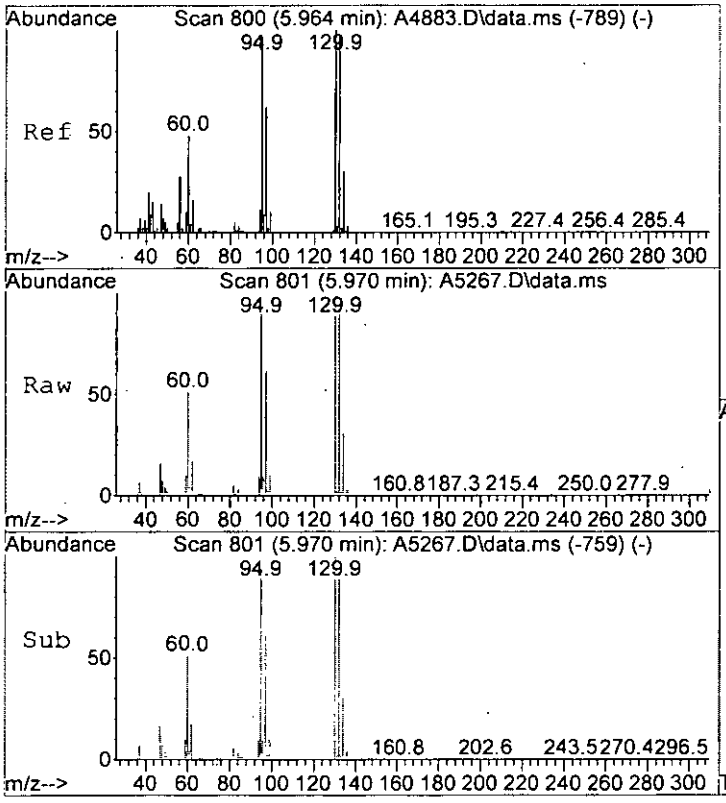


#34
cis-1,2-Dichloroethene
Concen: 55.05 ug/L
RT: 3.678 min Scan# 425
Delta R.T. -0.000 min
Lab File: A5267.D
Acq: 31 Dec 2014 3:10 pm

Tgt Ion: 96 Resp: 511996

Ion	Ratio	Lower	Upper
96	100		
61	142.6	139.1	179.1

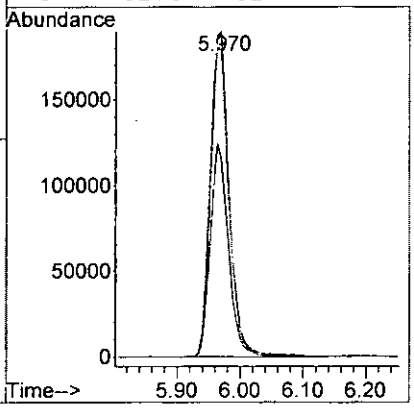


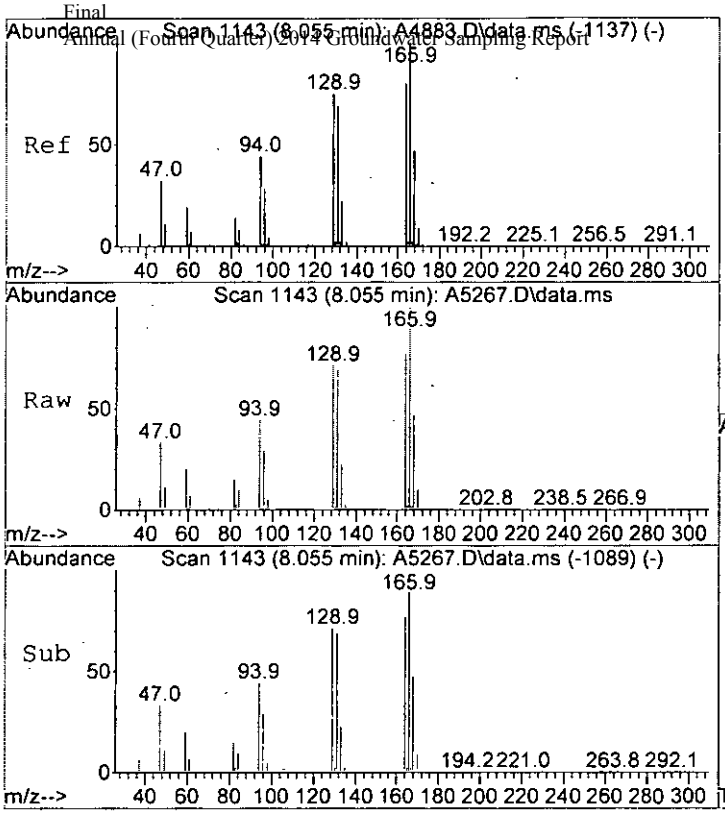


#54
Trichloroethene
Concen: 43.18 ug/L
RT: 5.970 min Scan# 801
Delta R.T. 0.006 min
Lab File: A5267.D
Acq: 31 Dec 2014 3:10 pm

Tgt Ion:130 Resp: 391575

Ion	Ratio	Lower	Upper
130	100		
132	92.2	76.6	116.6
95	93.4	76.5	116.5
97	61.0	42.4	82.4

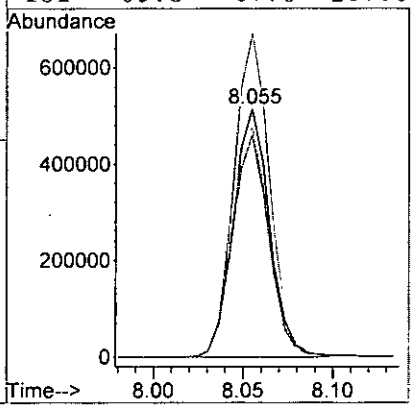




#72
Tetrachloroethene
Concen: 91.22 ug/L
RT: 8.055 min Scan# 1143
Delta R.T. -0.000 min
Lab File: A5267.D
Acq: 31 Dec 2014 3:10 pm

Tgt Ion:164 Resp: 716301

Ion	Ratio	Lower	Upper
164	100		
166	130.3	105.5	145.5
129	92.6	73.7	113.7
131	89.3	67.0	107.0



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5267.D
Acq On : 31 Dec 2014 3:10 pm
Operator : F.Naegler
Sample : R1410303-010|2.0
Misc : PARSONS 11603 T4
ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5267.D\data.ms

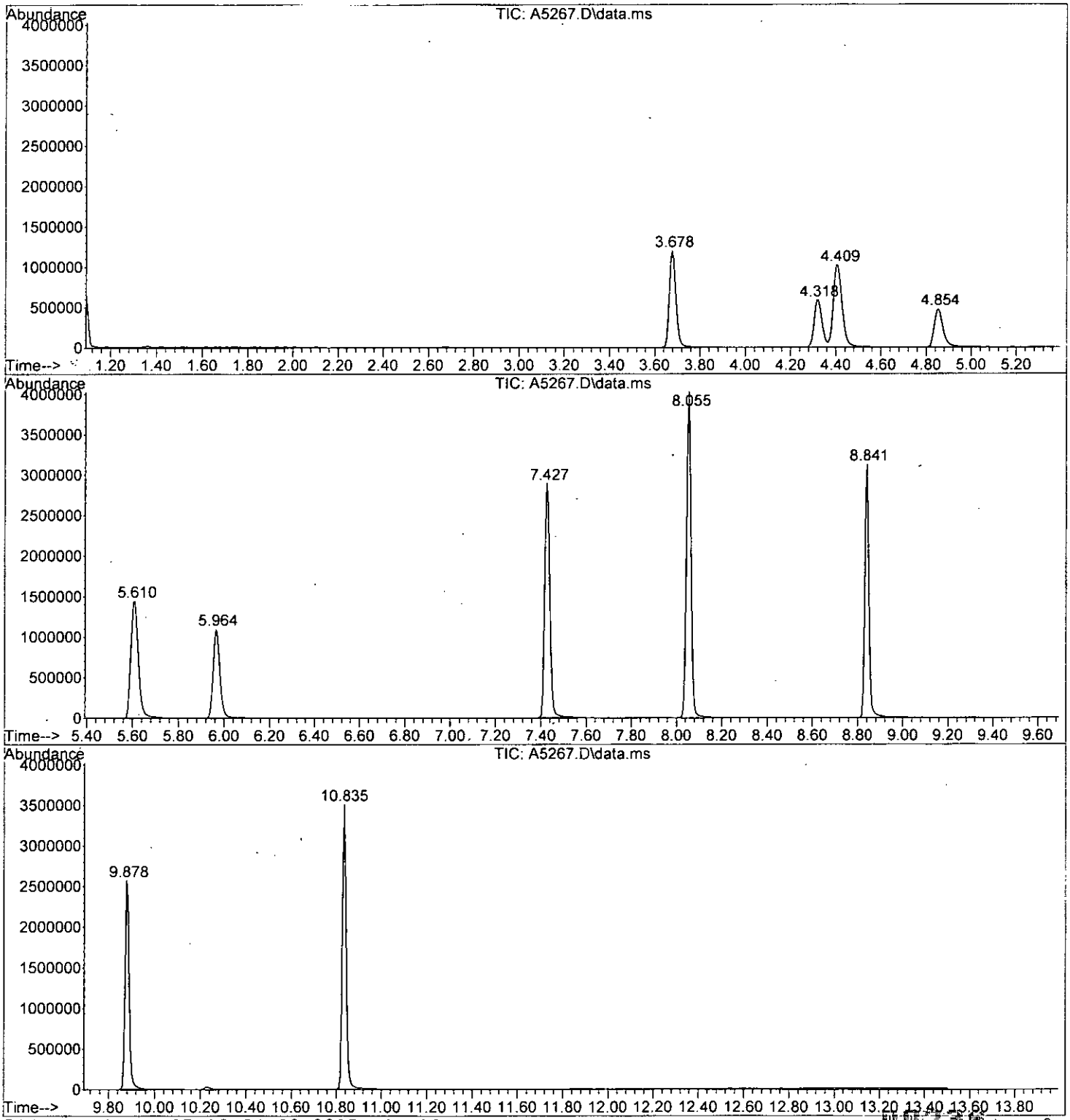
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.678	418	425	444	rBV	1192747	2388871	41.82%	6.837%
2	4.318	522	530	538	rBV	579996	1419835	24.86%	4.063%
3	4.409	538	545	563	rVB	1011043	2659230	46.56%	7.610%
4	4.854	605	618	639	rBV2	471806	1260980	22.08%	3.609%
5	5.610	735	742	759	rBV	1438547	3223637	56.44%	9.226%
6	5.964	793	800	816	rBV	1091712	2236481	39.16%	6.401%
7	7.427	1035	1040	1054	rBV	2887619	4441147	77.75%	12.710%
8	8.055	1136	1143	1156	rBV	4018829	5711720	100.00%	16.346%
9	8.841	1267	1272	1289	rBV	3119079	4121589	72.16%	11.796%
10	9.878	1438	1442	1457	rBV	2564534	3289768	57.60%	9.415%
11	10.835	1594	1599	1611	rBV	3501794	4188511	73.33%	11.987%

Sum of corrected areas: 34941769

```
Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5267.D
Acq On    : 31 Dec 2014    3:10 pm
Operator  : F.Naegler
Sample    : R1410303-010|2.0
Misc      : PARSONS 11603 T4
ALS Vial  : 9   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```



W121514.M Wed Jan 07 13:04:28 2015 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\123114\\
Data File : A5267.D
Acq On : 31 Dec 2014 3:10 pmm
Operator : F.Naeglerr
Sample : R1410303-010|2.0
Misc : PARSONS 11603 T44
ALS Vial : 9 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

00237

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1028
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 15:40
Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1410303-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5268.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	20

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	100	20	4.4	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	100	20	7.2	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	100	20	5.0	
79-00-5	1,1,2-Trichloroethane	ND	U	100	20	6.9	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	100	20	4.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	100	20	12	
563-58-6	1,1-Dichloropropene	ND	U	100	20	5.8	
87-61-6	1,2,3-Trichlorobenzene	ND	U	100	20	17	
96-18-4	1,2,3-Trichloropropane	ND	U	100	20	14	
120-82-1	1,2,4-Trichlorobenzene	ND	U	100	20	4.7	
95-63-6	1,2,4-Trimethylbenzene	ND	U	100	20	4.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	100	20	15	
106-93-4	1,2-Dibromoethane	ND	U	100	20	4.8	
95-50-1	1,2-Dichlorobenzene	ND	U	100	20	4.2	
107-06-2	1,2-Dichloroethane	ND	U	100	20	7.2	
78-87-5	1,2-Dichloropropane	ND	U	100	20	4.0	
108-67-8	1,3,5-Trimethylbenzene	ND	U	100	20	4.0	
541-73-1	1,3-Dichlorobenzene	ND	U	100	20	4.0	
142-28-9	1,3-Dichloropropane	ND	U	100	20	5.4	
106-46-7	1,4-Dichlorobenzene	ND	U	100	20	4.0	
594-20-7	2,2-Dichloropropane	ND	U	100	20	5.4	
78-93-3	2-Butanone (MEK)	ND	U	100	20	17	
95-49-8	2-Chlorotoluene	ND	U	100	20	4.0	
591-78-6	2-Hexanone	ND	U	100	100	34	
75-65-0	tert-Butyl Alcohol	ND	U	2000	400	220	
106-43-4	4-Chlorotoluene	ND	U	100	20	4.8	
99-87-6	p-Isopropyltoluene	ND	U	100	20	4.0	
108-10-1	4-Methyl-2-pentanone	ND	U	100	20	14	
67-64-1	Acetone	ND	U	100	100	25	
71-43-2	Benzene	ND	U	100	20	4.0	
108-86-1	Bromobenzene	ND	U	100	20	5.7	
74-97-5	Bromochloromethane	ND	U	100	20	6.4	
75-27-4	Bromodichloromethane	ND	U	100	20	6.4	
75-25-2	Bromoform	ND	U	100	20	8.4	
74-83-9	Bromomethane	ND	U	100	20	5.8	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1028
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 15:40
Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1410303-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5268.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	20

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	100	20	9.0	
108-90-7	Chlorobenzene	ND	U	100	20	5.8	
75-00-3	Chloroethane	ND	U	100	20	4.8	
67-66-3	Chloroform	ND	U	100	20	5.0	
74-87-3	Chloromethane	ND	U	100	20	4.2	
124-48-1	Dibromochloromethane	ND	U	100	20	6.2	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	100	20	9.3	
75-09-2	Methylene Chloride	ND	U	100	20	12	
100-41-4	Ethylbenzene	ND	U	100	20	4.0	
87-68-3	Hexachlorobutadiene	ND	U	100	20	13	
98-82-8	Isopropylbenzene (Cumene)	ND	U	100	20	4.0	
1634-04-4	Methyl tert-Butyl Ether	ND	U	100	20	5.8	
91-20-3	Naphthalene	ND	U	100	20	4.0	
100-42-5	Styrene	ND	U	100	20	4.0	
127-18-4	Tetrachloroethene (PCE)	**2400**		100	20	6.0	
108-88-3	Toluene	ND	U	100	20	4.0	
79-01-6	Trichloroethene (TCE)	**41**	**J**	100	20	4.4	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	100	20	4.0	
75-01-4	Vinyl Chloride	ND	U	100	20	6.4	
156-59-2	cis-1,2-Dichloroethene	**49**	**J**	100	20	6.0	
10061-01-5	cis-1,3-Dichloropropene	ND	U	100	20	4.8	
179601-23-1	m,p-Xylenes	ND	U	200	40	6.7	
104-51-8	n-Butylbenzene	ND	U	100	20	4.2	
103-65-1	n-Propylbenzene	ND	U	100	20	4.0	
95-47-6	o-Xylene	ND	U	100	20	4.0	
135-98-8	sec-Butylbenzene	ND	U	100	20	5.4	
98-06-6	tert-Butylbenzene	ND	U	100	20	4.0	
156-60-5	trans-1,2-Dichloroethene	ND	U	100	20	6.7	
10061-02-6	trans-1,3-Dichloropropene	ND	U	100	20	4.0	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1028
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 15:40
Sample Name:	FTMM-68-GW-565MW01D-22.31	**Units:**	µg/L
Lab Code:	R1410303-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5268.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	20

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	12/31/14 15:40	
Dibromofluoromethane	98	85-115	12/31/14 15:40	
Toluene-d8	108	85-120	12/31/14 15:40	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/31/14 1540

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-68-GW-565MW01D-22.31
Lab Code: R1410303-011

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-011|20.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5268.D Vial: 10
Acq On : 31 Dec 2014 3:40 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 11:45:41 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	943045	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1386405	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1279383	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	658938	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	427286	48.99	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.98%			
48) surr1,1,2-dichloroetha...	4.854	65	430369	48.59	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 97.18%			
65) SURR3,Toluene-d8	7.427	98	1648044	54.01	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 108.02%			
70) SURR2,BFB	9.878	95	635554	49.92	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.84%			
Target Compounds						Qvalue
34) cis-1,2-Dichloroethene	3.684	96	22416	2.45	ug/L	85
54) Trichloroethene	5.976	130	18875	2.07	ug/L	81
72) Tetrachloroethene	8.055	164	910075	118.34	ug/L	98

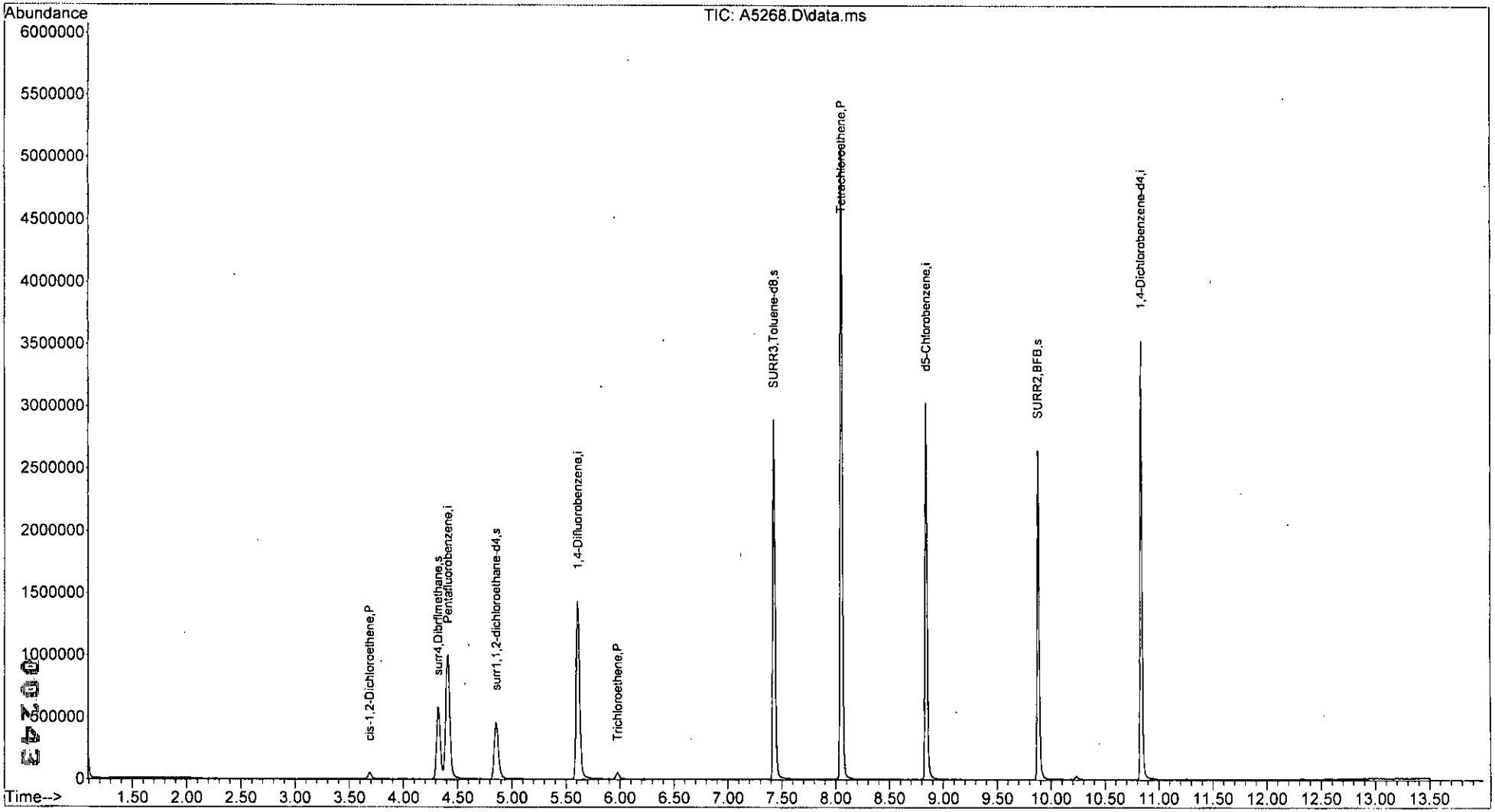
(#) = qualifier out of range (m) = manual integration (+) = signals summed

BA1/7

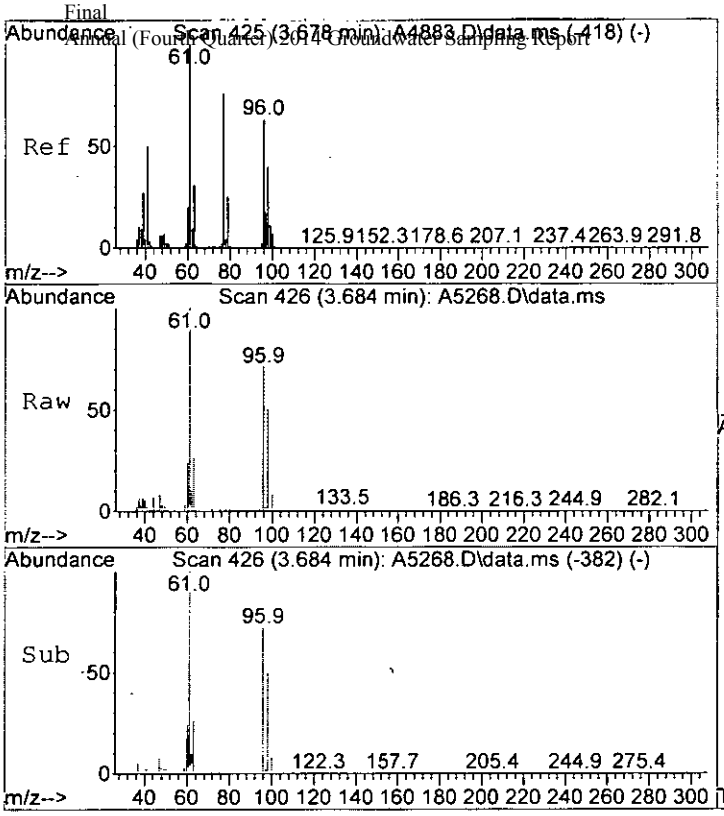
Quantitation Report (QT Reviewed)

Sample : R1410303-011|20.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5268.D Vial: 10
Acq On : 31 Dec 2014 3:40 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 11:45:41 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



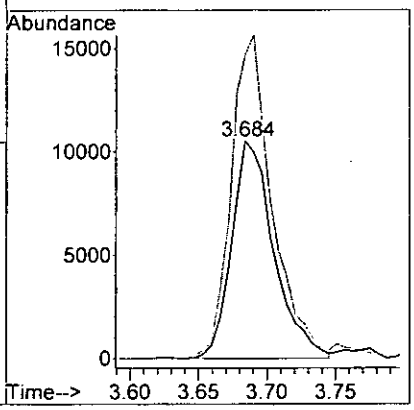
W121514.M Wed Jan 07 13:10:34 2015 MSVO10

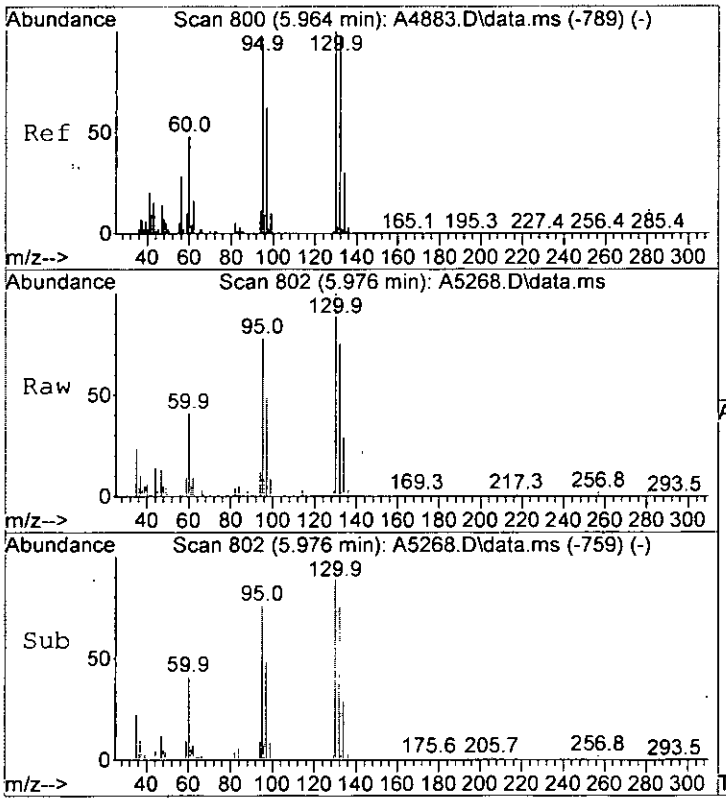


#34
cis-1,2-Dichloroethene
Concen: 2.45 ug/L
RT: 3.684 min Scan# 426
Delta R.T. 0.006 min
Lab File: A5268.D
Acq: 31 Dec 2014 3:40 pm

Tgt Ion: 96 Resp: 22416

Ion	Ratio	Lower	Upper
96	100		
61	140.0	139.1	179.1

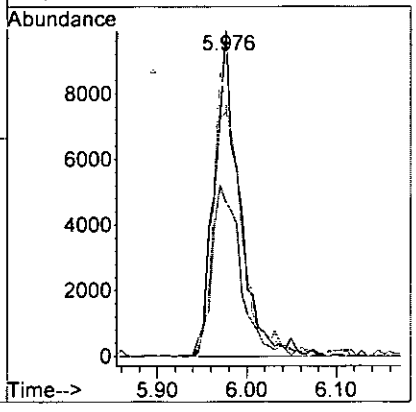


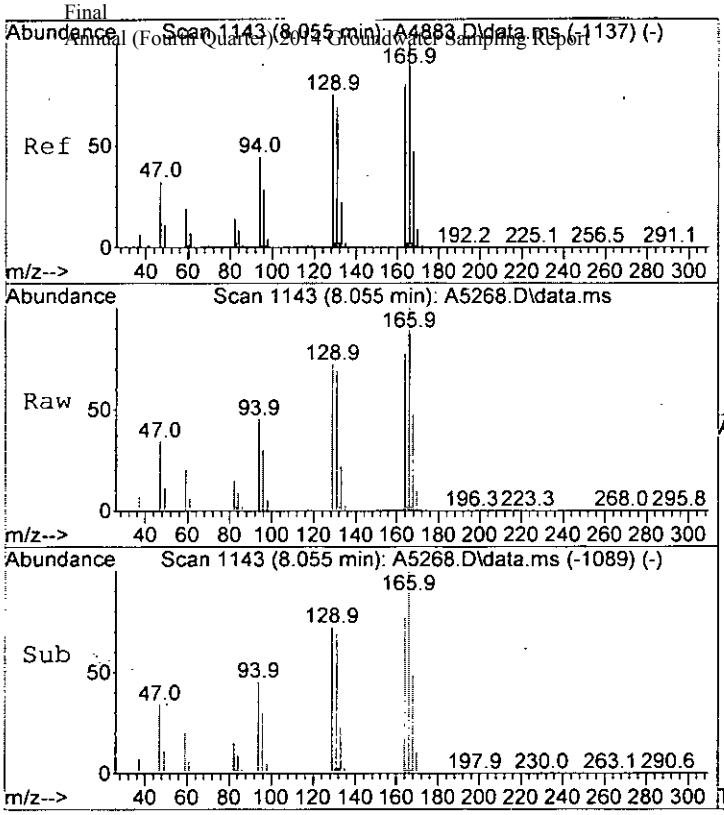


#54
Trichloroethene
Concen: 2.07 ug/L
RT: 5.976 min Scan# 802
Delta R.T. 0.012 min
Lab File: A5268.D
Acq: 31 Dec 2014 3:40 pm

Tgt Ion:130 Resp: 18875

Ion	Ratio	Lower	Upper
130	100		
132	77.7	76.6	116.6
95	78.3	76.5	116.5
97	47.6	42.4	82.4

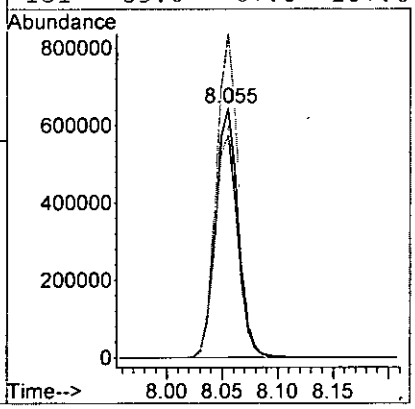




#72
Tetrachloroethene
Concen: 118.34 ug/L
RT: 8.055 min Scan# 1143
Delta R.T. 0.000 min
Lab File: A5268.D
Acq: 31 Dec 2014 3:40 pm

Tgt Ion:164 Resp: 910075

Ion	Ratio	Lower	Upper
164	100		
166	129.7	105.5	145.5
129	92.7	73.7	113.7
131	89.0	67.0	107.0



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5268.D
Acq On : 31 Dec 2014 3:40 pm
Operator : F.Naegler
Sample : R1410303-011|20.0
Misc : PARSONS 11603 T4
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5268.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.690	420	427	440	rBV	49263	110865	1.55%	0.348%
2	4.318	521	530	538	rBV2	578987	1393309	19.53%	4.380%
3	4.409	538	545	558	rVB	988021	2569007	36.01%	8.075%
4	4.854	610	618	635	rBV2	455766	1220636	17.11%	3.837%
5	5.610	735	742	760	rBV	1431261	3229505	45.27%	10.151%
6	5.976	796	802	811	rBV2	49776	102243	1.43%	0.321%
7	7.427	1035	1040	1066	rBV	2888919	4442901	62.29%	13.965%
8	8.055	1137	1143	1154	rBV	5051056	7133175	100.00%	22.421%
9	8.841	1267	1272	1287	rBV	3026923	4060997	56.93%	12.765%
10	9.878	1437	1442	1459	rBV	2648506	3302118	46.29%	10.379%
11	10.835	1594	1599	1616	rBV	3530431	4249309	59.57%	13.357%

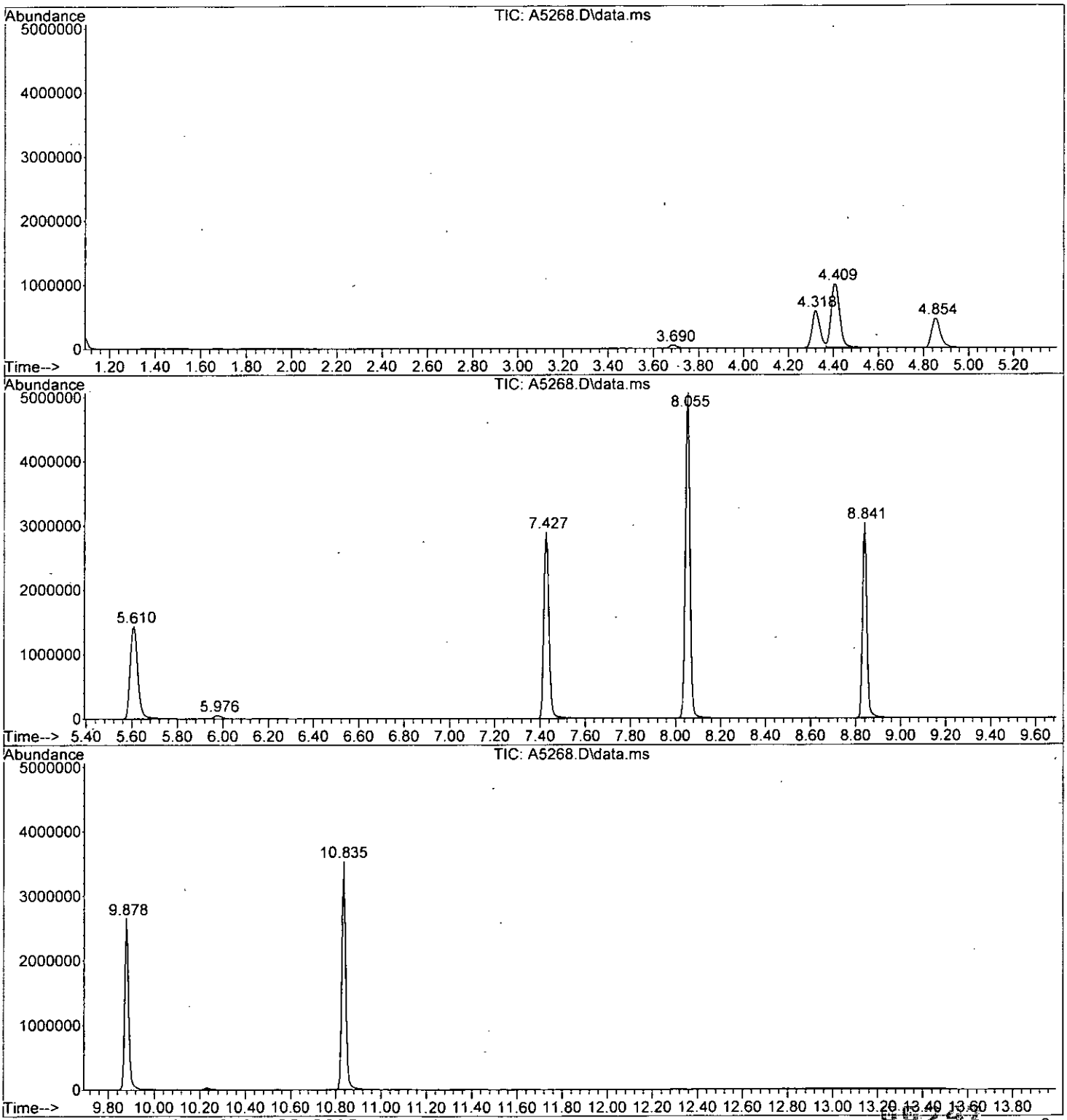
Sum of corrected areas: 31814065

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5268.D
Acq On : 31 Dec 2014 3:40 pm
Operator : F.Naegler
Sample : R1410303-011|20.0
Misc : PARSONS 11603 T4
ALS Vial : 10 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W121514.M Wed Jan 07 13:04:35 2015 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\123114\\
Data File : A5268.D
Acq On : 31 Dec 2014 3:40 pmm
Operator : F.Naeglerr
Sample : R1410303-011|20.0
Misc : PARSONS 11603 T44
ALS Vial : 10 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1330
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 08:29
Sample Name:	FTMM-22-GW-CWMW29-10.85	**Units:**	µg/L
Lab Code:	R1410303-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5206.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.1**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1330
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 08:29
Sample Name:	FTMM-22-GW-CWMW29-10.85	**Units:**	µg/L
Lab Code:	R1410303-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5206.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	4.7	J	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	0.83	J	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1330
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 08:29
Sample Name:	FTMM-22-GW-CWMW29-10.85	**Units:**	µg/L
Lab Code:	R1410303-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5206.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	12/30/14 08:29	
Dibromofluoromethane	98	85-115	12/30/14 08:29	
Toluene-d8	106	85-120	12/30/14 08:29	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 0829

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CWMW29-10.85	**Units:**	µg/L
Lab Code:	R1410303-012	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-012|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5206.D Vial: 41
Acq On : 30 Dec 2014 8:29 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 15:03:12 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	989250	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1429618	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1303652	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	665397	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	438446	48.75	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.50%			
48) surr1,1,2-dichloroetha...	4.854	65	456635	50.00	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 100.00%			
65) SURR3,Toluene-d8	7.427	98	1667794	53.01	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 106.02%			
70) SURR2,BFB	9.878	95	650639	49.56	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.12%			
Target Compounds						Qvalue
12) Acrolein	1.940	56	285	Below Cal	#	15
15) Acetone	2.129	43	3432	2.05	ug/L	87
34) cis-1,2-Dichloroethene	3.684	96	7990	0.83	ug/L #	62
54) Trichloroethene	5.970	130	43835	4.67	ug/L	94

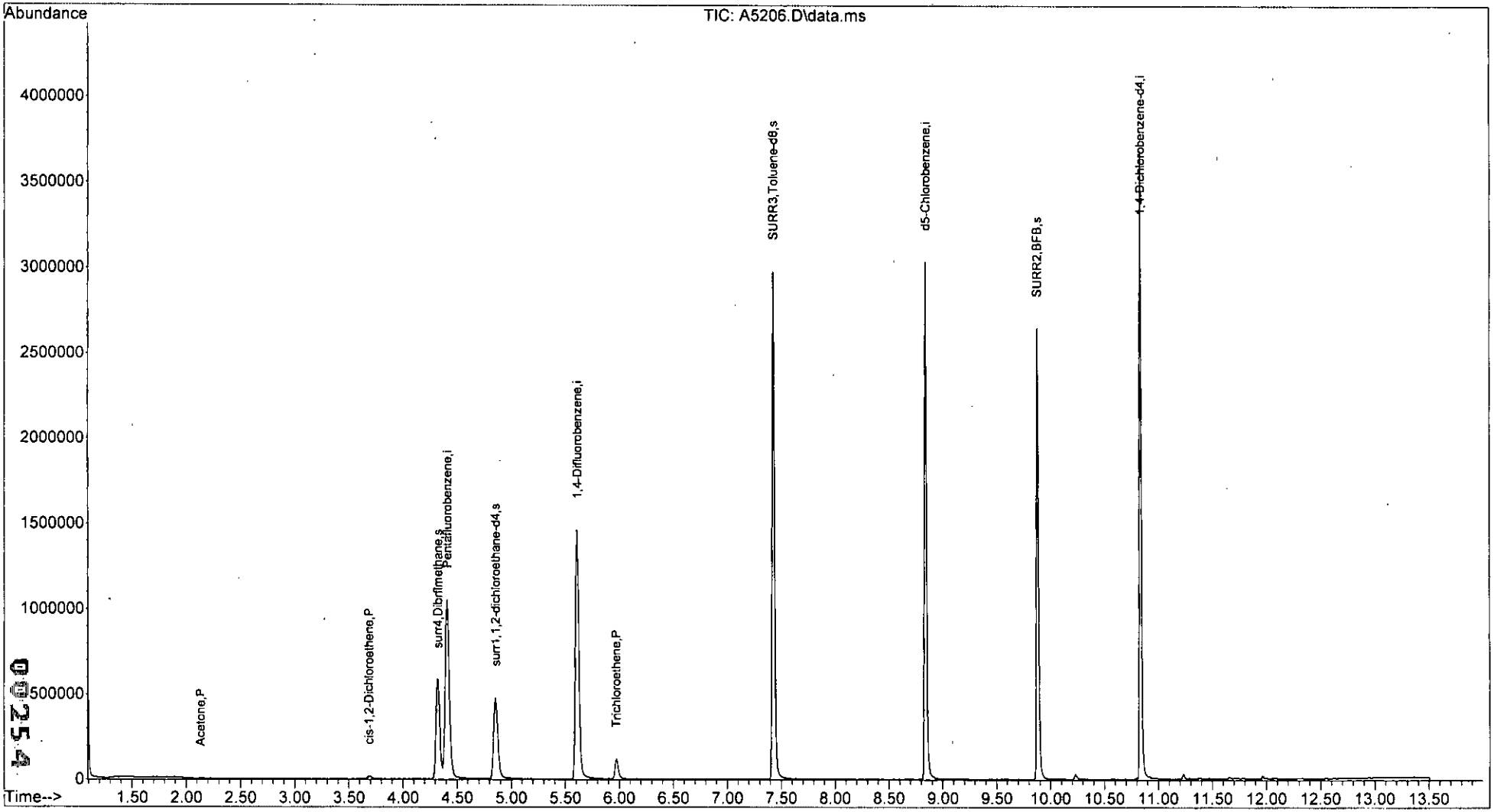
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FJ 1/6/15

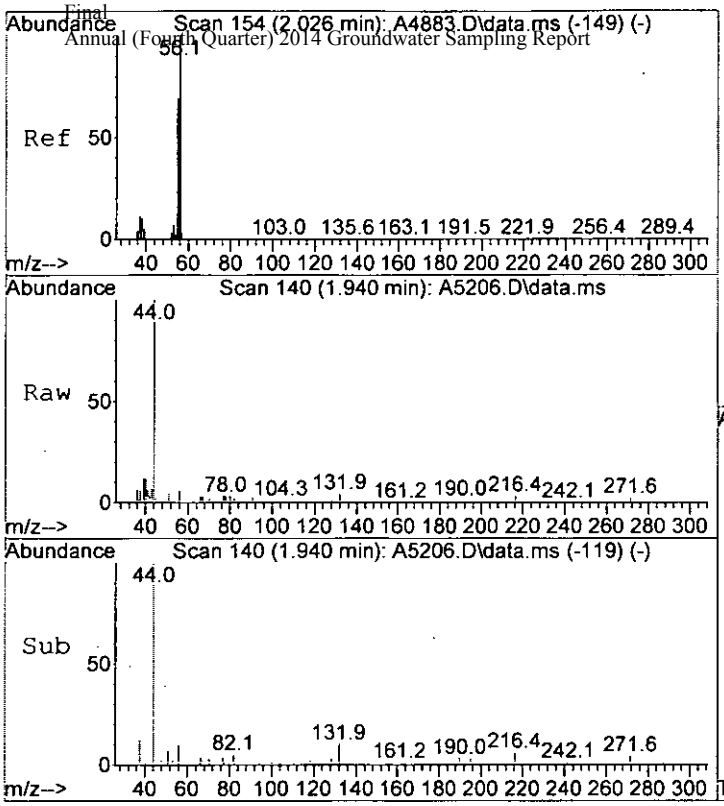
Quantitation Report (QT Reviewed)

Sample : R1410303-012|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5206.D Vial: 41
Acq On : 30 Dec 2014 8:29 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 15:03:12 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



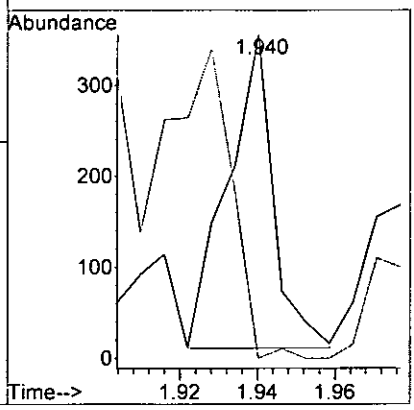
W121514.M Tue Jan 06 15:03:24 2015 MSVO10

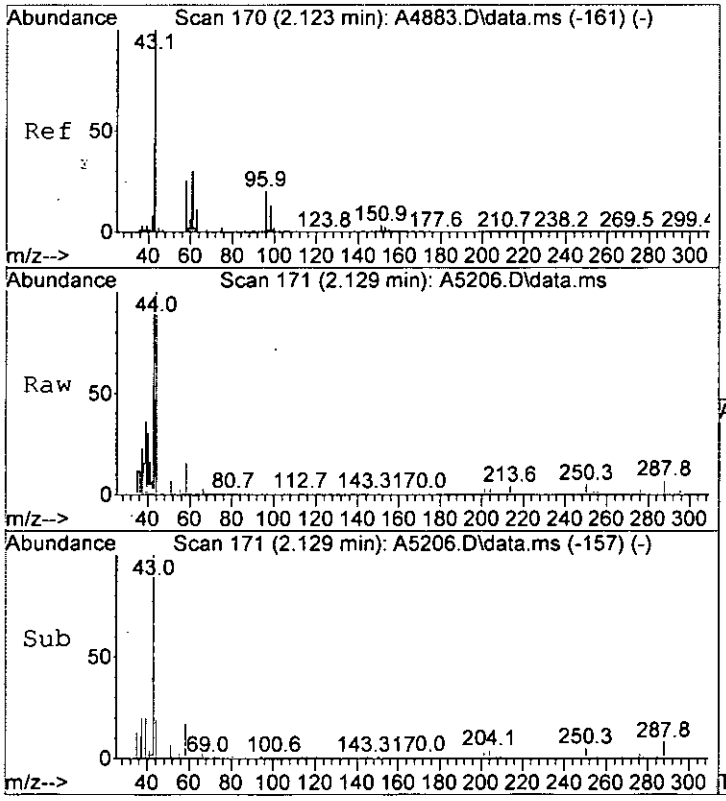


#12
Acrolein
Concen: Below Cal
RT: 1.940 min Scan# 140
Delta R.T. -0.079 min
Lab File: A5206.D
Acq: 30 Dec 2014 8:29 am

Tgt Ion: 56 Resp: 285

Ion	Ratio	Lower	Upper
56	100		
55	0.0	49.6	89.6#

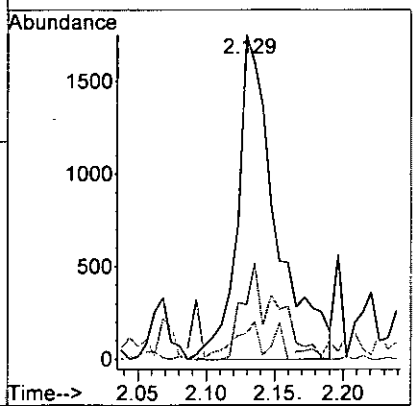


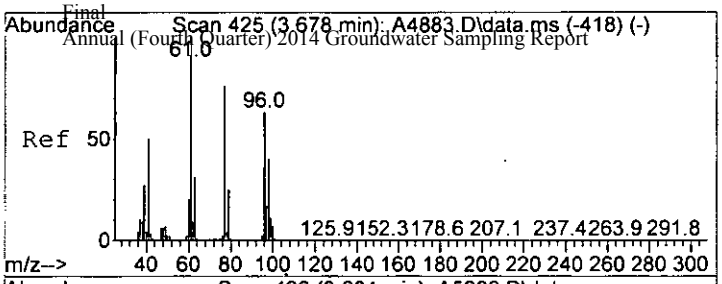


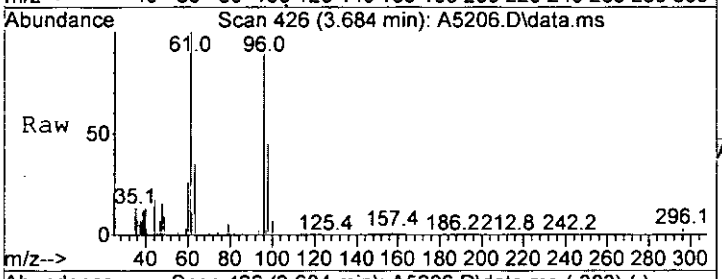
#15
Acetone
Concen: 2.05 ug/L
RT: 2.129 min Scan# 171
Delta R.T. 0.012 min
Lab File: A5206.D
Acq: 30 Dec 2014 8:29 am

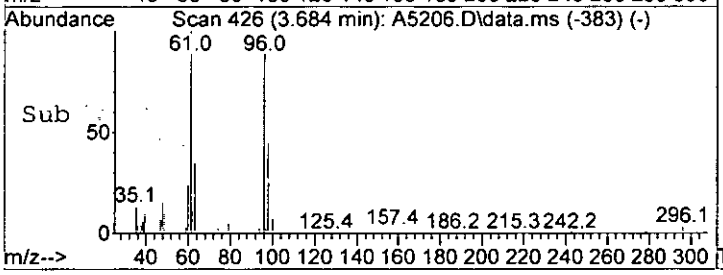
Tgt Ion: 43 Resp: 3432

Ion	Ratio	Lower	Upper
43	100		
58	16.9	5.3	45.3
42	7.9	0.0	29.0





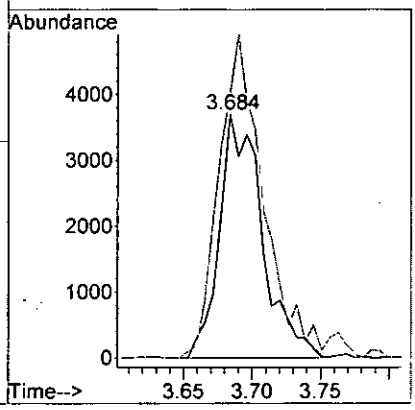


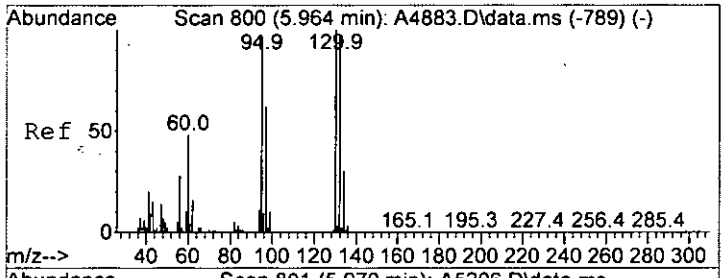


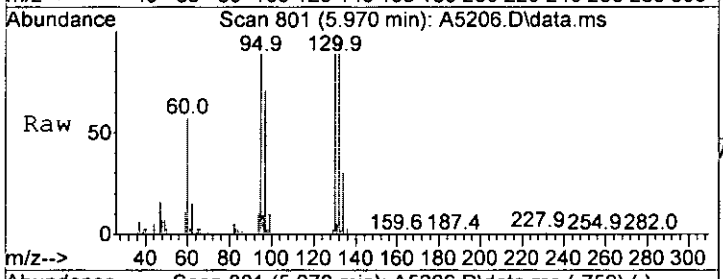
#34
cis-1,2-Dichloroethene
Concen: 0.83 ug/L
RT: 3.684 min Scan# 426
Delta R.T. 0.006 min
Lab File: A5206.D
Acq: 30 Dec 2014 8:29 am

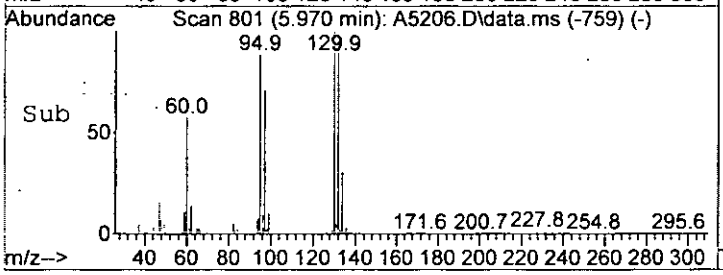
Tgt Ion: 96 Resp: 7990

Ion	Ratio	Lower	Upper
96	100		
61	108.6	139.1	179.1#





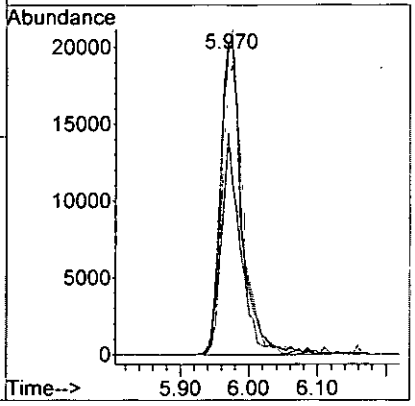




#54
Trichloroethene
Concen: 4.67 ug/L
RT: 5.970 min Scan# 801
Delta R.T. 0.006 min
Lab File: A5206.D
Acq: 30 Dec 2014 8:29 am

Tgt Ion:130 Resp: 43835

Ion	Ratio	Lower	Upper
130	100		
132	96.8	76.6	116.6
95	88.8	76.5	116.5
97	70.8	42.4	82.4



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5206.D
Acq On : 30 Dec 2014 8:29 am
Operator : F.Naegler
Sample : R1410303-012|1.0
Misc : PARSONS 11603 T4
ALS Vial : 41 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5206.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.318	522	530	538	rBV	582300	1449563	32.17%	5.729%
2	4.409	538	545	566	rVB	1046030	2788005	61.88%	11.019%
3	4.854	610	618	635	rBV	474492	1266413	28.11%	5.005%
4	5.604	734	741	764	rBV	1460756	3312287	73.52%	13.091%
5	5.970	795	801	813	rVB2	115110	243134	5.40%	0.961%
6	7.427	1035	1040	1058	rBV	2975669	4505506	100.00%	17.807%
7	8.841	1267	1272	1286	rBV	3032070	4127595	91.61%	16.314%
8	9.878	1438	1442	1458	rBV	2643415	3321363	73.72%	13.127%
9	10.835	1594	1599	1620	rBV	3677455	4287560	95.16%	16.946%

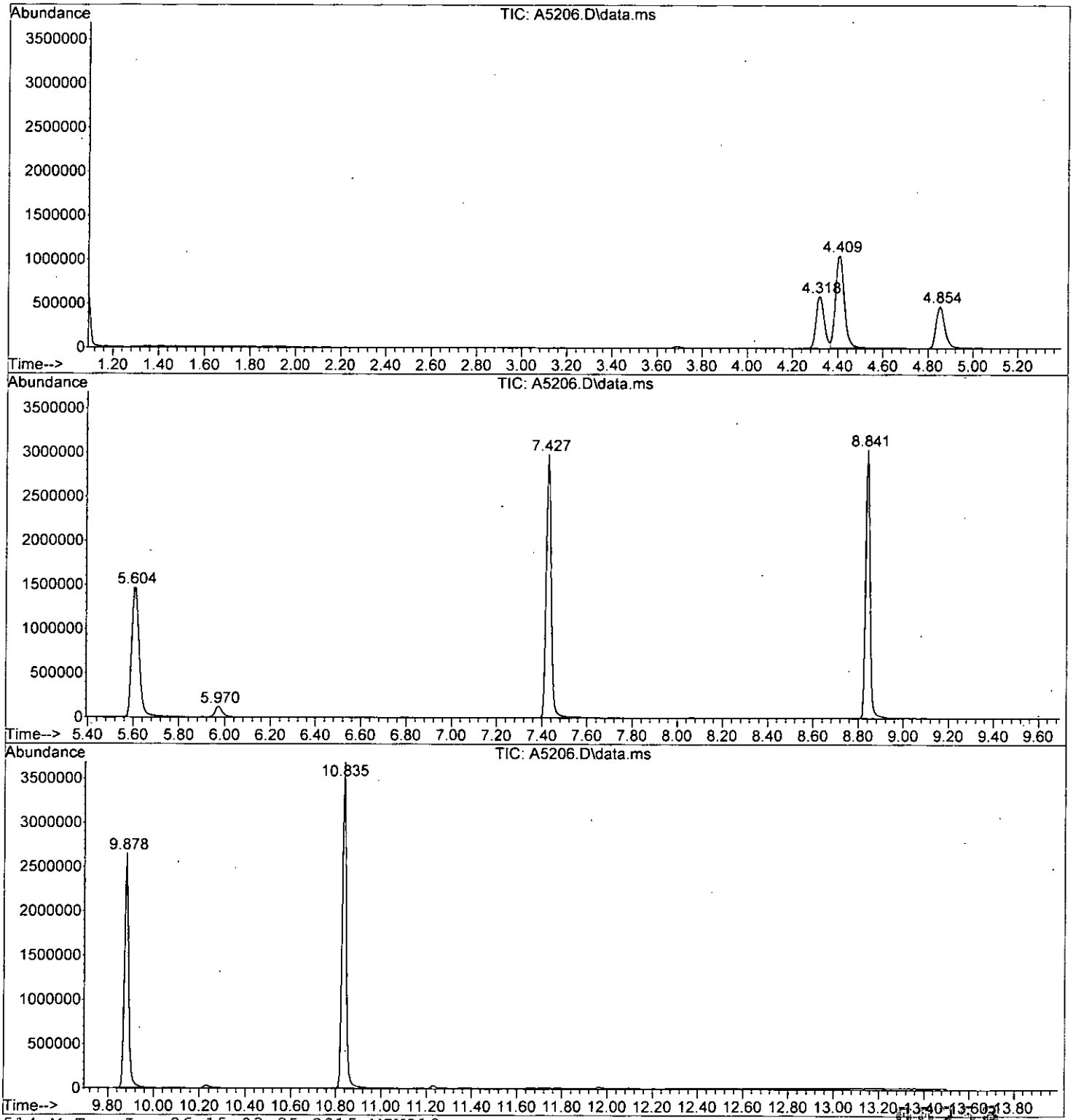
Sum of corrected areas: 25301426

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5206.D
Acq On : 30 Dec 2014 8:29 am
Operator : F.Naegler
Sample : R1410303-012|1.0
Misc : PARSONS 11603 T4
ALS Vial : 41 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W121514.M Tue Jan 06 15:03:35 2015 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\122914\\
Data File : A5206.D
Acq On : 30 Dec 2014 8:29 amm
Operator : F.Naeglerr
Sample : R1410303-012|1.0
Misc : PARSONS 11603 T44
ALS Vial : 41 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1322
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 08:59
Sample Name:	FTMM-22-GW-CW1MW281-33.74	**Units:**	µg/L
Lab Code:	R1410303-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5207.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**0.82**	**J**	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1322
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 08:59
Sample Name:	FTMM-22-GW-CW1MW281-33.74	**Units:**	µg/L
Lab Code:	R1410303-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5207.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**330**	E	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**1.8**	J	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**23**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1322
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 08:59
Sample Name:	FTMM-22-GW-CW1MW281-33.74	**Units:**	µg/L
Lab Code:	R1410303-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5207.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	12/30/14 08:59	
Dibromofluoromethane	99	85-115	12/30/14 08:59	
Toluene-d8	108	85-120	12/30/14 08:59	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 0859

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW281-33.74	**Units:**	µg/L
Lab Code:	R1410303-013	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-013|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5207.D Vial: 42
Acq On : 30 Dec 2014 8:59 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 15:05:20 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	990755	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1431447	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1311149	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	692757	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	447125	49.66	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.32%			
48) surr1,1,2-dichloroetha...	4.854	65	461620	50.48	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 100.96%			
65) SURR3,Toluene-d8	7.427	98	1701986	54.03	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 108.06%			
70) SURR2,BFB	9.878	95	658989	50.13	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.26%			
Target Compounds						Qvalue
4) Vinyl Chloride	1.361	62	20983	1.79	ug/L	98
12) Acrolein	2.026	56	289	Below Cal	#	69
13) 1,1-Diclethene	2.099	96	6539	0.82	ug/L #	83
15) Acetone	2.129	43	1851	1.11	ug/L	74
34) cis-1,2-Dichloroethene	3.684	96	223908	23.32	ug/L #	82
54) Trichloroethene	5.964	130	3063290	325.98	ug/L	98 E

(#) = qualifier out of range (m) = manual integration (+) = signals summed

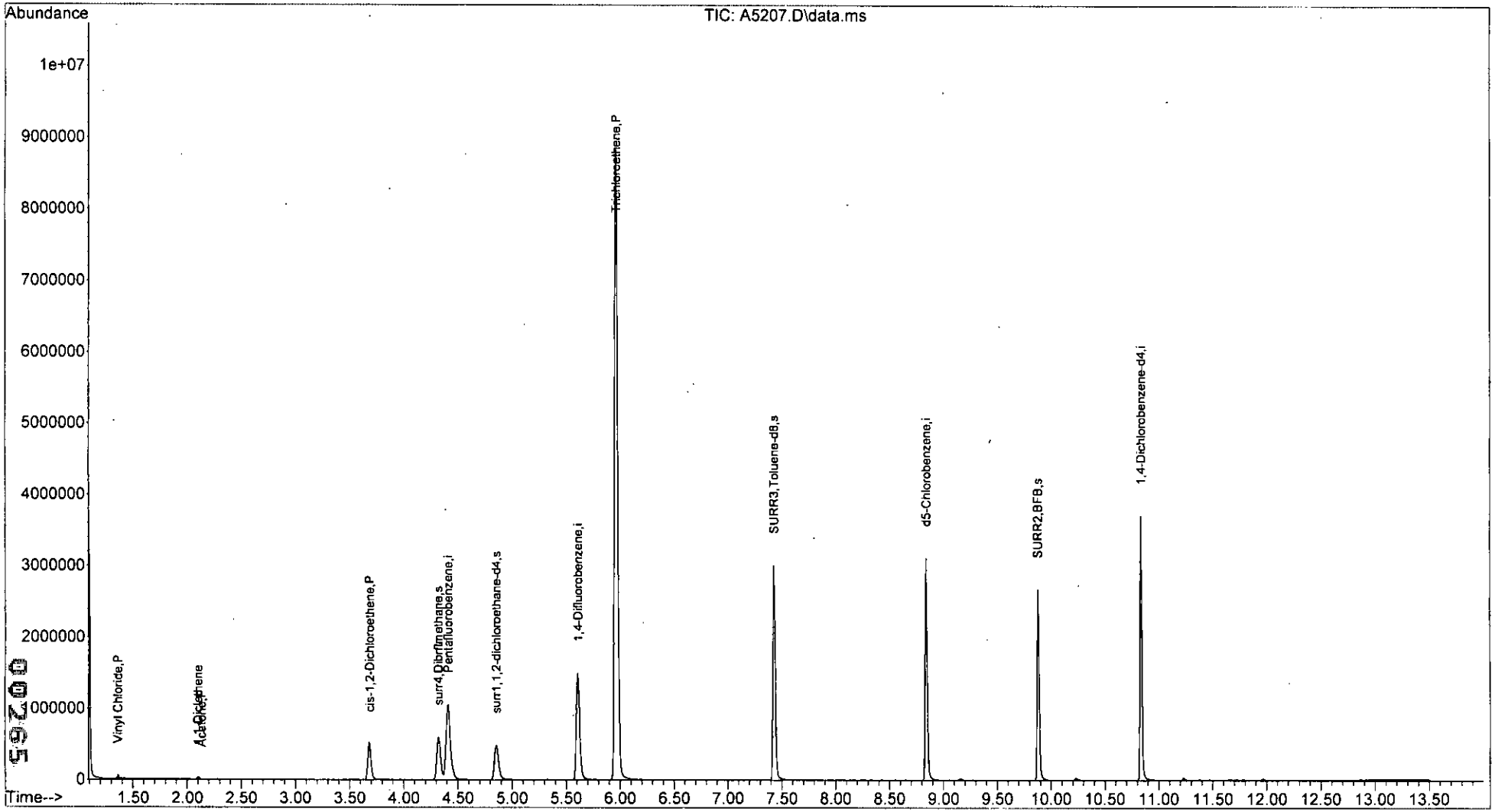
Report + RPT 1/5

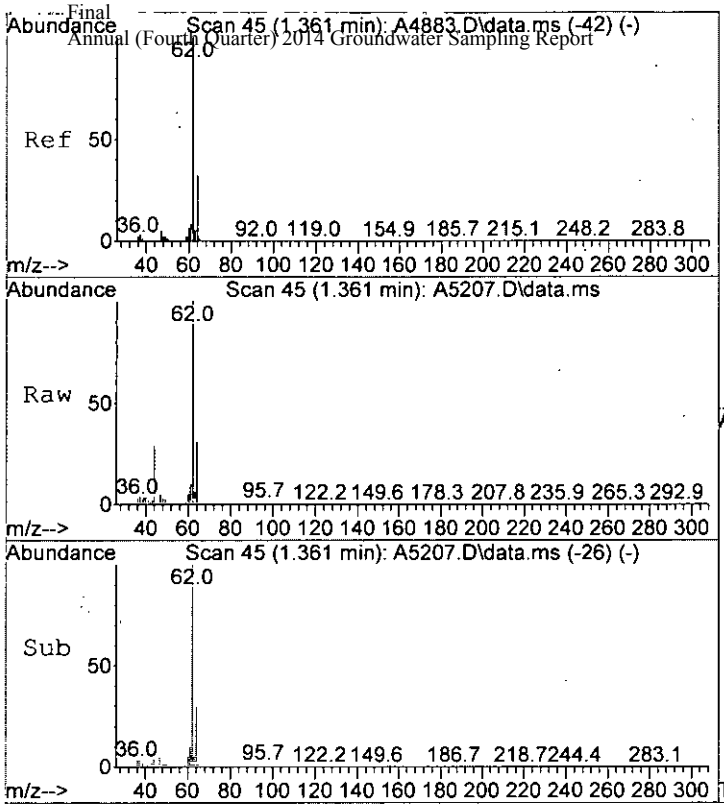
FN 1/6/15

Quantitation Report (QT Reviewed)

Sample : R1410303-013|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5207.D Vial: 42
Acq On : 30 Dec 2014 8:59 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 15:05:20 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

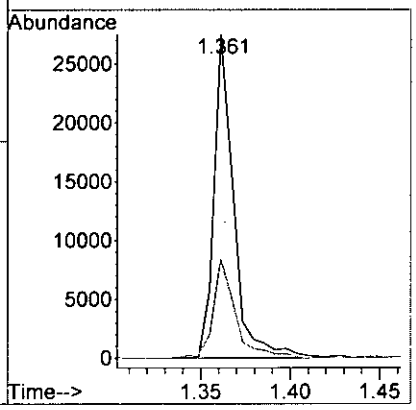


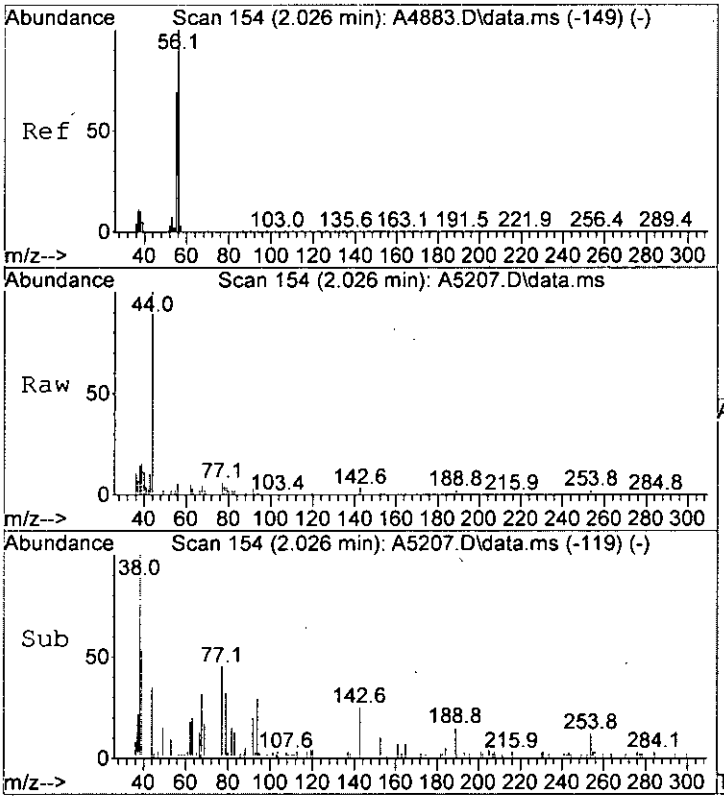


#4
Vinyl Chloride
Concen: 1.79 ug/L
RT: 1.361 min Scan# 45
Delta R.T. 0.000 min
Lab File: A5207.D
Acq: 30 Dec 2014 8:59 am

Tgt Ion: 62 Resp: 20983

Ion	Ratio	Lower	Upper
62	100		
64	30.6	11.7	51.7

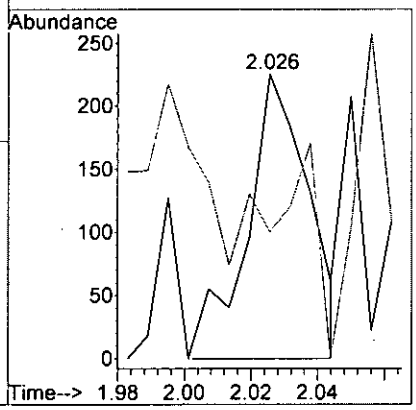


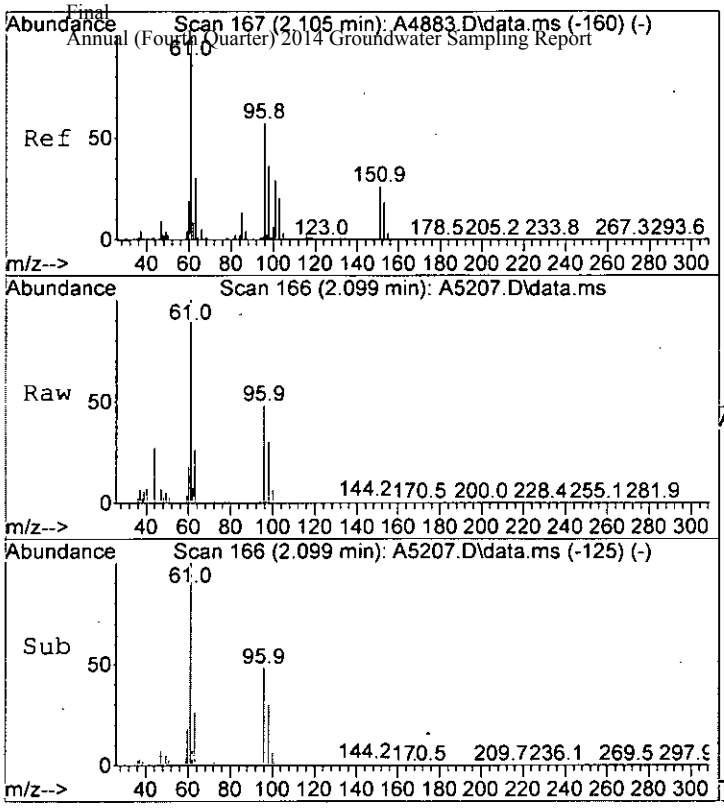


#12
Acrolein
Concen: Below Cal
RT: 2.026 min Scan# 154
Delta R.T. 0.007 min
Lab File: A5207.D
Acq: 30 Dec 2014 8:59 am

Tgt Ion: 56 Resp: 289

Ion	Ratio	Lower	Upper
56	100		
55	44.4	49.6	89.6#

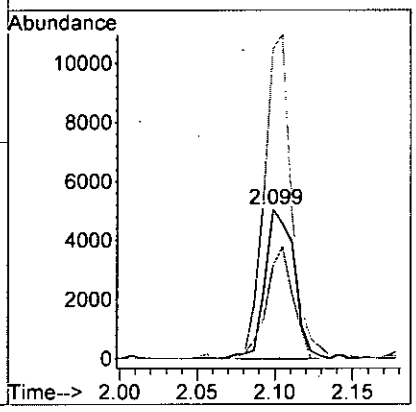


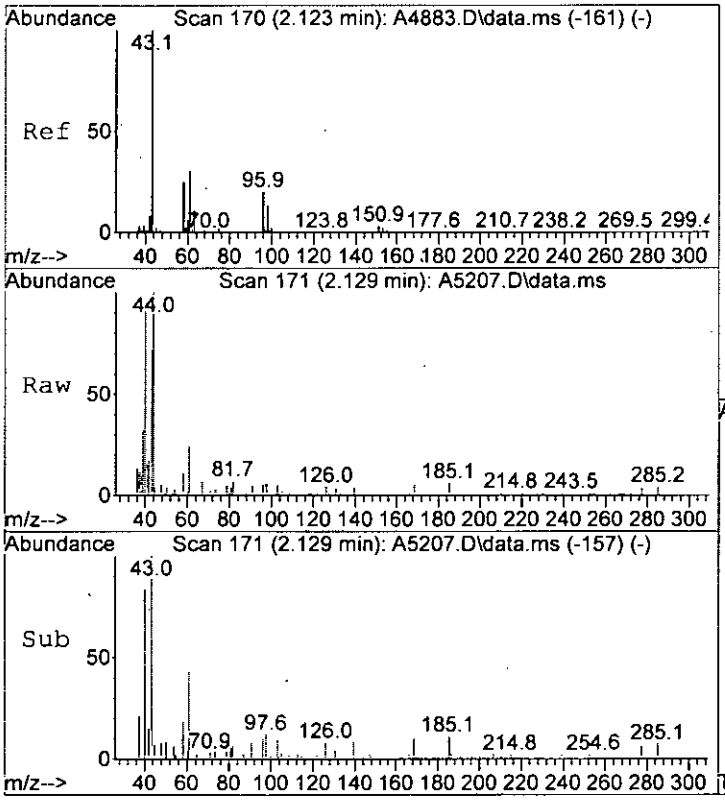


#13
1,1-Diclethene
Concen: 0.82 ug/L
RT: 2.099 min Scan# 166
Delta R.T. 0.000 min
Lab File: A5207.D
Acq: 30 Dec 2014 8:59 am

Tgt Ion: 96 Resp: 6539

Ion	Ratio	Lower	Upper
96	100		
98	62.5	43.2	83.2
61	207.6	155.6	195.6#

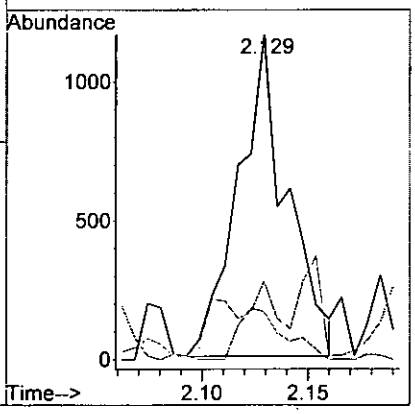


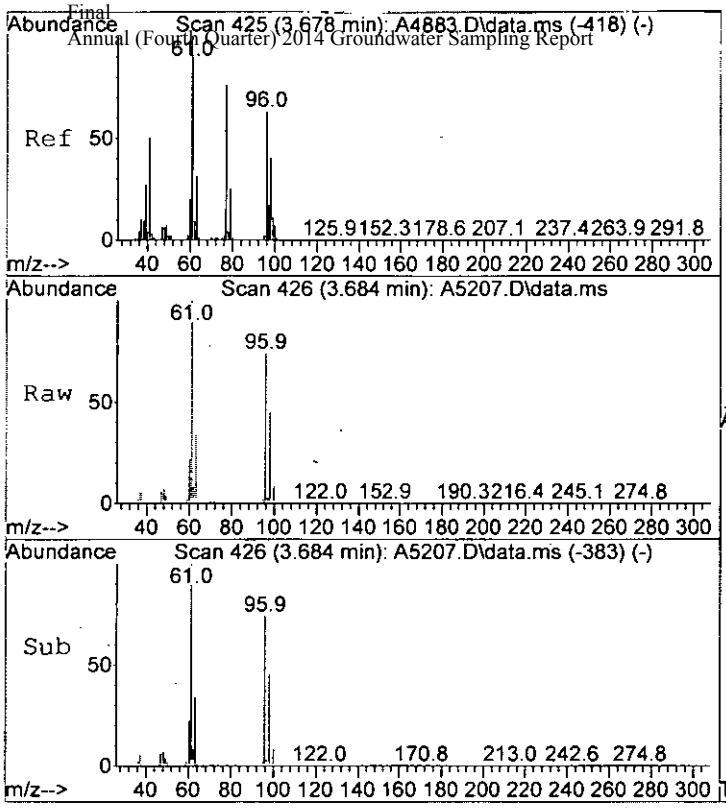


#15
Acetone
Concen: 1.11 ug/L
RT: 2.129 min Scan# 171
Delta R.T. 0.012 min
Lab File: A5207.D
Acq: 30 Dec 2014 8:59 am

Tgt Ion: 43 Resp: 1851

Ion	Ratio	Lower	Upper
43	100		
58	14.7	5.3	45.3
42	24.0	0.0	29.0

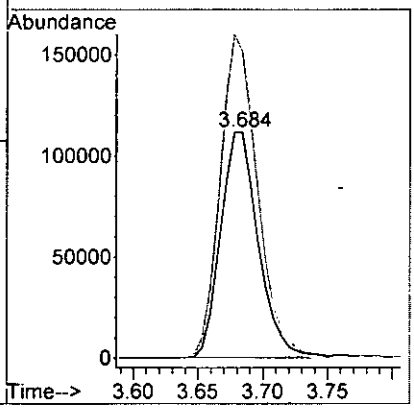


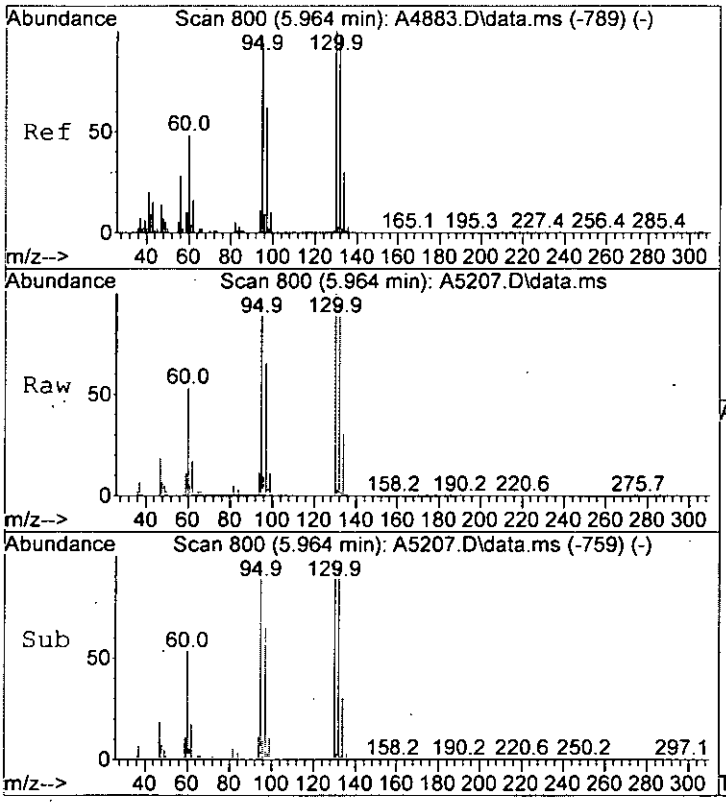


#34
cis-1,2-Dichloroethene
Concen: 23.32 ug/L
RT: 3.684 min Scan# 426
Delta R.T. 0.006 min
Lab File: A5207.D
Acq: 30 Dec 2014 8:59 am

Tgt Ion: 96 Resp: 223908

Ion	Ratio	Lower	Upper
96	100		
61	135.7	139.1	179.1#

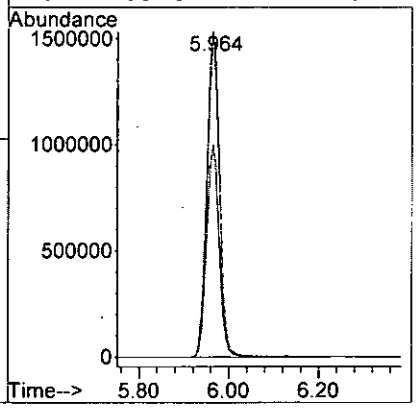




#54
Trichloroethene
Concen: 325.98 ug/L
RT: 5.964 min Scan# 800
Delta R.T. 0.000 min
Lab File: A5207.D
Acq: 30 Dec 2014 8:59 am

Tgt Ion:130 Resp: 3063290

Ion	Ratio	Lower	Upper
130	100		
132	95.4	76.6	116.6
95	97.5	76.5	116.5
97	65.2	42.4	82.4



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5207.D
Acq On : 30 Dec 2014 8:59 am
Operator : F.Naegler
Sample : R1410303-013|1.0
Misc : PARSONS 11603 T4
ALS Vial : 42 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5207.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.678	418	425	438	rBV	520899	1038443	5.93%	2.357%
2	4.318	520	530	538	rBV	595841	1467533	8.38%	3.331%
3	4.409	538	545	562	rVB	1047256	2949788	16.84%	6.696%
4	4.854	609	618	637	rBV	478818	1285653	7.34%	2.918%
5	5.610	734	742	765	rBV	1494318	3340709	19.07%	7.583%
6	5.964	792	800	822	rBV	8822101	17521268	100.00%	39.772%
7	7.427	1035	1040	1054	rBV	3009092	4532235	25.87%	10.288%
8	8.841	1267	1272	1291	rBV	3116633	4129067	23.57%	9.373%
9	9.878	1438	1442	1459	rVB	2673116	3364377	19.20%	7.637%
10	10.835	1594	1599	1617	rBV	3709648	4425254	25.26%	10.045%

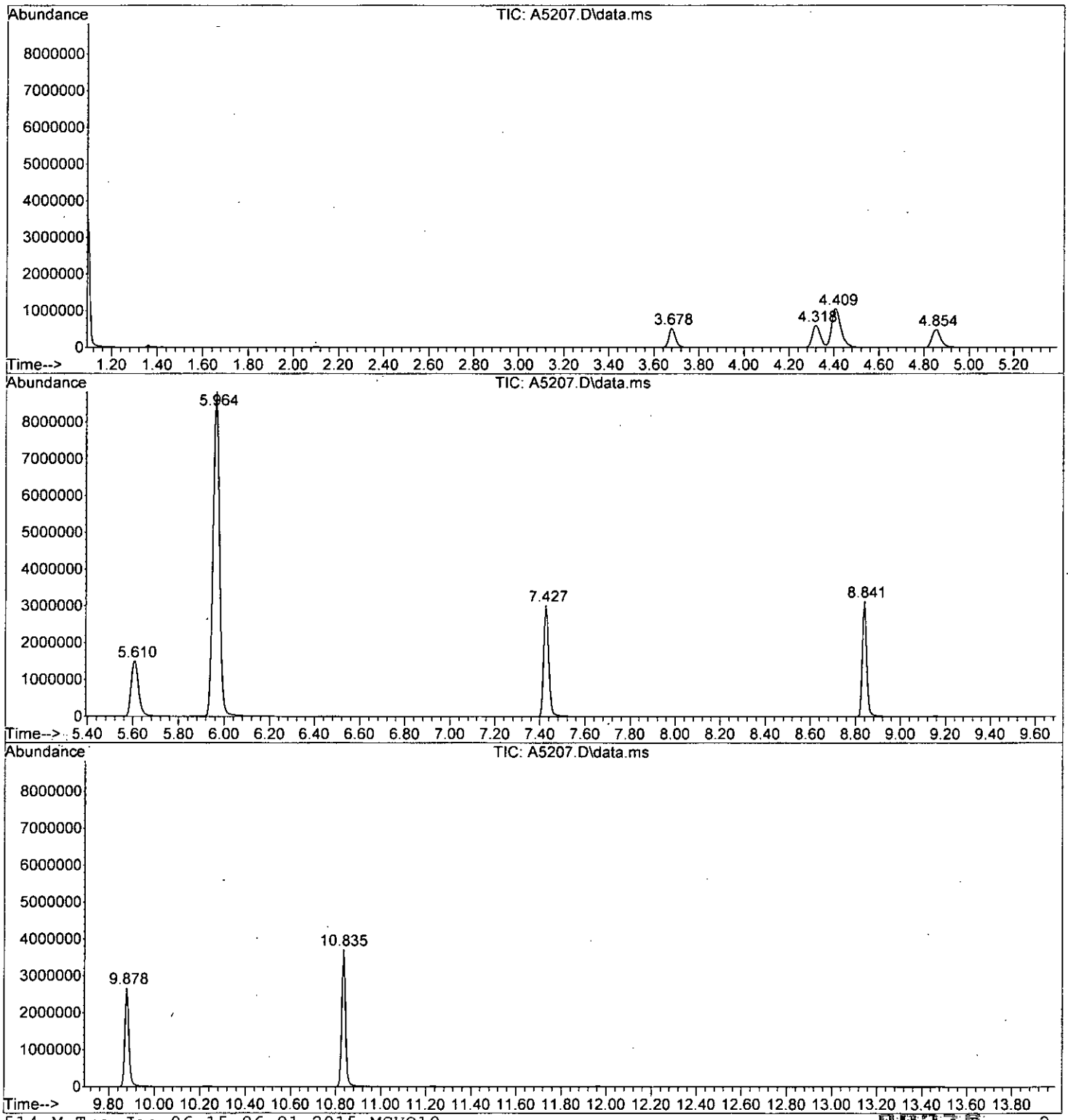
Sum of corrected areas: 44054327

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5207.D
Acq On : 30 Dec 2014 8:59 am
Operator : F.Naegler
Sample : R1410303-013|1.0
Misc : PARSONS 11603 T4
ALS Vial : 42 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W121514.M Tue Jan 06 15:06:01 2015 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\122914\\
Data File : A5207.D
Acq On : 30 Dec 2014 8:59 amm
Operator : F.Naeglerr
Sample : R1410303-013|1.0
Misc : PARSONS 11603 T44
ALS Vial : 42 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14 1322
Date Received: 12/20/14
Date Analyzed: 12/31/14 16:09

Sample Name: FTMM-22-GW-CW1MW281-33.74
Lab Code: R1410303-013
Run Type: Dilution

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\123114\A5269.D\

Analysis Lot: 427678
Instrument Name: R-MS-10
Dilution Factor: 5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	25	5.0	1.1	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	25	5.0	1.8	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	25	5.0	1.3	
79-00-5	1,1,2-Trichloroethane	ND	U	25	5.0	1.8	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	25	5.0	1.0	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	25	5.0	2.9	
563-58-6	1,1-Dichloropropene	ND	U	25	5.0	1.5	
87-61-6	1,2,3-Trichlorobenzene	ND	U	25	5.0	4.1	
96-18-4	1,2,3-Trichloropropane	ND	U	25	5.0	3.5	
120-82-1	1,2,4-Trichlorobenzene	ND	U	25	5.0	1.2	
95-63-6	1,2,4-Trimethylbenzene	ND	U	25	5.0	1.0	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	25	5.0	3.7	
106-93-4	1,2-Dibromoethane	ND	U	25	5.0	1.2	
95-50-1	1,2-Dichlorobenzene	ND	U	25	5.0	1.1	
107-06-2	1,2-Dichloroethane	ND	U	25	5.0	1.8	
78-87-5	1,2-Dichloropropane	ND	U	25	5.0	1.0	
108-67-8	1,3,5-Trimethylbenzene	ND	U	25	5.0	1.0	
541-73-1	1,3-Dichlorobenzene	ND	U	25	5.0	1.0	
142-28-9	1,3-Dichloropropane	ND	U	25	5.0	1.4	
106-46-7	1,4-Dichlorobenzene	ND	U	25	5.0	1.0	
594-20-7	2,2-Dichloropropane	ND	U	25	5.0	1.4	
78-93-3	2-Butanone (MEK)	ND	U	25	5.0	4.1	
95-49-8	2-Chlorotoluene	ND	U	25	5.0	1.0	
591-78-6	2-Hexanone	ND	U	25	25	8.3	
75-65-0	tert-Butyl Alcohol	ND	U	500	100	54	
106-43-4	4-Chlorotoluene	ND	U	25	5.0	1.2	
99-87-6	p-Isopropyltoluene	ND	U	25	5.0	1.0	
108-10-1	4-Methyl-2-pentanone	ND	U	25	5.0	3.4	
67-64-1	Acetone	ND	U	25	25	6.2	
71-43-2	Benzene	ND	U	25	5.0	1.0	
108-86-1	Bromobenzene	ND	U	25	5.0	1.5	
74-97-5	Bromochloromethane	ND	U	25	5.0	1.6	
75-27-4	Bromodichloromethane	ND	U	25	5.0	1.6	
75-25-2	Bromoform	ND	U	25	5.0	2.1	
74-83-9	Bromomethane	ND	U	25	5.0	1.5	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1322
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 16:09
Sample Name:	FTMM-22-GW-CW1MW281-33.74	**Units:**	µg/L
Lab Code:	R1410303-013	**Basis:**	NA
Run Type:	Dilution		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5269.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	25	5.0	2.3	
108-90-7	Chlorobenzene	ND	U	25	5.0	1.5	
75-00-3	Chloroethane	ND	U	25	5.0	1.2	
67-66-3	Chloroform	ND	U	25	5.0	1.3	
74-87-3	Chloromethane	ND	U	25	5.0	1.1	
124-48-1	Dibromochloromethane	ND	U	25	5.0	1.6	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	25	5.0	2.4	
75-09-2	Methylene Chloride	ND	U	25	5.0	3.0	
100-41-4	Ethylbenzene	ND	U	25	5.0	1.0	
87-68-3	Hexachlorobutadiene	ND	U	25	5.0	3.1	
98-82-8	Isopropylbenzene (Cumene)	ND	U	25	5.0	1.0	
1634-04-4	Methyl tert-Butyl Ether	ND	U	25	5.0	1.5	
91-20-3	Naphthalene	ND	U	25	5.0	1.0	
100-42-5	Styrene	ND	U	25	5.0	1.0	
127-18-4	Tetrachloroethene (PCE)	**1.5**	DJ	25	5.0	1.5	
108-88-3	Toluene	ND	U	25	5.0	1.0	
79-01-6	Trichloroethene (TCE)	**300**	D	25	5.0	1.1	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	25	5.0	1.0	
75-01-4	Vinyl Chloride	**1.7**	DJ	25	5.0	1.6	
156-59-2	cis-1,2-Dichloroethene	**22**	DJ	25	5.0	1.5	
10061-01-5	cis-1,3-Dichloropropene	ND	U	25	5.0	1.2	
179601-23-1	m,p-Xylenes	ND	U	50	10	1.7	
104-51-8	n-Butylbenzene	ND	U	25	5.0	1.1	
103-65-1	n-Propylbenzene	ND	U	25	5.0	1.0	
95-47-6	o-Xylene	ND	U	25	5.0	1.0	
135-98-8	sec-Butylbenzene	ND	U	25	5.0	1.4	
98-06-6	tert-Butylbenzene	ND	U	25	5.0	1.0	
156-60-5	trans-1,2-Dichloroethene	ND	U	25	5.0	1.7	
10061-02-6	trans-1,3-Dichloropropene	ND	U	25	5.0	1.0	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1322
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 16:09
Sample Name:	FTMM-22-GW-CW1MW281-33.74	**Units:**	µg/L
Lab Code:	R1410303-013	**Basis:**	NA
Run Type:	Dilution		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5269.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	5

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	12/31/14 16:09	
Dibromofluoromethane	97	85-115	12/31/14 16:09	
Toluene-d8	108	85-120	12/31/14 16:09	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 1609

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW281-33.74DL	**Units:**	µg/L
Lab Code:	R1410303-013	**Basis:**	NA
Run Type:	Dilution		
Analytical Method:	8260C		

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-013|5.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5269.D Vial: 11
Acq On : 31 Dec 2014 4:09 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

DL

Quant Time: Jan 07 11:47:18 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	950840	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1381264	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.842	117	1271095	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	649393	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	421629	48.53	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.06%			
48) surr1,1,2-dichloroetha...	4.854	65	448592	50.84	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 101.68%			
65) SURR3,Toluene-d8	7.427	98	1637272	53.86	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.72%			
70) SURR2,BFB	9.878	95	633344	49.93	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.86%			
Target Compounds						Qvalue
4) Vinyl Chloride	1.361	62	3883	0.34	ug/L	97
34) cis-1,2-Dichloroethene	3.684	96	40594	4.40	ug/L	98
54) Trichloroethene	5.964	130	552546	60.94	ug/L	96
72) Tetrachloroethene	8.055	164	2292	0.30	ug/L #	66

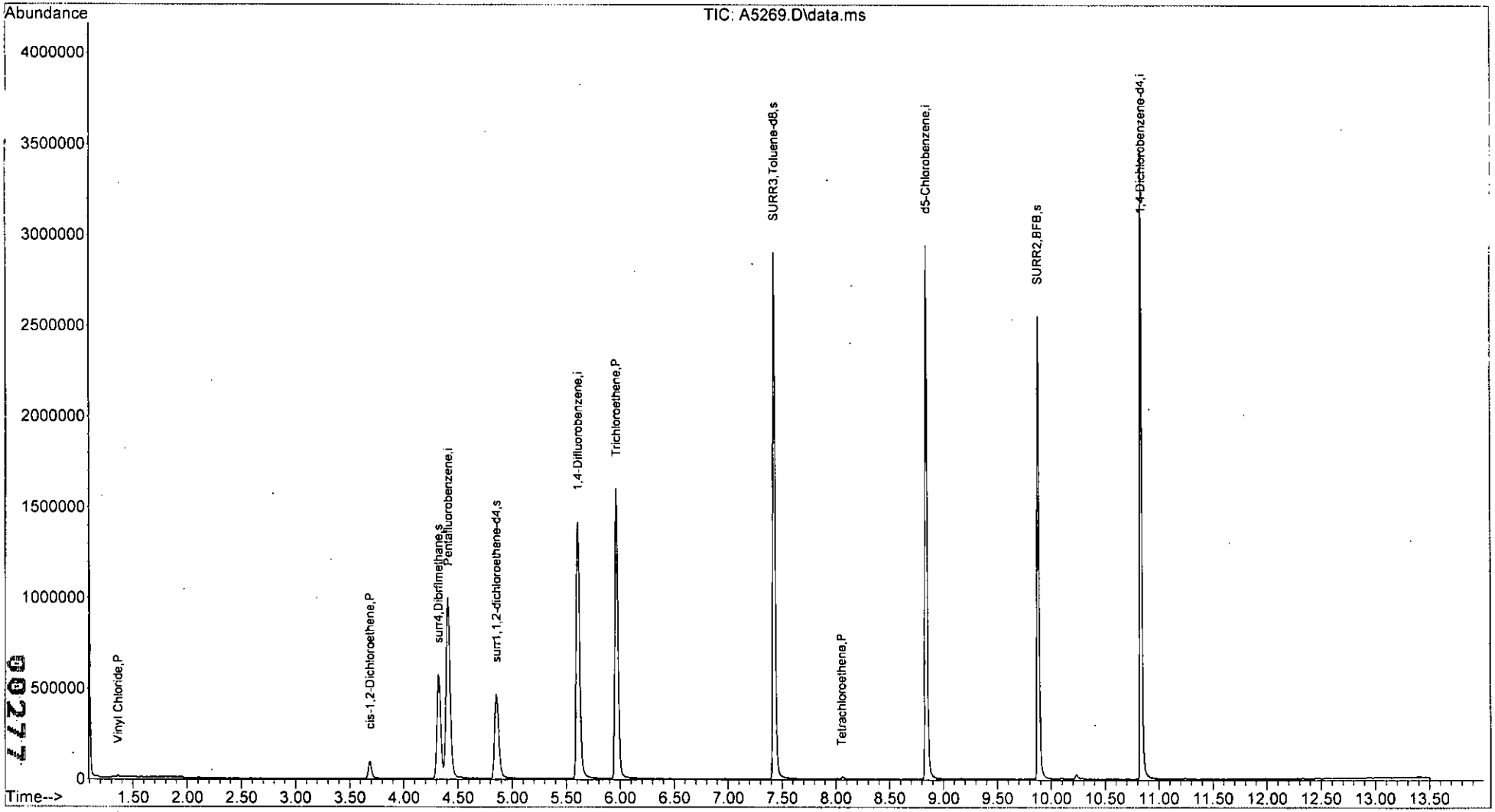
(#) = qualifier out of range (m) = manual integration (+) = signals summed

BA 1/7

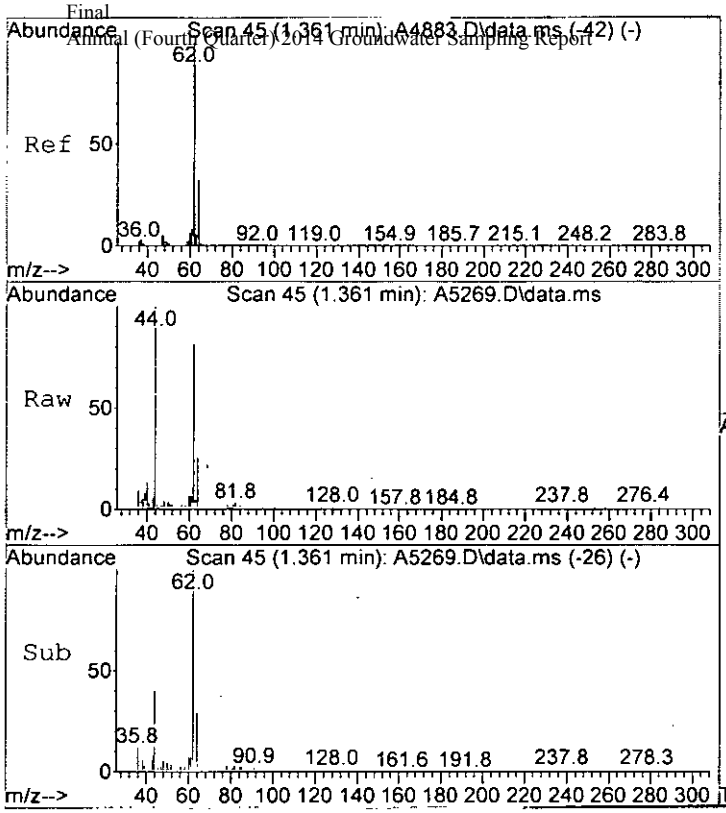
Quantitation Report (QT Reviewed)

Sample : R1410303-013|5.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5269.D Vial: 11
Acq On : 31 Dec 2014 4:09 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 11:47:18 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



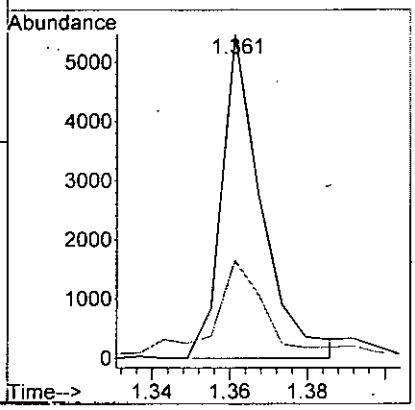
W121514.M Wed Jan 07 11:48:13 2015 MSVO10

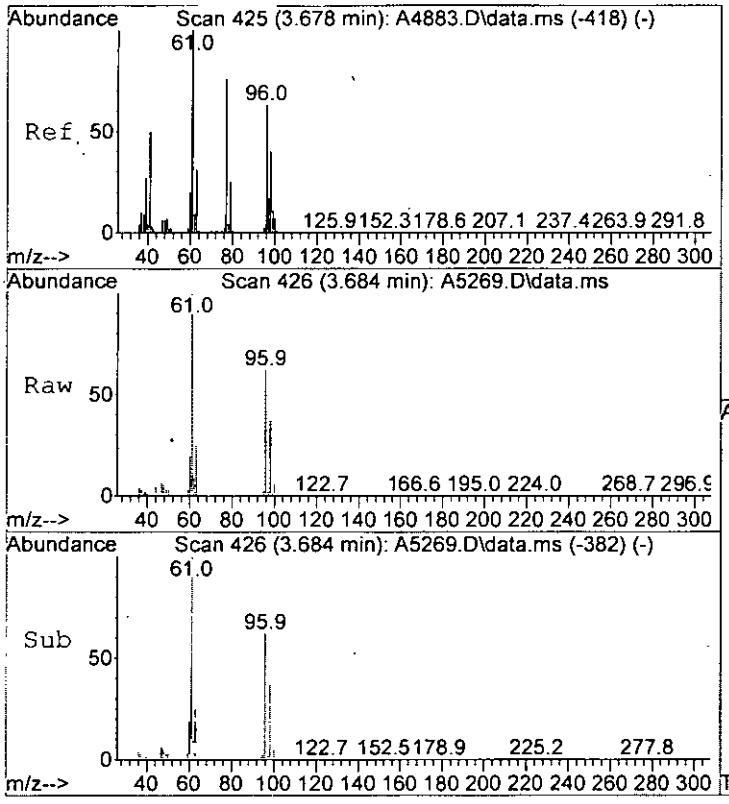


#4
Vinyl Chloride
Concen: 0.34 ug/L
RT: 1.361 min Scan# 45
Delta R.T. 0.000 min
Lab File: A5269.D
Acq: 31 Dec 2014 4:09 pm

Tgt Ion: 62 Resp: 3883

Ion	Ratio	Lower	Upper
62	100		
64	30.3	11.7	51.7

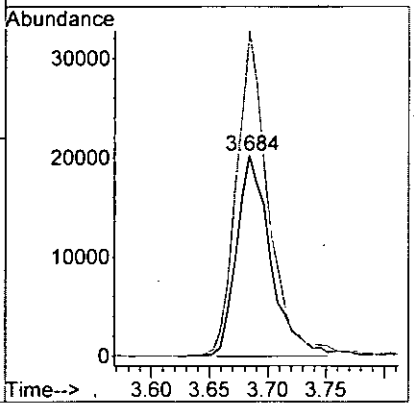


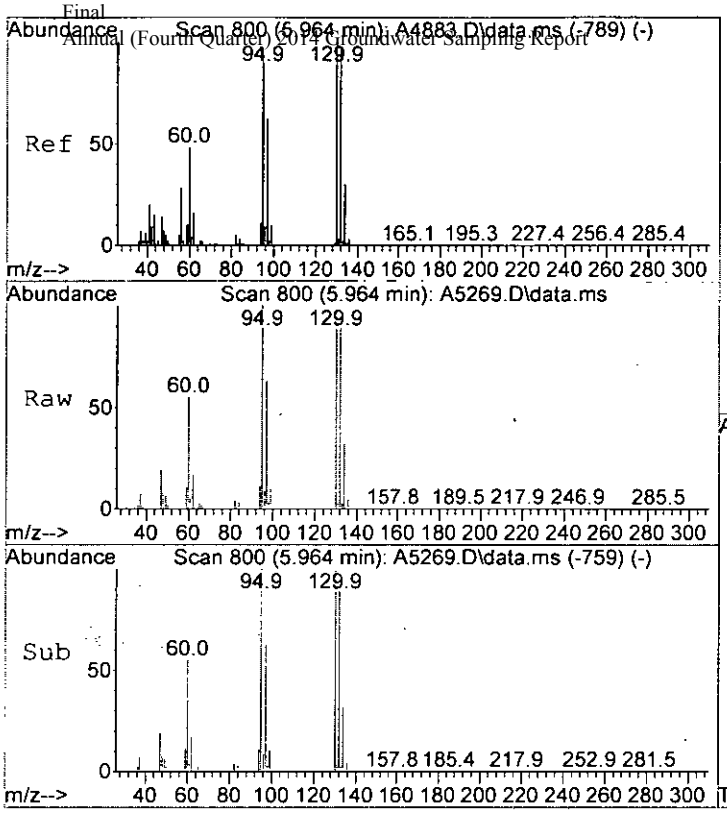


#34
cis-1,2-Dichloroethene
Concen: 4.40 ug/L
RT: 3.684 min Scan# 426
Delta R.T. 0.006 min
Lab File: A5269.D
Acq: 31 Dec 2014 4:09 pm

Tgt Ion: 96 Resp: 40594

Ion	Ratio	Lower	Upper
96	100		
61	162.0	139.1	179.1

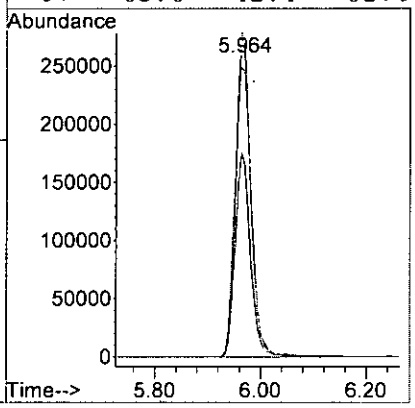


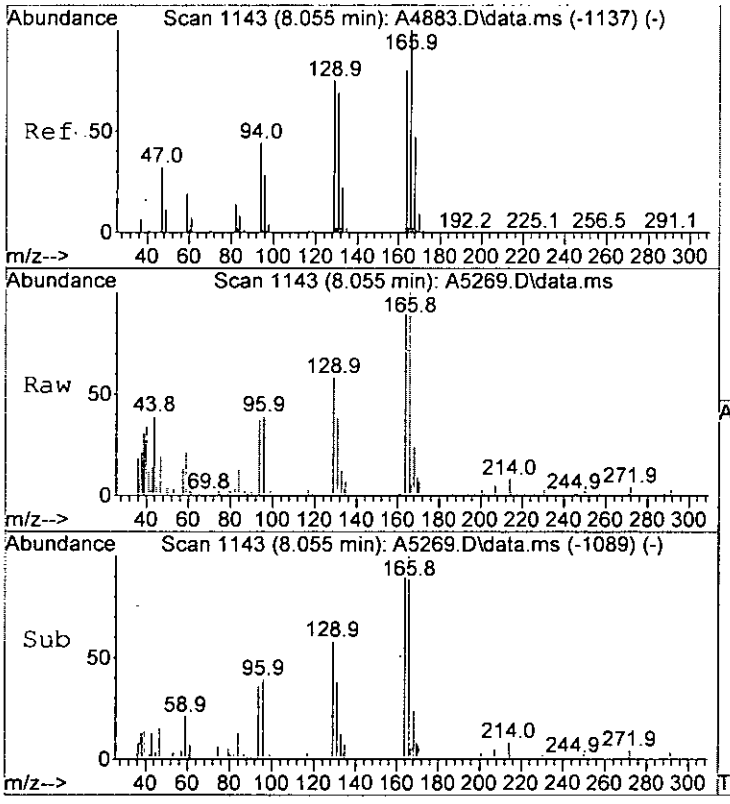


#54
Trichloroethene
Concen: 60.94 ug/L
RT: 5.964 min Scan# 800
Delta R.T. 0.000 min
Lab File: A5269.D
Acq: 31 Dec 2014 4:09 pm

Tgt Ion:130 Resp: 552546

Ion	Ratio	Lower	Upper
130	100		
132	90.5	76.6	116.6
95	100.9	76.5	116.5
97	63.6	42.4	82.4

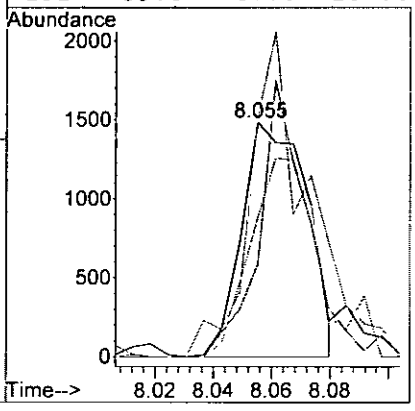




#72
Tetrachloroethene
Concen: 0.30 ug/L
RT: 8.055 min Scan# 1143
Delta R.T. 0.000 min
Lab File: A5269.D
Acq: 31 Dec 2014 4:09 pm

Tgt Ion:164 Resp: 2292

Ion	Ratio	Lower	Upper
164	100		
166	102.8	105.5	145.5#
129	59.5	73.7	113.7#
131	39.3	67.0	107.0#



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5269.D
Acq On : 31 Dec 2014 4:09 pm
Operator : F.Naegler
Sample : R1410303-013|5.0
Misc : PARSONS 11603 T4
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5269.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.684	420	426	442	rVB	96209	199381	4.52%	0.719%
2	4.318	521	530	538	rBV	571150	1386217	31.40%	5.001%
3	4.409	538	545	570	rVB	996863	2647766	59.98%	9.552%
4	4.854	610	618	637	rBV	463748	1245809	28.22%	4.494%
5	5.610	734	742	761	rBV	1414644	3211746	72.76%	11.587%
6	5.964	791	800	813	rBV	1600039	3165205	71.70%	11.419%
7	7.427	1035	1040	1058	rBV	2898359	4414267	100.00%	15.925%
8	8.842	1267	1272	1288	rBV	2941039	4032045	91.34%	14.546%
9	9.878	1438	1442	1457	rBV	2547327	3215404	72.84%	11.600%
10	10.231	1496	1500	1507	rBV4	26960	48228	1.09%	0.174%
11	10.835	1594	1599	1614	rBV	3463723	4152973	94.08%	14.982%

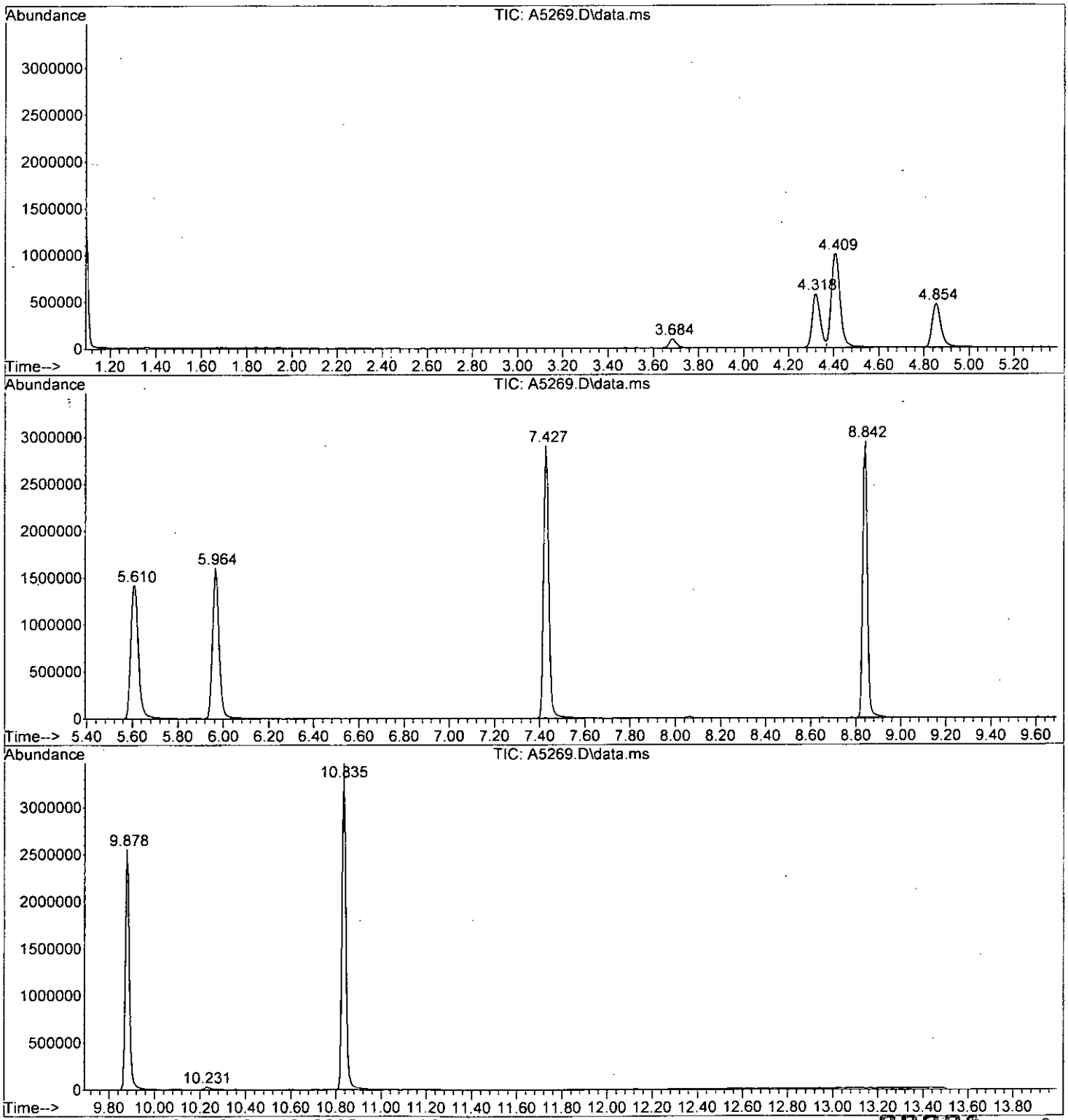
Sum of corrected areas: 27719041

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5269.D
Acq On : 31 Dec 2014 4:09 pm
Operator : F.Naegler
Sample : R1410303-013|5.0
Misc : PARSONS 11603 T4
ALS Vial : 11 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W121514.M Wed Jan 07 13:04:42 2015 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\123114\\
Data File : A5269.D
Acq On : 31 Dec 2014 4:09 pmm
Operator : F.Naeglerr
Sample : R1410303-013|5.0
Misc : PARSONS 11603 T44
ALS Vial : 11 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1315
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 09:28
Sample Name:	FTMM-22-GW-CW1MW28-11.21	**Units:**	µg/L
Lab Code:	R1410303-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5208.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	1.9	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1315
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 09:28
Sample Name:	FTMM-22-GW-CW1MW28-11.21	**Units:**	µg/L
Lab Code:	R1410303-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5208.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**4.6**	J	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1315
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 09:28
Sample Name:	FTMM-22-GW-CW1MW28-11.21	**Units:**	µg/L
Lab Code:	R1410303-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5208.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	12/30/14 09:28	
Dibromofluoromethane	100	85-115	12/30/14 09:28	
Toluene-d8	106	85-120	12/30/14 09:28	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 0928

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW28-11.21	**Units:**	µg/L
Lab Code:	R1410303-014	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-014|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5208.D Vial: 43
Acq On : 30 Dec 2014 9:28 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 15:07:36 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	988534	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1432334	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1319615	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	673093	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	451196	50.08	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.16%			
48) surr1,1,2-dichloroetha...	4.854	65	452610	49.46	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 98.92%			
65) SURR3,Toluene-d8	7.427	98	1677295	53.21	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 106.42%			
70) SURR2,BFB	9.878	95	653535	49.68	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.36%			
Target Compounds						Qvalue
12) Acrolein	1.965	56	231	Below Cal	#	20
15) Acetone	2.129	43	3139	1.88	ug/L	95
54) Trichloroethene	5.976	130	43044	4.58	ug/L #	88

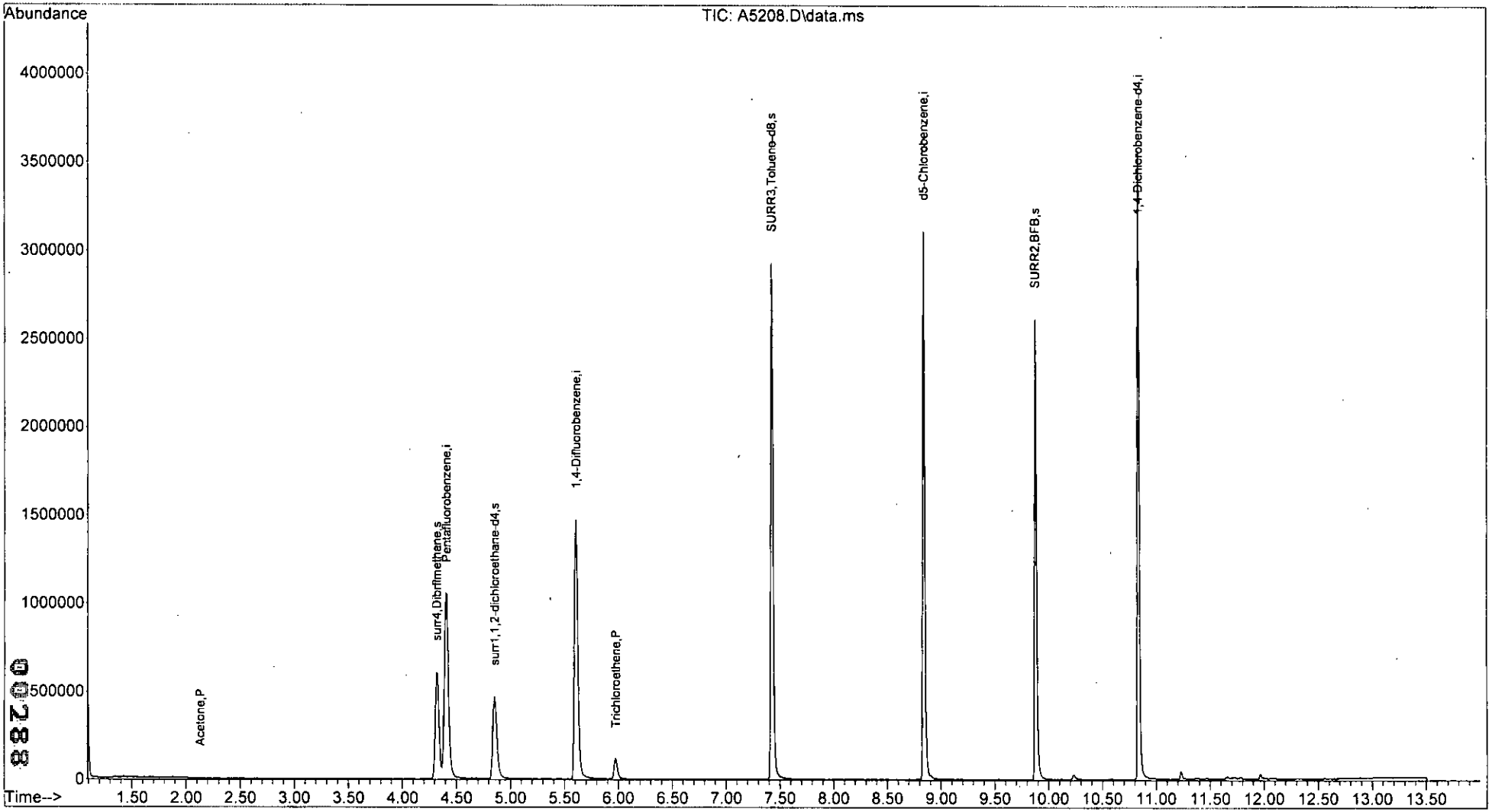
(#) = qualifier out of range (m) = manual integration (+) = signals summed

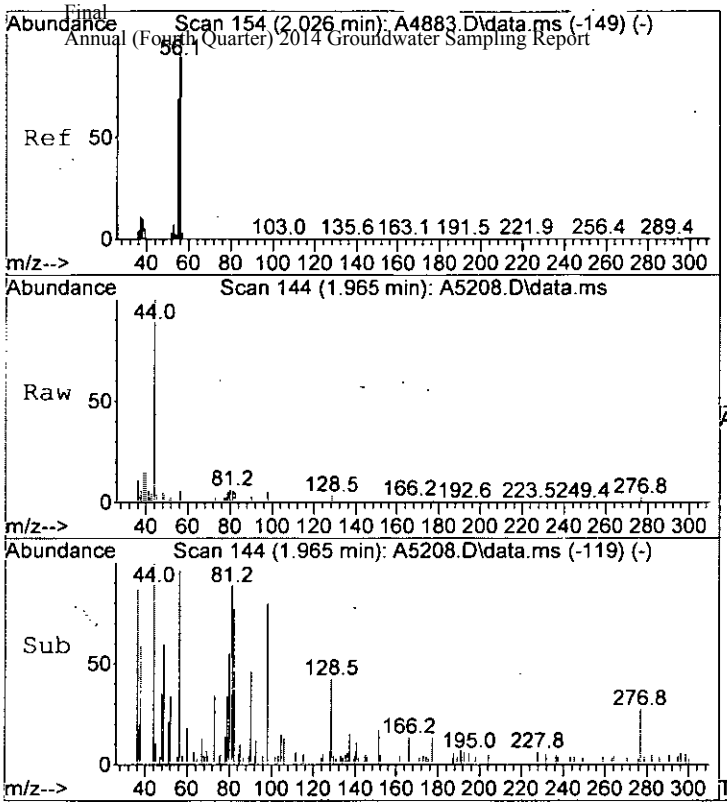
FD
1/6/15

Quantitation Report (QT Reviewed)

Sample : R1410303-014|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5208.D Vial: 43
Acq On : 30 Dec 2014 9:28 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 15:07:36 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

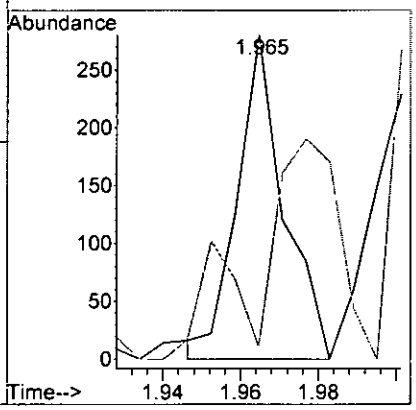


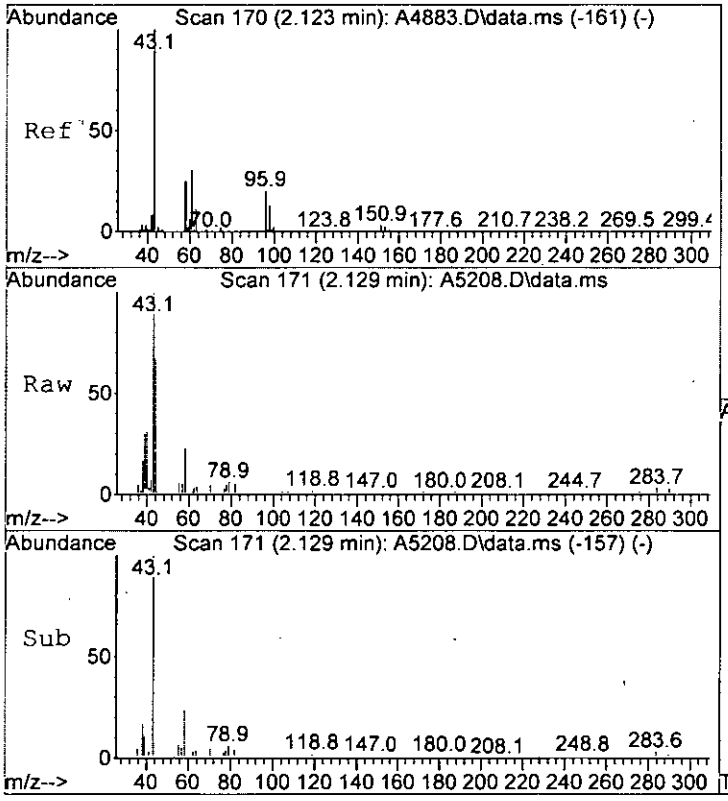


#12
Acrolein
Concen: Below Cal
RT: 1.965 min Scan# 144
Delta R.T. -0.054 min
Lab File: A5208.D
Acq: 30 Dec 2014 9:28 am

Tgt Ion: 56 Resp: 231

Ion	Ratio	Lower	Upper
56	100		
55	3.9	49.6	89.6#

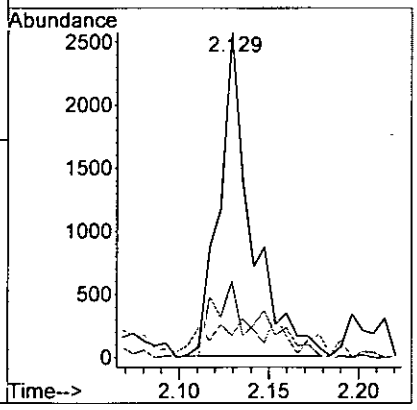


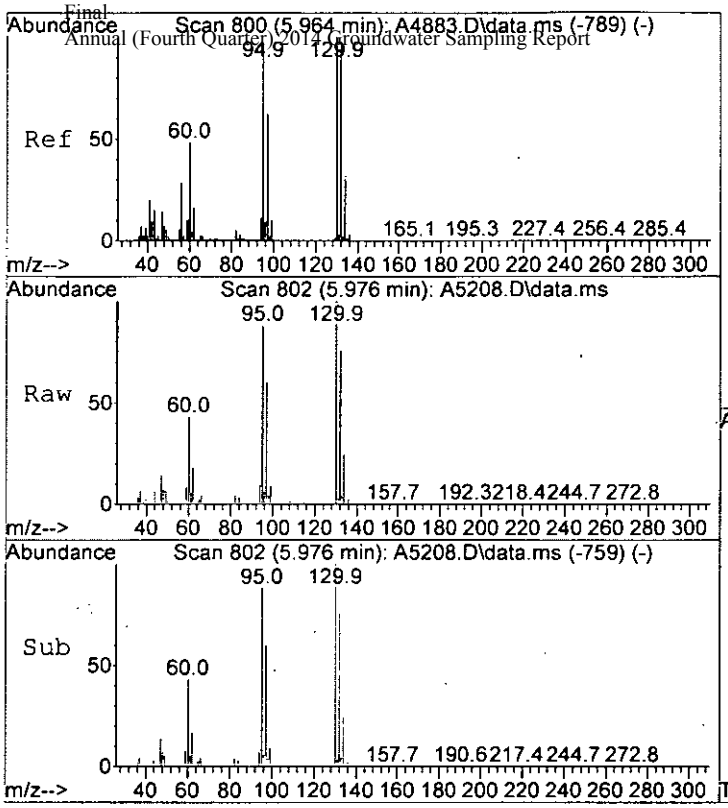


#15
Acetone
Concen: 1.88 ug/L
RT: 2.129 min Scan# 171
Delta R.T. 0.012 min
Lab File: A5208.D
Acq: 30 Dec 2014 9:28 am

Tgt Ion: 43 Resp: 3139

Ion	Ratio	Lower	Upper
43	100		
58	23.3	5.3	45.3
42	6.6	0.0	29.0

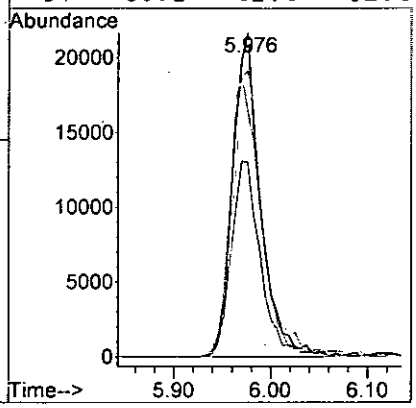




#54
Trichloroethene
Concen: 4.58 ug/L
RT: 5.976 min Scan# 802
Delta R.T. 0.012 min
Lab File: A5208.D
Acq: 30 Dec 2014 9:28 am

Tgt Ion:130 Resp: 43044

Ion	Ratio	Lower	Upper
130	100		
132	75.8	76.6	116.6#
95	88.4	76.5	116.5
97	60.1	42.4	82.4



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5208.D
Acq On : 30 Dec 2014 9:28 am
Operator : F.Naegler
Sample : R1410303-014|1.0
Misc : PARSONS 11603 T4
ALS Vial : 43 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5208.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.318	522	530	538	rBV	603422	1467720	32.41%	5.757%
2	4.403	538	544	561	rVB	1048730	2742386	60.55%	10.758%
3	4.854	608	618	640	rBV2	467214	1280639	28.27%	5.024%
4	5.610	734	742	759	rBV	1469000	3338894	73.72%	13.097%
5	5.970	795	801	813	rBV2	115048	239772	5.29%	0.941%
6	7.427	1035	1040	1067	rBV	2925276	4529268	100.00%	17.767%
7	8.841	1267	1272	1281	rBV	3104424	4120135	90.97%	16.162%
8	9.878	1438	1442	1460	rBV	2607467	3312678	73.14%	12.995%
9	10.231	1495	1500	1514	rBV3	25743	57608	1.27%	0.226%
10	10.835	1594	1599	1616	rBV	3563017	4348658	96.01%	17.058%
11	11.231	1660	1664	1668	rBV	42253	55011	1.21%	0.216%

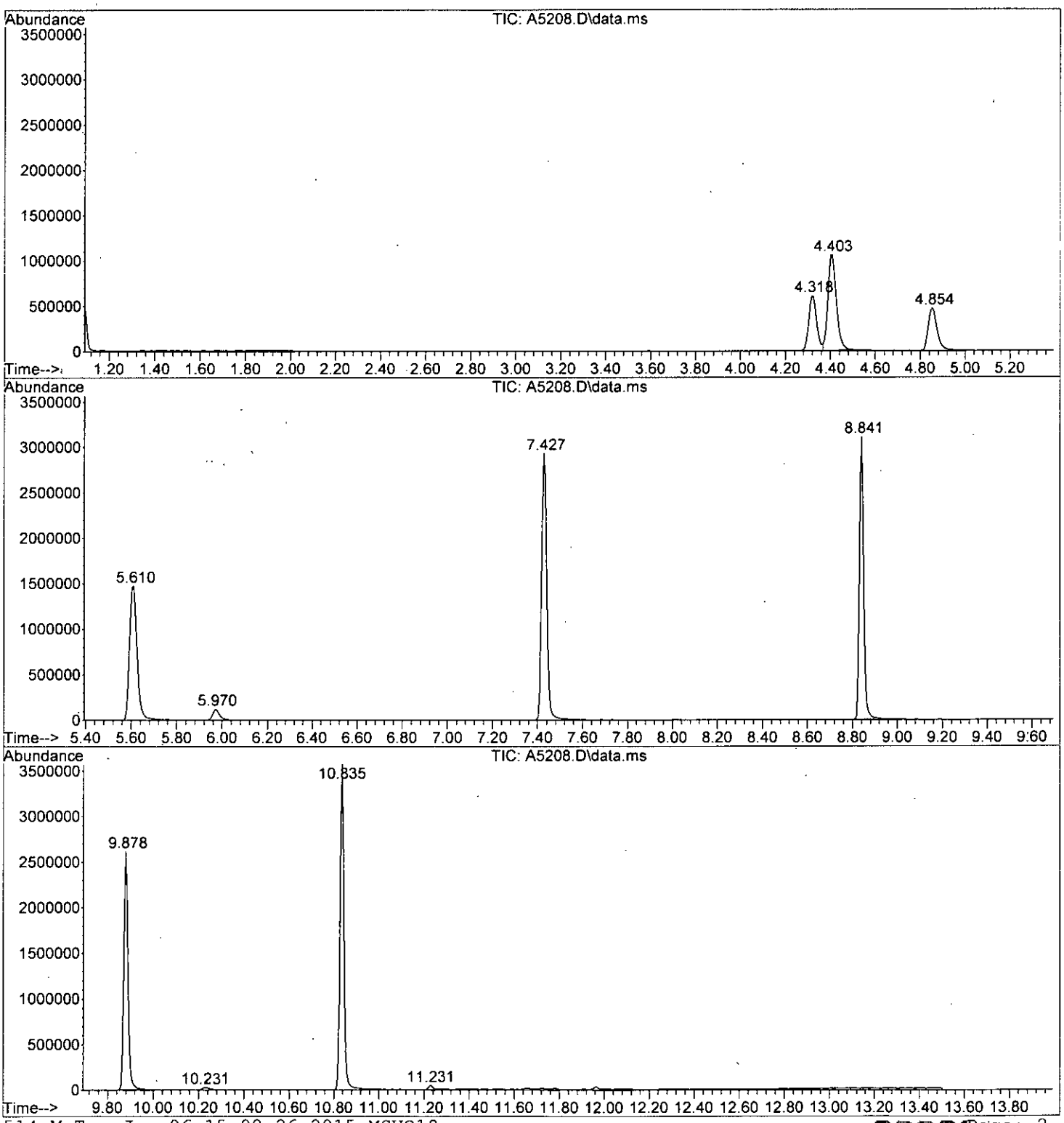
Sum of corrected areas: 25492769

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5208.D
Acq On : 30 Dec 2014 9:28 am
Operator : F.Naegler
Sample : R1410303-014|1.0
Misc : PARSONS 11603 T4
ALS Vial : 43 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W121514.M Tue Jan 06 15:08:26 2015 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\122914\\
Data File : A5208.D
Acq On : 30 Dec 2014 9:28 amm
Operator : F.Naeglerr
Sample : R1410303-014|1.0
Misc : PARSONS 11603 T44
ALS Vial : 43 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1350
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 09:58
Sample Name:	FTMM-22-GW-CW1MW27-12.63	**Units:**	µg/L
Lab Code:	R1410303-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5209.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	1.8	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1350
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 09:58
Sample Name:	FTMM-22-GW-CW1MW27-12.63	**Units:**	µg/L
Lab Code:	R1410303-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5209.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	0.68	J	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1350
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 09:58
Sample Name:	FTMM-22-GW-CW1MW27-12.63	**Units:**	µg/L
Lab Code:	R1410303-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5209.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	12/30/14 09:58	
Dibromofluoromethane	98	85-115	12/30/14 09:58	
Toluene-d8	105	85-120	12/30/14 09:58	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/30/14 0958

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-22-GW-CW1MW27-12.63
Lab Code: R1410303-015

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-015|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5209.D Vial: 44
Acq On : 30 Dec 2014 9:58 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 15:09:57 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	989839	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1435940	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1303171	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	675578	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	441173	48.84	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 97.68%			
48) surr1,1,2-dichloroetha...	4.854	65	460675	50.22	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 100.44%			
65) SURR3,Toluene-d8	7.427	98	1658594	52.48	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 104.96%			
70) SURR2,BFB	9.878	95	650093	49.30	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.60%			
Target Compounds						Qvalue
15) Acetone	2.123	43	2940	1.76	ug/L	82
54) Trichloroethene	5.988	130	6422	0.68	ug/L #	69

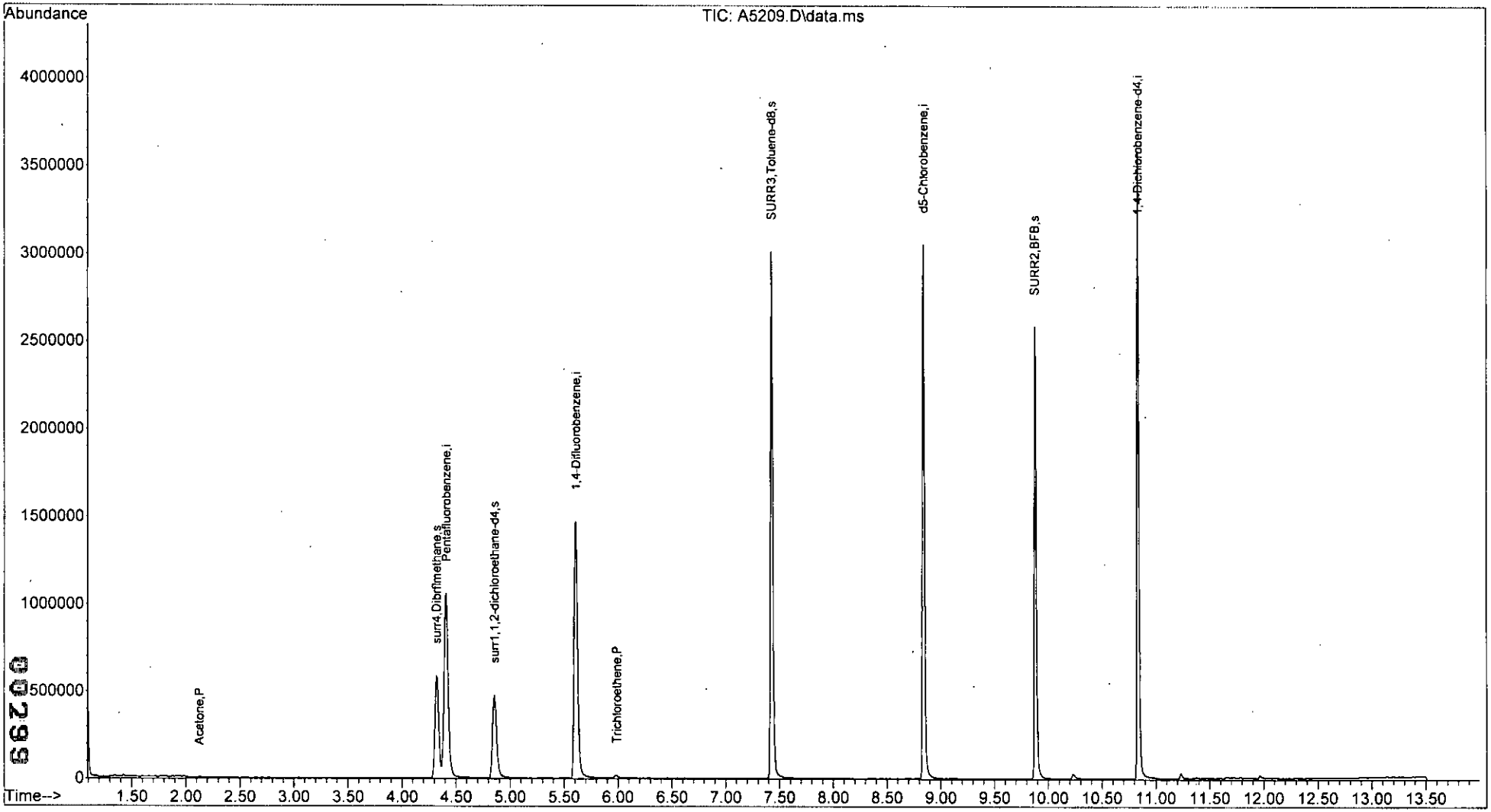
(#) = qualifier out of range (m) = manual integration (+) = signals summed

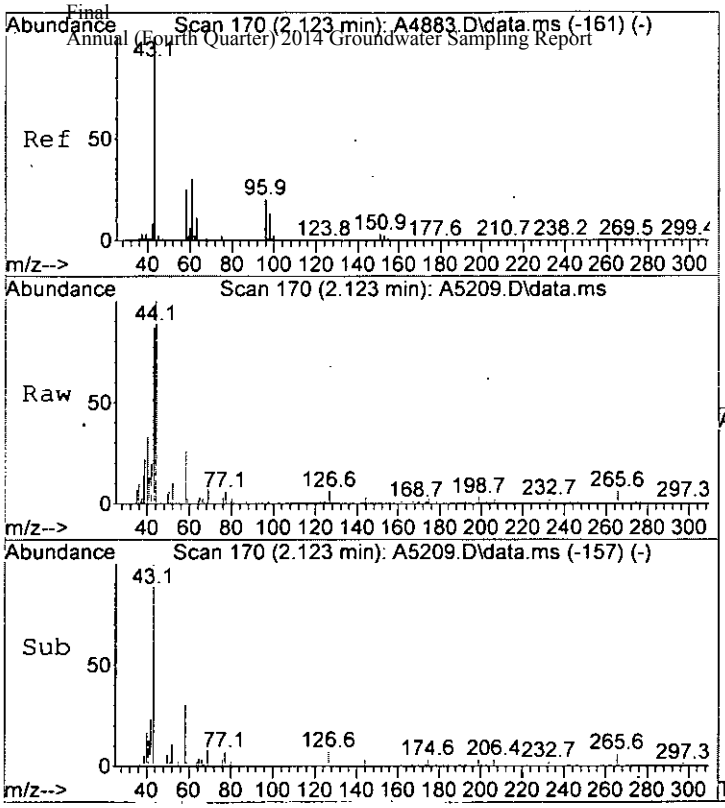
FJ
1/6/15

Quantitation Report (QT Reviewed)

Sample : R1410303-015|1.0
Data File : I:\ACQUDATA\msvoa10\data\122914\A5209.D Vial: 44
Acq On : 30 Dec 2014 9:58 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 15:09:57 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

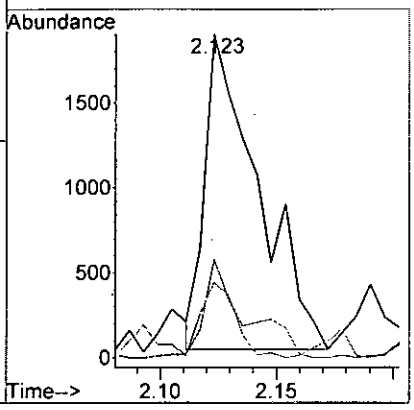


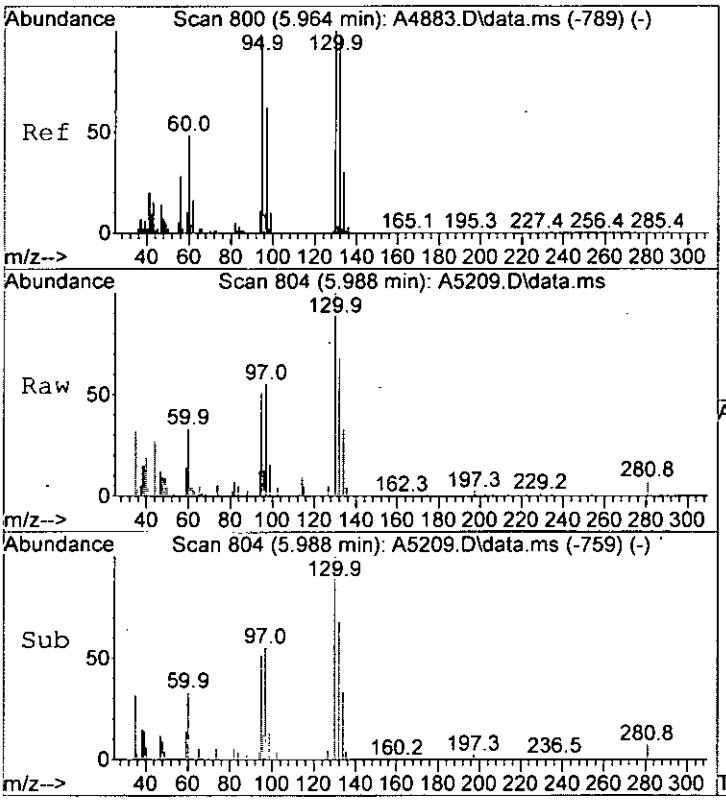


#15
Acetone
Concen: 1.76 ug/L
RT: 2.123 min Scan# 170
Delta R.T. 0.006 min
Lab File: A5209.D
Acq: 30 Dec 2014 9:58 am

Tgt Ion: 43 Resp: 2940

Ion	Ratio	Lower	Upper
43	100		
58	30.2	5.3	45.3
42	23.3	0.0	29.0

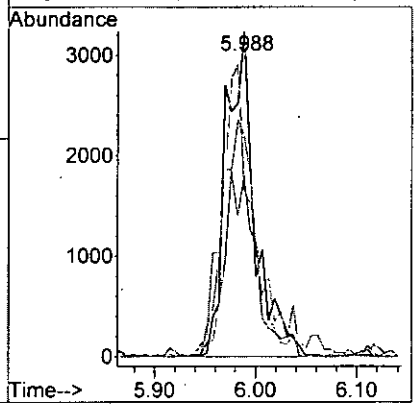




#54
Trichloroethene
Concen: 0.68 ug/L
RT: 5.988 min Scan# 804
Delta R.T. 0.024 min
Lab File: A5209.D
Acq: 30 Dec 2014 9:58 am

Tgt Ion:130 Resp: 6422

Ion	Ratio	Lower	Upper
130	100		
132	67.7	76.6	116.6#
95	51.5	76.5	116.5#
97	55.5	42.4	82.4



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5209.D
Acq On : 30 Dec 2014 9:58 am
Operator : F.Naegler
Sample : R1410303-015|1.0
Misc : PARSONS 11603 T4
ALS Vial : 44 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5209.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.318	521	530	537	rBV	585736	1428510	31.99%	5.681%
2	4.409	537	545	561	rVB	1050408	2772465	62.09%	11.025%
3	4.854	609	618	639	rBV	475124	1275909	28.57%	5.074%
4	5.610	734	742	770	rBV	1469015	3358769	75.22%	13.357%
5	7.427	1035	1040	1061	rBV	3008161	4465312	100.00%	17.757%
6	8.841	1267	1272	1288	rBV	3051195	4128824	92.46%	16.419%
7	9.878	1437	1442	1462	rBV	2585677	3334249	74.67%	13.259%
8	10.231	1495	1500	1506	rBV3	26109	48990	1.10%	0.195%
9	10.835	1594	1599	1616	rBV	3585496	4333788	97.05%	17.234%

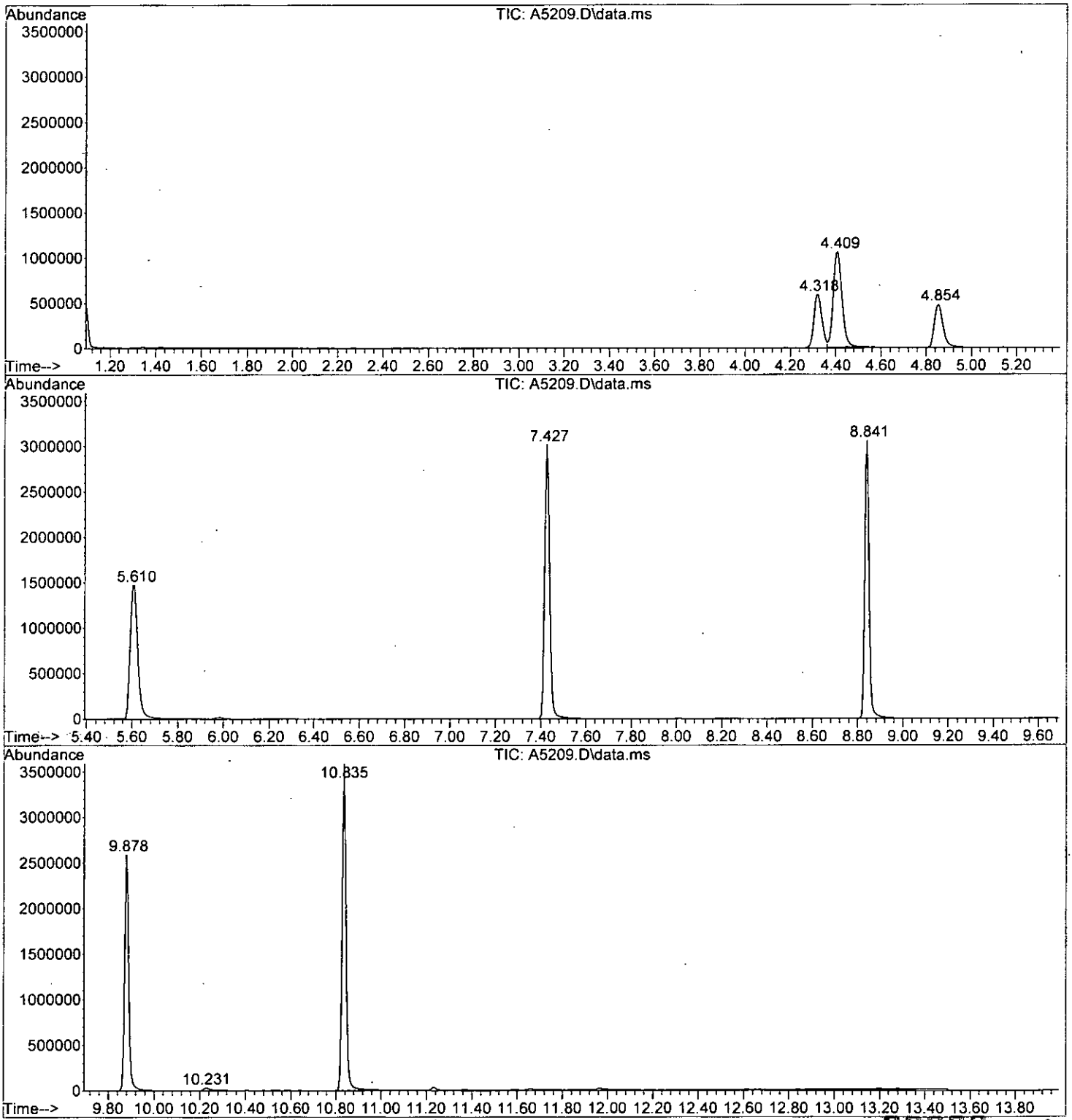
Sum of corrected areas: 25146816

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\122914\
Data File : A5209.D
Acq On : 30 Dec 2014 9:58 am
Operator : F.Naegler
Sample : R1410303-015|1.0
Misc : PARSONS 11603 T4
ALS Vial : 44 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W121514.M Tue Jan 06 15:10:20 2015 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\122914\\
Data File : A5209.D
Acq On : 30 Dec 2014 9:58 amm
Operator : F.Naeglerr
Sample : R1410303-015|1.0
Misc : PARSONS 11603 T44
ALS Vial : 44 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1344
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 16:39
Sample Name:	FTMM-22-GW-CW1MW31-16.4	**Units:**	µg/L
Lab Code:	R1410303-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5270.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1344
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 16:39
Sample Name:	FTMM-22-GW-CW1MW31-16.4	**Units:**	µg/L
Lab Code:	R1410303-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5270.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**4.4**	**J**	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1344
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 16:39
Sample Name:	FTMM-22-GW-CW1MW31-16.4	**Units:**	µg/L
Lab Code:	R1410303-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5270.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	12/31/14 16:39	
Dibromofluoromethane	100	85-115	12/31/14 16:39	
Toluene-d8	107	85-120	12/31/14 16:39	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/31/14 1639

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-22-GW-CW1MW31-16.4
Lab Code: R1410303-016

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-016|1.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5270.D Vial: 12
Acq On : 31 Dec 2014 4:39 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 11:49:27 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	938151	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1375191	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1263238	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	652965	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	433623	50.13	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.26%			
48) surr1,1,2-dichloroetha...	4.854	65	450813	51.31	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 102.62%			
65) SURR3,Toluene-d8	7.427	98	1616652	53.42	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 106.84%			
70) SURR2,BFB	9.878	95	624617	49.46	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.92%			
Target Compounds						Qvalue
54) Trichloroethene	5.970	130	39633	4.39	ug/L	97

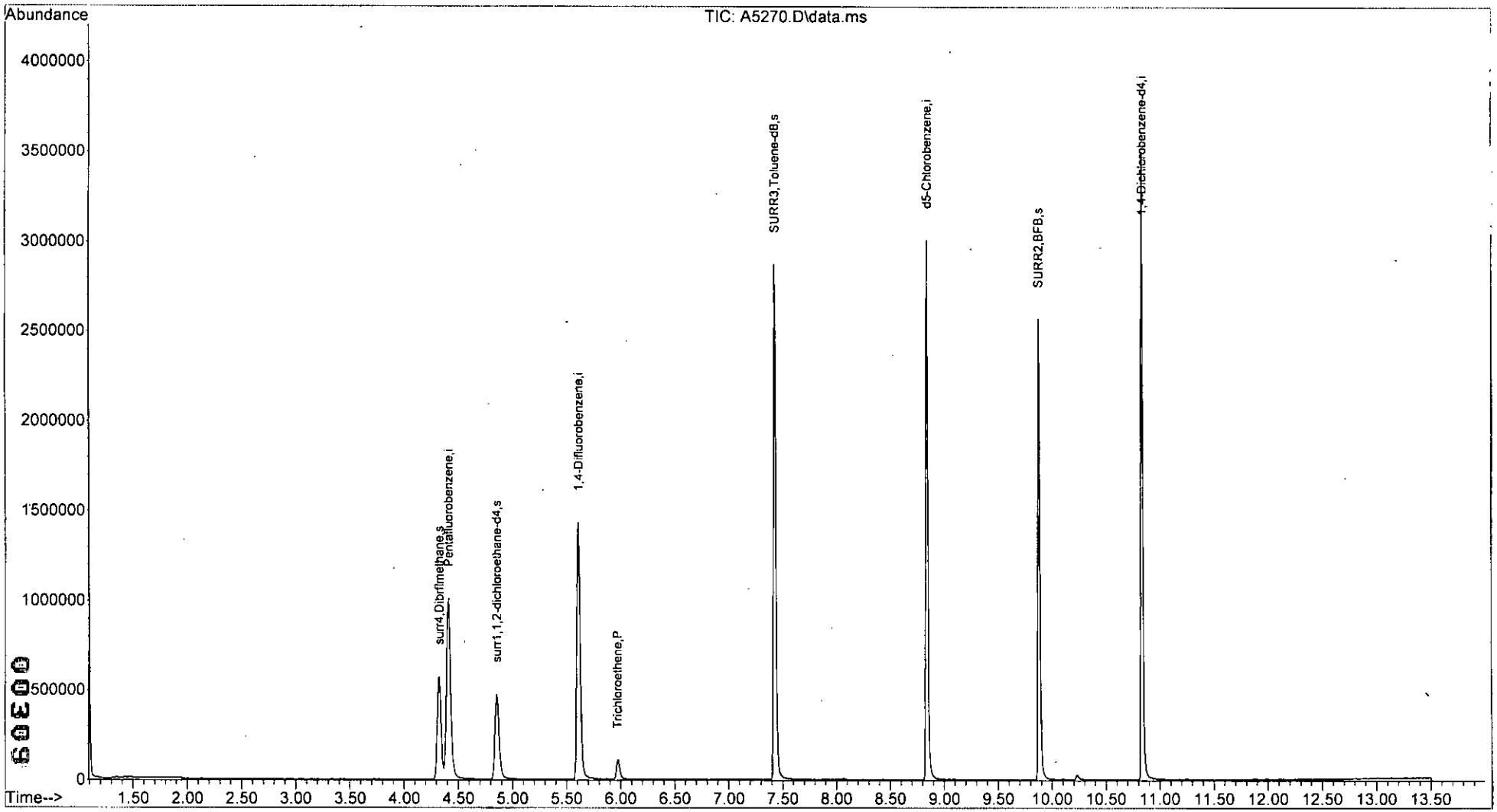
(#) = qualifier out of range (m) = manual integration (+) = signals summed

BA1 | 7

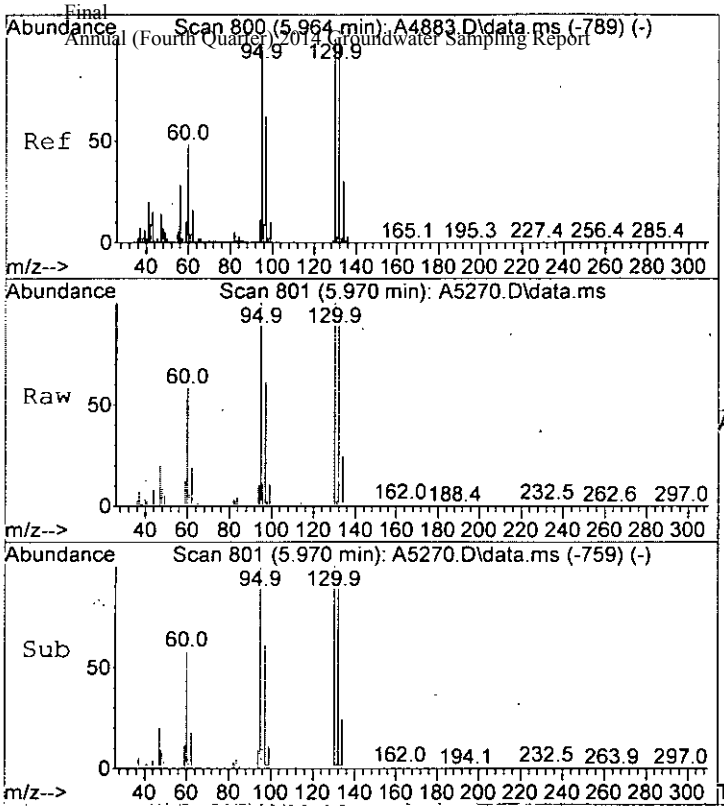
Quantitation Report (QT Reviewed)

Sample : R1410303-016|1.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5270.D Vial: 12
Acq On : 31 Dec 2014 4:39 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 11:49:27 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



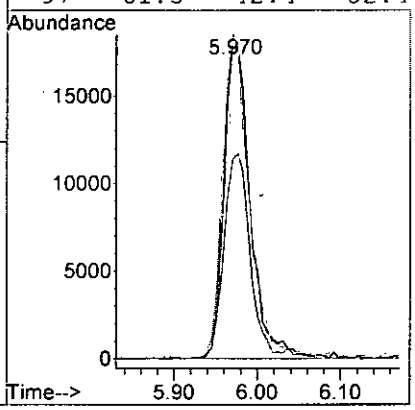
W121514.M Wed Jan 07 11:50:23 2015 MSVO10 Page: 2



#54
Trichloroethene
Concen: 4.39 ug/L
RT: 5.970 min Scan# 801
Delta R.T. 0.006 min
Lab File: A5270.D
Acq: 31 Dec 2014 4:39 pm

Tgt Ion:130 Resp: 39633

Ion	Ratio	Lower	Upper
130	100		
132	92.2	76.6	116.6
95	99.7	76.5	116.5
97	61.5	42.4	82.4



A5270.D W121514.M Wed Jan 07 11:50:24 2015 MSVO10 Page 3

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5270.D
Acq On : 31 Dec 2014 4:39 pm
Operator : F.Naegler
Sample : R1410303-016|1.0
Misc : PARSONS 11603 T4
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5270.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	522	531	538	rBV	571823	1406153	32.15%	5.698%
2	4.409	538	545	565	rVB	1004042	2672979	61.12%	10.831%
3	4.854	609	618	634	rBV2	472700	1252580	28.64%	5.076%
4	5.610	735	742	761	rBV	1431900	3204636	73.27%	12.985%
5	5.976	795	802	815	rBV	109501	238589	5.46%	0.967%
6	7.427	1035	1040	1057	rBV	2868644	4373517	100.00%	17.722%
7	8.841	1267	1272	1287	rBV	3007274	4027557	92.09%	16.320%
8	9.878	1437	1442	1461	rBV	2567379	3259471	74.53%	13.208%
9	10.231	1494	1500	1513	rBV5	26542	57229	1.31%	0.232%
10	10.835	1594	1599	1616	rBV	3497425	4186161	95.72%	16.963%

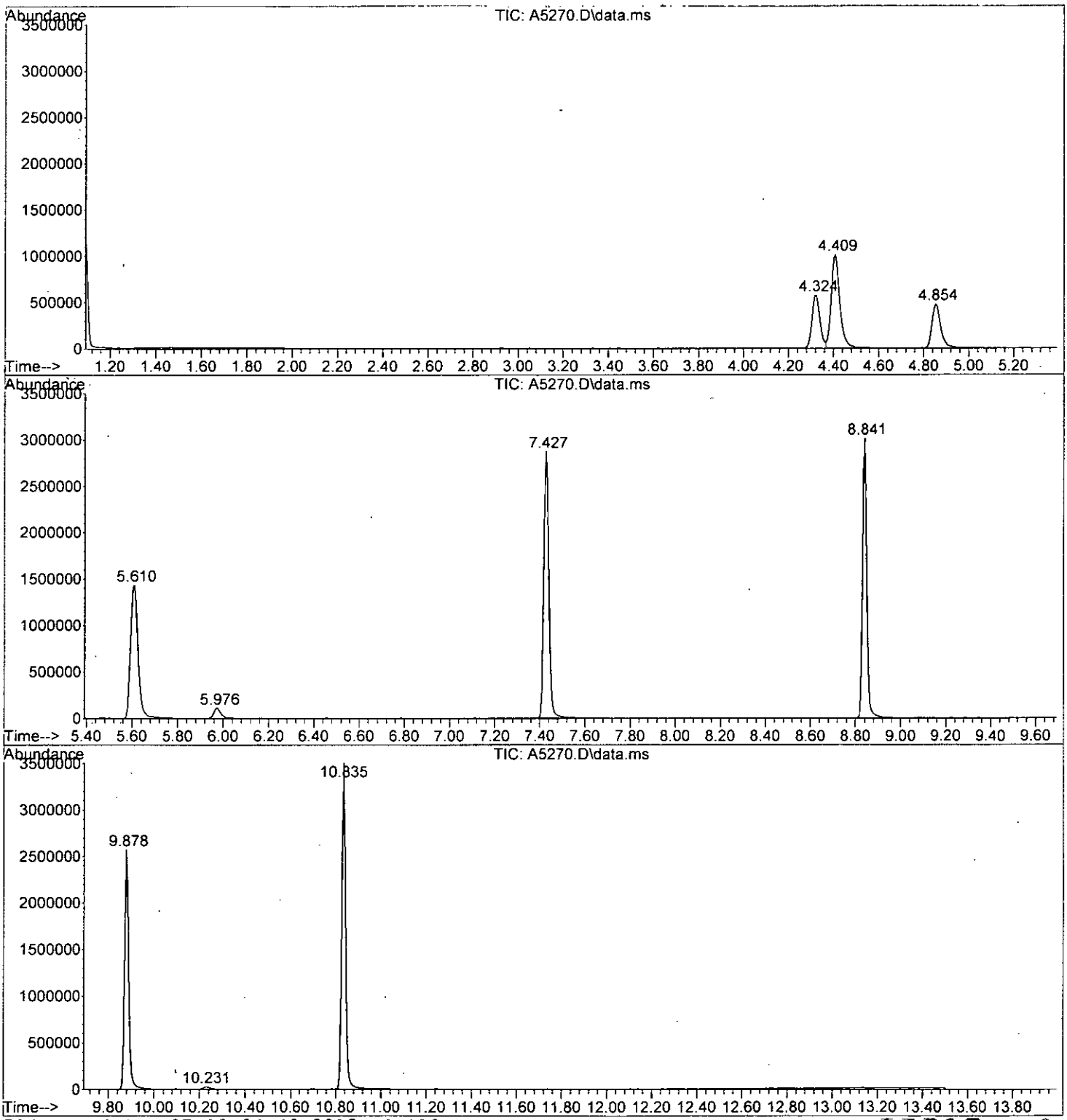
Sum of corrected areas: 24678872

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5270.D
Acq On : 31 Dec 2014 4:39 pm
Operator : F.Naegler
Sample : R1410303-016|1.0
Misc : PARSONS 11603 T4
ALS Vial : 12 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W121514.M Wed Jan 07 13:04:49 2015 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\123114\\
Data File : A5270.D
Acq On : 31 Dec 2014 4:39 pmm
Operator : F.Naeglerr
Sample : R1410303-016|1.0
Misc : PARSONS 11603 T44
ALS Vial : 12 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14 1337
Date Received: 12/20/14
Date Analyzed: 12/31/14 17:08

Sample Name: FTMM-22-GW-CW1MW37-11.78
Lab Code: R1410303-017

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\123114\A5271.D\

Analysis Lot: 427678
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1337
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 17:08
Sample Name:	FTMM-22-GW-CW1MW37-11.78	**Units:**	µg/L
Lab Code:	R1410303-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5271.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**0.23**	J	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1337
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 17:08
Sample Name:	FTMM-22-GW-CW1MW37-11.78	**Units:**	µg/L
Lab Code:	R1410303-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5271.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	75-120	12/31/14 17:08	
Dibromofluoromethane	99	85-115	12/31/14 17:08	
Toluene-d8	108	85-120	12/31/14 17:08	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 1708

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-22-GW-CW1MW37-11.78	**Units:**	µg/L
Lab Code:	R1410303-017	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-017|1.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5271.D Vial: 13
Acq On : 31 Dec 2014 5:08 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 11:51:32 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	937062	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1360837	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1265632	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	649451	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	425601	49.72	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.44%			
48) surr1,1,2-dichloroetha...	4.854	65	434695	50.00	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 100.00%			
65) SURR3,Toluene-d8	7.427	98	1615474	53.94	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.88%			
70) SURR2,BFB	9.878	95	629906	50.40	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.80%			
Target Compounds						Qvalue
44) Cyclohexane	4.446	41	14969	1.71	ug/L	80
54) Trichloroethene	5.988	130	2071	0.23	ug/L #	53

NT added for TIC

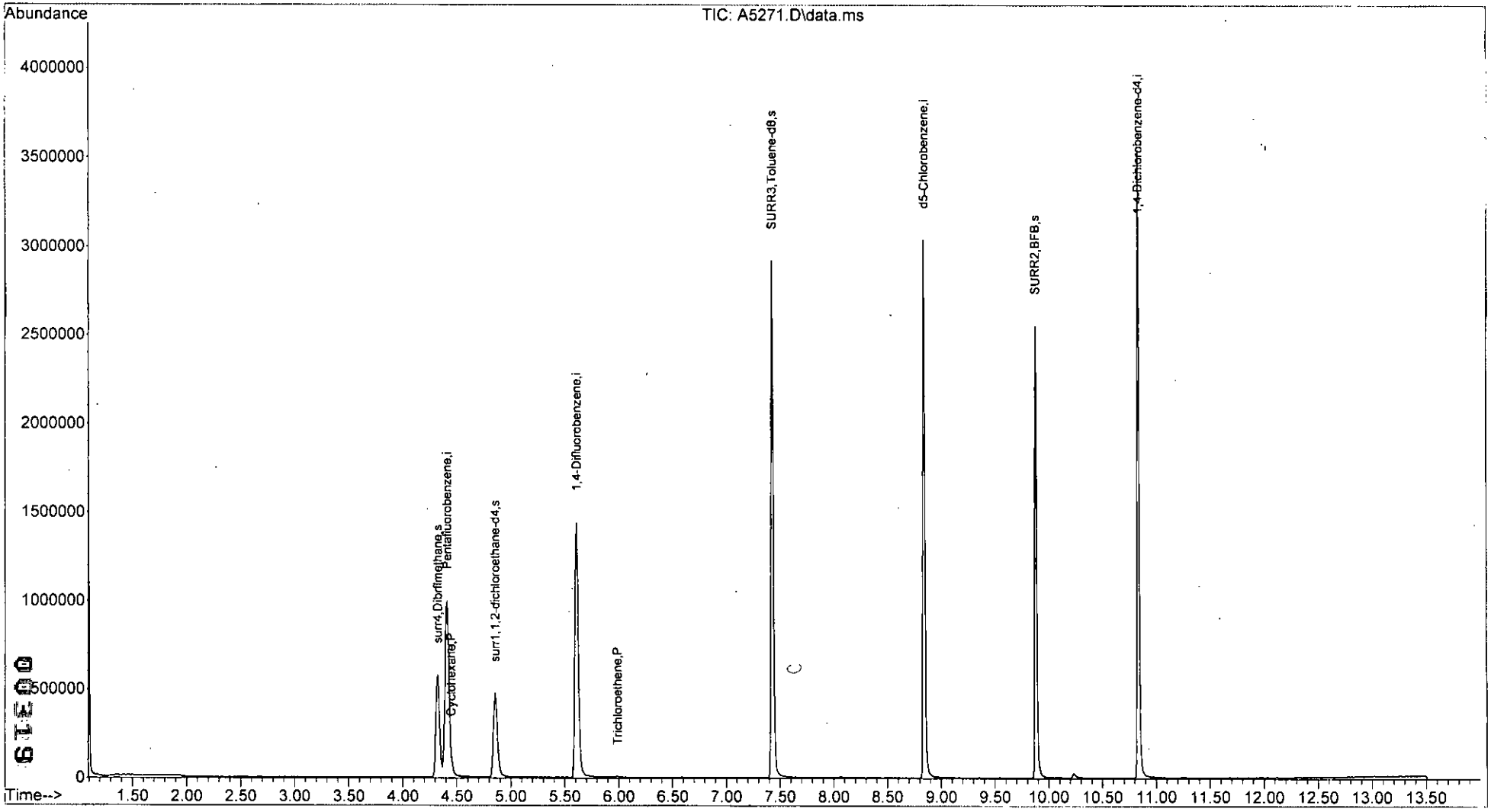
(#) = qualifier out of range (m) = manual integration (+) = signals summed

BA1/7

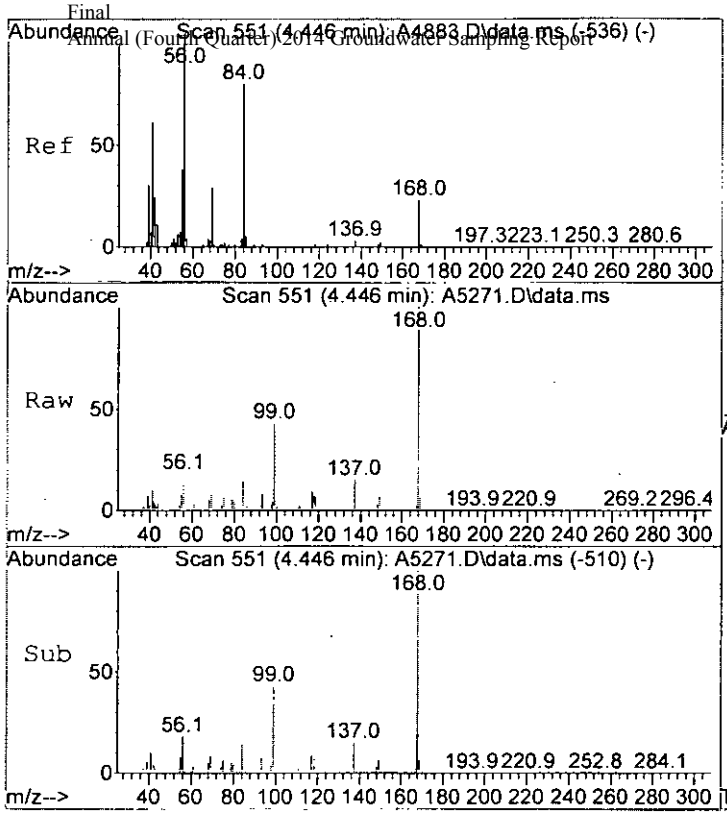
Quantitation Report (QT Reviewed)

Sample : R1410303-017|1.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5271.D Vial: 13
Acq On : 31 Dec 2014 5:08 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 11:51:32 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



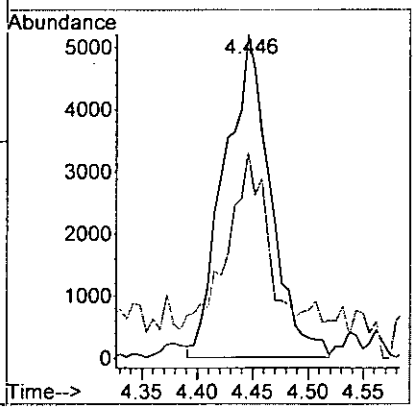
W121514.M Wed Jan 07 11:52:28 2015 MSVO10

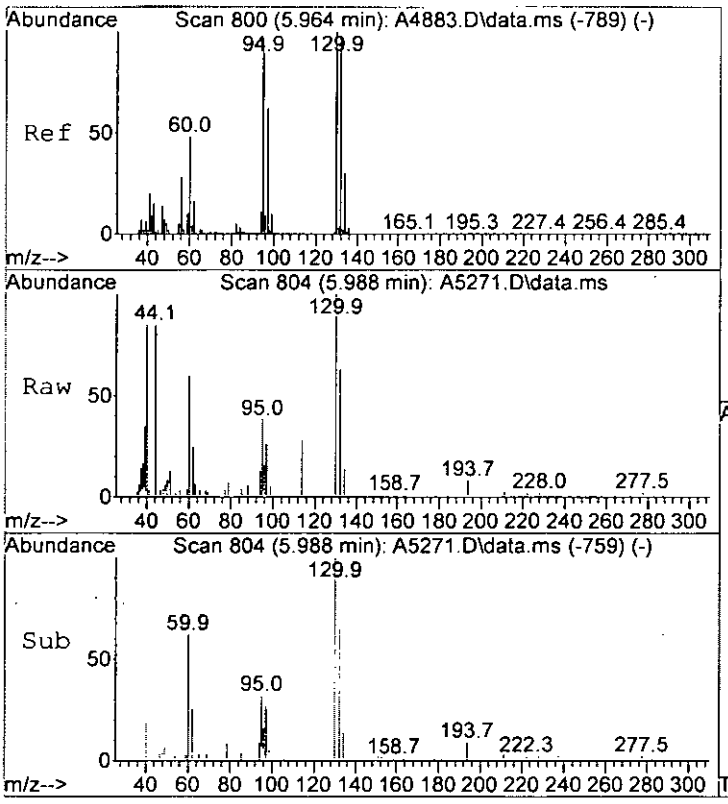


#44
Cyclohexane
Concen: 1.71 ug/L
RT: 4.446 min Scan# 551
Delta R.T. 0.001 min
Lab File: A5271.D
Acq: 31 Dec 2014 5:08 pm

Tgt Ion: 41 Resp: 14969

Ion	Ratio	Lower	Upper
41	100		
39	63.4	29.7	69.7

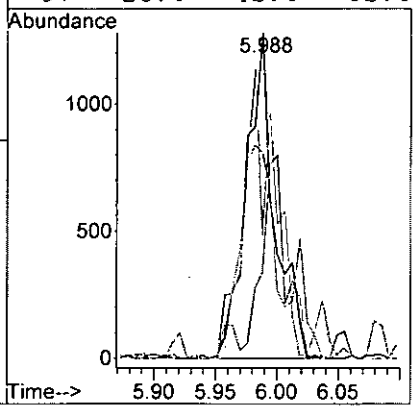




#54
Trichloroethene
Concen: 0.23 ug/L
RT: 5.988 min Scan# 804
Delta R.T. 0.024 min
Lab File: A5271.D
Acq: 31 Dec 2014 5:08 pm

Tgt Ion:130 Resp: 2071

Ion	Ratio	Lower	Upper
130	100		
132	63.0	76.6	116.6#
95	38.0	76.5	116.5#
97	26.4	42.4	82.4#



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5271.D
Acq On : 31 Dec 2014 5:08 pm
Operator : F.Naegler
Sample : R1410303-017|1.0
Misc : PARSONS 11603 T4
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5271.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	522	531	538	rBV	575669	1391611	31.77%	5.713%
2	4.409	538	545	568	rVB	993171	2677867	61.14%	10.994%
3	4.854	610	618	635	rBV	469501	1228415	28.05%	5.043%
4	5.610	735	742	757	rBV	1436497	3171063	72.40%	13.018%
5	7.427	1035	1040	1062	rBV	2913418	4379830	100.00%	17.981%
6	8.841	1267	1272	1287	rBV	3033151	4023668	91.87%	16.519%
7	9.878	1438	1442	1458	rBV	2545687	3225115	73.64%	13.240%
8	10.231	1494	1500	1510	rBV4	26369	50942	1.16%	0.209%
9	10.835	1594	1599	1611	rBV	3537897	4209702	96.12%	17.282%

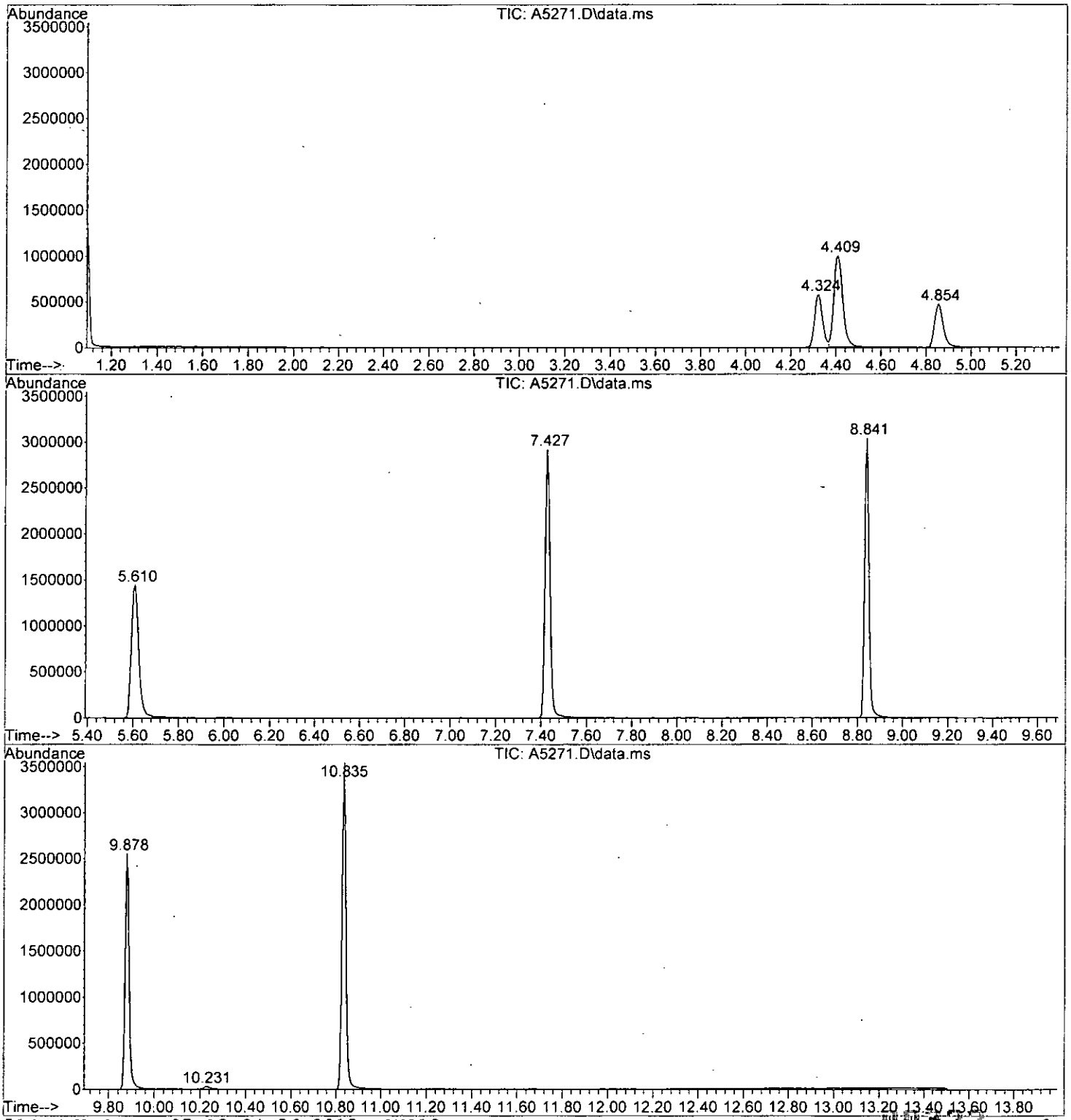
Sum of corrected areas: 24358213

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5271.D
Acq On : 31 Dec 2014 5:08 pm
Operator : F.Naegler
Sample : R1410303-017|1.0
Misc : PARSONS 11603 T4
ALS Vial : 13 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W121514.M Wed Jan 07 13:04:56 2015 MSVO10 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\123114\\
Data File : A5271.D
Acq On : 31 Dec 2014 5:08 pmm
Operator : F.Naeglerr
Sample : R1410303-017|1.0
Misc : PARSONS 11603 T44
ALS Vial : 13 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1614
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 17:38
Sample Name:	FTMM-54-GW-296MW06-5.07	**Units:**	µg/L
Lab Code:	R1410303-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5272.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.9**	**J**	5.0	5.0	1.3	
71-43-2	Benzene	**1.6**	**J**	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14 1614
Date Received: 12/20/14
Date Analyzed: 12/31/14 17:38

Sample Name: FTMM-54-GW-296MW06-5.07
Lab Code: R1410303-018

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\123114\A5272.D\

Analysis Lot: 427678
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**0.34**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.37**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1614
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 17:38
Sample Name:	FTMM-54-GW-296MW06-5.07	**Units:**	µg/L
Lab Code:	R1410303-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5272.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	12/31/14 17:38	
Dibromofluoromethane	99	85-115	12/31/14 17:38	
Toluene-d8	107	85-120	12/31/14 17:38	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/31/14 1738

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-54-GW-296MW06-5.07
Lab Code: R1410303-018

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000496-11-7	Indane	11.06	6.9	JN

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-018|1.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5272.D Vial: 14
Acq On : 31 Dec 2014 5:38 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 11:53:38 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev.(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	949355	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1395200	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1281405	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	652970	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4;Dibrflmethane	4.324	113	434428	49.50	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.00%			
48) surr1,1,2-dichloroetha...	4.848	65	449706	50.45	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 100.90%			
65) SURR3,Toluene-d8	7.427	98	1639505	53.40	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 106.80%			
70) SURR2,BFB	9.878	95	625808	48.84	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 97.68%			
Target Compounds						Qvalue
12) Acrolein	1.983	56	414	Below Cal		97
15) Acetone	2.123	43	2981	1.86	ug/L	81
44) Cyclohexane	4.452	41	19055m	2.12	ug/L	
49) Benzene	4.964	78	52939	1.58	ug/L	94
88) Isopropylbenzene	9.762	105	12402	0.34	ug/L	91
117) Naphthalen	12.408	128	6742	0.37	ug/L	91

NT added for TIC

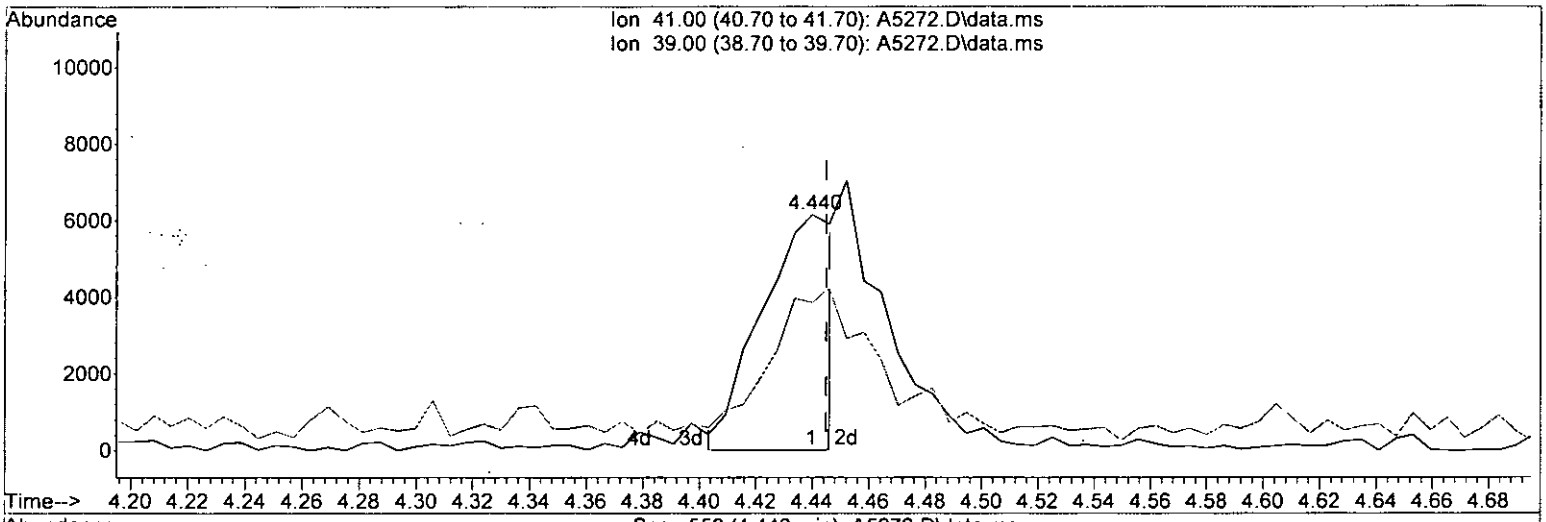
(#) = qualifier out of range (m) = manual integration (+) = signals summed

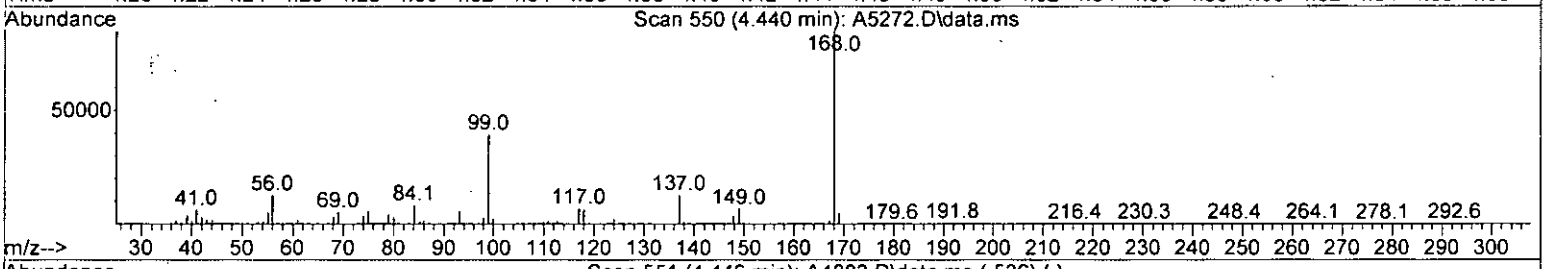
BA1/7

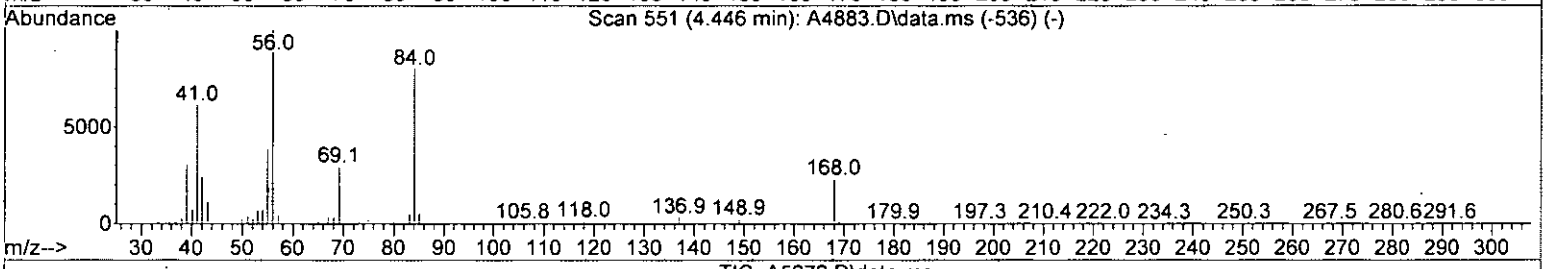
Quantitation Report (Qedit)

Sample : R1410303-018|1.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5272.D Vial: 14
Acq On : 31 Dec 2014 5:38 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Dec 31 17:51:48 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration







TIC: A5272.D\data.ms

(44) Cyclohexane (P)

4.440min (-0.005) 1.19 ug/L

response 10698

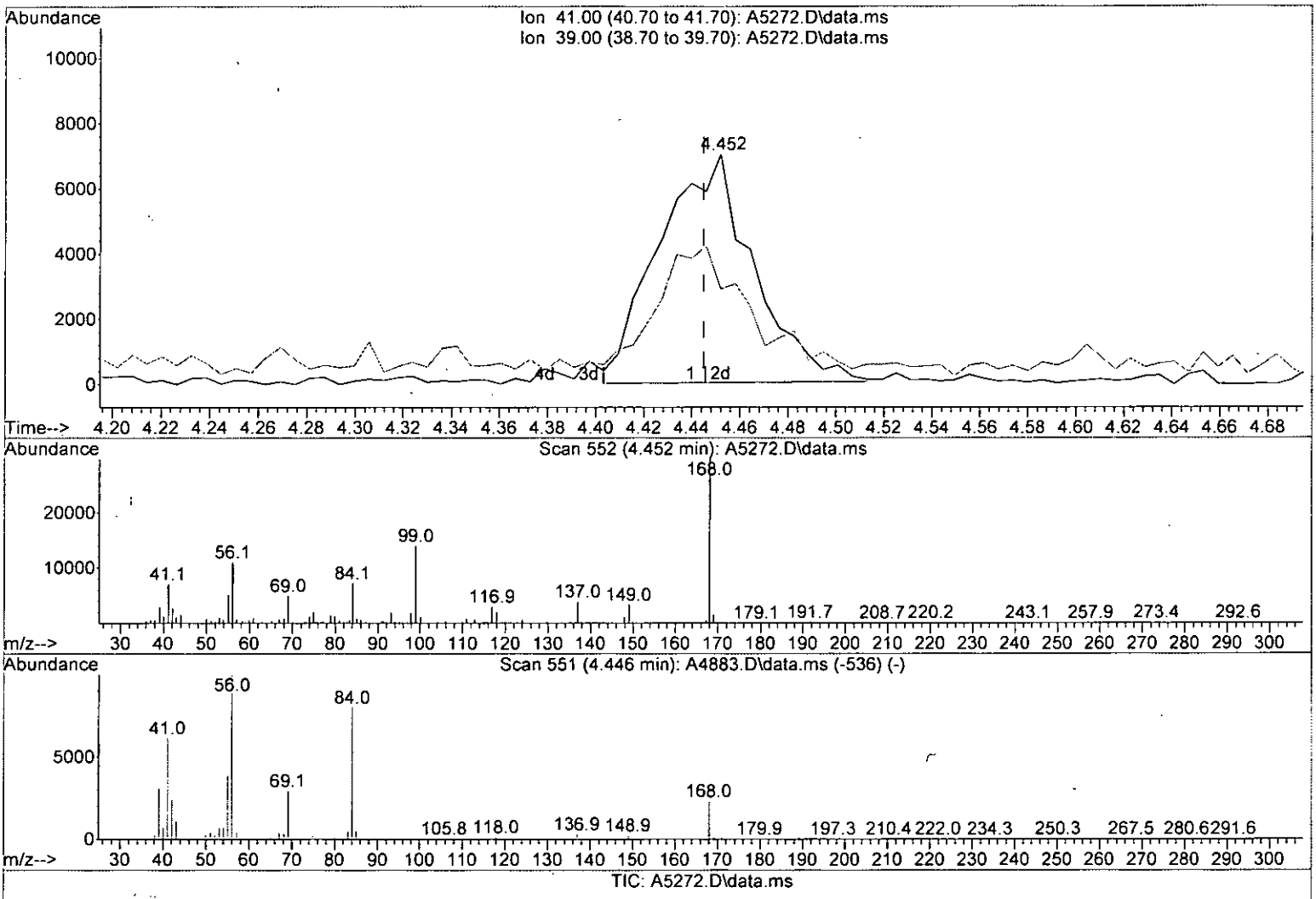
Ion	Exp%	Act%
41.00	100	100
39.00	49.70	62.75
0.00	0.00	0.00
0.00	0.00	0.00

B

Quantitation Report (Qedit)

Sample : R1410303-018|1.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5272.D Vial: 14
Acq On : 31 Dec 2014 5:38 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Dec 31 17:51:48 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



TIC: A5272.D\data.ms

(44) Cyclohexane (P)

4.452min (+0.007) 2.12 ug/L m

response 19055

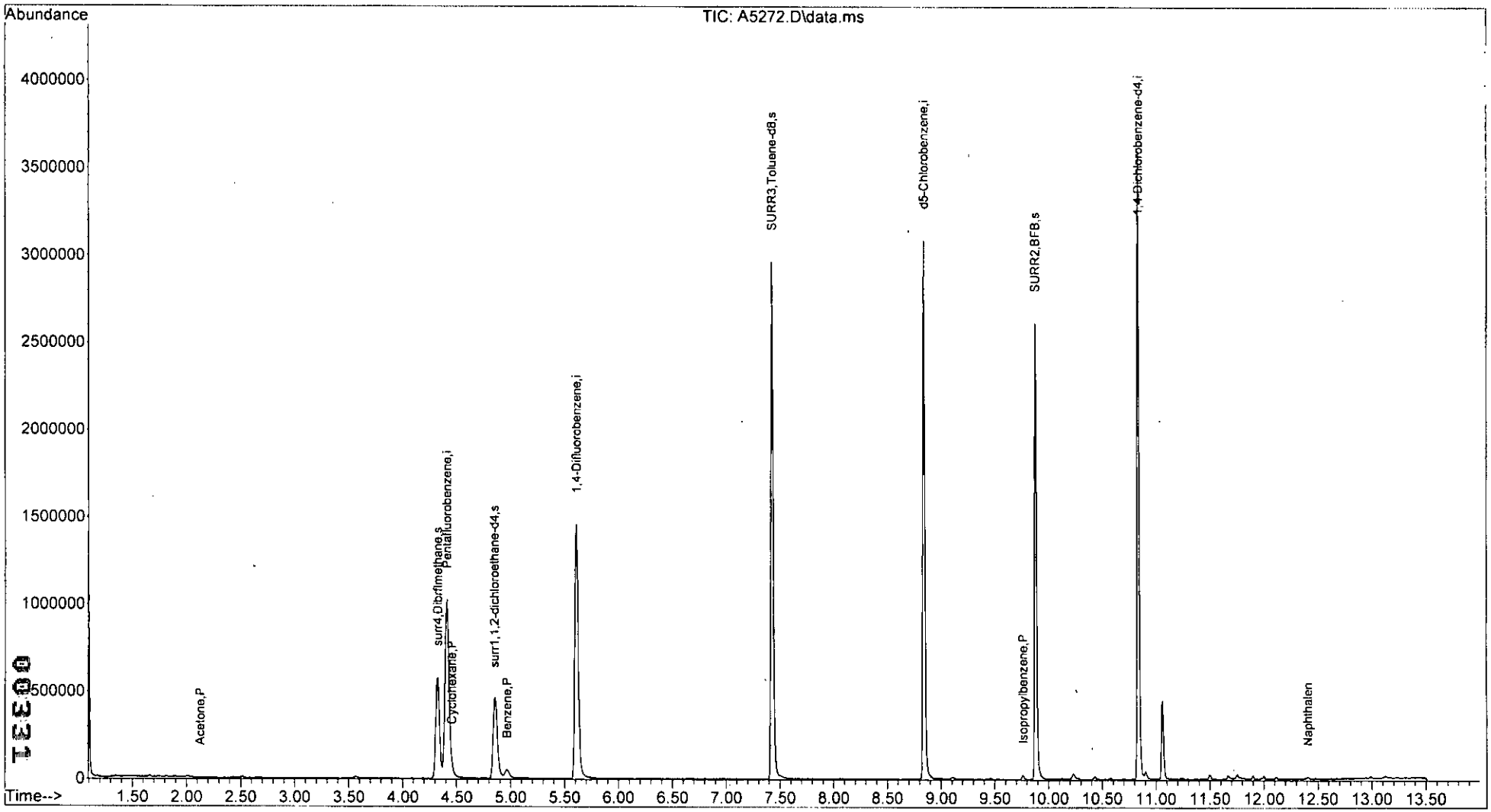
Ion	Exp%	Act%
41.00	100	100
39.00	49.70	41.39
0.00	0.00	0.00
0.00	0.00	0.00

A
BA 1/2
(BC)

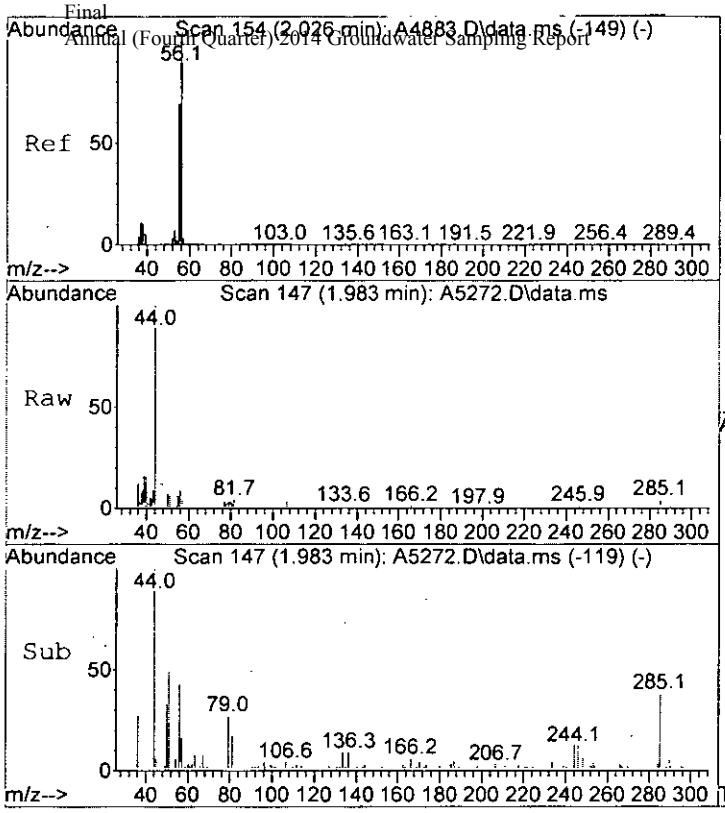
Quantitation Report (QT Reviewed)

Sample : R1410303-018|1.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5272.D Vial: 14
Acq On : 31 Dec 2014 5:38 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 11:53:38 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



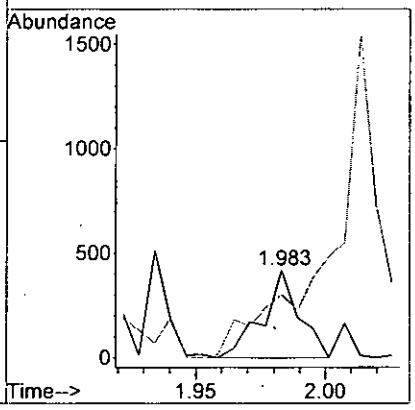
W121514.M Wed Jan 07 11:54:38 2015 MSVO10

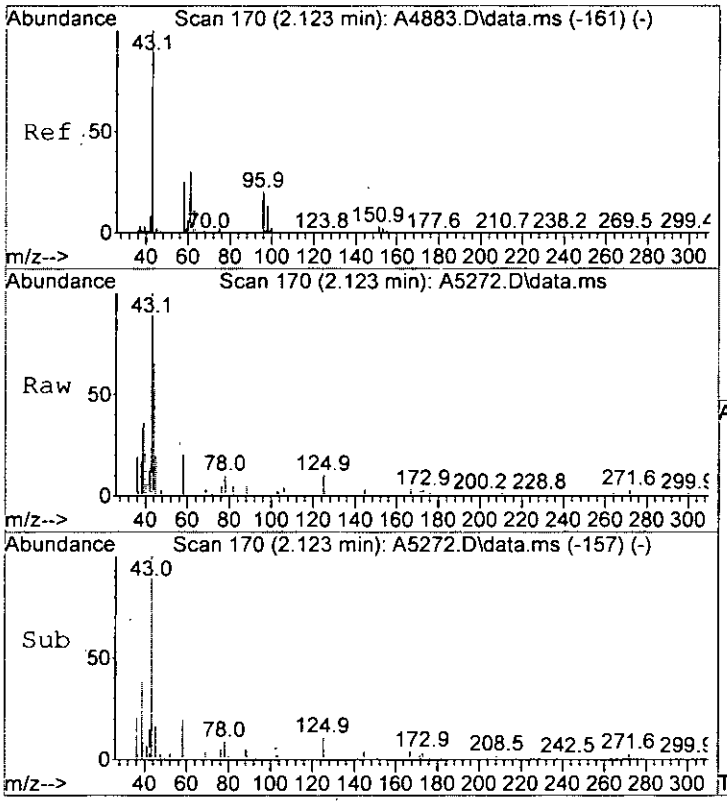


#12
Acrolein
Concen: Below Cal
RT: 1.983 min Scan# 147
Delta R.T. -0.036 min
Lab File: A5272.D
Acq: 31 Dec 2014 5:38 pm

Tgt Ion: 56 Resp: 414

Ion	Ratio	Lower	Upper
56	100		
55	71.8	49.6	89.6

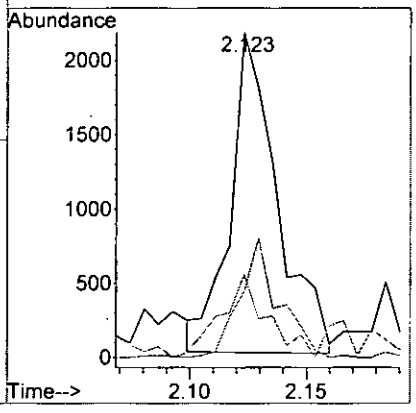


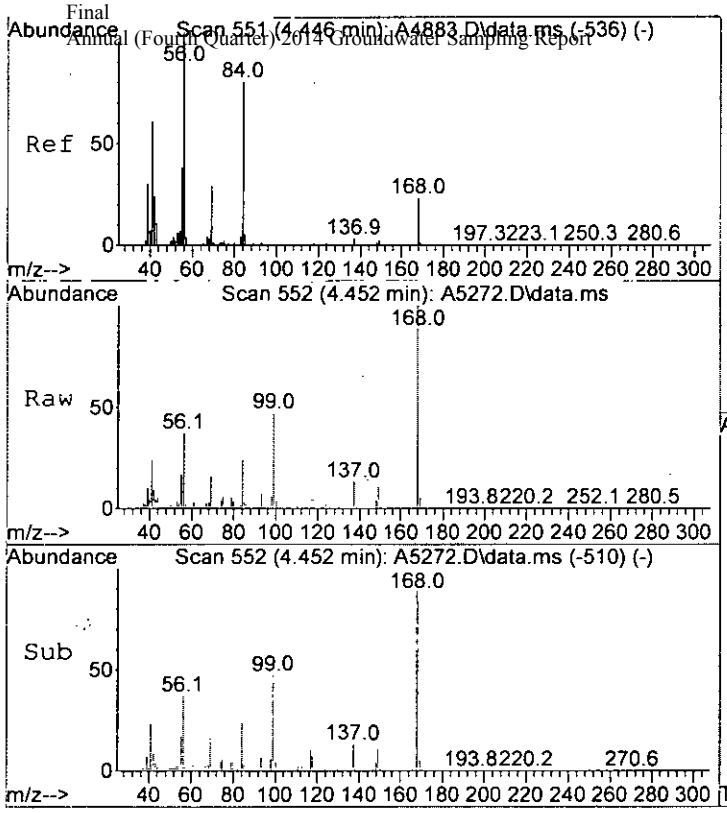


#15
Acetone
Concen: 1.86 ug/L
RT: 2.123 min Scan# 170
Delta R.T. 0.006 min
Lab File: A5272.D
Acq: 31 Dec 2014 5:38 pm

Tgt Ion: 43 Resp: 2981

Ion	Ratio	Lower	Upper
43	100		
58	20.2	5.3	45.3
42	25.4	0.0	29.0

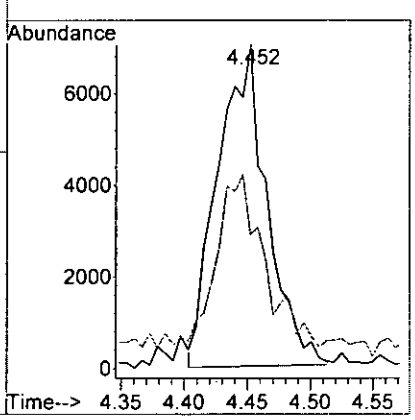


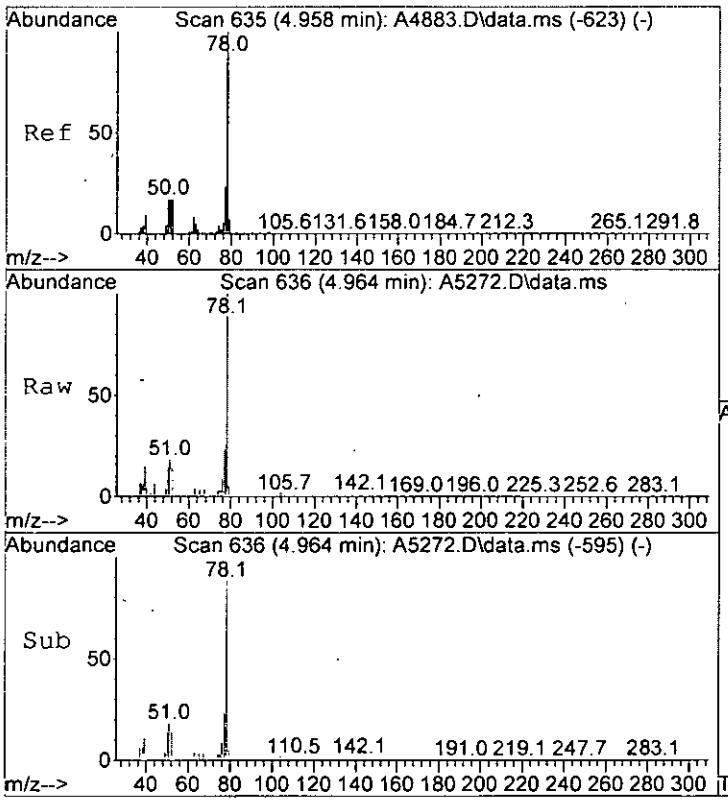


#44
Cyclohexane
Concen: 2.12 ug/L m
RT: 4.452 min Scan# 552
Delta R.T. 0.007 min
Lab File: A5272.D
Acq: 31 Dec 2014 5:38 pm

Tgt Ion: 41 Resp: 19055

Ion	Ratio	Lower	Upper
41	100		
39	41.4	29.7	69.7

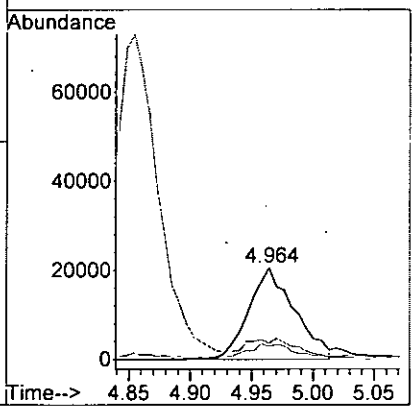


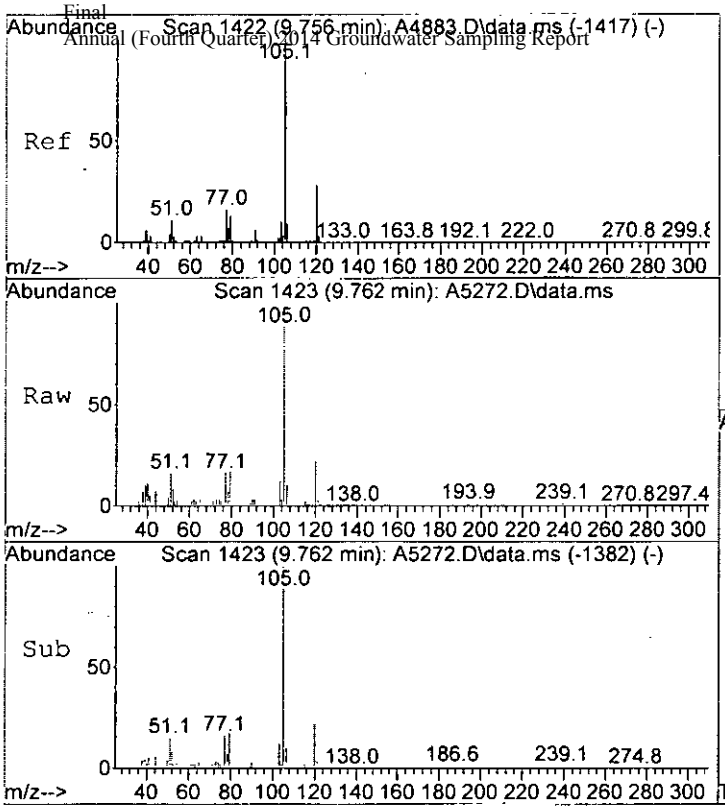


#49
Benzene
Concen: 1.58 ug/L
RT: 4.964 min Scan# 636
Delta R.T. 0.006 min
Lab File: A5272.D
Acq: 31 Dec 2014 5:38 pm

Tgt Ion: 78 Resp: 52939

Ion	Ratio	Lower	Upper
78	100		
51	17.5	0.0	40.0
52	14.1	0.0	37.0

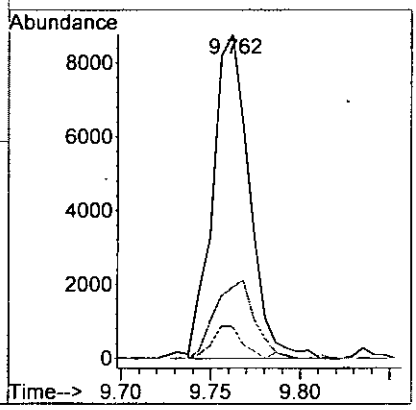


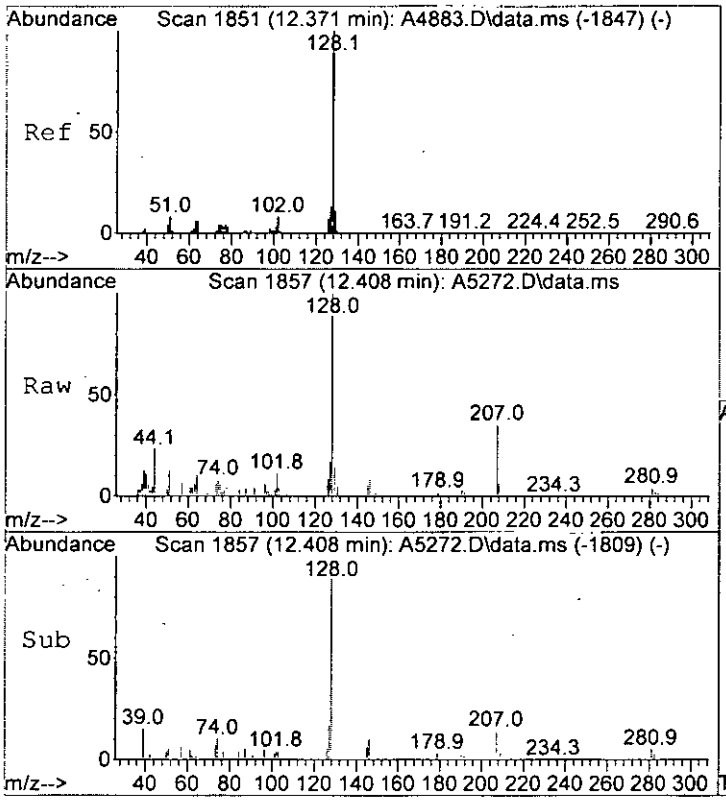


#88
Isopropylbenzene
Concen: 0.34 ug/L
RT: 9.762 min Scan# 1423
Delta R.T. 0.006 min
Lab File: A5272.D
Acq: 31 Dec 2014 5:38 pm

Tgt Ion:105 Resp: 12402

Ion	Ratio	Lower	Upper
105	100		
120	21.9	7.6	47.6
106	9.9	0.0	29.1

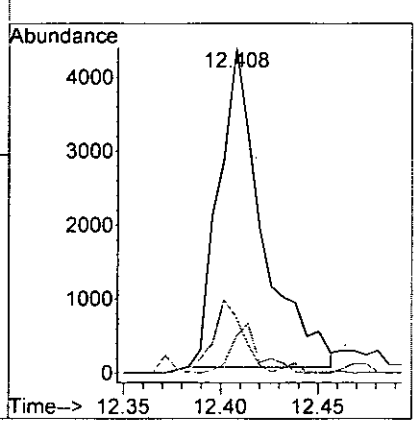




#117
Naphthalen
Concen: 0.37 ug/L
RT: 12.408 min Scan# 1857
Delta R.T. 0.037 min
Lab File: A5272.D
Acq: 31 Dec 2014 5:38 pm

Tgt Ion:128 Resp: 6742

Ion	Ratio	Lower	Upper
128	100		
127	17.2	0.0	33.2
102	11.2	0.0	28.4



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5272.D
Acq On : 31 Dec 2014 5:38 pm
Operator : F.Naegler
Sample : R1410303-018|1.0
Misc : PARSONS 11603 T4
ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5272.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	521	531	538	rBV	576196	1419790	31.78%	5.563%
2	4.409	538	545	565	rVB	1017512	2752059	61.60%	10.784%
3	4.854	610	618	630	rBV	462930	1239519	27.75%	4.857%
4	4.964	630	636	646	rVB3	44432	129538	2.90%	0.508%
5	5.610	735	742	760	rBV	1452238	3243477	72.60%	12.709%
6	7.427	1035	1040	1067	rBV	2956993	4467372	100.00%	17.505%
7	8.841	1267	1272	1290	rBV	3083317	4060654	90.90%	15.911%
8	9.878	1438	1442	1457	rBV	2607436	3245167	72.64%	12.716%
9	10.225	1494	1499	1504	rBV3	29592	49476	1.11%	0.194%
10	10.835	1594	1599	1607	rBV	3593282	4258740	95.33%	16.688%
11	10.902	1607	1610	1617	rVB	43411	67776	1.52%	0.266%
12	11.061	1631	1636	1643	rBV	445336	586698	13.13%	2.299%

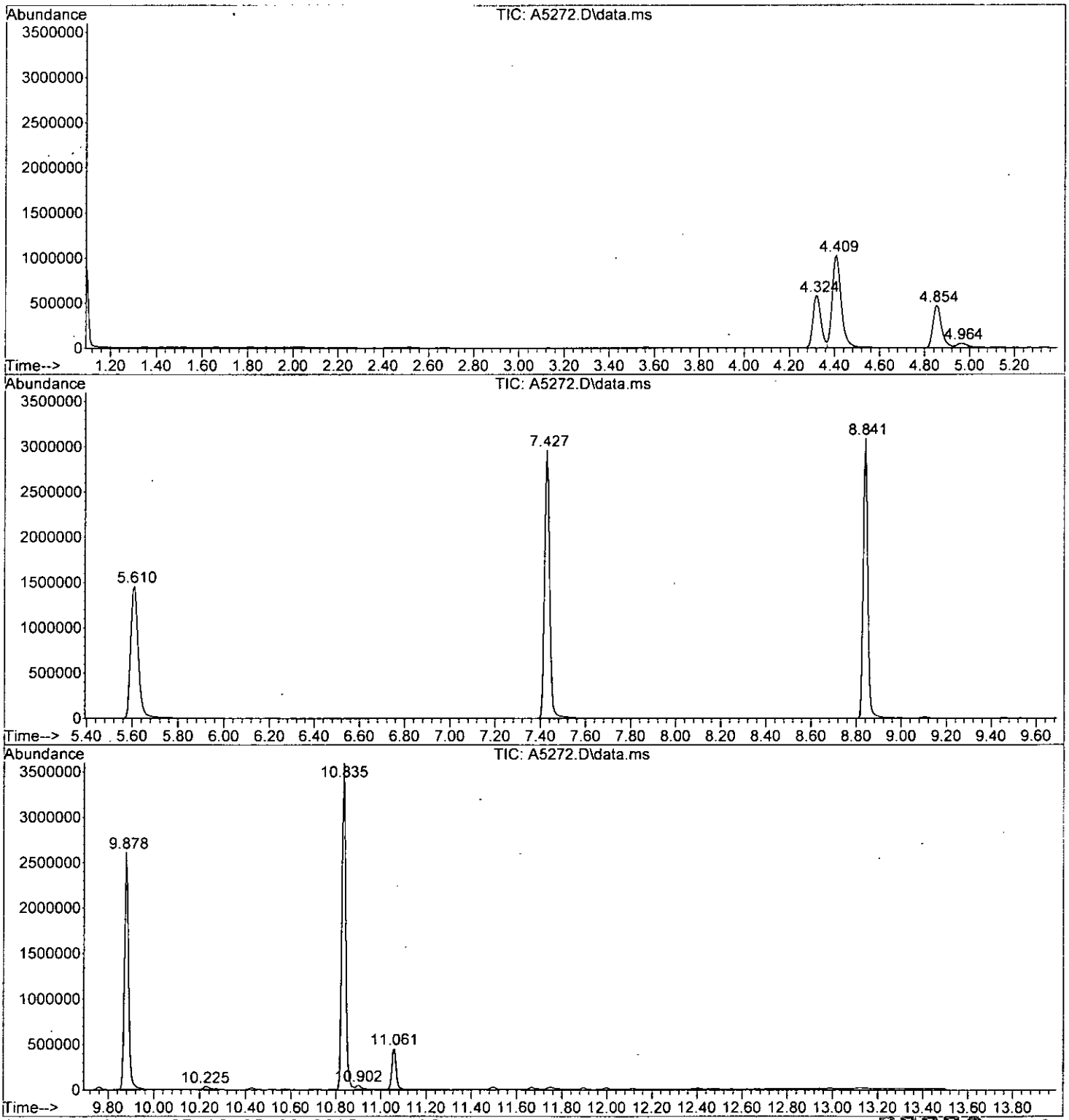
Sum of corrected areas: 25520266

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5272.D
Acq On : 31 Dec 2014 5:38 pm
Operator : F.Naegler
Sample : R1410303-018|1.0
Misc : PARSONS 11603 T4
ALS Vial : 14 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W121514.M Wed Jan 07 13:05:03 2015 MSVO10 Page: 2

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5272.D
Acq On : 31 Dec 2014 5:38 pm
Operator : F.Naegler
Sample : R1410303-018|1.0
Misc : PARSONS 11603 T4
ALS Vial : 14 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

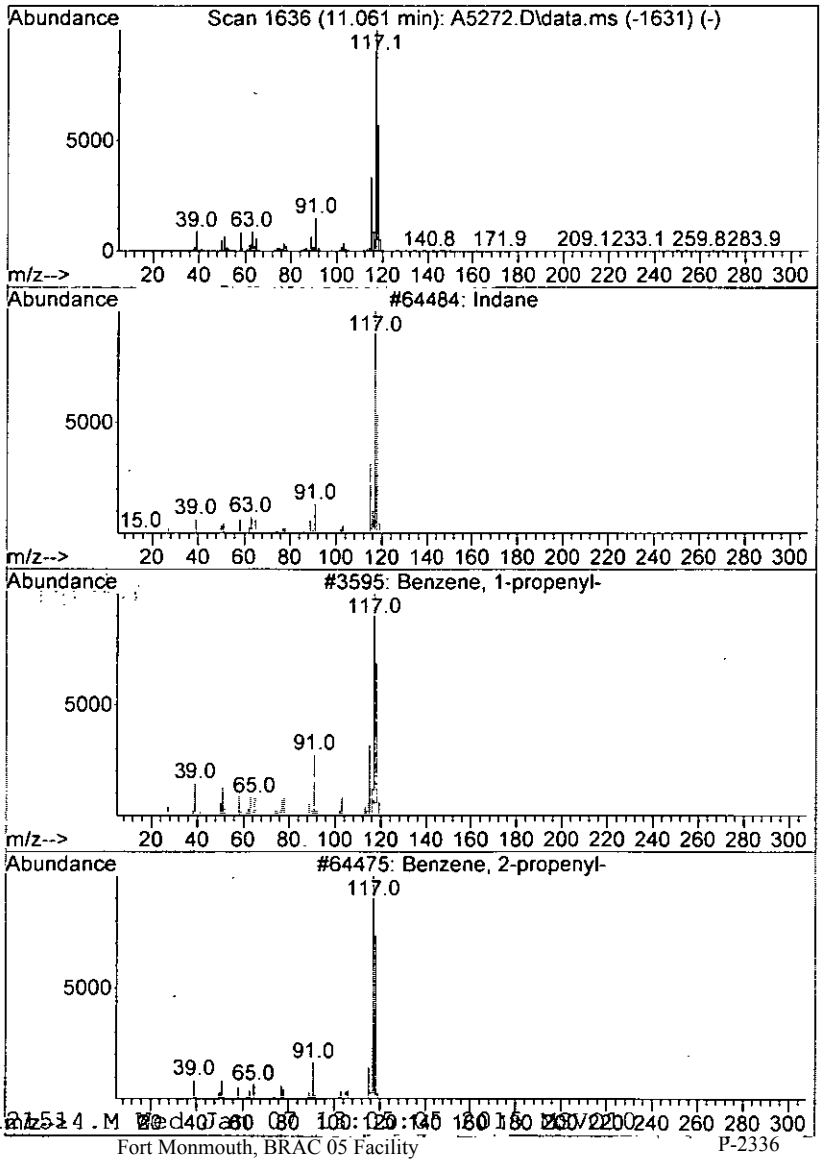
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

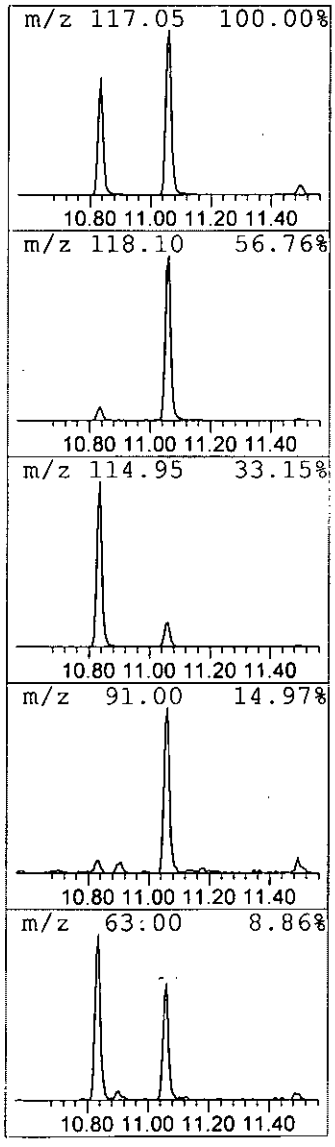
****

Peak Number 1 Indane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.060	6.89 ug/L	586698	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indane	118	C9H10	000496-11-7	95
2	Benzene, 1-propenyl-	118	C9H10	000637-50-3	74
3	Benzene, 2-propenyl-	118	C9H10	000300-57-2	72
4	Benzene, 1-propenyl-, (E)-	118	C9H10	000873-66-5	72
5	Indane	118	C9H10	000496-11-7	60





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5272.D
Acq On : 31 Dec 2014 5:38 pm
Operator : F.Naegler
Sample : R1410303-018|1.0
Misc : PARSONS 11603 T4
ALS Vial : 14 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Indane	11.060	6.9	ug/L	586698	4	10.835	4258740	50.0

00338

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1615
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 18:08
Sample Name:	FTMM-54-GW-296MW06-10.1	**Units:**	µg/L
Lab Code:	R1410303-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5273.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**15**		5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

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		Date Analyzed:	12/31/14 18:08
Sample Name:	FTMM-54-GW-296MW06-10.1	**Units:**	µg/L
Lab Code:	R1410303-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5273.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	**0.20**	J	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**0.76**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.66**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	**0.26**	J	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**0.51**	J	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	**0.22**	J	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

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		Date Analyzed:	12/31/14 18:08
Sample Name:	FTMM-54-GW-296MW06-10.1	**Units:**	µg/L
Lab Code:	R1410303-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5273.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	12/31/14 18:08	
Dibromofluoromethane	101	85-115	12/31/14 18:08	
Toluene-d8	108	85-120	12/31/14 18:08	

Analytical Report

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Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/31/14 1808

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-54-GW-296MW06-10.1
Lab Code: R1410303-019

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000496-11-7	Indane	11.06	**24.3**	JN

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-019|1.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5273.D Vial: 15
Acq On : 31 Dec 2014 6:08 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 12:00:44 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	951244	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1384305	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1272814	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	679415	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.324	113	438812	50.39	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.78%				
48) surr1,1,2-dichloroetha...	4.854	65	442939	50.09	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 100.18%				
65) SURR3,Toluene-d8	7.427	98	1644151	53.97	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.94%				
70) SURR2,BFB	9.878	95	638904	50.25	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.50%				
Target Compounds							Qvalue
12) Acrolein	2.014	56	277	Below Cal		#	1
15) Acetone	2.123	43	1835	1.14	ug/L		88
44) Cyclohexane	4.446	41	26796	3.01	ug/L		95
49) Benzene	4.958	78	491084	14.79	ug/L		98
66) Toluene	7.506	91	9158	0.26	ug/L		86
82) Ethylbenzene	8.982	106	2558	0.20	ug/L	#	87
83) (m+p)Xylene	9.098	106	7666	0.51	ug/L		96
84) o-Xylene	9.445	106	3418	0.22	ug/L	#	49
88) Isopropylbenzene	9.756	105	27403	0.76	ug/L		97
117) Naphthalen	12.390	128	12685	0.66	ug/L		89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

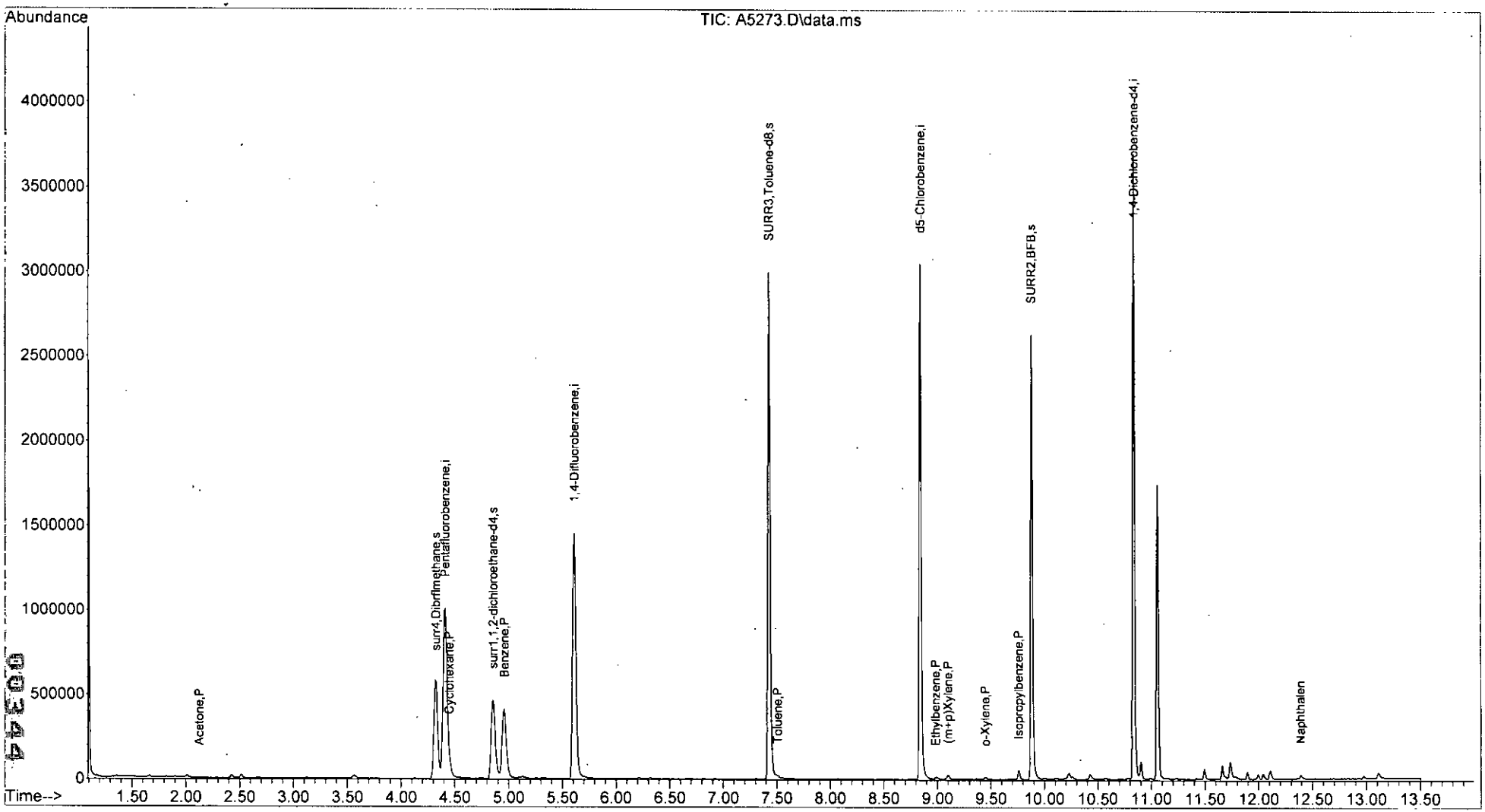
not added for TIC

BA1/7

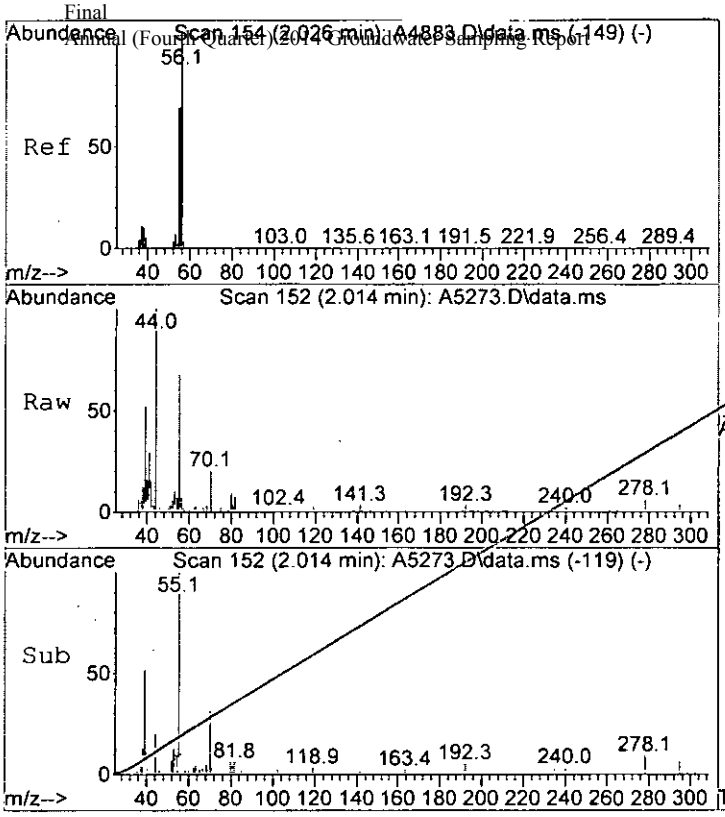
Quantitation Report (QT Reviewed)

Sample : R1410303-019|1.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5273.D Vial: 15
Acq On : 31 Dec 2014 6:08 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 12:00:44 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



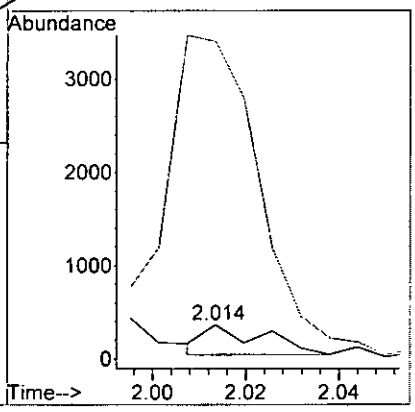
W121514.M Wed Jan 07 12:01:50 2015 MSVO10

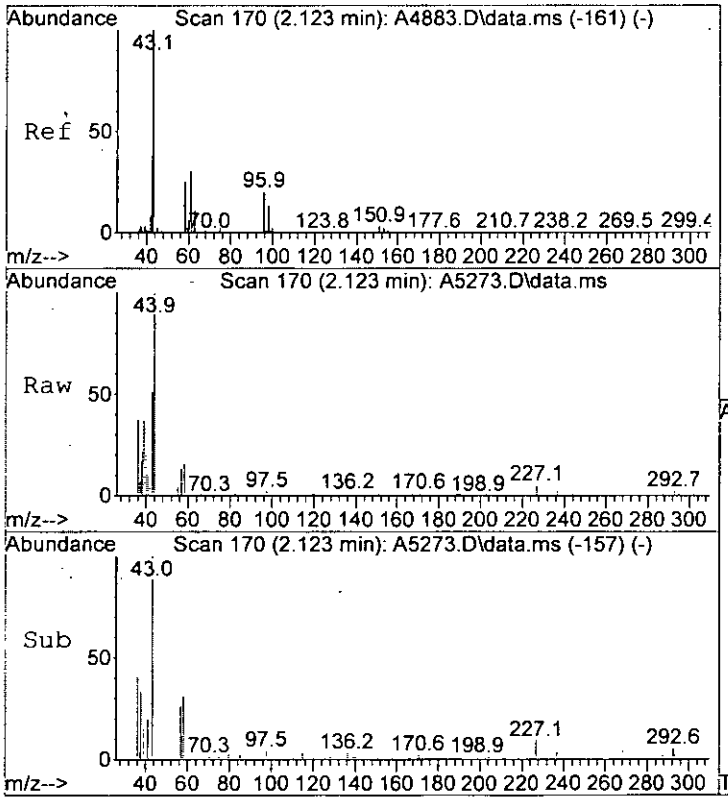


#12
Acrolein
Concen: Below Cal
RT: 2.014 min Scan# 152
Delta R.T. -0.005 min
Lab File: A5273.D
Acq: 31 Dec 2014 6:08 pm

Tgt Ion: 56 Resp: 277

Ion	Ratio	Lower	Upper
56	100		
55	931.2	49.6	89.6#

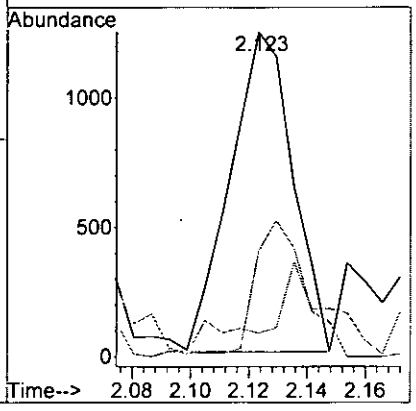


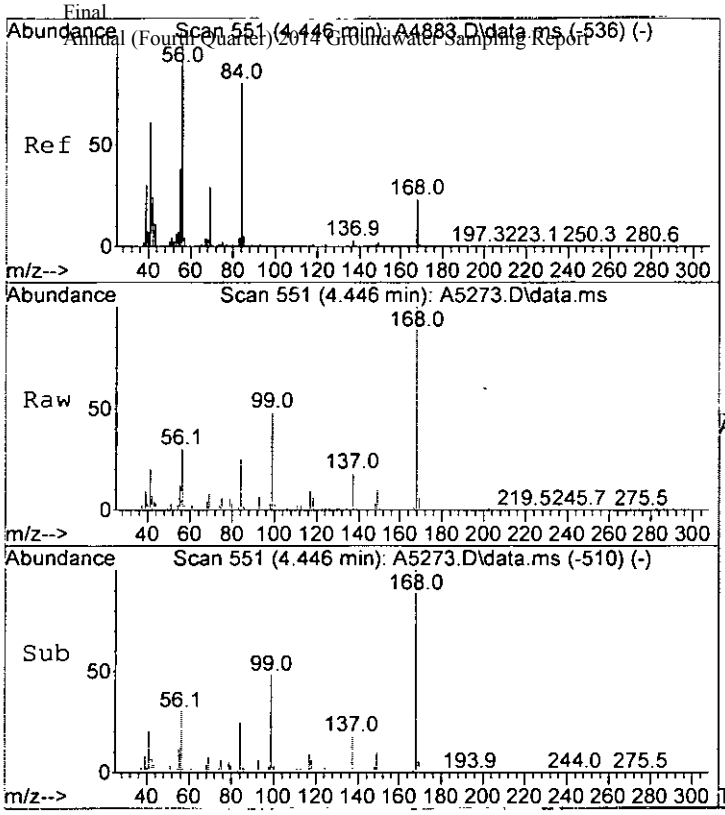


#15
Acetone
Concen: 1.14 ug/L
RT: 2.123 min Scan# 170
Delta R.T. 0.006 min
Lab File: A5273.D
Acq: 31 Dec 2014 6:08 pm

Tgt Ion: 43 Resp: 1835

Ion	Ratio	Lower	Upper
43	100		
58	32.4	5.3	45.3
42	7.3	0.0	29.0

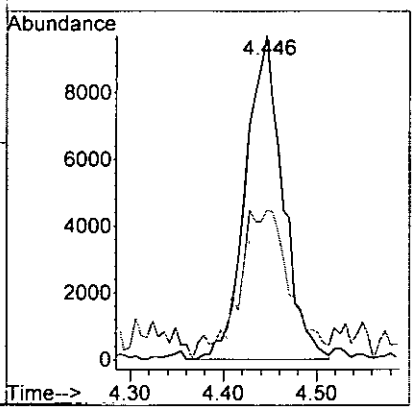


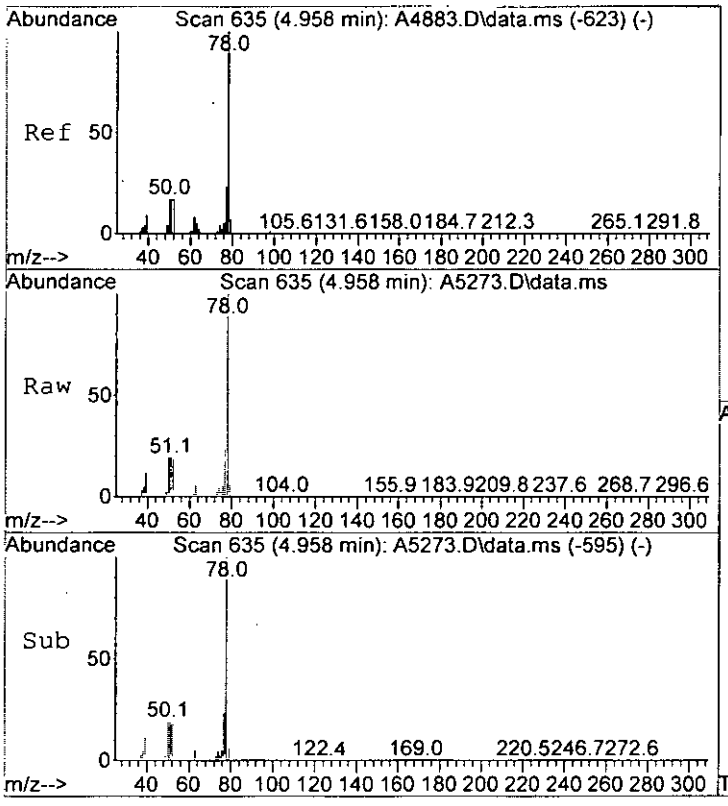


#44
Cyclohexane
Concen: 3.01 ug/L
RT: 4.446 min Scan# 551
Delta R.T. 0.001 min
Lab File: A5273.D
Acq: 31 Dec 2014 6:08 pm

Tgt Ion: 41 Resp: 26796

Ion	Ratio	Lower	Upper
41	100		
39	46.1	29.7	69.7

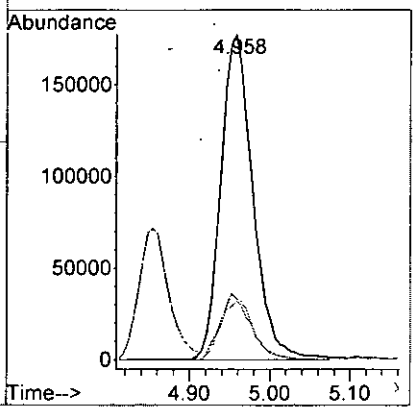


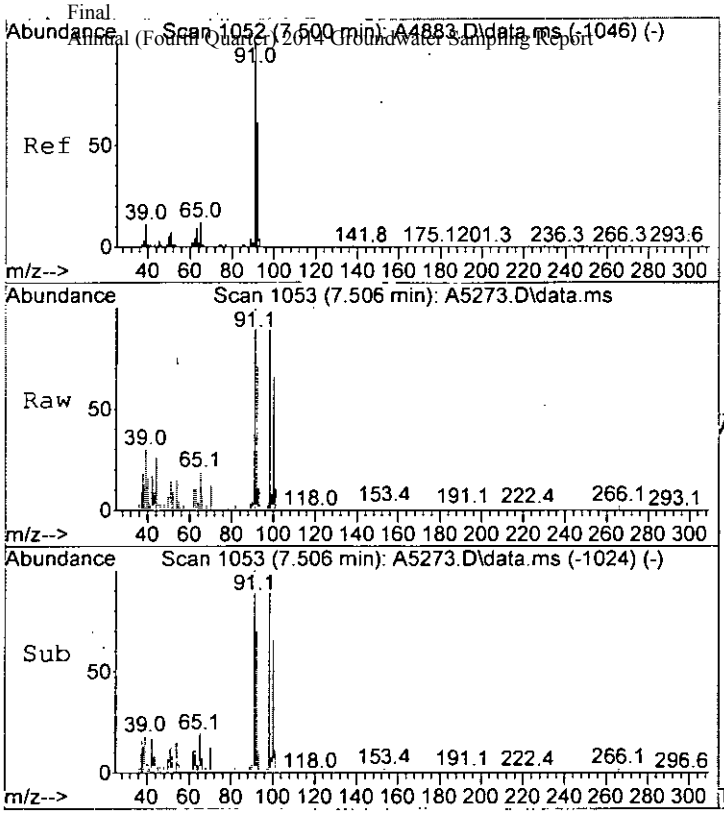


#49
Benzene
Concen: 14.79 ug/L
RT: 4.958 min Scan# 635
Delta R.T. 0.000 min
Lab File: A5273.D
Acq: 31 Dec 2014 6:08 pm

Tgt Ion: 78 Resp: 491084

Ion	Ratio	Lower	Upper
78	100		
51	19.0	0.0	40.0
52	18.2	0.0	37.0

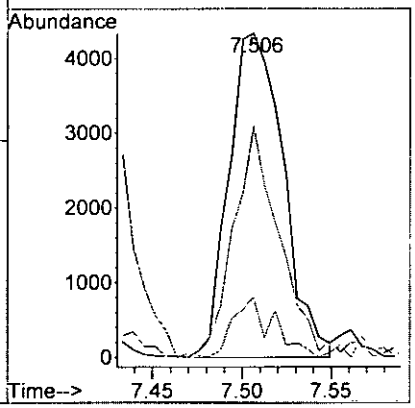


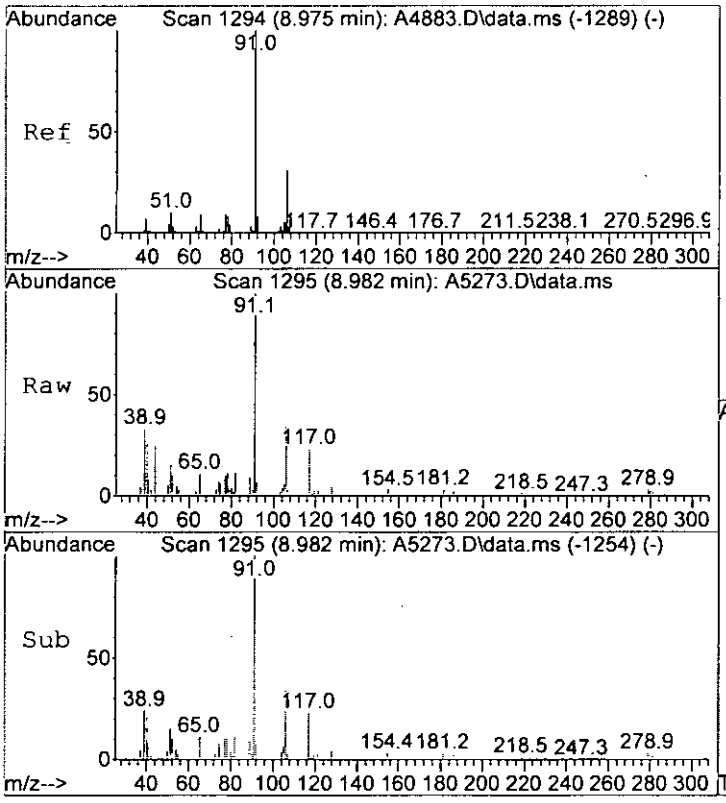


#66
Toluene
Concen: 0.26 ug/L
RT: 7.506 min Scan# 1053
Delta R.T. 0.006 min
Lab File: A5273.D
Acq: 31 Dec 2014 6:08 pm

Tgt Ion: 91 Resp: 9158

Ion	Ratio	Lower	Upper
91	100		
92	71.2	40.7	80.7
65	18.6	0.0	32.3

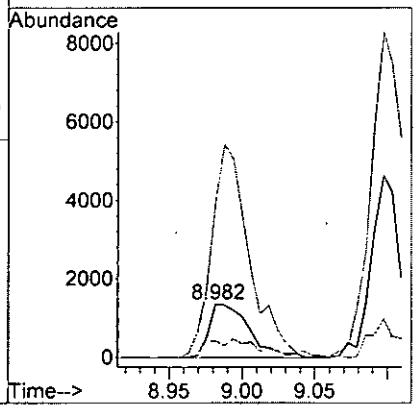


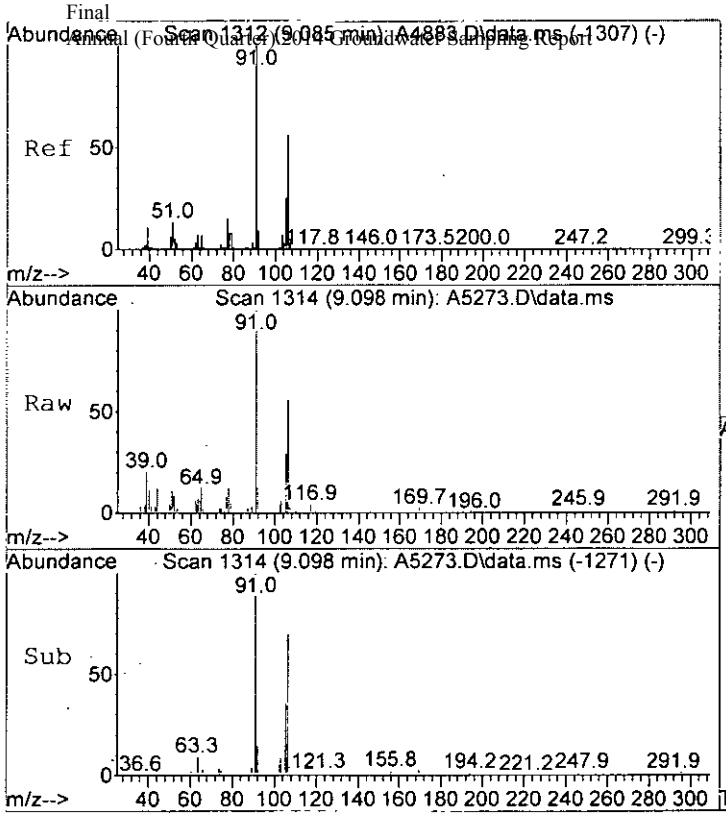


#82
Ethylbenzene
Concen: 0.20 ug/L
RT: 8.982 min Scan# 1295
Delta R.T. 0.000 min
Lab File: A5273.D
Acq: 31 Dec 2014 6:08 pm

Tgt Ion:106 Resp: 2558

Ion	Ratio	Lower	Upper
106	100		
91	292.8	302.6	342.6#
65	31.4	11.0	51.0

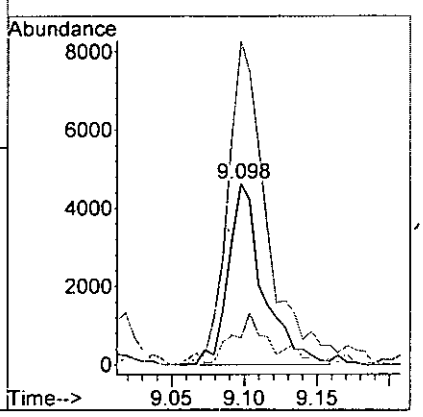


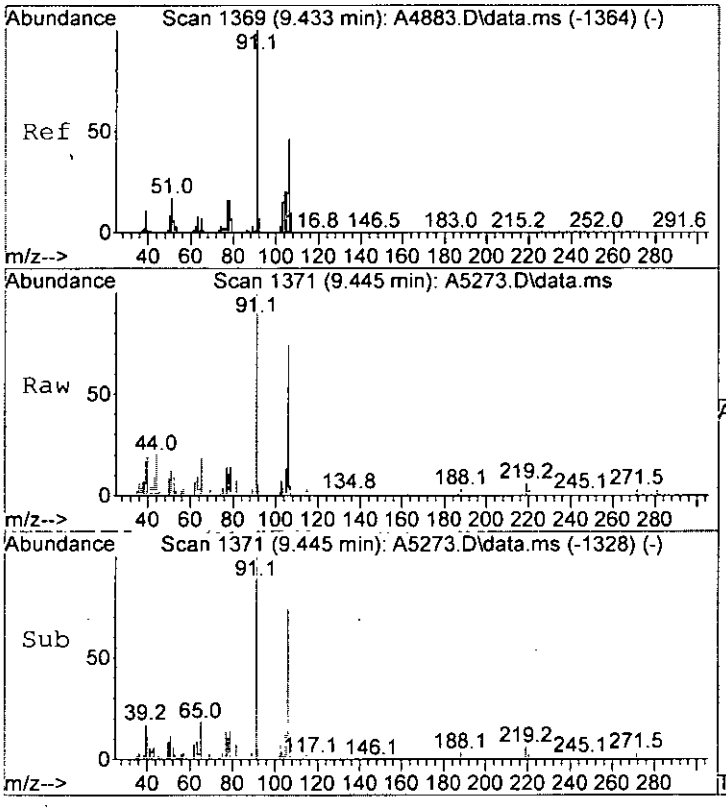


#83
(m+p)Xylene
Concen: 0.51 ug/L
RT: 9.098 min Scan# 1314
Delta R.T. 0.012 min
Lab File: A5273.D
Acq: 31 Dec 2014 6:08 pm

Tgt Ion:106 Resp: 7666

Ion	Ratio	Lower	Upper
106	100		
91	178.8	157.2	197.2
77	14.6	7.2	47.2

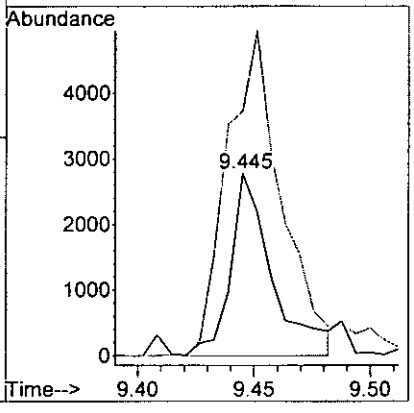


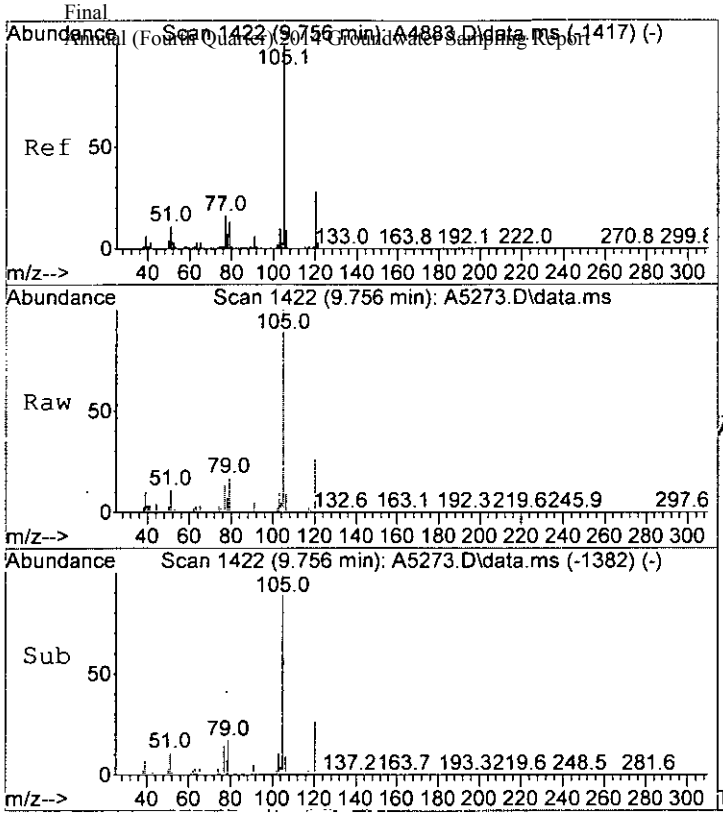


#84
o-Xylene
Concen: 0.22 ug/L
RT: 9.445 min Scan# 1371
Delta R.T. 0.012 min
Lab File: A5273.D
Acq: 31 Dec 2014 6:08 pm

Tgt Ion:106 Resp: 3418

Ion	Ratio	Lower	Upper
106	100		
91	134.4	195.3	235.3#

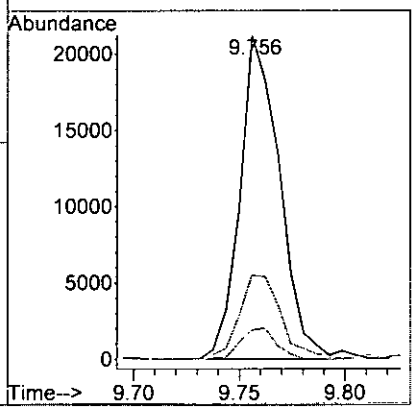


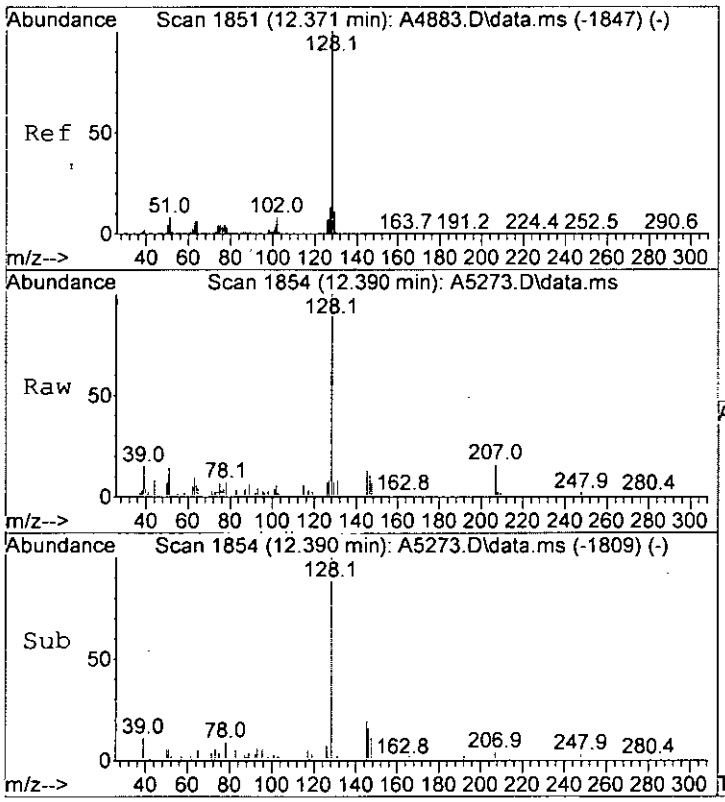


#88
Isopropylbenzene
Concen: 0.76 ug/L
RT: 9.756 min Scan# 1422
Delta R.T. 0.000 min
Lab File: A5273.D
Acq: 31 Dec 2014 6:08 pm

Tgt Ion:105 Resp: 27403

Ion	Ratio	Lower	Upper
105	100		
120	25.9	7.6	47.6
106	9.0	0.0	29.1

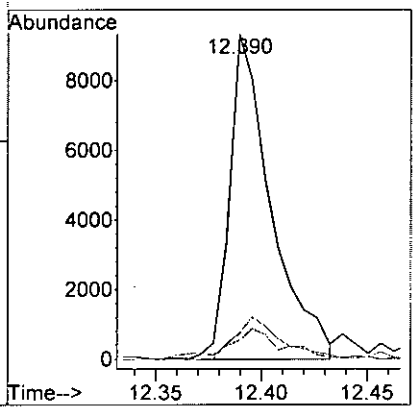




#117
Naphthalen
Concen: 0.66 ug/L
RT: 12.390 min Scan# 1854
Delta R.T. 0.018 min
Lab File: A5273.D
Acq: 31 Dec 2014 6:08 pm

Tgt Ion:128 Resp: 12685

Ion	Ratio	Lower	Upper
128	100		
127	7.8	0.0	33.2
102	5.8	0.0	28.4



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5273.D
Acq On : 31 Dec 2014 6:08 pm
Operator : F.Naegler
Sample : R1410303-019|1.0
Misc : PARSONS 11603 T4
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5273.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.562	398	406	414	rBV4	18399	46899	1.06%	0.162%
2	4.318	522	530	538	rBV	579698	1421891	32.12%	4.916%
3	4.409	538	545	564	rVB	1001392	2775786	62.71%	9.598%
4	4.854	609	618	628	rBV2	464350	1243462	28.09%	4.300%
5	4.958	628	635	650	rVB	404435	1107159	25.01%	3.828%
6	5.610	735	742	757	rBV	1452110	3235385	73.09%	11.187%
7	7.427	1035	1040	1051	rBV	2996434	4426605	100.00%	15.306%
8	8.841	1267	1272	1291	rBV	3044664	4074689	92.05%	14.089%
9	9.098	1309	1314	1323	rVB2	27039	45576	1.03%	0.158%
10	9.762	1417	1423	1428	rBV	52158	72788	1.64%	0.252%
11	9.878	1438	1442	1459	rVB	2625369	3290286	74.33%	11.377%
12	10.225	1495	1499	1503	rBV3	31454	48609	1.10%	0.168%
13	10.427	1528	1532	1540	rVB	30122	53811	1.22%	0.186%
14	10.835	1594	1599	1606	rBV	3692337	4317677	97.54%	14.929%
15	10.902	1606	1610	1621	rVB	105756	151631	3.43%	0.524%
16	11.054	1631	1635	1646	rBV	1737207	2098388	47.40%	7.256%
17	11.493	1703	1707	1715	rVB	60886	77286	1.75%	0.267%
18	11.658	1730	1734	1738	rBV	81014	101120	2.28%	0.350%
19	11.731	1742	1746	1752	rVV	92339	138711	3.13%	0.480%
20	11.896	1769	1773	1778	rVB	47197	52420	1.18%	0.181%
21	12.103	1803	1807	1815	rBV2	52068	84327	1.91%	0.292%
22	13.109	1968	1972	1979	rBV3	32758	56433	1.27%	0.195%

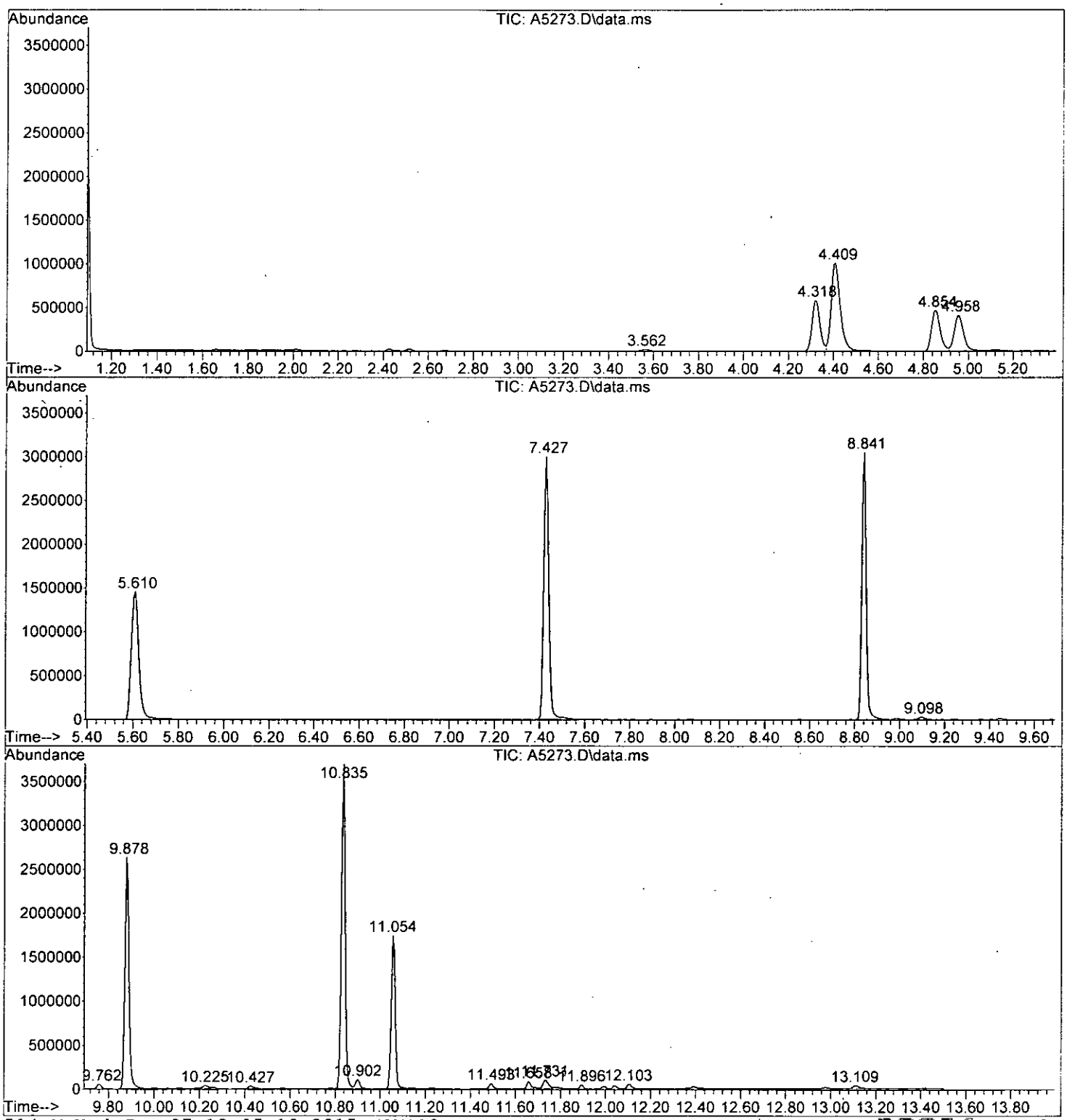
Sum of corrected areas: 28920939

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5273.D
Acq On : 31 Dec 2014 6:08 pm
Operator : F.Naegler
Sample : R1410303-019|1.0
Misc : PARSONS 11603 T4
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W121514.M Wed Jan 07 13:05:12 2015 MSVO10 Page: 2

Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5273.D
Acq On : 31 Dec 2014 6:08 pm
Operator : F.Naegler
Sample : R1410303-019|1.0
Misc : PARSONS 11603 T4
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

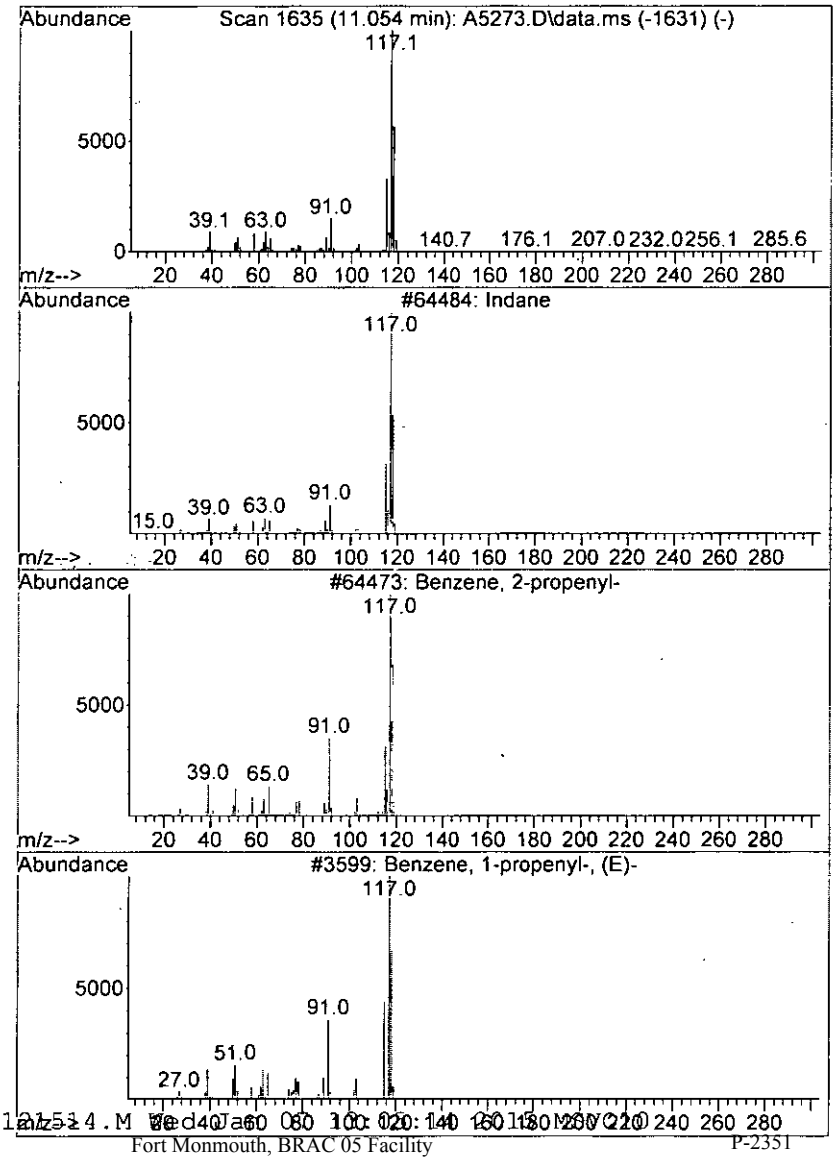
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

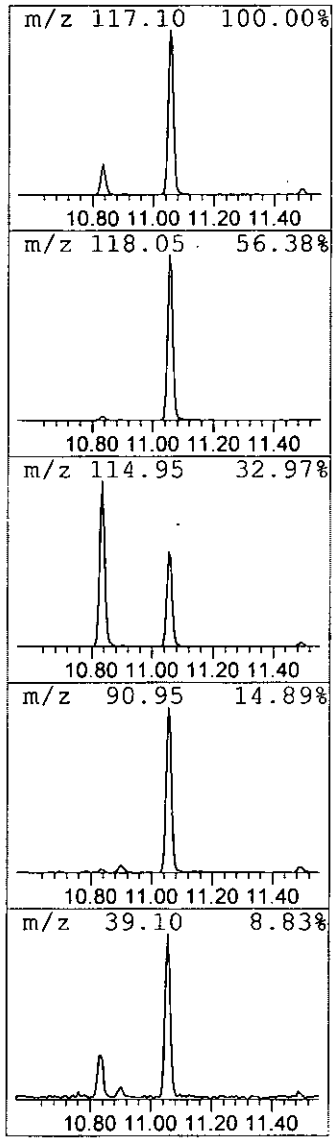
****

Peak Number 1 Indane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.055	24.30 ug/L	2098390	1,4-Dichlorobenzene-d4	10.835

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indane	118	C9H10	000496-11-7	93
2	Benzene, 2-propenyl-	118	C9H10	000300-57-2	74
3	Benzene, 1-propenyl-, (E)-	118	C9H10	000873-66-5	72
4	Benzeneethanol, .beta.-ethenyl-	148	C10H12O	006052-63-7	53
5	Benzene, 1-propenyl-	118	C9H10	000637-50-3	47





Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5273.D
Acq On : 31 Dec 2014 6:08 pm
Operator : F.Naegler
Sample : R1410303-019|1.0
Misc : PARSONS 11603 T4
ALS Vial : 15 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Indane	11.055	24.3	ug/L	2098390	4	10.835	4317680	50.0

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1615
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 18:37
Sample Name:	FTMM-54-GW-296MW04-6.35	**Units:**	µg/L
Lab Code:	R1410303-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5274.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.0**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1615
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 18:37
Sample Name:	FTMM-54-GW-296MW04-6.35	**Units:**	µg/L
Lab Code:	R1410303-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5274.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1615
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 18:37
Sample Name:	FTMM-54-GW-296MW04-6.35	**Units:**	µg/L
Lab Code:	R1410303-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5274.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	12/31/14 18:37	
Dibromofluoromethane	100	85-115	12/31/14 18:37	
Toluene-d8	108	85-120	12/31/14 18:37	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 1837

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-54-GW-296MW04-6.35	**Units:**	µg/L
Lab Code:	R1410303-020	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410303-020|1.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5274.D Vial: 16
Acq On : 31 Dec 2014 , 6:37 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 12:02:54 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	961428	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1379841	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1267203	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	664488	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	432164	49.79	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.58%			
48) surr1,1,2-dichloroetha...	4.854	65	446425	50.64	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 101.28%			
65) SURR3,Toluene-d8	7.427	98	1641171	54.04	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 108.08%			
70) SURR2,BFB	9.878	95	623564	49.21	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.42%			
Target Compounds						Qvalue
15) Acetone	2.142	43	3253	2.00	ug/L	78
44) Cyclohexane	4.446	41	17971	2.02	ug/L	79

Not Qualified Per TIC

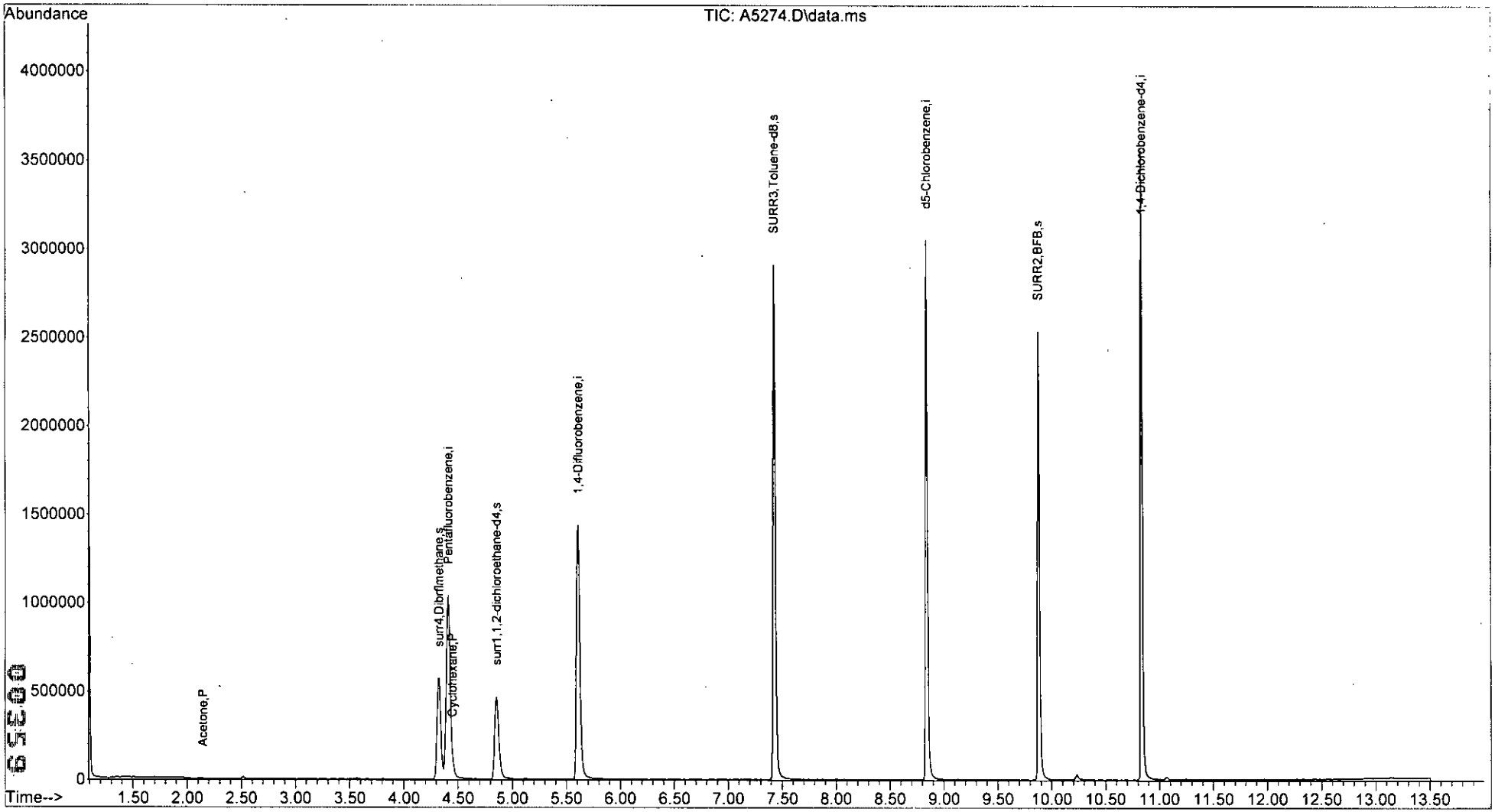
(#) = qualifier out of range (m) = manual integration (+) = signals summed

BA1/7

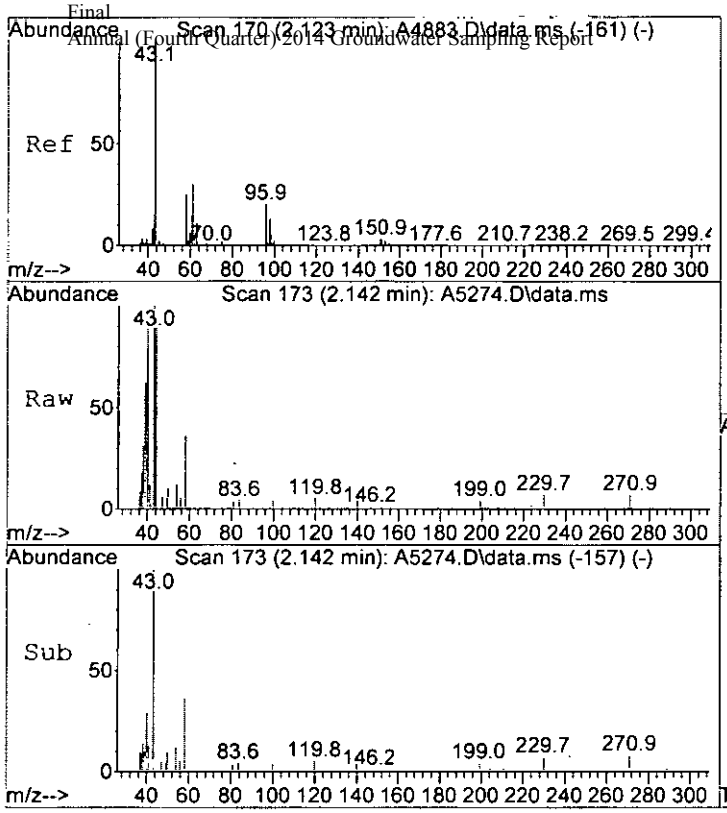
Quantitation Report (QT Reviewed)

Sample : R1410303-020|1.0
Data File : I:\ACQUDATA\msvoa10\data\123114\A5274.D Vial: 16
Acq On : 31 Dec 2014 6:37 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 07 12:02:54 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



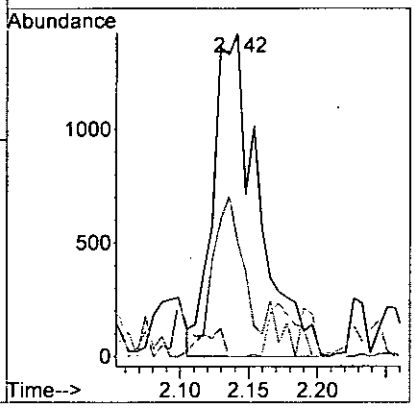
W121514.M Wed Jan 07 13:14:54 2015 MSVO10

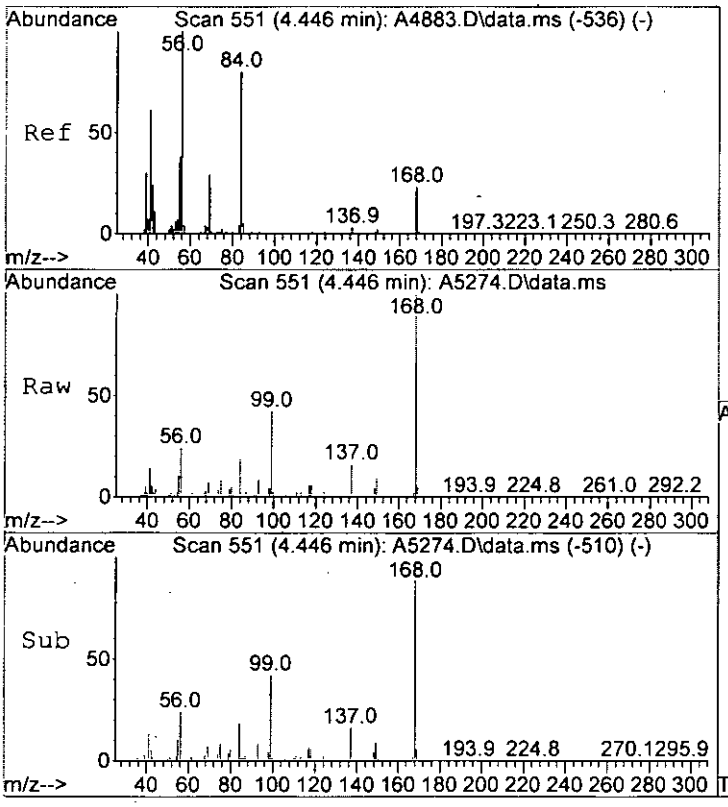


#15
Acetone
Concen: 2.00 ug/L
RT: 2.142 min Scan# 173
Delta R.T. 0.025 min
Lab File: A5274.D
Acq: 31 Dec 2014 6:37 pm

Tgt Ion: 43 Resp: 3253

Ion	Ratio	Lower	Upper
43	100		
58	35.8	5.3	45.3
42	0.0	0.0	29.0

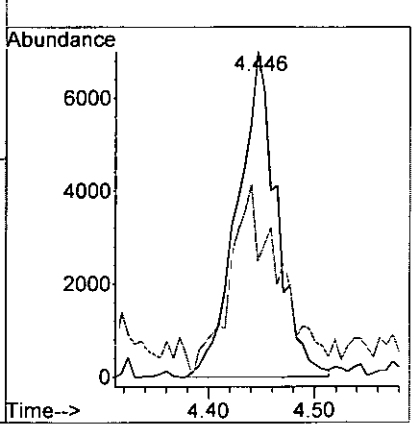




#44
Cyclohexane
Concen: 2.02 ug/L
RT: 4.446 min Scan# 551
Delta R.T. 0.001 min
Lab File: A5274.D
Acq: 31 Dec 2014 6:37 pm

Tgt Ion: 41 Resp: 17971

Ion	Ratio	Lower	Upper
41	100		
39	35.6	29.7	69.7



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5274.D
Acq On : 31 Dec 2014 6:37 pm
Operator : F.Naegler
Sample : R1410303-020|1.0
Misc : PARSONS 11603 T4
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5274.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.318	522	530	538	rBV2	569157	1416096	31.96%	5.749%
2	4.409	538	545	565	rVB	1032585	2759003	62.27%	11.200%
3	4.854	610	618	636	rBV	463498	1249779	28.21%	5.074%
4	5.610	735	742	760	rBV	1431804	3230667	72.91%	13.115%
5	7.427	1035	1040	1062	rBV	2905128	4430771	100.00%	17.987%
6	8.841	1267	1272	1291	rBV	3046107	4025177	90.85%	16.341%
7	9.878	1438	1442	1459	rVB	2529111	3219898	72.67%	13.071%
8	10.231	1496	1500	1506	rBV3	28431	46980	1.06%	0.191%
9	10.835	1594	1599	1611	rBV	3550927	4254750	96.03%	17.272%

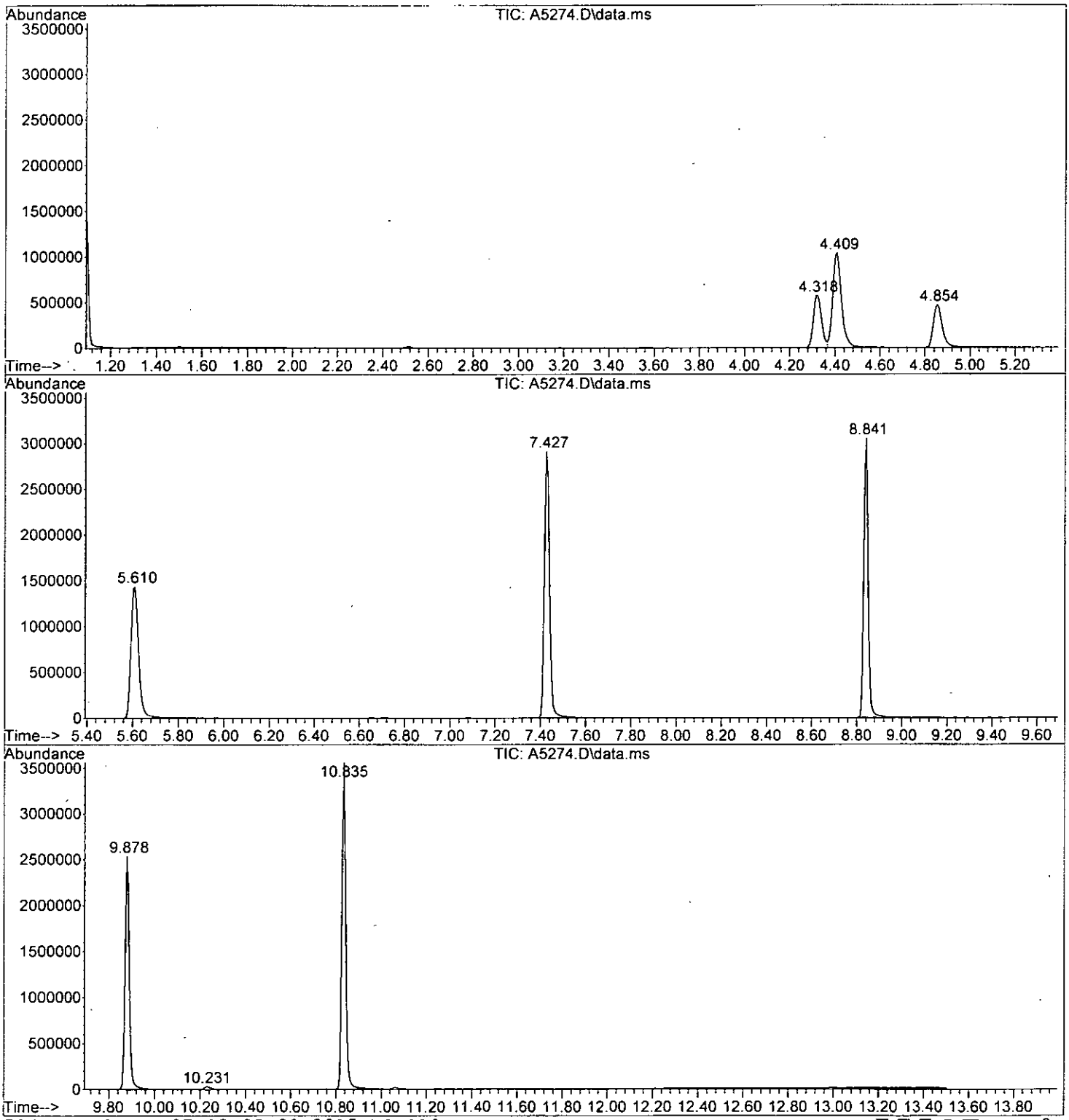
Sum of corrected areas: 24633121

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5274.D
Acq On    : 31 Dec 2014    6:37 pm
Operator  : F.Naegler
Sample    : R1410303-020|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 16   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```



W121514.M Wed Jan 07 13:05:20 2015 MSVO10 00362 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa10\data\123114\\
Data File : A5274.D
Acq On : 31 Dec 2014 6:37 pmm
Operator : F.Naeglerr
Sample : R1410303-020|1.0
Misc : PARSONS 11603 T44
ALS Vial : 16 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

00363

ALS Environmental

VOLATILE ORGANICS STANDARDS DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

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00364

Initial Calibration - Summary Report

Calibration ID: RC1400112 12/15/14 **Instrument ID:** R-MS-10
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
1,1,1,2-Tetrachloroethane	T	Average RF			0.3478	<=20	4.3
1,1,1-Trichloroethane (TCA)	T	Average RF		0.100	0.7301	<=20	3.0
1,1,2,2-Tetrachloroethane	T	Average RF		0.300	0.5578	<=20	3.8
1,1,2-Trichloroethane	T	Average RF		0.100	0.2324	<=20	3.7
1,1,2-Trichlorotrifluoroethane	T	Average RF		0.100	0.4341	<=20	4.4
1,1-Dichloroethane (1,1-DCA)	T	Average RF		0.200	0.8198	<=20	3.1
1,1-Dichloroethene (1,1-DCE)	T	Average RF		0.100	0.4008	<=20	6.4
1,1-Dichloropropene	T	Average RF			0.4176	<=20	5.0
1,2,3-Trichlorobenzene	T	Average RF			0.6687	<=20	4.5
1,2,3-Trichloropropane	T	Average RF			0.1469	<=20	8.5
1,2,4-Trichlorobenzene	T	Average RF		0.200	0.8548	<=20	5.1
1,2,4-Trimethylbenzene	T	Average RF			2.311	<=20	12.4
1,2-Dibromo-3-chloropropane (DBCP)	T	Average RF		0.050	0.09613	<=20	12.4
1,2-Dibromoethane	T	Average RF		0.100	0.2468	<=20	6.8
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	T	Average RF			0.5282	<=20	8.0
1,2-Dichlorobenzene	T	Average RF		0.400	1.338	<=20	5.7
1,2-Dichloroethane	T	Average RF		0.100	0.4114	<=20	4.8
1,2-Dichloropropane	T	Average RF		0.100	0.3157	<=20	3.6
1,3,5-Trichlorobenzene	T	Average RF			1.003	<=20	6.1
1,3,5-Trimethylbenzene	T	Average RF			2.240	<=20	11.5
1,3-Dichlorobenzene	T	Average RF		0.600	1.464	<=20	5.7
1,3-Dichloropropane	T	Average RF			0.4206	<=20	2.7
1,4-Dichlorobenzene	T	Average RF		0.500	1.508	<=20	8.2
1,4-Dioxane	T	Average RF			0.001806	<=20	7.5
1-Butanol	T	Quadratic	1/X2		0.003848	>=0.99	0.9965
1-Chloro-4-(trifluoromethyl)benzene	T	Average RF			0.4896	<=20	7.0
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	T	Average RF			0.5856	<=20	7.5
2,2-Dichloropropane	T	Average RF			0.6999	<=20	2.2
2,3,6-Trichlorotoluene	T	Average RF			0.4667	<=20	7.0
2,4,5-Trichlorotoluene	T	Average RF			0.4298	<=20	12.5
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	T	Average RF			1.088	<=20	13.3
2,4-Dichlorobenzotrifluoride	T	Average RF			0.6687	<=20	8.7
2,5-Dichlorobenzotrifluoride	T	Average RF			0.7829	<=20	6.3
2-Bromo-2-chloro-1,1,1-trifluoroethane	T	Average RF				<=20	
2-Butanone (MEK)	T	Average RF		0.05	0.1109	<=20	8.2
2-Chloro-1,3-butadiene	T	Average RF			0.6924	<=20	8.2
2-Chlorobenzotrifluoride	T	Average RF			0.5311	<=20	7.1
2-Chloroethyl Vinyl Ether	T	Average RF			0.1369	<=20	7.4
2-Chlorotoluene	T	Average RF			1.985	<=20	9.4
2-Hexanone	T	Average RF		0.05	0.1420	<=20	9.7
2-Methyl-1-propanol	T	Average RF			0.007162	<=20	8.6
2-Methyl-2-propanol	T	Average RF			0.02588	<=20	6.4
2-Nitropropane	T	Average RF			0.05539	<=20	11.8
2-Propanol	T	Average RF			0.01561	<=20	7.7
3,4- and 2,3-Dichlorotoluene Coelution	T	Average RF			1.114	<=20	16.1
3,4-Dichlorobenzotrifluoride	T	Average RF			0.7517	<=20	7.0
3-Chloro-1-propene	T	Average RF			0.2443	<=20	7.1
3-Chlorobenzotrifluoride	T	Average RF			0.5313	<=20	6.4
3-Chlorotoluene	T	Average RF			1.983	<=20	9.8
4-Chlorotoluene	T	Average RF			2.349	<=20	12.4
4-Isopropyltoluene	T	Average RF			2.238	<=20	11.9
4-Methyl-2-pentanone	T	Average RF		0.05	0.1918	<=20	5.5

Initial Calibration - Summary Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
Acetone	T	Average RF		0.05	0.08442	<=20	10.3
Acetonitrile	T	Average RF			0.01100	<=20	9.3
Acrolein	T	Quadratic	1/X2		0.02851	>=0.99	0.9956
Acrylonitrile	T	Average RF			0.09466	<=20	10.1
Benzene	T	Average RF		0.500	1.199	<=20	2.8
Bromobenzene	T	Average RF			0.7763	<=20	2.5
Bromochloromethane	T	Average RF			0.2783	<=20	4.1
Bromodichloromethane	T	Average RF		0.200	0.4144	<=20	3.5
Bromoform	T	Average RF		0.100	0.1843	<=20	9.9
Bromomethane	T	Average RF		0.100	0.3427	<=20	12.4
Carbon Disulfide	T	Average RF		0.100	1.301	<=20	12.2
Carbon Tetrachloride	T	Average RF		0.05	0.1381	<=20	4.3
Chlorobenzene	T	Average RF		0.500	0.9456	<=20	7.6
Chloroethane	T	Average RF		0.100	0.3111	<=20	6.1
Chloroform	T	Average RF		0.200	0.8153	<=20	1.2
Chloromethane	T	Average RF		0.100	0.6002	<=20	3.3
Cyclohexane	T	Average RF		0.100	0.3216	<=20	7.4
Cyclohexanone	T	Average RF			0.01163	<=20	8.6
Dibromochloromethane	T	Average RF		0.100	0.3189	<=20	5.9
Dibromomethane	T	Average RF			0.1732	<=20	5.0
Dichlorodifluoromethane (CFC 12)	T	Average RF		0.100	0.5497	<=20	6.0
Dichlorofluoromethane (CFC 21)	T	Average RF			0.8641	<=20	7.8
Dichloromethane	T	Average RF		0.100	0.4455	<=20	6.0
Diethyl Ether	T	Average RF			0.3255	<=20	5.0
Diisopropyl Ether	T	Average RF			1.508	<=20	4.1
Ethyl Methacrylate	T	Average RF			0.2857	<=20	6.3
Ethyl tert-Butyl Ether	T	Average RF			1.372	<=20	3.1
Ethylbenzene	T	Average RF		0.100	0.5021	<=20	4.9
Hexachlorobutadiene	T	Average RF			0.4106	<=20	6.7
Iodomethane	T	Average RF			0.5885	<=20	14.0
Isopropylbenzene (Cumene)	T	Average RF		0.100	1.410	<=20	14.8
Methacrylonitrile	T	Average RF			0.1042	<=20	8.8
Methyl Acetate	T	Average RF		0.100	0.1960	<=20	4.5
Methyl Methacrylate	T	Average RF			0.1283	<=20	8.1
Methyl tert-Butyl Ether	T	Average RF		0.100	1.057	<=20	4.1
Methylcyclohexane	T	Average RF		0.100	0.3971	<=20	9.5
Naphthalene	T	Average RF			1.405	<=20	9.2
Propionitrile	T	Average RF			0.03164	<=20	9.8
Styrene	T	Average RF		0.300	0.9818	<=20	8.9
Tetrachloroethene (PCE)	T	Average RF		0.200	0.3005	<=20	2.8
Tetrahydrofuran (THF)	T	Average RF			0.07106	<=20	4.0
Toluene	T	Average RF		0.400	1.274	<=20	11.5
Trichloroethene (TCE)	T	Average RF		0.200	0.3282	<=20	4.9
Trichlorofluoromethane (CFC 11)	T	Average RF		0.100	0.7297	<=20	5.6
Vinyl Acetate	T	Average RF			0.05511	<=20	13.0
Vinyl Chloride	T	Average RF		0.100	0.5919	<=20	5.1
cis-1,2-Dichloroethene	T	Average RF		0.100	0.4846	<=20	5.3
cis-1,3-Dichloropropene	T	Average RF		0.200	0.4923	<=20	2.9
m,p-Xylenes	T	Average RF		0.100	0.5871	<=20	10.5
n-Butyl Acetate	T	Average RF			0.3799	<=20	5.9
n-Butylbenzene	T	Average RF			2.075	<=20	11.4
n-Heptane	T	Average RF			0.3570	<=20	5.2

Initial Calibration - Summary Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
n-Propylbenzene	T	Average RF			3.032	<=20	17.9
o-Xylene	T	Average RF		0.300	0.6136	<=20	2.8
sec-Butylbenzene	T	Average RF			2.568	<=20	13.7
tert-Amyl Methyl Ether	T	Average RF			1.096	<=20	4.3
tert-Butylbenzene	T	Average RF			1.896	<=20	7.4
trans-1,2-Dichloroethene	T	Average RF		0.100	0.4378	<=20	6.4
trans-1,3-Dichloropropene	T	Average RF		0.100	0.4061	<=20	6.8
trans-1,4-Dichloro-2-butene	T	Average RF			0.08236	<=20	10.4
1,2-Dichloroethane-d4	S	Average RF			0.3194	<=20	3.8
4-Bromofluorobenzene	S	Average RF			0.4592	<=20	4.5
Dibromofluoromethane	S	Average RF			0.3145	<=20	2.6
Toluene-d8	S	Average RF			1.100	<=20	6.9

Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1400112-01	0.5 PPB STD	I:\ACQUDATA\msvoa10\data\121514\A4878.D	12/15/14 13:27
02	RC1400112-02	1.0 PPB STD	I:\ACQUDATA\msvoa10\data\121514\A4879.D	12/15/14 13:56
03	RC1400112-03	2.0 PPB STD	I:\ACQUDATA\msvoa10\data\121514\A4880.D	12/15/14 14:26
04	RC1400112-04	5.0 PPB STD	I:\ACQUDATA\msvoa10\data\121514\A4881.D	12/15/14 14:56
05	RC1400112-05	20 PPB STD	I:\ACQUDATA\msvoa10\data\121514\A4882.D	12/15/14 15:29
06	RC1400112-06	50 PPB STD	I:\ACQUDATA\msvoa10\data\121514\A4883.D	12/15/14 15:59
07	RC1400112-07	100 PPB STD	I:\ACQUDATA\msvoa10\data\121514\A4884.D	12/15/14 16:29
08	RC1400112-08	200 PPB STD	I:\ACQUDATA\msvoa10\data\121514\A4886.D	12/15/14 17:28
09	RC1400112-09	150 PPB STD	I:\ACQUDATA\msvoa10\data\121514\A4885.D	12/15/14 16:58

Analyte **Curve Fit** **Weighting**

1,1,1,2-Tetrachloroethane Average RF RSD = 4.3 Average RF = 0.3478

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3454	02	1.000	0.3139	03	2.000	0.3504	04	5.000	0.3356
05	20.000	0.3522	06	50.000	0.3605	07	100.000	0.3601	09	150.000	0.3536
08	200.000	0.3584									

1,1,1-Trichloroethane (TCA) Average RF RSD = 3.0 Average RF = 0.7301

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6972	02	1.000	0.7512	03	2.000	0.7541	04	5.000	0.7337
05	20.000	0.6969	06	50.000	0.7422	07	100.000	0.7165	09	150.000	0.7291
08	200.000	0.7498									

1,1,2,2-Tetrachloroethane Average RF RSD = 3.8 Average RF = 0.5578

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5495	02	1.000	0.6088	03	2.000	0.5564	04	5.000	0.5528
05	20.000	0.5627	06	50.000	0.5622	07	100.000	0.5352	09	150.000	0.5508
08	200.000	0.5415									

1,1,2-Trichloroethane Average RF RSD = 3.7 Average RF = 0.2324

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2320	02	1.000	0.2215	03	2.000	0.2469	04	5.000	0.2360
05	20.000	0.2261	06	50.000	0.2442	07	100.000	0.2296	09	150.000	0.2288
08	200.000	0.2262									

1,1,2-Trichlorotrifluoroethane Average RF RSD = 4.4 Average RF = 0.4341

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4298	02	1.000	0.4557	03	2.000	0.4674	04	5.000	0.4439
05	20.000	0.4106	06	50.000	0.4378	07	100.000	0.4104	09	150.000	0.4262
08	200.000	0.4253									

1,1-Dichloroethane (1,1-DCA) Average RF RSD = 3.1 Average RF = 0.8198

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7814	02	1.000	0.8443	03	2.000	0.8609	04	5.000	0.8320
05	20.000	0.8160	06	50.000	0.8372	07	100.000	0.8025	09	150.000	0.7985
08	200.000	0.8055									

1,1-Dichloroethene (1,1-DCE) Average RF RSD = 6.4 Average RF = 0.4008

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4381	02	1.000	0.4405	03	2.000	0.4053	04	5.000	0.4161
05	20.000	0.3787	06	50.000	0.3886	07	100.000	0.3702	09	150.000	0.3842
08	200.000	0.3857									

Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** Weighting

1,1-Dichloropropene Average RF RSD = 5.0 Average RF = 0.4176

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4645	02	1.000	0.3988	03	2.000	0.4128	04	5.000	0.4300
05	20.000	0.3943	06	50.000	0.4240	07	100.000	0.4068	09	150.000	0.4105
08	200.000	0.4169									

1,2,3-Trichlorobenzene Average RF RSD = 4.5 Average RF = 0.6687

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6714	02	1.000	0.7068	03	2.000	0.6533	04	5.000	0.6677
05	20.000	0.6255	06	50.000	0.7146	07	100.000	0.6544	09	150.000	0.6861
08	200.000	0.6382									

1,2,3-Trichloropropane Average RF RSD = 8.5 Average RF = 0.1469

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1771	02	1.000	0.1437	03	2.000	0.1473	04	5.000	0.1542
05	20.000	0.1418	06	50.000	0.1430	07	100.000	0.1364	09	150.000	0.1406
08	200.000	0.1385									

1,2,4-Trichlorobenzene Average RF RSD = 5.1 Average RF = 0.8548

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8692	02	1.000	0.8015	03	2.000	0.8232	04	5.000	0.9024
05	20.000	0.8444	06	50.000	0.9272	07	100.000	0.8725	09	150.000	0.8546
08	200.000	0.7984									

1,2,4-Trimethylbenzene Average RF RSD = 12.4 Average RF = 2.311

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.473	02	1.000	2.459	03	2.000	2.518	04	5.000	2.470
05	20.000	2.455	06	50.000	2.503	07	100.000	2.256	09	150.000	1.952
08	200.000	1.717									

1,2-Dibromo-3-chloropropane (DBCP) Average RF RSD = 12.4 Average RF = 0.09613

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.07190	03	2.000	0.08620	04	5.000	0.1030	05	20.000	0.09394
06	50.000	0.1058	07	100.000	0.09921	09	150.000	0.1071	08	200.000	0.1018

1,2-Dibromoethane Average RF RSD = 6.8 Average RF = 0.2468

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2401	02	1.000	0.2068	03	2.000	0.2588	04	5.000	0.2455
05	20.000	0.2521	06	50.000	0.2656	07	100.000	0.2489	09	150.000	0.2544
08	200.000	0.2486									

1,2-Dichloro-1,1,2-trifluoroethane (CFC Average RF RSD = 8.0 Average RF = 0.5282

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4898	02	1.000	0.5256	03	2.000	0.6036	04	5.000	0.5682
05	20.000	0.4890	06	50.000	0.4715	07	100.000	0.5168	09	150.000	0.5529
08	200.000	0.5362									

1,2-Dichlorobenzene Average RF RSD = 5.7 Average RF = 1.338

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.420	02	1.000	1.285	03	2.000	1.312	04	5.000	1.416
05	20.000	1.395	06	50.000	1.396	07	100.000	1.334	09	150.000	1.283
08	200.000	1.196									

Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

1,2-Dichloroethane Average RF RSD = 4.8 Average RF = 0.4114

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3820	02	1.000	0.4117	03	2.000	0.4391	04	5.000	0.4378
05	20.000	0.3983	06	50.000	0.4277	07	100.000	0.4045	09	150.000	0.4047
08	200.000	0.3968									

1,2-Dichloroethane-d4 Average RF RSD = 3.8 Average RF = 0.3194

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.3269	04	60.000	0.3399	05	70.000	0.3161	07	100.000	0.3130
09	125.000	0.3066	08	150.000	0.3140						

1,2-Dichloropropane Average RF RSD = 3.6 Average RF = 0.3157

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2891	02	1.000	0.3229	03	2.000	0.3137	04	5.000	0.3100
05	20.000	0.3153	06	50.000	0.3286	07	100.000	0.3221	09	150.000	0.3201
08	200.000	0.3198									

1,3,5-Trichlorobenzene Average RF RSD = 6.1 Average RF = 1.003

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.095	02	1.000	0.9937	03	2.000	1.013	04	5.000	1.055
05	20.000	0.8918	06	50.000	1.031	07	100.000	1.018	09	150.000	0.9960
08	200.000	0.9331									

1,3,5-Trimethylbenzene Average RF RSD = 11.5 Average RF = 2.240

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.257	02	1.000	2.336	03	2.000	2.443	04	5.000	2.434
05	20.000	2.394	06	50.000	2.441	07	100.000	2.225	09	150.000	1.924
08	200.000	1.710									

1,3-Dichlorobenzene Average RF RSD = 5.7 Average RF = 1.464

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.545	02	1.000	1.529	03	2.000	1.506	04	5.000	1.437
05	20.000	1.502	06	50.000	1.519	07	100.000	1.463	09	150.000	1.395
08	200.000	1.282									

1,3-Dichloropropane Average RF RSD = 2.7 Average RF = 0.4206

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4298	02	1.000	0.4041	03	2.000	0.4209	04	5.000	0.4236
05	20.000	0.4297	06	50.000	0.4368	07	100.000	0.4178	09	150.000	0.4187
08	200.000	0.4038									

1,4-Dichlorobenzene Average RF RSD = 8.2 Average RF = 1.508

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.652	02	1.000	1.695	03	2.000	1.512	04	5.000	1.511
05	20.000	1.526	06	50.000	1.534	07	100.000	1.463	09	150.000	1.384
08	200.000	1.292									

1,4-Dioxane Average RF RSD = 7.5 Average RF = 0.001806

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.001828	03	40.000	0.001625	04	100.000	0.001933	05	400.000	0.001854
06	1000.000	0.002025	07	2000.000	0.001647	09	3000.000	0.001800	08	4000.000	0.001737

1-Butanol Quadratic 1/X2 COD = 0.9965 $Y = 3.738E\text{-}6\ X^2 + 0.003958\ X + -0.001592$

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	50.000	0.002652	03	100.000	0.002502	04	250.000	0.003940	05	1000.000	0.003660
06	2500.000	0.004557	07	5000.000	0.004308	09	7500.000	0.004660	08	10000.000	0.004504

Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte	Curve Fit	Weighting									
1-Chloro-4-(trifluoromethyl)benzene	Average RF			RSD = 7.0		Average RF = 0.4896					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4576	02	1.000	0.5124	03	2.000	0.4888	04	5.000	0.5040
05	20.000	0.4114	06	50.000	0.5019	07	100.000	0.5059	09	150.000	0.5146
08	200.000	0.5103									
2,2-Dichloro-1,1,1-trifluoroethane (CFC	Average RF			RSD = 7.5		Average RF = 0.5856					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5934	02	1.000	0.5446	03	2.000	0.6633	04	5.000	0.6212
05	20.000	0.5473	06	50.000	0.5243	07	100.000	0.5697	09	150.000	0.6112
08	200.000	0.5950									
2,2-Dichloropropane	Average RF			RSD = 2.2		Average RF = 0.6999					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7049	02	1.000	0.6821	03	2.000	0.7144	04	5.000	0.6888
05	20.000	0.6879	06	50.000	0.7185	07	100.000	0.6809	09	150.000	0.7046
08	200.000	0.7168									
2,3,6-Trichlorotoluene	Average RF			RSD = 7.0		Average RF = 0.4667					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4380	02	1.000	0.4726	03	2.000	0.5108	04	5.000	0.4724
05	20.000	0.4012	06	50.000	0.4791	07	100.000	0.4523	09	150.000	0.4972
08	200.000	0.4764									
2,4,5-Trichlorotoluene	Average RF			RSD = 12.5		Average RF = 0.4298					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3150	02	1.000	0.4199	03	2.000	0.4274	04	5.000	0.4621
05	20.000	0.3792	06	50.000	0.4655	07	100.000	0.4478	09	150.000	0.4891
08	200.000	0.4623									
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut	Average RF			RSD = 13.3		Average RF = 1.088					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.500	1.085	02	3.000	1.139	03	6.000	1.236	04	15.000	1.234
05	60.000	1.051	06	150.000	1.207	07	300.000	1.102	09	450.000	0.9445
08	600.000	0.7944									
2,4-Dichlorobenzotrifluoride	Average RF			RSD = 8.7		Average RF = 0.6687					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6081	02	1.000	0.6316	03	2.000	0.6820	04	5.000	0.7006
05	20.000	0.5596	06	50.000	0.6737	07	100.000	0.7034	09	150.000	0.7322
08	200.000	0.7270									
2,5-Dichlorobenzotrifluoride	Average RF			RSD = 6.3		Average RF = 0.7829					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8366	02	1.000	0.7772	03	2.000	0.7948	04	5.000	0.7648
05	20.000	0.6672	06	50.000	0.7769	07	100.000	0.7918	09	150.000	0.8224
08	200.000	0.8146									
2-Butanone (MEK)	Average RF			RSD = 8.2		Average RF = 0.1109					
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.1079	05	20.000	0.09632	06	50.000	0.1238	07	100.000	0.1104
09	150.000	0.1161	08	200.000	0.1109						

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte	Curve Fit	Weighting

2-Chloro-1,3-butadiene — Average RF — RSD = 8.2 — Average RF = 0.6924

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6741	02	1.000	0.6581	03	2.000	0.7353	04	5.000	0.7346
05	20.000	0.5636	06	50.000	0.6909	07	100.000	0.7053	09	150.000	0.7326
08	200.000	0.7371									

2-Chlorobenzotrifluoride — Average RF — RSD = 7.1 — Average RF = 0.5311

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5054	02	1.000	0.5236	03	2.000	0.5691	04	5.000	0.5541
05	20.000	0.4439	06	50.000	0.5465	07	100.000	0.5496	09	150.000	0.5471
08	200.000	0.5410									

2-Chloroethyl Vinyl Ether — Average RF — RSD = 7.4 — Average RF = 0.1369

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1187	03	2.000	0.1315	04	5.000	0.1381	05	20.000	0.1273
06	50.000	0.1466	07	100.000	0.1443	09	150.000	0.1448	08	200.000	0.1438

2-Chlorotoluene — Average RF — RSD = 9.4 — Average RF = 1.985

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.114	02	1.000	2.009	03	2.000	2.147	04	5.000	2.092
05	20.000	2.091	06	50.000	2.088	07	100.000	1.973	09	150.000	1.754
08	200.000	1.599									

2-Hexanone — Average RF — RSD = 9.7 — Average RF = 0.1420

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	5.000	0.1281	05	20.000	0.1247	06	50.000	0.1611	07	100.000	0.1447
09	150.000	0.1508	08	200.000	0.1428						

2-Methyl-1-propanol — Average RF — RSD = 8.6 — Average RF = 0.007162

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	40.000	0.006312	04	100.000	0.006785	05	400.000	0.006713	06	1000.000	0.008146
07	2000.000	0.007250	09	3000.000	0.007640	08	4000.000	0.007288			

2-Methyl-2-propanol — Average RF — RSD = 6.4 — Average RF = 0.02588

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.02385	02	20.000	0.02724	03	40.000	0.02472	04	100.000	0.02602
05	400.000	0.02415	06	1000.000	0.02900	07	2000.000	0.02544	09	3000.000	0.02717
08	4000.000	0.02536									

2-Nitropropane — Average RF — RSD = 11.8 — Average RF = 0.05539

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.06801	03	4.000	0.04868	04	10.000	0.04851	05	40.000	0.05042
06	100.000	0.05942	07	200.000	0.05433	09	300.000	0.05788	08	400.000	0.05585

2-Propanol — Average RF — RSD = 7.7 — Average RF = 0.01561

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.01331	02	20.000	0.01662	03	40.000	0.01588	04	100.000	0.01627
05	400.000	0.01485	06	1000.000	0.01714	07	2000.000	0.01449	09	3000.000	0.01645
08	4000.000	0.01543									

3,4- and 2,3-Dichlorotoluene Coelution — Average RF — RSD = 16.1 — Average RF = 1.114

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.148	02	2.000	1.212	03	4.000	1.271	04	10.000	1.277
05	40.000	1.100	06	100.000	1.265	07	200.000	1.088	09	300.000	0.9052
08	400.000	0.7569									

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Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

3,4-Dichlorobenzotrifluoride Average RF RSD = 7.0 Average RF = 0.7517

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7023	02	1.000	0.7978	03	2.000	0.7592	04	5.000	0.7585
05	20.000	0.6376	06	50.000	0.7454	07	100.000	0.7773	09	150.000	0.7981
08	200.000	0.7891									

3-Chloro-1-propene Average RF RSD = 7.1 Average RF = 0.2443

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2264	02	1.000	0.2791	03	2.000	0.2595	04	5.000	0.2401
05	20.000	0.2424	06	50.000	0.2497	07	100.000	0.2475	09	150.000	0.2287
08	200.000	0.2256									

3-Chlorobenzotrifluoride Average RF RSD = 6.4 Average RF = 0.5313

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5259	02	1.000	0.5137	03	2.000	0.5310	04	5.000	0.5439
05	20.000	0.4499	06	50.000	0.5509	07	100.000	0.5570	09	150.000	0.5612
08	200.000	0.5480									

3-Chlorotoluene Average RF RSD = 9.8 Average RF = 1.983

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.974	02	1.000	2.145	03	2.000	2.110	04	5.000	2.216
05	20.000	1.819	06	50.000	2.099	07	100.000	2.050	09	150.000	1.811
08	200.000	1.625									

4-Bromofluorobenzene Average RF RSD = 4.5 Average RF = 0.4592

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.4874	04	60.000	0.4791	05	70.000	0.4540	07	100.000	0.4519
09	125.000	0.4297	08	150.000	0.4530						

4-Chlorotoluene Average RF RSD = 12.4 Average RF = 2.349

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.556	02	1.000	2.518	03	2.000	2.594	04	5.000	2.431
05	20.000	2.526	06	50.000	2.509	07	100.000	2.264	09	150.000	1.980
08	200.000	1.762									

4-Isopropyltoluene Average RF RSD = 11.9 Average RF = 2.238

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.255	02	1.000	2.252	03	2.000	2.415	04	5.000	2.432
05	20.000	2.424	06	50.000	2.504	07	100.000	2.231	09	150.000	1.947
08	200.000	1.686									

4-Methyl-2-pentanone Average RF RSD = 5.5 Average RF = 0.1918

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1915	03	2.000	0.1858	04	5.000	0.1971	05	20.000	0.1720
06	50.000	0.2080	07	100.000	0.1907	09	150.000	0.1998	08	200.000	0.1899

Acetone Average RF RSD = 10.3 Average RF = 0.08442

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.08167	04	5.000	0.09648	05	20.000	0.07453	06	50.000	0.09079
07	100.000	0.08663	09	150.000	0.08828	08	200.000	0.07256			

Acetonitrile Average RF RSD = 9.3 Average RF = 0.01100

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	10.000	0.01093	04	25.000	0.009718	05	100.000	0.009683	06	250.000	0.01249
07	500.000	0.01097	09	750.000	0.01147	08	1000.000	0.01171			

Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Acrolein Quadratic 1/X2 COD = 0.9956 Y = -3.655E-4 X² + 0.02739 X + 0.001575

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.04248	03	10.000	0.03531	04	25.000	0.03419	05	100.000	0.02303
06	250.000	0.02687	07	500.000	0.02450	09	750.000	0.02081	08	1000.000	0.02086

Acrylonitrile Average RF RSD = 10.1 Average RF = 0.09466

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.08147	02	5.000	0.07601	03	10.000	0.1005	04	25.000	0.09794
05	100.000	0.09591	06	250.000	0.1057	07	500.000	0.09726	09	750.000	0.1001
08	1000.000	0.09702									

Benzene Average RF RSD = 2.8 Average RF = 1.199

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.179	02	1.000	1.185	03	2.000	1.223	04	5.000	1.225
05	20.000	1.194	06	50.000	1.258	07	100.000	1.204	09	150.000	1.180
08	200.000	1.143									

Bromobenzene Average RF RSD = 2.5 Average RF = 0.7763

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7495	02	1.000	0.7714	03	2.000	0.8110	04	5.000	0.7813
05	20.000	0.8012	06	50.000	0.7696	07	100.000	0.7683	09	150.000	0.7612
08	200.000	0.7728									

Bromochloromethane Average RF RSD = 4.1 Average RF = 0.2783

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2921	02	1.000	0.2809	03	2.000	0.2738	04	5.000	0.2936
05	20.000	0.2758	06	50.000	0.2891	07	100.000	0.2708	09	150.000	0.2677
08	200.000	0.2611									

Bromodichloromethane Average RF RSD = 3.5 Average RF = 0.4144

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3890	02	1.000	0.4050	03	2.000	0.4026	04	5.000	0.4159
05	20.000	0.4064	06	50.000	0.4344	07	100.000	0.4250	09	150.000	0.4252
08	200.000	0.4260									

Bromoform Average RF RSD = 9.9 Average RF = 0.1843

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1635	02	1.000	0.1713	03	2.000	0.1552	04	5.000	0.1797
05	20.000	0.1843	06	50.000	0.2045	07	100.000	0.1954	09	150.000	0.2035
08	200.000	0.2010									

Bromomethane Average RF RSD = 12.4 Average RF = 0.3427

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4204	02	1.000	0.4038	03	2.000	0.3583	04	5.000	0.3136
05	20.000	0.3087	06	50.000	0.3128	07	100.000	0.3146	09	150.000	0.3176
08	200.000	0.3342									

Carbon Disulfide Average RF RSD = 12.2 Average RF = 1.301

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.568	02	1.000	1.389	03	2.000	1.405	04	5.000	1.398
05	20.000	1.068	06	50.000	1.287	07	100.000	1.279	09	150.000	1.212
08	200.000	1.104									

Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Carbon Tetrachloride Average RF RSD = 4.3 Average RF = 0.1381

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1452	02	1.000	0.1286	03	2.000	0.1442	04	5.000	0.1312
05	20.000	0.1334	06	50.000	0.1407	07	100.000	0.1373	09	150.000	0.1390
08	200.000	0.1432									

Chlorobenzene Average RF RSD = 7.6 Average RF = 0.9456

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9222	02	1.000	0.9746	03	2.000	1.003	04	5.000	0.9942
05	20.000	0.9949	06	50.000	1.008	07	100.000	0.9433	09	150.000	0.8753
08	200.000	0.7950									

Chloroethane Average RF RSD = 6.1 Average RF = 0.3111

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3563	02	1.000	0.3260	03	2.000	0.3090	04	5.000	0.3025
05	20.000	0.3035	06	50.000	0.3065	07	100.000	0.2993	09	150.000	0.2944
08	200.000	0.3026									

Chloroform Average RF RSD = 1.2 Average RF = 0.8153

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8257	02	1.000	0.8224	03	2.000	0.8178	04	5.000	0.8138
05	20.000	0.7935	06	50.000	0.8242	07	100.000	0.8099	09	150.000	0.8126
08	200.000	0.8175									

Chloromethane Average RF RSD = 3.3 Average RF = 0.6002

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6114	02	1.000	0.5771	03	2.000	0.6214	04	5.000	0.5806
05	20.000	0.6091	06	50.000	0.6352	07	100.000	0.5909	09	150.000	0.5866
08	200.000	0.5898									

Cyclohexane Average RF RSD = 7.4 Average RF = 0.3216

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3501	03	2.000	0.3458	04	5.000	0.3325	05	20.000	0.2932
06	50.000	0.2846	07	100.000	0.3097	09	150.000	0.3323	08	200.000	0.3249

Cyclohexanone Average RF RSD = 8.6 Average RF = 0.01163

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.01005	02	20.000	0.01333	03	40.000	0.01213	04	100.000	0.01204
05	400.000	0.01107	06	1000.000	0.01200	07	2000.000	0.01034	09	3000.000	0.01202
08	4000.000	0.01171									

Dibromochloromethane Average RF RSD = 5.9 Average RF = 0.3189

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2947	02	1.000	0.3023	03	2.000	0.2940	04	5.000	0.3150
05	20.000	0.3180	06	50.000	0.3385	07	100.000	0.3300	09	150.000	0.3413
08	200.000	0.3362									

Dibromofluoromethane Average RF RSD = 2.6 Average RF = 0.3145

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.3235	04	60.000	0.3242	05	70.000	0.3113	07	100.000	0.3093
09	125.000	0.3032	08	150.000	0.3157						

Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Dibromomethane Average RF RSD = 5.0 Average RF = 0.1732

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1923	02	1.000	0.1752	03	2.000	0.1676	04	5.000	0.1781
05	20.000	0.1677	06	50.000	0.1769	07	100.000	0.1667	09	150.000	0.1691
08	200.000	0.1654									

Dichlorodifluoromethane (CFC 12) Average RF RSD = 6.0 Average RF = 0.5497

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5910	02	1.000	0.5544	03	2.000	0.5006	04	5.000	0.5012
05	20.000	0.5444	06	50.000	0.5961	07	100.000	0.5513	09	150.000	0.5530
08	200.000	0.5559									

Dichlorofluoromethane (CFC 21) Average RF RSD = 7.8 Average RF = 0.8641

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8928	02	1.000	0.9449	03	2.000	0.9681	04	5.000	0.9069
05	20.000	0.8042	06	50.000	0.7795	07	100.000	0.8302	09	150.000	0.8511
08	200.000	0.7996									

Dichloromethane Average RF RSD = 6.0 Average RF = 0.4455

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5052	02	1.000	0.4716	03	2.000	0.4335	04	5.000	0.4361
05	20.000	0.4373	06	50.000	0.4457	07	100.000	0.4234	09	150.000	0.4239
08	200.000	0.4329									

Diethyl Ether Average RF RSD = 5.0 Average RF = 0.3255

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3413	02	1.000	0.3392	03	2.000	0.3231	04	5.000	0.3430
05	20.000	0.3361	06	50.000	0.3321	07	100.000	0.3047	09	150.000	0.3058
08	200.000	0.3045									

Diisopropyl Ether Average RF RSD = 4.1 Average RF = 1.508

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.502	02	1.000	1.541	03	2.000	1.579	04	5.000	1.550
05	20.000	1.488	06	50.000	1.566	07	100.000	1.508	09	150.000	1.455
08	200.000	1.383									

Ethyl Methacrylate Average RF RSD = 6.3 Average RF = 0.2857

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2869	02	1.000	0.2487	03	2.000	0.2726	04	5.000	0.2863
05	20.000	0.2808	06	50.000	0.3124	07	100.000	0.2921	09	150.000	0.3006
08	200.000	0.2906									

Ethyl tert-Butyl Ether Average RF RSD = 3.1 Average RF = 1.372

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.323	02	1.000	1.387	03	2.000	1.408	04	5.000	1.428
05	20.000	1.350	06	50.000	1.419	07	100.000	1.365	09	150.000	1.358
08	200.000	1.305									

Ethylbenzene Average RF RSD = 4.9 Average RF = 0.5021

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4398	02	1.000	0.5128	03	2.000	0.5262	04	5.000	0.5073
05	20.000	0.5072	06	50.000	0.5135	07	100.000	0.5074	09	150.000	0.5003
08	200.000	0.5039									

Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Hexachlorobutadiene Average RF RSD = 6.7 Average RF = 0.4106

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3984	02	1.000	0.4288	03	2.000	0.4167	04	5.000	0.3920
05	20.000	0.4733	06	50.000	0.3970	07	100.000	0.3825	09	150.000	0.4104
08	200.000	0.3959									

Iodomethane Average RF RSD = 14.0 Average RF = 0.5885

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.4605	04	5.000	0.5496	05	20.000	0.5065	06	50.000	0.6437
07	100.000	0.6635	09	150.000	0.6585	08	200.000	0.6376			

Isopropylbenzene (Cumene) Average RF RSD = 14.8 Average RF = 1.410

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.396	02	1.000	1.432	03	2.000	1.602	04	5.000	1.593
05	20.000	1.518	06	50.000	1.611	07	100.000	1.373	09	150.000	1.167
08	200.000	1.001									

Methacrylonitrile Average RF RSD = 8.8 Average RF = 0.1042

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.09165	03	2.000	0.09349	04	5.000	0.09986	05	20.000	0.1028
06	50.000	0.1190	07	100.000	0.1067	09	150.000	0.1120	08	200.000	0.1078

Methyl Acetate Average RF RSD = 4.5 Average RF = 0.1960

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1962	03	2.000	0.1876	04	5.000	0.2091	05	20.000	0.1849
06	50.000	0.2073	07	100.000	0.1905	09	150.000	0.1994	08	200.000	0.1930

Methyl Methacrylate Average RF RSD = 8.1 Average RF = 0.1283

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1098	03	2.000	0.1187	04	5.000	0.1274	05	20.000	0.1255
06	50.000	0.1410	07	100.000	0.1339	09	150.000	0.1388	08	200.000	0.1312

Methyl tert-Butyl Ether Average RF RSD = 4.1 Average RF = 1.057

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.034	02	1.000	1.073	03	2.000	1.069	04	5.000	1.126
05	20.000	1.061	06	50.000	1.110	07	100.000	1.025	09	150.000	1.033
08	200.000	0.9839									

Methylcyclohexane Average RF RSD = 9.5 Average RF = 0.3971

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4675	02	1.000	0.3954	03	2.000	0.4087	04	5.000	0.4091
05	20.000	0.3462	06	50.000	0.3412	07	100.000	0.3860	09	150.000	0.4136
08	200.000	0.4061									

Naphthalene Average RF RSD = 9.2 Average RF = 1.405

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.303	02	1.000	1.445	03	2.000	1.391	04	5.000	1.483
05	20.000	1.443	06	50.000	1.627	07	100.000	1.448	09	150.000	1.344
08	200.000	1.160									

Propionitrile Average RF RSD = 9.8 Average RF = 0.03164

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.02655	03	10.000	0.02926	04	25.000	0.02970	05	100.000	0.03065
06	250.000	0.03599	07	500.000	0.03355	09	750.000	0.03401	08	1000.000	0.03342

Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** Average RF **Weighting** Weighting

Styrene Average RF RSD = 8.9 Average RF = 0.9818

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9261	02	1.000	0.9762	03	2.000	0.9632	04	5.000	1.034
05	20.000	1.071	06	50.000	1.106	07	100.000	1.022	09	150.000	0.9157
08	200.000	0.8218									

Tetrachloroethene (PCE) Average RF RSD = 2.8 Average RF = 0.3005

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3043	02	1.000	0.2922	03	2.000	0.3177	04	5.000	0.3006
05	20.000	0.2906	06	50.000	0.3065	07	100.000	0.2941	09	150.000	0.2960
08	200.000	0.3029									

Tetrahydrofuran (THF) Average RF RSD = 4.0 Average RF = 0.07106

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.07045	04	5.000	0.06687	05	20.000	0.06963	06	50.000	0.07512
07	100.000	0.06949	09	150.000	0.07415	08	200.000	0.07172			

Toluene Average RF RSD = 11.5 Average RF = 1.274

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.374	02	1.000	1.312	03	2.000	1.395	04	5.000	1.346
05	20.000	1.353	06	50.000	1.374	07	100.000	1.252	09	150.000	1.085
08	200.000	0.9775									

Toluene-d8 Average RF RSD = 6.9 Average RF = 1.100

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	1.195	04	60.000	1.168	05	70.000	1.124	07	100.000	1.087
09	125.000	1.019	08	150.000	1.010						

Trichloroethene (TCE) Average RF RSD = 4.9 Average RF = 0.3282

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2896	02	1.000	0.3238	03	2.000	0.3389	04	5.000	0.3266
05	20.000	0.3278	06	50.000	0.3475	07	100.000	0.3316	09	150.000	0.3302
08	200.000	0.3381									

Trichlorofluoromethane (CFC 11) Average RF RSD = 5.6 Average RF = 0.7297

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6580	02	1.000	0.7408	03	2.000	0.7880	04	5.000	0.7463
05	20.000	0.7255	06	50.000	0.7838	07	100.000	0.7197	09	150.000	0.6987
08	200.000	0.7061									

Vinyl Acetate Average RF RSD = 13.0 Average RF = 0.05511

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.04419	03	2.000	0.04442	04	5.000	0.05534	05	20.000	0.05429
06	50.000	0.05986	07	100.000	0.05988	09	150.000	0.06159	08	200.000	0.06132

Vinyl Chloride Average RF RSD = 5.1 Average RF = 0.5919

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5752	02	1.000	0.5664	03	2.000	0.6503	04	5.000	0.5898
05	20.000	0.5952	06	50.000	0.6306	07	100.000	0.5869	09	150.000	0.5748
08	200.000	0.5582									

cis-1,2-Dichloroethene Average RF RSD = 5.3 Average RF = 0.4846

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5128	02	1.000	0.4316	03	2.000	0.5135	04	5.000	0.5005
05	20.000	0.4727	06	50.000	0.4972	07	100.000	0.4731	09	150.000	0.4747
08	200.000	0.4853									

Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte **Curve Fit** **Weighting**

cis-1,3-Dichloropropene Average RF RSD = 2.9 Average RF = 0.4923

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4863	02	1.000	0.4896	03	2.000	0.4808	04	5.000	0.4711
05	20.000	0.4872	06	50.000	0.5212	07	100.000	0.5038	09	150.000	0.4984
08	200.000	0.4925									

m,p-Xylenes Average RF RSD = 10.5 Average RF = 0.5871

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5454	02	2.000	0.6208	03	4.000	0.6298	04	10.000	0.6348
05	40.000	0.6255	06	100.000	0.6474	07	200.000	0.5892	09	300.000	0.5239
08	400.000	0.4675									

n-Butyl Acetate Average RF RSD = 5.9 Average RF = 0.3799

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.3730	03	2.000	0.3342	04	5.000	0.3850	05	20.000	0.3712
06	50.000	0.4087	07	100.000	0.3888	09	150.000	0.3987	08	200.000	0.3794

n-Butylbenzene Average RF RSD = 11.4 Average RF = 2.075

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.243	02	1.000	1.969	03	2.000	2.186	04	5.000	2.193
05	20.000	2.275	06	50.000	2.298	07	100.000	2.092	09	150.000	1.819
08	200.000	1.598									

n-Heptane Average RF RSD = 5.2 Average RF = 0.3570

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3600	02	1.000	0.3715	03	2.000	0.3647	04	5.000	0.3198
05	20.000	0.3865	06	50.000	0.3571	07	100.000	0.3437	09	150.000	0.3565
08	200.000	0.3532									

n-Propylbenzene Average RF RSD = 17.9 Average RF = 3.032

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	3.286	02	1.000	3.249	03	2.000	3.503	04	5.000	3.380
05	20.000	3.358	06	50.000	3.402	07	100.000	2.813	09	150.000	2.304
08	200.000	1.997									

o-Xylene Average RF RSD = 2.8 Average RF = 0.6136

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6358	02	1.000	0.6077	03	2.000	0.6016	04	5.000	0.6181
05	20.000	0.6278	06	50.000	0.6359	07	100.000	0.6130	09	150.000	0.5942
08	200.000	0.5883									

sec-Butylbenzene Average RF RSD = 13.7 Average RF = 2.568

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.595	02	1.000	2.607	03	2.000	2.834	04	5.000	2.812
05	20.000	2.821	06	50.000	2.908	07	100.000	2.533	09	150.000	2.148
08	200.000	1.859									

tert-Amyl Methyl Ether Average RF RSD = 4.3 Average RF = 1.096

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9968	02	1.000	1.112	03	2.000	1.087	04	5.000	1.134
05	20.000	1.069	06	50.000	1.168	07	100.000	1.096	09	150.000	1.111
08	200.000	1.092									

Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte	Curve Fit	Weighting

tert-Butylbenzene — Average RF — RSD = 7.4 — Average RF = 1.896

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.933	02	1.000	1.884	03	2.000	2.036	04	5.000	1.944
05	20.000	1.934	06	50.000	2.043	07	100.000	1.938	09	150.000	1.760
08	200.000	1.596									

trans-1,2-Dichloroethene — Average RF — RSD = 6.4 — Average RF = 0.4378

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4850	02	1.000	0.3883	03	2.000	0.4671	04	5.000	0.4482
05	20.000	0.4198	06	50.000	0.4435	07	100.000	0.4231	09	150.000	0.4261
08	200.000	0.4393									

trans-1,3-Dichloropropene — Average RF — RSD = 6.8 — Average RF = 0.4061

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3605	02	1.000	0.3749	03	2.000	0.3924	04	5.000	0.3913
05	20.000	0.4155	06	50.000	0.4438	07	100.000	0.4264	09	150.000	0.4290
08	200.000	0.4209									

trans-1,4-Dichloro-2-butene — Average RF — RSD = 10.4 — Average RF = 0.08236

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.06861	02	1.000	0.07412	03	2.000	0.07648	04	5.000	0.07921
05	20.000	0.08222	06	50.000	0.09383	07	100.000	0.08616	09	150.000	0.09241
08	200.000	0.08823									

Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte

1,1,1,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.7	02	1.000	0.90	-9.8	03	2.000	2.01	0.7
04	5.000	4.82	-3.5	05	20.000	20.26	1.3	06	50.000	51.84	3.7
07	100.000	103.54	3.5	09	150.000	152.50	1.7	08	200.000	206.08	3.0

1,1,1-Trichloroethane (TCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.5	02	1.000	1.03	2.9	03	2.000	2.07	3.3
04	5.000	5.03	0.5	05	20.000	19.09	-4.5	06	50.000	50.83	1.7
07	100.000	98.13	-1.9	09	150.000	149.79	-0.1	08	200.000	205.40	2.7

1,1,2,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.5	02	1.000	1.09	9.2	03	2.000	1.99	-0.3
04	5.000	4.96	-0.9	05	20.000	20.18	0.9	06	50.000	50.40	0.8
07	100.000	95.95	-4.0	09	150.000	148.12	-1.3	08	200.000	194.18	-2.9

1,1,2-Trichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.1	02	1.000	0.95	-4.7	03	2.000	2.13	6.3
04	5.000	5.08	1.6	05	20.000	19.46	-2.7	06	50.000	52.55	5.1
07	100.000	98.79	-1.2	09	150.000	147.69	-1.5	08	200.000	194.71	-2.6

1,1,2-Trichlorotrifluoroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-1.0	02	1.000	1.05	5.0	03	2.000	2.15	7.7
04	5.000	5.11	2.2	05	20.000	18.92	-5.4	06	50.000	50.42	0.8
07	100.000	94.53	-5.5	09	150.000	147.25	-1.8	08	200.000	195.94	-2.0

1,1-Dichloroethane (1,1-DCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.7	02	1.000	1.03	3.0	03	2.000	2.10	5.0
04	5.000	5.07	1.5	05	20.000	19.91	-0.5	06	50.000	51.06	2.1
07	100.000	97.89	-2.1	09	150.000	146.10	-2.6	08	200.000	196.50	-1.7

1,1-Dichloroethene (1,1-DCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.3	02	1.000	1.10	9.9	03	2.000	2.02	1.1
04	5.000	5.19	3.8	05	20.000	18.90	-5.5	06	50.000	48.47	-3.1
07	100.000	92.35	-7.6	09	150.000	143.76	-4.2	08	200.000	192.48	-3.8

1,1-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	11.2	02	1.000	0.95	-4.5	03	2.000	1.98	-1.2
04	5.000	5.15	3.0	05	20.000	18.88	-5.6	06	50.000	50.77	1.5
07	100.000	97.40	-2.6	09	150.000	147.44	-1.7	08	200.000	199.64	-0.2

Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte

1,2,3-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.4	02	1.000	1.06	5.7	03	2.000	1.95	-2.3
04	5.000	4.99	-0.1	05	20.000	18.71	-6.5	06	50.000	53.44	6.9
07	100.000	97.87	-2.1	09	150.000	153.91	2.6	08	200.000	190.89	-4.6

1,2,3-Trichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.60	20.5	02	1.000	0.98	-2.2	03	2.000	2.00	0.2
04	5.000	5.25	4.9	05	20.000	19.30	-3.5	06	50.000	48.66	-2.7
07	100.000	92.81	-7.2	09	150.000	143.57	-4.3	08	200.000	188.47	-5.8

1,2,4-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.7	02	1.000	0.94	-6.2	03	2.000	1.93	-3.7
04	5.000	5.28	5.6	05	20.000	19.76	-1.2	06	50.000	54.23	8.5
07	100.000	102.07	2.1	09	150.000	149.96	0.0	08	200.000	186.80	-6.6

1,2,4-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.0	02	1.000	1.06	6.4	03	2.000	2.18	8.9
04	5.000	5.34	6.8	05	20.000	21.24	6.2	06	50.000	54.15	8.3
07	100.000	97.59	-2.4	09	150.000	126.66	-15.6	08	200.000	148.54	-25.7

1,2-Dibromo-3-chloropropane (DBCP)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.75	-25.2	03	2.000	1.79	-10.3	04	5.000	5.36	7.1
05	20.000	19.54	-2.3	06	50.000	55.05	10.1	07	100.000	103.21	3.2
09	150.000	167.19	11.5	08	200.000	211.84	5.9				

1,2-Dibromoethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.7	02	1.000	0.84	-16.2	03	2.000	2.10	4.9
04	5.000	4.97	-0.5	05	20.000	20.44	2.2	06	50.000	53.82	7.6
07	100.000	100.86	0.9	09	150.000	154.66	3.1	08	200.000	201.50	0.8

1,2-Dichloro-1,1,2-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.3	02	1.000	1.00	-0.5	03	2.000	2.29	14.3
04	5.000	5.38	7.6	05	20.000	18.52	-7.4	06	50.000	44.63	-10.7
07	100.000	97.85	-2.1	09	150.000	157.03	4.7	08	200.000	203.05	1.5

1,2-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.2	02	1.000	0.96	-3.9	03	2.000	1.96	-1.9
04	5.000	5.29	5.9	05	20.000	20.86	4.3	06	50.000	52.19	4.4
07	100.000	99.70	-0.3	09	150.000	143.91	-4.1	08	200.000	178.84	-10.6

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Analyte

1,2-Dichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.1	02	1.000	1.00	0.1	03	2.000	2.13	6.7
04	5.000	5.32	6.4	05	20.000	19.37	-3.2	06	50.000	51.98	4.0
07	100.000	98.32	-1.7	09	150.000	147.56	-1.6	08	200.000	192.89	-3.6

1,2-Dichloroethane-d4

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	51.17	2.3	04	60.000	63.84	6.4	05	70.000	69.27	-1.0
07	100.000	98.00	-2.0	09	125.000	119.98	-4.0	08	150.000	147.46	-1.7

1,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-8.4	02	1.000	1.02	2.3	03	2.000	1.99	-0.6
04	5.000	4.91	-1.8	05	20.000	19.97	-0.1	06	50.000	52.04	4.1
07	100.000	102.00	2.0	09	150.000	152.10	1.4	08	200.000	202.57	1.3

1,3,5-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.2	02	1.000	0.99	-0.9	03	2.000	2.02	1.0
04	5.000	5.26	5.1	05	20.000	17.78	-11.1	06	50.000	51.38	2.8
07	100.000	101.51	1.5	09	150.000	148.96	-0.7	08	200.000	186.06	-7.0

1,3,5-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.7	02	1.000	1.04	4.3	03	2.000	2.18	9.0
04	5.000	5.43	8.6	05	20.000	21.37	6.9	06	50.000	54.47	8.9
07	100.000	99.29	-0.7	09	150.000	128.83	-14.1	08	200.000	152.62	-23.7

1,3-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.5	02	1.000	1.04	4.4	03	2.000	2.06	2.9
04	5.000	4.91	-1.8	05	20.000	20.51	2.6	06	50.000	51.87	3.7
07	100.000	99.91	-0.1	09	150.000	142.88	-4.7	08	200.000	175.08	-12.5

1,3-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.2	02	1.000	0.96	-3.9	03	2.000	2.00	0.1
04	5.000	5.04	0.7	05	20.000	20.43	2.2	06	50.000	51.93	3.9
07	100.000	99.35	-0.7	09	150.000	149.35	-0.4	08	200.000	192.02	-4.0

1,4-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.6	02	1.000	1.12	12.4	03	2.000	2.01	0.3
04	5.000	5.01	0.2	05	20.000	20.25	1.2	06	50.000	50.87	1.7
07	100.000	97.06	-2.9	09	150.000	137.69	-8.2	08	200.000	171.33	-14.3

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Analyte

1,4-Dioxane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	20.25	1.2	03	40.000	35.99	-10.0	04	100.000	107.01	7.0
05	400.000	410.59	2.6	06	1000.000	1,120.93	12.1	07	2000.000	1,824.03	-8.8
09	3000.000	2,989.91	-0.3	08	4000.000	3,846.77	-3.8				

1-Butanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	50.000	53.57	7.1	03	100.000	83.20	-16.8	04	250.000	267.65	7.1
05	1000.000	928.57	-7.1	06	2500.000	2,755.50	10.2	07	5000.000	4,991.57	-0.2
09	7500.000	7,724.12	3.0	08	10000.000	9,642.66	-3.6				

1-Chloro-4-(trifluoromethyl)benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.5	02	1.000	1.05	4.6	03	2.000	2.00	-0.2
04	5.000	5.15	2.9	05	20.000	16.80	-16.0	06	50.000	51.25	2.5
07	100.000	103.31	3.3	09	150.000	157.65	5.1	08	200.000	208.44	4.2

2,2-Dichloro-1,1,1-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.3	02	1.000	0.93	-7.0	03	2.000	2.27	13.3
04	5.000	5.30	6.1	05	20.000	18.69	-6.5	06	50.000	44.77	-10.5
07	100.000	97.30	-2.7	09	150.000	156.56	4.4	08	200.000	203.23	1.6

2,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.7	02	1.000	0.97	-2.5	03	2.000	2.04	2.1
04	5.000	4.92	-1.6	05	20.000	19.66	-1.7	06	50.000	51.33	2.7
07	100.000	97.29	-2.7	09	150.000	151.01	0.7	08	200.000	204.84	2.4

2,3,6-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.1	02	1.000	1.01	1.3	03	2.000	2.19	9.5
04	5.000	5.06	1.2	05	20.000	17.19	-14.0	06	50.000	51.33	2.7
07	100.000	96.92	-3.1	09	150.000	159.81	6.5	08	200.000	204.19	2.1

2,4,5-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.37	-26.7	02	1.000	0.98	-2.3	03	2.000	1.99	-0.6
04	5.000	5.38	7.5	05	20.000	17.65	-11.8	06	50.000	54.15	8.3
07	100.000	104.19	4.2	09	150.000	170.68	13.8	08	200.000	215.13	7.6

2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.500	1.50	-0.3	02	3.000	3.14	4.7	03	6.000	6.82	13.6
04	15.000	17.01	13.4	05	60.000	57.95	-3.4	06	150.000	166.37	10.9
07	300.000	303.69	1.2	09	450.000	390.61	-13.2	08	600.000	438.05	-27.0

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Analyte

2,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.1	02	1.000	0.94	-5.5	03	2.000	2.04	2.0
04	5.000	5.24	4.8	05	20.000	16.74	-16.3	06	50.000	50.38	0.8
07	100.000	105.19	5.2	09	150.000	164.24	9.5	08	200.000	217.43	8.7

2,5-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.9	02	1.000	0.99	-0.7	03	2.000	2.03	1.5
04	5.000	4.88	-2.3	05	20.000	17.04	-14.8	06	50.000	49.62	-0.8
07	100.000	101.13	1.1	09	150.000	157.57	5.0	08	200.000	208.09	4.0

2-Butanone (MEK)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	5.000	4.86	-2.7	05	20.000	17.37	-13.1	06	50.000	55.83	11.7
07	100.000	99.53	-0.5	09	150.000	156.99	4.7	08	200.000	200.02	0.0

2-Chloro-1,3-butadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.6	02	1.000	0.95	-5.0	03	2.000	2.12	6.2
04	5.000	5.30	6.1	05	20.000	16.28	-18.6	06	50.000	49.89	-0.2
07	100.000	101.86	1.9	09	150.000	158.71	5.8	08	200.000	212.91	6.5

2-Chlorobeozotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.9	02	1.000	0.99	-1.4	03	2.000	2.14	7.1
04	5.000	5.22	4.3	05	20.000	16.71	-16.4	06	50.000	51.44	2.9
07	100.000	103.47	3.5	09	150.000	154.50	3.0	08	200.000	203.72	1.9

2-Chloroethyl Vinyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.87	-13.3	03	2.000	1.92	-3.9	04	5.000	5.04	0.9
05	20.000	18.60	-7.0	06	50.000	53.55	7.1	07	100.000	105.44	5.4
09	150.000	158.65	5.8	08	200.000	210.04	5.0				

2-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.5	02	1.000	1.01	1.2	03	2.000	2.16	8.2
04	5.000	5.27	5.4	05	20.000	21.07	5.3	06	50.000	52.59	5.2
07	100.000	99.39	-0.6	09	150.000	132.55	-11.6	08	200.000	161.09	-19.5

2-Hexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
04	5.000	4.51	-9.8	05	20.000	17.55	-12.2	06	50.000	56.71	13.4
07	100.000	101.89	1.9	09	150.000	159.22	6.1	08	200.000	201.14	0.6

Initial Calibration - Detailed Report

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Analyte

2-Methyl-1-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	40.000	35.25	-11.9	04	100.000	94.74	-5.3	05	400.000	374.93	-6.3
06	1000.000	1,137.43	13.7	07	2000.000	2,024.67	1.2	09	3000.000	3,200.29	6.7
08	4000.000	4,070.09	1.8								

2-Methyl-2-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	9.21	-7.9	02	20.000	21.05	5.2	03	40.000	38.20	-4.5
04	100.000	100.54	0.5	05	400.000	373.18	-6.7	06	1000.000	1,120.49	12.0
07	2000.000	1,965.75	-1.7	09	3000.000	3,149.23	5.0	08	4000.000	3,918.98	-2.0

2-Nitropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	2.000	2.46	22.8	03	4.000	3.52	-12.1	04	10.000	8.76	-12.4
05	40.000	36.41	-9.0	06	100.000	107.28	7.3	07	200.000	196.18	-1.9
09	300.000	313.51	4.5	08	400.000	403.34	0.8				

2-Propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	8.53	-14.7	02	20.000	21.30	6.5	03	40.000	40.71	1.8
04	100.000	104.28	4.3	05	400.000	380.71	-4.8	06	1000.000	1,098.10	9.8
07	2000.000	1,857.02	-7.1	09	3000.000	3,162.03	5.4	08	4000.000	3,955.94	-1.1

3,4- and 2,3-Dichlorotoluene Coelution

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	1.03	3.1	02	2.000	2.18	8.8	03	4.000	4.57	14.1
04	10.000	11.47	14.7	05	40.000	39.49	-1.3	06	100.000	113.55	13.5
07	200.000	195.42	-2.3	09	300.000	243.84	-18.7	08	400.000	271.85	-32.0

3,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.6	02	1.000	1.06	6.1	03	2.000	2.02	1.0
04	5.000	5.05	0.9	05	20.000	16.96	-15.2	06	50.000	49.58	-0.8
07	100.000	103.41	3.4	09	150.000	159.25	6.2	08	200.000	209.94	5.0

3-Chloro-1-propene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.3	02	1.000	1.14	14.2	03	2.000	2.12	6.2
04	5.000	4.91	-1.7	05	20.000	19.84	-0.8	06	50.000	51.10	2.2
07	100.000	101.29	1.3	09	150.000	140.43	-6.4	08	200.000	184.66	-7.7

3-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.0	02	1.000	0.97	-3.3	03	2.000	2.00	-0.1
04	5.000	5.12	2.4	05	20.000	16.94	-15.3	06	50.000	51.85	3.7
07	100.000	104.84	4.8	09	150.000	158.45	5.6	08	200.000	206.30	3.2

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Analyte

3-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.5	02	1.000	1.08	8.2	03	2.000	2.13	6.4
04	5.000	5.59	11.7	05	20.000	18.35	-8.3	06	50.000	52.92	5.8
07	100.000	103.35	3.4	09	150.000	136.96	-8.7	08	200.000	163.84	-18.1

4-Bromofluorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	53.07	6.1	04	60.000	62.61	4.3	05	70.000	69.22	-1.1
07	100.000	98.40	-1.6	09	125.000	116.98	-6.4	08	150.000	147.98	-1.3

4-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.8	02	1.000	1.07	7.2	03	2.000	2.21	10.4
04	5.000	5.18	3.5	05	20.000	21.50	7.5	06	50.000	53.41	6.8
07	100.000	96.37	-3.6	09	150.000	126.45	-15.7	08	200.000	150.01	-25.0

4-Isopropyltoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.7	02	1.000	1.01	0.6	03	2.000	2.16	7.9
04	5.000	5.43	8.6	05	20.000	21.66	8.3	06	50.000	55.94	11.9
07	100.000	99.67	-0.3	09	150.000	130.50	-13.0	08	200.000	150.62	-24.7

4-Methyl-2-pentanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.00	-0.2	03	2.000	1.94	-3.2	04	5.000	5.14	2.7
05	20.000	17.93	-10.4	06	50.000	54.21	8.4	07	100.000	99.43	-0.6
09	150.000	156.20	4.1	08	200.000	197.92	-1.0				

Acetone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.93	-3.3	04	5.000	5.71	14.3	05	20.000	17.66	-11.7
06	50.000	53.78	7.6	07	100.000	102.62	2.6	09	150.000	156.85	4.6
08	200.000	171.91	-14.0								

Acetonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	10.000	9.94	-0.6	04	25.000	22.09	-11.6	05	100.000	88.06	-11.9
06	250.000	283.97	13.6	07	500.000	498.96	-0.2	09	750.000	782.36	4.3
08	1000.000	1,064.70	6.5								

Acrolein

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	5.000	4.89	-2.3	03	10.000	10.04	0.4	04	25.000	28.55	14.2
05	100.000	83.03	-17.0	06	250.000	260.52	4.2	07	500.000	515.21	3.0
09	750.000	696.27	-7.2	08	1000.000	1,056.58	5.7				

Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte

Acrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.15	-13.9	02	5.000	4.01	-19.7	03	10.000	10.61	6.1
04	25.000	25.87	3.5	05	100.000	101.32	1.3	06	250.000	279.26	11.7
07	500.000	513.73	2.7	09	750.000	793.44	5.8	08	1000.000	1,024.93	2.5

Benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.6	02	1.000	0.99	-1.2	03	2.000	2.04	2.0
04	5.000	5.11	2.2	05	20.000	19.92	-0.4	06	50.000	52.45	4.9
07	100.000	100.44	0.4	09	150.000	147.66	-1.6	08	200.000	190.63	-4.7

Bromobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.4	02	1.000	0.99	-0.6	03	2.000	2.09	4.5
04	5.000	5.03	0.7	05	20.000	20.64	3.2	06	50.000	49.57	-0.9
07	100.000	98.97	-1.0	09	150.000	147.10	-1.9	08	200.000	199.11	-0.4

Bromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.9	02	1.000	1.01	0.9	03	2.000	1.97	-1.6
04	5.000	5.28	5.5	05	20.000	19.82	-0.9	06	50.000	51.94	3.9
07	100.000	97.29	-2.7	09	150.000	144.28	-3.8	08	200.000	187.65	-6.2

Bromodichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.1	02	1.000	0.98	-2.3	03	2.000	1.94	-2.8
04	5.000	5.02	0.4	05	20.000	19.62	-1.9	06	50.000	52.41	4.8
07	100.000	102.56	2.6	09	150.000	153.90	2.6	08	200.000	205.59	2.8

Bromoform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-11.3	02	1.000	0.93	-7.1	03	2.000	1.68	-15.8
04	5.000	4.88	-2.5	05	20.000	20.00	0.0	06	50.000	55.49	11.0
07	100.000	106.07	6.1	09	150.000	165.70	10.5	08	200.000	218.13	9.1

Bromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.61	22.7	02	1.000	1.18	17.8	03	2.000	2.09	4.6
04	5.000	4.58	-8.5	05	20.000	18.02	-9.9	06	50.000	45.64	-8.7
07	100.000	91.82	-8.2	09	150.000	139.04	-7.3	08	200.000	195.07	-2.5

Carbon Disulfide

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.60	20.5	02	1.000	1.07	6.7	03	2.000	2.16	8.0
04	5.000	5.37	7.5	05	20.000	16.42	-17.9	06	50.000	49.47	-1.1
07	100.000	98.30	-1.7	09	150.000	139.69	-6.9	08	200.000	169.63	-15.2

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte

Carbon Tetrachloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.1	02	1.000	0.93	-6.9	03	2.000	2.09	4.4
04	5.000	4.75	-5.0	05	20.000	19.32	-3.4	06	50.000	50.94	1.9
07	100.000	99.43	-0.6	09	150.000	151.02	0.7	08	200.000	207.46	3.7

Chlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.5	02	1.000	1.03	3.1	03	2.000	2.12	6.1
04	5.000	5.26	5.1	05	20.000	21.04	5.2	06	50.000	53.29	6.6
07	100.000	99.75	-0.2	09	150.000	138.84	-7.4	08	200.000	168.14	-15.9

Chloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	14.5	02	1.000	1.05	4.8	03	2.000	1.99	-0.7
04	5.000	4.86	-2.8	05	20.000	19.51	-2.4	06	50.000	49.25	-1.5
07	100.000	96.21	-3.8	09	150.000	141.95	-5.4	08	200.000	194.52	-2.7

Chloroform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.3	02	1.000	1.01	0.9	03	2.000	2.01	0.3
04	5.000	4.99	-0.2	05	20.000	19.47	-2.7	06	50.000	50.55	1.1
07	100.000	99.34	-0.7	09	150.000	149.51	-0.3	08	200.000	200.54	0.3

Chloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.9	02	1.000	0.96	-3.9	03	2.000	2.07	3.5
04	5.000	4.84	-3.3	05	20.000	20.30	1.5	06	50.000	52.91	5.8
07	100.000	98.44	-1.6	09	150.000	146.58	-2.3	08	200.000	196.52	-1.7

Cyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.09	8.9	03	2.000	2.15	7.5	04	5.000	5.17	3.4
05	20.000	18.23	-8.8	06	50.000	44.24	-11.5	07	100.000	96.30	-3.7
09	150.000	154.97	3.3	08	200.000	202.00	1.0				

Cyclohexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	8.64	-13.6	02	20.000	22.92	14.6	03	40.000	41.70	4.3
04	100.000	103.51	3.5	05	400.000	380.78	-4.8	06	1000.000	1,031.42	3.1
07	2000.000	1,778.32	-11.1	09	3000.000	3,100.33	3.3	08	4000.000	4,027.43	0.7

Dibromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.6	02	1.000	0.95	-5.2	03	2.000	1.84	-7.8
04	5.000	4.94	-1.2	05	20.000	19.95	-0.3	06	50.000	53.08	6.2
07	100.000	103.48	3.5	09	150.000	160.54	7.0	08	200.000	210.85	5.4

Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte

Dibromofluoromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	51.42	2.8	04	60.000	61.84	3.1	05	70.000	69.28	-1.0
07	100.000	98.34	-1.7	09	125.000	120.49	-3.6	08	150.000	150.56	0.4

Dibromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	11.0	02	1.000	1.01	1.2	03	2.000	1.94	-3.2
04	5.000	5.14	2.8	05	20.000	19.36	-3.2	06	50.000	51.06	2.1
07	100.000	96.24	-3.8	09	150.000	146.39	-2.4	08	200.000	190.99	-4.5

Dichlorodifluoromethane (CFC 12)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.5	02	1.000	1.01	0.8	03	2.000	1.82	-8.9
04	5.000	4.56	-8.8	05	20.000	19.81	-1.0	06	50.000	54.21	8.4
07	100.000	100.28	0.3	09	150.000	150.88	0.6	08	200.000	202.24	1.1

Dichlorofluoromethane (CFC 21)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.3	02	1.000	1.09	9.3	03	2.000	2.24	12.0
04	5.000	5.25	4.9	05	20.000	18.61	-6.9	06	50.000	45.10	-9.8
07	100.000	96.07	-3.9	09	150.000	147.73	-1.5	08	200.000	185.07	-7.5

Dichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	13.4	02	1.000	1.06	5.9	03	2.000	1.95	-2.7
04	5.000	4.89	-2.1	05	20.000	19.63	-1.8	06	50.000	50.03	0.1
07	100.000	95.05	-5.0	09	150.000	142.71	-4.9	08	200.000	194.35	-2.8

Diethyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.9	02	1.000	1.04	4.2	03	2.000	1.98	-0.8
04	5.000	5.27	5.4	05	20.000	20.65	3.2	06	50.000	51.01	2.0
07	100.000	93.61	-6.4	09	150.000	140.91	-6.1	08	200.000	187.10	-6.5

Diisopropyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.4	02	1.000	1.02	2.2	03	2.000	2.09	4.7
04	5.000	5.14	2.8	05	20.000	19.73	-1.4	06	50.000	51.92	3.8
07	100.000	100.02	0.0	09	150.000	144.68	-3.5	08	200.000	183.43	-8.3

Ethyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.4	02	1.000	0.87	-13.0	03	2.000	1.91	-4.6
04	5.000	5.01	0.2	05	20.000	19.66	-1.7	06	50.000	54.68	9.4
07	100.000	102.25	2.3	09	150.000	157.84	5.2	08	200.000	203.47	1.7

Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte

Ethyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.5	02	1.000	1.01	1.2	03	2.000	2.05	2.6
04	5.000	5.20	4.1	05	20.000	19.69	-1.5	06	50.000	51.72	3.4
07	100.000	99.51	-0.5	09	150.000	148.57	-1.0	08	200.000	190.36	-4.8

Ethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-12.4	02	1.000	1.02	2.1	03	2.000	2.10	4.8
04	5.000	5.05	1.1	05	20.000	20.21	1.0	06	50.000	51.14	2.3
07	100.000	101.07	1.1	09	150.000	149.48	-0.3	08	200.000	200.73	0.4

Hexachlorobutadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-3.0	02	1.000	1.04	4.4	03	2.000	2.03	1.5
04	5.000	4.77	-4.5	05	20.000	23.06	15.3	06	50.000	48.35	-3.3
07	100.000	93.16	-6.8	09	150.000	149.95	0.0	08	200.000	192.88	-3.6

Iodomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.57	-21.7	04	5.000	4.67	-6.6	05	20.000	17.21	-13.9
06	50.000	54.68	9.4	07	100.000	112.73	12.7	09	150.000	167.82	11.9
08	200.000	216.66	8.3								

Isopropylbenzene (Cumene)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.0	02	1.000	1.02	1.5	03	2.000	2.27	13.6
04	5.000	5.65	13.0	05	20.000	21.52	7.6	06	50.000	57.11	14.2
07	100.000	97.35	-2.6	09	150.000	124.10	-17.3	08	200.000	142.01	-29.0

Methacrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.88	-12.0	03	2.000	1.79	-10.3	04	5.000	4.79	-4.1
05	20.000	19.74	-1.3	06	50.000	57.11	14.2	07	100.000	102.45	2.5
09	150.000	161.31	7.5	08	200.000	207.02	3.5				

Methyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	1.00	0.1	03	2.000	1.91	-4.3	04	5.000	5.33	6.7
05	20.000	18.87	-5.7	06	50.000	52.88	5.8	07	100.000	97.17	-2.8
09	150.000	152.61	1.7	08	200.000	196.94	-1.5				

Methyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.86	-14.4	03	2.000	1.85	-7.4	04	5.000	4.96	-0.7
05	20.000	19.56	-2.2	06	50.000	54.95	9.9	07	100.000	104.38	4.4
09	150.000	162.30	8.2	08	200.000	204.56	2.3				

Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte

Methyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.2	02	1.000	1.01	1.4	03	2.000	2.02	1.1
04	5.000	5.32	6.5	05	20.000	20.07	0.3	06	50.000	52.51	5.0
07	100.000	96.99	-3.0	09	150.000	146.61	-2.3	08	200.000	186.13	-6.9

Methylcyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	17.7	02	1.000	1.00	-0.4	03	2.000	2.06	2.9
04	5.000	5.15	3.0	05	20.000	17.44	-12.8	06	50.000	42.96	-14.1
07	100.000	97.21	-2.8	09	150.000	156.24	4.2	08	200.000	204.54	2.3

Naphthalene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.3	02	1.000	1.03	2.9	03	2.000	1.98	-1.0
04	5.000	5.28	5.5	05	20.000	20.54	2.7	06	50.000	57.90	15.8
07	100.000	103.09	3.1	09	150.000	143.52	-4.3	08	200.000	165.15	-17.4

Propionitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	5.000	4.20	-16.1	03	10.000	9.25	-7.5	04	25.000	23.47	-6.1
05	100.000	96.86	-3.1	06	250.000	284.38	13.8	07	500.000	530.22	6.0
09	750.000	806.10	7.5	08	1000.000	1,056.15	5.6				

Styrene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.7	02	1.000	0.99	-0.6	03	2.000	1.96	-1.9
04	5.000	5.27	5.3	05	20.000	21.81	9.1	06	50.000	56.32	12.6
07	100.000	104.13	4.1	09	150.000	139.91	-6.7	08	200.000	167.41	-16.3

Tetrachloroethene (PCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.2	02	1.000	0.97	-2.8	03	2.000	2.11	5.7
04	5.000	5.00	0.0	05	20.000	19.34	-3.3	06	50.000	51.00	2.0
07	100.000	97.86	-2.1	09	150.000	147.71	-1.5	08	200.000	201.54	0.8

Tetrahydrofuran (THF)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.98	-0.9	04	5.000	4.71	-5.9	05	20.000	19.60	-2.0
06	50.000	52.86	5.7	07	100.000	97.78	-2.2	09	150.000	156.53	4.4
08	200.000	201.86	0.9								

Toluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.8	02	1.000	1.03	3.0	03	2.000	2.19	9.5
04	5.000	5.28	5.6	05	20.000	21.24	6.2	06	50.000	53.92	7.8
07	100.000	98.24	-1.8	09	150.000	127.67	-14.9	08	200.000	153.42	-23.3

Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte

Toluene-d8

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	54.31	8.6	04	60.000	63.68	6.1	05	70.000	71.48	2.1
07	100.000	98.75	-1.2	09	125.000	115.72	-7.4	08	150.000	137.71	-8.2

Trichloroethene (TCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-11.8	02	1.000	0.99	-1.3	03	2.000	2.06	3.2
04	5.000	4.98	-0.5	05	20.000	19.97	-0.1	06	50.000	52.93	5.9
07	100.000	101.02	1.0	09	150.000	150.90	0.6	08	200.000	206.02	3.0

Trichlorofluoromethane (CFC 11)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.8	02	1.000	1.02	1.5	03	2.000	2.16	8.0
04	5.000	5.11	2.3	05	20.000	19.89	-0.6	06	50.000	53.71	7.4
07	100.000	98.63	-1.4	09	150.000	143.64	-4.2	08	200.000	193.55	-3.2

Vinyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.80	-19.8	03	2.000	1.61	-19.4	04	5.000	5.02	0.4
05	20.000	19.70	-1.5	06	50.000	54.31	8.6	07	100.000	108.66	8.7
09	150.000	167.63	11.8	08	200.000	222.52	11.3				

Vinyl Chloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.8	02	1.000	0.96	-4.3	03	2.000	2.20	9.9
04	5.000	4.98	-0.4	05	20.000	20.11	0.5	06	50.000	53.27	6.5
07	100.000	99.16	-0.8	09	150.000	145.65	-2.9	08	200.000	188.61	-5.7

cis-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.8	02	1.000	0.89	-10.9	03	2.000	2.12	6.0
04	5.000	5.16	3.3	05	20.000	19.51	-2.5	06	50.000	51.30	2.6
07	100.000	97.63	-2.4	09	150.000	146.93	-2.0	08	200.000	200.29	0.1

cis-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.2	02	1.000	0.99	-0.6	03	2.000	1.95	-2.3
04	5.000	4.78	-4.3	05	20.000	19.79	-1.0	06	50.000	52.93	5.9
07	100.000	102.34	2.3	09	150.000	151.85	1.2	08	200.000	200.08	0.0

m,p-Xylenes

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	0.93	-7.1	02	2.000	2.11	5.7	03	4.000	4.29	7.3
04	10.000	10.81	8.1	05	40.000	42.61	6.5	06	100.000	110.27	10.3
07	200.000	200.69	0.3	09	300.000	267.69	-10.8	08	400.000	318.52	-20.4

Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte

n-Butyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.98	-1.8	03	2.000	1.76	-12.0	04	5.000	5.07	1.3
05	20.000	19.54	-2.3	06	50.000	53.80	7.6	07	100.000	102.35	2.4
09	150.000	157.44	5.0	08	200.000	199.76	-0.1				

n-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.1	02	1.000	0.95	-5.1	03	2.000	2.11	5.4
04	5.000	5.28	5.7	05	20.000	21.93	9.6	06	50.000	55.37	10.7
07	100.000	100.85	0.9	09	150.000	131.53	-12.3	08	200.000	154.05	-23.0

n-Heptane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.8	02	1.000	1.04	4.1	03	2.000	2.04	2.2
04	5.000	4.48	-10.4	05	20.000	21.65	8.3	06	50.000	50.01	0.0
07	100.000	96.28	-3.7	09	150.000	149.80	-0.1	08	200.000	197.85	-1.1

n-Propylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.4	02	1.000	1.07	7.1	03	2.000	2.31	15.5
04	5.000	5.57	11.5	05	20.000	22.15	10.7	06	50.000	56.09	12.2
07	100.000	92.75	-7.2	09	150.000	113.98	-24.0	08	200.000	131.72	-34.1

o-Xylene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.6	02	1.000	0.99	-1.0	03	2.000	1.96	-2.0
04	5.000	5.04	0.7	05	20.000	20.46	2.3	06	50.000	51.82	3.6
07	100.000	99.90	-0.1	09	150.000	145.27	-3.2	08	200.000	191.76	-4.1

sec-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.0	02	1.000	1.01	1.5	03	2.000	2.21	10.3
04	5.000	5.47	9.5	05	20.000	21.97	9.8	06	50.000	56.61	13.2
07	100.000	98.63	-1.4	09	150.000	125.43	-16.4	08	200.000	144.74	-27.6

tert-Amyl Methyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.1	02	1.000	1.01	1.4	03	2.000	1.98	-0.9
04	5.000	5.17	3.5	05	20.000	19.50	-2.5	06	50.000	53.27	6.5
07	100.000	99.96	0.0	09	150.000	152.08	1.4	08	200.000	199.24	-0.4

tert-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.9	02	1.000	0.99	-0.7	03	2.000	2.15	7.3
04	5.000	5.13	2.5	05	20.000	20.39	2.0	06	50.000	53.87	7.7
07	100.000	102.20	2.2	09	150.000	139.24	-7.2	08	200.000	168.31	-15.8

Initial Calibration - Detailed Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Signal ID: 1

Analyte

trans-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.8	02	1.000	0.89	-11.3	03	2.000	2.13	6.7
04	5.000	5.12	2.4	05	20.000	19.18	-4.1	06	50.000	50.65	1.3
07	100.000	96.64	-3.4	09	150.000	145.98	-2.7	08	200.000	200.65	0.3

trans-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.44	-11.2	02	1.000	0.92	-7.7	03	2.000	1.93	-3.4
04	5.000	4.82	-3.6	05	20.000	20.46	2.3	06	50.000	54.64	9.3
07	100.000	105.01	5.0	09	150.000	158.47	5.6	08	200.000	207.28	3.6

trans-1,4-Dichloro-2-butene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.42	-16.7	02	1.000	0.90	-10.0	03	2.000	1.86	-7.1
04	5.000	4.81	-3.8	05	20.000	19.96	-0.2	06	50.000	56.96	13.9
07	100.000	104.61	4.6	09	150.000	168.30	12.2	08	200.000	214.25	7.1

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D Vial: 3
Acq On : 15 Dec 2014 1:27 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 15:38:48 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration

FV 12/16/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.403	168	961813	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1383806	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1246229	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	666954	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	443649	51.04	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.08%			
48) surr1,1,2-dichloroetha...	4.848	65	438913	47.86	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 95.72%			
65) SURR3,Toluene-d8	7.427	98	1616831	52.81	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 105.62%			
70) SURR2,BFB	9.878	95	654963	54.36	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 108.72%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.190	85	5684	0.52	ug/L	81
3) Chloromethane	1.300	50	5881	0.42	ug/L	92
4) Vinyl Chloride	1.361	62	5532	0.43	ug/L	98
5) Bromomethane	1.556	94	4043	1.08	ug/L	89
6) Chloroethane	1.617	64	3427	0.54	ug/L	90
7) Freon 21	1.721	67	8587	0.48	ug/L	100
8) Trichlorofluoromethane	1.770	101	6329	0.43	ug/L	92
9) Diethyl Ether	1.940	59	3283	0.44	ug/L	85
10) Freon 123a	1.934	67	4711m	0.42	ug/L	
11) Freon 123	1.965	83	5707	0.48	ug/L	80
12) Acrolein	2.020	56	1753	1.59	ug/L	83
13) 1,1-Diclethene	2.105	96	4214	0.61	ug/L	98
14) Freon 113	2.099	101	4134	0.48	ug/L	89
16) 2-Propanol	2.202	45	2561	6.22	ug/L #	51
17) Iodomethane	2.208	142	4392	0.59	ug/L	99
18) Carbon Disulfide	2.276	76	15080	0.53	ug/L	97
19) Acetonitrile	2.330	40	607	2.01	ug/L #	55
20) Allyl Chloride	2.355	76	2178	0.51	ug/L #	75
22) Methylene Chloride	2.440	84	4859	0.55	ug/L #	70
23) TBA	2.507	59	4588m	8.98	ug/L	
24) Acrylonitrile	2.654	53	3918m	1.47	ug/L	
25) Methyl-t-Butyl Ether	2.666	73	9948	0.51	ug/L	96
26) trans-1,2-Dichloroethene	2.672	96	4665	0.54	ug/L #	86
28) 1,1-Diclethane	3.056	63	7516	0.41	ug/L	87
30) DIPE	3.117	45	14448	0.35	ug/L	88
31) 2-Chloro-1,3-Butadiene	3.153	53	6484	0.36	ug/L	89
32) ETBE	3.507	59	12727	0.46	ug/L	87
33) 2,2-Dichloropropane	3.678	77	6780	0.59	ug/L	90
34) cis-1,2-Dichloroethene	3.684	96	4932	0.52	ug/L #	75
37) Bromochloromethane	3.989	130	2809	0.48	ug/L #	61
40) Chloroform	4.104	83	7942	0.49	ug/L	81
41) 1,1,1-Trichloroethane	4.348	97	6706	0.50	ug/L	82
42) TAME	5.190	73	9587m	0.51	ug/L	
44) Cyclohexane	4.440	41	6191m	0.50	ug/L	
46) Carbontetrachloride	4.598	121	2009	0.56	ug/L #	34

121514.M Tue Dec 16 07:43:22 2014 MSVO10

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\MSVOA10\DATA\121514\A4878.D Vial: 3
Acq On : 15 Dec 2014 1:27 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 15:38:48 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
47)	1,1-Dichloropropene	4.629	75	6428	0.58	ug/L		92
49)	Benzene	4.970	78	16319	0.48	ug/L		81
50)	1,2-Dichloroethane	5.007	62	5286	0.44	ug/L		84
52)	n-Heptane	5.458	43	4982	0.39	ug/L	#	71
54)	Trichloroethene	5.982	130	4008	0.42	ug/L		95
55)	Methylcyclohexane	6.220	55	6469	0.49	ug/L		94
56)	1,2-Diclpropane	6.263	63	4000m	0.40	ug/L		
57)	Dibromomethane	6.415	93	2661	0.55	ug/L		83
60)	Bromodichloromethane	6.628	83	5383	0.48	ug/L		94
63)	cis-1,3-Dichloropropene	7.159	75	6730	0.56	ug/L		92
64)	4-Methyl-2-pentanone	7.360	43	2304	0.30	ug/L		87
66)	Toluene	7.506	91	19013	0.53	ug/L		97
67)	trans-1,3-Dichloropropene	7.768	75	4989m	0.52	ug/L		
68)	Ethyl Methacrylate	7.915	69	3970m	0.52	ug/L		
69)	1,1,2-Trichloroethane	7.939	97	3211	0.50	ug/L	#	65
72)	Tetrachloroethene	8.061	164	3792m	0.52	ug/L		
74)	1,3-Dichloropropane	8.098	76	5356m	0.49	ug/L		
75)	Dibromochloromethane	8.311	129	3673	0.47	ug/L	#	76
77)	1,2-Dibromoethane	8.415	107	2992	0.48	ug/L		82
78)	3-Chlorobenzotrifluoride	8.884	180	6554	0.55	ug/L	#	75
79)	Chlorobenzene	8.866	112	11493	0.47	ug/L		85
80)	4-Chlorobenzotrifluoride	8.933	180	5703	0.52	ug/L		95
81)	1,1,1,2-Tetrachloroethane	8.945	131	4304	0.51	ug/L		90
82)	Ethylbenzene	8.988	106	5481	0.46	ug/L	#	90
83)	(m+p)Xylene	9.091	106	13593	0.91	ug/L	#	86
84)	o-Xylene	9.439	106	7923	0.54	ug/L	#	78
85)	Styrene	9.463	104	11541	0.48	ug/L		97
86)	Bromoform	9.610	173	2037	0.45	ug/L		85
87)	2-Chlorobenzotrifluoride	9.677	180	6298	0.48	ug/L		89
88)	Isopropylbenzene	9.762	105	17397	0.47	ug/L		95
89)	Cyclohexanone	9.835	55	2504	2.25	ug/L		80
90)	trans-1,4-Dichloro-2-B...	10.079	53	855	0.47	ug/L	#	38
92)	1,1,2,2-Tetrachloroethane	10.018	83	3665m	0.50	ug/L		
93)	Bromobenzene	10.006	156	4999	0.49	ug/L	#	83
94)	1,2,3-Trichloropropane	10.042	110	1181	0.57	ug/L	#	28
95)	n-Propylbenzene	10.109	91	21915	0.52	ug/L		99
96)	2-Chlorotoluene	10.176	91	14097	0.55	ug/L		83
97)	3-Chlorotoluene	10.231	91	13166	0.47	ug/L		96
98)	4-Chlorotoluene	10.274	91	17046	0.55	ug/L		86
99)	1,3,5-Trimethylbenzene	10.262	105	15054	0.49	ug/L		97
100)	tert-Butylbenzene	10.524	119	12892	0.51	ug/L		97
101)	1,2,4-Trimethylbenzene	10.567	105	16497	0.54	ug/L		96
102)	3,4-Dichlorobenzotrifl...	10.615	214	4684	0.57	ug/L		94
103)	sec-Butylbenzene	10.701	105	17305	0.48	ug/L		95
104)	p-Isopropyltoluene	10.823	119	15037	0.48	ug/L		78
105)	1,3-Dclbenz	10.786	146	10305	0.53	ug/L		96
106)	1,4-Dclbenz	10.853	146	11018	0.55	ug/L		86
107)	2,4-Dichlorobenzotrifl...	10.914	214	4056	0.56	ug/L		96
108)	2,5-Dichlorobenzotrifl...	10.945	214	5580m	0.64	ug/L		
109)	n-Butylbenzene	11.164	91	14957m	0.57	ug/L		
110)	1,2-Dclbenz	11.164	146	9473	0.53	ug/L		86
111)	1,2-Dibromo-3-chloropr...	11.719	157	339	0.29	ug/L	#	12

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D Vial: 3
Acq On : 15 Dec 2014 1:27 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 15:38:48 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
112) Trielution Dichlorotol...	11.822	125	21715	1.44	ug/L	96
113) 1,3,5-Trichlorobenzene	11.859	180	7306	0.63	ug/L	91
114) Coelution Dichlorotoluene	12.079	125	15319	1.10	ug/L	89
115) 1,2,4-Tcbenzene	12.249	180	5797	0.56	ug/L	94
116) Hexachlorobt	12.328	225	2657	0.62	ug/L	85
117) Naphthalen	12.414	128	8688	0.48	ug/L	88
118) 1,2,3-Tclbenzene	12.524	180	4478	0.58	ug/L	98
119) 2,4,5-Trichlorotoluene	12.944	159	2101m	0.51	ug/L	
120) 2,3,6-Trichlorotoluene	12.999	159	2921	0.69	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

121514.M Tue Dec 16 07:43:22 2014 MSVO10 Page: 3

```
Sample    : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D      Vial: 3
Acq On    : 15 Dec 2014    1:27 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
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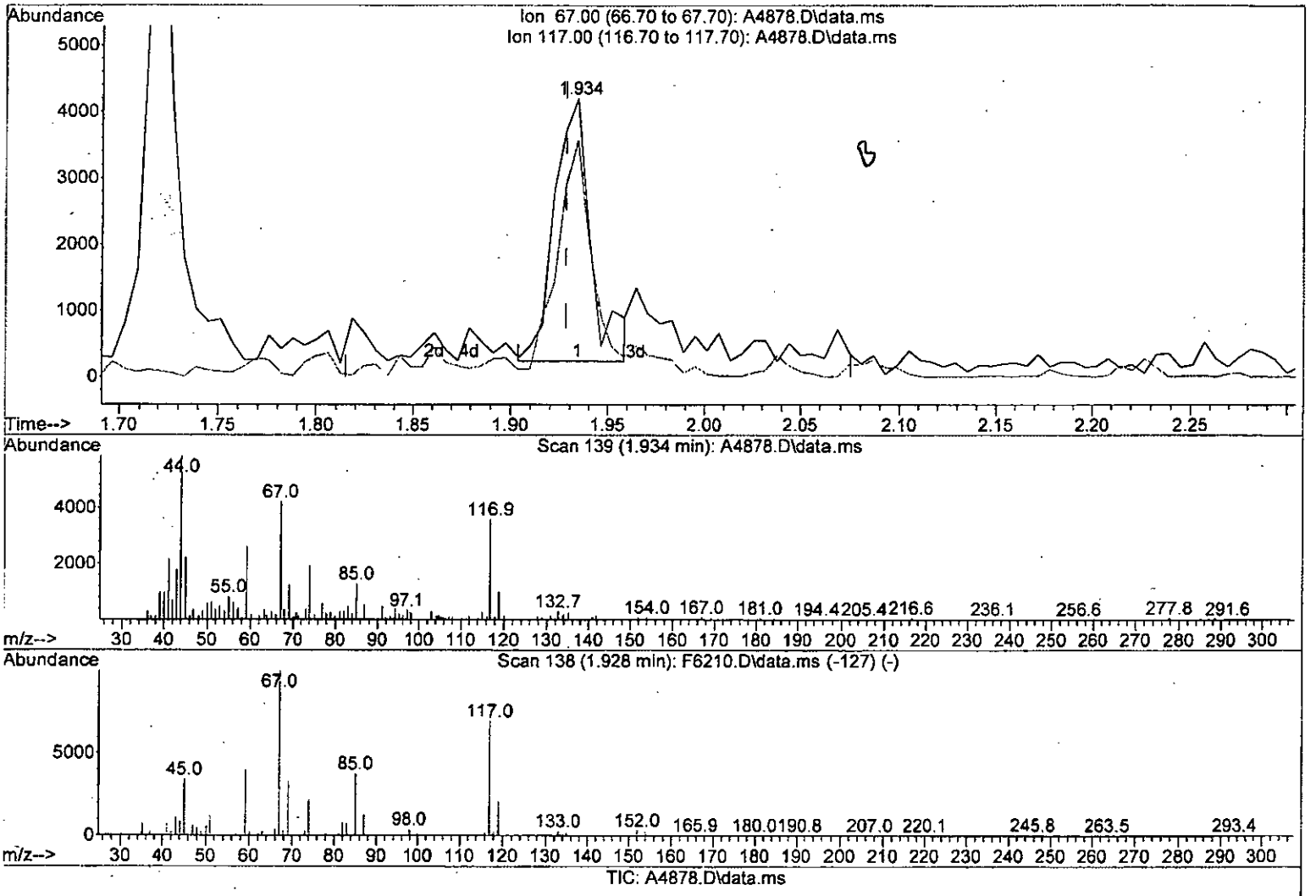

TIC: A4878.D\data.ms

(10) Freon 123a

1.934min (+0.006) 0.46 ug/L

response 5232

Ion	Exp%	Act%
67.00	100	100
117.00	73.00	84.93
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:26:43 2014 MSVO10 Page: 1

0395

```
Sample    : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D      Vial: 3
Acq On    : 15 Dec 2014    1:27 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
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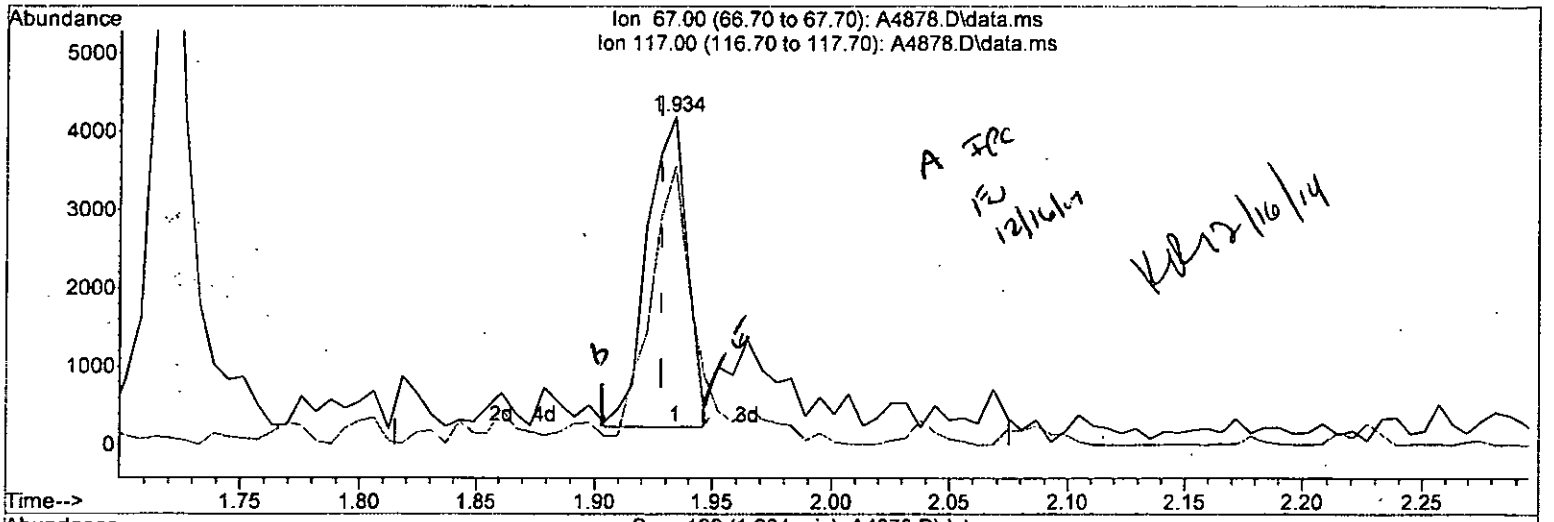
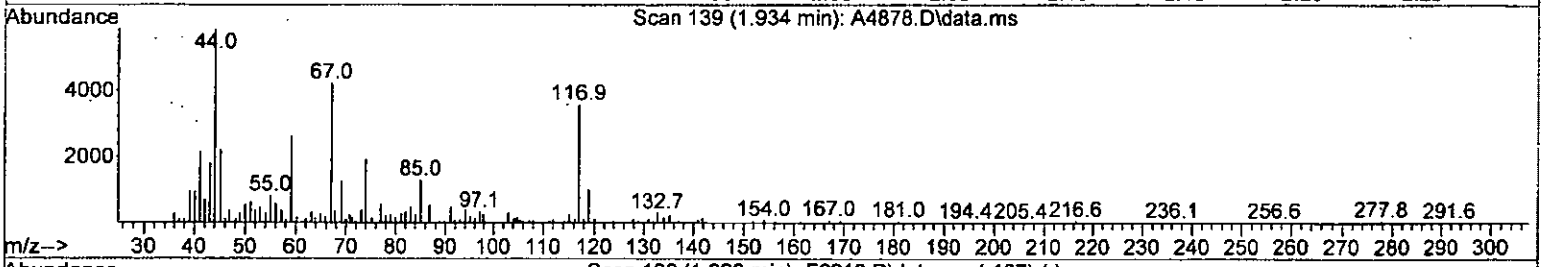
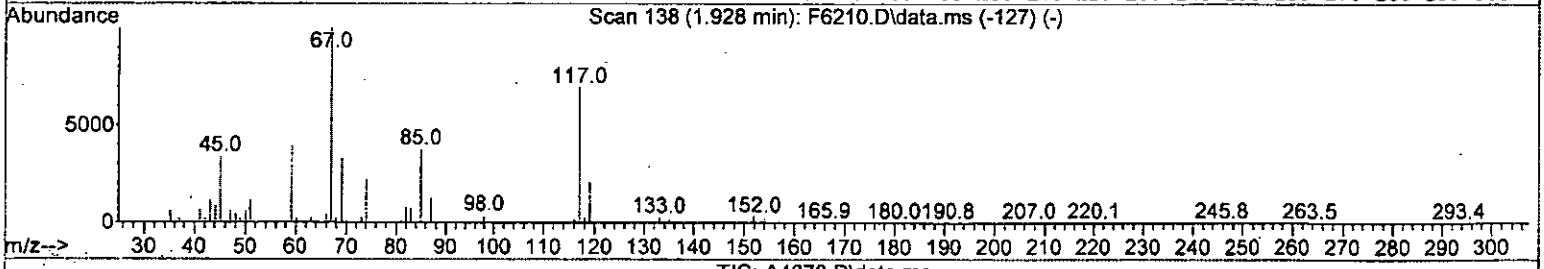






TIC: A4878.D\data.ms

(10) Freon 123a

1.934min (+0.006) 0.42 ug/L m

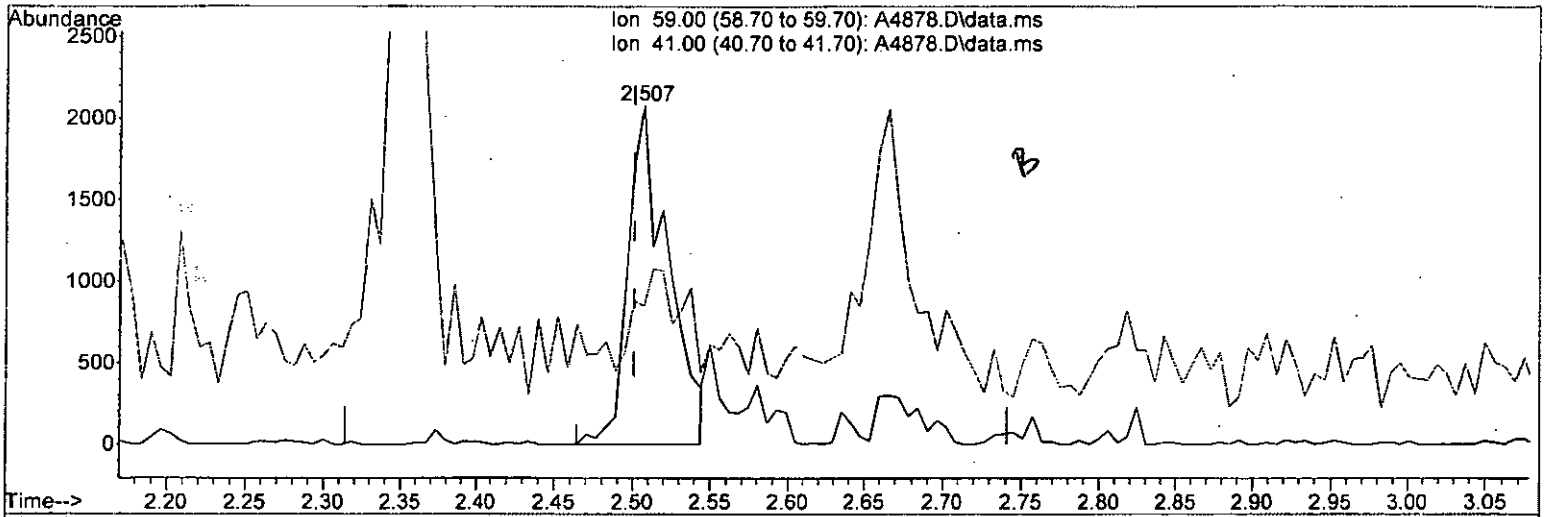
response 4711

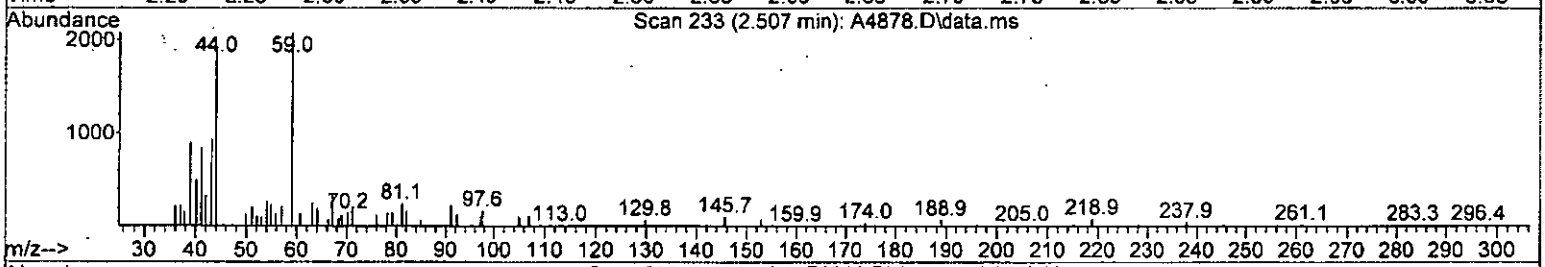
Ion	Exp%	Act%
67.00	100	100
117.00	73.00	84.93
0.00	0.00	0.00
0.00	0.00	0.00

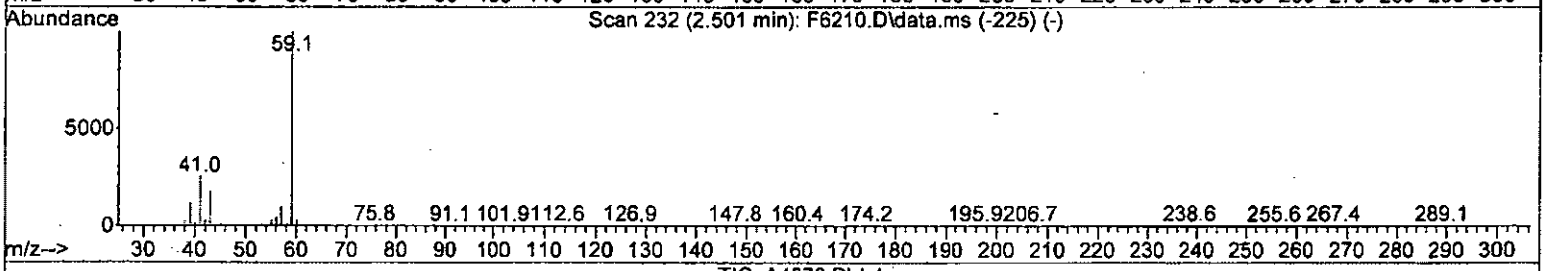
W121514.M Mon Dec 15 15:27:00 2014 MSVO10 Page: 1

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D Vial: 3
Acq On : 15 Dec 2014 1:27 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration







TIC: A4878.D\data.ms

(23) TBA

2.507min (+0.006) 7.26 ug/L

response 3709

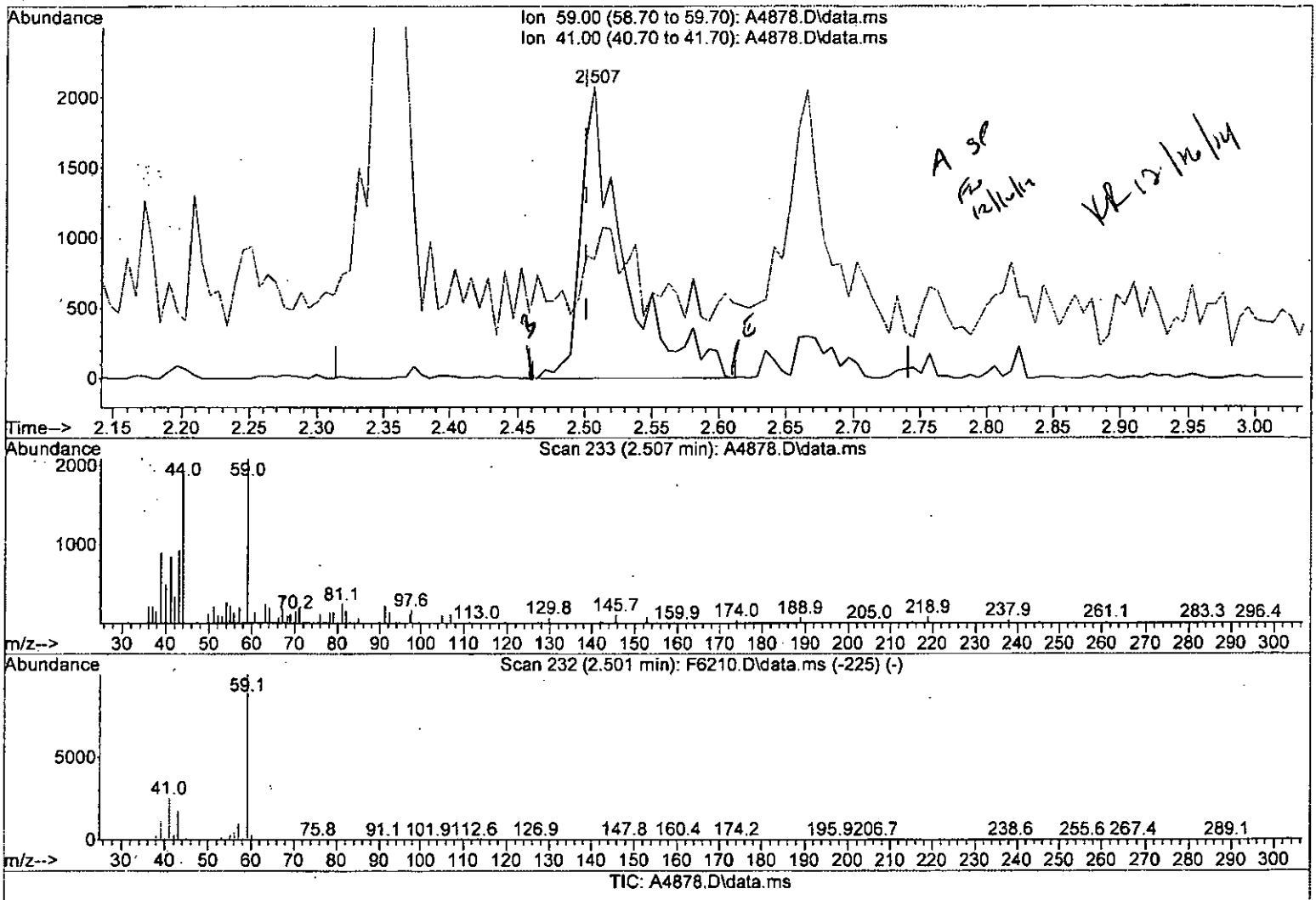
Ion	Exp%	Act%
59.00	100	100
41.00	22.80	40.79
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:28:03 2014 MSVO10 Page: 1

0040

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D Vial: 3
Acq On : 15 Dec 2014 1:27 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



TIC: A4878.D\data.ms

(23) TBA

2.507min (+0.006) 8.98 ug/L m

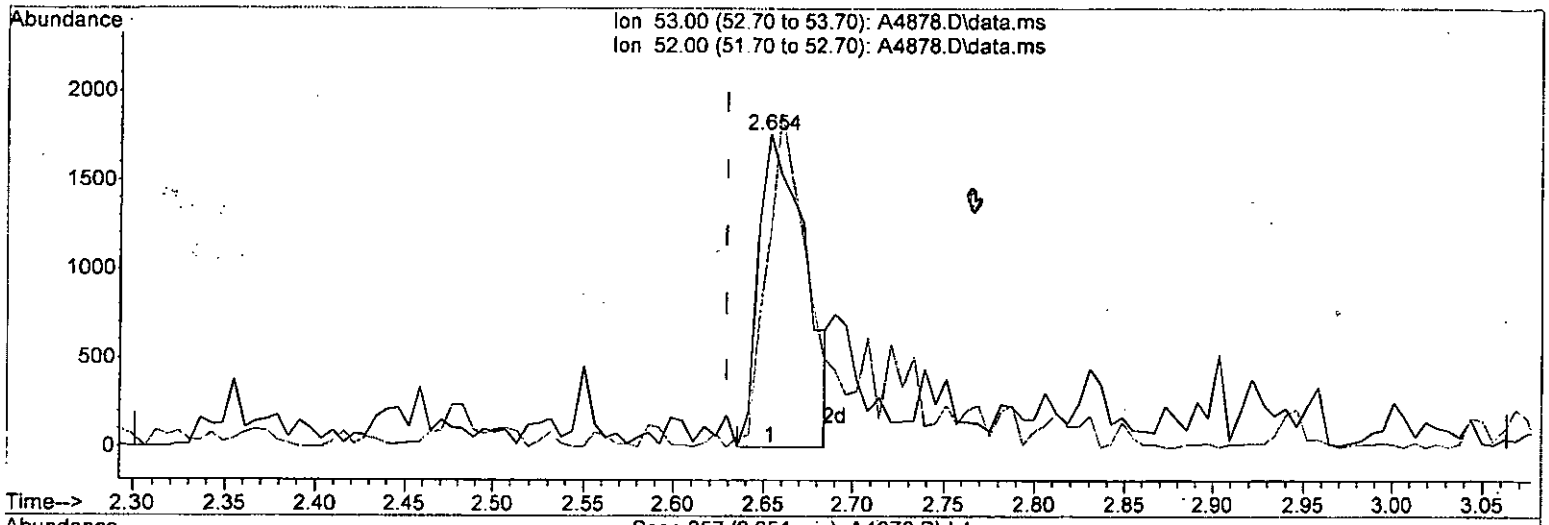
response 4588

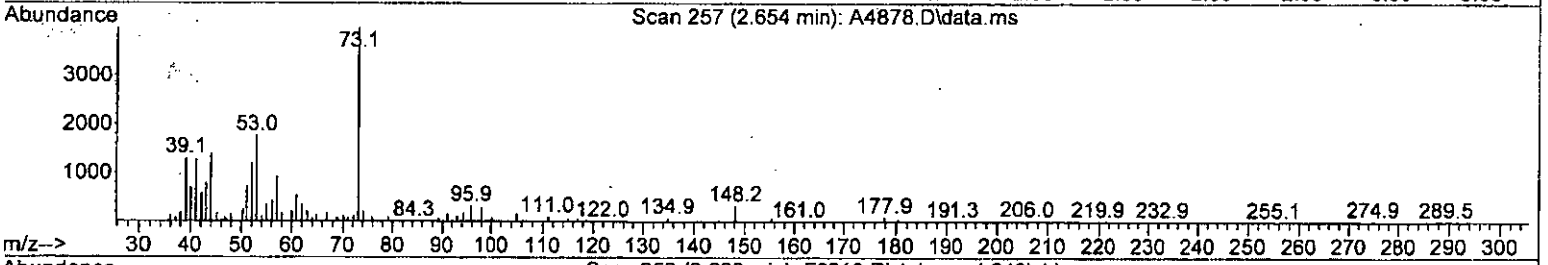
Ion	Exp%	Act%
59.00	100	100
41.00	22.80	40.79
0.00	0.00	0.00
0.00	0.00	0.00

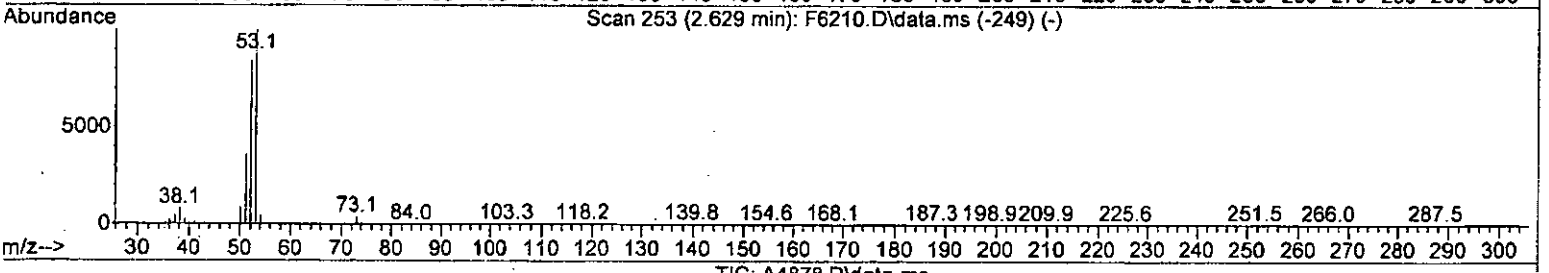
W121514.M Mon Dec 15 15:28:18 2014 MSVO10

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D Vial: 3
Acq On : 15 Dec 2014 1:27 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration







TIC: A4878.D\data.ms

(24) Acrylonitrile

2.654min (+0.024) 1.19 ug/L

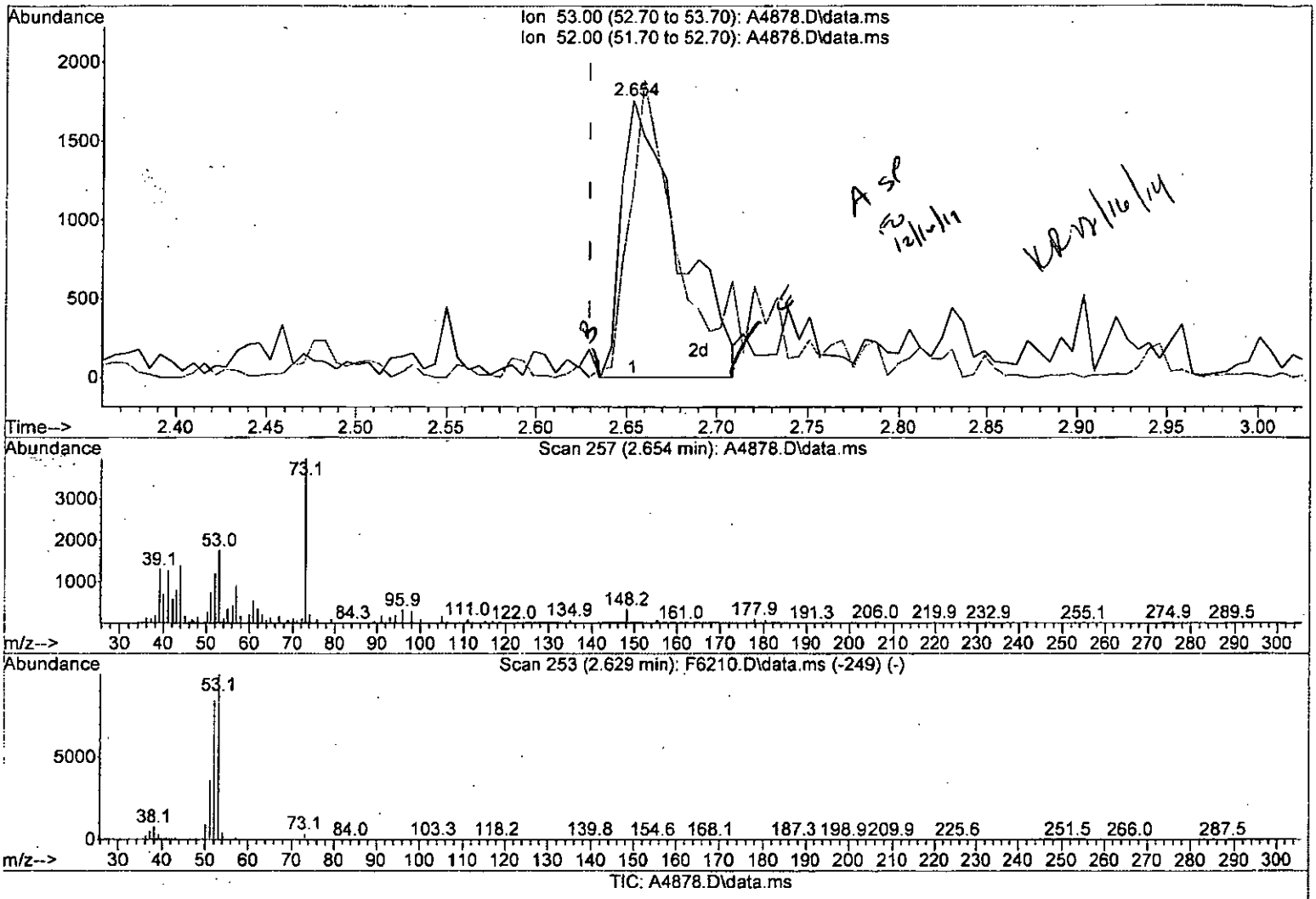
response 3185

Ion	Exp%	Act%
53.00	100	100
52.00	85.70	67.86
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:28:28 2014 MSVO10 Page: 1

```
Sample    : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D      Vial: 3
Acq On    : 15 Dec 2014    1:27 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



TIC: A4878.D\data.ms

(24) Acrylonitrile

2.654min (+0.024) 1.47 ug/L m

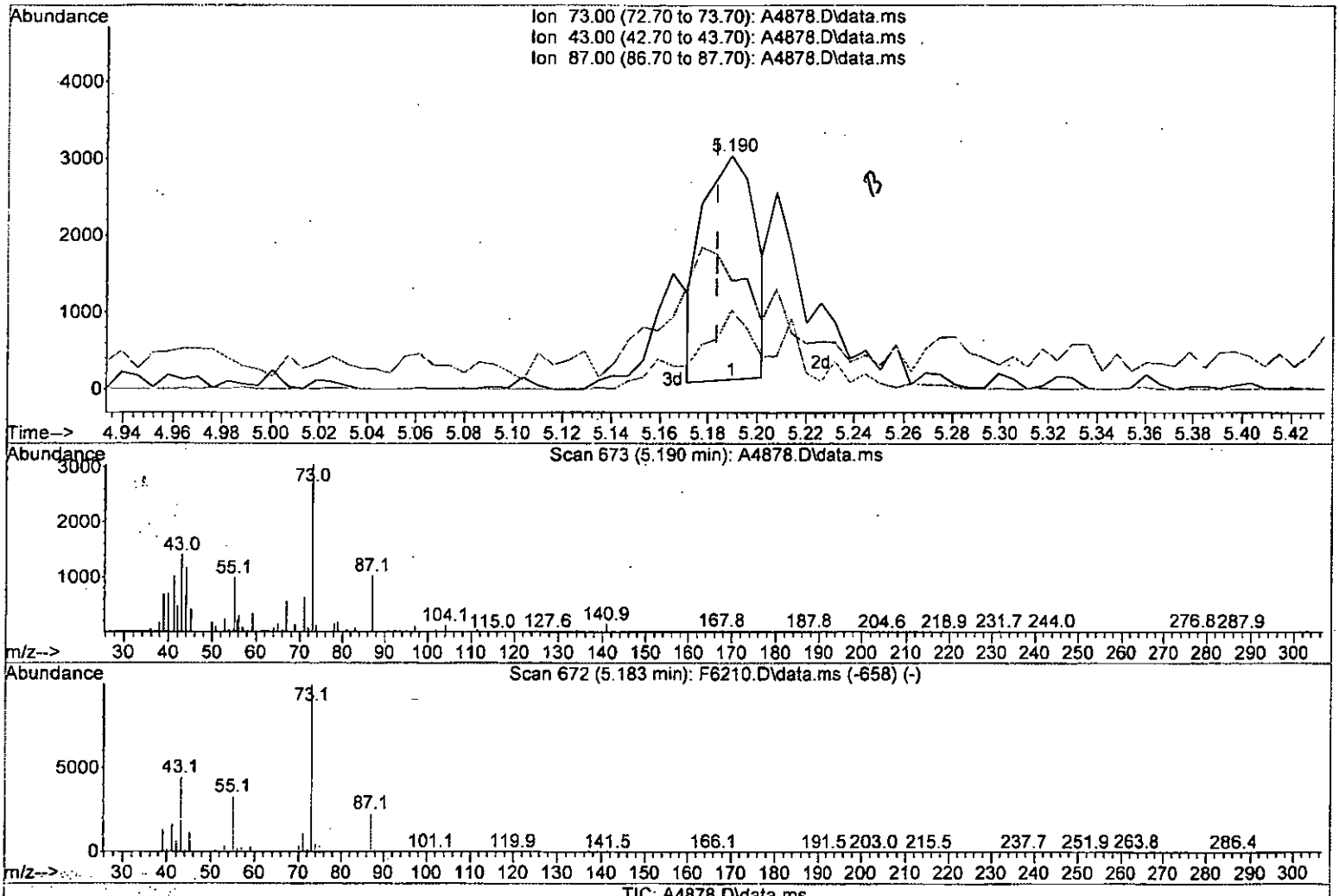
response 3918

Ion	Exp%	Act%
53.00	100	100
52.00	85.70	67.86
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:28:41 2014 MSVO10 Page: 1

```
Sample   : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D      Vial: 3
Acq On    : 15 Dec 2014    1:27 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



TIC: A4878.D\data.ms

(42) TAME

5.190min (+0.006) 0.23 ug/L

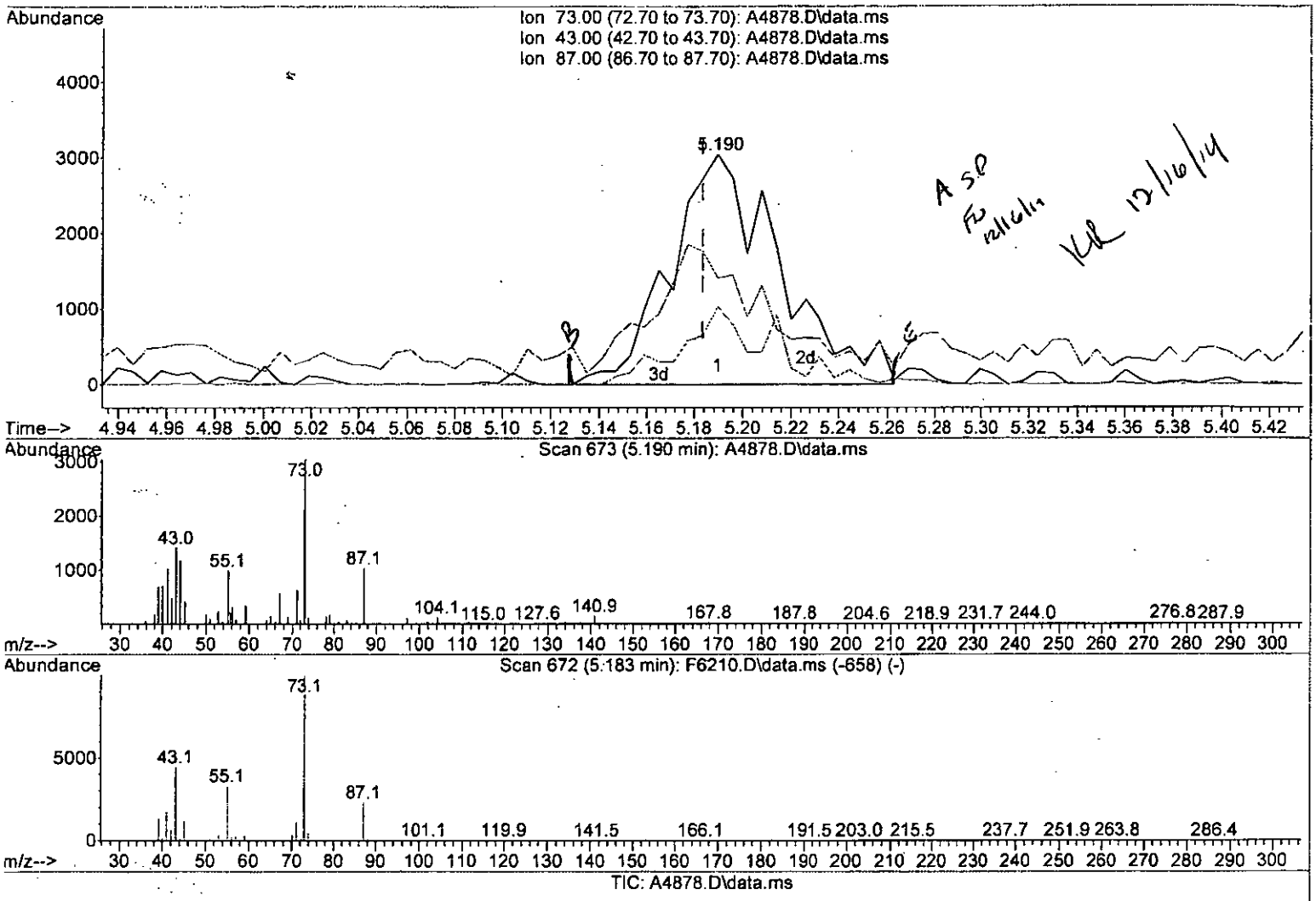
response 4399

Ion	Exp%	Act%
73.00	100	100
43.00	38.40	46.33
87.00	23.80	33.78
0.00	0.00	0.00

W121514.M Mon Dec 15 15:30:46 2014 MSVO10

```
Sample    : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D      Vial: 3
Acq On    : 15 Dec 2014    1:27 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



(42) TAME

5.190min (+0.006) 0.51 ug/L m

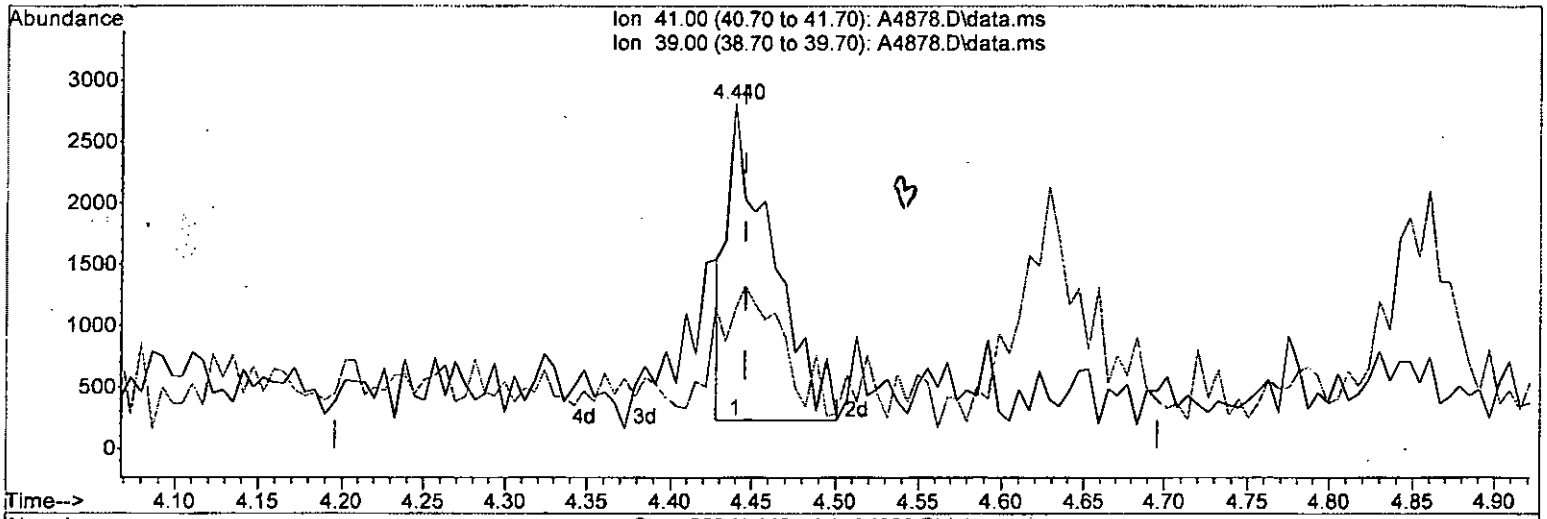
response 9587

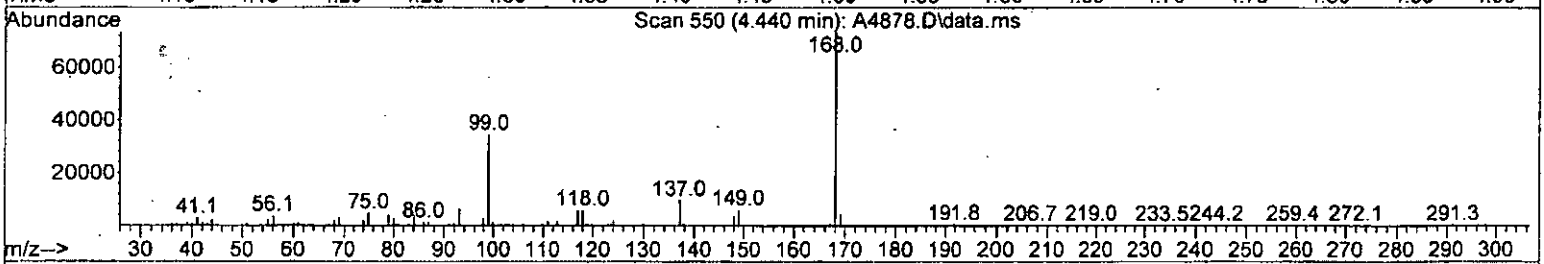
Ion	Exp%	Act%
73.00	100	100
43.00	38.40	46.33
87.00	23.80	33.78
0.00	0.00	0.00

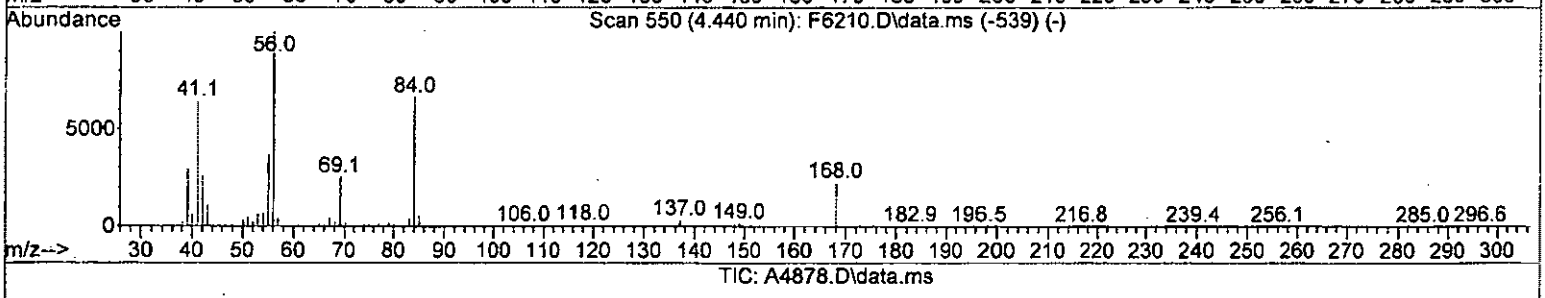
W121514.M Mon Dec 15 15:30:56 2014 MSVO10 Page: 1

```
Sample    : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D      Vial: 3
Acq On    : 15 Dec 2014    1:27 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```







TIC: A4878.D\data.ms

(44) Cyclohexane (P)

4.440min (-0.006) 0.40 ug/L

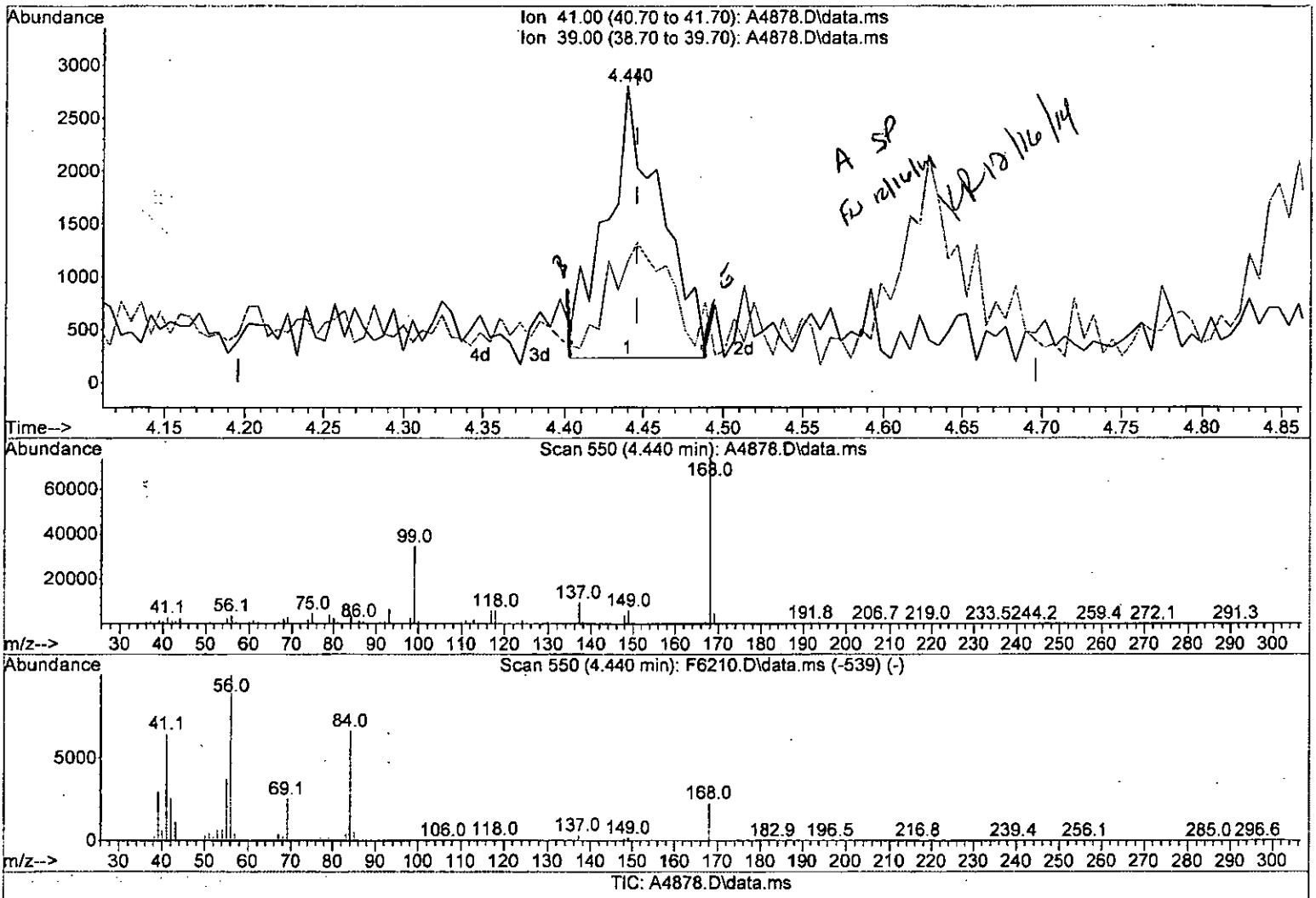
response 4913

Ion	Exp%	Act%
41.00	100	100
39.00	51.30	40.63
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:31:09 2014 MSVO10 Page: 1

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D Vial: 3
Acq On : 15 Dec 2014 1:27 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



TIC: A4878.D\data.ms

(44) Cyclohexane (P)

4.440min (-0.006) 0.50 ug/L m

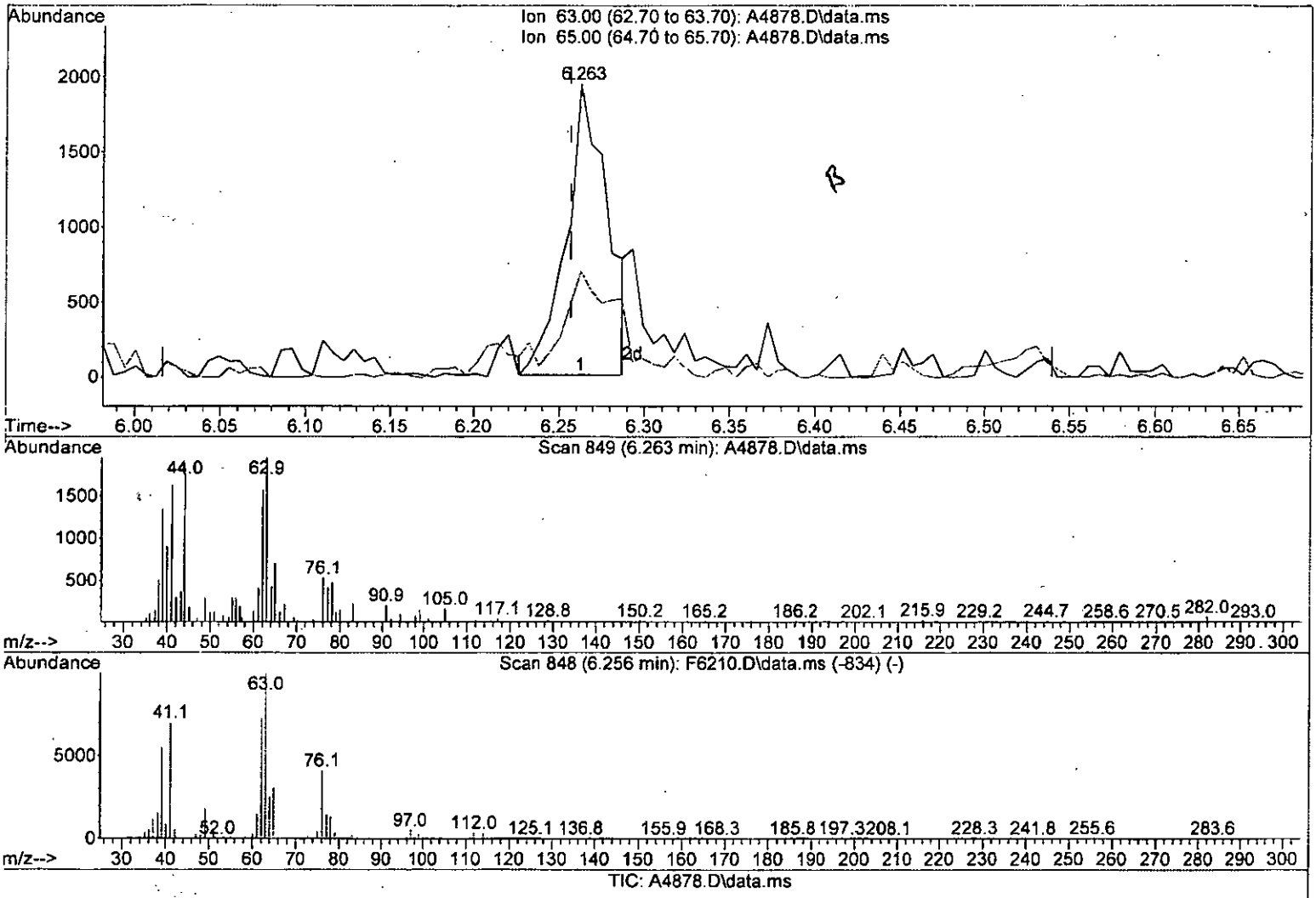
response 6191

Ion	Exp%	Act%
41.00	100	100
39.00	51.30	40.63
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:31:29 2014 MSVO10

```
Sample   : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D      Vial: 3
Acq On    : 15 Dec 2014    1:27 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



TIC: A4878.D\data.ms

(56) 1,2-Dichloropane (P)

6.263min (+0.006) 0.33 ug/L

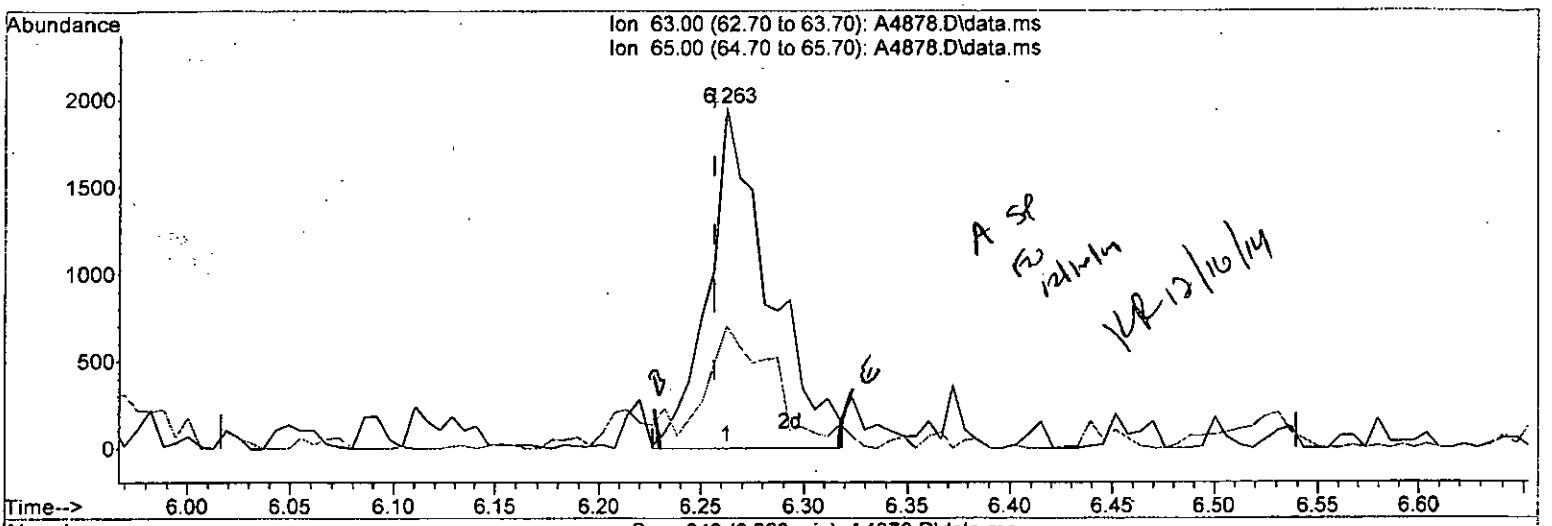
response 3270

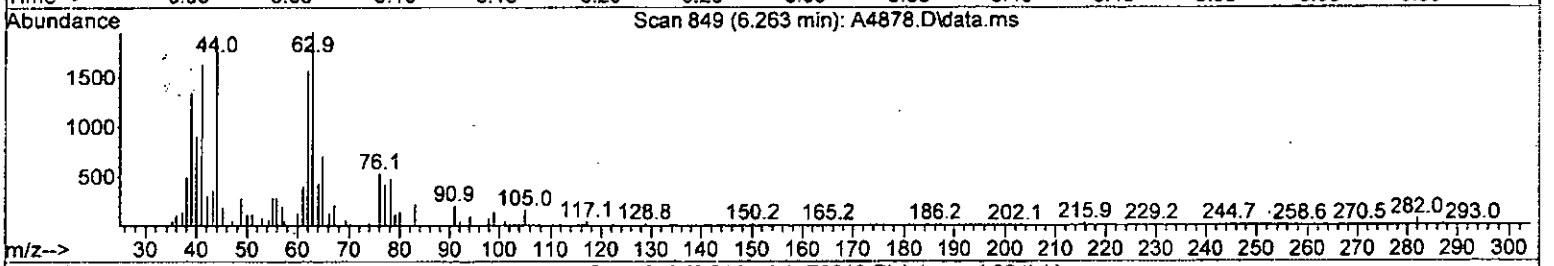
Ion	Exp%	Act%
63.00	100	100
65.00	30.00	35.94
0.00	0.00	0.00
0.00	0.00	0.00

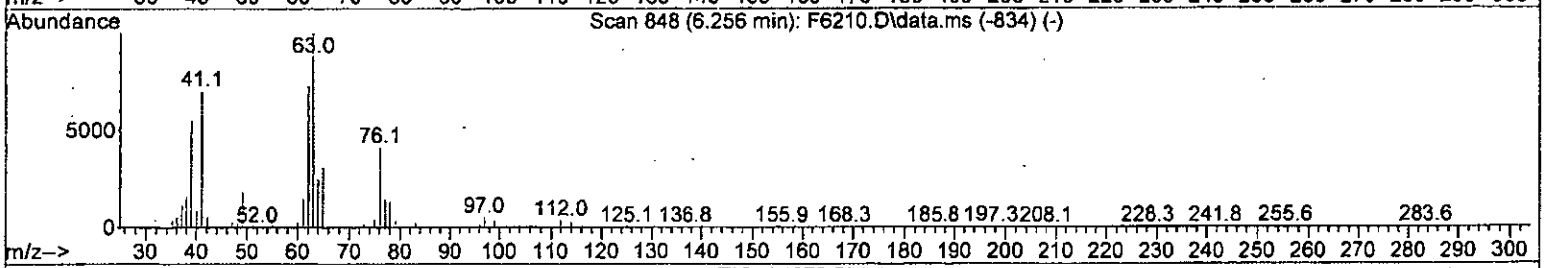
W121514.M Mon Dec 15 15:32:16 2014 MSVO10

Sample 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D Vial: 3
Acq On : 15 Dec 2014 1:27 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration







TIC: A4878.D\data.ms

(56) 1,2-Dichloropane (P)

6.263min (+0.006) 0.40 ug/L m

response 4000

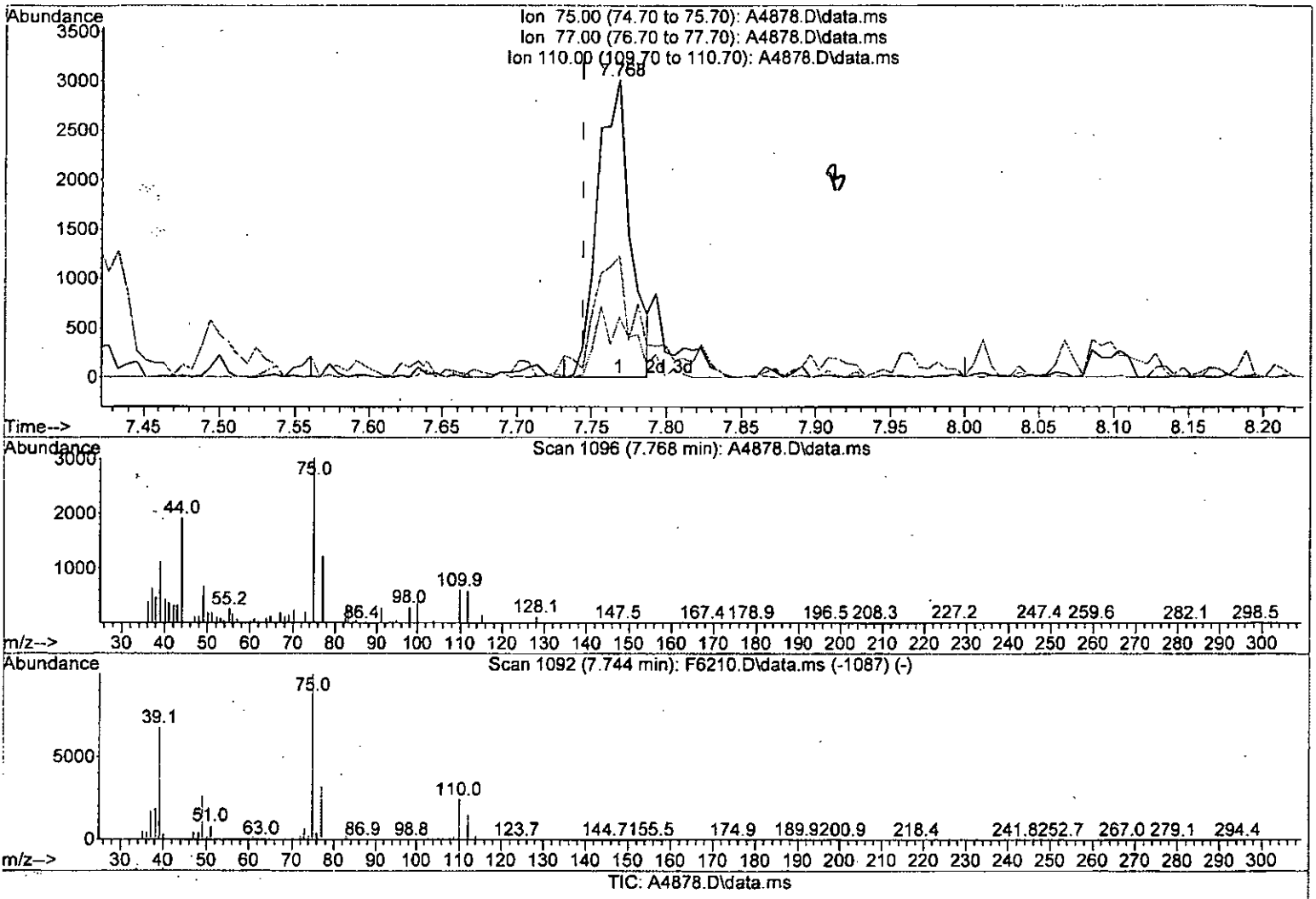
Ion	Exp%	Act%
63.00	100	100
65.00	30.00	35.94
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:32:33 2014 MSVO10

0041C

```
Sample   : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D      Vial: 3
Acq On    : 15 Dec 2014    1:27 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



(67) trans-1,3-Dichloropropene (P)

7.768min (+0.024) 0.47 ug/L

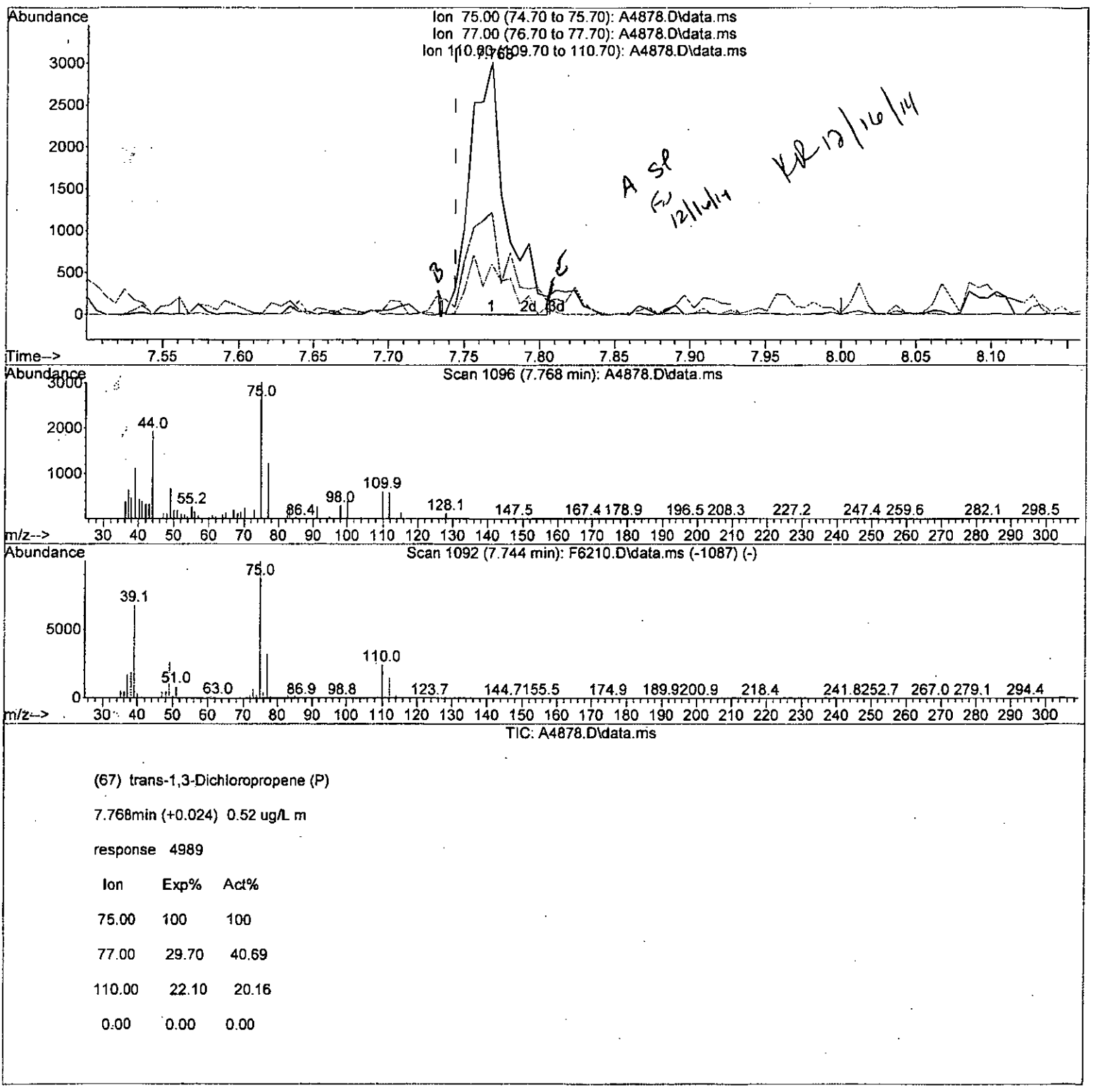
response 4516

Ion	Exp%	Act%
75.00	100	100
77.00	29.70	40.69
110.00	22.10	20.16
0.00	0.00	0.00

W121514.M Mon Dec 15 15:34:03 2014 MSVO10

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D Vial: 3
Acq On : 15 Dec 2014 1:27 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



TIC: A4878.D\data.ms

(67) trans-1,3-Dichloropropene (P)

7.768min (+0.024) 0.52 ug/L m

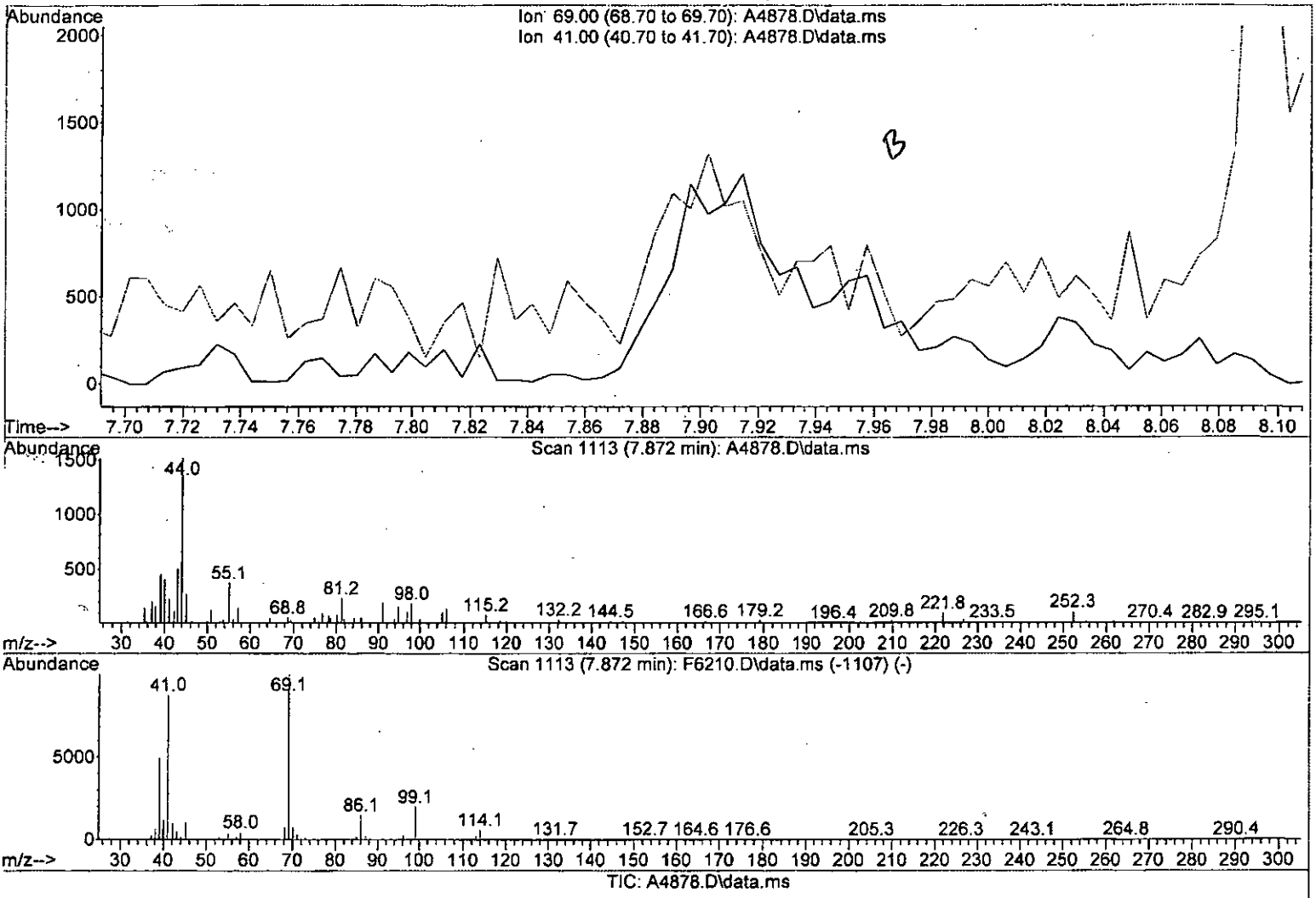
response 4989

Ion	Exp%	Act%
75.00	100	100
77.00	29.70	40.69
110.00	22.10	20.16
0.00	0.00	0.00

W121514.M Mon Dec 15 15:34:16 2014 MSVO10

Sample 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D Vial: 3
Acq On : 15 Dec 2014 1:27 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



TIC: A4878.D\data.ms

(68) Ethyl Methacrylate

7.872min 0.00 ug/L d

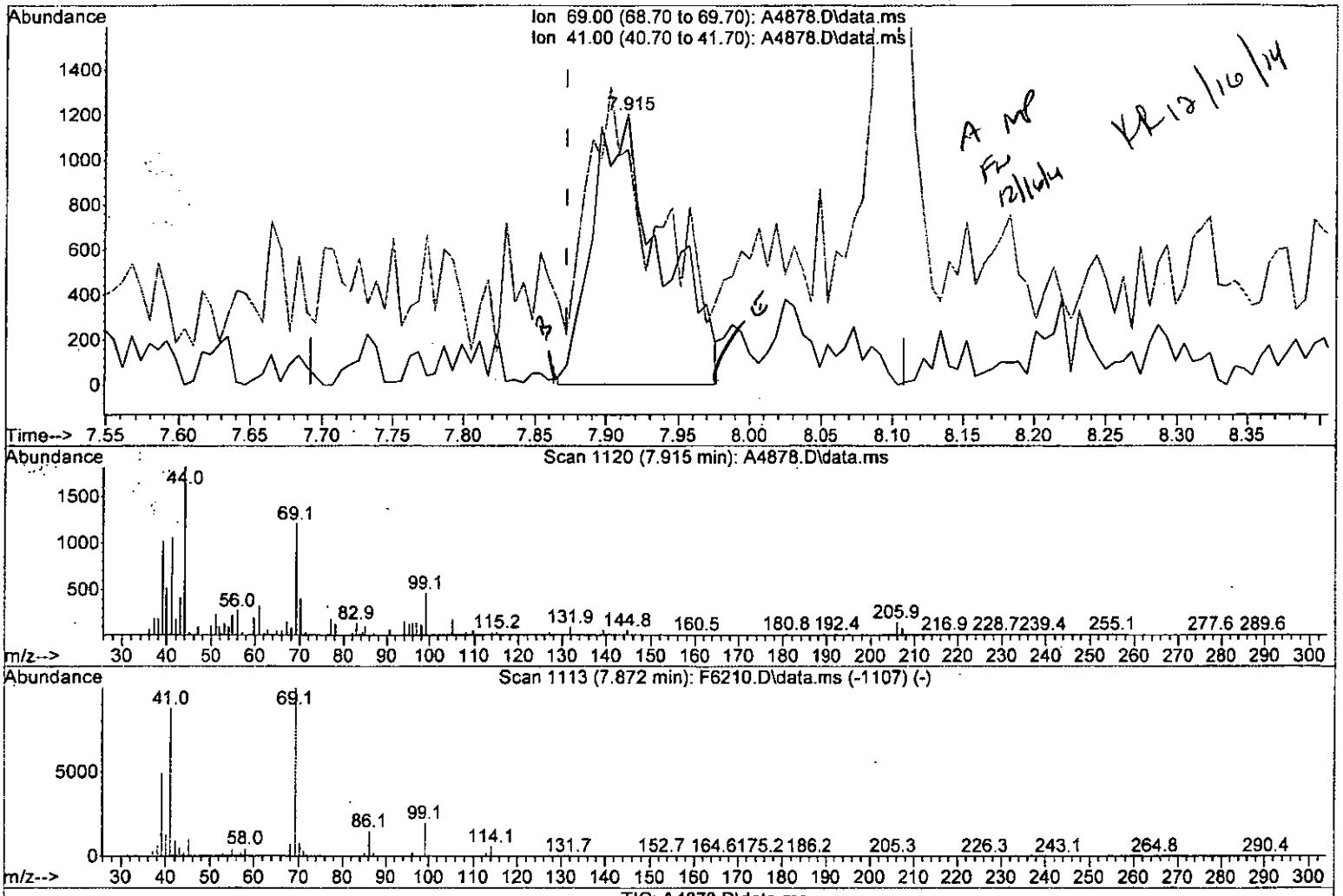
response 0

Ion	Exp%	Act%
69.00	100	0.00
41.00	71.50	0.00
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:34:38 2014 MSVO10

Sample 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D Vial: 3
Acq On : 15 Dec 2014 1:27 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



TIC: A4878.D\data.ms

(68) Ethyl Methacrylate

7.915min (+0.043) 0.52 ug/L m

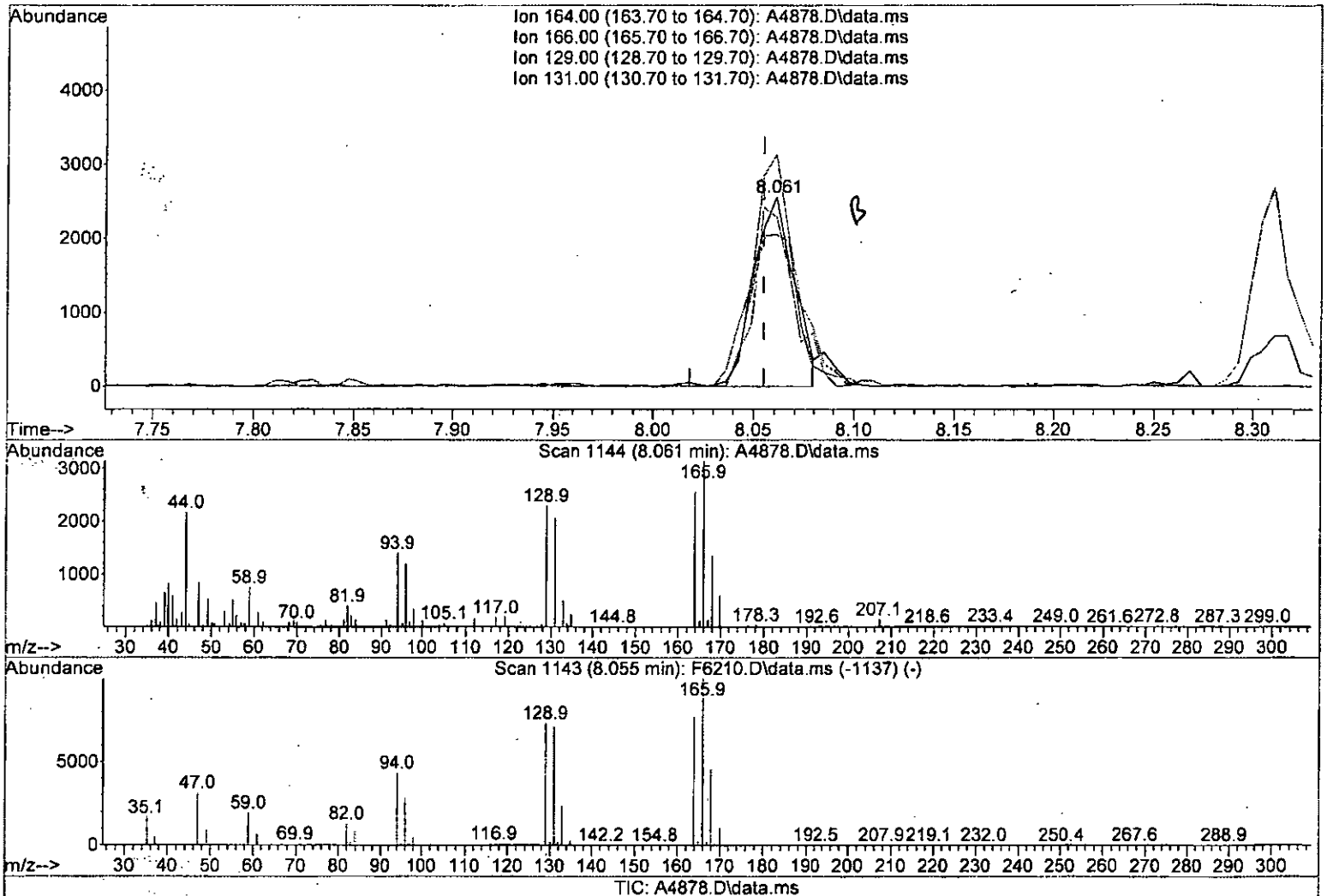
response 3970

Ion	Exp%	Act%
69.00	100	100
41.00	71.50	87.12
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:34:58 2014 MSVO10 Page: 1

```
Sample  : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D      Vial: 3
Acq On    : 15 Dec 2014   1:27 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



(72) Tetrachloroethene (P)

8.061min (+0.006) 0.48 ug/L

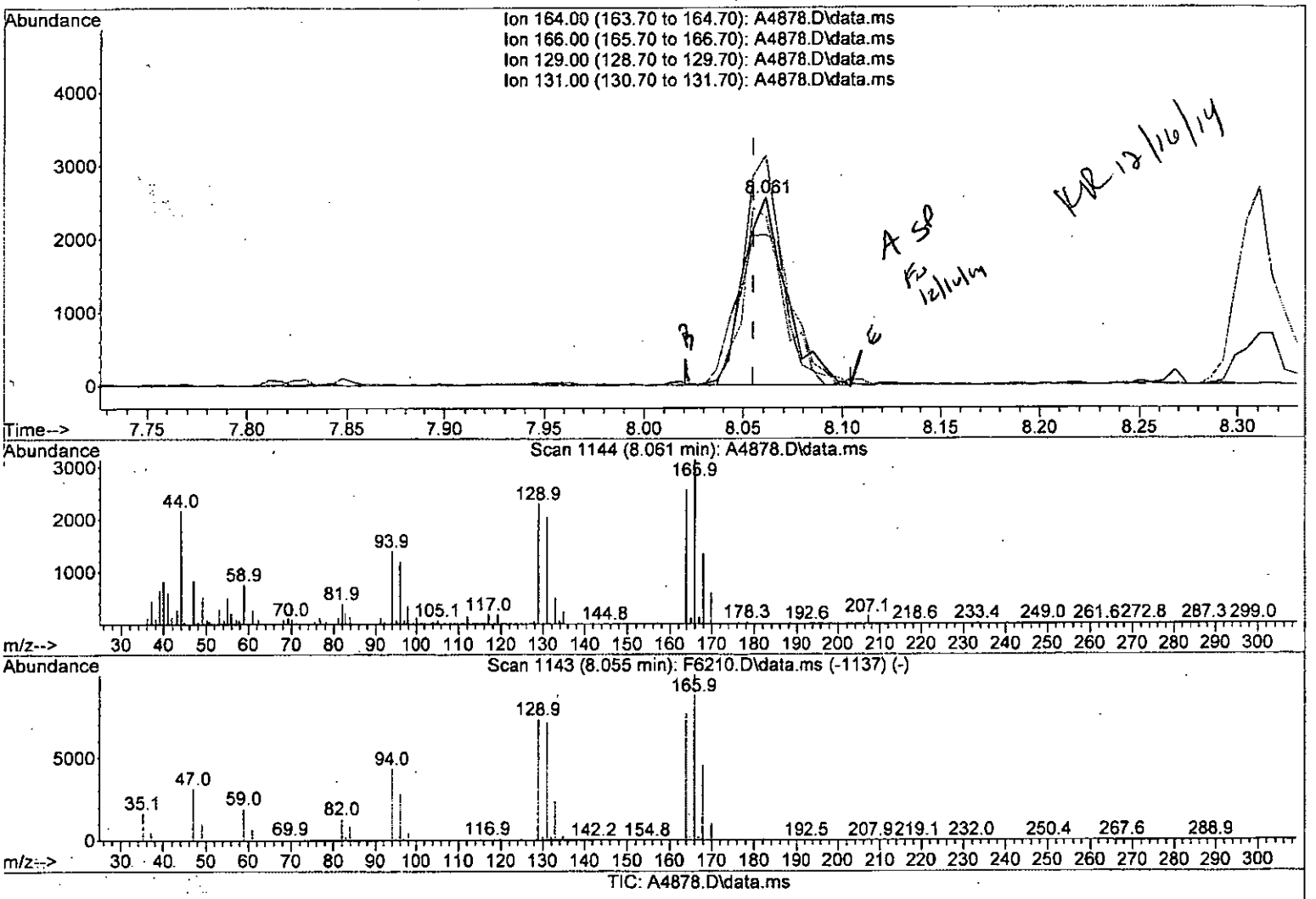
response 3514

Ion	Exp%	Act%
164.00	100	100
166.00	126.80	122.54
129.00	89.60	89.59
131.00	88.50	80.04

W121514.M Mon Dec 15 15:35:08 2014 MSVO10 Page: 1

```
Sample    : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D      Vial: 3
Acq On    : 15 Dec 2014    1:27 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



(72) Tetrachloroethene (P)

8.061min (+0.006) 0.52 ug/L m

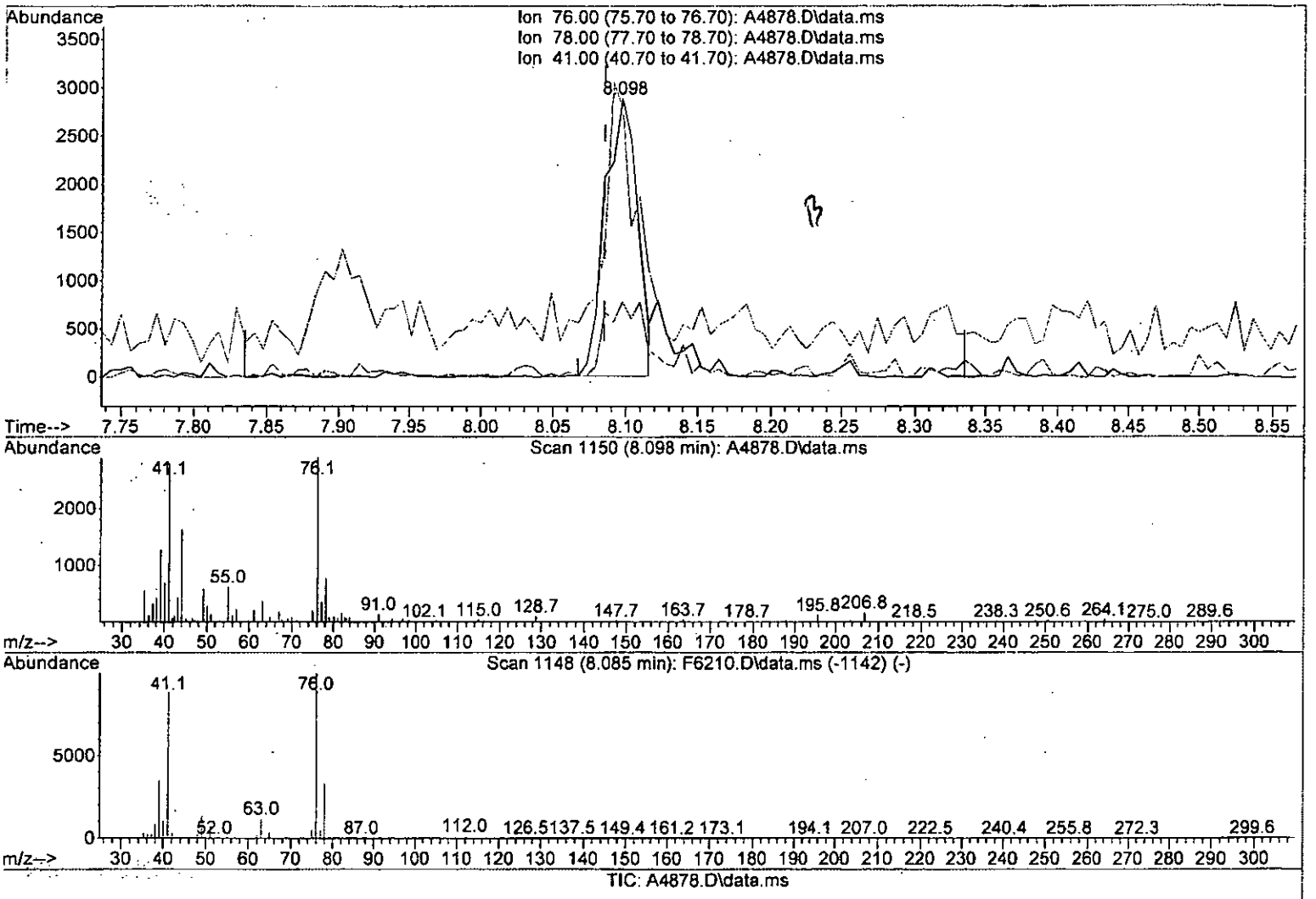
response 3792

Ion	Exp%	Act%
164.00	100	100
166.00	126.80	122.54
129.00	89.60	89.59
131.00	88.50	80.04

W121514.M Mon Dec 15 15:35:18 2014 MSVO10 Page: 1

```
Sample     : 0.5 PPB STD
Data File  : I:\ACQUDATA\msvoa10\data\121514\A4878.D      Vial: 3
Acq On     : 15 Dec 2014    1:27 pm
Operator   : F.NAEGLER
InstName   : MSVOA10
Misc       :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



(74) 1,3-Dichloropropane

8.098min (+0.012) 0.41 ug/L

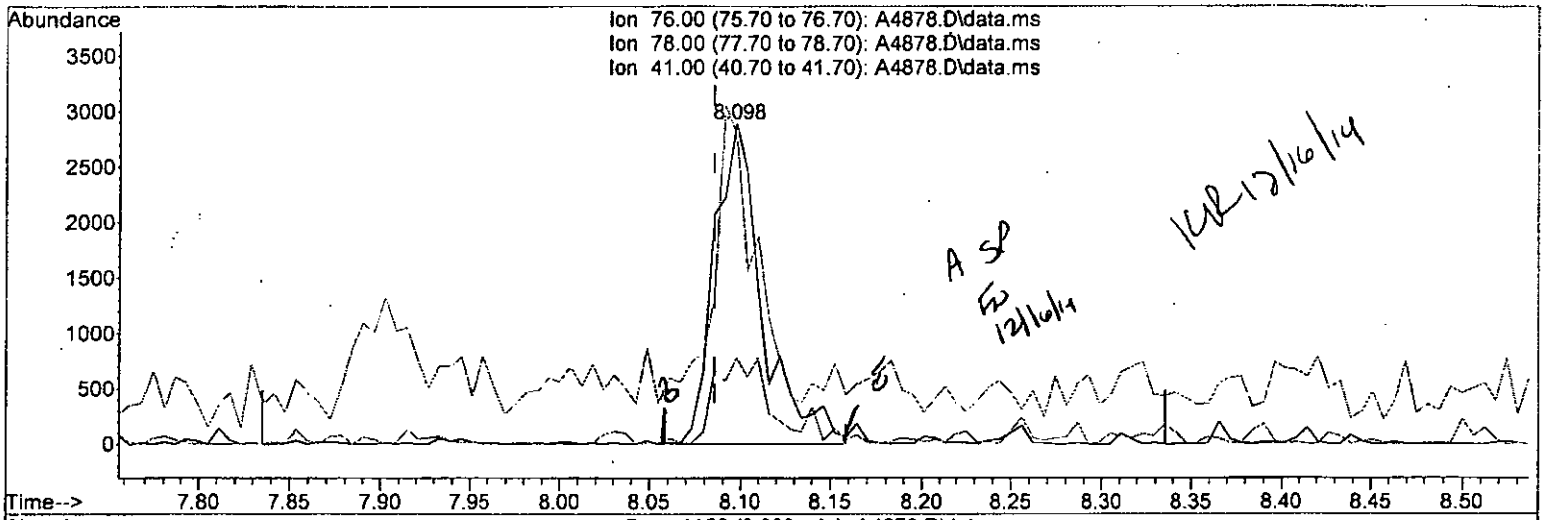
response 4492

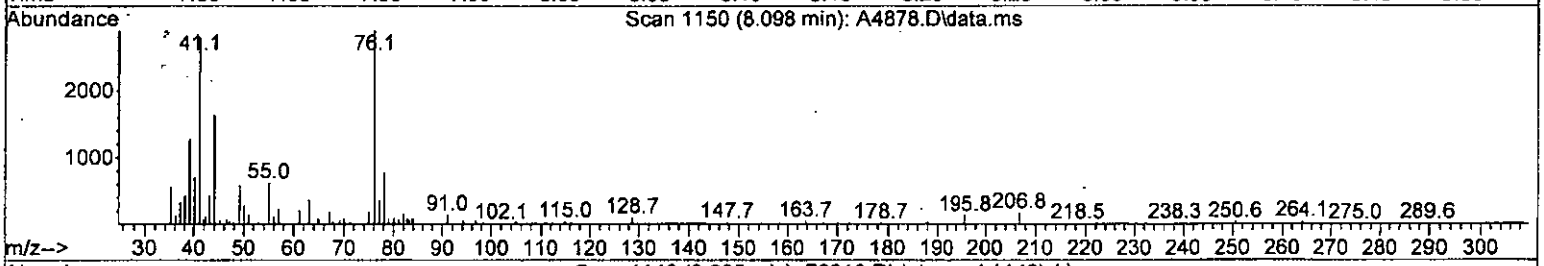
Ion	Exp%	Act%
76.00	100	100
78.00	31.70	26.88
41.00	66.30	96.74#
0.00	0.00	0.00

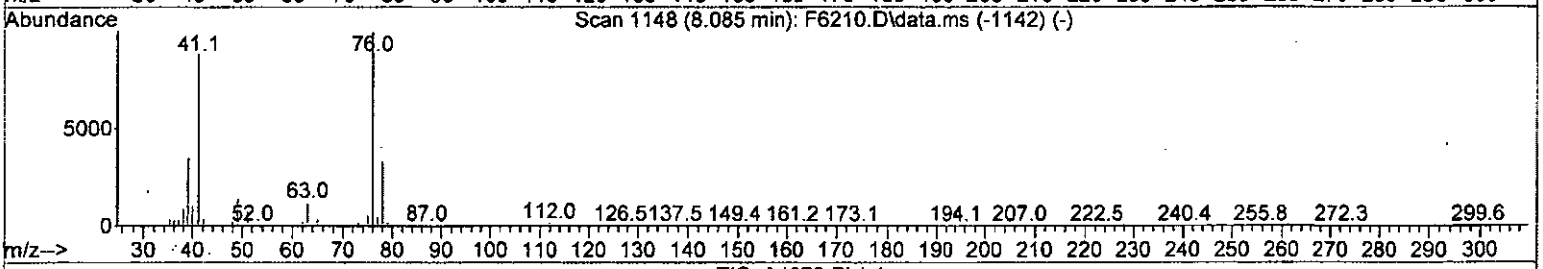
W121514.M Mon Dec 15 15:35:33 2014 MSVO10

```
Sample   : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D      Vial: 3
Acq On    : 15 Dec 2014    1:27 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```







TIC: A4878.D\data.ms

(74) 1,3-Dichloropropane

8.098min (+0.012) 0.49 ug/L m

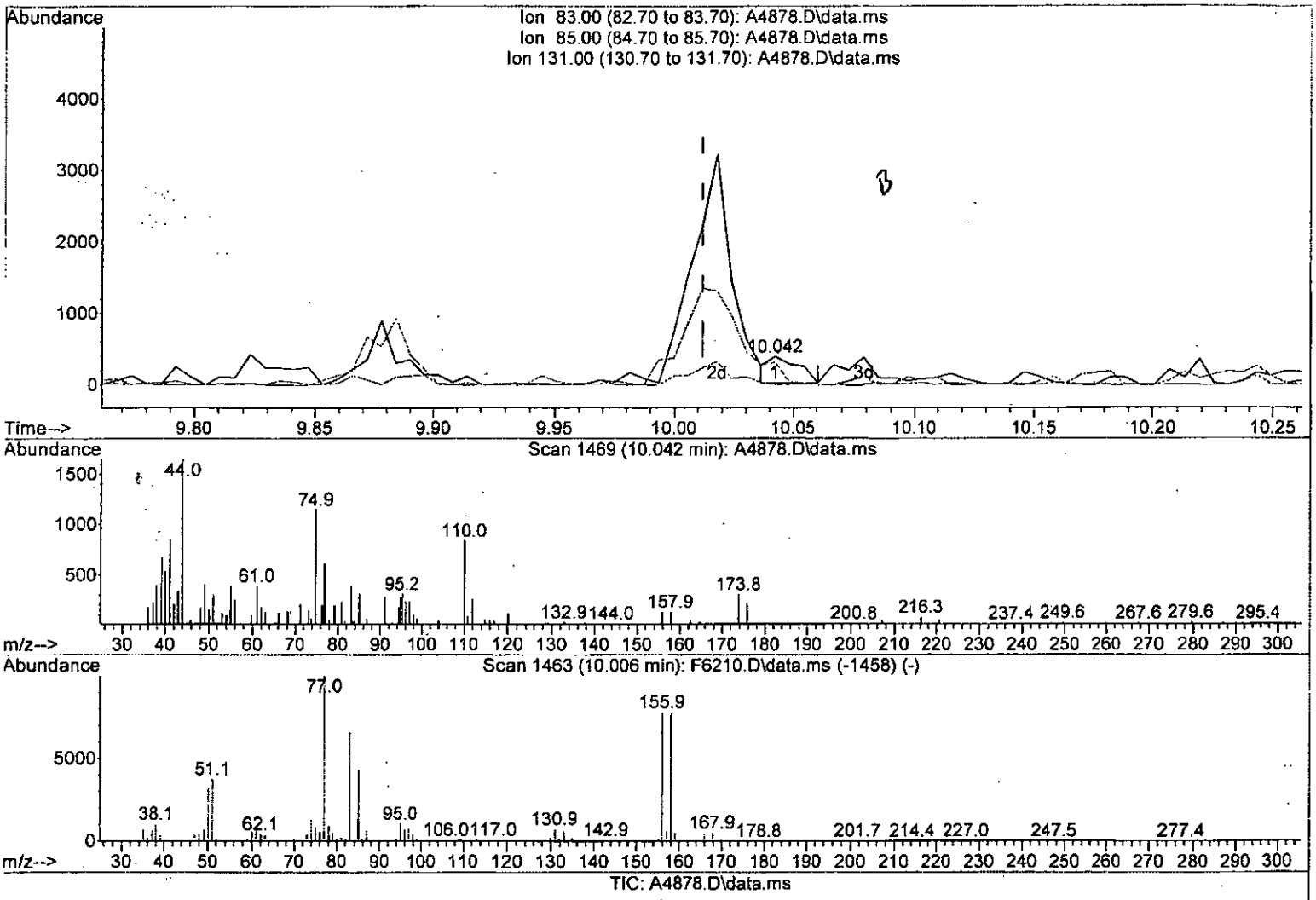
response 5356

Ion	Exp%	Act%
76.00	100	100
78.00	31.70	26.88
41.00	66.30	96.74#
0.00	0.00	0.00

W121514.M Mon Dec 15 15:35:44 2014 MSVO10 Page: 1

```
Sample     : 0.5 PPB STD
Data File  : I:\ACQUDATA\msvoa10\data\121514\A4878.D      Vial: 3
Acq On     : 15 Dec 2014    1:27 pm
Operator   : F.NAEGLER
InstName   : MSVOA10
Misc       :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



(92) 1,1,2,2-Tetrachloroethane (P)

10.042min (+0.030) 0.04 ug/L

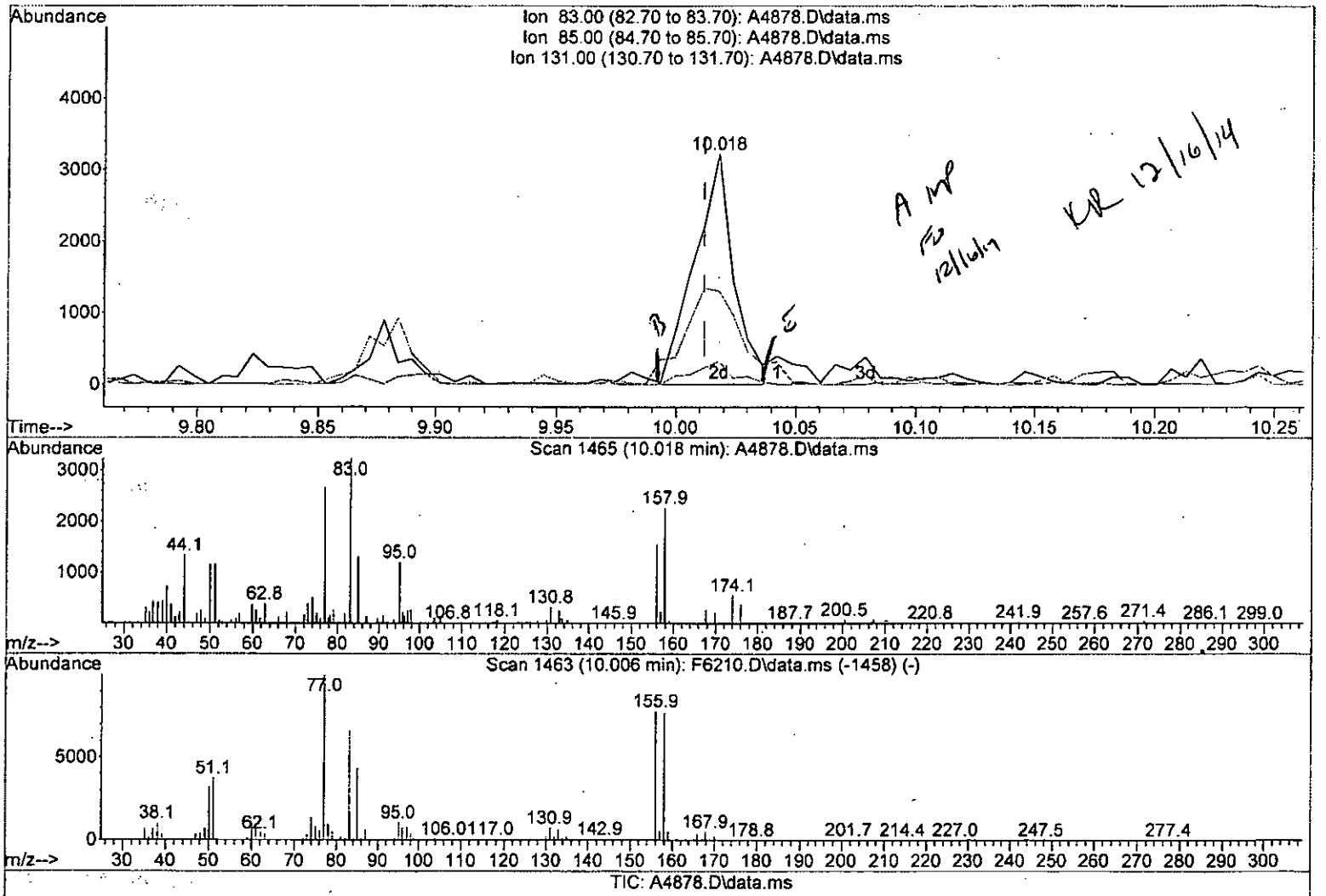
response 314

Ion	Exp%	Act%
83.00	100	100
85.00	62.60	79.69
131.00	9.80	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:36:56 2014 MSVO10

```
Sample    : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D      Vial: 3
Acq On    : 15 Dec 2014    1:27 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



TIC: A4878.D\data.ms

(92) 1,1,2,2-Tetrachloroethane (P)

10.018min (+0.006) 0.50 ug/L m

response 3665

Ion	Exp%	Act%
83.00	100	100
85.00	62.60	40.57#
131.00	9.80	9.97
0.00	0.00	0.00

W121514.M Mon Dec 15 15:37:11 2014 MSVO10

```
Sample    : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D      Vial: 3
Acq On    : 15 Dec 2014    1:27 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
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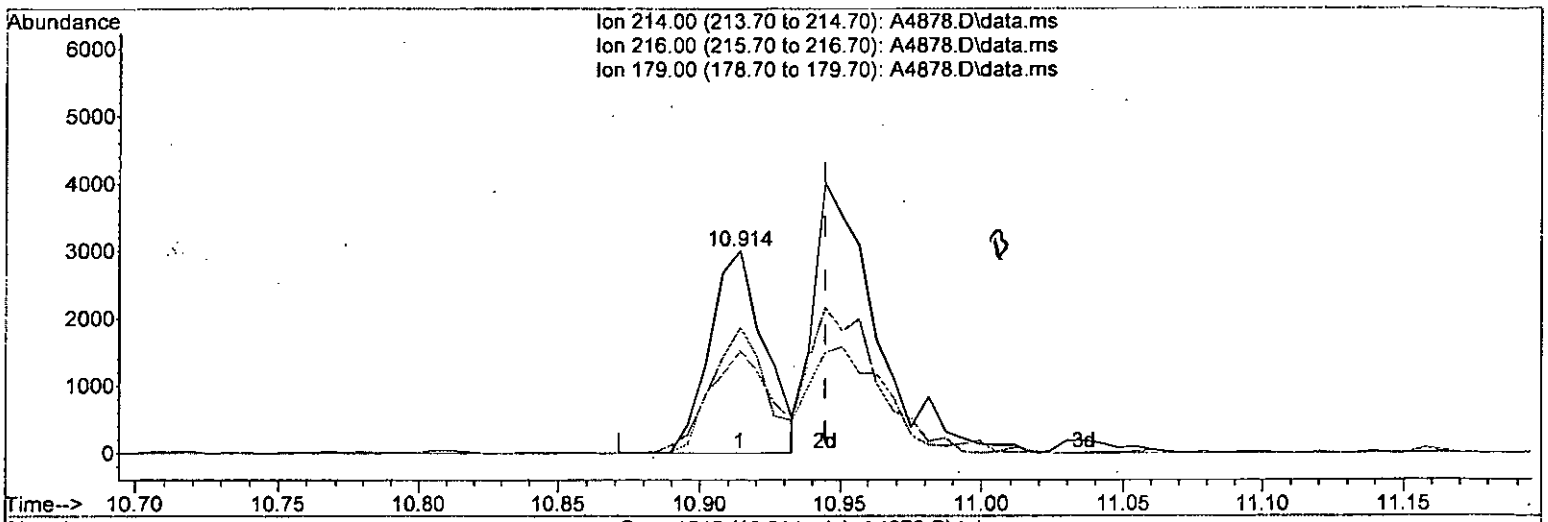
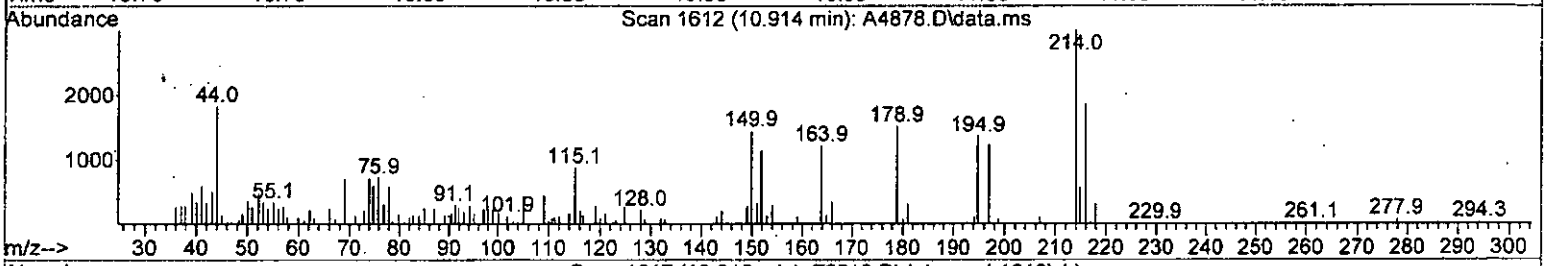
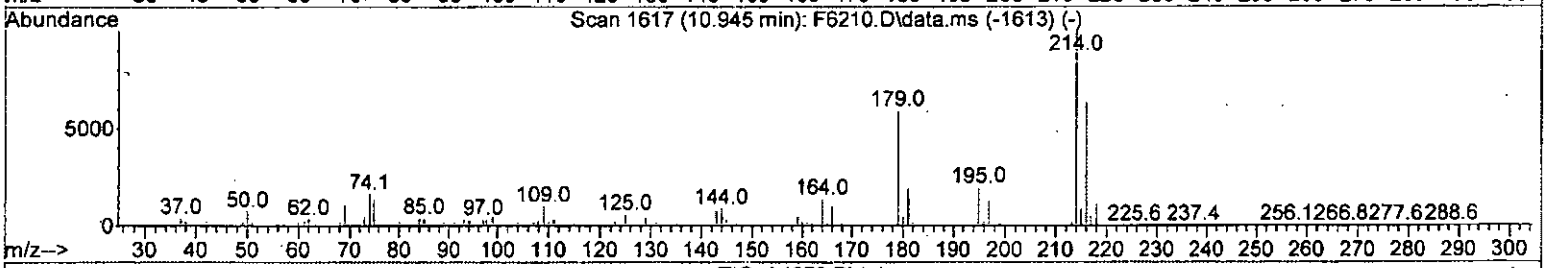






TIC: A4878.D\data.ms

(108) 2,5-Dichlorobenzotrifluoride

10.914min (-0.031) 0.46 ug/L

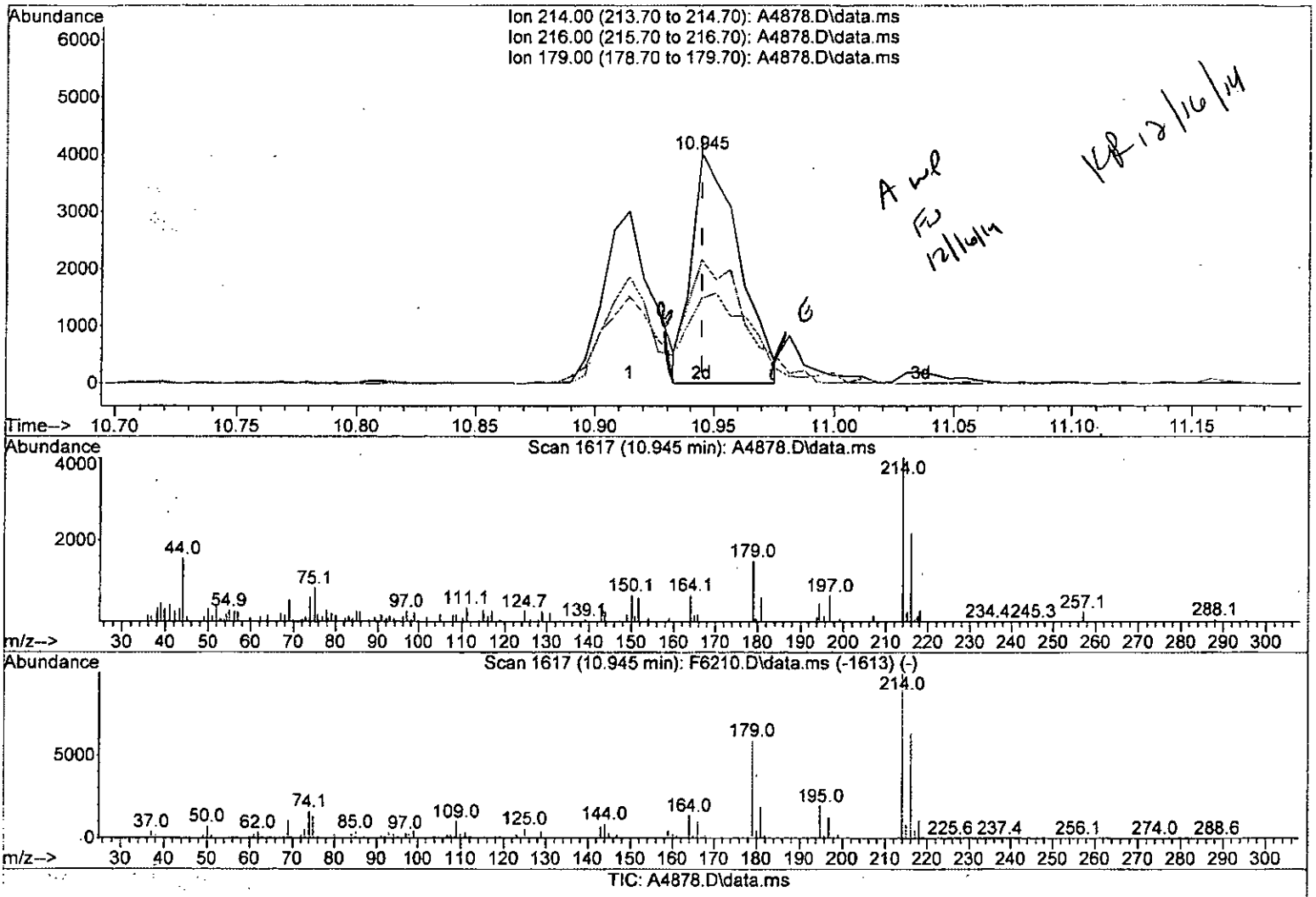
response 4056

Ion	Exp%	Act%
214.00	100	100
216.00	62.10	61.95
179.00	62.80	50.48
0.00	0.00	0.00

W121514.M Mon Dec 15 15:37:48 2014 MSVO10

```
Sample    : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D      Vial: 3
Acq On    : 15 Dec 2014    1:27 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



TIC: A4878.D\data.ms

(108) 2,5-Dichlorobenzotrifluoride

10.945min (-0.000) 0.64 ug/L m

response 5580

Ion	Exp%	Act%
214.00	100	100
216.00	62.10	53.66
179.00	62.80	37.00#
0.00	0.00	0.00

W121514.M Mon Dec 15 15:38:01 2014 MSVO10 Page: 1

```
Sample   : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D      Vial: 3
Acq On    : 15 Dec 2014   1:27 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
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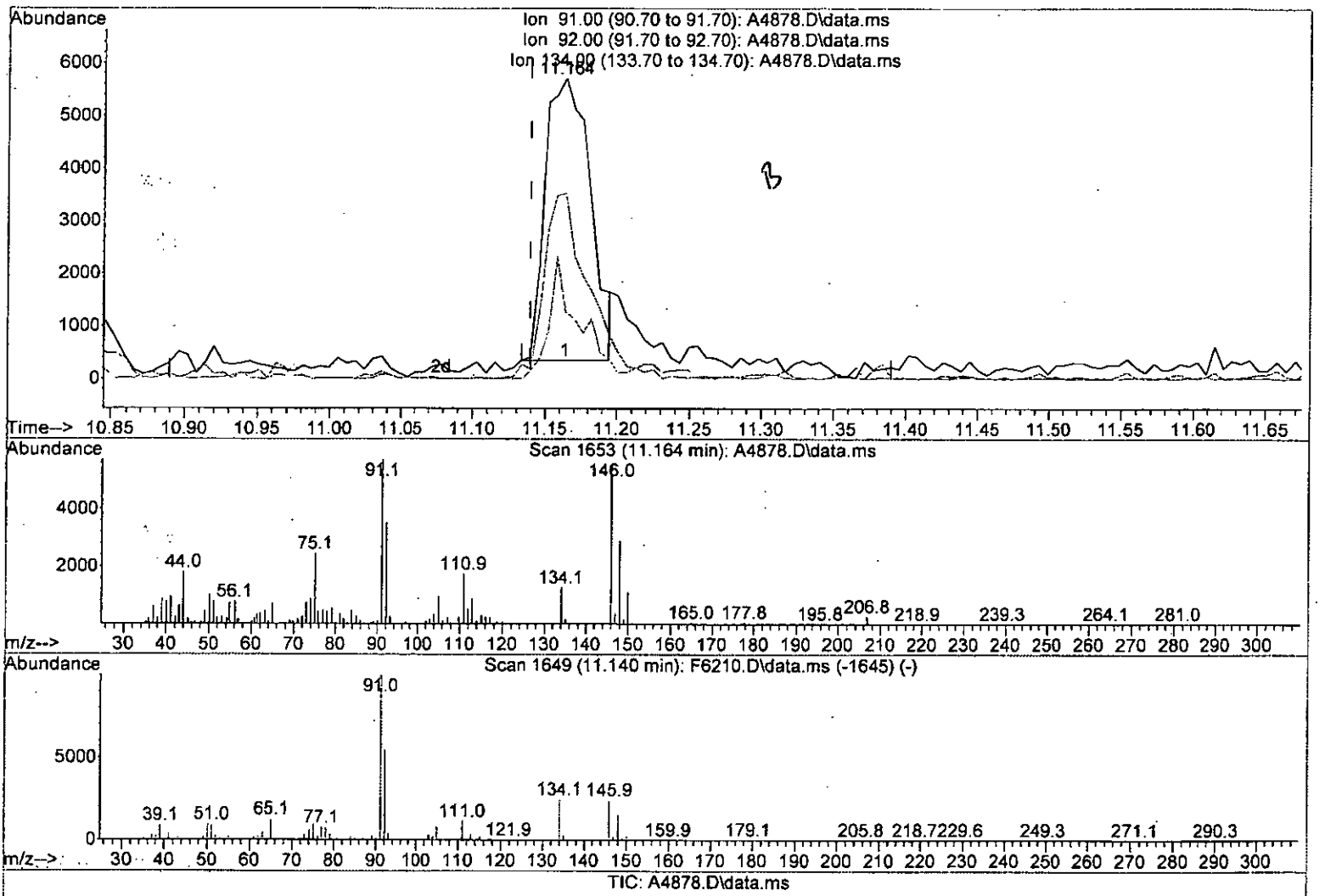


(109) n-Butylbenzene

11.164min (+0.024) 0.45 ug/L

response 11732

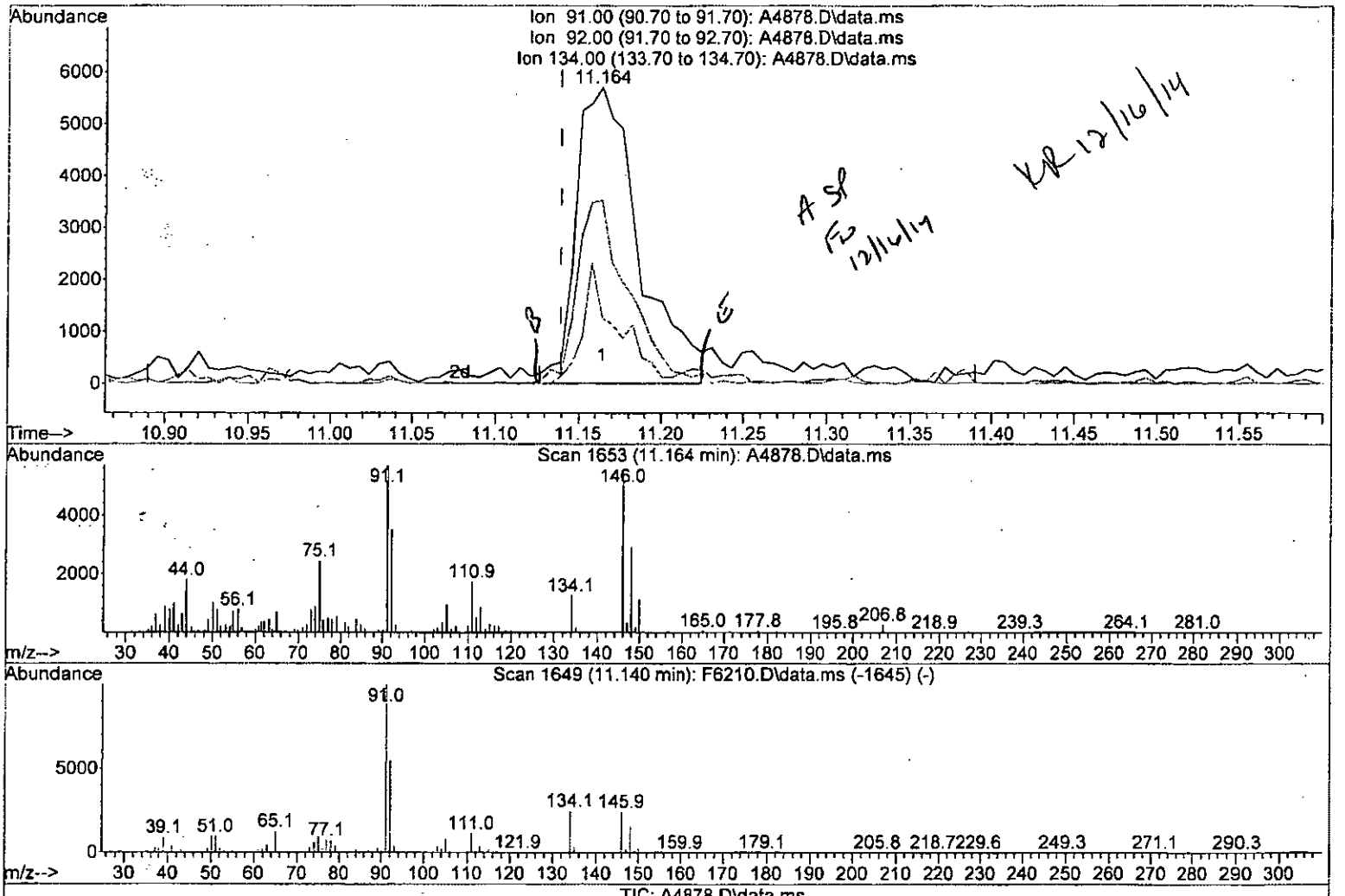
Ion	Exp%	Act%
91.00	100	100
92.00	55.10	61.70
134.00	24.20	22.17
0.00	0.00	0.00

W121514.M Mon Dec 15 15:38:14 2014 MSVO10 Page: 1

00423

```
Sample     : 0.5 PPB STD
Data File  : I:\ACQUDATA\msvoa10\data\121514\A4878.D      Vial: 3
Acq On     : 15 Dec 2014    1:27 pm
Operator   : F.NAEGLER
InstName   : MSVOA10
Misc       :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



(109) n-Butylbenzene

11.164min (+0.024) 0.57 ug/L m

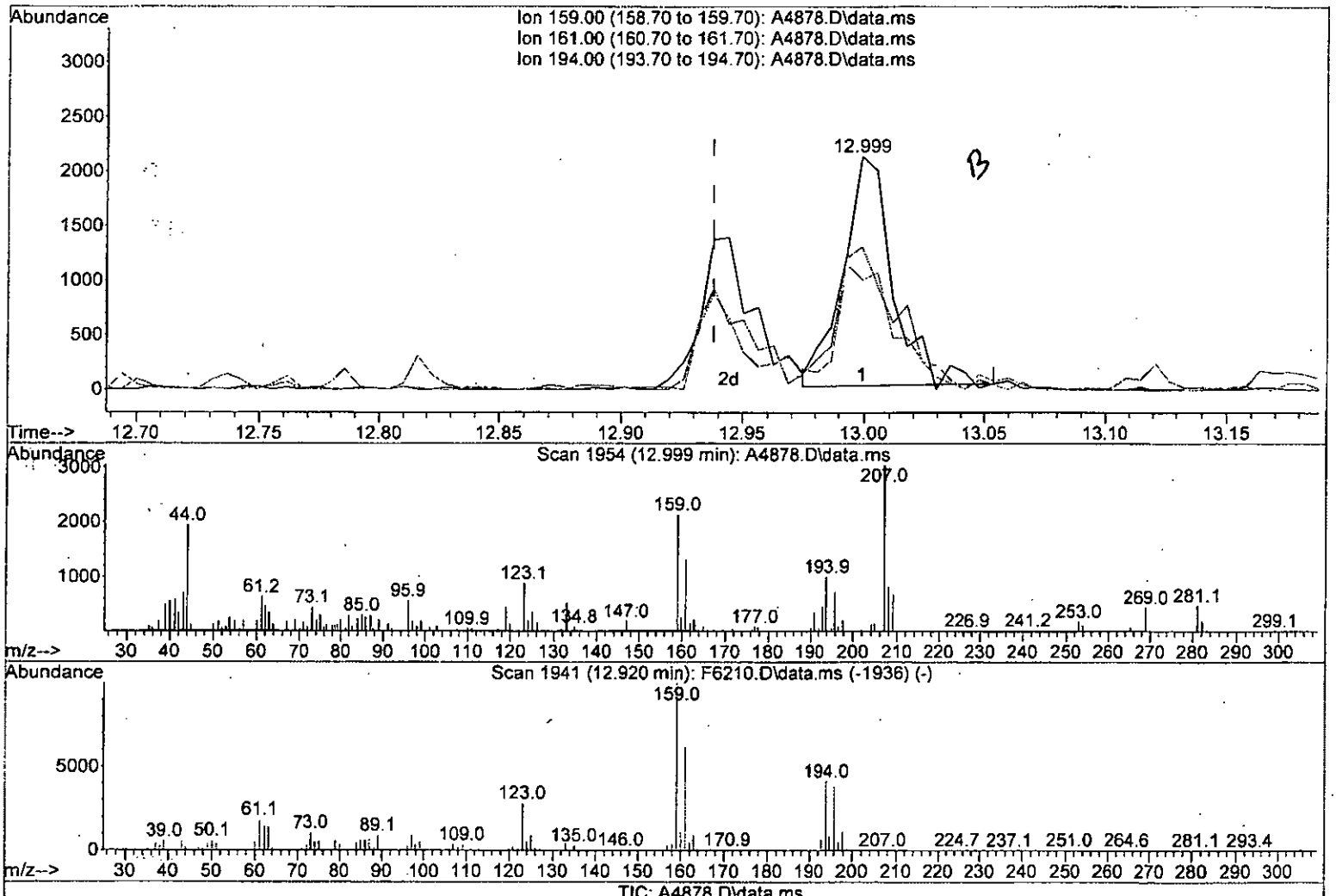
response 14957

Ion	Exp%	Act%
91.00	100	100
92.00	55.10	61.70
134.00	24.20	22.17
0.00	0.00	0.00

W121514.M Mon Dec 15 15:38:31 2014 MSVO10 Page: 1

```
Sample    : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D      Vial: 3
Acq On    : 15 Dec 2014    1:27 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



TIC: A4878.D\data.ms

(119) 2,4,5-Trichlorotoluene

12.999min (+0.061) 0.70 ug/L

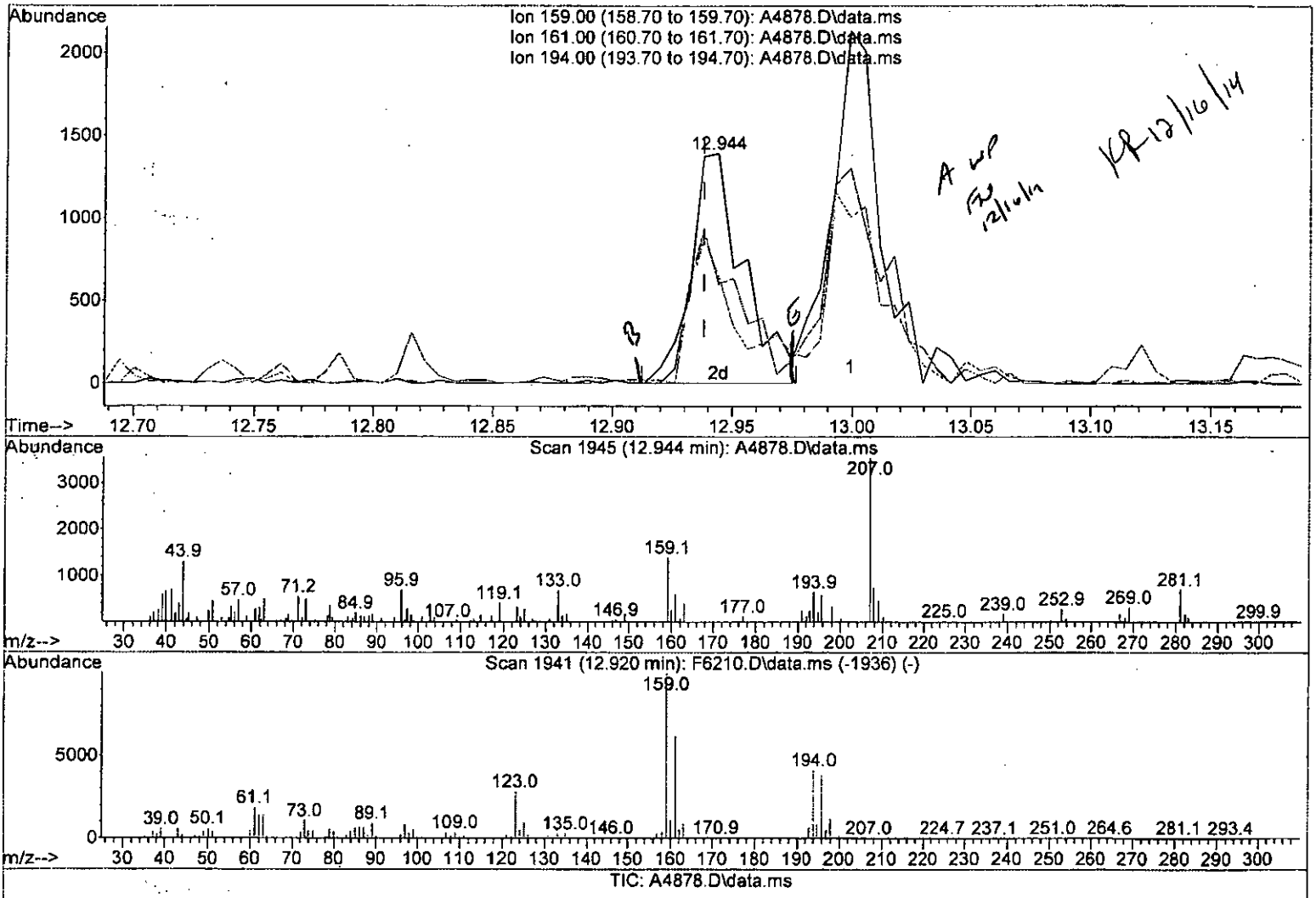
response 2921

Ion	Exp%	Act%
159.00	100	100
161.00	64.40	61.15
194.00	45.80	47.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:38:43 2014 MSVO10 Page: 1

```
Sample    : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D      Vial: 3
Acq On    : 15 Dec 2014    1:27 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 13:40:15 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



TIC: A4878.D\data.ms

(119) 2,4,5-Trichlorotoluene

12.944min (+0.006) 0.51 ug/L m

response 2101

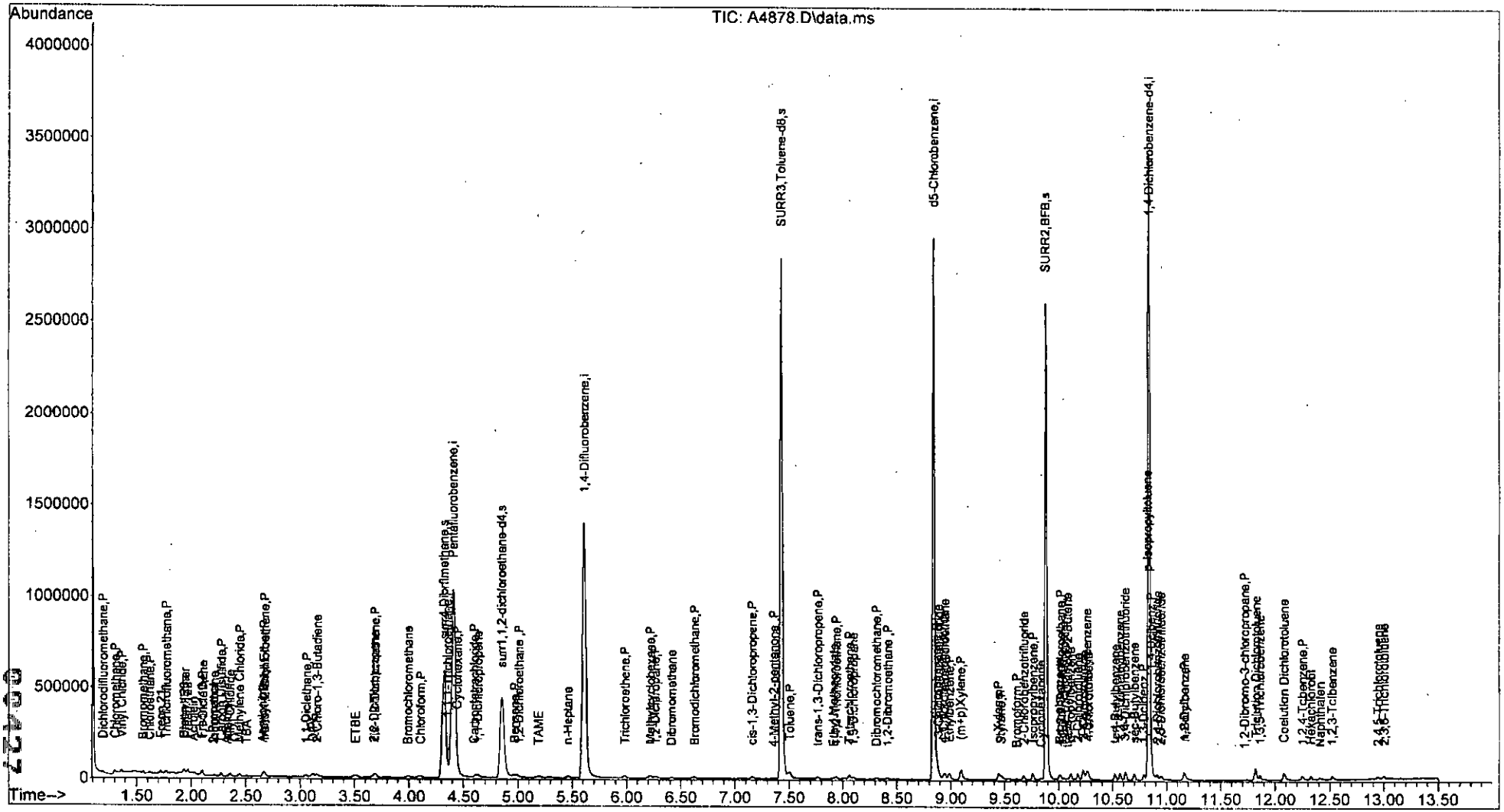
Ion	Exp%	Act%
159.00	100	100
161.00	64.40	43.05#
194.00	45.80	46.58
0.00	0.00	0.00

W121514.M Mon Dec 15 15:38:51 2014 MSVO10

Quantitation Report (QT Reviewed)

Sample : 0.5 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4878.D Vial: 3
Acq On : 15 Dec 2014 1:27 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 15:38:48 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



W121514.M Tue Dec 16 07:43:25 2014 MSVO10

Page: 4

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D Vial: 4
Acq On : 15 Dec 2014 1:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 16 07:37:16 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration

FV 12/16/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	949213	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1365937	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1241986	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	664146	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	447848	52.20	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 104.40%			
48) surr1,1,2-dichloroetha...	4.854	65	449609	49.67	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 99.34%			
65) SURR3,Toluene-d8	7.427	98	1625428	53.78	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.56%			
70) SURR2,BFB	9.878	95	648660	54.54	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 109.08%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.191	85	10524	0.98	ug/L	96
3) Chloromethane	1.300	50	10955	0.79	ug/L	98
4) Vinyl Chloride	1.361	62	10753	0.85	ug/L	92
5) Bromomethane	1.562	94	7665	2.07	ug/L	98
6) Chloroethane	1.617	64	6188	0.99	ug/L	96
7) Freon 21	1.721	67	17939	1.02	ug/L	97
8) Trichlorofluoromethane	1.770	101	14064	0.98	ug/L	96
9) Diethyl Ether	1.940	59	6439	0.87	ug/L	86
10) Freon 123a	1.934	67	9978	0.90	ug/L	91
11) Freon 123	1.971	83	10339	0.88	ug/L	92
12) Acrolein	2.032	56	4032	3.71	ug/L	87
13) 1,1-Diclethene	2.105	96	8362	1.24	ug/L	90
14) Freon 113	2.093	101	8652	1.02	ug/L	90
15) Acetone	2.129	43	2348	0.82	ug/L #	82
16) 2-Propanol	2.203	45	6310	15.53	ug/L	99
17) Iodomethane	2.215	142	8687	1.17	ug/L	80
18) Carbon Disulfide	2.276	76	26360	0.94	ug/L	98
20) Allyl Chloride	2.355	76	5299	1.27	ug/L #	81
21) Methyl Acetate	2.367	43	3725m	0.66	ug/L	
22) Methylene Chloride	2.446	84	8953	1.02	ug/L	88
23) TBA	2.501	59	10342	20.52	ug/L	90
24) Acrylonitrile	2.648	53	7215m	2.74	ug/L	
25) Methyl-t-Butyl Ether	2.666	73	20361	1.05	ug/L	99
26) trans-1,2-Dichloroethene	2.672	96	7372	0.87	ug/L	93
28) 1,1-Diclethane	3.050	63	16029	0.89	ug/L	99
29) Vinyl Acetate	3.123	86	839m	0.83	ug/L	
30) DIPE	3.117	45	29260	0.73	ug/L	95
31) 2-Chloro-1,3-Butadiene	3.154	53	12494	0.70	ug/L	92
32) ETBE	3.507	59	26340	0.96	ug/L	95
33) 2,2-Dichloropropane	3.678	77	12950	1.15	ug/L	97
34) cis-1,2-Dichloroethene	3.684	96	8194	0.88	ug/L	97
36) Propionitrile	3.885	54	2520m	3.27	ug/L	
37) Bromochloromethane	3.989	130	5333	0.93	ug/L	91
38) Methacrylonitrile	4.007	67	1740m	0.84	ug/L	
40) Chloroform	4.098	83	15612	0.98	ug/L	92

121514.M Tue Dec 16 07:43:31 2014 MSVO10

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D Vial: 4
Acq On : 15 Dec 2014 1:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 16 07:37:16 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41)	1,1,1-Trichloroethane	4.361	97	14261	1.08	ug/L	#	80
42)	TAME	5.178	73	21109	1.13	ug/L		92
44)	Cyclohexane	4.452	41	9565m	0.78	ug/L		
46)	Carbontetrachloride	4.604	121	3513	0.98	ug/L	#	65
47)	1,1-Dichloropropene	4.629	75	10895	1.00	ug/L		97
49)	Benzene	4.970	78	32365	0.97	ug/L		90
50)	1,2-Dichloroethane	5.007	62	11247	0.95	ug/L		86
51)	Iso-Butyl Alcohol	4.885	43	5315m	19.32	ug/L		
52)	n-Heptane	5.470	43	10149	0.81	ug/L		85
53)	1-Butanol	6.080	56	3623m	31.70	ug/L		
54)	Trichloroethene	5.976	130	8847	0.94	ug/L	#	87
55)	Methylcyclohexane	6.214	55	10801	0.83	ug/L		95
56)	1,2-Diclpropane	6.269	63	8821	0.90	ug/L		84
57)	Dibromomethane	6.415	93	4787	1.00	ug/L		91
58)	1,4-Dioxane	6.500	88	999m	17.79	ug/L		
59)	Methyl Methacrylate	6.513	69	2999m	0.84	ug/L		
60)	Bromodichloromethane	6.622	83	11065	1.00	ug/L		94
61)	2-Nitropropane	6.909	41	3716	2.61	ug/L	#	59
62)	2-Chloroethylvinyl Ether	7.025	63	3244m	0.78	ug/L		
63)	cis-1,3-Dichloropropene	7.153	75	13374	1.14	ug/L		89
64)	4-Methyl-2-pentanone	7.354	43	5232	0.70	ug/L		87
66)	Toluene	7.506	91	35852	1.00	ug/L		85
67)	trans-1,3-Dichloropropene	7.756	75	10243	1.09	ug/L		86
68)	Ethyl Methacrylate	7.884	69	6793m	0.89	ug/L		
69)	1,1,2-Trichloroethane	7.933	97	6052	0.96	ug/L		89
72)	Tetrachloroethene	8.061	164	7259	1.00	ug/L		93
74)	1,3-Dichloropropane	8.092	76	10037	0.93	ug/L		83
75)	Dibromochloromethane	8.311	129	7510	0.96	ug/L		95
76)	N-Butyl Acetate	8.366	43	9264	0.79	ug/L		98
77)	1,2-Dibromoethane	8.415	107	5138	0.83	ug/L		88
78)	3-Chlorobenzotrifluoride	8.884	180	12761	1.08	ug/L		96
79)	Chlorobenzene	8.866	112	24209	1.00	ug/L		95
80)	4-Chlorobenzotrifluoride	8.933	180	12727	1.17	ug/L		86
81)	1,1,1,2-Tetrachloroethane	8.951	131	7796	0.92	ug/L	#	88
82)	Ethylbenzene	8.982	106	12738	1.07	ug/L	#	83
83)	(m+p)Xylene	9.091	106	30841	2.08	ug/L		99
84)	o-Xylene	9.439	106	15095	1.04	ug/L	#	86
85)	Styrene	9.463	104	24248	1.01	ug/L		91
86)	Bromoform	9.604	173	4254	0.95	ug/L		95
87)	2-Chlorobenzotrifluoride	9.677	180	13007	0.99	ug/L		99
88)	Isopropylbenzene	9.756	105	35570	0.97	ug/L		94
89)	Cyclohexanone	9.829	55	6622	5.98	ug/L		86
90)	trans-1,4-Dichloro-2-B...	10.073	53	1841	1.02	ug/L		99
92)	1,1,2,2-Tetrachloroethane	10.012	83	8087	1.11	ug/L		85
93)	Bromobenzene	10.006	156	10246	1.01	ug/L		93
94)	1,2,3-Trichloropropane	10.055	110	1909	0.92	ug/L	#	78
95)	n-Propylbenzene	10.110	91	43151	1.04	ug/L		99
96)	2-Chlorotoluene	10.177	91	26685	1.04	ug/L		94
97)	3-Chlorotoluene	10.225	91	28492	1.03	ug/L		91
98)	4-Chlorotoluene	10.268	91	33452	1.08	ug/L		97
99)	1,3,5-Trimethylbenzene	10.256	105	31033	1.02	ug/L		96
100)	tert-Butylbenzene	10.518	119	25020	0.99	ug/L		99

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D Vial: 4
Acq On : 15 Dec 2014 1:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

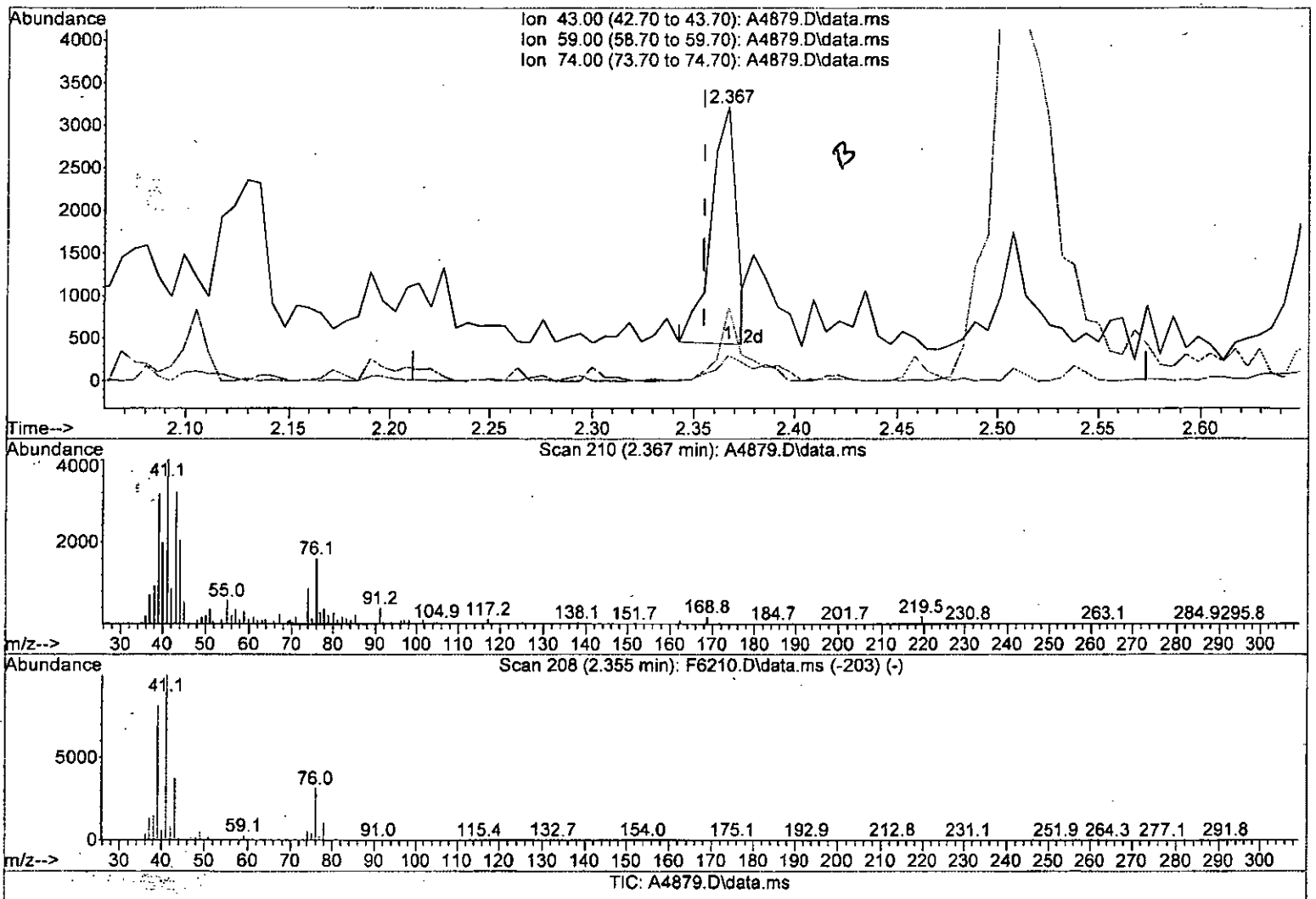
Quant Time: Dec 16 07:37:16 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
101)	1,2,4-Trimethylbenzene	10.567	105	32668	1.07	ug/L		97
102)	3,4-Dichlorobenzotrifl...	10.616	214	10597	1.30	ug/L		79
103)	sec-Butylbenzene	10.701	105	34623	0.97	ug/L		99
104)	p-Isopropyltoluene	10.817	119	29908	0.97	ug/L		98
105)	1,3-Dclbenz	10.786	146	20316	1.06	ug/L		95
106)	1,4-Dclbenz	10.853	146	22516	1.13	ug/L		92
107)	2,4-Dichlorobenzotrifl...	10.908	214	8390	1.16	ug/L		95
108)	2,5-Dichlorobenzotrifl...	10.951	214	10324	1.19	ug/L		95
109)	n-Butylbenzene	11.152	91	26156	1.00	ug/L		95
110)	1,2-Dclbenz	11.158	146	17075	0.95	ug/L		82
111)	1,2-Dibromo-3-chloropr...	11.719	157	955	0.83	ug/L	#	64
112)	Trielution Dichlorotol...	11.817	125	45400	3.02	ug/L		94
113)	1,3,5-Trichlorobenzene	11.853	180	13199	1.15	ug/L		84
114)	Coelution Dichlorotoluene	12.073	125	32199	2.33	ug/L		86
115)	1,2,4-Tcbenzene	12.243	180	10646	1.03	ug/L		82
116)	Hexachlorobt	12.323	225	5696	1.33	ug/L		100
117)	Naphthalen	12.396	128	19198	1.07	ug/L		95
118)	1,2,3-Tclbenzene	12.518	180	9388	1.23	ug/L		96
119)	2,4,5-Trichlorotoluene	12.932	159	5578m	1.35	ug/L		
120)	2,3,6-Trichlorotoluene	12.993	159	6278	1.50	ug/L		84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

```
Sample   : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D      Vial: 4
Acq On    : 15 Dec 2014    1:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



TIC: A4879.D\data.ms

(21) Methyl Acetate (P)

2.367min (+0.012) 0.43 ug/L

response 2422

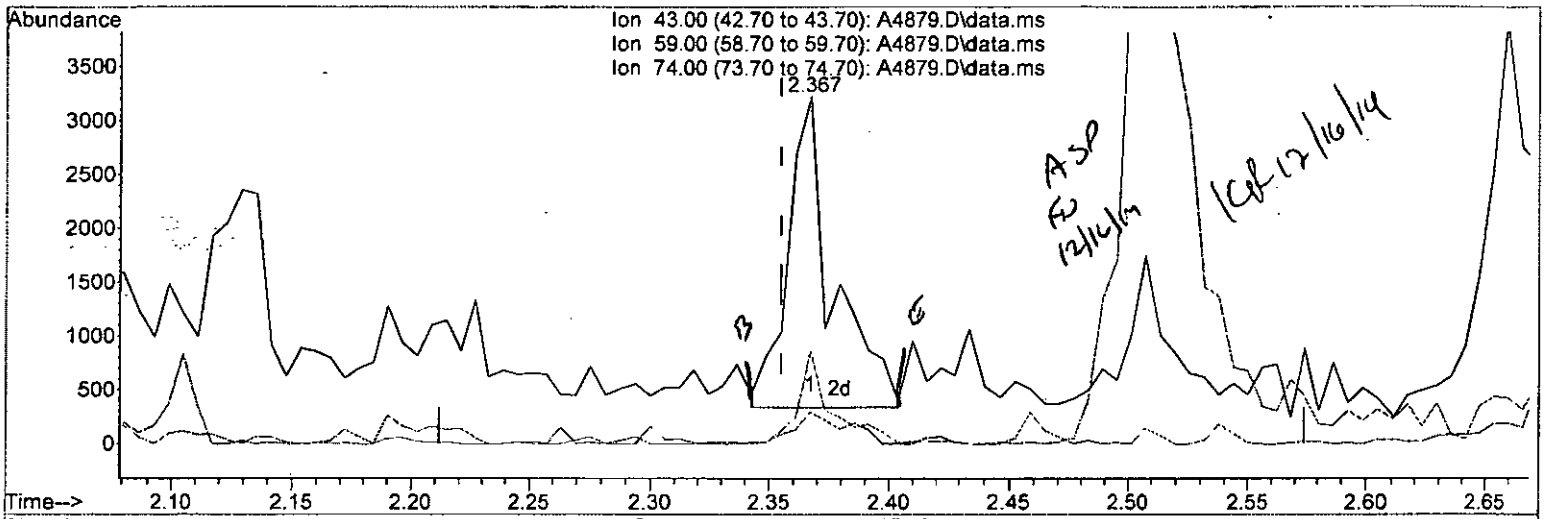
Ion	Exp%	Act%
43.00	100	100
59.00	9.40	9.20
74.00	21.90	26.85
0.00	0.00	0.00

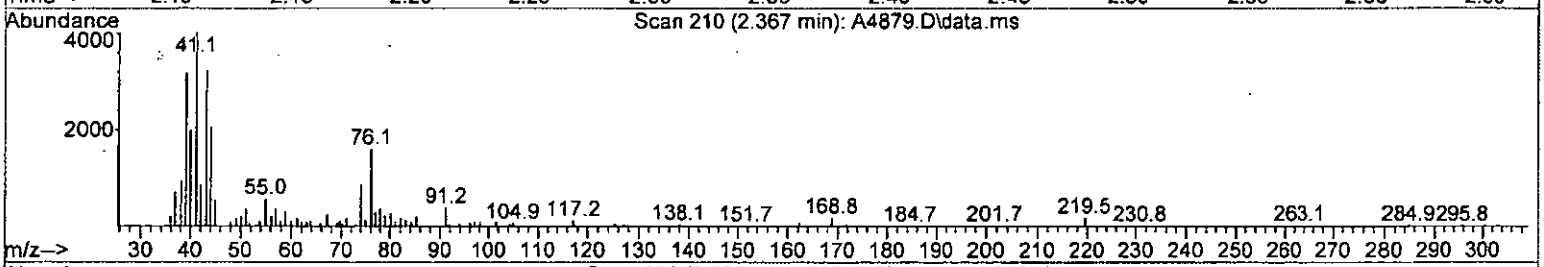
W121514.M Mon Dec 15 15:42:13 2014 MSVO10

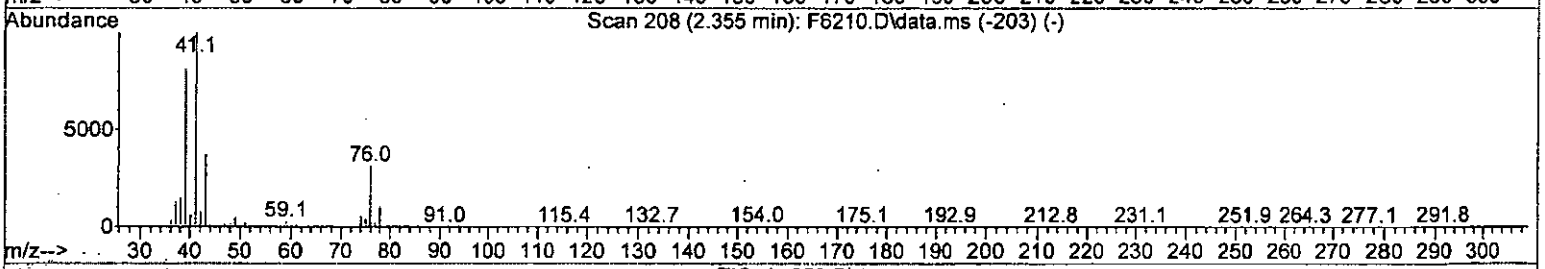
0043 Page: 1

```
Sample   : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D      Vial: 4
Acq On    : 15 Dec 2014    1:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```







TIC: A4879.D\data.ms

(21) Methyl Acetate (P)

2.367min (+0.012) 0.66 ug/L m

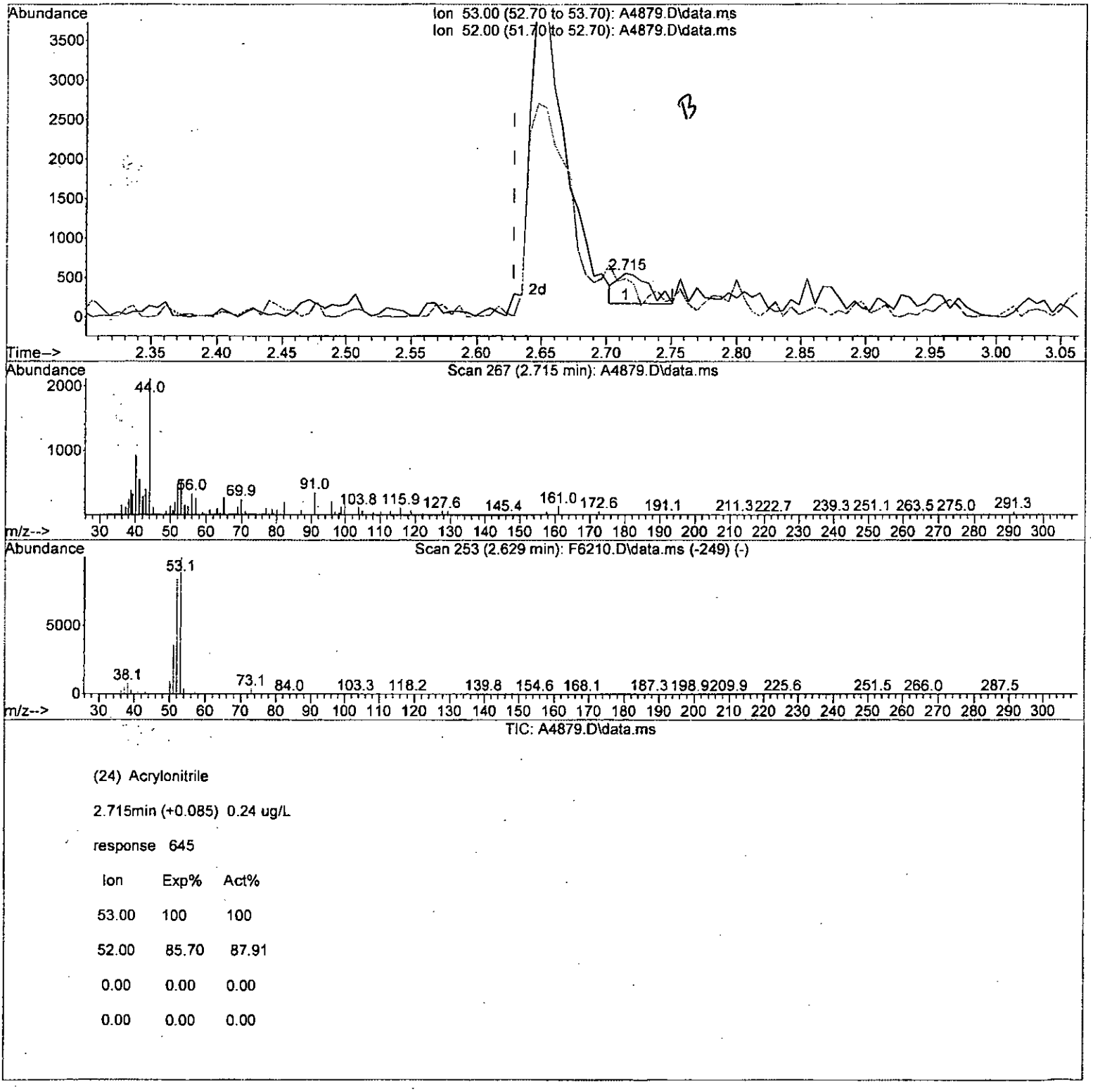
response 3725

Ion	Exp%	Act%
43.00	100	100
59.00	9.40	9.20
74.00	21.90	26.85
0.00	0.00	0.00

W121514.M Mon Dec 15 15:42:39 2014 MSVO10 Page: 1

```
Sample    : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D      Vial: 4
Acq On    : 15 Dec 2014    1:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



TIC: A4879.D\data.ms

(24) Acrylonitrile

2.715min (+0.085) 0.24 ug/L

response 645

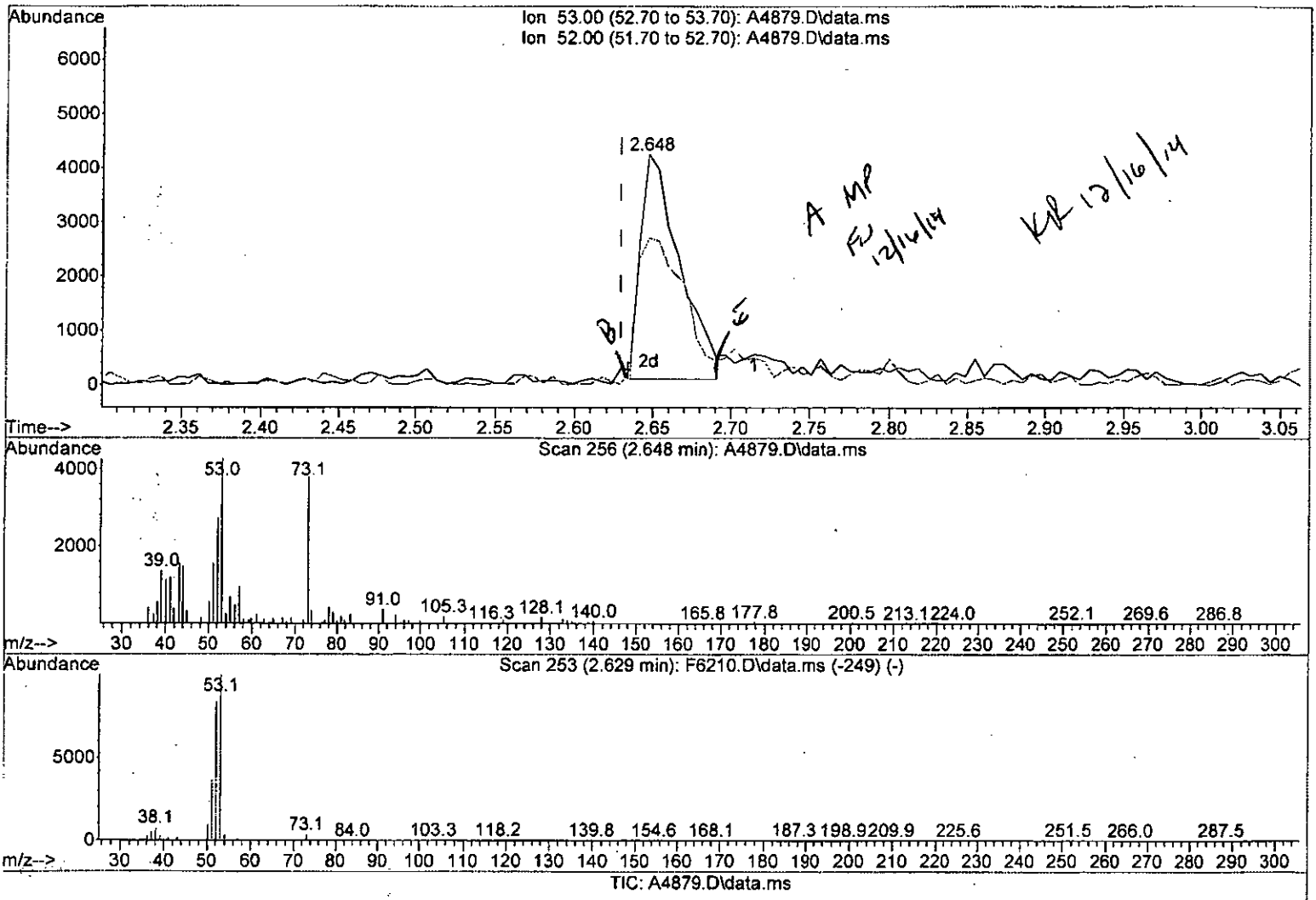
Ion	Exp%	Act%
53.00	100	100
52.00	85.70	87.91
0.00	0.00	0.00
0.00	0.00	0.00

```
W121514.M Mon Dec 15 15:42:57 2014 MSVO10                    Page: 1
```

0043

```
Sample    : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D      Vial: 4
Acq On    : 15 Dec 2014    1:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



TIC: A4879.D\data.ms

(24) Acrylonitrile

2.648min (+0.018) 2.74 ug/L m

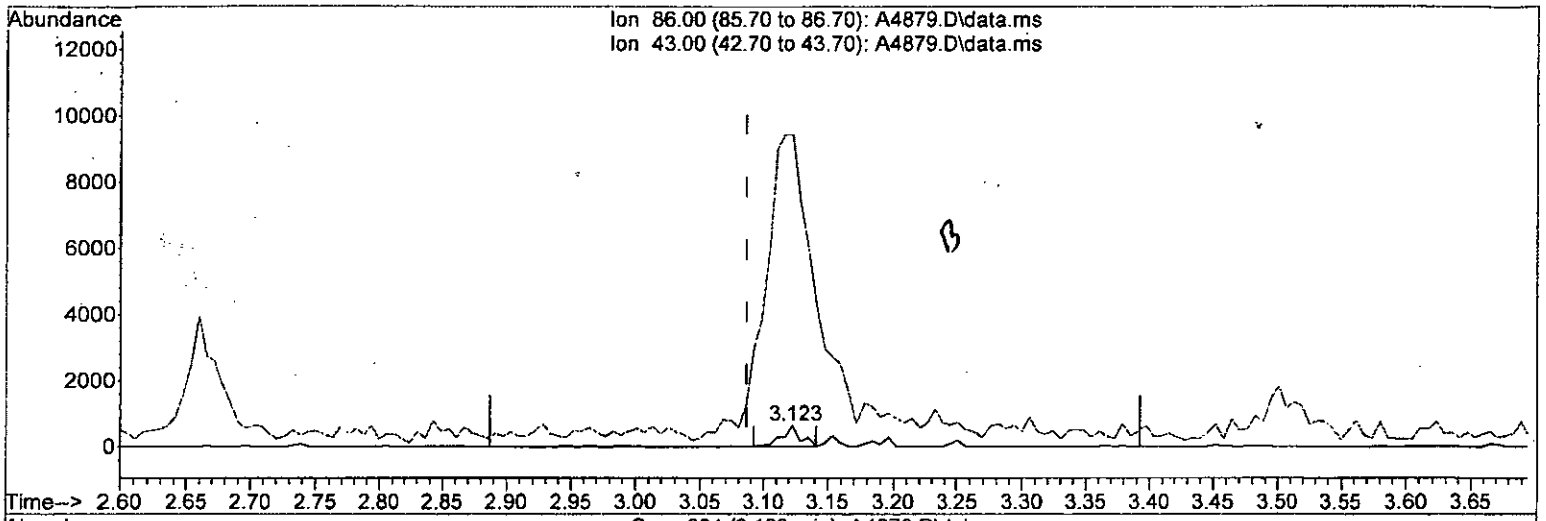
response 7215

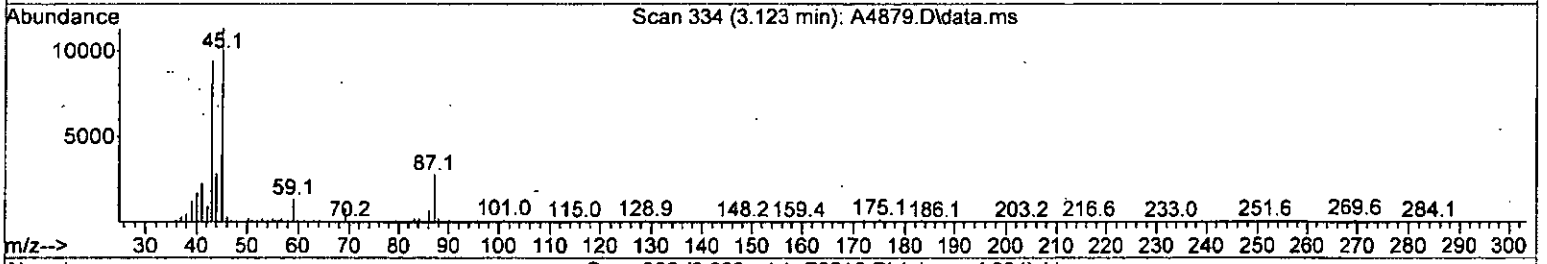
Ion	Exp%	Act%
53.00	100	100
52.00	85.70	63.68#
0.00	0.00	0.00
0.00	0.00	0.00

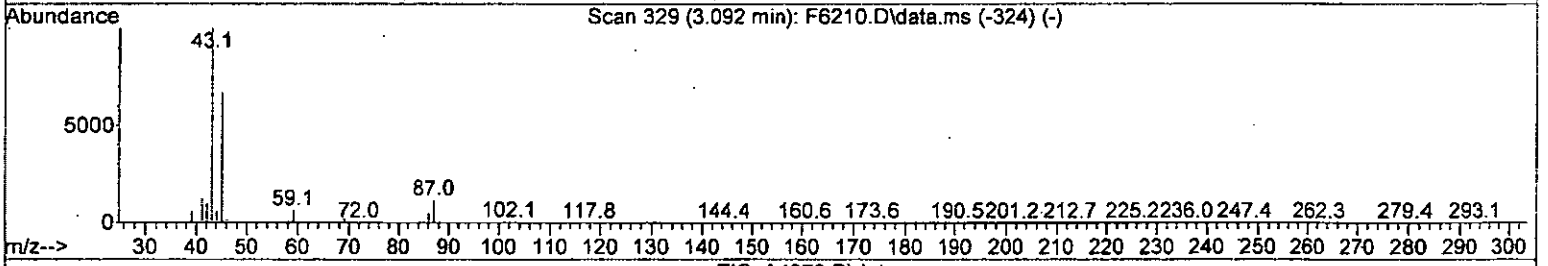
W121514.M Mon Dec 15 15:43:08 2014 MSVO10 Page: 1

```
Sample   : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D      Vial: 4
Acq On    : 15 Dec 2014    1:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 15:50:36 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```







TIC: A4879.D\data.ms

(29) Vinyl Acetate

3.123min (+0.037) 0.63 ug/L

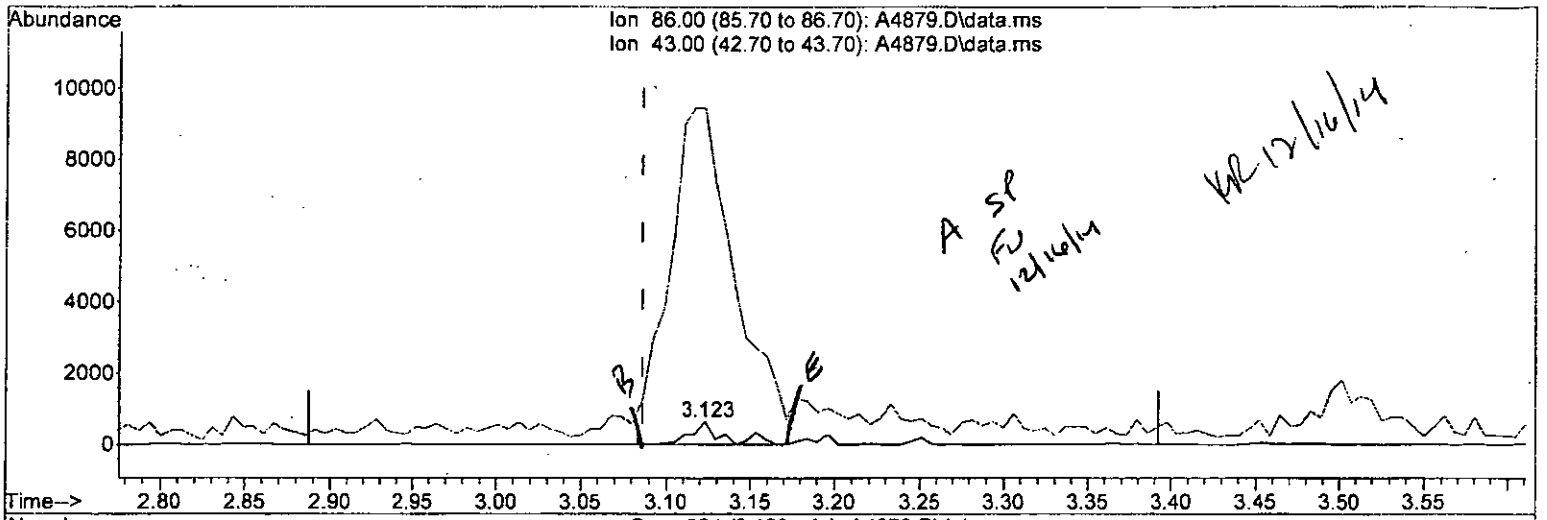
response 633

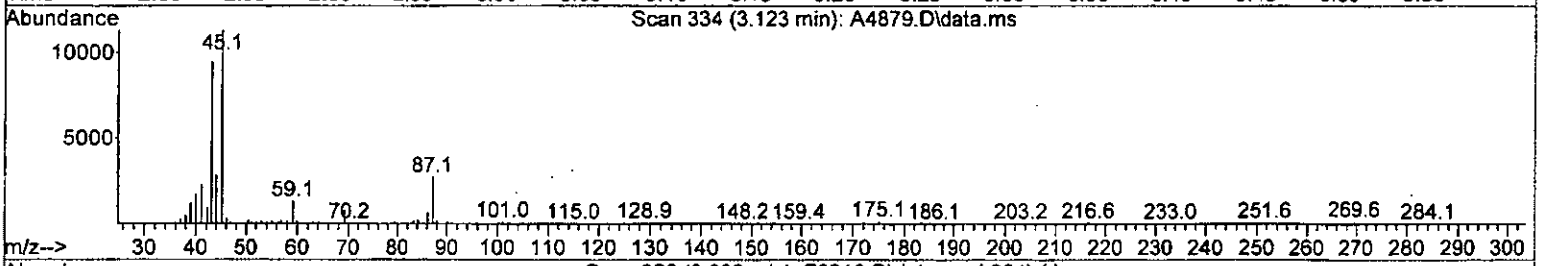
Ion	Exp%	Act%
86.00	100	100
43.00	1729.40	1475.59#
0.00	0.00	0.00
0.00	0.00	0.00

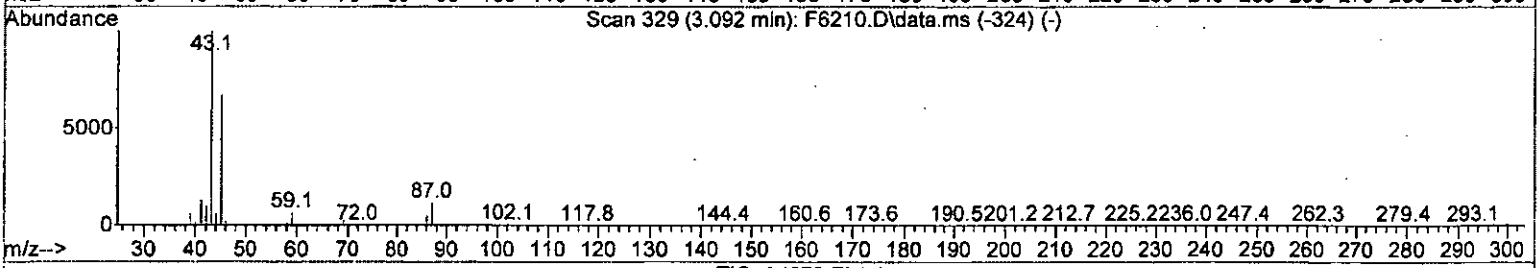
W121514.M Tue Dec 16 07:37:11 2014 MSVO10

```
Sample    : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D      Vial: 4
Acq On    : 15 Dec 2014    1:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 15:50:36 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```







TIC: A4879.D\data.ms

(29) Vinyl Acetate

3.123min (+0.037) 0.83 ug/L m

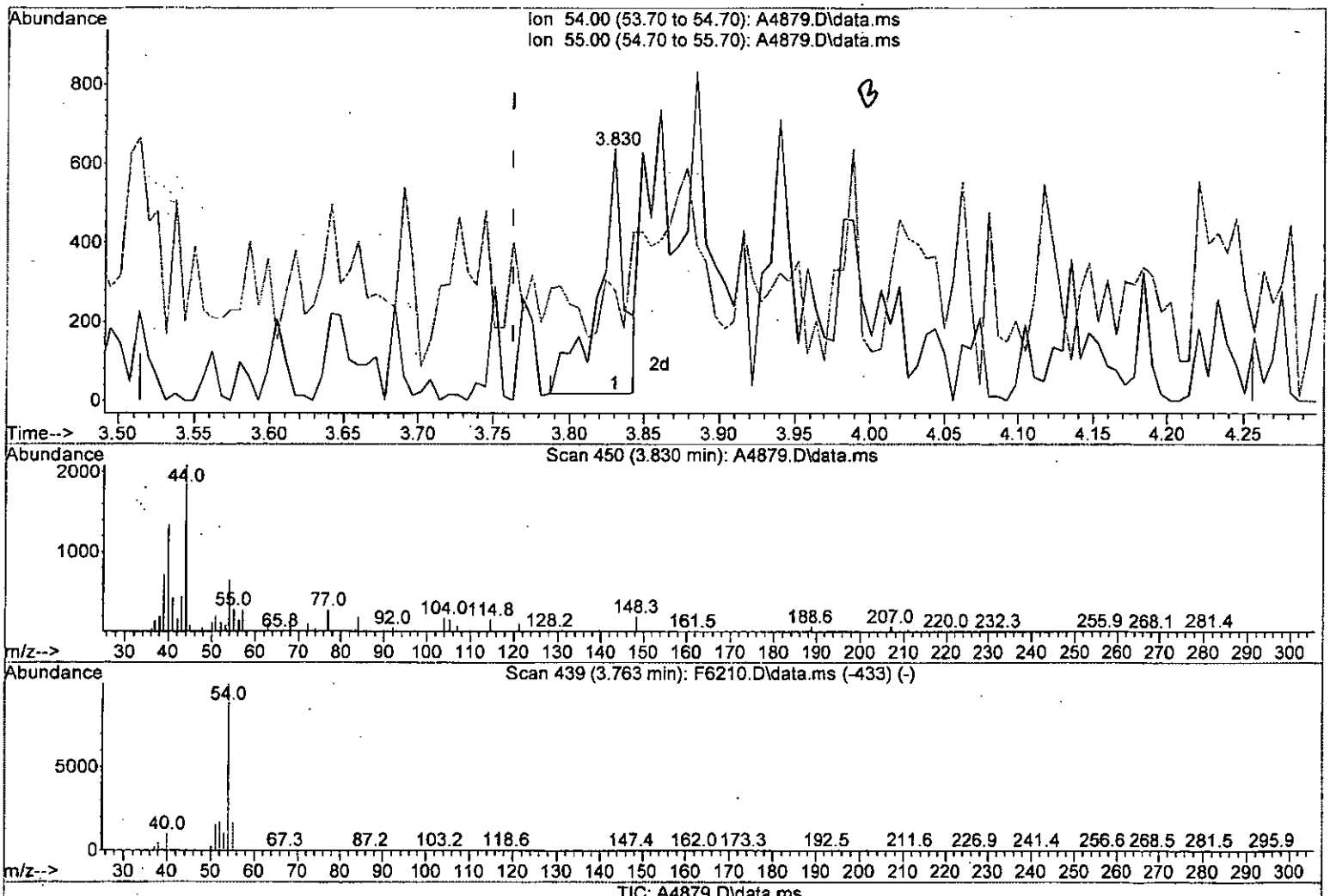
response 839

Ion	Exp%	Act%
86.00	100	100
43.00	1729.40	1475.59#
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Tue Dec 16 07:37:22 2014 MSVO10

Sample 10 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D Vial: 4
Acq On : 15 Dec 2014 1:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



TIC: A4879.D\data.ms

(36) Propionitrile

3.830min (+0.067) 0.95 ug/L

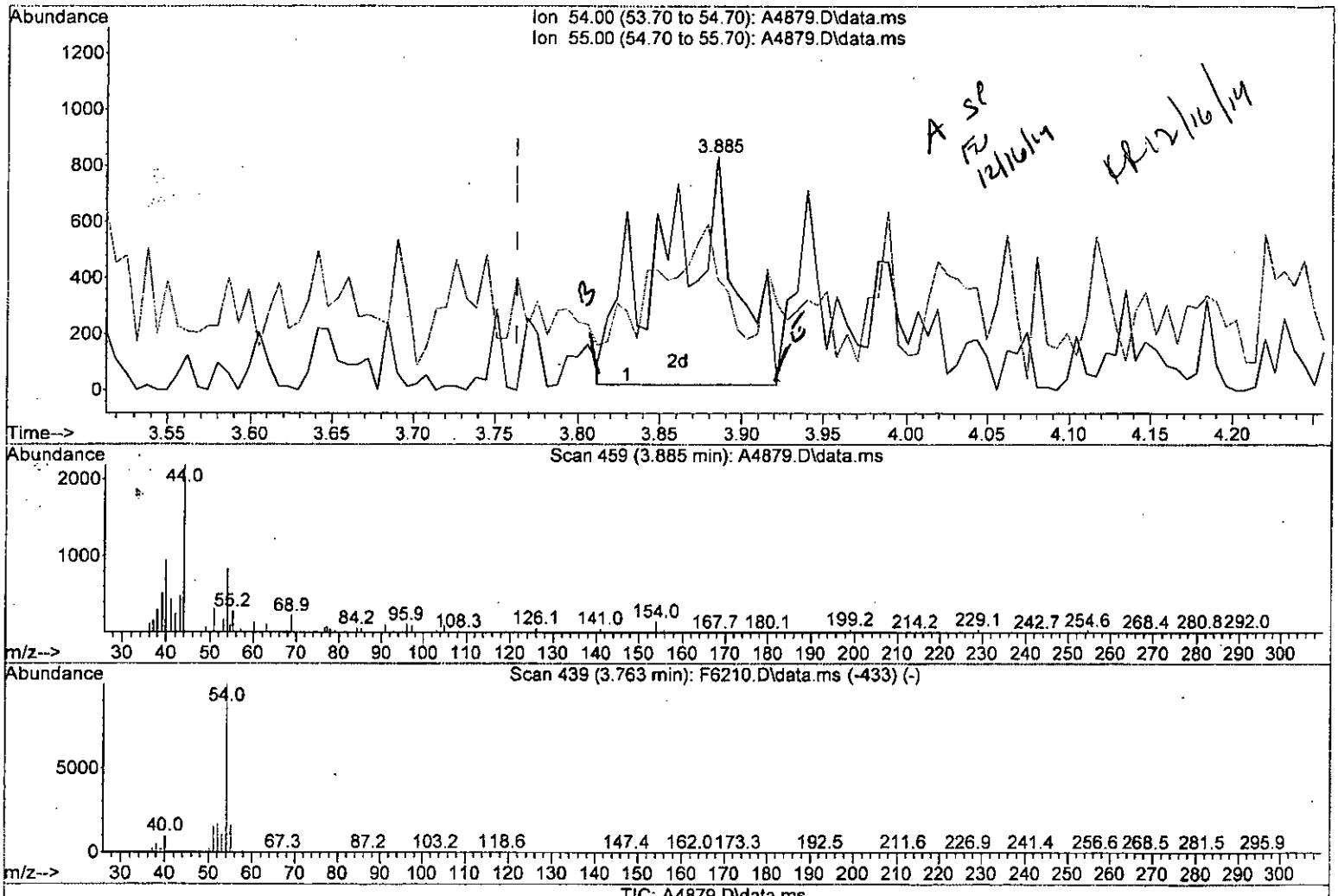
response 732

Ion	Exp%	Act%
54.00	100	100
55.00	13.70	43.87#
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:43:53 2014 MSVO10

Sample : 10 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D Vial: 4
Acq On : 15 Dec 2014 1:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



TIC: A4879.D\data.ms

(36) Propionitrile

3.885min (+0.122) 3.27 ug/L m

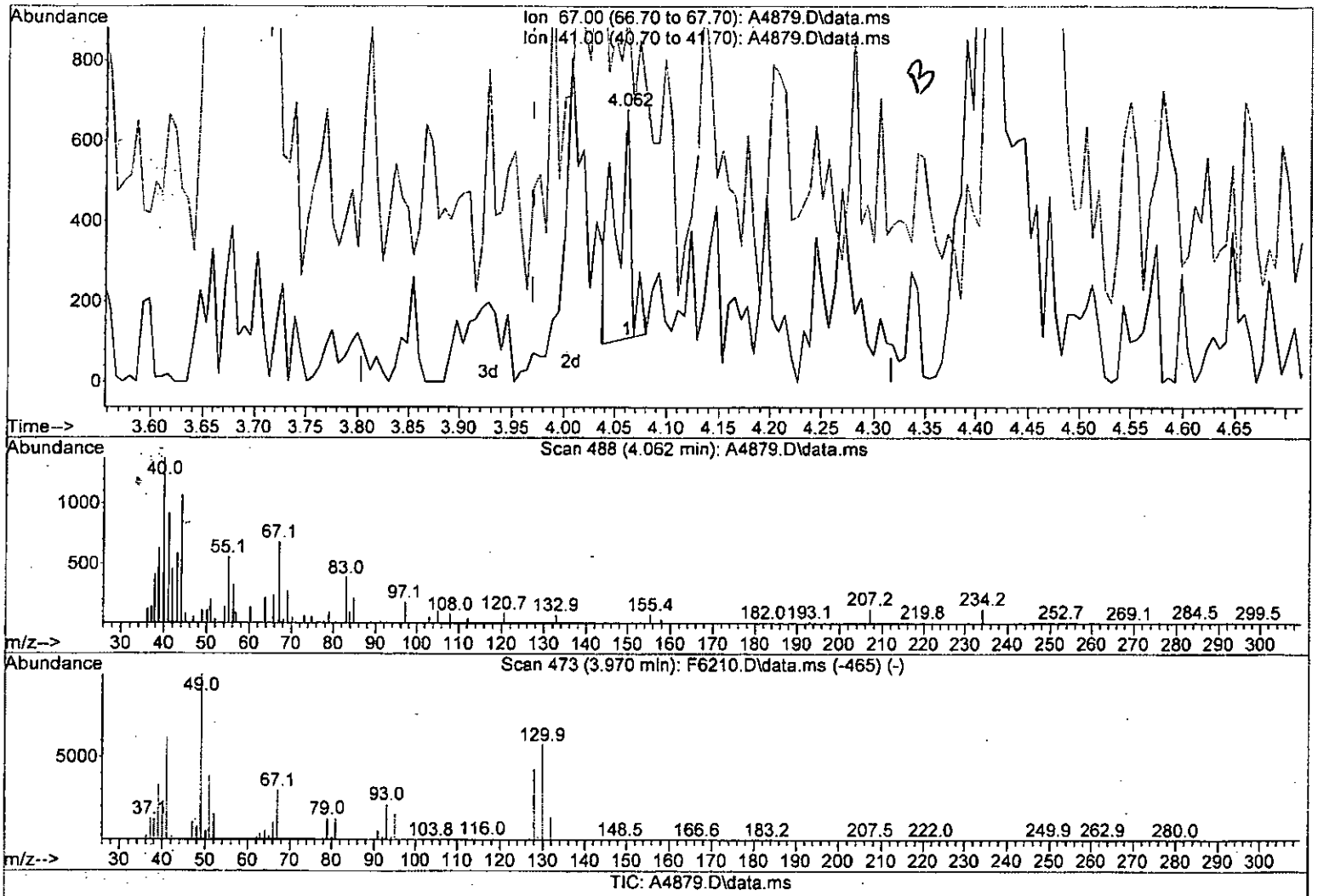
response 2520

Ion	Exp%	Act%
54.00	100	100
55.00	13.70	34.13#
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:44:11 2014 MSVO10

```
Sample   : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D      Vial: 4
Acq On    : 15 Dec 2014    1:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



TIC: A4879.D\data.ms

(38) Methacrylonitrile

4.062min (+0.091) 0.29 ug/L

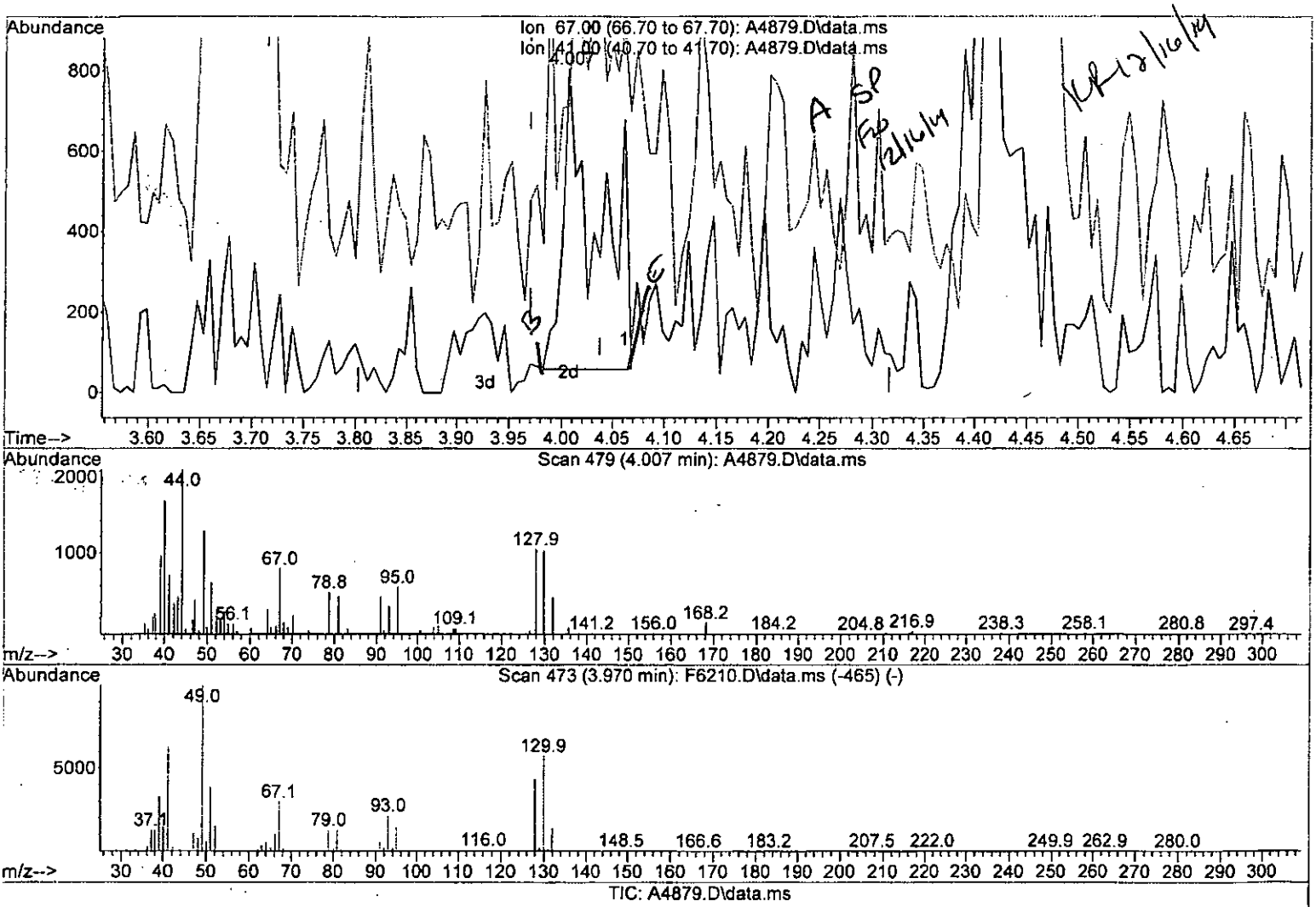
response 598

Ion	Exp%	Act%
67.00	100	100
41.00	149.10	134.86
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:44:36 2014 MSVO10

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D Vial: 4
Acq On : 15 Dec 2014 1:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



TIC: A4879.D\data.ms

(38) Methacrylonitrile

4.007min (+0.037) 0.84 ug/L m

response 1740

Ion	Exp%	Act%
67.00	100	100
41.00	149.10	88.68#
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:44:54 2014 MSVO10 Page: 1

```
Sample   : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D      Vial: 4
Acq On    : 15 Dec 2014    1:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
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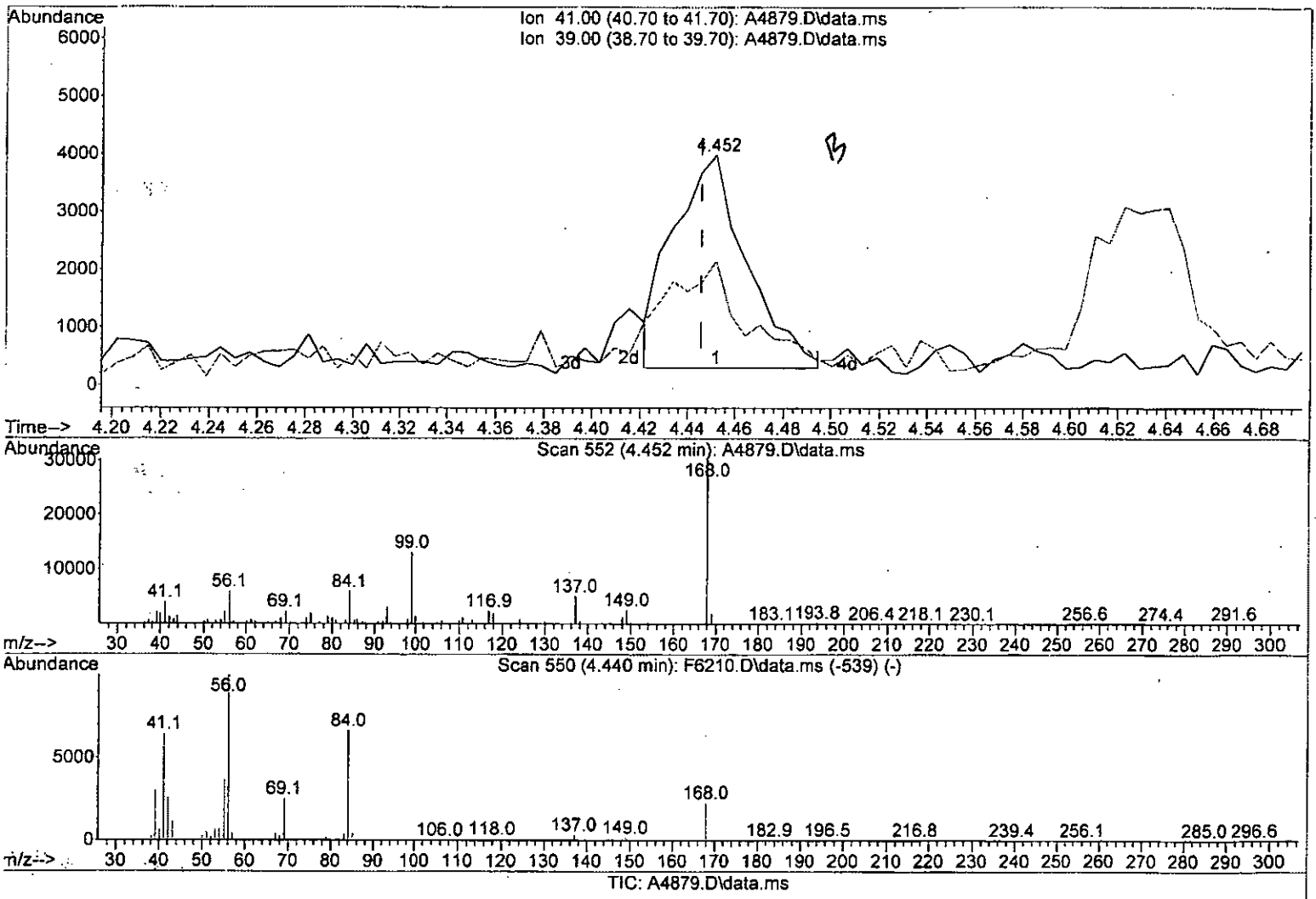


(44) Cyclohexane (P)

4.452min (+0.006) 0.65 ug/L

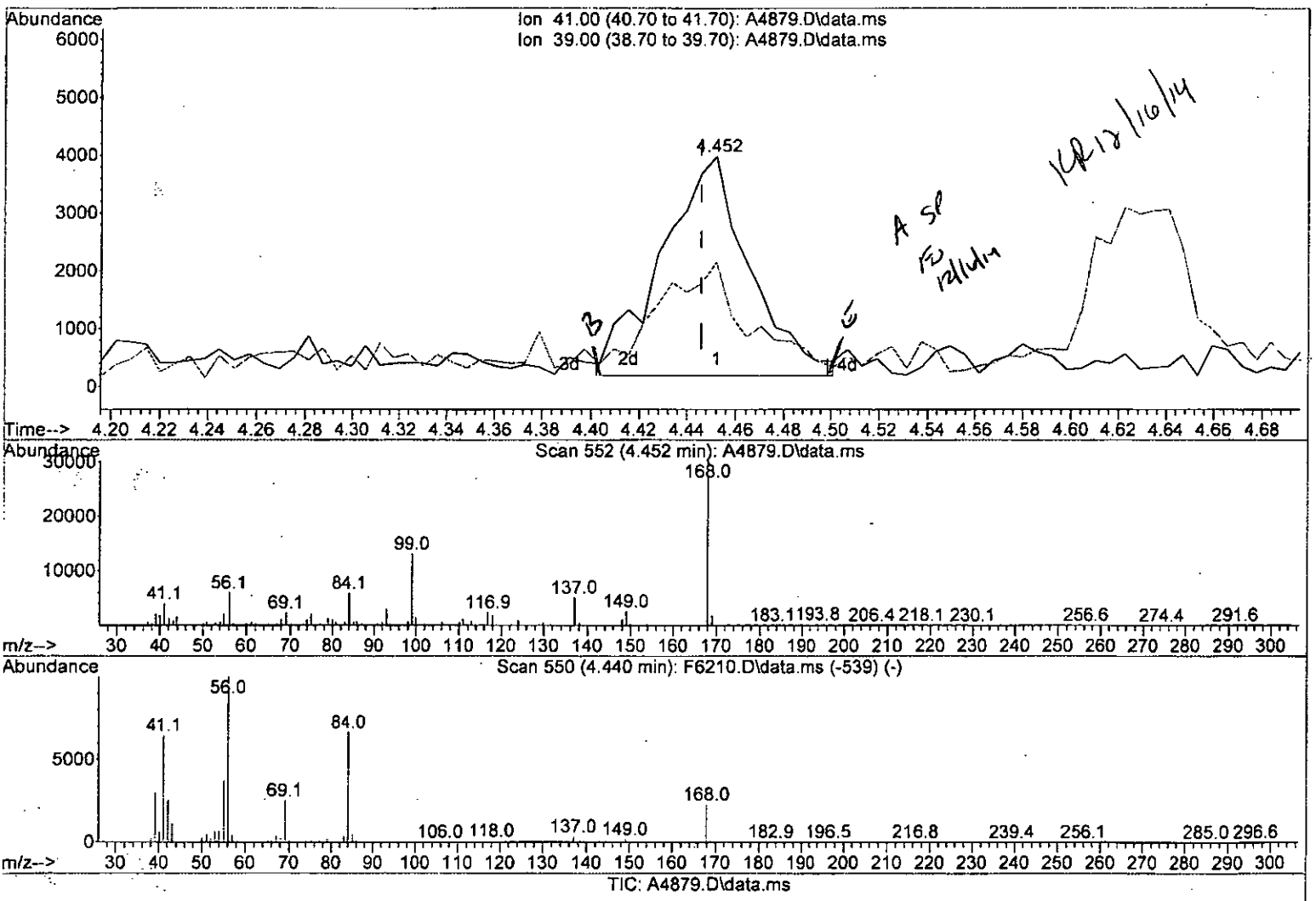
response 7906

Ion	Exp%	Act%
41.00	100	100
39.00	51.30	53.88
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:45:22 2014 MSVO10 Page: 1

Sample 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D Vial: 4
Acq On : 15 Dec 2014 1:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



TIC: A4879.D\data.ms

(44) Cyclohexane (P)

4.452min (+0.006) 0.78 ug/L m

response 9565

Ion	Exp%	Act%
41.00	100	100
39.00	51.30	53.88
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:45:30 2014 MSVO10 Page: 1

```
Sample    : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D      Vial: 4
Acq On    : 15 Dec 2014    1:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
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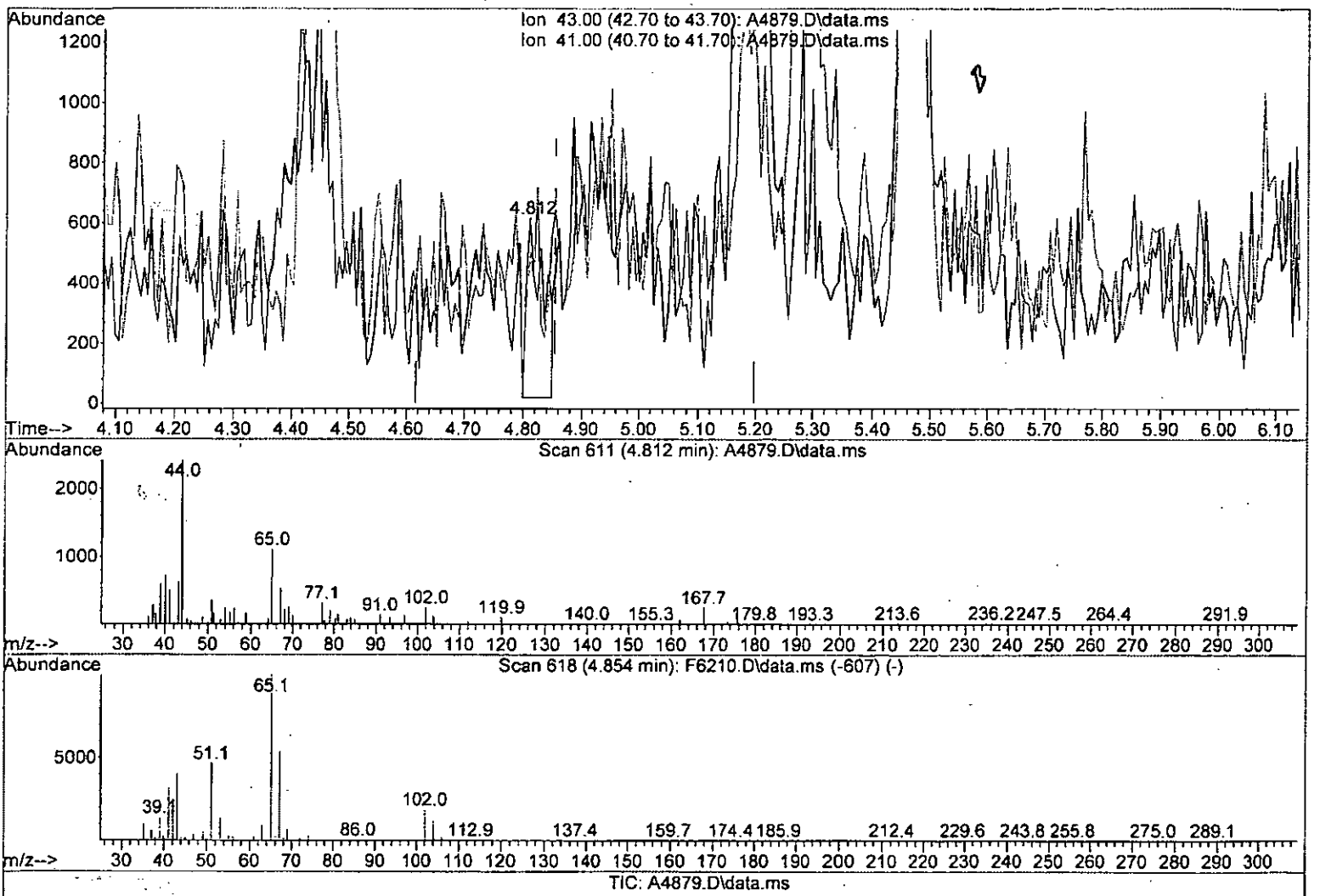


TIC: A4879.D\data.ms

(51) Iso-Butyl Alcohol

4.812min (-0.043) 4.26 ug/L

response 1172

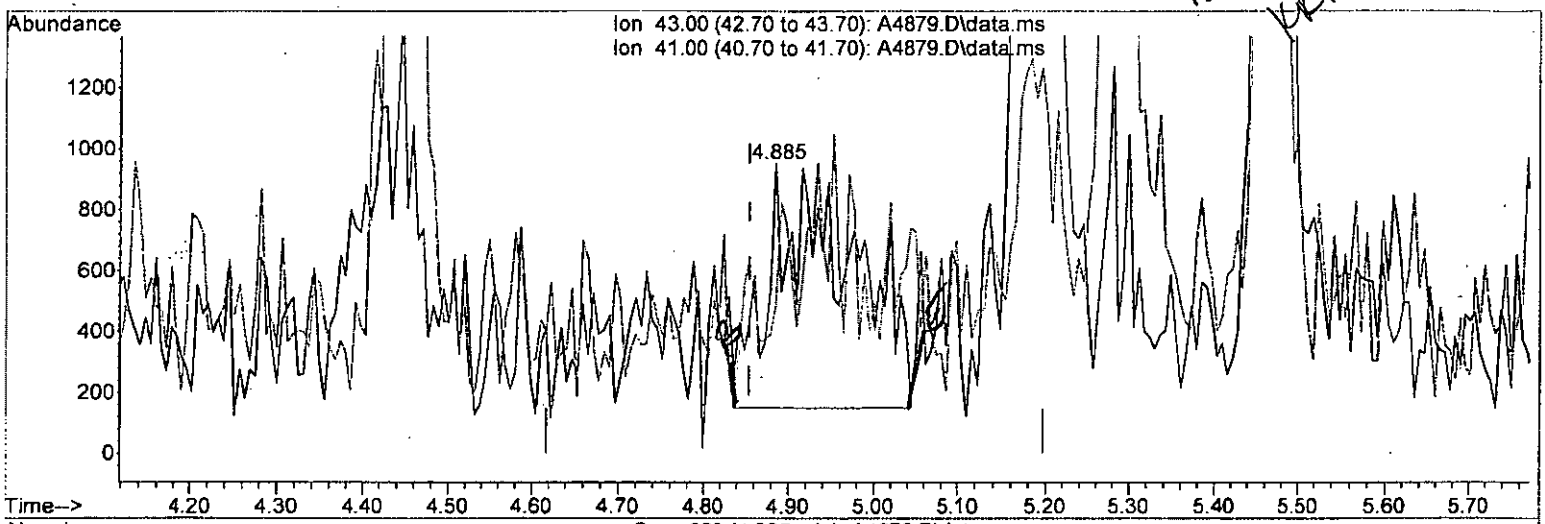
Ion	Exp%	Act%
43.00	100	100
41.00	76.40	81.33
0.00	0.00	0.00
0.00	0.00	0.00

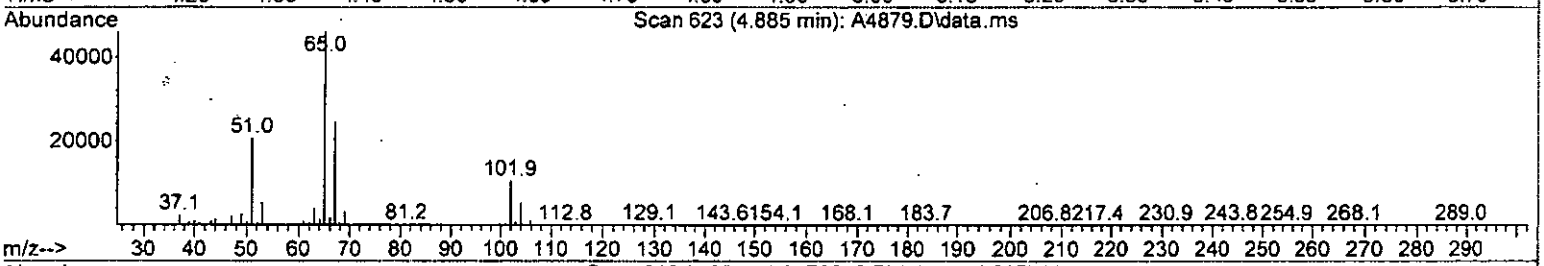
W121514.M Mon Dec 15 15:45:59 2014 MSVO10

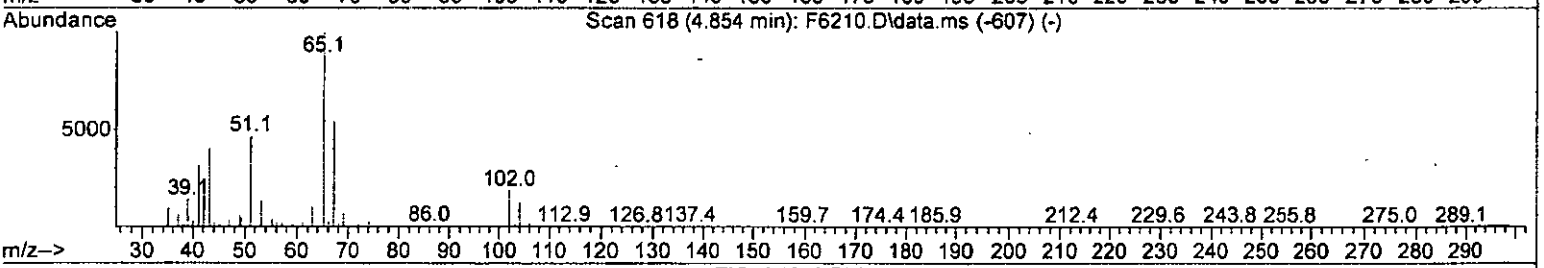
```
Sample   : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D      Vial: 4
Acq On    : 15 Dec 2014    1:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```

A mf 12/16/14 VL 12/16/14







TIC: A4879.D\data.ms

(51) Iso-Butyl Alcohol

4.885min (+0.031) 19.32 ug/L m

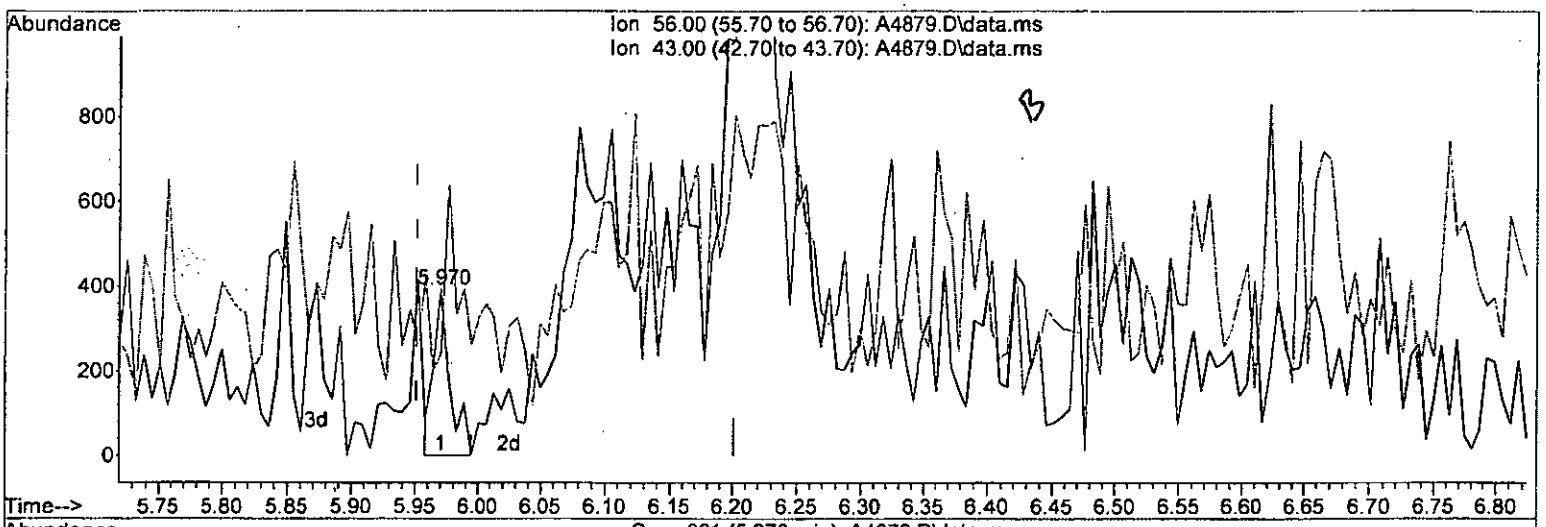
response 5315

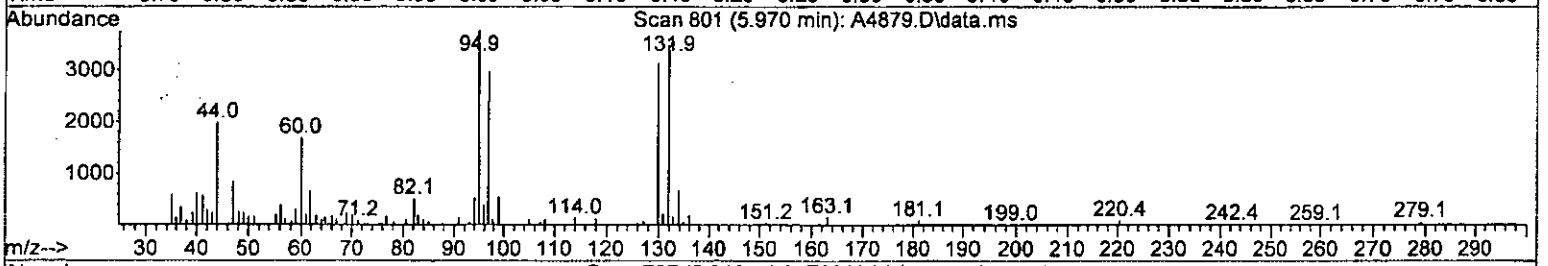
Ion	Exp%	Act%
43.00	100	100
41.00	76.40	50.84#
0.00	0.00	0.00
0.00	0.00	0.00

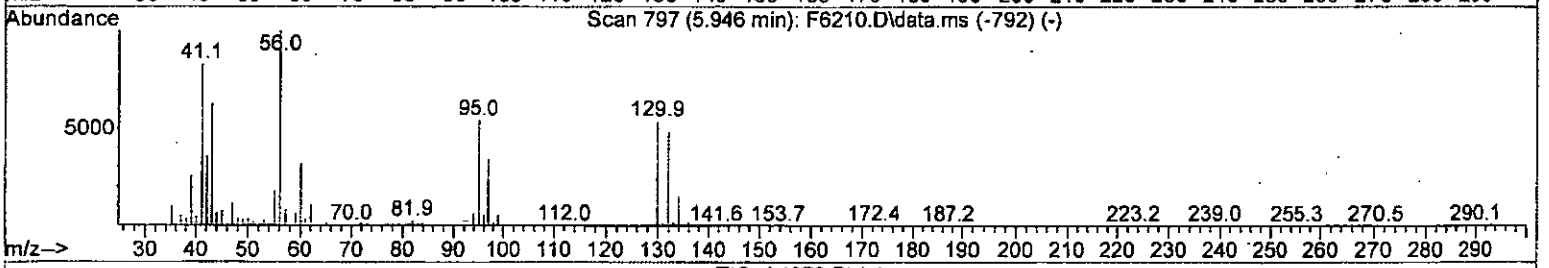
W121514.M Mon Dec 15 15:46:19 2014 MSVO10

```
Sample    : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D      Vial: 4
Acq On    : 15 Dec 2014    1:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```







TIC: A4879.D\data.ms

(53) 1-Butanol

5.970min (+0.019) 3.05 ug/L

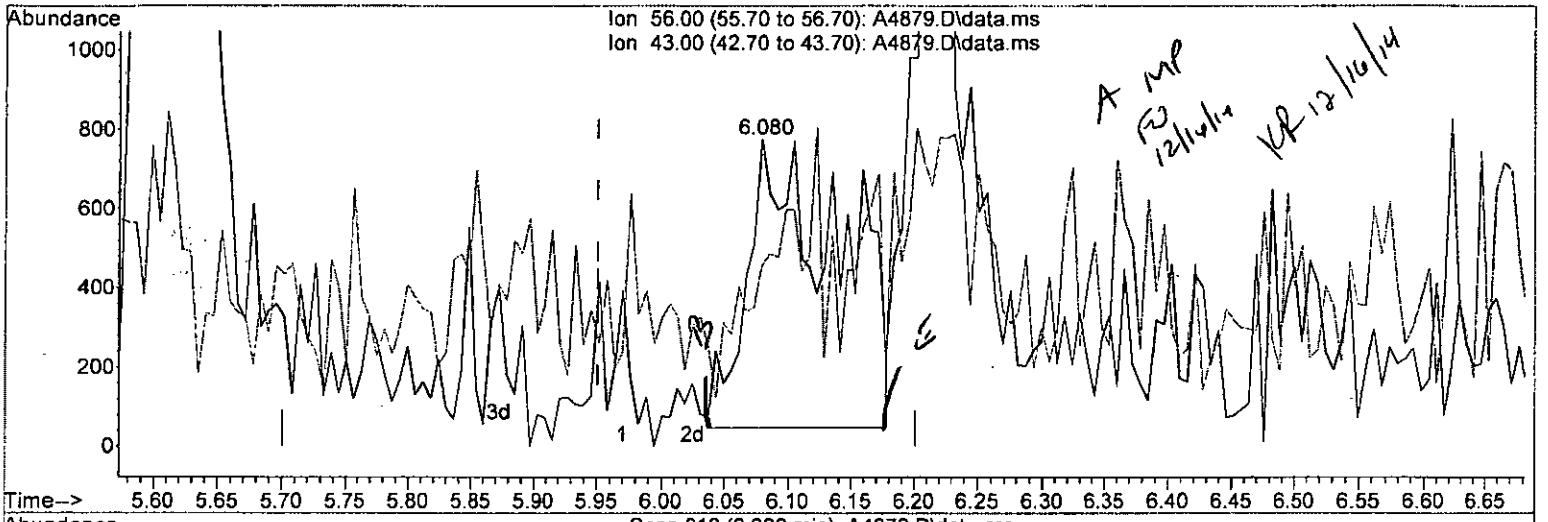
response 348

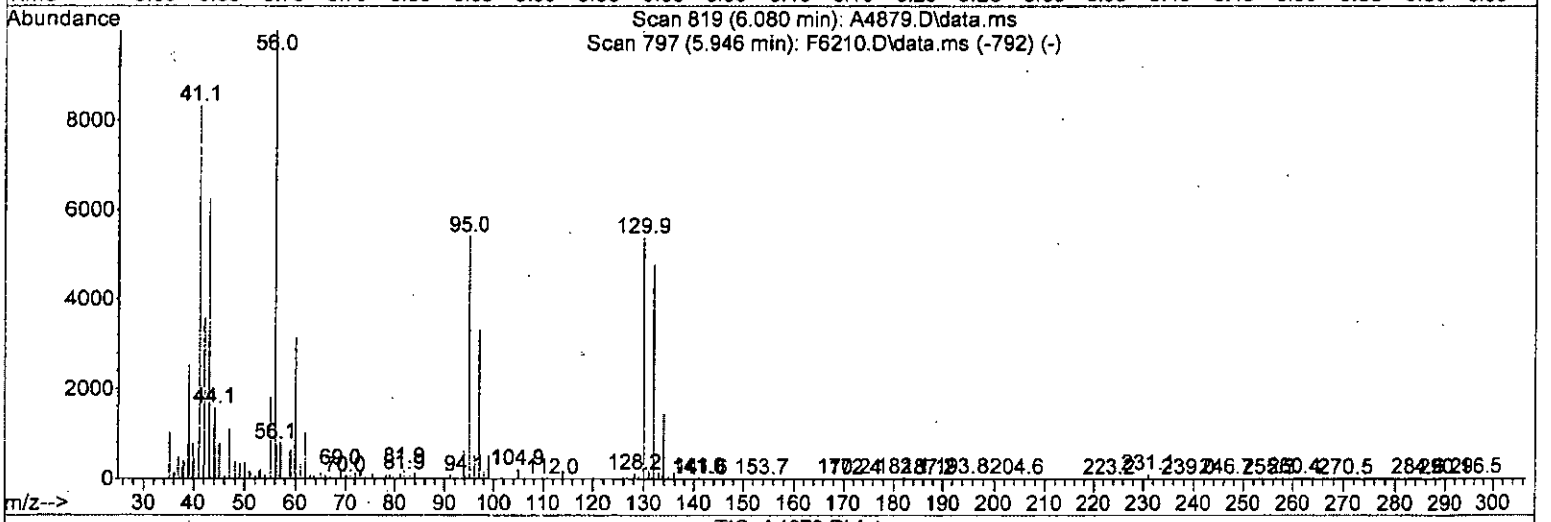
Ion	Exp%	Act%
56.00	100	100
43.00	56.20	60.87
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:47:16 2014 MSVO10

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D Vial: 4
Acq On : 15 Dec 2014 1:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration





TIC: A4879.D\data.ms

(53) 1-Butanol

6.080min (+0.129) 31.70 ug/L m

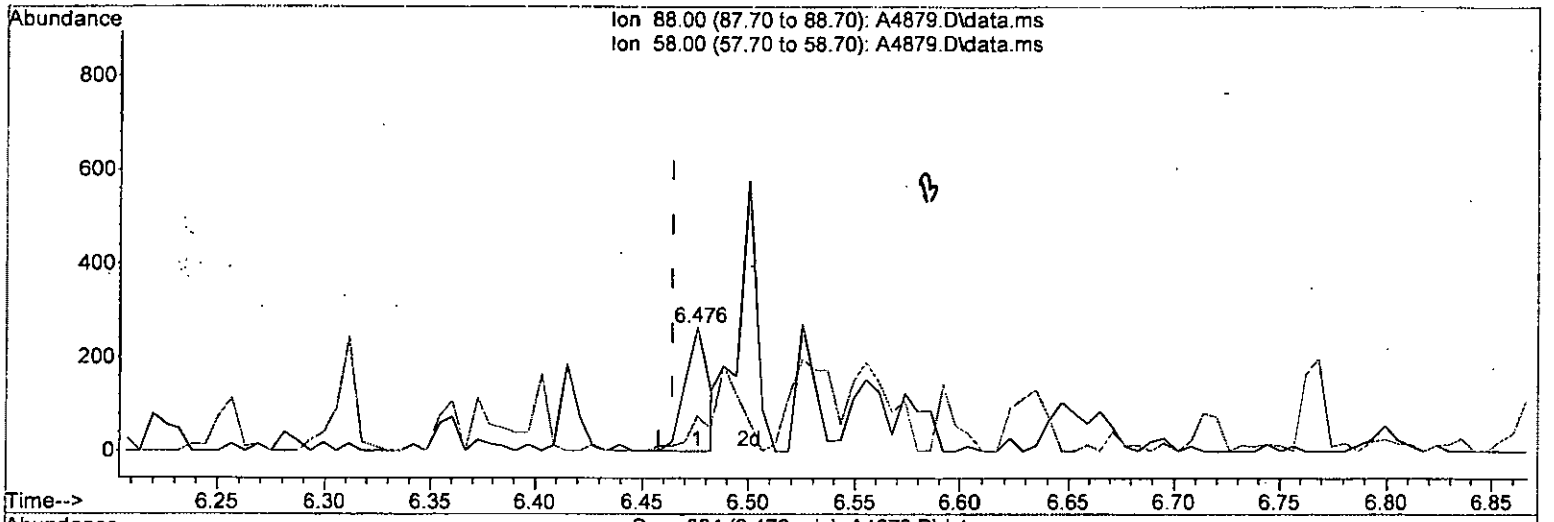
response 3623

Ion	Exp%	Act%
56.00	100	100
43.00	56.20	59.10
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:48:19 2014 MSVO10

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D Vial: 4
Acq On : 15 Dec 2014 1:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



TIC: A4879.D\data.ms

(58) 1,4-Dioxane

6.476min (+0.012) 3.63 ug/L

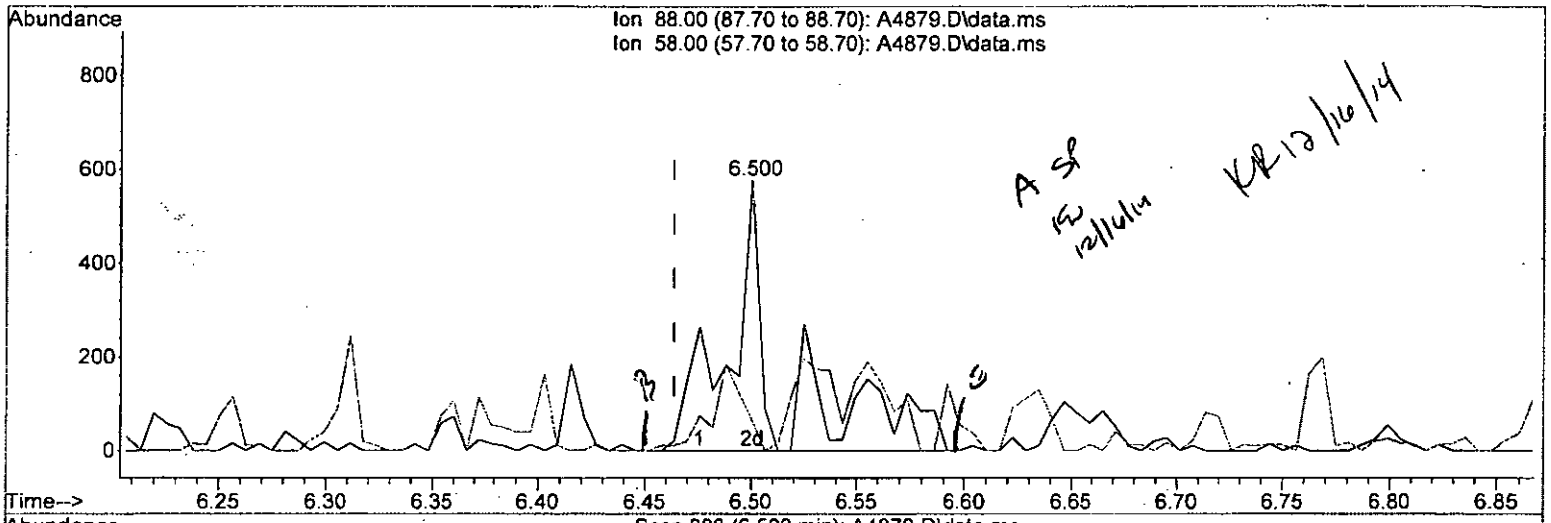
response 204

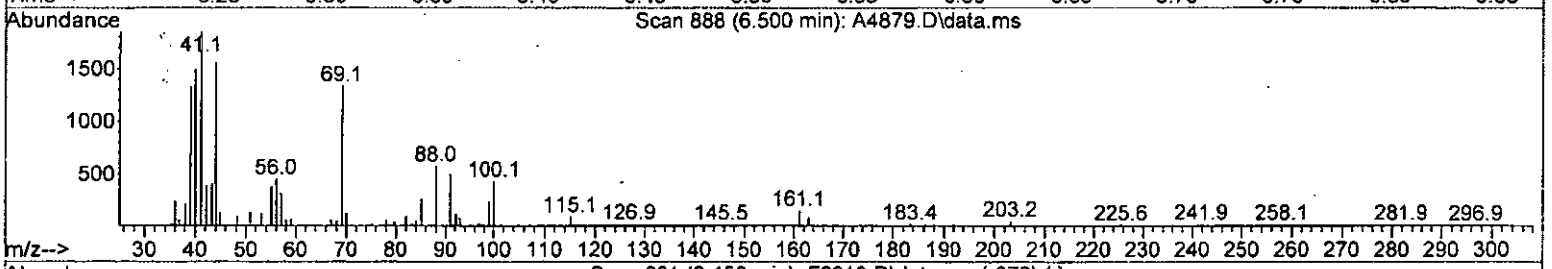
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	28.14#
0.00	0.00	0.00
0.00	0.00	0.00

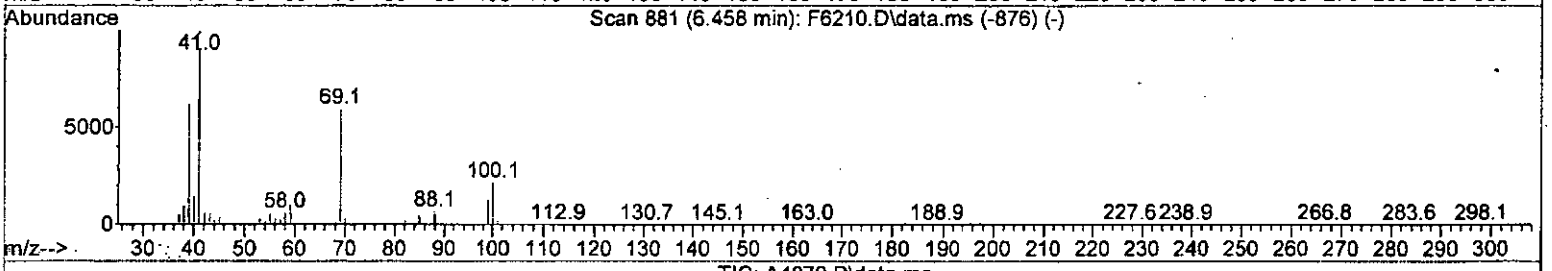
W121514.M Mon Dec 15 15:48:29 2014 MSVO10

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D Vial: 4
Acq On : 15 Dec 2014 1:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration







TIC: A4879.D\data.ms

(58) 1,4-Dioxane

6.500min (+0.037) 17.79 ug/L m

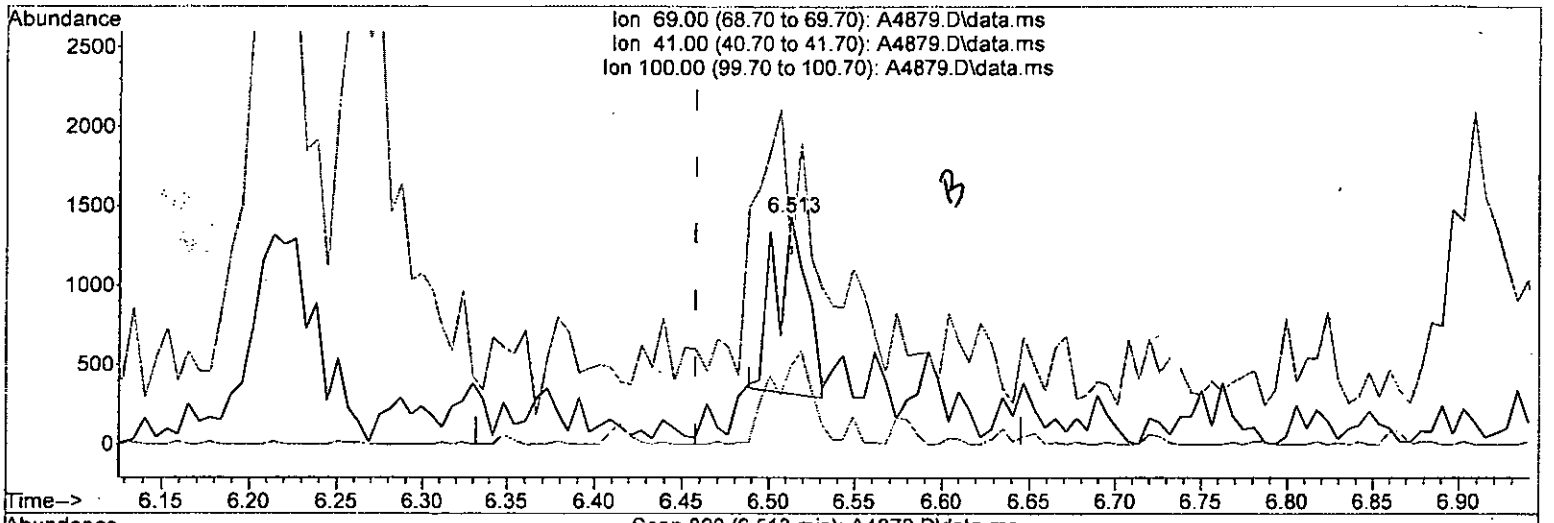
response 999

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	11.11#
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:48:36 2014 MSVO10 Page: 1

Sample 10 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D Vial: 4
Acq On : 15 Dec 2014 1:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



TIC: A4879.D\data.ms

(59) Methyl Methacrylate

6.513min (+0.055) 0.40 ug/L

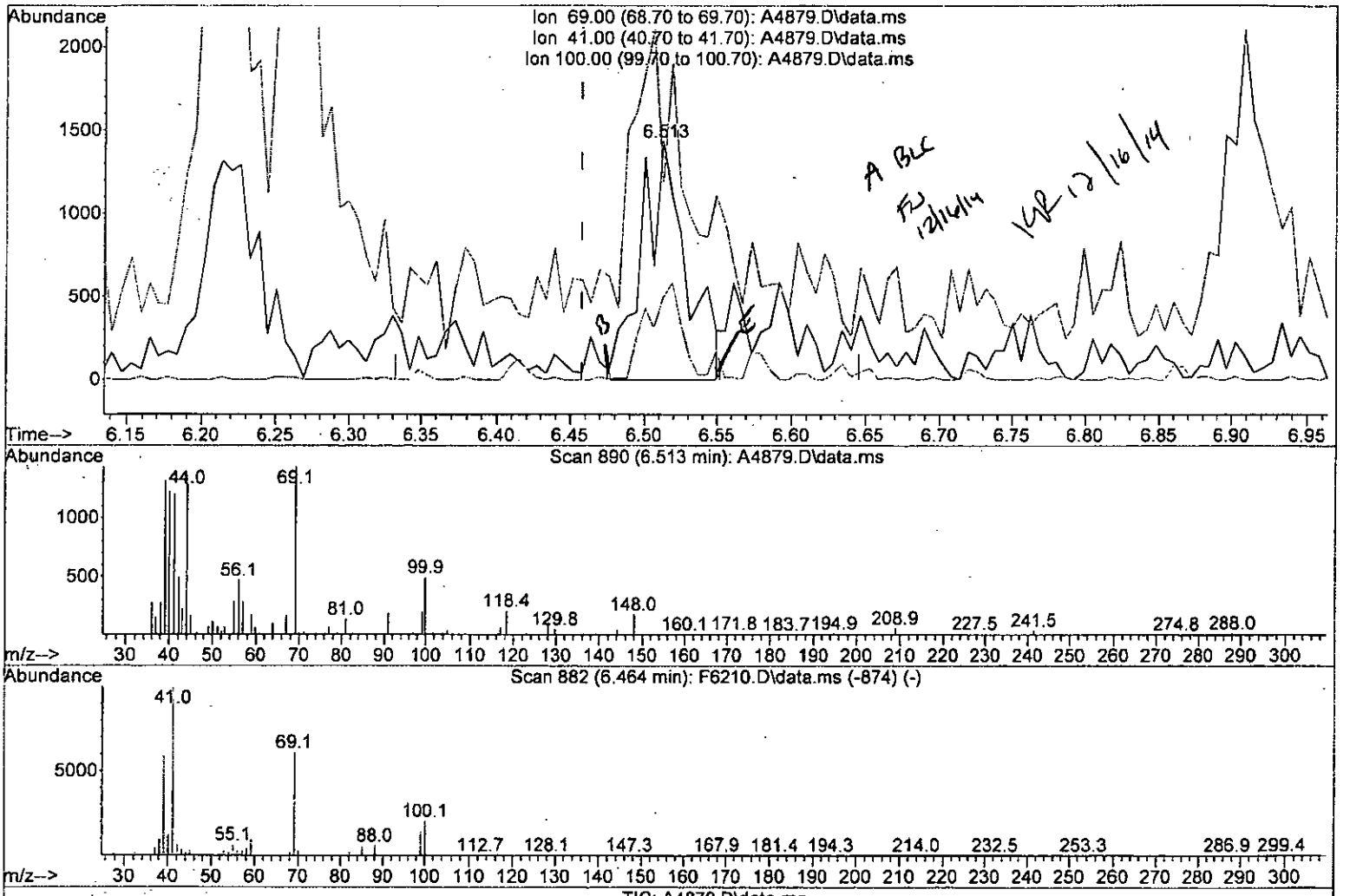
response 1441

Ion	Exp%	Act%
69.00	100	100
41.00	128.90	83.41#
100.00	36.90	34.36
0.00	0.00	0.00

W121514.M Mon Dec 15 15:48:44 2014 MSVO10 Page: 1

```
Sample : 10 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D      Vial: 4
Acq On    : 15 Dec 2014    1:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



TIC: A4879.D\data.ms

(59) Methyl Methacrylate

6.513min (+0.055) 0.84 ug/L m

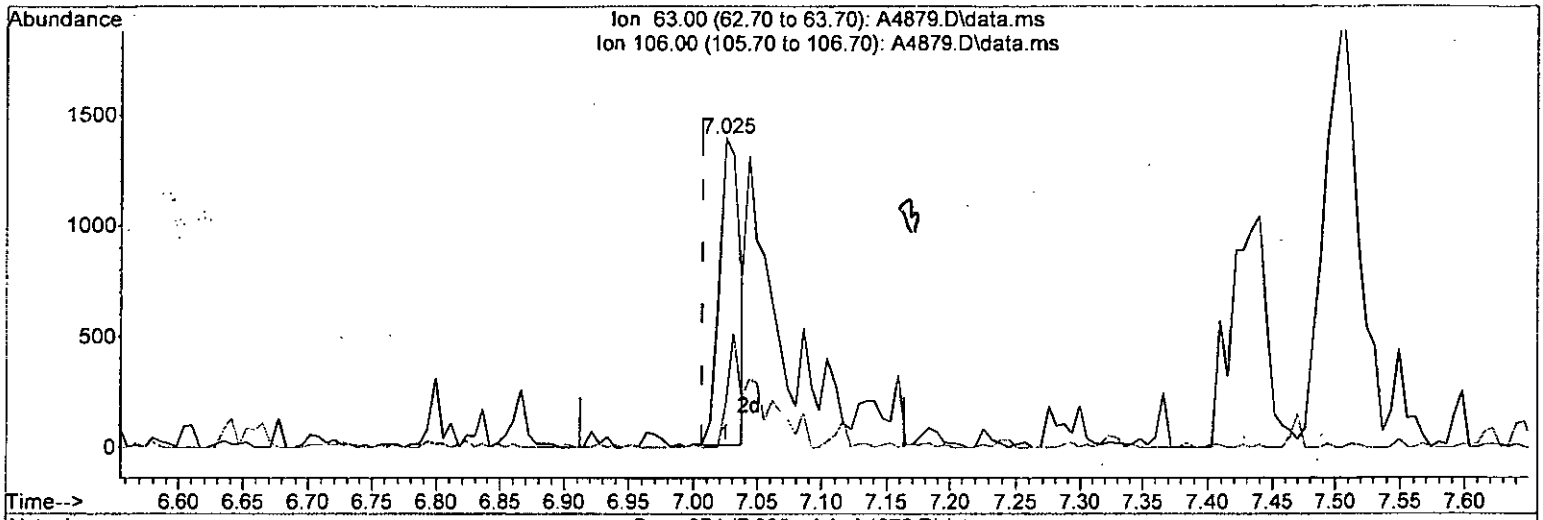
response 2999

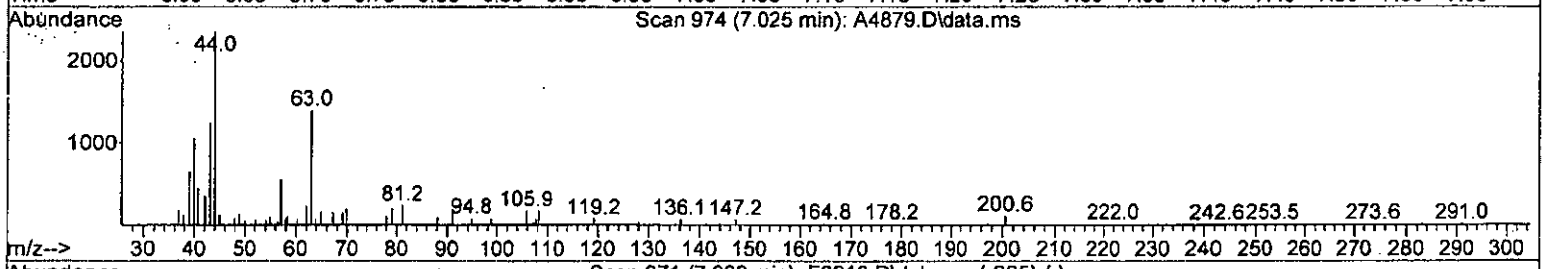
Ion	Exp%	Act%
69.00	100	100
41.00	128.90	83.41#
100.00	36.90	34.36
0.00	0.00	0.00

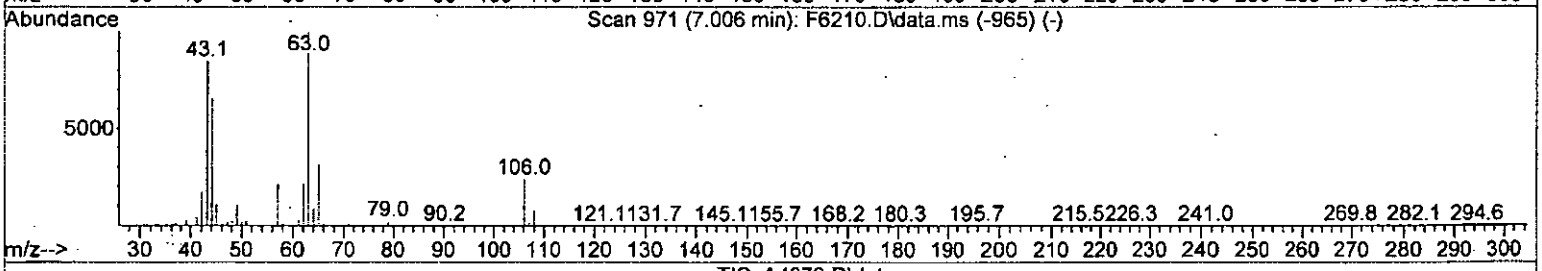
W121514.M Mon Dec 15 15:49:02 2014 MSVO10

```
Sample    : 10 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D      Vial: 4
Acq On    : 15 Dec 2014    1:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```







TIC: A4879.D\data.ms

(62) 2-Chloroethylvinyl Ether

7.025min (+0.018) 0.37 ug/L

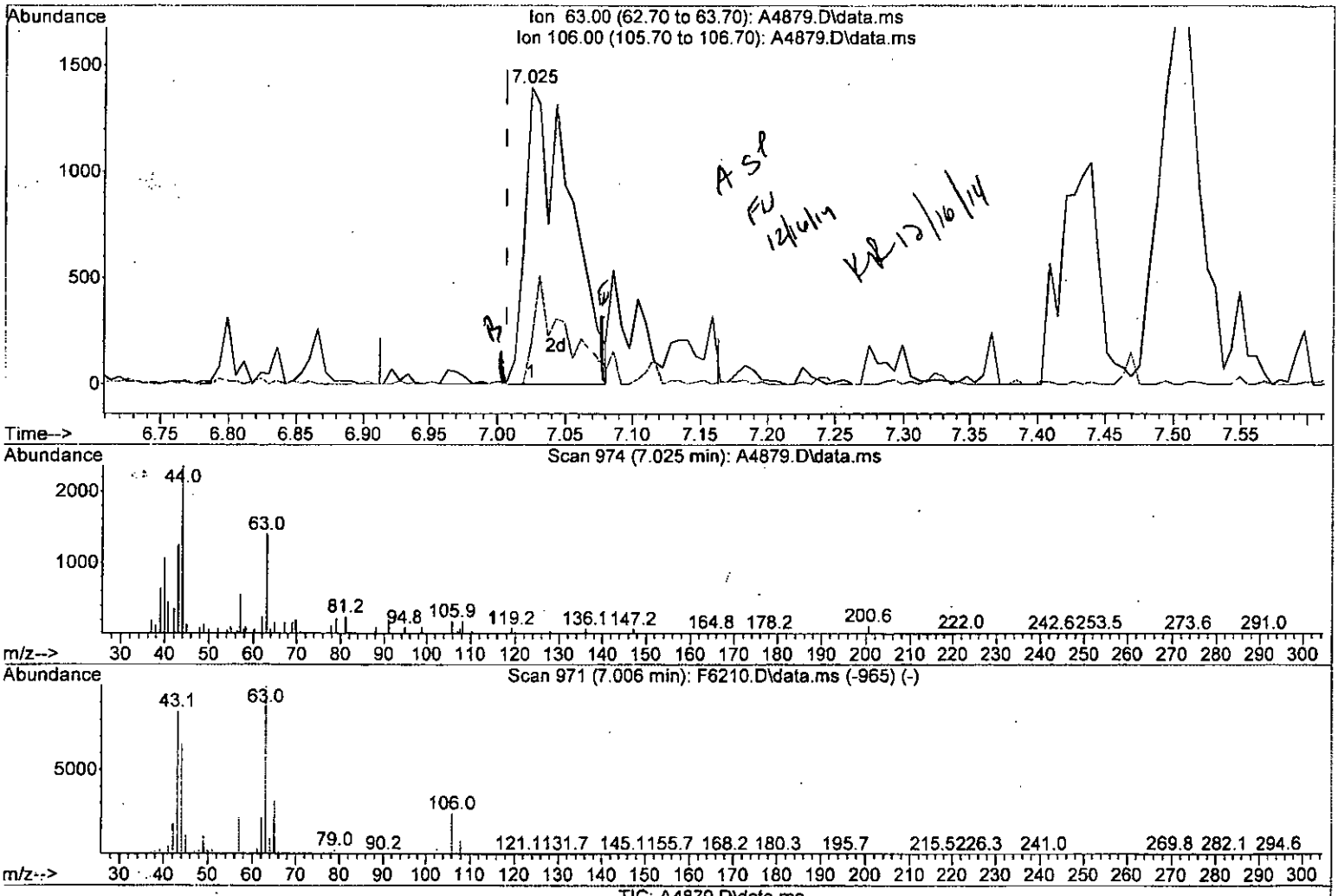
response 1520

Ion	Exp%	Act%
63.00	100	100
106.00	27.80	14.06
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:49:12 2014 MSVO10 Page: 1

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D Vial: 4
Acq On : 15 Dec 2014 1:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



(62) 2-Chloroethylvinyl Ether

7.025min (+0.018) 0.78 ug/L m

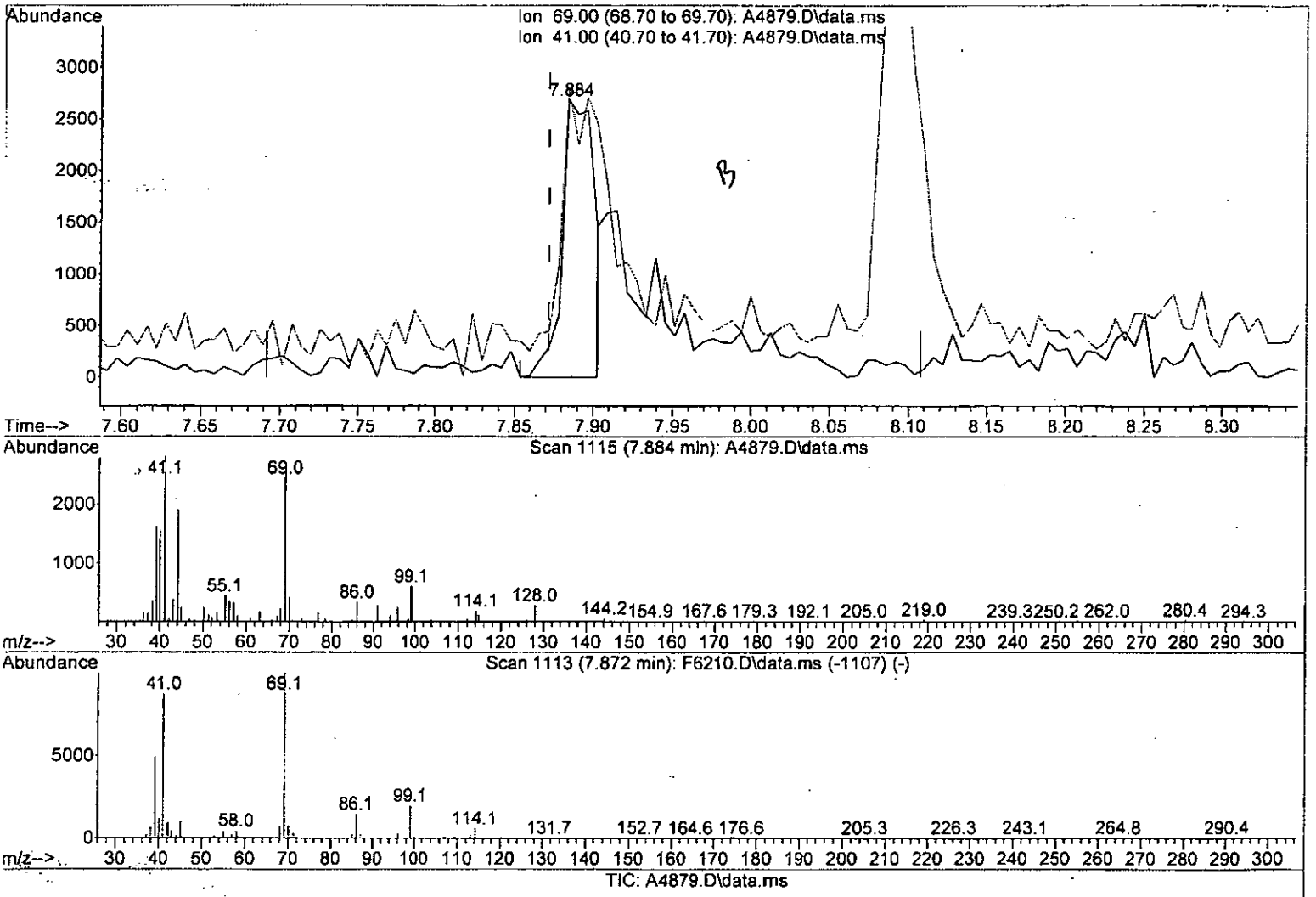
response 3244

Ion	Exp%	Act%
63.00	100	100
106.00	27.80	12.84
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:49:25 2014 MSVO10

```
Sample    : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D      Vial: 4
Acq On    : 15 Dec 2014    1:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



(68) Ethyl Methacrylate

7.884min (+0.012) 0.50 ug/L

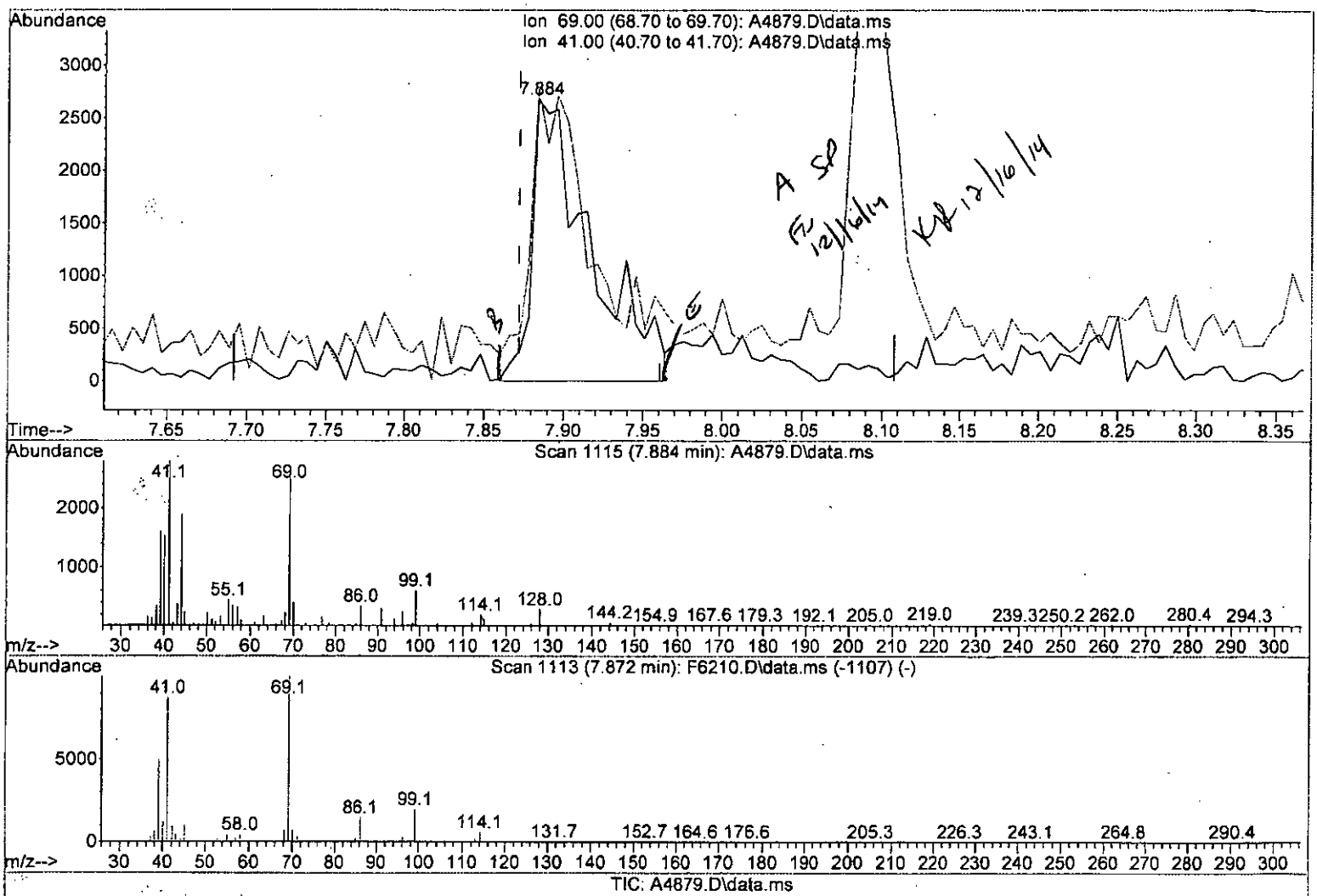
response 3776

Ion	Exp%	Act%
69.00	100	100
41.00	71.50	103.81#
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:49:39 2014 MSVO10

```
Sample   : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D      Vial: 4
Acq On    : 15 Dec 2014    1:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



(68) Ethyl Methacrylate

7.884min (+0.012) 0.89 ug/L m

response 6793

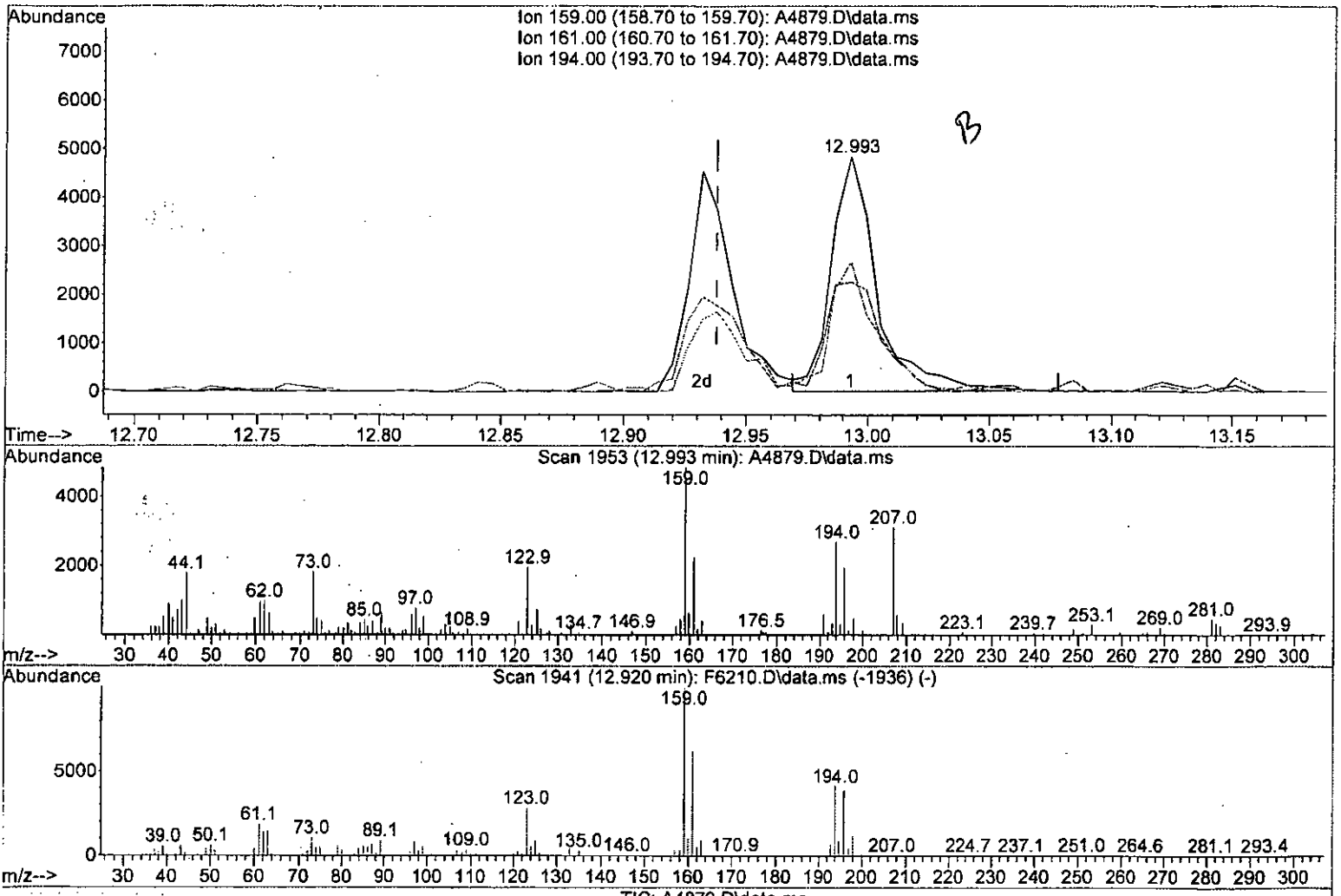
Ion	Exp%	Act%
69.00	100	100
41.00	71.50	103.81#
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:49:50 2014 MSVO10

0045 Page: 1

Sample 10 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D Vial: 4
Acq On : 15 Dec 2014 1:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



TIC: A4879.D\data.ms

(119) 2,4,5-Trichlorotoluene

12.993min (+0.055) 1.52 ug/L

response 6278

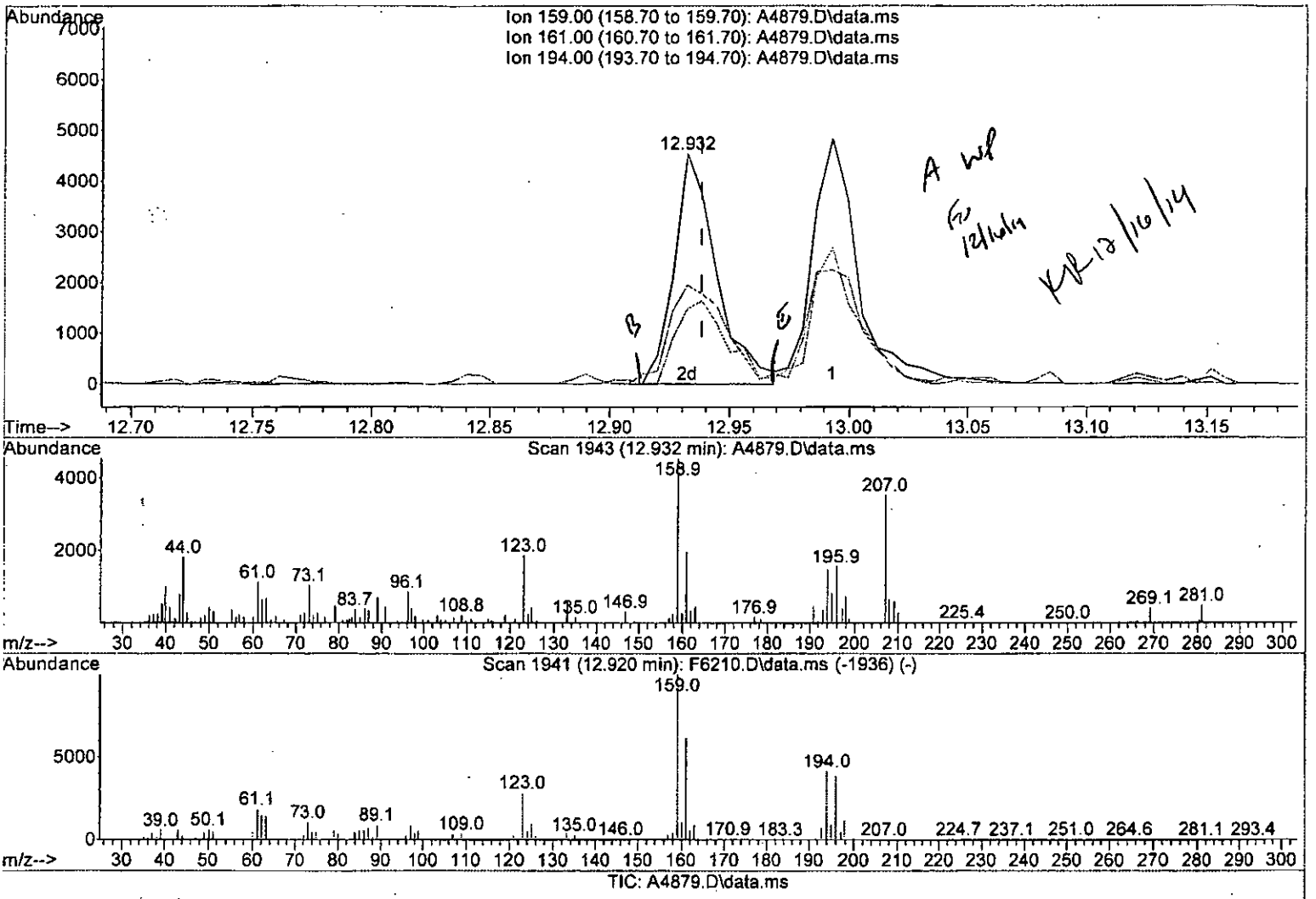
Ion	Exp%	Act%
159.00	100	100
161.00	64.40	46.53
194.00	45.80	55.31
0.00	0.00	0.00

W121514.M Mon Dec 15 15:50:34 2014 MSVO10

Quantitation Report (Qedit)

Sample : 0.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D Vial: 4
Acq On : 15 Dec 2014 1:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 14:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



TIC: A4879.D\data.ms

(119) 2,4,5-Trichlorotoluene

12.932min (-0.006) 1.35 ug/L m

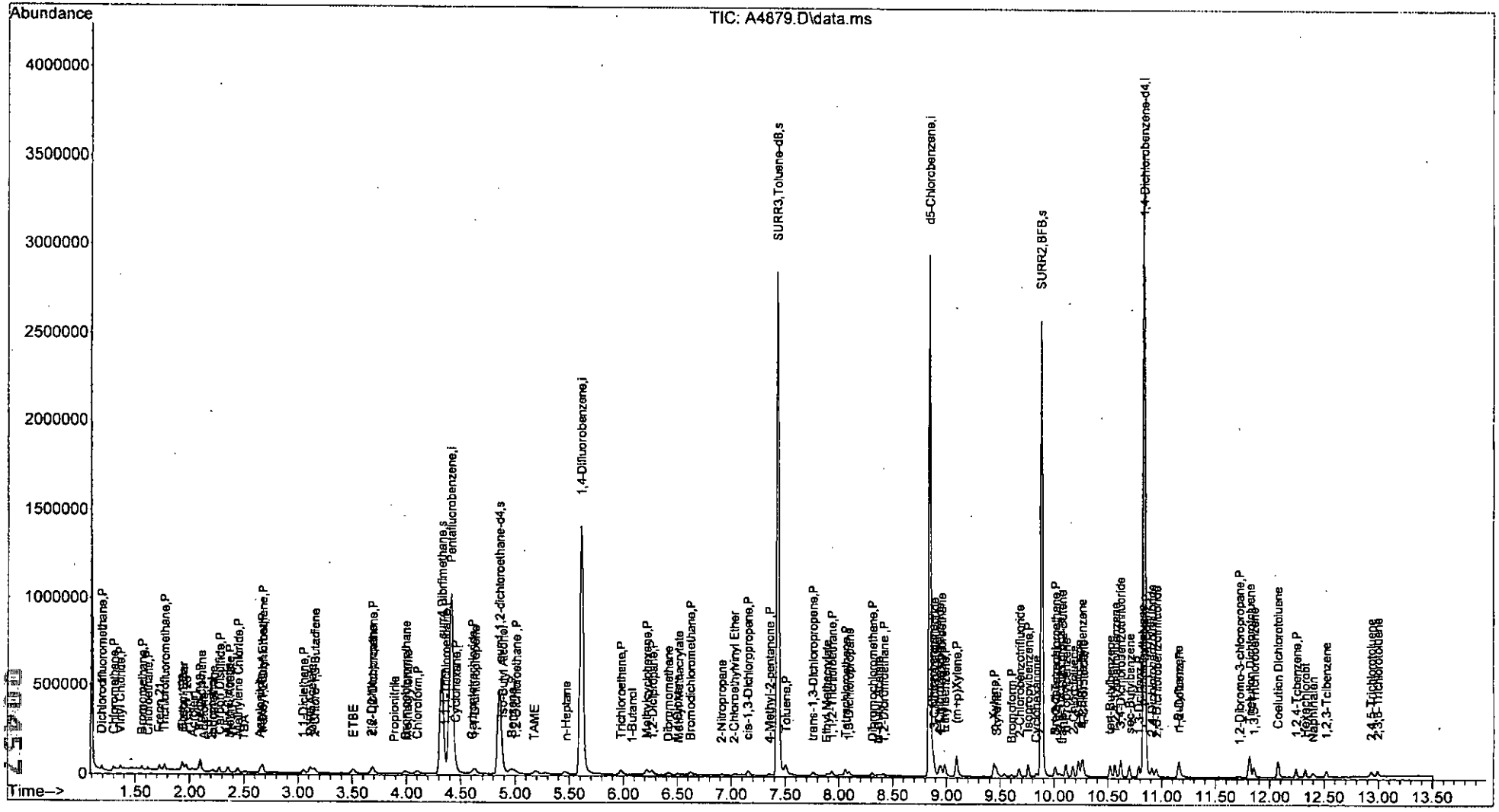
response 5578

Ion	Exp%	Act%
159.00	100	100
161.00	64.40	42.96#
194.00	45.80	32.56
0.00	0.00	0.00

W121514.M Mon Dec 15 15:50:43 2014 MSVO10 Page: 1

Sample : 1.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4879.D Vial: 4
Acq On : 15 Dec 2014 1:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 16 07:37:16 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



W121514.M Tue Dec 16 07:43:34 2014 MSVO10

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4880.D Vial: 5
Acq On : 15 Dec 2014 2:26 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 16 07:39:13 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration

FR 12/16/14

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	945012	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1358977	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1233252	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	658659	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.324	113	441701	51.75	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.50%				
48) surr1,1,2-dichloroetha...	4.854	65	442743	49.16	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 98.32%				
65) SURR3,Toluene-d8	7.427	98	1617498	53.80	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.60%				
70) SURR2,BFB	9.878	95	637967	53.92	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 107.84%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.190	85	18922	1.78	ug/L		94
3) Chloromethane	1.300	50	23489	1.70	ug/L		99
4) Vinyl Chloride	1.361	62	24582	1.96	ug/L		96
5) Bromomethane	1.562	94	13545	3.68	ug/L		91
6) Chloroethane	1.617	64	11682	1.88	ug/L		90
7) Freon 21	1.721	67	36596	2.08	ug/L		96
8) Trichlorofluoromethane	1.770	101	29786	2.08	ug/L		93
9) Diethyl Ether	1.940	59	12213	1.66	ug/L		98
10) Freon 123a	1.934	67	22815	2.06	ug/L		85
11) Freon 123	1.965	83	25074	2.14	ug/L		92
12) Acrolein	2.032	56	6673	6.17	ug/L		97
13) 1,1-Diclethene	2.105	96	15321	2.27	ug/L		98
14) Freon 113	2.093	101	17669	2.09	ug/L		87
15) Acetone	2.123	43	3087	1.09	ug/L		81
16) 2-Propanol	2.202	45	12007	29.68	ug/L		71
17) Iodomethane	2.215	142	17409	2.36	ug/L		95
18) Carbon Disulfide	2.276	76	53128	1.91	ug/L		96
19) Acetonitrile	2.336	40	2066m	6.95	ug/L		
20) Allyl Chloride	2.355	76	9808	2.36	ug/L	#	85
21) Methyl Acetate	2.367	43	7093	1.27	ug/L		95
22) Methylene Chloride	2.440	84	16387	1.88	ug/L	#	83
23) TBA	2.507	59	18688	37.24	ug/L		81
24) Acrylonitrile	2.641	53	18988	7.24	ug/L		93
25) Methyl-t-Butyl Ether	2.666	73	40400	2.10	ug/L		97
26) trans-1,2-Dichloroethene	2.672	96	17658	2.09	ug/L		96
28) 1,1-Diclethane	3.050	63	32543	1.82	ug/L		99
29) Vinyl Acetate	3.117	86	1679m	1.67	ug/L		
30) DIPE	3.111	45	59690	1.49	ug/L	#	76
31) 2-Chloro-1,3-Butadiene	3.147	53	27795	1.57	ug/L		91
32) ETBE	3.507	59	53216	1.94	ug/L		96
33) 2,2-Dichloropropane	3.684	77	27005	2.41	ug/L		96
34) cis-1,2-Dichloroethene	3.690	96	19409	2.10	ug/L		98
36) Propionitrile	3.818	54	5530m	7.21	ug/L		
37) Bromochloromethane	3.989	130	10348	1.82	ug/L		89
38) Methacrylonitrile	4.007	67	3534m	1.71	ug/L		

121514.M Tue Dec 16 07:43:43 2014 MSVO10

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4880.D Vial: 5
Acq On : 15 Dec 2014 2:26 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 16 07:39:13 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) Tetrahydrofuran	4.104	42	2663	1.27	ug/L		69
40) Chloroform	4.092	83	30913	1.95	ug/L		99
41) 1,1,1-Trichloroethane	4.360	97	28507	2.16	ug/L		95
42) TAME	5.190	73	41077	2.21	ug/L		91
44) Cyclohexane	4.452	41	18798	1.54	ug/L		97
46) Carbontetrachloride	4.629	121	7839	2.21	ug/L	#	73
47) 1,1-Dichloropropene	4.623	75	22439	2.08	ug/L		97
49) Benzene	4.958	78	66461	2.00	ug/L		93
50) 1,2-Dichloroethane	4.988	62	23868	2.03	ug/L		97
51) Iso-Butyl Alcohol	4.897	43	6862m	25.08	ug/L		
52) n-Heptane	5.458	43	19826	1.59	ug/L		98
53) 1-Butanol	6.043	56	6800m	59.81	ug/L		
54) Trichloroethene	5.970	130	18421	1.96	ug/L		92
55) Methylcyclohexane	6.214	55	22217	1.72	ug/L		91
56) 1,2-Diclpropane	6.263	63	17052	1.75	ug/L		91
57) Dibromomethane	6.409	93	9111	1.92	ug/L		88
58) 1,4-Dioxane	6.482	88	1767m	31.63	ug/L		
59) Methyl Methacrylate	6.494	69	6454	1.82	ug/L		96
60) Bromodichloromethane	6.622	83	21886	1.98	ug/L		95
61) 2-Nitropropane	6.903	41	5292	3.73	ug/L		99
62) 2-Chloroethylvinyl Ether	7.025	63	7149	1.73	ug/L		85
63) cis-1,3-Dichloropropene	7.153	75	26135	2.23	ug/L		93
64) 4-Methyl-2-pentanone	7.348	43	10099m	1.36	ug/L		
66) Toluene	7.500	91	75842	2.13	ug/L		97
67) trans-1,3-Dichloropropene	7.756	75	21332	2.27	ug/L		94
68) Ethyl Methacrylate	7.884	69	14817	1.96	ug/L		87
69) 1,1,2-Trichloroethane	7.927	97	13423	2.13	ug/L		93
72) Tetrachloroethene	8.061	164	15673	2.17	ug/L		96
73) 2-Hexanone	8.238	43	5862	1.11	ug/L		88
74) 1,3-Dichloropropane	8.091	76	20765	1.93	ug/L		82
75) Dibromochloromethane	8.305	129	14502	1.86	ug/L		89
76) N-Butyl Acetate	8.354	43	16488	1.42	ug/L		94
77) 1,2-Dibromoethane	8.408	107	12765	2.07	ug/L		98
78) 3-Chlorobenzotrifluoride	8.878	180	26192	2.23	ug/L	#	91
79) Chlorobenzene	8.872	112	49490	2.07	ug/L		91
80) 4-Chlorobenzotrifluoride	8.933	180	24111	2.23	ug/L		94
81) 1,1,1,2-Tetrachloroethane	8.951	131	17283	2.05	ug/L		89
82) Ethylbenzene	8.982	106	25958	2.20	ug/L	#	90
83) (m+p)Xylene	9.091	106	62135	4.22	ug/L		92
84) o-Xylene	9.439	106	29677	2.06	ug/L		95
85) Styrene	9.457	104	47516	1.99	ug/L		90
86) Bromoform	9.603	173	7654	1.72	ug/L		76
87) 2-Chlorobenzotrifluoride	9.670	180	28073	2.15	ug/L		92
88) Isopropylbenzene	9.756	105	79033	2.18	ug/L		96
89) Cyclohexanone	9.829	55	11966	10.88	ug/L		85
90) trans-1,4-Dichloro-2-B...	10.061	53	3773	2.10	ug/L		90
92) 1,1,2,2-Tetrachloroethane	10.012	83	14658	2.02	ug/L		88
93) Bromobenzene	10.006	156	21367	2.13	ug/L		97
94) 1,2,3-Trichloropropane	10.048	110	3880	1.88	ug/L	#	86
95) n-Propylbenzene	10.103	91	92296	2.24	ug/L		98
96) 2-Chlorotoluene	10.170	91	56569	2.22	ug/L		95
97) 3-Chlorotoluene	10.225	91	55590	2.03	ug/L		98

121514.M Tue Dec 16 07:43:43 2014 MSVO10 Page: 2

Sample : 20 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4880.D Vial: 5
Acq On : 15 Dec 2014 2:26 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 16 07:39:13 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration

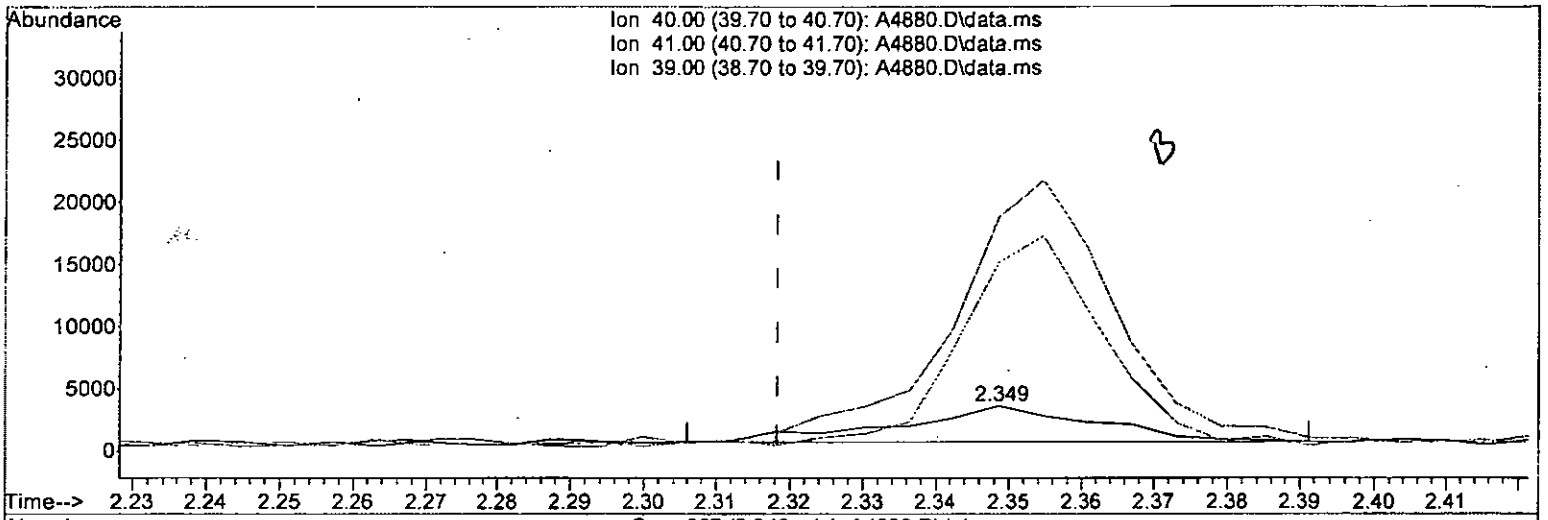
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
98)	4-Chlorotoluene	10.262	91	68351	2.22	ug/L		97
99)	1,3,5-Trimethylbenzene	10.256	105	64363	2.14	ug/L		94
100)	tert-Butylbenzene	10.518	119	53633	2.13	ug/L		99
101)	1,2,4-Trimethylbenzene	10.560	105	66337	2.19	ug/L		99
102)	3,4-Dichlorobenzotrifl...	10.615	214	20003	2.47	ug/L		95
103)	sec-Butylbenzene	10.695	105	74663	2.11	ug/L		98
104)	p-Isopropyltoluene	10.817	119	63624	2.08	ug/L		98
105)	1,3-Dclbenz	10.786	146	39688	2.09	ug/L		95
106)	1,4-Dclbenz	10.853	146	39847	2.02	ug/L		95
107)	2,4-Dichlorobenzotrifl...	10.908	214	17968	2.51	ug/L		88
108)	2,5-Dichlorobenzotrifl...	10.945	214	20939	2.43	ug/L		99
109)	n-Butylbenzene	11.146	91	57601	2.23	ug/L		98
110)	1,2-Dclbenz	11.158	146	34570	1.94	ug/L		91
111)	1,2-Dibromo-3-chloropr...	11.719	157	2271	1.98	ug/L	#	64
112)	Trielution Dichlorotol...	11.810	125	97715	6.55	ug/L		96
113)	1,3,5-Trichlorobenzene	11.853	180	26701	2.35	ug/L		95
114)	Coelution Dichlorotoluene	12.072	125	66975	4.89	ug/L		98
115)	1,2,4-Tcbenzene	12.237	180	21688	2.13	ug/L		90
116)	Hexachlorobt	12.328	225	10979	2.59	ug/L		98
117)	Naphthalen	12.389	128	36649	2.06	ug/L		94
118)	1,2,3-Tclbenzene	12.517	180	17211	2.27	ug/L		96
119)	2,4,5-Trichlorotoluene	12.926	159	11261	2.74	ug/L		93
120)	2,3,6-Trichlorotoluene	12.987	159	13457	3.23	ug/L		92

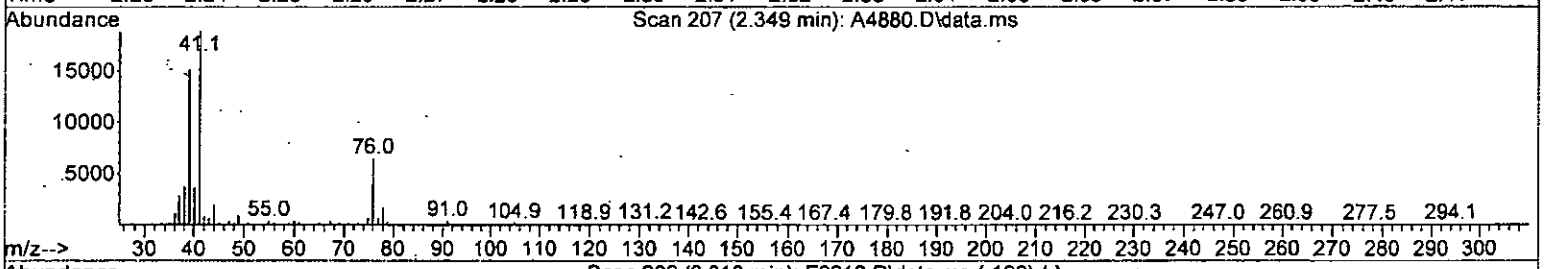
(#) = qualifier out of range (m) = manual integration (+) = signals summed

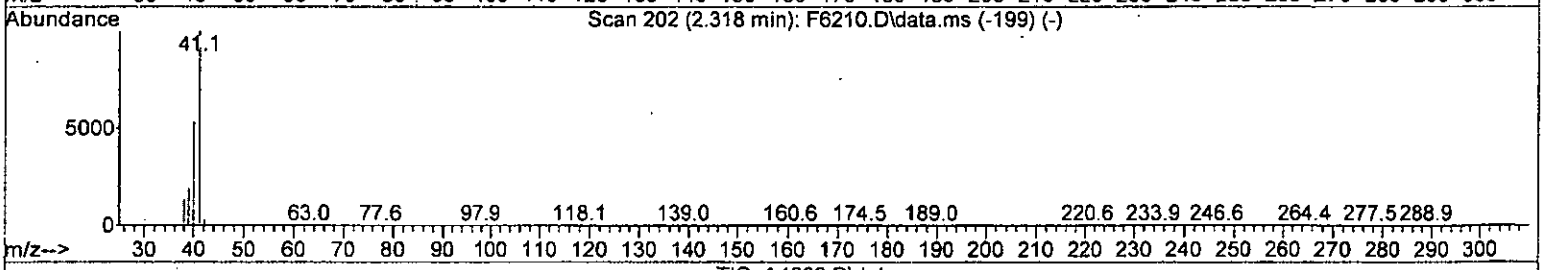
Quantitation Report (Quant)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4880.D Vial: 5
Acq On : 15 Dec 2014 2:26 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 14:39:39 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration







TIC: A4880.D\data.ms

(19) Acetonitrile

2.349min (+0.030) 18.12 ug/L

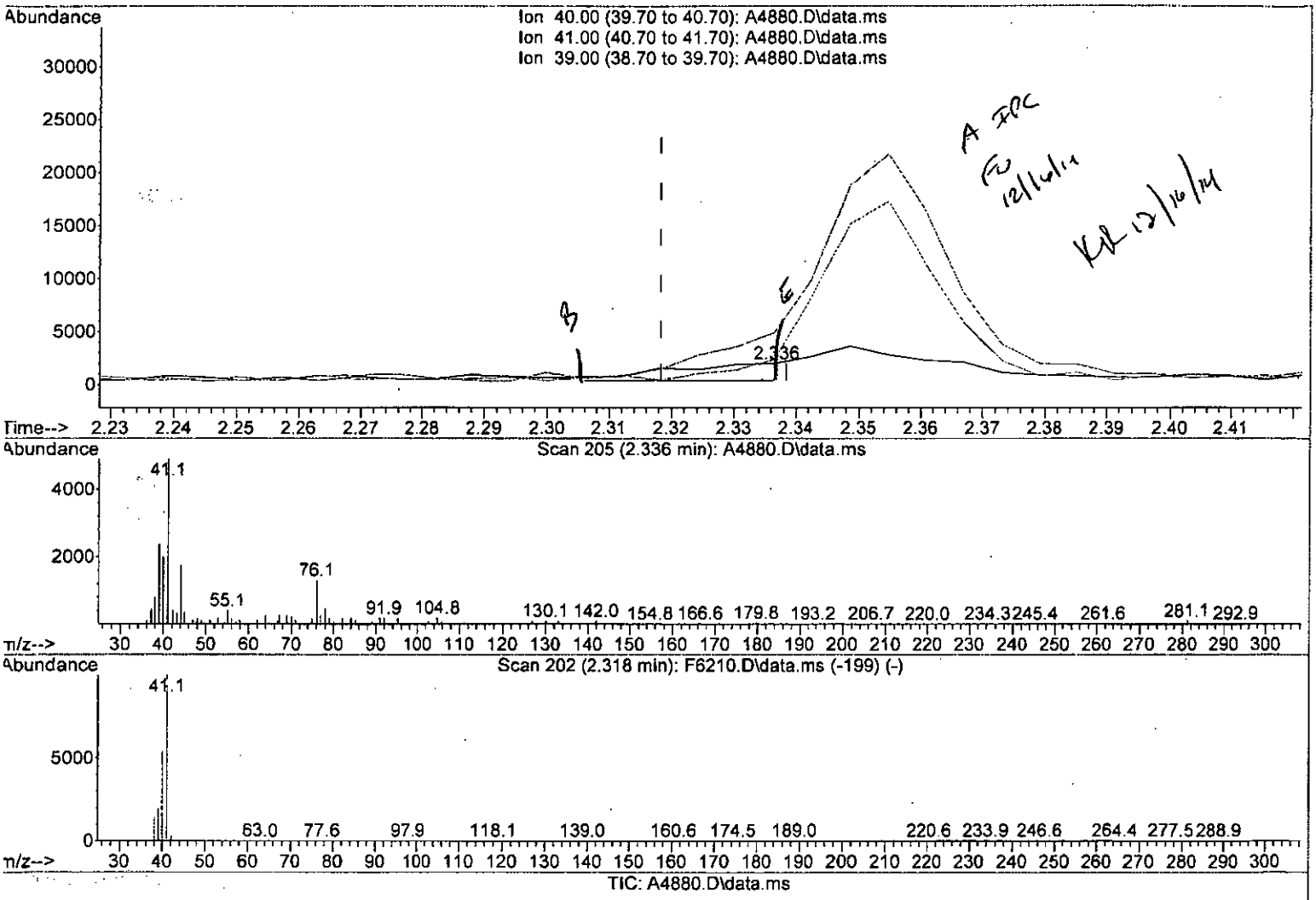
response 5389

Ion	Exp%	Act%
40.00	100	100
41.00	182.70	519.69#
39.00	36.00	418.89#
0.00	0.00	0.00

W121514.M Mon Dec 15 15:51:35 2014 MSVO10

```
Sample  : 20 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4880.D      Vial: 5
Acq On    : 15 Dec 2014    2:26 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 14:39:39 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



TIC: A4880.D\data.ms

(19) Acetonitrile

2.336min (+0.018) 6.95 ug/L m

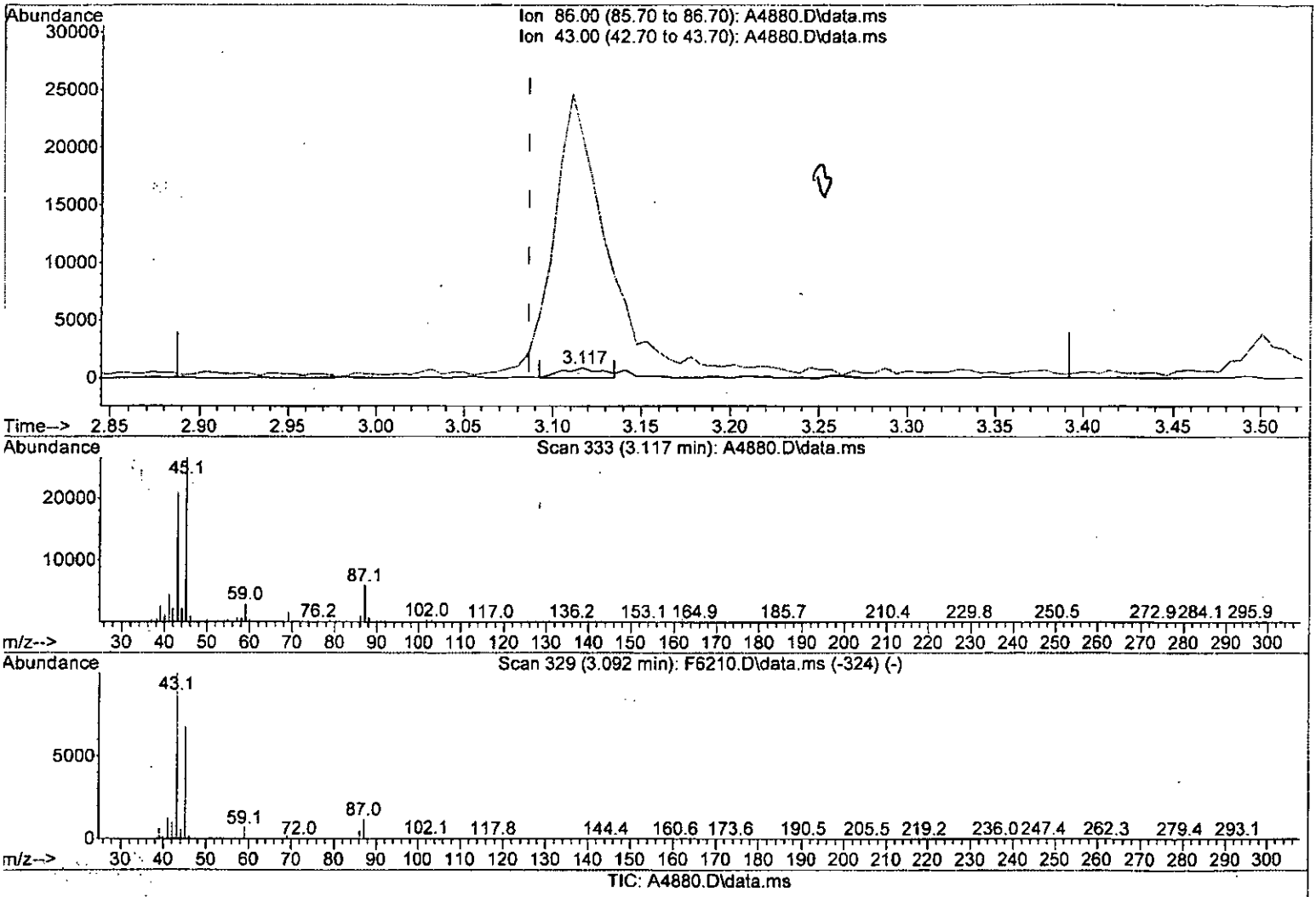
response 2066

Ion	Exp%	Act%
40.00	100	100
41.00	182.70	245.99#
39.00	36.00	119.19#
0.00	0.00	0.00

W121514.M Mon Dec 15 15:51:44 2014 MSVO10 Page: 1

```
Sample   : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4880.D      Vial: 5
Acq On    : 15 Dec 2014    2:26 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 15:55:20 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



TIC: A4880.D\data.ms

(29) Vinyl Acetate

3.117min (+0.030) 1.34 ug/L

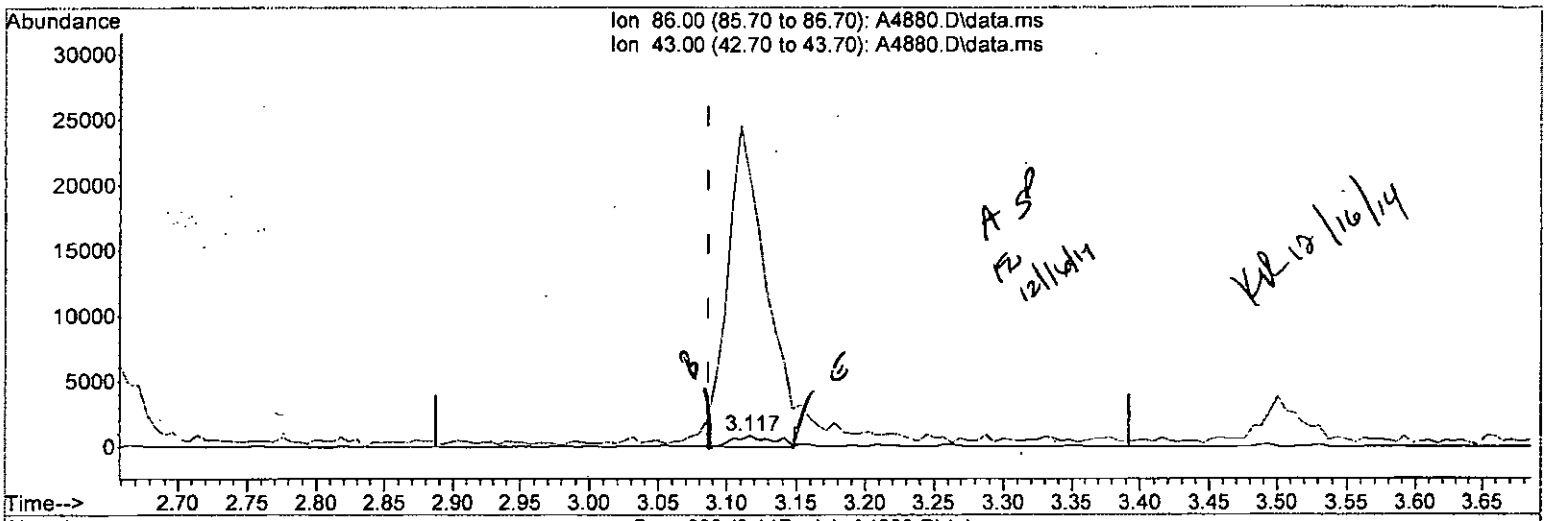
response 1347

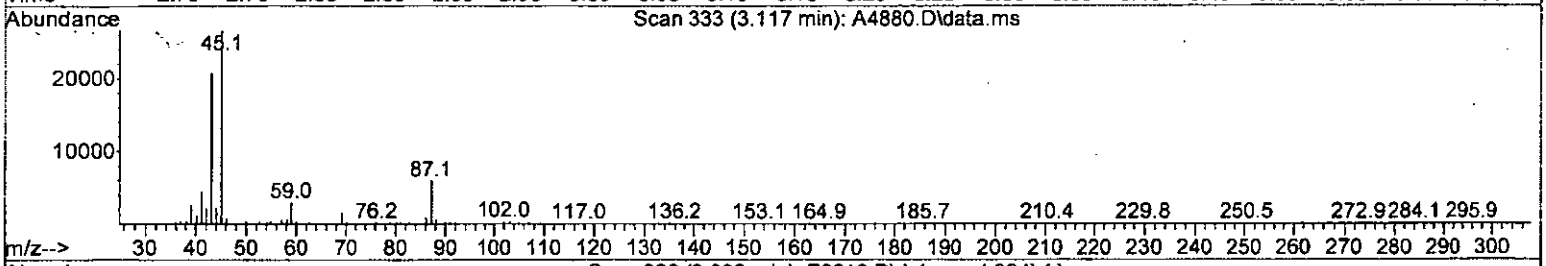
Ion	Exp%	Act%
86.00	100	100
43.00	1729.40	2423.36#
0.00	0.00	0.00
0.00	0.00	0.00

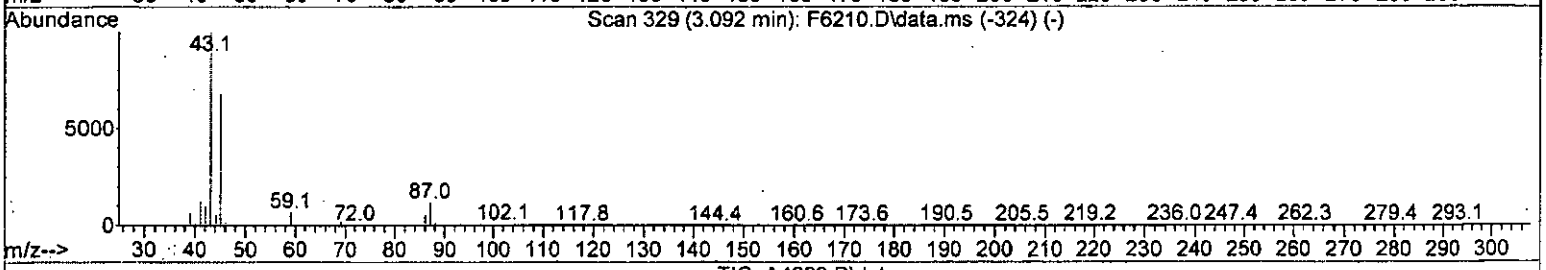
W121514.M Tue Dec 16 07:38:03 2014 MSVO10

```
Sample   : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4880.D      Vial: 5
Acq On    : 15 Dec 2014    2:26 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 15:55:20 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```







TIC: A4880.D\data.ms

(29) Vinyl Acetate

3.117min (+0.030) 1.67 ug/L m

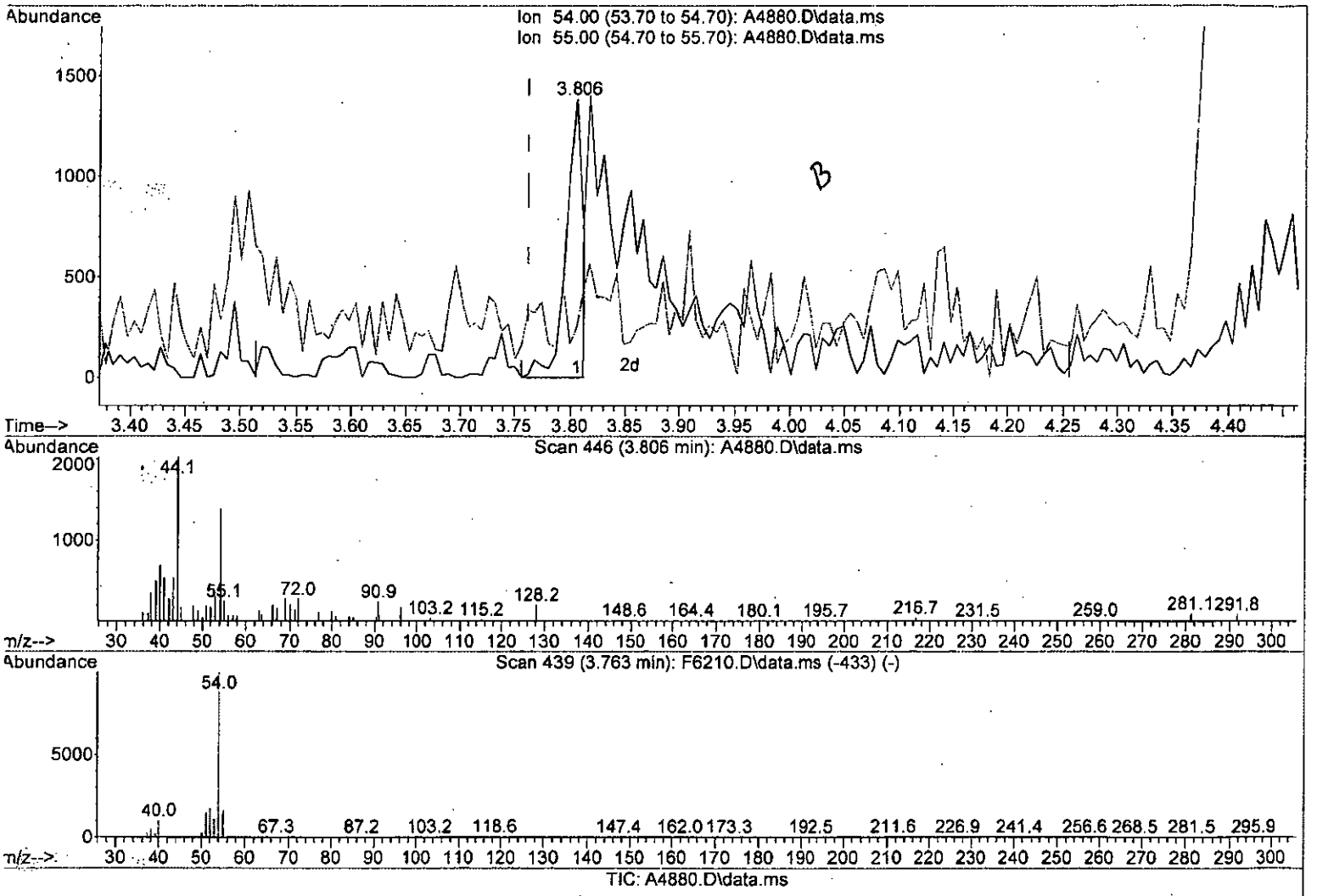
response 1679

Ion	Exp%	Act%
86.00	100	100
43.00	1729.40	2423.36#
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Tue Dec 16 07:38:23 2014 MSVO10

```
Sample    : 20 ng LCS STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4880.D      Vial: 5
Acq On    : 15 Dec 2014    2:26 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 14:39:39 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



(36) Propionitrile

3.806min (+0.043) 1.86 ug/L

response 1431

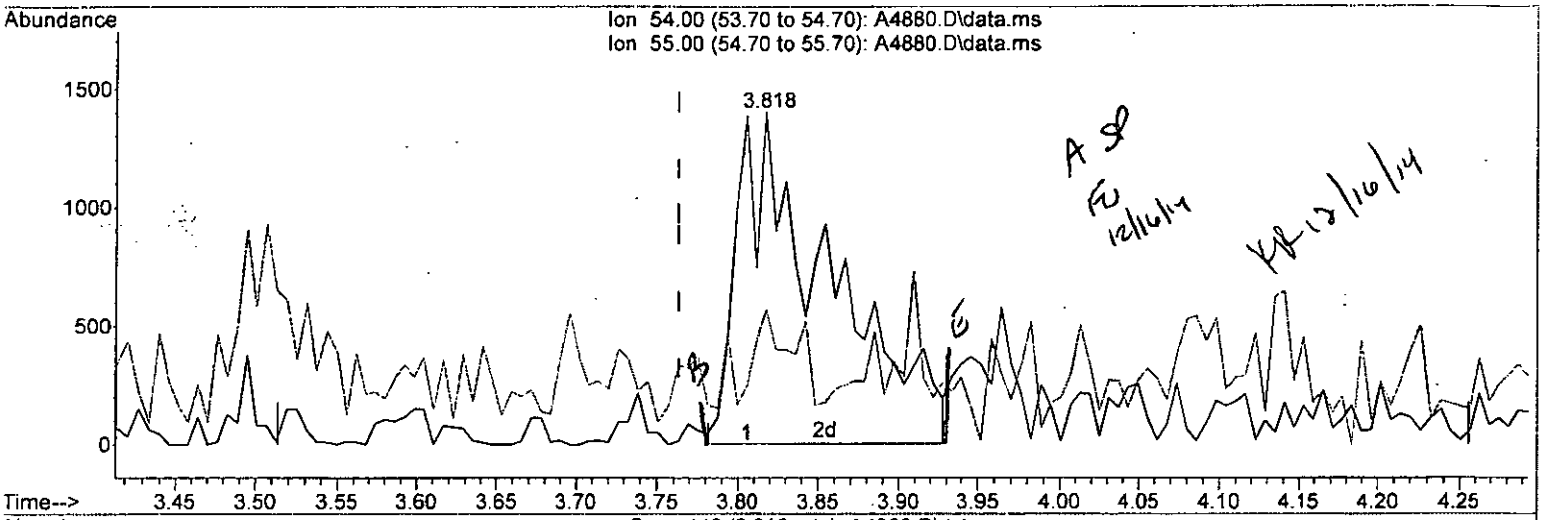
Ion	Exp%	Act%
54.00	100	100
55.00	13.70	18.11
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:52:16 2014 MSVO10

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4880.D Vial: 5
Acq On : 15 Dec 2014 2:26 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 14:39:39 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



TIC: A4880.D\data.ms

(36) Propionitrile

3.818min (+0.055) 7.21 ug/L m

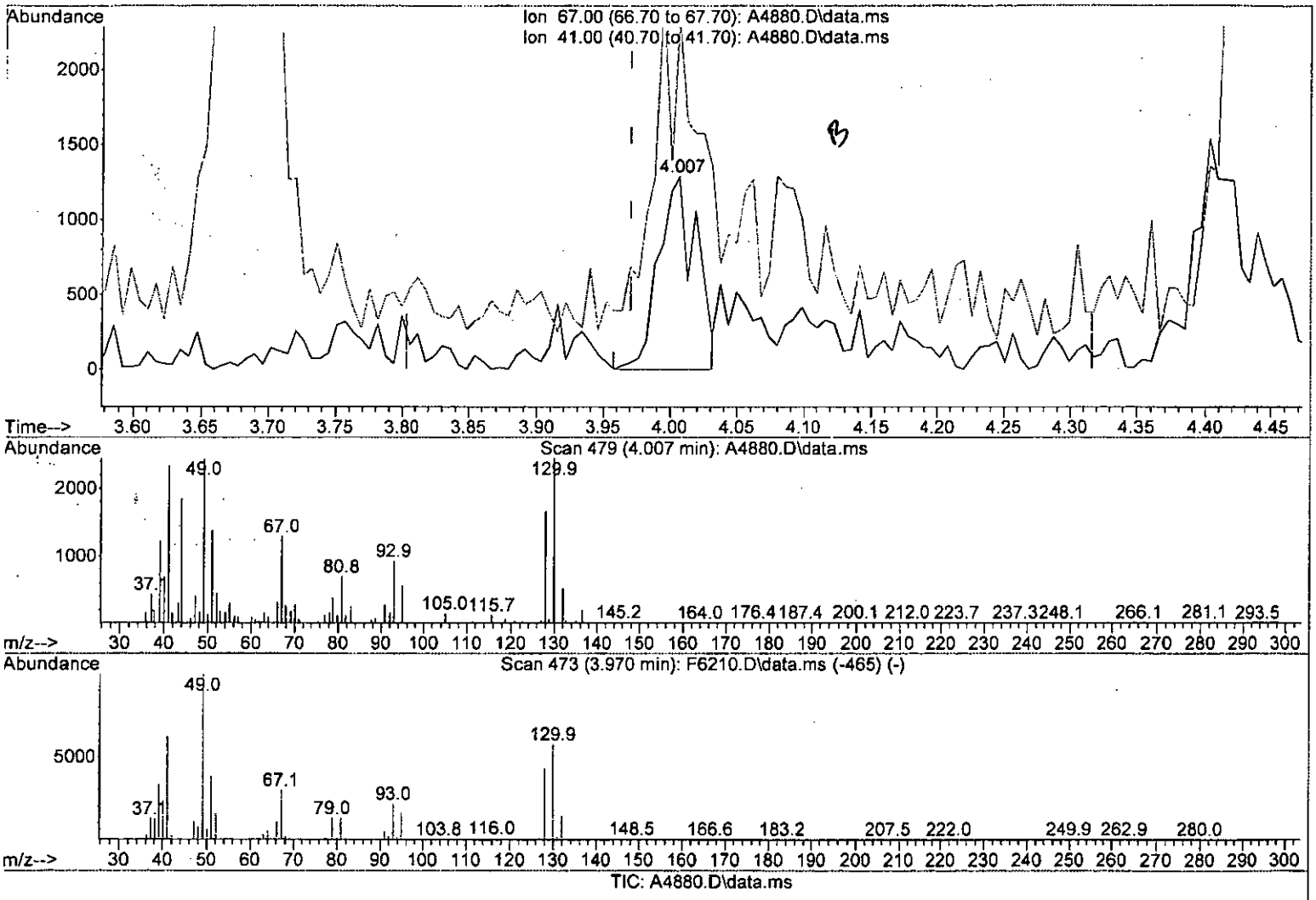
response 5530

Ion	Exp%	Act%
54.00	100	100
55.00	13.70	40.58#
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:53:00 2014 MSVO10 Page: 1

```
Sample
Data File : I:\ACQUDATA\msvoa10\data\121514\A4880.D      Vial: 5
Acq On    : 15 Dec 2014    2:26 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 14:39:39 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



TIC: A4880.D\data.ms

(38) Methacrylonitrile

4.007min (+0.036) 1.21 ug/L

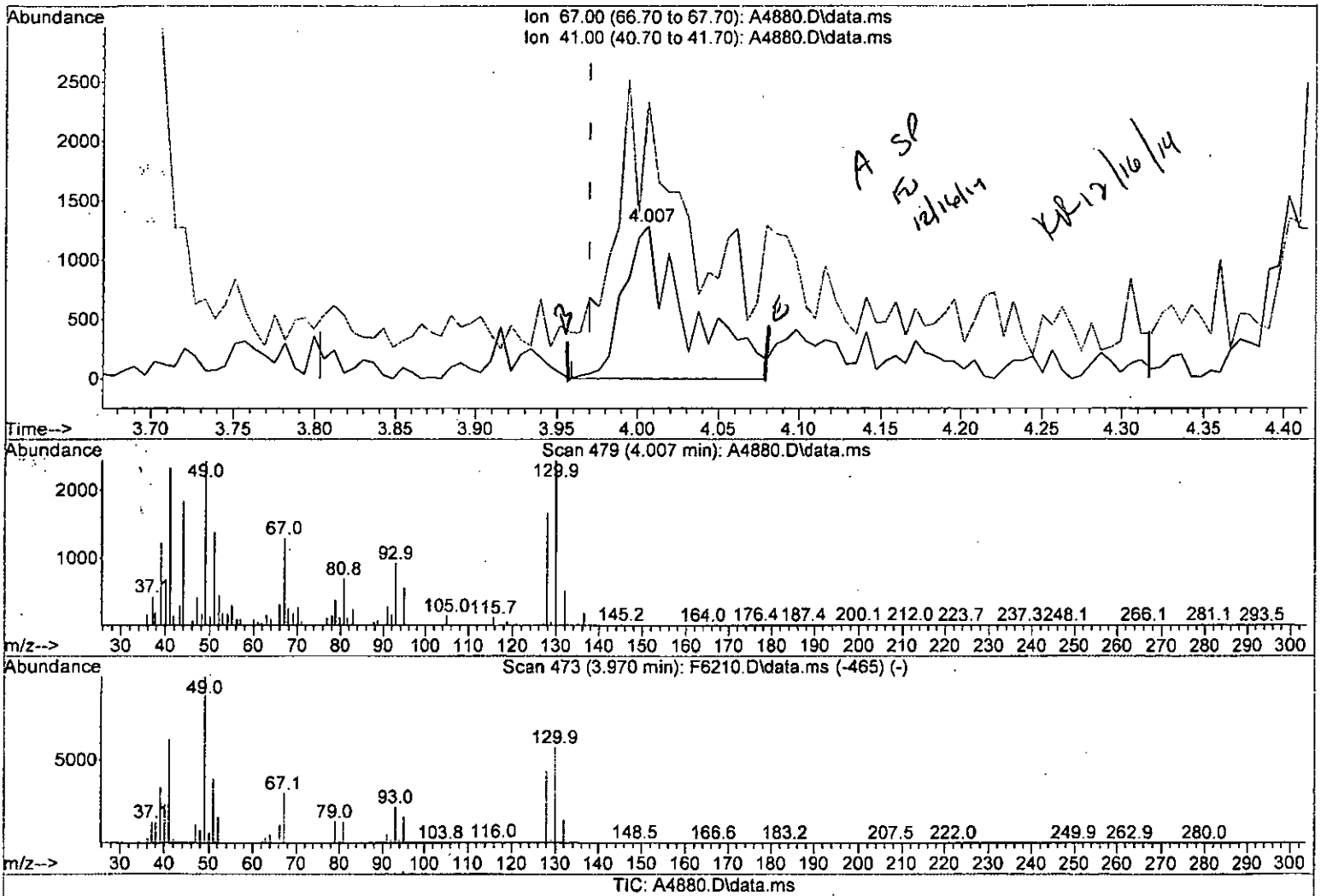
response 2493

Ion	Exp%	Act%
67.00	100	100
41.00	149.10	181.39#
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:53:41 2014 MSVO10 Page: 1

Sample 20 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4880.D Vial: 5
Acq On : 15 Dec 2014 2:26 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 14:39:39 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



TIC: A4880.D\data.ms

(38) Methacrylonitrile

4.007min (+0.036) 1.71 ug/L m

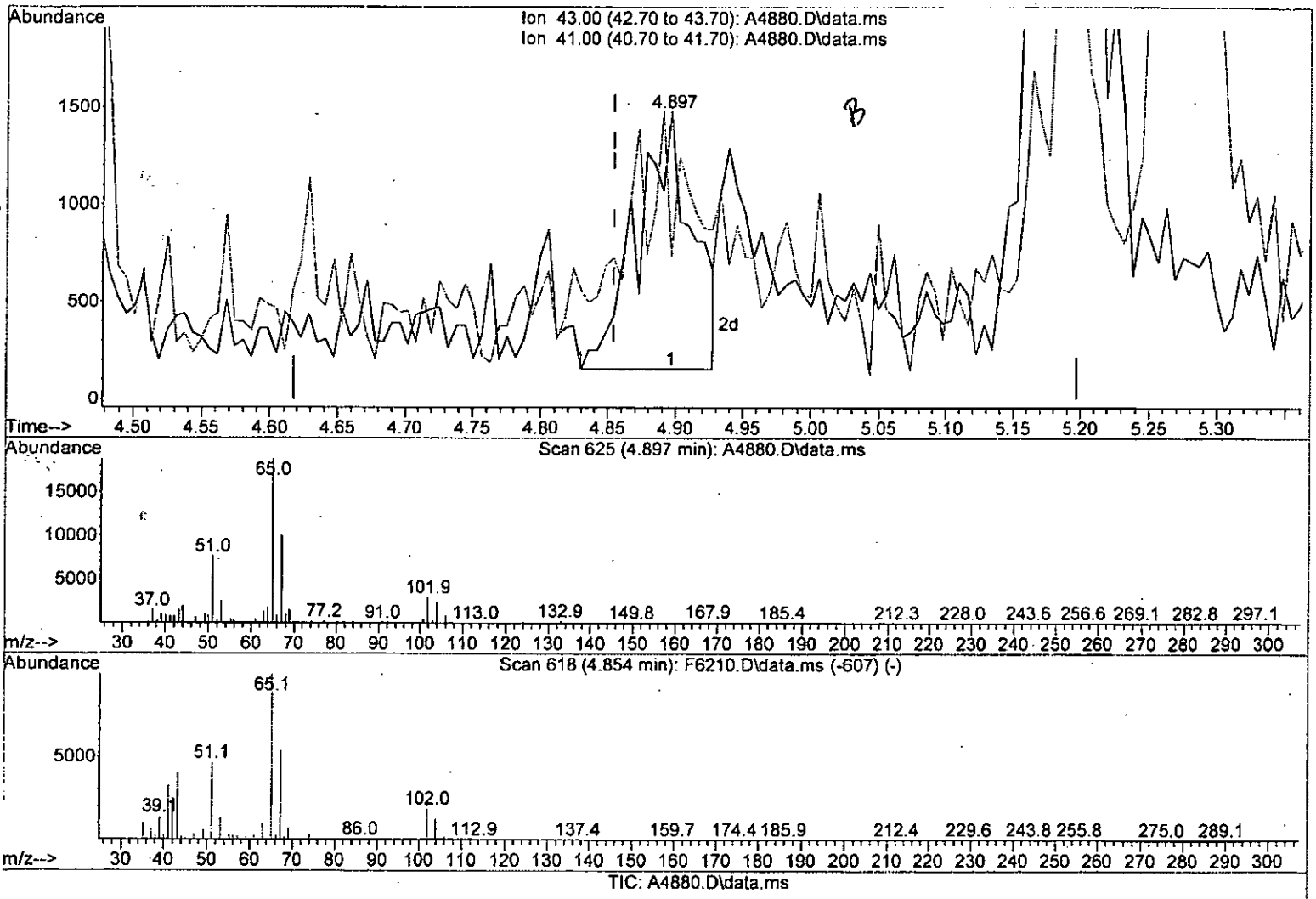
response 3534

Ion	Exp%	Act%
67.00	100	100
41.00	149.10	181.39#
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:53:56 2014 MSVO10

Sample 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4880.D Vial: 5
Acq On : 15 Dec 2014 2:26 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 14:39:39 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



TIC: A4880.D\data.ms

(51) Iso-Butyl Alcohol

4.897min (+0.043) 13.58 ug/L

response 3715

Ion	Exp%	Act%
43.00	100	100
41.00	76.40	49.66#
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:54:17 2014 MSVO10

```
Sample    : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4880.D      Vial: 5
Acq On    : 15 Dec 2014    2:26 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 14:39:39 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
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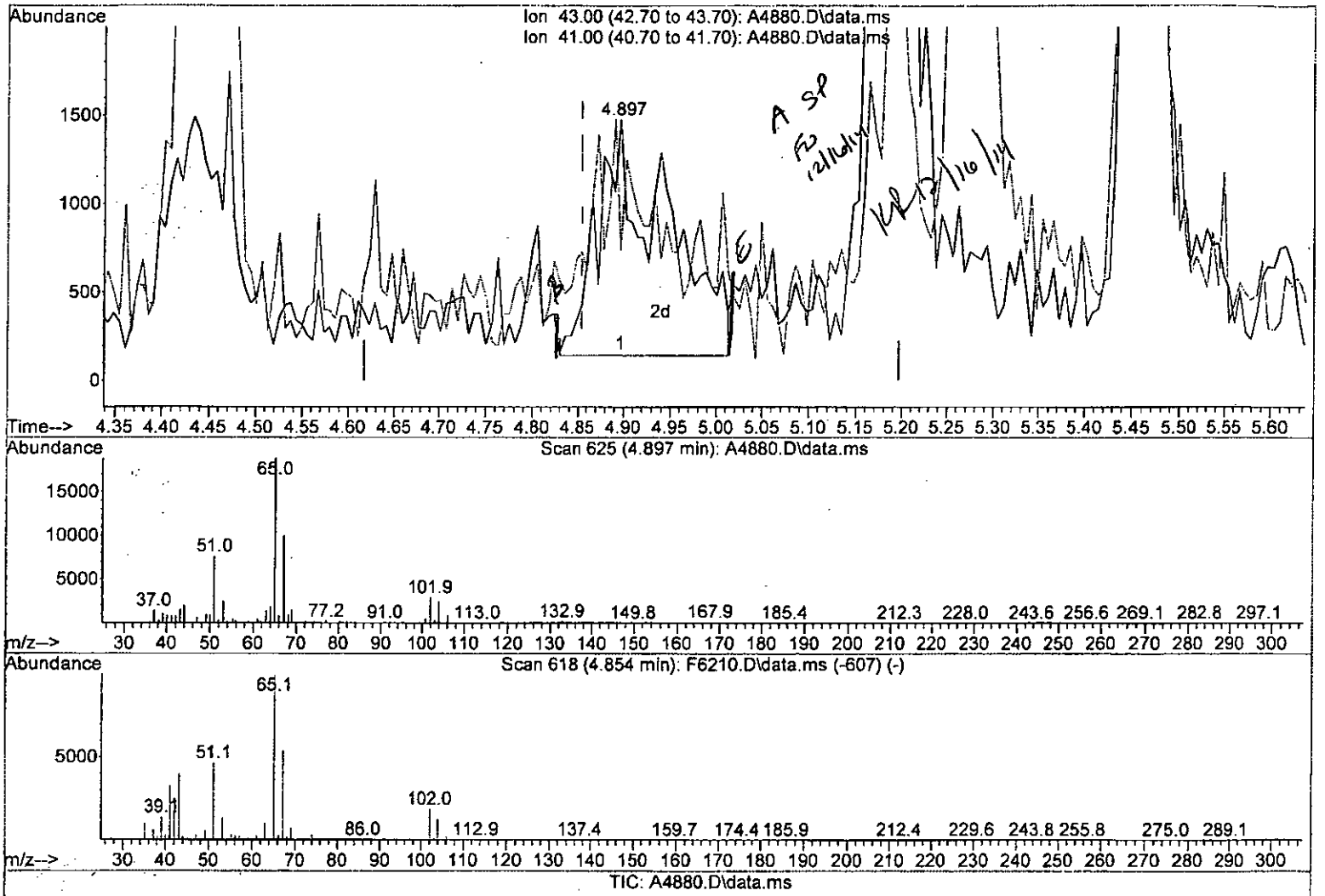


TIC: A4880.D\data.ms

(51) Iso-Butyl Alcohol

4.897min (+0.043) 25.08 ug/L m

response 6862

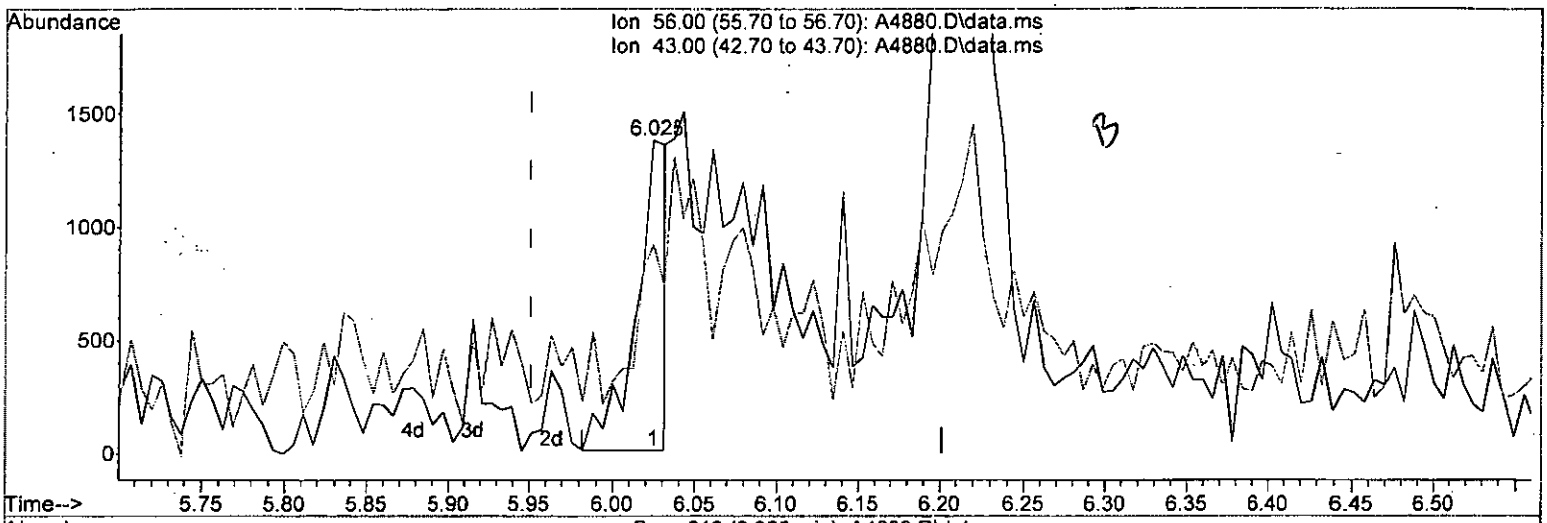
Ion	Exp%	Act%
43.00	100	100
41.00	76.40	49.66#
0.00	0.00	0.00
0.00	0.00	0.00

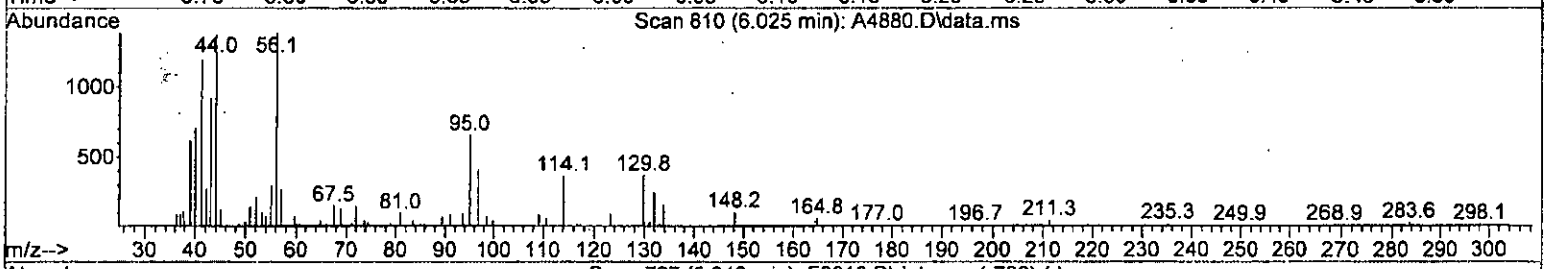
W121514.M Mon Dec 15 15:54:40 2014 MSVO10

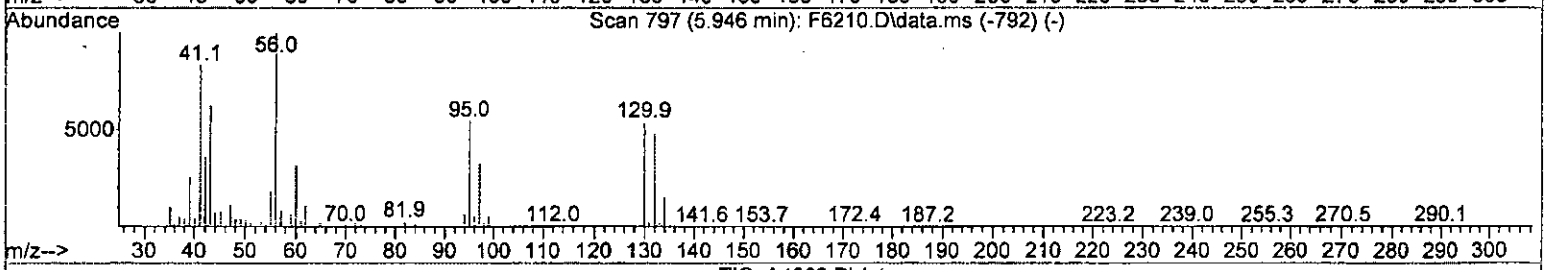
Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4880.D Vial: 5
Acq On : 15 Dec 2014 2:26 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 14:39:39 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration







TIC: A4880.D\data.ms

(53) 1-Butanol

6.025min (+0.074) 15.30 ug/L

response 1740

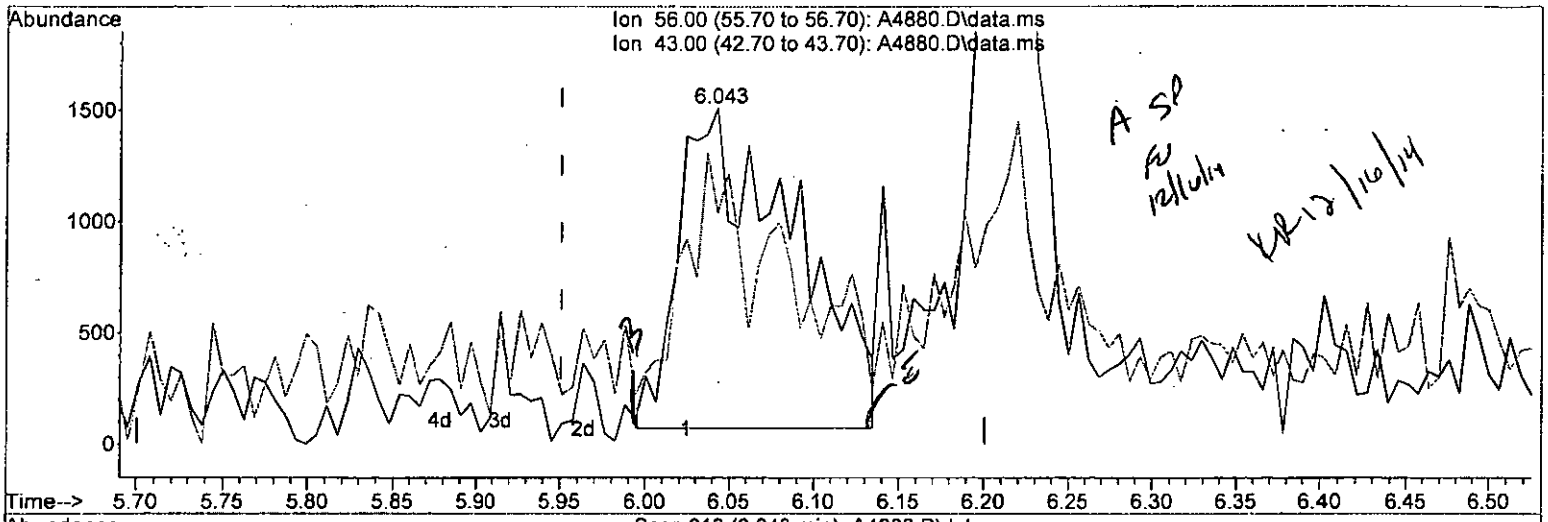
Ion	Exp%	Act%
56.00	100	100
43.00	56.20	66.55
0.00	0.00	0.00
0.00	0.00	0.00

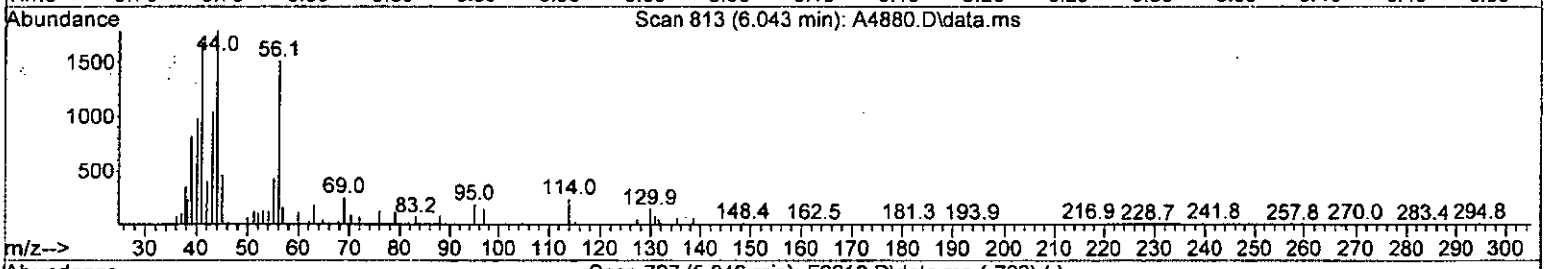
W121514.M Mon Dec 15 15:54:50 2014 MSVO10 0047 Page: 1

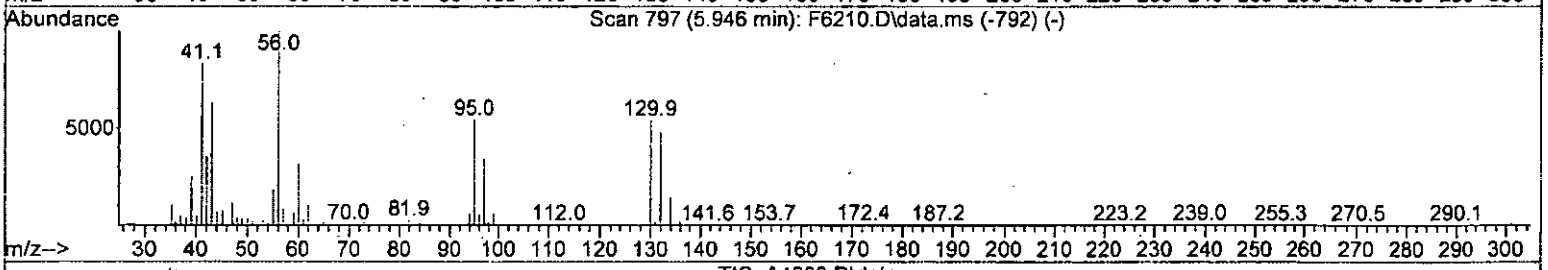
Quantitation Report (Quant)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4880.D Vial: 5
Acq On : 15 Dec 2014 2:26 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 14:39:39 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration







TIC: A4880.D\data.ms

(53) 1-Butanol

6.043min (+0.092) 59.81 ug/L m

response 6800

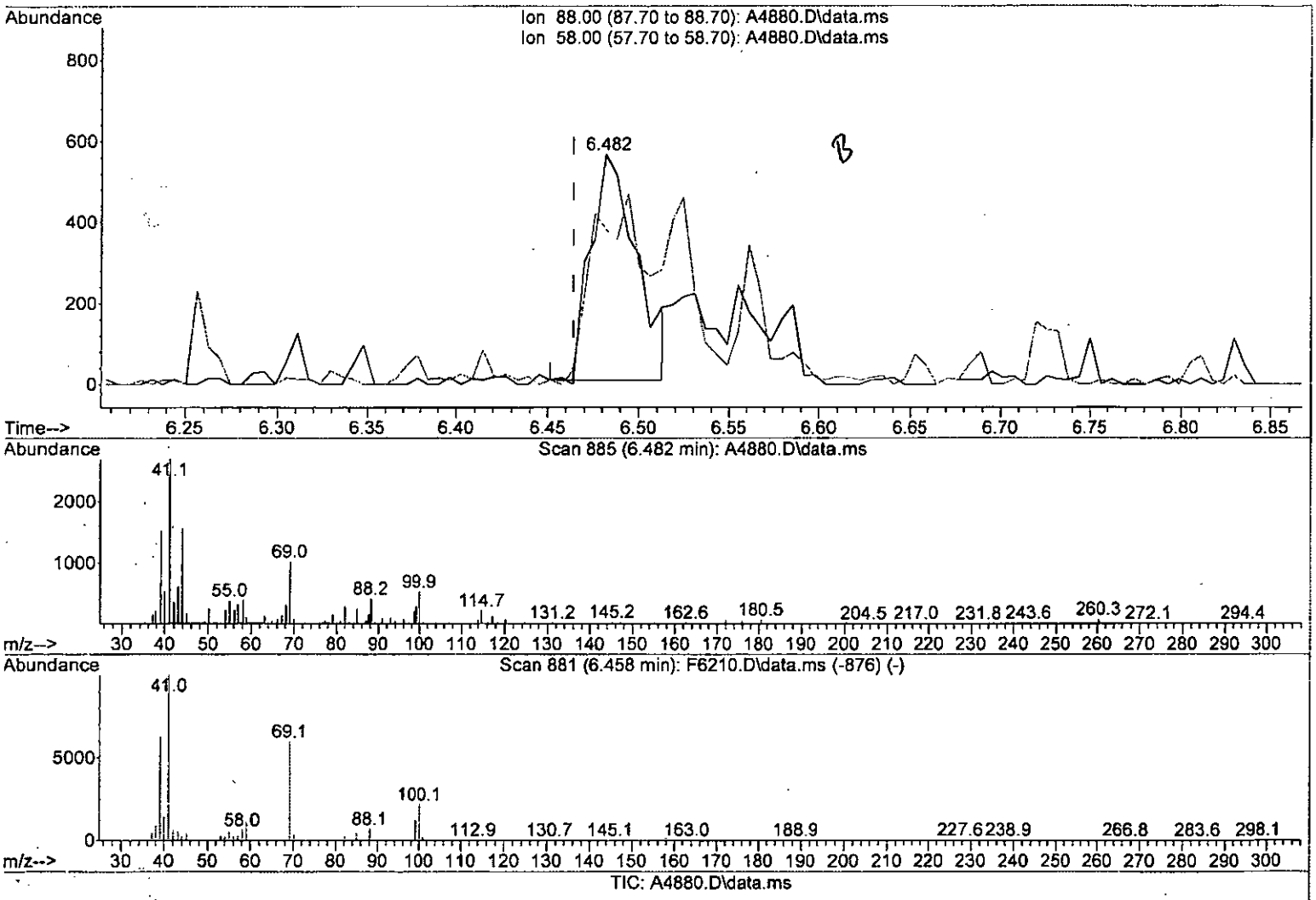
Ion	Exp%	Act%
56.00	100	100
43.00	56.20	68.61
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:55:06 2014 MSVO10

Quantitation Report (Qedit)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4880.D Vial: 5
Acq On : 15 Dec 2014 2:26 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 14:39:39 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



TIC: A4880.D\data.ms

(58) 1,4-Dioxane

6.482min (+0.018) 17.47 ug/L

response 976

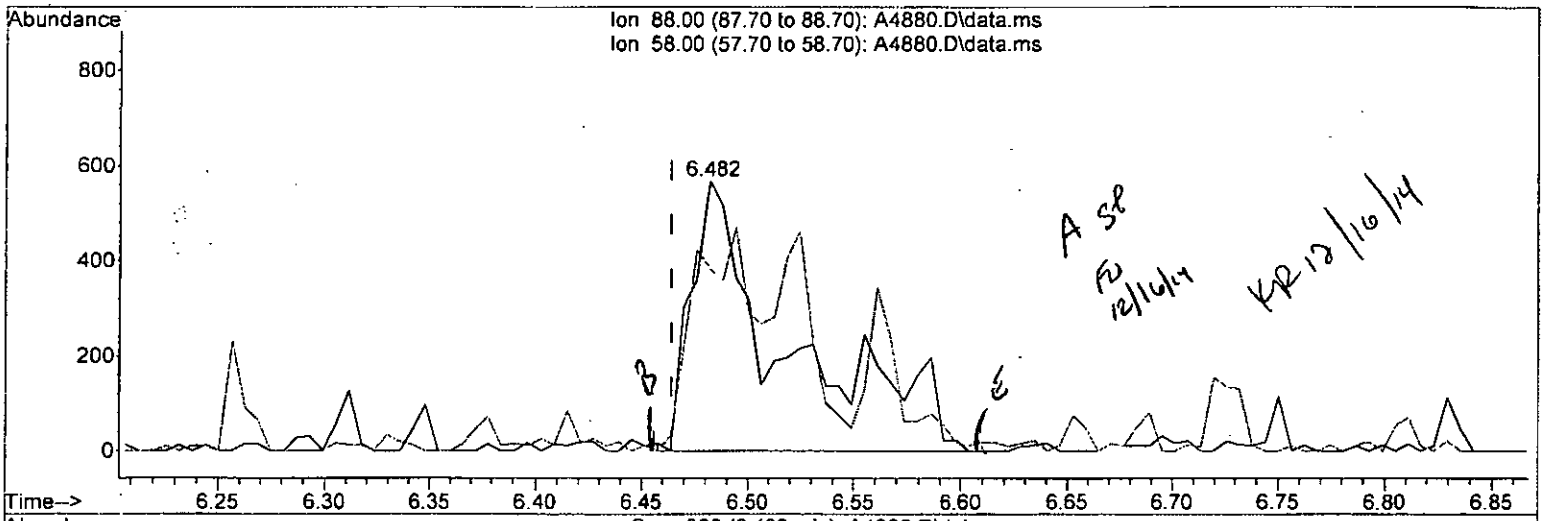
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	67.43
0.00	0.00	0.00
0.00	0.00	0.00

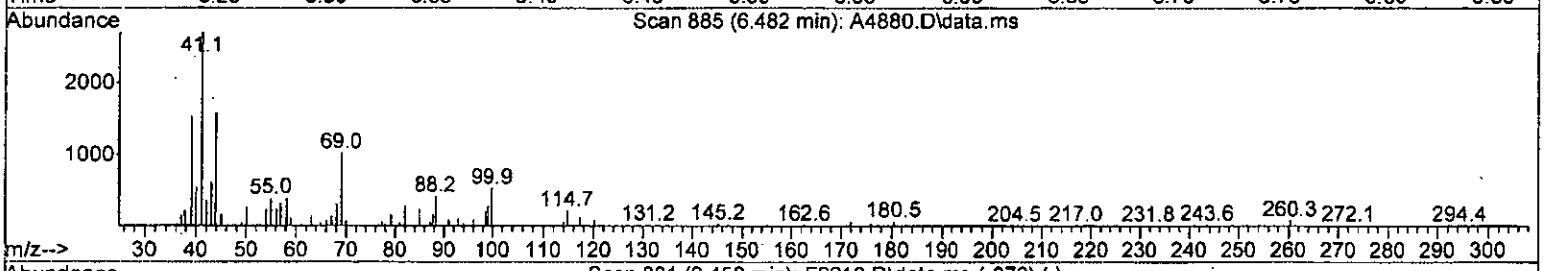
W121514.M Mon Dec 15 15:55:18 2014 MSVO10 Page: 1

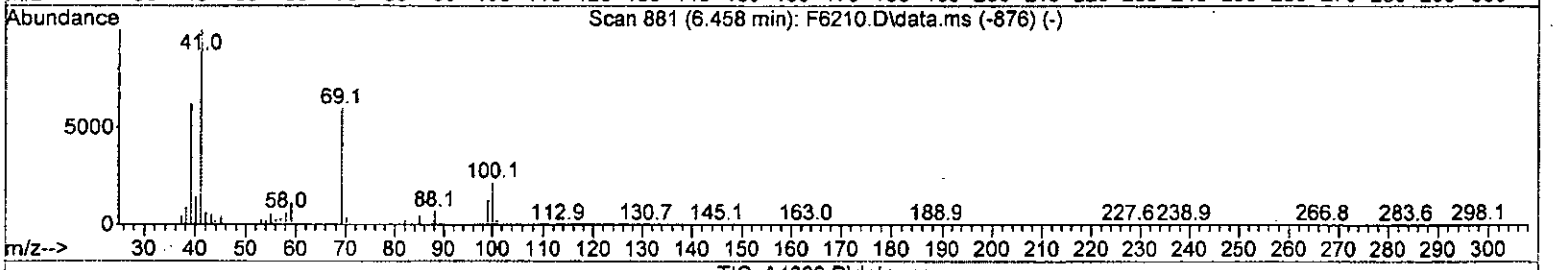
Quantitation Report (Qedit)

Sample : 20.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4880.D Vial: 5
Acq On : 15 Dec 2014 2:26 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 14:39:39 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration







TIC: A4880.D\data.ms

(58) 1,4-Dioxane

6.482min (+0.018) 31.63 ug/L m

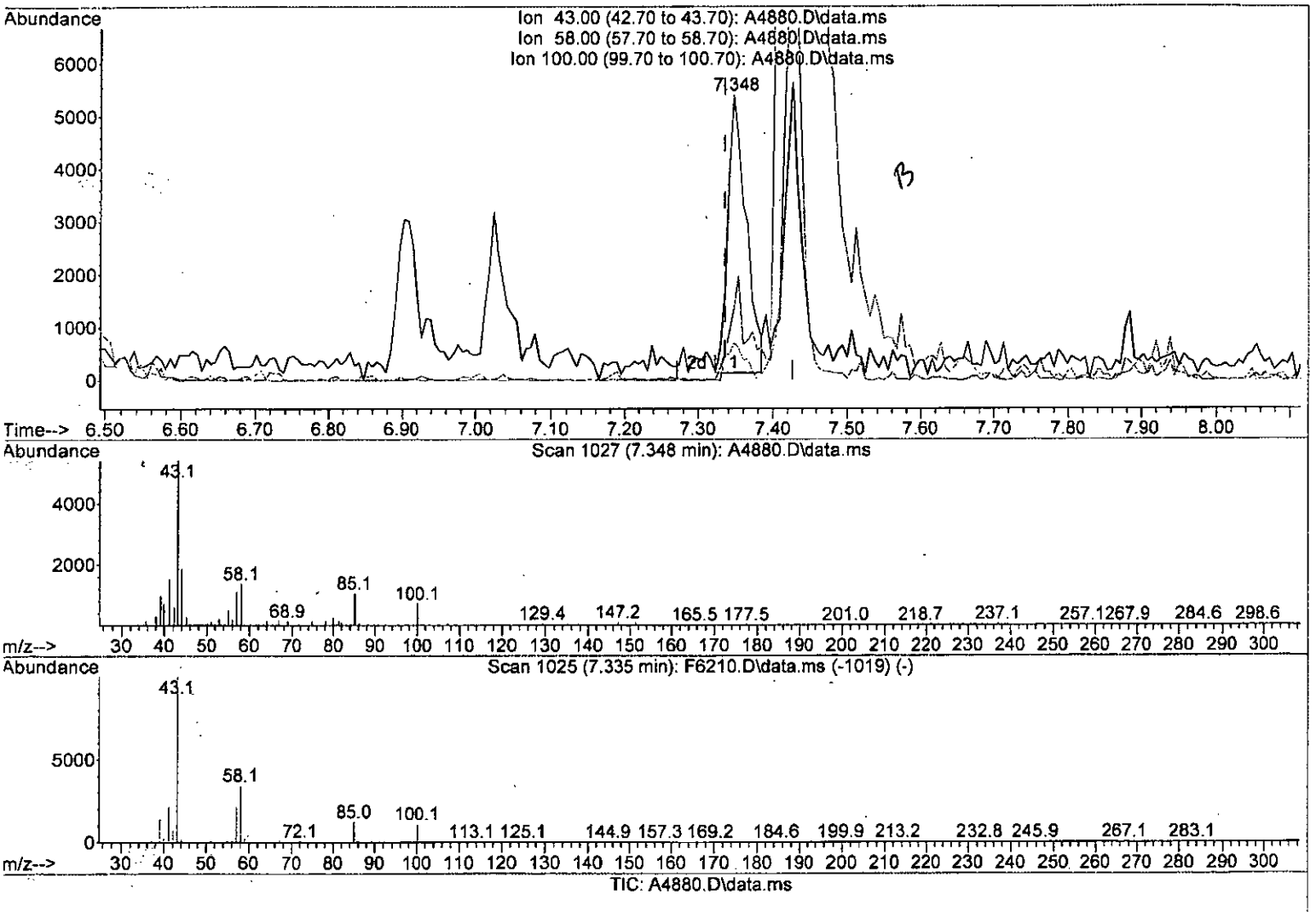
response 1767

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	92.74
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:55:26 2014 MSVO10 Page: 1

Sample : 20.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4880.D Vial: 5
Acq On : 15 Dec 2014 2:26 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 15:55:20 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



TIC: A4880.D\data.ms

(64) 4-Methyl-2-pentanone (P)

7.348min (+0.012) 1.20 ug/L

response 8923

Ion	Exp%	Act%
43.00	100	100
58.00	36.30	25.08
100.00	12.60	13.05
0.00	0.00	0.00

W121514.M Tue Dec 16 07:39:01 2014 MSVO10

```
Sample    : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4880.D      Vial: 5
Acq On    : 15 Dec 2014    2:26 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 15:55:20 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
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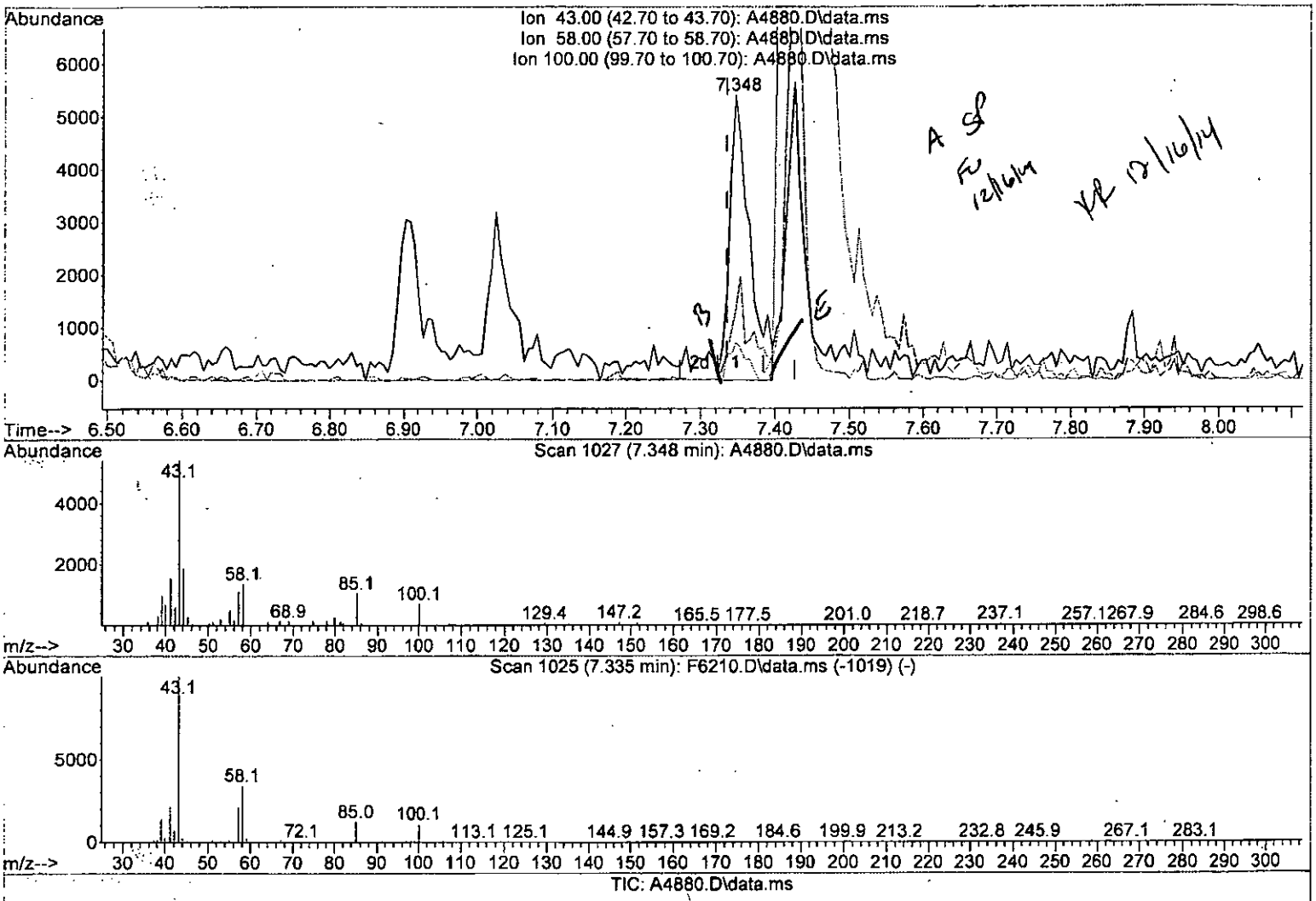


(64) 4-Methyl-2-pentanone (P)

7.348min (+0.012) 1.36 ug/L m

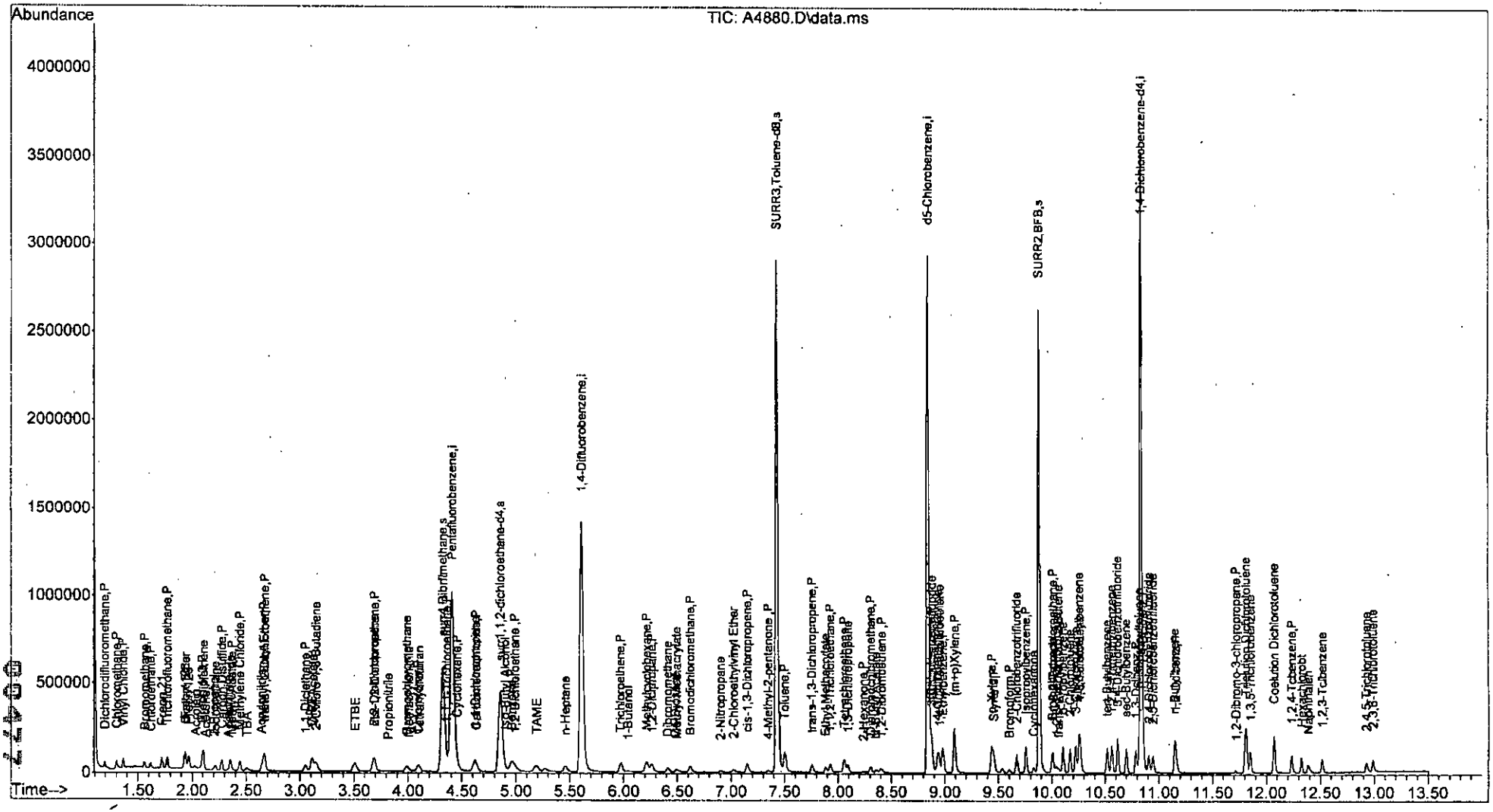
response 10099

Ion	Exp%	Act%
43.00	100	100
58.00	36.30	25.08
100.00	12.60	13.05
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Sample : 2.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4880.D Vial: 5
Acq On : 15 Dec 2014 2:26 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 16 07:39:13 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



W121514.M Tue Dec 16 07:43:46 2014 MSVO10 Page: 4

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4881.D Vial: 6
Acq On : 15 Dec 2014 2:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 15:58:37 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration

FD 12/16/14

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	953046	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1380984	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1250704	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	680595	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.324	113	537212	61.93	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 123.86%#				
48) surr1,1,2-dichloroetha...	4.854	65	563259	61.54	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 123.08%#				
65) SURR3,Toluene-d8	7.427	98	1935430	63.34	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 126.68%#				
70) SURR2,BFB	9.878	95	794028	66.04	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 132.08%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.190	85	47766	4.45	ug/L		96
3) Chloromethane	1.300	50	55332	3.97	ug/L		100
4) Vinyl Chloride	1.361	62	56211	4.45	ug/L		99
5) Bromomethane	1.556	94	29884	8.04	ug/L		99
6) Chloroethane	1.617	64	28832	4.60	ug/L		96
7) Freon 21	1.721	67	86429	4.87	ug/L		99
8) Trichlorofluoromethane	1.770	101	71126	4.93	ug/L		96
9) Diethyl Ether	1.940	59	32686	4.41	ug/L		95
10) Freon 123a	1.934	67	54154	4.84	ug/L		98
11) Freon 123	1.965	83	59203	5.00	ug/L		95
12) Acrolein	2.026	56	16292	14.94	ug/L		94
13) 1,1-Diclethene	2.099	96	39656	5.83	ug/L		97
14) Freon 113	2.093	101	42301	4.97	ug/L		96
15) Acetone	2.123	43	9195	3.22	ug/L		94
16) 2-Propanol	2.196	45	31017	76.02	ug/L		95
17) Iodomethane	2.215	142	52375	7.04	ug/L		95
18) Carbon Disulfide	2.276	76	133264	4.75	ug/L		99
19) Acetonitrile	2.324	40	4631	15.44	ug/L		99
20) Allyl Chloride	2.355	76	22883	5.46	ug/L		92
21) Methyl Acetate	2.361	43	19926	3.53	ug/L		97
22) Methylene Chloride	2.440	84	41562	4.73	ug/L		97
23) TBA	2.507	59	49606	98.01	ug/L		93
24) Acrylonitrile	2.635	53	46672	17.66	ug/L		90
25) Methyl-t-Butyl Ether	2.666	73	107303	5.52	ug/L		100
26) trans-1,2-Dichloroethene	2.672	96	42715	5.02	ug/L		93
28) 1,1-Diclethane	3.050	63	79298	4.39	ug/L		97
29) Vinyl Acetate	3.099	86	5274	5.19	ug/L	#	88
30) DIPE	3.111	45	147734	3.66	ug/L	#	78
31) 2-Chloro-1,3-Butadiene	3.147	53	70014	3.93	ug/L		92
32) ETBE	3.501	59	136050	4.93	ug/L		98
33) 2,2-Dichloropropane	3.690	77	65645	5.81	ug/L		98
34) cis-1,2-Dichloroethene	3.684	96	47703	5.11	ug/L		94
35) 2-Butanone	3.745	43	10282m	2.72	ug/L		
36) Propionitrile	3.793	54	14152	18.29	ug/L		89
37) Bromochloromethane	3.982	130	27986	4.87	ug/L		97

I121514.M Tue Dec 16 07:43:52 2014 MSVO10

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4881.D Vial: 6
Acq On : 15 Dec 2014 2:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 15:58:37 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
38) Methacrylonitrile	3.995	67	9517m	4.58 ug/L		
39) Tetrahydrofuran	4.074	42	6373	3.02 ug/L		76
40) Chloroform	4.098	83	77558	4.86 ug/L		96
41) 1,1,1-Trichloroethane	4.354	97	69928	5.25 ug/L		98
42) TAME	5.183	73	108097	5.77 ug/L		95
44) Cyclohexane	4.452	41	45918	3.71 ug/L		92
46) Carbontetrachloride	4.617	121	18115	5.02 ug/L		95
47) 1,1-Dichloropropene	4.623	75	59384	5.41 ug/L		96
49) Benzene	4.964	78	169202	5.01 ug/L		98
50) 1,2-Dichloroethane	4.995	62	60456	5.06 ug/L		93
51) Iso-Butyl Alcohol	4.873	43	18740	67.39 ug/L		91
52) n-Heptane	5.458	43	44159	3.48 ug/L		91
53) 1-Butanol	5.994	56	27207m	235.48 ug/L		
54) Trichloroethene	5.970	130	45105	4.72 ug/L		97
55) Methylcyclohexane	6.214	55	56490	4.29 ug/L		98
56) 1,2-Diclpropane	6.256	63	42814	4.32 ug/L		98
57) Dibromomethane	6.409	93	24600	5.10 ug/L		88
58) 1,4-Dioxane	6.488	88	5338m	94.04 ug/L		
59) Methyl Methacrylate	6.476	69	17587	4.88 ug/L		90
60) Bromodichloromethane	6.616	83	57440	5.12 ug/L		97
61) 2-Nitropropane	6.897	41	13397	9.29 ug/L	#	77
62) 2-Chloroethylvinyl Ether	7.018	63	19067	4.53 ug/L		90
63) cis-1,3-Dichloropropene	7.147	75	65055	5.47 ug/L		98
64) 4-Methyl-2-pentanone	7.342	43	27222	3.60 ug/L		95
66) Toluene	7.500	91	185857	5.15 ug/L		97
67) trans-1,3-Dichloropropene	7.750	75	54036	5.66 ug/L		97
68) Ethyl Methacrylate	7.878	69	39542	5.14 ug/L		84
69) 1,1,2-Trichloroethane	7.927	97	32598	5.09 ug/L		98
72) Tetrachloroethene	8.055	164	37596	5.14 ug/L		95
73) 2-Hexanone	8.213	43	16023	2.99 ug/L		98
74) 1,3-Dichloropropane	8.085	76	52974	4.86 ug/L		95
75) Dibromochloromethane	8.305	129	39393	4.99 ug/L		96
76) N-Butyl Acetate	8.348	43	48151	4.09 ug/L		94
77) 1,2-Dibromoethane	8.402	107	30701	4.91 ug/L		94
78) 3-Chlorobenzotrifluoride	8.878	180	68025	5.70 ug/L		95
79) Chlorobenzene	8.866	112	124343	5.12 ug/L		92
80) 4-Chlorobenzotrifluoride	8.933	180	63034	5.75 ug/L		98
81) 1,1,1,2-Tetrachloroethane	8.945	131	41973	4.91 ug/L		94
82) Ethylbenzene	8.975	106	63451	5.30 ug/L		92
83) (m+p)Xylene	9.085	106	158795	10.63 ug/L		98
84) o-Xylene	9.433	106	77301	5.30 ug/L		99
85) Styrene	9.451	104	129334	5.34 ug/L		95
86) Bromoform	9.597	173	22478	4.99 ug/L		84
87) 2-Chlorobenzotrifluoride	9.670	180	69306	5.24 ug/L		99
88) Isopropylbenzene	9.756	105	199290	5.41 ug/L		96
89) Cyclohexanone	9.823	55	30120	27.02 ug/L		100
90) trans-1,4-Dichloro-2-B...	10.061	53	9907	5.43 ug/L		86
92) 1,1,2,2-Tetrachloroethane	10.012	83	37622	5.02 ug/L		96
93) Bromobenzene	10.006	156	53177	5.12 ug/L		96
94) 1,2,3-Trichloropropane	10.042	110	10492	4.93 ug/L	#	75
95) n-Propylbenzene	10.103	91	230030	5.39 ug/L		98
96) 2-Chlorotoluene	10.170	91	142371	5.41 ug/L		94

121514.M Tue Dec 16 07:43:52 2014 MSVO10

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4881.D Vial: 6
Acq On : 15 Dec 2014 2:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 15:58:37 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration

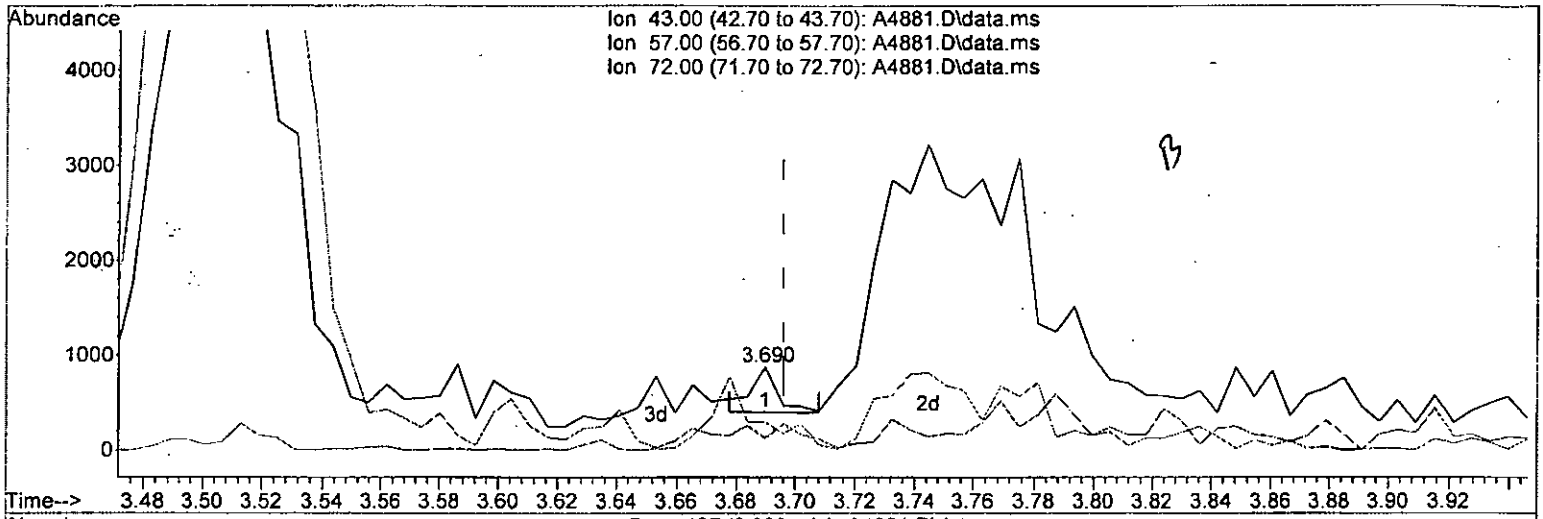
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	150793	5.33	ug/L	98
98)	4-Chlorotoluene	10.262	91	165460	5.20	ug/L	95
99)	1,3,5-Trimethylbenzene	10.256	105	165643	5.32	ug/L	99
100)	tert-Butylbenzene	10.518	119	132324	5.09	ug/L	97
101)	1,2,4-Trimethylbenzene	10.560	105	168087	5.36	ug/L	99
102)	3,4-Dichlorobenzotrifl...	10.615	214	51626	6.18	ug/L	98
103)	sec-Butylbenzene	10.695	105	191376	5.23	ug/L	97
104)	p-Isopropyltoluene	10.817	119	165501	5.23	ug/L	96
105)	1,3-Dclbenz	10.786	146	97822	4.97	ug/L	93
106)	1,4-Dclbenz	10.853	146	102817	5.04	ug/L	98
107)	2,4-Dichlorobenzotrifl...	10.902	214	47682	6.44	ug/L	95
108)	2,5-Dichlorobenzotrifl...	10.945	214	52052	5.84	ug/L	97
109)	n-Butylbenzene	11.146	91	149244	5.59	ug/L	96
110)	1,2-Dclbenz	11.152	146	96396	5.25	ug/L	97
111)	1,2-Dibromo-3-chloropr...	11.713	157	7008	5.91	ug/L	84
112)	Trielution Dichlorotol...	11.804	125	251963	16.35	ug/L	96
113)	1,3,5-Trichlorobenzene	11.847	180	71773	6.10	ug/L	95
114)	Coelution Dichlorotoluene	12.066	125	173833	12.28	ug/L	97
115)	1,2,4-Tcbenzene	12.231	180	61417	5.82	ug/L	97
116)	Hexachlorobt	12.322	225	26680	6.08	ug/L	94
117)	Naphthalen	12.377	128	100918	5.49	ug/L	97
118)	1,2,3-Tclbenzene	12.511	180	45442	5.80	ug/L	94
119)	2,4,5-Trichlorotoluene	12.926	159	31450	7.41	ug/L	96
120)	2,3,6-Trichlorotoluene	12.987	159	32151	7.48	ug/L	90

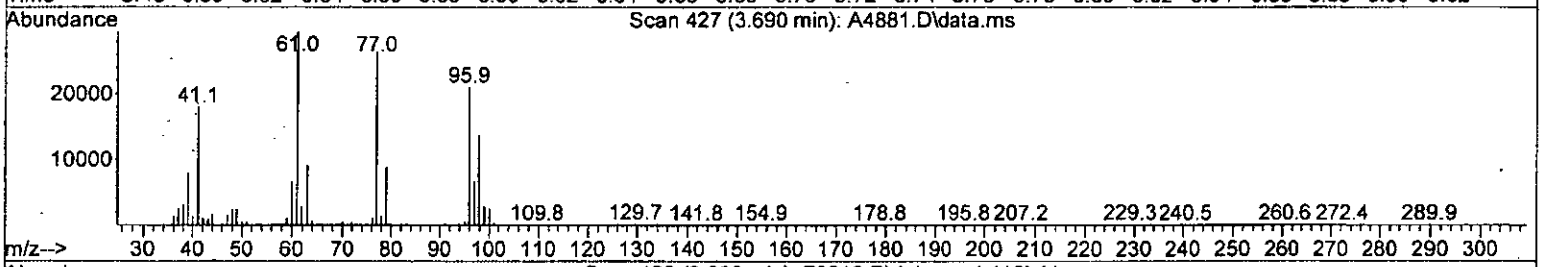
(#) = qualifier out of range (m) = manual integration (+) = signals summed

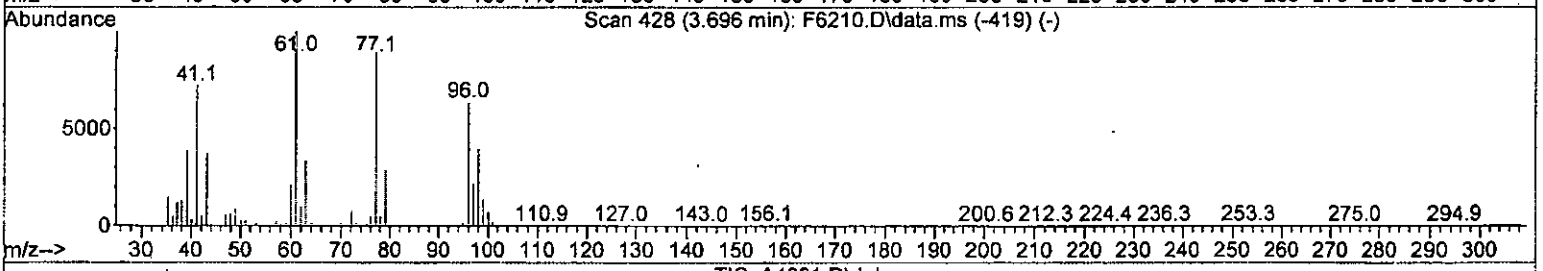
121514.M Tue Dec 16 07:43:52 2014 MSVO10

Sample : 8260B STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4881.D Vial: 6
Acq On : 15 Dec 2014 2:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 15:09:21 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration







TIC: A4881.D\data.ms

(35) 2-Butanone (P)

3.690min (-0.006) 0.07 ug/L

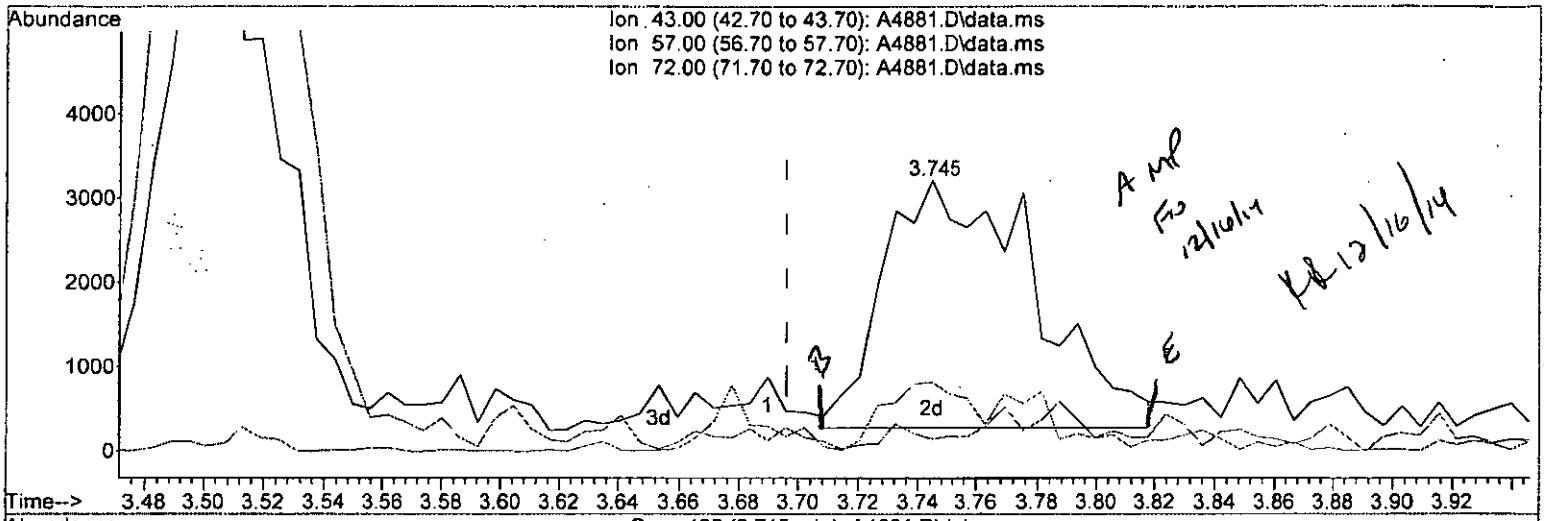
response 283

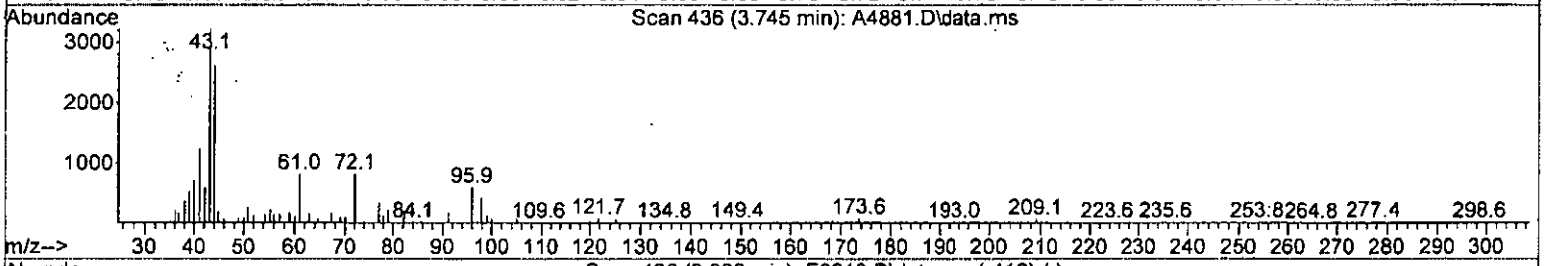
Ion	Exp%	Act%
43.00	100	100
57.00	8.30	16.02
72.00	23.50	33.18
0.00	0.00	0.00

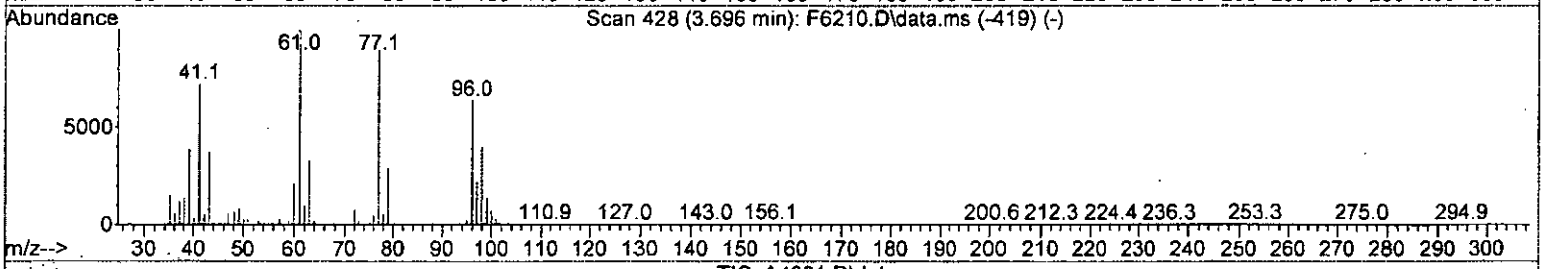
W121514.M Mon Dec 15 15:56:52 2014 MSVO10 Page: 1

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4881.D Vial: 6
Acq On : 15 Dec 2014 2:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 15:09:21 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration







TIC: A4881.D\data.ms

(35) 2-Butanone (P)

3.745min (+0.049) 2.72 ug/L m

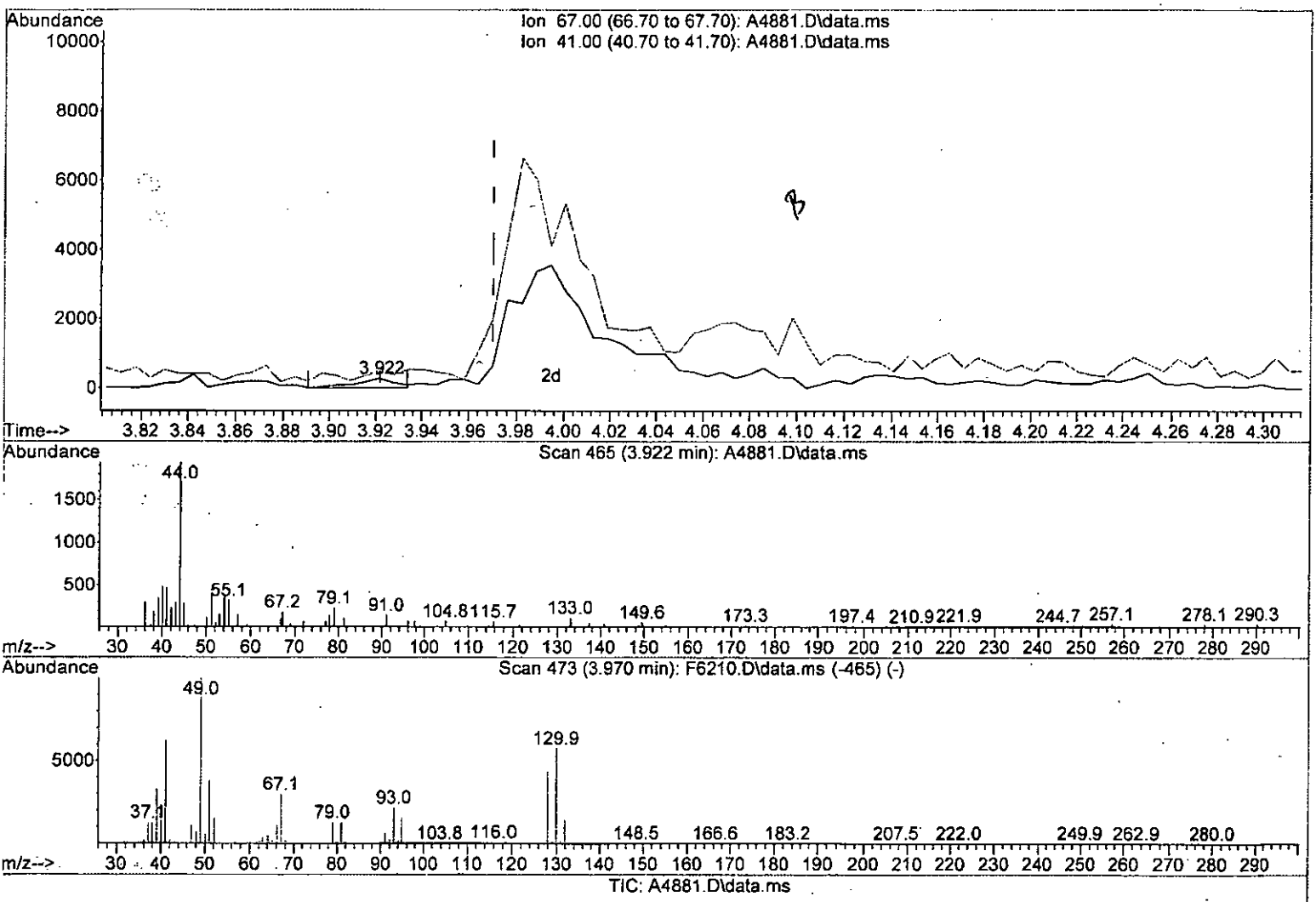
response 10282

Ion	Exp%	Act%
43.00	100	100
57.00	8.30	4.39
72.00	23.50	25.36
0.00	0.00	0.00

W121514.M Mon Dec 15 15:57:11 2014 MSVO10 Page: 1

```
Sample   : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4881.D      Vial: 6
Acq On    : 15 Dec 2014    2:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 15:09:21 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



(38) Methacrylonitrile

3.922min (-0.049) 0.14 ug/L

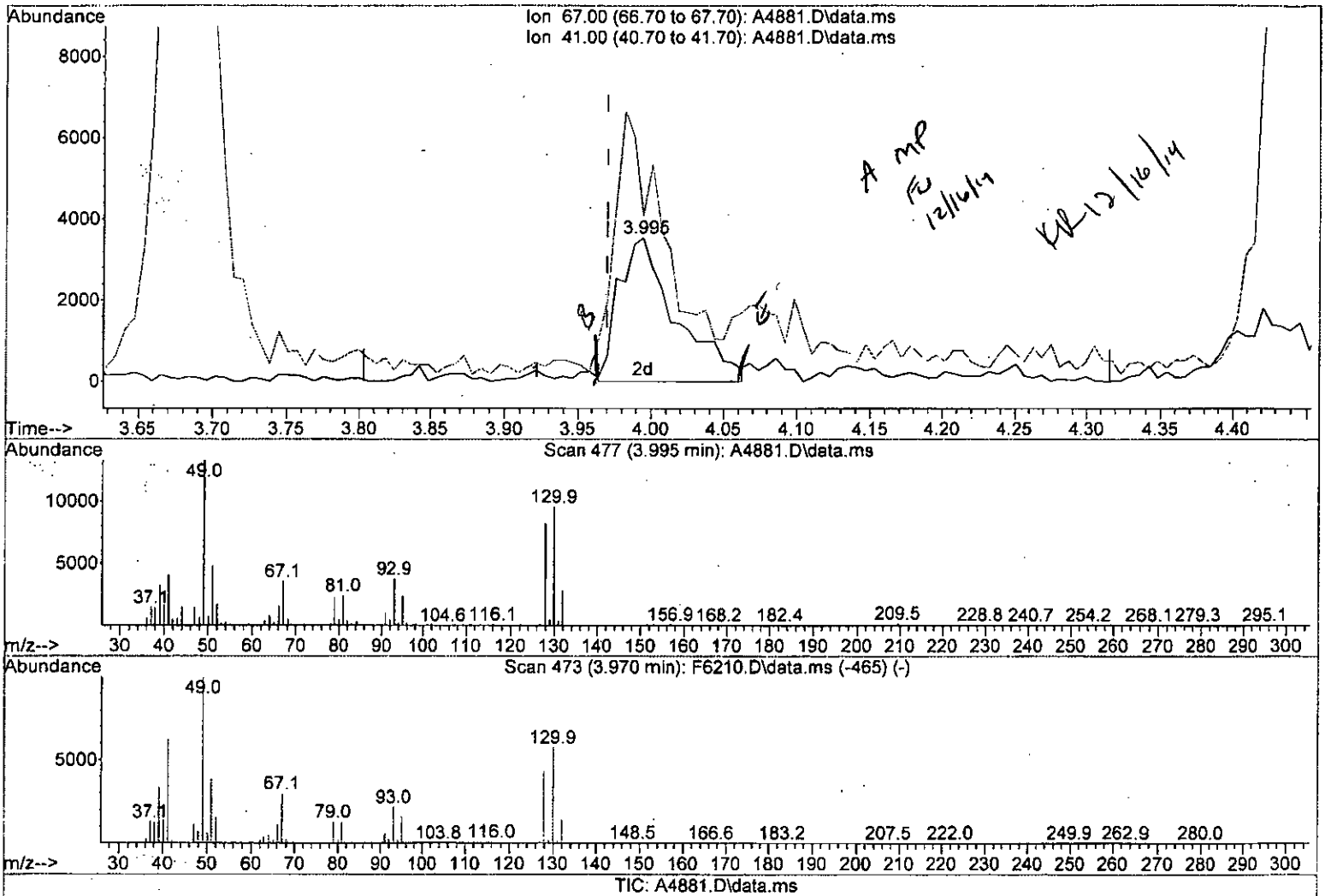
response 300

Ion	Exp%	Act%
67.00	100	100
41.00	149.10	166.18
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:57:22 2014 MSVO10

```
Sample : 5ug B PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4881.D      Vial: 6
Acq On    : 15 Dec 2014    2:56 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 15:09:21 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
```



TIC: A4881.D\data.ms

(38) Methacrylonitrile

3.995min (+0.024) 4.58 ug/L m

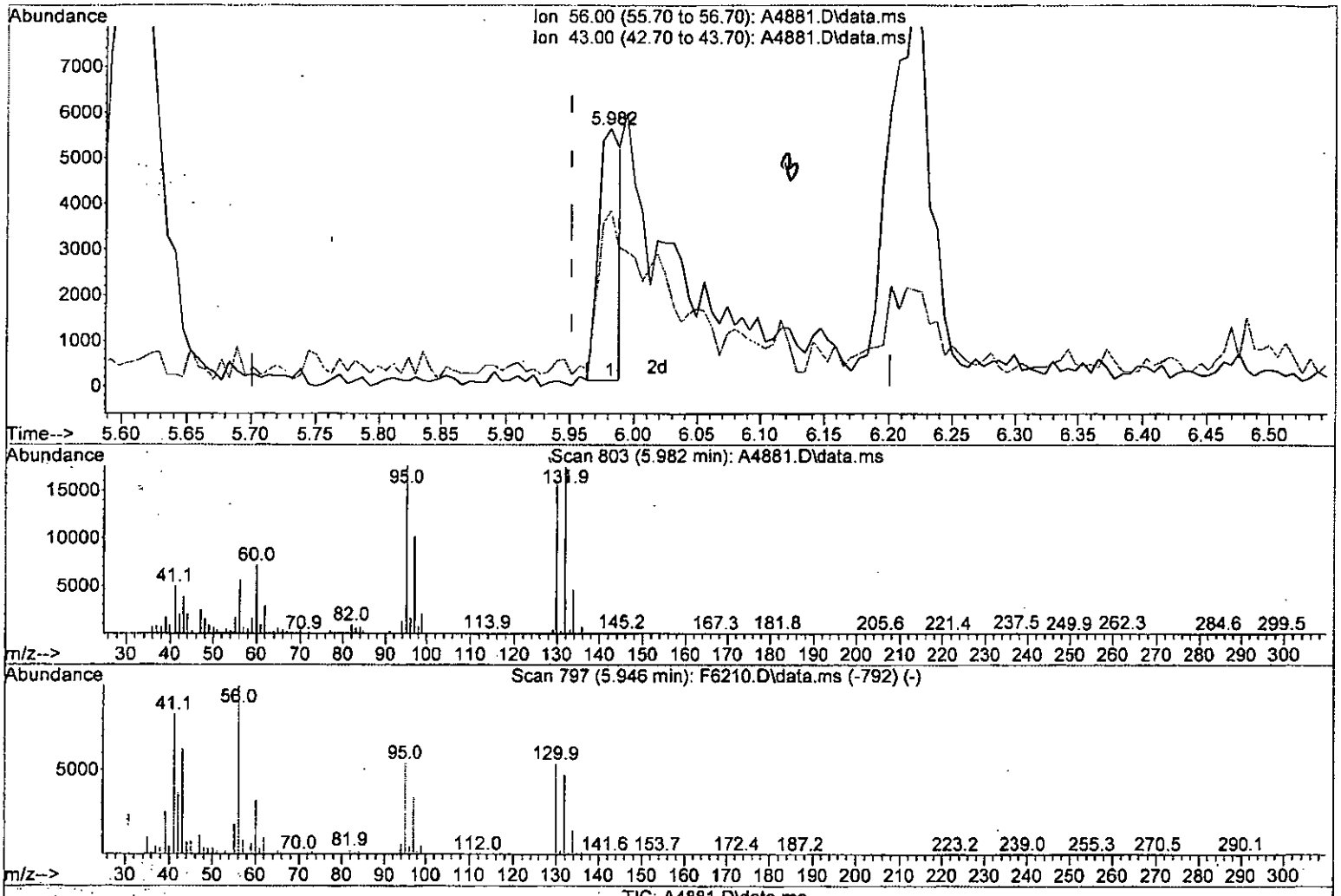
response 9517

Ion	Exp%	Act%
67.00	100	100
41.00	149.10	115.34#
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:57:41 2014 MSVO10

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4881.D Vial: 6
Acq On : 15 Dec 2014 2:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 15:09:21 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



TIC: A4881.D\data.ms

(53) 1-Butanol

5.982min (+0.031) 56.61 ug/L

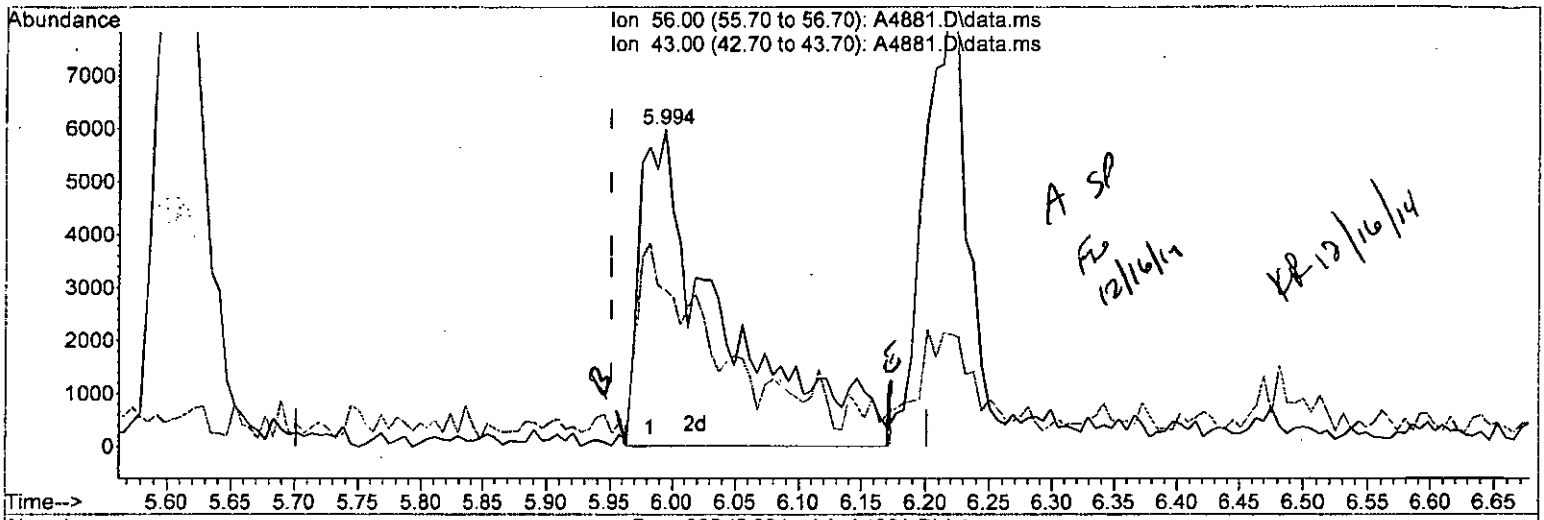
response 6541

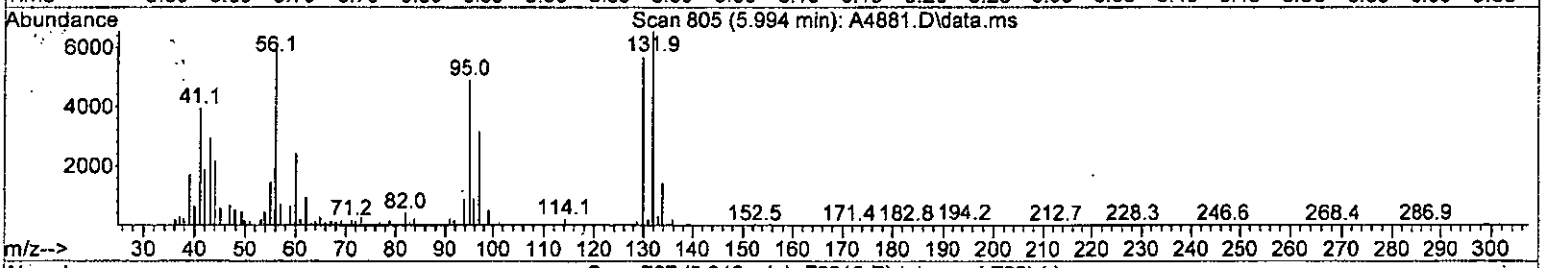
Ion	Exp%	Act%
56.00	100	100
43.00	56.20	68.09
0.00	0.00	0.00
0.00	0.00	0.00

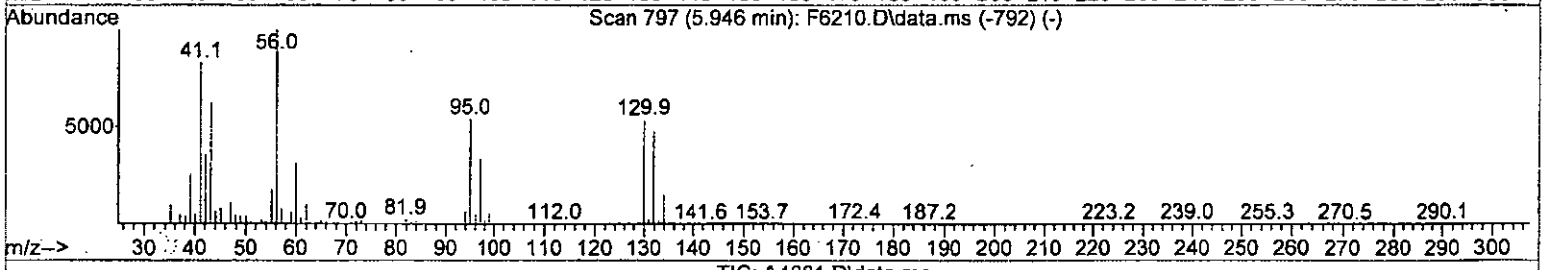
W121514.M Mon Dec 15 15:58:04 2014 MSVO10 Page: 1

Sample 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4881.D Vial: 6
Acq On : 15 Dec 2014 2:56 pm
Operator : F.NAEGLER
InstName : MSVOA10.
Misc :

Quant Time: Dec 15 15:09:21 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration







TIC: A4881.D\data.ms

(53) 1-Butanol

5.994min (+0.043) 235.48 ug/L m

response 27207

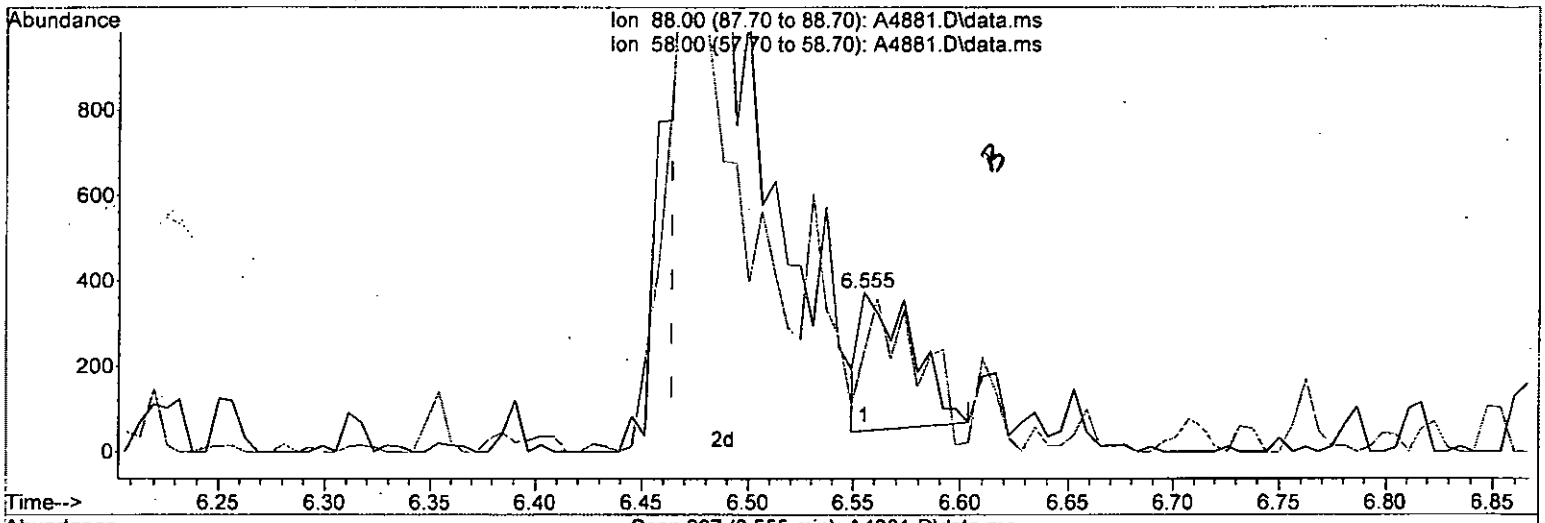
Ion	Exp%	Act%
56.00	100	100
43.00	56.20	49.05
0.00	0.00	0.00
0.00	0.00	0.00

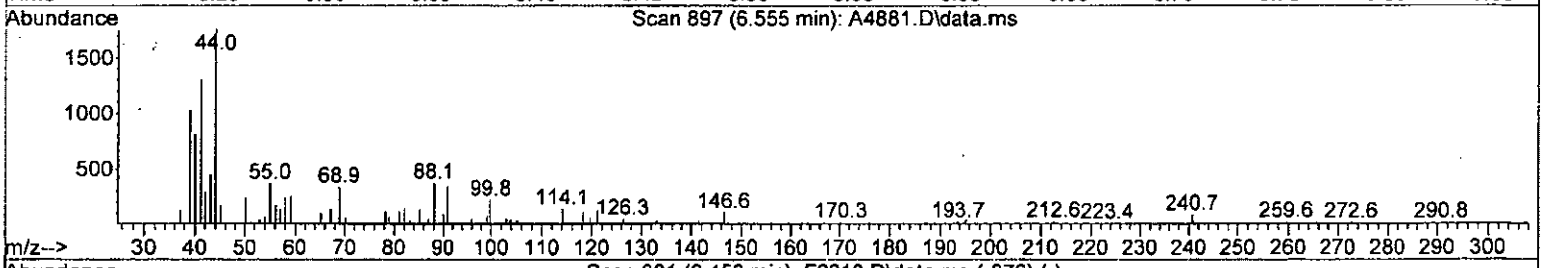
W121514.M Mon Dec 15 15:58:18 2014 MSVO10 Page: 1

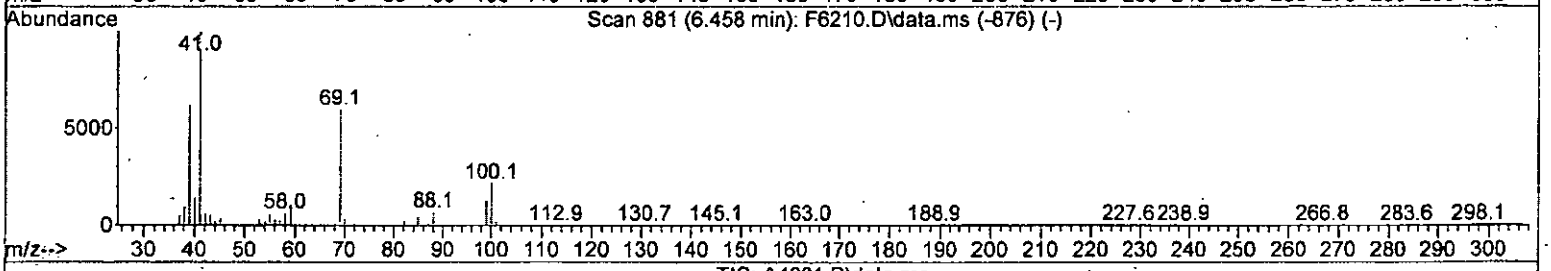
Quantitation Report (Quant)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4881.D Vial: 6
Acq On : 15 Dec 2014 2:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 15:09:21 2014
Quant.Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration







TIC: A4881.D\data.ms

(58) 1,4-Dioxane

6.555min (+0.091) 9.58 ug/L

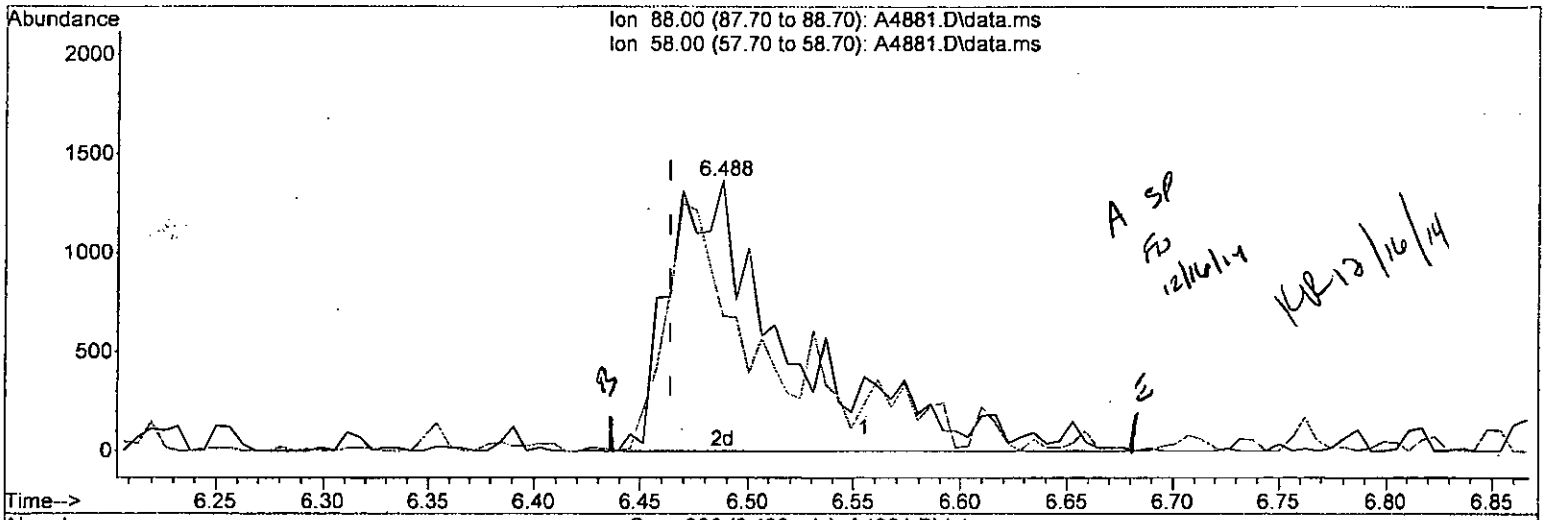
response 544

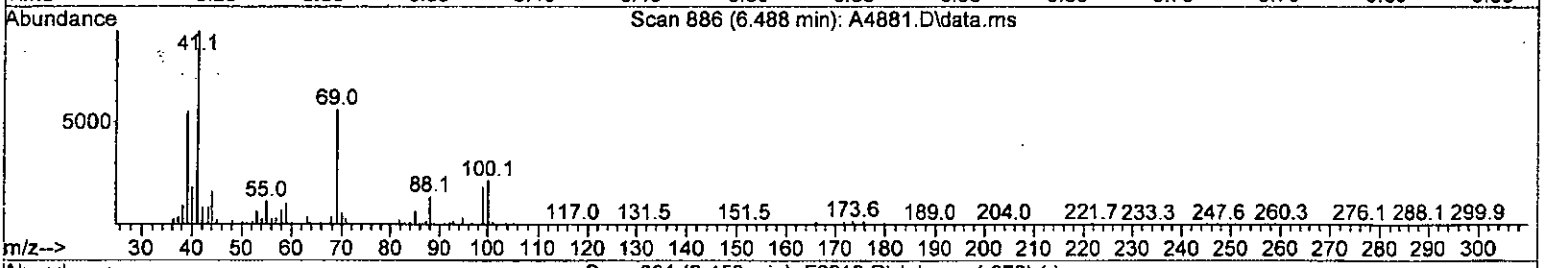
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	63.17
0.00	0.00	0.00
0.00	0.00	0.00

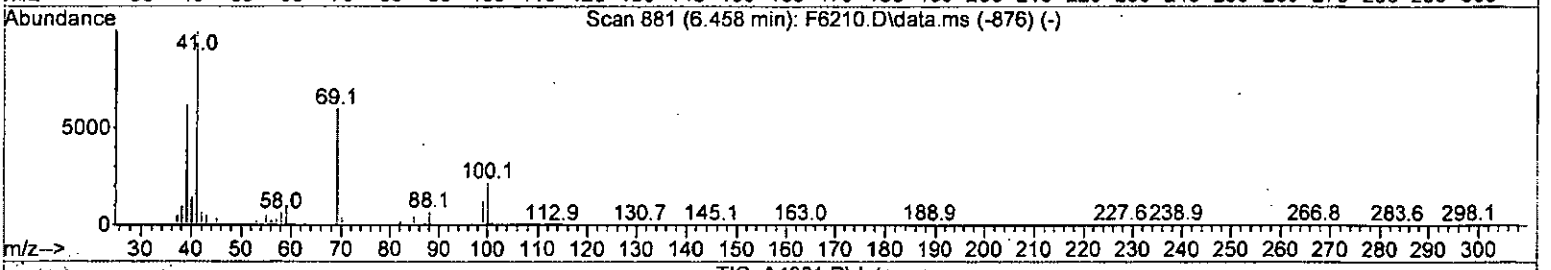
W121514.M Mon Dec 15 15:58:35 2014 MSVO10 Page: 1

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4881.D Vial: 6
Acq On : 15 Dec 2014 2:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 15:09:21 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration







TIC: A4881.D\data.ms

(58) 1,4-Dioxane

6.488min (+0.024) 94.04 ug/L m

response 5338

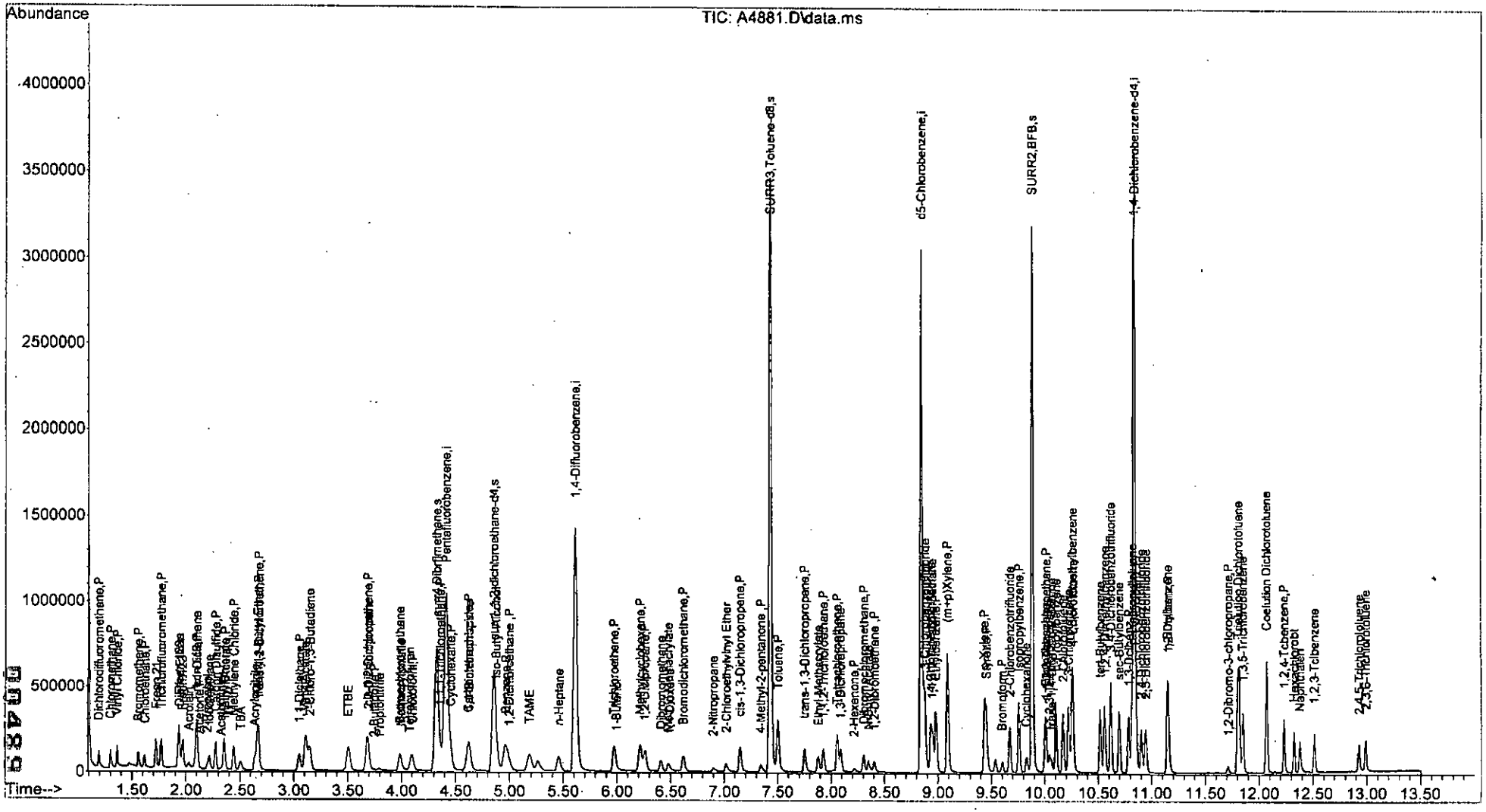
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	49.89#
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 15:58:43 2014 MSVO10 Page: 1

Quantitation Report (QT Reviewed)

Sample : 5.0 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4881.D Vial: 6
Acq On : 15 Dec 2014 2:56 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 15:58:37 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



W121514.M Tue Dec 16 07:43:55 2014 MSVO10

Page: 4

Sample : 20 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4882.D Vial: 7
Acq On : 15 Dec 2014 3:29 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 16:00:25 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration

FV 12/16/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	959305	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1392015	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1250394	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	674504	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	606662	69.38	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 138.76%#			
48) surr1,1,2-dichloroetha...	4.854	65	616022	66.78	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 133.56%#			
65) SURR3,Toluene-d8	7.427	98	2189818	71.10	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 142.20%#			
70) SURR2,BFB	9.878	95	884854	73.01	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 146.02%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.191	85	208900	19.31	ug/L	98
3) Chloromethane	1.300	50	233721	16.68	ug/L	99
4) Vinyl Chloride	1.361	62	228385	17.95	ug/L	99
5) Bromomethane	1.562	94	118467	31.66	ug/L	98
6) Chloroethane	1.617	64	116474	18.46	ug/L	98
7) Freon 21	1.721	67	308594	17.28	ug/L	99
8) Trichlorofluoromethane	1.770	101	278402	19.15	ug/L	97
9) Diethyl Ether	1.934	59	128966	17.28	ug/L	93
10) Freon 123a	1.928	67	187650	16.68	ug/L	91
11) Freon 123	1.965	83	210015	17.63	ug/L	97
12) Acrolein	2.026	56	44180	40.24	ug/L	92
13) 1,1-Diclethene	2.105	96	145313	21.24	ug/L	96
14) Freon 113	2.093	101	157564	18.38	ug/L	96
15) Acetone	2.123	43	28597	9.94	ug/L	96
16) 2-Propanol	2.196	45	113987	277.56	ug/L	96
17) Iodomethane	2.215	142	194350	25.96	ug/L	96
18) Carbon Disulfide	2.276	76	409928	14.50	ug/L	100
19) Acetonitrile	2.318	40	18578	61.54	ug/L	99
20) Allyl Chloride	2.355	76	93003	22.03	ug/L	97
21) Methyl Acetate	2.355	43	70941	12.48	ug/L	95
22) Methylene Chloride	2.440	84	167799	18.96	ug/L	99
23) TBA	2.501	59	185328	363.78	ug/L	98
24) Acrylonitrile	2.629	53	184012	69.16	ug/L	98
25) Methyl-t-Butyl Ether	2.660	73	407104	20.82	ug/L	99
26) trans-1,2-Dichloroethene	2.672	96	161081	18.81	ug/L	93
28) 1,1-Diclethane	3.050	63	313116	17.21	ug/L	97
29) Vinyl Acetate	3.087	86	20833	20.38	ug/L #	52
30) DIPE	3.105	45	570808	14.04	ug/L	87
31) 2-Chloro-1,3-Butadiene	3.147	53	216257	12.05	ug/L	100
32) ETBE	3.501	59	518144	18.66	ug/L	98
33) 2,2-Dichloropropane	3.678	77	263944	23.20	ug/L	97
34) cis-1,2-Dichloroethene	3.684	96	181376	19.32	ug/L	98
35) 2-Butanone	3.714	43	36961	9.71	ug/L	92
36) Propionitrile	3.775	54	58796	75.48	ug/L	92
37) Bromochloromethane	3.983	130	105841	18.32	ug/L	93

121514.M Tue Dec 16 07:44:04 2014 MSVO10 Page: 1

00450

Sample : 20 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4882.D Vial: 7
Acq On : 15 Dec 2014 3:29 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 16:00:25 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Methacrylonitrile	3.970	67	39454	18.86 ug/L #	81
39) Tetrahydrofuran	4.056	42	26717	12.56 ug/L	99
40) Chloroform	4.092	83	304499	18.94 ug/L	97
41) 1,1,1-Trichloroethane	4.361	97	267399	19.96 ug/L	98
42) TAME	5.178	73	410109	21.76 ug/L	98
44) Cyclohexane	4.440	41	163270	13.08 ug/L	97
46) Carbontetrachloride	4.617	121	74269	20.41 ug/L	94
47) 1,1-Dichloropropene	4.617	75	219528	19.84 ug/L	96
49) Benzene	4.952	78	664806	19.54 ug/L	99
50) 1,2-Dichloroethane	4.982	62	221792	18.40 ug/L	98
51) Iso-Butyl Alcohol	4.854	43	74760	266.70 ug/L	91
52) n-Heptane	5.452	43	215232	16.83 ug/L	92
53) 1-Butanol	5.952	56	101894	874.92 ug/L	97
54) Trichloroethene	5.964	130	182501	18.95 ug/L	98
55) Methylcyclohexane	6.214	55	192756	14.53 ug/L	96
56) 1,2-Diclpropane	6.257	63	175543	17.56 ug/L	96
57) Dibromomethane	6.403	93	93366	19.20 ug/L	99
58) 1,4-Dioxane	6.458	88	20646m	360.84 ug/L	
59) Methyl Methacrylate	6.464	69	69871	19.23 ug/L	89
60) Bromodichloromethane	6.616	83	226301	20.02 ug/L	99
61) 2-Nitropropane	6.891	41	56149	38.63 ug/L	94
62) 2-Chloroethylvinyl Ether	7.006	63	70873	16.71 ug/L	92
63) cis-1,3-Dichloropropene	7.147	75	271301	22.62 ug/L	96
64) 4-Methyl-2-pentanone	7.336	43	95762	12.55 ug/L	96
66) Toluene	7.500	91	753502	20.70 ug/L	98
67) trans-1,3-Dichloropropene	7.750	75	231358	24.06 ug/L	98
68) Ethyl Methacrylate	7.872	69	156369	20.18 ug/L	89
69) 1,1,2-Trichloroethane	7.921	97	125887	19.50 ug/L	97
72) Tetrachloroethene	8.055	164	145342	19.88 ug/L	96
73) 2-Hexanone	8.201	43	62351	11.65 ug/L	98
74) 1,3-Dichloropropane	8.086	76	214898	19.71 ug/L	94
75) Dibromochloromethane	8.299	129	159057	20.15 ug/L	99
76) N-Butyl Acetate	8.342	43	185650	15.78 ug/L	97
77) 1,2-Dibromoethane	8.396	107	126104	20.19 ug/L	98
78) 3-Chlorobenzotrifluoride	8.878	180	225032	18.86 ug/L	98
79) Chlorobenzene	8.866	112	497613	20.50 ug/L	98
80) 4-Chlorobenzotrifluoride	8.927	180	205754	18.79 ug/L	98
81) 1,1,1,2-Tetrachloroethane	8.945	131	176176	20.63 ug/L	97
82) Ethylbenzene	8.976	106	253679	21.21 ug/L	99
83) (m+p)Xylene	9.085	106	625657	41.90 ug/L	99
84) o-Xylene	9.433	106	314005	21.52 ug/L	97
85) Styrene	9.445	104	535551	22.12 ug/L	97
86) Bromoform	9.597	173	92172	20.47 ug/L	99
87) 2-Chlorobenzotrifluoride	9.671	180	222004	16.80 ug/L	96
88) Isopropylbenzene	9.756	105	758994	20.62 ug/L	100
89) Cyclohexanone	9.823	55	110773	99.38 ug/L	97
90) trans-1,4-Dichloro-2-B...	10.055	53	41121	22.53 ug/L	95
92) 1,1,2,2-Tetrachloroethane	10.006	83	151828	20.44 ug/L	95
93) Bromobenzene	10.000	156	216165	20.99 ug/L	96
94) 1,2,3-Trichloropropane	10.042	110	38253	18.13 ug/L	98
95) n-Propylbenzene	10.103	91	906075	21.43 ug/L	99
96) 2-Chlorotoluene	10.164	91	564289	21.65 ug/L	98

Sample : 20 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4882.D Vial: 7
Acq On : 15 Dec 2014 3:29 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 16:00:25 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration

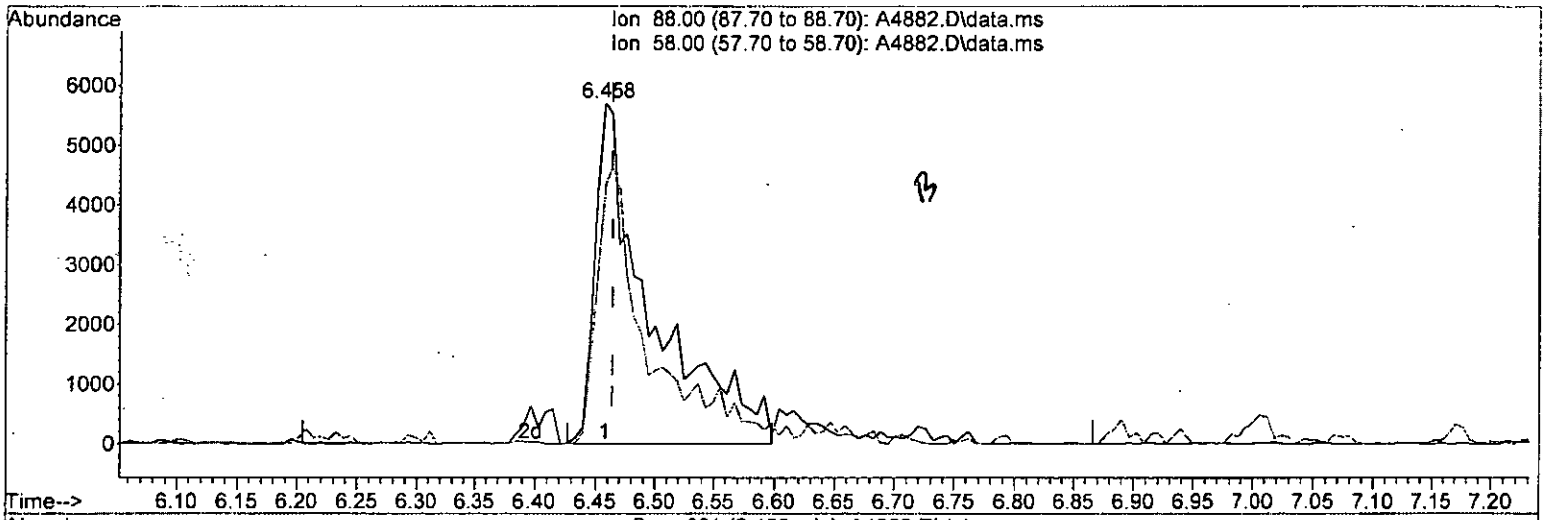
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	490888	17.51	ug/L	100
98)	4-Chlorotoluene	10.256	91	681403	21.60	ug/L	99
99)	1,3,5-Trimethylbenzene	10.250	105	645992	20.93	ug/L	98
100)	tert-Butylbenzene	10.518	119	521780	20.25	ug/L	99
101)	1,2,4-Trimethylbenzene	10.555	105	662358	21.31	ug/L	100
102)	3,4-Dichlorobenzotrifl...	10.616	214	172024	20.78	ug/L	95
103)	sec-Butylbenzene	10.695	105	761146	21.00	ug/L	98
104)	p-Isopropyltoluene	10.817	119	653995	20.85	ug/L	98
105)	1,3-Dclbenz	10.780	146	405210	20.79	ug/L	99
106)	1,4-Dclbenz	10.853	146	411788	20.38	ug/L	98
107)	2,4-Dichlorobenzotrifl...	10.902	214	150986	20.58	ug/L	98
108)	2,5-Dichlorobenzotrifl...	10.945	214	180011	20.38	ug/L	97
109)	n-Butylbenzene	11.140	91	613711	23.19	ug/L	99
110)	1,2-Dclbenz	11.152	146	376428	20.67	ug/L	97
111)	1,2-Dibromo-3-chloropr...	11.707	157	25345	21.57	ug/L	97
112)	Trielution Dichlorotol...	11.798	125	850579	55.68	ug/L	93
113)	1,3,5-Trichlorobenzene	11.847	180	240597	20.64	ug/L	96
114)	Coelution Dichlorotoluene	12.066	125	593301	42.30	ug/L	98
115)	1,2,4-Tcbenzene	12.225	180	227825	21.80	ug/L	96
116)	Hexachlorobt	12.323	225	127705	29.37	ug/L	99
117)	Naphthalen	12.371	128	389305	21.39	ug/L	99
118)	1,2,3-Tclbenzene	12.511	180	168764	21.75	ug/L	96
119)	2,4,5-Trichlorotoluene	12.920	159	102315	24.33	ug/L	94
120)	2,3,6-Trichlorotoluene	12.981	159	108246	25.40	ug/L	97

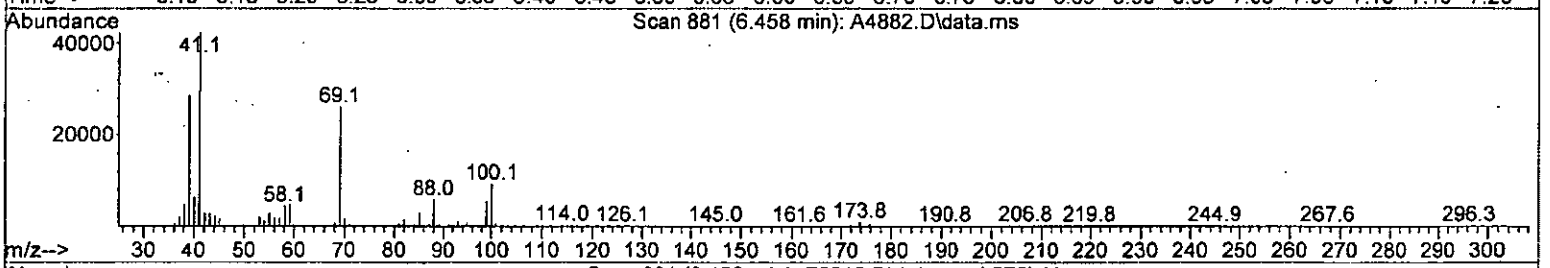
(#) = qualifier out of range (m) = manual integration (+) = signals summed

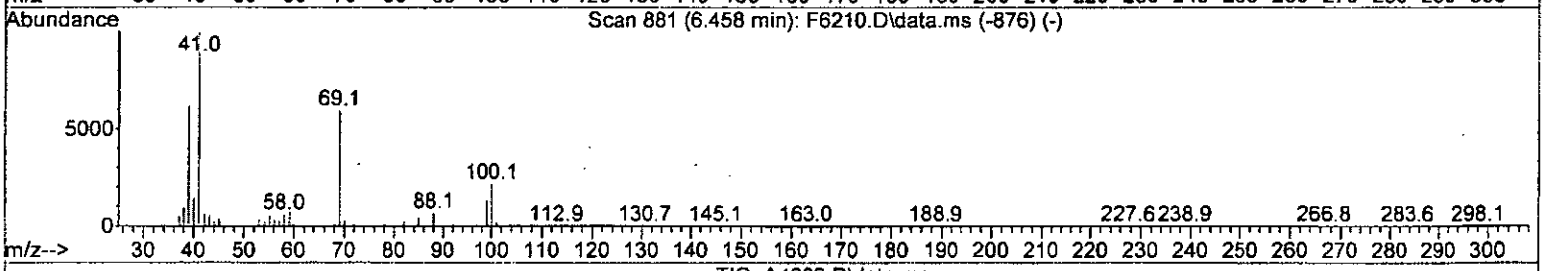
121514.M Tue Dec 16 07:44:04 2014 MSVO10

Sample : 20 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4882.D Vial: 7
Acq On : 15 Dec 2014 3:29 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 15:42:46 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration







TIC: A4882.D\data.ms

(58) 1,4-Dioxane

6.458min (-0.006). 324.05 ug/L

response 18541

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	76.06
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 16:00:24 2014 MSVO10 Page: 1

```
Sample : 20.0PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4882.D      Vial: 7
Acq On    : 15 Dec 2014    3:29 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 15:42:46 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration
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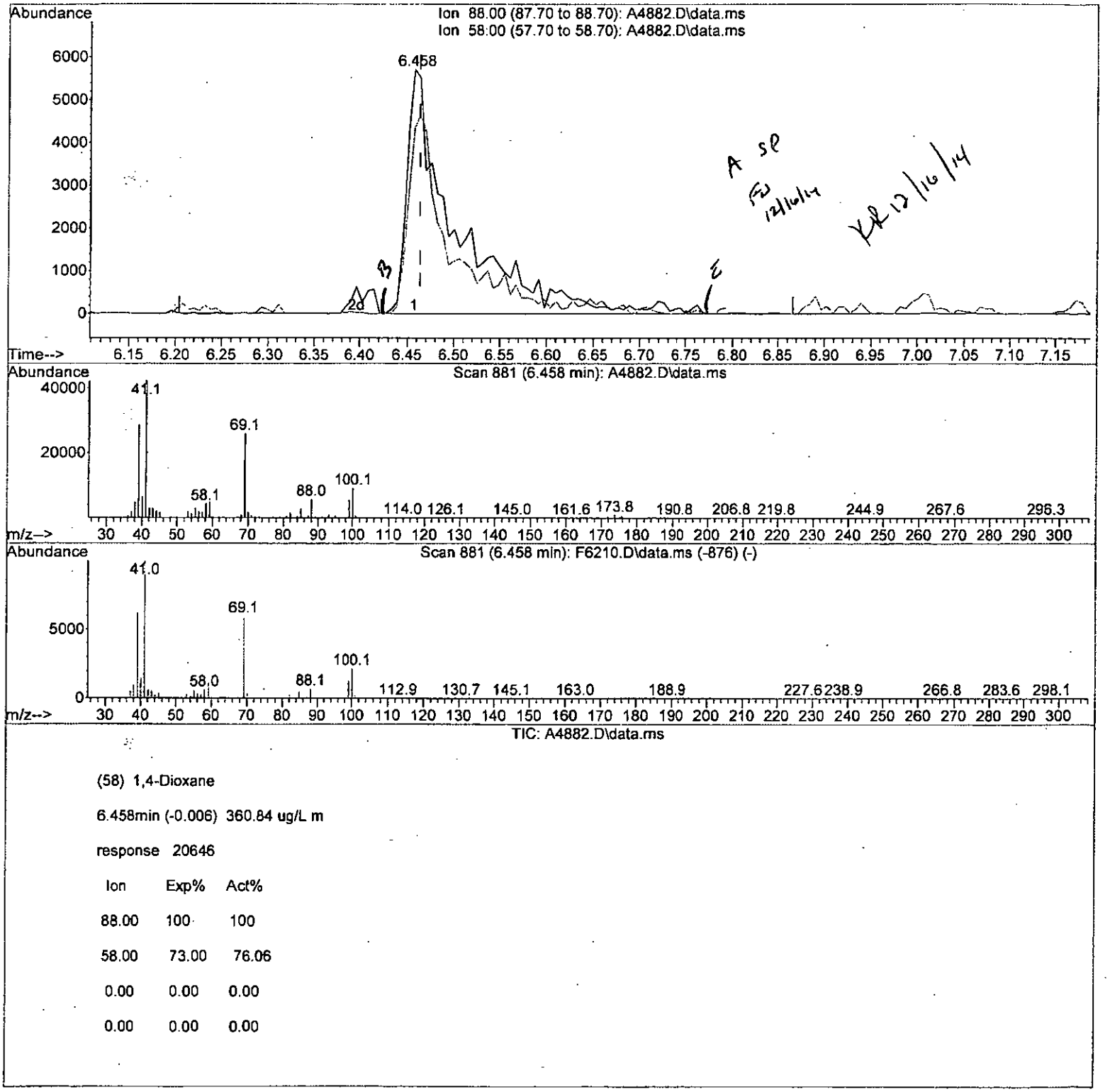


TIC: A4882.D\data.ms

(58) 1,4-Dioxane

6.458min (-0.006) 360.84 ug/L m

response 20646

Ion	Exp%	Act%
88.00	100	100
58.00	73.00	76.06
0.00	0.00	0.00
0.00	0.00	0.00

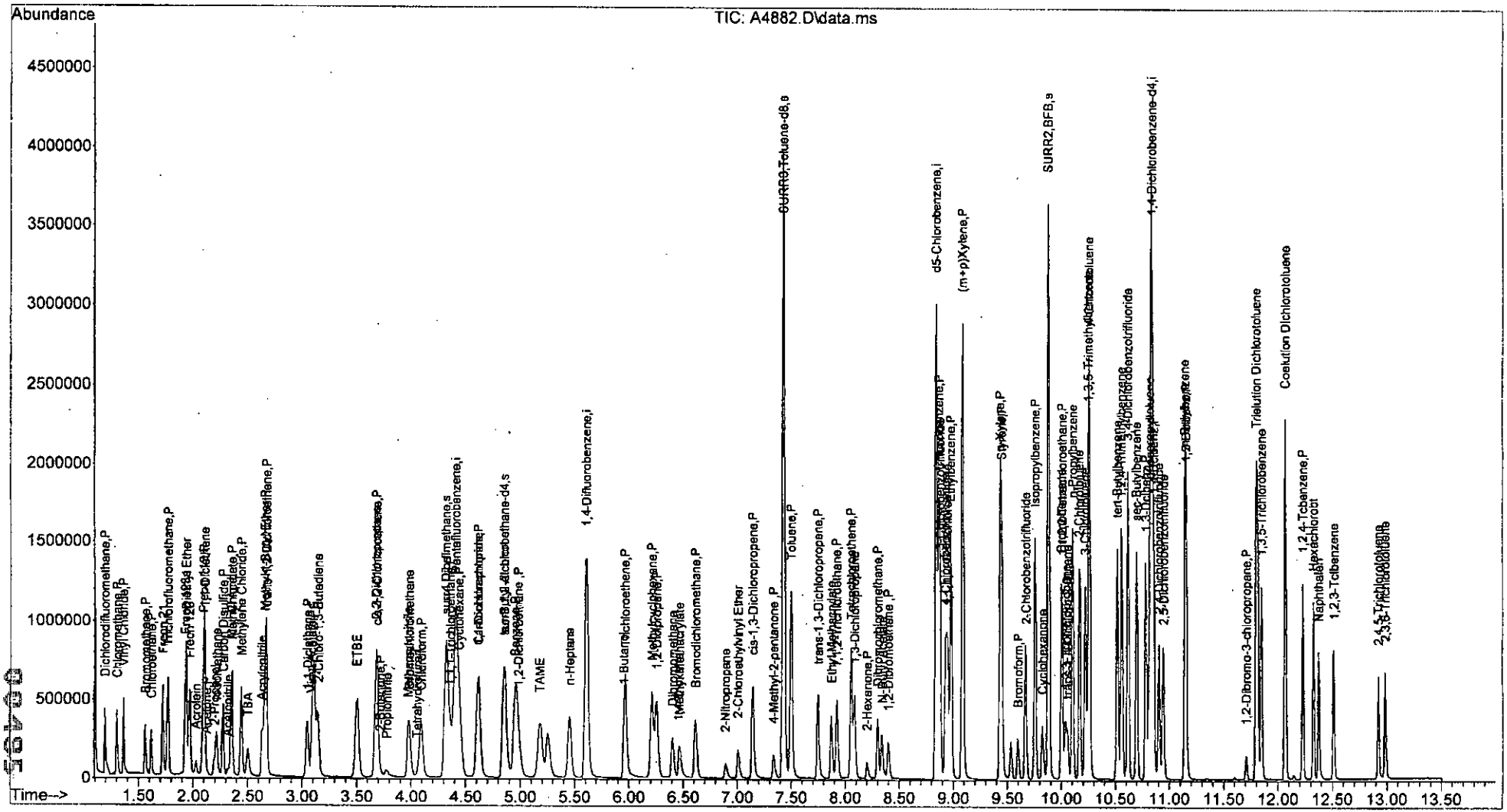
W121514.M Mon Dec 15 16:00:34 2014 MSVO10

0049 Page: 1

Quantitation Report (QT Reviewed)

Sample : 20 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4882.D Vial: 7
Acq On : 15 Dec 2014 3:29 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 16:00:25 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Fri Dec 12 14:36:54 2014
Response via : Initial Calibration



W121514.M Tue Dec 16 07:44:06 2014 MSVO10 Page: 4

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4883.D Vial: 8
Acq On : 15 Dec 2014 3:59 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 16:13:30 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:03:29 2014
Response via : Initial Calibration

FW 12/16/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	960900	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1388269	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1267944	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	707736	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	449054	50.90	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.80%			
48) surr1,1,2-dichloroetha...	4.854	65	453855	49.84	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 99.68%			
65) SURR3,Toluene-d8	7.427	98	1659149	52.15	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 104.30%			
70) SURR2,BFB	9.878	95	676593	52.23	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 104.46%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.190	85	572752	55.36	ug/L	96
3) Chloromethane	1.300	50	610376	52.94	ug/L	99
4) Vinyl Chloride	1.361	62	605959	52.96	ug/L	99
5) Bromomethane	1.562	94	300537	43.33	ug/L	98
6) Chloroethane	1.617	64	294478	47.96	ug/L	99
7) Freon 21	1.721	67	749008	43.14	ug/L	96
8) Trichlorofluoromethane	1.769	101	753132	53.56	ug/L	99
9) Diethyl Ether	1.940	59	319156	49.35	ug/L	96
10) Freon 123a	1.934	67	453018	44.04	ug/L	99
11) Freon 123	1.971	83	503824	44.14	ug/L	99
12) Acrolein	2.026	56	129117	195.93	ug/L	99
13) 1,1-Diclethene	2.105	96	373389	46.73	ug/L	95
14) Freon 113	2.093	101	420641	49.58	ug/L	95
15) Acetone	2.123	43	87244	48.25	ug/L	96
16) 2-Propanol	2.196	45	329320	1113.60	ug/L	95
17) Iodomethane	2.215	142	618509	66.20	ug/L	98
18) Carbon Disulfide	2.275	76	1237007	47.13	ug/L	99
19) Acetonitrile	2.318	40	60011	290.79	ug/L	95
20) Allyl Chloride	2.355	76	239931	50.04	ug/L	92
21) Methyl Acetate	2.355	43	199200	53.30	ug/L	97
22) Methylene Chloride	2.440	84	428318	48.80	ug/L	98
23) TBA	2.501	59	557379	1151.07	ug/L	95
24) Acrylonitrile	2.629	53	508054	292.57	ug/L	97
25) Methyl-t-Butyl Ether	2.660	73	1066984	51.77	ug/L	98
26) trans-1,2-Dichloroethene	2.672	96	426132	50.20	ug/L	96
28) 1,1-Diclethane	3.050	63	804420	50.62	ug/L	100
29) Vinyl Acetate	3.092	86	57524	67.03	ug/L	98
30) DIPE	3.105	45	1504835	51.11	ug/L	89
31) 2-Chloro-1,3-Butadiene	3.141	53	663897	51.32	ug/L	94
32) ETBE	3.501	59	1363353	51.43	ug/L	97
33) 2,2-Dichloropropane	3.684	77	690426	51.65	ug/L	97
34) cis-1,2-Dichloroethene	3.678	96	477794	51.13	ug/L	91
35) 2-Butanone	3.702	43	118979	60.63	ug/L	99
36) Propionitrile	3.769	54	172919	309.86	ug/L	92
37) Bromochloromethane	3.982	130	277813	51.04	ug/L	98

121514.M Tue Dec 16 07:44:15 2014 MSVO10

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4883.D Vial: 8
Acq On : 15 Dec 2014 3:59 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 16:13:30 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:03:29 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.970	67	114350	61.37	ug/L		96
39) Tetrahydrofuran	4.062	42	72181	54.45	ug/L		91
40) Chloroform	4.092	83	791994	50.59	ug/L		96
41) 1,1,1-Trichloroethane	4.354	97	713164	51.07	ug/L		94
42) TAME	5.183	73	1122031	54.08	ug/L		100
44) Cyclohexane	4.446	41	395085	40.22	ug/L		98
46) Carbontetrachloride	4.610	121	195315	51.53	ug/L		97
47) 1,1-Dichloropropene	4.616	75	588660	50.47	ug/L		98
49) Benzene	4.958	78	1746118	52.36	ug/L		99
50) 1,2-Dichloroethane	4.988	62	593763	51.68	ug/L		99
51) Iso-Butyl Alcohol	4.854	43	226187	1103.18	ug/L		94
52) n-Heptane	5.452	43	495735	49.53	ug/L		96
53) 1-Butanol	5.945	56	316351	3573.25	ug/L		98
54) Trichloroethene	5.964	130	482395	54.07	ug/L		98
55) Methylcyclohexane	6.214	55	473616	42.08	ug/L		98
56) 1,2-Diclpropane	6.256	63	456232	52.97	ug/L		100
57) Dibromomethane	6.403	93	245578	50.20	ug/L		100
58) 1,4-Dioxane	6.458	88	56213m	1118.49	ug/L		
59) Methyl Methacrylate	6.464	69	195723	58.58	ug/L		91
60) Bromodichloromethane	6.616	83	603079	53.79	ug/L		98
61) 2-Nitropropane	6.890	41	164977	110.23	ug/L		98
62) 2-Chloroethylvinyl Ether	7.006	63	203533	56.87	ug/L		99
63) cis-1,3-Dichloropropene	7.140	75	723595	53.96	ug/L		96
64) 4-Methyl-2-pentanone	7.335	43	288740	58.34	ug/L		99
66) Toluene	7.500	91	1907902	50.67	ug/L		99
67) trans-1,3-Dichloropropene	7.744	75	616071	57.34	ug/L		97
68) Ethyl Methacrylate	7.872	69	433741	56.79	ug/L		95
69) 1,1,2-Trichloroethane	7.921	97	339046	52.51	ug/L		97
72) Tetrachloroethene	8.055	164	388651	50.90	ug/L		98
73) 2-Hexanone	8.195	43	204253	65.02	ug/L		99
74) 1,3-Dichloropropane	8.085	76	553809	51.80	ug/L		92
75) Dibromochloromethane	8.299	129	429214	55.53	ug/L		99
76) N-Butyl Acetate	8.335	43	518262	55.86	ug/L		98
77) 1,2-Dibromoethane	8.396	107	336772	55.18	ug/L		96
78) 3-Chlorobenzotrifluoride	8.872	180	698532	53.71	ug/L		96
79) Chlorobenzene	8.866	112	1277762	51.53	ug/L		98
80) 4-Chlorobenzotrifluoride	8.927	180	636342	52.85	ug/L		98
81) 1,1,1,2-Tetrachloroethane	8.945	131	457146	53.10	ug/L		99
82) Ethylbenzene	8.975	106	651104	51.49	ug/L		95
83) (m+p)Xylene	9.085	106	1641760	105.92	ug/L	#	84
84) o-Xylene	9.433	106	806289	51.43	ug/L		98
85) Styrene	9.445	104	1402162	55.62	ug/L		99
86) Bromoform	9.597	173	259275	59.87	ug/L		95
87) 2-Chlorobenzotrifluoride	9.670	180	692914	52.63	ug/L		99
88) Isopropylbenzene	9.756	105	2042545	53.41	ug/L		99
89) Cyclohexanone	9.823	55	304264	1023.41	ug/L		98
90) trans-1,4-Dichloro-2-B...	10.054	53	118965	61.62	ug/L		96
92) 1,1,2,2-Tetrachloroethane	10.006	83	397882	49.66	ug/L		97
93) Bromobenzene	10.000	156	544696	49.15	ug/L		98
94) 1,2,3-Trichloropropane	10.036	110	101206	46.79	ug/L		97
95) n-Propylbenzene	10.103	91	2407383	50.69	ug/L		98
96) 2-Chlorotoluene	10.164	91	1477732	49.94	ug/L		98

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4883.D Vial: 8
Acq On : 15 Dec 2014 3:59 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 16:13:30 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:03:29 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	1485566	51.13 ug/L	98
98)	4-Chlorotoluene	10.256	91	1775909	49.69 ug/L	100
99)	1,3,5-Trimethylbenzene	10.250	105	1727415	51.43 ug/L	98
100)	tert-Butylbenzene	10.518	119	1446175	52.50 ug/L	100
101)	1,2,4-Trimethylbenzene	10.554	105	1771589	50.57 ug/L	98
102)	3,4-Dichlorobenzotrifl...	10.615	214	527581	50.98 ug/L	98
103)	sec-Butylbenzene	10.695	105	2058038	53.19 ug/L	100
104)	p-Isopropyltoluene	10.816	119	1772400	53.16 ug/L	99
105)	1,3-Dclbenz	10.780	146	1075160	50.50 ug/L	99
106)	1,4-Dclbenz	10.853	146	1085576	48.56 ug/L	98
107)	2,4-Dichlorobenzotrifl...	10.902	214	476827	52.93 ug/L	98
108)	2,5-Dichlorobenzotrifl...	10.938	214	549857	50.57 ug/L	99
109)	n-Butylbenzene	11.140	91	1626118	52.87 ug/L	99
110)	1,2-Dclbenz	11.152	146	988102	51.11 ug/L	99
111)	1,2-Dibromo-3-chloropr...	11.707	157	74907	65.20 ug/L	99
112)	Trielution Dichlorotol...	11.798	125	2562456	157.53 ug/L	94
113)	1,3,5-Trichlorobenzene	11.847	180	729504	51.04 ug/L	95
114)	Coelution Dichlorotoluene	12.066	125	1789911	105.24 ug/L	99
115)	1,2,4-Tcbenzene	12.225	180	656183	54.66 ug/L	95
116)	Hexachlorobt	12.322	225	280980	47.06 ug/L	97
117)	Naphthalen	12.371	128	1151452	57.57 ug/L	99
118)	1,2,3-Tclbenzene	12.511	180	505767	53.74 ug/L	97
119)	2,4,5-Trichlorotoluene	12.920	159	329436	58.08 ug/L	97
120)	2,3,6-Trichlorotoluene	12.981	159	339044	52.19 ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

```
Sample    : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4883.D      Vial: 8
Acq On    : 15 Dec 2014    3:59 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 16:12:25 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:03:29 2014
Response via : Initial Calibration
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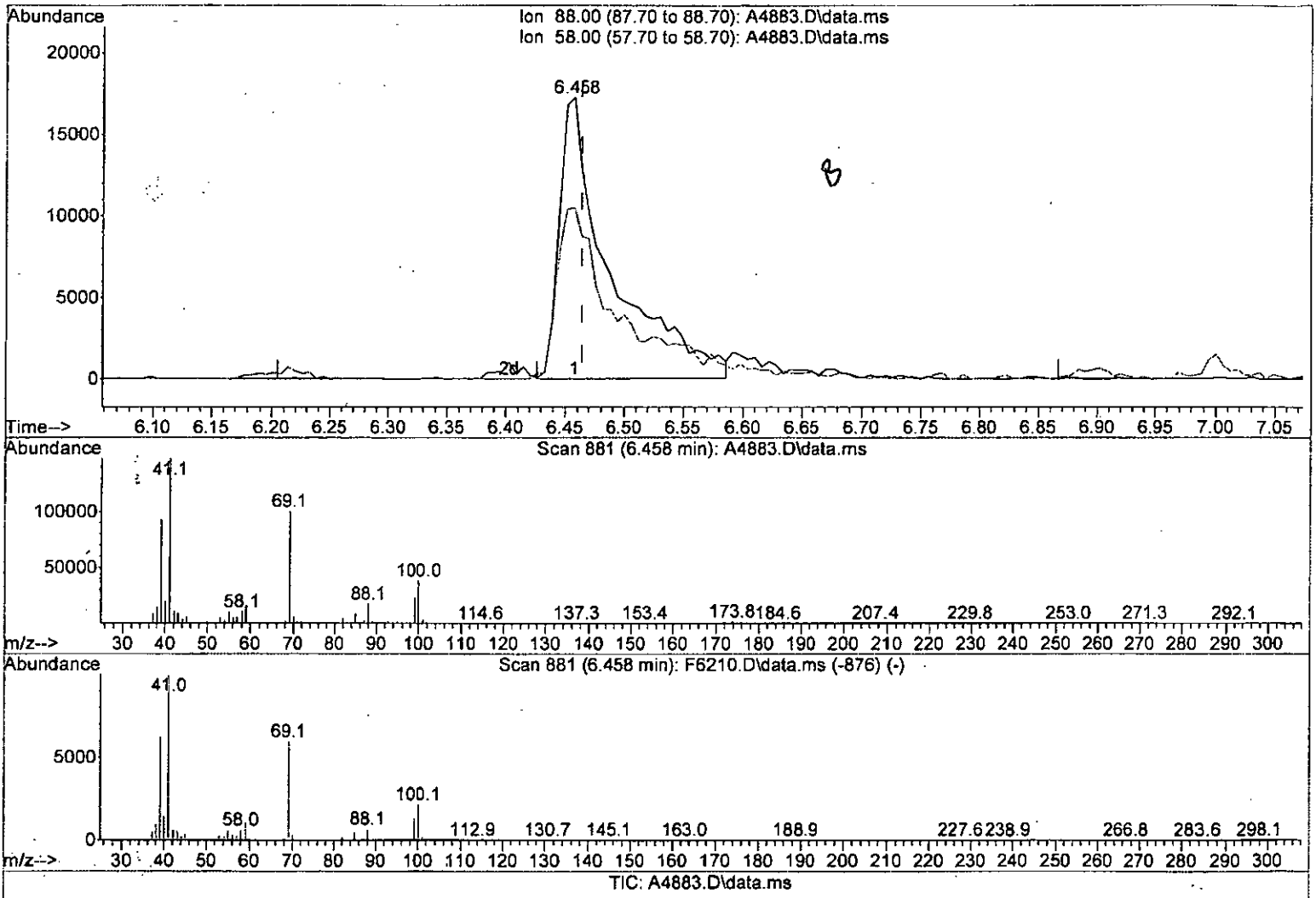


TIC: A4883.D\data.ms

(58) 1,4-Dioxane

6.458min (-0.006) 1017.77 ug/L

response 51151

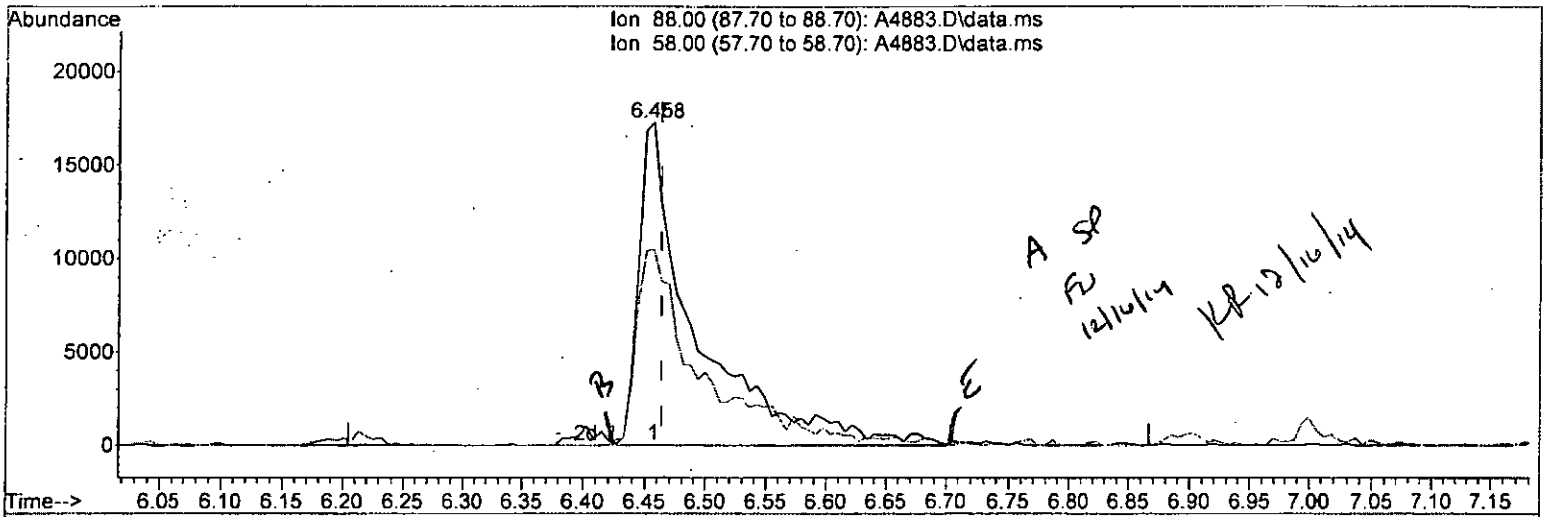
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	60.77
0.00	0.00	0.00
0.00	0.00	0.00

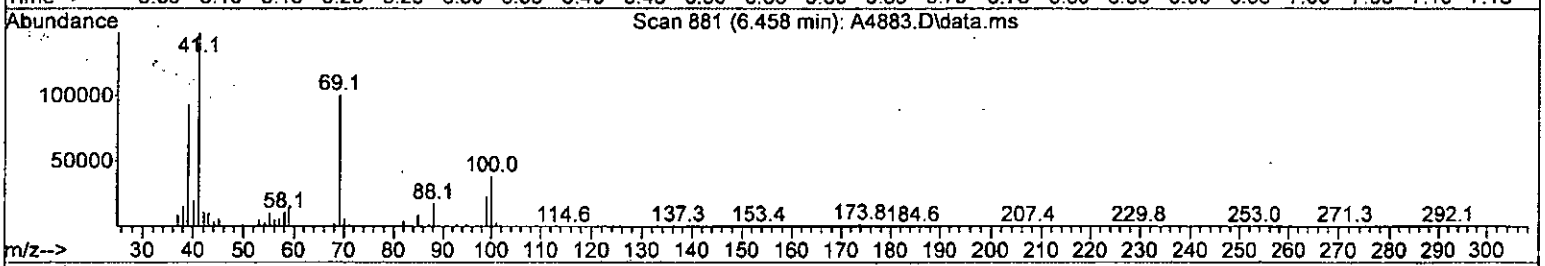
W121514.M Mon Dec 15 16:13:27 2014 MSVO10

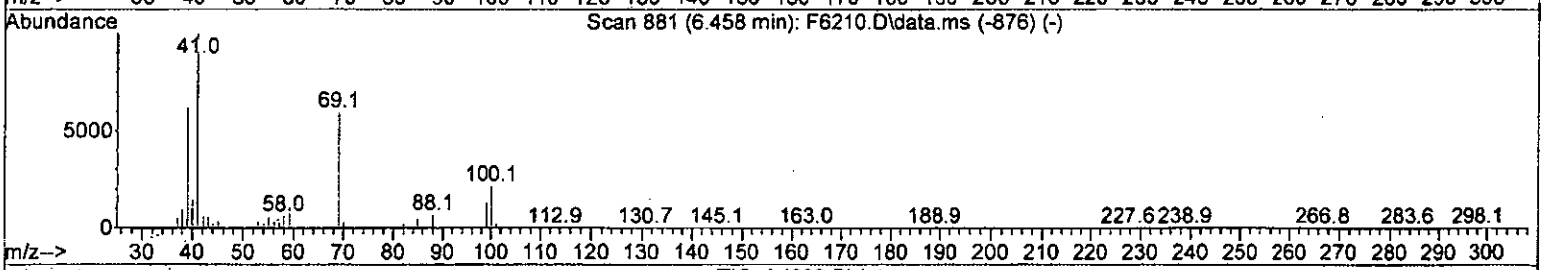
00499

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4883.D Vial: 8
Acq On : 15 Dec 2014 3:59 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 16:12:25 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:03:29 2014
Response via : Initial Calibration







TIC: A4883.D\data.ms

(58) 1,4-Dioxane

6.458min (-0.006) 1118.49 ug/L m

response 56213

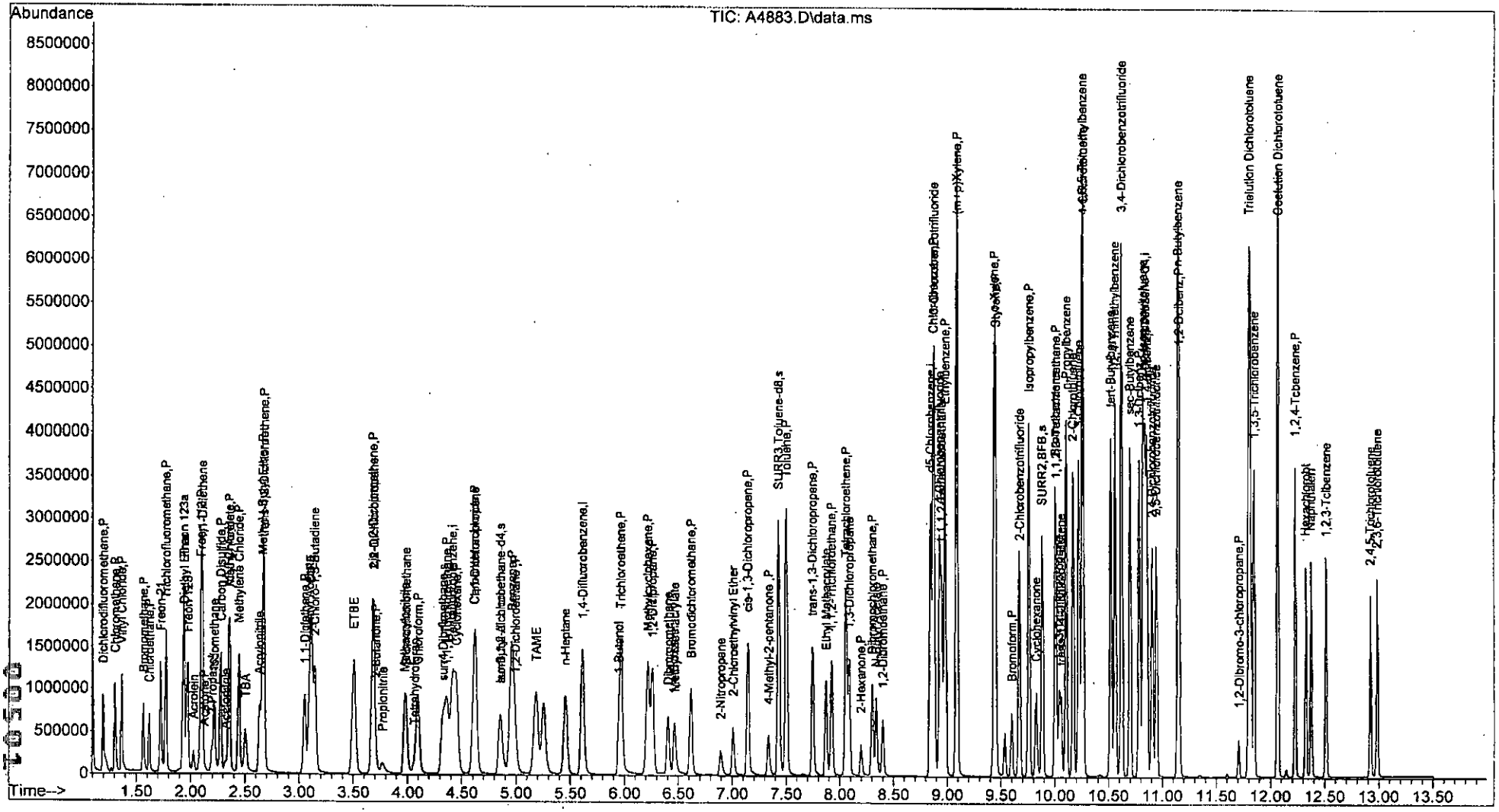
Ion	Exp%	Act%
88.00	100	100
58.00	73.00	60.77
0.00	0.00	0.00
0.00	0.00	0.00

W121514.M Mon Dec 15 16:13:38 2014 MSVO10

Quantitation Report (QT Reviewed)

Sample : 50 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4883.D Vial: 8
Acq On : 15 Dec 2014 3:59 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 16:13:30 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:03:29 2014
Response via : Initial Calibration



W121514.M Tue Dec 16 07:44:18 2014 MSVO10

Sample : 100 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4884.D Vial: 9
Acq On : 15 Dec 2014 4:29 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 16 07:00:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:26:35 2014
Response via : Initial Calibration

FV 12/16/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	992773	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1428540	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1306257	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	708257	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	883747	96.77	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 193.54%#			
48) surr1,1,2-dichloroetha...	4.854	65	894332	95.54	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 191.08%#			
65) SURR3,Toluene-d8	7.427	98	3104706	93.50	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 187.00%#			
70) SURR2,BFB	9.878	95	1291000	95.43	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 190.86%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.191	85	1094642	100.62	ug/L	98
3) Chloromethane	1.300	50	1173235	97.54	ug/L	97
4) Vinyl Chloride	1.361	62	1165415	97.62	ug/L	100
5) Bromomethane	1.562	94	624701	89.15	ug/L	97
6) Chloroethane	1.617	64	594342	94.34	ug/L	96
7) Freon 21	1.721	67	1648308	94.04	ug/L	96
8) Trichlorofluoromethane	1.770	101	1428955	97.20	ug/L	97
9) Diethyl Ether	1.934	59	605081	90.75	ug/L	96
10) Freon 123a	1.928	67	1026194	98.52	ug/L	94
11) Freon 123	1.965	83	1131233	97.83	ug/L	96
12) Acrolein	2.026	56	243239	370.62	ug/L	100
13) 1,1-Diclethene	2.099	96	734965	90.02	ug/L	97
14) Freon 113	2.093	101	814779	93.08	ug/L	99
15) Acetone	2.123	43	172016	100.89	ug/L	96
16) 2-Propanol	2.190	45	575394	1848.24	ug/L	97
17) Iodomethane	2.215	142	1317364	129.48	ug/L	99
18) Carbon Disulfide	2.276	76	2539605	94.56	ug/L	98
19) Acetonitrile	2.318	40	108943	512.51	ug/L	95
20) Allyl Chloride	2.349	76	491376	99.18	ug/L	98
21) Methyl Acetate	2.355	43	378169	96.67	ug/L	99
22) Methylene Chloride	2.440	84	840779	93.08	ug/L	99
23) TBA	2.501	59	1010283	1969.81	ug/L	97
24) Acrylonitrile	2.629	53	965607	523.35	ug/L	98
25) Methyl-t-Butyl Ether	2.660	73	2036007	95.05	ug/L	99
26) trans-1,2-Dichloroethene	2.666	96	840138	95.73	ug/L	96
28) 1,1-Diclethane	3.050	63	1593486	96.85	ug/L	100
29) Vinyl Acetate	3.087	86	118901	125.56	ug/L #	82
30) DIPE	3.105	45	2994835	98.09	ug/L	94
31) 2-Chloro-1,3-Butadiene	3.141	53	1400373	104.31	ug/L	99
32) ETBE	3.501	59	2710069	98.49	ug/L	98
33) 2,2-Dichloropropane	3.678	77	1351948	97.35	ug/L	98
34) cis-1,2-Dichloroethene	3.678	96	939347	96.94	ug/L	97
35) 2-Butanone	3.696	43	219143	100.94	ug/L	94
36) Propionitrile	3.763	54	333090	551.32	ug/L	99
37) Bromochloromethane	3.983	130	537643	95.27	ug/L	98

121514.M Tue Dec 16 07:44:26 2014 MSVO10

Sample : 100 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4884.D Vial: 9
Acq On : 15 Dec 2014 4:29 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 16 07:00:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:26:35 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.964	67	211929	105.30	ug/L		96
39) Tetrahydrofuran	4.056	42	137968	98.54	ug/L		90
40) Chloroform	4.092	83	1608047	99.22	ug/L		99
41) 1,1,1-Trichloroethane	4.361	97	1422550	98.25	ug/L		98
42) TAME	5.178	73	2175461	100.12	ug/L		100
44) Cyclohexane	4.446	41	884913	90.49	ug/L		99
46) Carbontetrachloride	4.617	121	392287	100.07	ug/L		99
47) 1,1-Dichloropropene	4.617	75	1162142	96.68	ug/L		99
49) Benzene	4.958	78	3440764	99.48	ug/L		99
50) 1,2-Dichloroethane	4.982	62	1155591	97.21	ug/L		99
51) Iso-Butyl Alcohol	4.848	43	414302	1924.00	ug/L		97
52) n-Heptane	5.452	43	982062	95.50	ug/L		99
53) 1-Butanol	5.940	56	615379	6220.77	ug/L		94
54) Trichloroethene	5.964	130	947359	101.81	ug/L		98
55) Methylcyclohexane	6.214	55	1102857	97.81	ug/L		99
56) 1,2-Diclpropane	6.257	63	920131	102.81	ug/L		99
57) Dibromomethane	6.397	93	476298	94.56	ug/L		97
58) 1,4-Dioxane	6.452	88	94126	1777.93	ug/L		93
59) Methyl Methacrylate	6.458	69	382559	107.58	ug/L		99
60) Bromodichloromethane	6.616	83	1214257	103.94	ug/L		99
61) 2-Nitropropane	6.891	41	310433	197.53	ug/L		97
62) 2-Chloroethylvinyl Ether	7.000	63	412384	108.98	ug/L		95
63) cis-1,3-Dichloropropene	7.141	75	1439529	102.96	ug/L		96
64) 4-Methyl-2-pentanone	7.336	43	544988	104.12	ug/L		99
66) Toluene	7.500	91	3576720	92.11	ug/L		93
67) trans-1,3-Dichloropropene	7.744	75	1218373	107.58	ug/L		99
68) Ethyl Methacrylate	7.866	69	834592	103.85	ug/L		94
69) 1,1,2-Trichloroethane	7.921	97	655925	97.91	ug/L		98
72) Tetrachloroethene	8.055	164	768325	97.39	ug/L		97
73) 2-Hexanone	8.195	43	378090	108.67	ug/L		98
74) 1,3-Dichloropropane	8.086	76	1091604	98.52	ug/L		95
75) Dibromochloromethane	8.299	129	862050	106.30	ug/L		99
76) N-Butyl Acetate	8.335	43	1015795	103.85	ug/L		100
77) 1,2-Dibromoethane	8.396	107	650216	101.66	ug/L		99
78) 3-Chlorobenzotrifluoride	8.872	180	1455116	107.27	ug/L		98
79) Chlorobenzene	8.866	112	2464273	95.97	ug/L		94
80) 4-Chlorobenzotrifluoride	8.927	180	1321572	105.53	ug/L		98
81) 1,1,1,2-Tetrachloroethane	8.945	131	940700	104.98	ug/L		97
82) Ethylbenzene	8.976	106	1325671	101.25	ug/L	#	68
83) (m+p)Xylene	9.085	106	3078392m	190.89	ug/L		
84) o-Xylene	9.433	106	1601519	98.69	ug/L	#	76
85) Styrene	9.445	104	2670833	100.95	ug/L		94
86) Bromoform	9.597	173	510577	110.79	ug/L		96
87) 2-Chlorobenzotrifluoride	9.665	180	1435800	104.93	ug/L		95
88) Isopropylbenzene	9.756	105	3586968	90.01	ug/L		89
89) Cyclohexanone	9.823	55	540450	1757.66	ug/L		99
90) trans-1,4-Dichloro-2-B...	10.055	53	225086	108.95	ug/L		98
92) 1,1,2,2-Tetrachloroethane	10.006	83	758093	94.66	ug/L		100
93) Bromobenzene	10.000	156	1088243	98.41	ug/L		95
94) 1,2,3-Trichloropropane	10.036	110	193174	90.21	ug/L		99
95) n-Propylbenzene	10.103	91	3983985	83.63	ug/L		82
96) 2-Chlorotoluene	10.164	91	2795028	94.40	ug/L		95

Sample : 100 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4884.D Vial: 9
Acq On : 15 Dec 2014 4:29 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

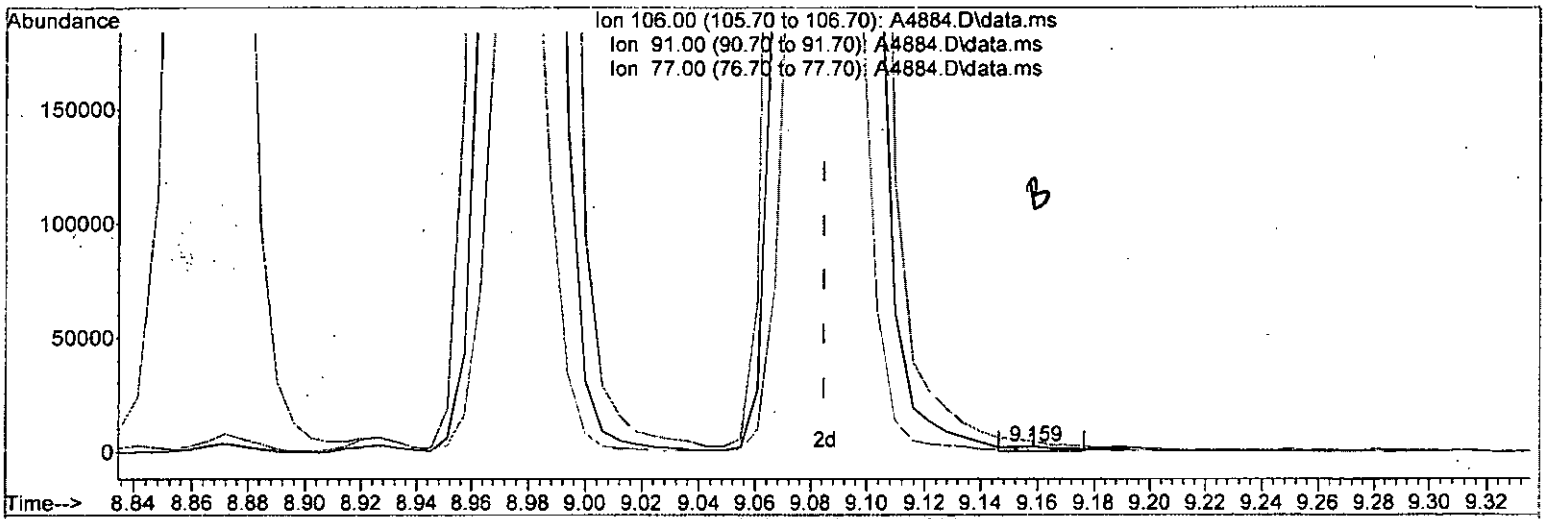
Quant Time: Dec 16 07:00:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:26:35 2014
Response via : Initial Calibration

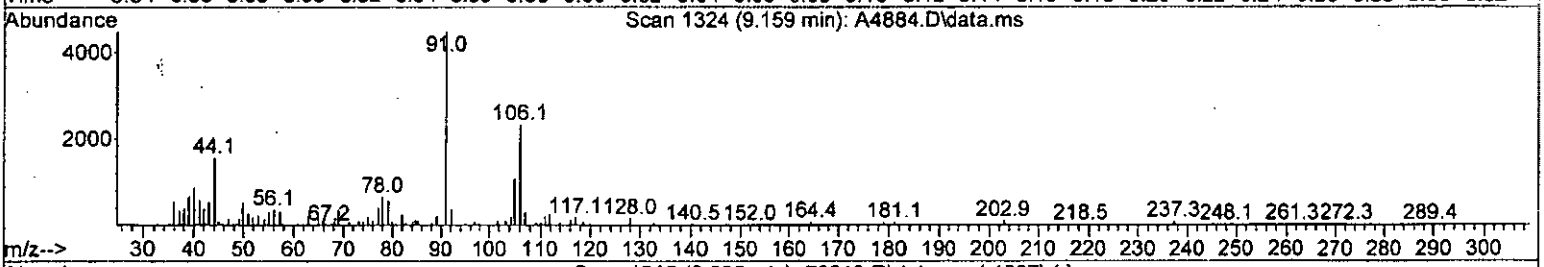
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	2903208	99.47	ug/L	94
98)	4-Chlorotoluene	10.256	91	3206320	89.74	ug/L	90
99)	1,3,5-Trimethylbenzene	10.250	105	3151145	93.30	ug/L	89
100)	tert-Butylbenzene	10.518	119	2745411	98.77	ug/L	97
101)	1,2,4-Trimethylbenzene	10.555	105	3195142	90.96	ug/L	88
102)	3,4-Dichlorobenzotrifl...	10.616	214	1101121	105.98	ug/L	98
103)	sec-Butylbenzene	10.695	105	3588402	91.70	ug/L	90
104)	p-Isopropyltoluene	10.817	119	3160356	93.74	ug/L	88
105)	1,3-Dclbenz	10.780	146	2072496	97.12	ug/L	94
106)	1,4-Dclbenz	10.853	146	2072808	93.10	ug/L	99
107)	2,4-Dichlorobenzotrifl...	10.902	214	996379	109.46	ug/L	98
108)	2,5-Dichlorobenzotrifl...	10.939	214	1121586	102.88	ug/L	98
109)	n-Butylbenzene	11.140	91	2964014	95.38	ug/L	89
110)	1,2-Dclbenz	11.152	146	1889076	97.28	ug/L	98
111)	1,2-Dibromo-3-chloropr...	11.707	157	140530	116.33	ug/L	94
112)	Trielution Dichlorotol...	11.798	125	4680978	285.18	ug/L	89
113)	1,3,5-Trichlorobenzene	11.847	180	1442138	100.48	ug/L	99
114)	Coelution Dichlorotoluene	12.066	125	3082661	179.54	ug/L	84
115)	1,2,4-Tcbenzene	12.225	180	1235940	101.30	ug/L	98
116)	Hexachlorobt	12.323	225	541795	91.57	ug/L	98
117)	Naphthalen	12.371	128	2051599	99.98	ug/L	98
118)	1,2,3-Tclbenzene	12.512	180	926946	97.20	ug/L	99
119)	2,4,5-Trichlorotoluene	12.926	159	634365	108.82	ug/L	98
120)	2,3,6-Trichlorotoluene	12.987	159	640659	97.82	ug/L	99

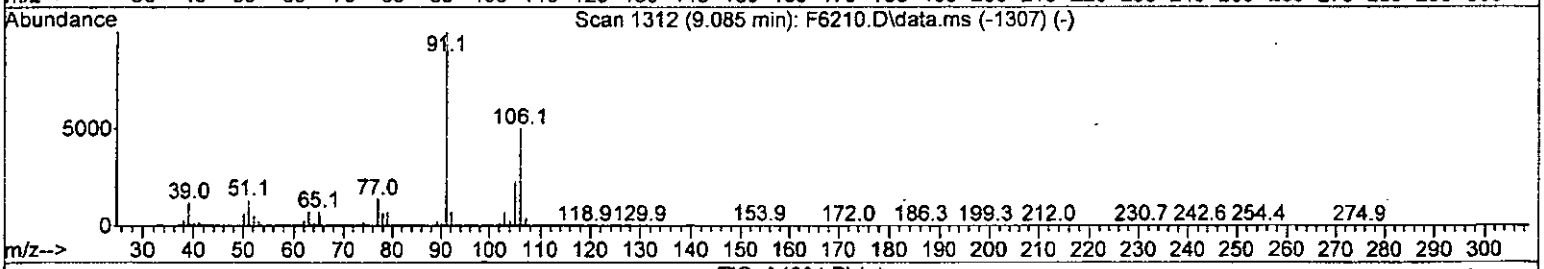
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 100 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4884.D Vial: 9
Acq On : 15 Dec 2014 4:29 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 16:42:12 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:26:35 2014
Response via : Initial Calibration







TIC: A4884.D\data.ms

(83) (m+p)Xylene (P)

9.159min (+0.073) 0.18 ug/L

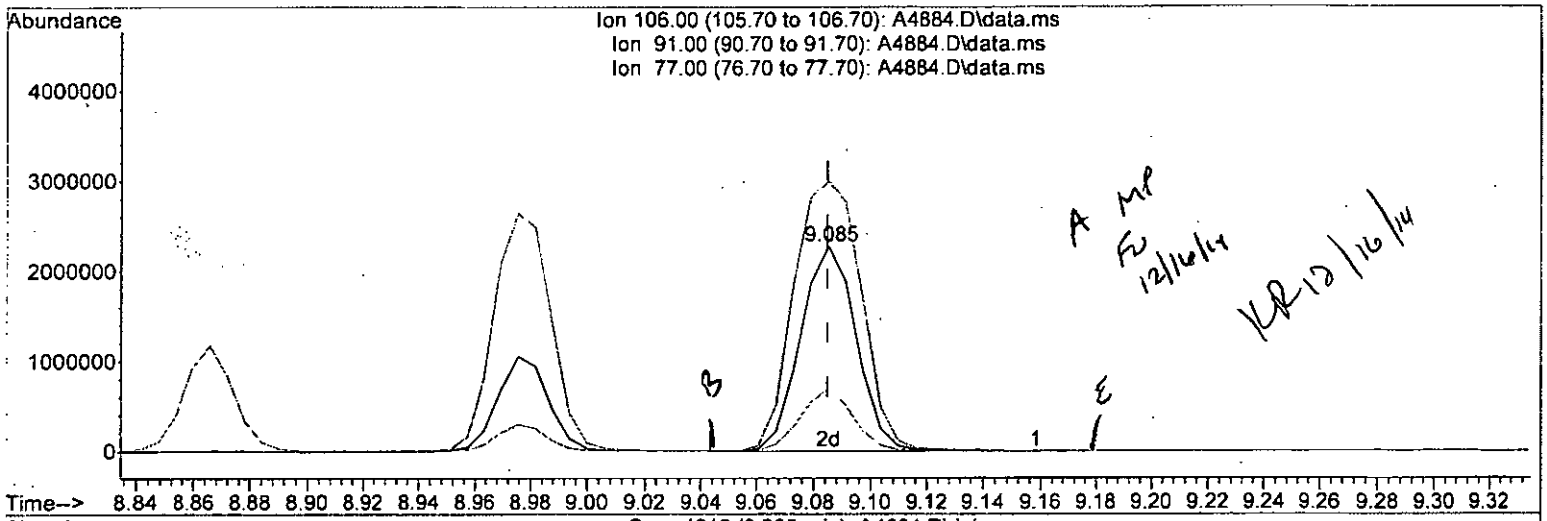
response 2847

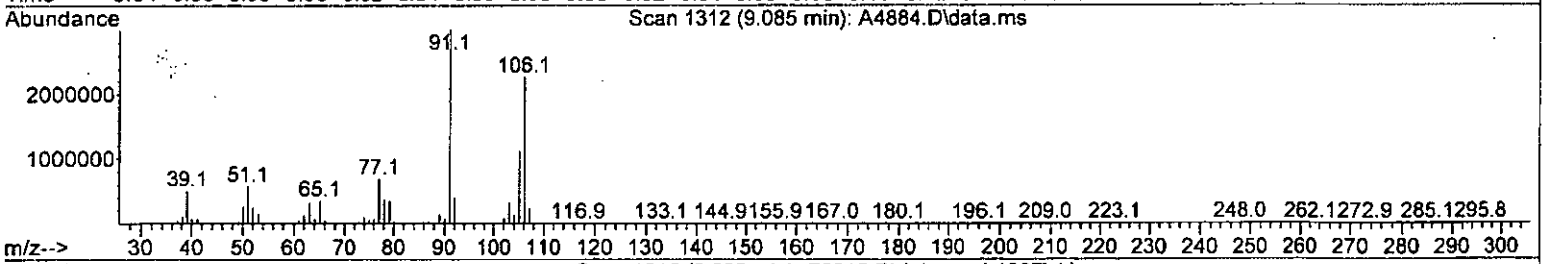
Ion	Exp%	Act%
106.00	100	100
91.00	177.20	192.29
77.00	27.20	17.41
0.00	0.00	0.00

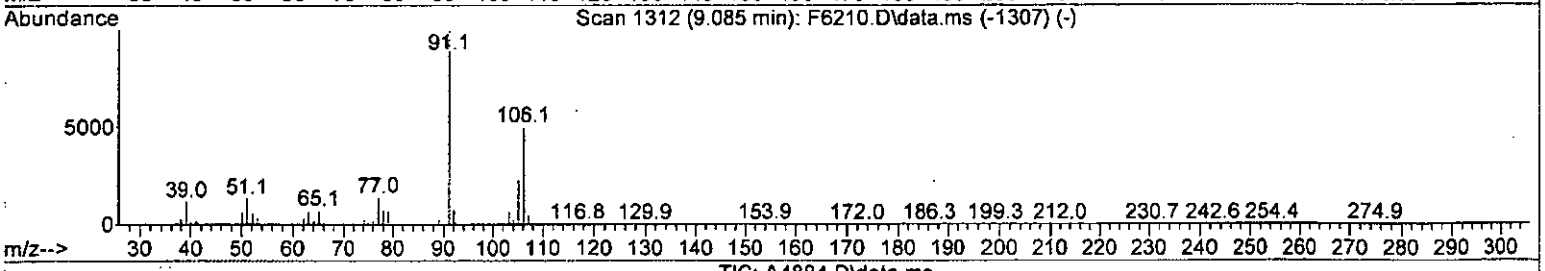
W121514.M Tue Dec 16 07:00:47 2014 MSVO10

Sample 100 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4884.D Vial: 9
Acq On : 15 Dec 2014 4:29 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 16:42:12 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:26:35 2014
Response via : Initial Calibration







TIC: A4884.D\data.ms

(83) (m+p)Xylene (P)

9.085min (+0.000) 190.89 ug/L m

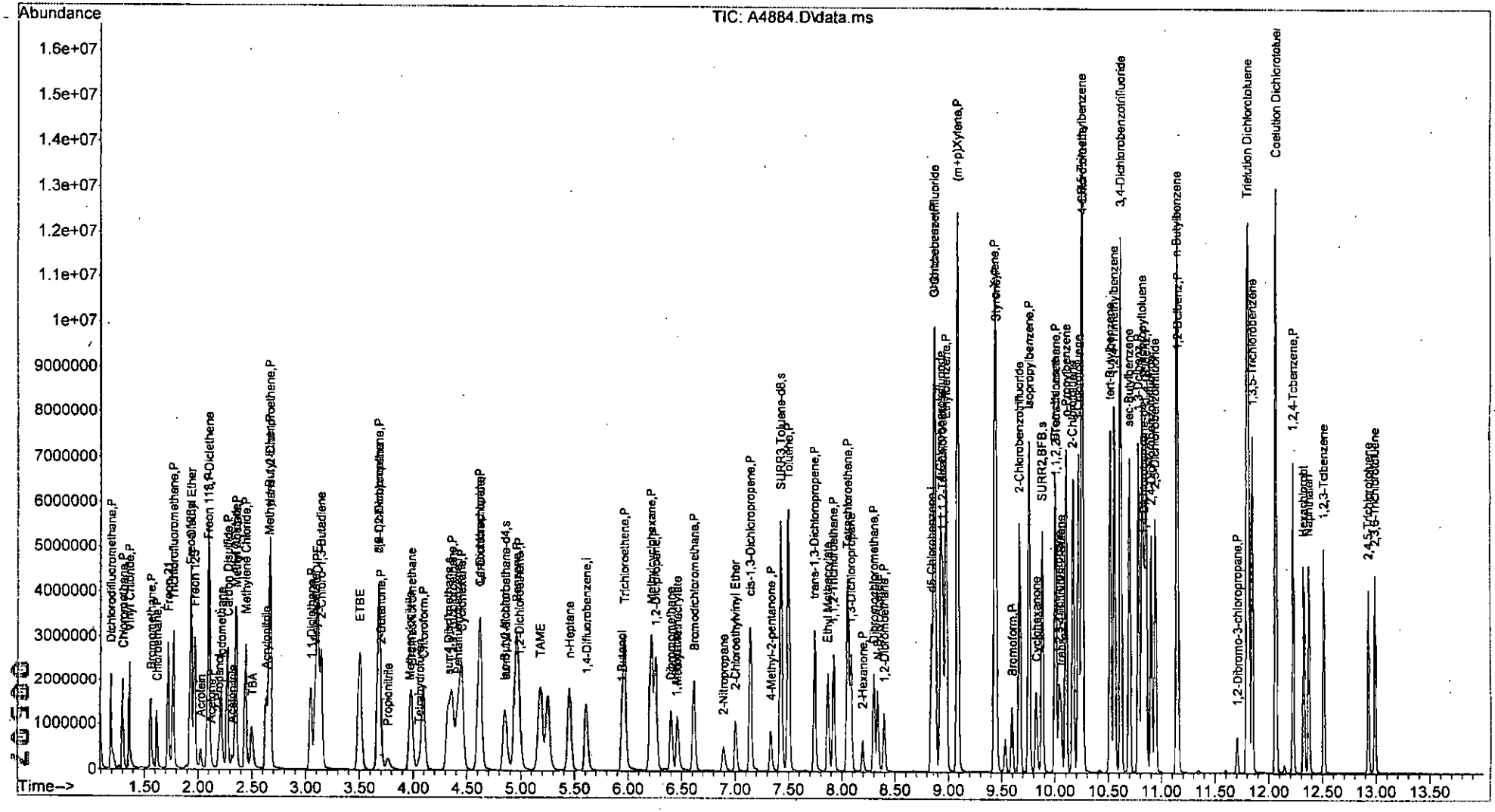
response 3078392

Ion	Exp%	Act%
106.00	100	100
91.00	177.20	132.11#
77.00	27.20	30.38
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Sample : 100 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4884.D Vial: 9
Acq On : 15 Dec 2014 4:29 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 16 07:00:51 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:26:35 2014
Response via : Initial Calibration



W121514.M Tue Dec 16 07:44:28 2014 MSVO10

Page: 4

Sample : 150 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4885.D Vial: 10
Acq On : 15 Dec 2014 4:58 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 17:11:58 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:26:35 2014
Response via : Initial Calibration

RJ 12/16/14

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	1008916	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1465319	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1312515	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	707850	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	1110666	118.56	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 237.12%#			
48) surr1,1,2-dichloroetha...	4.854	65	1123195	116.98	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 233.96%#			
65) SURR3,Toluene-d8	7.427	98	3731712	109.56	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 219.12%#			
70) SURR2,BFB	9.878	95	1574287	113.44	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 226.88%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.190	85	1673751	151.39	ug/L	98
3) Chloromethane	1.300	50	1775353	145.24	ug/L	95
4) Vinyl Chloride	1.361	62	1739721	143.40	ug/L	96
5) Bromomethane	1.556	94	961398	135.00	ug/L	97
6) Chloroethane	1.617	64	891154	139.18	ug/L	98
7) Freon 21	1.721	67	2575997	144.62	ug/L	89
8) Trichlorofluoromethane	1.769	101	2114888	141.56	ug/L	94
9) Diethyl Ether	1.934	59	925637	136.61	ug/L	97
10) Freon 123a	1.928	67	1673605	158.10	ug/L	96
11) Freon 123	1.964	83	1849871	157.42	ug/L	99
12) Acrolein	2.025	56	314916	472.15	ug/L	99
13) 1,1-Diclethene	2.099	96	1162735	140.13	ug/L	100
14) Freon 113	2.092	101	1289910	145.00	ug/L	97
15) Acetone	2.123	43	267189	154.21	ug/L	94
16) 2-Propanol	2.196	45	995681	3147.08	ug/L	99
17) Iodomethane	2.214	142	1992992	192.75	ug/L	97
18) Carbon Disulfide	2.275	76	3667487	134.37	ug/L	94
19) Acetonitrile	2.312	40	173598	803.60	ug/L	97
20) Allyl Chloride	2.349	76	692345	137.50	ug/L	97
21) Methyl Acetate	2.355	43	603546	151.81	ug/L	99
22) Methylene Chloride	2.440	84	1282989	139.77	ug/L	98
23) TBA	2.501	59	1644840	3155.73	ug/L	98
24) Acrylonitrile	2.629	53	1515592	808.30	ug/L	98
25) Methyl-t-Butyl Ether	2.659	73	3127790	143.68	ug/L	99
26) trans-1,2-Dichloroethene	2.666	96	1289661	144.60	ug/L	99
28) 1,1-Diclethane	3.050	63	2416922	144.55	ug/L	98
29) Vinyl Acetate	3.086	86	186412	193.70	ug/L #	67
30) DIPE	3.104	45	4402540	141.89	ug/L	96
31) 2-Chloro-1,3-Butadiene	3.141	53	2217398	162.53	ug/L	98
32) ETBE	3.501	59	4111785	147.04	ug/L	98
33) 2,2-Dichloropropane	3.678	77	2132577	151.10	ug/L	98
34) cis-1,2-Dichloroethene	3.678	96	1436759	145.89	ug/L	95
35) 2-Butanone	3.696	43	351276	159.21	ug/L	96
36) Propionitrile	3.763	54	514640	838.19	ug/L	97
37) Bromochloromethane	3.982	130	810276	141.28	ug/L	98

121514.M Tue Dec 16 07:44:37 2014 MSVO10

Sample : 150 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4885.D Vial: 10
Acq On : 15 Dec 2014 4:58 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 17:11:58 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:26:35 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
38) Methacrylonitrile	3.964	67	339093	165.78 ug/L		95
39) Tetrahydrofuran	4.049	42	224441	157.74 ug/L		97
40) Chloroform	4.092	83	2459626	149.34 ug/L		98
41) 1,1,1-Trichloroethane	4.360	97	2206720	149.97 ug/L		97
42) TAME	5.183	73	3363510	152.32 ug/L		100
44) Cyclohexane	4.446	41	1460745	145.63 ug/L		100
46) Carbontetrachloride	4.616	121	611169	152.00 ug/L		99
47) 1,1-Dichloropropene	4.616	75	1804448	146.34 ug/L		99
49) Benzene	4.958	78	5188481	146.24 ug/L		99
50) 1,2-Dichloroethane	4.988	62	1779032	145.89 ug/L		99
51) Iso-Butyl Alcohol	4.848	43	671725	3041.17 ug/L		96
52) n-Heptane	5.452	43	1567266	148.58 ug/L		99
53) 1-Butanol	5.939	56	1024299	10094.59 ug/L		96
54) Trichloroethene	5.964	130	1451580	152.08 ug/L		98
55) Methylcyclohexane	6.214	55	1818061	157.19 ug/L		98
56) 1,2-Diclpropane	6.256	63	1407321	153.29 ug/L		100
57) Dibromomethane	6.397	93	743141	143.83 ug/L		93
58) 1,4-Dioxane	6.458	88	158261	2914.33 ug/L		82
59) Methyl Methacrylate	6.458	69	610154	167.27 ug/L		97
60) Bromodichloromethane	6.616	83	1869026	155.97 ug/L		100
61) 2-Nitropropane	6.890	41	508871	315.67 ug/L		98
62) 2-Chloroethylvinyl Ether	7.000	63	636440	163.97 ug/L		92
63) cis-1,3-Dichloropropene	7.140	75	2191038	152.77 ug/L		95
64) 4-Methyl-2-pentanone	7.329	43	878204	163.56 ug/L		99
66) Toluene	7.500	91	4767986	119.70 ug/L		80
67) trans-1,3-Dichloropropene	7.744	75	1885980	162.34 ug/L		99
68) Ethyl Methacrylate	7.866	69	1321471	160.30 ug/L		94
69) 1,1,2-Trichloroethane	7.921	97	1005826	146.37 ug/L		98
72) Tetrachloroethene	8.055	164	1165327	147.00 ug/L		97
73) 2-Hexanone	8.195	43	593636	169.81 ug/L		94
74) 1,3-Dichloropropane	8.085	76	1648839	148.10 ug/L		97
75) Dibromochloromethane	8.299	129	1343842	164.91 ug/L		100
76) N-Butyl Acetate	8.335	43	1569993	159.74 ug/L		100
77) 1,2-Dibromoethane	8.396	107	1001832	155.89 ug/L		97
78) 3-Chlorobenzotrifluoride	8.878	180	2209870	162.14 ug/L		97
79) Chlorobenzene	8.866	112	3446344	133.58 ug/L		86
80) 4-Chlorobenzotrifluoride	8.927	180	2026291	161.04 ug/L		95
81) 1,1,1,2-Tetrachloroethane	8.945	131	1392214	154.63 ug/L		96
82) Ethylbenzene	8.975	106	1969940	149.75 ug/L	#	45
83) (m+p)Xylene	9.085	106	4125778	254.62 ug/L	#	61
84) o-Xylene	9.433	106	2339860	143.51 ug/L	#	60
85) Styrene	9.445	104	3605707	135.64 ug/L		79
86) Bromoform	9.597	173	801475	173.09 ug/L		99
87) 2-Chlorobenzotrifluoride	9.670	180	2154086	156.67 ug/L		96
88) Isopropylbenzene	9.756	105	4594502	114.75 ug/L		72
89) Cyclohexanone	9.823	55	946736	3064.31 ug/L		100
90) trans-1,4-Dichloro-2-B...	10.054	53	363863	175.29 ug/L		98
92) 1,1,2,2-Tetrachloroethane	10.006	83	1169563	146.12 ug/L		99
93) Bromobenzene	9.999	156	1616509	146.26 ug/L		92
94) 1,2,3-Trichloropropane	10.036	110	298670	139.56 ug/L		96
95) n-Propylbenzene	10.103	91	4892834	102.77 ug/L	#	61
96) 2-Chlorotoluene	10.170	91	3725393	125.90 ug/L		78

Sample 150 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4885.D Vial: 10
Acq On : 15 Dec 2014 4:58 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 17:11:58 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:26:35 2014
Response via : Initial Calibration

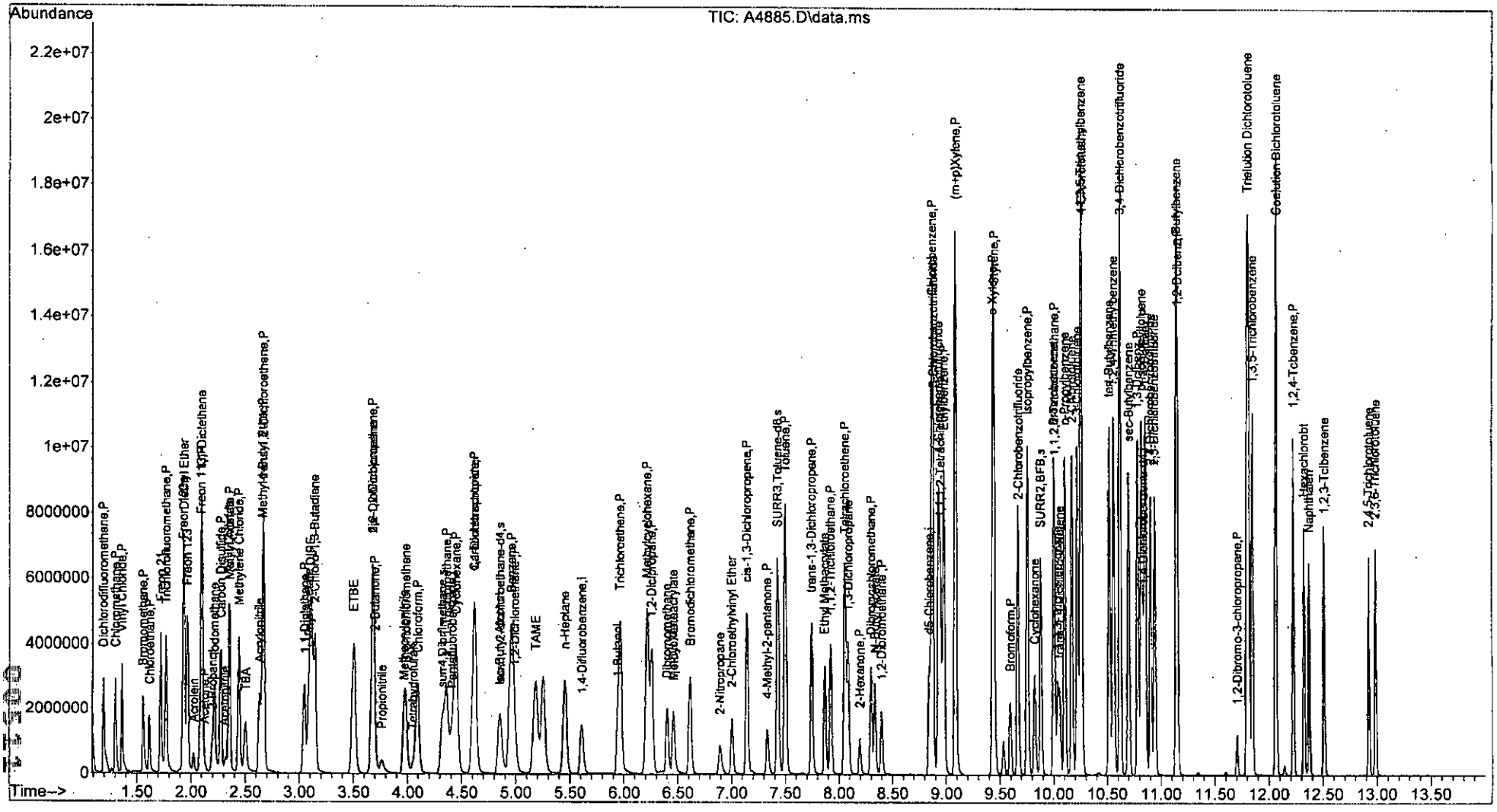
	Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
97)	3-Chlorotoluene	10.219	91	3845006	131.81 ug/L		78
98)	4-Chlorotoluene	10.256	91	4204812	117.75 ug/L		77
99)	1,3,5-Trimethylbenzene	10.249	105	4086226	121.06 ug/L	#	72
100)	tert-Butylbenzene	10.518	119	3738481	134.57 ug/L		87
101)	1,2,4-Trimethylbenzene	10.554	105	4144549	118.06 ug/L		72
102)	3,4-Dichlorobenzotrifl...	10.615	214	1694782	163.21 ug/L		99
103)	sec-Butylbenzene	10.701	105	4560625	116.61 ug/L		73
104)	p-Isopropyltoluene	10.816	119	4135461	122.73 ug/L		71
105)	1,3-Dclbenz	10.780	146	2961997	138.88 ug/L		89
106)	1,4-Dclbenz	10.853	146	2938903	132.08 ug/L		89
107)	2,4-Dichlorobenzotrifl...	10.902	214	1554808	170.90 ug/L		98
108)	2,5-Dichlorobenzotrifl...	10.938	214	1746497	160.30 ug/L		100
109)	n-Butylbenzene	11.140	91	3863334	124.39 ug/L	#	72
110)	1,2-Dclbenz	11.152	146	2725297	140.42 ug/L		91
111)	1,2-Dibromo-3-chloropr...	11.706	157	227528	188.46 ug/L		96
112)	Trielution Dichlorotol...	11.798	125	6017107	366.79 ug/L		72
113)	1,3,5-Trichlorobenzene	11.847	180	2115117	147.45 ug/L		98
114)	Coelution Dichlorotoluene	12.066	125	3844355	224.03 ug/L	#	58
115)	1,2,4-Tcbenzene	12.225	180	1814754	148.83 ug/L		99
116)	Hexachlorobt	12.322	225	871561	147.38 ug/L		98
117)	Naphthalen	12.371	128	2854562	139.19 ug/L		90
118)	1,2,3-Tclbenzene	12.511	180	1456967	152.87 ug/L		98
119)	2,4,5-Trichlorotoluene	12.920	159	1038564	178.26 ug/L		98
120)	2,3,6-Trichlorotoluene	12.981	159	1055771	161.30 ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Sample : 150 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4885.D Vial: 10
Acq On : 15 Dec 2014 4:58 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 17:11:58 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:26:35 2014
Response via : Initial Calibration



W121514.M Tue Dec 16 07:44:40 2014 MSVO10 Page: 4

Sample 200 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4886.D Vial: 11
Acq On : 15 Dec 2014 5:28 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

FD 12/16/14

Quant Time: Dec 16 07:03:50 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:26:35 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	991274	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1451469	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1317205	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	700223	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	1374723	148.15	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery =	296.30%#		
48) surr1,1,2-dichloroetha...	4.854	65	1367315	143.76	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery =	287.52%#		
65) SURR3,Toluene-d8	7.427	98	4398790	130.38	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery =	260.76%#		
70) SURR2,BFB	9.878	95	1972531	143.50	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery =	287.00%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.190	85	2204168	202.91	ug/L	95
3) Chloromethane	1.300	50	2338584	194.72	ug/L	90
4) Vinyl Chloride	1.361	62	2213381	185.69	ug/L	89
5) Bromomethane	1.556	94	1325197	189.40	ug/L	97
6) Chloroethane	1.611	64	1199893	190.74	ug/L	97
7) Freon 21	1.721	67	3170683	181.17	ug/L	83
8) Trichlorofluoromethane	1.770	101	2799839	190.74	ug/L	90
9) Diethyl Ether	1.934	59	1207551	181.38	ug/L	99
10) Freon 123a	1.928	67	2126190	204.43	ug/L	100
11) Freon 123	1.965	83	2359256	204.35	ug/L	98
12) Acrolein	2.019	56	413549	631.07	ug/L	99
13) 1,1-Diclethene	2.099	96	1529525	187.61	ug/L	96
14) Freon 113	2.093	101	1686335	192.93	ug/L	95
15) Acetone	2.117	43	287712	169.01	ug/L	95
16) 2-Propanol	2.196	45	1223891	3937.24	ug/L	100
17) Iodomethane	2.215	142	2528011	248.85	ug/L	95
18) Carbon Disulfide	2.269	76	4375644	163.17	ug/L	89
19) Acetonitrile	2.318	40	232117	1093.62	ug/L	91
20) Allyl Chloride	2.349	76	894528	180.82	ug/L	94
21) Methyl Acetate	2.355	43	765278	195.92	ug/L	98
22) Methylene Chloride	2.440	84	1716643	190.34	ug/L	96
23) TBA	2.501	59	2011088	3927.07	ug/L	98
24) Acrylonitrile	2.629	53	1923544	1044.12	ug/L	100
25) Methyl-t-Butyl Ether	2.660	73	3901446	182.41	ug/L	96
26) trans-1,2-Dichloroethene	2.666	96	1741676	198.76	ug/L	97
28) 1,1-Diclethane	3.044	63	3193829	194.41	ug/L	97
29) Vinyl Acetate	3.086	86	243130	257.13	ug/L #	61
30) DIPE	3.105	45	5484129	179.89	ug/L	97
31) 2-Chloro-1,3-Butadiene	3.141	53	2922637	218.04	ug/L	96
32) ETBE	3.501	59	5176192	188.39	ug/L	94
33) 2,2-Dichloropropane	3.678	77	2842231	204.97	ug/L	98
34) cis-1,2-Dichloroethene	3.678	96	1924258	198.87	ug/L	94
35) 2-Butanone	3.696	43	439745	202.86	ug/L	96
36) Propionitrile	3.763	54	662488	1098.19	ug/L	98
37) Bromochloromethane	3.983	130	1035454	183.76	ug/L	99

121514.M Tue Dec 16 07:44:48 2014 MSVO10

Sample : 200 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4886.D Vial: 11
Acq On : 15 Dec 2014 5:28 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 16 07:03:50 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:26:35 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.964	67	427579	212.77	ug/L		96
39) Tetrahydrofuran	4.050	42	284386	203.42	ug/L		96
40) Chloroform	4.092	83	3241350	200.30	ug/L		98
41) 1,1,1-Trichloroethane	4.361	97	2972946	205.64	ug/L		95
42) TAME	5.184	73	4329552	199.56	ug/L		99
44) Cyclohexane	4.446	41	1886133	189.83	ug/L		99
46) Carbontetrachloride	4.617	121	831633	208.80	ug/L		98
47) 1,1-Dichloropropene	4.617	75	2420217	198.16	ug/L		98
49) Benzene	4.958	78	6635249	188.81	ug/L		95
50) 1,2-Dichloroethane	4.988	62	2303621	190.71	ug/L		99
51) Iso-Butyl Alcohol	4.848	43	846218	3867.73	ug/L		97
52) n-Heptane	5.452	43	2050445	196.24	ug/L		98
53) 1-Butanol	5.939	56	1307358	13007.11	ug/L		96
54) Trichloroethene	5.964	130	1963060	207.62	ug/L		99
55) Methylcyclohexane	6.214	55	2357666	205.79	ug/L		98
56) 1,2-Diclpropane	6.256	63	1856584	204.16	ug/L		100
57) Dibromomethane	6.397	93	960396	187.65	ug/L		95
58) 1,4-Dioxane	6.452	88	201692	3749.54	ug/L		81
59) Methyl Methacrylate	6.458	69	761738	210.82	ug/L		96
60) Bromodichloromethane	6.610	83	2473123	208.35	ug/L		99
61) 2-Nitropropane	6.891	41	648498	406.12	ug/L		97
62) 2-Chloroethylvinyl Ether	7.000	63	834649	217.09	ug/L		92
63) cis-1,3-Dichloropropene	7.140	75	2859556	201.29	ug/L		94
64) 4-Methyl-2-pentanone	7.336	43	1102267	207.25	ug/L		97
66) Toluene	7.500	91	5675281	143.84	ug/L	#	70
67) trans-1,3-Dichloropropene	7.744	75	2443545	212.34	ug/L		97
68) Ethyl Methacrylate	7.872	69	1687379	206.65	ug/L		99
69) 1,1,2-Trichloroethane	7.921	97	1313506	192.97	ug/L		99
72) Tetrachloroethene	8.055	164	1595675	200.57	ug/L		99
73) 2-Hexanone	8.195	43	752588	214.51	ug/L		96
74) 1,3-Dichloropropane	8.085	76	2127448	190.40	ug/L		98
75) Dibromochloromethane	8.299	129	1771331	216.60	ug/L		99
76) N-Butyl Acetate	8.335	43	1999139	202.67	ug/L		99
77) 1,2-Dibromoethane	8.396	107	1309913	203.10	ug/L		99
78) 3-Chlorobenzotrifluoride	8.878	180	2887479	211.10	ug/L		98
79) Chlorobenzene	8.866	112	4188606	161.78	ug/L		72
80) 4-Chlorobenzotrifluoride	8.927	180	2688648	212.92	ug/L		92
81) 1,1,1,2-Tetrachloroethane	8.945	131	1888088	208.96	ug/L		95
82) Ethylbenzene	8.982	106	2654810	201.09	ug/L	#	28
83) (m+p)Xylene	9.085	106	4926816	302.97	ug/L	#	56
84) o-Xylene	9.433	106	3099839	189.44	ug/L	#	47
85) Styrene	9.445	104	4330046	162.30	ug/L	#	64
86) Bromoform	9.597	173	1058804	227.85	ug/L		97
87) 2-Chlorobenzotrifluoride	9.670	180	2850528	206.59	ug/L		92
88) Isopropylbenzene	9.756	105	5276422	131.31	ug/L	#	52
89) Cyclohexanone	9.823	55	1234234	3980.63	ug/L		100
90) trans-1,4-Dichloro-2-B...	10.061	53	464870	223.15	ug/L		94
92) 1,1,2,2-Tetrachloroethane	10.012	83	1516779	191.56	ug/L		99
93) Bromobenzene	10.000	156	2164522	197.98	ug/L		91
94) 1,2,3-Trichloropropane	10.036	110	387856	183.21	ug/L		99
95) n-Propylbenzene	10.103	91	5593847	118.78	ug/L	#	39
96) 2-Chlorotoluene	10.170	91	4478639	153.00	ug/L	#	61

Sample 200 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4886.D Vial: 11
Acq On : 15 Dec 2014 5:28 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 16 07:03:50 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:26:35 2014
Response via : Initial Calibration

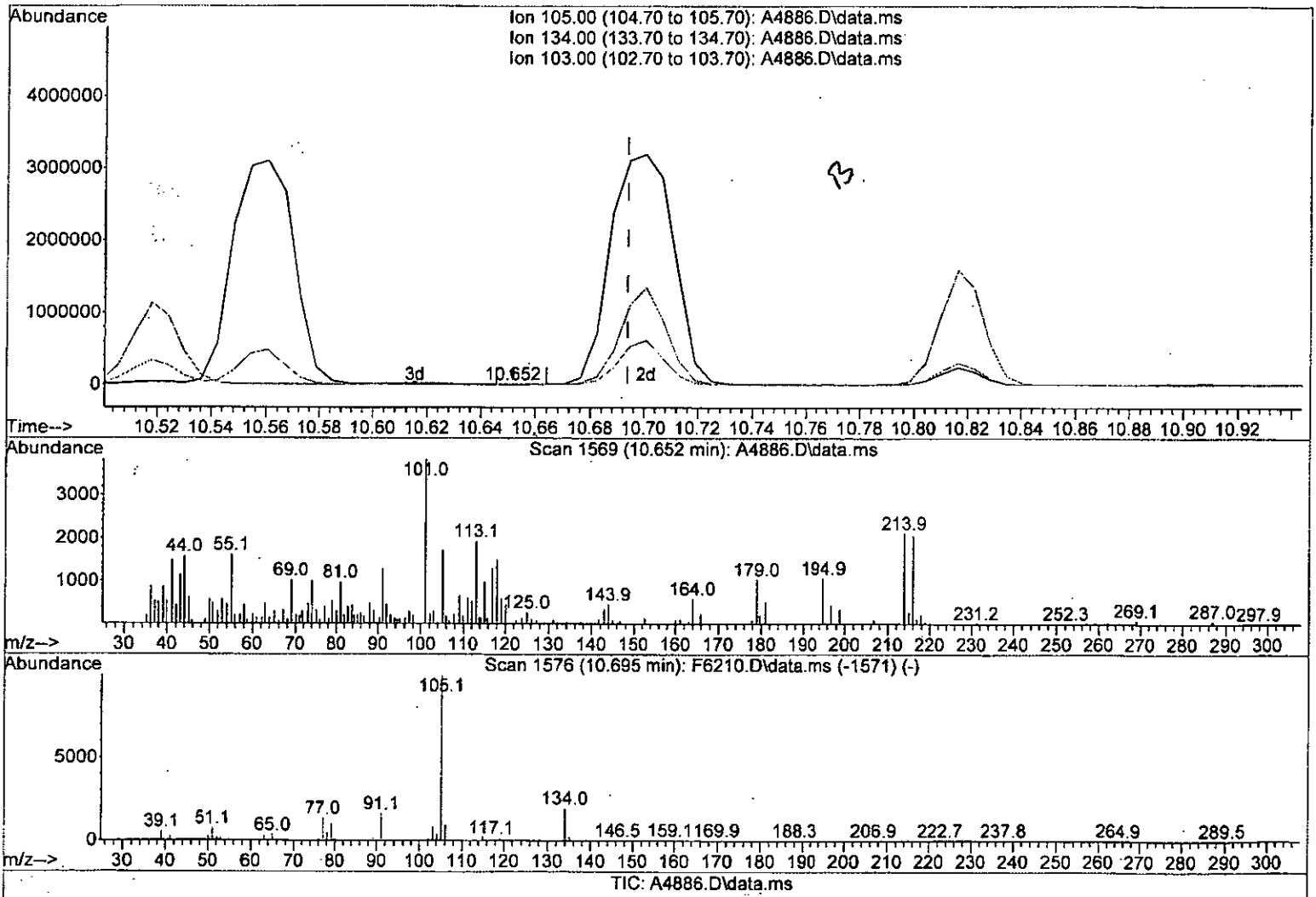
	Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
97)	3-Chlorotoluene	10.219	91	4550109	157.68 ug/L	#	63
98)	4-Chlorotoluene	10.262	91	4934476	139.69 ug/L	#	56
99)	1,3,5-Trimethylbenzene	10.256	105	4788690	143.42 ug/L	#	61
100)	tert-Butylbenzene	10.518	119	4470283	162.67 ug/L		73
101)	1,2,4-Trimethylbenzene	10.561	105	4808165	138.45 ug/L	#	55
102)	3,4-Dichlorobenzotrifl...	10.615	214	2210076	215.15 ug/L		95
103)	sec-Butylbenzene	10.701	105	5206216m	134.56 ug/L		
104)	p-Isopropyltoluene	10.817	119	4721408m	141.64 ug/L		
105)	1,3-Dclbenz	10.786	146	3590521	170.18 ug/L		78
106)	1,4-Dclbenz	10.853	146	3617429	164.35 ug/L		81
107)	2,4-Dichlorobenzotrifl...	10.902	214	2036135	226.25 ug/L		96
108)	2,5-Dichlorobenzotrifl...	10.945	214	2281579	211.69 ug/L		97
109)	n-Butylbenzene	11.140	91	4476003	145.68 ug/L	#	61
110)	1,2-Dclbenz	11.152	146	3350117	174.49 ug/L		82
111)	1,2-Dibromo-3-chloropr...	11.707	157	285186	238.79 ug/L		94
112)	Trielution Dichlorotol...	11.804	125	6675301	411.34 ug/L	#	46
113)	1,3,5-Trichlorobenzene	11.847	180	2613451	184.17 ug/L		95
114)	Coelution Dichlorotoluene	12.066	125	4239823	249.77 ug/L	#	39
115)	1,2,4-Tcbenzene	12.225	180	2236185	185.39 ug/L		97
116)	Hexachlorobt	12.322	225	1109004	189.58 ug/L		96
117)	Naphthalen	12.371	128	3249383	160.17 ug/L		84
118)	1,2,3-Tclbenzene	12.511	180	1787503	189.60 ug/L		97
119)	2,4,5-Trichlorotoluene	12.920	159	1294961	224.69 ug/L		98
120)	2,3,6-Trichlorotoluene	12.981	159	1334404	206.09 ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

121514.M Tue Dec 16 07:44:48 2014 MSVO10

```
Sample   : 200 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4886.D      Vial: 11
Acq On    : 15 Dec 2014    5:28 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 17:41:48 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:26:35 2014
Response via : Initial Calibration
```



TIC: A4886.D\data.ms

(103) sec-Butylbenzene

10.652min (-0.042) 0.01 ug/L

response 317

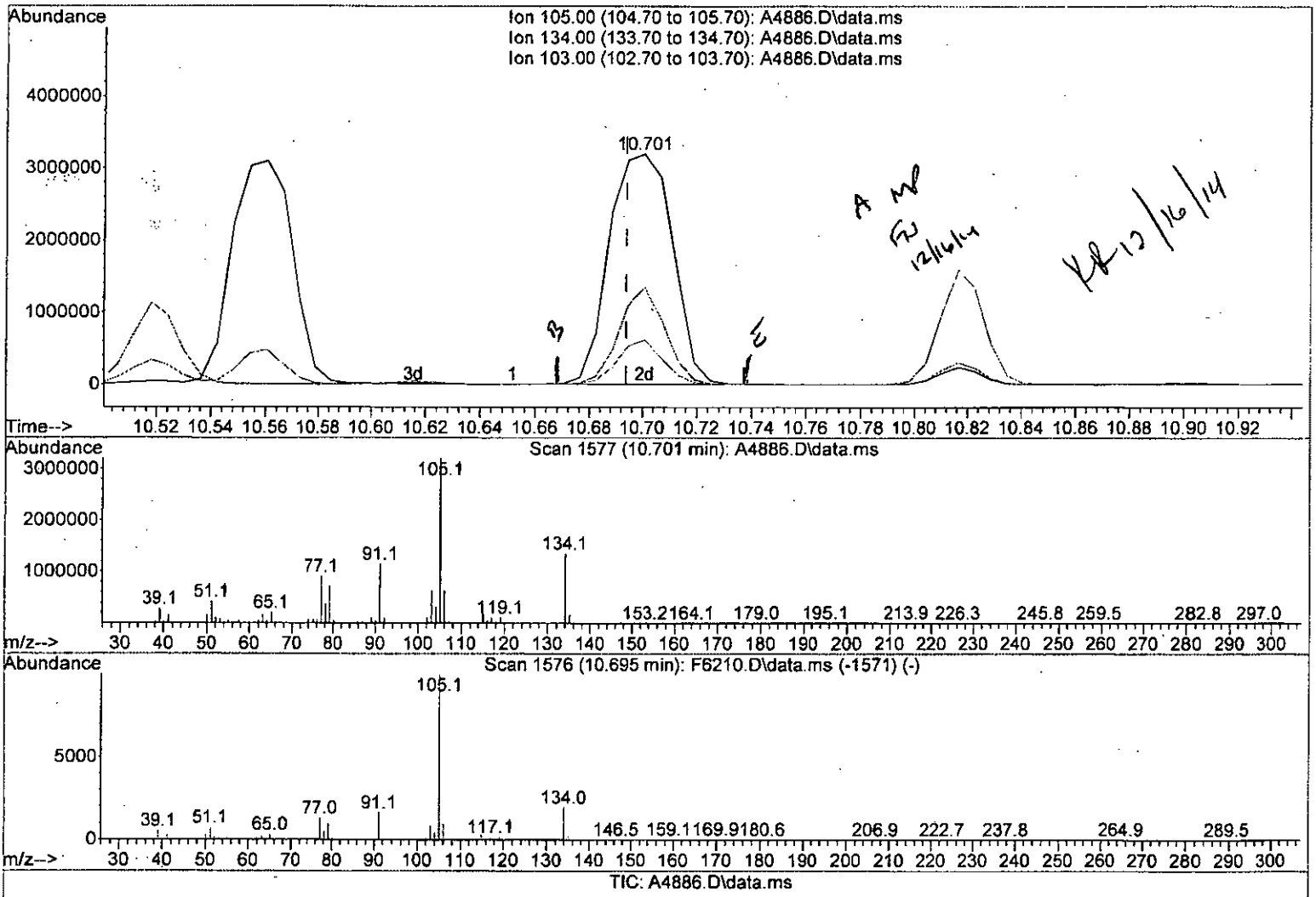
Ion	Exp%	Act%
105.00	100	100
134.00	19.10	3.55
103.00	8.60	17.85
0.00	0.00	0.00

W121514.M Tue Dec 16 07:03:32 2014 MSVO10

00515

```
Sample    : 200 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4886.D      Vial: 11
Acq On    : 15 Dec 2014    5:28 pm
Operator  : F.NAEGLER
InstName  : MSVOA10
Misc      :

Quant Time: Dec 15 17:41:48 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title  : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:26:35 2014
Response via : Initial Calibration
```



TIC: A4886.D\data.ms

(103) sec-Butylbenzene

10.701min (+0.007) 134.56 ug/L m

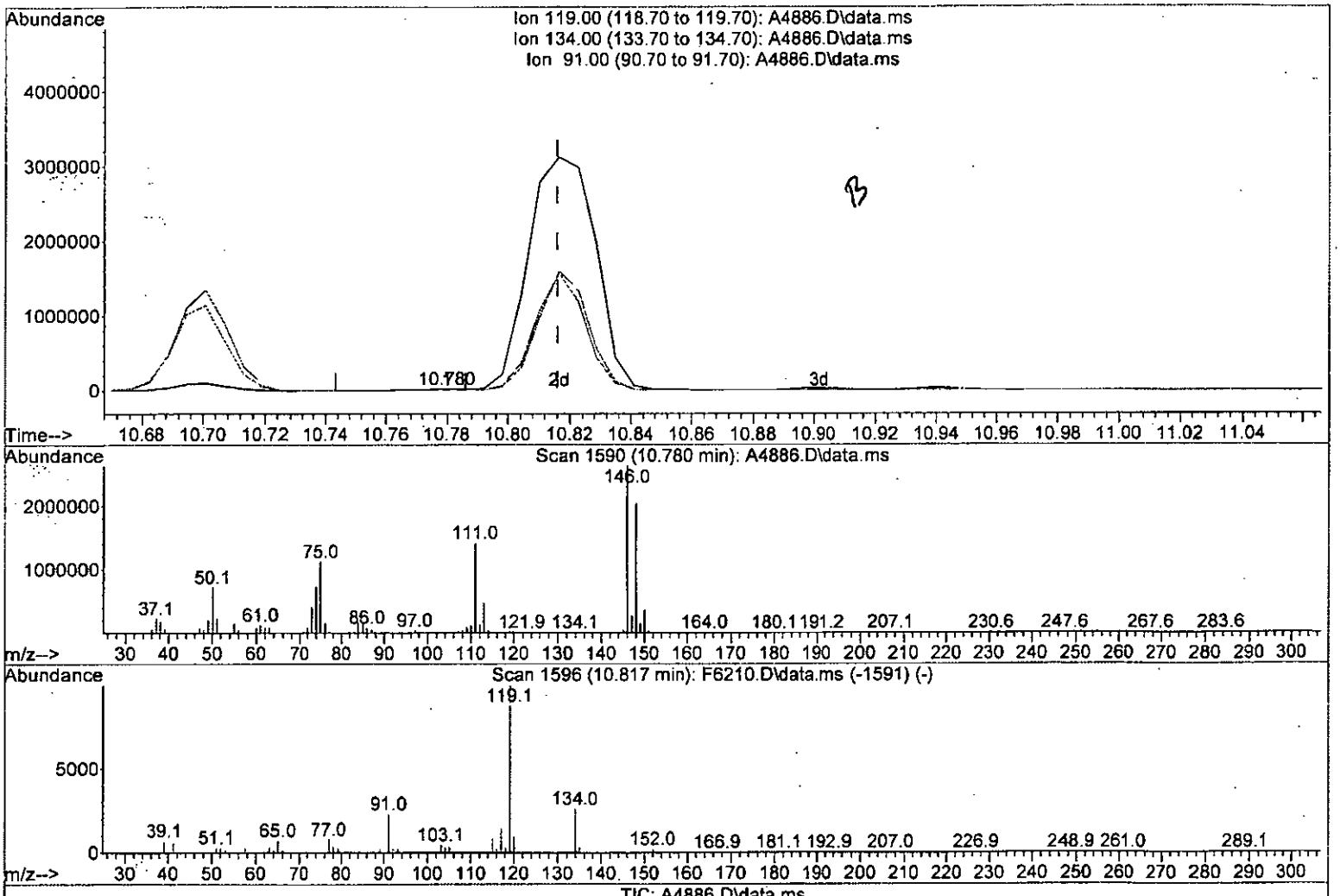
response 5206216

Ion	Exp%	Act%
105.00	100	100
134.00	19.10	42.23#
103.00	8.60	19.25
0.00	0.00	0.00

W121514.M Tue Dec 16 07:03:40 2014 MSVO10

Sample 200 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4886.D Vial: 11
Acq On : 15 Dec 2014 5:28 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 17:41:48 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:26:35 2014
Response via : Initial Calibration



TIC: A4886.D\data.ms

(104) p-Isopropyltoluene

10.780min (-0.036) 0.47 ug/L

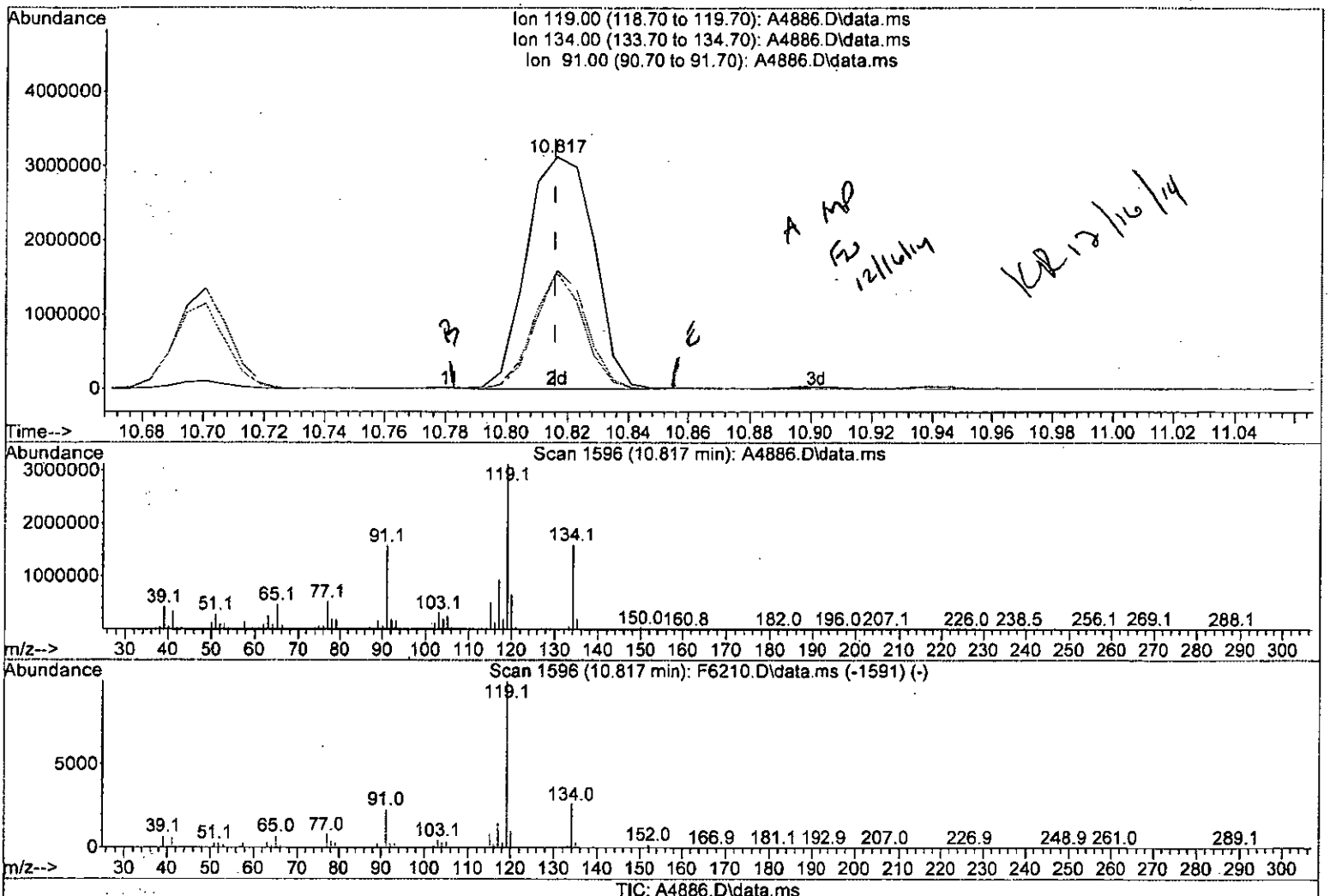
response 15810

Ion	Exp%	Act%
119.00	100	100
134.00	25.90	22.29
91.00	24.20	22.58
0.00	0.00	0.00

W121514.M Tue Dec 16 07:03:45 2014 MSVO10

Sample : 200 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4886.D Vial: 11
Acq On : 15 Dec 2014 5:28 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 15 17:41:48 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:26:35 2014
Response via : Initial Calibration



TIC: A4886.D\data.ms

(104) p-Isopropyltoluene

10.817min (+0.001) 141.64 ug/L m

response 4721408

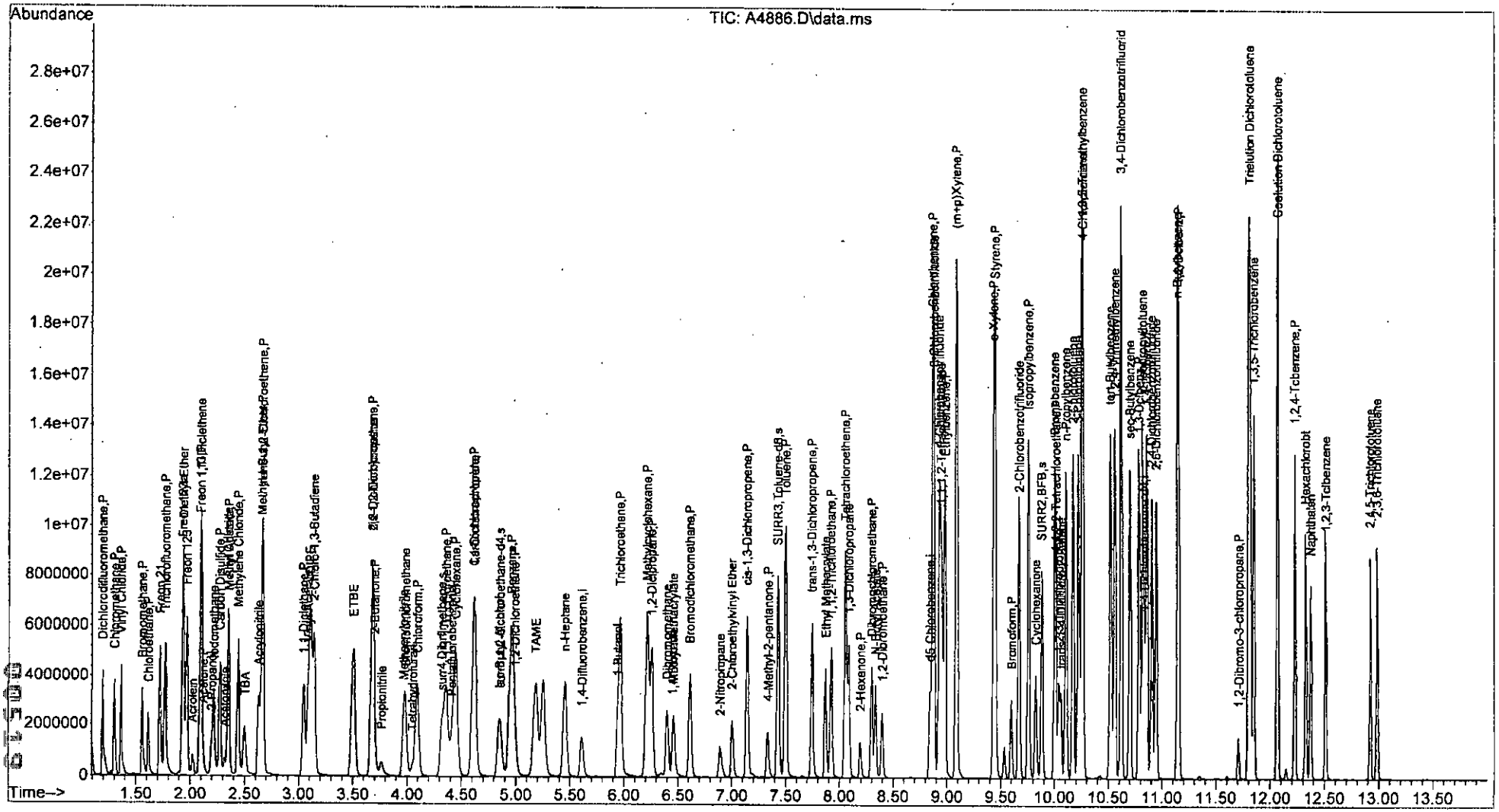
Ion	Exp%	Act%
119.00	100	100
134.00	25.90	50.91#
91.00	24.20	50.17#
0.00	0.00	0.00

W121514.M Tue Dec 16 07:03:51 2014 MSVO10

Quantitation Report (QT Reviewed)

Sample : 200 PPB STD
Data File : I:\ACQUDATA\msvoa10\data\121514\A4886.D Vial: 11
Acq On : 15 Dec 2014 5:28 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 16 07:03:50 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Mon Dec 15 16:26:35 2014
Response via : Initial Calibration



W121514.M Tue Dec 16 07:44:50 2014 MSVO10

Page: 4

Initial Calibration Verification Summary Report

Calibration ID: RC1400112 12/15/14 **Instrument ID:** R-MS-10
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
1,1,1,2-Tetrachloroethane	RC1400112-10	T	Average RF	50	50.90	ppm	1.8	<=30
1,1,1-Trichloroethane (TCA)	RC1400112-10	T	Average RF	50	49.03	ppm	-1.9	<=30
1,1,2,2-Tetrachloroethane	RC1400112-10	T	Average RF	50	50.02	ppm	0.0	<=30
1,1,2-Trichloroethane	RC1400112-10	T	Average RF	50	49.27	ppm	-1.5	<=30
1,1,2-Trichlorotrifluoroethane	RC1400112-10	T	Average RF	50	48.57	ppm	-2.9	<=30
1,1-Dichloroethane (1,1-DCA)	RC1400112-10	T	Average RF	50	49.85	ppm	-0.3	<=30
1,1-Dichloroethene (1,1-DCE)	RC1400112-10	T	Average RF	50	46.92	ppm	-6.2	<=30
1,1-Dichloropropene	RC1400112-10	T	Average RF	50	46.43	ppm	-7.1	<=30
1,2,3-Trichlorobenzene	RC1400112-10	T	Average RF	50	51.30	ppm	2.6	<=30
1,2,3-Trichloropropane	RC1400112-10	T	Average RF	50	49.38	ppm	-1.2	<=30
1,2,4-Trichlorobenzene	RC1400112-10	T	Average RF	50	52.36	ppm	4.7	<=30
1,2,4-Trimethylbenzene	RC1400112-10	T	Average RF	50	52.42	ppm	4.8	<=30
1,2-Dibromo-3-chloropropane (DBCP)	RC1400112-10	T	Average RF	50	53.40	ppm	6.8	<=30
1,2-Dibromoethane	RC1400112-10	T	Average RF	50	52.67	ppm	5.3	<=30
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	RC1400112-10	T	Average RF	50	57.06	ppm	14.1	<=30
1,2-Dichlorobenzene	RC1400112-10	T	Average RF	50	50.27	ppm	0.5	<=30
1,2-Dichloroethane	RC1400112-10	T	Average RF	50	49.57	ppm	-0.9	<=30
1,2-Dichloropropane	RC1400112-10	T	Average RF	50	50.30	ppm	0.6	<=30
1,3,5-Trichlorobenzene	RC1400112-10	T	Average RF	50	52.38	ppm	4.8	<=30
1,3,5-Trimethylbenzene	RC1400112-10	T	Average RF	50	52.37	ppm	4.7	<=30
1,3-Dichlorobenzene	RC1400112-10	T	Average RF	50	50.30	ppm	0.6	<=30
1,3-Dichloropropane	RC1400112-10	T	Average RF	50	50.50	ppm	1.0	<=30
1,4-Dichlorobenzene	RC1400112-10	T	Average RF	50	49.06	ppm	-1.9	<=30
1,4-Dioxane	RC1400112-10	T	Average RF	1000	923.8	ppm	-7.6	<=30
1-Butanol	RC1400112-10	T	Quadratic	2500	2600	ppm	4.0	<=30
1-Chloro-4-(trifluoromethyl)benzene	RC1400112-10	T	Average RF	50	50.31	ppm	0.6	<=30
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	RC1400112-10	T	Average RF	50	54.84	ppm	9.7	<=30
2,2-Dichloropropane	RC1400112-10	T	Average RF	50	46.95	ppm	-6.1	<=30
2,3,6-Trichlorotoluene	RC1400112-10	T	Average RF	50	53.15	ppm	6.3	<=30
2,4,5-Trichlorotoluene	RC1400112-10	T	Average RF	50	54.73	ppm	9.5	<=30
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	RC1400112-10	T	Average RF	150	171.4	ppm	14.3	<=30
2,4-Dichlorobenzotrifluoride	RC1400112-10	T	Average RF	50	50.81	ppm	1.6	<=30
2,5-Dichlorobenzotrifluoride	RC1400112-10	T	Average RF	50	49.56	ppm	-0.9	<=30
2-Butanone (MEK)	RC1400112-10	T	Average RF	50	50.89	ppm	1.8	<=30
2-Chloro-1,3-butadiene	RC1400112-10	T	Average RF	50	55.99	ppm	12.0	<=30
2-Chlorobenzotrifluoride	RC1400112-10	T	Average RF	50	51.56	ppm	3.1	<=30
2-Chloroethyl Vinyl Ether	RC1400112-10	T	Average RF	50	55.57	ppm	11.1	<=30
2-Chlorotoluene	RC1400112-10	T	Average RF	50	50.85	ppm	1.7	<=30
2-Hexanone	RC1400112-10	T	Average RF	50	51.68	ppm	3.4	<=30
2-Methyl-1-propanol	RC1400112-10	T	Average RF	1000	1025	ppm	2.5	<=30
2-Methyl-2-propanol	RC1400112-10	T	Average RF	1000	1026	ppm	2.6	<=30
2-Nitropropane	RC1400112-10	T	Average RF	100	103.2	ppm	3.2	<=30
2-Propanol	RC1400112-10	T	Average RF	1000	1009	ppm	0.9	<=30
3,4- and 2,3-Dichlorotoluene Coelution	RC1400112-10	T	Average RF	100	115.8	ppm	15.8	<=30
3,4-Dichlorobenzotrifluoride	RC1400112-10	T	Average RF	50	50.52	ppm	1.0	<=30
3-Chloro-1-propene	RC1400112-10	T	Average RF	50	45.17	ppm	-9.7	<=30
3-Chlorobenzotrifluoride	RC1400112-10	T	Average RF	50	51.22	ppm	2.4	<=30
3-Chlorotoluene	RC1400112-10	T	Average RF	50	53.93	ppm	7.9	<=30
4-Chlorotoluene	RC1400112-10	T	Average RF	50	51.31	ppm	2.6	<=30
4-Isopropyltoluene	RC1400112-10	T	Average RF	50	53.81	ppm	7.6	<=30
4-Methyl-2-pentanone	RC1400112-10	T	Average RF	50	51.56	ppm	3.1	<=30

Initial Calibration Verification Summary Report

Calibration ID: RC1400112 **Instrument ID:** R-MS-10
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Acetone	RC1400112-10	T	Average RF	50	43.64	ppm	-12.7	<=30
Acetonitrile	RC1400112-10	T	Average RF	250	226.3	ppm	-9.5	<=30
Acrolein	RC1400112-10	T	Quadratic	100	164.1	ppm	64.1	<=30
Acrylonitrile	RC1400112-10	T	Average RF	250	265.1	ppm	6.0	<=30
Benzene	RC1400112-10	T	Average RF	50	49.48	ppm	-1.0	<=30
Bromobenzene	RC1400112-10	T	Average RF	50	49.01	ppm	-2.0	<=30
Bromochloromethane	RC1400112-10	T	Average RF	50	50.84	ppm	1.7	<=30
Bromodichloromethane	RC1400112-10	T	Average RF	50	50.91	ppm	1.8	<=30
Bromoform	RC1400112-10	T	Average RF	50	54.41	ppm	8.8	<=30
Bromomethane	RC1400112-10	T	Average RF	50	42.35	ppm	-15.3	<=30
Carbon Disulfide	RC1400112-10	T	Average RF	50	52.47	ppm	4.9	<=30
Carbon Tetrachloride	RC1400112-10	T	Average RF	50	48.66	ppm	-2.7	<=30
Chlorobenzene	RC1400112-10	T	Average RF	50	51.26	ppm	2.5	<=30
Chloroethane	RC1400112-10	T	Average RF	50	45.39	ppm	-9.2	<=30
Chloroform	RC1400112-10	T	Average RF	50	49.45	ppm	-1.1	<=30
Chloromethane	RC1400112-10	T	Average RF	50	47.61	ppm	-4.8	<=30
Cyclohexane	RC1400112-10	T	Average RF	50	50.00	ppm	0.0	<=30
Cyclohexanone	RC1400112-10	T	Average RF	1000	826.6	ppm	-17.3	<=30
Dibromochloromethane	RC1400112-10	T	Average RF	50	52.20	ppm	4.4	<=30
Dibromomethane	RC1400112-10	T	Average RF	50	48.68	ppm	-2.6	<=30
Dichlorodifluoromethane (CFC 12)	RC1400112-10	T	Average RF	50	46.27	ppm	-7.5	<=30
Dichlorofluoromethane (CFC 21)	RC1400112-10	T	Average RF	50	56.12	ppm	12.2	<=30
Dichloromethane	RC1400112-10	T	Average RF	50	49.14	ppm	-1.7	<=30
Diethyl Ether	RC1400112-10	T	Average RF	50	50.62	ppm	1.2	<=30
Diisopropyl Ether	RC1400112-10	T	Average RF	50	49.74	ppm	-0.5	<=30
Ethyl Methacrylate	RC1400112-10	T	Average RF	50	53.19	ppm	6.4	<=30
Ethyl tert-Butyl Ether	RC1400112-10	T	Average RF	50	49.39	ppm	-1.2	<=30
Ethylbenzene	RC1400112-10	T	Average RF	50	45.98	ppm	-8.0	<=30
Hexachlorobutadiene	RC1400112-10	T	Average RF	50	42.79	ppm	-14.4	<=30
Iodomethane	RC1400112-10	T	Average RF	50	55.26	ppm	10.5	<=30
Isopropylbenzene (Cumene)	RC1400112-10	T	Average RF	50	54.59	ppm	9.2	<=30
Methacrylonitrile	RC1400112-10	T	Average RF	50	54.74	ppm	9.5	<=30
Methyl Acetate	RC1400112-10	T	Average RF	50	49.97	ppm	-0.1	<=30
Methyl Methacrylate	RC1400112-10	T	Average RF	50	52.91	ppm	5.8	<=30
Methyl tert-Butyl Ether	RC1400112-10	T	Average RF	50	51.99	ppm	4.0	<=30
Methylcyclohexane	RC1400112-10	T	Average RF	50	49.17	ppm	-1.7	<=30
Naphthalene	RC1400112-10	T	Average RF	50	56.78	ppm	13.6	<=30
Propionitrile	RC1400112-10	T	Average RF	250	273.2	ppm	9.3	<=30
Styrene	RC1400112-10	T	Average RF	50	53.87	ppm	7.7	<=30
Tetrachloroethene (PCE)	RC1400112-10	T	Average RF	50	48.63	ppm	-2.7	<=30
Tetrahydrofuran (THF)	RC1400112-10	T	Average RF	50	52.61	ppm	5.2	<=30
Toluene	RC1400112-10	T	Average RF	50	51.29	ppm	2.6	<=30
Trichloroethene (TCE)	RC1400112-10	T	Average RF	50	49.52	ppm	-1.0	<=30
Trichlorofluoromethane (CFC 11)	RC1400112-10	T	Average RF	50	48.59	ppm	-2.8	<=30
Vinyl Acetate	RC1400112-10	T	Average RF	50	56.16	ppm	12.3	<=30
Vinyl Chloride	RC1400112-10	T	Average RF	50	45.27	ppm	-9.5	<=30
cis-1,2-Dichloroethene	RC1400112-10	T	Average RF	50	49.29	ppm	-1.4	<=30
cis-1,3-Dichloropropene	RC1400112-10	T	Average RF	50	49.40	ppm	-1.2	<=30
m,p-Xylenes	RC1400112-10	T	Average RF	100	106.2	ppm	6.2	<=30
n-Butyl Acetate	RC1400112-10	T	Average RF	50	51.84	ppm	3.7	<=30
n-Butylbenzene	RC1400112-10	T	Average RF	50	52.96	ppm	5.9	<=30

Initial Calibration Verification Summary Report

Calibration ID:	RC1400112	**Instrument ID:**	R-MS-10
		Column Name:	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
n-Heptane	RC1400112-10	T	Average RF	50	42.63	ppm	-14.7	<=30
n-Propylbenzene	RC1400112-10	T	Average RF	50	53.64	ppm	7.3	<=30
o-Xylene	RC1400112-10	T	Average RF	50	50.06	ppm	0.1	<=30
sec-Butylbenzene	RC1400112-10	T	Average RF	50	53.28	ppm	6.6	<=30
tert-Amyl Methyl Ether	RC1400112-10	T	Average RF	50	51.30	ppm	2.6	<=30
tert-Butylbenzene	RC1400112-10	T	Average RF	50	51.43	ppm	2.9	<=30
trans-1,2-Dichloroethene	RC1400112-10	T	Average RF	50	49.02	ppm	-2.0	<=30
trans-1,3-Dichloropropene	RC1400112-10	T	Average RF	50	52.02	ppm	4.0	<=30
trans-1,4-Dichloro-2-butene	RC1400112-10	T	Average RF	50	49.24	ppm	-1.5	<=30
1,2-Dichloroethane-d4	RC1400112-10	S	Average RF	50	50.41	ppm	0.8	<=30
4-Bromofluorobenzene	RC1400112-10	S	Average RF	50	51.60	ppm	3.2	<=30
Dibromofluoromethane	RC1400112-10	S	Average RF	50	50.76	ppm	1.5	<=30
Toluene-d8	RC1400112-10	S	Average RF	50	53.63	ppm	7.3	<=30

Exceptions

QAP	Method
CRA-OXY	8260C

Compound	Type	Criteria	Result
Acrolein	Percent Difference	<= 30	64.14

Sample : 50 PPB ICV
Data File : I:\ACQUDATA\msvoa10\data\121514\A4889.D Vial: 14
Acq On : 15 Dec 2014 6:57 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 16 08:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	936177	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1374187	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1238843	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	690962	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.324	113	438796	50.76	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.52%			
48) surr1,1,2-dichloroetha...	4.848	65	442549	50.41	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 100.82%			
65) SURR3,Toluene-d8	7.427	98	1621769	53.63	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.26%			
70) SURR2,BFB	9.878	95	651155	51.60	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 103.20%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.191	85	476221	46.27	ug/L	98
3) Chloromethane	1.300	50	535046	47.61	ug/L	98
4) Vinyl Chloride	1.361	62	501733	45.27	ug/L	96
5) Bromomethane	1.562	94	271693	42.35	ug/L	99
6) Chloroethane	1.617	64	264436	45.39	ug/L	95
7) Freon 21	1.721	67	908073	56.12	ug/L	98
8) Trichlorofluoromethane	1.770	101	663866	48.59	ug/L	97
9) Diethyl Ether	1.934	59	308539	50.62	ug/L	97
10) Freon 123a	1.928	67	564326	57.06	ug/L	93
11) Freon 123	1.965	83	601296	54.84	ug/L	96
12) Acrolein	2.026	56	81966	164.14	ug/L	99
13) 1,1-Diclethene	2.099	96	352091	46.92	ug/L	96
14) Freon 113	2.093	101	394821	48.57	ug/L	99
15) Acetone	2.123	43	68983	43.64	ug/L	98
16) 2-Propanol	2.196	45	294922	1009.37	ug/L	100
17) Iodomethane	2.215	142	608951	55.26	ug/L	97
18) Carbon Disulfide	2.276	76	1278216	52.47	ug/L	100
19) Acetonitrile	2.318	40	46593	226.30	ug/L	90
20) Allyl Chloride	2.355	76	206625	45.17	ug/L	98
21) Methyl Acetate	2.355	43	183372	49.97	ug/L	98
22) Methylene Chloride	2.440	84	409945	49.14	ug/L	97
23) TBA	2.501	59	497282	1026.08	ug/L	96
24) Acrylonitrile	2.629	53	469805	265.06	ug/L	99
25) Methyl-t-Butyl Ether	2.660	73	1029149	51.99	ug/L	100
26) trans-1,2-Dichloroethene	2.672	96	401885	49.02	ug/L	100
28) 1,1-Diclethane	3.050	63	765242	49.85	ug/L	99
29) Vinyl Acetate	3.093	86	57950	56.16	ug/L #	94
30) DIPE	3.111	45	1404358	49.74	ug/L	88
31) 2-Chloro-1,3-Butadiene	3.141	53	725876	55.99	ug/L	97
32) ETBE	3.501	59	1268268	49.39	ug/L	99
33) 2,2-Dichloropropane	3.678	77	615229	46.95	ug/L	97
34) cis-1,2-Dichloroethene	3.678	96	447222	49.29	ug/L	96
35) 2-Butanone	3.702	43	105660	50.89	ug/L	94
36) Propionitrile	3.769	54	161838	273.19	ug/L	96
37) Bromochloromethane	3.983	130	264922	50.84	ug/L	98

121514.M Tue Dec 16 08:10:00 2014 MSVO10 Page: 1

Sample : 50 RRB ICV
Data File : I:\ACQUDATA\msvoa10\data\121514\A4889.D Vial: 14
Acq On : 15 Dec 2014 6:57 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 16 08:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Methacrylonitrile	3.970	67	106781	54.74 ug/L	87
39) Tetrahydrofuran	4.056	42	69999	52.61 ug/L	91
40) Chloroform	4.092	83	754873	49.45 ug/L	99
41) 1,1,1-Trichloroethane	4.361	97	670231	49.03 ug/L	94
42) TAME	5.184	73	1052732	51.30 ug/L	98
44) Cyclohexane	4.446	41	441963	50.00 ug/L	99
46) Carbontetrachloride	4.617	121	184676	48.66 ug/L	93
47) 1,1-Dichloropropene	4.617	75	532917	46.43 ug/L	98
49) Benzene	4.958	78	1630617	49.48 ug/L	98
50) 1,2-Dichloroethane	4.989	62	560477	49.57 ug/L	99
51) Iso-Butyl Alcohol	4.854	43	201669	1024.53 ug/L	96
52) n-Heptane	5.452	43	418243	42.63 ug/L	98
53) 1-Butanol	5.946	56	294495	2599.82 ug/L	98
54) Trichloroethene	5.964	130	446687	49.52 ug/L	97
55) Methylcyclohexane	6.214	55	536582	49.17 ug/L	96
56) 1,2-Diclpropane	6.257	63	436429	50.30 ug/L	99
57) Dibromomethane	6.403	93	231781	48.68 ug/L	98
58) 1,4-Dioxane	6.452	88	45857	923.79 ug/L	85
59) Methyl Methacrylate	6.464	69	186528	52.91 ug/L	96
60) Bromodichloromethane	6.616	83	579844	50.91 ug/L	100
61) 2-Nitropropane	6.891	41	157087	103.20 ug/L	98
62) 2-Chloroethylvinyl Ether	7.006	63	209049	55.57 ug/L	95
63) cis-1,3-Dichloropropene	7.141	75	668399	49.40 ug/L	98
64) 4-Methyl-2-pentanone	7.336	43	271855	51.56 ug/L	95
66) Toluene	7.500	91	1796459	51.29 ug/L	97
67) trans-1,3-Dichloropropene	7.744	75	580594	52.02 ug/L	99
68) Ethyl Methacrylate	7.872	69	417653	53.19 ug/L	99
69) 1,1,2-Trichloroethane	7.921	97	314672	49.27 ug/L	100
72) Tetrachloroethene	8.055	164	362115	48.63 ug/L	97
73) 2-Hexanone	8.195	43	181871	51.68 ug/L	96
74) 1,3-Dichloropropane	8.086	76	526278	50.50 ug/L	98
75) Dibromochloromethane	8.299	129	412439	52.20 ug/L	98
76) N-Butyl Acetate	8.335	43	487979	51.84 ug/L	99
77) 1,2-Dibromoethane	8.396	107	322046	52.67 ug/L	98
78) 3-Chlorobenzotrifluoride	8.872	180	674256	51.22 ug/L	99
79) Chlorobenzene	8.866	112	1200878	51.26 ug/L	100
80) 4-Chlorobenzotrifluoride	8.927	180	610310	50.31 ug/L	99
81) 1,1,1,2-Tetrachloroethane	8.945	131	438590	50.90 ug/L	97
82) Ethylbenzene	8.976	106	572004	45.98 ug/L	99
83) (m+p)Xylene	9.085	106	1545154	106.21 ug/L	97
84) o-Xylene	9.433	106	761083	50.06 ug/L	97
85) Styrene	9.445	104	1310431	53.87 ug/L	98
86) Bromoform	9.597	173	248382	54.41 ug/L	98
87) 2-Chlorobenzotrifluoride	9.665	180	678479	51.56 ug/L	95
88) Isopropylbenzene	9.756	105	1907556	54.59 ug/L	98
89) Cyclohexanone	9.823	55	238238	826.57 ug/L	97
90) trans-1,4-Dichloro-2-B...	10.055	53	100474	49.24 ug/L	97
92) 1,1,2,2-Tetrachloroethane	10.006	83	385528	50.02 ug/L	99
93) Bromobenzene	10.000	156	525718	49.01 ug/L	99
94) 1,2,3-Trichloropropane	10.042	110	100277	49.38 ug/L	96
95) n-Propylbenzene	10.103	91	2247562	53.64 ug/L	99
96) 2-Chlorotoluene	10.164	91	1395029	50.85 ug/L	99

121514.M Tue Dec 16 08:10:00 2014 MSVO10

Sample : 50 PPB ICV
Data File : I:\ACQUDATA\msvoa10\data\121514\A4889.D Vial: 14
Acq On : 15 Dec 2014 6:57 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 16 08:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

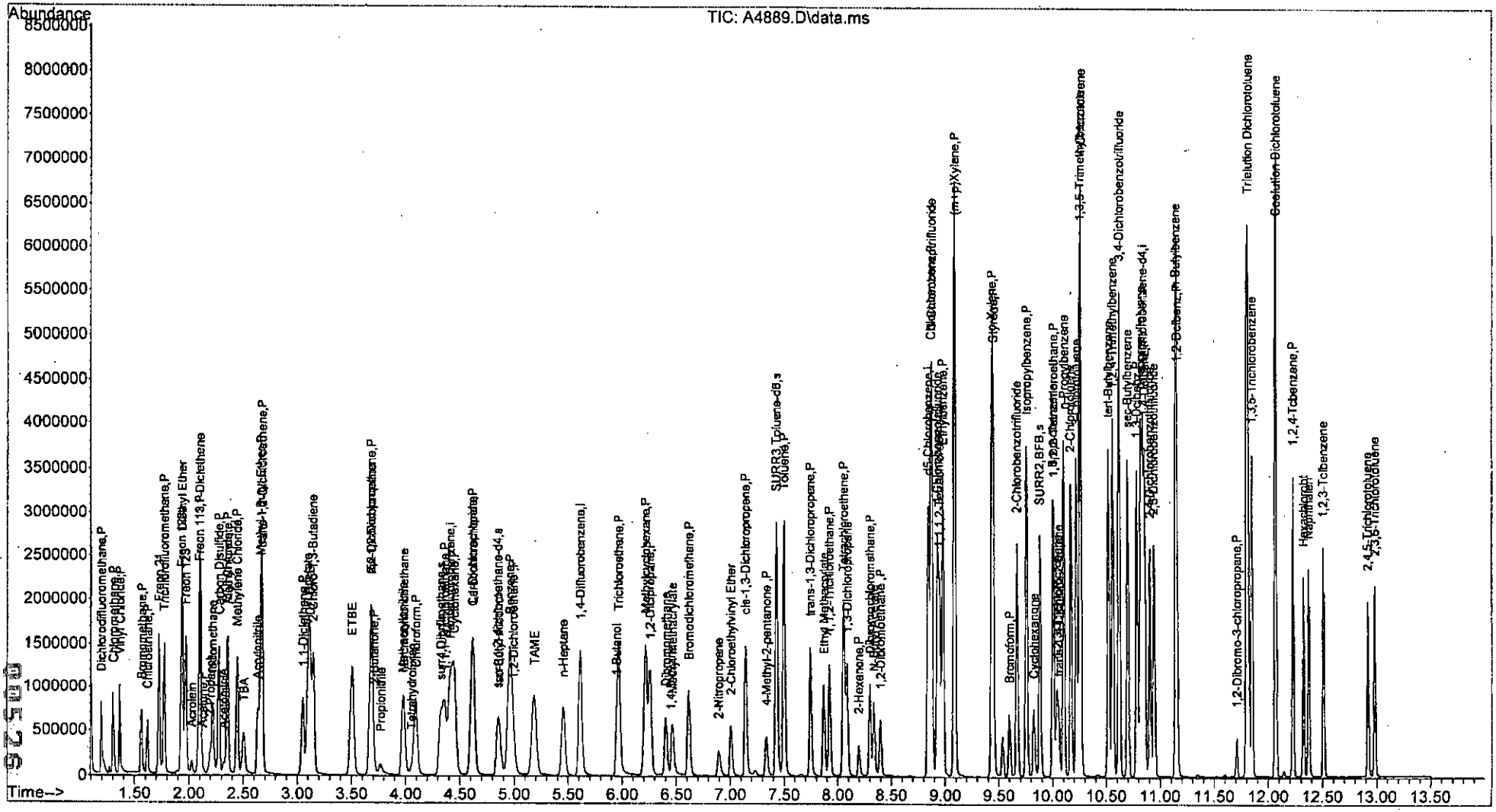
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	1477915	53.93	ug/L	99
98)	4-Chlorotoluene	10.256	91	1665367	51.31	ug/L	99
99)	1,3,5-Trimethylbenzene	10.250	105	1621515	52.37	ug/L	99
100)	tert-Butylbenzene	10.518	119	1347809	51.43	ug/L	99
101)	1,2,4-Trimethylbenzene	10.555	105	1674499	52.42	ug/L	99
102)	3,4-Dichlorobenzotrifl...	10.616	214	524815	50.52	ug/L	96
103)	sec-Butylbenzene	10.695	105	1891220	53.28	ug/L	99
104)	p-Isopropyltoluene	10.817	119	1664397	53.81	ug/L	100
105)	1,3-Dclbenz	10.780	146	1017833	50.30	ug/L	99
106)	1,4-Dclbenz	10.853	146	1022120	49.06	ug/L	99
107)	2,4-Dichlorobenzotrifl...	10.902	214	469572	50.81	ug/L	99
108)	2,5-Dichlorobenzotrifl...	10.939	214	536234	49.56	ug/L	99
109)	n-Butylbenzene	11.140	91	1518389	52.96	ug/L	98
110)	1,2-Dclbenz	11.152	146	929186	50.27	ug/L	98
111)	1,2-Dibromo-3-chloropr...	11.707	157	70937	53.40	ug/L	98
112)	Trielution Dichlorotol...	11.804	125	2577160	171.39	ug/L	95
113)	1,3,5-Trichlorobenzene	11.847	180	726076	52.38	ug/L	98
114)	Coelution Dichlorotoluene	12.066	125	1782370	115.82	ug/L	100
115)	1,2,4-Tcbenzene	12.225	180	618562	52.36	ug/L	99
116)	Hexachlorobt	12.323	225	242783	42.79	ug/L	96
117)	Naphthalen	12.371	128	1102350	56.78	ug/L	98
118)	1,2,3-Tclbenzene	12.505	180	474075	51.30	ug/L	98
119)	2,4,5-Trichlorotoluene	12.914	159	325084	54.73	ug/L	98
120)	2,3,6-Trichlorotoluene	12.981	159	342767	53.15	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Sample : 50 PPB ICV
Data File : I:\ACQUDATA\msvoa10\data\121514\A4889.D Vial: 14
Acq On : 15 Dec 2014 6:57 pm
Operator : F.NAEGLER
InstName : MSVOA10
Misc :

Quant Time: Dec 16 08:09:59 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



W121514.M Tue Dec 16 08:10:02 2014 MSVO10

Page: 4

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410303
Date Analyzed: 12/30/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\msvoa10\data\122914\A5191.D\

Calibration Date: 12/15/14
Calibration ID: RC1400112
Analysis Lot: 427294
Units: µg/L

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	44.6	0.3478	0.3104	-10.7	NA	± 20 %	Average RF
1,1,1-Trichloroethane (TCA)	50.0	43.5	0.7301	0.6348	-13.0	NA	± 20 %	Average RF
1,1,2,2-Tetrachloroethane	50.0	39.8	0.5578	0.4434	-20.5 *	NA	± 20 %	Average RF
1,1,2-Trichloroethane	50.0	45.8	0.2324	0.2127	-8.5	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	46.4	0.8198	0.7606	-7.2	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	44.4	0.4008	0.3558	-11.2	NA	± 20 %	Average RF
1,1-Dichloropropene	50.0	45.7	0.4176	0.3818	-8.6	NA	± 20 %	Average RF
1,2,3-Trichlorobenzene	50.0	44.9	0.6687	0.6008	-10.2	NA	± 20 %	Average RF
1,2,3-Trichloropropane	50.0	42.5	0.1469	0.1250	-14.9	NA	± 20 %	Average RF
1,2,4-Trichlorobenzene	50.0	45.4	0.8548	0.7760	-9.2	NA	± 20 %	Average RF
1,2,4-Trimethylbenzene	50.0	48.6	2.311	2.248	-2.7	NA	± 20 %	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	41.1	0.09613	0.07899	-17.8	NA	± 20 %	Average RF
1,2-Dibromoethane	50.0	47.1	0.2468	0.2322	-5.9	NA	± 20 %	Average RF
1,2-Dichlorobenzene	50.0	46.8	1.338	1.251	-6.5	NA	± 20 %	Average RF
1,2-Dichloroethane	50.0	46.6	0.4114	0.3830	-6.9	NA	± 20 %	Average RF
1,2-Dichloropropane	50.0	49.5	0.3157	0.3126	-1.0	NA	± 20 %	Average RF
1,3,5-Trimethylbenzene	50.0	49.1	2.240	2.200	-1.8	NA	± 20 %	Average RF
1,3-Dichlorobenzene	50.0	46.0	1.464	1.348	-7.9	NA	± 20 %	Average RF
1,3-Dichloropropane	50.0	46.7	0.4206	0.3928	-6.6	NA	± 20 %	Average RF
1,4-Dichlorobenzene	50.0	46.6	1.508	1.405	-6.8	NA	± 20 %	Average RF
2,2-Dichloropropane	50.0	36.2	0.6999	0.5071	-27.5 *	NA	± 20 %	Average RF
2-Butanone (MEK)	50.0	52.7	0.1109	0.1168	5.3	NA	± 20 %	Average RF
2-Chlorotoluene	50.0	47.6	1.985	1.889	-4.9	NA	± 20 %	Average RF
2-Hexanone	50.0	51.7	0.1420	0.1469	3.4	NA	± 20 %	Average RF
tert-Butyl Alcohol	1000	804	0.02588	0.02082	-19.6	NA	± 20 %	Average RF
4-Chlorotoluene	50.0	49.3	2.349	2.315	-1.4	NA	± 20 %	Average RF
p-Isopropyltoluene	50.0	49.9	2.238	2.233	-0.2	NA	± 20 %	Average RF
4-Methyl-2-pentanone	50.0	49.9	0.1918	0.1915	-0.2	NA	± 20 %	Average RF
Acetone	50.0	51.4	0.08442	0.08682	2.8	NA	± 20 %	Average RF
Benzene	50.0	47.9	1.199	1.148	-4.2	NA	± 20 %	Average RF
Bromobenzene	50.0	44.7	0.7763	0.6942	-10.6	NA	± 20 %	Average RF
Bromochloromethane	50.0	44.5	0.2783	0.2474	-11.1	NA	± 20 %	Average RF
Bromodichloromethane	50.0	45.2	0.4144	0.3750	-9.5	NA	± 20 %	Average RF
Bromoform	50.0	46.0	0.1843	0.1695	-8.0	NA	± 20 %	Average RF
Bromomethane	50.0	35.0	0.3427	0.2399	-30.0 *	NA	± 20 %	Average RF
Carbon Tetrachloride	50.0	43.9	0.1381	0.1211	-12.3	NA	± 20 %	Average RF
Chlorobenzene	50.0	47.9	0.9456	0.9055	-4.2	NA	± 20 %	Average RF
Chloroethane	50.0	49.5	0.3111	0.3082	-0.9	NA	± 20 %	Average RF
Chloroform	50.0	45.0	0.8153	0.7334	-10.0	NA	± 20 %	Average RF
Chloromethane	50.0	47.5	0.6002	0.5705	-5.0	NA	± 20 %	Average RF
Dibromochloromethane	50.0	46.0	0.3189	0.2934	-8.0	NA	± 20 %	Average RF

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410303
Date Analyzed: 12/30/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\msvoa10\data\122914\A5191.D\

Calibration Date: 12/15/14
Calibration ID: RC1400112
Analysis Lot: 427294
Units: µg/L

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane (CFC 12)	50.0	39.7	0.5497	0.4361	-20.7 *	NA	± 20 %	Average RF
Methylene Chloride	50.0	45.7	0.4455	0.4076	-8.5	NA	± 20 %	Average RF
Ethylbenzene	50.0	46.3	0.5021	0.4648	-7.4	NA	± 20 %	Average RF
Hexachlorobutadiene	50.0	40.9	0.4106	0.3360	-18.2	NA	± 20 %	Average RF
Isopropylbenzene (Cumene)	50.0	51.0	1.410	1.438	1.9	NA	± 20 %	Average RF
Methyl tert-Butyl Ether	50.0	44.9	1.057	0.9503	-10.1	NA	± 20 %	Average RF
Naphthalene	50.0	47.2	1.405	1.325	-5.7	NA	± 20 %	Average RF
Styrene	50.0	50.4	0.9818	0.9886	0.7	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	45.1	0.3005	0.2708	-9.9	NA	± 20 %	Average RF
Toluene	50.0	48.9	1.274	1.245	-2.3	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	50.8	0.3282	0.3334	1.6	NA	± 20 %	Average RF
Trichlorofluoromethane (CFC 11)	50.0	50.2	0.7297	0.7329	0.4	NA	± 20 %	Average RF
Vinyl Chloride	50.0	50.0	0.5919	0.5922	0.1	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	45.3	0.4846	0.4390	-9.4	NA	± 20 %	Average RF
cis-1,3-Dichloropropene	50.0	44.7	0.4923	0.4396	-10.7	NA	± 20 %	Average RF
m,p-Xylenes	100	101	0.5871	0.5905	0.6	NA	± 20 %	Average RF
n-Butylbenzene	50.0	50.0	2.075	2.074	-0.1	NA	± 20 %	Average RF
n-Propylbenzene	50.0	51.2	3.032	3.106	2.4	NA	± 20 %	Average RF
o-Xylene	50.0	47.2	0.6136	0.5786	-5.7	NA	± 20 %	Average RF
sec-Butylbenzene	50.0	50.0	2.568	2.571	0.1	NA	± 20 %	Average RF
tert-Butylbenzene	50.0	47.9	1.896	1.816	-4.2	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	45.4	0.4378	0.3976	-9.2	NA	± 20 %	Average RF
trans-1,3-Dichloropropene	50.0	44.6	0.4061	0.3621	-10.8	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	51.6	0.4592	0.4741	3.3	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	50.0	0.3145	0.3147	0.0	NA	± 20 %	Average RF
Toluene-d8	50.0	53.7	1.100	1.182	7.5	NA	± 20 %	Average RF

Evaluate Continuing Calibration Report

Sample
Data File : I:\ACQUDATA\msvoa10\data\122914\A5191.D Vial: 26
Acq On : 30 Dec 2014 1:08 am
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 30 09:04:57 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

FV 1/6/15

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	
1	i	Pentafluorobenzene	1.0000	1.0000	0.0	110	0.00	
2	P	Dichlorodifluoromethane	0.5497	0.4361	20.7#	80	0.00	(1)
3	P	Chloromethane	0.6002	0.5705	4.9	99	0.00	
4	P	Vinyl Chloride	0.5919	0.5922	-0.1	103	0.00	
5	P	Bromomethane	0.3427	0.2399	30.0#	84	0.00	(2)
6	P	Chloroethane	0.3111	0.3082	0.9	110	0.00	
7		Freon 21	0.8641	0.9062	-4.9	128	0.00	
8	P	Trichlorofluoromethane	0.7297	0.7329	-0.4	103	0.00	
9		Diethyl Ether	0.3255	0.3237	0.6	107	0.00	
10		Freon 123a	0.5282	0.5641	-6.8	131	0.00	
11		Freon 123	0.5856	0.6106	-4.3	128	0.00	
12		Acrolein	0.0285	0.0436 -79.6	~~53.0#~~	178	0.00	NT
13		1,1-Diclethene	0.4008	0.3558	11.2	100	0.00	
14	P	Freon 113	0.4341	0.3986	8.2	100	0.00	
15	P	Acetone	0.0844	0.0868	-2.8	105	0.00	
16		2-Propanol	0.0156	0.0129	17.3	83	0.00	
17		Iodomethane	0.5885	0.4647	21.0#	79	0.00	NT
18	P	Carbon Disulfide	1.3011	1.4697	-13.0	125	0.00	
19		Acetonitrile	0.0110	0.0091	17.3	80	0.00	
20		Allyl Chloride	0.2443	0.2150	12.0	94	0.00	
21	P	Methyl Acetate	0.1960	0.1844	5.9	98	0.00	
22	P	Methylene Chloride	0.4455	0.4076	8.5	100	0.00	
23		TBA	0.0259	0.0208	19.7	79	0.00	
24		Acrylonitrile	0.0947	0.0936	1.2	97	0.00	
25	P	Methyl-t-Butyl Ether	1.0573	0.9503	10.1	94	0.00	
26	P	trans-1,2-Dichloroethene	0.4378	0.3976	9.2	98	0.00	
27		Halothane	0.0000	0.0000	0.0	0#	-3.03#	
28	P	1,1-Diclethane	0.8198	0.7606	7.2	100	0.00	
29		Vinyl Acetate	0.0551	0.0291	47.2#	53	0.00	NT
30		DIPE	~~1.5080~~	~~0.0038~~	~~99.7#~~	~~0#~~	~~-0.01~~	
31		2-Chloro-1,3-Butadiene	0.6924	0.8878	-28.2#	141	0.00	NT
32		ETBE	~~1.3716~~	~~0.0003~~	~~100.0#~~	~~0#~~	~~0.00~~	
33		2,2-Dichloropropane	0.6999	0.5071	27.5#	77	0.00	(3)
34	P	cis-1,2-Dichloroethene	0.4846	0.4390	9.4	97	0.00	
35	P	2-Butanone	0.1109	0.1168	-5.3	104	0.00	
36		Propionitrile	0.0316	0.0313	0.9	95	0.00	
37		Bromochloromethane	0.2783	0.2474	11.1	94	0.00	
38		Methacrylonitrile	0.1042	0.0995	4.5	92	0.00	
39		Tetrahydrofuran	0.0711	0.0645	9.3	94	0.00	
40	P	Chloroform	0.8153	0.7334	10.0	98	0.00	
41	P	1,1,1-Trichloroethane	0.7301	0.6348	13.1	94	0.00	
42		TAME	~~1.0961~~	~~0.0003~~	~~100.0#~~	~~0#~~	~~0.02~~	
43	i	1,4-Difluorobenzene	1.0000	1.0000	0.0	108	0.00	
44	P	Cyclohexane	0.3216	0.3126	2.8	118	0.00	
45	s	surr4,Dibrflmethane	0.3145	0.3147	-0.1	105	0.00	
46	P	Carbontetrachloride	0.1381	0.1211	12.3	93	0.00	
47		1,1-Dichloropropene	0.4176	0.3818	8.6	97	0.00	

W121514.M Tue Dec 30 09:05:29 2014 MSVO10

00528

Evaluate Continuing Calibration Report

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\122914\A5191.D Vial: 26
Acq On : 30 Dec 2014 1:08 am
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 30 09:04:57 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	
48	s	surr1,1,2-dichloroethane-d4	0.3194	0.3159	1.1	104	0.00	
49	P	Benzene	1.1990	1.1484	4.2	98	0.00	
50	P	1,2-Dichloroethane	0.4114	0.3830	6.9	97	0.00	
51		Iso-Butyl Alcohol	0.0072	0.0061	15.3	81	0.00	
52		n-Heptane	0.3570	0.2971	16.8	90	0.00	
53		1-Butanol	~~0.0038~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~-5.94#~~	
54	P	Trichloroethene	0.3282	0.3334	-1.6	103	0.00	
55	P	Methylcyclohexane	0.3971	0.3621	8.8	114	0.00	
56	P	1,2-Diclpropane	0.3157	0.3126	1.0	103	0.00	
57		Dibromomethane	0.1732	0.1553	10.3	95	0.00	
58		1,4-Dioxane	0.0018	0.0014	22.2#	72	0.00	NT
59		Methyl Methacrylate	0.1283	0.1198	6.6	92	0.00	
60	P	Bromodichloromethane	0.4144	0.3750	9.5	93	0.00	
61		2-Nitropropane	0.0554	0.0377	31.9#	68	0.00	NT
62		2-Chloroethylvinyl Ether	0.1369	0.1436	-4.9	106	0.00	
63	P	cis-1,3-Dichloropropene	0.4923	0.4396	10.7	91	0.00	
64	P	4-Methyl-2-pentanone	0.1918	0.1915	0.2	99	0.00	
65	s	SURR3,Toluene-d8	1.1004	1.1824	-7.5	107	0.00	
66	P	Toluene	1.2743	1.2453	2.3	98	0.00	
67	P	trans-1,3-Dichloropropene	0.4061	0.3621	10.8	88	0.00	
68		Ethyl Methacrylate	0.2857	0.2618	8.4	90	0.00	
69	P	1,1,2-Trichloroethane	0.2324	0.2127	8.5	94	0.00	
70	s	SURR2,BFB	0.4592	0.4741	-3.2	105	0.00	
71	i	d5-Chlorobenzene	1.0000	1.0000	0.0	108	0.00	
72	P	Tetrachloroethene	0.3005	0.2708	9.9	95	0.00	
73	P	2-Hexanone	0.1420	0.1469	-3.5	98	0.00	
74		1,3-Dichloropropane	0.4206	0.3928	6.6	97	0.00	
75	P	Dibromochloromethane	0.3189	0.2934	8.0	93	0.00	
76		N-Butyl Acetate	0.3799	0.3595	5.4	95	0.00	
77	P	1,2-Dibromoethane	0.2468	0.2322	5.9	94	0.00	
78		3-Chlorobenzotrifluoride	~~0.5313~~	~~0.0004~~	~~99.9#~~	~~0#~~	~~0.00~~	
79	P	Chlorobenzene	0.9456	0.9055	4.2	97	0.00	
80		4-Chlorobenzotrifluoride	~~0.4896~~	~~0.0004~~	~~99.9#~~	~~0#~~	~~0.00~~	
81		1,1,1,2-Tetrachloroethane	0.3478	0.3104	10.8	93	0.00	
82	P	Ethylbenzene	0.5021	0.4648	7.4	98	0.00	
83	P	(m+p)Xylene	0.5871	0.5905	-0.6	98	0.00	
84	P	o-Xylene	0.6136	0.5786	5.7	98	0.00	
85	P	Styrene	0.9818	0.9886	-0.7	96	0.00	
86	P	Bromoform	0.1843	0.1695	8.0	89	0.00	
87		2-Chlorobenzotrifluoride	~~0.5311~~	~~0.0004~~	~~99.9#~~	~~0#~~	~~0.01~~	
88	P	Isopropylbenzene	1.4104	1.4378	-1.9	96	0.00	
89		Cyclohexanone	0.0116	0.0238	-105.2#	214#	0.00	NT
90		trans-1,4-Dichloro-2-Butene	0.0824	0.0711	13.7	82	0.00	
91	i	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	108	0.00	
92	P	1,1,2,2-Tetrachloroethane	0.5578	0.4434	20.5#	85	0.00	(4)
93		Bromobenzene	0.7763	0.6942	10.6	98	0.00	

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\122914\A5191.D Vial: 26
Acq On : 30 Dec 2014 1:08 am
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 30 09:04:57 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
94		1,2,3-Trichloropropane	0.1469	0.1250	14.9	95	0.00
95		n-Propylbenzene	3.0323	3.1058	-2.4	99	0.00
96		2-Chlorotoluene	1.9853	1.8889	4.9	98	0.00
97		3-Chlorotoluene	1.9831	0.0000	100.0#	0#	-10.22#
98		4-Chlorotoluene	2.3489	2.3152	1.4	100	0.00
99		1,3,5-Trimethylbenzene	2.2404	2.2004	1.8	98	0.00
100		tert-Butylbenzene	1.8965	1.8160	4.2	96	0.00
101		1,2,4-Trimethylbenzene	2.3114	2.2480	2.7	97	0.00
102		3,4-Dichlorobenzotrifluorid	0.7517	0.0013	99.8#	0#	0.00
103		sec-Butylbenzene	2.5684	2.5706	-0.1	96	0.00
104		p-Isopropyltoluene	2.2384	2.2334	0.2	97	0.00
105	P	1,3-Dclbenz	1.4643	1.3482	7.9	96	0.00
106	P	1,4-Dclbenz	1.5077	1.4054	6.8	99	0.00
107		2,4-Dichlorobenzotrifluorid	0.6687	0.0016	99.8#	0#	0.00
108		2,5-Dichlorobenzotrifluorid	0.7829	0.0017	99.8#	0#	0.00
109		n-Butylbenzene	2.0748	2.0735	0.1	98	0.00
110	P	1,2-Dclbenz	1.3376	1.2513	6.5	97	0.00
111	P	1,2-Dibromo-3-chloropropane	0.0961	0.0790	17.8	81	0.00
112		Trielution Dichlorotoluene	1.0881	0.0031	99.7#	0#	0.00
113		1,3,5-Trichlorobenzene	1.0030	0.0026	99.7#	0#	0.00
114		Coelution Dichlorotoluene	1.1136	0.0032	99.7#	0#	0.00
115	P	1,2,4-Tcbenzene	0.8548	0.7760	9.2	91	0.00
116		Hexachlorobt	0.4106	0.3360	18.2	92	0.00
117		Naphthalen	1.4049	1.3253	5.7	88	0.00
118		1,2,3-Tclbenzene	0.6687	0.6008	10.2	91	0.00
119		2,4,5-Trichlorotoluene	0.4298	0.0057	98.7#	1#	0.00
120		2,3,6-Trichlorotoluene	0.4667	0.0072	98.5#	2#	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\122914\A5191.D Vial: 26
Acq On : 30 Dec 2014 1:08 am
Operator : F.Naegler
InstName : MSVOA10
Misc :

FD 1/6/15

Quant Time: Dec 30 09:04:57 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	1054386	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1496395	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1367148	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	765939	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.318	113	470842	50.02	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.04%				
48) surr1,1,2-dichloroetha...	4.848	65	472701	49.45	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 98.90%				
65) SURR3,Toluene-d8	7.427	98	1769340	53.73	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.46%				
70) SURR2,BFB	9.878	95	709502	51.63	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 103.26%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.190	85	459864	39.67	ug/L		99
3) Chloromethane	1.300	50	601503	47.52	ug/L		98
4) Vinyl Chloride	1.361	62	624454	50.03	ug/L		98
5) Bromomethane	1.562	94	252995	35.01	ug/L		98
6) Chloroethane	1.617	64	324947	49.53	ug/L		98
7) Freon 21	1.721	67	955498	52.43	ug/L		96
8) Trichlorofluoromethane	1.770	101	772741	50.22	ug/L		100
9) Diethyl Ether	1.934	59	341340	49.72	ug/L		96
10) Freon 123a	1.928	67	594736	53.40	ug/L		91
11) Freon 123	1.965	83	643853	52.14	ug/L		99
12) Acrolein	2.019	56	229937	449.01	ug/L		99
13) 1,1-Diclethene	2.099	96	375162	44.39	ug/L		95
14) Freon 113	2.093	101	420329	45.92	ug/L		100
15) Acetone	2.123	43	91546	51.42	ug/L		95
16) 2-Propanol	2.196	45	271693	825.62	ug/L		98
17) Iodomethane	2.215	142	490021	39.48	ug/L		99
18) Carbon Disulfide	2.276	76	1549607	56.48	ug/L		99
19) Acetonitrile	2.318	40	47769	206.00	ug/L	#	83
20) Allyl Chloride	2.355	76	226673	43.99	ug/L		94
21) Methyl Acetate	2.355	43	194414	47.04	ug/L		98
22) Methylene Chloride	2.440	84	429755	45.74	ug/L		97
23) TBA	2.501	59	439010	804.29	ug/L		94
24) Acrylonitrile	2.629	53	493616	247.27	ug/L		97
25) Methyl-t-Butyl Ether	2.660	73	1001990	44.94	ug/L		99
26) trans-1,2-Dichloroethene	2.666	96	419242	45.41	ug/L		95
28) 1,1-Diclethane	3.050	63	801941	46.39	ug/L		99
29) Vinyl Acetate	3.092	86	30700	26.42	ug/L	#	39
31) 2-Chloro-1,3-Butadiene	3.141	53	936077	64.11	ug/L		99
33) 2,2-Dichloropropane	3.678	77	534701	36.23	ug/L		97
34) cis-1,2-Dichloroethene	3.678	96	462866	45.29	ug/L		100
35) 2-Butanone	3.696	43	123161	52.67	ug/L		96
36) Propionitrile	3.769	54	164984	247.28	ug/L		96
37) Bromochloromethane	3.982	130	260901	44.45	ug/L		92
38) Methacrylonitrile	3.970	67	104926	47.76	ug/L		97
39) Tetrahydrofuran	4.056	42	67958	45.35	ug/L		99

Quantitation Report (QT Reviewed)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\122914\A5191.D Vial: 26
Acq On : 30 Dec 2014 1:08 am
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 30 09:04:57 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40)	Chloroform	4.092	83	773274	44.98	ug/L	99
41)	1,1,1-Trichloroethane	4.360	97	669345	43.48	ug/L	94
44)	Cyclohexane	4.446	41	467703	48.59	ug/L	98
46)	Carbontetrachloride	4.617	121	181236	43.85	ug/L	97
47)	1,1-Dichloropropene	4.617	75	571308	45.71	ug/L	98
49)	Benzene	4.958	78	1718447	47.89	ug/L	99
50)	1,2-Dichloroethane	4.982	62	573139	46.55	ug/L	97
51)	Iso-Butyl Alcohol	4.848	43	183433	855.78	ug/L	95
52)	n-Heptane	5.452	43	444588	41.61	ug/L	99
54)	Trichloroethene	5.964	130	498922	50.79	ug/L	97
55)	Methylcyclohexane	6.214	55	541865	45.60	ug/L	98
56)	1,2-Diclpropane	6.256	63	467770	49.50	ug/L	97
57)	Dibromomethane	6.403	93	232344	44.82	ug/L	99
58)	1,4-Dioxane	6.458	88	40711	753.15	ug/L	80
59)	Methyl Methacrylate	6.464	69	179226	46.68	ug/L	97
60)	Bromodichloromethane	6.616	83	561112	45.24	ug/L	99
61)	2-Nitropropane	6.890	41	112891	68.11	ug/L	98
62)	2-Chloroethylvinyl Ether	7.006	63	214874	52.45	ug/L	98
63)	cis-1,3-Dichloropropene	7.140	75	657827	44.65	ug/L	97
64)	4-Methyl-2-pentanone	7.336	43	286573	49.91	ug/L	97
66)	Toluene	7.500	91	1863447	48.86	ug/L	99
67)	trans-1,3-Dichloropropene	7.744	75	541893	44.59	ug/L	99
68)	Ethyl Methacrylate	7.872	69	391715	45.82	ug/L	99
69)	1,1,2-Trichloroethane	7.921	97	318270	45.76	ug/L	94
72)	Tetrachloroethene	8.055	164	370186	45.05	ug/L	97
73)	2-Hexanone	8.195	43	200775	51.70	ug/L	99
74)	1,3-Dichloropropane	8.085	76	537064	46.70	ug/L	95
75)	Dibromochloromethane	8.299	129	401158	46.01	ug/L	99
76)	N-Butyl Acetate	8.335	43	491536	47.32	ug/L	99
77)	1,2-Dibromoethane	8.396	107	317472	47.05	ug/L	97
79)	Chlorobenzene	8.866	112	1237979	47.88	ug/L	100
81)	1,1,1,2-Tetrachloroethane	8.945	131	424413	44.63	ug/L	97
82)	Ethylbenzene	8.975	106	635491	46.29	ug/L	98
83)	(m+p)Xylene	9.085	106	1614581	100.57	ug/L	93
84)	o-Xylene	9.433	106	791095	47.15	ug/L	95
85)	Styrene	9.445	104	1351556	50.35	ug/L	99
86)	Bromoform	9.597	173	231678	45.99	ug/L	100
88)	Isopropylbenzene	9.756	105	1965701	50.97	ug/L	98
89)	Cyclohexanone	9.823	55	650352	2044.64	ug/L	100
90)	trans-1,4-Dichloro-2-B...	10.054	53	97167	43.15	ug/L	98
92)	1,1,2,2-Tetrachloroethane	10.006	83	339626	39.75	ug/L	100
93)	Bromobenzene	10.000	156	531723	44.72	ug/L	99
94)	1,2,3-Trichloropropane	10.036	110	95727	42.53	ug/L	98
95)	n-Propylbenzene	10.103	91	2378873	51.21	ug/L	98
96)	2-Chlorotoluene	10.164	91	1446787	47.57	ug/L	99
98)	4-Chlorotoluene	10.256	91	1773310	49.28	ug/L	100
99)	1,3,5-Trimethylbenzene	10.250	105	1685403	49.11	ug/L	100
100)	tert-Butylbenzene	10.518	119	1390979	47.88	ug/L	99
101)	1,2,4-Trimethylbenzene	10.554	105	1721827	48.63	ug/L	99
103)	sec-Butylbenzene	10.695	105	1968901	50.04	ug/L	100
104)	p-Isopropyltoluene	10.817	119	1710628	49.89	ug/L	98
105)	1,3-Dclbenz	10.780	146	1032668	46.04	ug/L	97

W121514.M Tue Dec 30 09:05:18 2014 MSVO10 Page: 2

Sample
Data File : I:\ACQUDATA\msvoa10\data\122914\A5191.D Vial: 26
Acq On : 30 Dec 2014 1:08 am
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 30 09:04:57 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

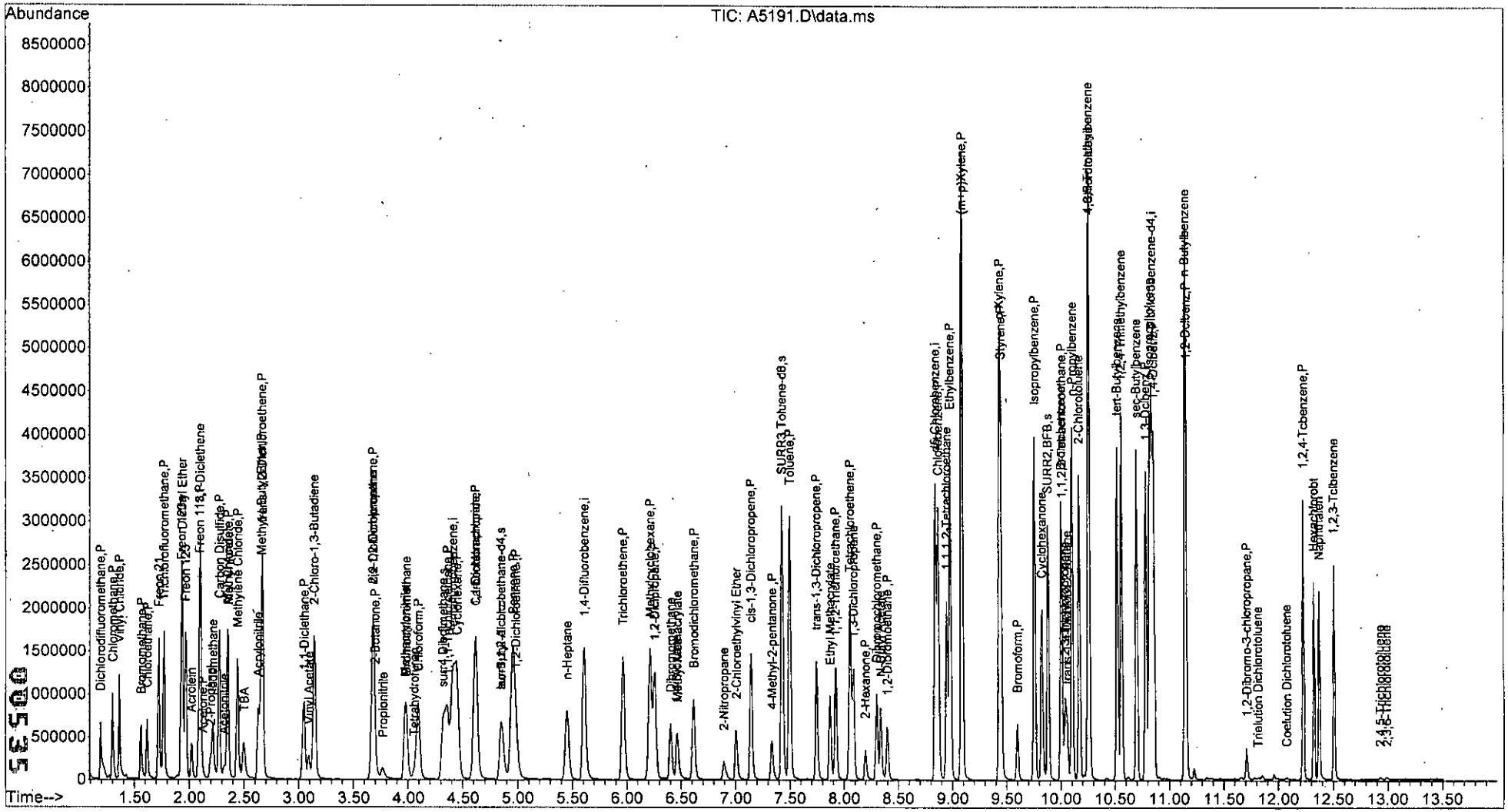
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106)	1,4-Dclbenz	10.853	146	1076461	46.61	ug/L	97
109)	n-Butylbenzene	11.140	91	1588181	49.97	ug/L	98
110)	1,2-Dclbenz	11.152	146	958412	46.77	ug/L	99
111)	1,2-Dibromo-3-chloropr...	11.707	157	60499	41.08	ug/L	92
112)	Trielution Dichlorotol...	11.810	125	7109	0.43	ug/L	83
114)	Coelution Dichlorotoluene	12.072	125	4890	0.29	ug/L	88
115)	1,2,4-Tcbenzene	12.225	180	594367	45.39	ug/L	99
116)	Hexachlorobt	12.322	225	257372	40.92	ug/L	97
117)	Naphthalen	12.371	128	1015068	47.16	ug/L	99
118)	1,2,3-Tclbenzene	12.505	180	460141	44.92	ug/L	100
119)	2,4,5-Trichlorotoluene	12.926	159	4353	0.66	ug/L	90
120)	2,3,6-Trichlorotoluene	12.987	159	5487	0.77	ug/L	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\122914\A5191.D Vial: 26
Acq On : 30 Dec 2014 1:08 am
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 30 09:04:57 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



W121514.M Tue Dec 30 09:05:20 2014 MSVO10

Page: 4

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410303
Date Analyzed: 12/31/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\msvoa10\data\123114\A5260.D\

Calibration Date: 12/15/14
Calibration ID: RC1400112
Analysis Lot: 427678
Units: µg/L

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	43.9	0.3478	0.3053	-12.2	NA	± 20 %	Average RF
1,1,1-Trichloroethane (TCA)	50.0	41.0	0.7301	0.5988	-18.0	NA	± 20 %	Average RF
1,1,2,2-Tetrachloroethane	50.0	44.8	0.5578	0.5000	-10.4	NA	± 20 %	Average RF
1,1,2-Trichloroethane	50.0	45.1	0.2324	0.2095	-9.8	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	45.4	0.8198	0.7444	-9.2	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	43.0	0.4008	0.3447	-14.0	NA	± 20 %	Average RF
1,1-Dichloropropene	50.0	43.1	0.4176	0.3597	-13.9	NA	± 20 %	Average RF
1,2,3-Trichlorobenzene	50.0	46.4	0.6687	0.6204	-7.2	NA	± 20 %	Average RF
1,2,3-Trichloropropane	50.0	43.0	0.1469	0.1265	-13.9	NA	± 20 %	Average RF
1,2,4-Trichlorobenzene	50.0	48.0	0.8548	0.8205	-4.0	NA	± 20 %	Average RF
1,2,4-Trimethylbenzene	50.0	47.5	2.311	2.197	-5.0	NA	± 20 %	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	41.4	0.09613	0.07954	-17.3	NA	± 20 %	Average RF
1,2-Dibromoethane	50.0	45.3	0.2468	0.2236	-9.4	NA	± 20 %	Average RF
1,2-Dichlorobenzene	50.0	46.4	1.338	1.241	-7.2	NA	± 20 %	Average RF
1,2-Dichloroethane	50.0	46.0	0.4114	0.3782	-8.1	NA	± 20 %	Average RF
1,2-Dichloropropane	50.0	48.1	0.3157	0.3035	-3.9	NA	± 20 %	Average RF
1,3,5-Trimethylbenzene	50.0	47.6	2.240	2.131	-4.9	NA	± 20 %	Average RF
1,3-Dichlorobenzene	50.0	45.4	1.464	1.329	-9.2	NA	± 20 %	Average RF
1,3-Dichloropropane	50.0	45.4	0.4206	0.3820	-9.2	NA	± 20 %	Average RF
1,4-Dichlorobenzene	50.0	45.2	1.508	1.364	-9.5	NA	± 20 %	Average RF
2,2-Dichloropropane	50.0	42.2	0.6999	0.5904	-15.6	NA	± 20 %	Average RF
2-Butanone (MEK)	50.0	49.9	0.1109	0.1107	-0.2	NA	± 20 %	Average RF
2-Chlorotoluene	50.0	46.1	1.985	1.831	-7.8	NA	± 20 %	Average RF
2-Hexanone	50.0	45.3	0.1420	0.1286	-9.5	NA	± 20 %	Average RF
tert-Butyl Alcohol	1000	866	0.02588	0.02240	-13.5	NA	± 20 %	Average RF
4-Chlorotoluene	50.0	48.0	2.349	2.256	-4.0	NA	± 20 %	Average RF
p-Isopropyltoluene	50.0	48.2	2.238	2.156	-3.7	NA	± 20 %	Average RF
4-Methyl-2-pentanone	50.0	46.7	0.1918	0.1792	-6.6	NA	± 20 %	Average RF
Acetone	50.0	44.7	0.08442	0.07546	-10.6	NA	± 20 %	Average RF
Benzene	50.0	45.5	1.199	1.091	-9.0	NA	± 20 %	Average RF
Bromobenzene	50.0	43.3	0.7763	0.6723	-13.4	NA	± 20 %	Average RF
Bromochloromethane	50.0	44.8	0.2783	0.2492	-10.5	NA	± 20 %	Average RF
Bromodichloromethane	50.0	44.9	0.4144	0.3723	-10.2	NA	± 20 %	Average RF
Bromoform	50.0	43.5	0.1843	0.1601	-13.1	NA	± 20 %	Average RF
Bromomethane	50.0	30.8	0.3427	0.2109	-38.4 *	NA	± 20 %	Average RF
Carbon Tetrachloride	50.0	40.1	0.1381	0.1108	-19.8	NA	± 20 %	Average RF
Chlorobenzene	50.0	46.7	0.9456	0.8825	-6.7	NA	± 20 %	Average RF
Chloroethane	50.0	48.8	0.3111	0.3038	-2.3	NA	± 20 %	Average RF
Chloroform	50.0	44.5	0.8153	0.7253	-11.0	NA	± 20 %	Average RF
Chloromethane	50.0	45.7	0.6002	0.5483	-8.6	NA	± 20 %	Average RF
Dibromochloromethane	50.0	43.4	0.3189	0.2766	-13.3	NA	± 20 %	Average RF

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410303
Date Analyzed: 12/31/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\msvoa10\data\123114\A5260.D\

Calibration Date: 12/15/14
Calibration ID: RC1400112
Analysis Lot: 427678
Units: µg/L

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane (CFC 12)	50.0	37.2	0.5497	0.4090	-25.6 *	NA	± 20 %	Average RF
Methylene Chloride	50.0	44.8	0.4455	0.3988	-10.5	NA	± 20 %	Average RF
Ethylbenzene	50.0	43.5	0.5021	0.4371	-12.9	NA	± 20 %	Average RF
Hexachlorobutadiene	50.0	42.6	0.4106	0.3494	-14.9	NA	± 20 %	Average RF
Isopropylbenzene (Cumene)	50.0	47.3	1.410	1.333	-5.5	NA	± 20 %	Average RF
Methyl tert-Butyl Ether	50.0	45.4	1.057	0.9602	-9.2	NA	± 20 %	Average RF
Naphthalene	50.0	49.6	1.405	1.393	-0.9	NA	± 20 %	Average RF
Styrene	50.0	48.0	0.9818	0.9428	-4.0	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	41.3	0.3005	0.2483	-17.4	NA	± 20 %	Average RF
Toluene	50.0	46.4	1.274	1.184	-7.1	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	43.2	0.3282	0.2838	-13.5	NA	± 20 %	Average RF
Trichlorofluoromethane (CFC 11)	50.0	47.7	0.7297	0.6957	-4.7	NA	± 20 %	Average RF
Vinyl Chloride	50.0	47.6	0.5919	0.5639	-4.7	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	44.6	0.4846	0.4323	-10.8	NA	± 20 %	Average RF
cis-1,3-Dichloropropene	50.0	44.6	0.4923	0.4394	-10.7	NA	± 20 %	Average RF
m,p-Xylenes	100	93.3	0.5871	0.5477	-6.7	NA	± 20 %	Average RF
n-Butylbenzene	50.0	49.2	2.075	2.040	-1.7	NA	± 20 %	Average RF
n-Propylbenzene	50.0	49.7	3.032	3.013	-0.6	NA	± 20 %	Average RF
o-Xylene	50.0	44.2	0.6136	0.5421	-11.6	NA	± 20 %	Average RF
sec-Butylbenzene	50.0	48.1	2.568	2.473	-3.7	NA	± 20 %	Average RF
tert-Butylbenzene	50.0	45.1	1.896	1.711	-9.8	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	44.2	0.4378	0.3869	-11.6	NA	± 20 %	Average RF
trans-1,3-Dichloropropene	50.0	45.1	0.4061	0.3662	-9.8	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	50.6	0.4592	0.4646	1.2	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	50.2	0.3145	0.3161	0.5	NA	± 20 %	Average RF
Toluene-d8	50.0	54.5	1.100	1.198	8.9	NA	± 20 %	Average RF

Evaluate Continuing Calibration Report

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\123114\A5260.D Vial: 2
Acq On : 31 Dec 2014 11:21 am
Operator : F.Naegler
InstName : MSVOA10
Misc :

FD 12/31/14

Quant Time: Dec 31 11:35:09 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	
1	i	Pentafluorobenzene	1.0000	1.0000	0.0	105	0.00	
2	P	Dichlorodifluoromethane	0.5497	0.4090	25.6#	72	0.00	(1)
3	P	Chloromethane	0.6002	0.5483	8.6	91	0.00	
4	P	Vinyl Chloride	0.5919	0.5639	4.7	94	0.00	
5	P	Bromomethane	0.3427	0.2109	38.5#	71	0.00	(2)
6	P	Chloroethane	0.3111	0.3038	2.3	104	0.00	
7		Freon 21	0.8641	0.8678	-0.4	117	0.00	
8	P	Trichlorofluoromethane	0.7297	0.6957	4.7	93	0.00	
9		Diethyl Ether	0.3255	0.3343	-2.7	106	0.00	
10		Freon 123a	0.5282	0.5365	-1.6	120	0.00	
11		Freon 123	0.5856	0.5815	0.7	117	0.00	
12		Acrolein	0.0285	0.0479	~~-100.8~~ ~~-68.1#~~	187	0.00	NT
13		1,1-Diclethene	0.4008	0.3447	14.0	93	0.00	
14	P	Freon 113	0.4341	0.3685	15.1	88	0.00	
15	P	Acetone	0.0844	0.0755	10.5	87	0.00	
16		2-Propanol	0.0156	0.0135	13.5	83	0.00	
17		Iodomethane	0.5885	0.3595	38.9#	59	0.00	NT
18	P	Carbon Disulfide	1.3011	1.2758	1.9	104	0.00	
19		Acetonitrile	0.0110	0.0135	-22.7#	114	0.00	NT
20		Allyl Chloride	0.2443	0.2146	12.2	90	0.00	
21	P	Methyl Acetate	0.1960	0.1913	2.4	97	0.00	
22	P	Methylene Chloride	0.4455	0.3988	10.5	94	0.00	
23		TBA	0.0259	0.0224	13.5	81	0.00	
24		Acrylonitrile	0.0947	0.0968	-2.2	96	0.00	
25	P	Methyl-t-Butyl Ether	1.0573	0.9602	9.2	91	0.00	
26	P	trans-1,2-Dichloroethene	0.4378	0.3869	11.6	92	0.00	
27		Halothane	0.0000	0.0000	0.0	0#	-3.03#	
28	P	1,1-Diclethane	0.8198	0.7444	9.2	93	0.00	
29		Vinyl Acetate	0.0551	0.0554	-0.5	97	0.00	
30		DIPE	1.5080	1.5741	-4.4	106	0.00	
31		2-Chloro-1,3-Butadiene	0.6924	0.7794	-12.6	119	0.00	
32		ETBE	1.3716	1.3029	5.0	96	0.00	
33		2,2-Dichloropropane	0.6999	0.5904	15.6	86	0.00	
34	P	cis-1,2-Dichloroethene	0.4846	0.4323	10.8	91	0.00	
35	P	2-Butanone	0.1109	0.1107	0.2	94	0.00	
36		Propionitrile	0.0316	0.0312	1.3	91	0.00	
37		Bromochloromethane	0.2783	0.2492	10.5	91	0.00	
38		Methacrylonitrile	0.1042	0.1052	-1.0	93	0.00	
39		Tetrahydrofuran	0.0711	0.0657	7.6	92	0.00	
40	P	Chloroform	0.8153	0.7253	11.0	92	0.00	
41	P	1,1,1-Trichloroethane	0.7301	0.5988	18.0	85	0.00	
42		TAME	1.0961	0.9974	9.0	90	0.00	
43	i	1,4-Difluorobenzene	1.0000	1.0000	0.0	105	0.00	
44	P	Cyclohexane	0.3216	0.2974	7.5	110	0.00	
45	s	surr4,Dibrflmethane	0.3145	0.3161	-0.5	103	0.00	
46	P	Carbontetrachloride	0.1381	0.1108	19.8	83	0.00	
47		1,1-Dichloropropene	0.4176	0.3597	13.9	89	0.00	

W121514.M Wed Dec 31 12:09:04 2014 MSVO10

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\123114\A5260.D Vial: 2
Acq On : 31 Dec 2014 11:21 am
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 31 11:35:09 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	
48	s	surr1,1,2-dichloroethane-d4	0.3194	0.3203	-0.3	103	0.00	
49	P	Benzene	1.1990	1.0909	9.0	91	0.00	
50	P	1,2-Dichloroethane	0.4114	0.3782	8.1	93	0.00	
51		Iso-Butyl Alcohol	0.0072	0.0064	11.1	82	0.00	
52		n-Heptane	0.3570	0.3135	12.2	93	0.00	
53		1-Butanol	0.0038	0.0034	16.0 ~~10.5~~	79	0.00	
54	P	Trichloroethene	0.3282	0.2838	13.5	86	0.00	
55	P	Methylcyclohexane	0.3971	0.3514	11.5	109	0.00	
56	P	1,2-Diclpropane	0.3157	0.3035	3.9	97	0.00	
57		Dibromomethane	0.1732	0.1544	10.9	92	0.00	
58		1,4-Dioxane	0.0018	0.0016	11.1	83	0.00	
59		Methyl Methacrylate	0.1283	0.1227	4.4	92	0.00	
60	P	Bromodichloromethane	0.4144	0.3723	10.2	90	0.00	
61		2-Nitropropane	0.0554	0.0386	30.3#	69	0.00	NT
62		2-Chloroethylvinyl Ether	0.1369	0.1375	-0.4	99	0.00	
63	P	cis-1,3-Dichloropropene	0.4923	0.4394	10.7	89	0.00	
64	P	4-Methyl-2-pentanone	0.1918	0.1792	6.6	91	0.00	
65	s	SURR3,Toluene-d8	1.1004	1.1983	-8.9	106	0.00	
66	P	Toluene	1.2743	1.1837	7.1	91	0.00	
67	P	trans-1,3-Dichloropropene	0.4061	0.3662	9.8	87	0.00	
68		Ethyl Methacrylate	0.2857	0.2599	9.0	88	0.00	
69	P	1,1,2-Trichloroethane	0.2324	0.2095	9.9	90	0.00	
70	s	SURR2,BFB	0.4592	0.4646	-1.2	100	0.00	
71	i	d5-Chlorobenzene	1.0000	1.0000	0.0	105	0.00	
72	P	Tetrachloroethene	0.3005	0.2483	17.4	85	0.00	
73	P	2-Hexanone	0.1420	0.1286	9.4	84	0.00	
74		1,3-Dichloropropane	0.4206	0.3820	9.2	92	0.00	
75	P	Dibromochloromethane	0.3189	0.2766	13.3	86	0.00	
76		N-Butyl Acetate	0.3799	0.3505	7.7	90	0.00	
77	P	1,2-Dibromoethane	0.2468	0.2236	9.4	89	0.00	
78		3-Chlorobenzotrifluoride	0.5313	0.5112	3.8	98	0.00	
79	P	Chlorobenzene	0.9456	0.8825	6.7	92	0.00	
80		4-Chlorobenzotrifluoride	0.4896	0.4665	4.7	98	0.00	
81		1,1,1,2-Tetrachloroethane	0.3478	0.3053	12.2	89	0.00	
82	P	Ethylbenzene	0.5021	0.4371	12.9	90	0.00	
83	P	(m+p)Xylene	0.5871	0.5477	6.7	89	0.00	
84	P	o-Xylene	0.6136	0.5421	11.7	90	0.00	
85	P	Styrene	0.9818	0.9428	4.0	90	0.00	
86	P	Bromoform	0.1843	0.1601	13.1	82	0.00	
87		2-Chlorobenzotrifluoride	0.5311	0.4963	6.6	96	0.00	
88	P	Isopropylbenzene	1.4104	1.3330	5.5	87	0.00	
89		Cyclohexanone	0.0116	0.0198	-70.7#	174	0.00	NT
90		trans-1,4-Dichloro-2-Butene	0.0824	0.0724	12.1	81	0.00	
91	i	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	104	0.00	
92	P	1,1,2,2-Tetrachloroethane	0.5578	0.5000	10.4	92	0.00	
93		Bromobenzene	0.7763	0.6723	13.4	90	0.00	

Evaluate Continuing Calibration Report

Sample CCV
Data File : I:\ACQUDATA\msvoa10\data\123114\A5260.D Vial: 2
Acq On : 31 Dec 2014 11:21 am
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 31 11:35:09 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
94		1,2,3-Trichloropropane	0.1469	0.1265	13.9	92	0.00
95		n-Propylbenzene	3.0323	3.0131	0.6	92	0.00
96		2-Chlorotoluene	1.9853	1.8305	7.8	91	0.00
97		3-Chlorotoluene	1.9831	2.0341	-2.6	100	0.00
98		4-Chlorotoluene	2.3489	2.2559	4.0	93	0.00
99		1,3,5-Trimethylbenzene	2.2404	2.1314	4.9	90	0.00
100		tert-Butylbenzene	1.8965	1.7113	9.8	87	0.00
101		1,2,4-Trimethylbenzene	2.3114	2.1966	5.0	91	0.00
102		3,4-Dichlorobenzotrifluorid	0.7517	0.7168	4.6	100	0.00
103		sec-Butylbenzene	2.5684	2.4730	3.7	88	0.00
104		p-Isopropyltoluene	2.2384	2.1564	3.7	89	0.00
105	P	1,3-Dclbenz	1.4643	1.3294	9.2	91	0.00
106	P	1,4-Dclbenz	1.5077	1.3642	9.5	92	0.00
107		2,4-Dichlorobenzotrifluorid	0.6687	0.6550	2.0	101	0.00
108		2,5-Dichlorobenzotrifluorid	0.7829	0.7420	5.2	99	0.00
109		n-Butylbenzene	2.0748	2.0397	1.7	92	0.00
110	P	1,2-Dclbenz	1.3376	1.2410	7.2	92	0.00
111	P	1,2-Dibromo-3-chloropropane	0.0961	0.0795	17.3	78	0.00
112		Trielution Dichlorotoluene	1.0881	1.1551	-6.2	99	0.00
113		1,3,5-Trichlorobenzene	1.0030	0.9909	1.2	100	0.00
114		Coelution Dichlorotoluene	1.1136	1.2153	-9.1	100	0.00
115	P	1,2,4-Tcbenzene	0.8548	0.8205	4.0	92	0.00
116		Hexachlorobt	0.4106	0.3494	14.9	91	0.00
117		Naphthalen	1.4049	1.3927	0.9	89	0.00
118		1,2,3-Tclbenzene	0.6687	0.6204	7.2	90	0.00
119		2,4,5-Trichlorotoluene	0.4298	0.4264	0.8	95	0.00
120		2,3,6-Trichlorotoluene	0.4667	0.4467	4.3	97	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Sample CCV
Data File : I:\ACQUDATA\msvoa10\data\123114\A5260.D Vial: 2
Acq On : 31 Dec 2014 11:21 am
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 31 11:35:09 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

FJ 12/31/14

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	1009712	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1462734	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1334757	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	732862	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.318	113	462310	50.24	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.48%				
48) surr1,1,2-dichloroetha...	4.854	65	468522	50.14	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 100.28%				
65) SURR3,Toluene-d8	7.427	98	1752823	54.45	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 108.90%				
70) SURR2,BFB	9.878	95	679556	50.59	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.18%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.191	85	413015	37.20	ug/L		98
3) Chloromethane	1.300	50	553668	45.68	ug/L		100
4) Vinyl Chloride	1.361	62	569421	47.64	ug/L		97
5) Bromomethane	1.556	94	212993	30.78	ug/L		100
6) Chloroethane	1.617	64	306791	48.83	ug/L		97
7) Freon 21	1.721	67	876271	50.21	ug/L		98
8) Trichlorofluoromethane	1.770	101	702408	47.67	ug/L		98
9) Diethyl Ether	1.934	59	337587	51.35	ug/L		95
10) Freon 123a	1.928	67	541712	50.79	ug/L		90
11) Freon 123	1.965	83	587166	49.65	ug/L		98
12) Acrolein	2.020	56	242071	502.01	ug/L		99
13) 1,1-Diclethene	2.099	96	348021	43.00	ug/L		96
14) Freon 113	2.093	101	372033	42.44	ug/L		98
15) Acetone	2.123	43	76192	44.69	ug/L		97
16) 2-Propanol	2.196	45	272024	863.20	ug/L		98
17) Iodomethane	2.215	142	363021	30.54	ug/L		98
18) Carbon Disulfide	2.276	76	1288149	49.03	ug/L		100
19) Acetonitrile	2.318	40	68351	307.80	ug/L		94
20) Allyl Chloride	2.349	76	216640	43.91	ug/L		92
21) Methyl Acetate	2.355	43	193143	48.80	ug/L		97
22) Methylene Chloride	2.440	84	402717	44.76	ug/L		97
23) TBA	2.501	59	452406	865.50	ug/L		93
24) Acrylonitrile	2.629	53	488510	255.54	ug/L		99
25) Methyl-t-Butyl Ether	2.660	73	969531	45.41	ug/L		98
26) trans-1,2-Dichloroethene	2.666	96	390687	44.19	ug/L		96
28) 1,1-Diclethane	3.044	63	751668	45.40	ug/L		99
29) Vinyl Acetate	3.093	86	55940	50.26	ug/L	#	53
30) DIPE	3.105	45	1589415	52.19	ug/L		95
31) 2-Chloro-1,3-Butadiene	3.141	53	786965	56.28	ug/L		100
32) ETBE	3.501	59	1315524	47.50	ug/L		98
33) 2,2-Dichloropropane	3.678	77	596130	42.18	ug/L		97
34) cis-1,2-Dichloroethene	3.678	96	436531	44.61	ug/L		98
35) 2-Butanone	3.702	43	111774	49.91	ug/L		98
36) Propionitrile	3.763	54	157291	246.18	ug/L		98
37) Bromochloromethane	3.977	130	251653	44.77	ug/L		89

W121514.M Wed Dec 31 12:08:57 2014 MSVO10 Page: 1

Quantitation Report (QT Reviewed)

Sample
Data File : I:\ACQUDATA\msvoa10\data\123114\A5260.D Vial: 2
Acq On : 31 Dec 2014 11:21 am
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 31 11:35:09 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.970	67	106198	50.48	ug/L		96
39) Tetrahydrofuran	4.056	42	66379	46.26	ug/L		100
40) Chloroform	4.092	83	732300	44.48	ug/L		98
41) 1,1,1-Trichloroethane	4.361	97	604613	41.01	ug/L		94
42) TAME	5.184	73	1007062	45.50	ug/L		98
44) Cyclohexane	4.440	41	434954	46.22	ug/L		99
46) Carbontetrachloride	4.617	121	162042	40.11	ug/L		96
47) 1,1-Dichloropropene	4.617	75	526103	43.06	ug/L		97
49) Benzene	4.958	78	1595687	45.49	ug/L		99
50) 1,2-Dichloroethane	4.982	62	553264	45.97	ug/L		97
51) Iso-Butyl Alcohol	4.848	43	186050	887.96	ug/L		85
52) n-Heptane	5.452	43	458587	43.91	ug/L		98
53) 1-Butanol	5.946	56	250422	2099.68	ug/L		97
54) Trichloroethene	5.964	130	415186	43.24	ug/L		97
55) Methylcyclohexane	6.214	55	514034	44.25	ug/L		98
56) 1,2-Diclpropane	6.251	63	443933	48.06	ug/L		99
57) Dibromomethane	6.403	93	225903	44.58	ug/L		99
58) 1,4-Dioxane	6.452	88	46733	884.45	ug/L		99
59) Methyl Methacrylate	6.464	69	179415	47.81	ug/L		99
60) Bromodichloromethane	6.610	83	544604	44.92	ug/L		99
61) 2-Nitropropane	6.891	41	113040	69.76	ug/L		98
62) 2-Chloroethylvinyl Ether	7.006	63	201135	50.23	ug/L		93
63) cis-1,3-Dichloropropene	7.141	75	642797	44.63	ug/L		97
64) 4-Methyl-2-pentanone	7.336	43	262094	46.70	ug/L		99
66) Toluene	7.494	91	1731413	46.44	ug/L		99
67) trans-1,3-Dichloropropene	7.744	75	535657	45.09	ug/L		99
68) Ethyl Methacrylate	7.866	69	380157	45.49	ug/L		94
69) 1,1,2-Trichloroethane	7.921	97	306474	45.08	ug/L		98
72) Tetrachloroethene	8.055	164	331430	41.31	ug/L		98
73) 2-Hexanone	8.195	43	171619	45.26	ug/L		97
74) 1,3-Dichloropropane	8.086	76	509925	45.42	ug/L		98
75) Dibromochloromethane	8.299	129	369162	43.37	ug/L		99
76) N-Butyl Acetate	8.335	43	467840	46.13	ug/L		98
77) 1,2-Dibromoethane	8.396	107	298517	45.32	ug/L		98
78) 3-Chlorobenzotrifluoride	8.872	180	682371	48.11	ug/L		97
79) Chlorobenzene	8.866	112	1177935	46.66	ug/L		99
80) 4-Chlorobenzotrifluoride	8.927	180	622600	47.63	ug/L		98
81) 1,1,1,2-Tetrachloroethane	8.945	131	407528	43.90	ug/L		97
82) Ethylbenzene	8.976	106	583432	43.53	ug/L		97
83) (m+p)Xylene	9.085	106	1462220	93.29	ug/L	#	87
84) o-Xylene	9.433	106	723627	44.18	ug/L		98
85) Styrene	9.445	104	1258466	48.02	ug/L		99
86) Bromoform	9.597	173	213761	43.46	ug/L		95
87) 2-Chlorobenzotrifluoride	9.664	180	662407	46.72	ug/L		96
88) Isopropylbenzene	9.756	105	1779183	47.26	ug/L		99
89) Cyclohexanone	9.823	55	528630	1702.29	ug/L		97
90) trans-1,4-Dichloro-2-B...	10.055	53	96693	43.98	ug/L		92
92) 1,1,2,2-Tetrachloroethane	10.006	83	366399	44.82	ug/L		99
93) Bromobenzene	10.000	156	492735	43.31	ug/L		99
94) 1,2,3-Trichloropropane	10.036	110	92710	43.04	ug/L		99
95) n-Propylbenzene	10.103	91	2208174	49.68	ug/L		98
96) 2-Chlorotoluene	10.164	91	1341514	46.10	ug/L		98

W121514.M Wed Dec 31 12:08:57 2014 MSVO10

Quantitation Report (QT Reviewed)

Sample CCV
Data File : I:\ACQUDATA\msvoa10\data\123114\A5260.D Vial: 2
Acq On : 31 Dec 2014 11:21 am
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 31 11:35:09 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

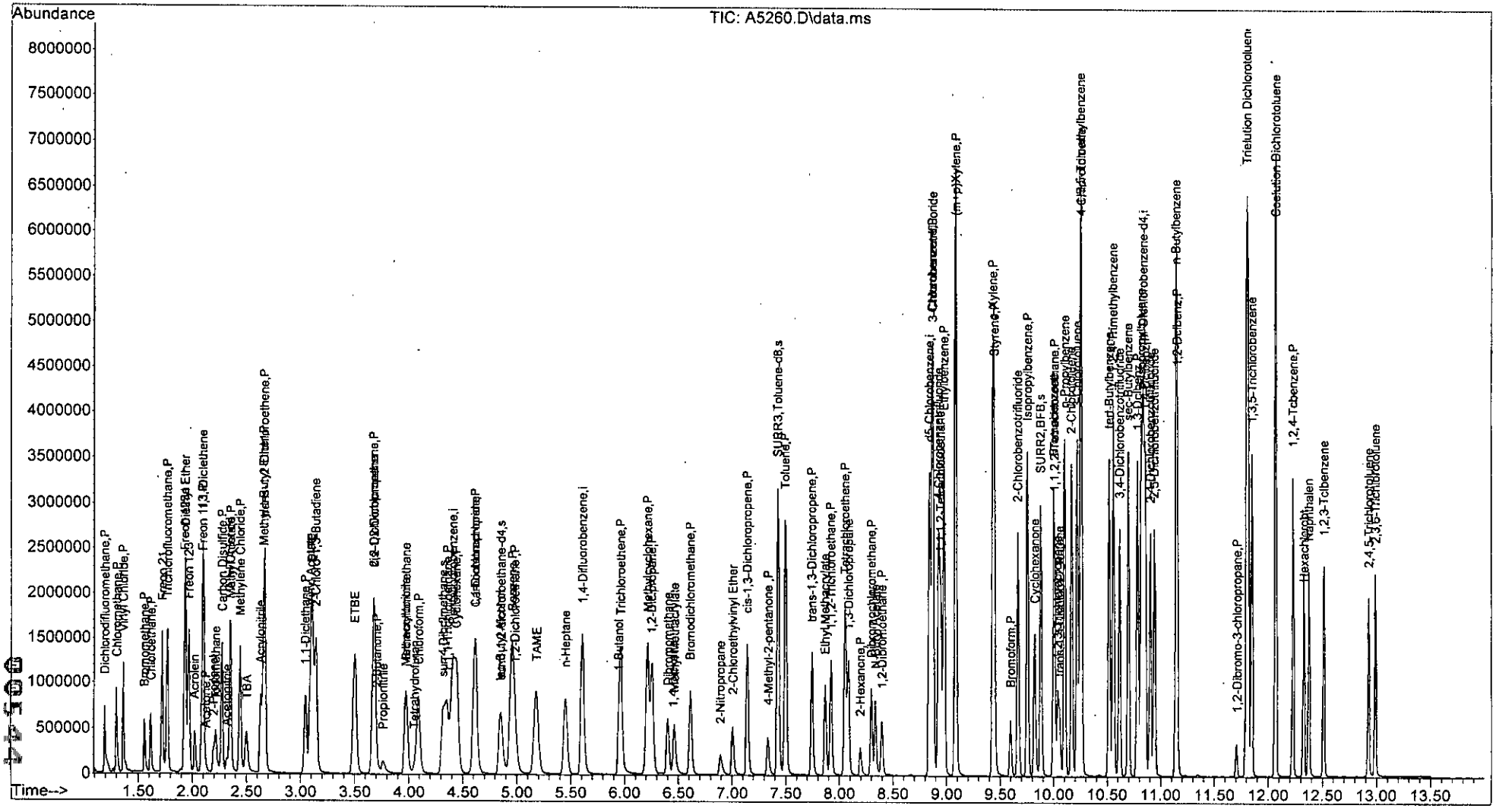
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	1490721	51.29	ug/L	98
98)	4-Chlorotoluene	10.256	91	1653270	48.02	ug/L	98
99)	1,3,5-Trimethylbenzene	10.250	105	1562015	47.57	ug/L	99
100)	tert-Butylbenzene	10.518	119	1254142	45.12	ug/L	99
101)	1,2,4-Trimethylbenzene	10.555	105	1609781	47.52	ug/L	99
102)	3,4-Dichlorobenzotrifl...	10.616	214	525289	47.68	ug/L	98
103)	sec-Butylbenzene	10.695	105	1812365	48.14	ug/L	99
104)	p-Isopropyltoluene	10.817	119	1580317	48.17	ug/L	99
105)	1,3-Dclbenz	10.780	146	974268	45.39	ug/L	97
106)	1,4-Dclbenz	10.853	146	999773	45.24	ug/L	97
107)	2,4-Dichlorobenzotrifl...	10.902	214	480000	48.97	ug/L	99
108)	2,5-Dichlorobenzotrifl...	10.939	214	543758	47.38	ug/L	96
109)	n-Butylbenzene	11.140	91	1494842	49.16	ug/L	98
110)	1,2-Dclbenz	11.152	146	909449	46.39	ug/L	98
111)	1,2-Dibromo-3-chloropr...	11.707	157	58294	41.37	ug/L	98
112)	Trielution Dichlorotol...	11.798	125	2539488	159.23	ug/L	99
113)	1,3,5-Trichlorobenzene	11.847	180	726195	49.40	ug/L	99
114)	Coelution Dichlorotoluene	12.066	125	1781296	109.13	ug/L	98
115)	1,2,4-Tcbenzene	12.225	180	601296	47.99	ug/L	99
116)	Hexachlorobt	12.329	225	256064	42.55	ug/L	99
117)	Naphthalen	12.371	128	1020643	49.56	ug/L	100
118)	1,2,3-Tclbenzene	12.512	180	454678	46.39	ug/L	98
119)	2,4,5-Trichlorotoluene	12.926	159	312524	49.61	ug/L	99
120)	2,3,6-Trichlorotoluene	12.987	159	327342	47.86	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Sample : CCV
Data File : I:\ACQUDATA\msvoa10\data\123114\A5260.D Vial: 2
Acq On : 31 Dec 2014 11:21 am
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 31 11:35:09 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



W121514.M Wed Dec 31 12:08:59 2014 MSVO10

Page: 4

ALS Environmental

VOLATILE ORGANICS
RAW QC DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

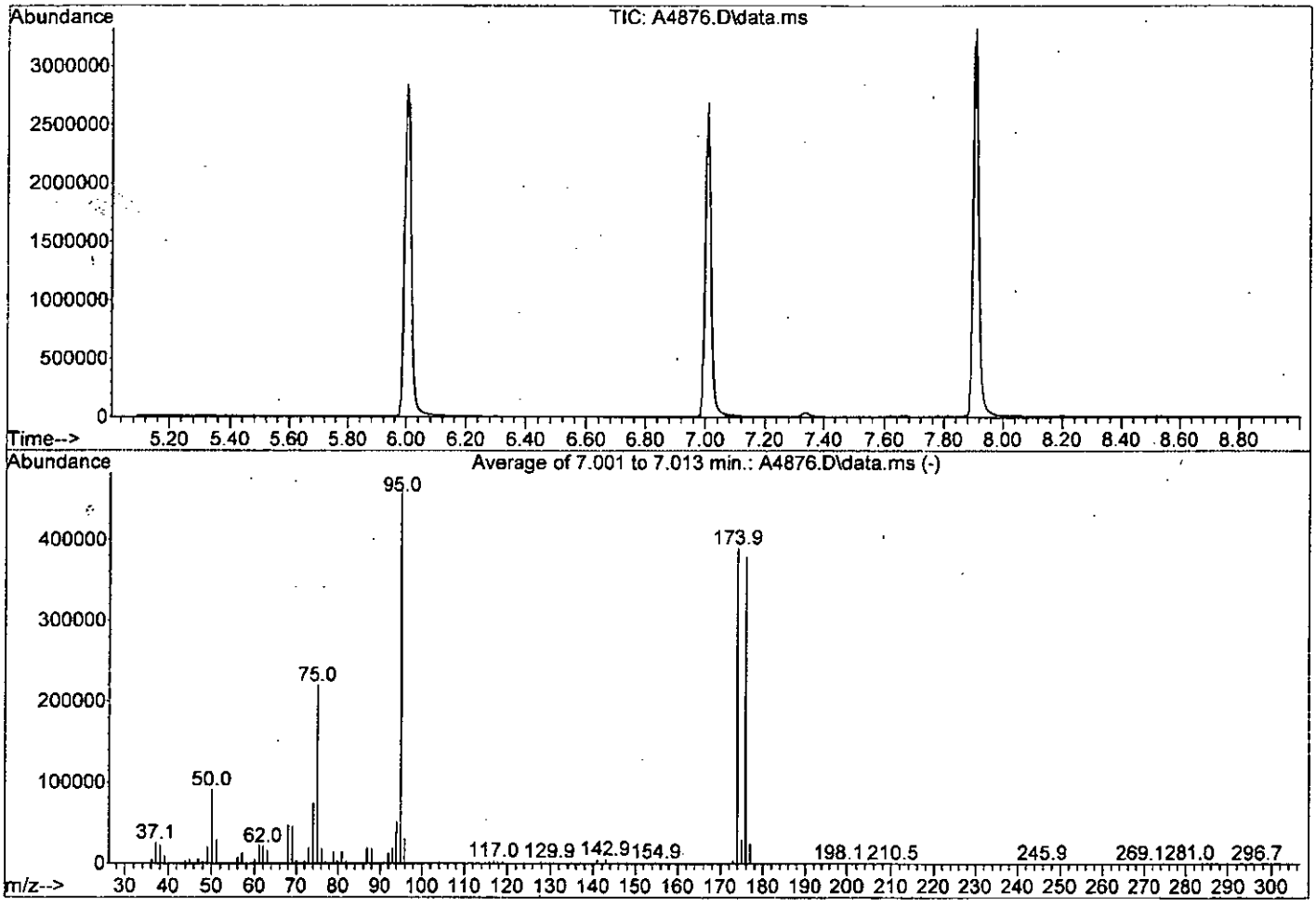
RIGHT SOLUTIONS | RIGHT PARTNER

Data Path : I:\ACQUDATA\msvoa10\data\121514\
Data File : A4876.D
Acq On : 15 Dec 2014 11:44 am
Operator : F.NAEGLER
Sample : TUNE
Misc :
ALS Vial : 1 Sample Multiplier: 1

FJ 12/16/14

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\T121514.M
Title : 8260B WATERS
Last Update : Wed Sep 27 14:33:13 2006



AutoFind: Scans 314, 315, 316; Background Corrected with Scan 309

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.6	89920	PASS
75	95	30	60	47.7	219200	PASS
95	95	100	100	100.0	459216	PASS
96	95	5	9	6.5	29821	PASS
173	174	0.00	2	1.0	3744	PASS
174	95	50	120	84.8	389291	PASS
175	174	5	9	7.5	29211	PASS
176	174	95	101	97.4	379115	PASS
177	176	5	9	6.7	25235	PASS

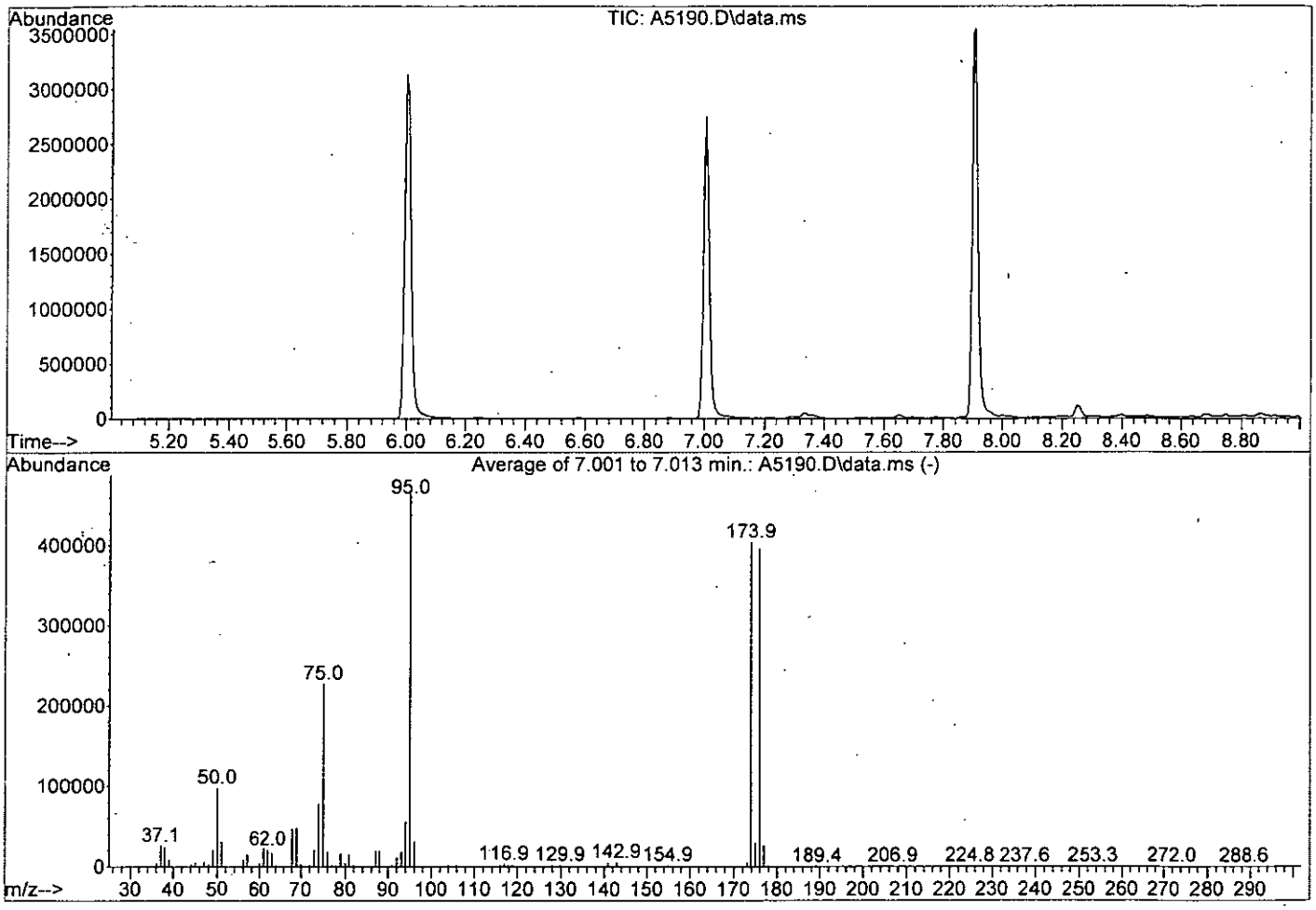
T121514.M Mon Dec 15 11:51:08 2014 MSVO10 Page: 1

Data Path : I:\ACQUDATA\MSVOA10\DATA\122914\
Data File : A5190.D
Acq On : 30 Dec 2014 12:42 am
Operator : F.Naegler
Sample : TUNE
Misc :
ALS Vial : 25 Sample Multiplier: 1

FV 1/6/15

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\T121514.M
Title : 8260B WATERS
Last Update : Wed Sep 27 14:33:13 2006



AutoFind: Scans 314, 315, 316; Background Corrected with Scan 309

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.0	97506	PASS
75	95	30	60	48.9	227157	PASS
95	95	100	100	100.0	464277	PASS
96	95	5	9	6.7	31155	PASS
173	174	0.00	2	1.2	4899	PASS
174	95	50	120	87.0	403691	PASS
175	174	5	9	7.3	29448	PASS
176	174	95	101	98.0	395541	PASS
177	176	5	9	6.7	26331	PASS

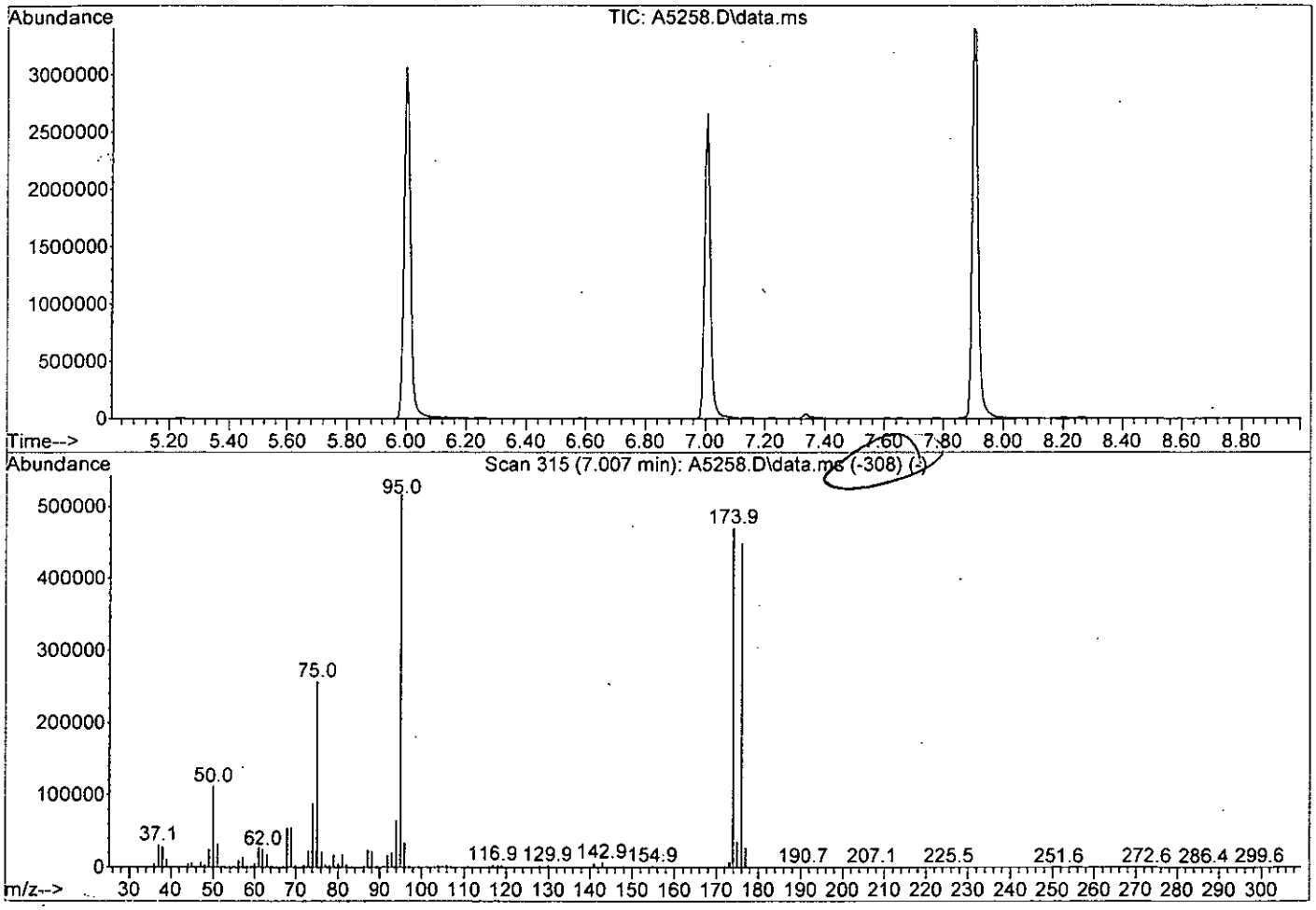
T121514.M Tue Dec 30 09:03:14 2014 MSVO10

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5258.D
Acq On : 31 Dec 2014 10:25 am
Operator : F.Naegler
Sample : TUNE
Misc :
ALS Vial : 1 Sample Multiplier: 1

FJ 12/31/14

Integration File: CPD4.P

Method : I:\ACQUDATA\MSVOA10\METHODS\T121514.M
Title : 8260B WATERS
Last Update : Wed Sep 27 14:33:13 2006



Spectrum Information: Scan 315

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.6	111631	PASS
75	95	30	60	49.7	256640	PASS
95	95	100	100	100.0	516864	PASS
96	95	5	9	6.5	33424	PASS
173	174	0.00	2	1.5	7154	PASS
174	95	50	120	90.8	469568	PASS
175	174	5	9	7.5	35112	PASS
176	174	95	101	95.5	448320	PASS
177	176	5	9	6.0	26768	PASS

T121514.M Wed Dec 31 10:35:42 2014 MSVO10

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: NA
Date Received: NA
Date Analyzed: 12/30/14 02:36

Sample Name: Method Blank
Lab Code: RQ1500158-01

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\122914\A5194.D\

Analysis Lot: 427294
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: NA
Date Received: NA
Date Analyzed: 12/30/14 02:36

Sample Name: Method Blank
Lab Code: RQ1500158-01

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\122914\A5194.D\

Analysis Lot: 427294
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/30/14 02:36
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1500158-01	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5194.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	12/30/14 02:36	
Dibromofluoromethane	100	85-115	12/30/14 02:36	
Toluene-d8	109	85-120	12/30/14 02:36	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/30/14 0236

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1500158-01	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample MBLK
Data File : I:\ACQUDATA\msvoa10\data\122914\A5194.D Vial: 29
Acq On : 30 Dec 2014 2:36 am
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Jan 06 14:28:26 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.409	168	997630	50.00	ug/L	0.00
43) 1,4-Difluorobenzene	5.610	114	1429877	50.00	ug/L	0.00
71) d5-Chlorobenzene	8.841	117	1318441	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	705846	50.00	ug/L	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.318	113	450026	50.03	ug/L	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.06%			
48) surr1,1,2-dichloroetha...	4.854	65	454593	49.77	ug/L	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 99.54%			
65) SURR3,Toluene-d8	7.427	98	1719287	54.64	ug/L	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 109.28%			
70) SURR2,BFB	9.878	95	667634	50.84	ug/L	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.68%			
Target Compounds						Qvalue
115) 1,2,4-Tcbenzene	12.255	180	2700	0.22	ug/L	89
116) Hexachlorobt	12.328	225	2149	0.37	ug/L #	79
118) 1,2,3-Tclbenzene	12.523	180	3348	0.35	ug/L	89

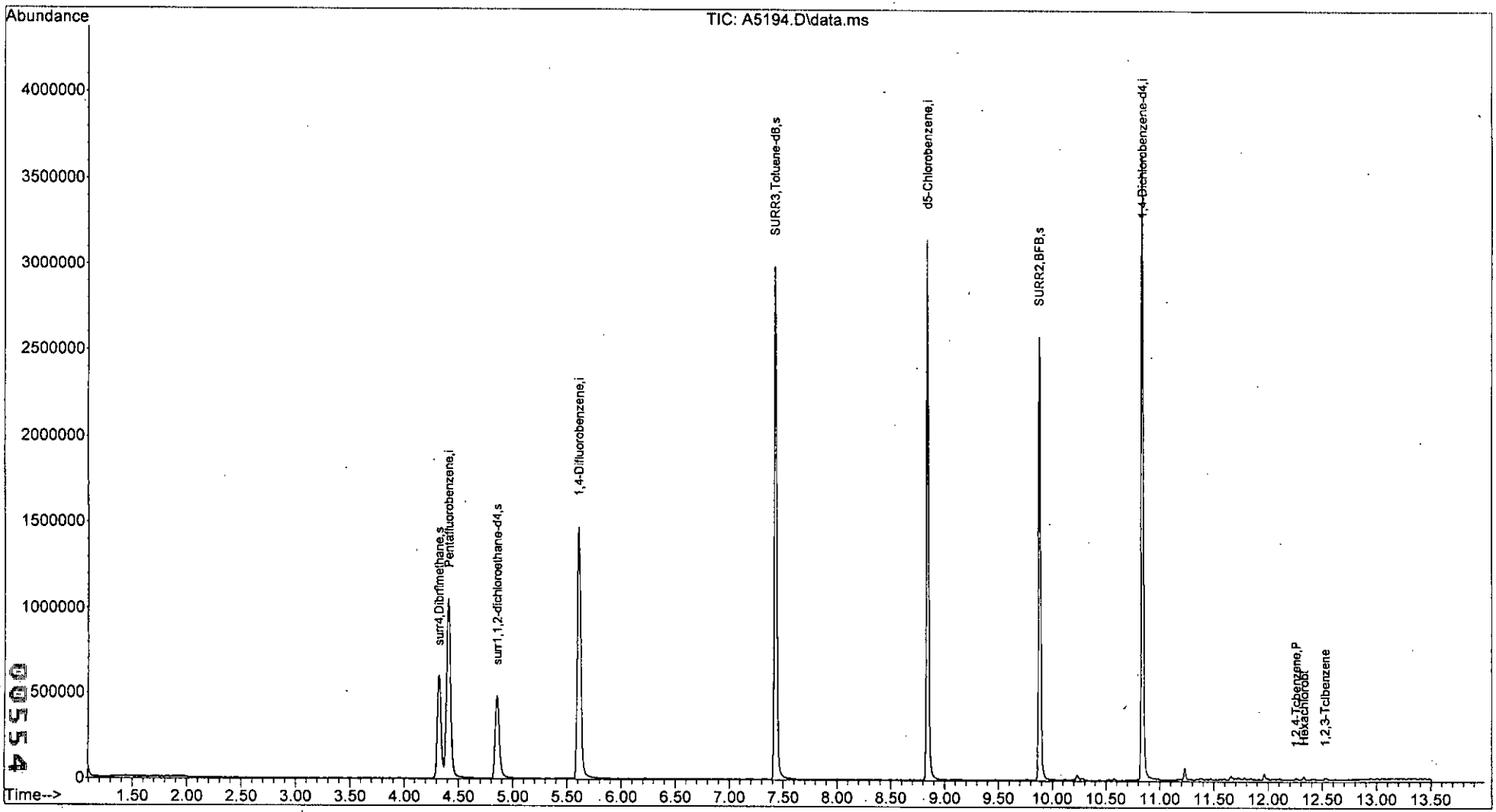
(#) = qualifier out of range (m) = manual integration (+) = signals summed

FJ
1/6/15

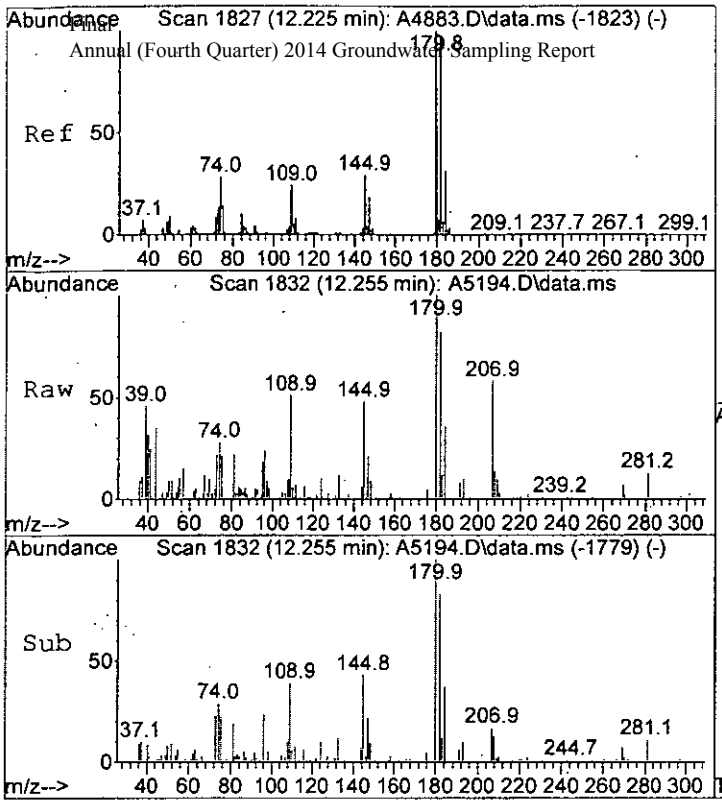
Quantitation Report (QT Reviewed)

Sample : MBLK
Data File : I:\ACQUDATA\msvoa10\data\122914\A5194.D Vial: 29
Acq On : 30 Dec 2014 2:36 am
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Jan 06 14:28:26 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



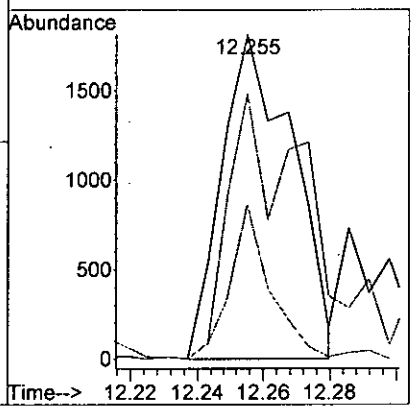
W121514.M Tue Jan 06 14:29:43 2015 MSVO10

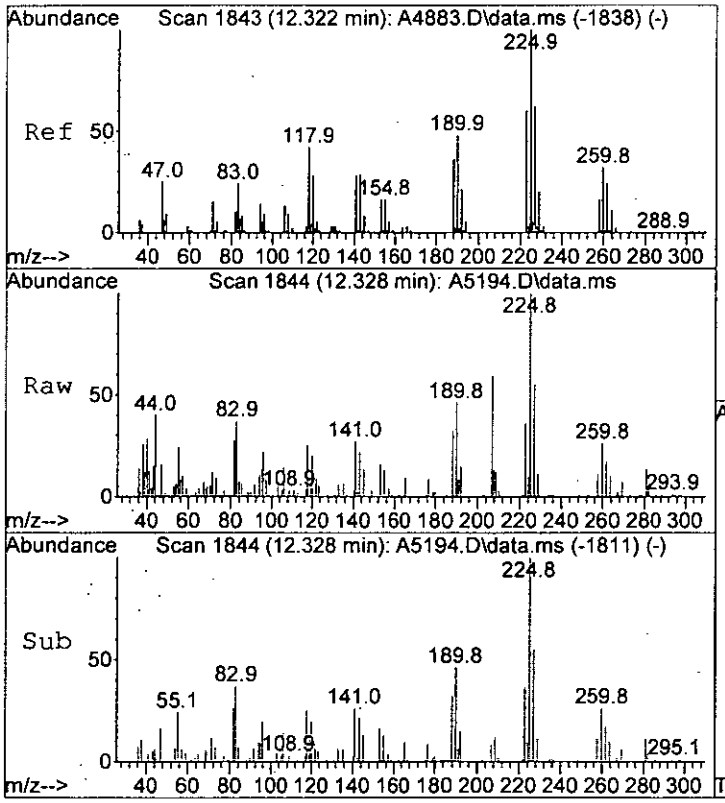


#115
1,2,4-Tcbenzene
Concen: 0.22 ug/L
RT: 12.255 min Scan# 1832
Delta R.T. 0.030 min
Lab File: A5194.D
Acq: 30 Dec 2014 2:36 am

Tgt Ion:180 Resp: 2700

Ion	Ratio	Lower	Upper
180	100		
182	93.8	77.2	117.2
145	47.6	8.5	48.5

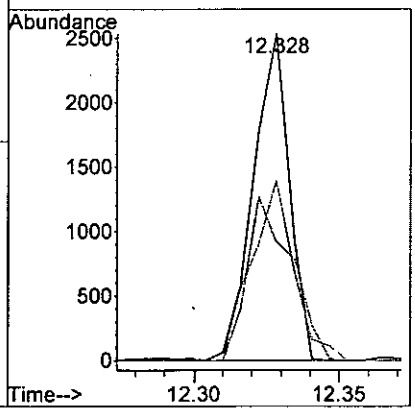




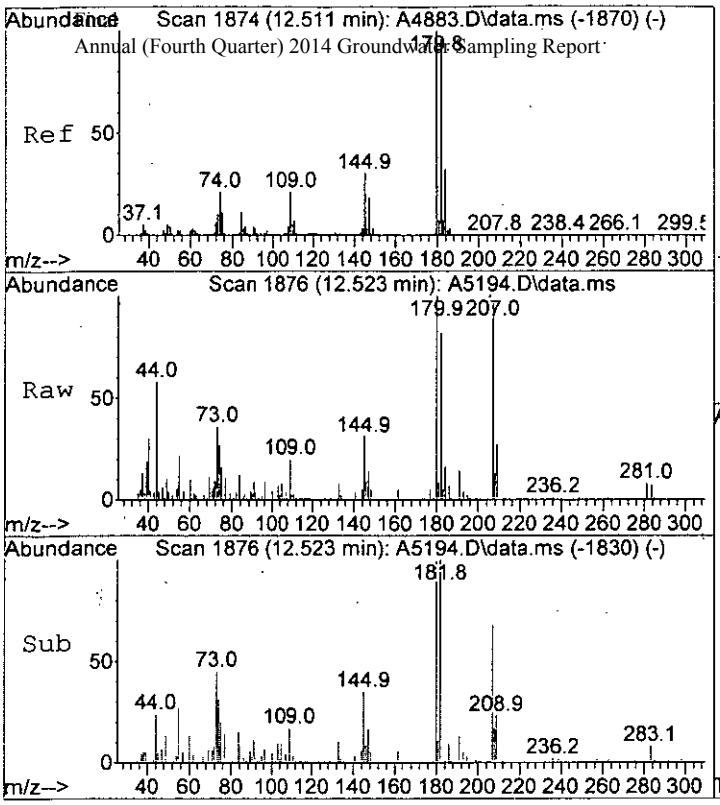
#116
Hexachlorobt
Concen: 0.37 ug/L
RT: 12.328 min Scan# 1844
Delta R.T. 0.006 min
Lab File: A5194.D
Acq: 30 Dec 2014 2:36 am

Tgt Ion:225 Resp: 2149

Ion	Ratio	Lower	Upper
225	100		
223	36.0	40.4	80.4#
227	54.6	42.0	82.0



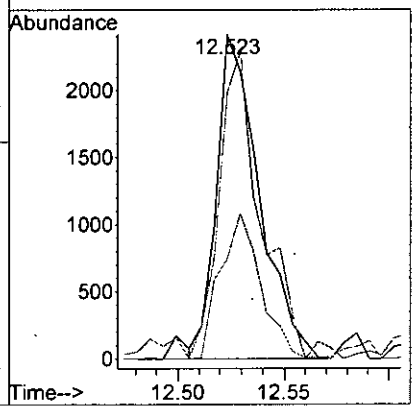
A5194.D W121514.M Tue Jan 06 14:29:45 2015 MSVO10



#118
1,2,3-Tclbenzene
Concen: 0.35 ug/L
RT: 12.523 min Scan# 1876
Delta R.T. 0.012 min
Lab File: A5194.D
Acq: 30 Dec 2014 2:36 am

Tgt Ion:180 Resp: 3348

Ion	Ratio	Lower	Upper
180	100		
182	82.1	75.6	115.6
145	30.8	9.7	49.7



ESC Area Percent Report

Data Path : I:\ACQUDATA\MSVOA10\DATA\122914\
Data File : A5194.D
Acq On : 30 Dec 2014 2:36 am
Operator : F.Naegler
Sample : MBLK
Misc :
ALS Vial : 29 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5194.D\data.ms

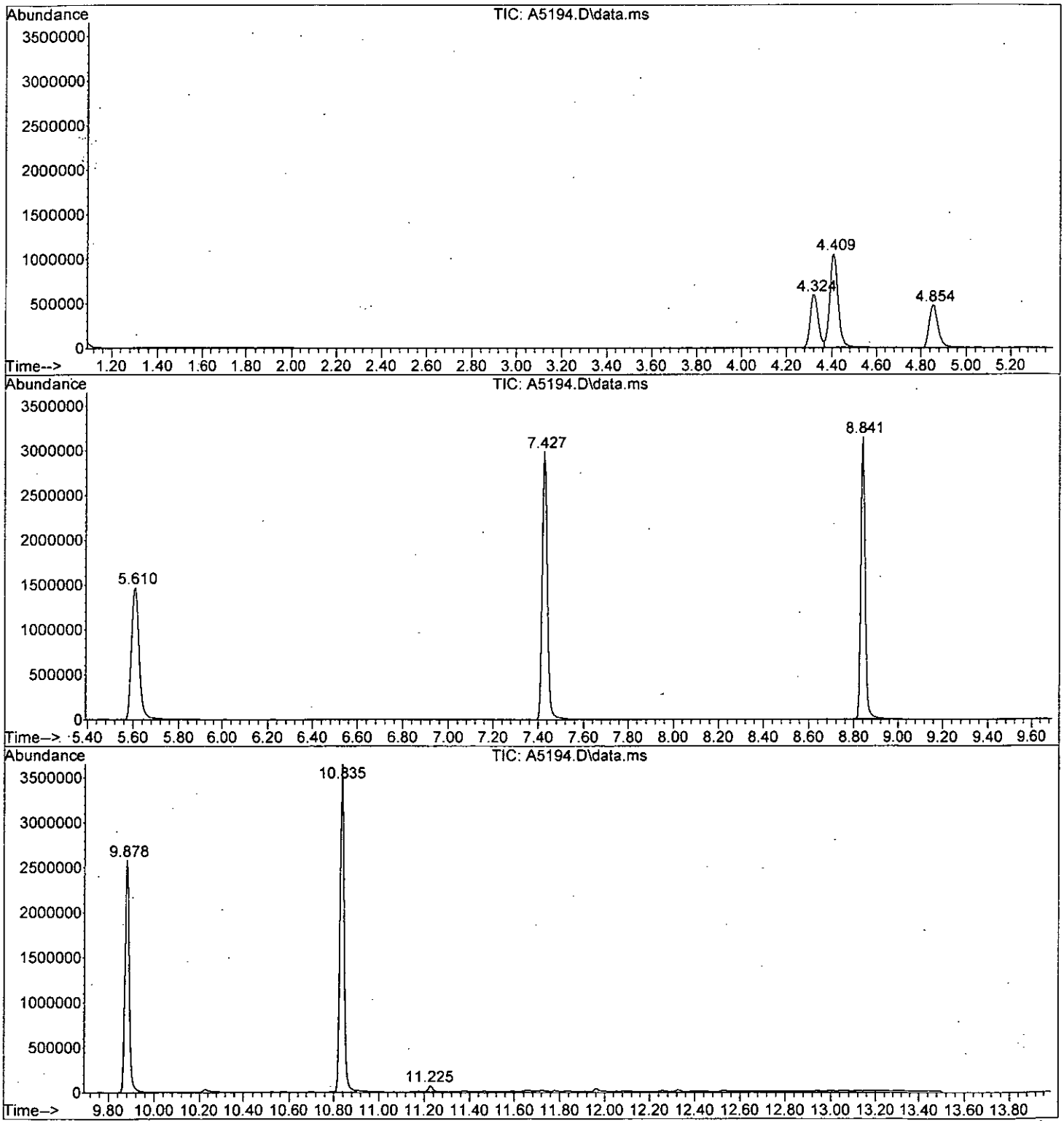
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	522	531	538	rBV	591429	1463889	31.95%	5.754%
2	4.409	538	545	562	rVB	1046645	2713696	59.22%	10.666%
3	4.854	610	618	632	rBV	476918	1270224	27.72%	4.993%
4	5.610	735	742	763	rBV	1465819	3329067	72.65%	13.085%
5	7.427	1035	1040	1055	rBV	2985208	4582208	100.00%	18.010%
6	8.841	1267	1272	1288	rBV	3143285	4165899	90.91%	16.374%
7	9.878	1438	1442	1460	rVB	2575421	3373983	73.63%	13.261%
8	10.835	1594	1599	1610	rBV	3640248	4459316	97.32%	17.527%
9	11.225	1660	1663	1669	rBV	66257	84117	1.84%	0.331%

Sum of corrected areas: 25442399

Data Path : I:\ACQUDATA\MSVOA10\DATA\122914\
Data File : A5194.D
Acq On : 30 Dec 2014 2:36 am
Operator : F.Naegler
Sample : MBLK
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W121514.M Tue Jan 06 14:29:53 2015 MSVO10 Page: 2

Tentatively Identified Compound (TIC) Summary

Data Path : I:\ACQUDATA\MSVOA10\DATA\122914\\
Data File : A5194.D
Acq On : 30 Dec 2014 2:36 amm
Operator : F.Naeglerr
Sample : MBLKK
Misc :
ALS Vial : 29 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: NA
Date Received: NA
Date Analyzed: 12/31/14 13:11

Sample Name: Method Blank
Lab Code: RQ1500199-04

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\123114\A5263.D\

Analysis Lot: 427678
Instrument Name: R-MS-10
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	0.24	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/31/14 13:11
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1500199-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5263.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/31/14 13:11
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1500199-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5263.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	12/31/14 13:11	
Dibromofluoromethane	100	85-115	12/31/14 13:11	
Toluene-d8	109	85-120	12/31/14 13:11	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/31/14 1311

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1500199-04	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (Not Reviewed)

Sample MBLK
Data File : I:\ACQUDATA\MSVOA10\DATA\123114\A5263.D Vial: 5
Acq On : 31 Dec 2014 1:11 pm
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 31 13:25:13 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	953196	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1367162	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1264253	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	674595	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.324	113	428701	49.85	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.70%				
48) surr1,1,2-dichloroetha...	4.854	65	444159	50.85	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 101.70%				
65) SURR3,Toluene-d8	7.427	98	1635175	54.35	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 108.70%				
70) SURR2,BFB	9.878	95	640580	51.02	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.04%				
Target Compounds							Qvalue
12) Acrolein	2.044	56	450	Below Cal		#	33
16) 2-Propanol	2.196	45	583	1.96	ug/L		62
~~20) Allyl Chloride~~	~~2.276~~	~~76~~	~~1197~~	~~0.26~~	~~ug/L~~	~~#~~	~~1~~
~~53) 1-Butanol~~	~~5.860~~	~~56~~	~~276~~	~~22.65~~	~~ug/L~~	~~#~~	~~37~~
~~61) 2-Nitropropane~~	~~6.836~~	~~41~~	~~360~~	~~0.24~~	~~ug/L~~	~~#~~	~~17~~
~~89) Cyclohexanone~~	~~9.841~~	~~55~~	~~461~~	~~1.57~~	~~ug/L~~	~~#~~	~~14~~
112) Trielution Dichlorotol...	11.835	125	5570	0.38	ug/L		94
114) Coelution Dichlorotoluene	12.097	125	4769	0.32	ug/L		89
115) 1,2,4-Tcbenzene	12.261	180	2767	0.24	ug/L	#	68
116) Hexachlorobt	12.328	225	1540	0.28	ug/L		88
118) 1,2,3-Tclbenzene	12.530	180	3218	0.36	ug/L		96
119) 2,4,5-Trichlorotoluene	12.938	159	5077	0.88	ug/L		87
120) 2,3,6-Trichlorotoluene	12.999	159	5817	0.92	ug/L		79

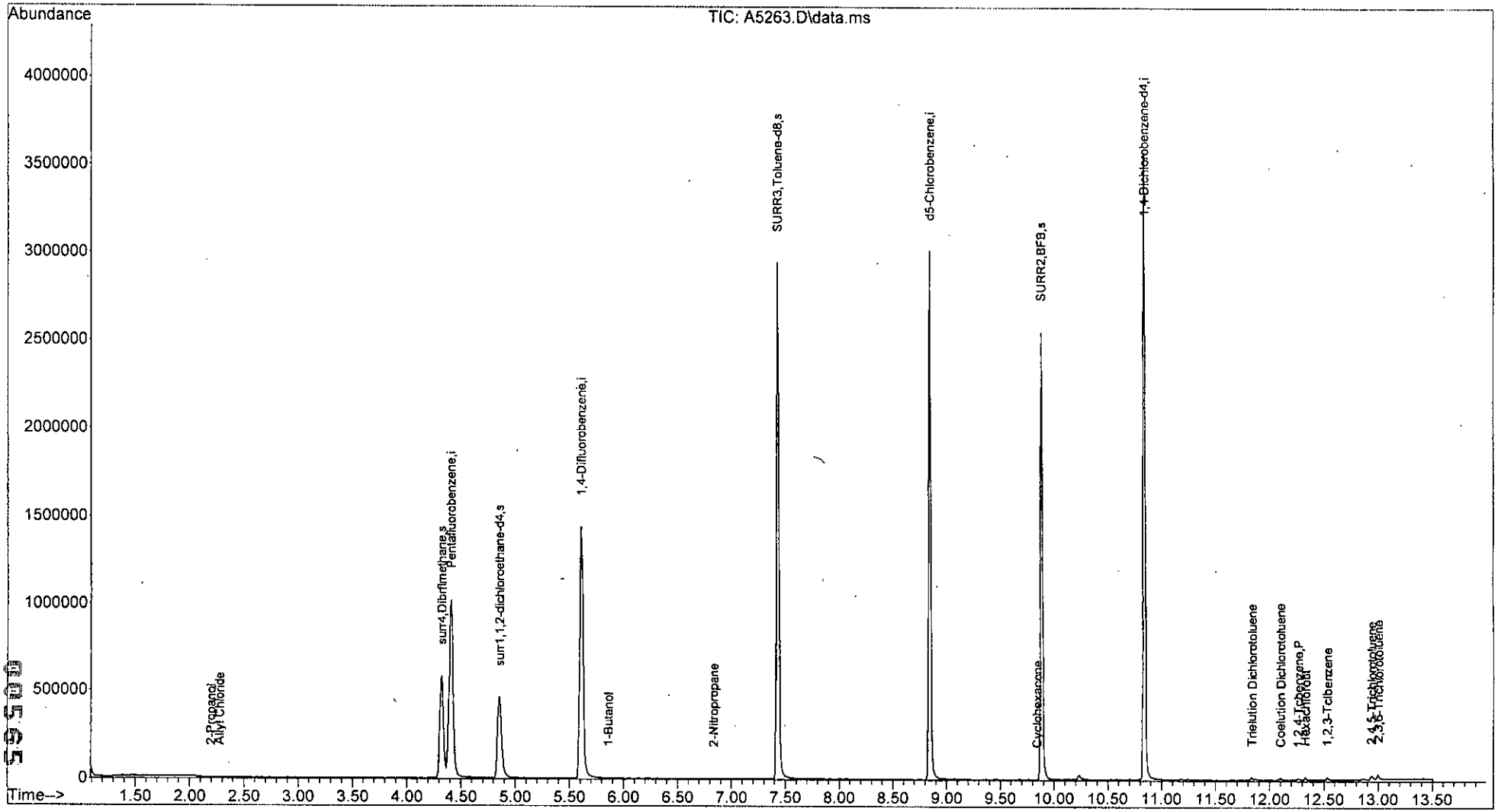
(#) = qualifier out of range (m) = manual integration (+) = signals summed

BA 1/7

Quantitation Report (Not Reviewed)

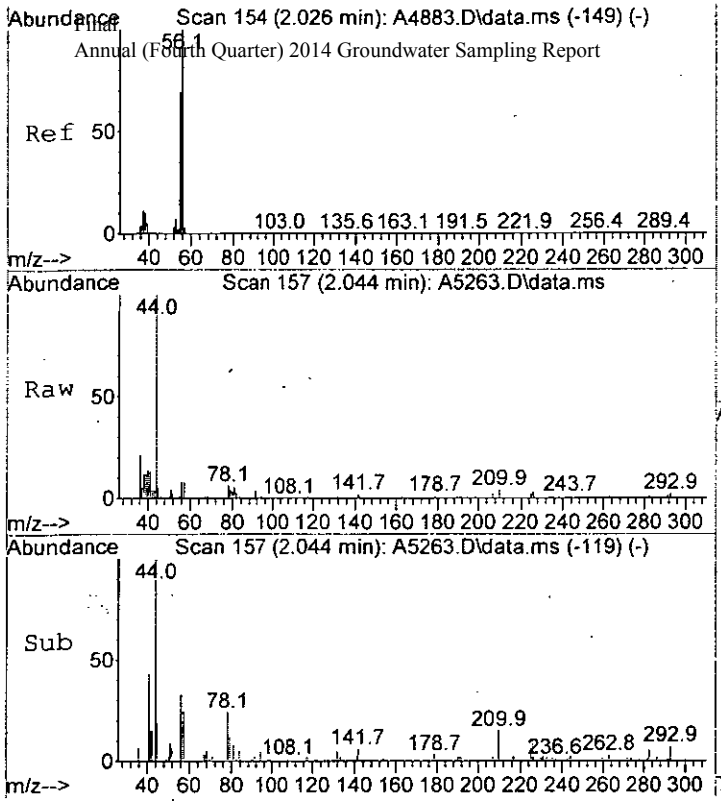
Sample : MBLK
Data File : I:\ACQUDATA\MSVOA10\DATA\123114\A5263.D Vial: 5
Acq On : 31 Dec 2014 1:11 pm
Operator : F:Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 31 13:25:13 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



W121514.M Wed Dec 31 13:25:06 2014 MSVO10

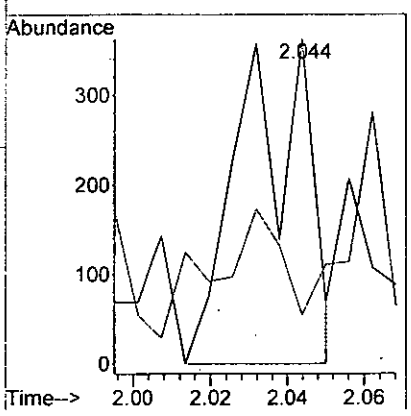
Page: 2

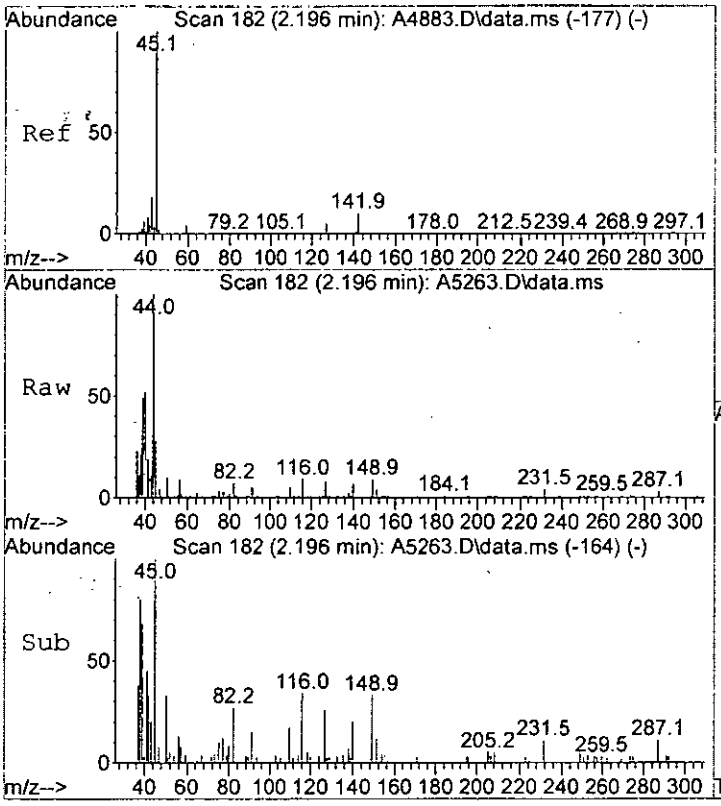


#12
Acrolein
Concen: Below Cal
RT: 2.044 min Scan# 157
Delta R.T. 0.025 min
Lab File: A5263.D
Acq: 31 Dec 2014 1:11 pm

Tgt Ion: 56 Resp: 450

Ion	Ratio	Lower	Upper
56	100		
55	15.2	49.6	89.6#

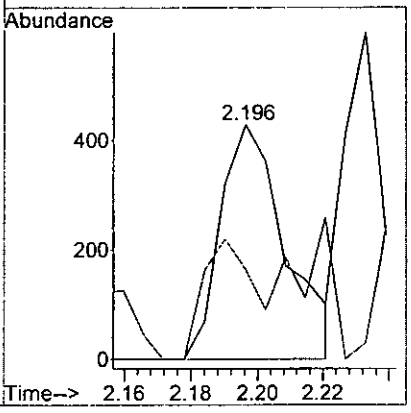


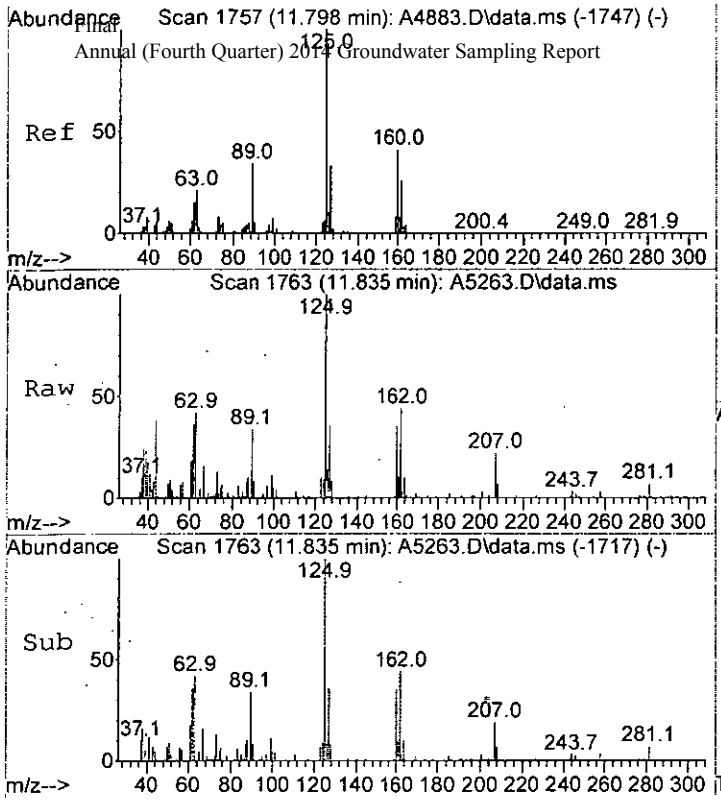


#16
2-Propanol
Concen: 1.96 ug/L
RT: 2.196 min Scan# 182
Delta R.T. 0.000 min
Lab File: A5263.D
Acq: 31 Dec 2014 1:11 pm

Tgt Ion: 45 Resp: 583

Ion	Ratio	Lower	Upper
45	100		
43	38.3	0.5	40.5

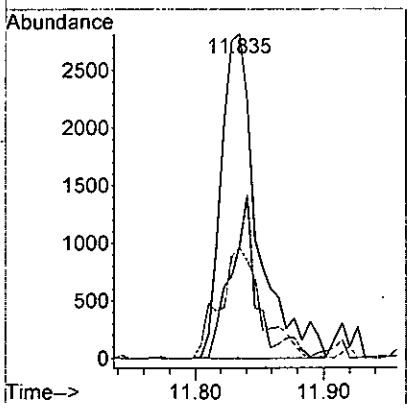


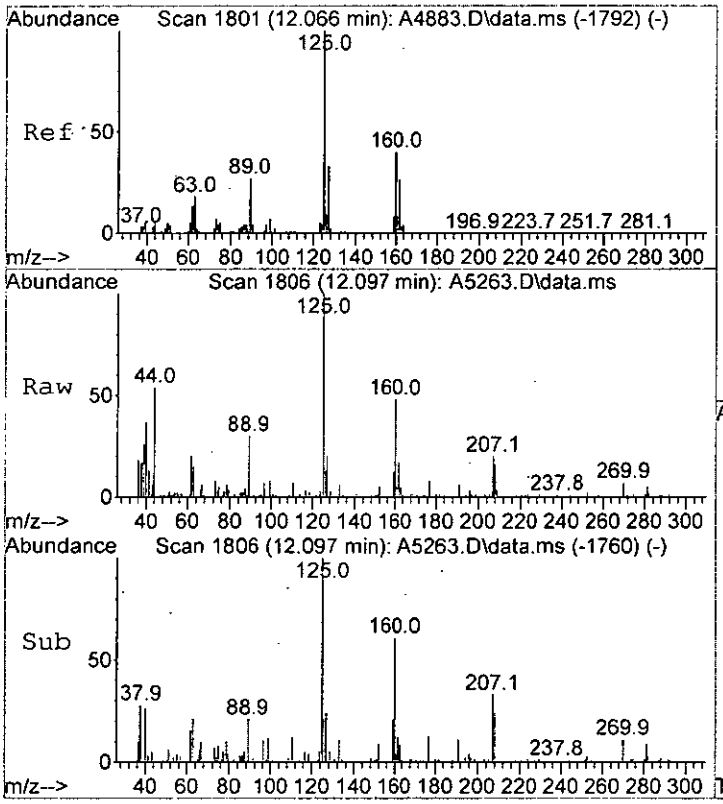


#112
Trielution Dichlorotoluene
Concen: 0.38 ug/L
RT: 11.835 min Scan# 1763
Delta R.T. 0.030 min
Lab File: A5263.D
Acq: 31 Dec 2014 1:11 pm

Tgt Ion:125 Resp: 5570

Ion	Ratio	Lower	Upper
125	100		
160	34.7	21.1	61.1
89	34.0	14.2	54.2

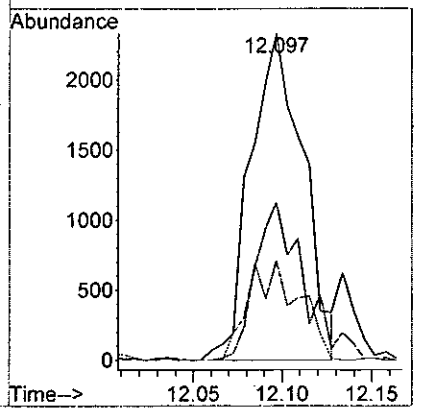




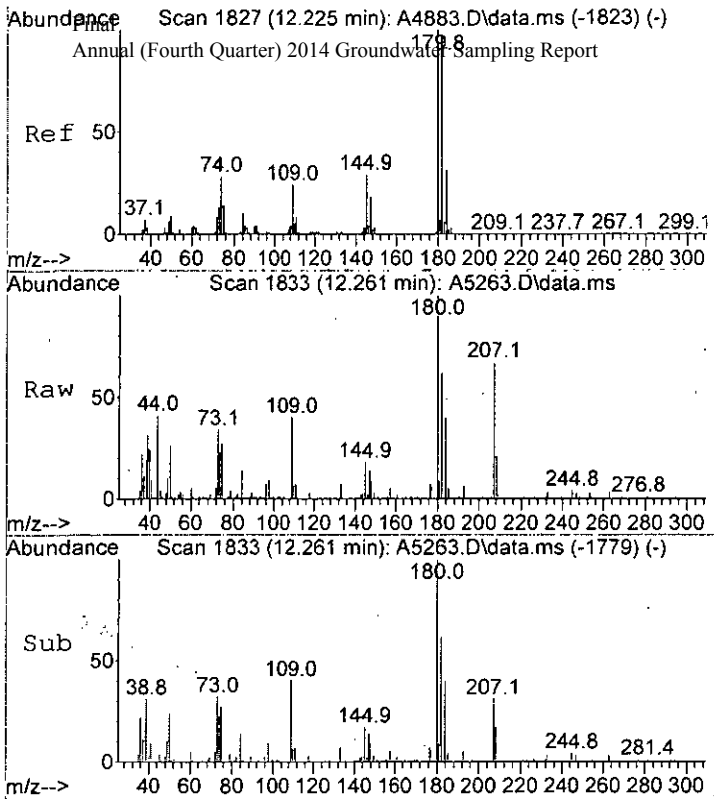
#114
Coelution Dichlorotoluene
Concen: 0.32 ug/L
RT: 12.097 min Scan# 1806
Delta R.T. 0.031 min
Lab File: A5263.D
Acq: 31 Dec 2014 1:11 pm

Tgt Ion:125 Resp: 4769

Ion	Ratio	Lower	Upper
125	100		
160	48.2	19.7	59.7
89	30.3	7.0	47.0



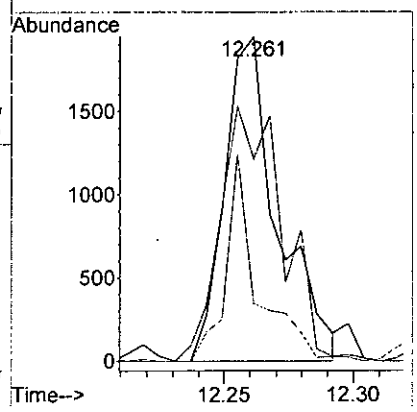
A5263.D W121514.M Wed Jan 07 14:54:41 2015

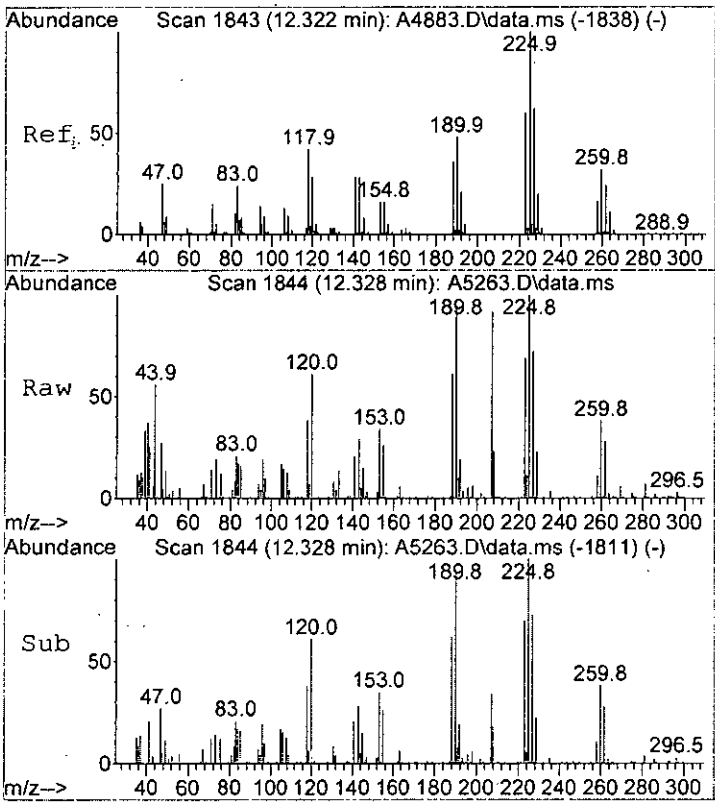


#115
1,2,4-Tcbenzene
Concen: 0.24 ug/L
RT: 12.261 min Scan# 1833
Delta R.T. 0.037 min
Lab File: A5263.D
Acq: 31 Dec 2014 1:11 pm

Tgt Ion:180 Resp: 2767

Ion	Ratio	Lower	Upper
180	100		
182	62.3	77.2	117.2#
145	17.7	8.5	48.5

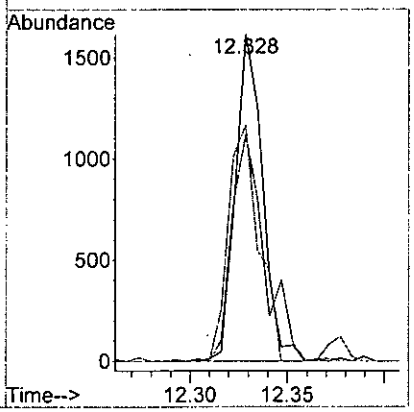




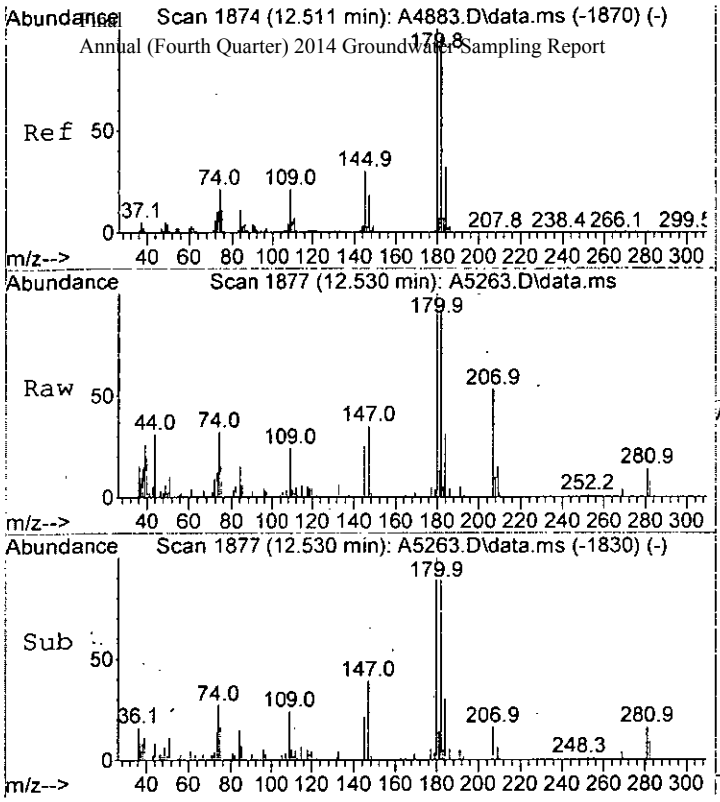
#116
Hexachlorobt
Concen: 0.28 ug/L
RT: 12.328 min Scan# 1844
Delta R.T. 0.006 min
Lab File: A5263.D
Acq: 31 Dec 2014 1:11 pm

Tgt Ion:225 Resp: 1540

Ion	Ratio	Lower	Upper
225	100		
223	69.3	40.4	80.4
227	72.1	42.0	82.0



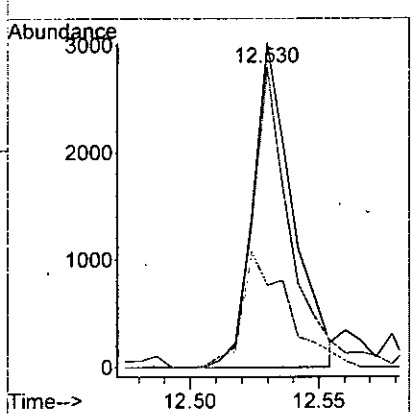
A5263.D W121514.M Wed Jan 07 14:54:43 2015

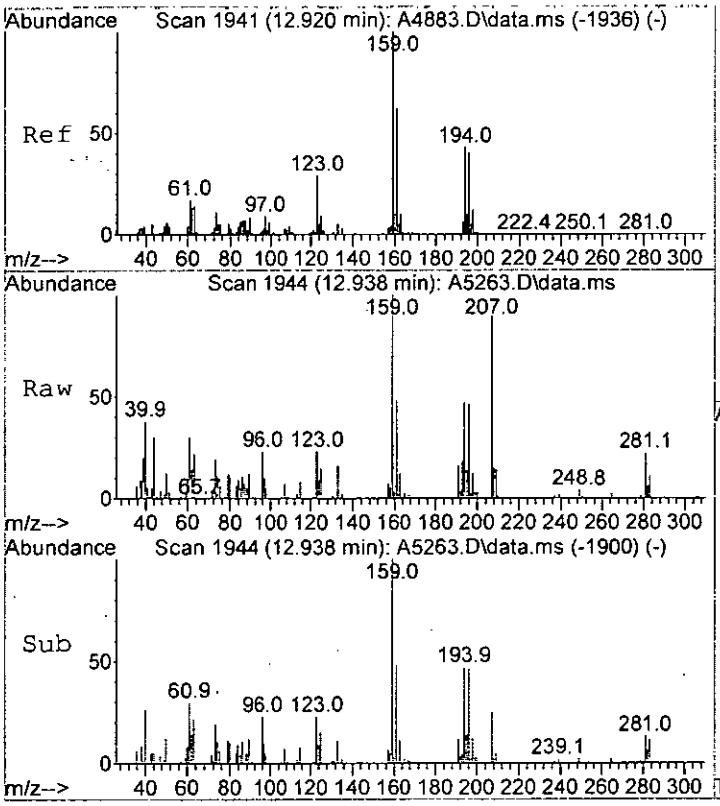


#118
1,2,3-Tclbenzene
Concen: 0.36 ug/L
RT: 12.530 min Scan# 1877
Delta R.T. 0.018 min
Lab File: A5263.D
Acq: 31 Dec 2014 1:11 pm

Tgt Ion:180 Resp: 3218

Ion	Ratio	Lower	Upper
180	100		
182	92.4	75.6	115.6
145	25.2	9.7	49.7

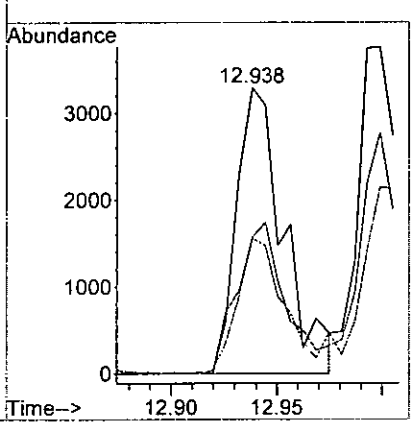


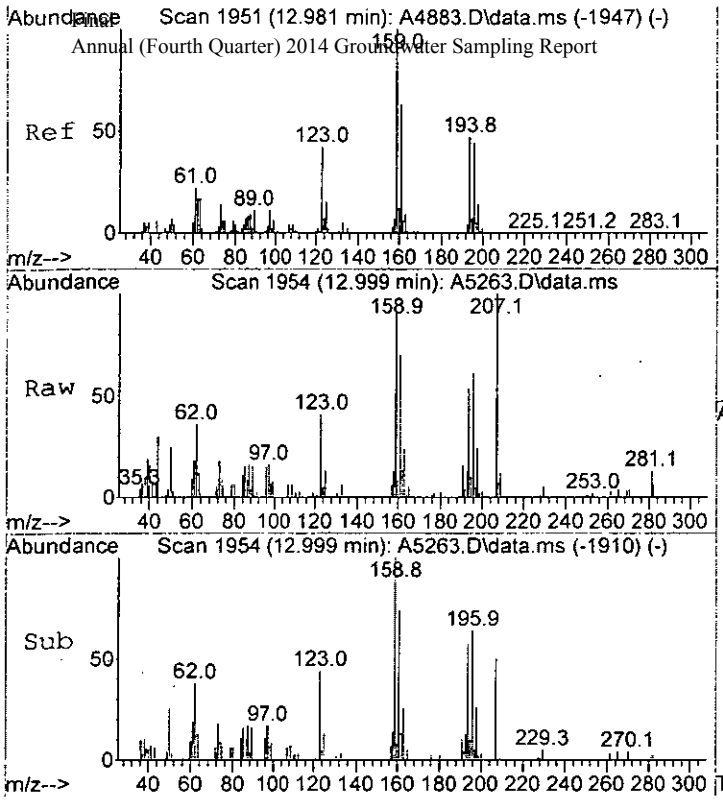


#119
2,4,5-Trichlorotoluene
Concen: 0.88 ug/L
RT: 12.938 min Scan# 1944
Delta R.T. 0.018 min
Lab File: A5263.D
Acq: 31 Dec 2014 1:11 pm

Tgt Ion:159 Resp: 5077

Ion	Ratio	Lower	Upper
159	100		
161	46.5	42.0	82.0
194	46.0	23.5	63.5

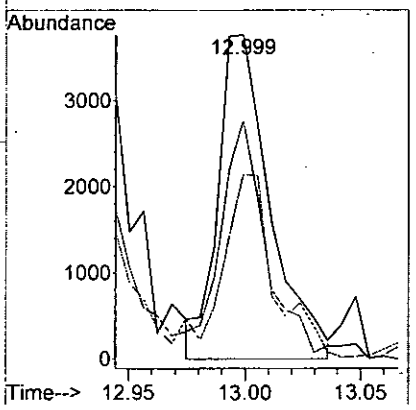




#120
2,3,6-Trichlorotoluene
Concen: 0.92 ug/L
RT: 12.999 min Scan# 1954
Delta R.T. 0.018 min
Lab File: A5263.D
Acq: 31 Dec 2014 1:11 pm

Tgt Ion:159 Resp: 5817

Ion	Ratio	Lower	Upper
159	100		
161	73.6	42.8	82.8
194	67.2	27.3	67.3



A5263.D W121514.M Wed Jan 07 14:54:45 2015

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5263.D
Acq On : 31 Dec 2014 1:11 pm
Operator : F.Naegler
Sample : MBLK
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: CPD4.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Title : MS#10 - 8260B WATERS 10mL Purge

Signal : TIC: A5263.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.324	518	531	538	rBV	578738	1406662	32.05%	5.743%
2	4.409	538	545	561	rVB2	1007928	2584551	58.90%	10.551%
3	4.854	610	618	640	rBV	455243	1238854	28.23%	5.057%
4	5.610	735	742	758	rBV	1432238	3193333	72.77%	13.036%
5	7.427	1035	1040	1051	rBV	2934972	4388368	100.00%	17.915%
6	8.841	1267	1272	1287	rBV	3006180	4030528	91.85%	16.454%
7	9.878	1438	1442	1455	rBV	2540464	3256066	74.20%	13.293%
8	10.231	1496	1500	1506	rBV2	26866	49057	1.12%	0.200%
9	10.835	1594	1599	1616	rBV	3567834	4348091	99.08%	17.751%

Sum of corrected areas: 24495510

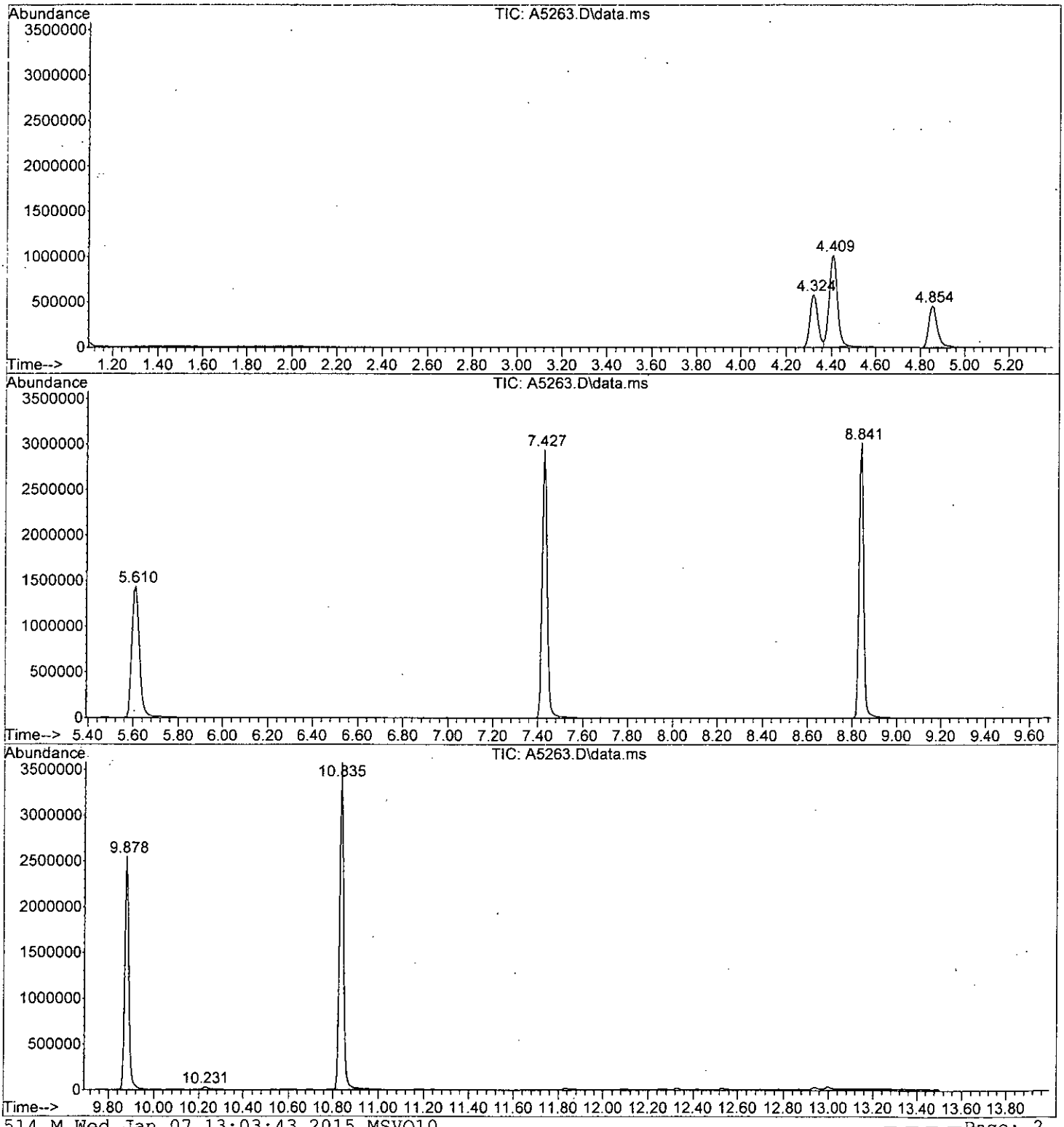
W121514.M Wed Jan 07 13:03:41 2015 MSVO10 Page: 1

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa10\data\123114\
Data File : A5263.D
Acq On : 31 Dec 2014 1:11 pm
Operator : F.Naegler
Sample : MBLK
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W121514.M Wed Jan 07 13:03:43 2015 MSVO10 Page: 2

Tentatively Identified Compound (LSC) Summary

Data Path : I:\ACQUDATA\msvoa10\data\123114\\
Data File : A5263.D
Acq On : 31 Dec 2014 1:11 pmm
Operator : F.Naeglerr
Sample : MBLKK
Misc :
ALS Vial : 5 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.MM
Quant Title : MS#10 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected

****

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/30/14 01:37
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1500158-02	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5192.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**18.0**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**18.0**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**16.5**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**18.7**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**18.9**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**18.4**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**17.8**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**19.7**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**18.0**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**20.1**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**19.6**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**17.3**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**19.1**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**19.4**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**19.1**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**19.9**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**19.7**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**18.8**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**19.5**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**19.0**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**14.6**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**20.6**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**19.2**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**19.9**		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	**368**		100	20	11	
106-43-4	4-Chlorotoluene	**20.1**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**19.6**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**18.5**		5.0	1.0	0.67	
67-64-1	Acetone	**21.9**		5.0	5.0	1.3	
71-43-2	Benzene	**19.1**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**19.2**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**18.9**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**18.9**		5.0	1.0	0.32	
75-25-2	Bromoform	**18.0**		5.0	1.0	0.42	
74-83-9	Bromomethane	**13.8**		5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/30/14 01:37
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1500158-02	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5192.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**16.9**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**19.6**		5.0	1.0	0.29	
75-00-3	Chloroethane	**20.0**		5.0	1.0	0.24	
67-66-3	Chloroform	**18.8**		5.0	1.0	0.25	
74-87-3	Chloromethane	**20.8**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**18.0**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**19.2**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**19.4**		5.0	1.0	0.60	
100-41-4	Ethylbenzene	**17.0**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**17.4**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**20.0**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**19.1**		5.0	1.0	0.29	
91-20-3	Naphthalene	**20.9**		5.0	1.0	0.20	
100-42-5	Styrene	**20.2**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**17.8**		5.0	1.0	0.30	
108-88-3	Toluene	**19.5**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**20.2**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**19.6**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**19.8**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**18.8**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**17.6**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**39.8**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**19.7**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**20.7**		5.0	1.0	0.20	
95-47-6	o-Xylene	**18.6**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**19.5**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**18.8**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**19.0**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**17.5**		5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/30/14 01:37
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1500158-02	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5192.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	100	75-120	12/30/14 01:37	
Dibromofluoromethane	100	85-115	12/30/14 01:37	
Toluene-d8	108	85-120	12/30/14 01:37	

Quantitation Report (QT Reviewed)

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\122914\A5192.D Vial: 27
Acq On : 30 Dec 2014 1:37 am
Operator : F.Naegler
InstName : MSVOA10
Misc :

FJ 1/6/15

Quant Time: Dec 30 09:06:38 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	1031487	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1497538	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1354520	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	735477	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.318	113	472686	50.18	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.36%				
48) surr1,1,2-dichloroetha...	4.854	65	470331	49.16	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 98.32%				
65) SURR3,Toluene-d8	7.427	98	1773719	53.82	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.64%				
70) SURR2,BFB	9.878	95	687742	50.01	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.02%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.191	85	218092	19.23	ug/L		98
3) Chloromethane	1.300	50	257137	20.77	ug/L		97
4) Vinyl Chloride	1.361	62	241133	19.75	ug/L		95
5) Bromomethane	1.562	94	97348	13.77	ug/L		98
6) Chloroethane	1.617	64	128398	20.00	ug/L		98
7) Freon 21	1.721	67	441359	24.76	ug/L		99
8) Trichlorofluoromethane	1.770	101	295437	19.63	ug/L		97
9) Diethyl Ether	1.934	59	140110	20.86	ug/L		95
10) Freon 123a	1.928	67	268728	24.66	ug/L		90
11) Freon 123	1.965	83	280817	23.25	ug/L		98
12) Acrolein	2.026	56	28052	47.37	ug/L		92
13) 1,1-Diclethene	2.099	96	151721	18.35	ug/L		96
14) Freon 113	2.093	101	153818	17.18	ug/L		91
15) Acetone	2.123	43	38100	21.88	ug/L		92
16) 2-Propanol	2.196	45	124157	385.66	ug/L		98
17) Iodomethane	2.215	142	141462	11.65	ug/L		98
18) Carbon Disulfide	2.276	76	507861	18.92	ug/L		99
19) Acetonitrile	2.324	40	19097	84.18	ug/L		93
20) Allyl Chloride	2.355	76	81610	16.19	ug/L		97
21) Methyl Acetate	2.355	43	72855	18.02	ug/L		96
22) Methylene Chloride	2.440	84	177806	19.35	ug/L		97
23) TBA	2.501	59	196534	368.05	ug/L		94
24) Acrylonitrile	2.635	53	191585	98.10	ug/L		97
25) Methyl-t-Butyl Ether	2.660	73	415531	19.05	ug/L		99
26) trans-1,2-Dichloroethene	2.672	96	171698	19.01	ug/L		97
28) 1,1-Diclethane	3.050	63	319843	18.91	ug/L		97
29) Vinyl Acetate	3.093	86	11939	10.50	ug/L	#	10
31) 2-Chloro-1,3-Butadiene	3.147	53	286073	20.03	ug/L		97
33) 2,2-Dichloropropane	3.684	77	210557	14.58	ug/L		96
34) cis-1,2-Dichloroethene	3.678	96	188112	18.82	ug/L		97
35) 2-Butanone	3.714	43	47115	20.59	ug/L		95
36) Propionitrile	3.769	54	66207	101.43	ug/L		99
37) Bromochloromethane	3.983	130	108257	18.85	ug/L		95
38) Methacrylonitrile	3.970	67	41411	19.27	ug/L		99
39) Tetrahydrofuran	4.062	42	29561	20.16	ug/L		94

W121514.M Tue Dec 30 09:06:54 2014 MSVO10 Page: 1

Quantitation Report (QT Reviewed)

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\122914\A5192.D Vial: 27
Acq On : 30 Dec 2014 1:37 am
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 30 09:06:38 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40)	Chloroform	4.092	83	316891	18.84	ug/L		98
41)	1,1,1-Trichloroethane	4.361	97	271063	18.00	ug/L		97
44)	Cyclohexane	4.440	41	198963	20.65	ug/L		96
46)	Carbontetrachloride	4.617	121	69886	16.90	ug/L		95
47)	1,1-Dichloropropene	4.617	75	222396	17.78	ug/L		98
49)	Benzene	4.952	78	685995	19.10	ug/L		99
50)	1,2-Dichloroethane	4.982	62	234698	19.05	ug/L		96
51)	Iso-Butyl Alcohol	4.854	43	78901	367.82	ug/L		87
52)	n-Heptane	5.452	43	159191	14.89	ug/L		94
54)	Trichloroethene	5.970	130	198627	20.20	ug/L		95
55)	Methylcyclohexane	6.214	55	224951	18.92	ug/L		99
56)	1,2-Diclpropane	6.257	63	187993	19.88	ug/L		98
57)	Dibromomethane	6.403	93	91558	17.65	ug/L		93
58)	1,4-Dioxane	6.464	88	21937	405.52	ug/L		97
59)	Methyl Methacrylate	6.470	69	67565	17.59	ug/L		98
60)	Bromodichloromethane	6.616	83	235119	18.94	ug/L		100
61)	2-Nitropropane	6.897	41	44752	26.98	ug/L		99
62)	2-Chloroethylvinyl Ether	7.006	63	80678	19.68	ug/L		90
63)	cis-1,3-Dichloropropene	7.147	75	259988	17.63	ug/L		97
64)	4-Methyl-2-pentanone	7.336	43	106114	18.47	ug/L		97
66)	Toluene	7.500	91	744112	19.50	ug/L		97
67)	trans-1,3-Dichloropropene	7.744	75	212510	17.47	ug/L		95
68)	Ethyl Methacrylate	7.872	69	155840	18.21	ug/L		96
69)	1,1,2-Trichloroethane	7.921	97	129900	18.66	ug/L		96
72)	Tetrachloroethene	8.055	164	145270	17.84	ug/L		96
73)	2-Hexanone	8.201	43	76440	19.87	ug/L		99
74)	1,3-Dichloropropane	8.086	76	222327	19.51	ug/L		95
75)	Dibromochloromethane	8.299	129	155515	18.00	ug/L		98
76)	N-Butyl Acetate	8.342	43	182286	17.71	ug/L		99
77)	1,2-Dibromoethane	8.403	107	127495	19.07	ug/L		99
79)	Chlorobenzene	8.866	112	502864	19.63	ug/L		99
81)	1,1,1,2-Tetrachloroethane	8.945	131	169572	18.00	ug/L		96
82)	Ethylbenzene	8.976	106	230895	16.98	ug/L		96
83)	(m+p)Xylene	9.085	106	633593	39.83	ug/L	#	86
84)	o-Xylene	9.433	106	309344	18.61	ug/L		95
85)	Styrene	9.445	104	536495	20.17	ug/L		98
86)	Bromoform	9.597	173	89585	17.95	ug/L		99
88)	Isopropylbenzene	9.756	105	762171	19.95	ug/L		99
89)	Cyclohexanone	9.823	55	246450	782.04	ug/L		94
90)	trans-1,4-Dichloro-2-B...	10.061	53	31911	14.30	ug/L		94
92)	1,1,2,2-Tetrachloroethane	10.012	83	134974	16.45	ug/L		95
93)	Bromobenzene	10.000	156	218682	19.15	ug/L		99
94)	1,2,3-Trichloropropane	10.042	110	38849	17.97	ug/L		93
95)	n-Propylbenzene	10.103	91	923891	20.71	ug/L		95
96)	2-Chlorotoluene	10.164	91	559572	19.16	ug/L		99
98)	4-Chlorotoluene	10.256	91	692744	20.05	ug/L		99
99)	1,3,5-Trimethylbenzene	10.250	105	648642	19.68	ug/L		99
100)	tert-Butylbenzene	10.518	119	524567	18.80	ug/L		99
101)	1,2,4-Trimethylbenzene	10.555	105	667731	19.64	ug/L		99
103)	sec-Butylbenzene	10.695	105	737235	19.51	ug/L		99
104)	p-Isopropyltoluene	10.817	119	645988	19.62	ug/L		99
105)	1,3-Dclbenz	10.780	146	404456	18.78	ug/L		96

W121514.M Tue Dec 30 09:06:54 2014 MSVO10

Quantitation Report (QT Reviewed)

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\122914\A5192.D Vial: 27
Acq On : 30 Dec 2014 1:37 am
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 30 09:06:38 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

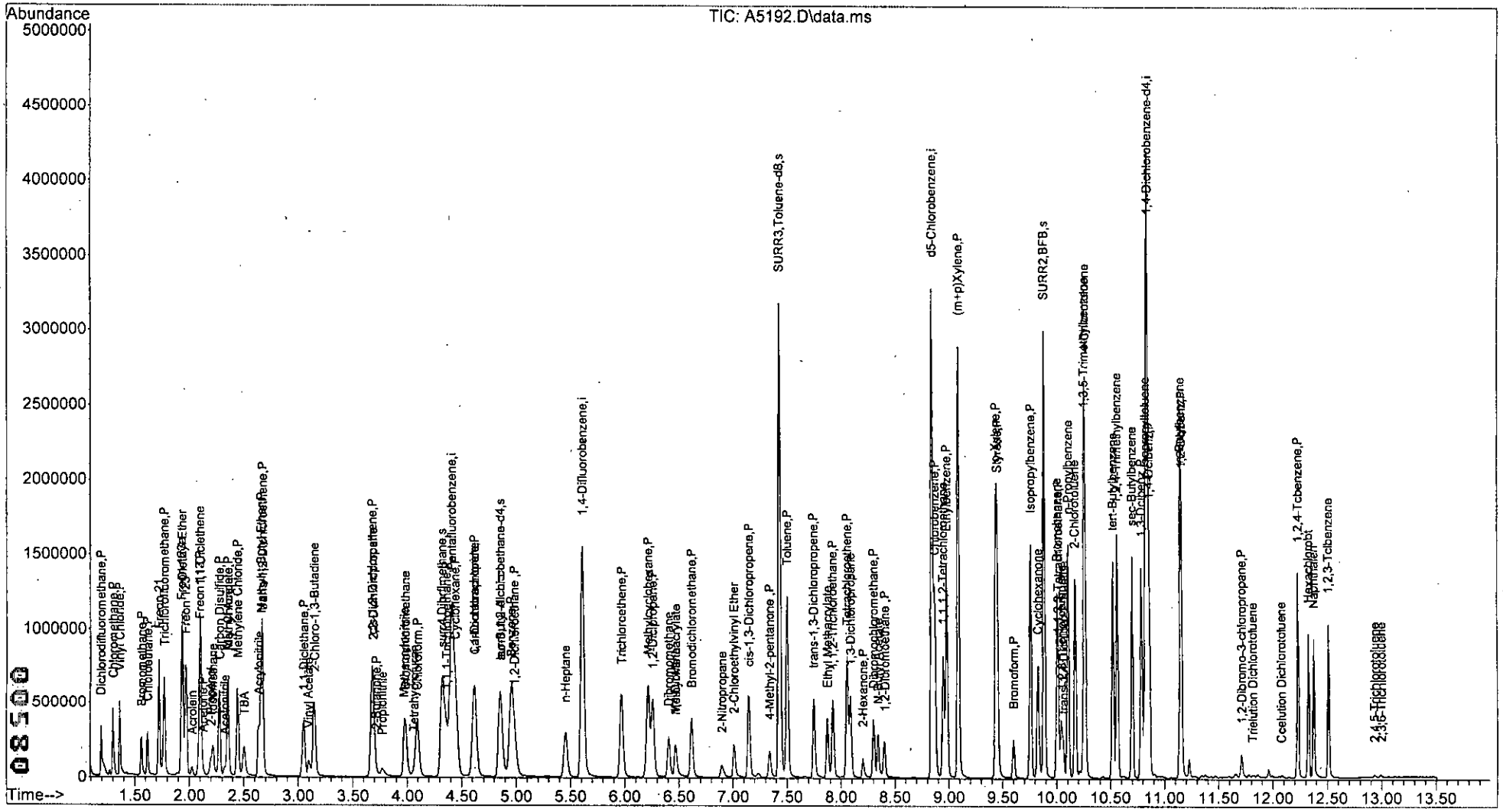
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
106) 1,4-Dclbenz	10.853	146	421614	19.01 ug/L	99
109) n-Butylbenzene	11.140	91	601429	19.71 ug/L	99
110) 1,2-Dclbenz	11.152	146	381714	19.40 ug/L	99
111) 1,2-Dibromo-3-chloropr...	11.707	157	24482	17.31 ug/L	95
112) Trielution Dichlorotol...	11.810	125	3991	0.25 ug/L	84
114) Coelution Dichlorotoluene	12.073	125	3524	0.22 ug/L	92
115) 1,2,4-Tcbenzene	12.225	180	252991	20.12 ug/L	96
116) Hexachlorobt	12.323	225	105049	17.39 ug/L	96
117) Naphthalen	12.371	128	431415	20.88 ug/L	99
118) 1,2,3-Tclbenzene	12.505	180	193870	19.71 ug/L	95
119) 2,4,5-Trichlorotoluene	12.932	159	2932	0.46 ug/L	76
120) 2,3,6-Trichlorotoluene	12.993	159	2369	0.35 ug/L	82

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\122914\A5192.D Vial: 27
Acq On : 30 Dec 2014 1:37 am
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 30 09:06:38 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



W121514.M Tue Dec 30 09:06:56 2014 MSVO10

Page: 4

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/31/14 12:02
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1500199-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5261.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**18.9**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**18.9**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**19.0**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**19.4**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**20.5**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**19.5**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**18.3**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**21.0**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**18.0**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**20.9**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**20.4**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**16.3**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**19.7**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**19.8**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**19.8**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**21.6**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**20.6**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**19.5**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**19.4**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**19.3**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**18.6**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**19.2**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**20.1**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**16.2**		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	**364**		100	20	11	
106-43-4	4-Chlorotoluene	**20.7**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**21.3**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**17.6**		5.0	1.0	0.67	
67-64-1	Acetone	**16.2**		5.0	5.0	1.3	
71-43-2	Benzene	**20.1**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**19.5**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**19.6**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**19.6**		5.0	1.0	0.32	
75-25-2	Bromoform	**17.4**		5.0	1.0	0.42	
74-83-9	Bromomethane	**12.5**		5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/31/14 12:02
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1500199-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5261.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**17.6**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**20.3**		5.0	1.0	0.29	
75-00-3	Chloroethane	**22.9**		5.0	1.0	0.24	
67-66-3	Chloroform	**19.9**		5.0	1.0	0.25	
74-87-3	Chloromethane	**22.4**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**17.9**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**21.1**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**20.1**		5.0	1.0	0.60	
100-41-4	Ethylbenzene	**17.8**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**20.6**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**21.3**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**19.2**		5.0	1.0	0.29	
91-20-3	Naphthalene	**21.0**		5.0	1.0	0.20	
100-42-5	Styrene	**20.7**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**18.3**		5.0	1.0	0.30	
108-88-3	Toluene	**20.6**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**19.6**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**21.5**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**21.5**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**20.0**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**18.6**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**42.1**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**21.7**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**21.6**		5.0	1.0	0.20	
95-47-6	o-Xylene	**19.8**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**21.2**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**20.0**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**20.3**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**18.4**		5.0	1.0	0.20	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/31/14 12:02
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1500199-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5261.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	12/31/14 12:02	
Dibromofluoromethane	101	85-115	12/31/14 12:02	
Toluene-d8	108	85-120	12/31/14 12:02	

Quantitation Report (QT Reviewed)

Sample
Data File : I:\ACQUDATA\msvoa10\data\123114\A5261.D Vial: 3
Acq On : 31 Dec 2014 12:02 pm
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 31 12:15:44 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

FD 12/31/14

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.403	168	992398	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.604	114	1439513	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1319080	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	737056	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.318	113	457767	50.55	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.10%				
48) surr1,1,2-dichloroetha...	4.848	65	447372	48.65	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 97.30%				
65) SURR3,Toluene-d8	7.427	98	1710278	53.99	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.98%				
70) SURR2,BFB	9.878	95	674089	50.99	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.98%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.191	85	230135	21.09	ug/L		99
3) Chloromethane	1.300	50	266258	22.35	ug/L		99
4) Vinyl Chloride	1.361	62	251994	21.45	ug/L		99
5) Bromomethane	1.556	94	84942	12.49	ug/L		92
6) Chloroethane	1.617	64	141142	22.86	ug/L		89
7) Freon 21	1.721	67	422858	24.65	ug/L		98
8) Trichlorofluoromethane	1.770	101	311572	21.51	ug/L		99
9) Diethyl Ether	1.934	59	141028	21.83	ug/L		95
10) Freon 123a	1.928	67	255807	24.40	ug/L		88
11) Freon 123	1.965	83	251287	21.62	ug/L		98
12) Acrolein	2.026	56	39945	71.98	ug/L		99
13) 1,1-Diclethene	2.099	96	155281	19.52	ug/L		95
14) Freon 113	2.093	101	164944	19.14	ug/L		100
15) Acetone	2.123	43	27193	16.23	ug/L		98
16) 2-Propanol	2.196	45	112295	362.56	ug/L		100
17) Iodomethane	2.215	142	111450	9.54	ug/L		98
18) Carbon Disulfide	2.276	76	534618	20.70	ug/L		99
19) Acetonitrile	2.318	40	20275	92.89	ug/L	#	85
20) Allyl Chloride	2.355	76	89043	18.36	ug/L		95
21) Methyl Acetate	2.355	43	73901	19.00	ug/L		93
22) Methylene Chloride	2.440	84	178120	20.14	ug/L		96
23) TBA	2.501	59	186834	363.67	ug/L		92
24) Acrylonitrile	2.629	53	190185	101.22	ug/L		96
25) Methyl-t-Butyl Ether	2.660	73	403655	19.24	ug/L		97
26) trans-1,2-Dichloroethene	2.666	96	176438	20.30	ug/L		94
28) 1,1-Diclethane	3.044	63	333322	20.48	ug/L		99
29) Vinyl Acetate	3.093	86	21092	19.28	ug/L	#	64
30) DIPE	3.105	45	583554	19.50	ug/L		96
31) 2-Chloro-1,3-Butadiene	3.141	53	300600	21.87	ug/L		97
32) ETBE	3.501	59	474237	17.42	ug/L		100
33) 2,2-Dichloropropane	3.678	77	257982	18.57	ug/L		98
34) cis-1,2-Dichloroethene	3.678	96	192144	19.98	ug/L		98
35) 2-Butanone	3.720	43	42321	19.23	ug/L		94
36) Propionitrile	3.769	54	69151	110.12	ug/L		99
37) Bromochloromethane	3.983	130	108334	19.61	ug/L		93

Quantitation Report (QT Reviewed)

Sample
Data File : I:\ACQUDATA\msvoa10\data\123114\A5261.D Vial: 3
Acq On : 31 Dec 2014 12:02 pm
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 31 12:15:44 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.970	67	42601	20.60	ug/L		88
39) Tetrahydrofuran	4.068	42	27035	19.17	ug/L		84
40) Chloroform	4.092	83	322084	19.90	ug/L		99
41) 1,1,1-Trichloroethane	4.355	97	273189	18.85	ug/L		94
42) TAME	5.184	73	382000	17.56	ug/L		98
44) Cyclohexane	4.446	41	182619	19.72	ug/L		99
46) Carbontetrachloride	4.611	121	69971	17.60	ug/L		97
47) 1,1-Dichloropropene	4.617	75	220116	18.31	ug/L		97
49) Benzene	4.952	78	693355	20.09	ug/L		99
50) 1,2-Dichloroethane	4.982	62	234906	19.83	ug/L		94
51) Iso-Butyl Alcohol	4.861	43	77275	374.76	ug/L		95
52) n-Heptane	5.452	43	206976	20.14	ug/L		99
53) 1-Butanol	5.952	56	91259	808.66	ug/L		93
54) Trichloroethene	5.964	130	184997	19.58	ug/L		97
55) Methylcyclohexane	6.214	55	223296	19.53	ug/L		91
56) 1,2-Diclpropane	6.257	63	196320	21.60	ug/L		97
57) Dibromomethane	6.403	93	93780	18.80	ug/L		94
58) 1,4-Dioxane	6.464	88	22067	424.37	ug/L		92
59) Methyl Methacrylate	6.464	69	68989	18.68	ug/L		94
60) Bromodichloromethane	6.610	83	233671	19.59	ug/L		97
61) 2-Nitropropane	6.891	41	44822	28.11	ug/L		95
62) 2-Chloroethylvinyl Ether	7.006	63	75756	19.22	ug/L		86
63) cis-1,3-Dichloropropene	7.141	75	263626	18.60	ug/L		95
64) 4-Methyl-2-pentanone	7.336	43	97414	17.64	ug/L		98
66) Toluene	7.500	91	757019	20.63	ug/L		96
67) trans-1,3-Dichloropropene	7.744	75	214872	18.38	ug/L		99
68) Ethyl Methacrylate	7.872	69	151914	18.47	ug/L		97
69) 1,1,2-Trichloroethane	7.921	97	129784	19.40	ug/L		96
72) Tetrachloroethene	8.055	164	144911	18.28	ug/L		96
73) 2-Hexanone	8.201	43	60870	16.24	ug/L		98
74) 1,3-Dichloropropane	8.085	76	215502	19.42	ug/L		96
75) Dibromochloromethane	8.299	129	150944	17.94	ug/L		99
76) N-Butyl Acetate	8.342	43	179764	17.94	ug/L		97
77) 1,2-Dibromoethane	8.396	107	128462	19.73	ug/L		96
78) 3-Chlorobenzotrifluoride	8.872	180	240566	17.16	ug/L		95
79) Chlorobenzene	8.866	112	507518	20.34	ug/L		97
80) 4-Chlorobenzotrifluoride	8.927	180	213014	16.49	ug/L		97
81) 1,1,1,2-Tetrachloroethane	8.945	131	172977	18.85	ug/L		95
82) Ethylbenzene	8.976	106	235322	17.77	ug/L		98
83) (m+p)Xylene	9.085	106	652114	42.10	ug/L	#	86
84) o-Xylene	9.433	106	320886	19.82	ug/L		100
85) Styrene	9.445	104	535376	20.67	ug/L		99
86) Bromoform	9.597	173	84614	17.41	ug/L		99
87) 2-Chlorobenzotrifluoride	9.664	180	233644	16.67	ug/L		98
88) Isopropylbenzene	9.756	105	791204	21.26	ug/L		99
89) Cyclohexanone	9.823	55	161142	525.08	ug/L		95
90) trans-1,4-Dichloro-2-B...	10.055	53	33197	15.28	ug/L		91
92) 1,1,2,2-Tetrachloroethane	10.006	83	156092	18.98	ug/L		98
93) Bromobenzene	10.000	156	223409	19.52	ug/L		96
94) 1,2,3-Trichloropropane	10.036	110	38958	17.99	ug/L		99
95) n-Propylbenzene	10.103	91	967420	21.64	ug/L		98
96) 2-Chlorotoluene	10.164	91	587389	20.07	ug/L		100

W121514.M Wed Dec 31 12:55:35 2014 MSVO10

Quantitation Report (QT Reviewed)

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\123114\A5261.D Vial: 3
Acq On : 31 Dec 2014 12:02 pm
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 31 12:15:44 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

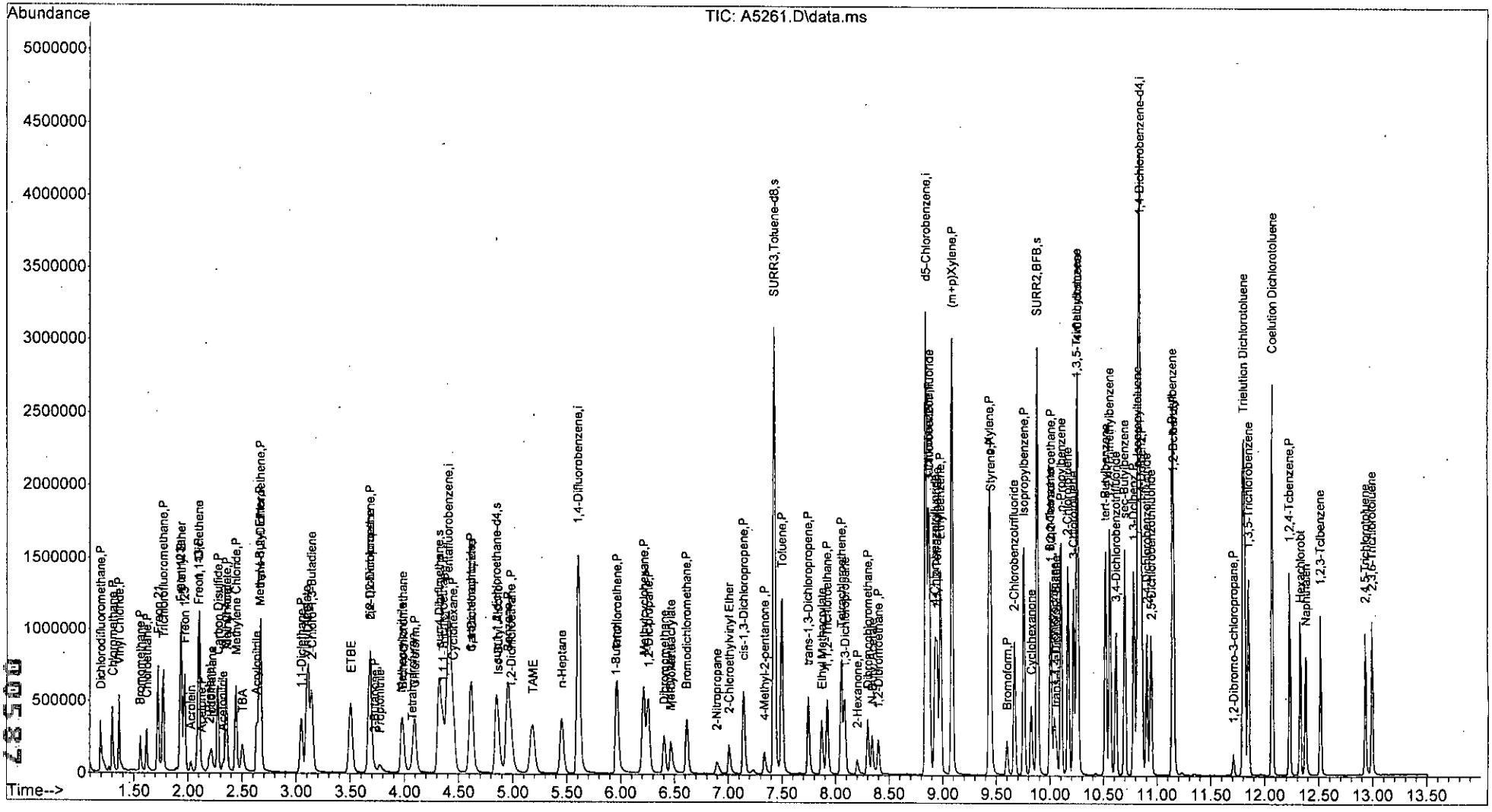
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
97)	3-Chlorotoluene	10.219	91	520930	17.82 ug/L	100
98)	4-Chlorotoluene	10.256	91	716451	20.69 ug/L	99
99)	1,3,5-Trimethylbenzene	10.250	105	681054	20.62 ug/L	99
100)	tert-Butylbenzene	10.518	119	559164	20.00 ug/L	99
101)	1,2,4-Trimethylbenzene	10.555	105	696392	20.44 ug/L	98
102)	3,4-Dichlorobenzotrifl...	10.616	214	192753	17.39 ug/L	98
103)	sec-Butylbenzene	10.695	105	802965	21.21 ug/L	98
104)	p-Isopropyltoluene	10.817	119	704196	21.34 ug/L	98
105)	1,3-Dclbenz	10.780	146	421834	19.54 ug/L	99
106)	1,4-Dclbenz	10.853	146	429143	19.31 ug/L	98
107)	2,4-Dichlorobenzotrifl...	10.902	214	173556	17.61 ug/L	97
108)	2,5-Dichlorobenzotrifl...	10.945	214	203817	17.66 ug/L	92
109)	n-Butylbenzene	11.140	91	663357	21.69 ug/L	99
110)	1,2-Dclbenz	11.152	146	389942	19.78 ug/L	99
111)	1,2-Dibromo-3-chloropr...	11.707	157	23086	16.29 ug/L	92
112)	Trielution Dichlorotol...	11.798	125	953937	59.47 ug/L	99
113)	1,3,5-Trichlorobenzene	11.847	180	274910	18.59 ug/L	100
114)	Coelution Dichlorotoluene	12.066	125	666013	40.57 ug/L	98
115)	1,2,4-Tcbenzene	12.225	180	263336	20.90 ug/L	97
116)	Hexachlorobt	12.329	225	124929	20.64 ug/L	99
117)	Naphthalen	12.377	128	434672	20.99 ug/L	99
118)	1,2,3-Tclbenzene	12.511	180	206497	20.95 ug/L	96
119)	2,4,5-Trichlorotoluene	12.926	159	149188	23.55 ug/L	98
120)	2,3,6-Trichlorotoluene,	12.987	159	161318	23.45 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Sample : LCS
Data File : I:\ACQUDATA\msvoa10\data\123114\A5261.D Vial: 3
Acq On : 31 Dec 2014 12:02 pm
Operator : F.Naegler
InstName : MSVOA10
Misc :

Quant Time: Dec 31 12:15:44 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



W121514.M Wed Dec 31 12:55:37 2014 MSVO10

Page: 4

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14 1008
Date Received: 12/20/14
Date Analyzed: 12/30/14 10:57

Sample Name: FTMM-53-GW-699RW05-10
Lab Code: RQ1500158-05
Run Type: Matrix Spike

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\122914\A5211.D\

Analysis Lot: 427294
Instrument Name: R-MS-10
Dilution Factor: 2.5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**121**		13	2.5	0.55	
71-55-6	1,1,1-Trichloroethane (TCA)	**123**		13	2.5	0.90	
79-34-5	1,1,2,2-Tetrachloroethane	**118**		13	2.5	0.63	
79-00-5	1,1,2-Trichloroethane	**121**		13	2.5	0.86	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**130**		13	2.5	0.50	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**129**		13	2.5	1.5	
563-58-6	1,1-Dichloropropene	**125**		13	2.5	0.73	
87-61-6	1,2,3-Trichlorobenzene	**119**		13	2.5	2.1	
96-18-4	1,2,3-Trichloropropane	**112**		13	2.5	1.8	
120-82-1	1,2,4-Trichlorobenzene	**124**		13	2.5	0.58	
95-63-6	1,2,4-Trimethylbenzene	**370**		13	2.5	0.50	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**109**		13	2.5	1.9	
106-93-4	1,2-Dibromoethane	**125**		13	2.5	0.60	
95-50-1	1,2-Dichlorobenzene	**126**		13	2.5	0.53	
107-06-2	1,2-Dichloroethane	**124**		13	2.5	0.90	
78-87-5	1,2-Dichloropropane	**133**		13	2.5	0.50	
108-67-8	1,3,5-Trimethylbenzene	**198**		13	2.5	0.50	
541-73-1	1,3-Dichlorobenzene	**125**		13	2.5	0.50	
142-28-9	1,3-Dichloropropane	**124**		13	2.5	0.68	
106-46-7	1,4-Dichlorobenzene	**125**		13	2.5	0.50	
594-20-7	2,2-Dichloropropane	**124**		13	2.5	0.68	
78-93-3	2-Butanone (MEK)	**129**		13	2.5	2.1	
95-49-8	2-Chlorotoluene	**150**		13	2.5	0.50	
591-78-6	2-Hexanone	**117**		13	13	4.2	
75-65-0	tert-Butyl Alcohol	**2180**		250	50	27	
106-43-4	4-Chlorotoluene	**143**		13	2.5	0.60	
99-87-6	p-Isopropyltoluene	**140**		13	2.5	0.50	
108-10-1	4-Methyl-2-pentanone	**117**		13	2.5	1.7	
67-64-1	Acetone	**160**		13	13	3.1	
71-43-2	Benzene	**132**		13	2.5	0.50	
108-86-1	Bromobenzene	**122**		13	2.5	0.71	
74-97-5	Bromochloromethane	**124**		13	2.5	0.80	
75-27-4	Bromodichloromethane	**123**		13	2.5	0.80	
75-25-2	Bromoform	**114**		13	2.5	1.1	
74-83-9	Bromomethane	**70.4**		13	2.5	0.73	

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410303
Date Collected: 12/18/14 1008
Date Received: 12/20/14
Date Analyzed: 12/30/14 10:57

Sample Name: FTMM-53-GW-699RW05-10
Lab Code: RQ1500158-05
Run Type: Matrix Spike

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa10\data\122914\A5211.D\

Analysis Lot: 427294
Instrument Name: R-MS-10
Dilution Factor: 2.5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**121**		13	2.5	1.2	
108-90-7	Chlorobenzene	**131**		13	2.5	0.73	
75-00-3	Chloroethane	**140**		13	2.5	0.60	
67-66-3	Chloroform	**126**		13	2.5	0.63	
74-87-3	Chloromethane	**140**		13	2.5	0.53	
124-48-1	Dibromochloromethane	**116**		13	2.5	0.78	
75-71-8	Dichlorodifluoromethane (CFC 12)	**136**		13	2.5	1.2	
75-09-2	Methylene Chloride	**127**		13	2.5	1.5	
100-41-4	Ethylbenzene	**235**		13	2.5	0.50	
87-68-3	Hexachlorobutadiene	**112**		13	2.5	1.6	
98-82-8	Isopropylbenzene (Cumene)	**150**		13	2.5	0.50	
1634-04-4	Methyl tert-Butyl Ether	**123**		13	2.5	0.73	
91-20-3	Naphthalene	**195**		13	2.5	0.50	
100-42-5	Styrene	**151**		13	2.5	0.50	
127-18-4	Tetrachloroethene (PCE)	**125**		13	2.5	0.75	
108-88-3	Toluene	**140**		13	2.5	0.50	
79-01-6	Trichloroethene (TCE)	**128**		13	2.5	0.55	
75-69-4	Trichlorofluoromethane (CFC 11)	**141**		13	2.5	0.50	
75-01-4	Vinyl Chloride	**140**		13	2.5	0.80	
156-59-2	cis-1,2-Dichloroethene	**128**		13	2.5	0.75	
10061-01-5	cis-1,3-Dichloropropene	**118**		13	2.5	0.60	
179601-23-1	m,p-Xylenes	**611**		25	5.0	0.83	
104-51-8	n-Butylbenzene	**145**		13	2.5	0.53	
103-65-1	n-Propylbenzene	**149**		13	2.5	0.50	
95-47-6	o-Xylene	**425**		13	2.5	0.50	
135-98-8	sec-Butylbenzene	**139**		13	2.5	0.68	
98-06-6	tert-Butylbenzene	**132**		13	2.5	0.50	
156-60-5	trans-1,2-Dichloroethene	**130**		13	2.5	0.83	
10061-02-6	trans-1,3-Dichloropropene	**119**		13	2.5	0.50	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1008
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 10:57
Sample Name:	FTMM-53-GW-699RW05-10	**Units:**	µg/L
Lab Code:	RQ1500158-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5211.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2.5

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	103	75-120	12/30/14 10:57	
Dibromofluoromethane	101	85-115	12/30/14 10:57	
Toluene-d8	107	85-120	12/30/14 10:57	

Quantitation Report (QT Reviewed)

Sample : R1410303-002MS|2.5
Data File : I:\ACQUDATA\msvoa10\data\122914\A5211.D Vial: 46
Acq On : 30 Dec 2014 10:57 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 15:28:37 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

FV 1/6/15

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	1025022	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1484045	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1354053	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	769432	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.318	113	469295	50.27	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.54%				
48) surr1,1,2-dichloroetha...	4.854	65	467241	49.28	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 98.56%				
65) SURR3,Toluene-d8	7.427	98	1742694	53.36	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 106.72%				
70) SURR2,BFB	9.878	95	699534	51.33	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.66%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.190	85	615201	54.59	ug/L		100
3) Chloromethane	1.300	50	688625	55.96	ug/L		99
4) Vinyl Chloride	1.361	62	679770	56.02	ug/L		98
5) Bromomethane	1.556	94	197802	28.16	ug/L		96
6) Chloroethane	1.617	64	357982	56.12	ug/L		100
7) Freon 21	1.721	67	1130100	63.79	ug/L		100
8) Trichlorofluoromethane	1.770	101	844497	56.46	ug/L		99
9) Diethyl Ether	1.934	59	374290	56.08	ug/L		97
10) Freon 123a	1.928	67	701977	64.83	ug/L		92
11) Freon 123	1.965	83	726052	60.48	ug/L		98
12) Acrolein	2.020	56	80732	146.64	ug/L		82
13) 1,1-Diclethene	2.099	96	423829	51.58	ug/L		93
14) Freon 113	2.093	101	457999	51.46	ug/L		93
15) Acetone	2.123	43	110847	64.05	ug/L		97
16) 2-Propanol	2.196	45	288745	902.57	ug/L		93
17) Iodomethane	2.215	142	357379	29.62	ug/L		97
18) Carbon Disulfide	2.276	76	1242207	46.57	ug/L		100
19) Acetonitrile	2.318	40	70682	313.54	ug/L		98
20) Allyl Chloride	2.349	76	225930	45.10	ug/L		99
21) Methyl Acetate	2.355	43	207245	51.58	ug/L		98
22) Methylene Chloride	2.440	84	463913	50.79	ug/L		99
23) TBA	2.495	59	463564	873.60	ug/L		79
24) Acrylonitrile	2.629	53	499735	257.51	ug/L		100
25) Methyl-t-Butyl Ether	2.660	73	1062701	49.03	ug/L		66
26) trans-1,2-Dichloroethene	2.666	96	467508	52.09	ug/L		96
28) 1,1-Diclethane	3.044	63	875782	52.11	ug/L		99
29) Vinyl Acetate	3.086	86	59344	52.53	ug/L	#	41
30) DIPE	3.086	45	6409	0.21	ug/L	#	1
31) 2-Chloro-1,3-Butadiene	3.141	53	790740	55.71	ug/L		100
33) 2,2-Dichloropropane	3.678	77	712882	49.69	ug/L		97
34) cis-1,2-Dichloroethene	3.678	96	508779	51.21	ug/L		95
35) 2-Butanone	3.696	43	116842	51.40	ug/L		96
36) Propionitrile	3.763	54	169903	261.94	ug/L		98
37) Bromochloromethane	3.976	130	282299	49.48	ug/L	#	87
38) Methacrylonitrile	3.964	67	107538	50.35	ug/L		98

Quantitation Report (QT Reviewed)

Sample : R1410303-002MS|2.5
Data File : I:\ACQUDATA\msvoa10\data\122914\A5211.D Vial: 46
Acq On : 30 Dec 2014 10:57 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 15:28:37 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) Tetrahydrofuran	4.062	42	68896	47.29	ug/L		95
40) Chloroform	4.092	83	845252	50.57	ug/L		99
41) 1,1,1-Trichloroethane	4.354	97	738373	49.33	ug/L		93
44) Cyclohexane	4.446	41	581234	60.88	ug/L		98
46) Carbontetrachloride	4.617	121	198367	48.40	ug/L		95
47) 1,1-Dichloropropene	4.617	75	617477	49.82	ug/L		98
49) Benzene	4.952	78	1879239	52.81	ug/L		98
50) 1,2-Dichloroethane	4.982	62	605896	49.62	ug/L		98
51) Iso-Butyl Alcohol	4.848	43	185273	871.55	ug/L		88
52) n-Heptane	5.452	43	516651	48.76	ug/L		99
53) 1-Butanol	5.921	56	908	27.83	ug/L		81
54) Trichloroethene	5.964	130	497858	51.10	ug/L		98
55) Methylcyclohexane	6.214	55	673838	57.18	ug/L		100
56) 1,2-Diclpropane	6.250	63	498841	53.23	ug/L		99
57) Dibromomethane	6.397	93	243853	47.43	ug/L		93
58) 1,4-Dioxane	6.458	88	39770	741.86	ug/L		77
59) Methyl Methacrylate	6.464	69	202093	53.08	ug/L		98
60) Bromodichloromethane	6.610	83	603452	49.06	ug/L		99
61) 2-Nitropropane	6.891	41	132220	80.43	ug/L		98
63) cis-1,3-Dichloropropene	7.141	75	690678	47.26	ug/L		97
64) 4-Methyl-2-pentanone	7.336	43	267572	46.99	ug/L		99
66) Toluene	7.500	91	2110955	55.81	ug/L		99
67) trans-1,3-Dichloropropene	7.744	75	573488	47.58	ug/L		98
68) Ethyl Methacrylate	7.866	69	407146	48.02	ug/L		90
69) 1,1,2-Trichloroethane	7.921	97	333267	48.32	ug/L		97
72) Tetrachloroethene	8.055	164	408412	50.18	ug/L		98
73) 2-Hexanone	8.195	43	179565	46.68	ug/L		99
74) 1,3-Dichloropropane	8.085	76	565998	49.69	ug/L		97
75) Dibromochloromethane	8.299	129	399523	46.26	ug/L		99
76) N-Butyl Acetate	8.335	43	503663	48.96	ug/L		99
77) 1,2-Dibromoethane	8.396	107	332865	49.81	ug/L		97
79) Chlorobenzene	8.866	112	1337853	52.24	ug/L		99
81) 1,1,1,2-Tetrachloroethane	8.945	131	455338	48.35	ug/L		98
82) Ethylbenzene	8.976	106	1279178	94.08	ug/L	#	80
83) (m+p)Xylene	9.085	106	3886241m	244.41	ug/L		
84) o-Xylene	9.433	106	2825670m	170.05	ug/L		
85) Styrene	9.445	104	1600954	60.21	ug/L		95
86) Bromoform	9.597	173	227250	45.54	ug/L		100
88) Isopropylbenzene	9.756	105	2294514	60.08	ug/L		99
89) Cyclohexanone	9.823	55	144972	460.18	ug/L		95
90) trans-1,4-Dichloro-2-B...	10.055	53	93310	41.83	ug/L		88
92) 1,1,2,2-Tetrachloroethane	10.006	83	404804	47.16	ug/L		99
93) Bromobenzene	10.000	156	582655	48.78	ug/L		97
94) 1,2,3-Trichloropropane	10.042	110	101149	44.73	ug/L		94
95) n-Propylbenzene	10.103	91	2773553	59.44	ug/L		100
96) 2-Chlorotoluene	10.164	91	1833197	60.00	ug/L		99
98) 4-Chlorotoluene	10.256	91	2066764	57.18	ug/L		98
99) 1,3,5-Trimethylbenzene	10.250	105	2726463	79.08	ug/L		96
100) tert-Butylbenzene	10.518	119	1544870	52.93	ug/L		98
101) 1,2,4-Trimethylbenzene	10.554	105	5268306m	148.11	ug/L		
103) sec-Butylbenzene	10.695	105	2197697	55.60	ug/L		99
104) p-Isopropyltoluene	10.817	119	1928524	55.99	ug/L		99

Quantitation Report (QT Reviewed)

Sample : R1410303-002MS|2.5
Data File : I:\ACQUDATA\msvoa10\data\122914\A5211.D Vial: 46
Acq On : 30 Dec 2014 10:57 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 15:28:37 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

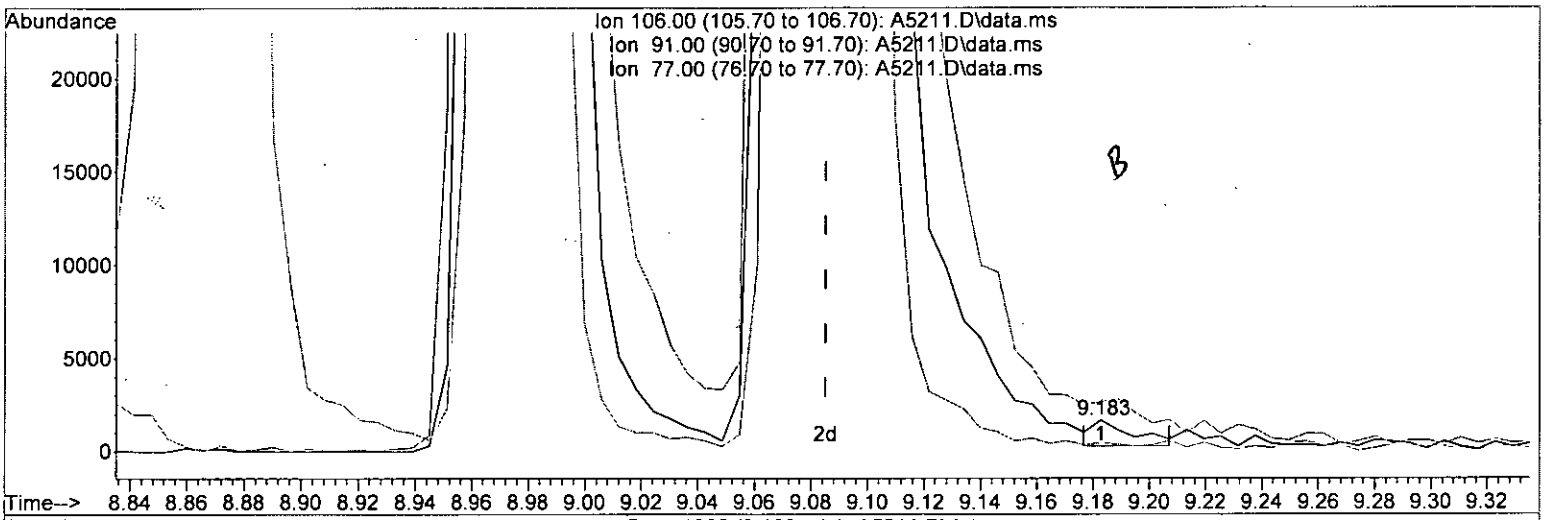
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
105) 1,3-Dclbenz	10.780	146	1126848	50.01 ug/L	97
106) 1,4-Dclbenz	10.853	146	1161064	50.04 ug/L	97
109) n-Butylbenzene	11.140	91	1851365	57.99 ug/L	99
110) 1,2-Dclbenz	11.152	146	1036459	50.35 ug/L	99
111) 1,2-Dibromo-3-chloropr...	11.707	157	64359	43.51 ug/L	92
115) 1,2,4-Tcbenzene	12.225	180	652232	49.58 ug/L	98
116) Hexachlorobt	12.322	225	281997	44.63 ug/L	97
117) Naphthalen	12.371	128	1689144	78.13 ug/L	100
118) 1,2,3-Tclbenzene	12.511	180	487845	47.41 ug/L	99

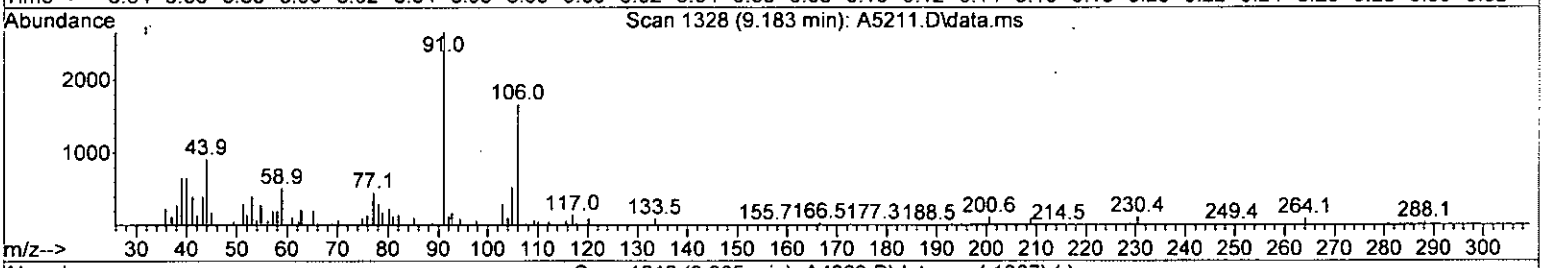
(#) = qualifier out of range (m) = manual integration (+) = signals summed

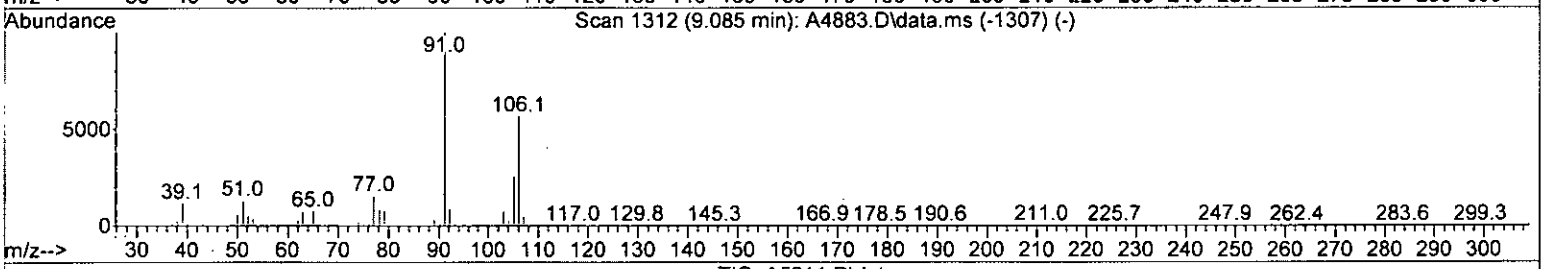
Quantitation Report (Qedit)

Sample : R1410303-002MS|2.5
Data File : I:\ACQUDATA\msvoa10\data\122914\A5211.D Vial: 46
Acq On : 30 Dec 2014 10:57 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Dec 30 11:10:54 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration







TIC: A5211.D\data.ms

(83) (m+p)Xylene (P)

9.183min (+0.098) 0.09 ug/L

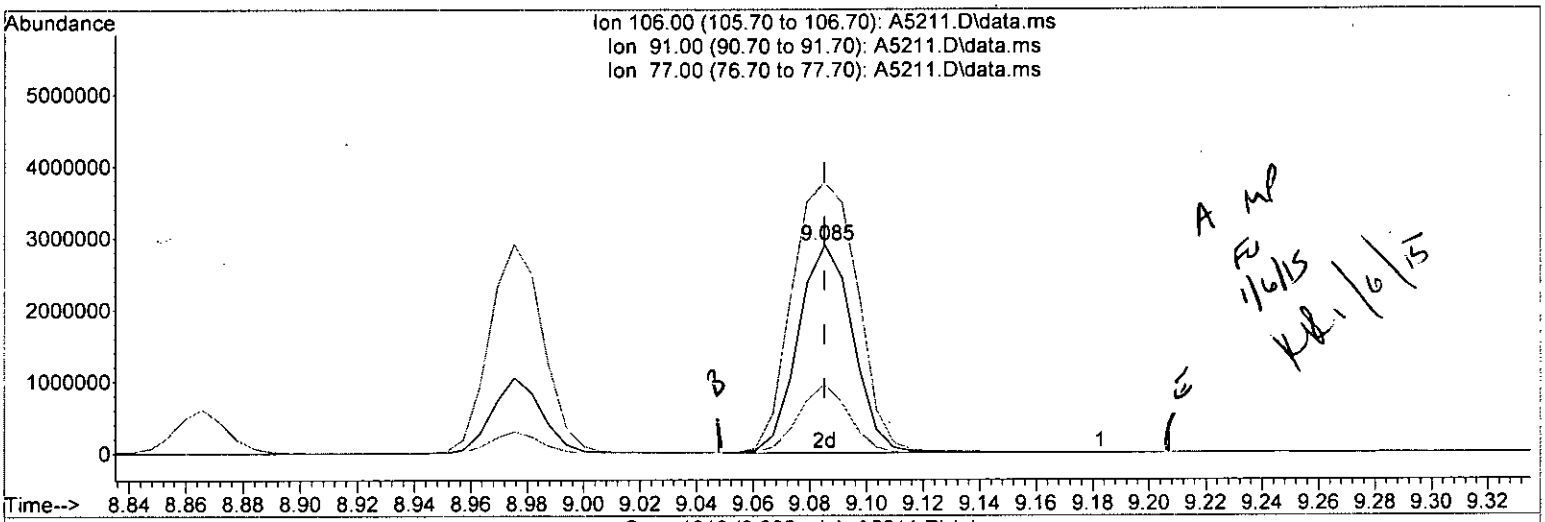
response 1358

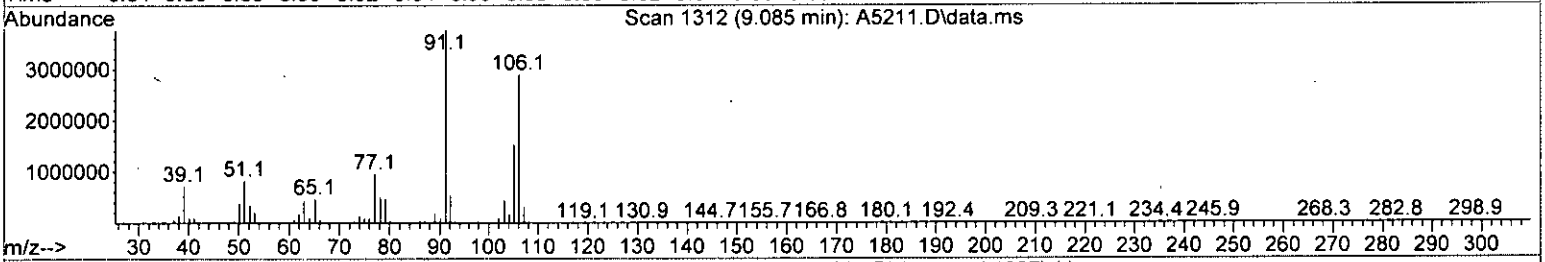
Ion	Exp%	Act%
106.00	100	100
91.00	177.20	159.11
77.00	27.20	27.00
0.00	0.00	0.00

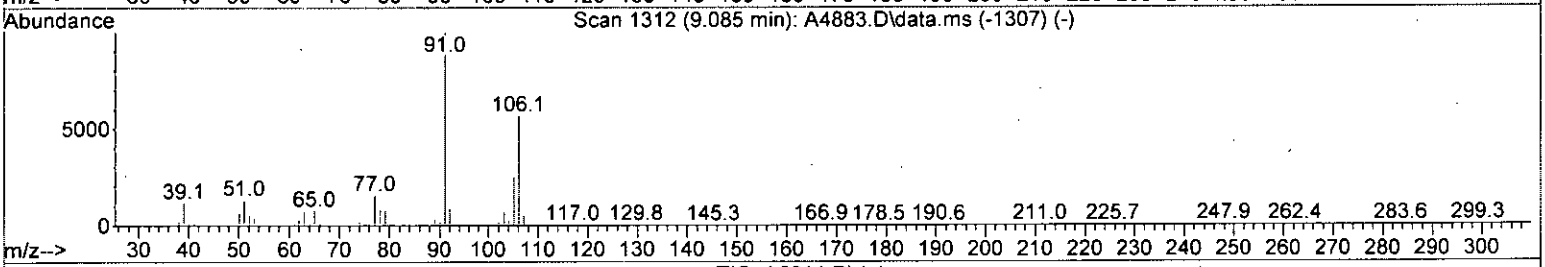
Quantitation Report (Qedit)

Sample : R1410303-002MS|2.5
Data File : I:\ACQUDATA\msvoa10\data\122914\A5211.D Vial: 46
Acq On : 30 Dec 2014 10:57 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Dec 30 11:10:54 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration







TIC: A5211.D\data.ms

(83) (m+p)Xylene (P)

9.085min (+0.000) 244.41 ug/L m

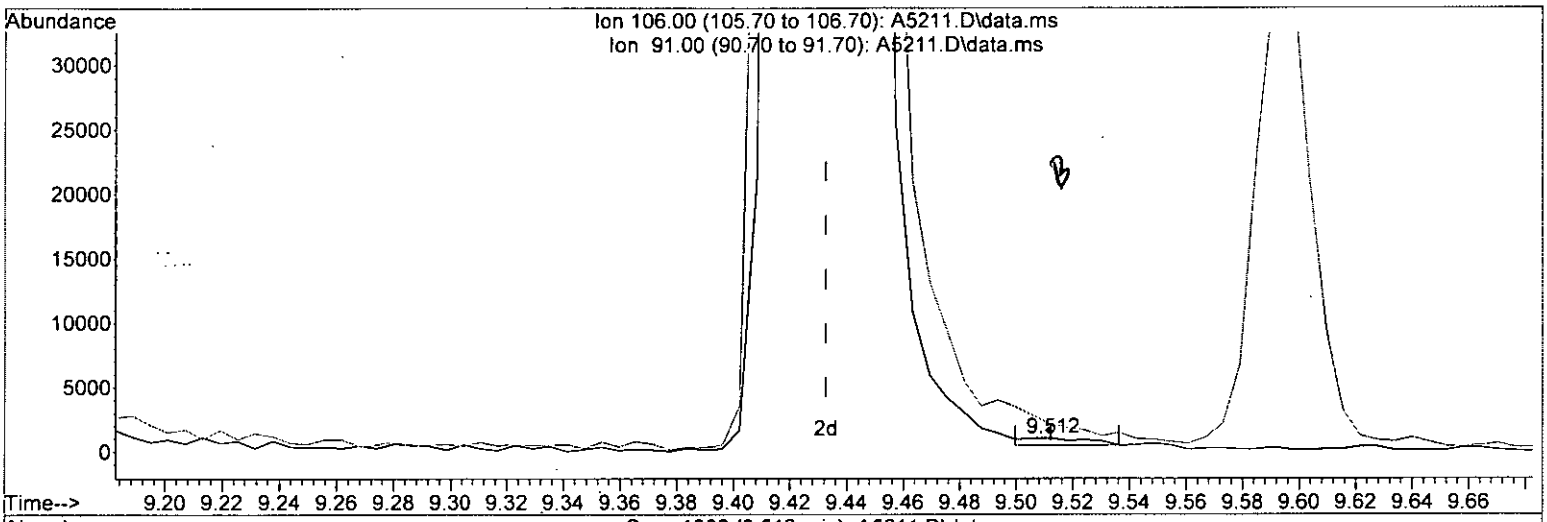
response 3886241

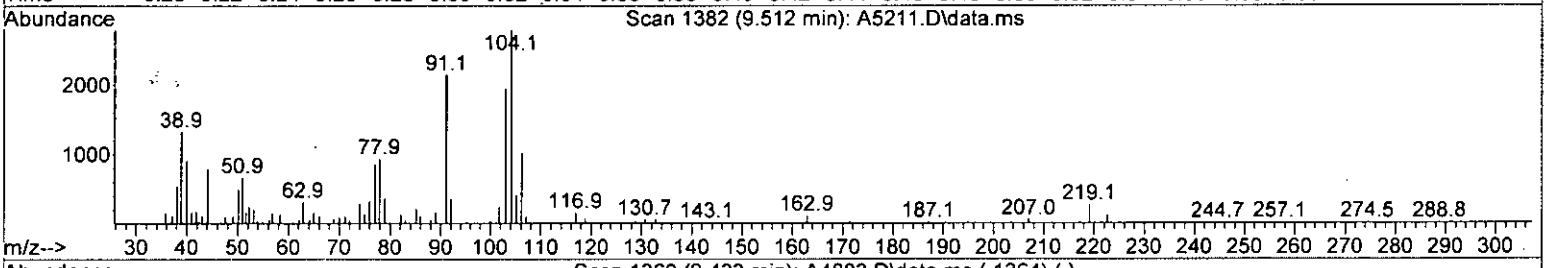
Ion	Exp%	Act%
106.00	100	100
91.00	177.20	130.12#
77.00	27.20	32.97
0.00	0.00	0.00

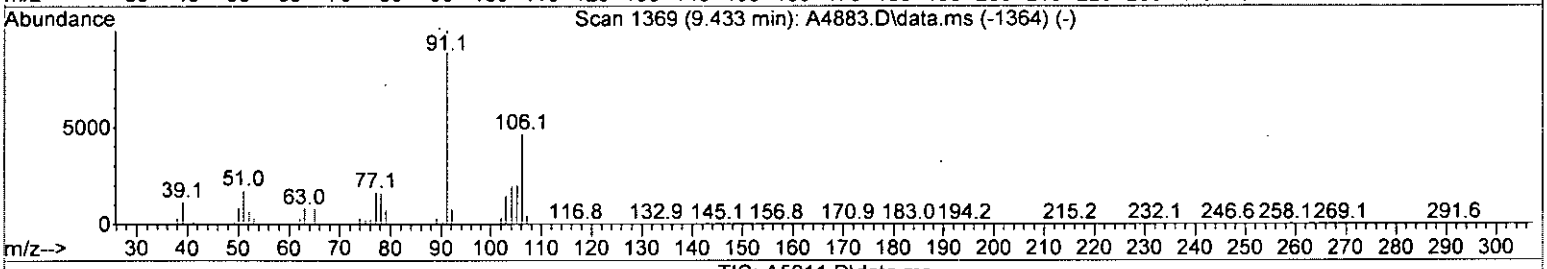
Quantitation Report (Qedit)

Sample : R1410303-002MS|2.5
Data File : I:\ACQUDATA\msvoa10\data\122914\A5211.D Vial: 46
Acq On : 30 Dec 2014 10:57 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Dec 30 11:10:54 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration







TIC: A5211.D\data.ms

(84) o-Xylene (P)

9.512min (+0.079) 0.05 ug/L

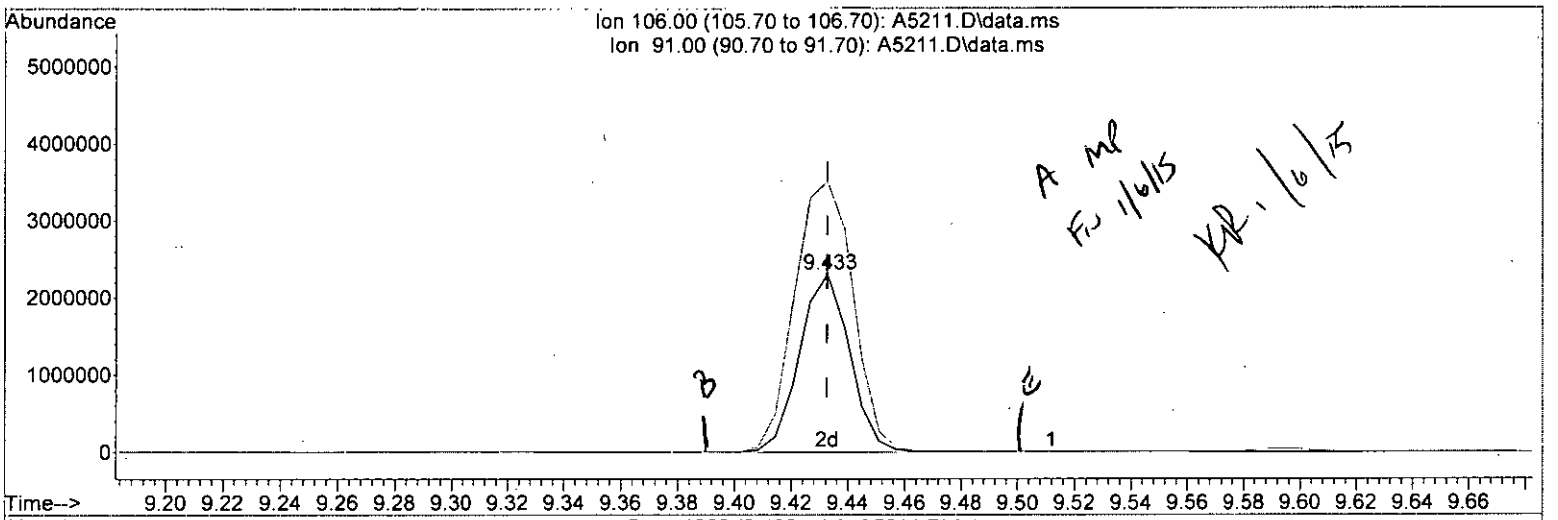
response 827

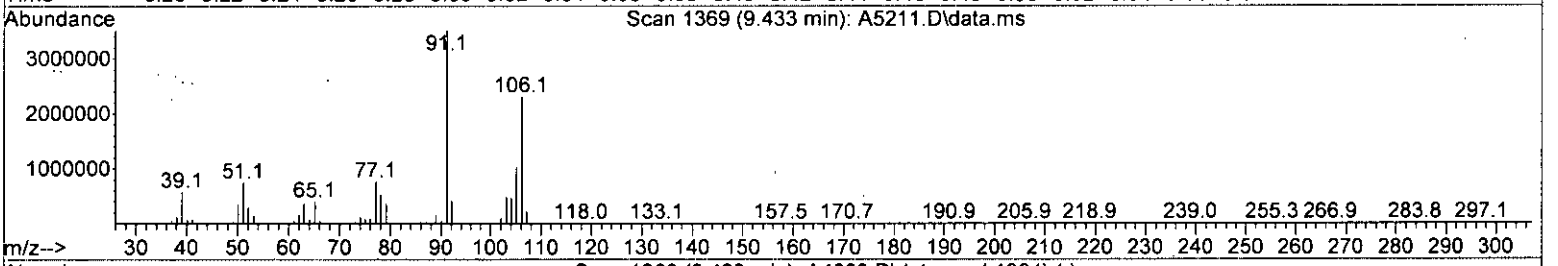
Ion	Exp%	Act%
106.00	100	100
91.00	215.30	209.26
0.00	0.00	0.00
0.00	0.00	0.00

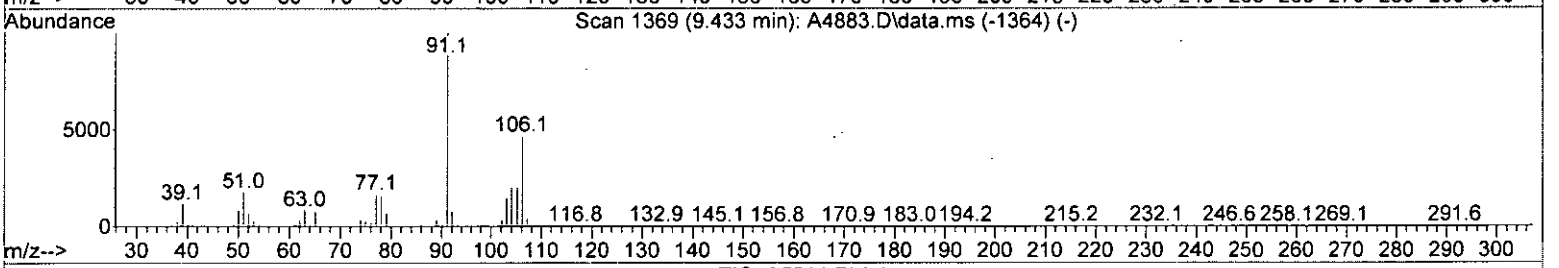
Quantitation Report (Qedit)

Sample : R1410303-002MS|2.5
Data File : I:\ACQUDATA\msvoa10\data\122914\A5211.D Vial: 46
Acq On : 30 Dec 2014 10:57 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Dec 30 11:10:54 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration







TIC: A5211.D\data.ms

(84) o-Xylene (P)

9.433min (+0.000) 170.05 ug/L m

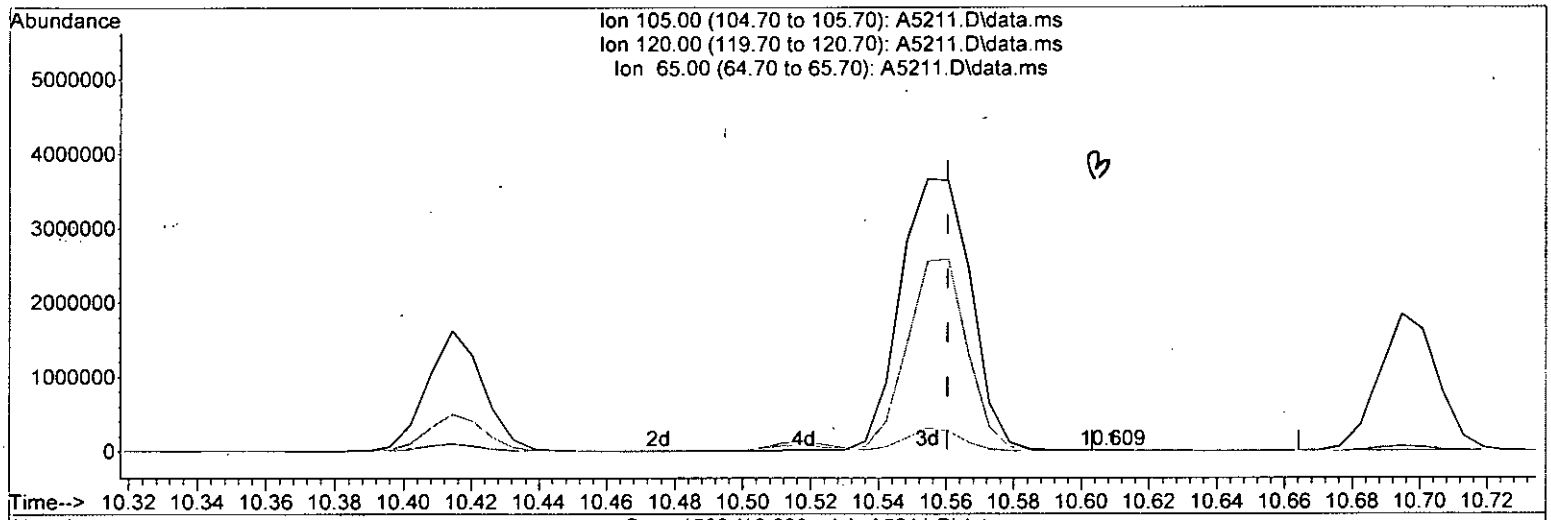
response 2825670

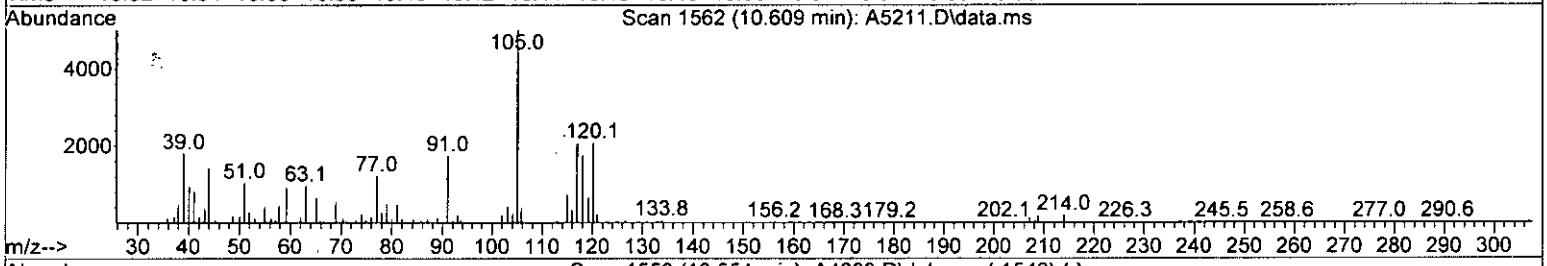
Ion	Exp%	Act%
106.00	100	100
91.00	215.30	152.25#
0.00	0.00	0.00
0.00	0.00	0.00

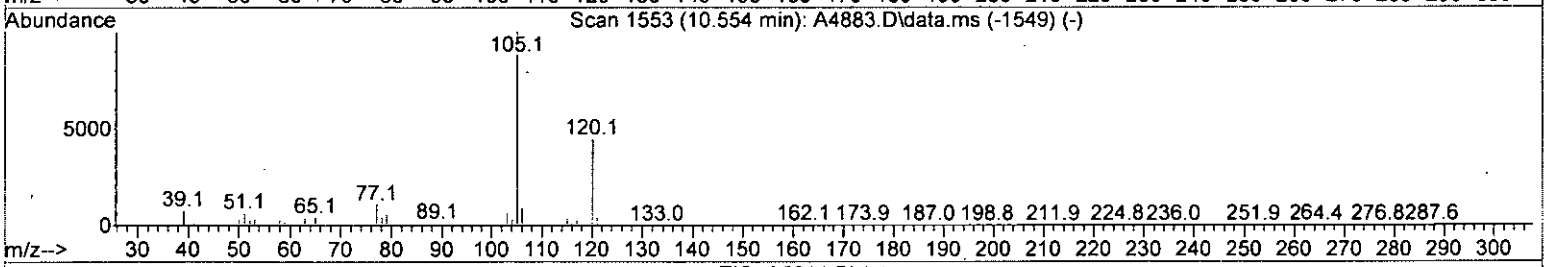
Quantitation Report (Qedit)

Sample. : R1410303-002MS|2.5
Data File : I:\ACQUDATA\msvoa10\data\122914\A5211.D Vial: 46
Acq On : 30 Dec 2014 10:57 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Dec 30 11:10:54 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration







TIC: A5211.D\data.ms

(101) 1,2,4-Trimethylbenzene

10.609min (+0.049) 0.15 ug/L

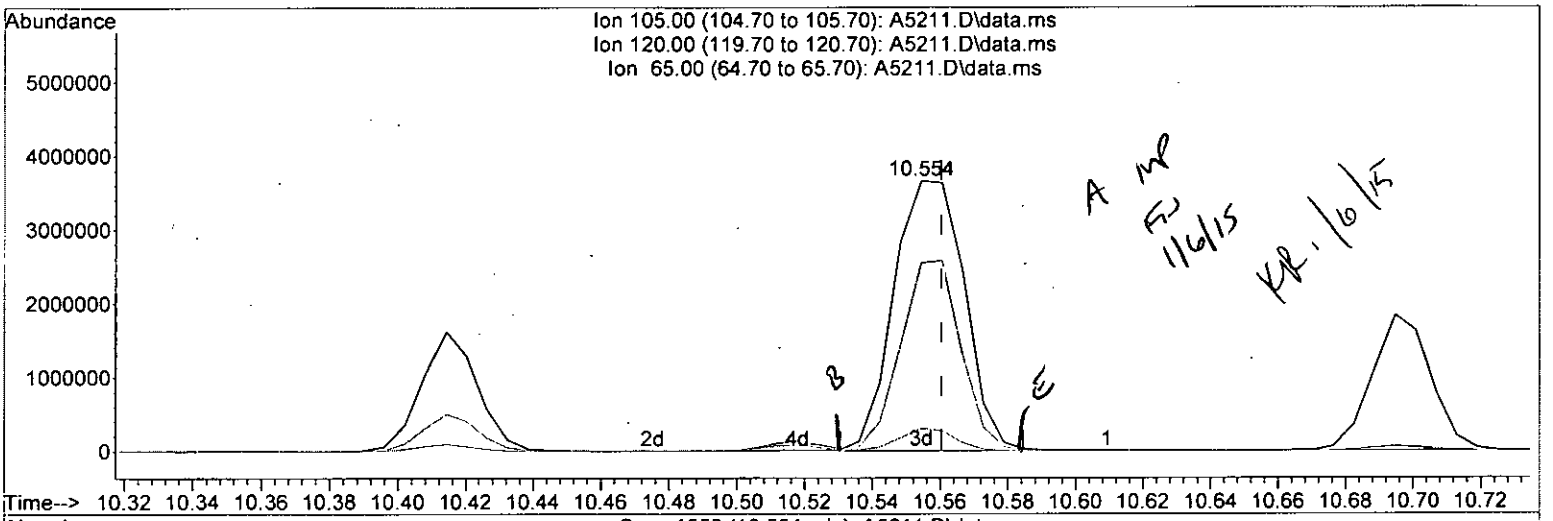
response 5296

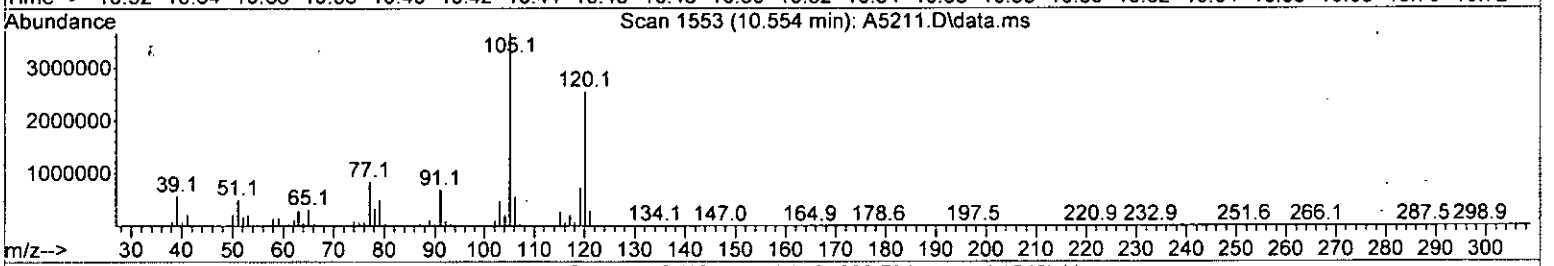
Ion	Exp%	Act%
105.00	100	100
120.00	46.30	41.36
65.00	4.80	12.67
0.00	0.00	0.00

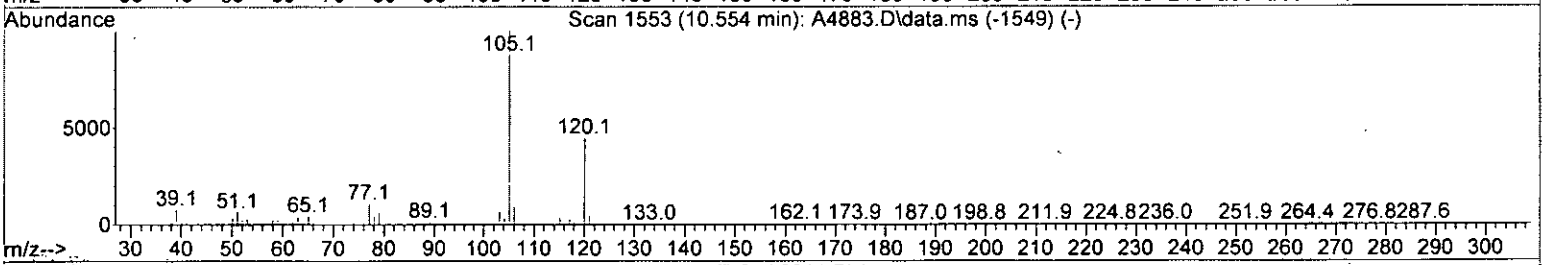
Quantitation Report (Qedit)

Sample : R1410303-002MS|2.5
Data File : I:\ACQUDATA\msvoa10\data\122914\A5211.D Vial: 46
Acq On : 30 Dec 2014 10:57 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Dec 30 11:10:54 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration







TIC: A5211.D\data.ms

(101) 1,2,4-Trimethylbenzene

10.554min (-0.006) 148.11 ug/L m

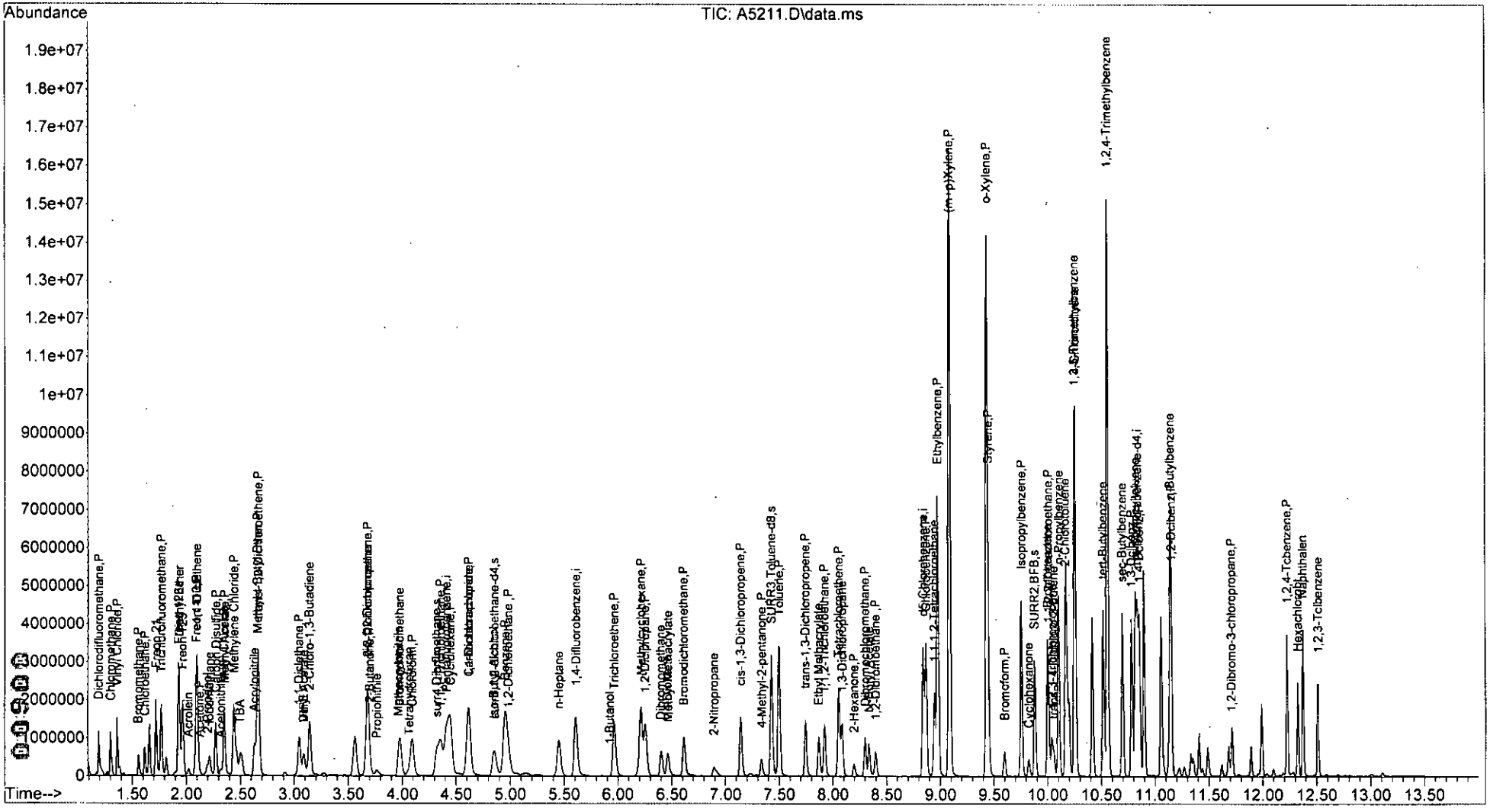
response 5268306

Ion	Exp%	Act%
105.00	100	100
120.00	46.30	69.62#
65.00	4.80	8.37
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Sample : R1410303-002MS|2.5
Data File : I:\ACQUDATA\msvoa10\data\122914\A5211.D Vial: 46
Acq On : 30 Dec 2014 10:57 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 15:28:37 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



W121514.M Tue Jan 06 15:29:47 2015 MSVO10

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1008
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 11:27
Sample Name:	FTMM-53-GW-699RW05-10	**Units:**	µg/L
Lab Code:	RQ1500158-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5212.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2.5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**117**		13	2.5	0.55	
71-55-6	1,1,1-Trichloroethane (TCA)	**120**		13	2.5	0.90	
79-34-5	1,1,2,2-Tetrachloroethane	**117**		13	2.5	0.63	
79-00-5	1,1,2-Trichloroethane	**114**		13	2.5	0.86	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**125**		13	2.5	0.50	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**125**		13	2.5	1.5	
563-58-6	1,1-Dichloropropene	**119**		13	2.5	0.73	
87-61-6	1,2,3-Trichlorobenzene	**121**		13	2.5	2.1	
96-18-4	1,2,3-Trichloropropane	**114**		13	2.5	1.8	
120-82-1	1,2,4-Trichlorobenzene	**124**		13	2.5	0.58	
95-63-6	1,2,4-Trimethylbenzene	**366**		13	2.5	0.50	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**114**		13	2.5	1.9	
106-93-4	1,2-Dibromoethane	**121**		13	2.5	0.60	
95-50-1	1,2-Dichlorobenzene	**124**		13	2.5	0.53	
107-06-2	1,2-Dichloroethane	**121**		13	2.5	0.90	
78-87-5	1,2-Dichloropropane	**130**		13	2.5	0.50	
108-67-8	1,3,5-Trimethylbenzene	**195**		13	2.5	0.50	
541-73-1	1,3-Dichlorobenzene	**123**		13	2.5	0.50	
142-28-9	1,3-Dichloropropane	**122**		13	2.5	0.68	
106-46-7	1,4-Dichlorobenzene	**123**		13	2.5	0.50	
594-20-7	2,2-Dichloropropane	**120**		13	2.5	0.68	
78-93-3	2-Butanone (MEK)	**125**		13	2.5	2.1	
95-49-8	2-Chlorotoluene	**147**		13	2.5	0.50	
591-78-6	2-Hexanone	**111**		13	13	4.2	
75-65-0	tert-Butyl Alcohol	**2150**		250	50	27	
106-43-4	4-Chlorotoluene	**141**		13	2.5	0.60	
99-87-6	p-Isopropyltoluene	**139**		13	2.5	0.50	
108-10-1	4-Methyl-2-pentanone	**116**		13	2.5	1.7	
67-64-1	Acetone	**158**		13	13	3.1	
71-43-2	Benzene	**127**		13	2.5	0.50	
108-86-1	Bromobenzene	**119**		13	2.5	0.71	
74-97-5	Bromochloromethane	**120**		13	2.5	0.80	
75-27-4	Bromodichloromethane	**119**		13	2.5	0.80	
75-25-2	Bromoform	**111**		13	2.5	1.1	
74-83-9	Bromomethane	**75.6**		13	2.5	0.73	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1008
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 11:27
Sample Name:	FTMM-53-GW-699RW05-10	**Units:**	µg/L
Lab Code:	RQ1500158-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5212.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2.5

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**115**		13	2.5	1.2	
108-90-7	Chlorobenzene	**127**		13	2.5	0.73	
75-00-3	Chloroethane	**134**		13	2.5	0.60	
67-66-3	Chloroform	**124**		13	2.5	0.63	
74-87-3	Chloromethane	**135**		13	2.5	0.53	
124-48-1	Dibromochloromethane	**115**		13	2.5	0.78	
75-71-8	Dichlorodifluoromethane (CFC 12)	**130**		13	2.5	1.2	
75-09-2	Methylene Chloride	**121**		13	2.5	1.5	
100-41-4	Ethylbenzene	**226**		13	2.5	0.50	
87-68-3	Hexachlorobutadiene	**110**		13	2.5	1.6	
98-82-8	Isopropylbenzene (Cumene)	**143**		13	2.5	0.50	
1634-04-4	Methyl tert-Butyl Ether	**119**		13	2.5	0.73	
91-20-3	Naphthalene	**195**		13	2.5	0.50	
100-42-5	Styrene	**145**		13	2.5	0.50	
127-18-4	Tetrachloroethene (PCE)	**121**		13	2.5	0.75	
108-88-3	Toluene	**135**		13	2.5	0.50	
79-01-6	Trichloroethene (TCE)	**123**		13	2.5	0.55	
75-69-4	Trichlorofluoromethane (CFC 11)	**135**		13	2.5	0.50	
75-01-4	Vinyl Chloride	**130**		13	2.5	0.80	
156-59-2	cis-1,2-Dichloroethene	**123**		13	2.5	0.75	
10061-01-5	cis-1,3-Dichloropropene	**116**		13	2.5	0.60	
179601-23-1	m,p-Xylenes	**587**		25	5.0	0.83	
104-51-8	n-Butylbenzene	**141**		13	2.5	0.53	
103-65-1	n-Propylbenzene	**145**		13	2.5	0.50	
95-47-6	o-Xylene	**413**		13	2.5	0.50	
135-98-8	sec-Butylbenzene	**137**		13	2.5	0.68	
98-06-6	tert-Butylbenzene	**128**		13	2.5	0.50	
156-60-5	trans-1,2-Dichloroethene	**125**		13	2.5	0.83	
10061-02-6	trans-1,3-Dichloropropene	**116**		13	2.5	0.50	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1008
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 11:27
Sample Name:	FTMM-53-GW-699RW05-10	**Units:**	µg/L
Lab Code:	RQ1500158-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427294
Data File Name:	I:\ACQUDATA\msvoa10\data\122914\A5212.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	2.5

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	75-120	12/30/14 11:27	
Dibromofluoromethane	101	85-115	12/30/14 11:27	
Toluene-d8	108	85-120	12/30/14 11:27	

Quantitation Report (QT Reviewed)

Sample : R1410303-002DMS|2.5
Data File : I:\ACQUDATA\msvoa10\data\122914\A5212.D Vial: 47
Acq On : 30 Dec 2014 11:27 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

FJ 1/6/15

Quant Time: Jan 06 15:30:41 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	1042011	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1514875	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1378731	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	769177	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.318	113	480722	50.45	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.90%				
48) surr1,1,2-dichloroetha...	4.854	65	473129	48.89	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 97.78%				
65) SURR3,Toluene-d8	7.427	98	1793480	53.80	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 107.60%				
70) SURR2,BFB	9.878	95	704401	50.63	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.26%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.190	85	597354	52.14	ug/L		98
3) Chloromethane	1.300	50	676398	54.07	ug/L		98
4) Vinyl Chloride	1.361	62	643655	52.18	ug/L		99
5) Bromomethane	1.556	94	216048	30.25	ug/L		98
6) Chloroethane	1.617	64	347753	53.63	ug/L		99
7) Freon 21	1.721	67	1100997	61.14	ug/L		97
8) Trichlorofluoromethane	1.770	101	822035	54.06	ug/L		98
9) Diethyl Ether	1.934	59	364111	53.67	ug/L		97
10) Freon 123a	1.928	67	681973	61.96	ug/L		91
11) Freon 123	1.965	83	722248	59.19	ug/L		97
12) Acrolein	2.019	56	80056	142.81	ug/L		88
13) 1,1-Diclethene	2.099	96	416281	49.84	ug/L		96
14) Freon 113	2.093	101	451217	49.87	ug/L		98
15) Acetone	2.117	43	111143	63.17	ug/L		92
16) 2-Propanol	2.196	45	282921	869.95	ug/L		96
17) Iodomethane	2.215	142	463672	37.80	ug/L		99
18) Carbon Disulfide	2.269	76	1201849	44.32	ug/L		100
19) Acetonitrile	2.318	40	60882	265.66	ug/L		93
20) Allyl Chloride	2.349	76	220639	43.33	ug/L		98
21) Methyl Acetate	2.355	43	204095	49.97	ug/L		99
22) Methylene Chloride	2.440	84	451192	48.59	ug/L		98
23) TBA	2.495	59	463632	859.48	ug/L		84
24) Acrylonitrile	2.629	53	497646	252.25	ug/L		99
25) Methyl-t-Butyl Ether	2.660	73	1046930	47.51	ug/L		67
26) trans-1,2-Dichloroethene	2.666	96	455431	49.91	ug/L		96
28) 1,1-Diclethane	3.044	63	857551	50.19	ug/L		100
29) Vinyl Acetate	3.086	86	58433	50.88	ug/L	#	46
30) DIPE	3.080	45	6353	0.20	ug/L	#	1
31) 2-Chloro-1,3-Butadiene	3.141	53	770519	53.40	ug/L		98
33) 2,2-Dichloropropane	3.678	77	702149	48.14	ug/L		98
34) cis-1,2-Dichloroethene	3.678	96	496213	49.13	ug/L		100
35) 2-Butanone	3.696	43	115227	49.86	ug/L		98
36) Propionitrile	3.763	54	171536	260.15	ug/L		96
37) Bromochloromethane	3.976	130	279280	48.15	ug/L		93
38) Methacrylonitrile	3.964	67	107840	49.67	ug/L		85

Quantitation Report (QT Reviewed)

Sample : R1410303-002DMS|2.5
Data File : I:\ACQUDATA\msvoa10\data\122914\A5212.D Vial: 47
Acq On : 30 Dec 2014 11:27 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 15:30:41 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39)	Tetrahydrofuran	4.062	42	74709	50.45	ug/L		93
40)	Chloroform	4.092	83	840612	49.48	ug/L		98
41)	1,1,1-Trichloroethane	4.360	97	732356	48.13	ug/L		97
44)	Cyclohexane	4.446	41	565746	58.06	ug/L		97
46)	Carbontetrachloride	4.610	121	191933	45.88	ug/L		96
47)	1,1-Dichloropropene	4.617	75	601231	47.52	ug/L		99
49)	Benzene	4.952	78	1849706	50.92	ug/L		99
50)	1,2-Dichloroethane	4.982	62	605359	48.57	ug/L		98
51)	Iso-Butyl Alcohol	4.848	43	182146	839.41	ug/L		95
52)	n-Heptane	5.452	43	498873	46.12	ug/L		95
53)	1-Butanol	5.921	56	460	23.94	ug/L		93
54)	Trichloroethene	5.964	130	487974	49.07	ug/L		99
55)	Methylcyclohexane	6.214	55	663894	55.19	ug/L		99
56)	1,2-Diclpropane	6.256	63	497852	52.05	ug/L		99
57)	Dibromomethane	6.397	93	245331	46.75	ug/L		90
58)	1,4-Dioxane	6.452	88	45434	830.27	ug/L		93
59)	Methyl Methacrylate	6.464	69	193279	49.73	ug/L		97
60)	Bromodichloromethane	6.610	83	598456	47.67	ug/L		98
61)	2-Nitropropane	6.890	41	132308	78.85	ug/L		92
63)	cis-1,3-Dichloropropene	7.140	75	690054	46.26	ug/L		99
64)	4-Methyl-2-pentanone	7.335	43	268728	46.23	ug/L		98
66)	Toluene	7.500	91	2082442	53.94	ug/L		98
67)	trans-1,3-Dichloropropene	7.744	75	572035	46.49	ug/L		99
68)	Ethyl Methacrylate	7.866	69	396562	45.82	ug/L		91
69)	1,1,2-Trichloroethane	7.921	97	320493	45.52	ug/L		94
72)	Tetrachloroethene	8.055	164	401707	48.47	ug/L		98
73)	2-Hexanone	8.195	43	174654	44.59	ug/L		97
74)	1,3-Dichloropropane	8.085	76	567854	48.97	ug/L		98
75)	Dibromochloromethane	8.299	129	402874	45.82	ug/L		98
76)	N-Butyl Acetate	8.335	43	493965	47.16	ug/L		99
77)	1,2-Dibromoethane	8.396	107	329148	48.37	ug/L		98
79)	Chlorobenzene	8.866	112	1329468	50.99	ug/L		98
81)	1,1,1,2-Tetrachloroethane	8.945	131	450477	46.98	ug/L		97
82)	Ethylbenzene	8.975	106	1254007	90.58	ug/L	#	81
83)	(m+p)Xylene	9.085	106	3803032	234.90	ug/L	#	71
84)	o-Xylene	9.433	106	2793100	165.08	ug/L	#	60
85)	Styrene	9.445	104	1569912	57.99	ug/L		94
86)	Bromoform	9.597	173	225631	44.41	ug/L		99
88)	Isopropylbenzene	9.756	105	2231275	57.37	ug/L		99
89)	Cyclohexanone	9.823	55	146566	456.92	ug/L		98
90)	trans-1,4-Dichloro-2-B...	10.054	53	86589	38.13	ug/L		97
92)	1,1,2,2-Tetrachloroethane	10.006	83	401940	46.84	ug/L		99
93)	Bromobenzene	10.000	156	566486	47.44	ug/L		98
94)	1,2,3-Trichloropropane	10.036	110	102813	45.48	ug/L	#	89
95)	n-Propylbenzene	10.103	91	2713889	58.18	ug/L		99
96)	2-Chlorotoluene	10.164	91	1791988	58.68	ug/L		98
98)	4-Chlorotoluene	10.256	91	2035462	56.33	ug/L		98
99)	1,3,5-Trimethylbenzene	10.250	105	2690609	78.07	ug/L		97
100)	tert-Butylbenzene	10.518	119	1495792	51.27	ug/L		99
101)	1,2,4-Trimethylbenzene	10.554	105	5209891	146.52	ug/L	#	67
103)	sec-Butylbenzene	10.695	105	2168255	54.88	ug/L		99
104)	p-Isopropyltoluene	10.817	119	1920632	55.78	ug/L		99

Quantitation Report (QT Reviewed)

Sample : R1410303-002DMS|2.5
Data File : I:\ACQUDATA\msvoa10\data\122914\A5212.D Vial: 47
Acq On : 30 Dec 2014 11:27 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 15:30:41 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

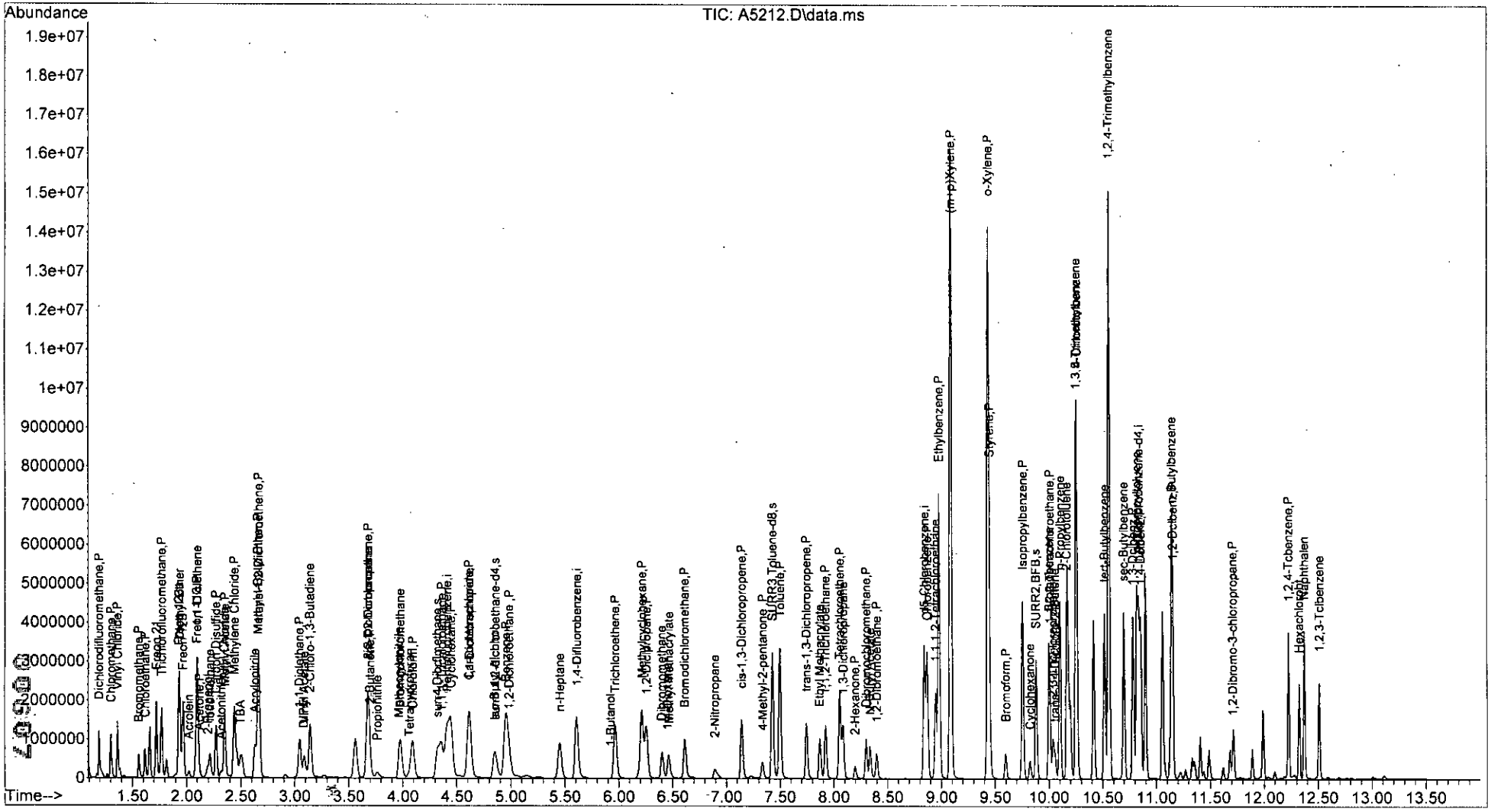
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3-Dclbenz	10.780	146	1112193	49.37	ug/L	98
106) 1,4-Dclbenz	10.853	146	1141386	49.21	ug/L	98
109) n-Butylbenzene	11.140	91	1806162	56.59	ug/L	98
110) 1,2-Dclbenz	11.152	146	1018680	49.50	ug/L	99
111) 1,2-Dibromo-3-chloropr...	11.707	157	67612	45.72	ug/L	96
115) 1,2,4-Tcbenzene	12.225	180	651033	49.51	ug/L	99
116) Hexachlorobt	12.322	225	279047	44.18	ug/L	95
117) Naphthalen	12.371	128	1682193	77.83	ug/L	99
118) 1,2,3-Tclbenzene	12.511	180	499185	48.53	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Sample : R1410303-002DMS|2.5
Data File : I:\ACQUDATA\msvoa10\data\122914\A5212.D Vial: 47
Acq On : 30 Dec 2014 11:27 am
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Jan 06 15:30:41 2015
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



W121514.M Tue Jan 06 15:30:59 2015 MSVO10

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0936
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 20:36
Sample Name:	FTMM-53-GW-699MW06-10.2	**Units:**	µg/L
Lab Code:	RQ1500199-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5278.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**46.8**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**49.1**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**45.6**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**45.4**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**52.6**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**51.9**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**48.8**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**45.0**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**40.8**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**47.2**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**50.6**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**39.9**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**46.4**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**47.6**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**48.0**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**53.7**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**51.4**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**47.1**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**46.9**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**47.8**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**43.2**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**50.7**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**50.0**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**44.2**		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	797		100	20	11	
106-43-4	4-Chlorotoluene	**51.3**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**53.6**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**45.5**		5.0	1.0	0.67	
67-64-1	Acetone	**42.7**		5.0	5.0	1.3	
71-43-2	Benzene	**51.6**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**46.3**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**49.3**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**48.2**		5.0	1.0	0.32	
75-25-2	Bromoform	**42.1**		5.0	1.0	0.42	
74-83-9	Bromomethane	**31.7**		5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0936
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 20:36
Sample Name:	FTMM-53-GW-699MW06-10.2	**Units:**	µg/L
Lab Code:	RQ1500199-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5278.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**47.1**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**50.9**		5.0	1.0	0.29	
75-00-3	Chloroethane	**58.5**		5.0	1.0	0.24	
67-66-3	Chloroform	**49.8**		5.0	1.0	0.25	
74-87-3	Chloromethane	**58.1**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**43.8**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**54.2**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**49.5**		5.0	1.0	0.60	
100-41-4	Ethylbenzene	**46.5**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**41.8**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**55.4**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**47.1**		5.0	1.0	0.29	
91-20-3	Naphthalene	**47.1**		5.0	1.0	0.20	
100-42-5	Styrene	**50.8**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**48.4**		5.0	1.0	0.30	
108-88-3	Toluene	**52.7**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**51.3**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**56.7**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**57.2**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**50.3**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**45.4**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**106**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**53.1**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**54.7**		5.0	1.0	0.20	
95-47-6	o-Xylene	**50.5**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**53.7**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**50.9**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**51.6**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**44.9**		5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0936
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 20:36
Sample Name:	FTMM-53-GW-699MW06-10.2	**Units:**	µg/L
Lab Code:	RQ1500199-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5278.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	101	75-120	12/31/14 20:36	
Dibromofluoromethane	100	85-115	12/31/14 20:36	
Toluene-d8	109	85-120	12/31/14 20:36	

Quantitation Report (Not Reviewed)

Sample : R1410303-004MS|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\123114\A5278.D Vial: 20
Acq On : 31 Dec 2014 8:36 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Dec 31 20:49:16 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	967637	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1419547	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1307529	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	739250	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.324	113	445526	49.89	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.78%				
48) surr1,1,2-dichloroetha...	4.854	65	453747	50.03	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 100.06%				
65) SURR3,Toluene-d8	7.427	98	1697307	54.33	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 108.66%				
70) SURR2,BFB	9.878	95	660867	50.69	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.38%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.190	85	576177	54.16	ug/L		99
3) Chloromethane	1.300	50	675053	58.11	ug/L		98
4) Vinyl Chloride	1.361	62	654832	57.16	ug/L		99
5) Bromomethane	1.556	94	210274	31.71	ug/L		100
6) Chloroethane	1.617	64	352372	58.52	ug/L		98
7) Freon 21	1.721	67	1076859	64.39	ug/L		98
8) Trichlorofluoromethane	1.770	101	800406	56.68	ug/L		99
9) Diethyl Ether	1.934	59	343395	54.51	ug/L		94
10) Freon 123a	1.928	67	665238	65.08	ug/L		90
11) Freon 123	1.965	83	686952	60.62	ug/L		98
12) Acrolein	2.026	56	96347	188.35	ug/L		95
13) 1,1-Diclethene	2.099	96	402213	51.85	ug/L		93
14) Freon 113	2.093	101	421742	50.20	ug/L		97
15) Acetone	2.123	43	69699	42.66	ug/L		96
16) 2-Propanol	2.196	45	241472	799.57	ug/L		98
17) Iodomethane	2.215	142	303120	26.61	ug/L		99
18) Carbon Disulfide	2.269	76	1276422	50.69	ug/L		100
19) Acetonitrile	2.318	40	55001	258.45	ug/L		95
20) Allyl Chloride	2.349	76	215570	45.59	ug/L		98
21) Methyl Acetate	2.355	43	163755	43.17	ug/L		98
22) Methylene Chloride	2.440	84	426763	49.50	ug/L		96
23) TBA	2.501	59	399064	796.65	ug/L		97
24) Acrylonitrile	2.629	53	448669	244.91	ug/L		97
25) Methyl-t-Butyl Ether	2.660	73	963720	47.10	ug/L		99
26) trans-1,2-Dichloroethene	2.666	96	437288	51.61	ug/L		94
28) 1,1-Diclethane	3.044	63	833692	52.55	ug/L		98
29) Vinyl Acetate	3.086	86	47455	44.49	ug/L	#	93
30) DIPE	3.105	45	1443246	49.45	ug/L		97
31) 2-Chloro-1,3-Butadiene	3.141	53	789597	58.93	ug/L		99
32) ETBE	3.501	59	1178300	44.39	ug/L		99
33) 2,2-Dichloropropane	3.678	77	585356	43.22	ug/L		97
34) cis-1,2-Dichloroethene	3.678	96	471301	50.25	ug/L		98
35) 2-Butanone	3.702	43	108730	50.66	ug/L		98
36) Propionitrile	3.763	54	153231	250.25	ug/L		98
37) Bromochloromethane	3.983	130	265584	49.31	ug/L		92

BA1/1

Quantitation Report (Not Reviewed)

Sample : R1410303-004MS|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\123114\A5278.D Vial: 20
Acq On : 31 Dec 2014 8:36 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Dec 31 20:49:16 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38)	Methacrylonitrile	3.964	67	101920	50.55	ug/L	98
39)	Tetrahydrofuran	4.056	42	67917	49.39	ug/L	90
40)	Chloroform	4.092	83	784935	49.75	ug/L	98
41)	1,1,1-Trichloroethane	4.354	97	693259	49.07	ug/L	94
42)	TAME	5.177	73	925089	43.61	ug/L	98
44)	Cyclohexane	4.440	41	496562	54.38	ug/L	97
46)	Carbontetrachloride	4.610	121	184574	47.08	ug/L	98
47)	1,1-Dichloropropene	4.617	75	578466	48.79	ug/L	99
49)	Benzene	4.952	78	1755522	51.57	ug/L	98
50)	1,2-Dichloroethane	4.982	62	560072	47.95	ug/L	96
51)	Iso-Butyl Alcohol	4.848	43	166368	818.18	ug/L	92
52)	n-Heptane	5.452	43	441522	43.56	ug/L	95
53)	1-Butanol	5.946	56	203145	1768.91	ug/L	95
54)	Trichloroethene	5.964	130	478222	51.32	ug/L	97
55)	Methylcyclohexane	6.214	55	572004	50.74	ug/L	99
56)	1,2-Diclpropane	6.256	63	481396	53.70	ug/L	98
57)	Dibromomethane	6.397	93	226869	46.13	ug/L	90
58)	1,4-Dioxane	6.452	88	36150	704.98	ug/L	90
59)	Methyl Methacrylate	6.464	69	172549	47.38	ug/L	96
60)	Bromodichloromethane	6.610	83	567435	48.23	ug/L	97
61)	2-Nitropropane	6.891	41	108456	68.97	ug/L	96
63)	cis-1,3-Dichloropropene	7.140	75	634606	45.40	ug/L	98
64)	4-Methyl-2-pentanone	7.336	43	247652	45.47	ug/L	95
66)	Toluene	7.500	91	1908010	52.74	ug/L	99
67)	trans-1,3-Dichloropropene	7.744	75	518021	44.93	ug/L	99
68)	Ethyl Methacrylate	7.866	69	362063	44.64	ug/L	88
69)	1,1,2-Trichloroethane	7.921	97	299800	45.44	ug/L	97
72)	Tetrachloroethene	8.055	164	380331	48.39	ug/L	97
73)	2-Hexanone	8.195	43	164275	44.23	ug/L	97
74)	1,3-Dichloropropane	8.085	76	516156	46.93	ug/L	96
75)	Dibromochloromethane	8.299	129	365482	43.83	ug/L	100
76)	N-Butyl Acetate	8.335	43	412893	41.56	ug/L	99
77)	1,2-Dibromoethane	8.396	107	299188	46.36	ug/L	98
78)	3-Chlorobenzotrifluoride	8.872	180	669056	48.16	ug/L	100
79)	Chlorobenzene	8.866	112	1258038	50.88	ug/L	100
80)	4-Chlorobenzotrifluoride	8.927	180	607676	47.46	ug/L	98
81)	1,1,1,2-Tetrachloroethane	8.945	131	425373	46.77	ug/L	98
82)	Ethylbenzene	8.975	106	610691	46.51	ug/L	99
83)	(m+p)Xylene	9.085	106	1634814	106.47	ug/L	94
84)	o-Xylene	9.433	106	809541	50.45	ug/L	96
85)	Styrene	9.445	104	1303827	50.78	ug/L	98
86)	Bromoform	9.597	173	202613	42.05	ug/L	99
87)	2-Chlorobenzotrifluoride	9.664	180	674433	48.56	ug/L	97
88)	Isopropylbenzene	9.756	105	2043829	55.42	ug/L	98
89)	Cyclohexanone	9.823	55	124406	408.95	ug/L	99
90)	trans-1,4-Dichloro-2-B...	10.055	53	71829	33.35	ug/L	92
92)	1,1,2,2-Tetrachloroethane	10.006	83	376175	45.62	ug/L	97
93)	Bromobenzene	10.000	156	530899	46.26	ug/L	98
94)	1,2,3-Trichloropropane	10.036	110	88570	40.77	ug/L	98
95)	n-Propylbenzene	10.103	91	2451690	54.68	ug/L	99
96)	2-Chlorotoluene	10.164	91	1468432	50.03	ug/L	99
97)	3-Chlorotoluene	10.219	91	1472087	50.21	ug/L	99

Quantitation Report (Not Reviewed)

Sample : R1410303-004MS|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\123114\A5278.D Vial: 20
Acq On : 31 Dec 2014 8:36 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Dec 31 20:49:16 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

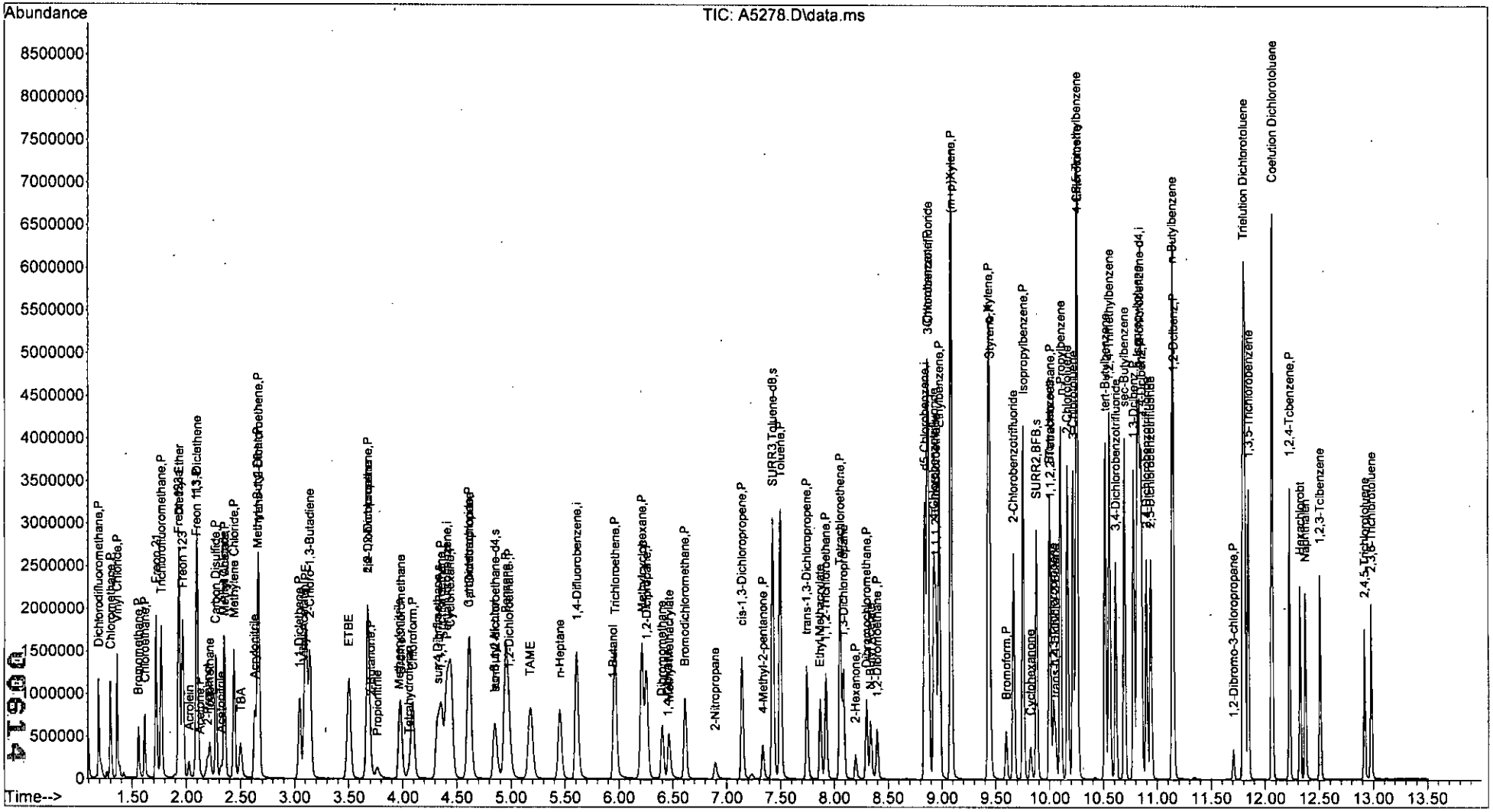
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	4-Chlorotoluene	10.256	91	1780131	51.26	ug/L	99
99)	1,3,5-Trimethylbenzene	10.250	105	1701409	51.36	ug/L	100
100)	tert-Butylbenzene	10.518	119	1427480	50.91	ug/L	100
101)	1,2,4-Trimethylbenzene	10.554	105	1728691	50.58	ug/L	100
102)	3,4-Dichlorobenzotrifl...	10.615	214	499601	44.95	ug/L	99
103)	sec-Butylbenzene	10.695	105	2038346	53.68	ug/L	99
104)	p-Isopropyltoluene	10.817	119	1774668	53.62	ug/L	99
105)	1,3-Dclbenz	10.780	146	1019046	47.07	ug/L	97
106)	1,4-Dclbenz	10.853	146	1066060	47.82	ug/L	97
107)	2,4-Dichlorobenzotrifl...	10.902	214	453851	45.91	ug/L	99
108)	2,5-Dichlorobenzotrifl...	10.938	214	526216	45.46	ug/L	97
109)	n-Butylbenzene	11.140	91	1627752	53.06	ug/L	98
110)	1,2-Dclbenz	11.152	146	940410	47.55	ug/L	99
111)	1,2-Dibromo-3-chloropr...	11.707	157	56691	39.89	ug/L	97
112)	Trielution Dichlorotol...	11.798	125	2451140	152.36	ug/L	99
113)	1,3,5-Trichlorobenzene	11.847	180	693375	46.76	ug/L	98
114)	Coelution Dichlorotoluene	12.066	125	1691459	102.73	ug/L	99
115)	1,2,4-Tcbenzene	12.225	180	597093	47.24	ug/L	100
116)	Hexachlorobt	12.322	225	253538	41.77	ug/L	97
117)	Naphthalen	12.371	128	979290	47.14	ug/L	99
118)	1,2,3-Tclbenzene	12.505	180	444489	44.96	ug/L	99
119)	2,4,5-Trichlorotoluene	12.920	159	274895	43.26	ug/L	98
120)	2,3,6-Trichlorotoluene	12.981	159	291538	42.25	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Sample : R1410303-004MS|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\123114\A5278.D Vial: 20
Acq On : 31 Dec 2014 8:36 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Dec 31 20:49:16 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration


Abundance
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7500000
7000000
6500000
6000000
5500000
5000000
4500000
4000000
3500000
3000000
2500000
2000000
1500000
1000000
500000
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Time-->
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12.00
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13.50
Dichlorodifluoromethane,P
Chloromethane,P
Bromomethane,P
Trichlorofluoromethane,P
Acrolein
Acetone,P
Carbon Disulfide,P
Methylene Chloride,P
TBA
Acrylonitrile
ETBE
1,3-Butadiene
Propionitrile
Methacrylonitrile
Tetrahydrofuran,P
Chloroform,P
1,1,1-Trichloroethane,P
Cyclohexane,P
Carbon Tetrachloride,P
Benzene,P
1,2-Dichloroethane-d4,s
1,2-Dichloroethane,P
TAME
n-Heptane
1,4-Difluorobenzene,i
Trichloroethene,P
1-Butanol
1,2-Dichloropropane,P
Methylcyclohexane,P
Dibromomethane,P
1,4-Dioxane,P
Bromodichloromethane,P
2-Nitropropane
cis-1,3-Dichloropropene,P
4-Methyl-2-pentanone,P
SURR3 Toluene-d8,s
Toluene,P
trans-1,3-Dichloropropene,P
Ethyl Methacrylate
1,1,2-Trichloroethane,P
Tetrachloroethene,P
1,3-Dichloropropane,P
2-Hexanone,P
Dibromochloromethane,P
1,2-Dibromoethane,P
Chlorobenzene-d5,i
Ethylbenzene,P
(m+p)Xylene,P
Styrene,P
o-Xylene,P
Bromoform,P
2-Chlorobenzotrifluoride
Isopropylbenzene,P
Cyclohexanone
SURR2 BFB,s
1,1,2,2-Tetrachloroethane,P
n-Propylbenzene
2-Chlorotoluene
4-Chlorotoluene
1,3,5-Trimethylbenzene
tert-Butylbenzene
1,2,4-Trimethylbenzene
sec-Butylbenzene
1,3-Dichlorobenzene,P
1,4-Dichlorobenzene-d4,i
1,4-Dichlorobenzene,P
p-Isopropyltoluene
1,2-Dichlorobenzene,P
n-Butylbenzene
1,2-Dibromo-3-chloropropane,P
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Naphthalene,P
1,2,3-Trichlorobenzene
Trichlorotoluene
Trichlorotoluene
Trichlorotolu

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0936
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 21:05
Sample Name:	FTMM-53-GW-699MW06-10.2	**Units:**	µg/L
Lab Code:	RQ1500199-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5279.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**48.6**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**51.2**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**45.6**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**46.6**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**53.6**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**52.5**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**51.1**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**48.2**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**42.9**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**49.3**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**51.9**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**41.0**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**48.2**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**48.8**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**49.5**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**54.4**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**52.7**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**49.3**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**50.1**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**48.6**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**44.6**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**51.0**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**52.4**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**48.4**		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	**835**		100	20	11	
106-43-4	4-Chlorotoluene	**53.4**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**54.8**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**47.9**		5.0	1.0	0.67	
67-64-1	Acetone	**46.1**		5.0	5.0	1.3	
71-43-2	Benzene	**53.5**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**47.6**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**49.9**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**50.3**		5.0	1.0	0.32	
75-25-2	Bromoform	**42.9**		5.0	1.0	0.42	
74-83-9	Bromomethane	**37.1**		5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0936
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 21:05
Sample Name:	FTMM-53-GW-699MW06-10.2	**Units:**	µg/L
Lab Code:	RQ1500199-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5279.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**49.5**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**52.9**		5.0	1.0	0.29	
75-00-3	Chloroethane	**60.1**		5.0	1.0	0.24	
67-66-3	Chloroform	**51.4**		5.0	1.0	0.25	
74-87-3	Chloromethane	**58.8**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**46.2**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**55.8**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**50.8**		5.0	1.0	0.60	
100-41-4	Ethylbenzene	**48.1**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**45.2**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**56.6**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**47.5**		5.0	1.0	0.29	
91-20-3	Naphthalene	**48.9**		5.0	1.0	0.20	
100-42-5	Styrene	**52.9**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**50.9**		5.0	1.0	0.30	
108-88-3	Toluene	**54.5**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**52.2**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**58.7**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**58.9**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**51.6**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**47.2**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**110**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**55.0**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**56.9**		5.0	1.0	0.20	
95-47-6	o-Xylene	**50.7**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**55.3**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**52.7**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**53.7**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**46.7**		5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410303
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 0936
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 21:05
Sample Name:	FTMM-53-GW-699MW06-10.2	**Units:**	µg/L
Lab Code:	RQ1500199-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427678
Data File Name:	I:\ACQUDATA\msvoa10\data\123114\A5279.D\	**Instrument Name:**	R-MS-10
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	102	75-120	12/31/14 21:05	
Dibromofluoromethane	100	85-115	12/31/14 21:05	
Toluene-d8	109	85-120	12/31/14 21:05	

Quantitation Report (Not Reviewed)

Sample : R1410303-004DMS|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\123114\A5279.D Vial: 21
Acq On : 31 Dec 2014 9:05 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Dec 31 21:18:41 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.409	168	1019641	50.00	ug/L		0.00
43) 1,4-Difluorobenzene	5.610	114	1483869	50.00	ug/L		0.00
71) d5-Chlorobenzene	8.841	117	1350170	50.00	ug/L		0.00
91) 1,4-Dichlorobenzene-d4	10.835	152	745469	50.00	ug/L		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.318	113	467108	50.04	ug/L		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.08%				
48) surr1,1,2-dichloroetha...	4.848	65	469746	49.55	ug/L		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 99.10%				
65) SURR3,Toluene-d8	7.427	98	1778078	54.45	ug/L		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 108.90%				
70) SURR2,BFB	9.878	95	691643	50.75	ug/L		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 101.50%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.190	85	626005	55.84	ug/L		100
3) Chloromethane	1.300	50	719226	58.76	ug/L		99
4) Vinyl Chloride	1.361	62	710900	58.89	ug/L		99
5) Bromomethane	1.556	94	259505	37.14	ug/L		96
6) Chloroethane	1.617	64	381086	60.06	ug/L		96
7) Freon 21	1.721	67	1142265	64.82	ug/L		98
8) Trichlorofluoromethane	1.770	101	872771	58.65	ug/L		99
9) Diethyl Ether	1.934	59	373525	56.26	ug/L		95
10) Freon 123a	1.928	67	716737	66.54	ug/L		89
11) Freon 123	1.965	83	746554	62.52	ug/L		99
12) Acrolein	2.019	56	97931	181.21	ug/L		92
13) 1,1-Diclethene	2.099	96	429370	52.53	ug/L		94
14) Freon 113	2.093	101	458920	51.84	ug/L		97
15) Acetone	2.123	43	79438	46.14	ug/L		94
16) 2-Propanol	2.196	45	258152	811.20	ug/L		100
17) Iodomethane	2.215	142	453259	37.77	ug/L		96
18) Carbon Disulfide	2.269	76	1435992	54.12	ug/L		100
19) Acetonitrile	2.318	40	57970	258.51	ug/L		92
20) Allyl Chloride	2.349	76	231057	46.37	ug/L		96
21) Methyl Acetate	2.355	43	168014	42.04	ug/L		98
22) Methylene Chloride	2.440	84	461753	50.82	ug/L		96
23) TBA	2.495	59	440650	834.80	ug/L		93
24) Acrylonitrile	2.629	53	487000	252.27	ug/L		97
25) Methyl-t-Butyl Ether	2.660	73	1025077	47.54	ug/L		97
26) trans-1,2-Dichloroethene	2.666	96	479554	53.71	ug/L		95
28) 1,1-Diclethane	3.044	63	895880	53.59	ug/L		98
29) Vinyl Acetate	3.086	86	52684	46.88	ug/L	#	90
30) DIPE	3.105	45	1584627	51.53	ug/L		94
31) 2-Chloro-1,3-Butadiene	3.141	53	882447	62.50	ug/L		98
32) ETBE	3.501	59	1295866	46.33	ug/L		99
33) 2,2-Dichloropropane	3.678	77	636786	44.62	ug/L		99
34) cis-1,2-Dichloroethene	3.678	96	509833	51.59	ug/L		97
35) 2-Butanone	3.702	43	115244	50.96	ug/L		97
36) Propionitrile	3.763	54	167907	260.23	ug/L		93
37) Bromochloromethane	3.982	130	283293	49.91	ug/L		94

BA 1/7

Quantitation Report (Not Reviewed)

Sample : R1410303-004DMS|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\123114\A5279.D Vial: 21
Acq On : 31 Dec 2014 9:05 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Dec 31 21:18:41 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.964	67	106891	50.31	ug/L	98
39) Tetrahydrofuran	4.056	42	69966	48.28	ug/L	93
40) Chloroform	4.092	83	854522	51.40	ug/L	99
41) 1,1,1-Trichloroethane	4.354	97	762240	51.20	ug/L	97
42) TAME	5.177	73	1001196	44.79	ug/L	98
44) Cyclohexane	4.446	41	520693	54.55	ug/L	98
46) Carbontetrachloride	4.617	121	202939	49.52	ug/L	98
47) 1,1-Dichloropropene	4.617	75	633413	51.11	ug/L	98
49) Benzene	4.952	78	1902626	53.47	ug/L	99
50) 1,2-Dichloroethane	4.982	62	603715	49.45	ug/L	97
51) Iso-Butyl Alcohol	4.848	43	180263	848.09	ug/L	89
52) n-Heptane	5.452	43	473896	44.73	ug/L	98
53) 1-Butanol	5.946	56	236776	1963.17	ug/L	92
54) Trichloroethene	5.964	130	508497	52.20	ug/L	99
55) Methylcyclohexane	6.214	55	610587	51.82	ug/L	95
56) 1,2-Diclpropane	6.256	63	509424	54.37	ug/L	99
57) Dibromomethane	6.397	93	240794	46.84	ug/L	93
58) 1,4-Dioxane	6.458	88	43982	820.53	ug/L	83
59) Methyl Methacrylate	6.464	69	180841	47.50	ug/L	94
60) Bromodichloromethane	6.610	83	617930	50.25	ug/L	98
61) 2-Nitropropane	6.890	41	122345	74.43	ug/L	98
63) cis-1,3-Dichloropropene	7.140	75	689280	47.17	ug/L	98
64) 4-Methyl-2-pentanone	7.335	43	272456	47.85	ug/L	97
66) Toluene	7.500	91	2062334	54.53	ug/L	98
67) trans-1,3-Dichloropropene	7.744	75	563212	46.73	ug/L	99
68) Ethyl Methacrylate	7.872	69	396127	46.72	ug/L	95
69) 1,1,2-Trichloroethane	7.921	97	321352	46.60	ug/L	94
72) Tetrachloroethene	8.055	164	412968	50.89	ug/L	99
73) 2-Hexanone	8.195	43	185610	48.39	ug/L	98
74) 1,3-Dichloropropane	8.085	76	568506	50.06	ug/L	96
75) Dibromochloromethane	8.299	129	398009	46.22	ug/L	99
76) N-Butyl Acetate	8.335	43	419657	40.91	ug/L	100
77) 1,2-Dibromoethane	8.396	107	320822	48.15	ug/L	99
78) 3-Chlorobenzotrifluoride	8.872	180	747677	52.12	ug/L	98
79) Chlorobenzene	8.866	112	1350845	52.90	ug/L	100
80) 4-Chlorobenzotrifluoride	8.927	180	679700	51.41	ug/L	98
81) 1,1,1,2-Tetrachloroethane	8.945	131	456654	48.63	ug/L	95
82) Ethylbenzene	8.975	106	651901	48.09	ug/L	99
83) (m+p)Xylene	9.085	106	1748455	110.28	ug/L	95
84) o-Xylene	9.433	106	840111	50.70	ug/L	99
85) Styrene	9.445	104	1402815	52.91	ug/L	99
86) Bromoform	9.597	173	213419	42.89	ug/L	98
87) 2-Chlorobenzotrifluoride	9.664	180	741809	51.72	ug/L	96
88) Isopropylbenzene	9.756	105	2155510	56.60	ug/L	99
89) Cyclohexanone	9.823	55	142513	453.68	ug/L	99
90) trans-1,4-Dichloro-2-B...	10.054	53	81555	36.67	ug/L	86
92) 1,1,2,2-Tetrachloroethane	10.006	83	379327	45.61	ug/L	97
93) Bromobenzene	10.000	156	550657	47.58	ug/L	98
94) 1,2,3-Trichloropropane	10.036	110	93970	42.89	ug/L	94
95) n-Propylbenzene	10.103	91	2573122	56.91	ug/L	99
96) 2-Chlorotoluene	10.164	91	1549790	52.36	ug/L	97
97) 3-Chlorotoluene	10.219	91	1590207	53.78	ug/L	100

Quantitation Report (Not Reviewed)

Sample : R1410303-004DMS|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\123114\A5279.D Vial: 21
Acq On : 31 Dec 2014 9:05 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Dec 31 21:18:41 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration

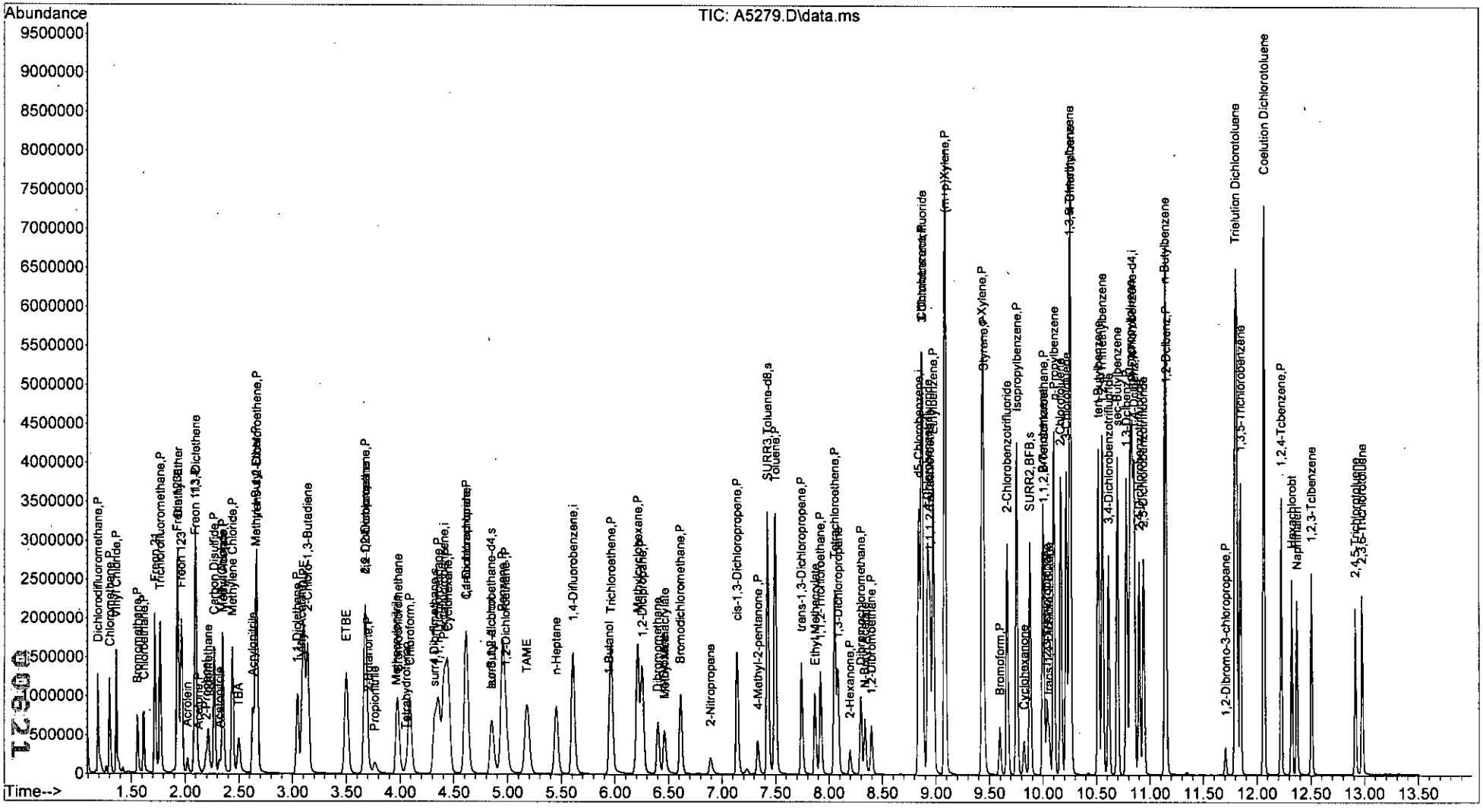
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	4-Chlorotoluene	10.256	91	1870894	53.42	ug/L	99
99)	1,3,5-Trimethylbenzene	10.250	105	1759899	52.69	ug/L	99
100)	tert-Butylbenzene	10.518	119	1491350	52.74	ug/L	99
101)	1,2,4-Trimethylbenzene	10.554	105	1789669	51.93	ug/L	100
102)	3,4-Dichlorobenzotrifl...	10.615	214	532941	47.55	ug/L	98
103)	sec-Butylbenzene	10.695	105	2118265	55.32	ug/L	99
104)	p-Isopropyltoluene	10.817	119	1828205	54.78	ug/L	99
105)	1,3-Dclbenz	10.780	146	1075259	49.25	ug/L	97
106)	1,4-Dclbenz	10.853	146	1092447	48.60	ug/L	97
107)	2,4-Dichlorobenzotrifl...	10.902	214	495987	49.75	ug/L	99
108)	2,5-Dichlorobenzotrifl...	10.938	214	564438	48.35	ug/L	98
109)	n-Butylbenzene	11.140	91	1702120	55.02	ug/L	100
110)	1,2-Dclbenz	11.152	146	972482	48.76	ug/L	100
111)	1,2-Dibromo-3-chloropr...	11.707	157	58701	40.96	ug/L	91
112)	Trielution Dichlorotol...	11.798	125	2647355	163.18	ug/L	99
113)	1,3,5-Trichlorobenzene	11.847	180	752111	50.30	ug/L	98
114)	Coelution Dichlorotoluene	12.066	125	1830731	110.26	ug/L	98
115)	1,2,4-Tcbenzene	12.225	180	628666	49.33	ug/L	99
116)	Hexachlorobt	12.322	225	276387	45.15	ug/L	98
117)	Naphthalen	12.371	128	1024548	48.91	ug/L	99
118)	1,2,3-Tclbenzene	12.505	180	480324	48.18	ug/L	97
119)	2,4,5-Trichlorotoluene	12.914	159	319182	49.81	ug/L	98
120)	2,3,6-Trichlorotoluene	12.975	159	334727	48.11	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Sample : R1410303-004DMS|1.0
Data File : I:\ACQUDATA\MSVOA10\DATA\123114\A5279.D Vial: 21
Acq On : 31 Dec 2014 9:05 pm
Operator : F.Naegler
InstName : MSVOA10
Misc : PARSONS 11603 T4

Quant Time: Dec 31 21:18:41 2014
Quant Method : I:\ACQUDATA\MSVOA10\METHODS\W121514.M
Quant Title : MS#10 - 8260B WATERS 10mL Purge
QLast Update : Tue Dec 16 08:09:09 2014
Response via : Initial Calibration



W121514.M Wed Dec 31 21:18:49 2014 MSVO10

Analysis: 8260C | Analyst: F. Naegler | Tune Method: T121514.M
Date: 12/15/14 | Data Path: j:\acqudata\msvoa_w\12x5M | Run Method: W1215M.M
Instr. MS #10 | LIMS Run# : —

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								A4875	Y	
1	TUNE								76	Y	
2	ICAL BLK								77	Y	
3	0.5 ppb std								78	Y	
4	1.0								79	Y	
5	2.0								80	Y	
6	5.0								81	Y	
7	20								82	Y	
8	50								83	Y	
9	100								84	Y	
10	150								85	Y	
11	200								86	Y	
12	BLK								87	Y	
13	BLK								88	Y	
14	50 ppb ICV								89	Y	
15	BLK								90	Y	

WATER ICAL TABLE

CONC (PPB)	0.5	1.0	2.0	5.0	20	50	100	150	200
1° T|G = 77102	10mL/1mL 5mL/5mL	10mL/5mL	20mL/5mL	50mL/5mL	2mL/5mL	5mL/5mL	10mL/5mL	15mL/5mL	20mL/5mL
1° HSL = 77319	↓	↓	↓	↓	↓	↓	↓	↓	↓
1° Fr = 77318	↓	↓	↓	↓	↓	↓	↓	↓	↓
1° HBO = 76830	↓	↓	↓	↓	↓	↓	↓	↓	↓
1° OCC = 77316	↓	↓	↓	↓	↓	↓	↓	↓	↓
SURR = 76722	—	—	—	1mL/5mL	2mL/5mL	—	5mL/5mL	7.5mL/5mL	10mL/5mL

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

Primary :
Primary :
Primary :
Primary :
Primary :

Fr Secondary 200 : 76763 - 12.5uL
TG Secondary 500 : 76853 - 5uL
HSL Secondary : 77159 -
HBO Secondary : 77314 -
OCC Secondary : 77315 -
5mL (ICV)

Combined IS/Surr 500 : 77312
Surrogate : —
Internal Std : —

Runlog-MSVOAr2 9/20/13

Analysis: 8260C | Analyst: F. Nagler | Tune Method: T121514.M
Date: 12/29/14 #2 | Data Path: j:\acqudata\msvoa_01\122914 | Run Method: W121514.M
Instr. MS #10 | LIMS Run#: 427294

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
25	TUNE								A5190	Y	
26	CCV								91	Y	
27	LCS								92	Y	
28	MBLK								93	(N)	
29	MBLK								94	Y	BQL500158-01
30	R1410303-001	1.0		[redacted]	11603	4	1	<2	95	Y	
31	-002	1.0					1	<2	96	(Y)	Rpt 1/2.5
32	-003	1.0					1	<2	97	(N)	Rpt 1/1 c/o ?
33	-004	1.0					1	<2	98	(N)	Rpt 1/1 c/o ?
34	-005	1.0					1	<2	99	(N)	Rpt 1/1 c/o ?
35	-006	1.0					1	<2	A5200	Y	
36	-007	1.0					1	<2	01	Y	
37	-008	1.0					1	<2	02	Y	
38	-009	1.0					1	<2	03	Y	
39	-010	5.0	10/5mL				1	<2	04	(N)	Rpt 1/1
40	-011	50.0	1/5mL				1	<2	05	(N)	Rpt 1/20
41	-012	1.0					1	<2	06	Y	
42	-013	1.0					1	<2	07	(Y)	Rpt 1/5
43	-014	1.0					1	<2	08	Y	
44	-015	1.0					1	<2	09	Y	
45	-002	2.5	20/5mL				2	<2	10	Y	DL
46	-002MS	2.5					2	<2	11	Y	
47	-002MSD	2.5					2	<2	12	Y	
48	BLK								13	Y	

FN 12/30/14

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

T/G Primary 500 : 77102 - 5mL
HSL Primary 500 : 77558 - 5mL
Fr Primary 500 : 77318 - 5mL
(5mL CCV)
02 HG Primary :
FJ 12/30/14 Primary :

Fr Secondary 200 : 77448 - 5mL (-12.5mL)
T/G Secondary 500 : 77562 - 2mL (5mL LCS -5mL)
HSL Secondary 500 : 77159 - 2mL (5mL SDK -5mL)
Secondary :
Secondary :

Combined IS/Surr 500 : 77581
Surrogate :
Internal Std :

Runlog-MSVOAr2 9/20/13

Analysis: 8260C | Analyst: F. Vaughan | Tune Method: T121514.M
Date: 12/31/14 | Data Path: j:\acqudata\msvoa 01\123114 | Run Method: W121514.M
Instr. MS #10 | LIMS Run#: 427678

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								A5257	Y	
1	TUNE								58	Y	
2	CCV								59	(N)	
2	CCV								60	Y	
3	LCS								61	Y	
4	MBLK								62	(N)	
5	MBLK								63	Y	
6	R1410303-003	1.0		[redacted]	11603	4	3	<2	64	Y	
7	-004	1.0					3	<2	65	Y	
8	-005	1.0					3	<2	66	Y	
9	-010	2.0	25/5mL				3	<2	67	Y	
10	-011	20.0	2.5/5mL				3	<2	68	Y	
11	-013	5.0	10/5mL				3	<2	69	Y	DL
12	-016	1.0					2	<2	70	Y	
13	-017	1.0					2	<2	71	Y	
14	-018	1.0					2	<2	72	Y	
15	-019	1.0					2	<2	73	Y	
16	-020	1.0					2	<2	74	Y	
17	R1410376-001	2.5	20/5mL	[redacted]	6675	2	2	<2	75	Y	DL
18	-004	5.0	10/5mL				2	<2	76	Y	DL
19	-006	1.0					2	<2	77	Y	
20	R1410303-004MS	1.0		[redacted]	11603	4	4	<2	78	Y	
21	-004ASD	1.0					5	<2	79	Y	
22	BLK								80	Y	
23	BLK								81	Y	
24	BLK								82	Y	
25	BLK								83	Y	

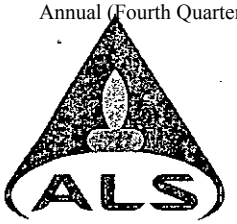
All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

T/G Primary 500 : 77102 - 5mL | 5mL
HSL Primary : 77558 -
Fr Primary : 77318 -
HBO Primary : 77540 -
OCC Primary : 77316 - (CCV)

Fr Secondary 200 : 77448 - 5mL | 12.5mL
T/G Secondary 500 : 77562 - 2mL | 5mL
HSL Secondary : 77645 - | 5mL (LCS)
HBO Secondary : 77314 -
OCC Secondary : 77315 - | 5mL (SPK)

Combined IS/Surr 500 : 77581
Surrogate : —
Internal Std : —

Runlog-MSVOAr2 9/20/13



ALS Environmental
ALS Group USA, Corp
1565 Jefferson Rd, Building 300, Suite 360
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T: 585-288-5380
F: 585-288-8475
www.alsglobal.com

January 14, 2015

Analytical Report for Service Request No: R1410307

Sandra de las Fuentes
Parsons, Inc.
8000 Centre Park Drive, Suite 200
Austin, TX 78754

Laboratory Results for: FTMM 4Q GW/748810-03000

Dear Sandra:

Enclosed are the results of the sample(s) submitted to our laboratory on December 20, 2014. For your reference, these analyses have been assigned our service request number **R1410307**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Janice Jaeger
Project Manager

CASE NARRATIVE

Client:	Parsons Engineering Science	**Service Request No.:**	R1410307
Project:	FTMM 4Q GW	**Project No.:**	748810-03000
Sample Matrix:	Water	**Date Received:**	12/20/14

General Comments

The DOD QSM 4.1 requires detections reported to the Method Detection Limit (MDL). Values greater than the MDL and less than the Limit of Quantitation (LOQ) were flagged as estimates (J). Values less than the MDL and Limit of Detection (LOD) were reported as non-detect (ND). The LOD for each analyte is verified quarterly by the laboratory using procedures defined in DOD Quality Systems Manual Version 4.1.

Sample Receipt

Samples were collected on 12/18-19/14 and received in good condition at cooler temperatures of 0.2-2.3 °C as noted on the cooler receipt and preservation check form. The samples were stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the batching form for a cross-reference between Client ID and ALS Job #.

Volatile Organics

Twenty two water samples were analyzed for TCL Volatile organics by SW-846 method 5030/8260C. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

Library Searches against the NBS/EPA library were conducted on all samples. The 20 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

All Tuning criteria for BFB were and within QC limits.

Internal Standard Areas were within QC limits.

All the initial calibration criteria were met for all analytes. All Continuing Calibration Verification (CCV) standards were within 20% Difference (D) except tert-Butyl alcohol and Chloromethane on the 12/30/14 CCV and 2,2-Dichloropropane and ter-Butyl alcohol on the 12/31/14 CCV. No data was affected.

All surrogate standard recoveries were within acceptance limits for all samples.

The Blank Spike (LCS) recoveries were all acceptable except Chloromethane was outside limits high on the 12/30/14 LCS and 12/31/14 LCS/LCSD and has been flagged with an "*". No data was affected.

A Matrix Spike/Matrix spike duplicate (MS/MSD) was not requested on these samples; however was performed. All outlying QC has been flagged with an "*".

The Method Blanks associated with these samples were free of contamination except the 12/30/14 and 12/31/14 blanks had low level detections for 1,2,4-Trichlorobenzene, Hexachlorobutadiene and Naphthalene. No data was affected.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 748810-03000	Batch Complete: Yes	Date Revised:
Submission: R1410307	Diskette Requested: No	Date Due: 1/15/15
Client: Parsons Engineering Science	Date: 12/29/14	Protocol: SW846
Client Rep: JJAEGER	Custody Seal: Present/Absent:	Shipping No.:
Project: FTMM 4Q GW	Chain of Custody: Present/Absent:	SDG #: FTMM-2-GW-M2MW21-8.8

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1410307-001	FTMM-2-GW-M2MW21-8.8	Water	8260C	12/18/14	12/20/14			
R1410307-002	FTMM-2-GW-M2MW21-15.97	Water	8260C	12/18/14	12/20/14			
R1410307-003	FTMM-2-GW-M2MW10-17.31	Water	8260C	12/18/14	12/20/14			
R1410307-004	FTMM-2-GW-M2MW10-7.32	Water	8260C	12/18/14	12/20/14			
R1410307-005	FTMM-2-GW-M2MW10-12.32	Water	8260C	12/18/14	12/20/14			
R1410307-006	FTMM-2-GW-M2MW24-9.97	Water	8260C	12/18/14	12/20/14			
R1410307-007	FTMM-2-GW-M2MW24-16.5	Water	8260C	12/18/14	12/20/14			
R1410307-008	FTMM-2-GW-M2MW11-36.91	Water	8260C	12/18/14	12/20/14			
R1410307-009	FTMM-2-GW-M2MW11-46.91	Water	8260C	12/18/14	12/20/14			
R1410307-010	FTMM-2-GW-M2MW11-41.91	Water	8260C	12/18/14	12/20/14			
R1410307-011	FTMM-2-GW-M2MW11-31.91	Water	8260C	12/18/14	12/20/14			
R1410307-012	FTMM-2-GW-M2MW22-10.03	Water	8260C	12/18/14	12/20/14			
R1410307-013	FTMM-2-GW-M2MW22-10.67	Water	8260C	12/18/14	12/20/14			
R1410307-014	FTMM-2-GW-M2MW03-10.27	Water	8260C	12/18/14	12/20/14			
R1410307-015	FTMM-5-GW-M5MW11-9.46	Water	8260C	12/19/14	12/20/14			
R1410307-016	FTMM-5-GW-M5MW16-14.57	Water	8260C	12/19/14	12/20/14			
R1410307-017	FTMM-5-GW-M5MW23-10.82	Water	8260C	12/19/14	12/20/14			
R1410307-018	FTMM-5-GW-M5MW20-13.65	Water	8260C	12/19/14	12/20/14			
R1410307-019	FTMM-18-GW-M18MW23-9.28	Water	8260C	12/19/14	12/20/14			
R1410307-020	FTMM-18-GW-M18MW23-16.22	Water	8260C	12/19/14	12/20/14			
R1410307-021	FTMM-18-GW-M18MW22-18.91	Water	8260C	12/19/14	12/20/14			
R1410307-022	FTMM-TB-121914	Water	8260C	12/19/14	12/20/14			

E0003

Folder Comments: DoD reporting

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

\+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to
http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

ALS Environmental

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

20661

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 3 OF 5

Project Name: FTMM 4Q GW	Project Number: 744881D - 03000
Project Manager: Cris Grill	Report CC:
Company/Address: 100 High St, Boston, MA 02210	
Phone #: (617) 449-1533	Email: cris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: D. Lorenz, C. Watson

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1

Preservative Key: 0. NONE; 1. HCL; 2. HNO_3; 3. H_2SO_4; 4. NaOH; 5. Zn. Acetate; 6. MeOH; 7. $NaHSO_4$; 8. Other

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GCMS VOAs • 8260 • 624 • CLP	GCMS SVOAs • 8270 • 625	GC VOAs • 8021 • 601/602	PESTICIDES • 8081 • 608	PCBs • 8082 • 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
FTMM-2-GW-MWM21-8.46		12/15/14	1535	GW	3	X							
FTMM-2-GW-MWM21-15.97			1537	GW	3	X							
FTMM-2-GW-MWM10-17.31			1429	GW	3	X							
FTMM-2-GW-MWM10-7.38			1435	GW	3	X							
FTMM-2-GW-MWM10-13.38			1437	GW	3	X							
FTMM-2-GW-MWM24-9.97			1538	GW	3	X							
FTMM-2-GW-MWM24-16.15			1540	GW	3	X							
FTMM-2-GW-MWM11-36.91			1500	GW	3	X							
FTMM-2-GW-MWM11-46.91			1502	GW	3	X							
FTMM-2-GW-MWM11-41.91		↓	1501	GW	3	X							
FTMM-2-GW-MWM11-31.91			1458	GW	3	X							

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED New Jersey

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
Standard
REQUESTED REPORT DATE

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
Edata ____ Yes ____ No

INVOICE INFORMATION
PO #
BILL TO:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature:	Signature:	Signature:	Signature:	Signature:	Signature:
Printed Name: Chris Watson	Printed Name: J. Seward	Printed Name:	Printed Name:	Printed Name:	Printed Name:
Firm: PARSONS	Firm: ALS	Firm:	Firm:	Firm:	Firm:
Date/Time: 12/19/14 1100	Date/Time: 12/20/14 1015	Date/Time:	Date/Time:	Date/Time:	Date/Time:

R1410307 5
Parsons, Inc.
FTMM 4Q GW

Distribution: White - Lab Copy; Yellow - Return to Originator

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

20662

1565 Jefferson Road, Building 300, Suite 360 ◦ Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 4 OF 5

Project Name: FTMM 4Q GW	Project Number: [illegible] - 03000
Project Manager: Chris Grill	Report CC:
Company/Address: 100 High St, Boston, MA 02210	
Phone #: (617) 449-1553	Email: chris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: N. Lacroix, C. Watson

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1

Preservative Key: 0. NONE; 1. HCL; 2. HNO_3; 3. H_2SO_4; 4. NaOH; 5. Zn. Acetate; 6. MeOH; 7. $NaHSO_4$; 8. Other _____

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ◦ 8260 ◦ 624 ◦ CLP	GC/MS SVOAs ◦ 8270 ◦ 625	GC VOAs ◦ 8021 ◦ 601/602	PESTICIDES ◦ 8081 ◦ 608	PCBs ◦ 8082 ◦ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
FTMM-2-~~MDMW~~GW-MDMW22-10.03		12/19/14	1523	GW	3	X							
FTMM-2-~~MDMW~~GW-MDMW23-10.67		↓	1520	GW	3	X							
FTMM-2-~~MDMW~~GW-MDMW21-10.37		↓	1458	GW	3	X							
FTMM-5-GW-MSMW11-9.46		12/19/14	0833	GW	3	X							
FTMM-5-GW-MSMW10-14.97		↓	0827	GW	3	X							
FTMM-5-GW-MSMW33-10.58		↓	0834	GW	3	X							
FTMM-5-GW-MSMW20-13.55		↓	0835	GW	3	X							
FTMM-18-GW-MWMW33-9.76		↓	0857	GW	3	X							
FTMM-18-GW-MWMW22-16.92		↓	0858	GW	3	X							
FTMM-18-GW-MWMW23-18.31		↓	0851	GW	3	X							
FTMM-TB-121914		↓	—	GW	3	X							Trip Blank

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED New Jersey

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
_____ 1 day _____ 2 day _____ 3 day
_____ 4 day _____ 5 day
Standard
REQUESTED REPORT DATE
_____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw
Edata ____ Yes ____ No

INVOICE INFORMATION
PO #
BILL TO:

R1410307 5
Parsons, Inc.
FTMM 4Q GW

	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	
Signature	[signature]	[signature]				
Printed Name	Chris Watson	[signature]				
Firm	PARSONS	MSI				
Date/Time	12/19/14 1500	12/20/14 1315				

Distribution: White - Lab Copy; Yellow - Return to Originator

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Cooler Receipt and Preservation Check Form

R1410307 5
Parsons, Inc.
FTMM 4Q GW

Project/Client Parsons Folder Number R14-10307

Cooler received on 12/20 by: JM

COURIER: ALS (UPS) FEDEX VELOCITY CLIENT

1	Were Custody seals on outside of cooler?	(Y) N	5a	Perchlorate samples have required headspace?	Y N (NA)
2	Custody papers properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk, or Sulfide have sig* bubbles?	Y (N) NA
3	Did all bottles arrive in good condition (unbroken)?	(Y) N	6	Where did the bottles originate?	(ALS/ROC) CLIENT
4	Circle: (Wet Ice) Dry Ice Gel packs present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 12/20 Time: 1020 ID: IR#3 (IR#4) From: Temp Blank Sample Bottle

Observed Temp (°C)	0.3	2.4					
Correction Factor (°C)	-0.1	-0.1					
Corrected Temp (°C)	0.2	2.3					
Within 0-6°C?	(Y) N	(Y) N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: air by JM on 12/20 at 1020
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: JMN 12/22/14

Cooler Breakdown: Date: 12/22/14 Time: 1431 by: DD

1. Were all bottle labels complete (i.e. analysis, preservation, etc.)? (YES) NO
2. Did all bottle labels and tags agree with custody papers? (YES) NO
3. Were correct containers used for the tests indicated? (YES) NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated (N/A)

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	411405D	11/5				

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 4-258-004
Other Comments:

PC Secondary Review: JMN 12/26/14 *significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1535
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 20:06
Sample Name:	FTMM-2-GW-M2MW21-8.8	**Units:**	µg/L
Lab Code:	R1410307-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1914.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**0.58**	**J**	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**0.97**	**J**	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**2.0**	**J**	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1535
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 20:06
Sample Name:	FTMM-2-GW-M2MW21-8.8	**Units:**	µg/L
Lab Code:	R1410307-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1914.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	16		5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1535
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 20:06
Sample Name:	FTMM-2-GW-M2MW21-8.8	**Units:**	µg/L
Lab Code:	R1410307-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1914.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	12/30/14 20:06	
Dibromofluoromethane	101	85-115	12/30/14 20:06	
Toluene-d8	99	85-120	12/30/14 20:06	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/30/14 2006

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-2-GW-M2MW21-8.8
Lab Code: R1410307-001

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1537
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 20:37
Sample Name:	FTMM-2-GW-M2MW21-15.97	**Units:**	µg/L
Lab Code:	R1410307-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1915.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**0.59**	J	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**0.95**	J	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**2.1**	J	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1537
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 20:37
Sample Name:	FTMM-2-GW-M2MW21-15.97	**Units:**	µg/L
Lab Code:	R1410307-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1915.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	**22**		5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1537
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 20:37
Sample Name:	FTMM-2-GW-M2MW21-15.97	**Units:**	µg/L
Lab Code:	R1410307-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1915.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/30/14 20:37	
Dibromofluoromethane	101	85-115	12/30/14 20:37	
Toluene-d8	99	85-120	12/30/14 20:37	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 2037

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-2-GW-M2MW21-15.97	**Units:**	µg/L
Lab Code:	R1410307-002	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1429
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 21:10
Sample Name:	FTMM-2-GW-M2MW10-17.31	**Units:**	µg/L
Lab Code:	R1410307-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1916.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.2**	**J**	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1429
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 21:10
Sample Name:	FTMM-2-GW-M2MW10-17.31	**Units:**	µg/L
Lab Code:	R1410307-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1916.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1429
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 21:10
Sample Name:	FTMM-2-GW-M2MW10-17.31	**Units:**	µg/L
Lab Code:	R1410307-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1916.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/30/14 21:10	
Dibromofluoromethane	102	85-115	12/30/14 21:10	
Toluene-d8	100	85-120	12/30/14 21:10	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 2110

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-2-GW-M2MW10-17.31	**Units:**	µg/L
Lab Code:	R1410307-003	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14 1425
Date Received: 12/20/14
Date Analyzed: 12/30/14 21:42

Sample Name: FTMM-2-GW-M2MW10-7.32
Lab Code: R1410307-004

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\123014\MM1917.D\

Analysis Lot: 427512
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.5**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1425
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 21:42
Sample Name:	FTMM-2-GW-M2MW10-7.32	**Units:**	µg/L
Lab Code:	R1410307-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1917.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1425
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 21:42
Sample Name:	FTMM-2-GW-M2MW10-7.32	**Units:**	µg/L
Lab Code:	R1410307-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1917.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	75-120	12/30/14 21:42	
Dibromofluoromethane	100	85-115	12/30/14 21:42	
Toluene-d8	100	85-120	12/30/14 21:42	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 2142

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-2-GW-M2MW10-7.32	**Units:**	µg/L
Lab Code:	R1410307-004	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14 1427
Date Received: 12/20/14
Date Analyzed: 12/30/14 22:14

Sample Name: FTMM-2-GW-M2MW10-12.32
Lab Code: R1410307-005

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\123014\MM1918.D\

Analysis Lot: 427512
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	1.7	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14 1427
Date Received: 12/20/14
Date Analyzed: 12/30/14 22:14

Sample Name: FTMM-2-GW-M2MW10-12.32
Lab Code: R1410307-005

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\123014\MM1918.D\

Analysis Lot: 427512
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1427
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 22:14
Sample Name:	FTMM-2-GW-M2MW10-12.32	**Units:**	µg/L
Lab Code:	R1410307-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1918.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/30/14 22:14	
Dibromofluoromethane	100	85-115	12/30/14 22:14	
Toluene-d8	100	85-120	12/30/14 22:14	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 2214

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-2-GW-M2MW10-12.32	**Units:**	µg/L
Lab Code:	R1410307-005	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1538
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 04:05
Sample Name:	FTMM-2-GW-M2MW24-9.97	**Units:**	µg/L
Lab Code:	R1410307-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1929.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**0.38**	J	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**0.54**	J	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**2.8**	J	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**0.49**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1538
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 04:05
Sample Name:	FTMM-2-GW-M2MW24-9.97	**Units:**	µg/L
Lab Code:	R1410307-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1929.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	**5.0**	J	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**3.7**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	**0.39**	J	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**1.4**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**1.9**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.75**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1538
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 04:05
Sample Name:	FTMM-2-GW-M2MW24-9.97	**Units:**	µg/L
Lab Code:	R1410307-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1929.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/31/14 04:05	
Dibromofluoromethane	100	85-115	12/31/14 04:05	
Toluene-d8	100	85-120	12/31/14 04:05	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/31/14 0405

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-2-GW-M2MW24-9.97
Lab Code: R1410307-006

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000496-11-7	Indane	10.97	**15.5**	JN
027133-93-3	2,3-Dihydro-1-methylindene	11.41	**9.8**	JN
000767-58-8	Indan, 1-methyl-	11.92	**14.0**	JN

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1540
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 04:37
Sample Name:	FTMM-2-GW-M2MW24-16.5	**Units:**	µg/L
Lab Code:	R1410307-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1930.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**0.41**	J	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**0.46**	J	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**2.6**	J	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**0.46**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1540
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 04:37
Sample Name:	FTMM-2-GW-M2MW24-16.5	**Units:**	µg/L
Lab Code:	R1410307-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1930.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	**5.1**		5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**3.5**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	**0.34**	J	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**1.7**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**1.5**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.60**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

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Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1540
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 04:37
Sample Name:	FTMM-2-GW-M2MW24-16.5	**Units:**	µg/L
Lab Code:	R1410307-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1930.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	12/31/14 04:37	
Dibromofluoromethane	100	85-115	12/31/14 04:37	
Toluene-d8	100	85-120	12/31/14 04:37	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/31/14 0437

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-2-GW-M2MW24-16.5
Lab Code: R1410307-007

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000496-11-7	Indane	10.97	**15.4**	JN
027133-93-3	2,3-Dihydro-1-methylindene	11.41	**8.4**	JN
000767-58-8	Indan, 1-methyl-	11.92	**13.0**	JN

Comments:

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1500
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 05:09
Sample Name:	FTMM-2-GW-M2MW11-36.91	**Units:**	µg/L
Lab Code:	R1410307-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1931.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14 1500
Date Received: 12/20/14
Date Analyzed: 12/31/14 05:09

Sample Name: FTMM-2-GW-M2MW11-36.91
Lab Code: R1410307-008

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\123014\MM1931.D\

Analysis Lot: 427514
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1500
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 05:09
Sample Name:	FTMM-2-GW-M2MW11-36.91	**Units:**	µg/L
Lab Code:	R1410307-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1931.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/31/14 05:09	
Dibromofluoromethane	99	85-115	12/31/14 05:09	
Toluene-d8	100	85-120	12/31/14 05:09	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 0509

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-2-GW-M2MW11-36.91	**Units:**	µg/L
Lab Code:	R1410307-008	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14 1504
Date Received: 12/20/14
Date Analyzed: 12/31/14 05:41

Sample Name: FTMM-2-GW-M2MW11-46.91
Lab Code: R1410307-009

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\123014\MM1932.D\

Analysis Lot: 427514
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	1.6	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1504
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 05:41
Sample Name:	FTMM-2-GW-M2MW11-46.91	**Units:**	µg/L
Lab Code:	R1410307-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1932.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1504
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 05:41
Sample Name:	FTMM-2-GW-M2MW11-46.91	**Units:**	µg/L
Lab Code:	R1410307-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1932.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/31/14 05:41	
Dibromofluoromethane	101	85-115	12/31/14 05:41	
Toluene-d8	100	85-120	12/31/14 05:41	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 0541

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-2-GW-M2MW11-46.91	**Units:**	µg/L
Lab Code:	R1410307-009	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14 1501
Date Received: 12/20/14
Date Analyzed: 12/31/14 06:13

Sample Name: FTMM-2-GW-M2MW11-41.91
Lab Code: R1410307-010

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\123014\MM1933.D\

Analysis Lot: 427514
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1501
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 06:13
Sample Name:	FTMM-2-GW-M2MW11-41.91	**Units:**	µg/L
Lab Code:	R1410307-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1933.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1501
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 06:13
Sample Name:	FTMM-2-GW-M2MW11-41.91	**Units:**	µg/L
Lab Code:	R1410307-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1933.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	75-120	12/31/14 06:13	
Dibromofluoromethane	102	85-115	12/31/14 06:13	
Toluene-d8	100	85-120	12/31/14 06:13	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/31/14 0613

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-2-GW-M2MW11-41.91
Lab Code: R1410307-010

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1458
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 15:50
Sample Name:	FTMM-2-GW-M2MW11-31.91	**Units:**	µg/L
Lab Code:	R1410307-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1906.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	1.7	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1458
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 15:50
Sample Name:	FTMM-2-GW-M2MW11-31.91	**Units:**	µg/L
Lab Code:	R1410307-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1906.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1458
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 15:50
Sample Name:	FTMM-2-GW-M2MW11-31.91	**Units:**	µg/L
Lab Code:	R1410307-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1906.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	12/30/14 15:50	
Dibromofluoromethane	100	85-115	12/30/14 15:50	
Toluene-d8	99	85-120	12/30/14 15:50	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 1550

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-2-GW-M2MW11-31.91	**Units:**	µg/L
Lab Code:	R1410307-011	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1523
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 06:45
Sample Name:	FTMM-2-GW-M2MW22-10.03	**Units:**	µg/L
Lab Code:	R1410307-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1934.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.3**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1523
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 06:45
Sample Name:	FTMM-2-GW-M2MW22-10.03	**Units:**	µg/L
Lab Code:	R1410307-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1934.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	**1.5**	J	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**23**		5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1523
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 06:45
Sample Name:	FTMM-2-GW-M2MW22-10.03	**Units:**	µg/L
Lab Code:	R1410307-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1934.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	12/31/14 06:45	
Dibromofluoromethane	101	85-115	12/31/14 06:45	
Toluene-d8	100	85-120	12/31/14 06:45	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 0645

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-2-GW-M2MW22-10.03	**Units:**	µg/L
Lab Code:	R1410307-012	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1520
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 07:17
Sample Name:	FTMM-2-GW-M2MW22-10.67	**Units:**	µg/L
Lab Code:	R1410307-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1935.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1520
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 07:17
Sample Name:	FTMM-2-GW-M2MW22-10.67	**Units:**	µg/L
Lab Code:	R1410307-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1935.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	**2.8**	J	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**17**		5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1520
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 07:17
Sample Name:	FTMM-2-GW-M2MW22-10.67	**Units:**	µg/L
Lab Code:	R1410307-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1935.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/31/14 07:17	
Dibromofluoromethane	101	85-115	12/31/14 07:17	
Toluene-d8	99	85-120	12/31/14 07:17	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 0717

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-2-GW-M2MW22-10.67	**Units:**	µg/L
Lab Code:	R1410307-013	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14 1458
Date Received: 12/20/14
Date Analyzed: 12/31/14 11:32

Sample Name: FTMM-2-GW-M2MW03-10.27
Lab Code: R1410307-014

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\123014\MM1943.D\

Analysis Lot: 427514
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**1.3**	J	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**1.0**	J	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**3.9**	J	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**2.2**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1458
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 11:32
Sample Name:	FTMM-2-GW-M2MW03-10.27	**Units:**	µg/L
Lab Code:	R1410307-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1943.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	**49**		5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**0.73**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**0.35**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.43**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1458
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 11:32
Sample Name:	FTMM-2-GW-M2MW03-10.27	**Units:**	µg/L
Lab Code:	R1410307-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1943.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	12/31/14 11:32	
Dibromofluoromethane	100	85-115	12/31/14 11:32	
Toluene-d8	99	85-120	12/31/14 11:32	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 1132

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-2-GW-M2MW03-10.27	**Units:**	µg/L
Lab Code:	R1410307-014	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0823
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 07:49
Sample Name:	FTMM-5-GW-M5MW11-9.46	**Units:**	µg/L
Lab Code:	R1410307-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1936.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.5**	J	5.0	5.0	I.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0823
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 07:49
Sample Name:	FTMM-5-GW-M5MW11-9.46	**Units:**	µg/L
Lab Code:	R1410307-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1936.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**1.8**	J	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0823
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 07:49
Sample Name:	FTMM-5-GW-M5MW11-9.46	**Units:**	µg/L
Lab Code:	R1410307-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1936.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	12/31/14 07:49	
Dibromofluoromethane	101	85-115	12/31/14 07:49	
Toluene-d8	99	85-120	12/31/14 07:49	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 0749

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-5-GW-M5MW11-9.46	**Units:**	µg/L
Lab Code:	R1410307-015	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0827
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 08:21
Sample Name:	FTMM-5-GW-M5MW16-14.57	**Units:**	µg/L
Lab Code:	R1410307-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	1:\ACQUDATA\msvoa12\Data\123014\MM1937.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**3.3**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0827
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 08:21
Sample Name:	FTMM-5-GW-M5MW16-14.57	**Units:**	µg/L
Lab Code:	R1410307-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1937.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**1.7**	J	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**1.6**	J	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0827
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 08:21
Sample Name:	FTMM-5-GW-M5MW16-14.57	**Units:**	µg/L
Lab Code:	R1410307-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1937.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	12/31/14 08:21	
Dibromofluoromethane	99	85-115	12/31/14 08:21	
Toluene-d8	100	85-120	12/31/14 08:21	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 0821

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-5-GW-M5MW16-14.57	**Units:**	µg/L
Lab Code:	R1410307-016	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0834
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 08:53
Sample Name:	FTMM-5-GW-M5MW23-10.82	**Units:**	µg/L
Lab Code:	R1410307-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1938.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (I,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.4**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0834
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 08:53
Sample Name:	FTMM-5-GW-M5MW23-10.82	**Units:**	µg/L
Lab Code:	R1410307-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1938.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**23**		5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**2.1**	**J**	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0834
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 08:53
Sample Name:	FTMM-5-GW-M5MW23-10.82	**Units:**	µg/L
Lab Code:	R1410307-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1938.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/31/14 08:53	
Dibromofluoromethane	99	85-115	12/31/14 08:53	
Toluene-d8	100	85-120	12/31/14 08:53	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 0853

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-5-GW-M5MW23-10.82	**Units:**	µg/L
Lab Code:	R1410307-017	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/19/14 0835
Date Received: 12/20/14
Date Analyzed: 12/31/14 09:25

Sample Name: FTMM-5-GW-M5MW20-13.65
Lab Code: R1410307-018

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\123014\MM1939.D\

Analysis Lot: 427514
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.1**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0835
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 09:25
Sample Name:	FTMM-5-GW-M5MW20-13.65	**Units:**	µg/L
Lab Code:	R1410307-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1939.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	1.2	J	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	0.73	J	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	2.5	J	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0835
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 09:25
Sample Name:	FTMM-5-GW-M5MW20-13.65	**Units:**	µg/L
Lab Code:	R1410307-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1939.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	12/31/14 09:25	
Dibromofluoromethane	101	85-115	12/31/14 09:25	
Toluene-d8	99	85-120	12/31/14 09:25	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 0925

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-5-GW-M5MW20-13.65	**Units:**	µg/L
Lab Code:	R1410307-018	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/19/14 0857
Date Received: 12/20/14
Date Analyzed: 12/31/14 09:57

Sample Name: FTMM-18-GW-M18MW23-9.28
Lab Code: R1410307-019

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\123014\MM1940.D\

Analysis Lot: 427514
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	9.1		5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0857
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 09:57
Sample Name:	FTMM-18-GW-M18MW23-9.28	**Units:**	µg/L
Lab Code:	R1410307-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1940.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0857
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 09:57
Sample Name:	FTMM-18-GW-M18MW23-9.28	**Units:**	µg/L
Lab Code:	R1410307-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1940.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/31/14 09:57	
Dibromofluoromethane	100	85-115	12/31/14 09:57	
Toluene-d8	100	85-120	12/31/14 09:57	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 0957

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-18-GW-M18MW23-9.28	**Units:**	µg/L
Lab Code:	R1410307-019	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0858
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 10:29
Sample Name:	FTMM-18-GW-M18MW23-16.22	**Units:**	µg/L
Lab Code:	R1410307-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1941.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	6.5		5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0858
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 10:29
Sample Name:	FTMM-18-GW-M18MW23-16.22	**Units:**	µg/L
Lab Code:	R1410307-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1941.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0858
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 10:29
Sample Name:	FTMM-18-GW-M18MW23-16.22	**Units:**	µg/L
Lab Code:	R1410307-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1941.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	12/31/14 10:29	
Dibromofluoromethane	103	85-115	12/31/14 10:29	
Toluene-d8	100	85-120	12/31/14 10:29	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 1029

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-18-GW-M18MW23-16.22	**Units:**	µg/L
Lab Code:	R1410307-020	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0851
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 11:01
Sample Name:	FTMM-18-GW-M18MW22-18.91	**Units:**	µg/L
Lab Code:	R1410307-021	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1942.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	2.6	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0851
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 11:01
Sample Name:	FTMM-18-GW-M18MW22-18.91	**Units:**	µg/L
Lab Code:	R1410307-021	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1942.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0851
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 11:01
Sample Name:	FTMM-18-GW-M18MW22-18.91	**Units:**	µg/L
Lab Code:	R1410307-021	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1942.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	75-120	12/31/14 11:01	
Dibromofluoromethane	101	85-115	12/31/14 11:01	
Toluene-d8	100	85-120	12/31/14 11:01	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 1101

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-18-GW-M18MW22-18.91	**Units:**	µg/L
Lab Code:	R1410307-021	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/19/14
Date Received: 12/20/14
Date Analyzed: 12/31/14 03:33

Sample Name: FTMM-TB-121914
Lab Code: R1410307-022

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\123014\MM1928.D\

Analysis Lot: 427514
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	0.29	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 03:33
Sample Name:	FTMM-TB-121914	**Units:**	µg/L
Lab Code:	R1410307-022	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1928.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	0.21	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 03:33
Sample Name:	FTMM-TB-121914	**Units:**	µg/L
Lab Code:	R1410307-022	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1928.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/31/14 03:33	
Dibromofluoromethane	100	85-115	12/31/14 03:33	
Toluene-d8	98	85-120	12/31/14 03:33	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 0333

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-TB-121914	**Units:**	µg/L
Lab Code:	R1410307-022	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/30/14 13:43
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1416037-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1902.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.35**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/30/14 13:43
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1416037-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1902.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**0.63**	J	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.24**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/30/14 13:43
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1416037-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1902.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Ree	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/30/14 13:43	
Dibromofluoromethane	100	85-115	12/30/14 13:43	
Toluene-d8	99	85-120	12/30/14 13:43	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/30/14 1343

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1416037-04	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: NA
Date Received: NA
Date Analyzed: 12/31/14 03:01

Sample Name: Method Blank
Lab Code: RQ1416038-05

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\123014\MM1927.D\

Analysis Lot: 427514
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	0.36	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: NA
Date Received: NA
Date Analyzed: 12/31/14 03:01

Sample Name: Method Blank
Lab Code: RQ1416038-05

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\123014\MM1927.D\

Analysis Lot: 427514
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**0.67**	J	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.28**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/31/14 03:01
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1416038-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1927.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/31/14 03:01	
Dibromofluoromethane	99	85-115	12/31/14 03:01	
Toluene-d8	99	85-120	12/31/14 03:01	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/31/14 0301

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1416038-05	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/30/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-2-GW-M2MW11-31.91
Lab Code: R1410307-011

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-2-GW-M2MW11-31.91 MS Matrix Spike RQ1416037-05			FTMM-2-GW-M2MW11-31.91 DMS Duplicate Matrix Spike RQ1416037-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	ND	51.3	50.0	103	50.9	50.0	102	80 - 130	<1	30
1,1,1-Trichloroethane (TCA)	ND	48.0	50.0	96	46.3	50.0	93	65 - 130	4	30
1,1,2,2-Tetrachloroethane	ND	48.2	50.0	96	46.9	50.0	94	65 - 130	3	30
1,1,2-Trichloroethane	ND	48.7	50.0	97	47.0	50.0	94	75 - 125	4	30
1,1-Dichloroethane (1,1-DCA)	ND	48.7	50.0	97	46.5	50.0	93	70 - 135	5	30
1,1-Dichloroethene (1,1-DCE)	ND	50.0	50.0	100	48.8	50.0	98	70 - 130	2	30
1,1-Dichloropropene	ND	47.6	50.0	95	46.3	50.0	93	75 - 130	3	30
1,2,3-Trichlorobenzene	ND	48.2	50.0	96	49.4	50.0	99	75 - 125	2	30
1,2,3-Trichloropropane	ND	45.8	50.0	92	44.8	50.0	90	75 - 125	2	30
1,2,4-Trichlorobenzene	ND	51.0	50.0	102	51.9	50.0	104	65 - 135	2	30
1,2,4-Trimethylbenzene	ND	50.3	50.0	101	49.9	50.0	100	75 - 130	<1	30
1,2-Dibromo-3-chloropropane (DBC	ND	48.0	50.0	96	45.9	50.0	92	50 - 130	4	30
1,2-Dibromoethane	ND	50.7	50.0	101	48.8	50.0	98	80 - 120	4	30
1,2-Dichlorobenzene	ND	50.5	50.0	101	49.3	50.0	99	70 - 120	2	30
1,2-Dichloroethane	ND	46.0	50.0	92	45.0	50.0	90	70 - 130	2	30
1,2-Dichloropropane	ND	48.4	50.0	97	47.5	50.0	95	75 - 125	2	30
1,3,5-Trimethylbenzene	ND	51.0	50.0	102	49.8	50.0	100	75 - 130	2	30
1,3-Dichlorobenzene	ND	49.5	50.0	99	48.9	50.0	98	75 - 125	1	30
1,3-Dichloropropane	ND	50.1	50.0	100	48.8	50.0	98	75 - 125	3	30
1,4-Dichlorobenzene	ND	49.3	50.0	99	48.1	50.0	96	75 - 125	2	30
2,2-Dichloropropane	ND	40.9	50.0	82	39.4	50.0	79	70 - 135	4	30
2-Butanone (MEK)	ND	45.7	50.0	91	43.5	50.0	87	30 - 150	5	30
2-Chlorotoluene	ND	49.6	50.0	99	48.8	50.0	98	75 - 125	2	30
2-Hexanone	ND	41.4	50.0	83	40.8	50.0	82	55 - 130	1	30
tert-Butyl Alcohol	ND	735	1000	73	746	1000	75	50 - 150	2	30
4-Chlorotoluene	ND	50.0	50.0	100	49.1	50.0	98	75 - 130	2	30
p-Isopropyltoluene	ND	53.4	50.0	107	52.3	50.0	105	75 - 130	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/30/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-2-GW-M2MW11-31.91
Lab Code: R1410307-011

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-2-GW-M2MW11-31.91 MS Matrix Spike RQ1416037-05			FTMM-2-GW-M2MW11-31.91 DMS Duplicate Matrix Spike RQ1416037-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
4-Methyl-2-pentanone	ND	42.6	50.0	85	41.7	50.0	83	60 - 135	2	30
Acetone	1.7	42.4	50.0	82	43.3	50.0	83	40 - 140	2	30
Benzene	ND	49.7	50.0	99	48.2	50.0	96	80 - 120	3	30
Bromobenzene	ND	49.2	50.0	98	48.7	50.0	97	75 - 125	<1	30
Bromochloromethane	ND	49.7	50.0	99	47.5	50.0	95	65 - 130	5	30
Bromodichloromethane	ND	46.3	50.0	93	44.9	50.0	90	75 - 120	3	30
Bromoform	ND	41.0	50.0	82	40.3	50.0	81	70 - 130	2	30
Bromomethane	ND	25.5	50.0	51	38.1	50.0	76	30 - 145	40 *	30
Carbon Tetrachloride	ND	43.5	50.0	87	42.7	50.0	85	65 - 140	2	30
Chlorobenzene	ND	50.7	50.0	101	50.3	50.0	101	80 - 120	<1	30
Chloroethane	ND	57.1	50.0	114	54.2	50.0	108	60 - 135	5	30
Chloroform	ND	48.1	50.0	96	46.0	50.0	92	65 - 135	4	30
Chloromethane	ND	65.6	50.0	131 *	61.2	50.0	122	40 - 125	7	30
Dibromochloromethane	ND	45.6	50.0	91	44.3	50.0	89	60 - 135	3	30
Dichlorodifluoromethane (CFC 12)	ND	64.4	50.0	129	61.3	50.0	123	30 - 155	5	30
Methylene Chloride	ND	50.1	50.0	100	47.8	50.0	96	55 - 140	5	30
Ethylbenzene	ND	47.3	50.0	95	46.0	50.0	92	75 - 125	3	30
Hexachlorobutadiene	ND	49.3	50.0	99	50.6	50.0	101	50 - 140	3	30
Isopropylbenzene (Cumene)	ND	51.0	50.0	102	50.2	50.0	100	75 - 125	2	30
Methyl tert-Butyl Ether	ND	46.5	50.0	93	45.9	50.0	92	65 - 125	1	30
Naphthalene	ND	50.8	50.0	102	51.5	50.0	103	55 - 140	1	30
Styrene	ND	51.2	50.0	102	49.6	50.0	99	65 - 135	3	30
Tetrachloroethene (PCE)	ND	52.8	50.0	106	51.4	50.0	103	45 - 150	3	30
Toluene	ND	50.1	50.0	100	49.1	50.0	98	75 - 120	2	30
Trichloroethene (TCE)	ND	50.6	50.0	101	49.5	50.0	99	70 - 125	2	30
Trichlorofluoromethane (CFC 11)	ND	48.7	50.0	97	47.3	50.0	95	60 - 145	3	30
Vinyl Chloride	ND	61.5	50.0	123	58.0	50.0	116	50 - 145	6	30

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Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/30/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-2-GW-M2MW11-31.91
Lab Code: R1410307-011

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-2-GW-M2MW11-31.91 MS Matrix Spike RQ1416037-05			FTMM-2-GW-M2MW11-31.91 DMS Duplicate Matrix Spike RQ1416037-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
cis-1,2-Dichloroethene	ND	51.1	50.0	102	48.3	50.0	96	70 - 125	6	30
cis-1,3-Dichloropropene	ND	41.4	50.0	83	40.5	50.0	81	70 - 130	2	30
m,p-Xylenes	ND	106	100	106	104	100	104	75 - 130	3	30
n-Butylbenzene	ND	52.3	50.0	105	51.4	50.0	103	70 - 135	2	30
n-Propylbenzene	ND	51.1	50.0	102	50.4	50.0	101	70 - 130	1	30
o-Xylene	ND	51.8	50.0	104	50.2	50.0	100	80 - 120	3	30
sec-Butylbenzene	ND	51.3	50.0	103	49.9	50.0	100	70 - 125	3	30
tert-Butylbenzene	ND	51.6	50.0	103	50.6	50.0	101	70 - 130	2	30
trans-1,2-Dichloroethene	ND	51.7	50.0	103	49.6	50.0	99	60 - 140	4	30
trans-1,3-Dichloropropene	ND	41.1	50.0	82	40.0	50.0	80	55 - 140	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Analyzed: 12/30/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 427512

Lab Control Sample
RQ1416037-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	19.5	20.0	98	80 - 130
1,1,1-Trichloroethane (TCA)	17.8	20.0	89	65 - 130
1,1,2,2-Tetrachloroethane	18.6	20.0	93	65 - 130
1,1,2-Trichloroethane	18.8	20.0	94	75 - 125
1,1-Dichloroethane (1,1-DCA)	18.4	20.0	92	70 - 135
1,1-Dichloroethene (1,1-DCE)	18.8	20.0	94	70 - 130
1,1-Dichloropropene	18.2	20.0	91	75 - 130
1,2,3-Trichlorobenzene	21.7	20.0	108	75 - 125
1,2,3-Trichloropropane	18.4	20.0	92	75 - 125
1,2;4-Trichlorobenzene	21.8	20.0	109	65 - 135
1,2,4-Trimethylbenzene	20.0	20.0	100	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	17.8	20.0	89	50 - 130
1,2-Dibromoethane	19.4	20.0	97	80 - 120
1,2-Dichlorobenzene	19.4	20.0	97	70 - 120
1,2-Dichloroethane	17.5	20.0	87	70 - 130
1,2-Dichloropropane	18.3	20.0	92	75 - 125
1,3,5-Trimethylbenzene	19.9	20.0	99	75 - 130
1,3-Dichlorobenzene	19.4	20.0	97	75 - 125
1,3-Dichloropropane	18.4	20.0	92	75 - 125
1,4-Dichlorobenzene	19.3	20.0	96	75 - 125
2,2-Dichloropropane	17.1	20.0	85	70 - 135
2-Butanone (MEK)	18.2	20.0	91	30 - 150
2-Chlorotoluene	19.7	20.0	98	75 - 125
2-Hexanone	17.4	20.0	87	55 - 130
tert-Butyl Alcohol	288	400	72	50 - 150
4-Chlorotoluene	19.4	20.0	97	75 - 130
p-Isopropyltoluene	21.6	20.0	108	75 - 130
4-Methyl-2-pentanone	16.2	20.0	81	60 - 135
Acetone	19.3	20.0	97	40 - 140
Benzene	18.9	20.0	95	80 - 120
Bromobenzene	19.3	20.0	96	75 - 125
Bromochloromethane	19.6	20.0	98	65 - 130
Bromodichloromethane	18.2	20.0	91	75 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Analyzed: 12/30/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 427512

Lab Control Sample
RQ1416037-03

Analyte Name	Result	Spike Amount	% Rec		% Rec Limits
Bromoform	19.0	20.0	95		70 - 130
Bromomethane	23.1	20.0	116		30 - 145
Carbon Tetrachloride	18.1	20.0	90		65 - 140
Chlorobenzene	19.3	20.0	96		80 - 120
Chloroethane	21.4	20.0	107		60 - 135
Chloroform	18.5	20.0	93		65 - 135
Chloromethane	26.9	20.0	134	*	40 - 125
Dibromochloromethane	19.3	20.0	96		60 - 135
Dichlorodifluoromethane (CFC 12)	24.1	20.0	121		30 - 155
Methylene Chloride	18.4	20.0	92		55 - 140
Ethylbenzene	18.0	20.0	90		75 - 125
Hexachlorobutadiene	23.8	20.0	119		50 - 140
Isopropylbenzene (Cumene)	20.4	20.0	102		75 - 125
Methyl tert-Butyl Ether	17.6	20.0	88		65 - 125
Naphthalene	21.4	20.0	107		55 - 140
Styrene	18.7	20.0	94		65 - 135
Tetrachloroethene (PCE)	19.8	20.0	99		45 - 150
Toluene	19.1	20.0	96		75 - 120
Trichloroethene (TCE)	19.3	20.0	97		70 - 125
Trichlorofluoromethane (CFC 11)	18.6	20.0	93		60 - 145
Vinyl Chloride	22.6	20.0	113		50 - 145
cis-1,2-Dichloroethene	19.2	20.0	96		70 - 125
cis-1,3-Dichloropropene	17.6	20.0	88		70 - 130
m,p-Xylenes	39.5	40.0	99		75 - 130
n-Butylbenzene	21.0	20.0	105		70 - 135
n-Propylbenzene	20.6	20.0	103		70 - 130
o-Xylene	19.2	20.0	96		80 - 120
sec-Butylbenzene	20.4	20.0	102		70 - 125
tert-Butylbenzene	20.6	20.0	103		70 - 130
trans-1,2-Dichloroethene	19.5	20.0	97		60 - 140
trans-1,3-Dichloropropene	17.4	20.0	87		55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Analyzed: 12/31/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 427514

Analyte Name	Lab Control Sample RQ1416038-03 Result	Spike Amount	% Rec	Duplicate Lab Control Sample RQ1416038-04 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	20.2	20.0	101	19.8	20.0	99	80 - 130	2	30
1,1,1-Trichloroethane (TCA)	19.9	20.0	99	18.7	20.0	94	65 - 130	6	30
1,1,2,2-Tetrachloroethane	19.5	20.0	97	19.3	20.0	96	65 - 130	1	30
1,1,2-Trichloroethane	20.3	20.0	101	20.0	20.0	100	75 - 125	1	30
1,1-Dichloroethane (1,1-DCA)	19.9	20.0	100	19.3	20.0	96	70 - 135	3	30
1,1-Dichloroethene (1,1-DCE)	20.3	20.0	102	19.0	20.0	95	70 - 130	7	30
1,1-Dichloropropene	19.3	20.0	97	18.8	20.0	94	75 - 130	3	30
1,2,3-Trichlorobenzene	22.6	20.0	113	22.1	20.0	111	75 - 125	2	30
1,2,3-Trichloropropane	19.5	20.0	97	20.1	20.0	101	75 - 125	3	30
1,2,4-Trichlorobenzene	22.4	20.0	112	22.3	20.0	112	65 - 135	<1	30
1,2,4-Trimethylbenzene	21.6	20.0	108	20.7	20.0	104	75 - 130	4	30
1,2-Dibromo-3-chloropropane (DBCP)	19.5	20.0	98	20.9	20.0	104	50 - 130	6	30
1,2-Dibromoethane	21.0	20.0	105	21.1	20.0	106	80 - 120	<1	30
1,2-Dichlorobenzene	21.0	20.0	105	20.7	20.0	103	70 - 120	2	30
1,2-Dichloroethane	19.2	20.0	96	19.3	20.0	97	70 - 130	<1	30
1,2-Dichloropropane	19.6	20.0	98	19.0	20.0	95	75 - 125	3	30
1,3,5-Trimethylbenzene	20.9	20.0	105	20.0	20.0	100	75 - 130	4	30
1,3-Dichlorobenzene	20.7	20.0	103	20.4	20.0	102	75 - 125	1	30
1,3-Dichloropropane	20.7	20.0	104	20.7	20.0	104	75 - 125	<1	30
1,4-Dichlorobenzene	20.6	20.0	103	20.3	20.0	102	75 - 125	1	30
2,2-Dichloropropane	15.5	20.0	78	14.6	20.0	73	70 - 135	6	30
2-Butanone (MEK)	19.5	20.0	97	20.6	20.0	103	30 - 150	5	30
2-Chlorotoluene	21.3	20.0	106	20.8	20.0	104	75 - 125	3	30
2-Hexanone	16.7	20.0	84	17.4	20.0	87	55 - 130	4	30
tert-Butyl Alcohol	341	400	85	338	400	85	50 - 150	<1	30
4-Chlorotoluene	20.8	20.0	104	19.9	20.0	99	75 - 130	5	30
p-Isopropyltoluene	22.7	20.0	113	21.6	20.0	108	75 - 130	5	30
4-Methyl-2-pentanone	16.8	20.0	84	17.7	20.0	88	60 - 135	5	30
Acetone	20.5	20.0	102	21.7	20.0	108	40 - 140	6	30
Benzene	20.3	20.0	102	19.6	20.0	98	80 - 120	4	30
Bromobenzene	21.2	20.0	106	20.7	20.0	103	75 - 125	2	30
Bromochloromethane	21.0	20.0	105	20.8	20.0	104	65 - 130	1	30
Bromodichloromethane	19.9	20.0	99	19.7	20.0	98	75 - 120	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Analyzed: 12/31/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 427514

	Lab Control Sample RQ1416038-03			Duplicate Lab Control Sample RQ1416038-04					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Bromoform	20.8	20.0	104	21.5	20.0	107	70 - 130	3	30
Bromomethane	20.4	20.0	102	20.2	20.0	101	30 - 145	<1	30
Carbon Tetrachloride	19.5	20.0	98	18.5	20.0	92	65 - 140	6	30
Chlorobenzene	20.9	20.0	104	20.2	20.0	101	80 - 120	3	30
Chloroethane	23.3	20.0	116	22.1	20.0	110	60 - 135	5	30
Chloroform	20.0	20.0	100	19.1	20.0	96	65 - 135	5	30
Chloromethane	26.2	20.0	131 *	25.3	20.0	126 *	40 - 125	4	30
Dibromochloromethane	20.9	20.0	104	21.0	20.0	105	60 - 135	<1	30
Dichlorodifluoromethane (CFC 12)	26.5	20.0	133	24.8	20.0	124	30 - 155	7	30
Methylene Chloride	20.4	20.0	102	20.3	20.0	101	55 - 140	<1	30
Ethylbenzene	19.6	20.0	98	18.2	20.0	91	75 - 125	7	30
Hexachlorobutadiene	24.1	20.0	120	21.8	20.0	109	50 - 140	10	30
Isopropylbenzene (Cumene)	21.6	20.0	108	20.9	20.0	104	75 - 125	4	30
Methyl tert-Butyl Ether	19.3	20.0	97	19.3	20.0	97	65 - 125	<1	30
Naphthalene	22.6	20.0	113	22.7	20.0	113	55 - 140	<1	30
Styrene	20.2	20.0	101	19.6	20.0	98	65 - 135	3	30
Tetrachloroethene (PCE)	21.6	20.0	108	20.6	20.0	103	45 - 150	5	30
Toluene	20.5	20.0	103	19.9	20.0	99	75 - 120	3	30
Trichloroethene (TCE)	21.8	20.0	109	21.4	20.0	107	70 - 125	2	30
Trichlorofluoromethane (CFC 11)	20.1	20.0	101	18.9	20.0	95	60 - 145	6	30
Vinyl Chloride	24.3	20.0	122	23.5	20.0	118	50 - 145	3	30
cis-1,2-Dichloroethene	20.6	20.0	103	19.7	20.0	99	70 - 125	4	30
cis-1,3-Dichloropropene	18.8	20.0	94	18.3	20.0	91	70 - 130	3	30
m,p-Xylenes	43.4	40.0	108	40.6	40.0	101	75 - 130	7	30
n-Butylbenzene	21.8	20.0	109	20.9	20.0	104	70 - 135	4	30
n-Propylbenzene	21.8	20.0	109	20.9	20.0	104	70 - 130	4	30
o-Xylene	20.7	20.0	104	19.9	20.0	99	80 - 120	4	30
sec-Butylbenzene	21.8	20.0	109	21.0	20.0	105	70 - 125	4	30
tert-Butylbenzene	22.0	20.0	110	21.0	20.0	105	70 - 130	5	30
trans-1,2-Dichloroethene	20.9	20.0	105	19.7	20.0	98	60 - 140	6	30
trans-1,3-Dichloropropene	18.2	20.0	91	18.3	20.0	91	55 - 140	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Environmental
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January 14, 2015

Analytical Report for Service Request No: R1410307

Sandra de las Fuentes
Parsons, Inc.
8000 Centre Park Drive, Suite 200
Austin, TX 78754

Laboratory Results for: FTMM 4Q GW/748810-03000

Dear Sandra:

Enclosed are the results of the sample(s) submitted to our laboratory on December 20, 2014. For your reference, these analyses have been assigned our service request number **R1410307**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s) for analysis of these samples, and represented by Laboratory Control Sample control limits. Any events, such as QC failures, which may add to the uncertainty are explained in the report narrative.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Janice Jaeger
Project Manager

Parsons, Inc.
R1410307

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SDG NARRATIVE

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CASE NARRATIVE

Client:	Parsons Engineering Science	**Service Request No.:**	R1410307
Project:	FTMM 4Q GW	**Project No.:**	748810-03000
Sample Matrix:	Water	**Date Received:**	12/20/14

General Comments

The DOD QSM 4.1 requires detections reported to the Method Detection Limit (MDL). Values greater than the MDL and less than the Limit of Quantitation (LOQ) were flagged as estimates (J). Values less than the MDL and Limit of Detection (LOD) were reported as non-detect (ND). The LOD for each analyte is verified quarterly by the laboratory using procedures defined in DOD Quality Systems Manual Version 4.1.

Sample Receipt

Samples were collected on 12/18-19/14 and received in good condition at cooler temperatures of 0.2-2.3 °C as noted on the cooler receipt and preservation check form. The samples were stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the batching form for a cross-reference between Client ID and ALS Job #.

Volatile Organics

Twenty two water samples were analyzed for TCL Volatile organics by SW-846 method 5030/8260C. Any value detected between the LOQ and MDL was flagged with a "J" as estimated.

Library Searches against the NBS/EPA library were conducted on all samples. The 20 largest peaks, within 10 % of the nearest Internal Standard, were searched. A summary of detected peaks is included following the Target data. Any analytes detected are quantitated based on the closest internal standard and are reported flagged with a "J" as estimated. The flag "N" on a TIC compound indicates presumptive evidence of a particular compound.

All Tuning criteria for BFB were and within QC limits.

Internal Standard Areas were within QC limits.

All the initial calibration criteria were met for all analytes. All Continuing Calibration Verification (CCV) standards were within 20% Difference (D) except tert-Butyl alcohol and Chloromethane on the 12/30/14 CCV and 2,2-Dichloropropane and ter-Butyl alcohol on the 12/31/14 CCV. No data was affected.

All surrogate standard recoveries were within acceptance limits for all samples.

The Blank Spike (LCS) recoveries were all acceptable except Chloromethane was outside limits high on the 12/30/14 LCS and 12/31/14 LCS/LCSD and has been flagged with an "*". No data was affected.

A Matrix Spike/Matrix spike duplicate (MS/MSD) was not requested on these samples; however was performed. All outlying QC has been flagged with an "*".

The Method Blanks associated with these samples were free of contamination except the 12/30/14 and 12/31/14 blanks had low level detections for 1,2,4-Trichlorobenzene, Hexachlorobutadiene and Naphthalene. No data was affected.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

ALS ASP/CLP Batching Form/Login Sheet

Client Proj #: 748810-03000	Batch Complete: Yes	Date Revised:
Submission: R1410307	Diskette Requested: No	Date Due: 1/15/15
Client: Parsons Engineering Science	Date: 12/29/14	Protocol: SW846
Client Rep: JJAEGER	Custody Seal: Present/Absent:	Shipping No.:
Project: FTMM 4Q GW	Chain of Custody: Present/Absent:	SDG #: FTMM-2-GW-M2MW21-8.8

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1410307-001	FTMM-2-GW-M2MW21-8.8	Water	8260C	12/18/14	12/20/14			
R1410307-002	FTMM-2-GW-M2MW21-15.97	Water	8260C	12/18/14	12/20/14			
R1410307-003	FTMM-2-GW-M2MW10-17.31	Water	8260C	12/18/14	12/20/14			
R1410307-004	FTMM-2-GW-M2MW10-7.32	Water	8260C	12/18/14	12/20/14			
R1410307-005	FTMM-2-GW-M2MW10-12.32	Water	8260C	12/18/14	12/20/14			
R1410307-006	FTMM-2-GW-M2MW24-9.97	Water	8260C	12/18/14	12/20/14			
R1410307-007	FTMM-2-GW-M2MW24-16.5	Water	8260C	12/18/14	12/20/14			
R1410307-008	FTMM-2-GW-M2MW11-36.91	Water	8260C	12/18/14	12/20/14			
R1410307-009	FTMM-2-GW-M2MW11-46.91	Water	8260C	12/18/14	12/20/14			
R1410307-010	FTMM-2-GW-M2MW11-41.91	Water	8260C	12/18/14	12/20/14			
R1410307-011	FTMM-2-GW-M2MW11-31.91	Water	8260C	12/18/14	12/20/14			
R1410307-012	FTMM-2-GW-M2MW22-10.03	Water	8260C	12/18/14	12/20/14			
R1410307-013	FTMM-2-GW-M2MW22-10.67	Water	8260C	12/18/14	12/20/14			
R1410307-014	FTMM-2-GW-M2MW03-10.27	Water	8260C	12/18/14	12/20/14			
R1410307-015	FTMM-5-GW-M5MW11-9.46	Water	8260C	12/19/14	12/20/14			
R1410307-016	FTMM-5-GW-M5MW16-14.57	Water	8260C	12/19/14	12/20/14			
R1410307-017	FTMM-5-GW-M5MW23-10.82	Water	8260C	12/19/14	12/20/14			
R1410307-018	FTMM-5-GW-M5MW20-13.65	Water	8260C	12/19/14	12/20/14			
R1410307-019	FTMM-18-GW-M18MW23-9.28	Water	8260C	12/19/14	12/20/14			
R1410307-020	FTMM-18-GW-M18MW23-16.22	Water	8260C	12/19/14	12/20/14			
R1410307-021	FTMM-18-GW-M18MW22-18.91	Water	8260C	12/19/14	12/20/14			
R1410307-022	FTMM-TB-121914	Water	8260C	12/19/14	12/20/14			

Folder Comments: DoD reporting

ALS Environmental

REPORT QUALIFIERS AND DEFINITIONS

U Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.

J Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).

B Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.

E Inorganics- Concentration is estimated due to the serial dilution was outside control limits.

E Organics- Concentration has exceeded the calibration range for that specific analysis.

D Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.

* Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.

H Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.

Spike was diluted out.

\+ Correlation coefficient for MSA is <0.995.

N Inorganics- Matrix spike recovery was outside laboratory limits.

N Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.

S Concentration has been determined using Method of Standard Additions (MSA).

W Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.

P Concentration >40% (25% for CLP) difference between the two GC columns.

C Confirmed by GC/MS

Q DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).

X See Case Narrative for discussion.

MRL Method Reporting Limit. Also known as:
LOQ Limit of Quantitation (LOQ)
The lowest concentration at which the method analyte may be reliably quantified under the method conditions.

MDL Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).

LOD Limit of Detection. A value at or above the MDL which has been verified to be detectable.

ND Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

ACCREDITED IN ACCORDANCE WITH NELAC

Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Maine ID #NY0032	New Hampshire ID # 294100 A/B
Connecticut ID # PH0556	Nebraska Accredited	
Delaware Accredited	Nevada ID # NY-00032	North Carolina #676
DoD ELAP #65817	New Jersey ID # NY004	Pennsylvania ID# 68-786
Florida ID # E87674	New York ID # 10145	Rhode Island ID # 158
Illinois ID #200047		Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to http://www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads/North-America-Downloads

ALS Environmental

CHAINS OF CUSTODY

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

20661

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 3 OF 5

Project Name: FTMM 4Q GW	Project Number: 748810-03000
Project Manager: Cris Grill	Report CC:
Company/Address: 100 High St, Boston, MA 02210	
Phone #: (617) 449-1583	Email: cris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: D. Loizos, C. Watson

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1

Preservative Key: 0. NONE; 1. HCL; 2. HNO_3; 3. H_2SO_4; 4. NaOH; 5. Zn. Acetate; 6. MeOH; 7. $NaHSO_4$; 8. Other

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ○ 8260 ○ 624 ○ CLP	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
FTMM-2-GW-MWMW21-8.48		12/18/14	1535	GW	3	X							
FTMM-2-GW-MWMW21-15.97			1537	GW	3	X							
FTMM-2-GW-MWMW10-17.31			1429	GW	3	X							
FTMM-2-GW-MWMW10-7.38			1425	GW	3	X							
FTMM-2-GW-MWMW10-13.39			1427	GW	3	X							
FTMM-2-GW-MWMW24-9.97			1538	GW	3	X							
FTMM-2-GW-MWMW24-16.5			1540	GW	3	X							
FTMM-2-GW-MWMW11-36.91			1500	GW	3	X							
FTMM-2-GW-MWMW11-46.91			1504	GW	3	X							
FTMM-2-GW-MWMW11-41.91			1501	GW	3	X							
FTMM-2-GW-MWMW11-31.91			1458	GW	3	X							

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
___ RUSH (SURCHARGES APPLY)
___ 1 day ___ 2 day ___ 3 day
___ 4 day ___ 5 day
Standard
REQUESTED REPORT DATE

REPORT REQUIREMENTS
___ I. Results Only
___ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
___ III. Results + QC and Calibration Summaries
___ IV. Data Validation Report with Raw Data
Edata ___ Yes ___ No

INVOICE INFORMATION
PO #
BILL TO:

STATE WHERE SAMPLES WERE COLLECTED New Jersey

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: C. Watson	Signature:	Signature:	Signature:	Signature:	Signature:
Printed Name: Chris Watson	Printed Name: J. Sewell	Printed Name:	Printed Name:	Printed Name:	
Firm: PARSONS	Firm: ALS	Firm:	Firm:	Firm:	
Date/Time: 12/19/14 1100	Date/Time: 12/22/14 1015	Date/Time:	Date/Time:	Date/Time:	

Distribution: White - Lab Copy; Yellow - Return to Originator

R1410307 5
Parsons, Inc.
FTMM 4Q GW

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

20662

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Project Name: FTMM 4Q GW	Project Number: [illegible]-03000
Project Manager: Cris Grill	Report CC:
Company/Address: 100 High St, Boston, MA 02210	
Phone #: (617) 449-1583	Email: cris.grill@parsons.com
Sampler's Signature:	Sampler's Printed Name: N. Lazos, C. Watson

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 1

Preservative Key: 0. NONE; 1. HCL; 2. HNO_3; 3. H_2SO_4; 4. NaOH; 5. Zn. Acetate; 6. MeOH; 7. $NaHSO_4$; 8. Other

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ○ 8260 ○ 624 ○ CLP	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	REMARKS/ ALTERNATE DESCRIPTION
FTMM-2-[illegible]GW-MWMW22-W103		12/18/14	1523	GW	3	X							
FTMM-2-[illegible]GW-MWMW22-16.67		↓	1520	GW	3	X							
FTMM-2-[illegible]GW-MWMW03-10.37		↓	1458	GW	3	X							
FTMM-5-GW-MWMW11-9.46		12/19/14	0823	GW	3	X							
FTMM-5-GW-MWMW16-14.57		↓	0827	GW	3	X							
FTMM-5-GW-MWMW33-10.58		↓	0834	GW	3	X							
FTMM-5-GW-MWMW30-13.65		↓	0835	GW	3	X							
FTMM-18-GW-MWMW33-9.96		↓	0857	GW	3	X							
FTMM-18-GW-MWMW33-16.02		↓	0858	GW	3	X							
FTMM-18-GW-MWMW38-18.11		↓	0851	GW	3	X							
FTMM-TB-121914		↓	—	GW	3	X							Trip Blank

SPECIAL INSTRUCTIONS/COMMENTS
Metals

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
Standard
REQUESTED REPORT DATE

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw
Edata ____ Yes ____ No

INVOICE INFORMATION
PO #
BILL TO:

R1410307 5
Parsons, Inc.
FTMM 4Q GW

STATE WHERE SAMPLES WERE COLLECTED New Jersey

	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	
Signature	[signature]	[signature]				
Printed Name	Chris Watson	[signature]				
Firm	PARSONS	ARS				
Date/Time	12/19/14 1100	12/20/14 1015				

Distribution: White - Lab Copy; Yellow - Return to Originator

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R1410307 5
Persons, Inc.
FTMM 4Q GW

Cooler Receipt and Preservation Check Form

Project/Client Persons Folder Number R14-10307

Cooler received on 12/20 by: JM COURIER: ALS UPS FEDEX VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	Y N	5a	**Perchlorate** samples have required headspace?	Y N NA
2	**Custody papers** properly completed (ink, signed)?	Y N	5b	Did VOA vials, Alk,or Sulfide have sig* **bubbles**?	Y N NA
3	Did all bottles arrive in good **condition** (unbroken)?	Y N	6	Where did the bottles originate?	ALS/ROC CLIENT
4	Circle: Wet Ice Dry Ice Gel packs present?	Y N	7	Soil VOA received as: Bulk Encore 5035set	NA

8. Temperature Readings Date: 12/20 Time: 1026 ID: IR#3 IR#4 From: Temp Blank Sample Bottle

Observed Temp (°C)	0.3	2.4					
Correction Factor (°C)	-0.1	-0.1					
Corrected Temp (°C)	0.2	2.3					
Within 0-6°C?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: _____ Ice melted Poorly Packed Same Day Rule

&Client Approval to Run Samples: _____ Standing Approval Client aware at drop-off Client notified by: _____

All samples held in storage location: Area by JM on 12/20 at 1020
5035 samples placed in storage location: _____ by _____ on _____ at _____

PC Secondary Review: JMW 12/22/14

Cooler Breakdown: Date: 12/22/14 Time: 1431 by: BD

1. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
2. Did all bottle labels and tags agree with custody papers? YES NO
3. Were correct containers used for the tests indicated? YES NO
4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated N/A

Explain any discrepancies:

pH	Reagent	Yes	No	Lot Received	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For CN Phenol and 522			If +, contact PM to add $Na_2S_2O_3$ (CN), ascorbic (phenol).					
	$Na_2S_2O_3$	-	-						
	ZnAcetate	-	-						
	HCl	**	**	4114050	11/15				

**Not to be tested before analysis – pH tested and recorded by VOAs on a separate worksheet

Yes=All samples OK

No=Samples were preserved at The lab as listed

PM OK to Adjust: _____

Bottle lot numbers: 4-268-004
Other Comments:

PC Secondary Review: JMW 12/26/14 *significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4Q GW/748810-03000

Service Request: R1410307

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1410307-001.01					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1458	In Lab / KRUEST	
		12/29/14	1502	R-001-S12 / BWOJTASIEWICZ	
R1410307-001.02					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/30/14	1621	In Lab / KRUEST	
		12/30/14	1631	R-001-S12 / BWOJTASIEWICZ	
R1410307-001.03					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-002.01					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1458	In Lab / KRUEST	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	
R1410307-002.02					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/30/14	1621	In Lab / KRUEST	
		12/30/14	1631	R-001-S12 / BWOJTASIEWICZ	
R1410307-002.03					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-003.01					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1458	In Lab / KRUEST	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	
R1410307-003.02					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/30/14	1621	In Lab / KRUEST	
		12/30/14	1631	R-001-S12 / BWOJTASIEWICZ	
R1410307-003.03					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4Q GW/748810-03000

Service Request: R1410307

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1410307-004.01					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1458	In Lab / KRUEST	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	
R1410307-004.02					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/30/14	1621	In Lab / KRUEST	
		12/30/14	1631	R-001-S12 / BWOJTASIEWICZ	
R1410307-004.03					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-005.01					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1458	In Lab / KRUEST	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	
R1410307-005.02					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/30/14	1621	In Lab / KRUEST	
		12/30/14	1631	R-001-S12 / BWOJTASIEWICZ	
R1410307-005.03					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-006.01					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1458	In Lab / KRUEST	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	
R1410307-006.02					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/30/14	1627	In Lab / KRUEST	
		12/30/14	1630	R-001-S12 / BWOJTASIEWICZ	
R1410307-006.03					
		12/22/14	1432	SMO / GLAFORCE	

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4Q GW/748810-03000

Service Request: R1410307

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-007.01					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1458	In Lab / KRUEST	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	
R1410307-007.02					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/30/14	1627	In Lab / KRUEST	
		12/30/14	1630	R-001-S12 / BWOJTASIEWICZ	
R1410307-007.03					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-008.01					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1458	In Lab / KRUEST	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	
R1410307-008.02					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/30/14	1627	In Lab / KRUEST	
		12/30/14	1630	R-001-S12 / BWOJTASIEWICZ	
R1410307-008.03					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-009.01					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-009.02					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1458	In Lab / KRUEST	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	
R1410307-009.03					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4Q GW/748810-03000

Service Request: R1410307

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		12/30/14	1627	In Lab / KRUEST	
		12/30/14	1630	R-001-S12 / BWOJTASIEWICZ	
R1410307-010.01					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1458	In Lab / KRUEST	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	
R1410307-010.02					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/30/14	1627	In Lab / KRUEST	
		12/30/14	1630	R-001-S12 / BWOJTASIEWICZ	
R1410307-010.03					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-011.01					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-011.02					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/30/14	1621	In Lab / KRUEST	
R1410307-011.03					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	
R1410307-012.01					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-012.02					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/30/14	1627	In Lab / KRUEST	
		12/30/14	1630	R-001-S12 / BWOJTASIEWICZ	
R1410307-012.03					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	

Client: Parsons, Inc.
Project: FTMM 4Q GW/748810-03000
Service Request: R1410307

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1410307-013.01					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	
		12/30/14	1627	In Lab / KRUEST	
		12/30/14	1630	R-001-S12 / BWOJTASIEWICZ	
R1410307-013.02					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-013.03					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-014.01					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	
		12/30/14	1627	In Lab / KRUEST	
		12/30/14	1631	R-001-S12 / BWOJTASIEWICZ	
R1410307-014.02					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-014.03					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-015.01					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	
		12/30/14	1627	In Lab / KRUEST	
		12/30/14	1631	R-001-S12 / BWOJTASIEWICZ	
R1410307-015.02					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-015.03					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-016.01					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4Q GW/748810-03000

Service Request: R1410307

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	
		12/30/14	1627	In Lab / KRUEST	
		12/30/14	1631	R-001-S12 / BWOJTASIEWICZ	
R1410307-016.02					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-016.03					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-017.01					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	
		12/30/14	1627	In Lab / KRUEST	
		12/30/14	1631	R-001-S12 / BWOJTASIEWICZ	
R1410307-017.02					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-017.03					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-018.01					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	
		12/30/14	1627	In Lab / KRUEST	
		12/30/14	1631	R-001-S12 / BWOJTASIEWICZ	
R1410307-018.02					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-018.03					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-019.01					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4Q GW/748810-03000

Service Request: R1410307

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
		12/30/14	1627	In Lab / KRUEST	
		12/30/14	1631	R-001-S12 / BWOJTASIEWICZ	
R1410307-019.02					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-019.03					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-020.01					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	
		12/30/14	1627	In Lab / KRUEST	
		12/30/14	1631	R-001-S12 / BWOJTASIEWICZ	
R1410307-020.02					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-020.03					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-021.01					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	
		12/30/14	1628	In Lab / KRUEST	
		12/30/14	1631	R-001-S12 / BWOJTASIEWICZ	
R1410307-021.02					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-021.03					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-022.01					
	8260C				
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
		12/29/14	1503	R-001-S12 / BWOJTASIEWICZ	
		12/30/14	1628	In Lab / KRUEST	
		12/30/14	1631	R-001-S12 / BWOJTASIEWICZ	

ALS ENVIRONMENTAL
Chain of Custody Report

Client: Parsons, Inc.
Project: FTMM 4Q GW/748810-03000

Service Request: R1410307

Bottle ID	Tests	Date	Time	Sample Location / User	Disposed On
R1410307-022.02					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	
R1410307-022.03					
		12/22/14	1432	SMO / GLAFORCE	
		12/22/14	1432	R-001 / GLAFORCE	

ALS Environmental

VOLATILE ORGANICS QC SUMMARY

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Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/30/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-2-GW-M2MW11-31.91
Lab Code: R1410307-011

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-2-GW-M2MW11-31.91 MS Matrix Spike RQ1416037-05			FTMM-2-GW-M2MW11-31.91 DMS Duplicate Matrix Spike RQ1416037-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
1,1,1,2-Tetrachloroethane	ND	51.3	50.0	103	50.9	50.0	102	80 - 130	<1	30
1,1,1-Trichloroethane (TCA)	ND	48.0	50.0	96	46.3	50.0	93	65 - 130	4	30
1,1,2,2-Tetrachloroethane	ND	48.2	50.0	96	46.9	50.0	94	65 - 130	3	30
1,1,2-Trichloroethane	ND	48.7	50.0	97	47.0	50.0	94	75 - 125	4	30
1,1-Dichloroethane (1,1-DCA)	ND	48.7	50.0	97	46.5	50.0	93	70 - 135	5	30
1,1-Dichloroethene (1,1-DCE)	ND	50.0	50.0	100	48.8	50.0	98	70 - 130	2	30
1,1-Dichloropropene	ND	47.6	50.0	95	46.3	50.0	93	75 - 130	3	30
1,2,3-Trichlorobenzene	ND	48.2	50.0	96	49.4	50.0	99	75 - 125	2	30
1,2,3-Trichloropropane	ND	45.8	50.0	92	44.8	50.0	90	75 - 125	2	30
1,2,4-Trichlorobenzene	ND	51.0	50.0	102	51.9	50.0	104	65 - 135	2	30
1,2,4-Trimethylbenzene	ND	50.3	50.0	101	49.9	50.0	100	75 - 130	<1	30
1,2-Dibromo-3-chloropropane (DBC	ND	48.0	50.0	96	45.9	50.0	92	50 - 130	4	30
1,2-Dibromoethane	ND	50.7	50.0	101	48.8	50.0	98	80 - 120	4	30
1,2-Dichlorobenzene	ND	50.5	50.0	101	49.3	50.0	99	70 - 120	2	30
1,2-Dichloroethane	ND	46.0	50.0	92	45.0	50.0	90	70 - 130	2	30
1,2-Dichloropropane	ND	48.4	50.0	97	47.5	50.0	95	75 - 125	2	30
1,3,5-Trimethylbenzene	ND	51.0	50.0	102	49.8	50.0	100	75 - 130	2	30
1,3-Dichlorobenzene	ND	49.5	50.0	99	48.9	50.0	98	75 - 125	1	30
1,3-Dichloropropane	ND	50.1	50.0	100	48.8	50.0	98	75 - 125	3	30
1,4-Dichlorobenzene	ND	49.3	50.0	99	48.1	50.0	96	75 - 125	2	30
2,2-Dichloropropane	ND	40.9	50.0	82	39.4	50.0	79	70 - 135	4	30
2-Butanone (MEK)	ND	45.7	50.0	91	43.5	50.0	87	30 - 150	5	30
2-Chlorotoluene	ND	49.6	50.0	99	48.8	50.0	98	75 - 125	2	30
2-Hexanone	ND	41.4	50.0	83	40.8	50.0	82	55 - 130	1	30
tert-Butyl Alcohol	ND	735	1000	73	746	1000	75	50 - 150	2	30
4-Chlorotoluene	ND	50.0	50.0	100	49.1	50.0	98	75 - 130	2	30
p-Isopropyltoluene	ND	53.4	50.0	107	52.3	50.0	105	75 - 130	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/30/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-2-GW-M2MW11-31.91
Lab Code: R1410307-011

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-2-GW-M2MW11-31.91 MS Matrix Spike RQ1416037-05			FTMM-2-GW-M2MW11-31.91 DMS Duplicate Matrix Spike RQ1416037-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
4-Methyl-2-pentanone	ND	42.6	50.0	85	41.7	50.0	83	60 - 135	2	30
Acetone	1.7	42.4	50.0	82	43.3	50.0	83	40 - 140	2	30
Benzene	ND	49.7	50.0	99	48.2	50.0	96	80 - 120	3	30
Bromobenzene	ND	49.2	50.0	98	48.7	50.0	97	75 - 125	<1	30
Bromochloromethane	ND	49.7	50.0	99	47.5	50.0	95	65 - 130	5	30
Bromodichloromethane	ND	46.3	50.0	93	44.9	50.0	90	75 - 120	3	30
Bromoform	ND	41.0	50.0	82	40.3	50.0	81	70 - 130	2	30
Bromomethane	ND	25.5	50.0	51	38.1	50.0	76	30 - 145	40 *	30
Carbon Tetrachloride	ND	43.5	50.0	87	42.7	50.0	85	65 - 140	2	30
Chlorobenzene	ND	50.7	50.0	101	50.3	50.0	101	80 - 120	<1	30
Chloroethane	ND	57.1	50.0	114	54.2	50.0	108	60 - 135	5	30
Chloroform	ND	48.1	50.0	96	46.0	50.0	92	65 - 135	4	30
Chloromethane	ND	65.6	50.0	131 *	61.2	50.0	122	40 - 125	7	30
Dibromochloromethane	ND	45.6	50.0	91	44.3	50.0	89	60 - 135	3	30
Dichlorodifluoromethane (CFC 12)	ND	64.4	50.0	129	61.3	50.0	123	30 - 155	5	30
Methylene Chloride	ND	50.1	50.0	100	47.8	50.0	96	55 - 140	5	30
Ethylbenzene	ND	47.3	50.0	95	46.0	50.0	92	75 - 125	3	30
Hexachlorobutadiene	ND	49.3	50.0	99	50.6	50.0	101	50 - 140	3	30
Isopropylbenzene (Cumene)	ND	51.0	50.0	102	50.2	50.0	100	75 - 125	2	30
Methyl tert-Butyl Ether	ND	46.5	50.0	93	45.9	50.0	92	65 - 125	1	30
Naphthalene	ND	50.8	50.0	102	51.5	50.0	103	55 - 140	1	30
Styrene	ND	51.2	50.0	102	49.6	50.0	99	65 - 135	3	30
Tetrachloroethene (PCE)	ND	52.8	50.0	106	51.4	50.0	103	45 - 150	3	30
Toluene	ND	50.1	50.0	100	49.1	50.0	98	75 - 120	2	30
Trichloroethene (TCE)	ND	50.6	50.0	101	49.5	50.0	99	70 - 125	2	30
Trichlorofluoromethane (CFC 11)	ND	48.7	50.0	97	47.3	50.0	95	60 - 145	3	30
Vinyl Chloride	ND	61.5	50.0	123	58.0	50.0	116	50 - 145	6	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/30/14

Matrix Spike Summary
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-2-GW-M2MW11-31.91
Lab Code: R1410307-011

Units: µg/L
Basis: NA

Analytical Method: 8260C

		FTMM-2-GW-M2MW11-31.91 MS Matrix Spike RQ1416037-05			FTMM-2-GW-M2MW11-31.91 DMS Duplicate Matrix Spike RQ1416037-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
cis-1,2-Dichloroethene	ND	51.1	50.0	102	48.3	50.0	96	70 - 125	6	30
cis-1,3-Dichloropropene	ND	41.4	50.0	83	40.5	50.0	81	70 - 130	2	30
m,p-Xylenes	ND	106	100	106	104	100	104	75 - 130	3	30
n-Butylbenzene	ND	52.3	50.0	105	51.4	50.0	103	70 - 135	2	30
n-Propylbenzene	ND	51.1	50.0	102	50.4	50.0	101	70 - 130	1	30
o-Xylene	ND	51.8	50.0	104	50.2	50.0	100	80 - 120	3	30
sec-Butylbenzene	ND	51.3	50.0	103	49.9	50.0	100	70 - 125	3	30
tert-Butylbenzene	ND	51.6	50.0	103	50.6	50.0	101	70 - 130	2	30
trans-1,2-Dichloroethene	ND	51.7	50.0	103	49.6	50.0	99	60 - 140	4	30
trans-1,3-Dichloropropene	ND	41.1	50.0	82	40.0	50.0	80	55 - 140	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Analyzed: 12/30/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 427512

Lab Control Sample
RQ1416037-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,1,1,2-Tetrachloroethane	19.5	20.0	98	80 - 130
1,1,1-Trichloroethane (TCA)	17.8	20.0	89	65 - 130
1,1,2,2-Tetrachloroethane	18.6	20.0	93	65 - 130
1,1,2-Trichloroethane	18.8	20.0	94	75 - 125
1,1-Dichloroethane (1,1-DCA)	18.4	20.0	92	70 - 135
1,1-Dichloroethene (1,1-DCE)	18.8	20.0	94	70 - 130
1,1-Dichloropropene	18.2	20.0	91	75 - 130
1,2,3-Trichlorobenzene	21.7	20.0	108	75 - 125
1,2,3-Trichloropropane	18.4	20.0	92	75 - 125
1,2,4-Trichlorobenzene	21.8	20.0	109	65 - 135
1,2,4-Trimethylbenzene	20.0	20.0	100	75 - 130
1,2-Dibromo-3-chloropropane (DBCP)	17.8	20.0	89	50 - 130
1,2-Dibromoethane	19.4	20.0	97	80 - 120
1,2-Dichlorobenzene	19.4	20.0	97	70 - 120
1,2-Dichloroethane	17.5	20.0	87	70 - 130
1,2-Dichloropropane	18.3	20.0	92	75 - 125
1,3,5-Trimethylbenzene	19.9	20.0	99	75 - 130
1,3-Dichlorobenzene	19.4	20.0	97	75 - 125
1,3-Dichloropropane	18.4	20.0	92	75 - 125
1,4-Dichlorobenzene	19.3	20.0	96	75 - 125
2,2-Dichloropropane	17.1	20.0	85	70 - 135
2-Butanone (MEK)	18.2	20.0	91	30 - 150
2-Chlorotoluene	19.7	20.0	98	75 - 125
2-Hexanone	17.4	20.0	87	55 - 130
tert-Butyl Alcohol	288	400	72	50 - 150
4-Chlorotoluene	19.4	20.0	97	75 - 130
p-Isopropyltoluene	21.6	20.0	108	75 - 130
4-Methyl-2-pentanone	16.2	20.0	81	60 - 135
Acetone	19.3	20.0	97	40 - 140
Benzene	18.9	20.0	95	80 - 120
Bromobenzene	19.3	20.0	96	75 - 125
Bromochloromethane	19.6	20.0	98	65 - 130
Bromodichloromethane	18.2	20.0	91	75 - 120

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Analyzed: 12/30/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 427512

Lab Control Sample
RQ1416037-03

Analyte Name	Result	Spike Amount	% Rec		% Rec Limits
Bromoform	19.0	20.0	95		70 - 130
Bromomethane	23.1	20.0	116		30 - 145
Carbon Tetrachloride	18.1	20.0	90		65 - 140
Chlorobenzene	19.3	20.0	96		80 - 120
Chloroethane	21.4	20.0	107		60 - 135
Chloroform	18.5	20.0	93		65 - 135
Chloromethane	26.9	20.0	134	*	40 - 125
Dibromochloromethane	19.3	20.0	96		60 - 135
Dichlorodifluoromethane (CFC 12)	24.1	20.0	121		30 - 155
Methylene Chloride	18.4	20.0	92		55 - 140
Ethylbenzene	18.0	20.0	90		75 - 125
Hexachlorobutadiene	23.8	20.0	119		50 - 140
Isopropylbenzene (Cumene)	20.4	20.0	102		75 - 125
Methyl tert-Butyl Ether	17.6	20.0	88		65 - 125
Naphthalene	21.4	20.0	107		55 - 140
Styrene	18.7	20.0	94		65 - 135
Tetrachloroethene (PCE)	19.8	20.0	99		45 - 150
Toluene	19.1	20.0	96		75 - 120
Trichloroethene (TCE)	19.3	20.0	97		70 - 125
Trichlorofluoromethane (CFC 11)	18.6	20.0	93		60 - 145
Vinyl Chloride	22.6	20.0	113		50 - 145
cis-1,2-Dichloroethene	19.2	20.0	96		70 - 125
cis-1,3-Dichloropropene	17.6	20.0	88		70 - 130
m,p-Xylenes	39.5	40.0	99		75 - 130
n-Butylbenzene	21.0	20.0	105		70 - 135
n-Propylbenzene	20.6	20.0	103		70 - 130
o-Xylene	19.2	20.0	96		80 - 120
sec-Butylbenzene	20.4	20.0	102		70 - 125
tert-Butylbenzene	20.6	20.0	103		70 - 130
trans-1,2-Dichloroethene	19.5	20.0	97		60 - 140
trans-1,3-Dichloropropene	17.4	20.0	87		55 - 140

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Analyzed: 12/31/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 427514

Analyte Name	Lab Control Sample RQ1416038-03 Result	Spike Amount	% Rec	Duplicate Lab Control Sample RQ1416038-04 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	20.2	20.0	101	19.8	20.0	99	80 - 130	2	30
1,1,1-Trichloroethane (TCA)	19.9	20.0	99	18.7	20.0	94	65 - 130	6	30
1,1,2,2-Tetrachloroethane	19.5	20.0	97	19.3	20.0	96	65 - 130	1	30
1,1,2-Trichloroethane	20.3	20.0	101	20.0	20.0	100	75 - 125	1	30
1,1-Dichloroethane (1,1-DCA)	19.9	20.0	100	19.3	20.0	96	70 - 135	3	30
1,1-Dichloroethene (1,1-DCE)	20.3	20.0	102	19.0	20.0	95	70 - 130	7	30
1,1-Dichloropropene	19.3	20.0	97	18.8	20.0	94	75 - 130	3	30
1,2,3-Trichlorobenzene	22.6	20.0	113	22.1	20.0	111	75 - 125	2	30
1,2,3-Trichloropropane	19.5	20.0	97	20.1	20.0	101	75 - 125	3	30
1,2,4-Trichlorobenzene	22.4	20.0	112	22.3	20.0	112	65 - 135	<1	30
1,2,4-Trimethylbenzene	21.6	20.0	108	20.7	20.0	104	75 - 130	4	30
1,2-Dibromo-3-chloropropane (DBCP)	19.5	20.0	98	20.9	20.0	104	50 - 130	6	30
1,2-Dibromoethane	21.0	20.0	105	21.1	20.0	106	80 - 120	<1	30
1,2-Dichlorobenzene	21.0	20.0	105	20.7	20.0	103	70 - 120	2	30
1,2-Dichloroethane	19.2	20.0	96	19.3	20.0	97	70 - 130	<1	30
1,2-Dichloropropane	19.6	20.0	98	19.0	20.0	95	75 - 125	3	30
1,3,5-Trimethylbenzene	20.9	20.0	105	20.0	20.0	100	75 - 130	4	30
1,3-Dichlorobenzene	20.7	20.0	103	20.4	20.0	102	75 - 125	1	30
1,3-Dichloropropane	20.7	20.0	104	20.7	20.0	104	75 - 125	<1	30
1,4-Dichlorobenzene	20.6	20.0	103	20.3	20.0	102	75 - 125	1	30
2,2-Dichloropropane	15.5	20.0	78	14.6	20.0	73	70 - 135	6	30
2-Butanone (MEK)	19.5	20.0	97	20.6	20.0	103	30 - 150	5	30
2-Chlorotoluene	21.3	20.0	106	20.8	20.0	104	75 - 125	3	30
2-Hexanone	16.7	20.0	84	17.4	20.0	87	55 - 130	4	30
tert-Butyl Alcohol	341	400	85	338	400	85	50 - 150	<1	30
4-Chlorotoluene	20.8	20.0	104	19.9	20.0	99	75 - 130	5	30
p-Isopropyltoluene	22.7	20.0	113	21.6	20.0	108	75 - 130	5	30
4-Methyl-2-pentanone	16.8	20.0	84	17.7	20.0	88	60 - 135	5	30
Acetone	20.5	20.0	102	21.7	20.0	108	40 - 140	6	30
Benzene	20.3	20.0	102	19.6	20.0	98	80 - 120	4	30
Bromobenzene	21.2	20.0	106	20.7	20.0	103	75 - 125	2	30
Bromochloromethane	21.0	20.0	105	20.8	20.0	104	65 - 130	1	30
Bromodichloromethane	19.9	20.0	99	19.7	20.0	98	75 - 120	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Analyzed: 12/31/14

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

Units: µg/L
Basis: NA

Analysis Lot: 427514

Analyte Name	Lab Control Sample RQ1416038-03 Result	Spike Amount	% Rec		Duplicate Lab Control Sample RQ1416038-04 Result	Spike Amount	% Rec		% Rec Limits	RPD	RPD Limit
Bromoform	20.8	20.0	104		21.5	20.0	107		70 - 130	3	30
Bromomethane	20.4	20.0	102		20.2	20.0	101		30 - 145	<1	30
Carbon Tetrachloride	19.5	20.0	98		18.5	20.0	92		65 - 140	6	30
Chlorobenzene	20.9	20.0	104		20.2	20.0	101		80 - 120	3	30
Chloroethane	23.3	20.0	116		22.1	20.0	110		60 - 135	5	30
Chloroform	20.0	20.0	100		19.1	20.0	96		65 - 135	5	30
Chloromethane	26.2	20.0	131	*	25.3	20.0	126	*	40 - 125	4	30
Dibromochloromethane	20.9	20.0	104		21.0	20.0	105		60 - 135	<1	30
Dichlorodifluoromethane (CFC 12)	26.5	20.0	133		24.8	20.0	124		30 - 155	7	30
Methylene Chloride	20.4	20.0	102		20.3	20.0	101		55 - 140	<1	30
Ethylbenzene	19.6	20.0	98		18.2	20.0	91		75 - 125	7	30
Hexachlorobutadiene	24.1	20.0	120		21.8	20.0	109		50 - 140	10	30
Isopropylbenzene (Cumene)	21.6	20.0	108		20.9	20.0	104		75 - 125	4	30
Methyl tert-Butyl Ether	19.3	20.0	97		19.3	20.0	97		65 - 125	<1	30
Naphthalene	22.6	20.0	113		22.7	20.0	113		55 - 140	<1	30
Styrene	20.2	20.0	101		19.6	20.0	98		65 - 135	3	30
Tetrachloroethene (PCE)	21.6	20.0	108		20.6	20.0	103		45 - 150	5	30
Toluene	20.5	20.0	103		19.9	20.0	99		75 - 120	3	30
Trichloroethene (TCE)	21.8	20.0	109		21.4	20.0	107		70 - 125	2	30
Trichlorofluoromethane (CFC 11)	20.1	20.0	101		18.9	20.0	95		60 - 145	6	30
Vinyl Chloride	24.3	20.0	122		23.5	20.0	118		50 - 145	3	30
cis-1,2-Dichloroethene	20.6	20.0	103		19.7	20.0	99		70 - 125	4	30
cis-1,3-Dichloropropene	18.8	20.0	94		18.3	20.0	91		70 - 130	3	30
m,p-Xylenes	43.4	40.0	108		40.6	40.0	101		75 - 130	7	30
n-Butylbenzene	21.8	20.0	109		20.9	20.0	104		70 - 135	4	30
n-Propylbenzene	21.8	20.0	109		20.9	20.0	104		70 - 130	4	30
o-Xylene	20.7	20.0	104		19.9	20.0	99		80 - 120	4	30
sec-Butylbenzene	21.8	20.0	109		21.0	20.0	105		70 - 125	4	30
tert-Butylbenzene	22.0	20.0	110		21.0	20.0	105		70 - 130	5	30
trans-1,2-Dichloroethene	20.9	20.0	105		19.7	20.0	98		60 - 140	6	30
trans-1,3-Dichloropropene	18.2	20.0	91		18.3	20.0	91		55 - 140	<1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Analyzed: 12/30/14 13:43

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1416037-04
Instrument ID: R-MS-12
File ID: I:\ACQUDATA\MSVOA12\DATA\123014\MM1902.D\

Analytical Method: 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1416037-03	I:\ACQUDATA\MSVOA12\DATA\123014\MM1900.D\	12/30/14 12:40
FTMM-2-GW-M2MW11-31.91	R1410307-011	I:\ACQUDATA\MSVOA12\DATA\123014\MM1906.D\	12/30/14 15:50
FTMM-2-GW-M2MW21-8.8	R1410307-001	I:\ACQUDATA\MSVOA12\DATA\123014\MM1914.D\	12/30/14 20:06
FTMM-2-GW-M2MW21-15.97	R1410307-002	I:\ACQUDATA\MSVOA12\DATA\123014\MM1915.D\	12/30/14 20:37
FTMM-2-GW-M2MW10-17.31	R1410307-003	I:\ACQUDATA\MSVOA12\DATA\123014\MM1916.D\	12/30/14 21:10
FTMM-2-GW-M2MW10-7.32	R1410307-004	I:\ACQUDATA\MSVOA12\DATA\123014\MM1917.D\	12/30/14 21:42
FTMM-2-GW-M2MW10-12.32	R1410307-005	I:\ACQUDATA\MSVOA12\DATA\123014\MM1918.D\	12/30/14 22:14
FTMM-2-GW-M2MW11-31.91MS	RQ1416037-05	I:\ACQUDATA\MSVOA12\DATA\123014\MM1919.D\	12/30/14 22:45
FTMM-2-GW-M2MW11-31.91DMS	RQ1416037-06	I:\ACQUDATA\MSVOA12\DATA\123014\MM1920.D\	12/30/14 23:17

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Analyzed: 12/31/14 03:01

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: RQ1416038-05
Instrument ID: R-MS-12
File ID: I:\ACQUDATA\msvoa12\Data\123014\MM1927.D\

Analytical Method: 8260C

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	RQ1416038-03	I:\ACQUDATA\msvoa12\Data\123014\MM1924.D\	12/31/14 01:25
Duplicate Lab Control Sample	RQ1416038-04	I:\ACQUDATA\msvoa12\Data\123014\MM1925.D\	12/31/14 01:57
FTMM-TB-121914	R1410307-022	I:\ACQUDATA\msvoa12\Data\123014\MM1928.D\	12/31/14 03:33
FTMM-2-GW-M2MW24-9.97	R1410307-006	I:\ACQUDATA\msvoa12\Data\123014\MM1929.D\	12/31/14 04:05
FTMM-2-GW-M2MW24-16.5	R1410307-007	I:\ACQUDATA\msvoa12\Data\123014\MM1930.D\	12/31/14 04:37
FTMM-2-GW-M2MW11-36.91	R1410307-008	I:\ACQUDATA\msvoa12\Data\123014\MM1931.D\	12/31/14 05:09
FTMM-2-GW-M2MW11-46.91	R1410307-009	I:\ACQUDATA\msvoa12\Data\123014\MM1932.D\	12/31/14 05:41
FTMM-2-GW-M2MW11-41.91	R1410307-010	I:\ACQUDATA\msvoa12\Data\123014\MM1933.D\	12/31/14 06:13
FTMM-2-GW-M2MW22-10.03	R1410307-012	I:\ACQUDATA\msvoa12\Data\123014\MM1934.D\	12/31/14 06:45
FTMM-2-GW-M2MW22-10.67	R1410307-013	I:\ACQUDATA\msvoa12\Data\123014\MM1935.D\	12/31/14 07:17
FTMM-5-GW-M5MW11-9.46	R1410307-015	I:\ACQUDATA\msvoa12\Data\123014\MM1936.D\	12/31/14 07:49
FTMM-5-GW-M5MW16-14.57	R1410307-016	I:\ACQUDATA\msvoa12\Data\123014\MM1937.D\	12/31/14 08:21
FTMM-5-GW-M5MW23-10.82	R1410307-017	I:\ACQUDATA\msvoa12\Data\123014\MM1938.D\	12/31/14 08:53
FTMM-5-GW-M5MW20-13.65	R1410307-018	I:\ACQUDATA\msvoa12\Data\123014\MM1939.D\	12/31/14 09:25
FTMM-18-GW-M18MW23-9.28	R1410307-019	I:\ACQUDATA\msvoa12\Data\123014\MM1940.D\	12/31/14 09:57
FTMM-18-GW-M18MW23-16.22	R1410307-020	I:\ACQUDATA\msvoa12\Data\123014\MM1941.D\	12/31/14 10:29
FTMM-18-GW-M18MW22-18.91	R1410307-021	I:\ACQUDATA\msvoa12\Data\123014\MM1942.D\	12/31/14 11:01
FTMM-2-GW-M2MW03-10.27	R1410307-014	I:\ACQUDATA\msvoa12\Data\123014\MM1943.D\	12/31/14 11:32

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410307
Date Analyzed: 10/27/14 15:08

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\102714\MM0095.D\
Instrument ID: R-MS-12

Analytical Method: 8260C
Analysis Lot:

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	23.1	98133	Pass
75	95	30	60	53.6	227669	Pass
95	95	100	100	100.0	424533	Pass
96	95	5	9	6.7	28573	Pass
173	174	0	2	1.1	3648	Pass
174	95	50	120	76.3	324011	Pass
175	174	5	9	7.7	25107	Pass
176	174	95	101	96.8	313536	Pass
177	176	5	9	6.8	21386	Pass

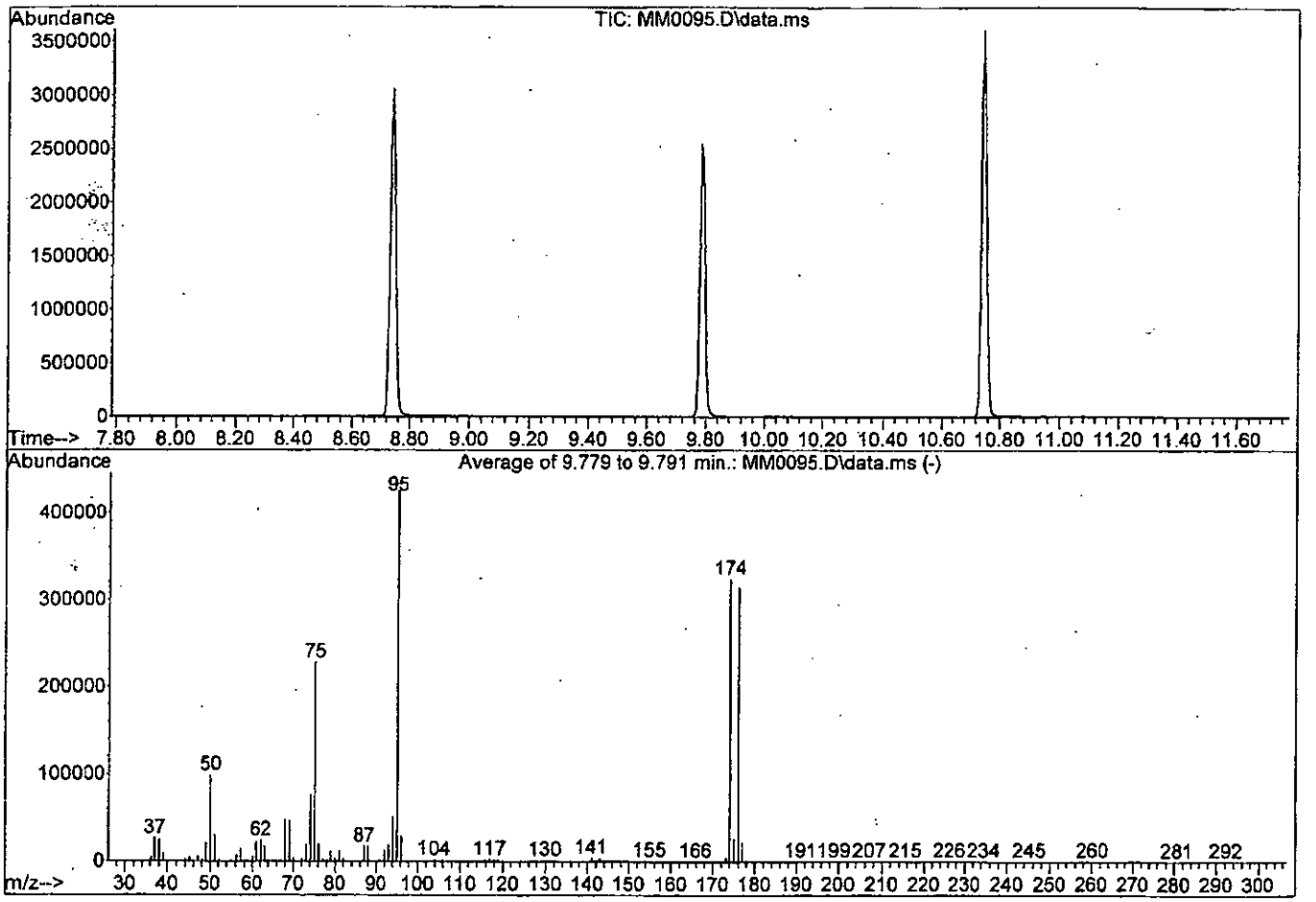
Sample Name	Lab Code	File ID	Date Analyzed	Q
Initial CalibrationICAL	0.5 ppb	I:\ACQUDATA\msvoa12\Data\102714\MM0097.D\	10/27/14 16:13	
Initial CalibrationICAL	1.0 ppb	I:\ACQUDATA\msvoa12\Data\102714\MM0098.D\	10/27/14 16:45	
Initial CalibrationICAL	2.0 ppb	I:\ACQUDATA\msvoa12\Data\102714\MM0099.D\	10/27/14 17:17	
Initial CalibrationICAL	5.0 ppb	I:\ACQUDATA\msvoa12\Data\102714\MM0101.D\	10/27/14 17:49	
Initial CalibrationICAL	20 ppb	I:\ACQUDATA\msvoa12\Data\102714\MM0102.D\	10/27/14 18:21	
Initial CalibrationICAL	50 ppb	I:\ACQUDATA\msvoa12\Data\102714\MM0102.D\	10/27/14 18:54	
Initial CalibrationICAL	100 ppb	I:\ACQUDATA\msvoa12\Data\102714\MM0103.D\	10/27/14 19:26	
Initial CalibrationICAL	150 ppb	I:\ACQUDATA\msvoa12\Data\102714\MM0104.D\	10/27/14 19:58	
Initial CalibrationICAL	200 ppb	I:\ACQUDATA\msvoa12\Data\102714\MM0105.D\	10/27/14 20:31	

Data Path : I:\ACQUDATA\msvoa12\Data\102714\
Data File : MM0095.D
Acq On : 27 Oct 2014 3:08 pm
Operator : K.Ruest
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: INTP60.P

KR 10/27/14

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Mon Oct 27 15:07:21 2014



AutoFind: Scans 1424, 1425, 1426; Background Corrected with Scan 1419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.1	98133	PASS
75	95	30	60	53.6	227669	PASS
95	95	100	100	100.0	424533	PASS
96	95	5	9	6.7	28573	PASS
173	174	0.00	2	1.1	3648	PASS
174	95	50	120	76.3	324011	PASS
175	174	5	9	7.7	25107	PASS
176	174	95	101	96.8	313536	PASS
177	176	5	9	6.8	21386	PASS

W102714.M Mon Oct 27 16:29:58 2014 Page: 1

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410307
Date Analyzed: 12/30/14 11:39

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\123014\MM1898.D\
Instrument ID: R-MS-12

Analytical Method: 8260C
Analysis Lot: 427512

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	21.90	89688	Pass
75	95	30	60	53.28	218176	Pass
95	95	100	100	100.00	409515	Pass
96	95	5	9	6.62	27107	Pass
173	174	0	2	1.09	3738	Pass
174	95	50	120	83.86	343403	Pass
175	174	5	9	7.63	26195	Pass
176	174	95	101	96.56	331605	Pass
177	176	5	9	6.52	21621	Pass

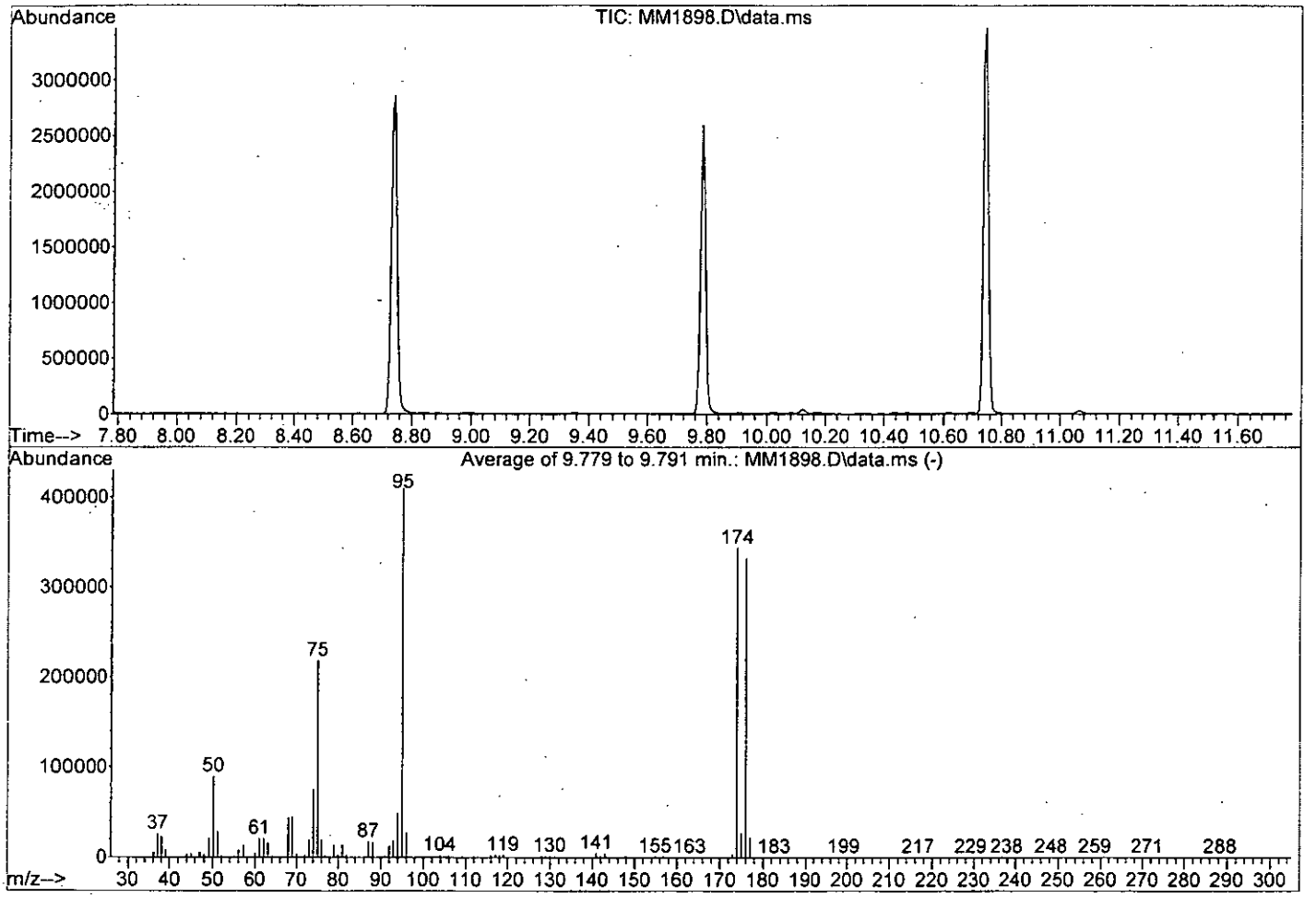
Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1416037-02	I:\ACQUDATA\MSVOA12\DATA\123014\MM1899.D\	12/30/14 12:10	
Lab Control Sample	RQ1416037-03	I:\ACQUDATA\MSVOA12\DATA\123014\MM1900.D\	12/30/14 12:40	
Method Blank	RQ1416037-04	I:\ACQUDATA\MSVOA12\DATA\123014\MM1902.D\	12/30/14 13:43	
FTMM-2-GW-M2MW11-31.91	R1410307-011	I:\ACQUDATA\MSVOA12\DATA\123014\MM1906.D\	12/30/14 15:50	
FTMM-2-GW-M2MW21-8.8	R1410307-001	I:\ACQUDATA\MSVOA12\DATA\123014\MM1914.D\	12/30/14 20:06	
FTMM-2-GW-M2MW21-15.97	R1410307-002	I:\ACQUDATA\MSVOA12\DATA\123014\MM1915.D\	12/30/14 20:37	
FTMM-2-GW-M2MW10-17.31	R1410307-003	I:\ACQUDATA\MSVOA12\DATA\123014\MM1916.D\	12/30/14 21:10	
FTMM-2-GW-M2MW10-7.32	R1410307-004	I:\ACQUDATA\MSVOA12\DATA\123014\MM1917.D\	12/30/14 21:42	
FTMM-2-GW-M2MW10-12.32	R1410307-005	I:\ACQUDATA\MSVOA12\DATA\123014\MM1918.D\	12/30/14 22:14	
FTMM-2-GW-M2MW11-31.91MS	RQ1416037-05	I:\ACQUDATA\MSVOA12\DATA\123014\MM1919.D\	12/30/14 22:45	
FTMM-2-GW-M2MW11-31.91DMS	RQ1416037-06	I:\ACQUDATA\MSVOA12\DATA\123014\MM1920.D\	12/30/14 23:17	

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1898.D
Acq On : 30 Dec 2014 11:39 am
Operator : K.Ruest
Sample : TUNE RQ1411603-01
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Tue Oct 28 10:54:16 2014

KR 12/30/14



AutoFind: Scans 1424, 1425, 1426; Background Corrected with Scan 1419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.9	89688	PASS
75	95	30	60	53.3	218176	PASS
95	95	100	100	100.0	409515	PASS
96	95	5	9	6.6	27107	PASS
173	174	0.00	2	1.1	3738	PASS
174	95	50	120	83.9	343403	PASS
175	174	5	9	7.6	26195	PASS
176	174	95	101	96.6	331605	PASS
177	176	5	9	6.5	21621	PASS

W102714.M Tue Dec 30 12:05:51 2014 Page: 1

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410307
Date Analyzed: 12/31/14 00:21

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\123014\MM1922.D\
Instrument ID: R-MS-12

Analytical Method: 8260C
Analysis Lot: 427514

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	20.83	88740	Pass
75	95	30	60	52.68	224384	Pass
95	95	100	100	100.00	425963	Pass
96	95	5	9	7.04	29992	Pass
173	174	0	2	1.15	4144	Pass
174	95	50	120	84.57	360235	Pass
175	174	5	9	7.73	27844	Pass
176	174	95	101	98.02	353109	Pass
177	176	5	9	6.46	22797	Pass

Sample Name	Lab Code	File ID	Date Analyzed	Q
Continuing Calibration Verification	RQ1416038-02	I:\ACQUDATA\msvoa12\Data\123014\MM1923.D\	12/31/14 00:53	
Lab Control Sample	RQ1416038-03	I:\ACQUDATA\msvoa12\Data\123014\MM1924.D\	12/31/14 01:25	
Duplicate Lab Control Sample	RQ1416038-04	I:\ACQUDATA\msvoa12\Data\123014\MM1925.D\	12/31/14 01:57	
Method Blank	RQ1416038-05	I:\ACQUDATA\msvoa12\Data\123014\MM1927.D\	12/31/14 03:01	
FTMM-TB-121914	R1410307-022	I:\ACQUDATA\msvoa12\Data\123014\MM1928.D\	12/31/14 03:33	
FTMM-2-GW-M2MW24-9.97	R1410307-006	I:\ACQUDATA\msvoa12\Data\123014\MM1929.D\	12/31/14 04:05	
FTMM-2-GW-M2MW24-16.5	R1410307-007	I:\ACQUDATA\msvoa12\Data\123014\MM1930.D\	12/31/14 04:37	
FTMM-2-GW-M2MW11-36.91	R1410307-008	I:\ACQUDATA\msvoa12\Data\123014\MM1931.D\	12/31/14 05:09	
FTMM-2-GW-M2MW11-46.91	R1410307-009	I:\ACQUDATA\msvoa12\Data\123014\MM1932.D\	12/31/14 05:41	
FTMM-2-GW-M2MW11-41.91	R1410307-010	I:\ACQUDATA\msvoa12\Data\123014\MM1933.D\	12/31/14 06:13	
FTMM-2-GW-M2MW22-10.03	R1410307-012	I:\ACQUDATA\msvoa12\Data\123014\MM1934.D\	12/31/14 06:45	
FTMM-2-GW-M2MW22-10.67	R1410307-013	I:\ACQUDATA\msvoa12\Data\123014\MM1935.D\	12/31/14 07:17	
FTMM-5-GW-M5MW11-9.46	R1410307-015	I:\ACQUDATA\msvoa12\Data\123014\MM1936.D\	12/31/14 07:49	
FTMM-5-GW-M5MW16-14.57	R1410307-016	I:\ACQUDATA\msvoa12\Data\123014\MM1937.D\	12/31/14 08:21	
FTMM-5-GW-M5MW23-10.82	R1410307-017	I:\ACQUDATA\msvoa12\Data\123014\MM1938.D\	12/31/14 08:53	
FTMM-5-GW-M5MW20-13.65	R1410307-018	I:\ACQUDATA\msvoa12\Data\123014\MM1939.D\	12/31/14 09:25	
FTMM-18-GW-M18MW23-9.28	R1410307-019	I:\ACQUDATA\msvoa12\Data\123014\MM1940.D\	12/31/14 09:57	
FTMM-18-GW-M18MW23-16.22	R1410307-020	I:\ACQUDATA\msvoa12\Data\123014\MM1941.D\	12/31/14 10:29	
FTMM-18-GW-M18MW22-18.91	R1410307-021	I:\ACQUDATA\msvoa12\Data\123014\MM1942.D\	12/31/14 11:01	
FTMM-2-GW-M2MW03-10.27	R1410307-014	I:\ACQUDATA\msvoa12\Data\123014\MM1943.D\	12/31/14 11:32	

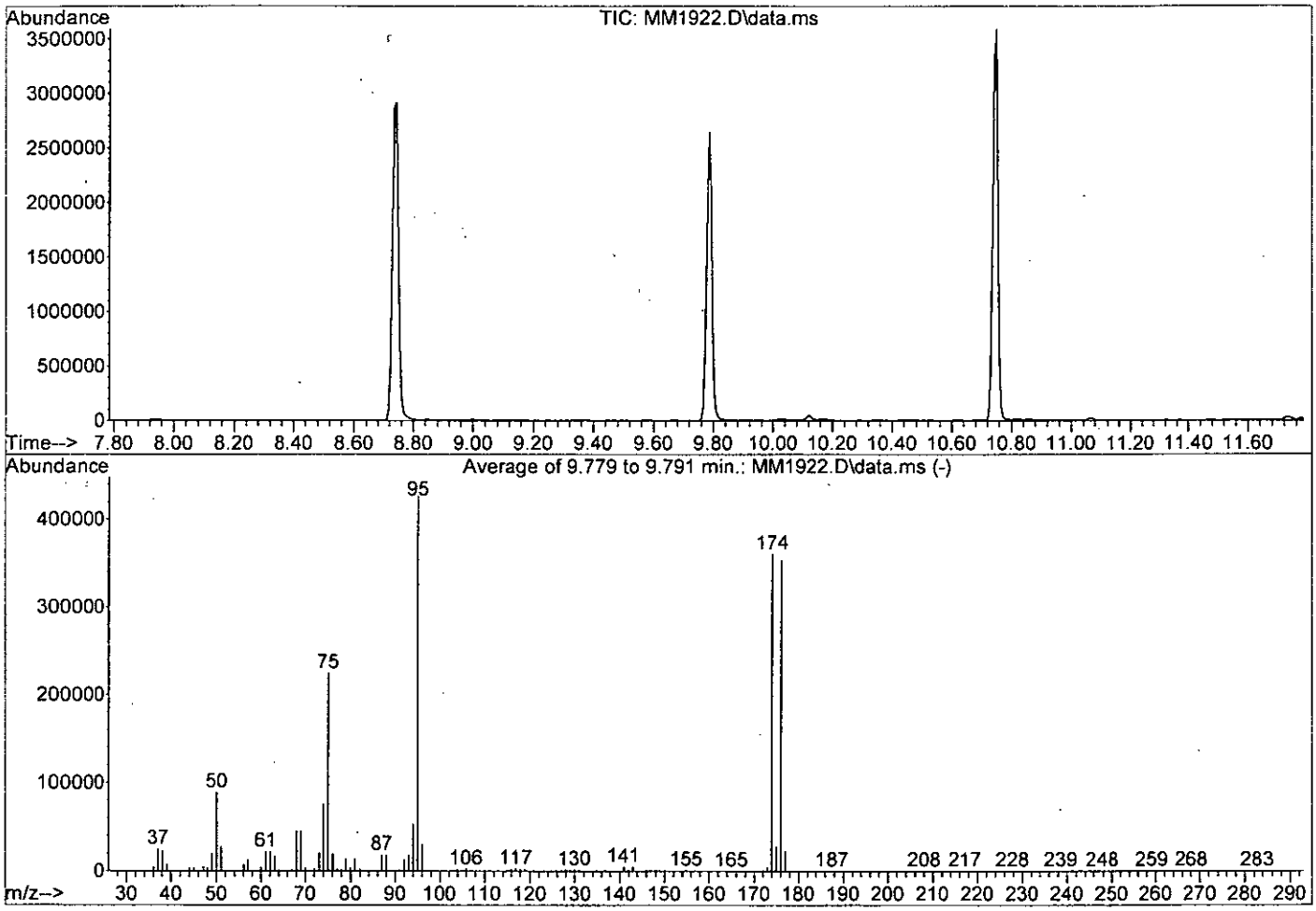
BFB

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1922.D
Acq On : 31 Dec 2014 12:21 am
Operator : K.Ruest
Sample : TUNE RQ1416038-01
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Tue Oct 28 10:54:16 2014

KR 12/31/14



AutoFind: Scans 1424, 1425, 1426; Background Corrected with Scan 1419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.8	88740	PASS
75	95	30	60	52.7	224384	PASS
95	95	100	100	100.0	425963	PASS
96	95	5	9	7.0	29992	PASS
173	174	0.00	2	1.2	4144	PASS
174	95	50	120	84.6	360235	PASS
175	174	5	9	7.7	27844	PASS
176	174	95	101	98.0	353109	PASS
177	176	5	9	6.5	22797	PASS

W102714.M Wed Dec 31 08:59:12 2014 Page: 1

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410307
Date Analyzed: 12/30/14 12:10

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA12\DATA\123014\MM1899.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1416037-02
Analysis Lot: 427512
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
	Results ==>	761,777	10.75	1,350,444	5.44	1,272,956	8.74
	Upper Limit ==>	1,523,554	11.25	2,700,888	5.94	2,545,912	9.24
	Lower Limit ==>	380,889	10.25	675,222	4.94	636,478	8.24
	ICAL Result ==>	744,954	10.75	1,362,156	5.45	1,272,285	8.74
Associated Analyses							
Lab Control Sample	RQ1416037-03	726,945	10.75	1,362,508	5.44	1,269,424	8.74
Method Blank	RQ1416037-04	671,626	10.75	1,354,117	5.44	1,240,114	8.74
FTMM-2-GW-M2MW11-31.91	R1410307-011	646,639	10.75	1,345,135	5.44	1,233,427	8.74
FTMM-2-GW-M2MW21-8.8	R1410307-001	655,909	10.75	1,339,129	5.44	1,231,983	8.74
FTMM-2-GW-M2MW21-15.97	R1410307-002	669,258	10.75	1,346,870	5.44	1,233,983	8.74
FTMM-2-GW-M2MW10-17.31	R1410307-003	656,917	10.75	1,343,260	5.44	1,234,509	8.74
FTMM-2-GW-M2MW10-7.32	R1410307-004	656,915	10.75	1,347,732	5.44	1,239,896	8.74
FTMM-2-GW-M2MW10-12.32	R1410307-005	650,819	10.75	1,334,179	5.44	1,222,066	8.74
FTMM-2-GW-M2MW11-31.91MS	RQ1416037-05	764,682	10.75	1,371,105	5.44	1,282,655	8.74
FTMM-2-GW-M2MW11-31.91DMS	RQ1416037-06	775,607	10.75	1,398,918	5.44	1,310,767	8.74

Results flagged with an asterisk (*) indicate values outside control criteria.

QA/QC Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410307
Date Analyzed: 12/30/14 12:10

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\MSVOA12\DATA\123014\MM1899.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1416037-02
Analysis Lot: 427512
Signal ID:

		Pentafluorobenzene	
		Area	**RT**
	Results ==>	900,058	4.24
	Upper Limit ==>	1,800,116	4.74
	Lower Limit ==>	450,029	3.74
	ICAL Result ==>	896,470	4.24
Associated Analyses			
Lab Control Sample	RQ1416037-03	901,412	4.24
Method Blank	RQ1416037-04	885,105	4.24
FTMM-2-GW-M2MW11-31.91	R1410307-011	882,303	4.24
FTMM-2-GW-M2MW21-8.8	R1410307-001	867,654	4.24
FTMM-2-GW-M2MW21-15.97	R1410307-002	885,481	4.24
FTMM-2-GW-M2MW10-17.31	R1410307-003	885,281	4.24
FTMM-2-GW-M2MW10-7.32	R1410307-004	882,634	4.24
FTMM-2-GW-M2MW10-12.32	R1410307-005	868,069	4.24
FTMM-2-GW-M2MW11-31.91MS	RQ1416037-05	896,761	4.24
FTMM-2-GW-M2MW11-31.91DMS	RQ1416037-06	930,499	4.24

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410307
Date Analyzed: 12/31/14 00:53

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\123014\MM1923.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1416038-02
Analysis Lot: 427514
Signal ID:

		1,4-Dichlorobenzene-d4		1,4-Difluorobenzene		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
	Results ==>	760,958	10.75	1,407,637	5.44	1,309,719	8.74
	Upper Limit ==>	1,521,916	11.25	2,815,274	5.94	2,619,438	9.24
	Lower Limit ==>	380,479	10.25	703,819	4.94	654,860	8.24
	ICAL Result ==>	744,954	10.75	1,362,156	5.45	1,272,285	8.74
Associated Analyses							
Lab Control Sample	RQ1416038-03	749,820	10.75	1,414,788	5.44	1,304,066	8.74
Duplicate Lab Control Sample	RQ1416038-04	741,692	10.75	1,410,291	5.44	1,309,927	8.74
Method Blank	RQ1416038-05	682,351	10.75	1,388,459	5.44	1,267,908	8.74
FTMM-TB-121914	R1410307-022	641,239	10.75	1,375,849	5.44	1,265,842	8.74
FTMM-2-GW-M2MW24-9.97	R1410307-006	687,174	10.75	1,367,774	5.44	1,262,937	8.74
FTMM-2-GW-M2MW24-16.5	R1410307-007	697,858	10.75	1,383,688	5.44	1,277,343	8.74
FTMM-2-GW-M2MW11-36.91	R1410307-008	675,207	10.75	1,374,741	5.44	1,256,316	8.74
FTMM-2-GW-M2MW11-46.91	R1410307-009	680,876	10.75	1,383,512	5.44	1,273,855	8.74
FTMM-2-GW-M2MW11-41.91	R1410307-010	677,759	10.75	1,359,141	5.44	1,267,267	8.74
FTMM-2-GW-M2MW22-10.03	R1410307-012	678,949	10.75	1,369,016	5.44	1,269,036	8.74
FTMM-2-GW-M2MW22-10.67	R1410307-013	670,040	10.75	1,366,489	5.44	1,254,770	8.74
FTMM-5-GW-M5MW11-9.46	R1410307-015	677,323	10.75	1,363,274	5.44	1,259,906	8.74
FTMM-5-GW-M5MW16-14.57	R1410307-016	671,008	10.75	1,359,859	5.44	1,260,124	8.74
FTMM-5-GW-M5MW23-10.82	R1410307-017	672,756	10.75	1,344,732	5.44	1,244,333	8.74
FTMM-5-GW-M5MW20-13.65	R1410307-018	666,426	10.75	1,352,771	5.44	1,250,361	8.74
FTMM-18-GW-M18MW23-9.28	R1410307-019	661,087	10.75	1,355,756	5.44	1,244,991	8.74
FTMM-18-GW-M18MW23-16.22	R1410307-020	669,951	10.75	1,332,549	5.44	1,228,265	8.74
FTMM-18-GW-M18MW22-18.91	R1410307-021	668,974	10.75	1,330,236	5.44	1,232,382	8.74
FTMM-2-GW-M2MW03-10.27	R1410307-014	671,256	10.75	1,336,411	5.44	1,244,318	8.74

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410307
Date Analyzed: 12/31/14 00:53

Internal Standard Area and RT Summary
Volatile Organic Compounds by GC/MS

File ID: I:\ACQUDATA\msvoa12\Data\123014\MM1923.D\
Instrument ID: R-MS-12
Analytical Method: 8260C

Lab Code: RQ1416038-02
Analysis Lot: 427514
Signal ID:

		Pentafluorobenzene	
		Area	**RT**
	Results ==>	925,294	4.24
	Upper Limit ==>	1,850,588	4.74
	Lower Limit ==>	462,647	3.74
	ICAL Result ==>	896,470	4.24
Associated Analyses			
Lab Control Sample	RQ1416038-03	931,142	4.24
Duplicate Lab Control Sample	RQ1416038-04	936,494	4.24
Method Blank	RQ1416038-05	918,066	4.24
FTMM-TB-121914	R1410307-022	904,557	4.24
FTMM-2-GW-M2MW24-9.97	R1410307-006	913,472	4.24
FTMM-2-GW-M2MW24-16.5	R1410307-007	914,623	4.24
FTMM-2-GW-M2MW11-36.91	R1410307-008	901,661	4.24
FTMM-2-GW-M2MW11-46.91	R1410307-009	910,968	4.24
FTMM-2-GW-M2MW11-41.91	R1410307-010	903,205	4.24
FTMM-2-GW-M2MW22-10.03	R1410307-012	912,131	4.24
FTMM-2-GW-M2MW22-10.67	R1410307-013	899,919	4.24
FTMM-5-GW-M5MW11-9.46	R1410307-015	893,874	4.24
FTMM-5-GW-M5MW16-14.57	R1410307-016	893,772	4.24
FTMM-5-GW-M5MW23-10.82	R1410307-017	875,097	4.24
FTMM-5-GW-M5MW20-13.65	R1410307-018	886,979	4.24
FTMM-18-GW-M18MW23-9.28	R1410307-019	896,696	4.24
FTMM-18-GW-M18MW23-16.22	R1410307-020	885,083	4.24
FTMM-18-GW-M18MW22-18.91	R1410307-021	883,081	4.24
FTMM-2-GW-M2MW03-10.27	R1410307-014	882,348	4.24

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Environmental

VOLATILE ORGANICS SAMPLE DATA

ALS Environmental - Rochester, NY
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www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

00038

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1535
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 20:06
Sample Name:	FTMM-2-GW-M2MW21-8.8	**Units:**	µg/L
Lab Code:	R1410307-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1914.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**0.58**	J	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	0.97	J	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**2.0**	J	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1535
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 20:06
Sample Name:	FTMM-2-GW-M2MW21-8.8	**Units:**	µg/L
Lab Code:	R1410307-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1914.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	**16**		5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1535
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 20:06
Sample Name:	FTMM-2-GW-M2MW21-8.8	**Units:**	µg/L
Lab Code:	R1410307-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1914.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	12/30/14 20:06	
Dibromofluoromethane	101	85-115	12/30/14 20:06	
Toluene-d8	99	85-120	12/30/14 20:06	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 2006

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-2-GW-M2MW21-8.8	**Units:**	µg/L
Lab Code:	R1410307-001	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-001|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1914.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 8:06 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 16:39:46 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.243	168	867654	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.444	114	1339129	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1231983	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	655909	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	394951	50.64	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.28%			
48) surr1,1,2-dichloroetha...	4.658	65	442600	46.61	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 93.22%			
65) SURR3,Toluene-d8	7.316	98	1624843	49.49	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.98%			
70) SURR2,BFB	9.785	95	604530	47.46	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 94.92%			
Target Compounds						Qvalue
15) Acetone	2.048	43	2008	1.09	ppb	61
16) 2-Propanol	2.109	45	1429	3.92	ppb	94 NTD
44) Cyclohexane	4.316	41	17708	1.79	ppb	98 NTD
78) Chlorobenzene	8.766	112	379466	15.90	ppb	96
105) 1,3-Dclbenz	10.693	146	17029	0.97	ppb	95
106) 1,4-Dclbenz	10.766	146	36890	2.00	ppb	97
110) 1,2-Dclbenz	11.065	146	9694	0.58	ppb	88

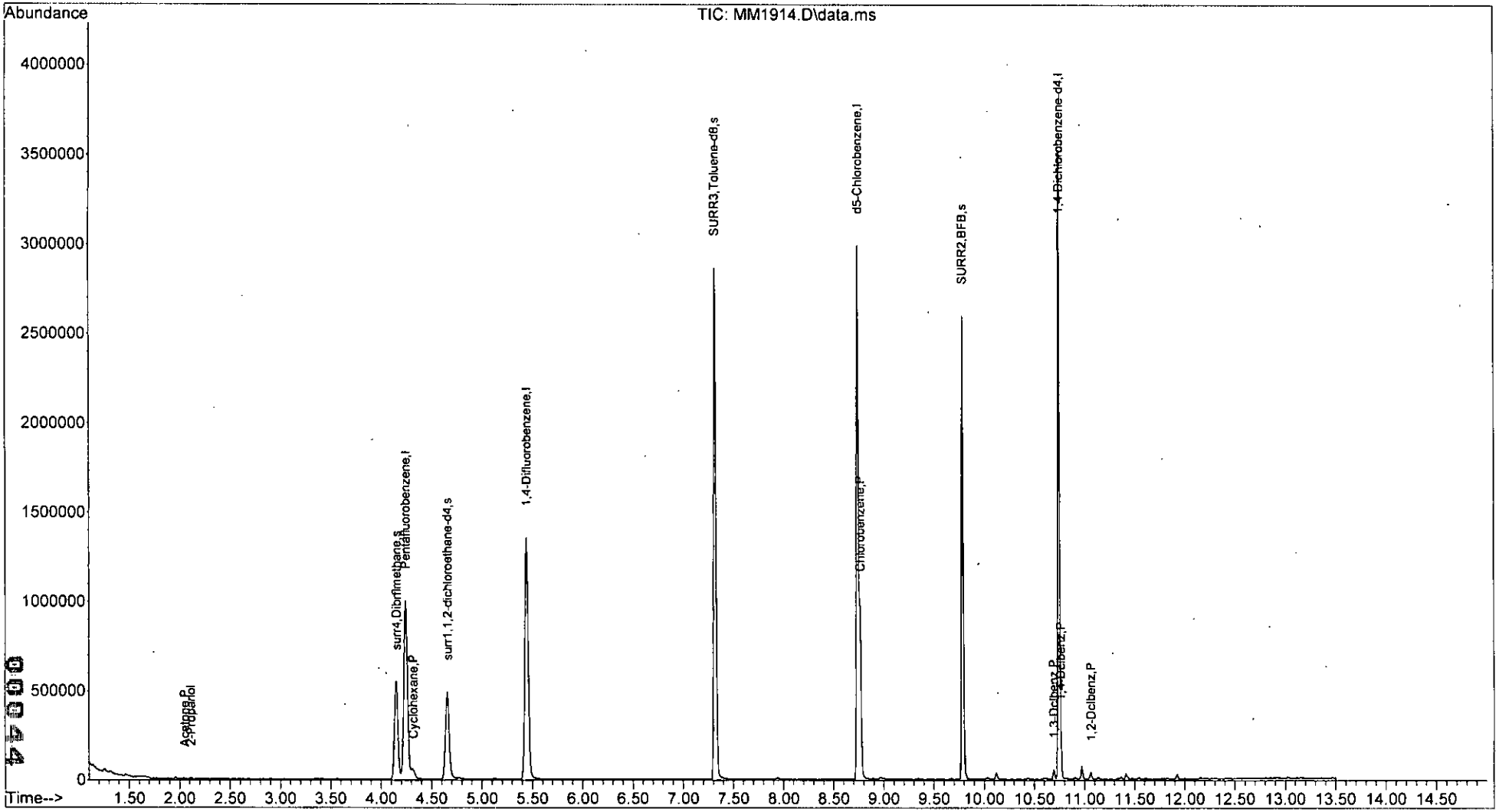
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KL 12/31/14
DL 1/5/15

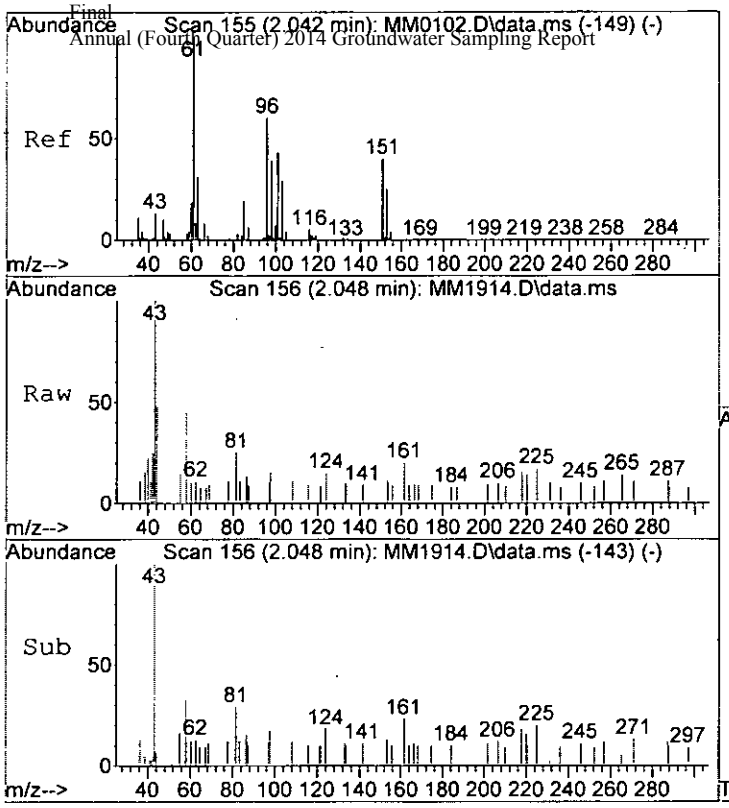
Quantitation Report (QT Reviewed)

Sample : R1410307-001|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1914.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 8:06 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 16:39:46 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



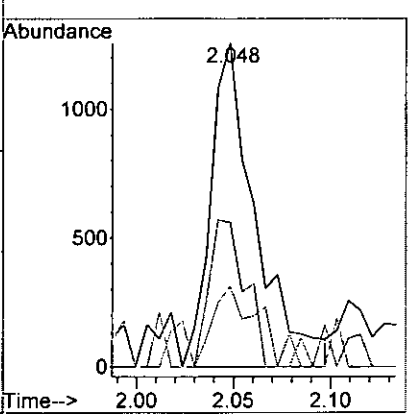
W102714.M Wed Dec 31 16:40:49 2014 Page: 2

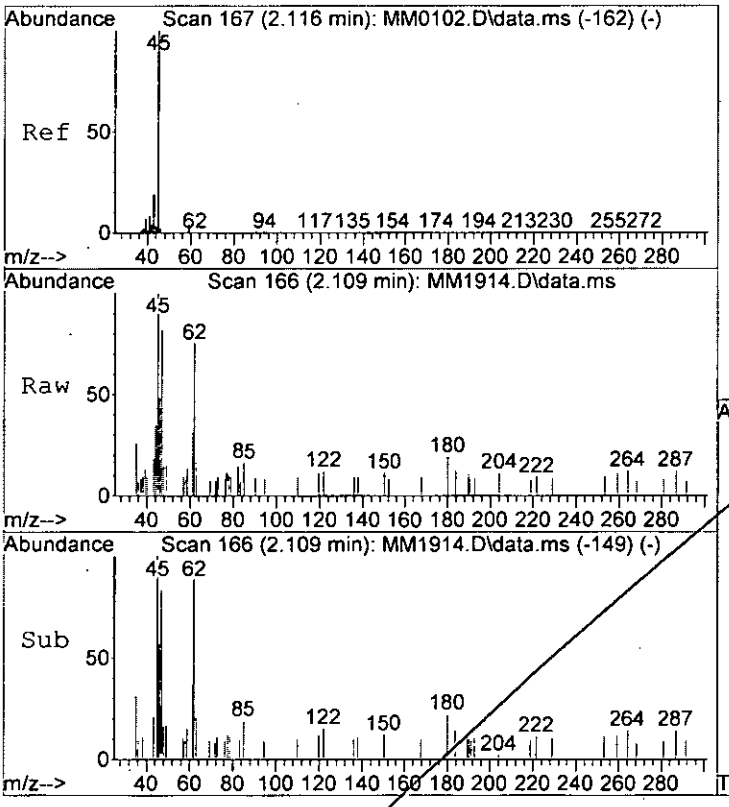


#15
Acetone
Concen: 1.09 ppb
RT: 2.048 min Scan# 156
Delta R.T. 0.006 min
Lab File: MM1914.D
Acq: 30 Dec 2014 8:06 pm

Tgt Ion: 43 Resp: 2008

Ion	Ratio	Lower	Upper
43	100		
58	44.7	6.2	46.2
42	24.9	0.0	27.2



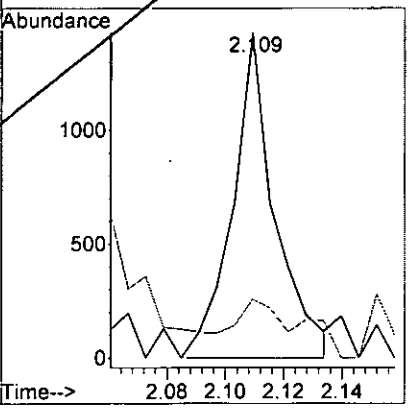


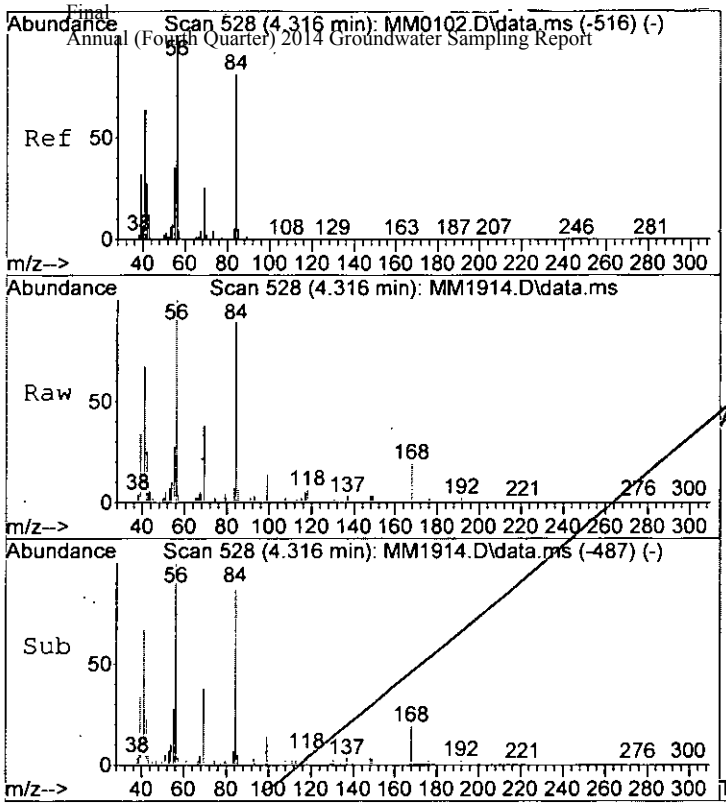
#16
2-Propanol
Concen: 3.92 ppb
RT: 2.109 min Scan# 166
Delta R.T. -0.006 min
Lab File: MM1914.D
Acq: 30 Dec 2014 8:06 pm

NTD

Tgt Ion: 45 Resp: 1429

Ion	Ratio	Lower	Upper
45	100		
43	17.9	0.8	40.8



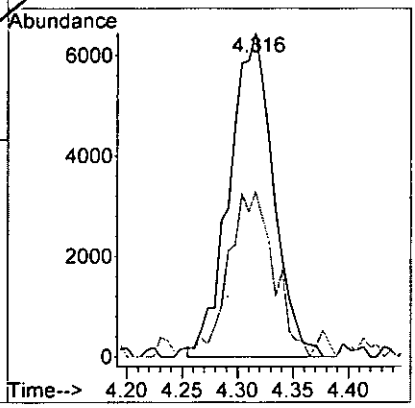


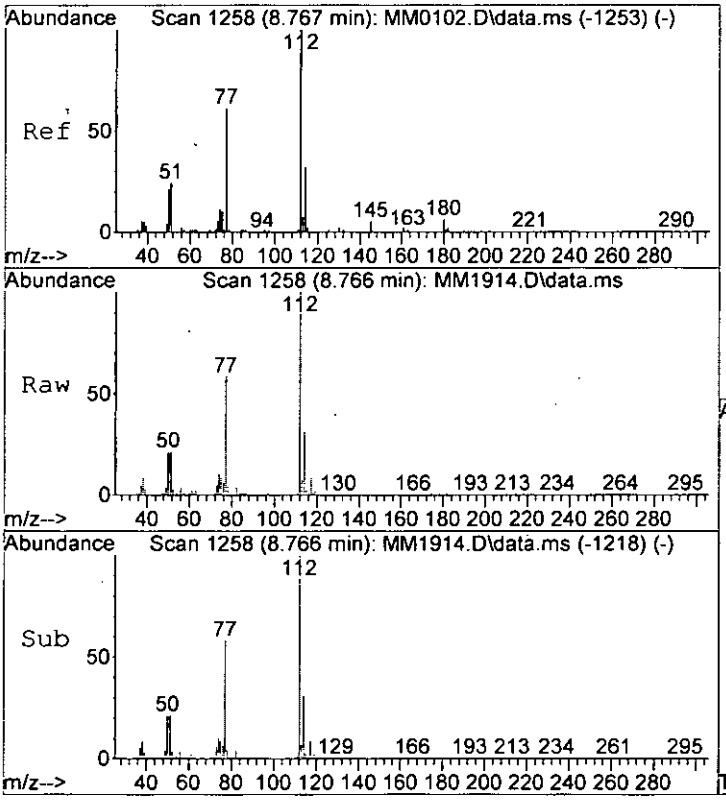
#44
Cyclohexane
Concen: 1.79 ppb
RT: 4.316 min Scan# 528
Delta R.T. -0.000 min
Lab File: MM1914.D
Acq: 30 Dec 2014 8:06 pm

Tgt Ion: 41 Resp: 17708

Ion	Ratio	Lower	Upper
41	100		
39	50.9	29.7	69.7

NTD

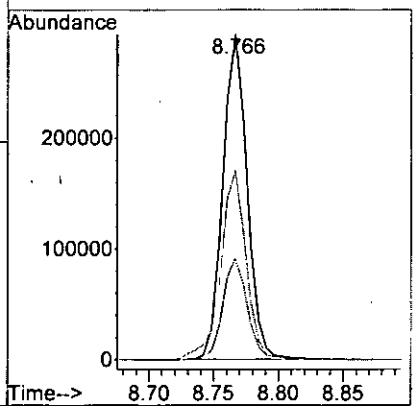


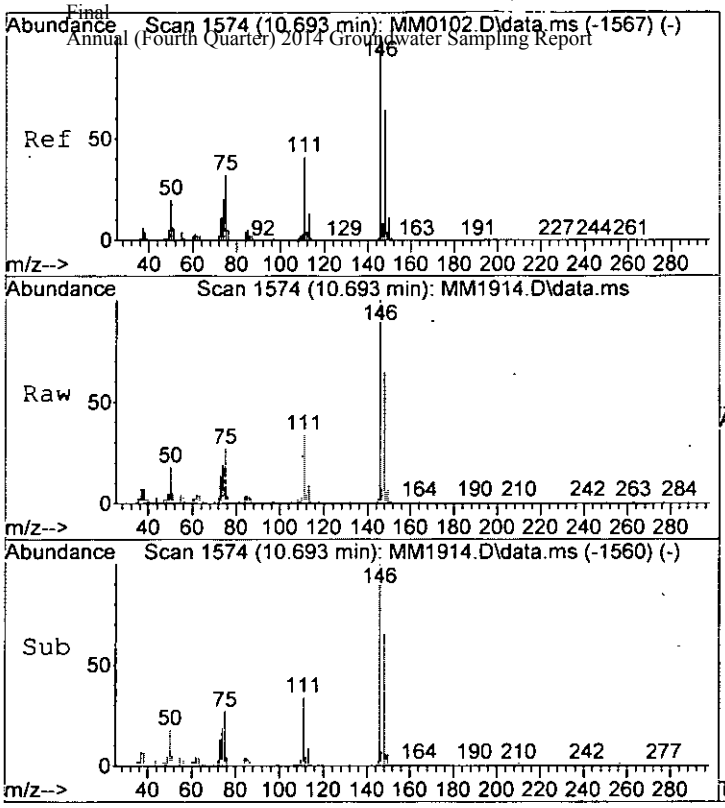


#78
Chlorobenzene
Concen: 15.90 ppb
RT: 8.766 min Scan# 1258
Delta R.T. -0.006 min
Lab File: MM1914.D
Acq: 30 Dec 2014 8:06 pm

Tgt Ion:112 Resp: 379466

Ion	Ratio	Lower	Upper
112	100		
114	31.1	12.3	52.3
77	58.0	41.5	81.5

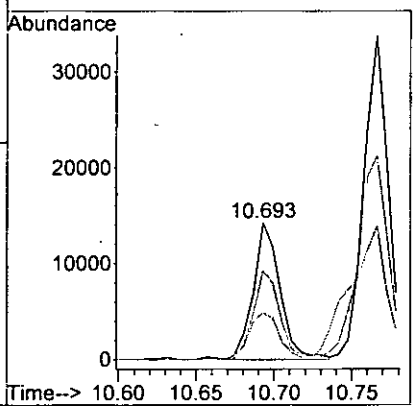


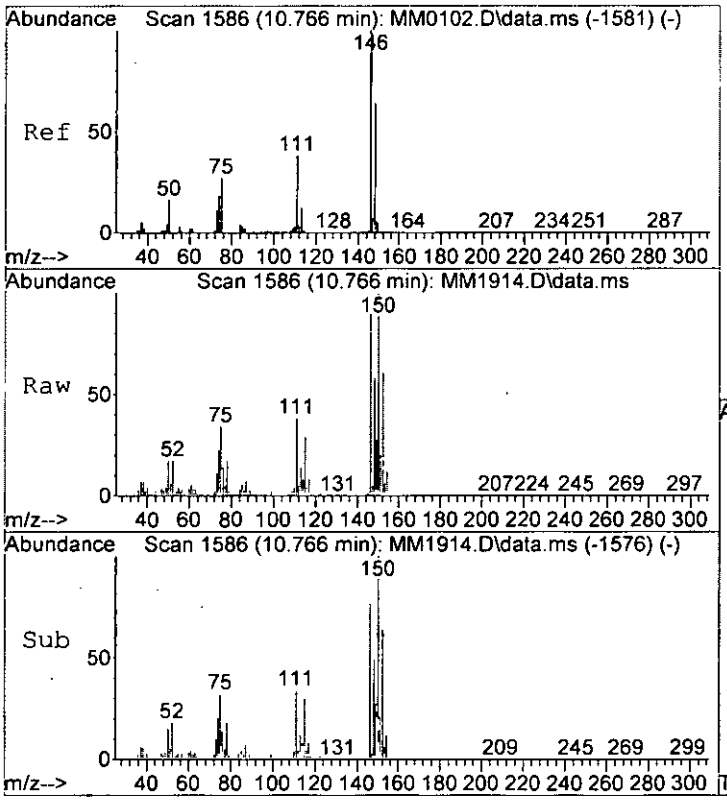


#105
1,3-Dclbenz
Concen: 0.97 ppb
RT: 10.693 min Scan# 1574
Delta R.T. -0.006 min
Lab File: MM1914.D
Acq: 30 Dec 2014 8:06 pm

Tgt Ion:146 Resp: 17029

Ion	Ratio	Lower	Upper
146	100		
148	65.0	43.9	83.9
111	33.9	20.5	60.5

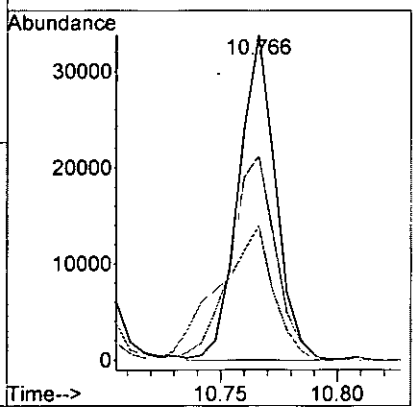


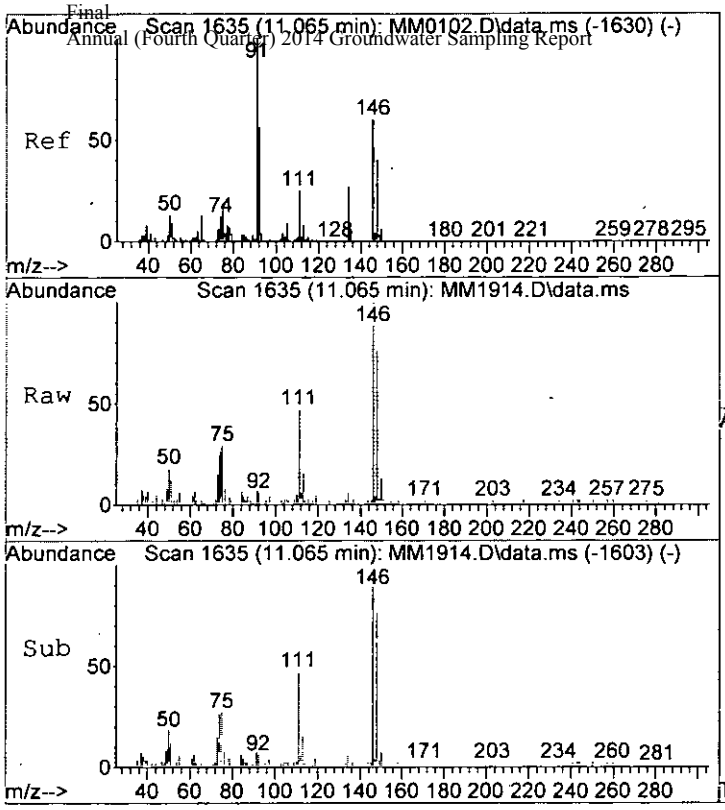


#106
1,4-Dclbenz
Concen: 2.00 ppb
RT: 10.766 min Scan# 1586
Delta R.T. -0.006 min
Lab File: MM1914.D
Acq: 30 Dec 2014 8:06 pm

Tgt Ion:146 Resp: 36890

Ion	Ratio	Lower	Upper
146	100		
148	62.9	44.1	84.1
111	41.2	17.8	57.8

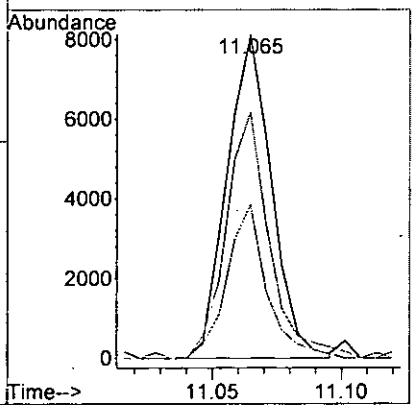




#110
1,2-Dclbenz
Concen: 0.58 ppb
RT: 11.065 min Scan# 1635
Delta R.T. -0.000 min
Lab File: MM1914.D
Acq: 30 Dec 2014 8:06 pm

Tgt Ion:146 Resp: 9694

Ion	Ratio	Lower	Upper
146	100		
148	76.1	45.7	85.7
111	47.4	20.8	60.8



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1914.D
Acq On : 30 Dec 2014 8:06 pm
Operator : K.Ruest
Sample : R1410307-001|1.0
Misc : PARSONS 11603 T4
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1914.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.145	491	500	508	rBV	548000	1299863	29.85%	5.378%
2	4.243	508	516	524	rVV	970693	2331201	53.53%	9.645%
3	4.658	574	584	598	rBV	486750	1247021	28.63%	5.159%
4	5.444	703	713	732	rBV	1351954	3107542	71.36%	12.857%
5	7.316	1014	1020	1035	rBV	2863458	4355021	100.00%	18.018%
6	8.742	1248	1254	1257	rBV	2988002	4250602	97.60%	17.586%
7	9.785	1420	1425	1437	rBV	2593928	3048169	69.99%	12.611%
8	10.120	1476	1480	1487	rBV	35046	44421	1.02%	0.184%
9	10.693	1570	1574	1578	rBV	56347	67922	1.56%	0.281%
10	10.748	1578	1583	1591	rVB	3518987	4225905	97.04%	17.484%
11	10.973	1613	1620	1625	rBV	72923	89670	2.06%	0.371%
12	11.065	1630	1635	1642	rVB2	40463	55126	1.27%	0.228%
13	11.412	1688	1692	1699	rVB2	33237	47823	1.10%	0.198%

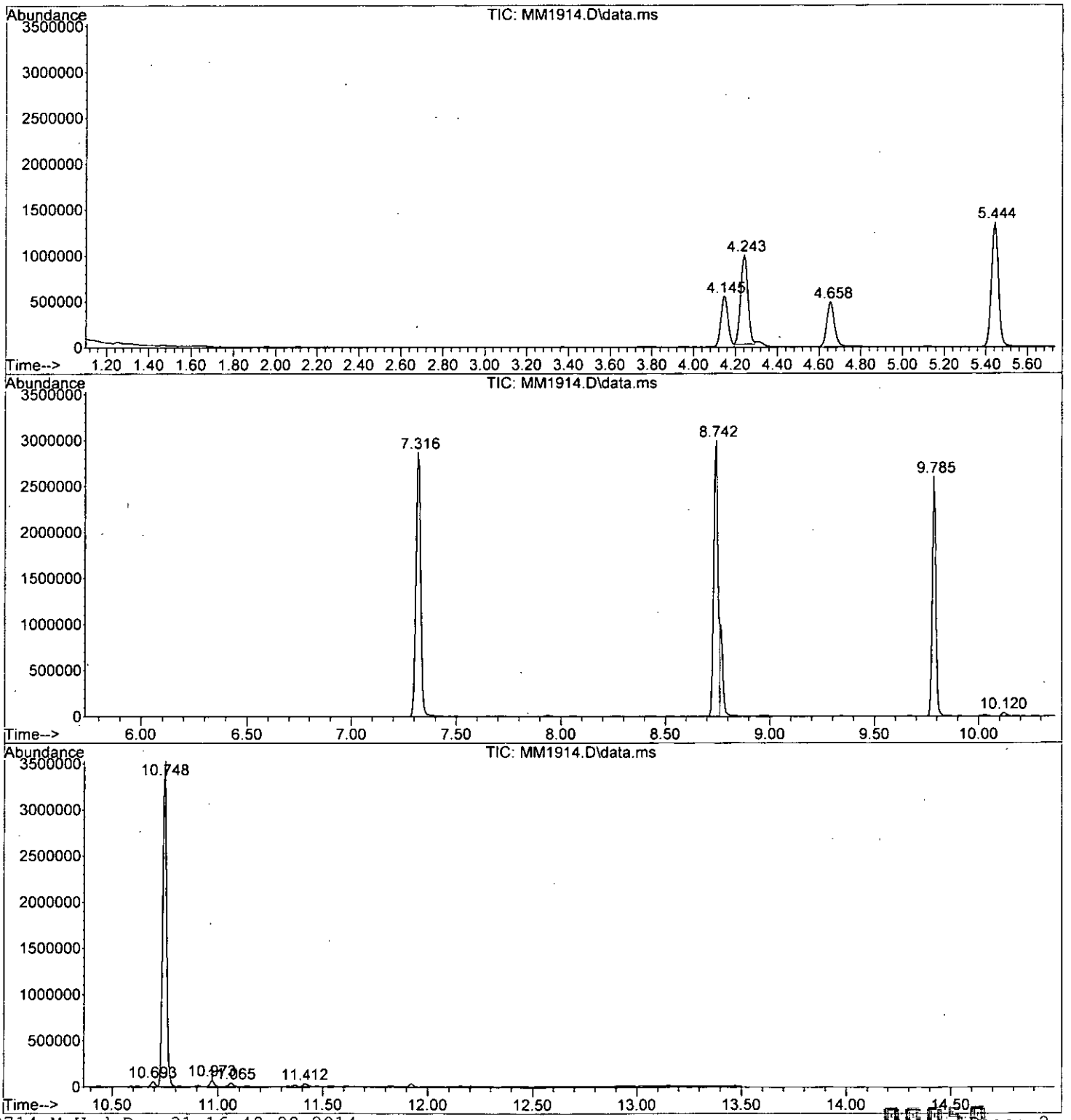
Sum of corrected areas: 24170286

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1914.D
Acq On : 30 Dec 2014 8:06 pm
Operator : K.Ruest
Sample : R1410307-001|1.0
Misc : PARSONS 11603 T4
ALS Vial : 18 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W102714.M Wed Dec 31 16:48:00 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1914.D
Acq On : 30 Dec 2014 8:06 pmm
Operator : K.Ruestt
Sample : R1410307-001|1.00
Misc : PARSONS 11603 T44
ALS Vial : 18 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1537
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 20:37
Sample Name:	FTMM-2-GW-M2MW21-15.97	**Units:**	µg/L
Lab Code:	R1410307-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1915.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**0.59**	J	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**0.95**	J	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**2.1**	J	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1537
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 20:37
Sample Name:	FTMM-2-GW-M2MW21-15.97	**Units:**	µg/L
Lab Code:	R1410307-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1915.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	22		5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1537
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 20:37
Sample Name:	FTMM-2-GW-M2MW21-15.97	**Units:**	µg/L
Lab Code:	R1410307-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1915.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/30/14 20:37	
Dibromofluoromethane	101	85-115	12/30/14 20:37	
Toluene-d8	99	85-120	12/30/14 20:37	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/30/14 2037

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-2-GW-M2MW21-15.97
Lab Code: R1410307-002

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-002|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1915.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 8:37 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 16:41:40 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.243	168	885481	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.444	114	1346870	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1233983	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	669258	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.146	113	394618	50.31	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.62%			
48) surr1,1,2-dichloroetha...	4.652	65	449346	47.05	ppb	-0.01
Spiked Amount 50.000	Range 78 - 122		Recovery = 94.10%			
65) SURR3,Toluene-d8	7.316	98	1632977	49.46	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.92%			
70) SURR2,BFB	9.785	95	601638	46.96	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 93.92%			
Target Compounds						Qvalue
15) Acetone	2.049	43	1907	1.02	ppb	96
16) 2-Propanol	2.110	45	1294	3.48	ppb	81 MD
44) Cyclohexane	4.304	41	18970	1.90	ppb	88 J
78) Chlorobenzene	8.767	112	527562	22.08	ppb	95
105) 1,3-Dclbenz	10.693	146	17166	0.95	ppb	90
106) 1,4-Dclbenz	10.766	146	39541	2.10	ppb	96
110) 1,2-Dclbenz	11.065	146	9971	0.59	ppb	88

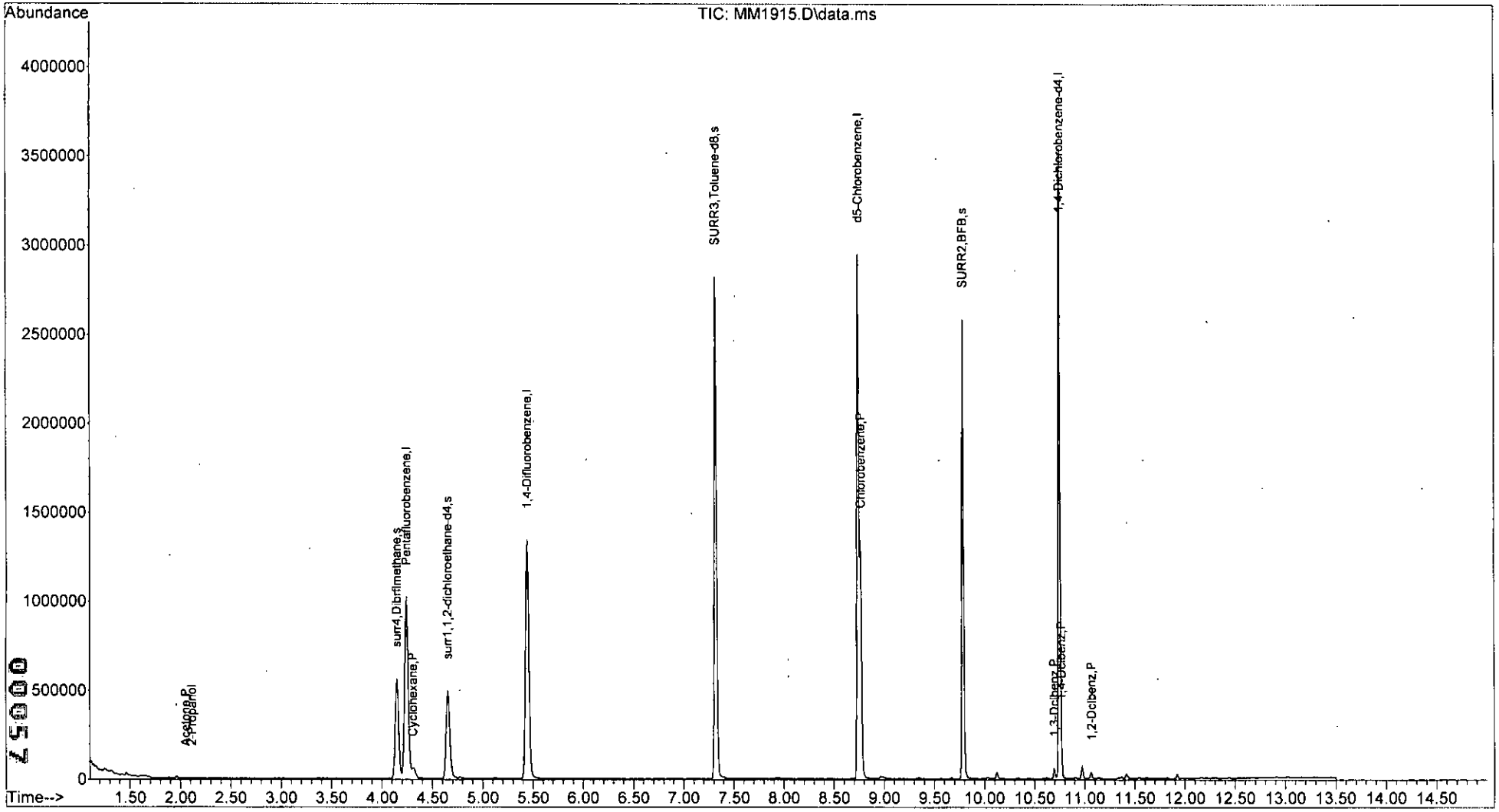
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR 12/3/14

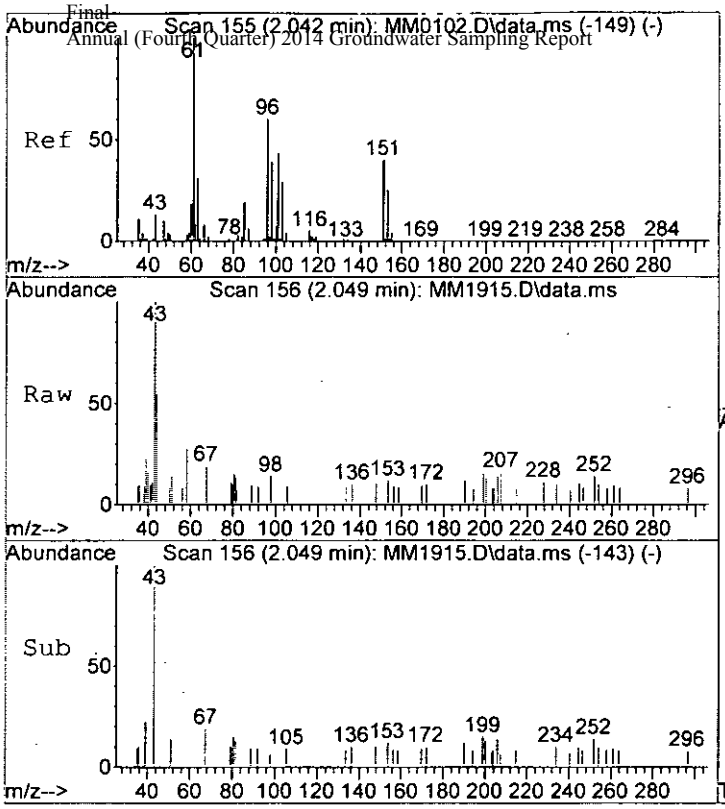
Quantitation Report (QT Reviewed)

Sample : R1410307-002|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1915.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 8:37 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 16:41:40 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



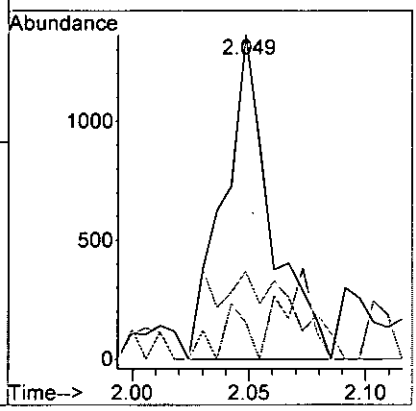
W102714.M Wed Dec 31 16:42:57 2014 Page: 2

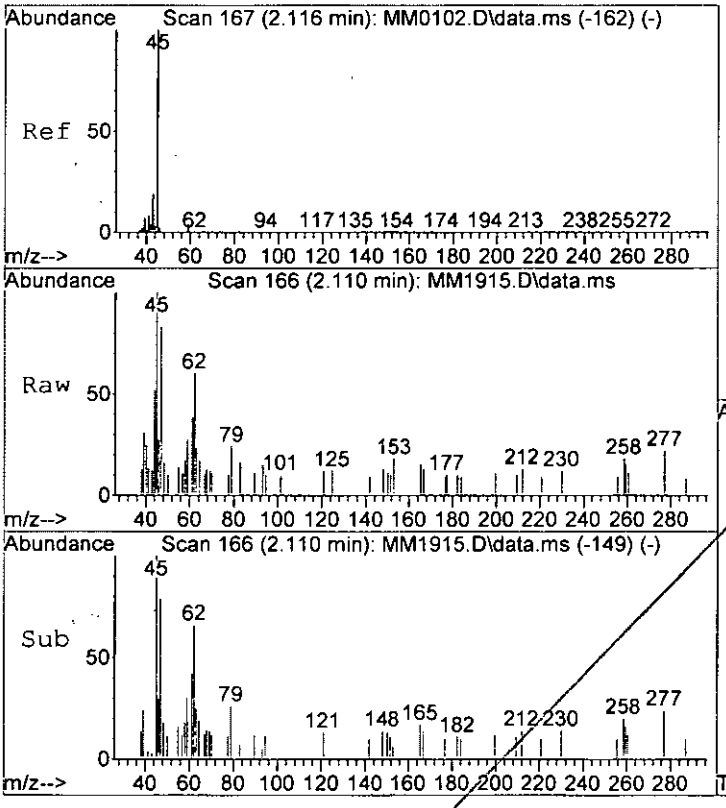


#15
Acetone
Concen: 1.02 ppb
RT: 2.049 min Scan# 156
Delta R.T. 0.006 min
Lab File: MM1915.D
Acq: 30 Dec 2014 8:37 pm

Tgt Ion: 43 Resp: 1907

Ion	Ratio	Lower	Upper
43	100		
58	27.1	6.2	46.2
42	11.5	0.0	27.2

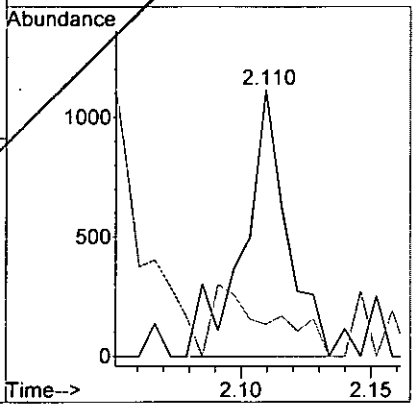




#16
2-Propanol
Concen: 3.48 ppb
RT: 2.110 min Scan# 166
Delta R.T. -0.006 min
Lab File: MM1915.D
Acq: 30 Dec 2014 8:37 pm

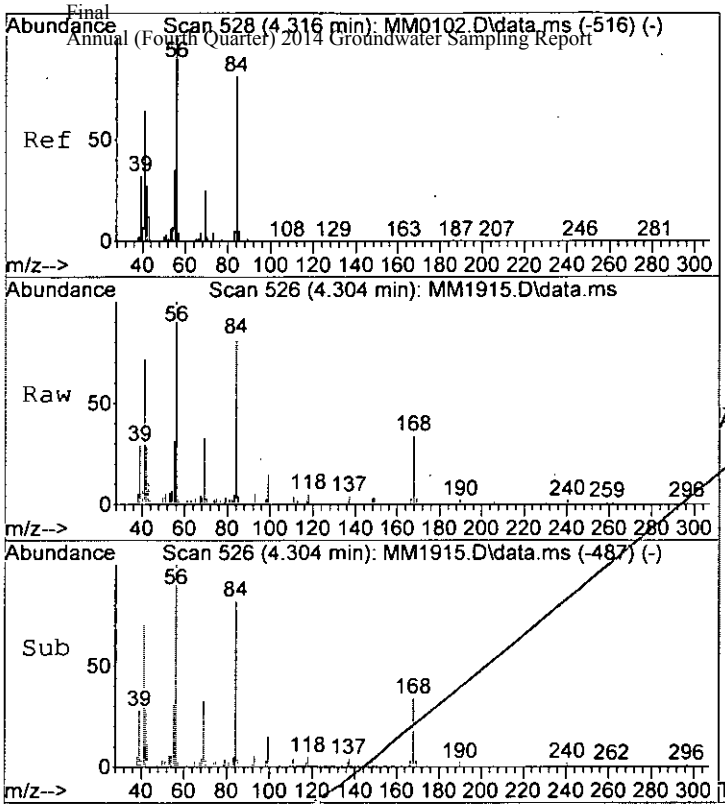
Tgt Ion: 45 Resp: 1294

Ion	Ratio	Lower	Upper
45	100		
43	11.9	0.8	40.8



MD

MM1915.D W102714.M Wed Dec 31 16:42:59 2014 Page 3

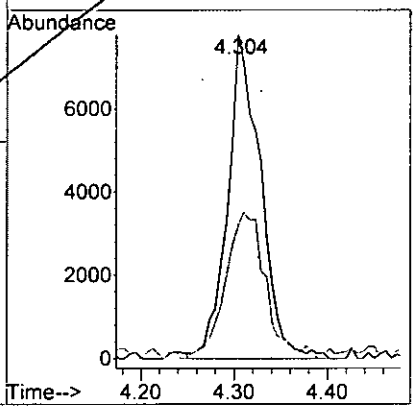


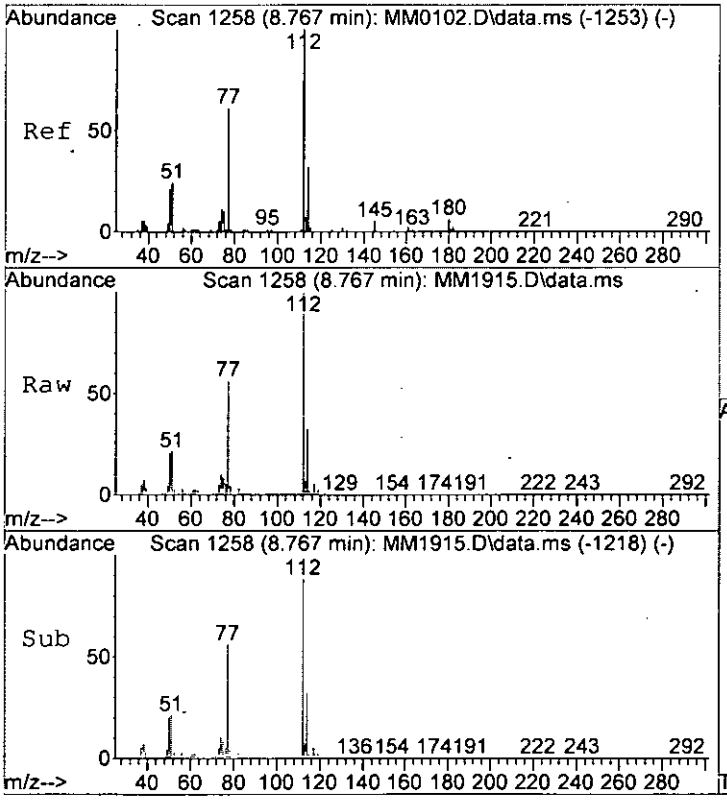
#44
Cyclohexane
Concen: 1.90 ppb
RT: 4.304 min Scan# 526
Delta R.T. -0.012 min
Lab File: MM1915.D
Acq: 30 Dec 2014 8:37 pm

Tgt Ion: 41 Resp: 18970

Ion	Ratio	Lower	Upper
41	100		
39	41.1	29.7	69.7

NTD

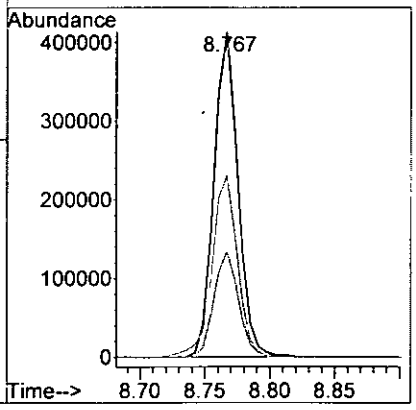


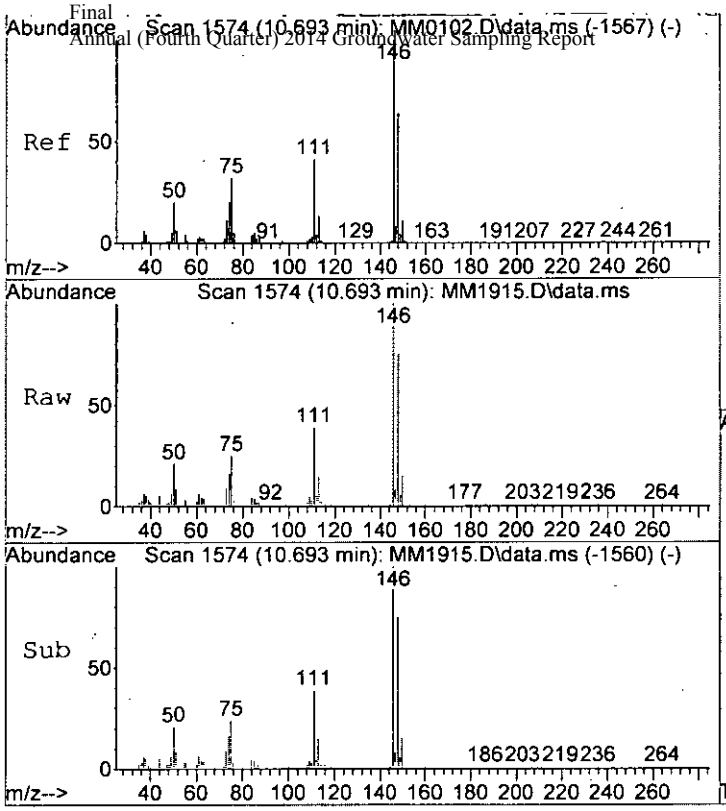


#78
Chlorobenzene
Concen: 22.08 ppb
RT: 8.767 min Scan# 1258
Delta R.T. -0.006 min
Lab File: MM1915.D
Acq: 30 Dec 2014 8:37 pm

Tgt Ion:112 Resp: 527562

Ion	Ratio	Lower	Upper
112	100		
114	32.4	12.3	52.3
77	55.9	41.5	81.5

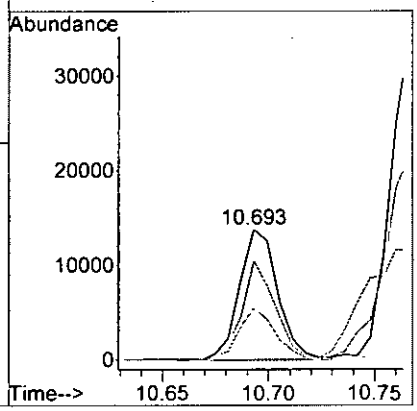


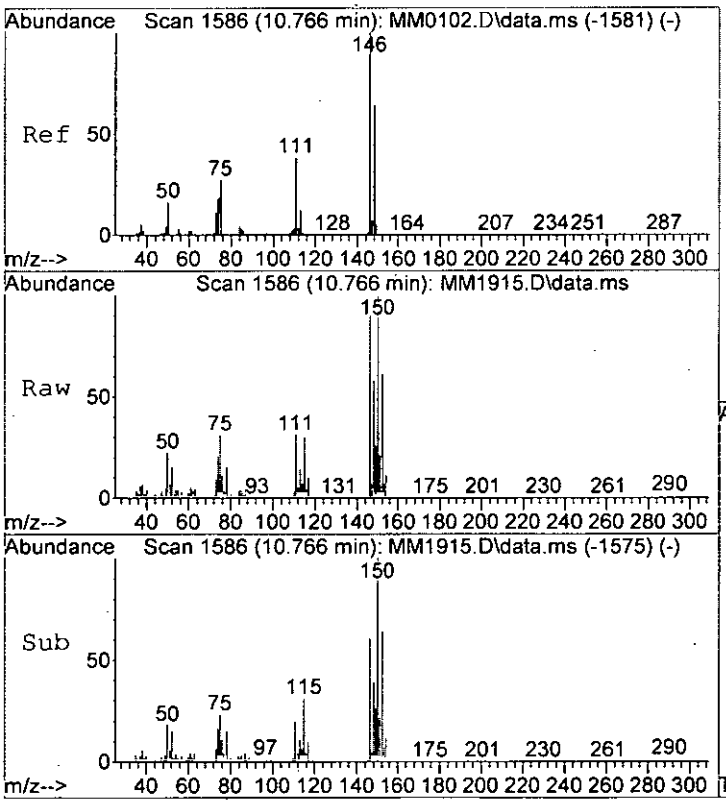


#105
1,3-Dclbenz
Concen: 0.95 ppb
RT: 10.693 min Scan# 1574
Delta R.T. -0.006 min
Lab File: MM1915.D
Acq: 30 Dec 2014 8:37 pm

Tgt Ion:146 Resp: 17166

Ion	Ratio	Lower	Upper
146	100		
148	75.5	43.9	83.9
111	39.2	20.5	60.5

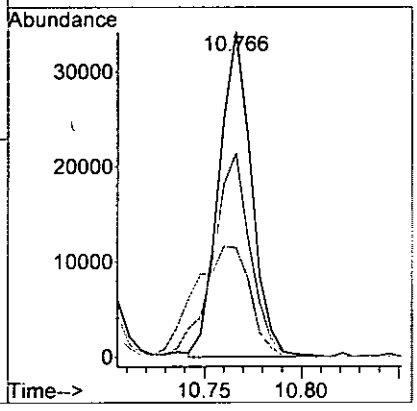


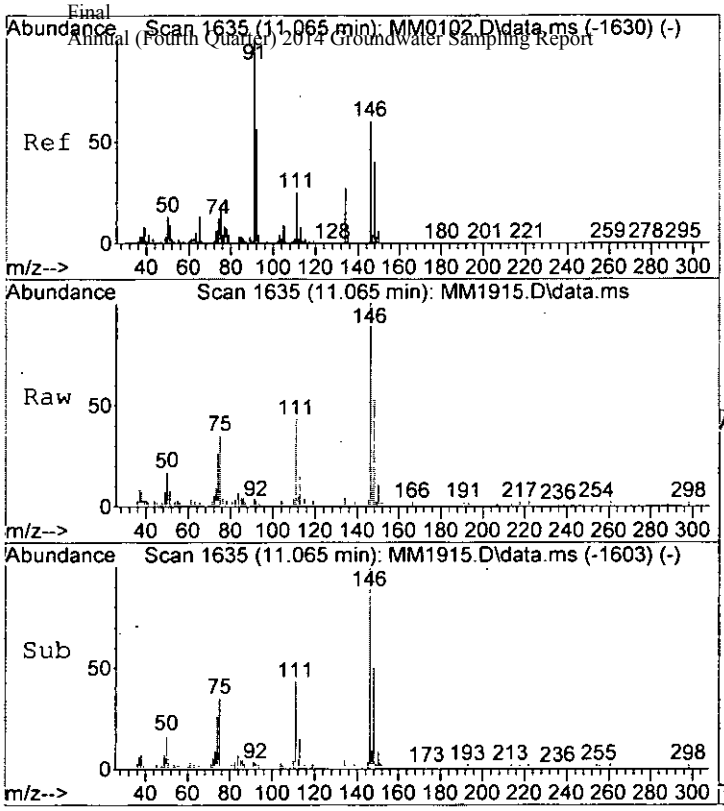


#106
1,4-Dclbenz
Concen: 2.10 ppb
RT: 10.766 min Scan# 1586
Delta R.T. -0.006 min
Lab File: MM1915.D
Acq: 30 Dec 2014 8:37 pm

Tgt Ion:146 Resp: 39541

Ion	Ratio	Lower	Upper
146	100		
148	62.6	44.1	84.1
111	33.4	17.8	57.8

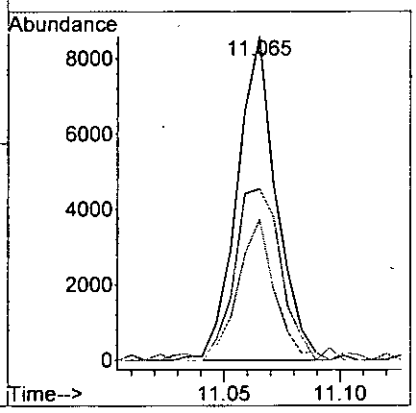




#110
1,2-Dclbenz
Concen: 0.59 ppb
RT: 11.065 min Scan# 1635
Delta R.T. 0.000 min
Lab File: MM1915.D
Acq: 30 Dec 2014 8:37 pm

Tgt Ion:146 Resp: 9971

Ion	Ratio	Lower	Upper
146	100		
148	52.8	45.7	85.7
111	43.3	20.8	60.8



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1915.D
Acq On : 30 Dec 2014 8:37 pm
Operator : K.Ruest
Sample : R1410307-002|1.0
Misc : PARSONS 11603 T4
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1915.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.146	489	500	508	rBV	559867	1305435	29.86%	5.097%
2	4.243	508	516	524	rBV	994826	2375214	54.33%	9.274%
3	4.652	574	583	599	rBV	491644	1267741	29.00%	4.950%
4	5.444	704	713	727	rBV	1339199	3126303	71.51%	12.206%
5	7.316	1014	1020	1032	rBV	2818483	4371717	100.00%	17.069%
6	8.742	1248	1254	1256	rBV	2944275	4012448	91.78%	15.666%
7	8.767	1256	1258	1271	rVB	1339122	1541408	35.26%	6.018%
8	9.785	1420	1425	1436	rBV	2579115	3059978	69.99%	11.947%
9	10.120	1476	1480	1485	rBV2	36727	47250	1.08%	0.184%
10	10.693	1569	1574	1578	rBV	59013	71261	1.63%	0.278%
11	10.748	1578	1583	1592	rVB	3534421	4295208	98.25%	16.770%
12	10.974	1615	1620	1627	rVB	71547	88902	2.03%	0.347%
13	11.065	1629	1635	1640	rVB2	38016	49343	1.13%	0.193%

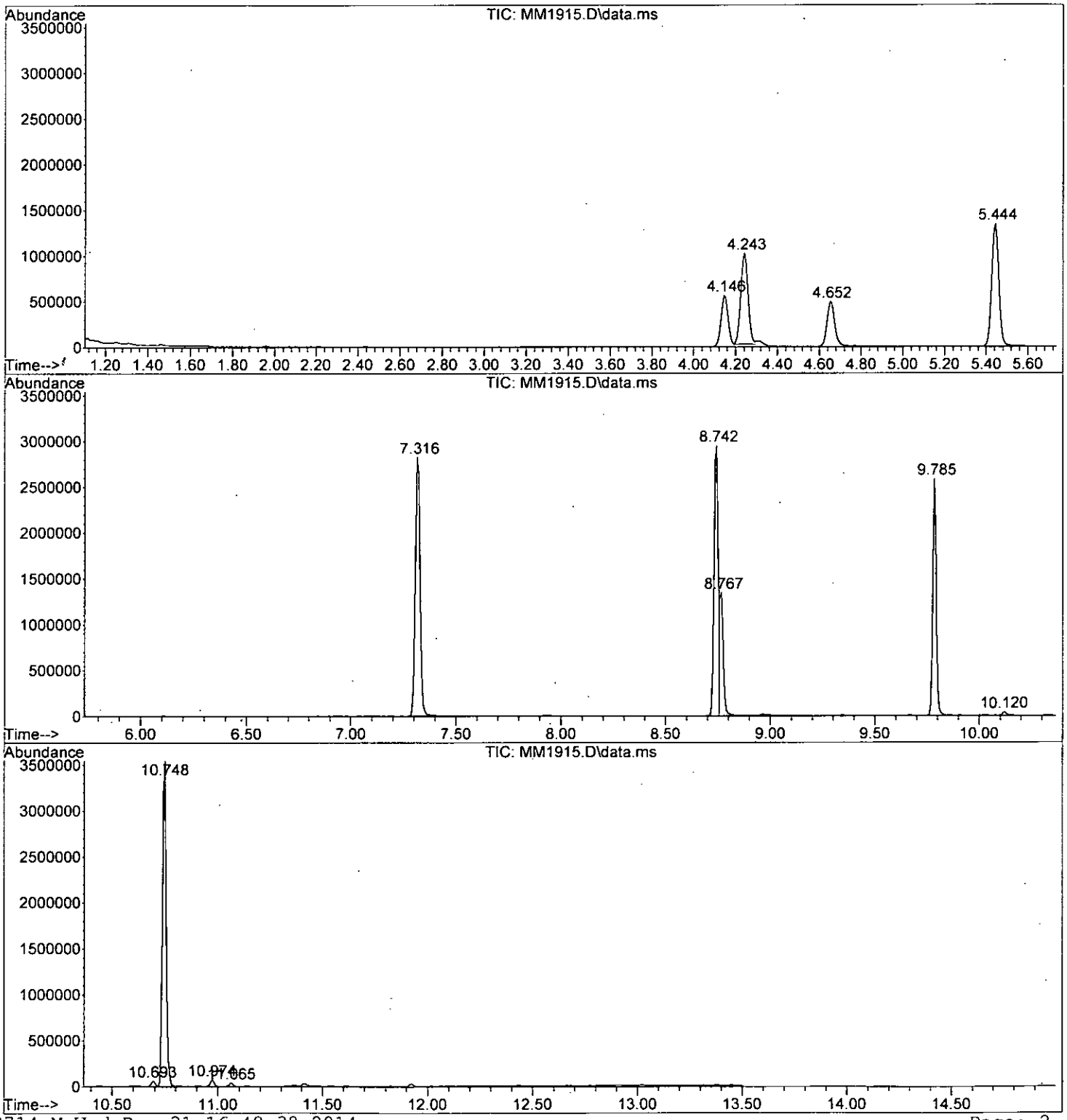
Sum of corrected areas: 25612208

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1915.D
Acq On : 30 Dec 2014 8:37 pm
Operator : K.Ruest
Sample : R1410307-002|1.0
Misc : PARSONS 11603 T4
ALS Vial : 19 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W102714.M Wed Dec 31 16:48:38 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1915.D
Acq On : 30 Dec 2014 8:37 pmm
Operator : K.Ruestt
Sample : R1410307-002|1.00
Misc : PARSONS 11603 T44
ALS Vial : 19 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1429
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 21:10
Sample Name:	FTMM-2-GW-M2MW10-17.31	**Units:**	µg/L
Lab Code:	R1410307-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1916.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	2.2	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1429
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 21:10
Sample Name:	FTMM-2-GW-M2MW10-17.31	**Units:**	µg/L
Lab Code:	R1410307-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1916.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1429
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 21:10
Sample Name:	FTMM-2-GW-M2MW10-17.31	**Units:**	µg/L
Lab Code:	R1410307-003	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1916.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/30/14 21:10	
Dibromofluoromethane	102	85-115	12/30/14 21:10	
Toluene-d8	100	85-120	12/30/14 21:10	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 2110

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-2-GW-M2MW10-17.31	**Units:**	µg/L
Lab Code:	R1410307-003	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-003|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1916.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 9:10 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 16:43:42 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.243	168	885281	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.444	114	1343260	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1234509	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	656917	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	397541	50.82	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.64%			
48) surr1,1,2-dichloroetha...	4.658	65	445310	46.75	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 93.50%			
65) SURR3,Toluene-d8	7.316	98	1646143	49.99	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.98%			
70) SURR2,BFB	9.785	95	598629	46.85	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 93.70%			
Target Compounds						Qvalue
15) Acetone	2.048	43	4063	2.17	ppb	85
16) 2-Propanol	2.115	45	2523	6.78	ppb	84

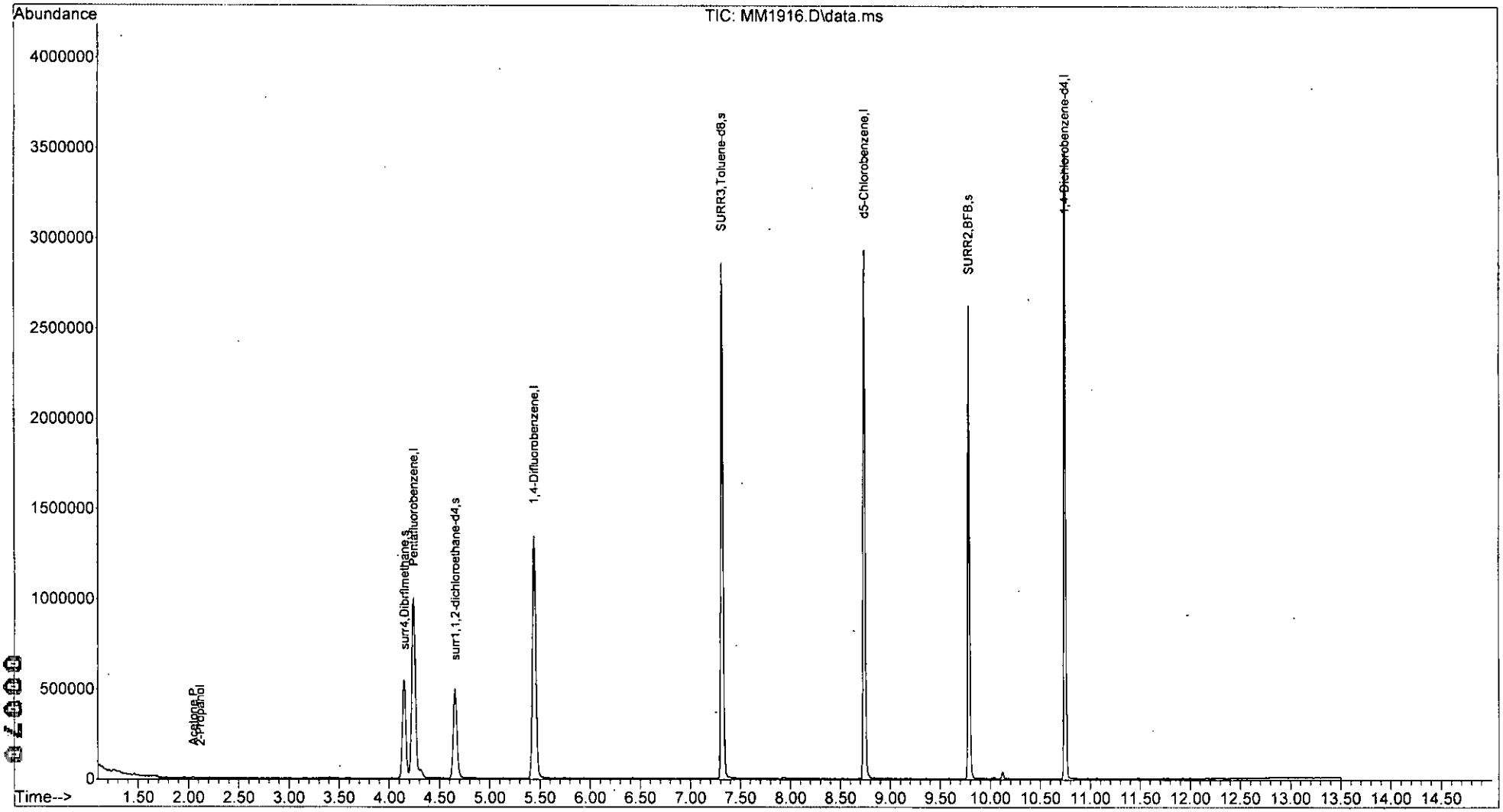
(#) = qualifier out of range (m) = manual integration (+) = signals summed

12/31/14

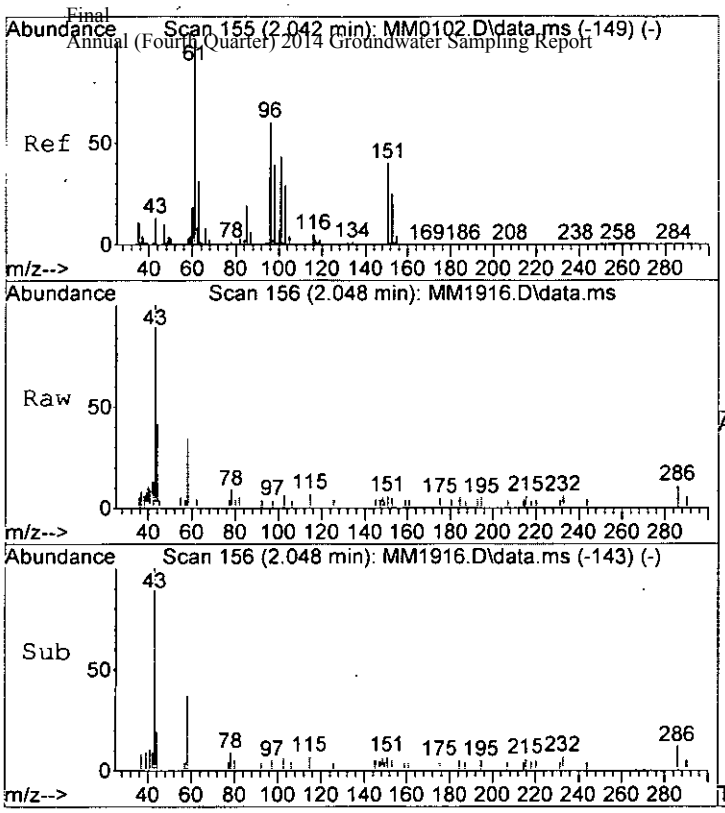
Quantitation Report (QT Reviewed)

Sample : R1410307-003|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1916.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 9:10 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 16:43:42 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



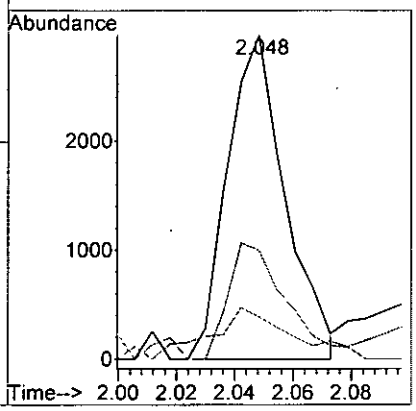
W102714.M Wed Dec 31 16:45:10 2014 Page: 2

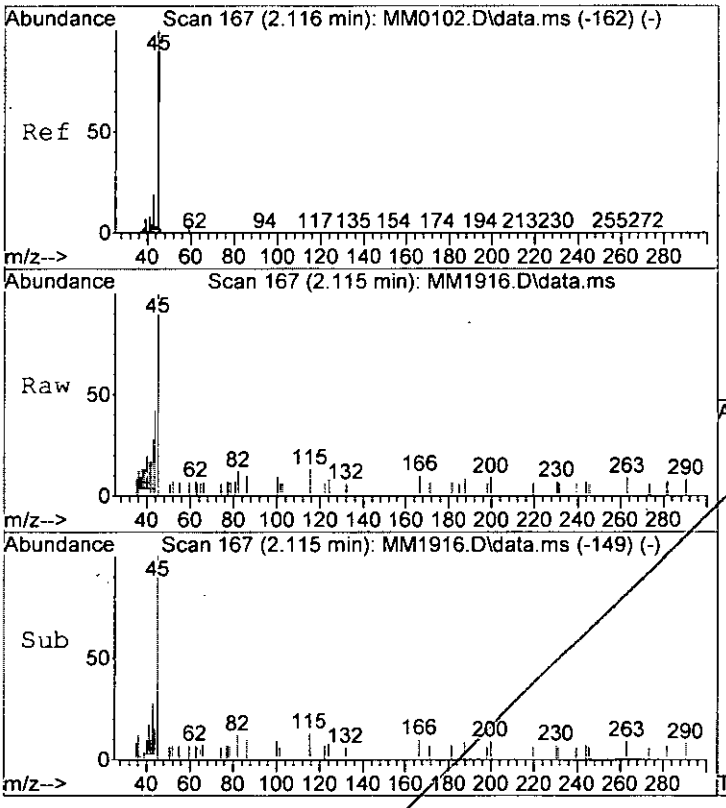


#15
Acetone
Concen: 2.17 ppb
RT: 2.048 min Scan# 156
Delta R.T. 0.006 min
Lab File: MM1916.D
Acq: 30 Dec 2014 9:10 pm

Tgt Ion: 43 Resp: 4063

Ion	Ratio	Lower	Upper
43	100		
58	33.6	6.2	46.2
42	13.0	0.0	27.2



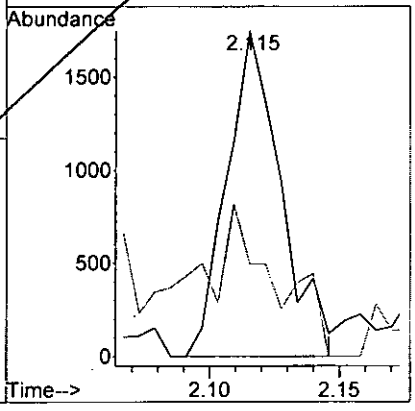


#16
2-Propanol
Concen: 6.78 ppb
RT: 2.115 min Scan# 167
Delta R.T. 0.000 min
Lab File: MM1916.D
Acq: 30 Dec 2014 9:10 pm

MD

Tgt Ion: 45 Resp: 2523

Ion	Ratio	Lower	Upper
45	100		
43	28.3	0.8	40.8



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1916.D
Acq On : 30 Dec 2014 9:10 pm
Operator : K.Ruest
Sample : R1410307-003|1.0
Misc : PARSONS 11603 T4
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1916.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.146	489	500	508	rBV	546576	1309999	29.86%	5.555%
2	4.243	508	516	526	rVV	973844	2387682	54.43%	10.125%
3	4.652	573	583	598	rBV	497323	1276826	29.11%	5.414%
4	5.444	703	713	730	rBV	1344634	3123650	71.21%	13.245%
5	7.316	1012	1020	1037	rBV	2860919	4386774	100.00%	18.601%
6	8.742	1248	1254	1268	rBV	2933724	3897661	88.85%	16.527%
7	9.785	1420	1425	1435	rBV	2622873	3048789	69.50%	12.928%
8	10.120	1476	1480	1486	rVB2	38999	51129	1.17%	0.217%
9	10.748	1578	1583	1592	rBV	3481417	4100564	93.48%	17.388%

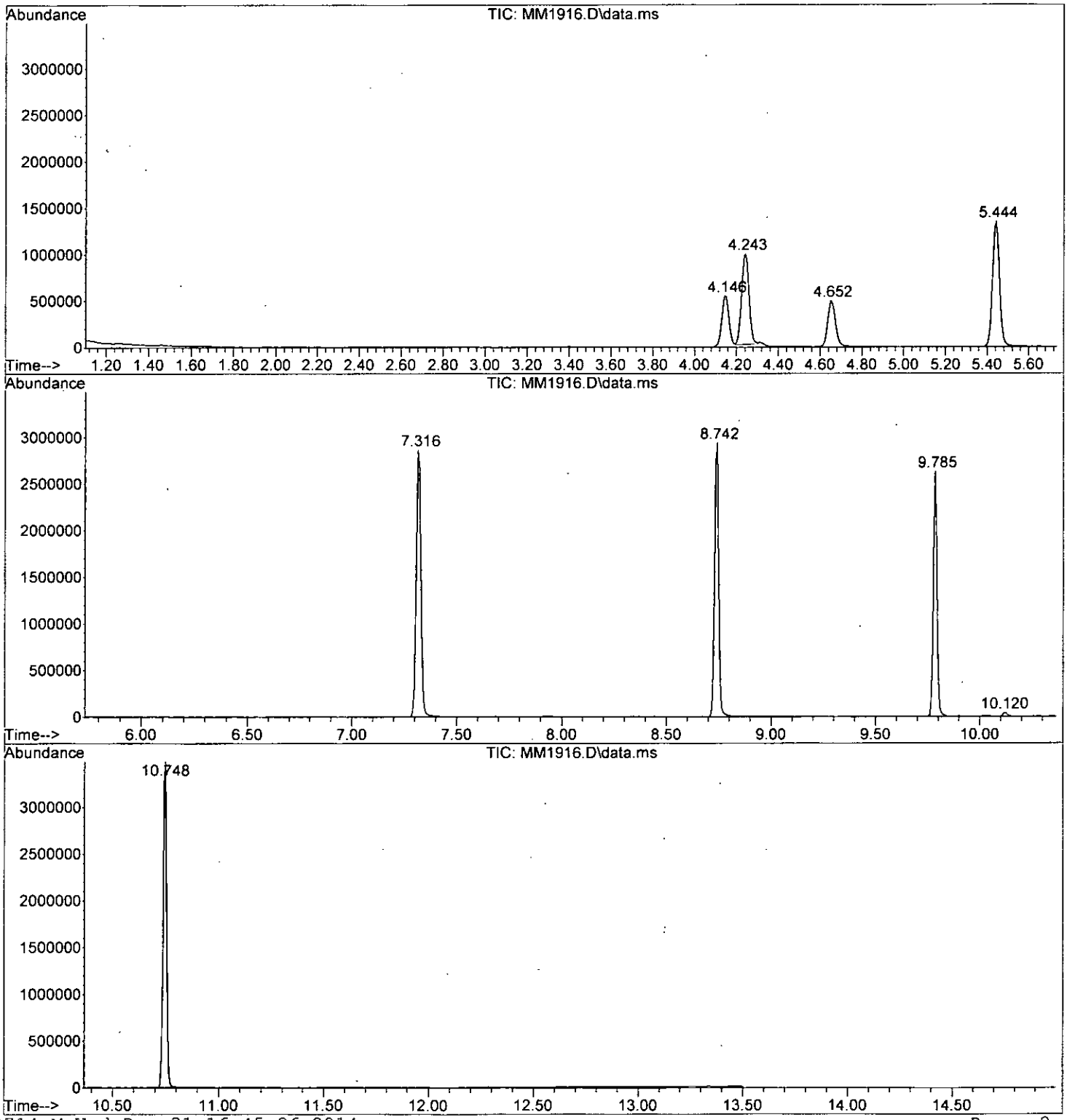
Sum of corrected areas: 23583074

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1916.D
Acq On : 30 Dec 2014 9:10 pm
Operator : K.Ruest
Sample : R1410307-003|1.0
Misc : PARSONS 11603 T4
ALS Vial : 20 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1916.D
Acq On : 30 Dec 2014 9:10 pmm
Operator : K.Ruestt
Sample : R1410307-003|1.00
Misc : PARSONS 11603 T44
ALS Vial : 20 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1425
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 21:42
Sample Name:	FTMM-2-GW-M2MW10-7.32	**Units:**	µg/L
Lab Code:	R1410307-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1917.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.5**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1425
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 21:42
Sample Name:	FTMM-2-GW-M2MW10-7.32	**Units:**	µg/L
Lab Code:	R1410307-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1917.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1425
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 21:42
Sample Name:	FTMM-2-GW-M2MW10-7.32	**Units:**	µg/L
Lab Code:	R1410307-004	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1917.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	93	75-120	12/30/14 21:42	
Dibromofluoromethane	100	85-115	12/30/14 21:42	
Toluene-d8	100	85-120	12/30/14 21:42	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 2142

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-2-GW-M2MW10-7.32	**Units:**	µg/L
Lab Code:	R1410307-004	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-004|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1917.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 9:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 02 09:59:43 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.243	168	882634	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.444	114	1347732	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1239896	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	656915	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.146	113	390779	49.79	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.58%			
48) surr1,1,2-dichloroetha...	4.652	65	447260	46.80	ppb	-0.01
Spiked Amount 50.000	Range 78 - 122		Recovery = 93.60%			
65) SURR3,Toluene-d8	7.316	98	1645288	49.80	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.60%			
70) SURR2,BFB	9.785	95	596886	46.56	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 93.12%			
Target Compounds						Qvalue
15) Acetone	2.048	43	4625	2.47	ppb	98

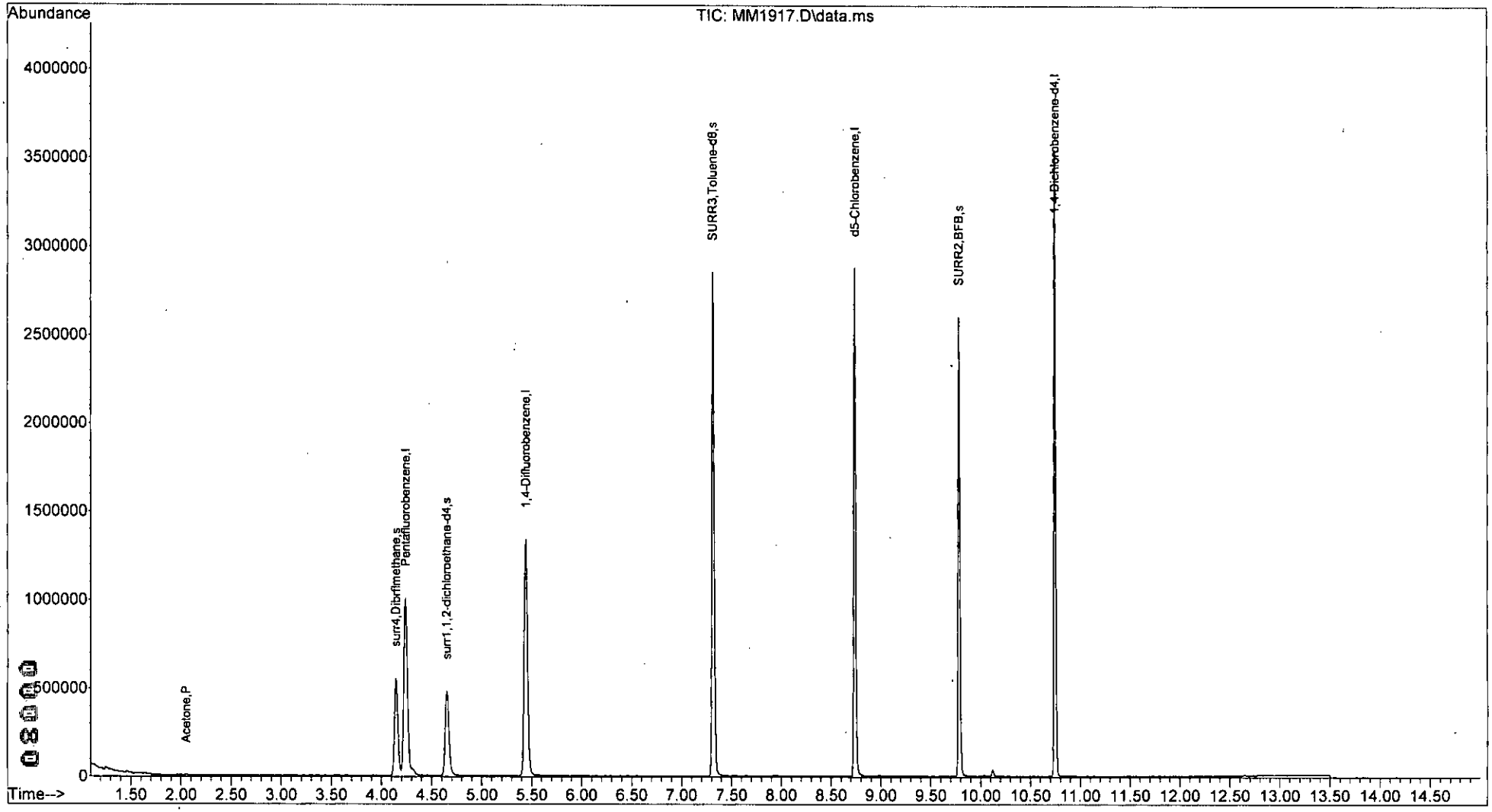
(#) = qualifier out of range (m) = manual integration (+) = signals summed

W102714.M Fri Jan 02 10:01:12 2015 Page: 1

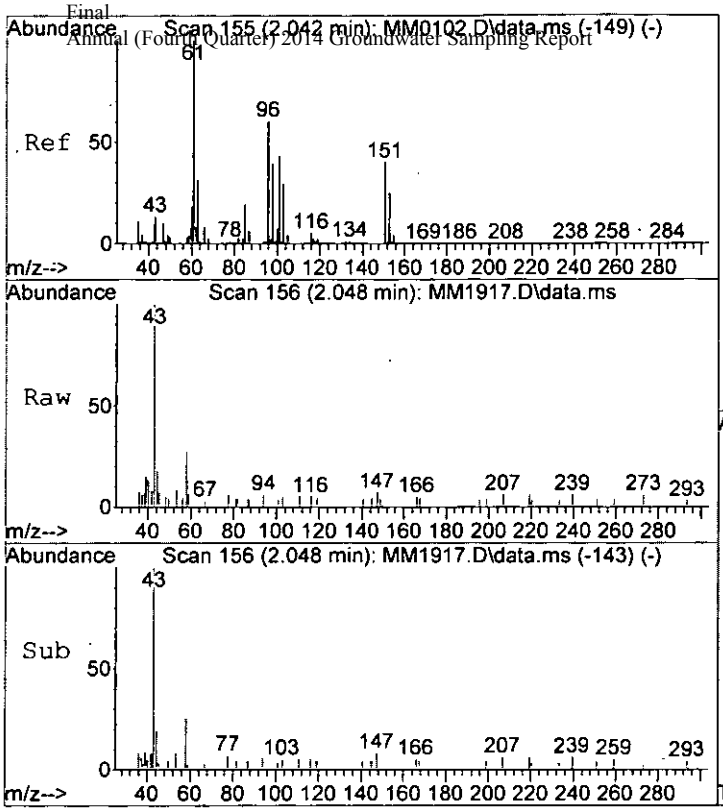
Quantitation Report (QT Reviewed)

Sample : R1410307-004|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1917.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 9:42 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 02 09:59:43 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



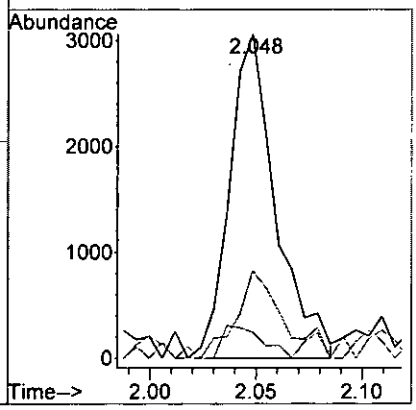
W102714.M Fri Jan 02 10:01:14 2015 Page: 2



#15
Acetone
Concen: 2.47 ppb
RT: 2.048 min Scan# 156
Delta R.T. 0.006 min
Lab File: MM1917.D
Acq: 30 Dec 2014 9:42 pm

Tgt Ion: 43 Resp: 4625

Ion	Ratio	Lower	Upper
43	100		
58	26.9	6.2	46.2
42	8.1	0.0	27.2



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1917.D
Acq On : 30 Dec 2014 9:42 pm
Operator : K.Ruest
Sample : R1410307-004|1.0
Misc : PARSONS 11603 T4
ALS Vial : 21 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1917.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.146	491	500	508	rBV	551209	1288089	29.40%	5.465%
2	4.243	508	516	525	rVV	981288	2379894	54.31%	10.098%
3	4.652	571	583	602	rBV	479612	1260010	28.76%	5.346%
4	5.444	701	713	727	rBV	1338529	3134071	71.52%	13.298%
5	7.316	1013	1020	1034	rBV	2853323	4381880	100.00%	18.592%
6	8.742	1248	1254	1269	rBV	2880012	3903637	89.09%	16.563%
7	9.785	1420	1425	1440	rBV	2602637	3071225	70.09%	13.031%
8	10.120	1476	1480	1486	rBV2	38085	48427	1.11%	0.205%
9	10.748	1578	1583	1592	rBV	3541578	4101166	93.59%	17.401%

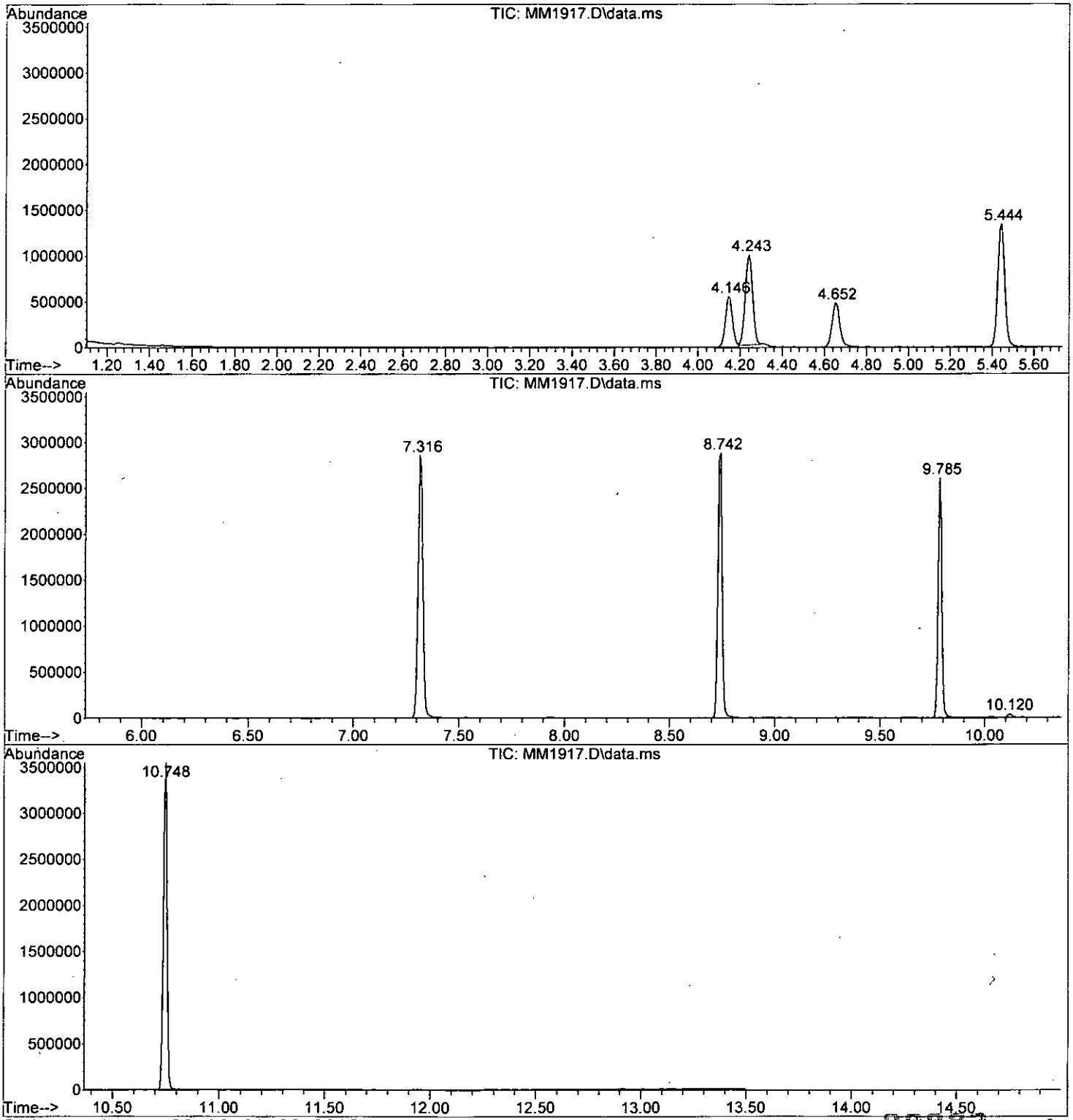
Sum of corrected areas: 23568399

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1917.D
Acq On : 30 Dec 2014 9:42 pm
Operator : K.Ruest
Sample : R1410307-004|1.0
Misc : PARSONS 11603 T4
ALS Vial : 21 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W102714.M Fri Jan 02 10:01:23 2015 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1917.D
Acq On : 30 Dec 2014 9:42 pmm
Operator : K.Ruestt
Sample : R1410307-004|1.00
Misc : PARSONS 11603 T44
ALS Vial : 21 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1427
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 22:14
Sample Name:	FTMM-2-GW-M2MW10-12.32	**Units:**	µg/L
Lab Code:	R1410307-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1918.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	1.7	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1427
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 22:14
Sample Name:	FTMM-2-GW-M2MW10-12.32	**Units:**	µg/L
Lab Code:	R1410307-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1918.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1427
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 22:14
Sample Name:	FTMM-2-GW-M2MW10-12.32	**Units:**	µg/L
Lab Code:	R1410307-005	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1918.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/30/14 22:14	
Dibromofluoromethane	100	85-115	12/30/14 22:14	
Toluene-d8	100	85-120	12/30/14 22:14	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 2214

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-2-GW-M2MW10-12.32	**Units:**	µg/L
Lab Code:	R1410307-005	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-005|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1918.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 10:14 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 02 10:03:53 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.243	168	868069	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.444	114	1334179	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1222066	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	650819	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.145	113	389284	50.10	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.20%			
48) surr1,1,2-dichloroetha...	4.651	65	444952	47.03	ppb	-0.01
Spiked Amount 50.000	Range 78 - 122		Recovery = 94.06%			
65) SURR3,Toluene-d8	7.316	98	1635263	50.00	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.00%			
70) SURR2,BFB	9.785	95	594251	46.82	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 93.64%			
Target Compounds						Qvalue
15) Acetone	2.048	43	3060	1.66	ppb	89

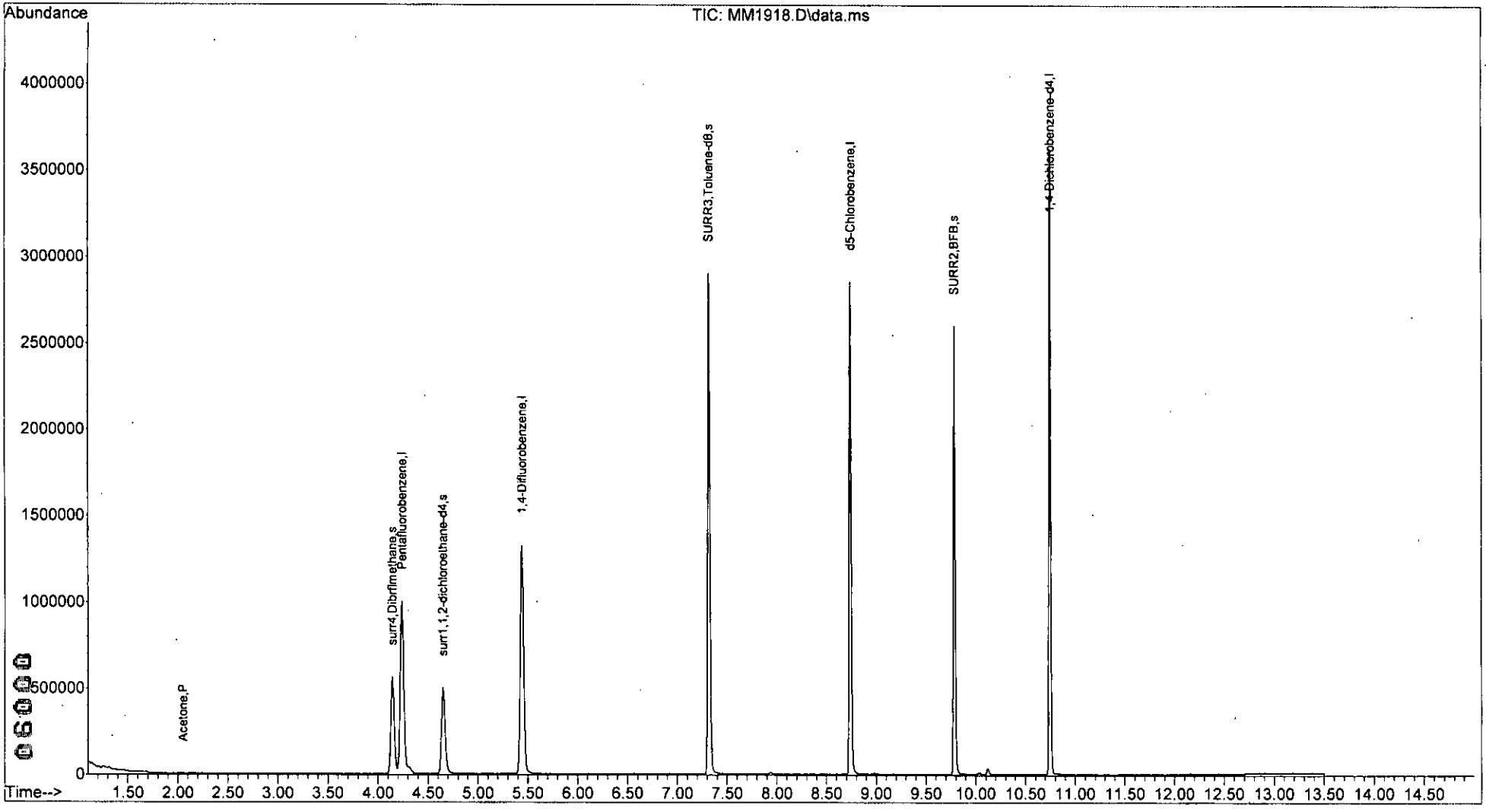
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KB 1/2/15

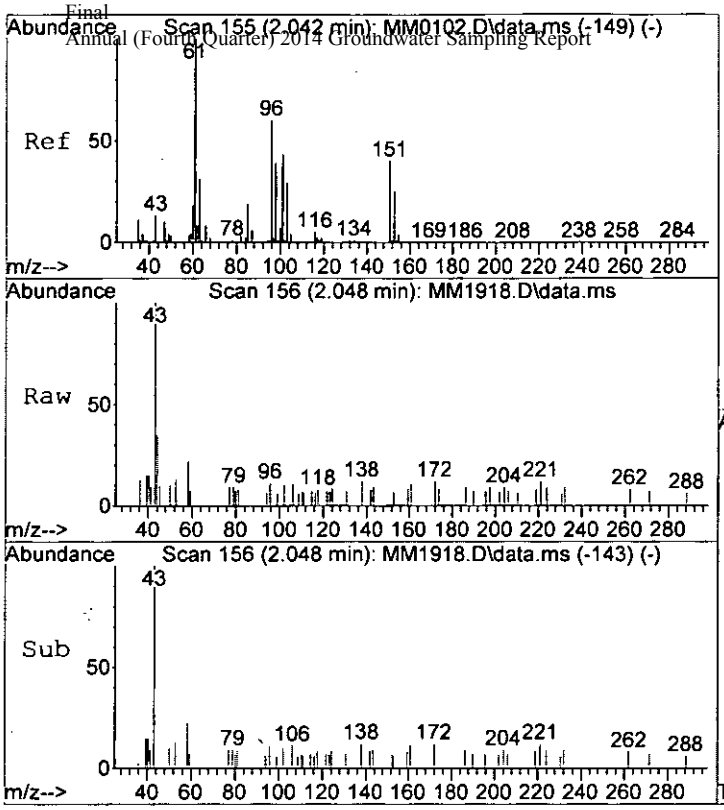
Quantitation Report (QT Reviewed)

Sample : R1410307-005|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1918.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 10:14 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 02 10:03:53 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



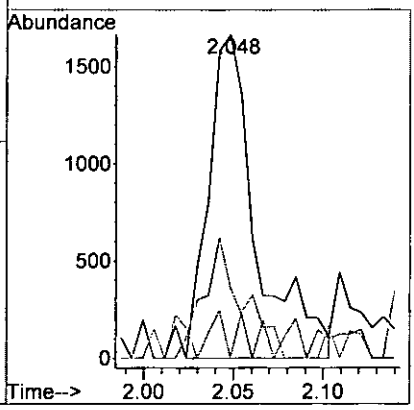
W102714.M Fri Jan 02 10:06:15 2015 Page: 2



#15
Acetone
Concen: 1.66 ppb
RT: 2.048 min Scan# 156
Delta R.T. 0.006 min
Lab File: MM1918.D
Acq: 30 Dec 2014 10:14 pm

Tgt Ion: 43 Resp: 3060

Ion	Ratio	Lower	Upper
43	100		
58	21.8	6.2	46.2
42	0.0	0.0	27.2



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1918.D
Acq On : 30 Dec 2014 10:14 pm
Operator : K.Ruest
Sample : R1410307-005|1.0
Misc : PARSONS 11603 T4
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1918.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.145	491	500	508	rBV	560982	1293107	29.56%	5.525%
2	4.243	508	516	525	rVV	975008	2361376	53.99%	10.089%
3	4.651	574	583	600	rBV	500534	1267179	28.97%	5.414%
4	5.444	704	713	732	rBV	1322083	3087823	70.60%	13.192%
5	7.316	1014	1020	1036	rBV	2900709	4373827	100.00%	18.686%
6	8.742	1248	1254	1268	rBV	2852892	3846077	87.93%	16.432%
7	9.785	1420	1425	1435	rBV	2597967	3058004	69.92%	13.065%
8	10.120	1477	1480	1486	rVB2	34436	47124	1.08%	0.201%
9	10.748	1578	1583	1591	rVB	3616300	4071865	93.10%	17.396%

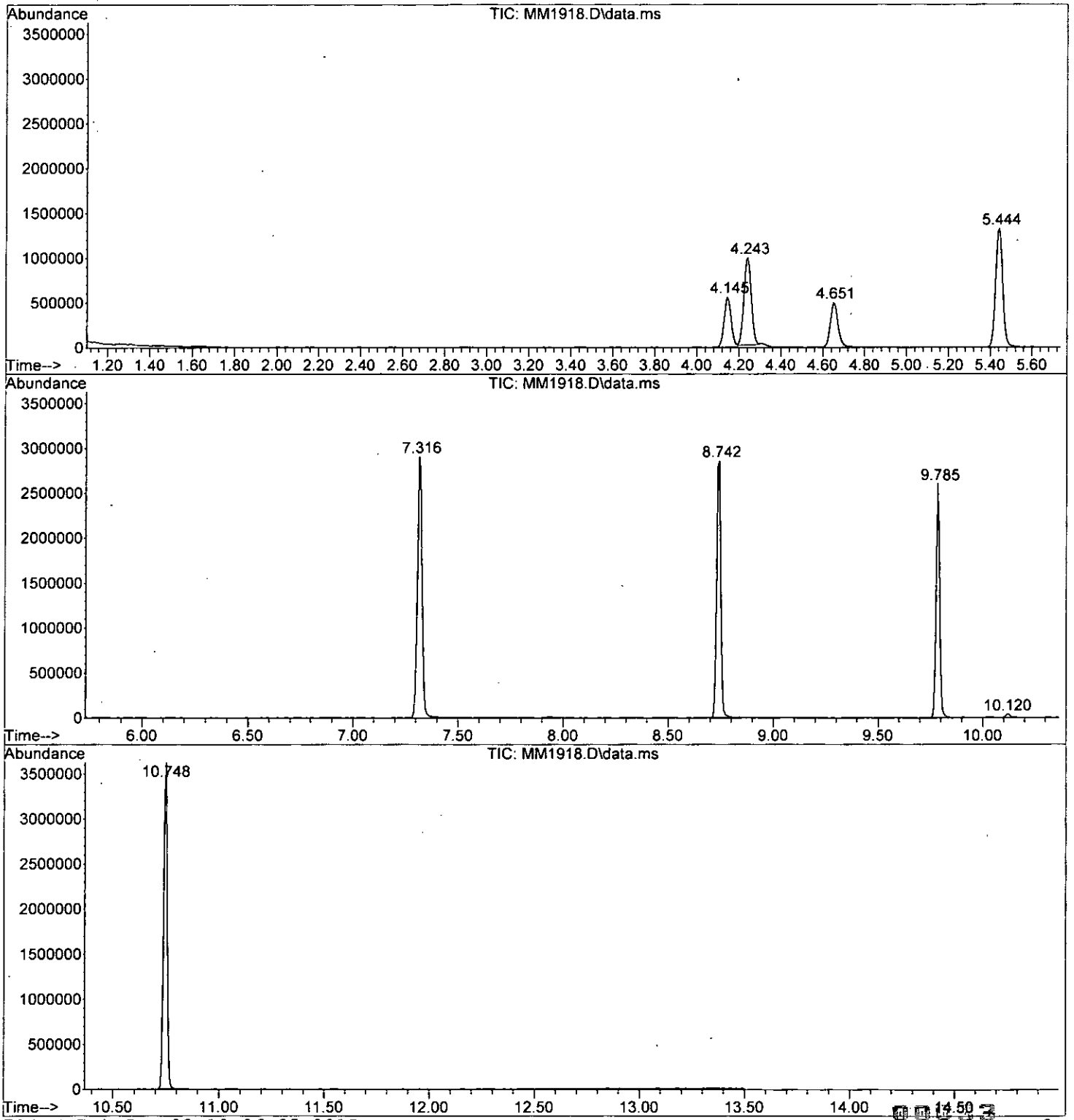
Sum of corrected areas: 23406382

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1918.D
Acq On : 30 Dec 2014 10:14 pm
Operator : K.Ruest
Sample : R1410307-005|1.0
Misc : PARSONS 11603 T4
ALS Vial : 22 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W102714.M Fri Jan 02 10:06:25 2015 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1918.D
Acq On : 30 Dec 2014 10:14 pmm
Operator : K.Ruestt
Sample : R1410307-005|1.00
Misc : PARSONS 11603 T44
ALS Vial : 22 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1538
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 04:05
Sample Name:	FTMM-2-GW-M2MW24-9.97	**Units:**	µg/L
Lab Code:	R1410307-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1929.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**0.38**	J	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**0.54**	J	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**2.8**	**J**	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**0.49**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1538
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 04:05
Sample Name:	FTMM-2-GW-M2MW24-9.97	**Units:**	µg/L
Lab Code:	R1410307-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1929.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	**5.0**	J	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**3.7**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	**0.39**	J	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**1.4**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**1.9**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.75**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1538
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 04:05
Sample Name:	FTMM-2-GW-M2MW24-9.97	**Units:**	µg/L
Lab Code:	R1410307-006	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1929.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/31/14 04:05	
Dibromofluoromethane	100	85-115	12/31/14 04:05	
Toluene-d8	100	85-120	12/31/14 04:05	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/31/14 0405

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-2-GW-M2MW24-9.97
Lab Code: R1410307-006

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000496-11-7	Indane	10.97	**15.5**	JN
027133-93-3	2,3-Dihydro-1-methylindene	11.41	**9.8**	JN
000767-58-8	Indan, 1-methyl-	11.92	**14.0**	JN

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-006|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1929.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 4:05 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 11:42:13 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

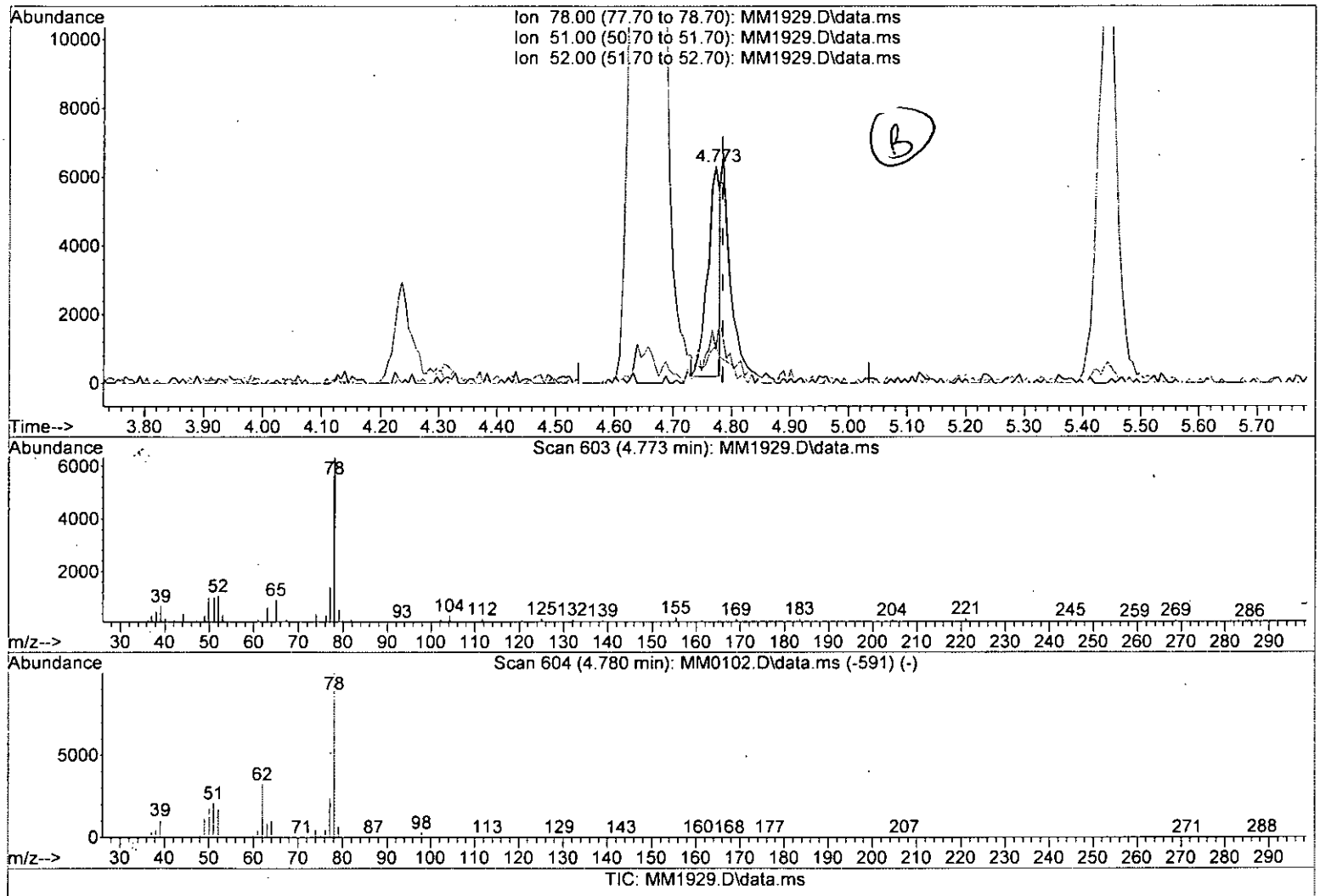
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	913472	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1367774	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1262937	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	687174	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.145	113	400156	50.24	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.48%				
48) surr1,1,2-dichloroetha...	4.658	65	461236	47.56	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 95.12%				
65) SURR3,Toluene-d8	7.316	98	1679278	50.08	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.16%				
70) SURR2,BFB	9.785	95	613644	47.16	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 94.32%				
Target Compounds							Qvalue
15) Acetone	2.054	43	2321	1.20	ppb		80
49) Benzene	4.786	78	17187m	0.49	ppb		
78) Chlorobenzene	8.766	112	122154	4.99	ppb		95
89) Isopropylbenzene	9.669	105	134233	3.66	ppb		98
95) n-Propylbenzene	10.016	91	58783	1.38	ppb		93
100) tert-Butylbenzene	10.437	119	19259	0.75	ppb		94
103) sec-Butylbenzene	10.614	105	68964	1.91	ppb		98
105) 1,3-Dclbenz	10.693	146	9964	0.54	ppb		94
106) 1,4-Dclbenz	10.766	146	54559	2.82	ppb		98
109) n-Butylbenzene	11.065	91	10770m	0.39	ppb		
110) 1,2-Dclbenz	11.065	146	6628	0.38	ppb		93
115) 1,2,4-Tcbenzene	12.162	180	2066	0.20	ppb	#	50
116) Hexachlorobt	12.266	225	1228	0.31	ppb		83
118) 1,2,3-Tclbenzene	12.437	180	1958	0.23	ppb	#	67

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1/5/15

Sample : R1410307-006|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1929.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 4:05 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 04:19:50 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



TIC: MM1929.D\data.ms

(49) Benzene (P)

4.773min (-0.012) 0.26 ppb

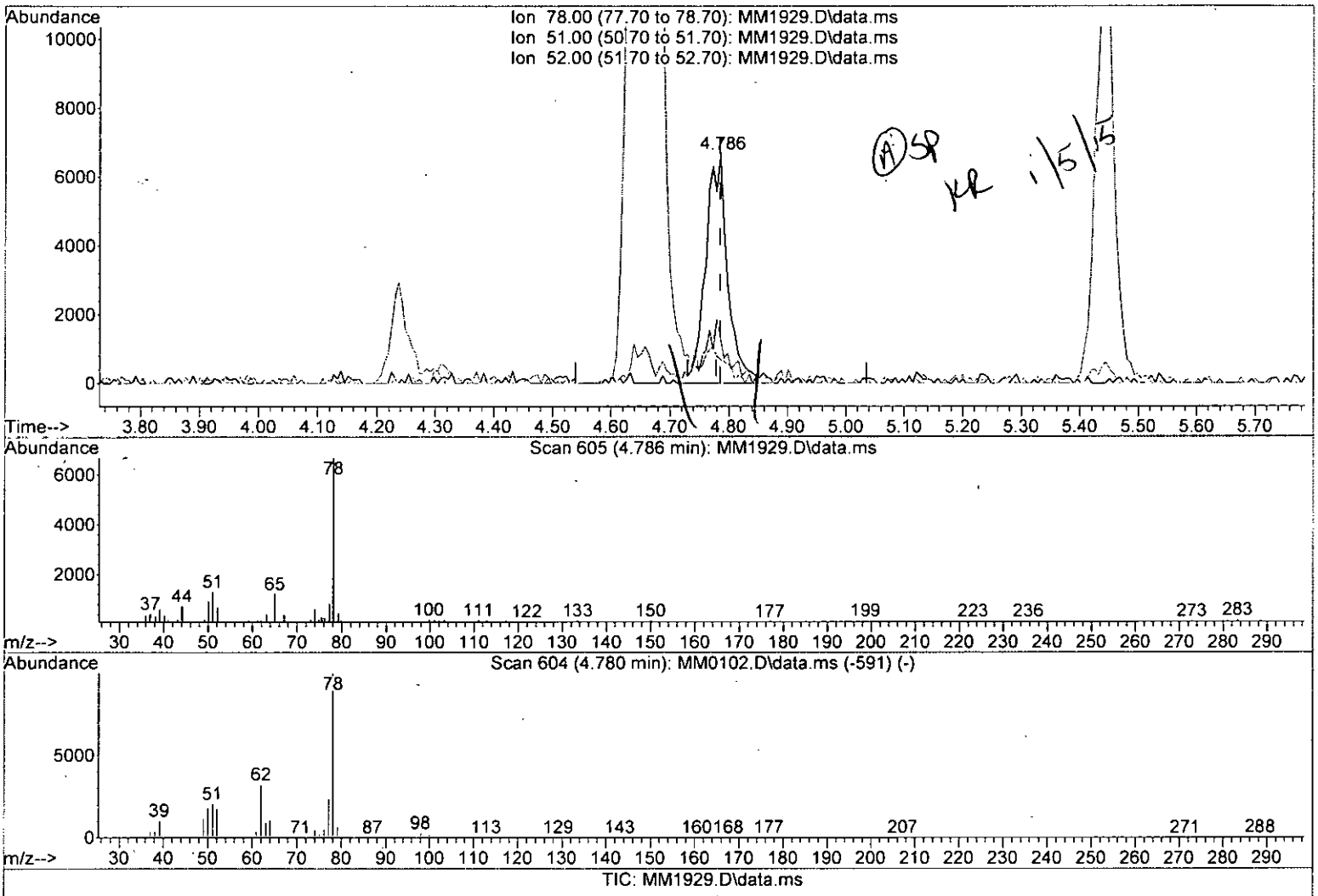
response 9011

Ion	Exp%	Act%
78.00	100	100
51.00	21.20	15.73
52.00	17.60	16.92
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : R1410307-006|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1929.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 4:05 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 04:19:50 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



TIC: MM1929.D\data.ms

(49) Benzene (P)

4.786min (-0.000) 0.49 ppb m

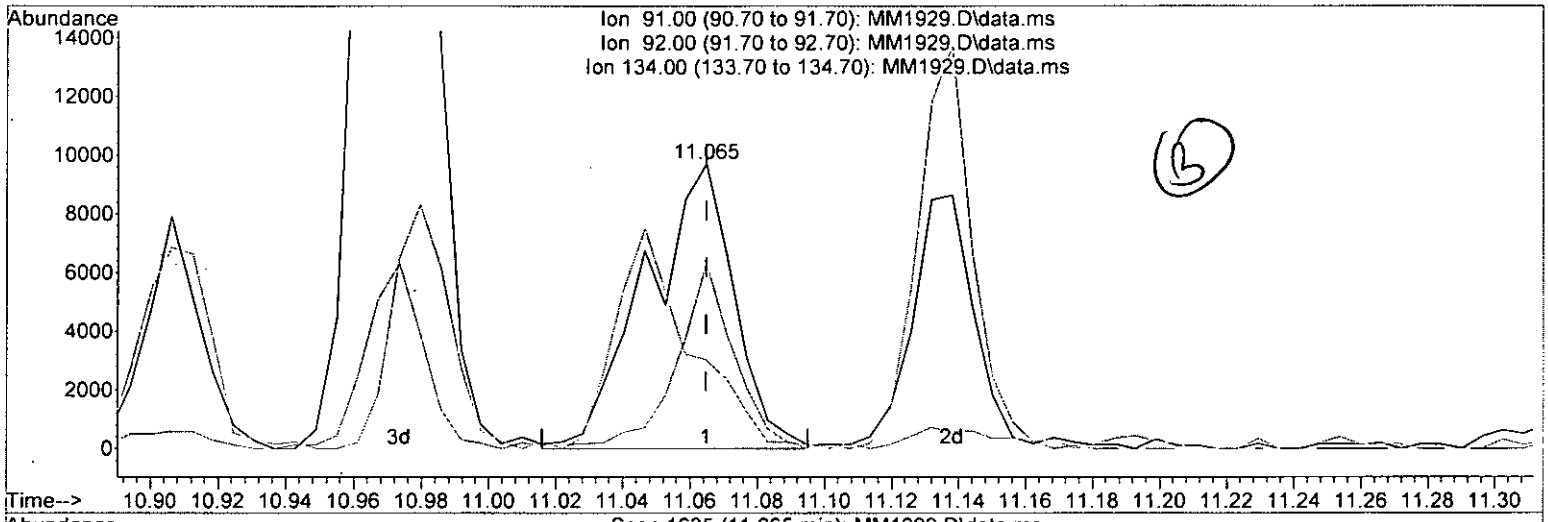
response 17187

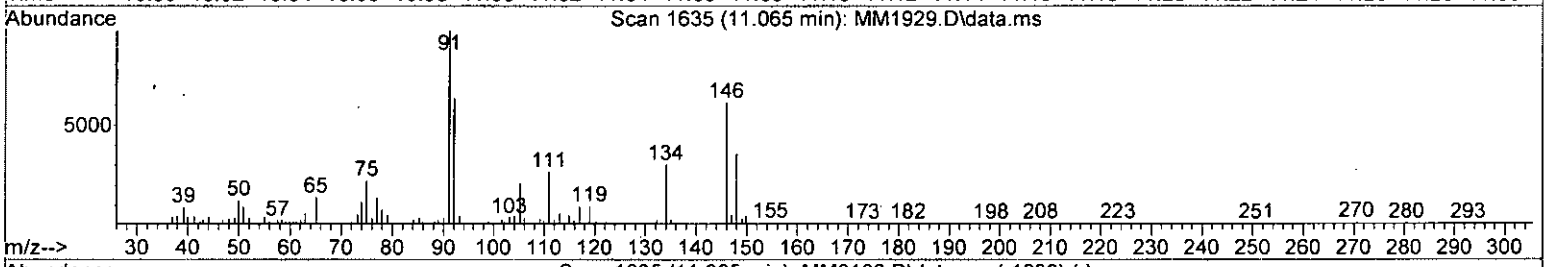
Ion	Exp%	Act%
78.00	100	100
51.00	21.20	19.51
52.00	17.60	10.25
0.00	0.00	0.00

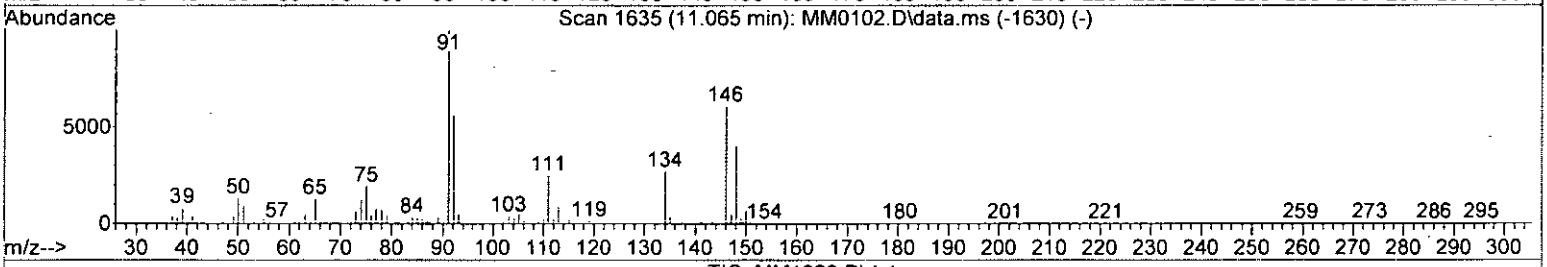
Quantitation Report (Qedit)

Sample : R1410307-006|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1929.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 4:05 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 04:19:50 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1929.D\data.ms

(109) n-Butylbenzene

11.065min (-0.000) 0.63 ppb

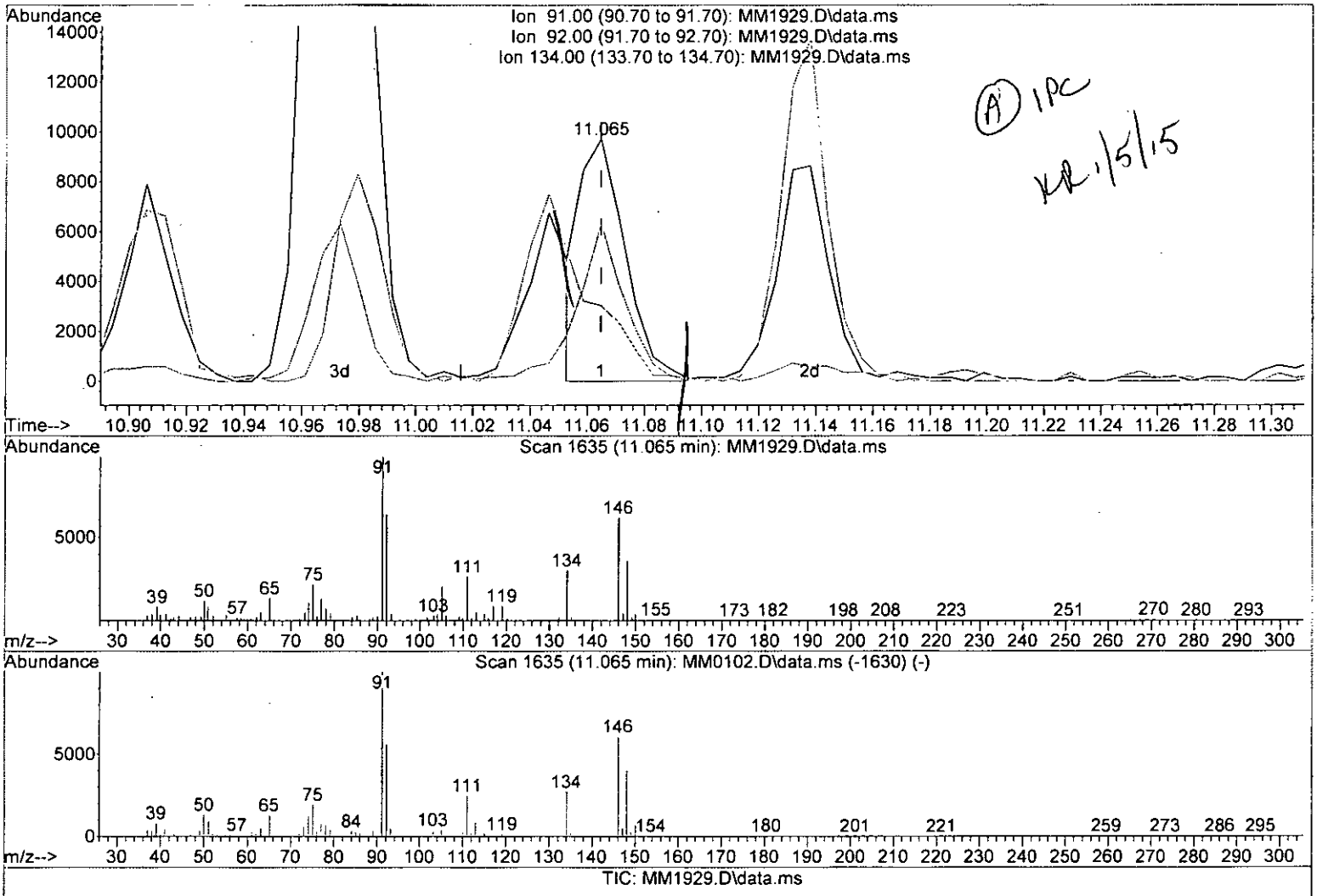
response 17540

Ion	Exp%	Act%
91.00	100	100
92.00	55.60	65.10
134.00	26.90	31.24
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : R1410307-006|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1929.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 4:05 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 04:19:50 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



TIC: MM1929.D\data.ms

(109) n-Butylbenzene

11.065min (-0.000) 0.39 ppb m

response 10770

Ion	Exp%	Act%
91.00	100	100
92.00	55.60	65.10
134.00	26.90	31.24
0.00	0.00	0.00

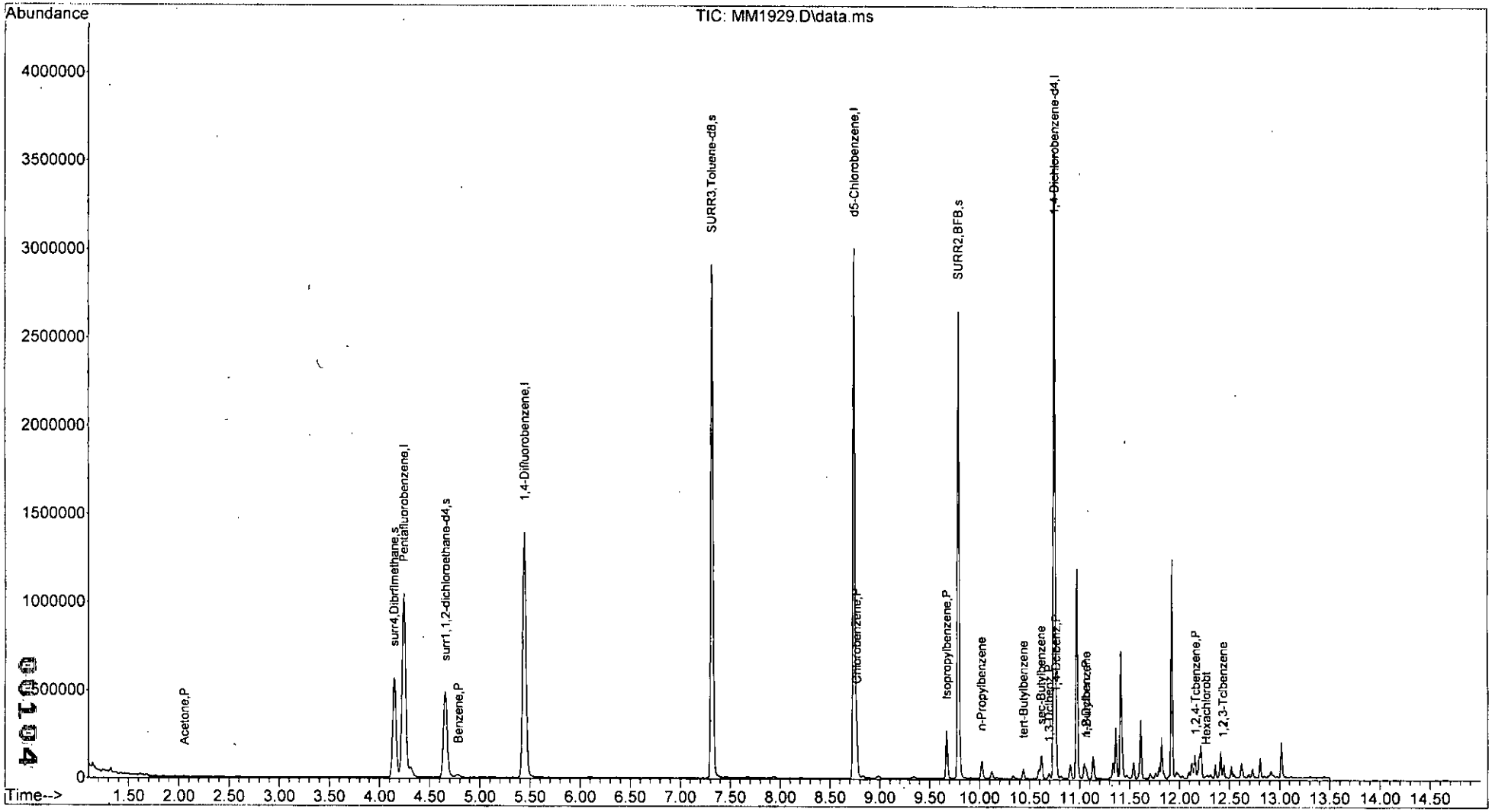
(A) IPC
KR 1/5/15

mm 1/1

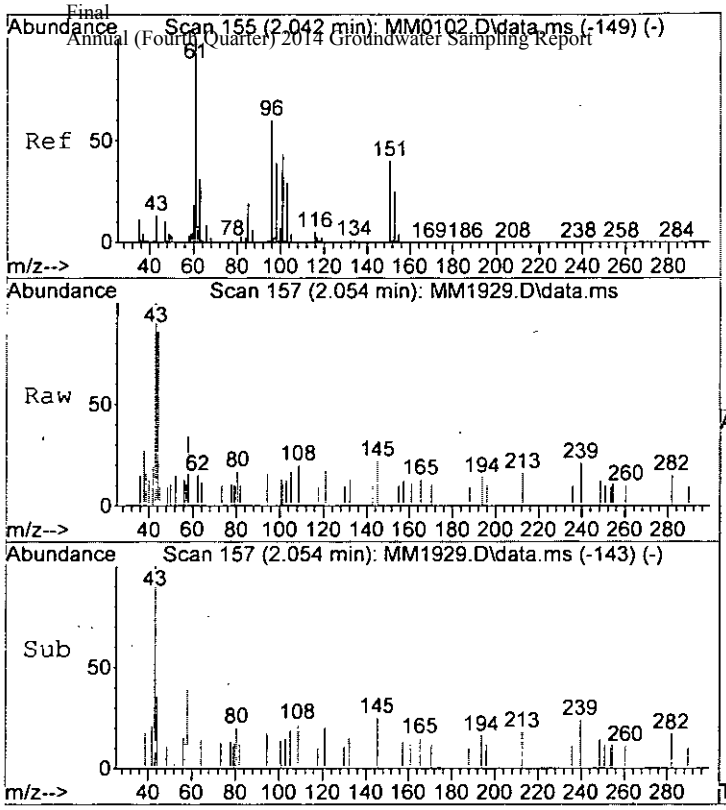
Quantitation Report (QT Reviewed)

Sample : R1410307-006|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1929.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 4:05 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 11:42:13 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



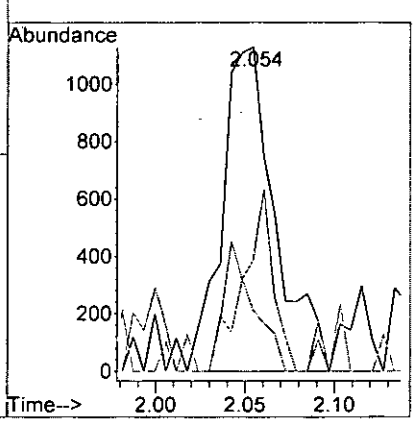
W102714.M Mon Jan 05 11:42:23 2015

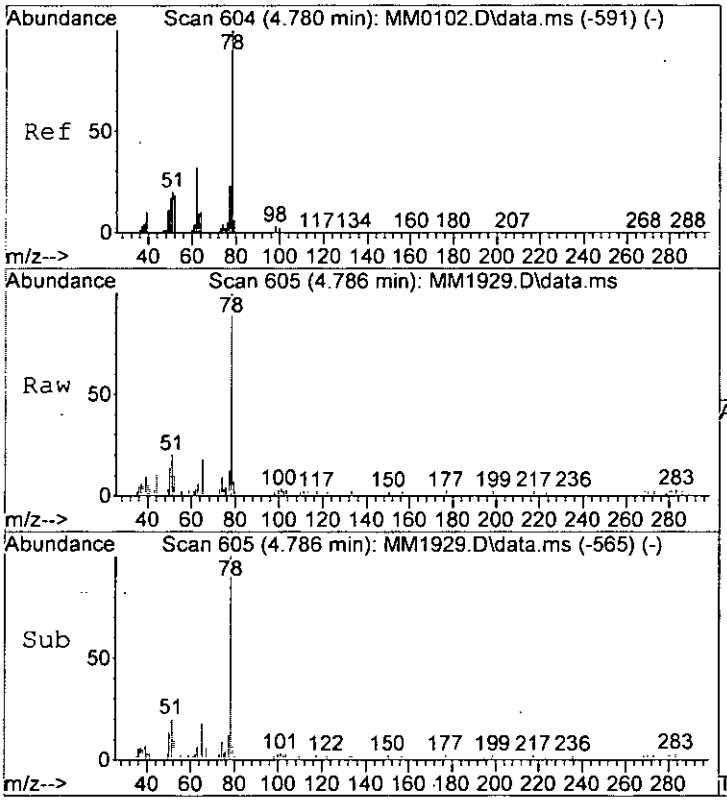


#15
Acetone
Concen: 1.20 ppb
RT: 2.054 min Scan# 157
Delta R.T. 0.012 min
Lab File: MM1929.D
Acq: 31 Dec 2014 4:05 am

Tgt Ion: 43 Resp: 2321

Ion	Ratio	Lower	Upper
43	100		
58	34.2	6.2	46.2
42	18.8	0.0	27.2

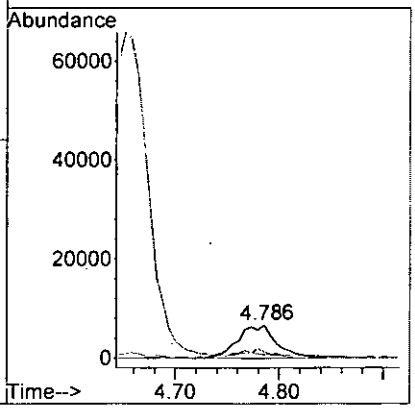


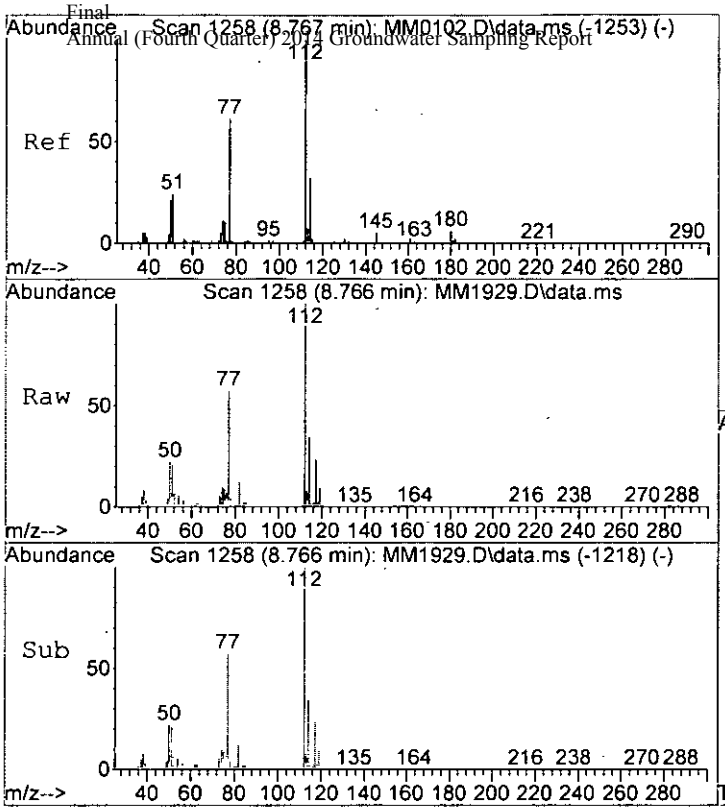


#49
Benzene
Concen: 0.49 ppb m
RT: 4.786 min Scan# 605
Delta R.T. -0.000 min
Lab File: MM1929.D
Acq: 31 Dec 2014 4:05 am

Tgt Ion: 78 Resp: 17187

Ion	Ratio	Lower	Upper
78	100		
51	19.5	1.2	41.2
52	10.2	0.0	37.6

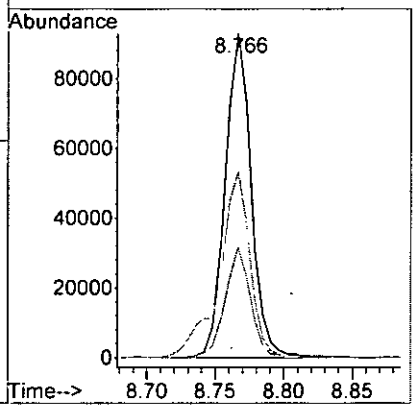


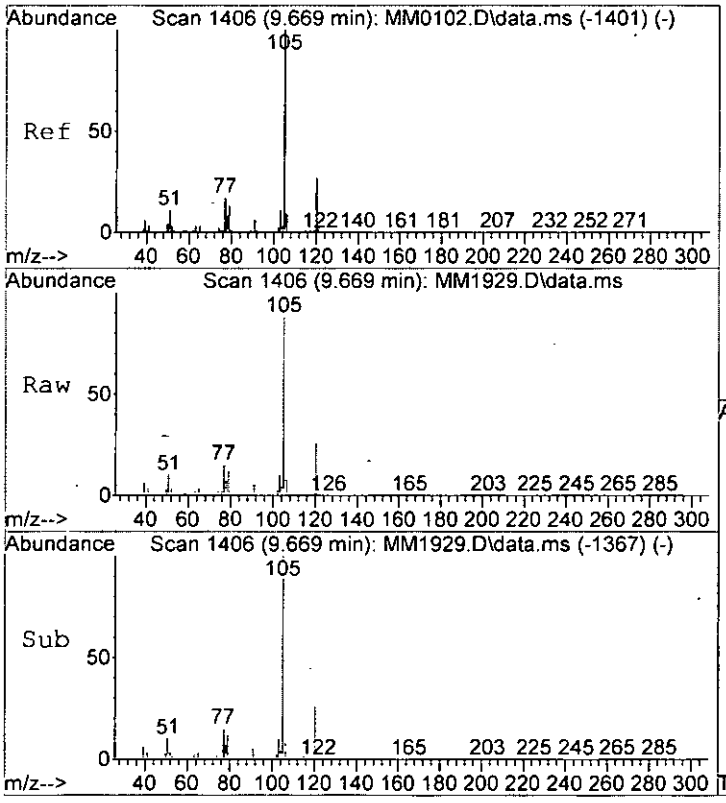


#78
Chlorobenzene
Concen: 4.99 ppb
RT: 8.766 min Scan# 1258
Delta R.T. -0.006 min
Lab File: MM1929.D
Acq: 31 Dec 2014 4:05 am

Tgt Ion:112 Resp: 122154

Ion	Ratio	Lower	Upper
112	100		
114	34.1	12.3	52.3
77	57.2	41.5	81.5

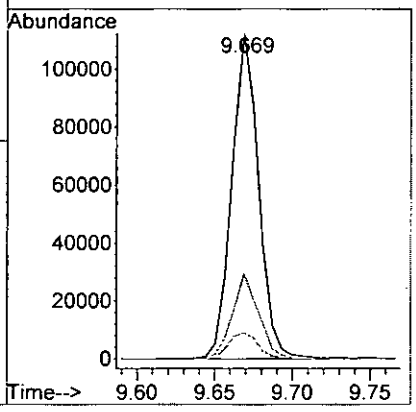


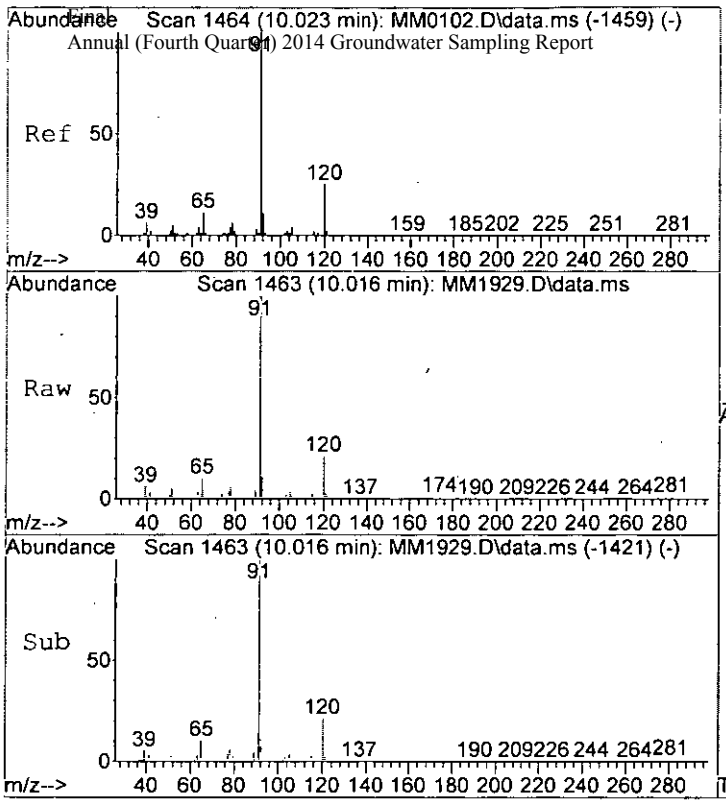


#89
Isopropylbenzene
Concen: 3.66 ppb
RT: 9.669 min Scan# 1406
Delta R.T. -0.006 min
Lab File: MM1929.D
Acq: 31 Dec 2014 4:05 am

Tgt Ion:105 Resp: 134233

Ion	Ratio	Lower	Upper
105	100		
120	26.2	7.0	47.0
106	8.0	0.0	28.8

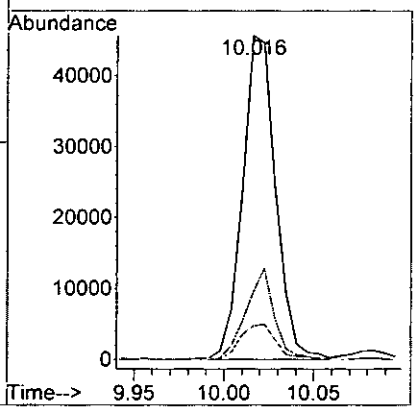


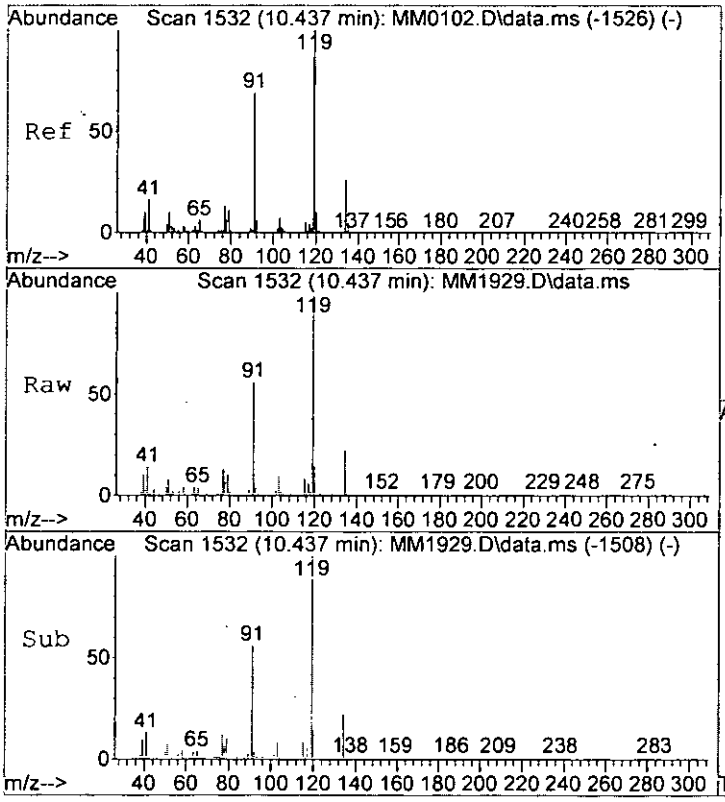


#95
n-Propylbenzene
Concen: 1.38 ppb
RT: 10.016 min Scan# 1463
Delta R.T. -0.006 min
Lab File: MM1929.D
Acq: 31 Dec 2014 4:05 am

Tgt Ion: 91 Resp: 58783

Ion	Ratio	Lower	Upper
91	100		
120	20.7	4.9	44.9
65	10.2	0.0	31.3

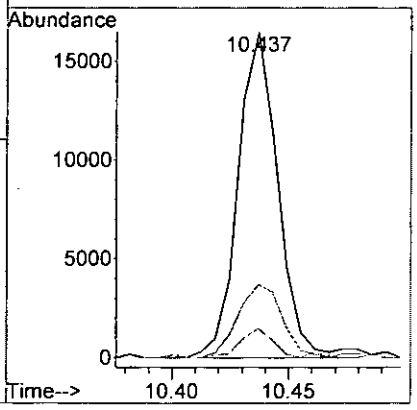


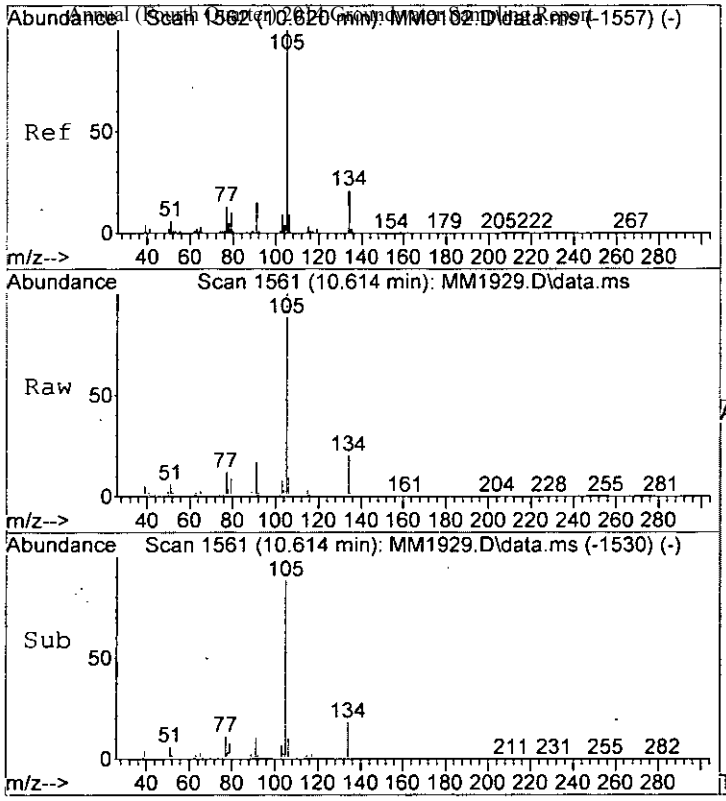


#100
tert-Butylbenzene
Concen: 0.75 ppb
RT: 10.437 min Scan# 1532
Delta R.T. -0.006 min
Lab File: MM1929.D
Acq: 31 Dec 2014 4:05 am

Tgt Ion:119 Resp: 19259

Ion	Ratio	Lower	Upper
119	100		
134	22.4	5.5	45.5
103	8.8	0.0	26.8

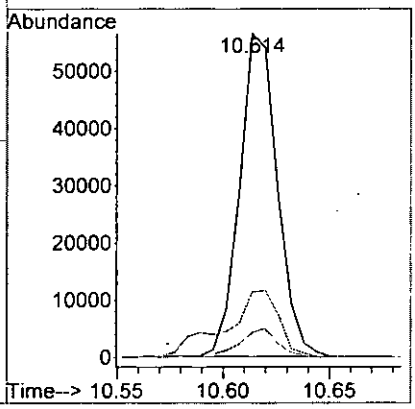


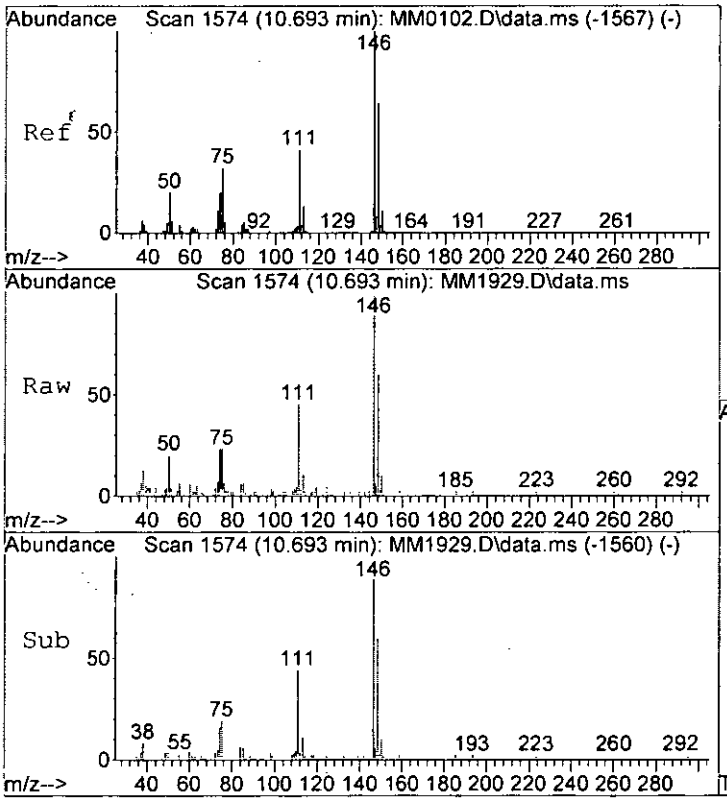


#103
sec-Butylbenzene
Concen: 1.91 ppb
RT: 10.614 min Scan# 1561
Delta R.T. -0.006 min
Lab File: MM1929.D
Acq: 31 Dec 2014 4:05 am

Tgt Ion:105 Resp: 68964

Ion	Ratio	Lower	Upper
105	100		
134	20.1	1.0	41.0
103	7.6	0.0	28.6

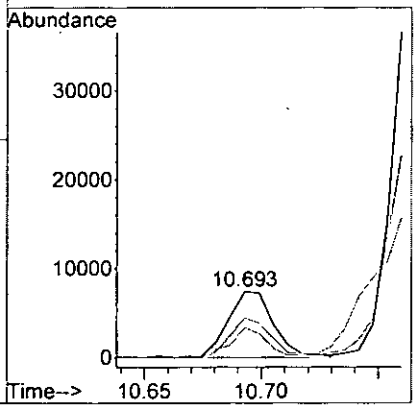


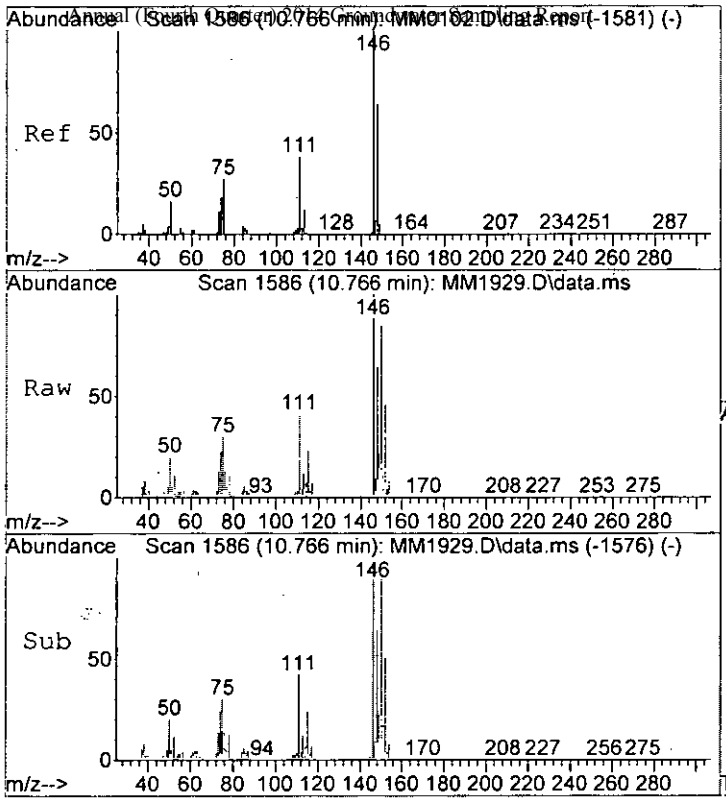


#105
1,3-Dclbenz
Concen: 0.54 ppb
RT: 10.693 min Scan# 1574
Delta R.T. -0.006 min
Lab File: MM1929.D
Acq: 31 Dec 2014 4:05 am

Tgt Ion:146 Resp: 9964

Ion	Ratio	Lower	Upper
146	100		
148	59.7	43.9	83.9
111	45.4	20.5	60.5

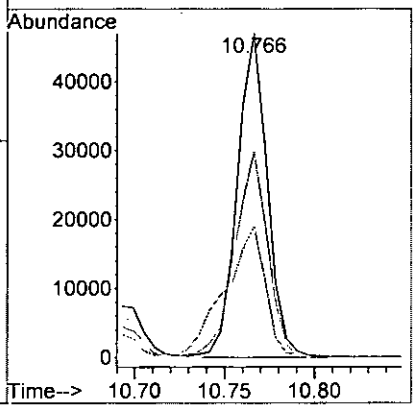


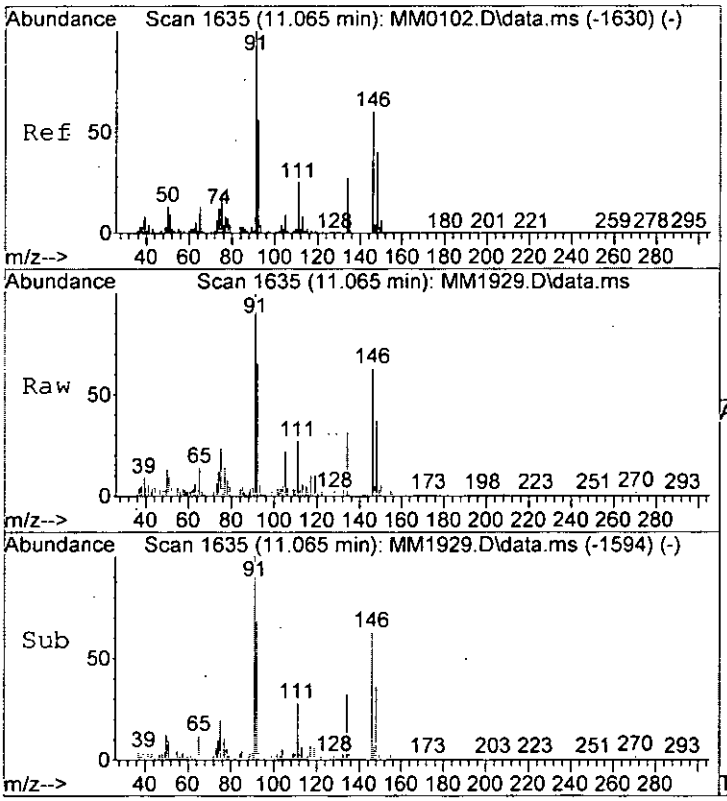


#106
1,4-Dclbenz
Concen: 2.82 ppb
RT: 10.766 min Scan# 1586
Delta R.T. -0.006 min
Lab File: MM1929.D
Acq: 31 Dec 2014 4:05 am

Tgt Ion:146 Resp: 54559

Ion	Ratio	Lower	Upper
146	100		
148	63.6	44.1	84.1
111	40.5	17.8	57.8

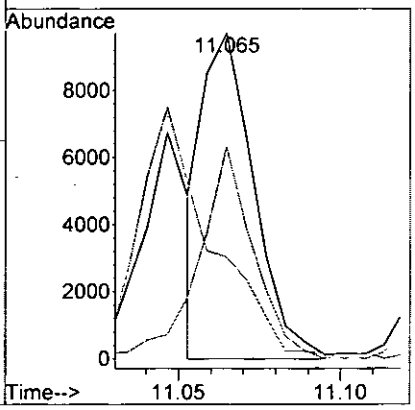


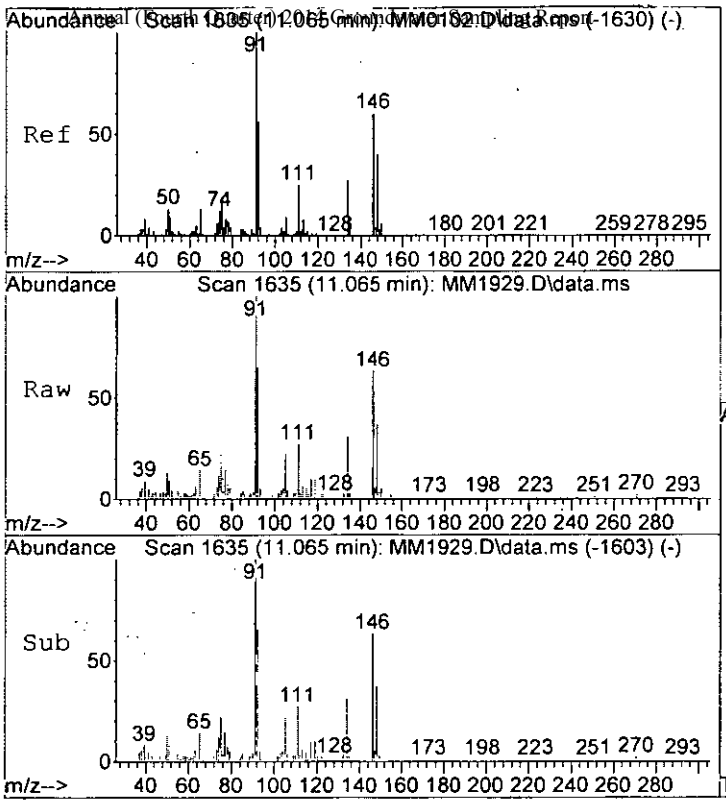


#109
n-Butylbenzene
Concen: 0.39 ppb m
RT: 11.065 min Scan# 1635
Delta R.T. -0.000 min
Lab File: MM1929.D
Acq: 31 Dec 2014 4:05 am

Tgt Ion: 91 Resp: 10770

Ion	Ratio	Lower	Upper
91	100		
92	65.1	35.6	75.6
134	31.2	6.9	46.9

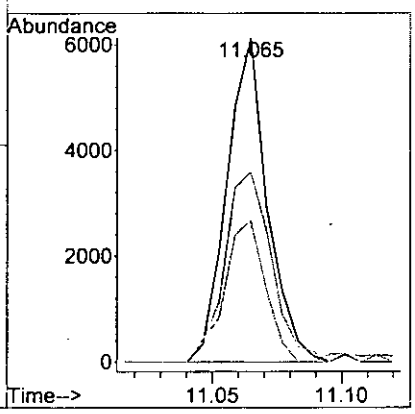


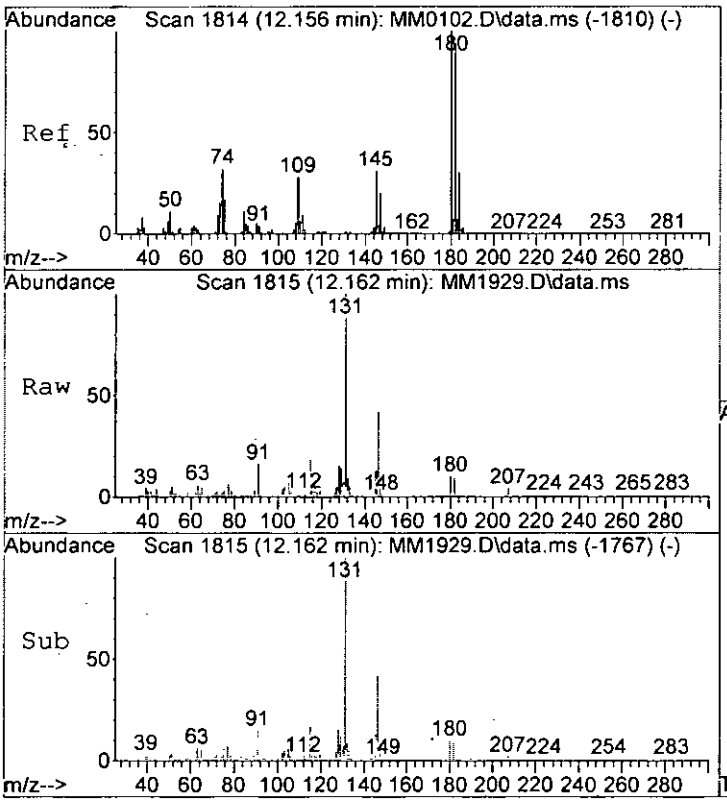


#110
1,2-Dclbenz
Concen: 0.38 ppb
RT: 11.065 min Scan# 1635
Delta R.T. -0.000 min
Lab File: MM1929.D
Acq: 31 Dec 2014 4:05 am

Tgt Ion:146 Resp: 6628

Ion	Ratio	Lower	Upper
146	100		
148	58.5	45.7	85.7
111	43.5	20.8	60.8

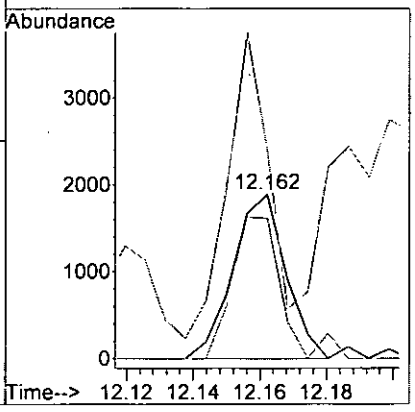


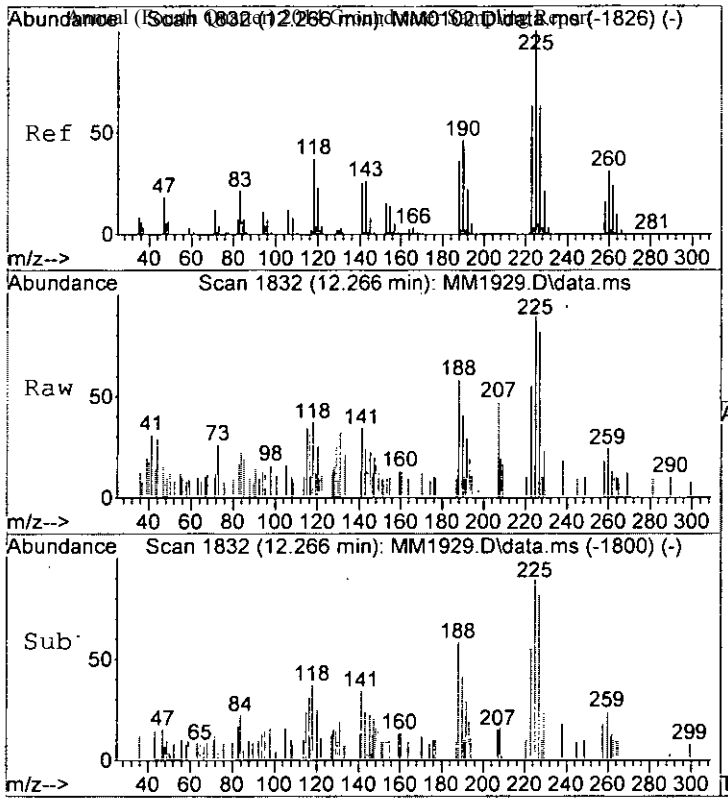


#115
1,2,4-Tcbenzene
Concen: 0.20 ppb
RT: 12.162 min Scan# 1815
Delta R.T. -0.000 min
Lab File: MM1929.D
Acq: 31 Dec 2014 4:05 am

Tgt Ion:180 Resp: 2066

Ion	Ratio	Lower	Upper
180	100		
182	85.3	74.0	114.0
145	126.1	11.2	51.2#

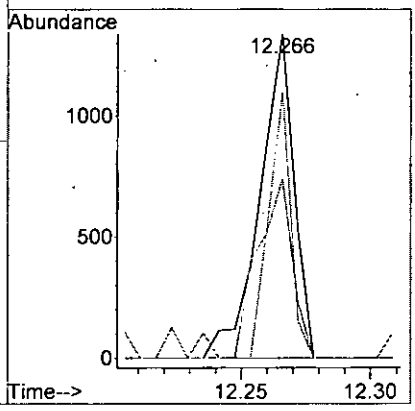


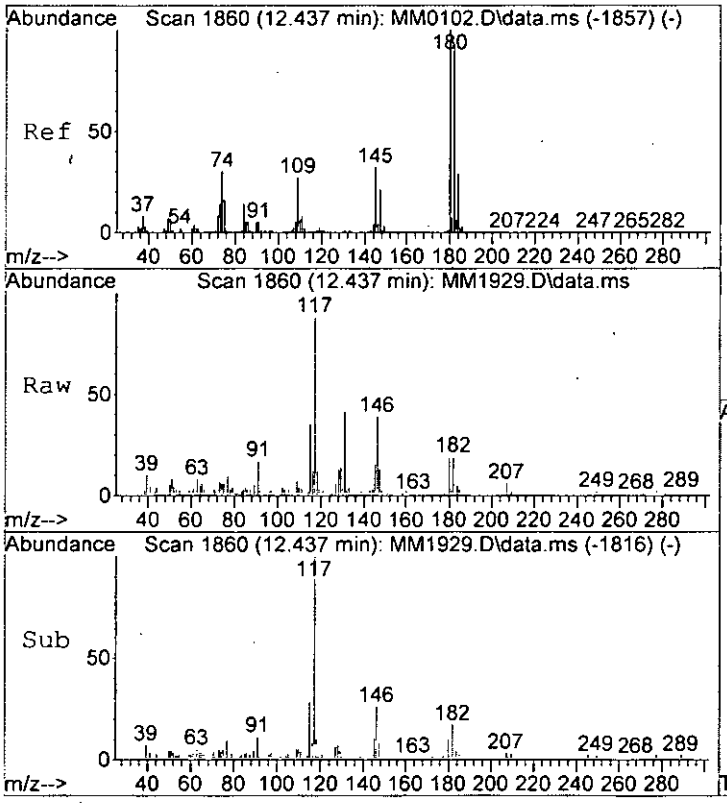


#116
Hexachlorobt
Concen: 0.31 ppb
RT: 12.266 min Scan# 1832
Delta R.T. -0.000 min
Lab File: MM1929.D
Acq: 31 Dec 2014 4:05 am

Tgt Ion:225 Resp: 1228

Ion	Ratio	Lower	Upper
225	100		
223	55.3	42.5	82.5
227	81.9	42.6	82.6

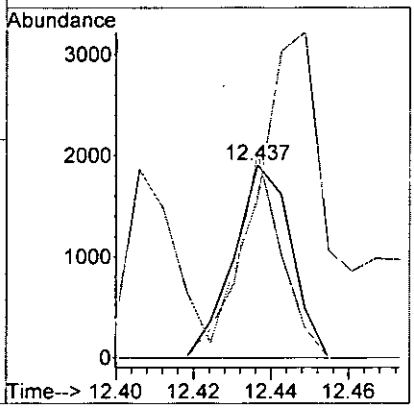




#118
1,2,3-Tclbenzene
Concen: 0.23 ppb
RT: 12.437 min Scan# 1860
Delta R.T. -0.000 min
Lab File: MM1929.D
Acq: 31 Dec 2014 4:05 am

Tgt Ion:180 Resp: 1958

Ion	Ratio	Lower	Upper
180	100		
182	106.3	73.0	113.0
145	82.1	11.8	51.8#



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1929.D
Acq On : 31 Dec 2014 4:05 am
Operator : K.Ruest
Sample : R1410307-006|1.0
Misc : PARSONS 11603 T4
ALS Vial : 34 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1929.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.145	491	500	508	rBV	565370	1335199	29.86%	4.153%
2	4.243	508	516	525	rVV	1015502	2447497	54.73%	7.613%
3	4.651	575	583	597	rBV	483602	1261940	28.22%	3.925%
4	5.444	702	713	730	rBV	1392577	3205754	71.69%	9.972%
5	7.316	1014	1020	1030	rBV	2910671	4471620	100.00%	13.909%
6	8.742	1247	1254	1265	rBV	3009870	4371063	97.75%	13.596%
7	9.669	1401	1406	1411	rBV	270947	320115	7.16%	0.996%
8	9.785	1420	1425	1436	rBV	2648799	3141372	70.25%	9.771%
9	10.022	1458	1464	1470	rBV	98402	140254	3.14%	0.436%
10	10.120	1476	1480	1486	rVB	39320	51315	1.15%	0.160%
11	10.437	1527	1532	1536	rBV	54622	69012	1.54%	0.215%
12	10.589	1551	1557	1559	rBV	55171	76739	1.72%	0.239%
13	10.614	1559	1561	1568	rVB	131452	161537	3.61%	0.502%
14	10.748	1578	1583	1592	rVV	3551508	4455465	99.64%	13.859%
15	10.906	1603	1609	1615	rBV	82149	107752	2.41%	0.335%
16	10.973	1615	1620	1627	rVV	1192169	1383195	30.93%	4.302%
17	11.047	1627	1632	1640	rVB2	87796	160272	3.58%	0.499%
18	11.138	1643	1647	1653	rVB	125629	156692	3.50%	0.487%
19	11.333	1671	1679	1681	rBV	90604	110400	2.47%	0.343%
20	11.364	1681	1684	1688	rVV	285831	302282	6.76%	0.940%
21	11.412	1688	1692	1699	rVV2	719733	870172	19.46%	2.707%
22	11.540	1707	1713	1718	rVB	93940	113991	2.55%	0.355%
23	11.614	1718	1725	1729	rBV	334304	376654	8.42%	1.172%
24	11.796	1751	1755	1757	rBV	56663	59804	1.34%	0.186%
25	11.821	1757	1759	1766	rVB	231402	233388	5.22%	0.726%
26	11.924	1771	1776	1780	rVV2	1240702	1243449	27.81%	3.868%
27	11.967	1781	1783	1791	rVB3	32397	60810	1.36%	0.189%
28	12.126	1806	1809	1811	rVV	84352	100386	2.24%	0.312%
29	12.156	1811	1814	1817	rVV2	131385	148656	3.32%	0.462%
30	12.211	1817	1823	1828	rVB2	182530	321275	7.18%	0.999%
31	12.357	1844	1847	1850	rBV	79602	70292	1.57%	0.219%
32	12.412	1850	1856	1859	rVV	150279	158915	3.55%	0.494%
33	12.443	1859	1861	1865	rVB2	75035	67242	1.50%	0.209%
34	12.516	1870	1873	1876	rBV	65337	61458	1.37%	0.191%
35	12.619	1884	1890	1894	rBV3	82192	104810	2.34%	0.326%

00112

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1929.D
Acq On : 31 Dec 2014 4:05 am
Operator : K.Ruest
Sample : R1410307-006|1.0
Misc : PARSONS 11603 T4
ALS Vial : 34 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

36	12.729	1904	1908	1911	rBV	51314	47242	1.06%	0.147%
37	12.808	1918	1921	1924	rBV	110906	108673	2.43%	0.338%
38	12.912	1931	1938	1941	rBV3	37581	56842	1.27%	0.177%
39	13.016	1952	1955	1962	rBV	203188	215364	4.82%	0.670%

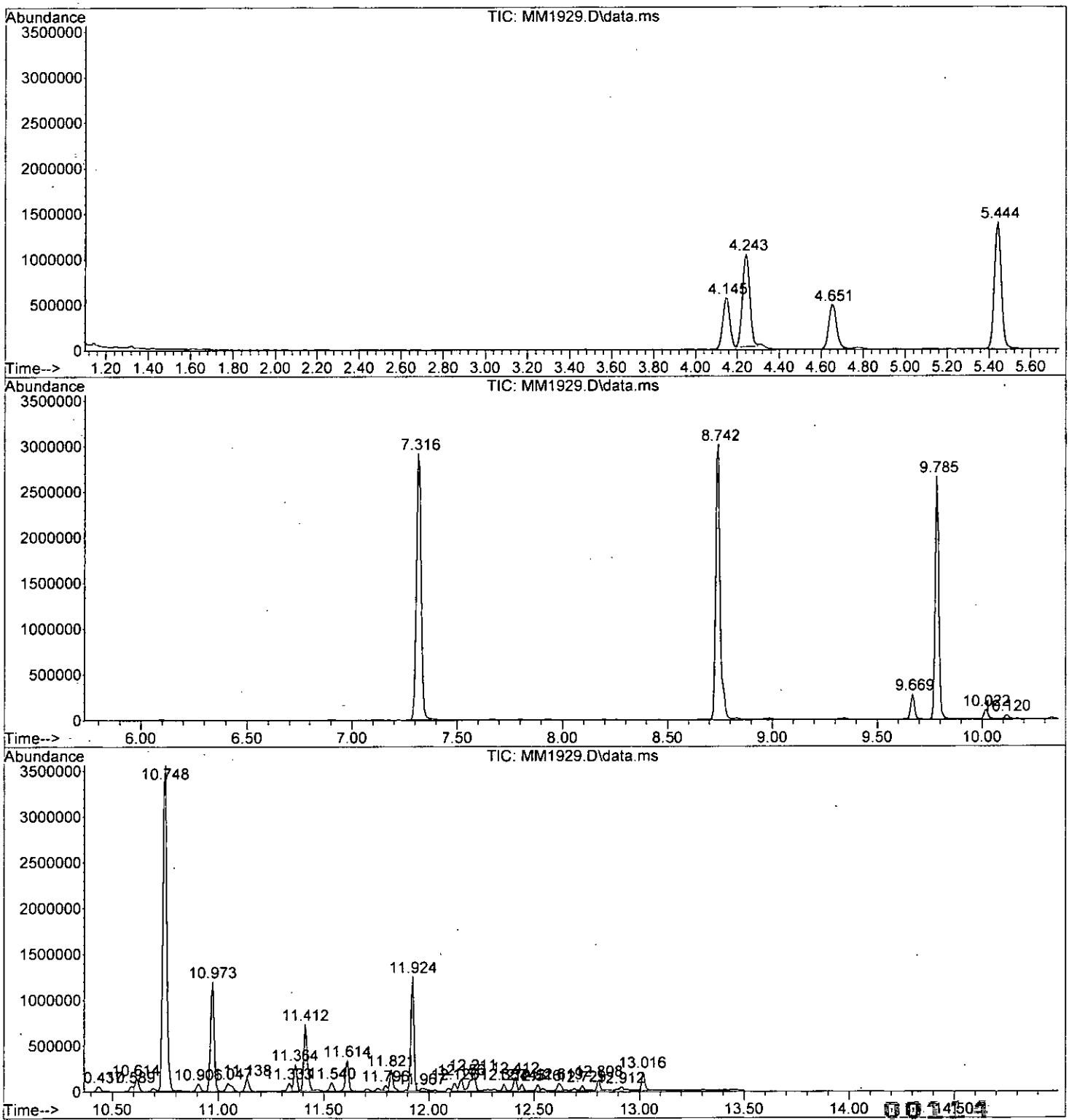
Sum of corrected areas: 32148898

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1929.D
Acq On : 31 Dec 2014 4:05 am
Operator : K.Ruest
Sample : R1410307-006|1.0
Misc : PARSONS 11603 T4
ALS Vial : 34 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W102714.M Mon Jan 05 11:42:44 2015 Page: 3

Library Search Compound Report


```
Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1929.D
Acq On    : 31 Dec 2014    4:05 am
Operator  : K.Ruest
Sample    : R1410307-006|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 34   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

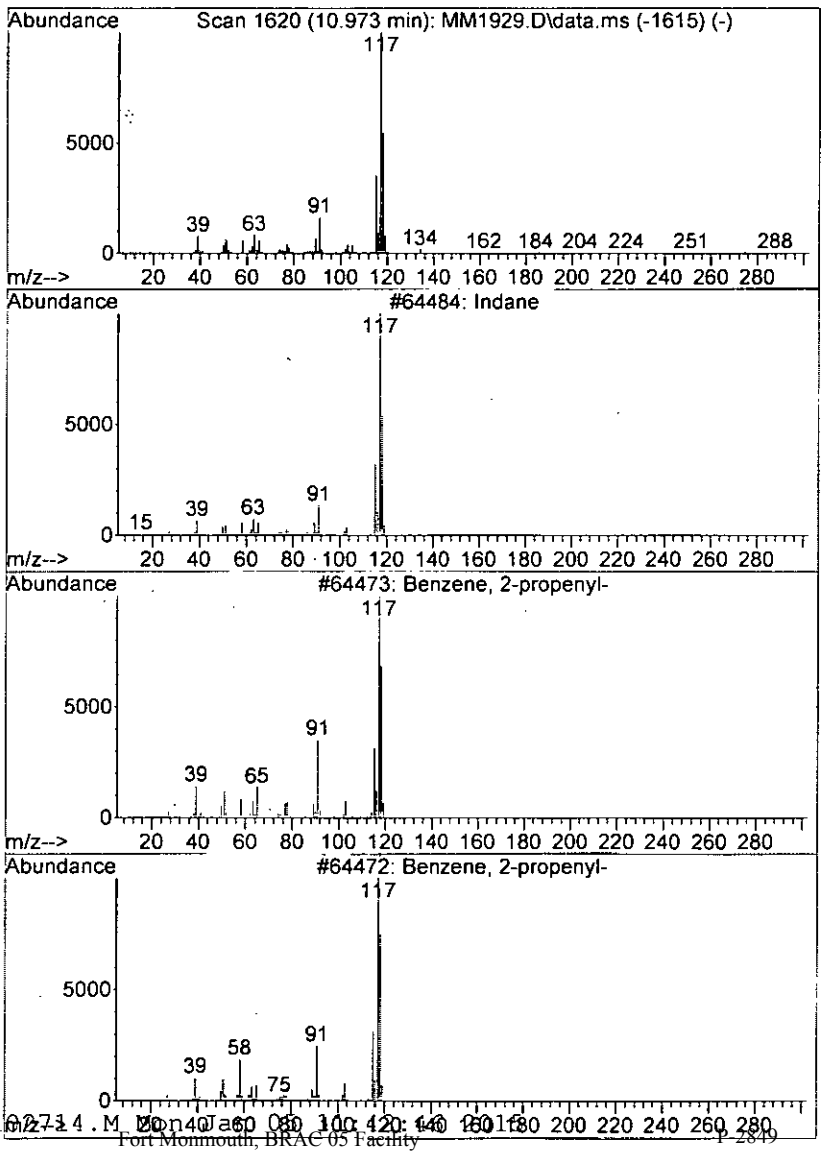
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

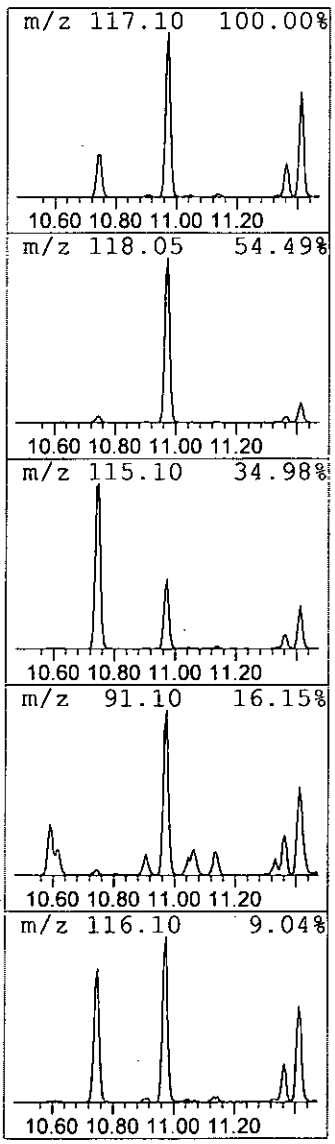
****

Peak Number 1 Indane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.973	15.52 ppb	1383200	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indane	118	C9H10	000496-11-7	87
2	Benzene, 2-propenyl-	118	C9H10	000300-57-2	80
3	Benzene, 2-propenyl-	118	C9H10	000300-57-2	49
4	Benzene, 1-propenyl-	118	C9H10	000637-50-3	49
5	Benzene, 2-propenyl-	118	C9H10	000300-57-2	47





```
Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1929.D
Acq On    : 31 Dec 2014    4:05 am
Operator  : K.Ruest
Sample    : R1410307-006|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 34   Sample Multiplier: 1

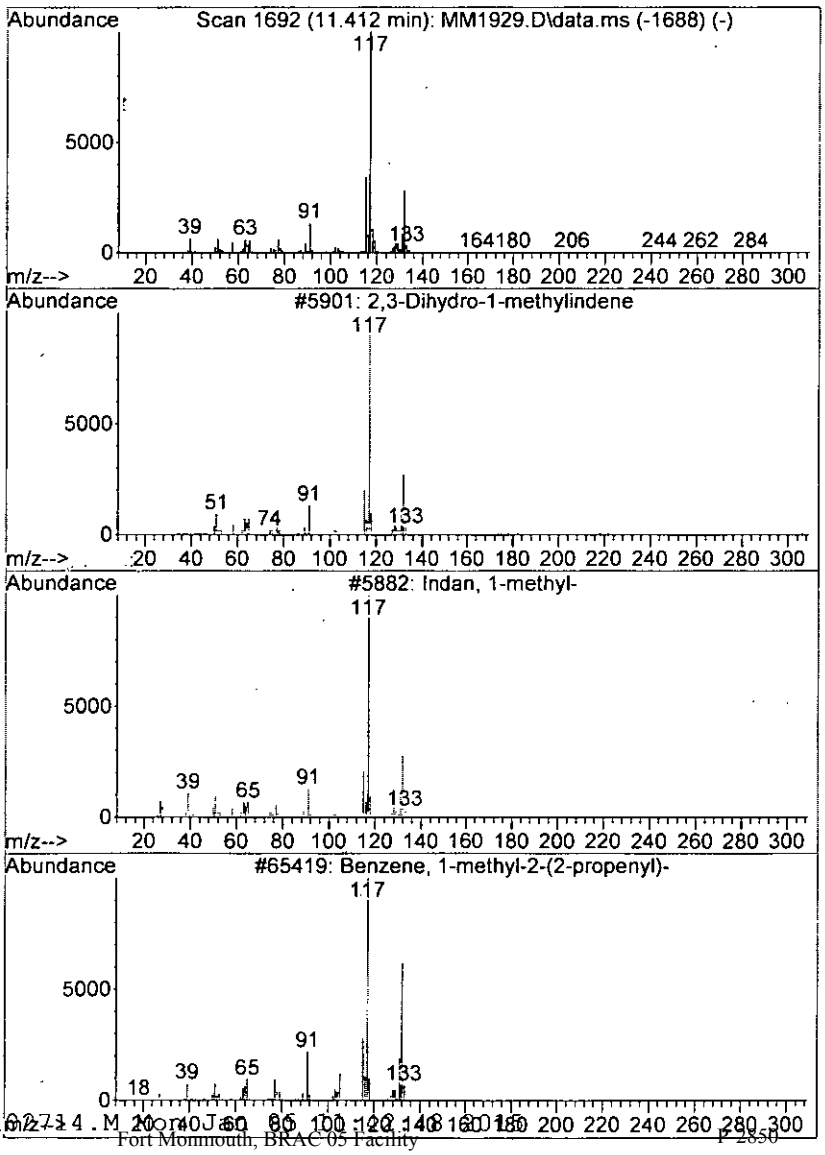
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

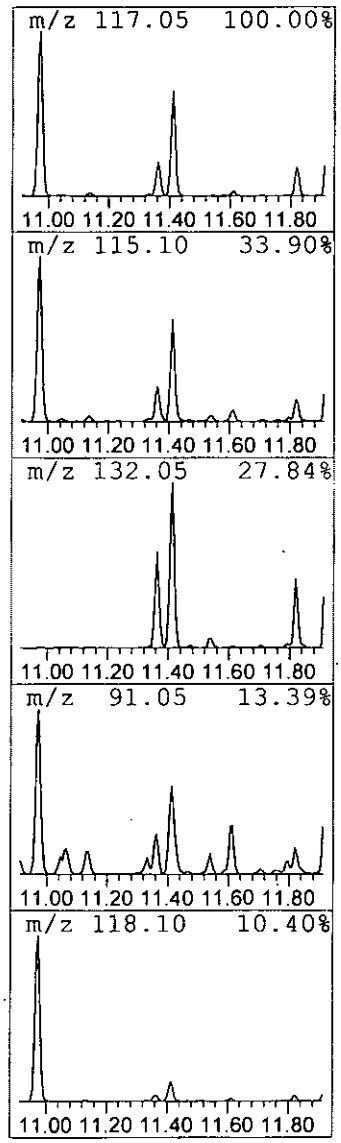
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

**********************************************************************
Peak Number  2  2,3-Dihydro-1-methylindene      Concentration Rank  3
```

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.412	9.77 ppb	870172	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	87
2	Indan, 1-methyl-	132	C10H12	000767-58-8	87
3	Benzene, 1-methyl-2-(2-propenyl)-	132	C10H12	001587-04-8	80
4	Benzene, 1-ethenyl-3-ethyl-, mix...	264	C20H24	055319-72-7	80
5	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	78





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1929.D
Acq On : 31 Dec 2014 4:05 am
Operator : K.Ruest
Sample : R1410307-006|1.0
Misc : PARSONS 11603 T4
ALS Vial : 34 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

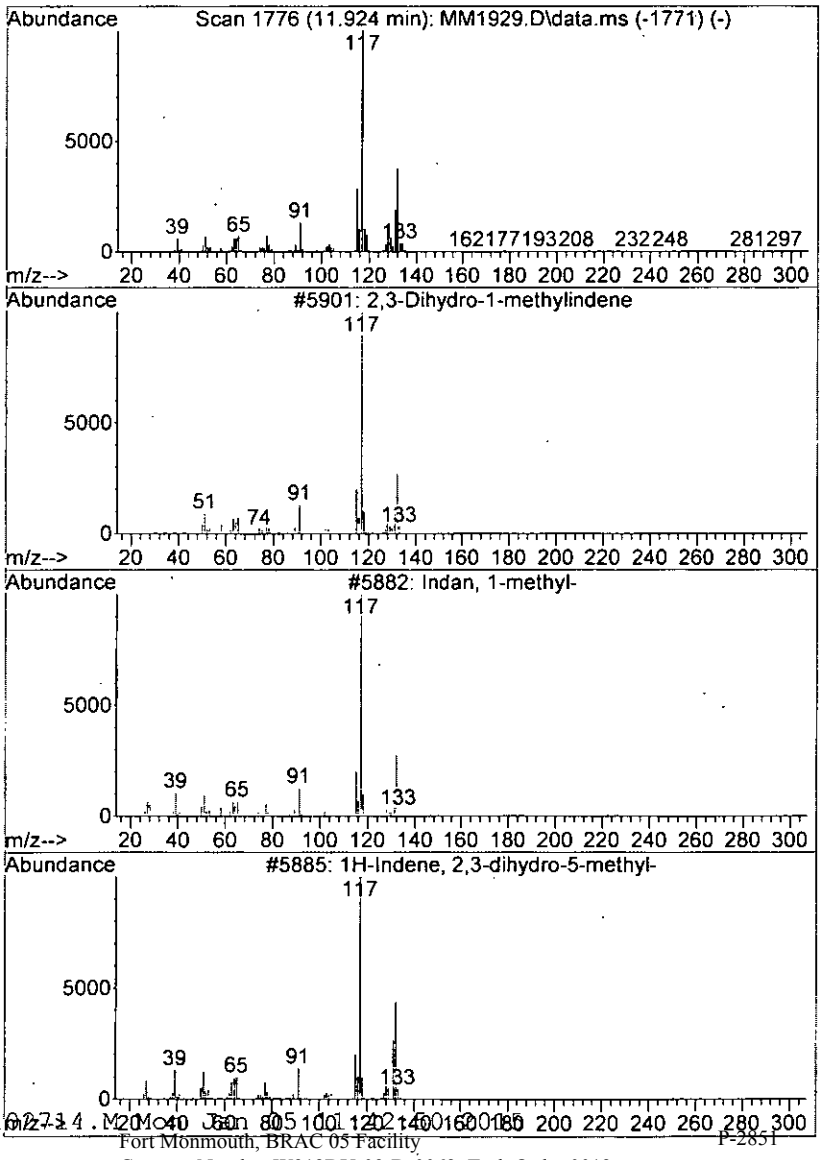
****

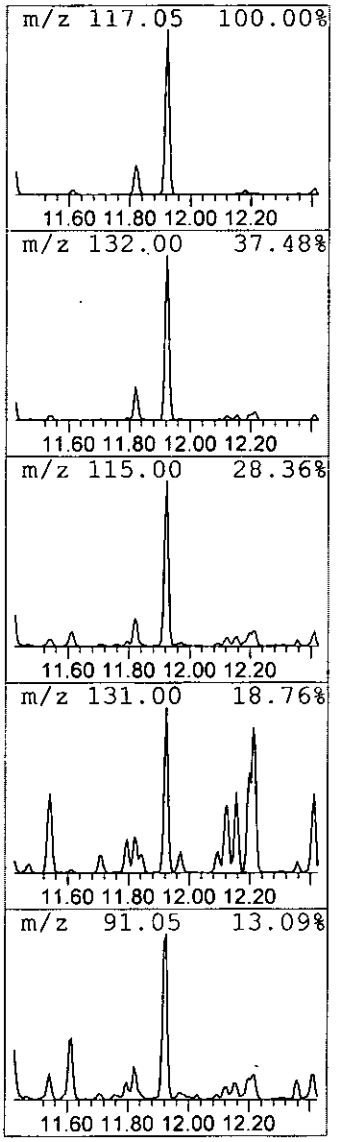
Peak Number 3 2,3-Dihydro-1-methylindene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.924	13.95 ppb	1243450	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	94
2	Indan, 1-methyl-	132	C10H12	000767-58-8	90
3	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	87
4	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	87
5	Benzene, (2-methyl-2-propenyl)-	132	C10H12	003290-53-7	83

already called





Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1929.D
Acq On : 31 Dec 2014 4:05 am
Operator : K.Ruest
Sample : R1410307-006|1.0
Misc : PARSONS 11603 T4
ALS Vial : 34 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Indane	10.973	15.5	ppb	1383200	4	10.748	4455470	50.0
2,3-Dihydro-1-m...	11.412	9.8	ppb	870172	4	10.748	4455470	50.0
2,3-Dihydro-1-m...	11.924	14.0	ppb	1243450	4	10.748	4455470	50.0

00118

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1540
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 04:37
Sample Name:	FTMM-2-GW-M2MW24-16.5	**Units:**	µg/L
Lab Code:	R1410307-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1930.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**0.41**	J	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**0.46**	J	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**2.6**	J	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**0.46**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1540
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 04:37
Sample Name:	FTMM-2-GW-M2MW24-16.5	**Units:**	µg/L
Lab Code:	R1410307-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1930.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	**5.1**		5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**3.5**	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	**0.34**	J	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**1.7**	J	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**1.5**	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**0.60**	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1540
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 04:37
Sample Name:	FTMM-2-GW-M2MW24-16.5	**Units:**	µg/L
Lab Code:	R1410307-007	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1930.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	12/31/14 04:37	
Dibromofluoromethane	100	85-115	12/31/14 04:37	
Toluene-d8	100	85-120	12/31/14 04:37	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/31/14 0437

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-2-GW-M2MW24-16.5
Lab Code: R1410307-007

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q
000496-11-7	Indane	10.97	**15.4**	JN
027133-93-3	2,3-Dihydro-1-methylindene	11.41	**8.4**	JN
000767-58-8	Indan, 1-methyl-	11.92	**13.0**	JN

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-007|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1930.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 4:37 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 12:01:08 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

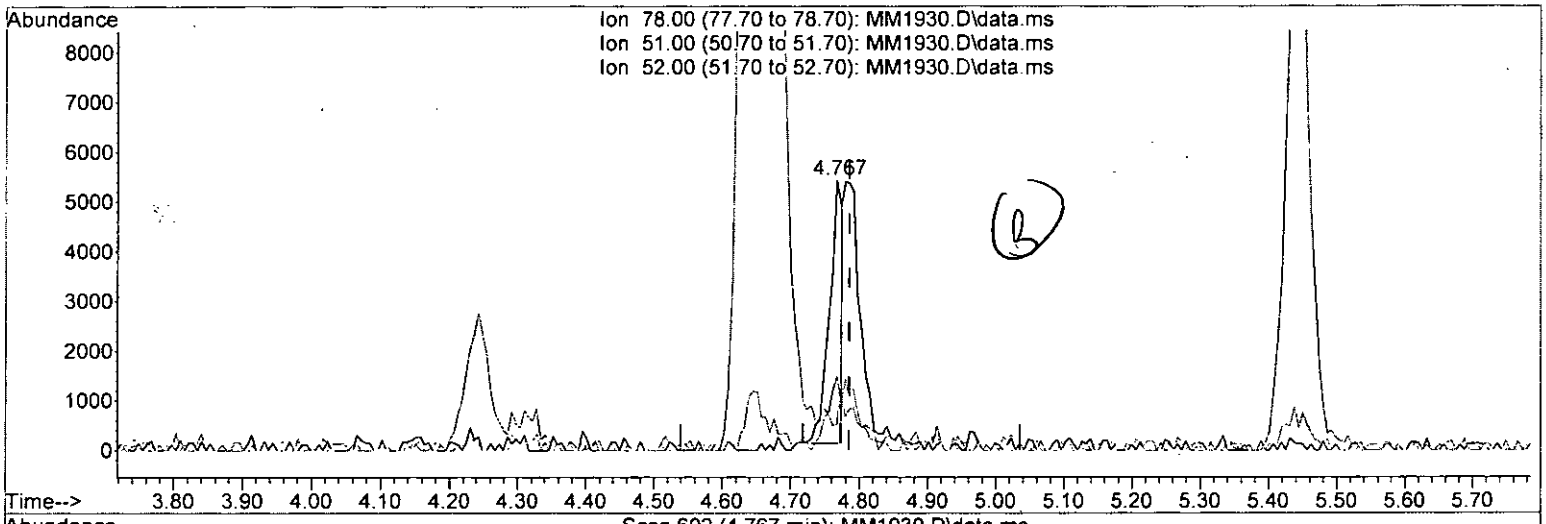
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.243	168	914623	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.444	114	1383688	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1277343	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	697858	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.145	113	402991	50.01	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.02%			
48) surr1,1,2-dichloroetha...	4.658	65	460055	46.89	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 93.78%			
65) SURR3,Toluene-d8	7.316	98	1690209	49.83	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.66%			
70) SURR2,BFB	9.785	95	625349	47.51	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.02%			
Target Compounds						Qvalue
15) Acetone	2.042	43	2017	1.04	ppb	80
49) Benzene	4.767	78	16294m	0.46	ppb	
78) Chlorobenzene	8.766	112	125698	5.08	ppb	95
89) Isopropylbenzene	9.669	105	128894	3.46	ppb	97
95) n-Propylbenzene	10.016	91	71250	1.65	ppb	99
100) tert-Butylbenzene	10.437	119	15723	0.60	ppb	92
103) sec-Butylbenzene	10.614	105	55334	1.51	ppb	98
105) 1,3-Dclbenz	10.699	146	8701	0.46	ppb	90
106) 1,4-Dclbenz	10.766	146	51815	2.64	ppb	96
109) n-Butylbenzene	11.065	91	9588m	0.34	ppb	
110) 1,2-Dclbenz	11.065	146	7159	0.41	ppb	97
116) Hexachlorobt	12.266	225	1081	0.26	ppb	81

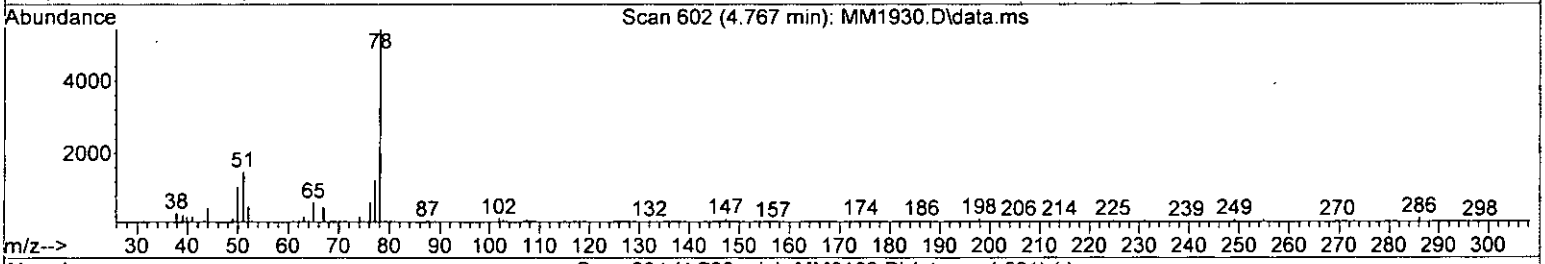
(#) = qualifier out of range (m) = manual integration (+) = signals summed

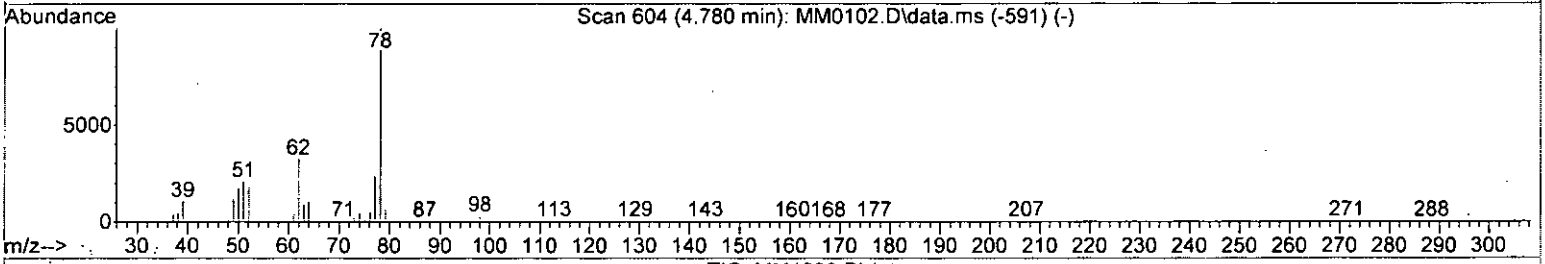
KR 1/5/15

Sample : R1410307-007|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1930.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 4:37 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 04:51:45 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1930.D\data.ms

(49) Benzene (P)

4.767min (-0.018) 0.19 ppb

response 6675

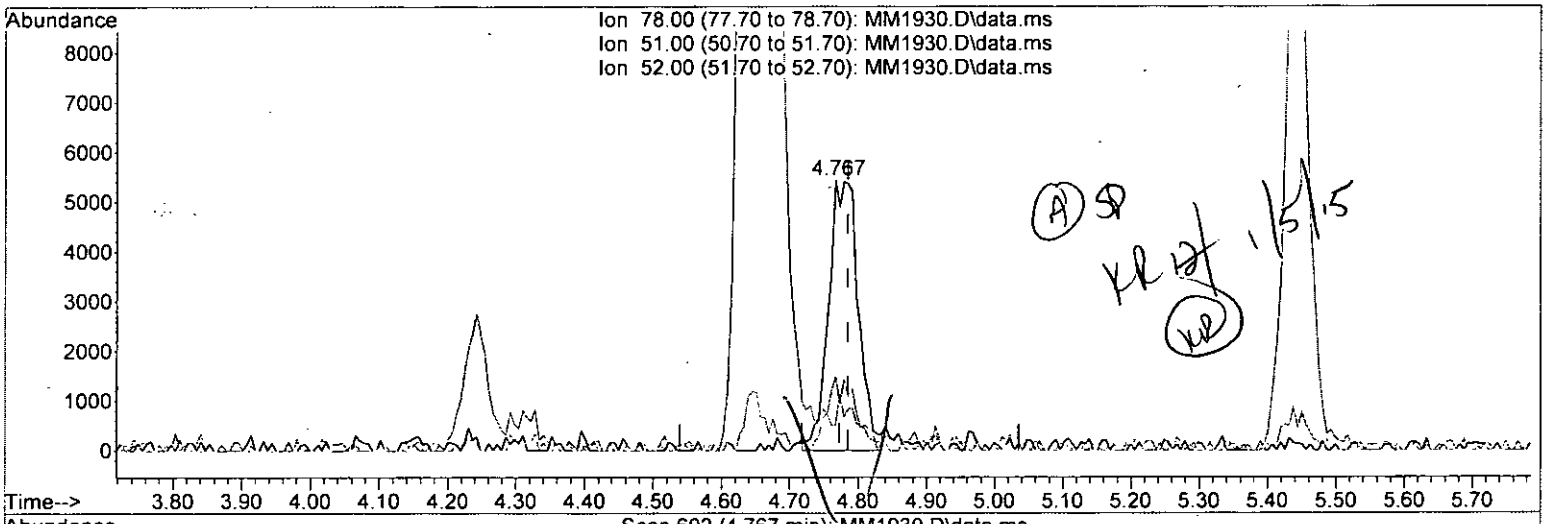
Ion	Exp%	Act%
78.00	100	100
51.00	21.20	27.16
52.00	17.60	9.53
0.00	0.00	0.00

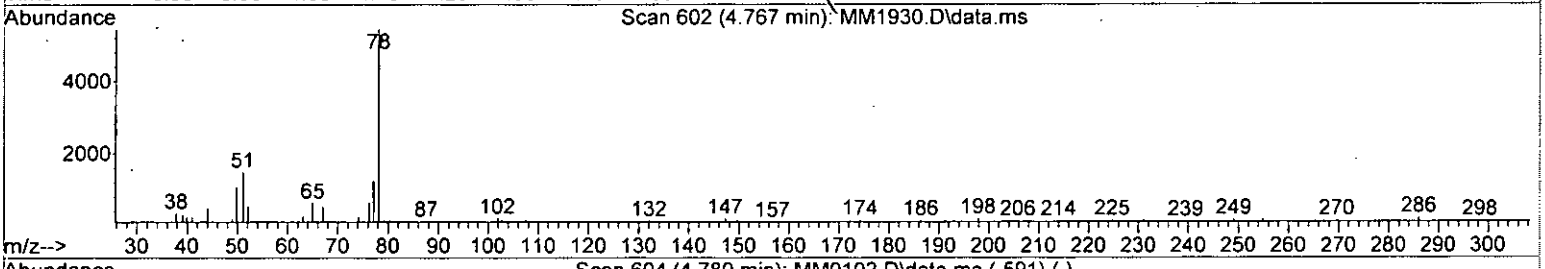
00124

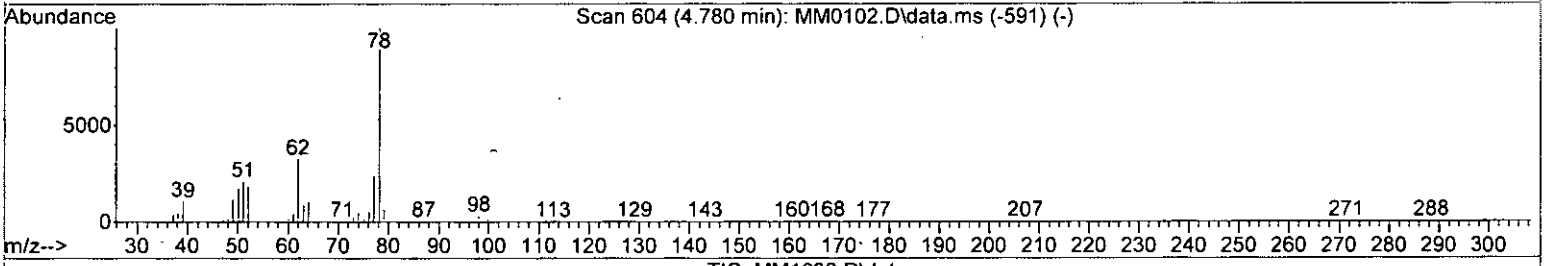
Quantitation Report (Qedit)

Sample : R1410307-007|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1930.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 4:37 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 04:51:45 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1930.D\data.ms

(49) Benzene (P)

4.767min (-0.018) 0.46 ppb m

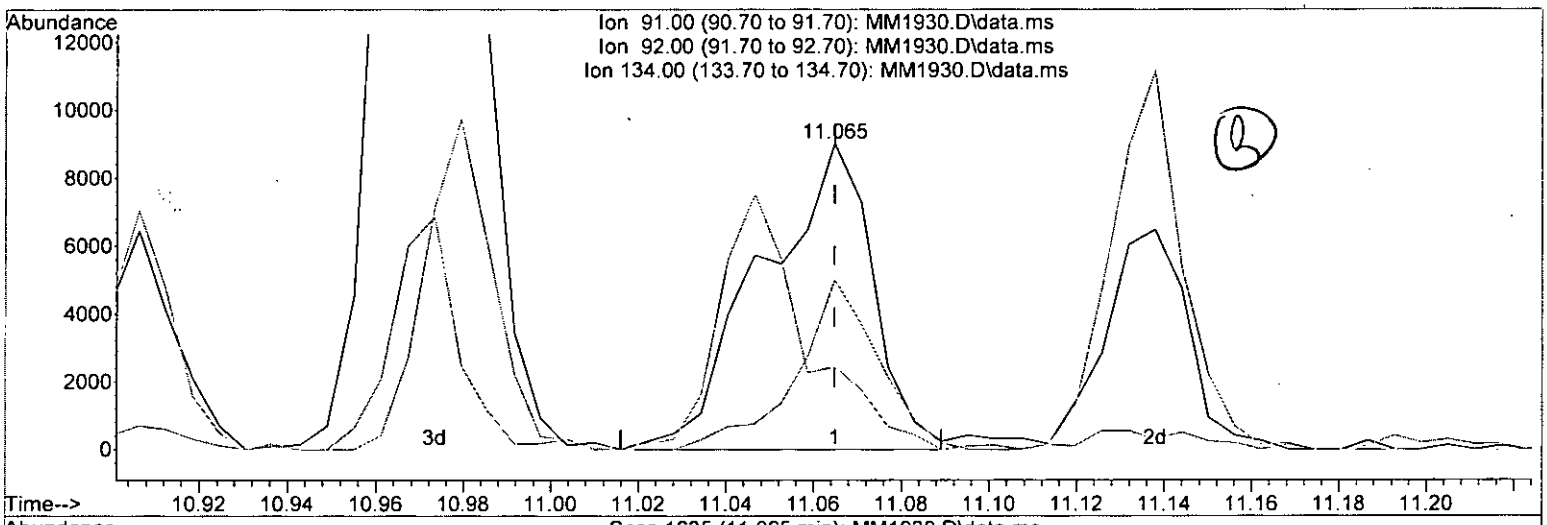
response 16294

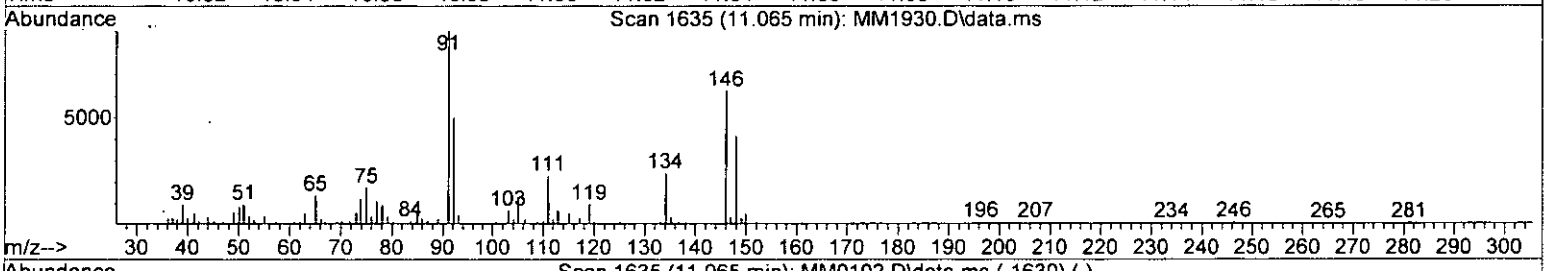
Ion	Exp%	Act%
78.00	100	100
51.00	21.20	27.16
52.00	17.60	9.53
0.00	0.00	0.00

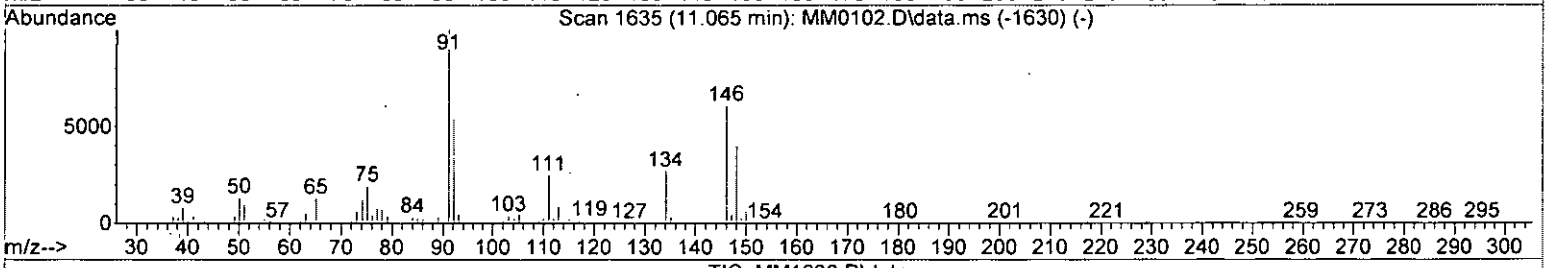
Quantitation Report (Qedit)

Sample : R1410307-007|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1930.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 4:37 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 04:51:45 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1930.D\data.ms

(109) n-Butylbenzene

11.065min (-0.000) 0.56 ppb

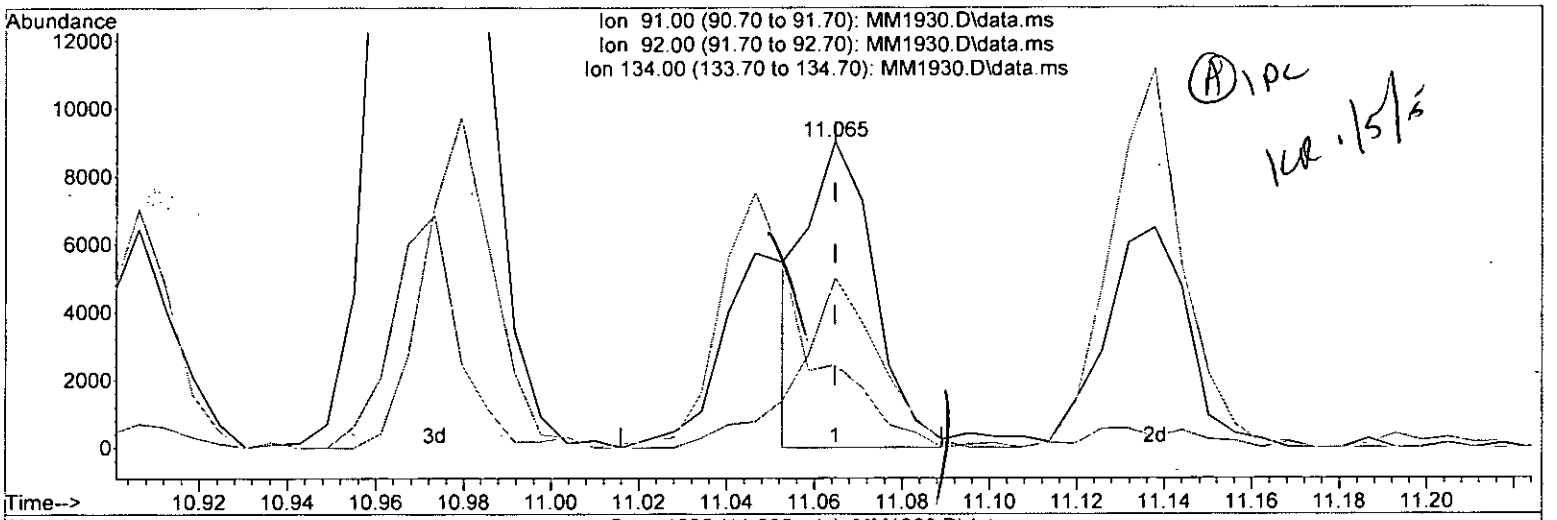
response 15785

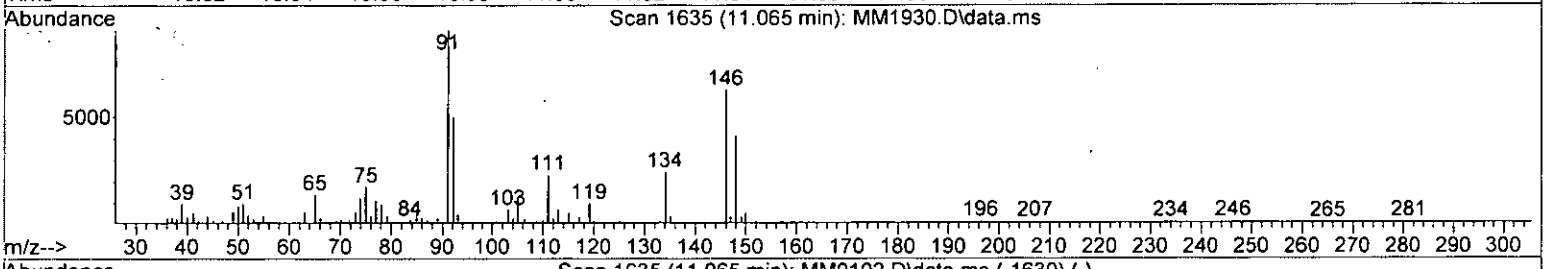
Ion	Exp%	Act%
91.00	100	100
92.00	55.60	55.35
134.00	26.90	26.93
0.00	0.00	0.00

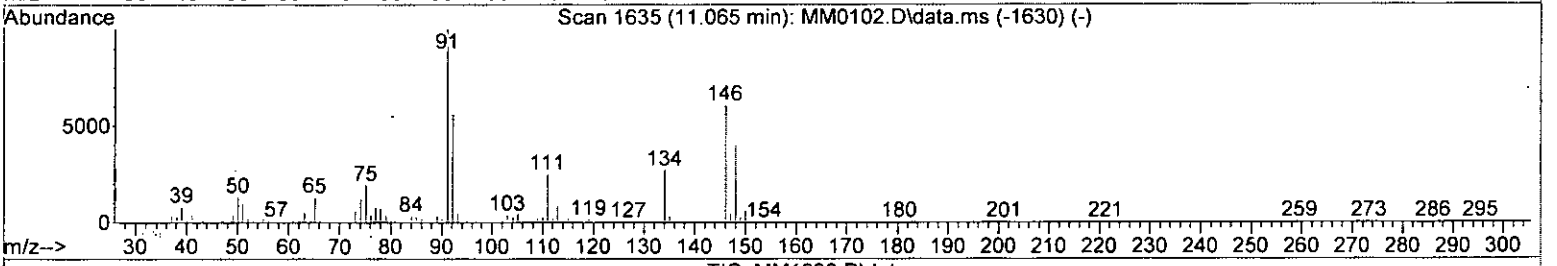
Quantitation Report (Qedit)

Sample : R1410307-007|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1930.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 4:37 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 04:51:45 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1930.D\data.ms

(109) n-Butylbenzene

11.065min (-0.000) 0.34 ppb m

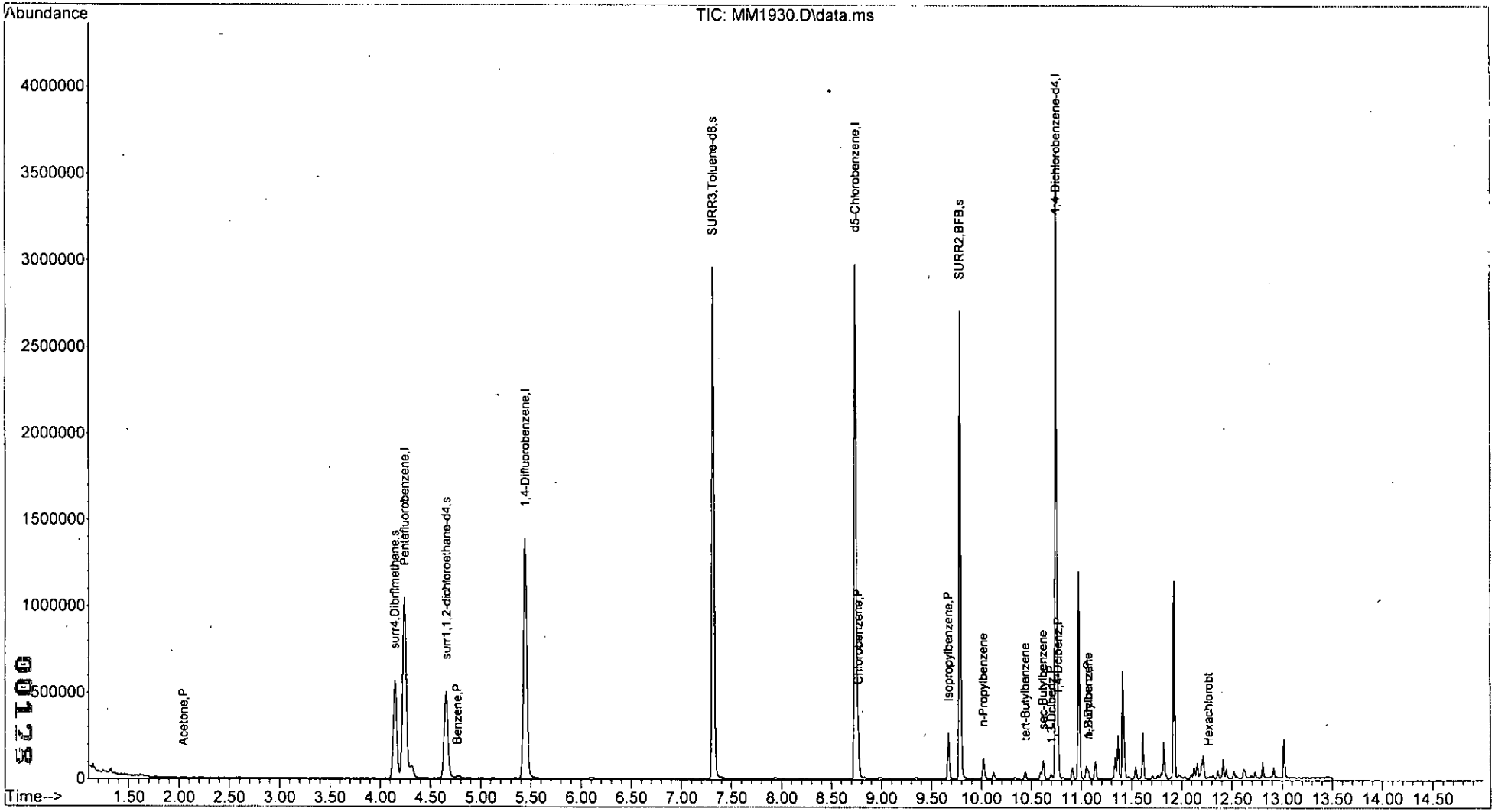
response 9588

Ion	Exp%	Act%
91.00	100	100
92.00	55.60	55.35
134.00	26.90	26.93
0.00	0.00	0.00

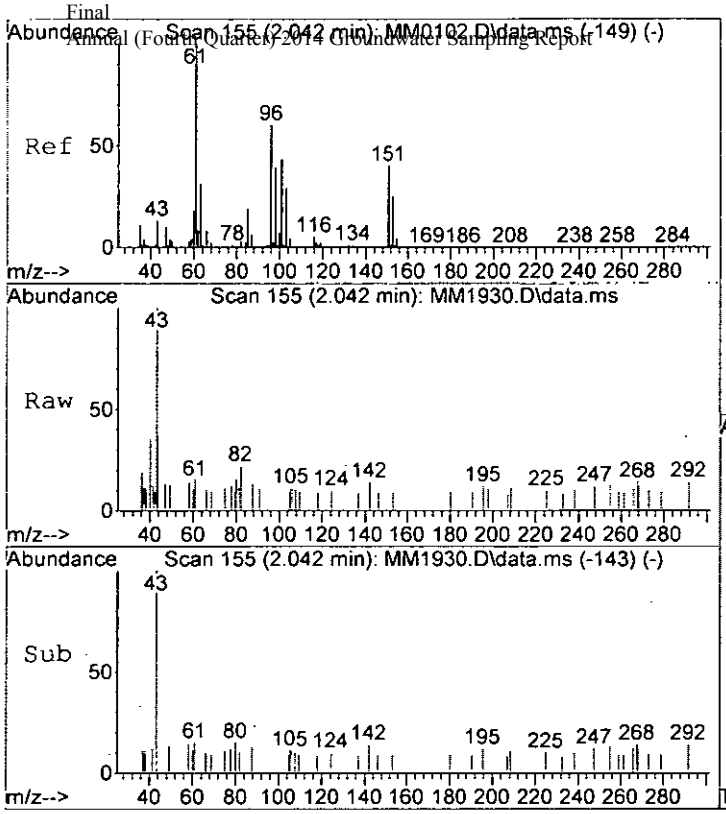
Quantitation Report (QT Reviewed)

Sample : R1410307-007|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1930.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 4:37 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 12:01:08 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



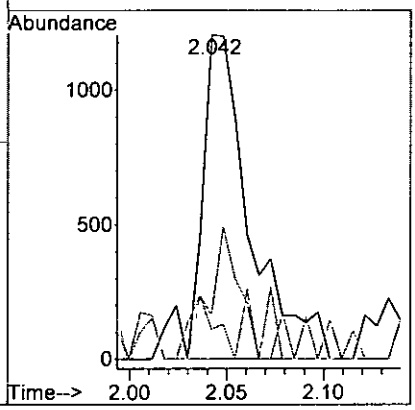
W102714.M Mon Jan 05 12:01:49 2015 Page: 2

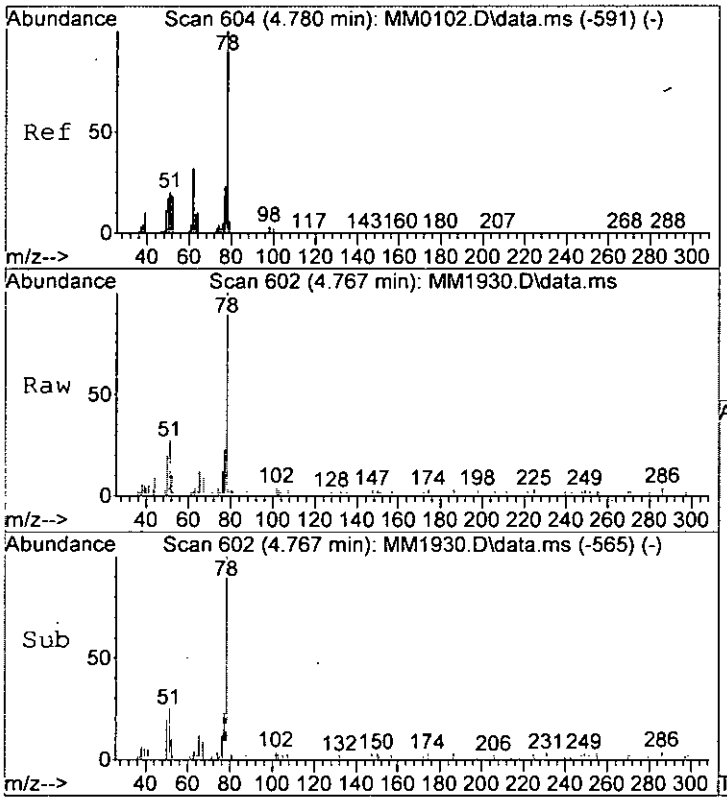


#15
Acetone
Concen: 1.04 ppb
RT: 2.042 min Scan# 155
Delta R.T. -0.000 min
Lab File: MM1930.D
Acq: 31 Dec 2014 4:37 am

Tgt Ion: 43 Resp: 2017

Ion	Ratio	Lower	Upper
43	100		
58	13.7	6.2	46.2
42	9.2	0.0	27.2

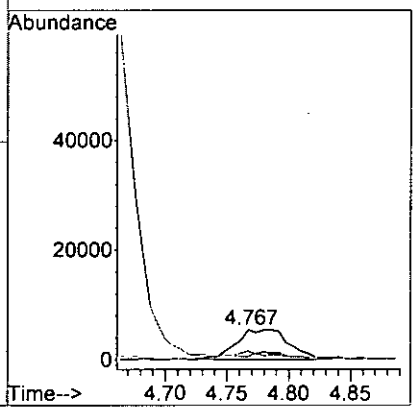


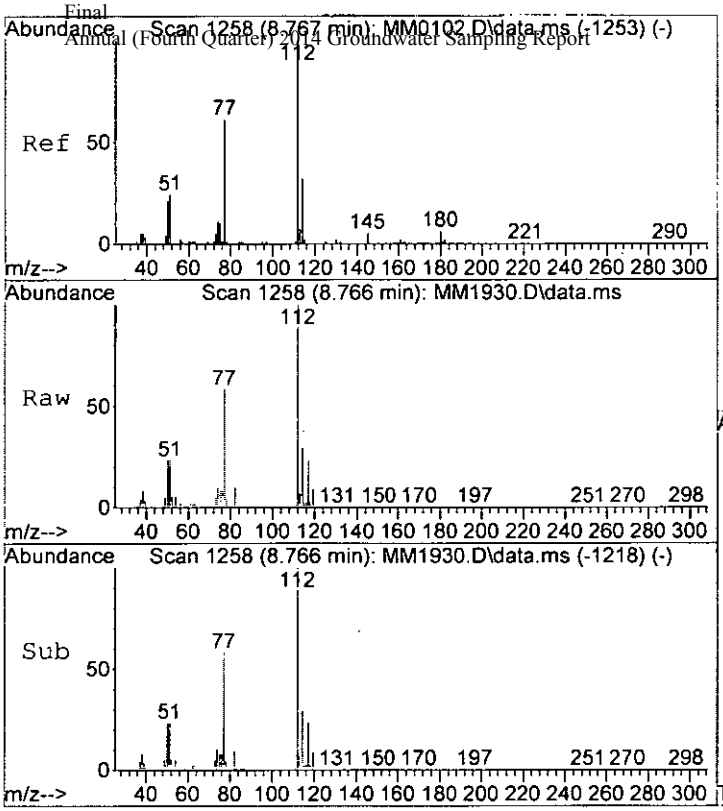


#49
Benzene
Concen: 0.46 ppb m
RT: 4.767 min Scan# 602
Delta R.T. -0.018 min
Lab File: MM1930.D
Acq: 31 Dec 2014 4:37 am

Tgt Ion: 78 Resp: 16294

Ion	Ratio	Lower	Upper
78	100		
51	27.2	1.2	41.2
52	9.5	0.0	37.6

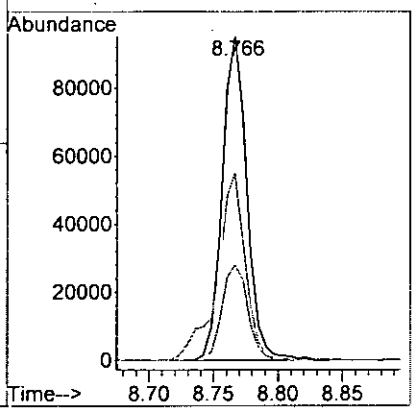


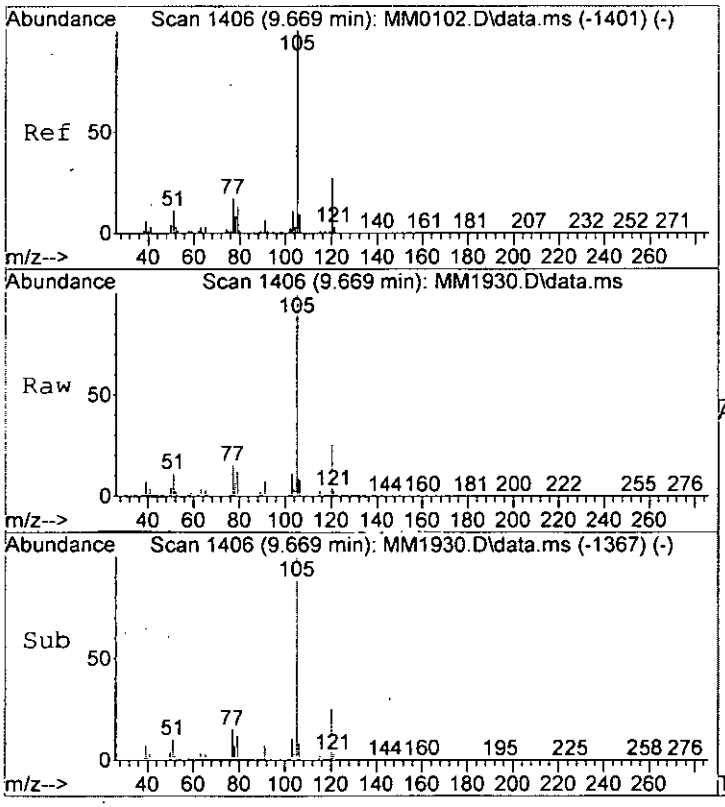


#78
Chlorobenzene
Concen: 5.08 ppb
RT: 8.766 min Scan# 1258
Delta R.T. -0.006 min
Lab File: MM1930.D
Acq: 31 Dec 2014 4:37 am

Tgt Ion:112 Resp: 125698

Ion	Ratio	Lower	Upper
112	100		
114	29.4	12.3	52.3
77	57.8	41.5	81.5

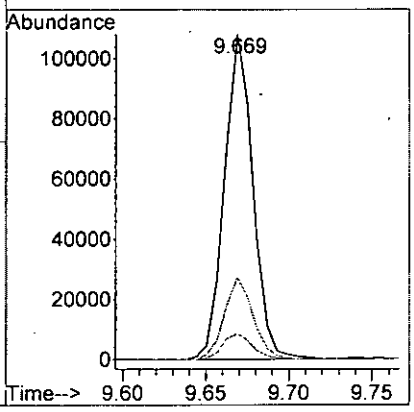


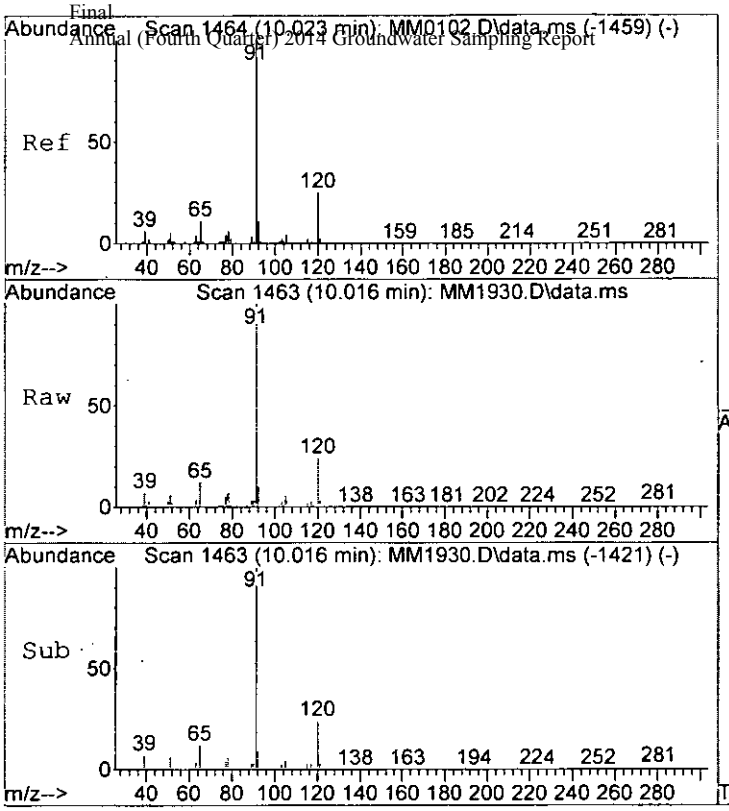


#89
Isopropylbenzene
Concen: 3.46 ppb
RT: 9.669 min Scan# 1406
Delta R.T. -0.006 min
Lab File: MM1930.D
Acq: 31 Dec 2014 4:37 am

Tgt Ion:105 Resp: 128894

Ion	Ratio	Lower	Upper
105	100		
120	25.2	7.0	47.0
106	7.9	0.0	28.8

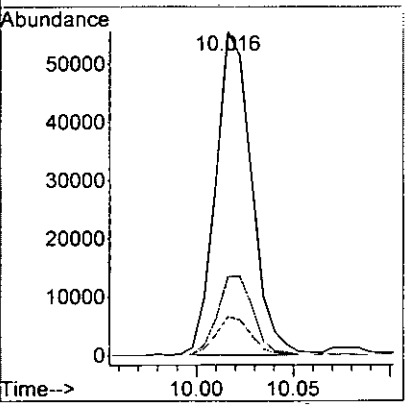


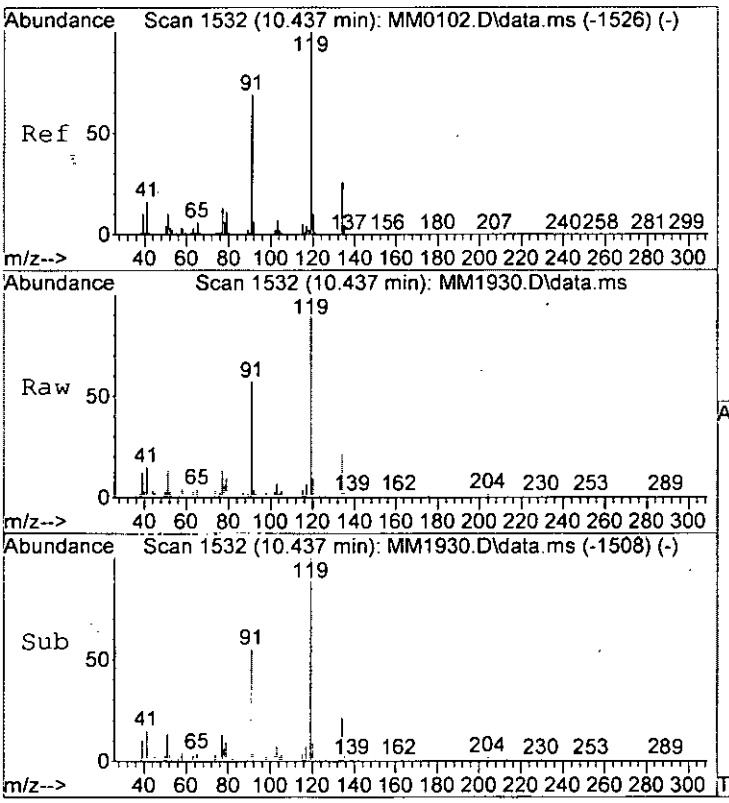


#95
n-Propylbenzene
Concen: 1.65 ppb
RT: 10.016 min Scan# 1463
Delta R.T. -0.006 min
Lab File: MM1930.D
Acq: 31 Dec 2014 4:37 am

Tgt Ion: 91 Resp: 71250

Ion	Ratio	Lower	Upper
91	100		
120	24.2	4.9	44.9
65	11.8	0.0	31.3

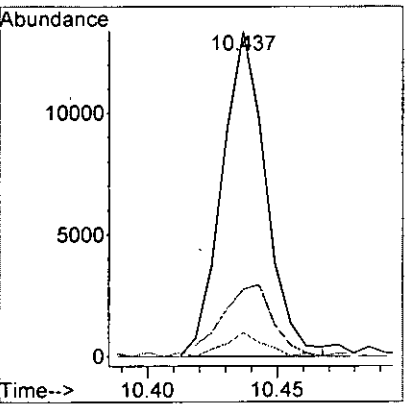


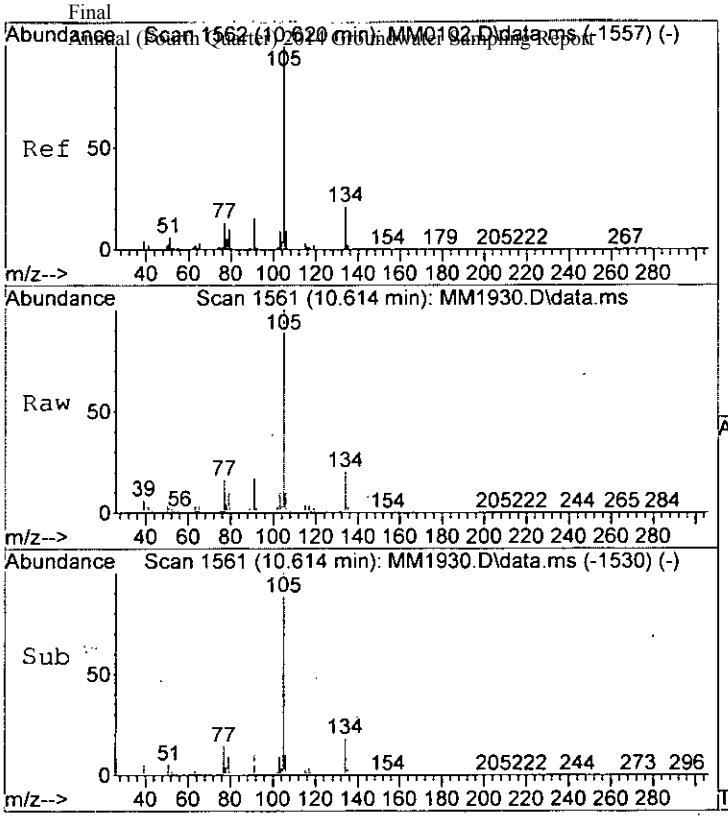


#100
tert-Butylbenzene
Concen: 0.60 ppb
RT: 10.437 min Scan# 1532
Delta R.T. -0.006 min
Lab File: MM1930.D
Acq: 31 Dec 2014 4:37 am

Tgt Ion:119 Resp: 15723

Ion	Ratio	Lower	Upper
119	100		
134	20.5	5.5	45.5
103	7.3	0.0	26.8

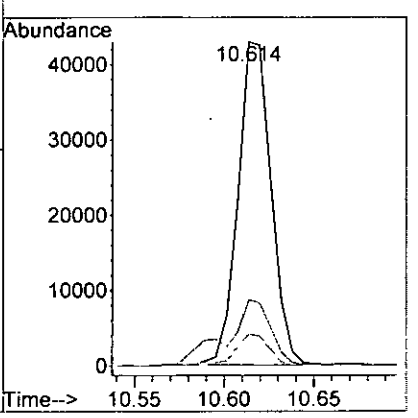


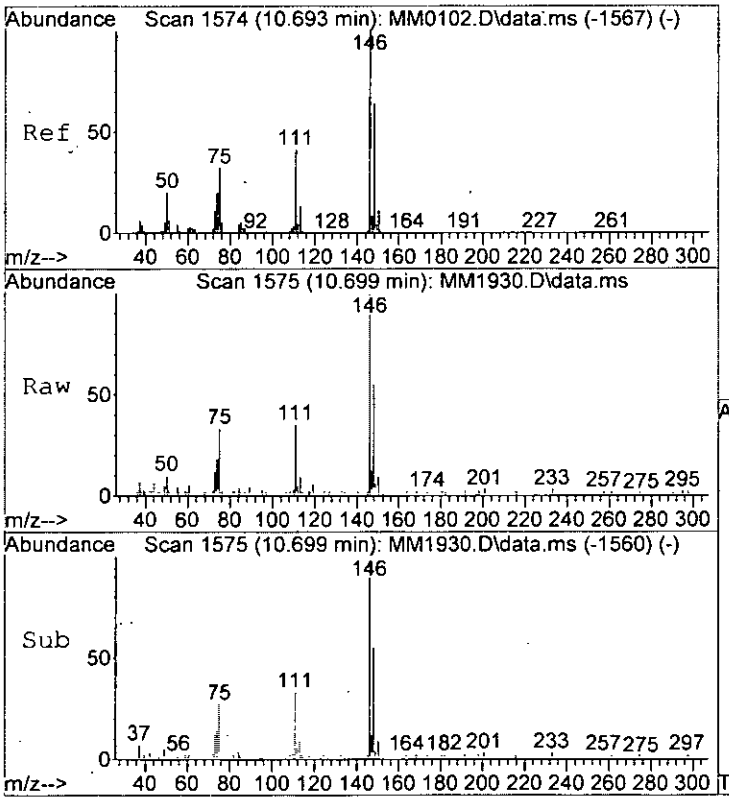


#103
sec-Butylbenzene
Concen: 1.51 ppb
RT: 10.614 min Scan# 1561
Delta R.T. -0.006 min
Lab File: MM1930.D
Acq: 31 Dec 2014 4:37 am

Tgt Ion:105 Resp: 55334

Ion	Ratio	Lower	Upper
105	100		
134	20.3	1.0	41.0
103	9.7	0.0	28.6

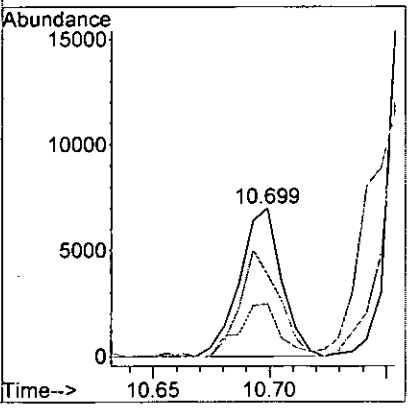


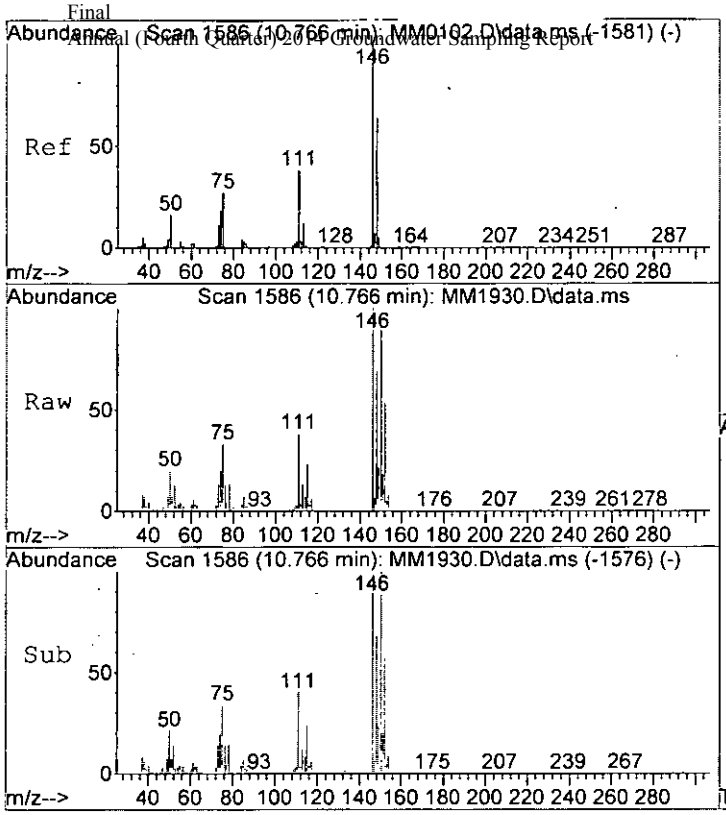


#105
1,3-Dclbenz
Concen: 0.46 ppb
RT: 10.699 min Scan# 1575
Delta R.T. -0.000 min
Lab File: MM1930.D
Acq: 31 Dec 2014 4:37 am

Tgt Ion:146 Resp: 8701

Ion	Ratio	Lower	Upper
146	100		
148	55.2	43.9	83.9
111	35.4	20.5	60.5

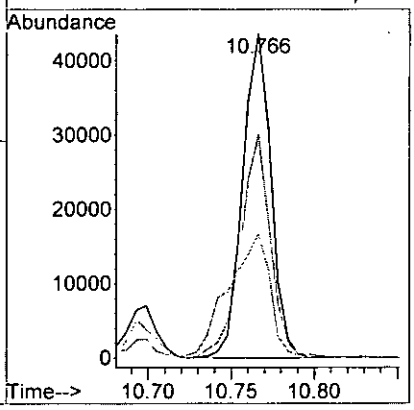


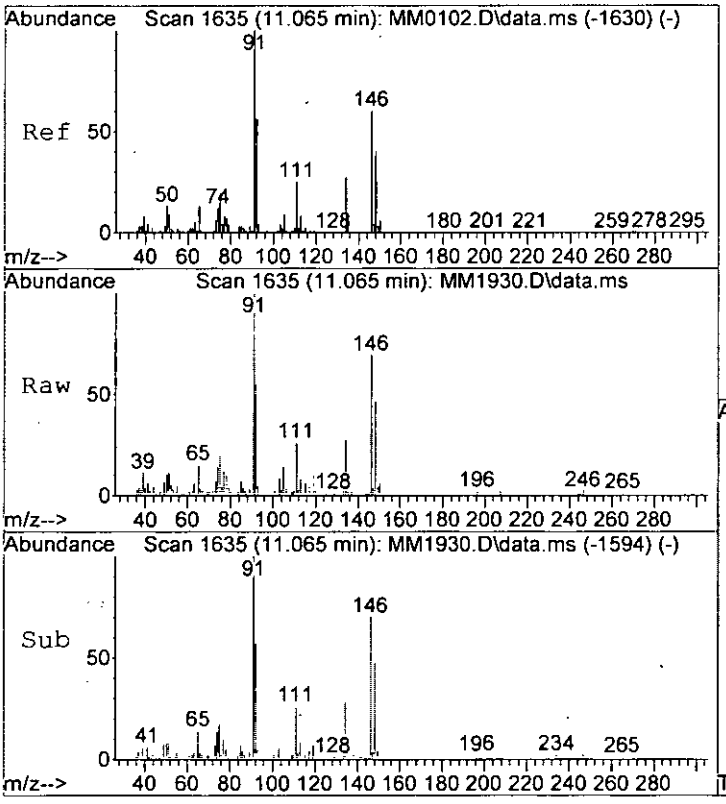


#106
1,4-Dclbenz
Concen: 2.64 ppb
RT: 10.766 min Scan# 1586
Delta R.T. -0.006 min
Lab File: MM1930.D
Acq: 31 Dec 2014 4:37 am

Tgt Ion:146 Resp: 51815

Ion	Ratio	Lower	Upper
146	100		
148	68.8	44.1	84.1
111	38.3	17.8	57.8

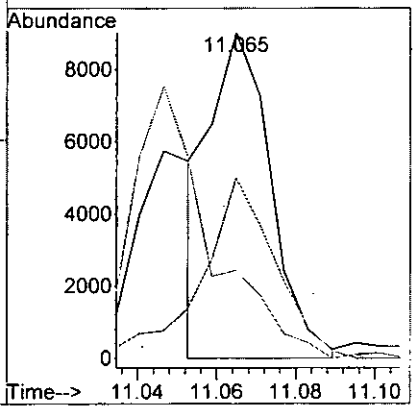


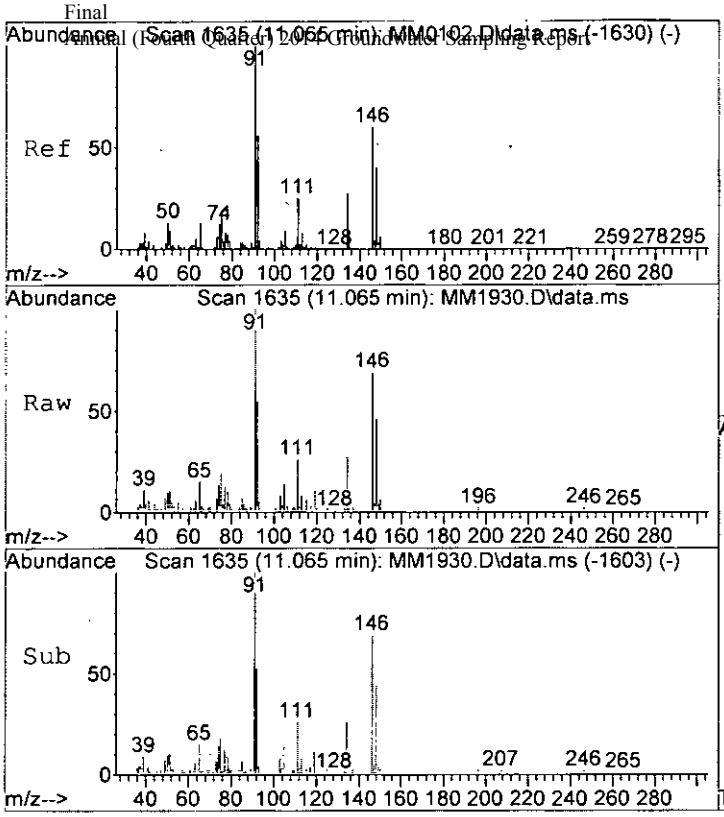


#109
n-Butylbenzene
Concen: 0.34 ppb m
RT: 11.065 min Scan# 1635
Delta R.T. -0.000 min
Lab File: MM1930.D
Acq: 31 Dec 2014 4:37 am

Tgt Ion: 91 Resp: 9588

Ion	Ratio	Lower	Upper
91	100		
92	55.4	35.6	75.6
134	26.9	6.9	46.9

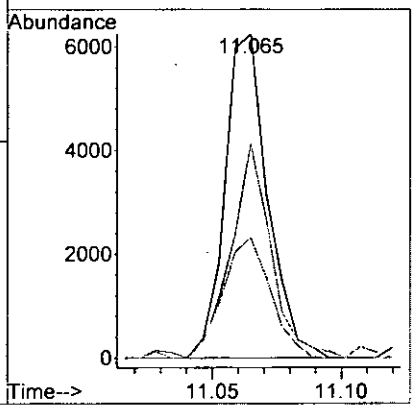


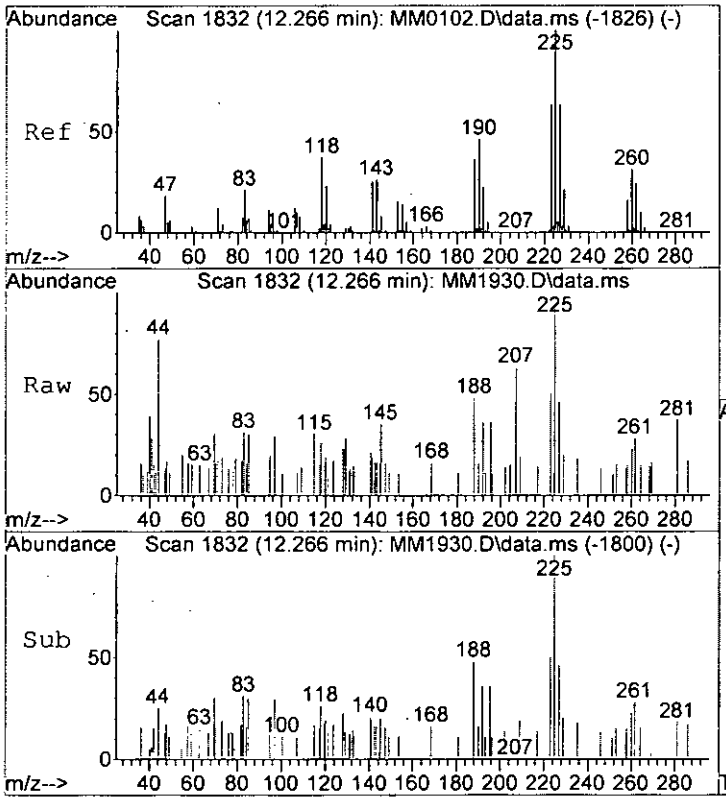


#110
1,2-Dclbenz
Concen: 0.41 ppb
RT: 11.065 min Scan# 1635
Delta R.T. -0.000 min
Lab File: MM1930.D
Acq: 31 Dec 2014 4:37 am

Tgt Ion:146 Resp: 7159

Ion	Ratio	Lower	Upper
146	100		
148	66.1	45.7	85.7
111	37.0	20.8	60.8

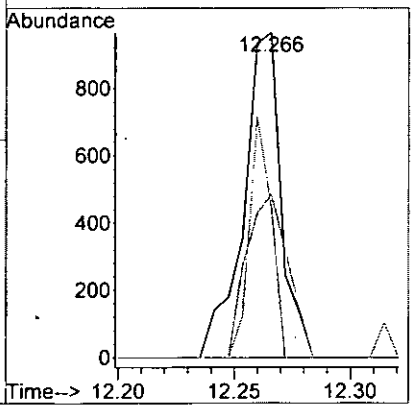




#116
Hexachlorobt
Concen: 0.26 ppb
RT: 12.266 min Scan# 1832
Delta R.T. -0.000 min
Lab File: MM1930.D
Acq: 31 Dec 2014 4:37 am

Tgt Ion:225 Resp: 1081

Ion	Ratio	Lower	Upper
225	100		
223	50.3	42.5	82.5
227	46.2	42.6	82.6



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1930.D
Acq On : 31 Dec 2014 4:37 am
Operator : K.Ruest
Sample : R1410307-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 35 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1930.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.145	490	500	508	rBV	563939	1346107	29.95%	4.298%
2	4.243	508	516	524	rBV	1017612	2437579	54.23%	7.784%
3	4.658	575	584	598	rBV	503256	1284307	28.57%	4.101%
4	5.444	703	713	732	rBV	1386966	3236628	72.01%	10.335%
5	7.316	1014	1020	1031	rBV	2957753	4494627	100.00%	14.353%
6	8.742	1248	1254	1265	rBV	2978940	4389757	97.67%	14.018%
7	9.669	1400	1406	1412	rBV	267876	323890	7.21%	1.034%
8	9.785	1420	1425	1434	rBV	2706466	3165626	70.43%	10.109%
9	10.016	1459	1463	1470	rBV	119705	160703	3.58%	0.513%
10	10.437	1526	1532	1536	rBV2	43974	57766	1.29%	0.184%
11	10.589	1553	1557	1559	rBV	43031	56156	1.25%	0.179%
12	10.614	1559	1561	1569	rVB	108334	130775	2.91%	0.418%
13	10.748	1578	1583	1591	rVB	3626908	4487452	99.84%	14.330%
14	10.906	1605	1609	1614	rBV	68207	80377	1.79%	0.257%
15	10.973	1615	1620	1628	rVV	1200111	1380178	30.71%	4.407%
16	11.047	1628	1632	1641	rVB2	74351	142101	3.16%	0.454%
17	11.138	1641	1647	1653	rBV	105935	130980	2.91%	0.418%
18	11.333	1673	1679	1681	rBV	125286	135103	3.01%	0.431%
19	11.364	1681	1684	1688	rVV	252176	264022	5.87%	0.843%
20	11.412	1688	1692	1699	rVB2	620630	757207	16.85%	2.418%
21	11.540	1708	1713	1717	rVB	71472	80898	1.80%	0.258%
22	11.613	1717	1725	1729	rBV	268355	278931	6.21%	0.891%
23	11.821	1756	1759	1766	rVB	213448	224010	4.98%	0.715%
24	11.924	1771	1776	1780	rVV2	1142422	1170101	26.03%	3.736%
25	12.126	1806	1809	1811	rBV	50941	56073	1.25%	0.179%
26	12.156	1811	1814	1816	rVV2	82215	87678	1.95%	0.280%
27	12.211	1816	1823	1829	rVB3	133366	232385	5.17%	0.742%
28	12.357	1844	1847	1851	rBV	50344	48913	1.09%	0.156%
29	12.412	1851	1856	1859	rVV2	108289	109782	2.44%	0.351%
30	12.443	1859	1861	1868	rVB	56383	52155	1.16%	0.167%
31	12.522	1870	1874	1876	rBV	42544	45388	1.01%	0.145%
32	12.619	1885	1890	1895	rBV2	55622	85319	1.90%	0.272%
33	12.808	1917	1921	1924	rBV	94257	88509	1.97%	0.283%
34	12.918	1932	1939	1941	rBV	60913	70383	1.57%	0.225%
35	13.022	1952	1956	1961	rVB	221940	223887	4.98%	0.715%

LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1930.D
Acq On : 31 Dec 2014 4:37 am
Operator : K.Ruest
Sample : R1410307-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 35 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Sum of corrected areas: 31315753

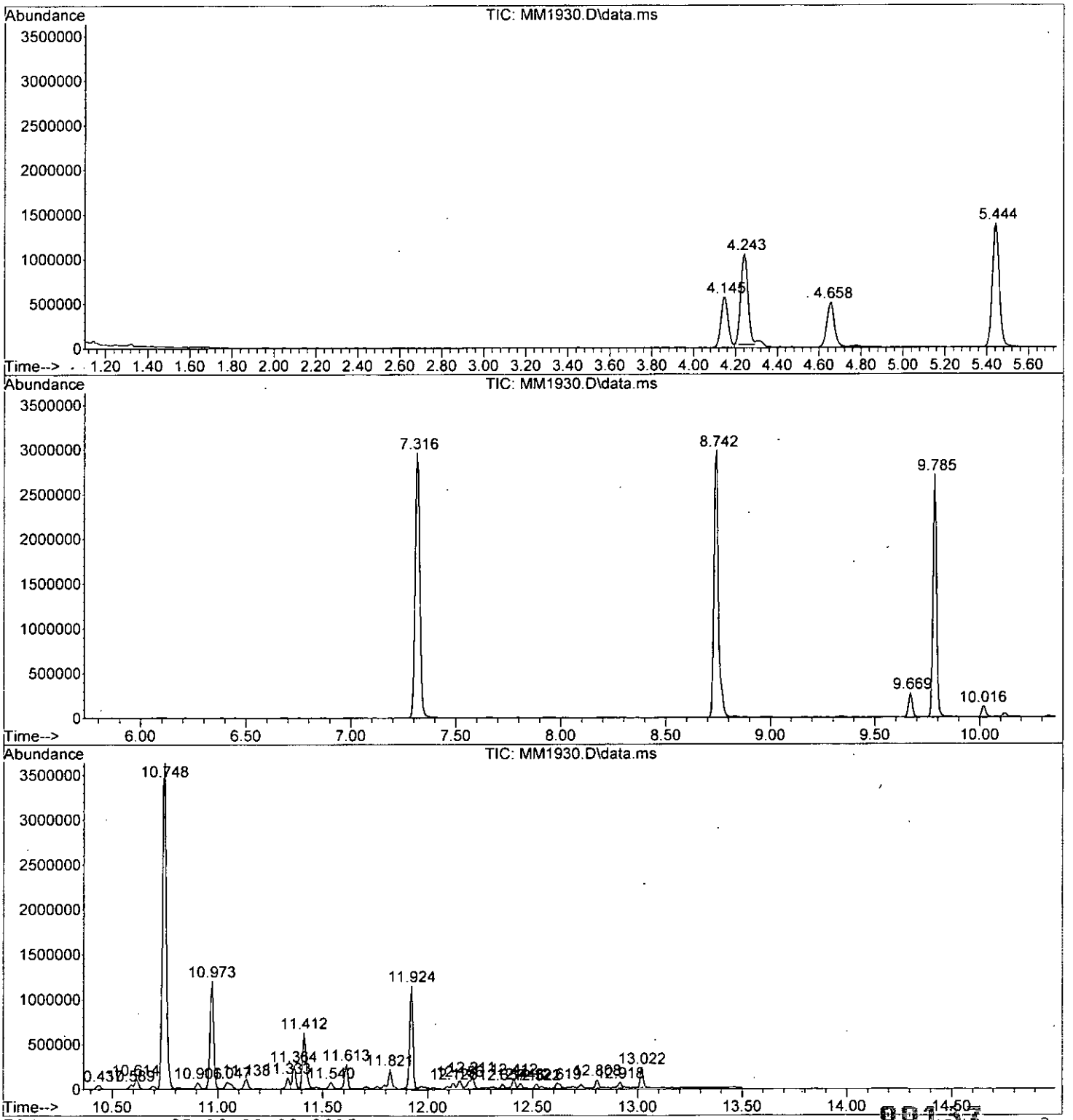
00136

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1930.D
Acq On : 31 Dec 2014 4:37 am
Operator : K.Ruest
Sample : R1410307-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 35 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W102714.M Mon Jan 05 12:02:08 2015 Page: 3

Library Search Compound Report

```
Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1930.D
Acq On    : 31 Dec 2014    4:37 am
Operator  : K.Ruest
Sample    : R1410307-007|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 35   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

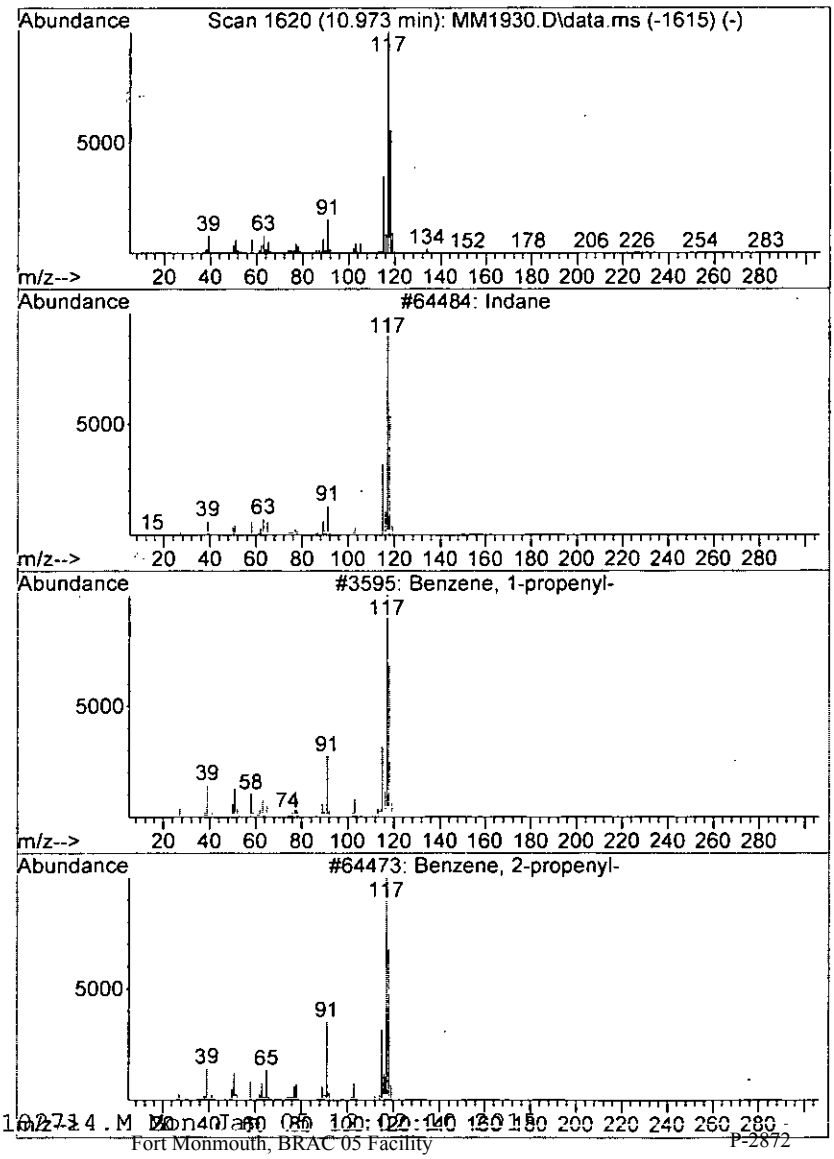
TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```

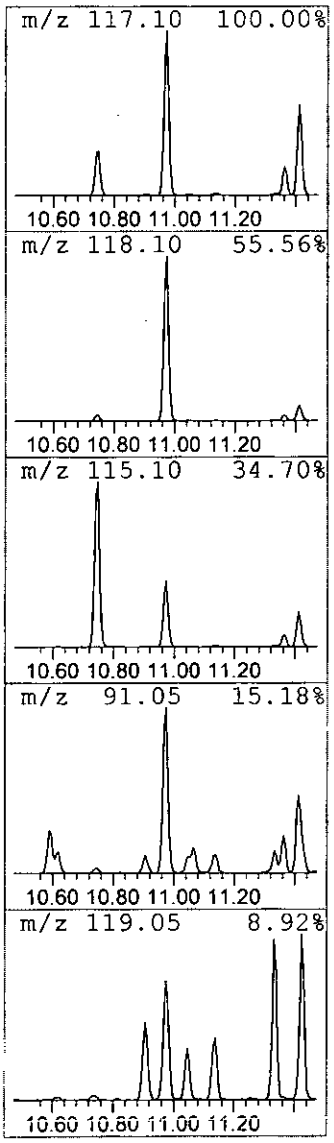
****

Peak Number 1 Indane — Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.973	15.38 ppb	1380180	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indane	118	C9H10	000496-11-7	94
2	Benzene, 1-propenyl-	118	C9H10	000637-50-3	87
3	Benzene, 2-propenyl-	118	C9H10	000300-57-2	83
4	Benzeneethanol, .beta.-ethenyl-	148	C10H12O	006052-63-7	83
5	Benzene, cyclopropyl-	118	C9H10	000873-49-4	81





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1930.D
Acq On : 31 Dec 2014 4:37 am
Operator : K.Ruest
Sample : R1410307-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 35 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

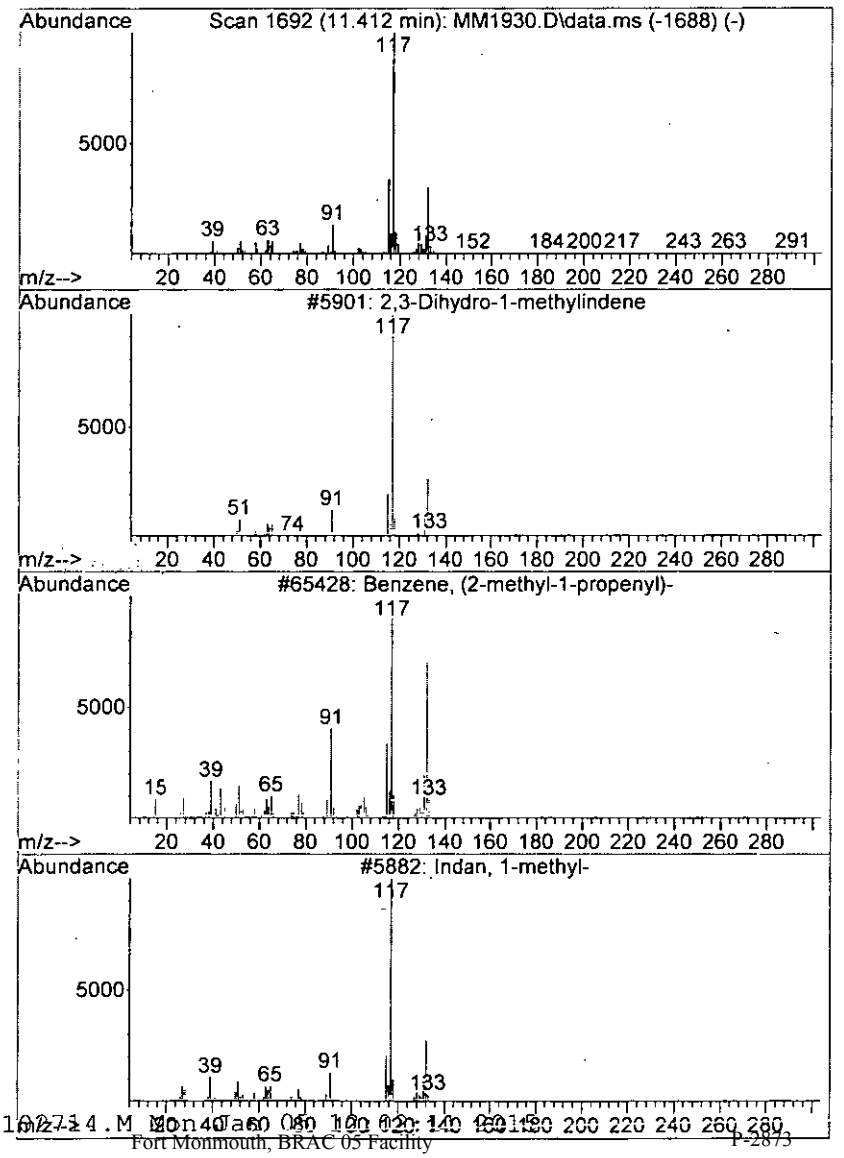
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

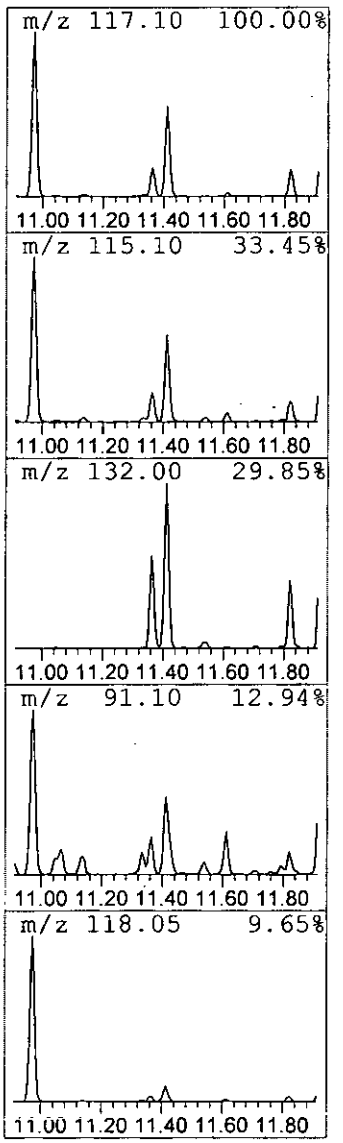
****

Peak Number 2 2,3-Dihydro-1-methylindene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.412	8.44 ppb	757207	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	91
2	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	91
3	Indan, 1-methyl-	132	C10H12	000767-58-8	87
4	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	87
5	Benzene, 1-methyl-4-(2-propenyl)-	132	C10H12	003333-13-9	86





Library Search Compound Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1930.D
Acq On : 31 Dec 2014 4:37 am
Operator : K.Ruest
Sample : R1410307-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 35 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

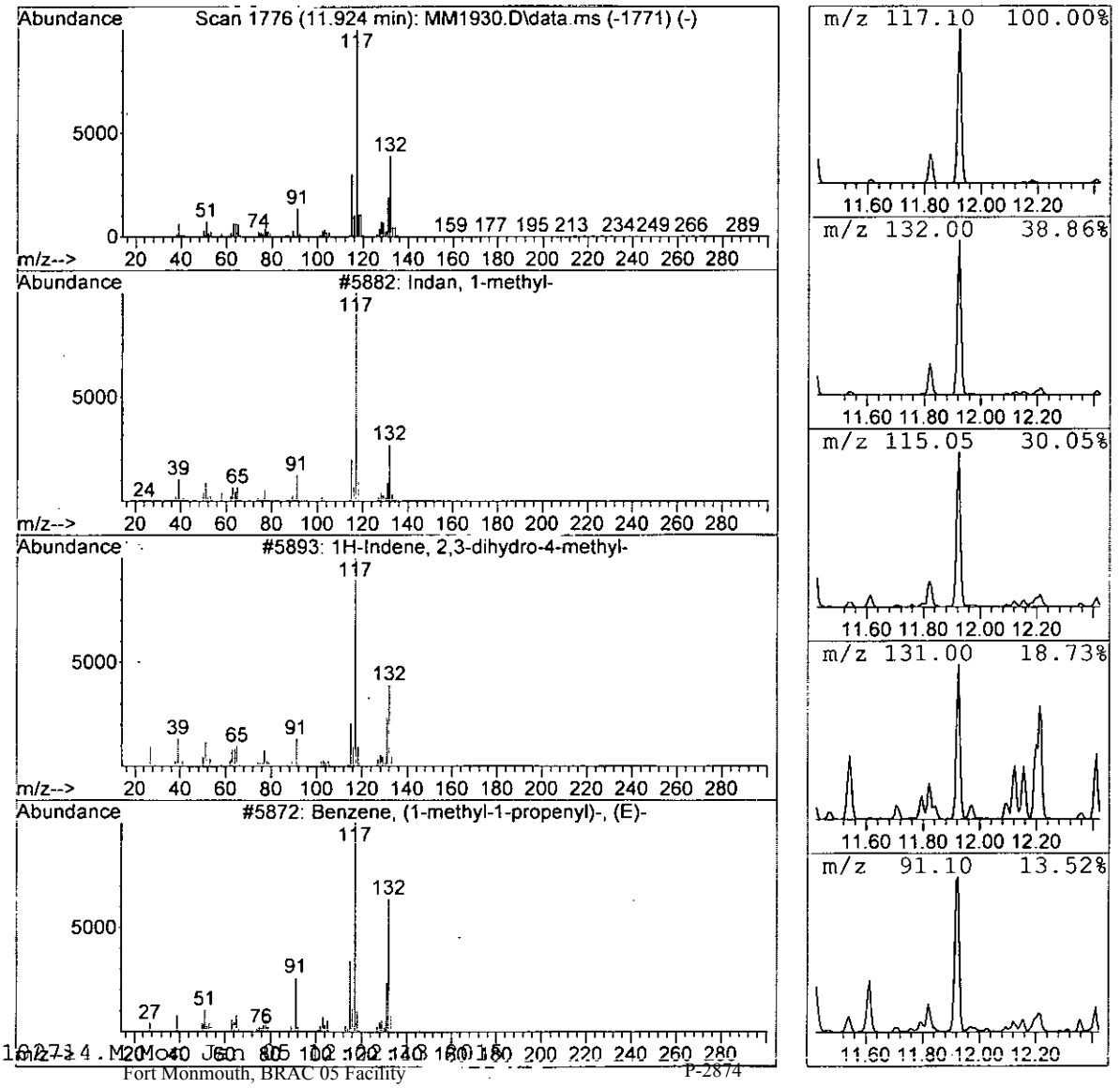
TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****

Peak Number 3 Indan, 1-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.924	13.04 ppb	1170100	1,4-Dichlorobenzene-d4	10.748

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indan, 1-methyl-	132	C10H12	000767-58-8	90
2	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	87
3	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	87
4	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	87
5	1H-Indene, 2,3-dihydro-5-methyl-	132	C10H12	000874-35-1	87



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1930.D
Acq On : 31 Dec 2014 4:37 am
Operator : K.Ruest
Sample : R1410307-007|1.0
Misc : PARSONS 11603 T4
ALS Vial : 35 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc
Indane	10.973	15.4	ppb	1380180	4	10.748	4487450	50.0
2,3-Dihydro-1-m...	11.412	8.4	ppb	757207	4	10.748	4487450	50.0
Indan, 1-methyl-	11.924	13.0	ppb	1170100	4	10.748	4487450	50.0

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1500
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 05:09
Sample Name:	FTMM-2-GW-M2MW11-36.91	**Units:**	µg/L
Lab Code:	R1410307-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1931.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1500
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 05:09
Sample Name:	FTMM-2-GW-M2MW11-36.91	**Units:**	µg/L
Lab Code:	R1410307-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1931.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1500
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 05:09
Sample Name:	FTMM-2-GW-M2MW11-36.91	**Units:**	µg/L
Lab Code:	R1410307-008	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1931.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/31/14 05:09	
Dibromofluoromethane	99	85-115	12/31/14 05:09	
Toluene-d8	100	85-120	12/31/14 05:09	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 0509

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-2-GW-M2MW11-36.91	**Units:**	µg/L
Lab Code:	R1410307-008	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-008|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1931.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 5:09 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 12:03:55 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.243	168	901661	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.444	114	1374741	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1256316	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	675207	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.145	113	394573	49.29	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.58%			
48) surr1,1,2-dichloroetha...	4.658	65	462239	47.42	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 94.84%			
65) SURR3,Toluene-d8	7.316	98	1678940	49.82	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.64%			
70) SURR2,BFB	9.785	95	615578	47.07	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 94.14%			
Target Compounds						Qvalue
15) Acetone	2.054	43	2199	1.15	ppb	91
23) TBA	2.402	59	658	1.05	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

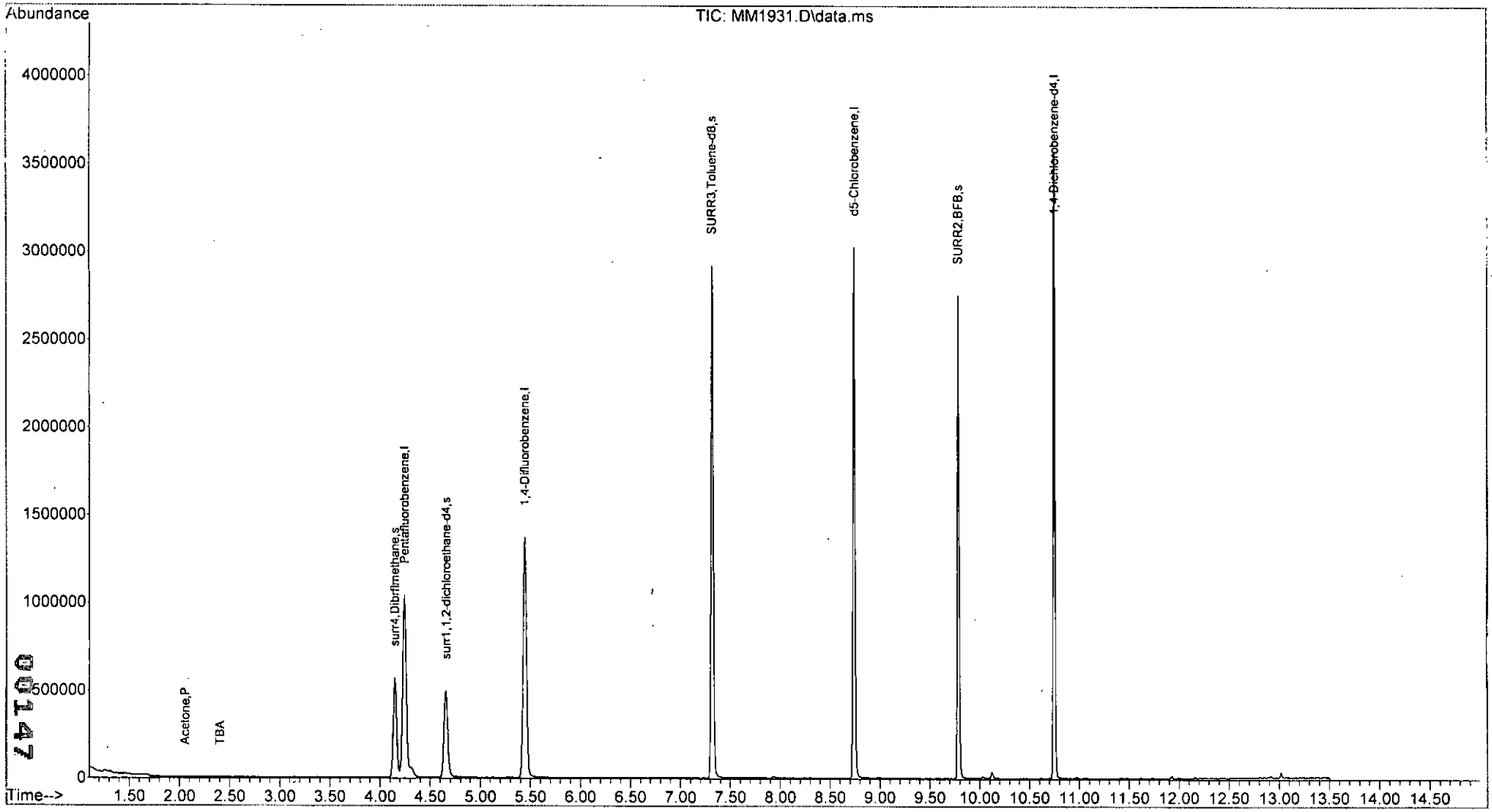
KL 1/5/15

00146

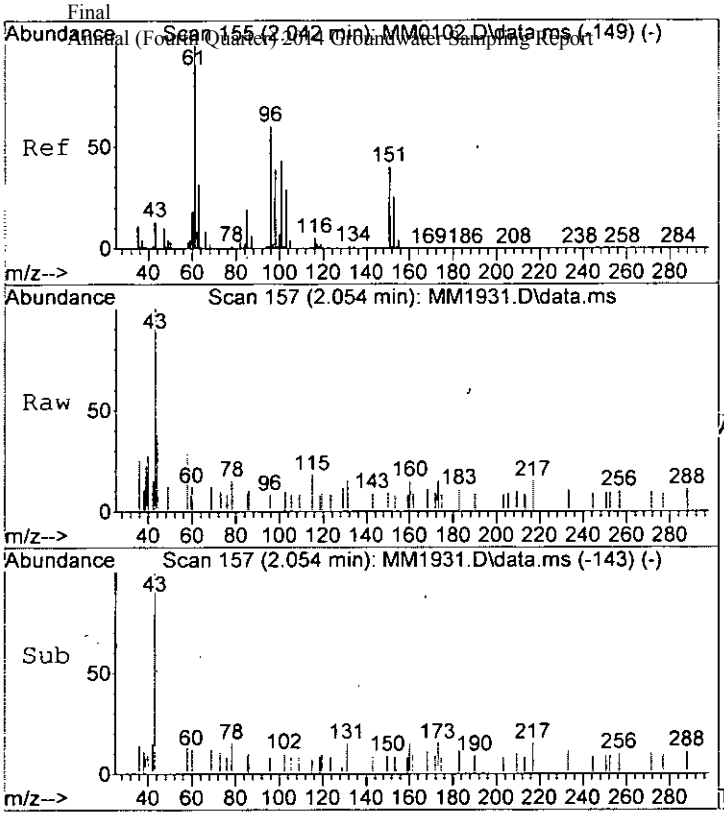
Quantitation Report (QT Reviewed)

Sample : R1410307-008|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1931.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 5:09 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 12:03:55 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



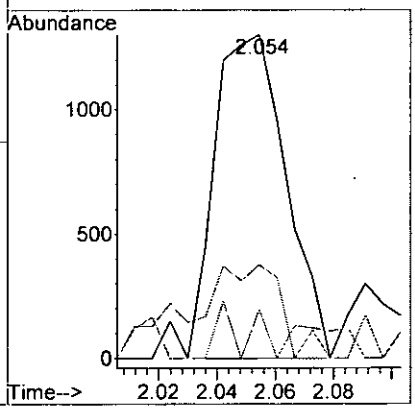
W102714.M Mon Jan 05 12:04:16 2015 Page: 2

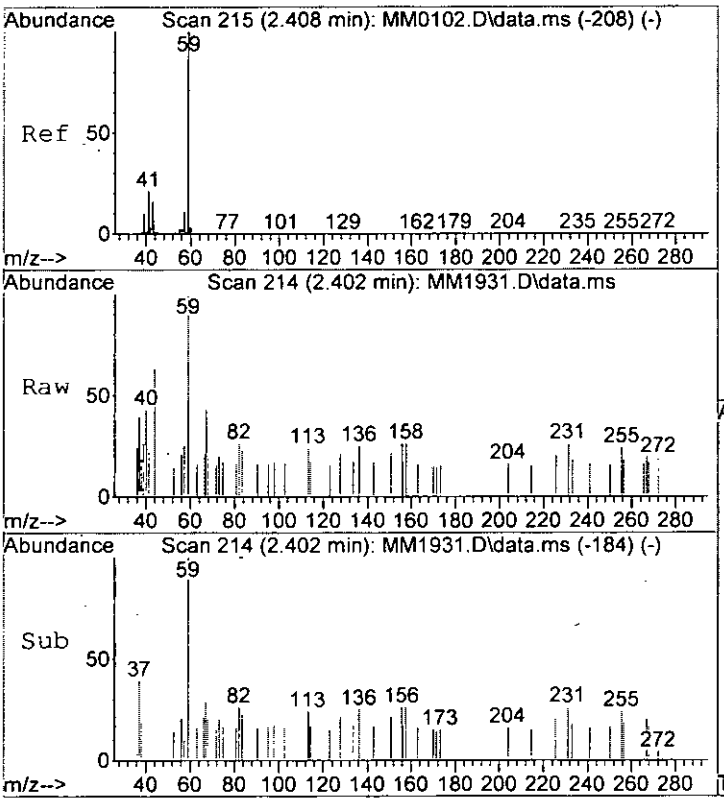


#15
Acetone
Concen: 1.15 ppb
RT: 2.054 min Scan# 157
Delta R.T. 0.012 min
Lab File: MM1931.D
Acq: 31 Dec 2014 5:09 am

Tgt Ion: 43 Resp: 2199

Ion	Ratio	Lower	Upper
43	100		
58	28.8	6.2	46.2
42	15.0	0.0	27.2

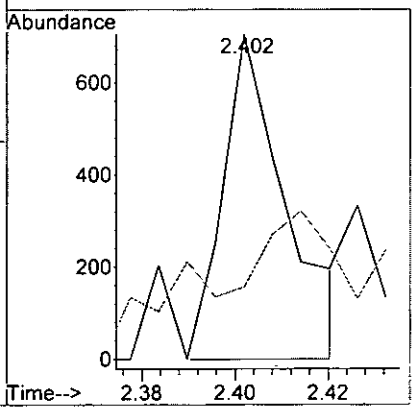




#23
TBA
Concen: 1.05 ppb
RT: 2.402 min Scan# 214
Delta R.T. -0.006 min
Lab File: MM1931.D
Acq: 31 Dec 2014 5:09 am

Tgt Ion: 59 Resp: 658

Ion	Ratio	Lower	Upper
59	100		
41	22.0	3.4	43.4



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1931.D
Acq On : 31 Dec 2014 5:09 am
Operator : K.Ruest
Sample : R1410307-008|1.0
Misc : PARSONS 11603 T4
ALS Vial : 36 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1931.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.145	491	500	508	rBV	564161	1323379	29.50%	5.502%
2	4.243	508	516	524	rVV	1005879	2405583	53.62%	10.001%
3	4.658	573	584	599	rBV	493412	1293874	28.84%	5.379%
4	5.444	704	713	725	rBV	1368713	3185638	71.01%	13.244%
5	7.316	1014	1020	1032	rBV	2916677	4486498	100.00%	18.652%
6	8.742	1248	1254	1262	rBV	3021615	3950316	88.05%	16.423%
7	9.785	1420	1425	1434	rBV	2749012	3150299	70.22%	13.097%
8	10.120	1476	1480	1485	rBV	36788	47361	1.06%	0.197%
9	10.748	1578	1583	1594	rBV	3571353	4210440	93.85%	17.505%

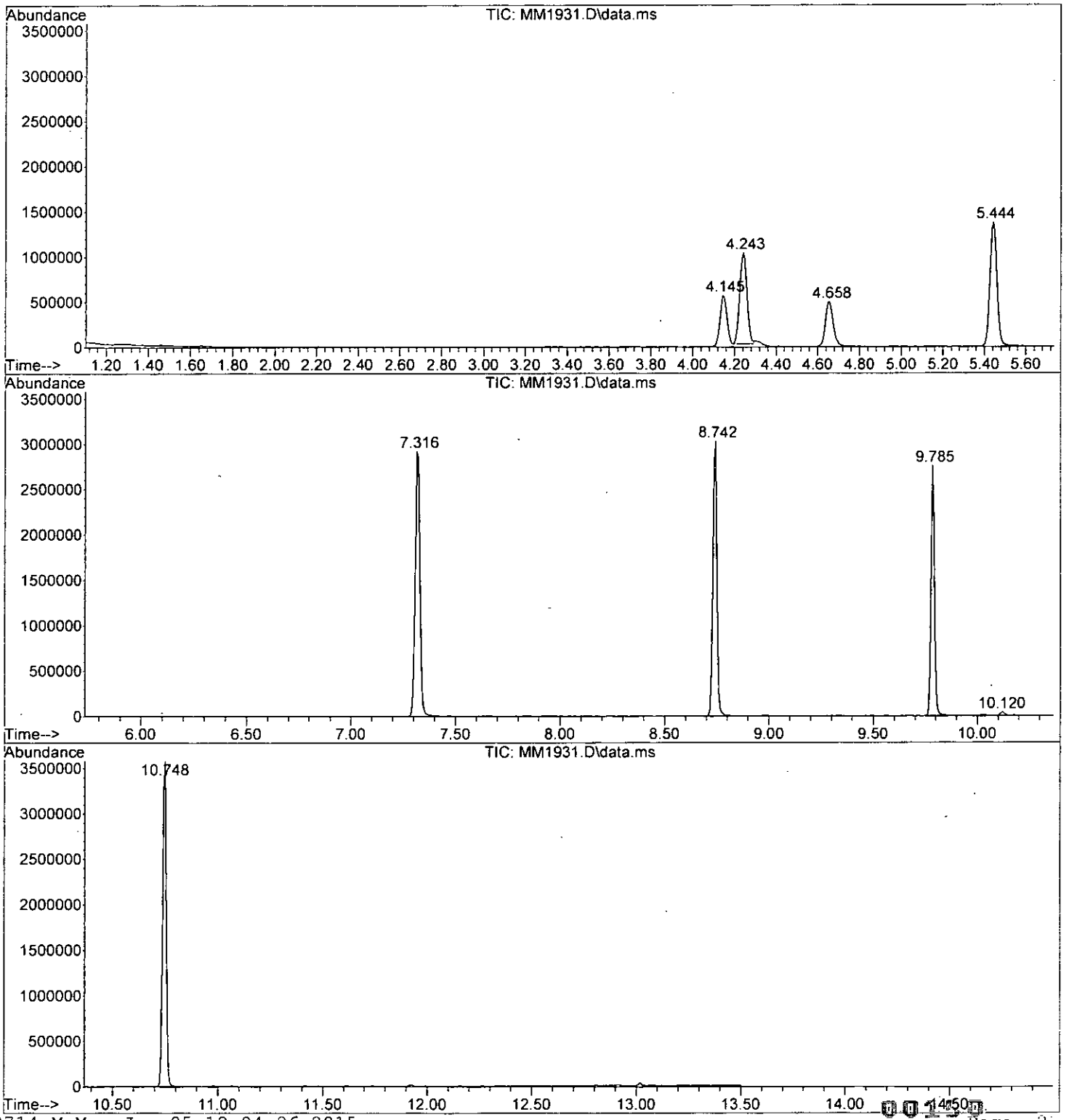
Sum of corrected areas: 24053388

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1931.D
Acq On : 31 Dec 2014 5:09 am
Operator : K.Ruest
Sample : R1410307-008|1.0
Misc : PARSONS 11603 T4
ALS Vial : 36 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W102714.M Mon Jan 05 12:04:26 2015 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1931.D
Acq On : 31 Dec 2014 5:09 amm
Operator : K.Ruestt
Sample : R1410307-008|1.00
Misc : PARSONS 11603 T44
ALS Vial : 36 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1504
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 05:41
Sample Name:	FTMM-2-GW-M2MW11-46.91	**Units:**	µg/L
Lab Code:	R1410307-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1932.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	1.6	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1504
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 05:41
Sample Name:	FTMM-2-GW-M2MW11-46.91	**Units:**	µg/L
Lab Code:	R1410307-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\I23014\MM1932.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1504
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 05:41
Sample Name:	FTMM-2-GW-M2MW11-46.91	**Units:**	µg/L
Lab Code:	R1410307-009	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1932.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/31/14 05:41	
Dibromofluoromethane	101	85-115	12/31/14 05:41	
Toluene-d8	100	85-120	12/31/14 05:41	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 0541

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-2-GW-M2MW11-46.91	**Units:**	µg/L
Lab Code:	R1410307-009	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-009|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1932.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 5:41 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 12:06:33 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	910968	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1383512	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1273855	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	680876	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.146	113	406346	50.43	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.86%				
48) surr1,1,2-dichloroetha...	4.658	65	465304	47.43	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 94.86%				
65) SURR3,Toluene-d8	7.316	98	1687531	49.75	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.50%				
70) SURR2,BFB	9.785	95	619795	47.09	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 94.18%				
Target Compounds							Qvalue
15) Acetone	2.048	43	3069	1.59	ppb		77
23) TBA	2.414	59	721	1.14	ppb	#	1

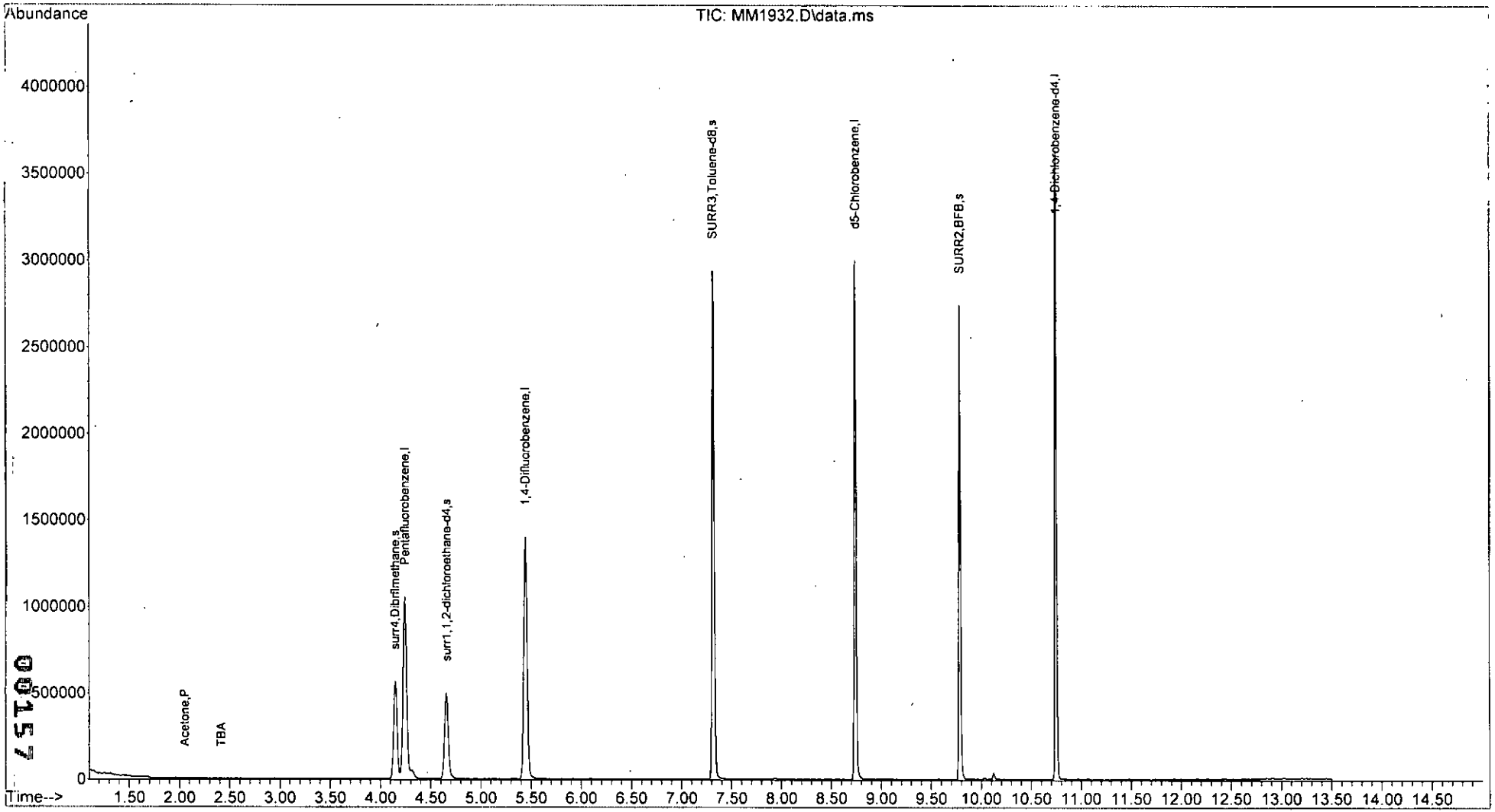
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1/5/15

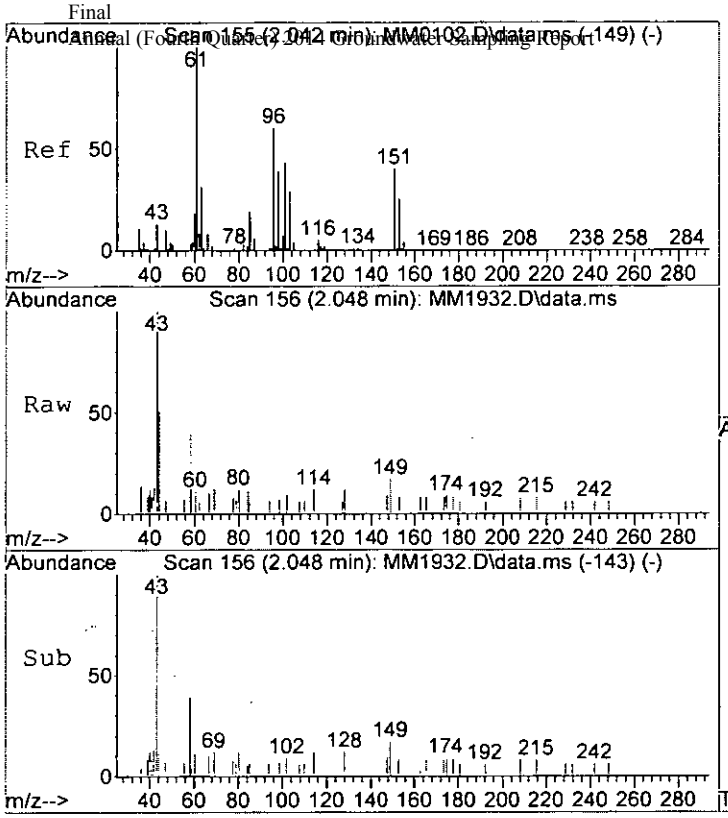
Quantitation Report (QT Reviewed)

Sample : R1410307-009|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1932.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 5:41 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 12:06:33 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



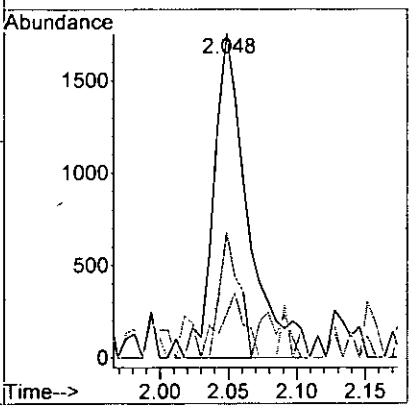
W102714.M Mon Jan 05 12:06:48 2015 Page: 2

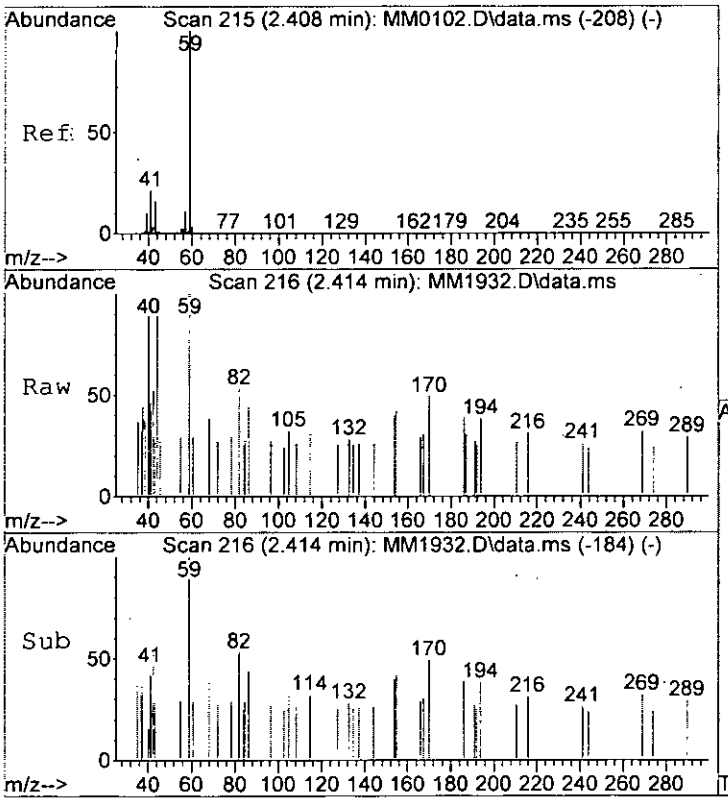


#15
Acetone
Concen: 1.59 ppb
RT: 2.048 min Scan# 156
Delta R.T. 0.006 min
Lab File: MM1932.D
Acq: 31 Dec 2014 5:41 am

Tgt Ion: 43 Resp: 3069

Ion	Ratio	Lower	Upper
43	100		
58	38.7	6.2	46.2
42	13.5	0.0	27.2

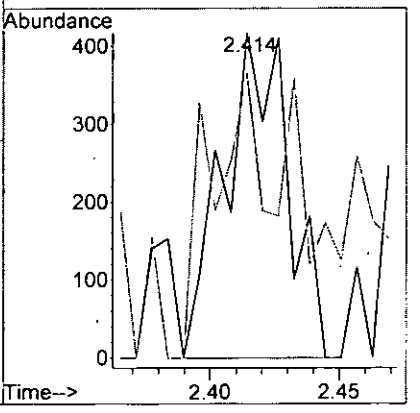




#23
TBA
Concen: 1.14 ppb
RT: 2.414 min Scan# 216
Delta R.T. 0.006 min
Lab File: MM1932.D
Acq: 31 Dec 2014 5:41 am

Tgt Ion: 59 Resp: 721

Ion	Ratio	Lower	Upper
59	100		
41	87.5	3.4	43.4#



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1932.D
Acq On : 31 Dec 2014 5:41 am
Operator : K.Ruest
Sample : R1410307-009|1.0
Misc : PARSONS 11603 T4
ALS Vial : 37 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1932.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.146	489	500	508	rBV	565890	1352961	29.96%	5.564%
2	4.243	508	516	525	rVV	1022916	2450760	54.27%	10.078%
3	4.658	574	584	598	rBV	496711	1296642	28.71%	5.332%
4	5.444	701	713	733	rBV	1398356	3236971	71.68%	13.311%
5	7.316	1014	1020	1038	rBV	2937578	4516098	100.00%	18.571%
6	8.742	1248	1254	1266	rBV	2996035	4010038	88.79%	16.490%
7	9.785	1420	1425	1436	rBV	2739697	3156170	69.89%	12.979%
8	10.120	1476	1480	1486	rBV	38384	50708	1.12%	0.209%
9	10.748	1578	1583	1592	rBV	3628236	4247423	94.05%	17.466%

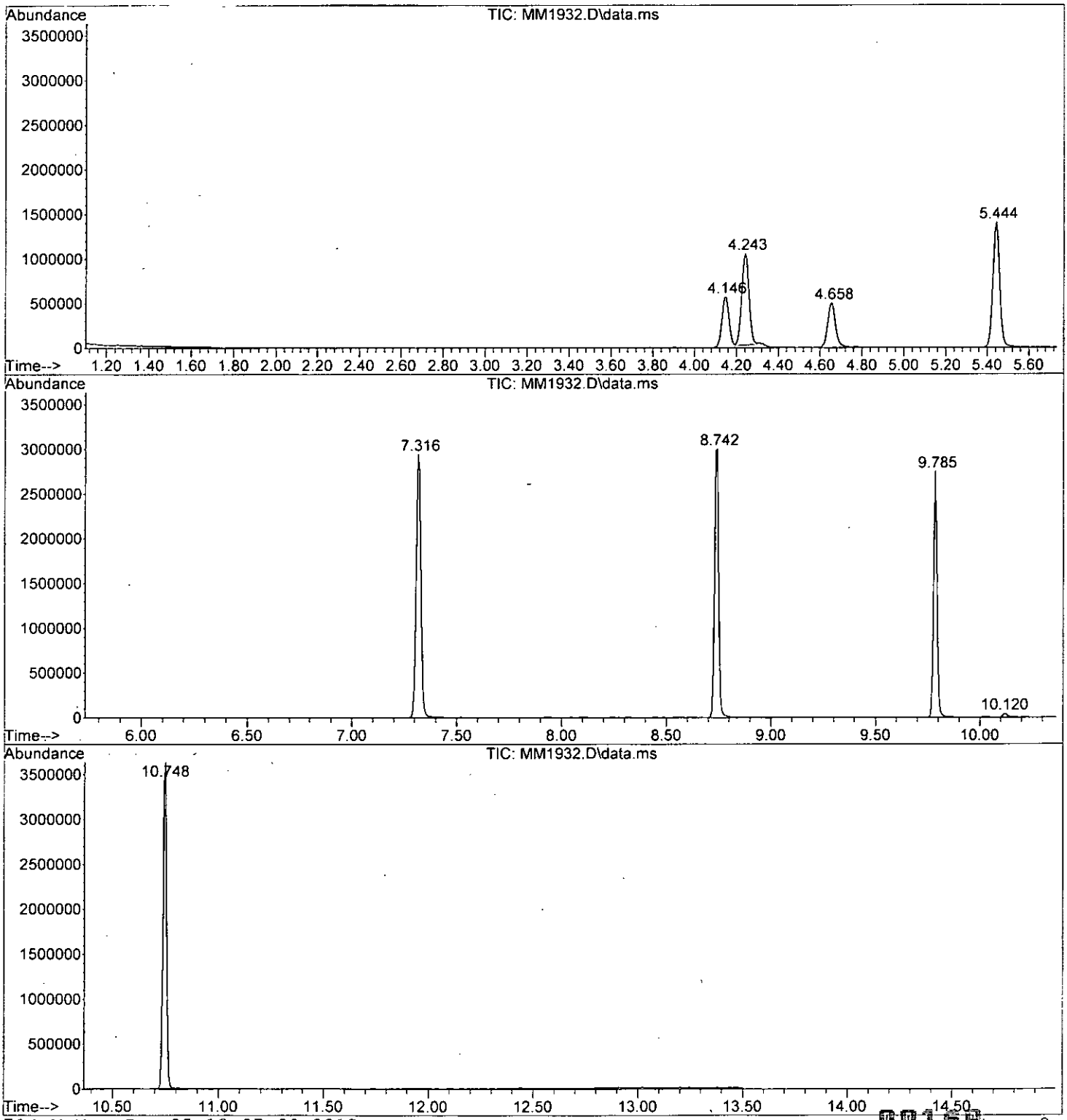
Sum of corrected areas: 24317771

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1932.D
Acq On : 31 Dec 2014 5:41 am
Operator : K.Ruest
Sample : R1410307-009|1.0
Misc : PARSONS 11603 T4
ALS Vial : 37 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W102714.M Mon Jan 05 12:07:00 2015 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1932.D
Acq On : 31 Dec 2014 5:41 amm
Operator : K.Ruestt
Sample : R1410307-009|1.00
Misc : PARSONS 11603 T44
ALS Vial : 37 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14 1501
Date Received: 12/20/14
Date Analyzed: 12/31/14 06:13

Sample Name: FTMM-2-GW-M2MW11-41.91
Lab Code: R1410307-010

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\123014\MM1933.D\

Analysis Lot: 427514
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1501
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 06:13
Sample Name:	FTMM-2-GW-M2MW11-41.91	**Units:**	µg/L
Lab Code:	R1410307-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1933.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1501
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 06:13
Sample Name:	FTMM-2-GW-M2MW11-41.91	**Units:**	µg/L
Lab Code:	R1410307-010	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1933.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	75-120	12/31/14 06:13	
Dibromofluoromethane	102	85-115	12/31/14 06:13	
Toluene-d8	100	85-120	12/31/14 06:13	

Analytical Report

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14
Date Received: 12/20/14
Date Analyzed: 12/31/14 0613

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name: FTMM-2-GW-M2MW11-41.91
Lab Code: R1410307-010

Units: µg/L
Basis: NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-010|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1933.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 6:13 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 12:07:34 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.243	168	903205	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.444	114	1359141	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1267267	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	677759	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	403617	50.99	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.98%			
48) surr1,1,2-dichloroetha...	4.652	65	456316	47.35	ppb	-0.01
Spiked Amount 50.000	Range 78 - 122		Recovery = 94.70%			
65) SURR3,Toluene-d8	7.316	98	1673319	50.22	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.44%			
70) SURR2,BFB	9.785	95	617475	47.76	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.52%			
Target Compounds						Qvalue
15) Acetone	2.054	43	2089	1.09	ppb	84

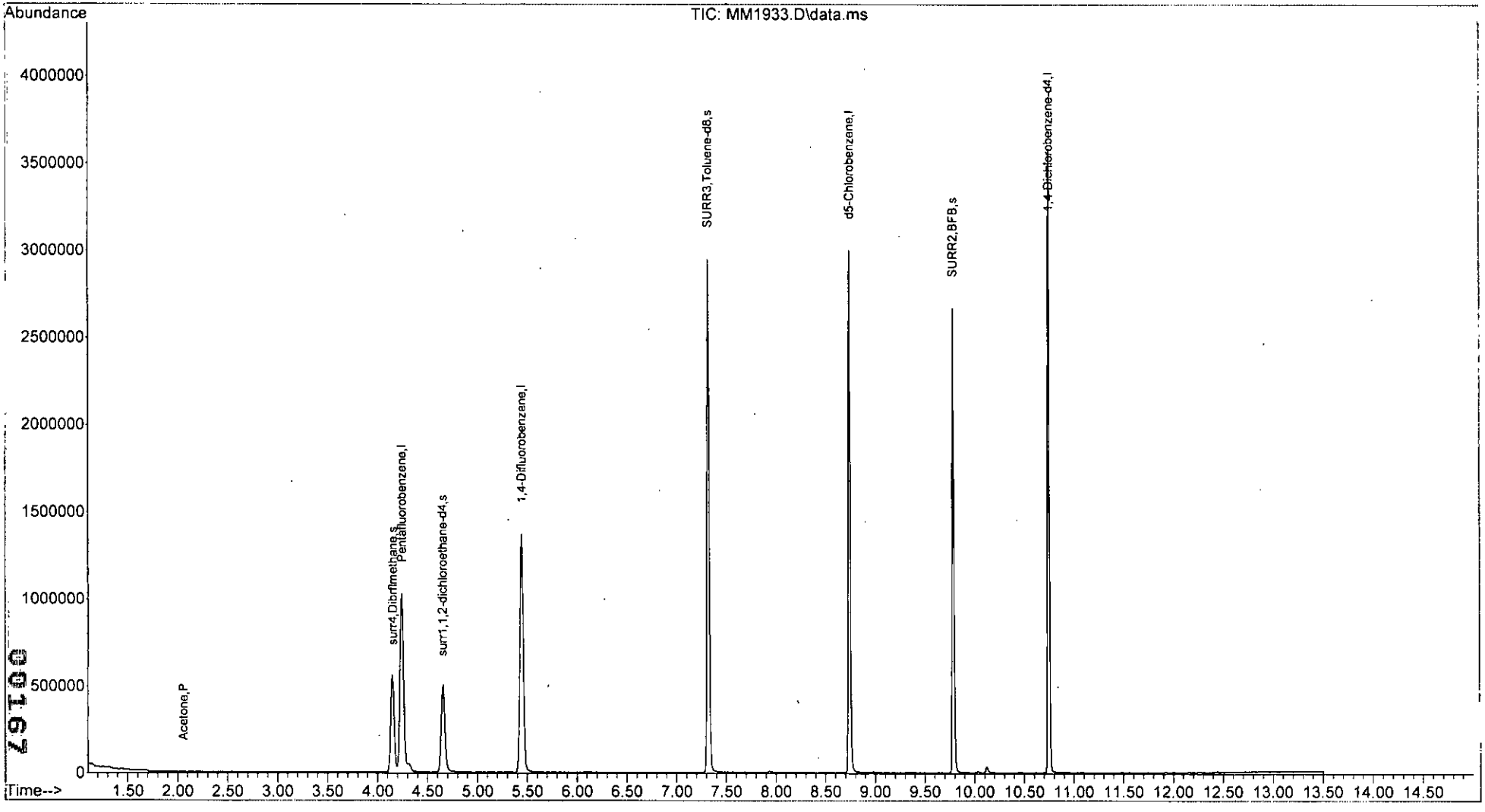
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1/5/15

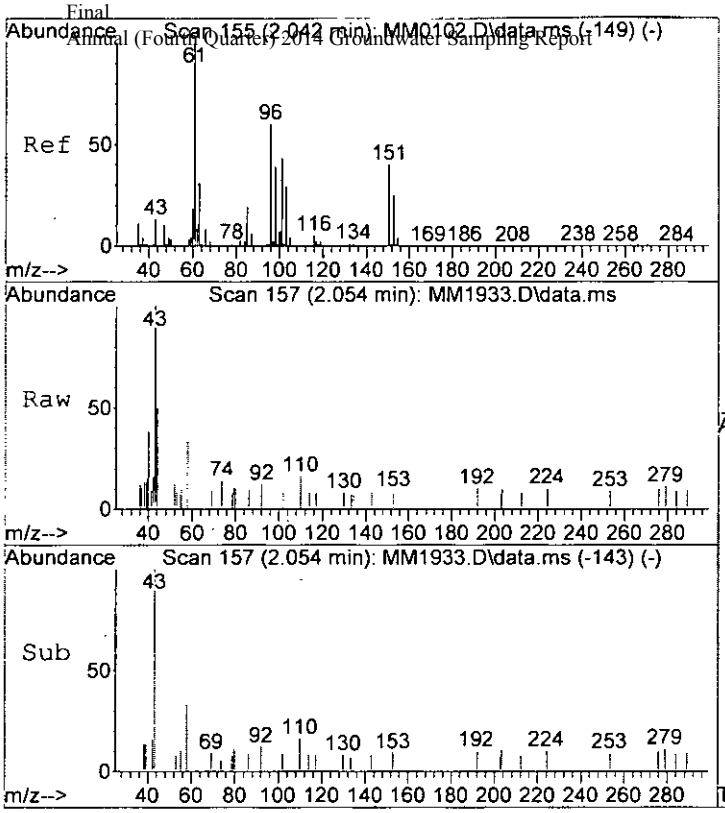
Quantitation Report (QT Reviewed)

Sample : R1410307-010|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1933.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 6:13 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 12:07:34 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



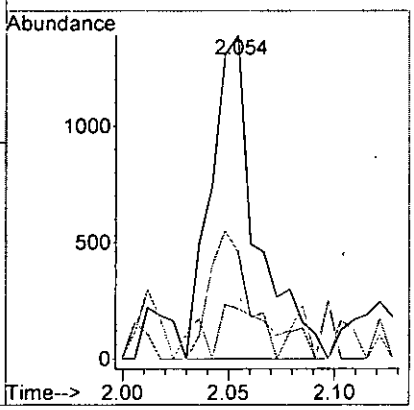
W102714.M Mon Jan 05 12:08:55 2015 Page: 2



#15
Acetone
Concen: 1.09 ppb
RT: 2.054 min Scan# 157
Delta R.T. 0.012 min
Lab File: MM1933.D
Acq: 31 Dec 2014 6:13 am

Tgt Ion: 43 Resp: 2089

Ion	Ratio	Lower	Upper
43	100		
58	33.2	6.2	46.2
42	15.6	0.0	27.2



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1933.D
Acq On : 31 Dec 2014 6:13 am
Operator : K.Ruest
Sample : R1410307-010|1.0
Misc : PARSONS 11603 T4
ALS Vial : 38 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1933.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.146	492	500	508	rBV	561899	1335916	29.81%	5.541%
2	4.243	508	516	525	rVV	999319	2435297	54.34%	10.101%
3	4.658	573	584	601	rBV	504111	1301973	29.05%	5.400%
4	5.444	702	713	730	rBV	1367445	3191396	71.21%	13.237%
5	7.316	1011	1020	1037	rBV	2946251	4481783	100.00%	18.589%
6	8.742	1248	1254	1267	rBV	2995228	3981644	88.84%	16.515%
7	9.785	1420	1425	1434	rBV	2664735	3135319	69.96%	13.005%
8	10.120	1476	1480	1488	rBV	33825	47907	1.07%	0.199%
9	10.748	1578	1583	1589	rBV	3578947	4198024	93.67%	17.412%

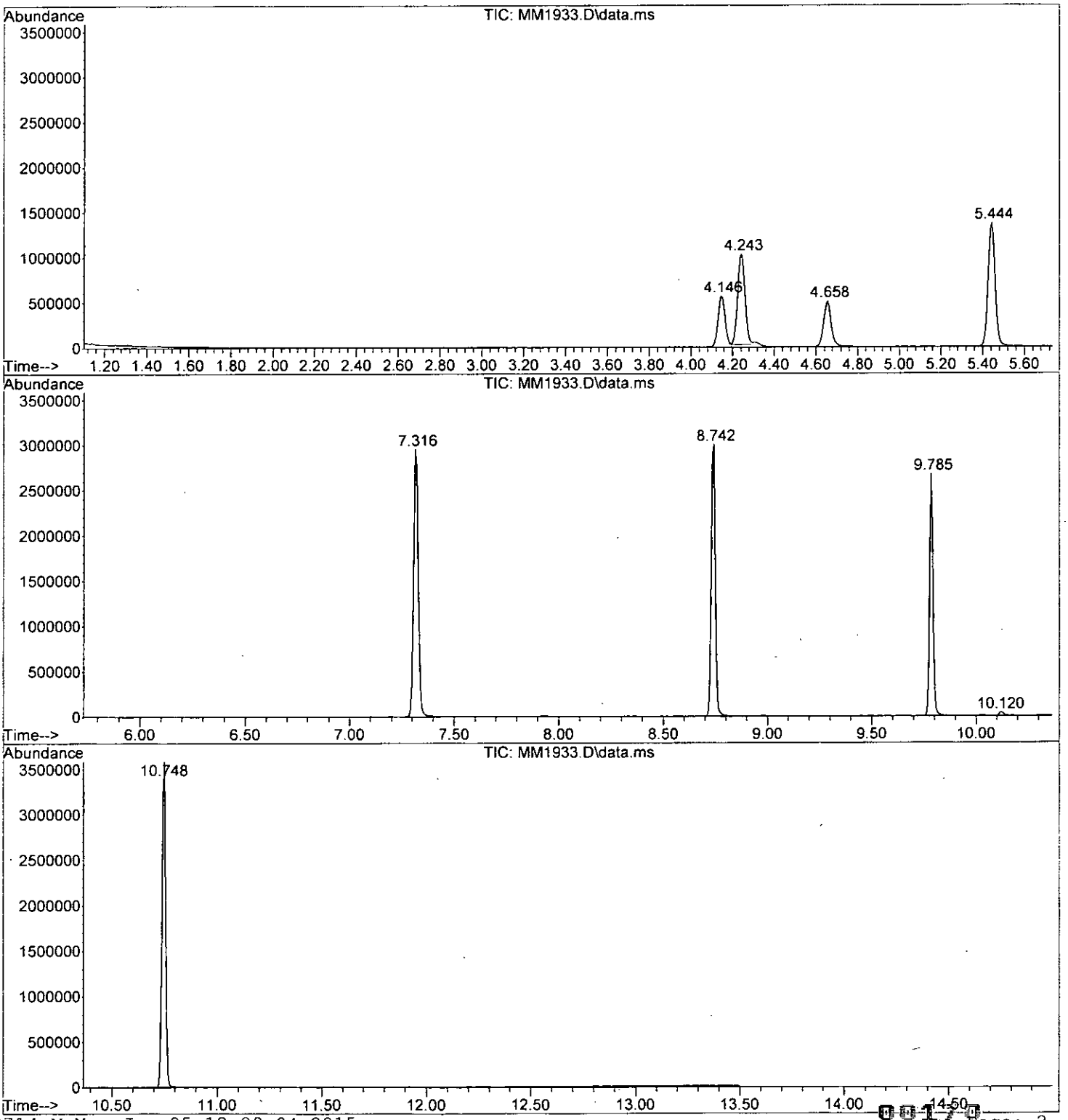
Sum of corrected areas: 24109259

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1933.D
Acq On : 31 Dec 2014 6:13 am
Operator : K.Ruest
Sample : R1410307-010|1.0
Misc : PARSONS 11603 T4
ALS Vial : 38 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W102714.M Mon Jan 05 12:09:04 2015 0017 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1933.D
Acq On : 31 Dec 2014 6:13 amm
Operator : K.Ruestt
Sample : R1410307-010|1.00
Misc : PARSONS 11603 T44
ALS Vial : 38 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14 1458
Date Received: 12/20/14
Date Analyzed: 12/30/14 15:50

Sample Name: FTMM-2-GW-M2MW11-31.91
Lab Code: R1410307-011

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\123014\MM1906.D\

Analysis Lot: 427512
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	1.7	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1458
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 15:50
Sample Name:	FTMM-2-GW-M2MW11-31.91	**Units:**	µg/L
Lab Code:	R1410307-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1906.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1458
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 15:50
Sample Name:	FTMM-2-GW-M2MW11-31.91	**Units:**	µg/L
Lab Code:	R1410307-011	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1906.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	12/30/14 15:50	
Dibromofluoromethane	100	85-115	12/30/14 15:50	
Toluene-d8	99	85-120	12/30/14 15:50	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 1550

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-2-GW-M2MW11-31.91	**Units:**	µg/L
Lab Code:	R1410307-011	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-011|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1906.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 3:50 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 16:11:18 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	882303	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1345135	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1233427	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	646639	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	393439	50.23	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.46%				
48) surr1,1,2-dichloroetha...	4.658	65	450499	47.23	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 94.46%				
65) SURR3,Toluene-d8	7.322	98	1639913	49.73	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.46%				
70) SURR2,BFB	9.785	95	609705	47.65	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.30%				
Target Compounds							Qvalue
15) Acetone	2.042	43	3075m	1.65	ppb		
44) Cyclohexane	4.310	41	15325	1.54	ppb		99
120) 2,3,6-Trichlorotoluene	12.912	159	1153	0.23	ppb	#	85

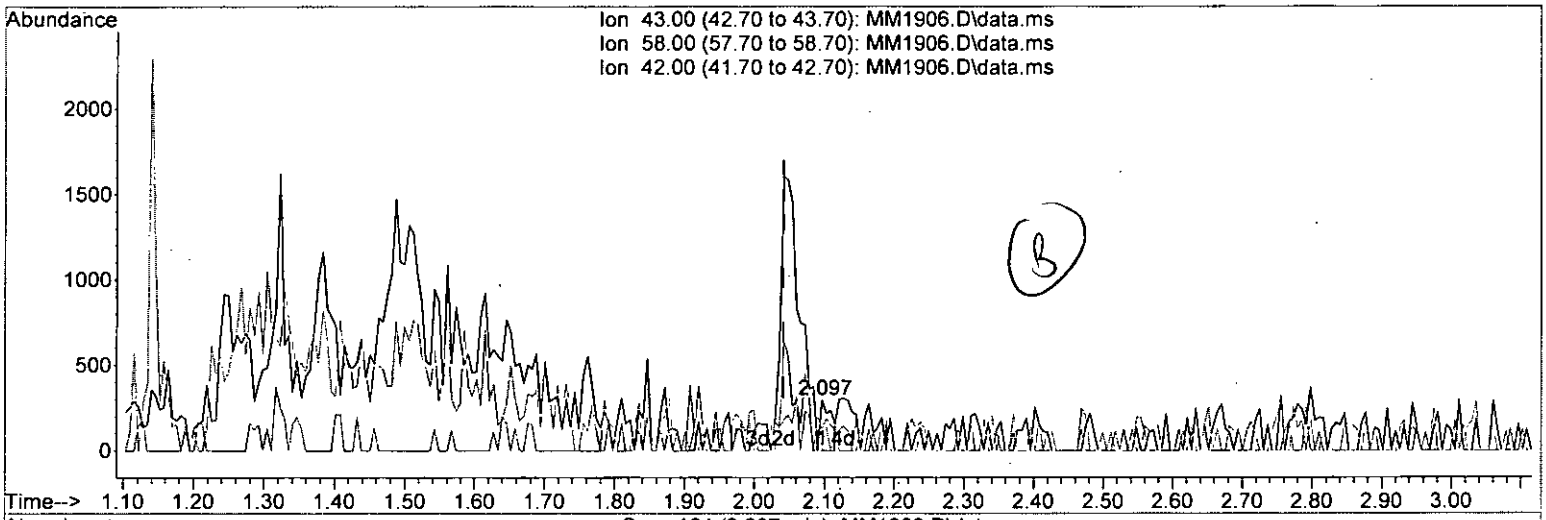
(#) = qualifier out of range (m) = manual integration (+) = signals summed

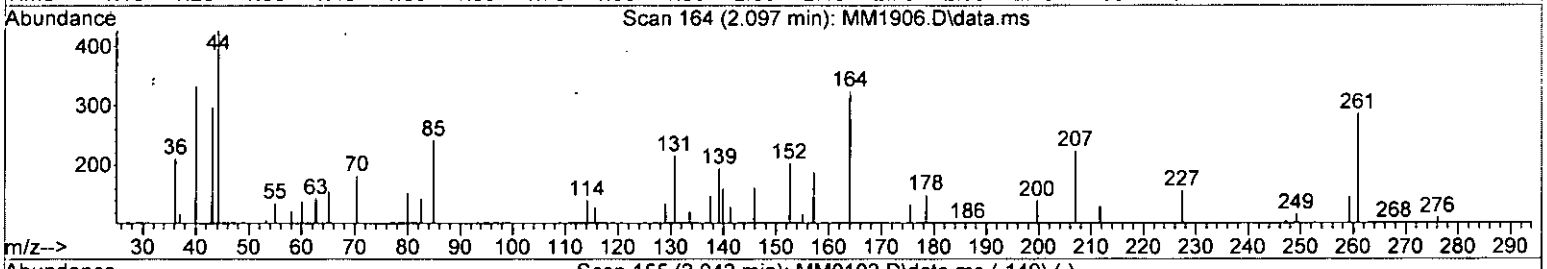
12/31/14

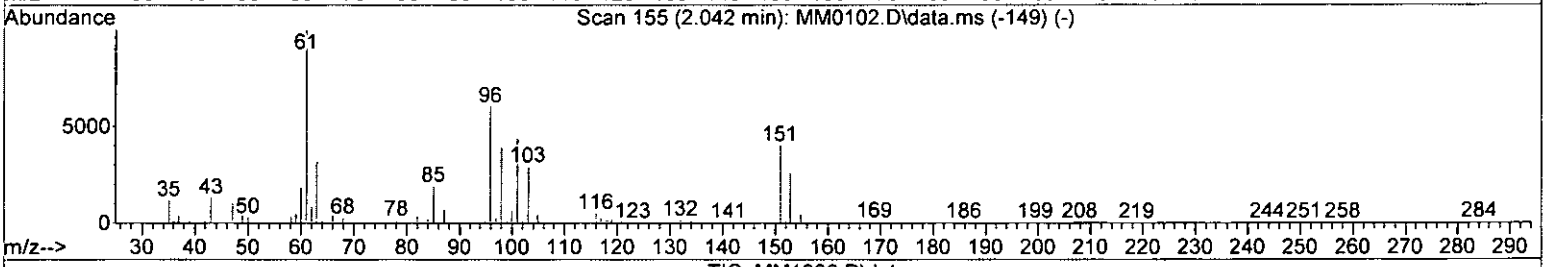
Quantitation Report (Qedit)

Sample : R1410307-011|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1906.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 3:50 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 16:05:05 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1906.D\data.ms

(15) Acetone (P)

2.097min (+0.055) 0.18 ppb

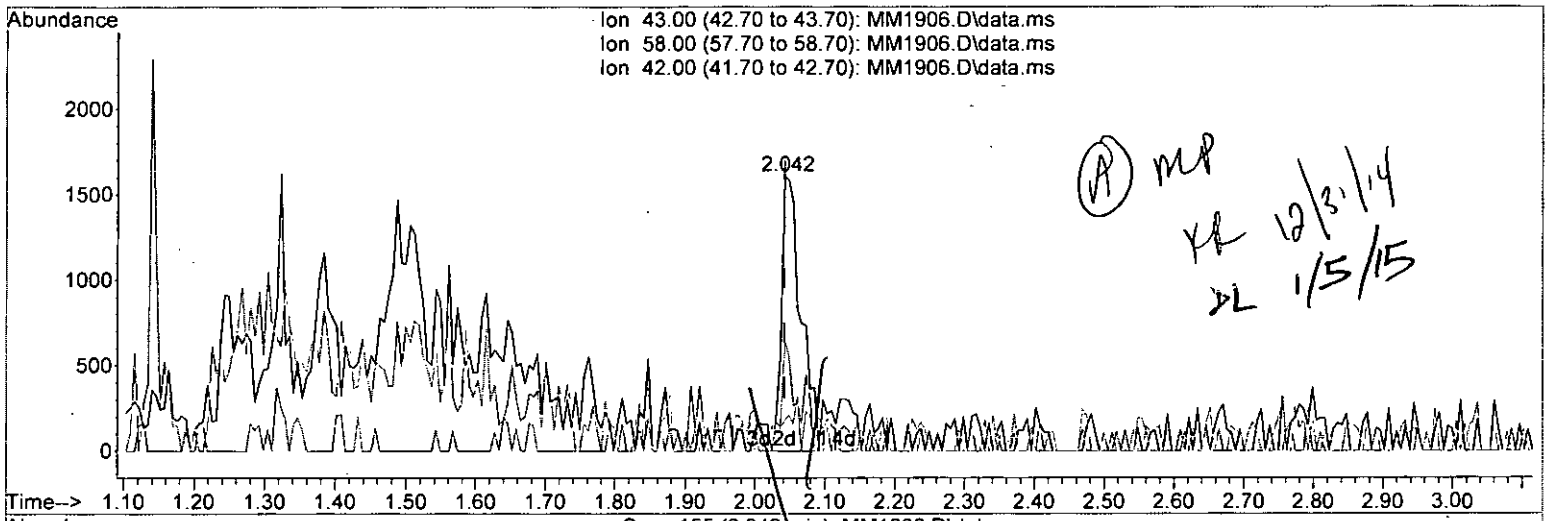
response 330

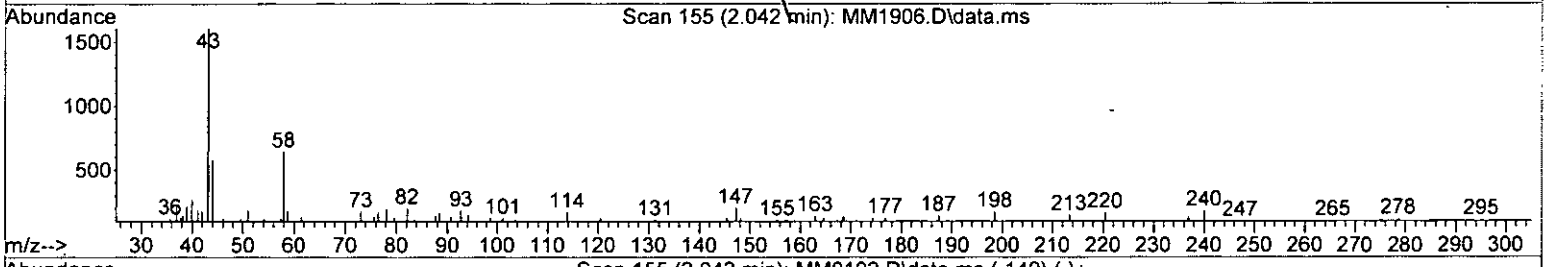
Ion	Exp%	Act%
43.00	100	100
58.00	26.20	41.22
42.00	7.20	0.00
0.00	0.00	0.00

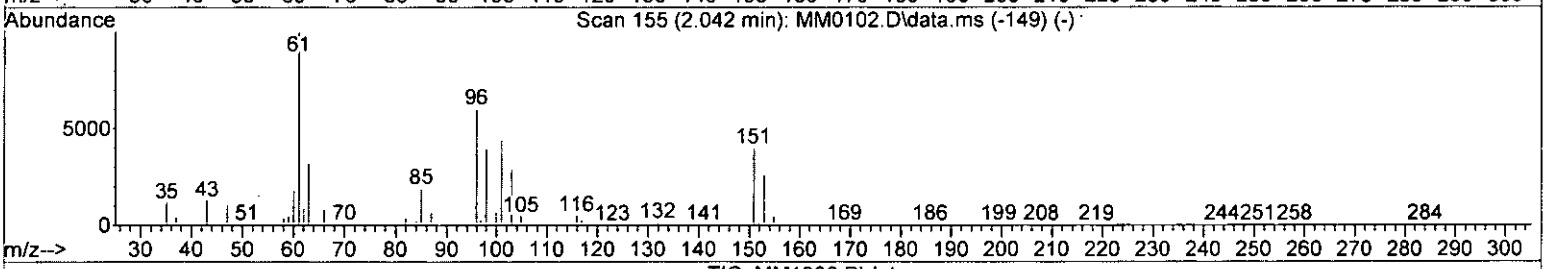
Quantitation Report (Qedit)

Sample : R1410307-011|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1906.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 3:50 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 16:05:05 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1906.D\data.ms

(15) Acetone (P)

2.042min (+0.000) 1.65 ppb m

response 3075

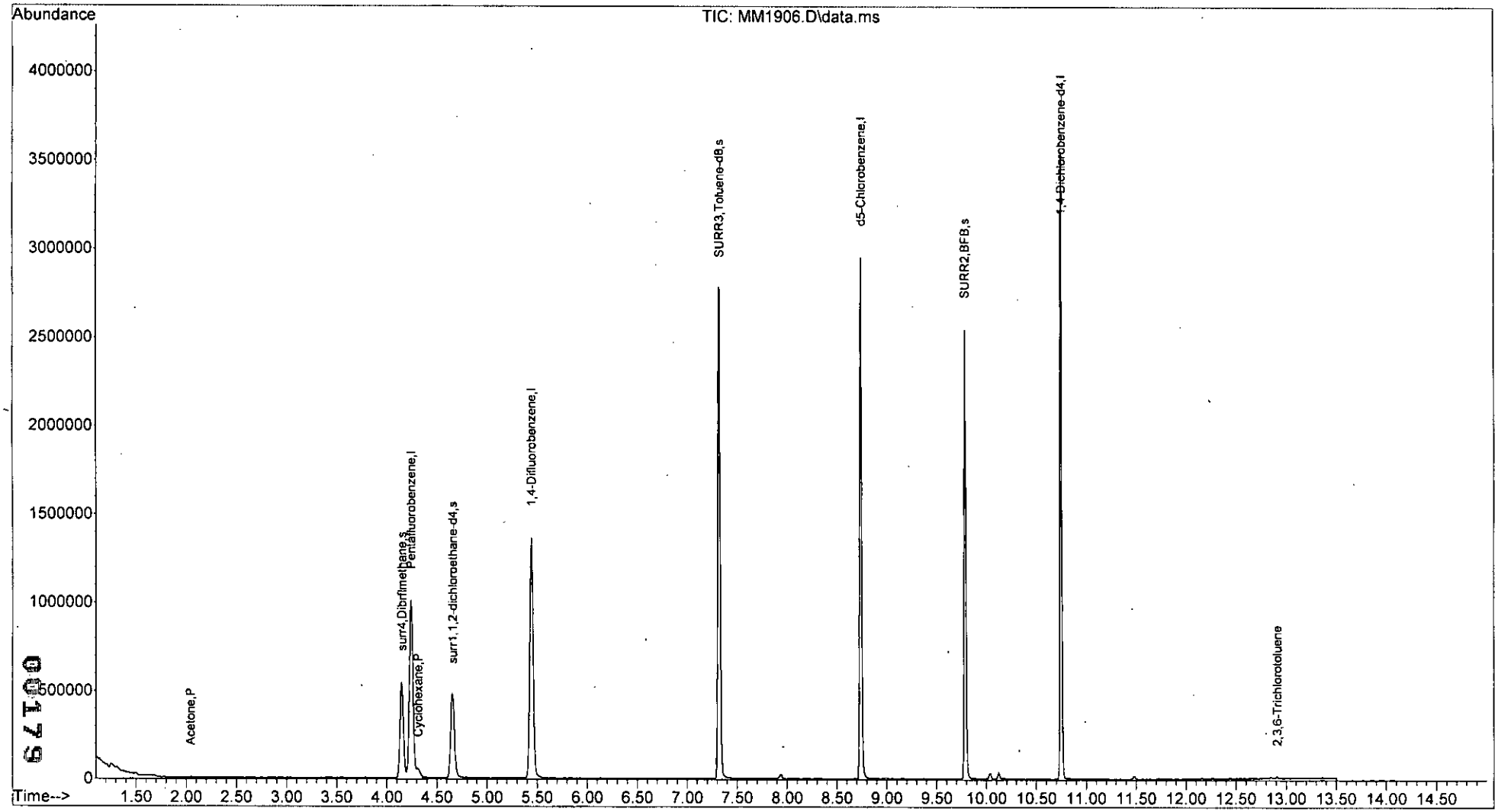
Ion	Exp%	Act%
43.00	100	100
58.00	26.20	40.22
42.00	7.20	10.90
0.00	0.00	0.00

W102714.M Wed Dec 31 16:11:21 2014 Page: 1

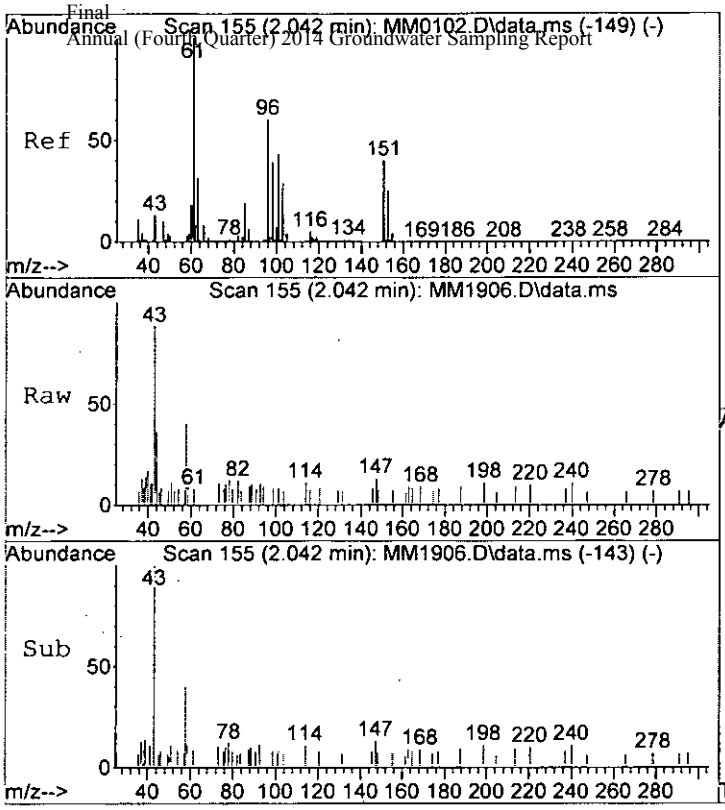
Quantitation Report (QT Reviewed)

Sample : R1410307-011|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1906.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 3:50 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 16:11:18 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



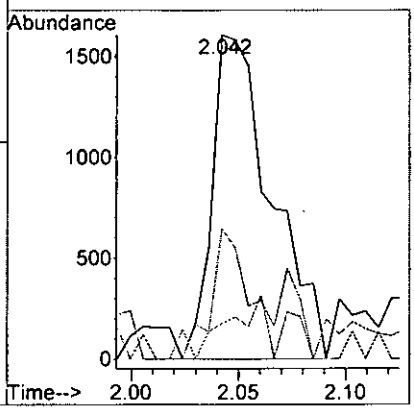
W102714.M Wed Dec 31 16:12:26 2014 Page: 2

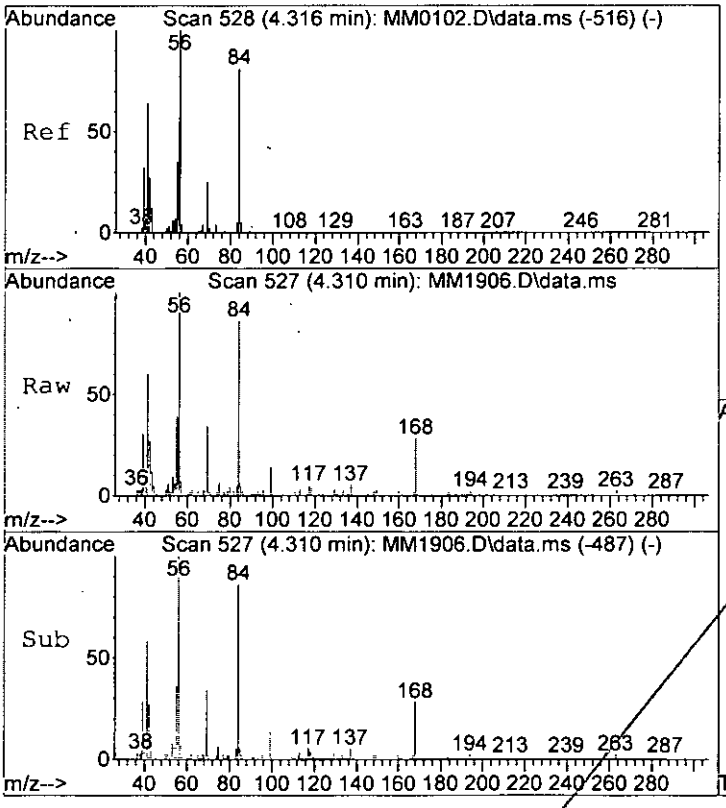


#15
Acetone
Concen: 1.65 ppb m
RT: 2.042 min Scan# 155
Delta R.T. 0.000 min
Lab File: MM1906.D
Acq: 30 Dec 2014 3:50 pm

Tgt Ion: 43 Resp: 3075

Ion	Ratio	Lower	Upper
43	100		
58	40.2	6.2	46.2
42	10.9	0.0	27.2



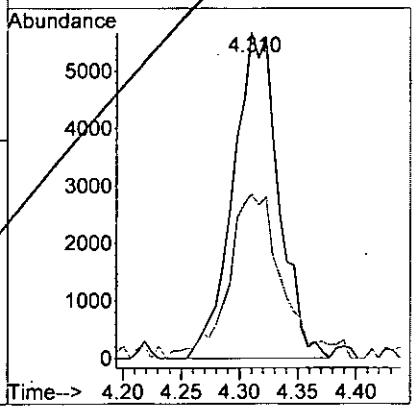


#44
Cyclohexane
Concen: 1.54 ppb
RT: 4.310 min Scan# 527
Delta R.T. -0.006 min
Lab File: MM1906.D
Acq: 30 Dec 2014 3:50 pm

MTD

Tgt Ion: 41 Resp: 15325

Ion	Ratio	Lower	Upper
41	100		
39	50.4	29.7	69.7



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1906.D
Acq On : 30 Dec 2014 3:50 pm
Operator : K.Ruest
Sample : R1410307-011|1.0
Misc : PARSONS 11603 T4
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1906.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.250	23	25	33	rVB	24584	46558	1.06%	0.196%
2	4.146	491	500	508	rBV	541116	1288405	29.34%	5.438%
3	4.243	508	516	526	rVV	980952	2396666	54.58%	10.115%
4	4.652	574	583	597	rBV	480517	1262751	28.76%	5.329%
5	5.444	703	713	731	rBV	1359438	3141034	71.53%	13.256%
6	7.316	1014	1020	1040	rBV	2782266	4391272	100.00%	18.533%
7	7.937	1116	1122	1126	rBV2	23763	43923	1.00%	0.185%
8	8.742	1248	1254	1268	rBV	2947909	3901001	88.84%	16.464%
9	9.785	1420	1425	1436	rBV	2540590	3072697	69.97%	12.968%
10	10.035	1458	1466	1471	rBV	34424	58964	1.34%	0.249%
11	10.120	1477	1480	1486	rBV2	37354	49777	1.13%	0.210%
12	10.748	1578	1583	1592	rVB	3544347	4041536	92.04%	17.057%

Sum of corrected areas: 23694584

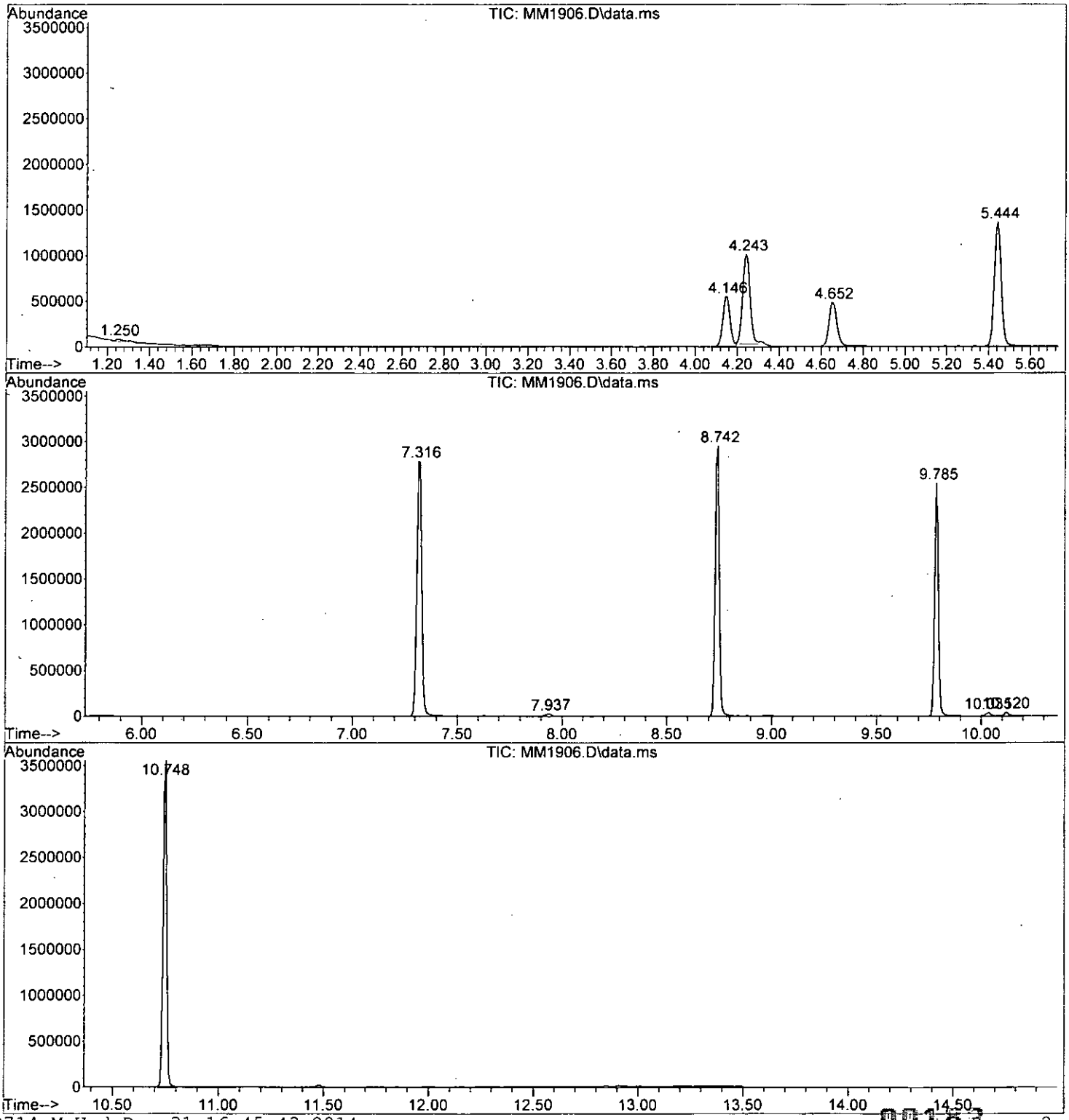
W102714.M Wed Dec 31 16:45:40 2014 Page: 1

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1906.D
Acq On : 30 Dec 2014 3:50 pm
Operator : K.Ruest
Sample : R1410307-011|1.0
Misc : PARSONS 11603 T4
ALS Vial : 10 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W102714.M Wed Dec 31 16:45:43 2014 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1906.D
Acq On : 30 Dec 2014 3:50 pmm
Operator : K.Ruestt
Sample : R1410307-011|1.00
Misc : PARSONS 11603 T44
ALS Vial : 10 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					|--Internal Standard---|		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1523
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 06:45
Sample Name:	FTMM-2-GW-M2MW22-10.03	**Units:**	µg/L
Lab Code:	R1410307-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1934.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.3**	**J**	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1523
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 06:45
Sample Name:	FTMM-2-GW-M2MW22-10.03	**Units:**	µg/L
Lab Code:	R1410307-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1934.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	**1.5**	J	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**23**		5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1523
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 06:45
Sample Name:	FTMM-2-GW-M2MW22-10.03	**Units:**	µg/L
Lab Code:	R1410307-012	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1934.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	12/31/14 06:45	
Dibromofluoromethane	101	85-115	12/31/14 06:45	
Toluene-d8	100	85-120	12/31/14 06:45	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 0645

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-2-GW-M2MW22-10.03	**Units:**	µg/L
Lab Code:	R1410307-012	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-012|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1934.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 6:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 15:34:03 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	912131	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1369016	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1269036	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	678949	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.146	113	401639	50.38	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.76%				
48) surr1,1,2-dichloroetha...	4.658	65	460775	47.47	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 94.94%				
65) SURR3,Toluene-d8	7.316	98	1686644	50.25	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.50%				
70) SURR2,BFB	9.785	95	620193	47.62	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.24%				
Target Compounds							Qvalue
15) Acetone	2.048	43	2574	1.33	ppb		91
23) TBA	2.414	59	1089	1.72	ppb	#	44
25) Methyl-t-Butyl Ether	2.579	73	513714	23.26	ppb		99
78) Chlorobenzene	8.767	112	37148	1.51	ppb		94

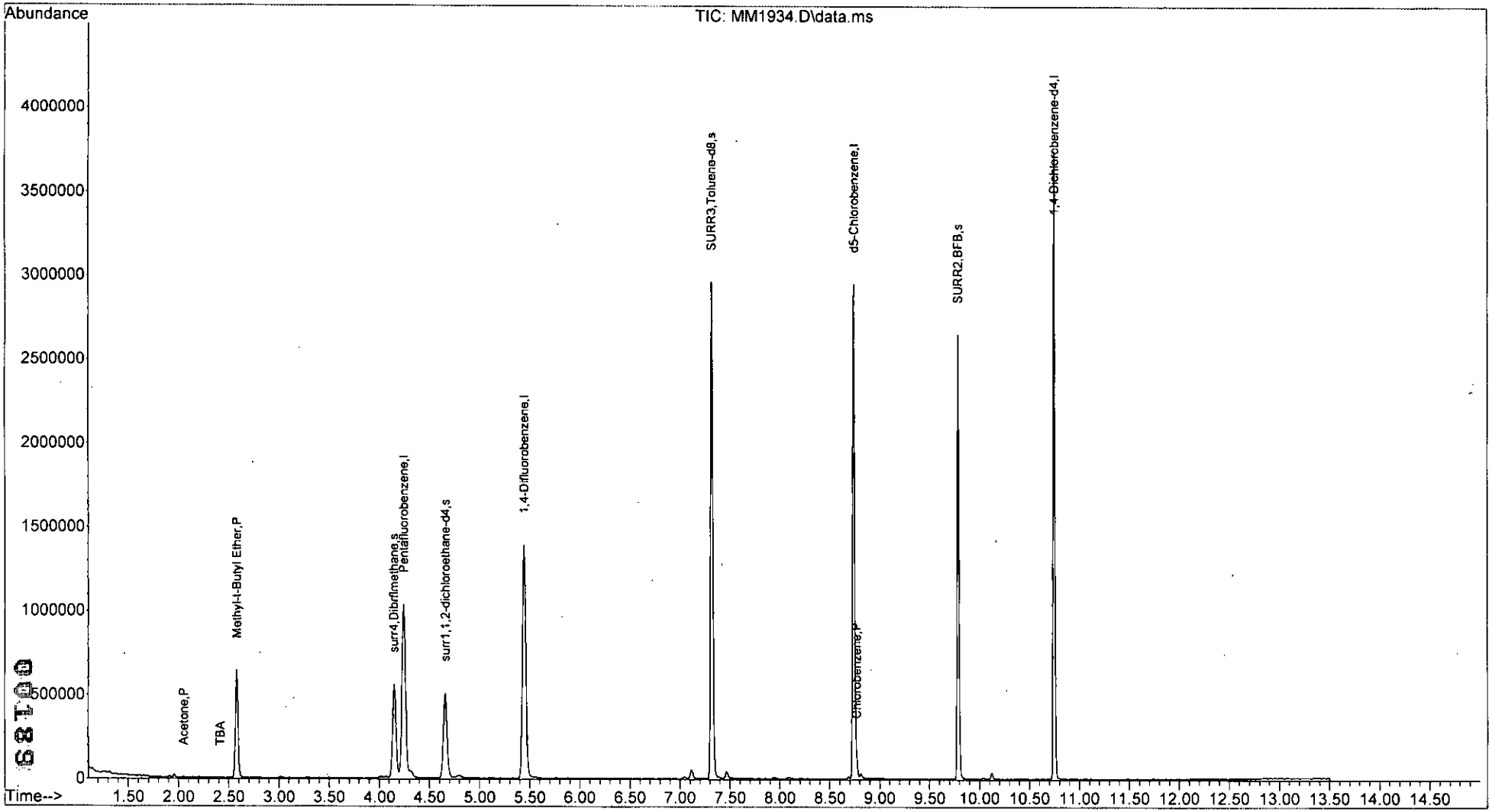
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR 1/5/15

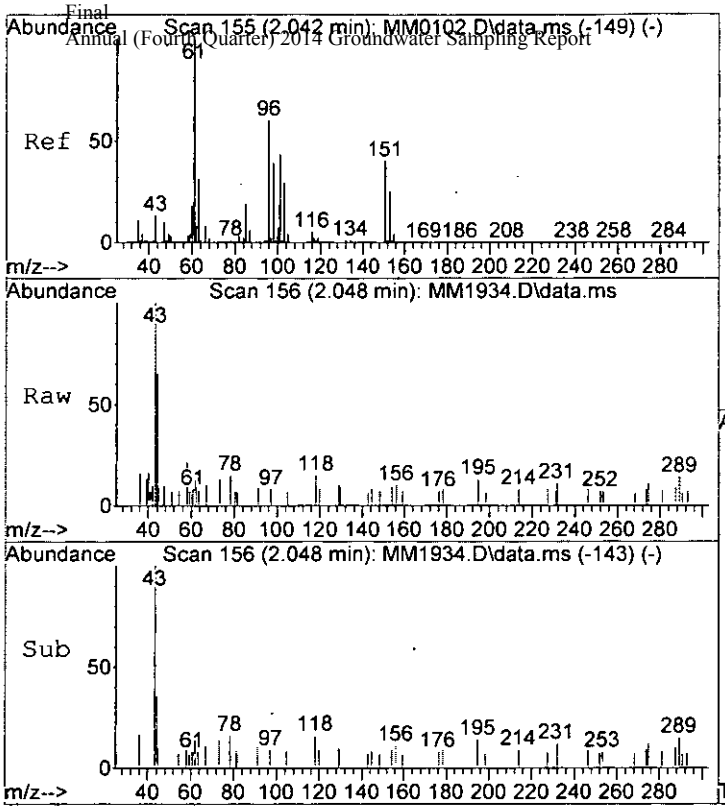
Quantitation Report (QT Reviewed)

Sample : R1410307-012|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1934.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 6:45 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 15:34:03 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



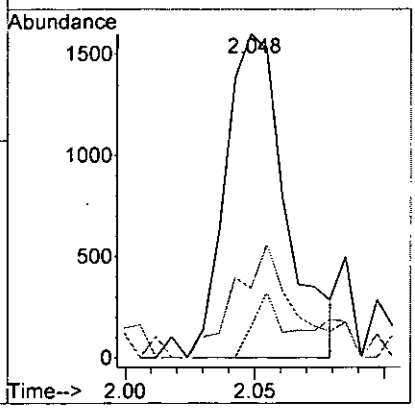
W102714.M Mon Jan 05 15:34:51 2015 Page: 2

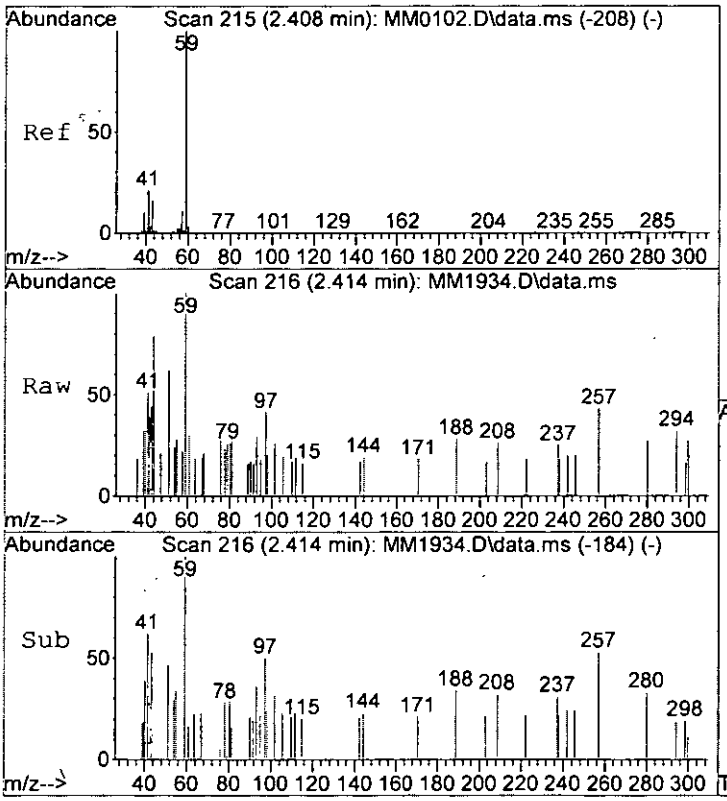


#15
Acetone
Concen: 1.33 ppb
RT: 2.048 min Scan# 156
Delta R.T. 0.006 min
Lab File: MM1934.D
Acq: 31 Dec 2014 6:45 am

Tgt Ion: 43 Resp: 2574

Ion	Ratio	Lower	Upper
43	100		
58	21.5	6.2	46.2
42	9.5	0.0	27.2

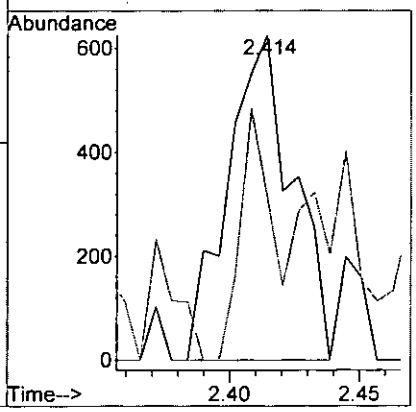


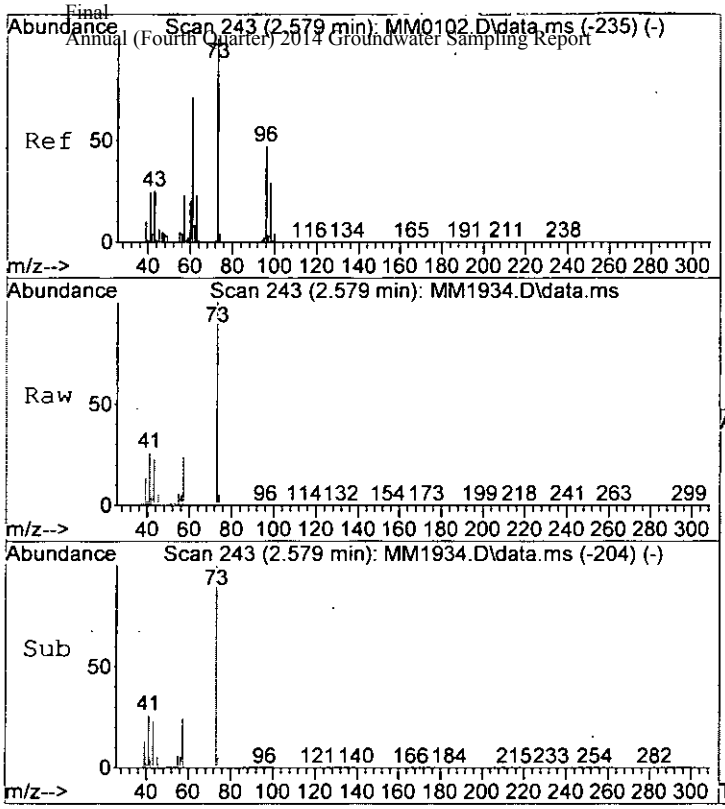


#23
TBA
Concen: 1.72 ppb
RT: 2.414 min Scan# 216
Delta R.T. 0.006 min
Lab File: MM1934.D
Acq: 31 Dec 2014 6:45 am

Tgt Ion: 59 Resp: 1089

Ion	Ratio	Lower	Upper
59	100		
41	50.7	3.4	43.4#

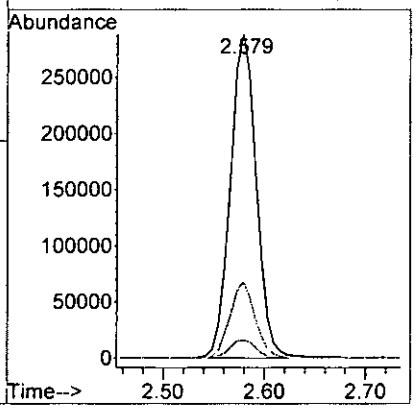


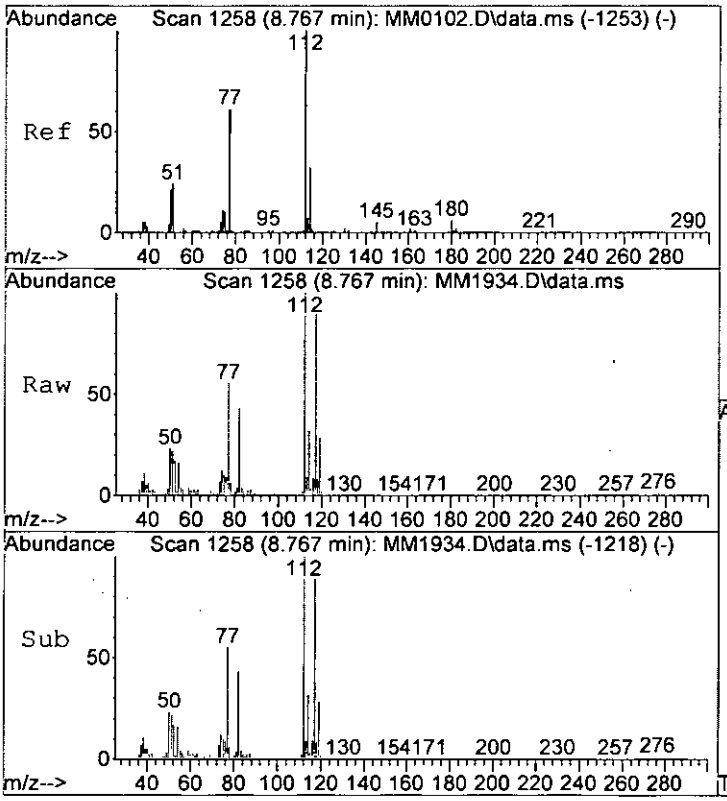


#25
Methyl-t-Butyl Ether
Concen: 23.26 ppb
RT: 2.579 min Scan# 243
Delta R.T. 0.000 min
Lab File: MM1934.D
Acq: 31 Dec 2014 6:45 am

Tgt Ion: 73 Resp: 513714

Ion	Ratio	Lower	Upper
73	100		
57	23.6	3.0	43.0
55	5.5	0.0	25.2

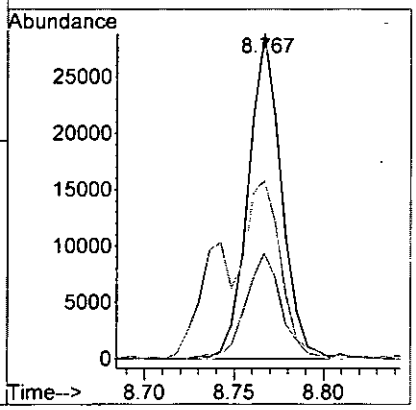




#78
Chlorobenzene
Concen: 1.51 ppb
RT: 8.767 min Scan# 1258
Delta R.T. -0.006 min
Lab File: MM1934.D
Acq: 31 Dec 2014 6:45 am

Tgt Ion:112 Resp: 37148

Ion	Ratio	Lower	Upper
112	100		
114	32.4	12.3	52.3
77	54.8	41.5	81.5



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1934.D
Acq On : 31 Dec 2014 6:45 am
Operator : K.Ruest
Sample : R1410307-012|1.0
Misc : PARSONS 11603 T4
ALS Vial : 39 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1934.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.579	235	243	256	rBV	639845	1139149	25.31%	4.450%
2	4.146	492	500	508	rBV2	552655	1298685	28.86%	5.073%
3	4.243	508	516	525	rVV	1006591	2434103	54.09%	9.509%
4	4.658	575	584	599	rBV	505299	1286444	28.59%	5.026%
5	4.798	600	607	617	rVB6	15058	46054	1.02%	0.180%
6	5.444	704	713	727	rBV	1387821	3197664	71.06%	12.492%
7	7.115	981	987	996	rBV2	53147	96048	2.13%	0.375%
8	7.316	1013	1020	1031	rBV	2959180	4500234	100.00%	17.581%
9	7.462	1039	1044	1051	rBV3	40303	72315	1.61%	0.283%
10	8.742	1248	1254	1263	rBV	2946399	4086552	90.81%	15.964%
11	9.785	1420	1425	1441	rBV	2647821	3166512	70.36%	12.370%
12	10.120	1476	1480	1486	rBV	38295	52838	1.17%	0.206%
13	10.748	1578	1583	1590	rBV	3739323	4221169	93.80%	16.490%

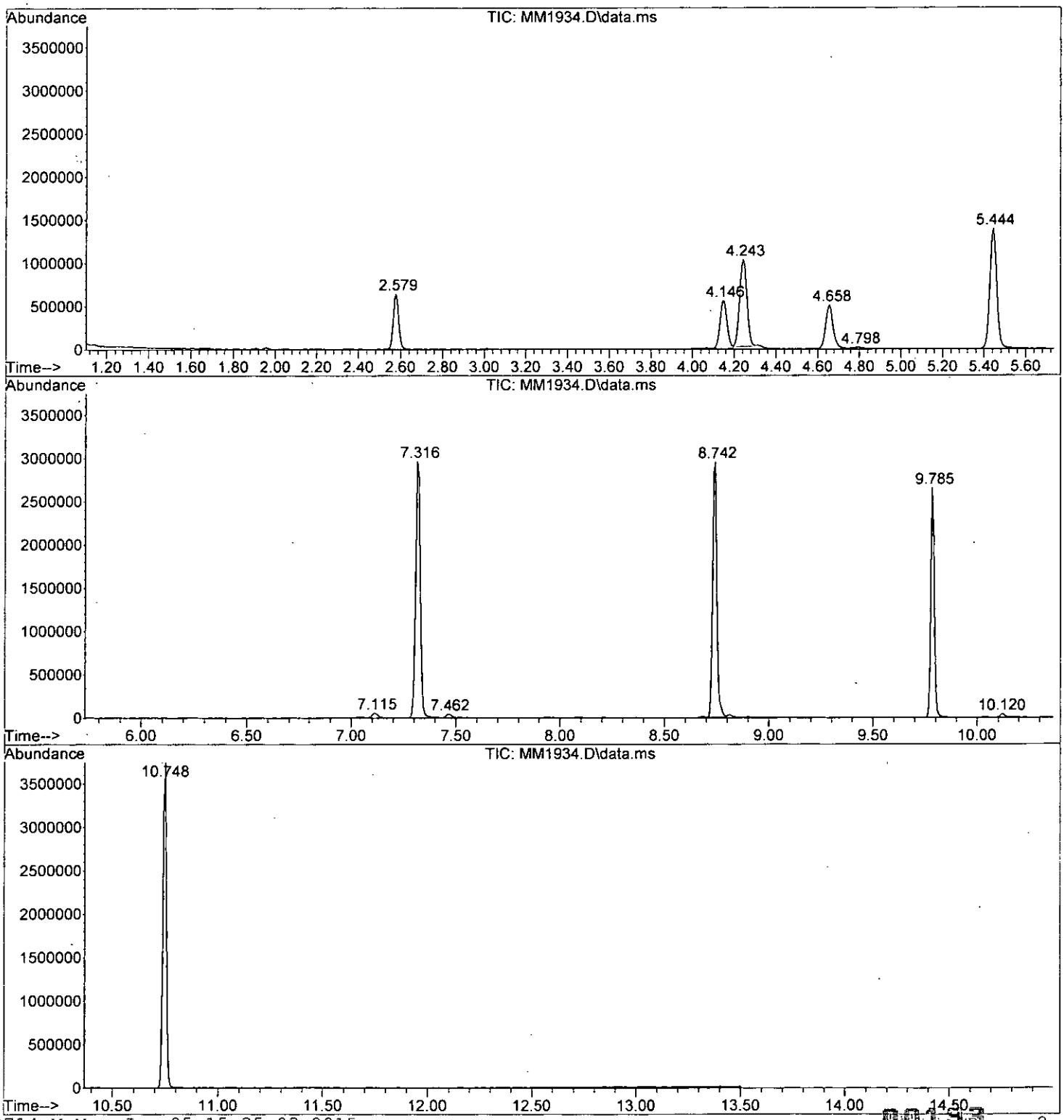
Sum of corrected areas: 25597767

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1934.D
Acq On : 31 Dec 2014 6:45 am
Operator : K.Ruest
Sample : R1410307-012|1.0
Misc : PARSONS 11603 T4
ALS Vial : 39 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1934.D
Acq On : 31 Dec 2014 6:45 amm
Operator : K.Ruestt
Sample : R1410307-012|1.00
Misc : PARSONS 11603 T44
ALS Vial : 39 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1520
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 07:17
Sample Name:	FTMM-2-GW-M2MW22-10.67	**Units:**	µg/L
Lab Code:	R1410307-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1935.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1520
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 07:17
Sample Name:	FTMM-2-GW-M2MW22-10.67	**Units:**	µg/L
Lab Code:	R1410307-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1935.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	**2.8**	**J**	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	17		5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1520
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 07:17
Sample Name:	FTMM-2-GW-M2MW22-10.67	**Units:**	µg/L
Lab Code:	R1410307-013	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1935.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/31/14 07:17	
Dibromofluoromethane	101	85-115	12/31/14 07:17	
Toluene-d8	99	85-120	12/31/14 07:17	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 0717

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-2-GW-M2MW22-10.67	**Units:**	µg/L
Lab Code:	R1410307-013	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-013|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1935.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 7:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 15:36:42 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.243	168	899919	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.444	114	1366489	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1254770	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	670040	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.146	113	402305	50.55	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.10%			
48) surr1,1,2-dichloroetha...	4.658	65	451686	46.62	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 93.24%			
65) SURR3,Toluene-d8	7.316	98	1653197	49.35	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.70%			
70) SURR2,BFB	9.785	95	612187	47.09	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 94.18%			
Target Compounds						Qvalue
15) Acetone	2.061	43	2102	1.10	ppb	87
23) TBA	2.414	59	1252m	2.00	ppb	
25) Methyl-t-Butyl Ether	2.579	73	378452	17.37	ppb	99
78) Chlorobenzene	8.767	112	68337	2.81	ppb	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

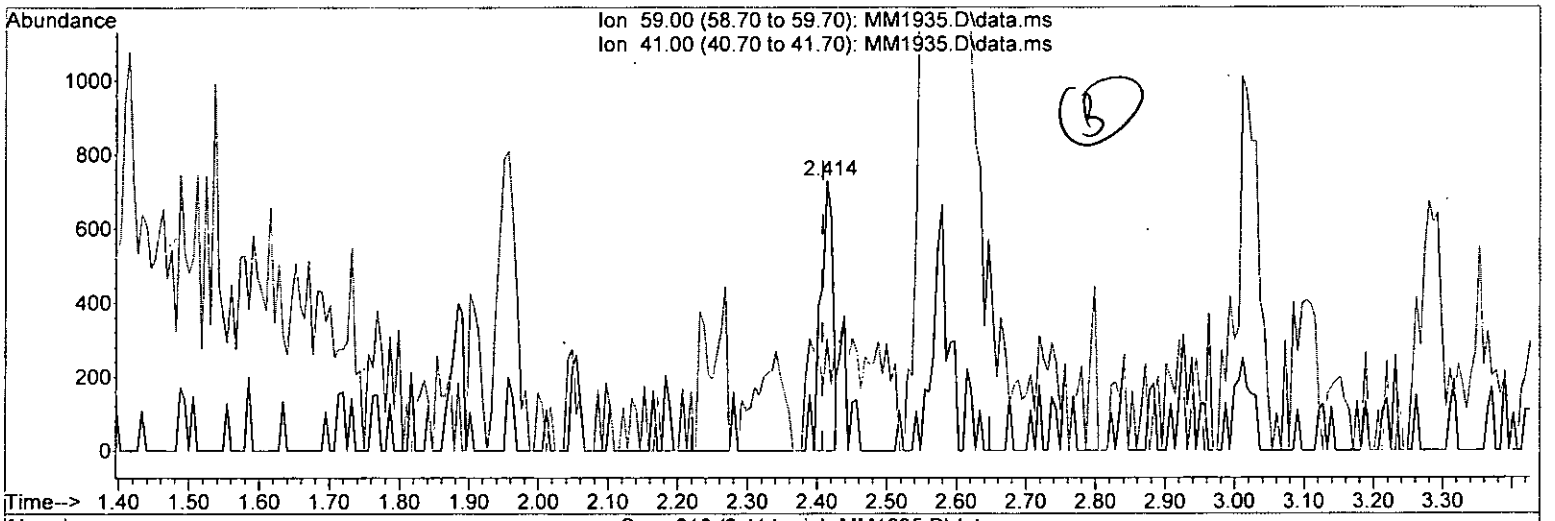
1/5/15

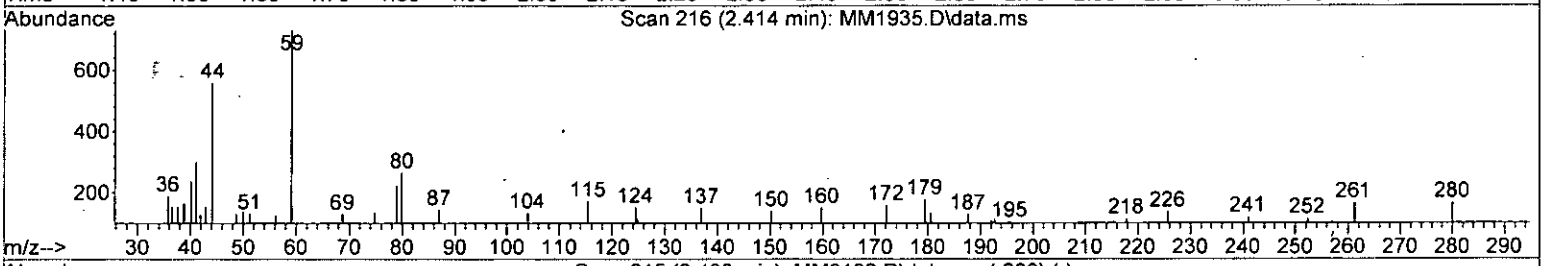
00199

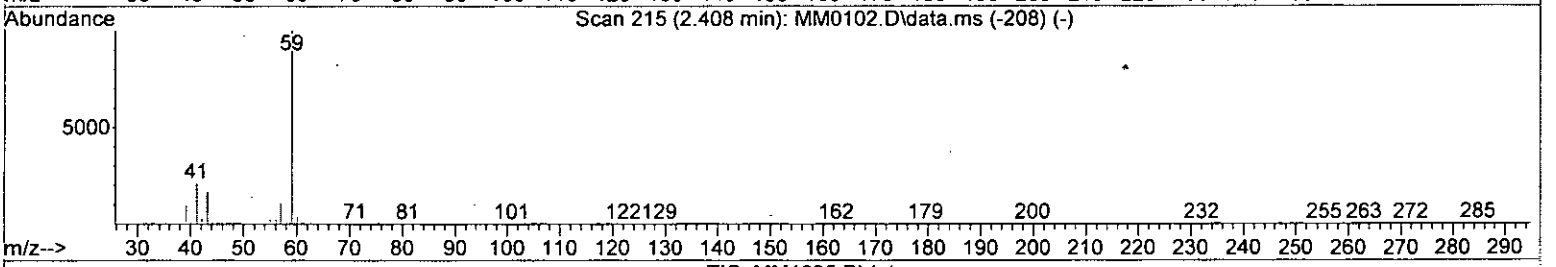
Quantitation Report (Qedit)

Sample : R1410307-013|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1935.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 7:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 07:31:38 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1935.D\data.ms

(23) TBA

2.414min (+0.006) 1.40 ppb

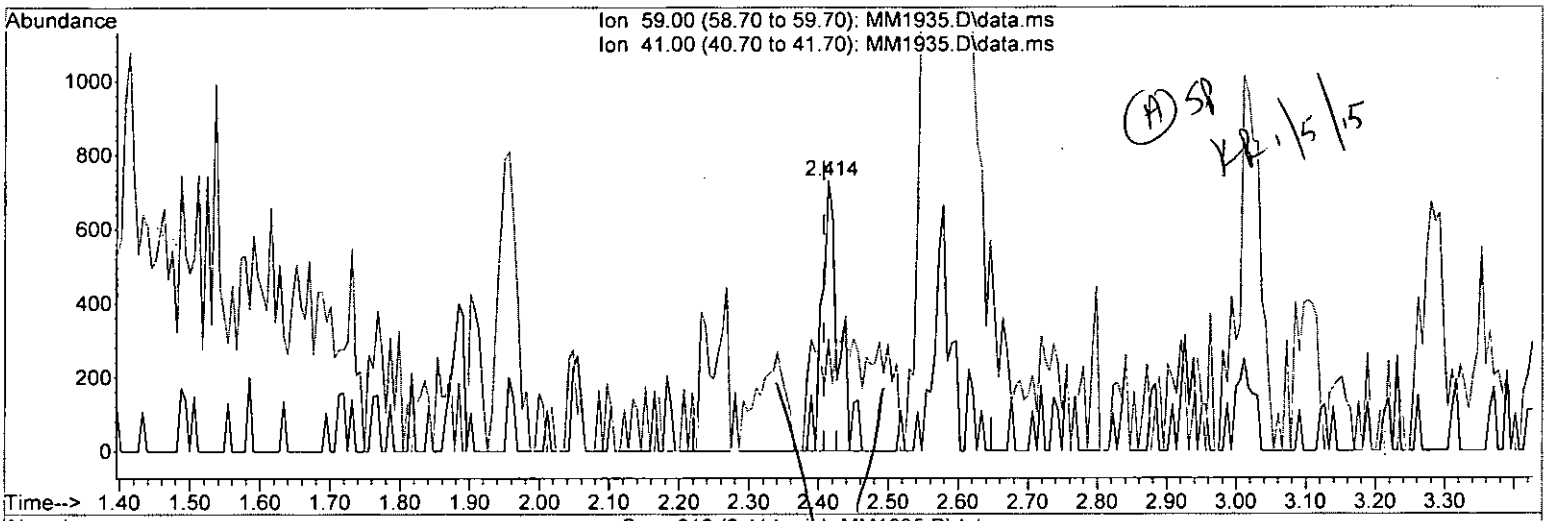
response 873

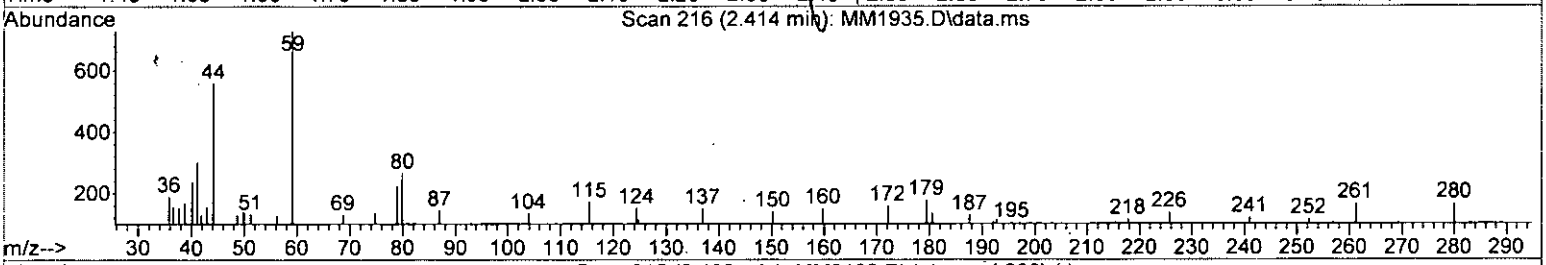
Ion	Exp%	Act%
59.00	100	100
41.00	23.40	41.29
0.00	0.00	0.00
0.00	0.00	0.00

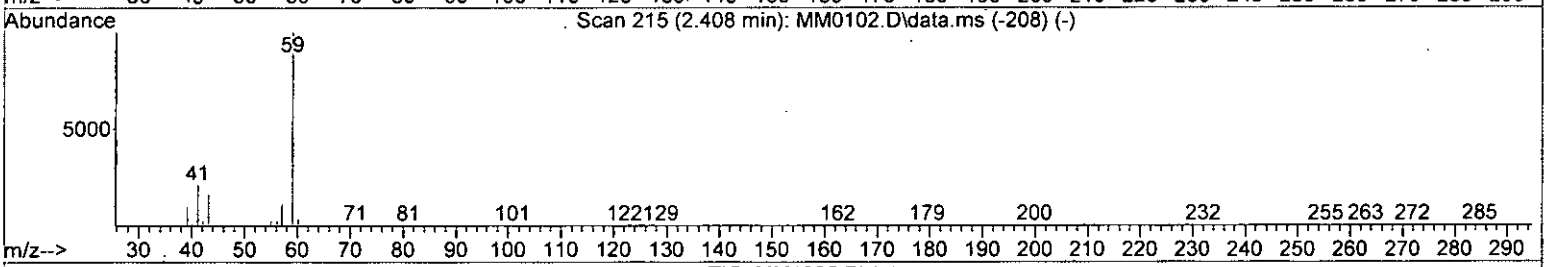
Quantitation Report (Qedit)

Sample : R1410307-013|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1935.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 7:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 07:31:38 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1935.D\data.ms

(23) TBA

2.414min (+0.006) 2.00 ppb m

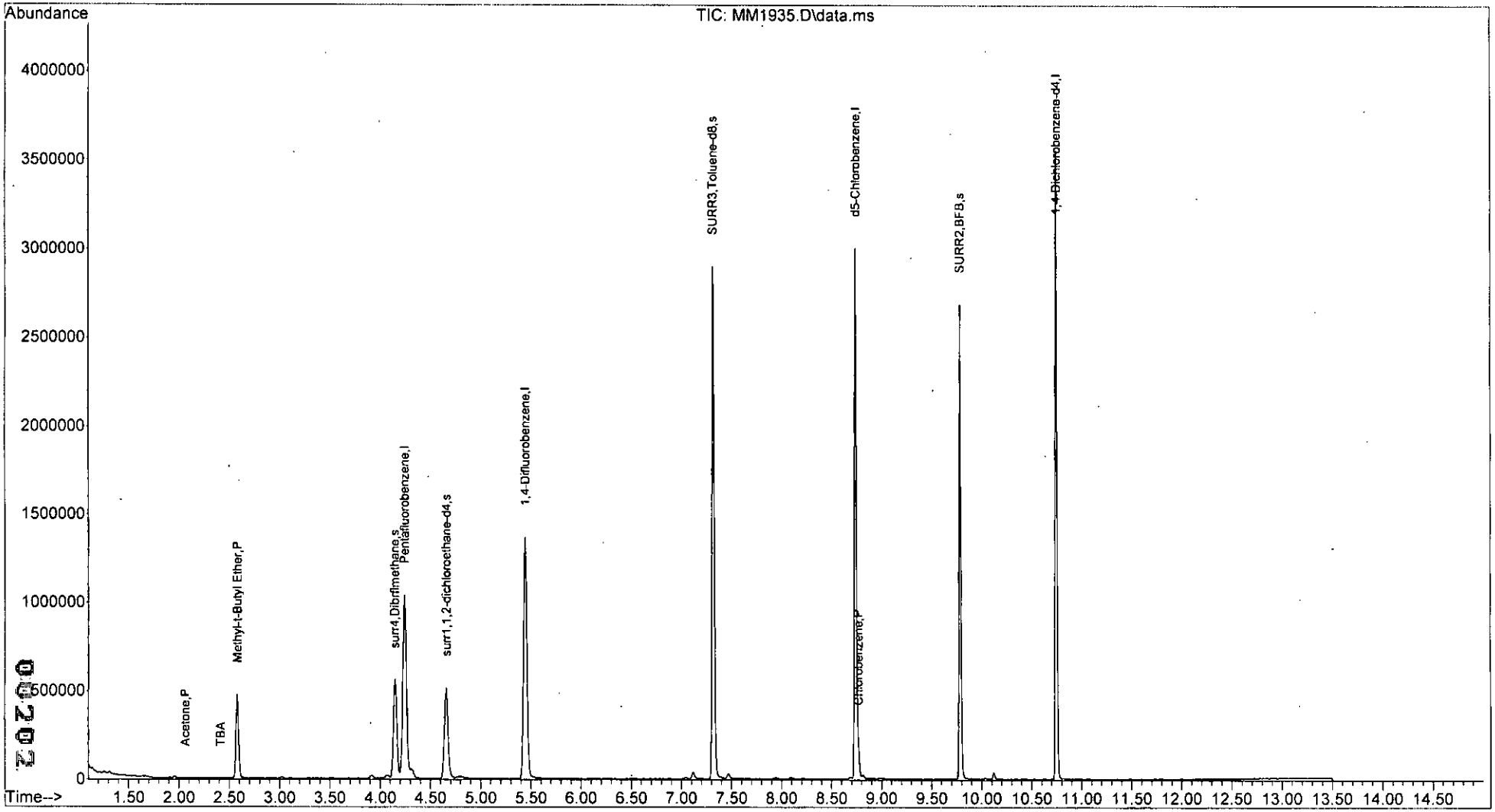
response 1252

Ion	Exp%	Act%
59.00	100	100
41.00	23.40	41.29
0.00	0.00	0.00
0.00	0.00	0.00

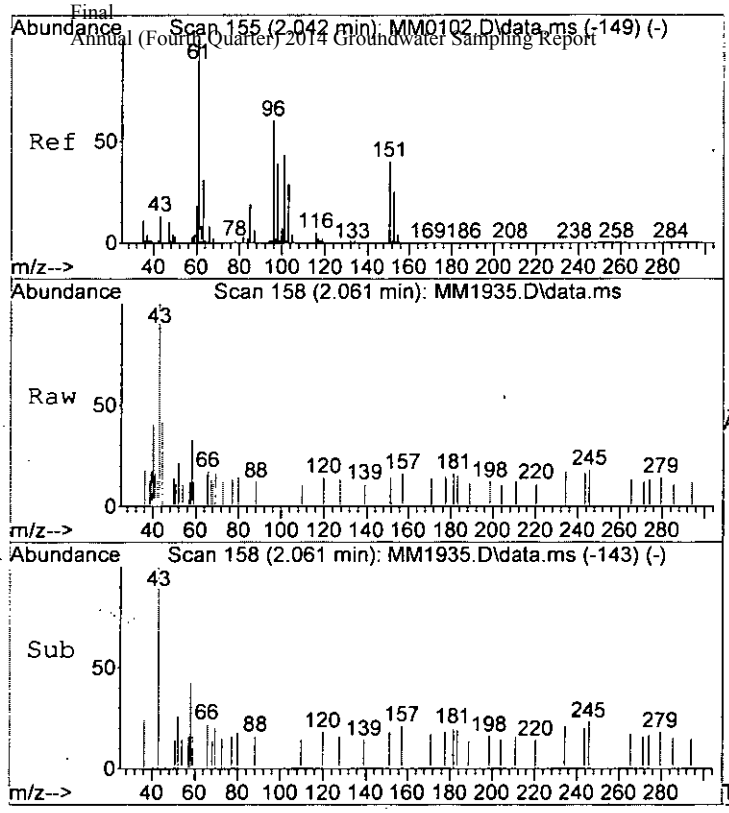
Quantitation Report (QT Reviewed)

Sample : R1410307-013|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1935.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 7:17 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 15:36:42 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



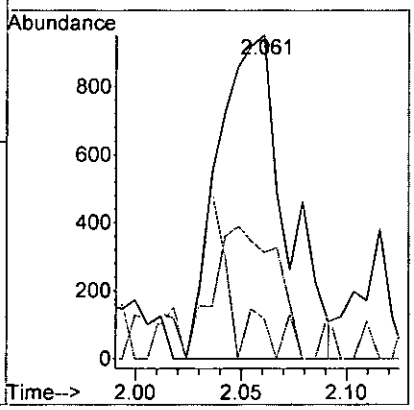
W102714.M Mon Jan 05 15:37:27 2015 Page: 2

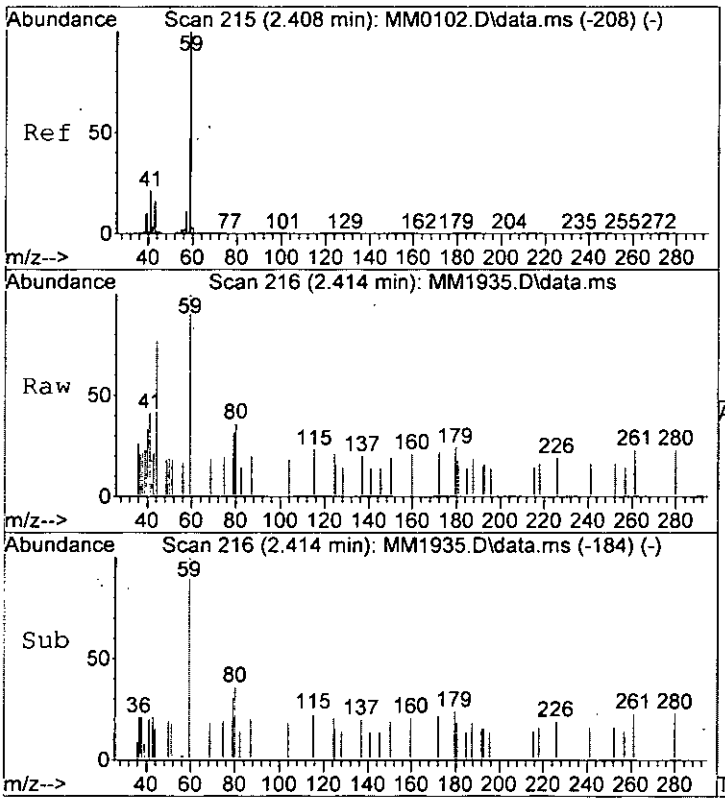


#15
Acetone
Concen: 1.10 ppb
RT: 2.061 min Scan# 158
Delta R.T. 0.018 min
Lab File: MM1935.D
Acq: 31 Dec 2014 7:17 am

Tgt Ion: 43 Resp: 2102

Ion	Ratio	Lower	Upper
43	100		
58	32.7	6.2	46.2
42	12.5	0.0	27.2

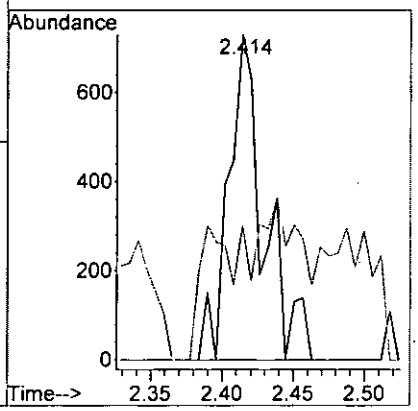


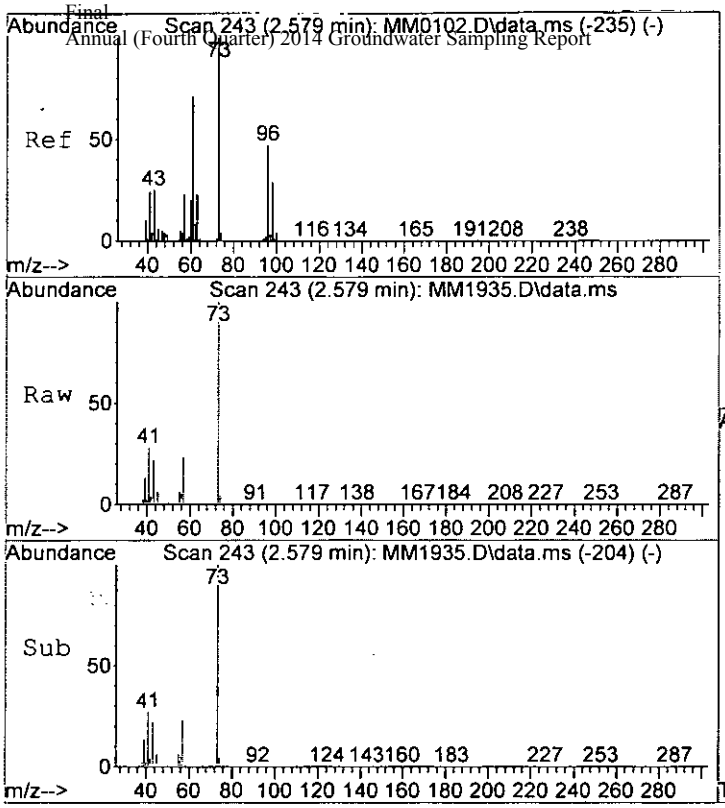


#23
TBA
Concen: 2.00 ppb m
RT: 2.414 min Scan# 216
Delta R.T. 0.006 min
Lab File: MM1935.D
Acq: 31 Dec 2014 7:17 am

Tgt Ion: 59 Resp: 1252

Ion	Ratio	Lower	Upper
59	100		
41	41.3	3.4	43.4

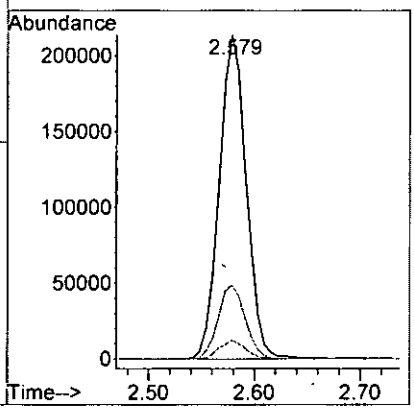


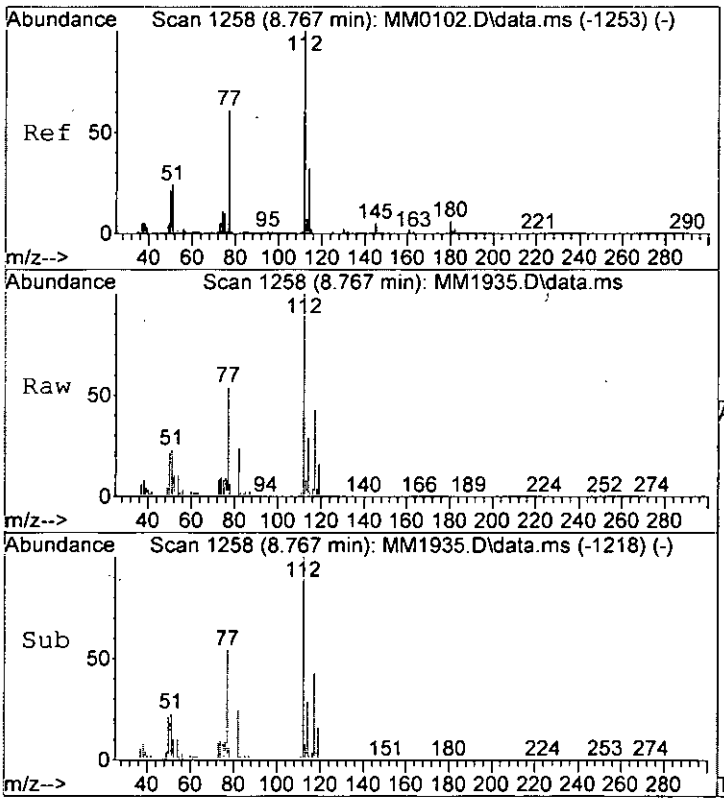


#25
Methyl-t-Butyl Ether
Concen: 17.37 ppb
RT: 2.579 min Scan# 243
Delta R.T. 0.000 min
Lab File: MM1935.D
Acq: 31 Dec 2014 7:17 am

Tgt Ion: 73 Resp: 378452

Ion	Ratio	Lower	Upper
73	100		
57	22.7	3.0	43.0
55	5.8	0.0	25.2

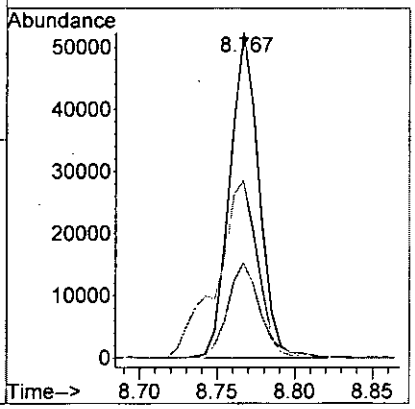




#78
Chlorobenzene
Concen: 2.81 ppb
RT: 8.767 min Scan# 1258
Delta R.T. -0.006 min
Lab File: MM1935.D
Acq: 31 Dec 2014 7:17 am

Tgt Ion:112 Resp: 68337

Ion	Ratio	Lower	Upper
112	100		
114	29.1	12.3	52.3
77	54.4	41.5	81.5



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1935.D
Acq On : 31 Dec 2014 7:17 am
Operator : K.Ruest
Sample : R1410307-013|1.0
Misc : PARSONS 11603 T4
ALS Vial : 40 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1935.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.579	235	243	251	rBV	472930	832523	18.84%	3.336%
2	4.152	493	501	508	rBV	552390	1292467	29.24%	5.179%
3	4.243	508	516	525	rVV	1006776	2413220	54.60%	9.670%
4	4.658	575	584	598	rBV	510929	1287848	29.14%	5.160%
5	5.444	701	713	727	rBV	1368463	3180685	71.96%	12.745%
6	7.115	981	987	995	rBV2	35414	70307	1.59%	0.282%
7	7.316	1014	1020	1030	rBV	2895742	4420046	100.00%	17.711%
8	8.742	1248	1254	1263	rBV	2995610	4122721	93.27%	16.520%
9	9.785	1420	1425	1435	rBV	2684561	3114143	70.45%	12.479%
10	10.120	1476	1480	1485	rBV2	38834	47199	1.07%	0.189%
11	10.748	1578	1583	1592	rBV	3547213	4174757	94.45%	16.729%

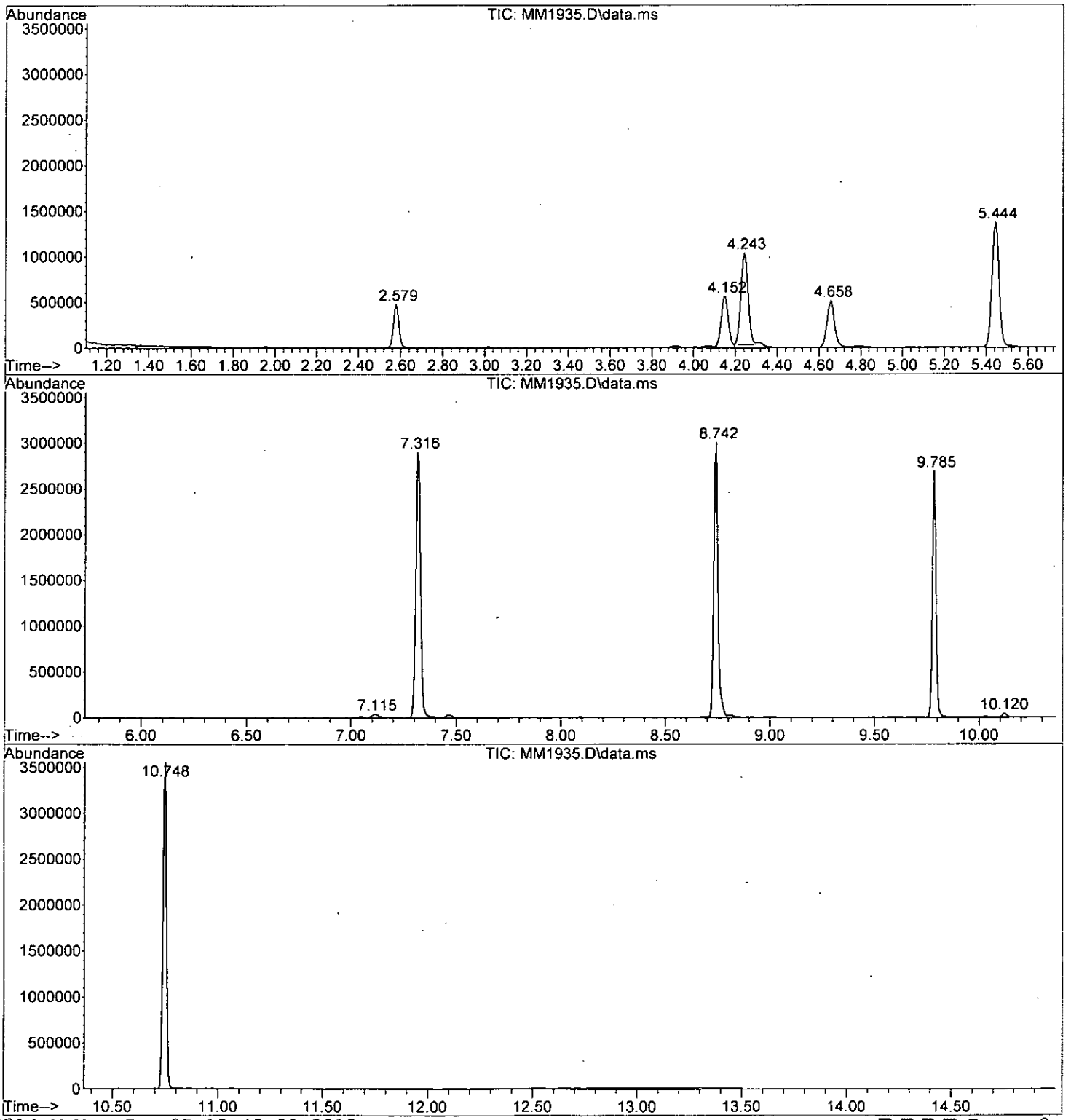
Sum of corrected areas: 24955916

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1935.D
Acq On : 31 Dec 2014 7:17 am
Operator : K.Ruest
Sample : R1410307-013|1.0
Misc : PARSONS 11603 T4
ALS Vial : 40 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W102714.M Mon Jan 05 15:45:58 2015 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1935.D
Acq On : 31 Dec 2014 7:17 amm
Operator : K.Ruestt
Sample : R1410307-013|1.00
Misc : PARSONS 11603 T44
ALS Vial : 40 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1458
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 11:32
Sample Name:	FTMM-2-GW-M2MW03-10.27	**Units:**	µg/L
Lab Code:	R1410307-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1943.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**1.3**	J	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**1.0**	J	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**3.9**	J	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**2.2**	J	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: 12/18/14 1458
Date Received: 12/20/14
Date Analyzed: 12/31/14 11:32

Sample Name: FTMM-2-GW-M2MW03-10.27
Lab Code: R1410307-014

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\123014\MM1943.D\

Analysis Lot: 427514
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	49		5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	0.73	J	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	0.35	J	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	0.43	J	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1458
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 11:32
Sample Name:	FTMM-2-GW-M2MW03-10.27	**Units:**	µg/L
Lab Code:	R1410307-014	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1943.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	12/31/14 11:32	
Dibromofluoromethane	100	85-115	12/31/14 11:32	
Toluene-d8	99	85-120	12/31/14 11:32	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 1132

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-2-GW-M2MW03-10.27	**Units:**	µg/L
Lab Code:	R1410307-014	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected..

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-014|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1943.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 11:32 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 16:10:10 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	882348	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1336411	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1244318	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	671256	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.146	113	388970	49.98	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.96%				
48) surr1,1,2-dichloroetha...	4.658	65	446085	47.07	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 94.14%				
65) SURR3,Toluene-d8	7.316	98	1629259	49.73	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.46%				
70) SURR2,BFB	9.785	95	601592	47.32	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 94.64%				
Target Compounds							Qvalue
4) Vinyl Chloride	1.323	62	2441	0.20	ppb		85
9) Diethyl Ether	1.878	59	6709	1.02	ppb	#	82
15) Acetone	2.049	43	2389	1.28	ppb		85
49) Benzene	4.780	78	75377	2.20	ppb		96
78) Chlorobenzene	8.767	112	1177248	48.85	ppb		96
89) Isopropylbenzene	9.669	105	26164	0.73	ppb		97
100) tert-Butylbenzene	10.437	119	10756	0.43	ppb		97
103) sec-Butylbenzene	10.614	105	12363	0.35	ppb		92
105) 1,3-Dclbenz	10.693	146	18521	1.03	ppb		99
106) 1,4-Dclbenz	10.766	146	73604	3.90	ppb		95
110) 1,2-Dclbenz	11.065	146	21204	1.25	ppb		99

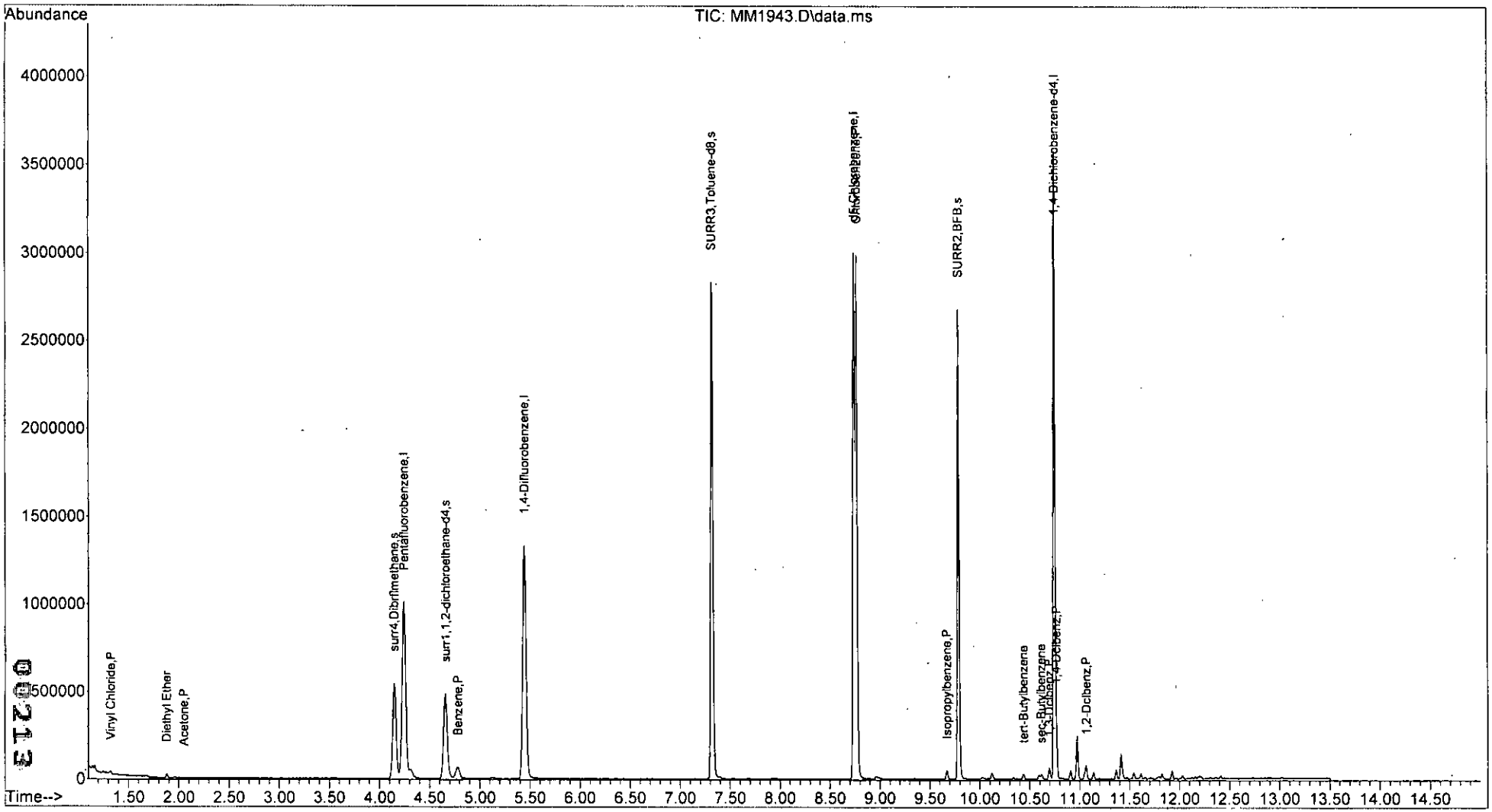
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KL 1/5/15

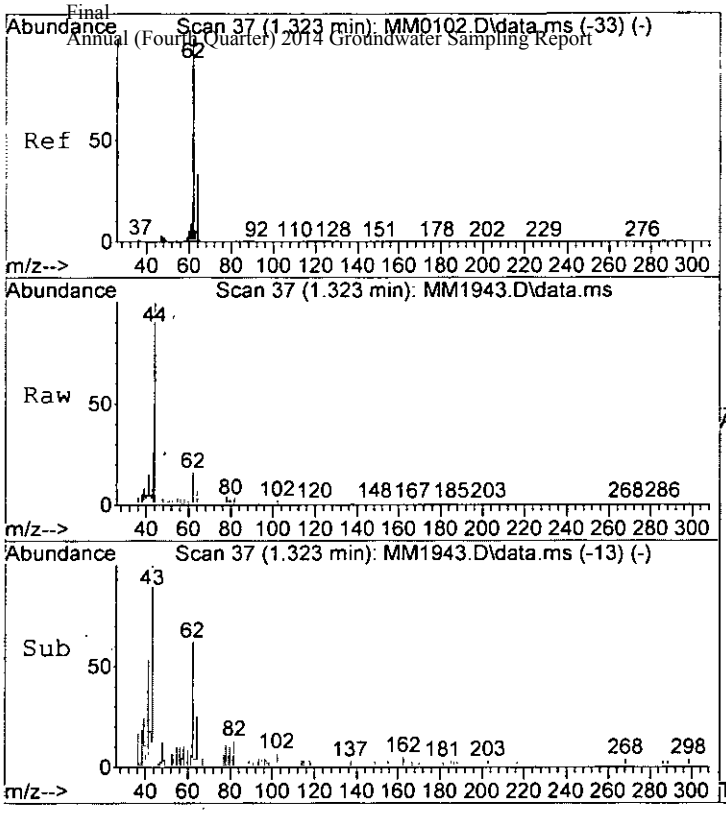
Quantitation Report (QT Reviewed)

Sample : R1410307-014|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1943.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 11:32 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 16:10:10 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



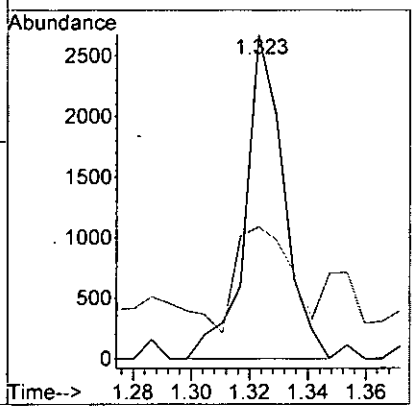
W102714.M Mon Jan 05 16:11:18 2015 Page: 2

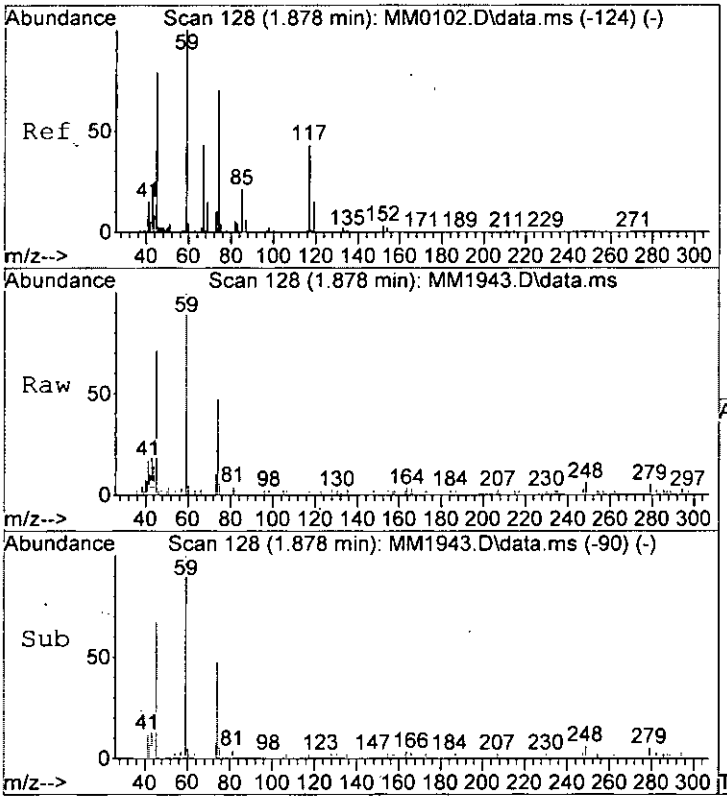


#4
Vinyl Chloride
Concen: 0.20 ppb
RT: 1.323 min Scan# 37
Delta R.T. 0.000 min
Lab File: MM1943.D
Acq: 31 Dec 2014 11:32 am

Tgt Ion: 62 Resp: 2441

Ion	Ratio	Lower	Upper
62	100		
64	40.7	12.5	52.5

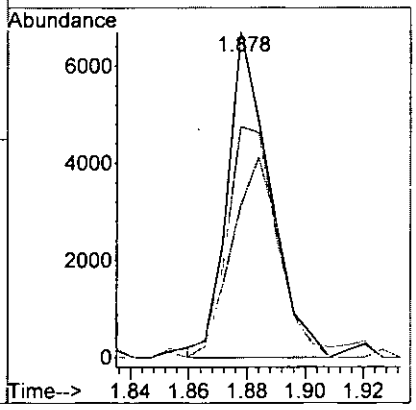


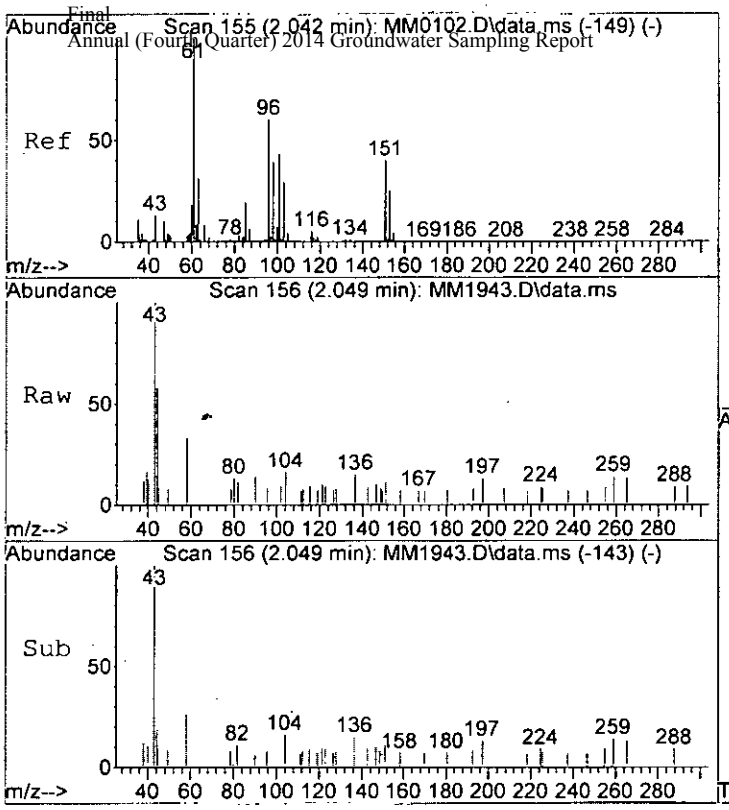


#9
Diethyl Ether
Concen: 1.02 ppb
RT: 1.878 min Scan# 128
Delta R.T. 0.000 min
Lab File: MM1943.D
Acq: 31 Dec 2014 11:32 am

Tgt Ion: 59 Resp: 6709

Ion	Ratio	Lower	Upper
59	100		
45	71.0	59.1	99.1
74	46.6	50.0	90.0#

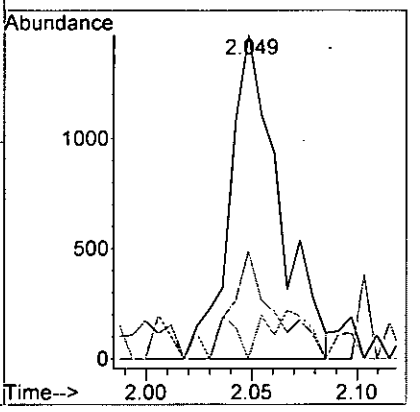


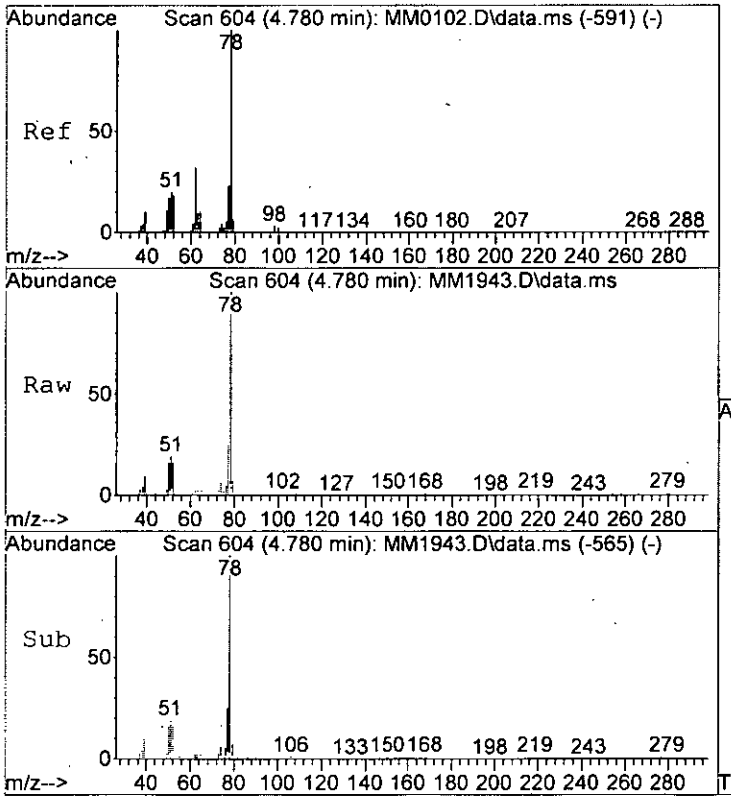


#15
Acetone
Concen: 1.28 ppb
RT: 2.049 min Scan# 156
Delta R.T. 0.006 min
Lab File: MM1943.D
Acq: 31 Dec 2014 11:32 am

Tgt Ion: 43 Resp: 2389

Ion	Ratio	Lower	Upper
43	100		
58	33.2	6.2	46.2
42	0.0	0.0	27.2

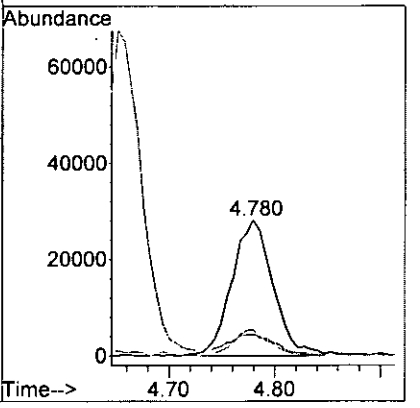


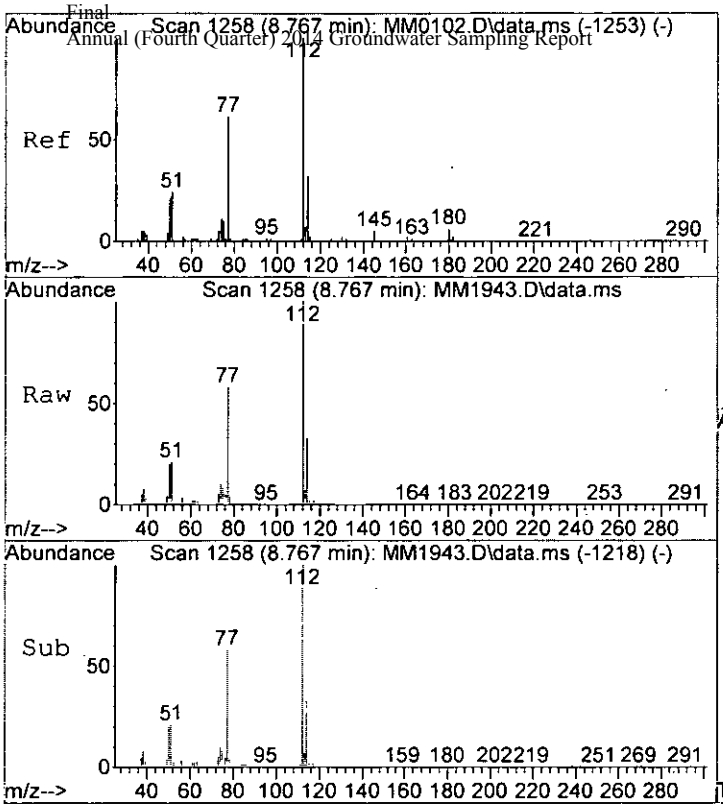


#49
Benzene
Concen: 2.20 ppb
RT: 4.780 min Scan# 604
Delta R.T. -0.006 min
Lab File: MM1943.D
Acq: 31 Dec 2014 11:32 am

Tgt Ion: 78 Resp: 75377

Ion	Ratio	Lower	Upper
78	100		
51	19.4	1.2	41.2
52	15.5	0.0	37.6

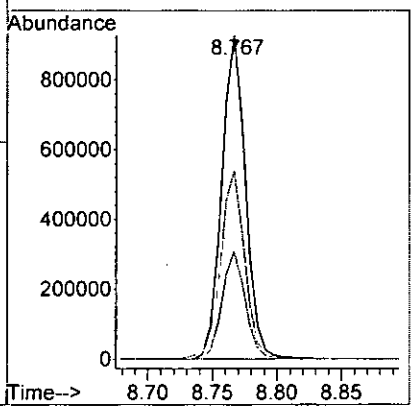


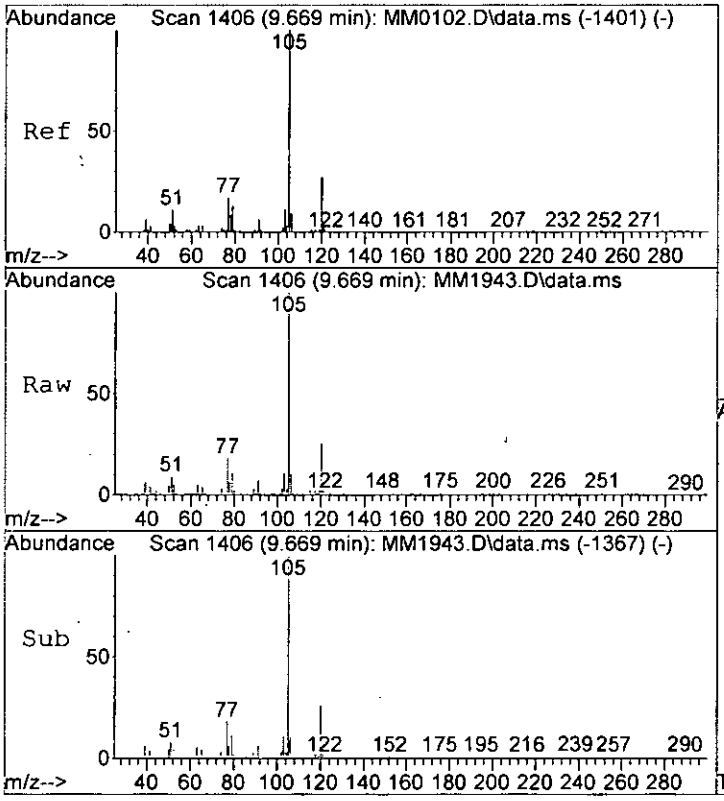


#78
Chlorobenzene
Concen: 48.85 ppb
RT: 8.767 min Scan# 1258
Delta R.T. -0.006 min
Lab File: MM1943.D
Acq: 31 Dec 2014 11:32 am

Tgt Ion:112 Resp: 1177248

Ion	Ratio	Lower	Upper
112	100		
114	33.2	12.3	52.3
77	58.1	41.5	81.5

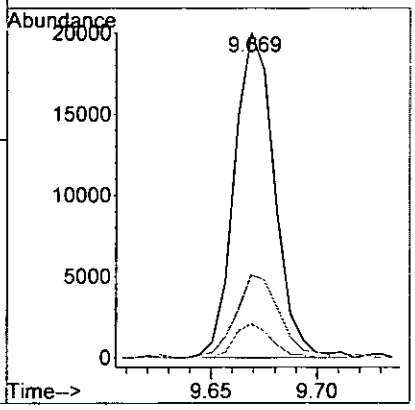


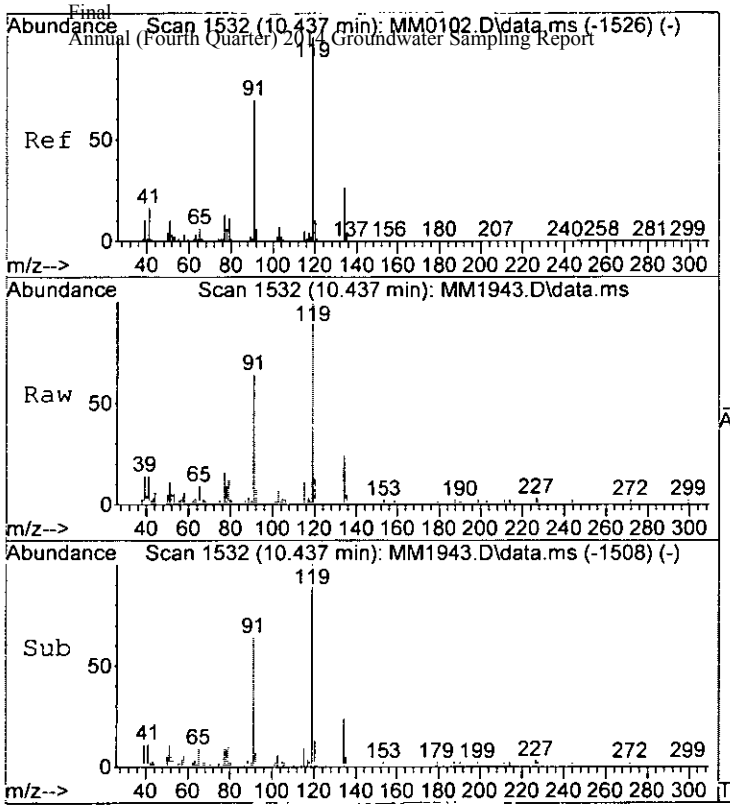


#89
Isopropylbenzene
Concen: 0.73 ppb
RT: 9.669 min Scan# 1406
Delta R.T. -0.006 min
Lab File: MM1943.D
Acq: 31 Dec 2014 11:32 am

Tgt Ion:105 Resp: 26164

Ion	Ratio	Lower	Upper
105	100		
120	25.4	7.0	47.0
106	10.3	0.0	28.8

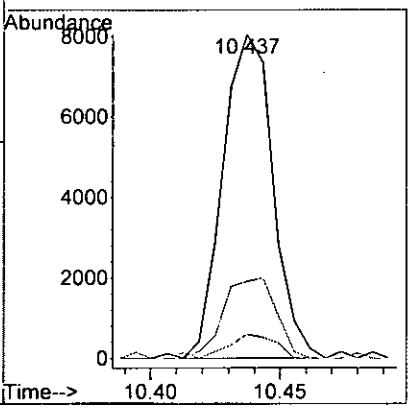


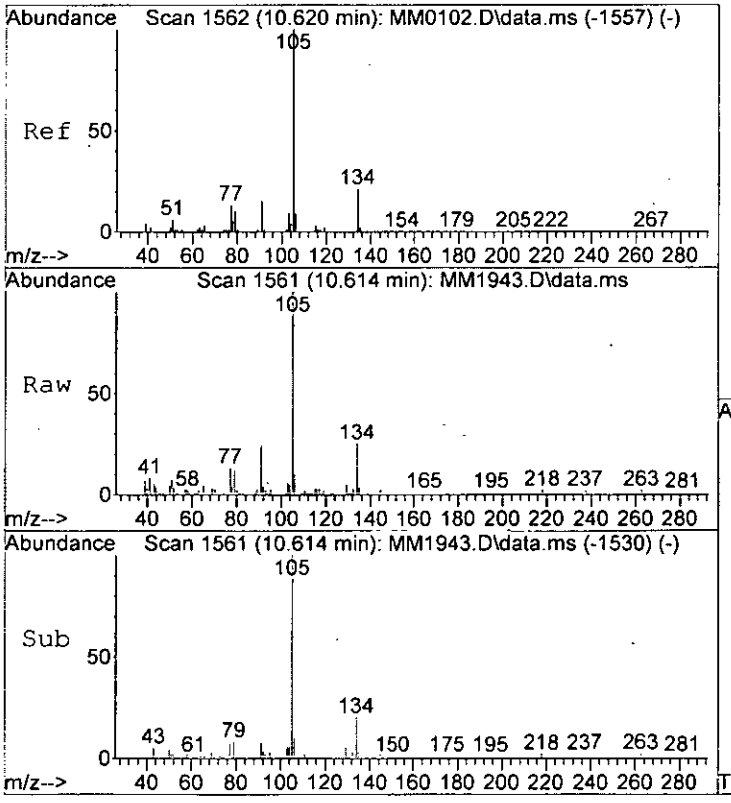


#100
tert-Butylbenzene
Concen: 0.43 ppb
RT: 10.437 min Scan# 1532
Delta R.T. -0.006 min
Lab File: MM1943.D
Acq: 31 Dec 2014 11:32 am

Tgt Ion:119 Resp: 10756

Ion	Ratio	Lower	Upper
119	100		
134	23.7	5.5	45.5
103	7.4	0.0	26.8

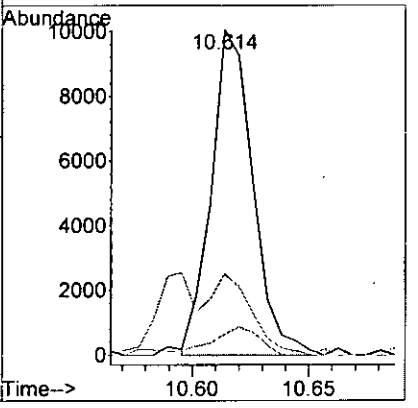


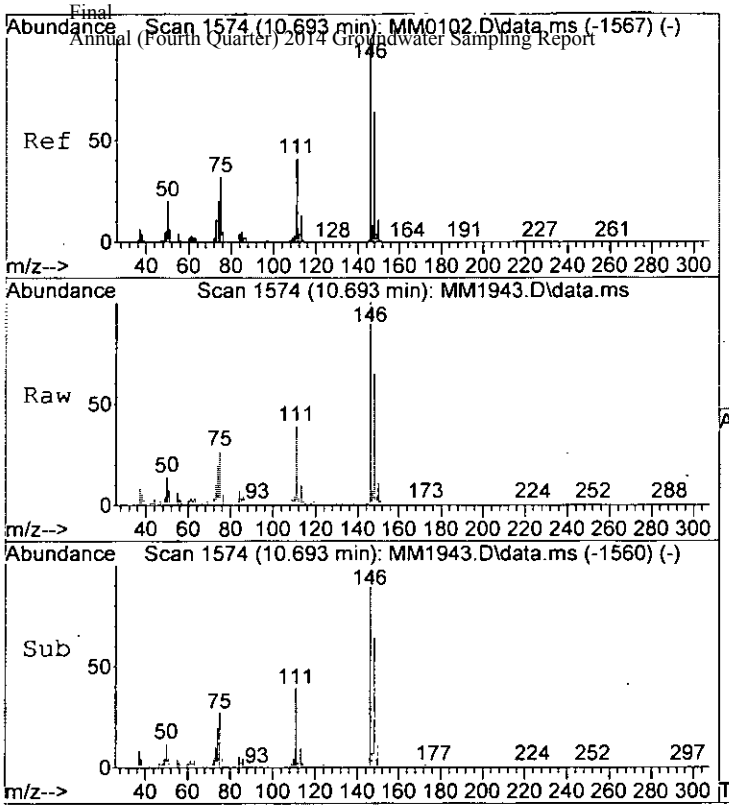


#103
sec-Butylbenzene
Concen: 0.35 ppb
RT: 10.614 min Scan# 1561
Delta R.T. -0.006 min
Lab File: MM1943.D
Acq: 31 Dec 2014 11:32 am

Tgt Ion:105 Resp: 12363

Ion	Ratio	Lower	Upper
105	100		
134	25.0	1.0	41.0
103	6.3	0.0	28.6

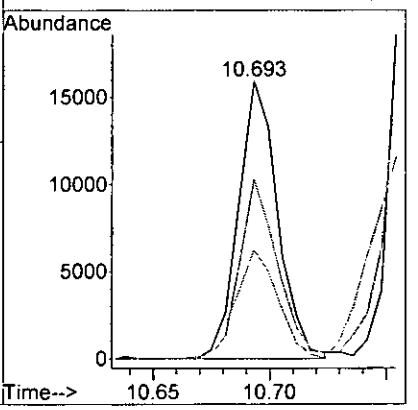


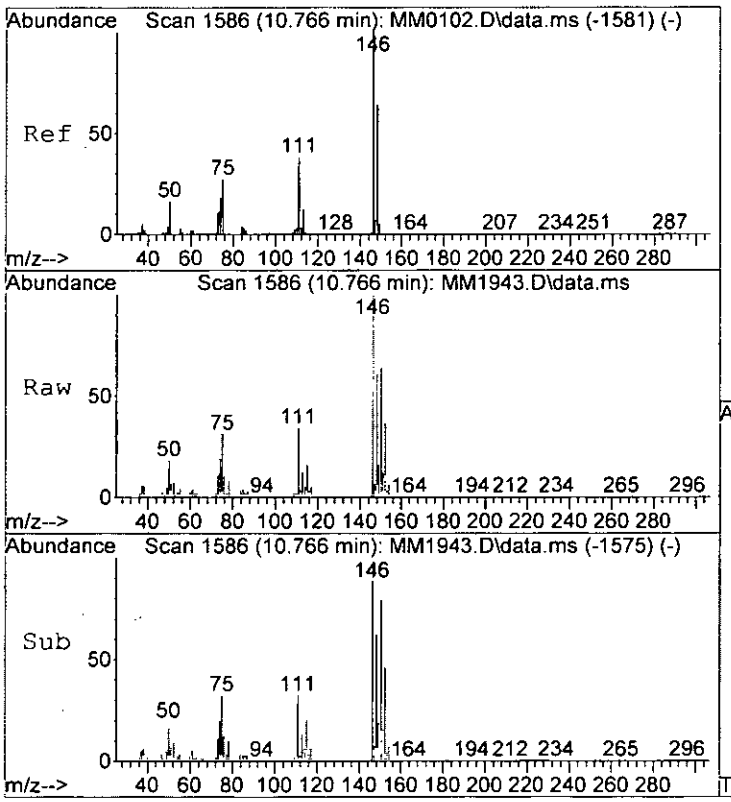


#105
1,3-Dclbenz
Concen: 1.03 ppb
RT: 10.693 min Scan# 1574
Delta R.T. -0.006 min
Lab File: MM1943.D
Acq: 31 Dec 2014 11:32 am

Tgt Ion:146 Resp: 18521

Ion	Ratio	Lower	Upper
146	100		
148	64.6	43.9	83.9
111	39.1	20.5	60.5

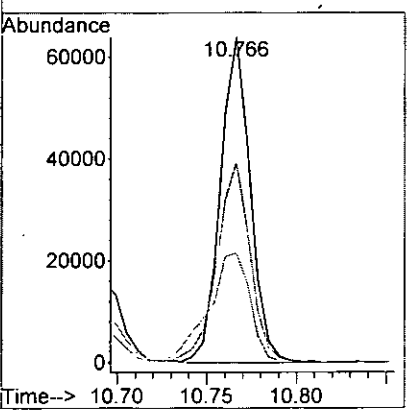


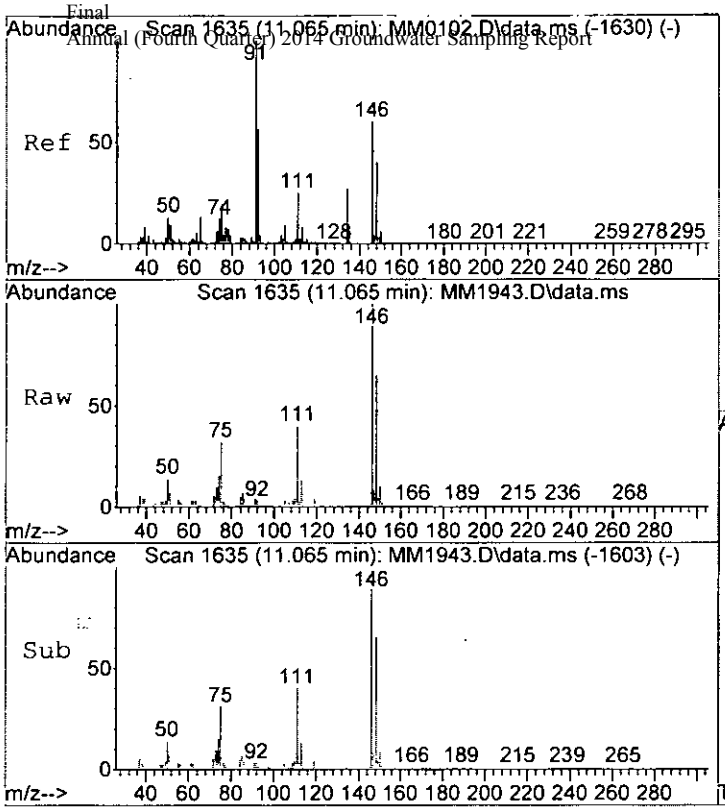


#106
1,4-Dclbenz
Concen: 3.90 ppb
RT: 10.766 min Scan# 1586
Delta R.T. -0.006 min
Lab File: MM1943.D
Acq: 31 Dec 2014 11:32 am

Tgt Ion:146 Resp: 73604

Ion	Ratio	Lower	Upper
146	100		
148	61.3	44.1	84.1
111	33.6	17.8	57.8

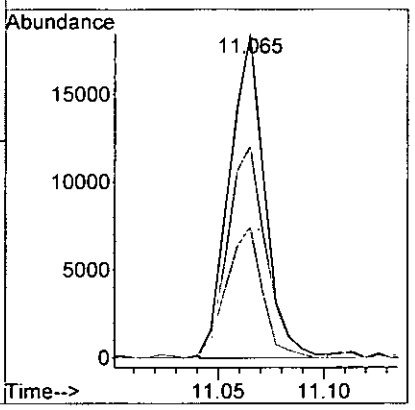




#110
1,2-Dclbenz
Concen: 1.25 ppb
RT: 11.065 min Scan# 1635
Delta R.T. 0.000 min
Lab File: MM1943.D
Acq: 31 Dec 2014 11:32 am

Tgt Ion:146 Resp: 21204

Ion	Ratio	Lower	Upper
146	100		
148	65.2	45.7	85.7
111	40.4	20.8	60.8



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1943.D
Acq On : 31 Dec 2014 11:32 am
Operator : K.Ruest
Sample : R1410307-014|1.0
Misc : PARSONS 11603 T4
ALS Vial : 48 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1943.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.146	491	500	508	rBV	544341	1296304	29.14%	4.510%
2	4.243	508	516	526	rVV	979850	2380069	53.51%	8.281%
3	4.658	573	584	596	rBV	484557	1237466	27.82%	4.305%
4	4.780	596	604	618	rVB	62752	177276	3.99%	0.617%
5	5.444	703	713	726	rBV	1331245	3098423	69.66%	10.780%
6	7.316	1014	1020	1031	rBV	2829787	4359681	98.02%	15.168%
7	8.742	1248	1254	1256	rBV	2999016	4334305	97.45%	15.079%
8	8.767	1256	1258	1273	rVB	2982739	3304598	74.30%	11.497%
9	9.669	1401	1406	1411	rBV	52570	73991	1.66%	0.257%
10	9.785	1420	1425	1441	rBV	2678823	3083531	69.33%	10.728%
11	10.120	1476	1480	1487	rVB2	34762	46124	1.04%	0.160%
12	10.693	1570	1574	1578	rBV2	63632	81006	1.82%	0.282%
13	10.748	1578	1583	1592	rVB	3569745	4447892	100.00%	15.475%
14	10.907	1605	1609	1612	rBV	47118	54398	1.22%	0.189%
15	10.974	1615	1620	1628	rBV	248075	297482	6.69%	1.035%
16	11.059	1628	1634	1640	rVB2	76892	126133	2.84%	0.439%
17	11.138	1643	1647	1653	rVB	39902	46405	1.04%	0.161%
18	11.364	1680	1684	1688	rBV	53198	61725	1.39%	0.215%
19	11.413	1688	1692	1699	rVV2	142324	188848	4.25%	0.657%
20	11.925	1772	1776	1781	rVB	46917	47372	1.07%	0.165%

Sum of corrected areas: 28743029

LSC Report - Integrated Chromatogram

```
Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1943.D
Acq On    : 31 Dec 2014  11:32 am
Operator  : K.Ruest
Sample    : R1410307-014|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 48   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
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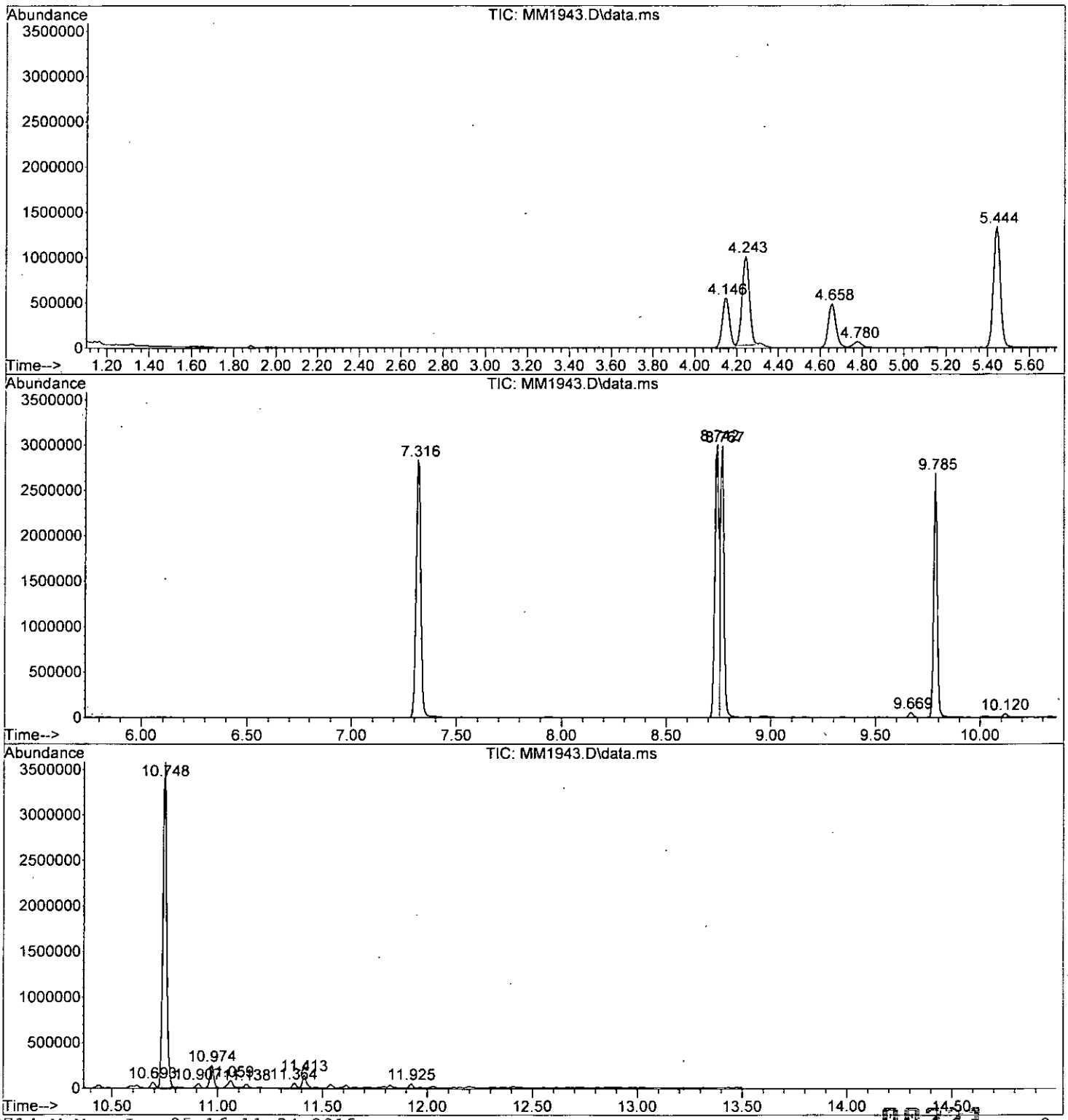


W102714.M Mon Jan 05 16:11:34 2015 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1943.D
Acq On : 31 Dec 2014 11:32 amm
Operator : K.Ruestt
Sample : R1410307-014|1.00
Misc : PARSONS 11603 T44
ALS Vial : 48 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0823
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 07:49
Sample Name:	FTMM-5-GW-M5MW11-9.46	**Units:**	µg/L
Lab Code:	R1410307-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1936.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.5**	**J**	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0823
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 07:49
Sample Name:	FTMM-5-GW-M5MW11-9.46	**Units:**	µg/L
Lab Code:	R1410307-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1936.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**1.8**	J	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0823
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 07:49
Sample Name:	FTMM-5-GW-M5MW11-9.46	**Units:**	µg/L
Lab Code:	R1410307-015	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1936.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	12/31/14 07:49	
Dibromofluoromethane	101	85-115	12/31/14 07:49	
Toluene-d8	99	85-120	12/31/14 07:49	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 0749

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-5-GW-M5MW11-9.46	**Units:**	µg/L
Lab Code:	R1410307-015	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-015|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1936.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 7:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 15:47:24 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.243	168	893874	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.444	114	1363274	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1259906	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	677323	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.146	113	400307	50.42	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.84%			
48) surr1,1,2-dichloroetha...	4.652	65	456984	47.27	ppb	-0.01
Spiked Amount 50.000	Range 78 - 122		Recovery = 94.54%			
65) SURR3,Toluene-d8	7.316	98	1656560	49.57	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.14%			
70) SURR2,BFB	9.785	95	617289	47.60	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.20%			
Target Compounds						Qvalue
15) Acetone	2.048	43	4674	2.47	ppb	97
72) Tetrachloroethene	7.962	164	13354m	1.84	ppb	

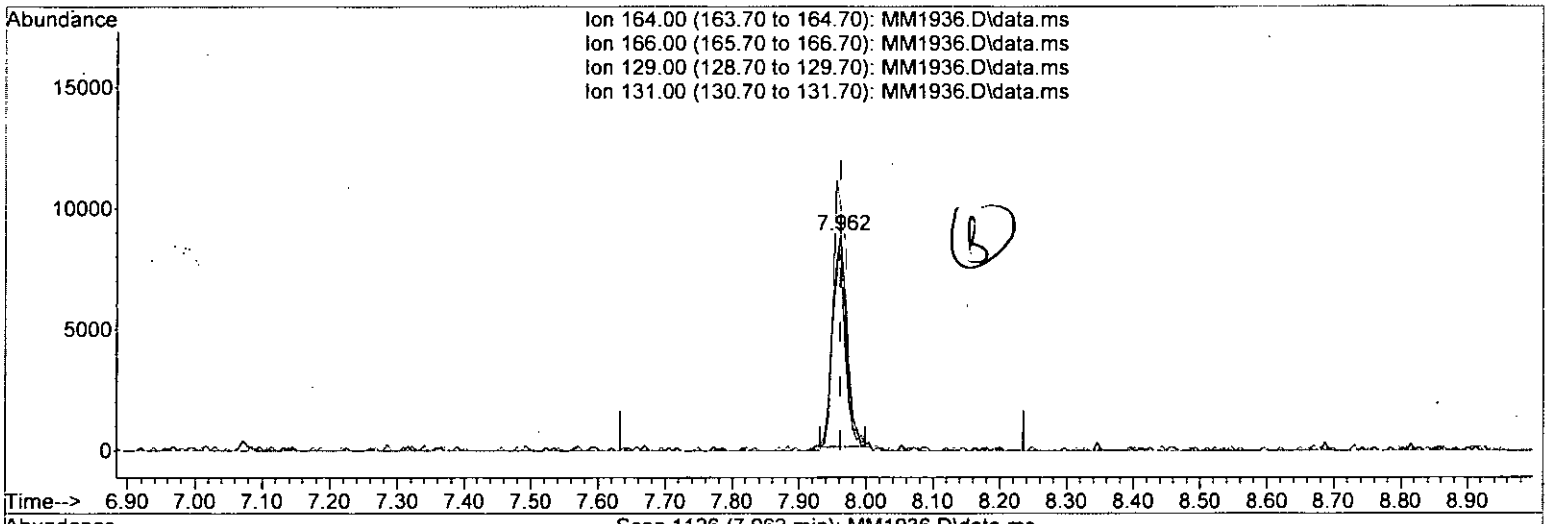
(#) = qualifier out of range (m) = manual integration (+) = signals summed

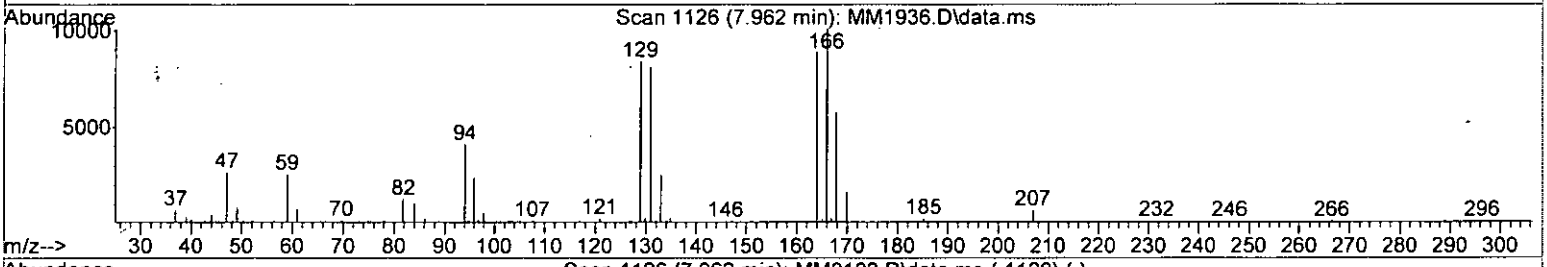
KB 1/5/15

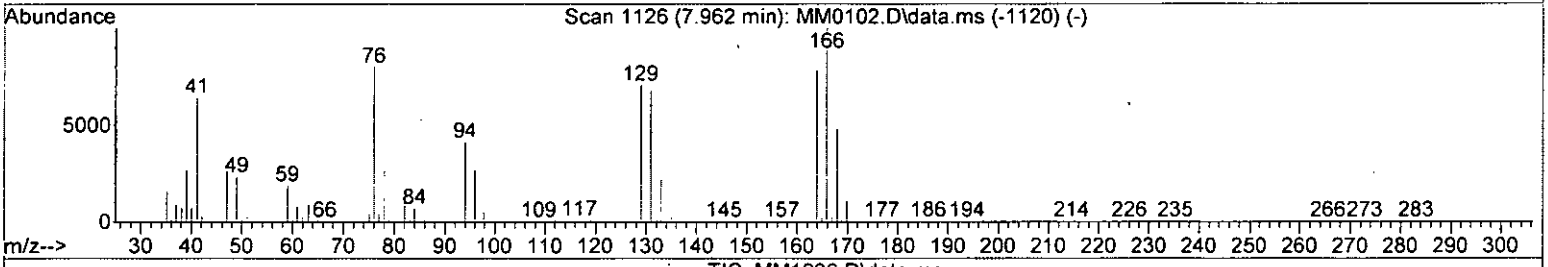
Quantitation Report (Qedit)

Sample : R1410307-015|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1936.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 7:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 08:03:39 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1936.D\data.ms

(72) Tetrachloroethene (P)

7.962min (+0.000) 1.71 ppb

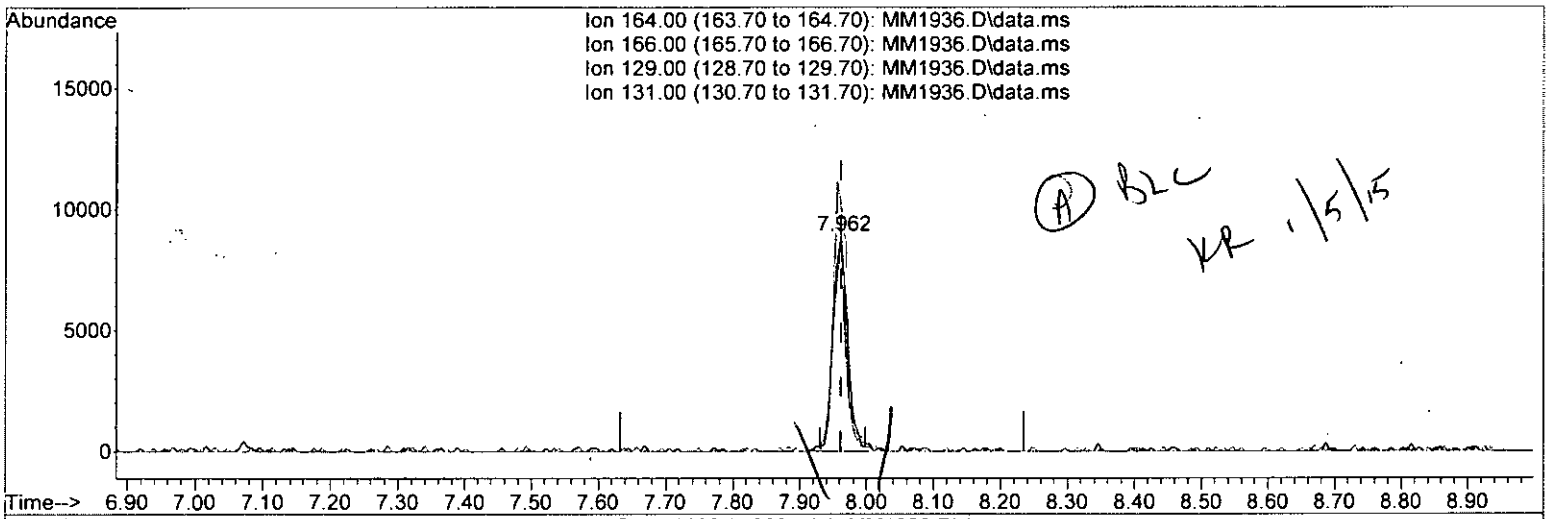
response 12385

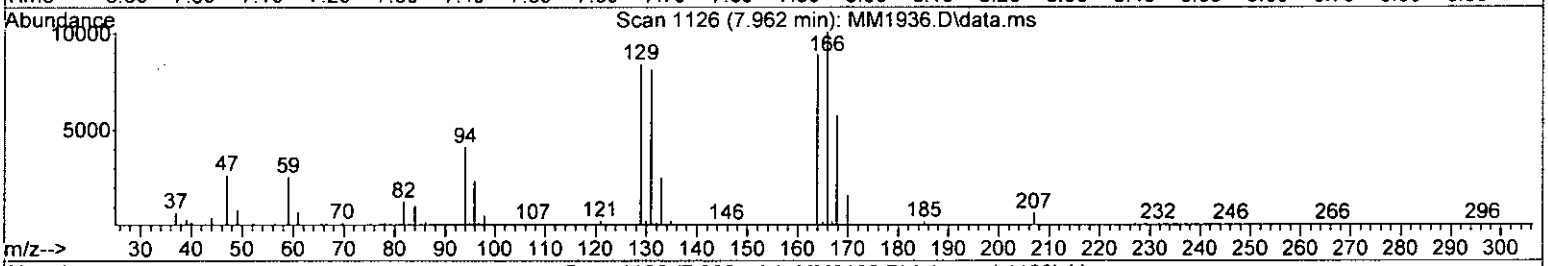
Ion	Exp%	Act%
164.00	100	100
166.00	127.70	113.19
129.00	90.10	94.32
131.00	86.30	91.25

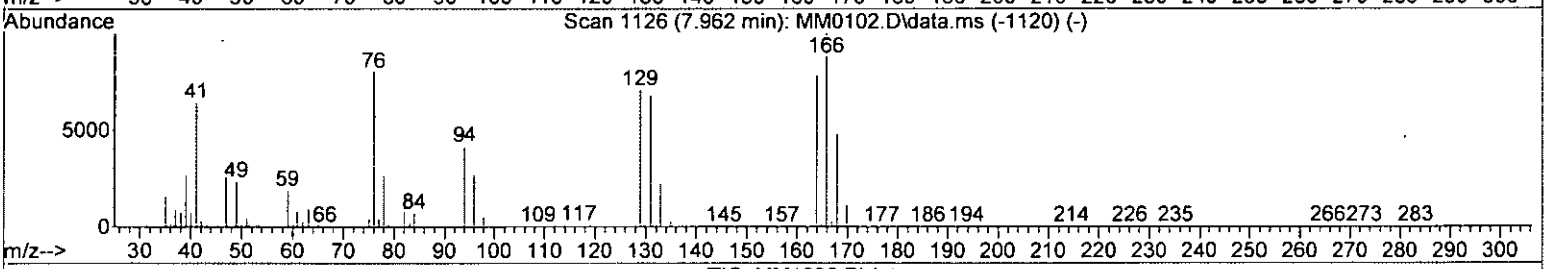
Quantitation Report (Qedit)

Sample : R1410307-015|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1936.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 7:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 08:03:39 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1936.D\data.ms

(72) Tetrachloroethene (P)

7.962min (+0.000) 1.84 ppb m

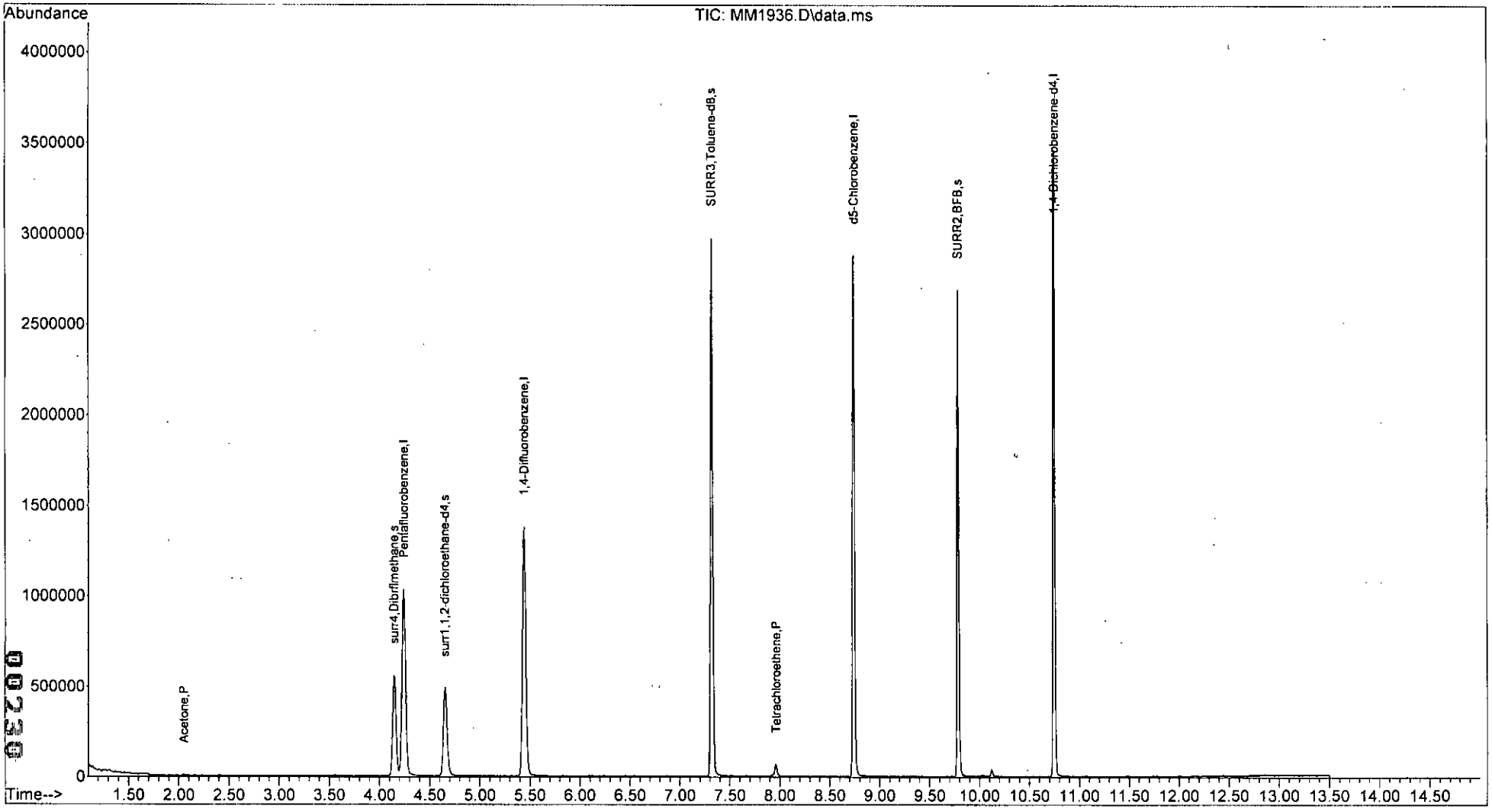
response 13354

Ion	Exp%	Act%
164.00	100	100
166.00	127.70	113.19
129.00	90.10	94.32
131.00	86.30	91.25

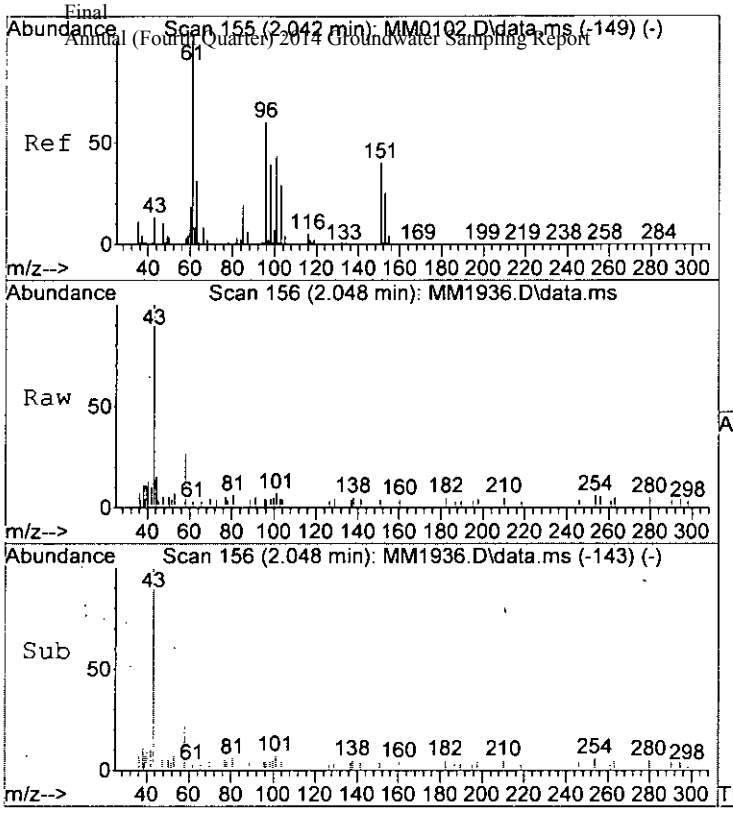
Quantitation Report (QT Reviewed)

Sample : R1410307-015|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1936.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 7:49 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 15:47:24 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



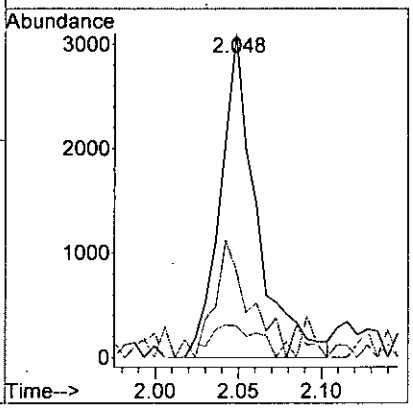
W102714.M Mon Jan 05 15:48:15 2015 Page: 2

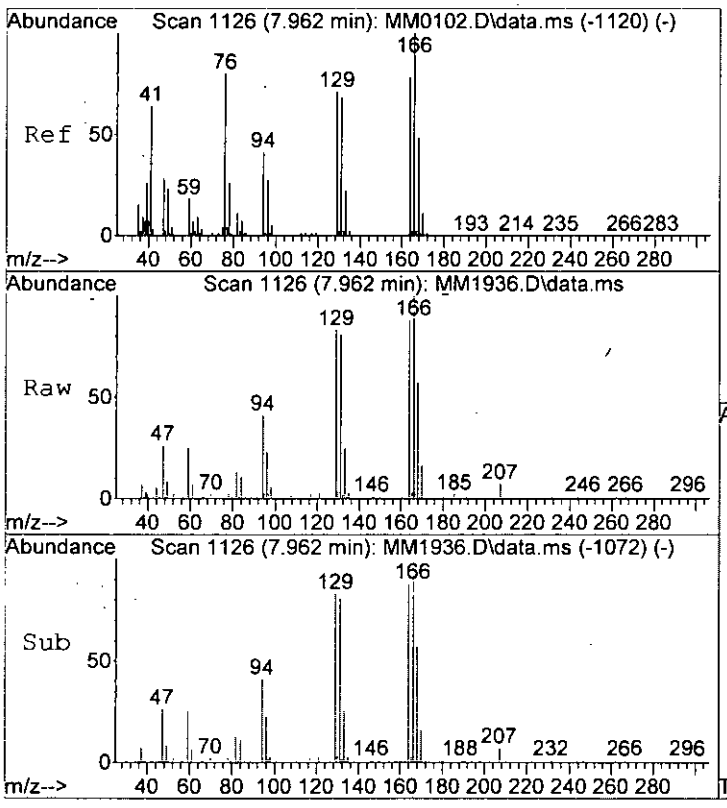


#15
Acetone
Concen: 2.47 ppb
RT: 2.048 min Scan# 156
Delta R.T. 0.006 min
Lab File: MM1936.D
Acq: 31 Dec 2014 7:49 am

Tgt Ion: 43 Resp: 4674

Ion	Ratio	Lower	Upper
43	100		
58	26.9	6.2	46.2
42	9.7	0.0	27.2

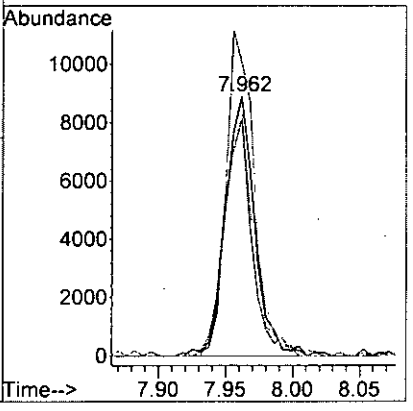




#72
Tetrachloroethene
Concen: 1.84 ppb m
RT: 7.962 min Scan# 1126
Delta R.T. 0.000 min
Lab File: MM1936.D
Acq: 31 Dec 2014 7:49 am

Tgt Ion:164 Resp: 13354

Ion	Ratio	Lower	Upper
164	100		
166	113.2	107.7	147.7
129	94.3	70.1	110.1
131	91.2	66.3	106.3



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1936.D
Acq On : 31 Dec 2014 7:49 am
Operator : K.Ruest
Sample : R1410307-015|1.0
Misc : PARSONS 11603 T4
ALS Vial : 41 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1936.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.146	491	500	508	rBV	555123	1310699	29.54%	5.415%
2	4.243	508	516	534	rVB	1031091	2548920	57.45%	10.531%
3	4.658	572	584	601	rBV2	488529	1276168	28.76%	5.273%
4	5.444	702	713	731	rBV	1378989	3194822	72.01%	13.200%
5	7.316	1014	1020	1035	rBV	2975160	4436895	100.00%	18.332%
6	7.956	1117	1125	1132	rBV2	66459	114034	2.57%	0.471%
7	8.742	1248	1254	1264	rBV	2881059	3945040	88.91%	16.300%
8	9.785	1420	1425	1434	rBV	2688001	3126207	70.46%	12.916%
9	10.120	1476	1480	1487	rBV	38918	52653	1.19%	0.218%
10	10.748	1578	1583	1591	rBV	3459648	4197985	94.62%	17.345%

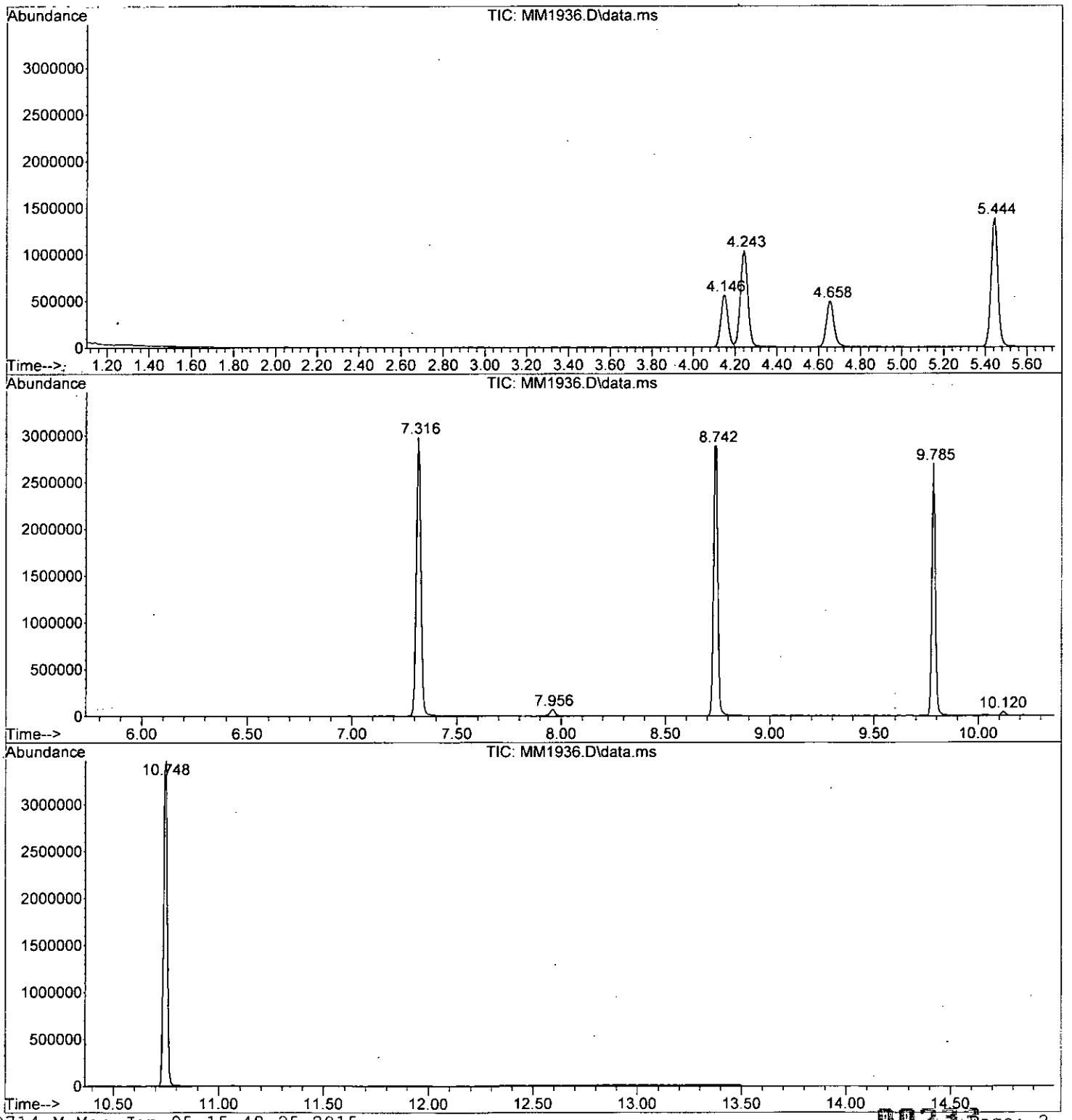
Sum of corrected areas: 24203423

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1936.D
Acq On : 31 Dec 2014 7:49 am
Operator : K.Ruest
Sample : R1410307-015|1.0
Misc : PARSONS 11603 T4
ALS Vial : 41 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W102714.M Mon Jan 05 15:48:25 2015 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1936.D
Acq On : 31 Dec 2014 7:49 amm
Operator : K.Ruestt
Sample : R1410307-015|1.00
Misc : PARSONS 11603 T44
ALS Vial : 41 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0827
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 08:21
Sample Name:	FTMM-5-GW-M5MW16-14.57	**Units:**	µg/L
Lab Code:	R1410307-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1937.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**3.3**	**J**	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0827
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 08:21
Sample Name:	FTMM-5-GW-M5MW16-14.57	**Units:**	µg/L
Lab Code:	R1410307-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1937.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**1.7**	**J**	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**1.6**	**J**	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0827
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 08:21
Sample Name:	FTMM-5-GW-M5MW16-14.57	**Units:**	µg/L
Lab Code:	R1410307-016	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1937.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	12/31/14 08:21	
Dibromofluoromethane	99	85-115	12/31/14 08:21	
Toluene-d8	100	85-120	12/31/14 08:21	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 0821

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-5-GW-M5MW16-14.57	**Units:**	µg/L
Lab Code:	R1410307-016	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-016|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1937.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 8:21 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 15:49:41 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	893772	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1359859	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1260124	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	671008	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	391974	49.50	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.00%				
48) surr1,1,2-dichloroetha...	4.658	65	460310	47.74	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 95.48%				
65) SURR3,Toluene-d8	7.316	98	1664629	49.93	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.86%				
70) SURR2,BFB	9.785	95	612219	47.33	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 94.66%				
Target Compounds							Qvalue
15) Acetone	2.048	43	6290	3.32	ppb		90
34) cis-1,2-Dichloroethene	3.542	96	14212	1.57	ppb	#	81
72) Tetrachloroethene	7.962	164	12537	1.73	ppb		98

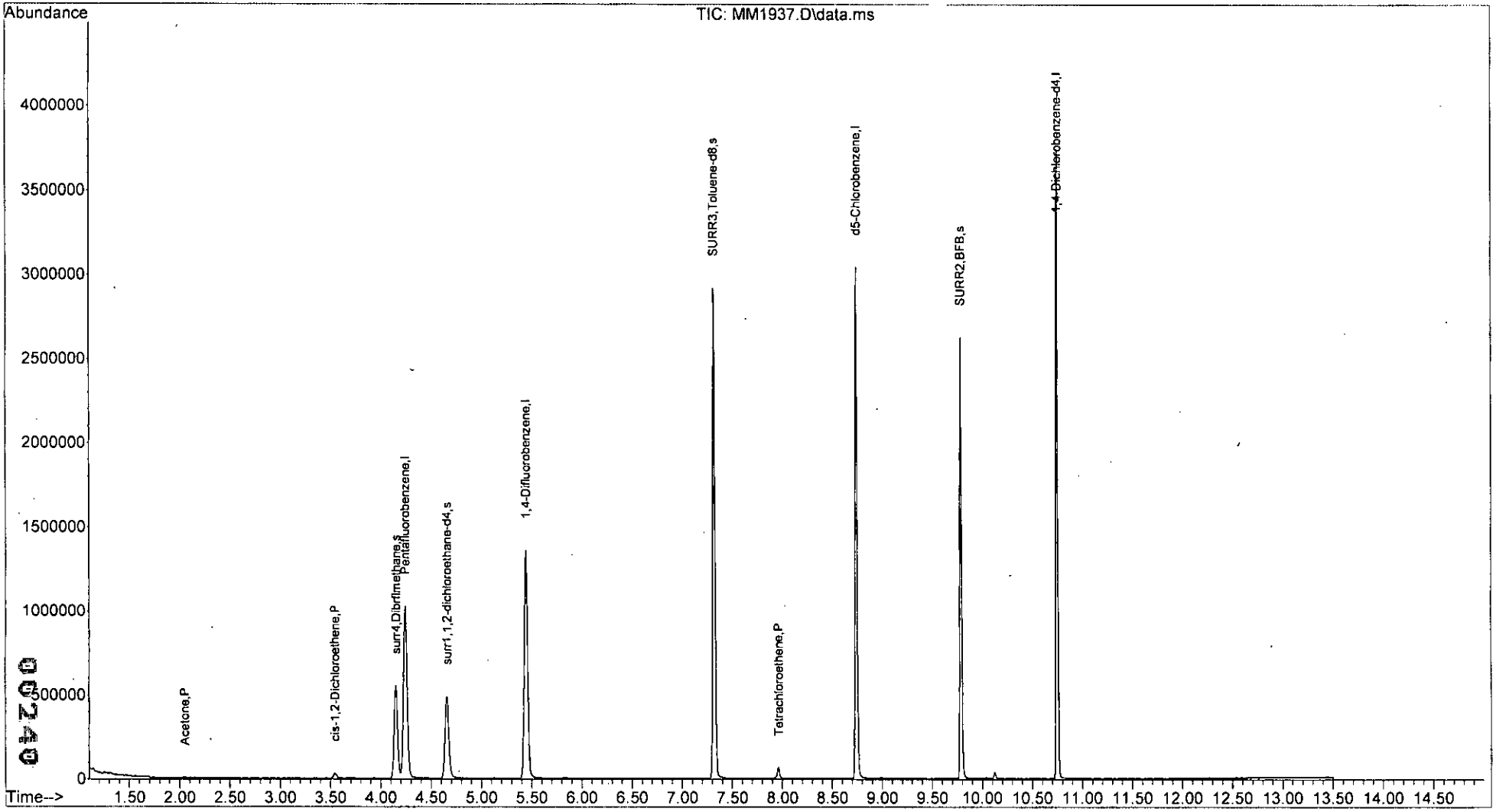
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR 1/5/15

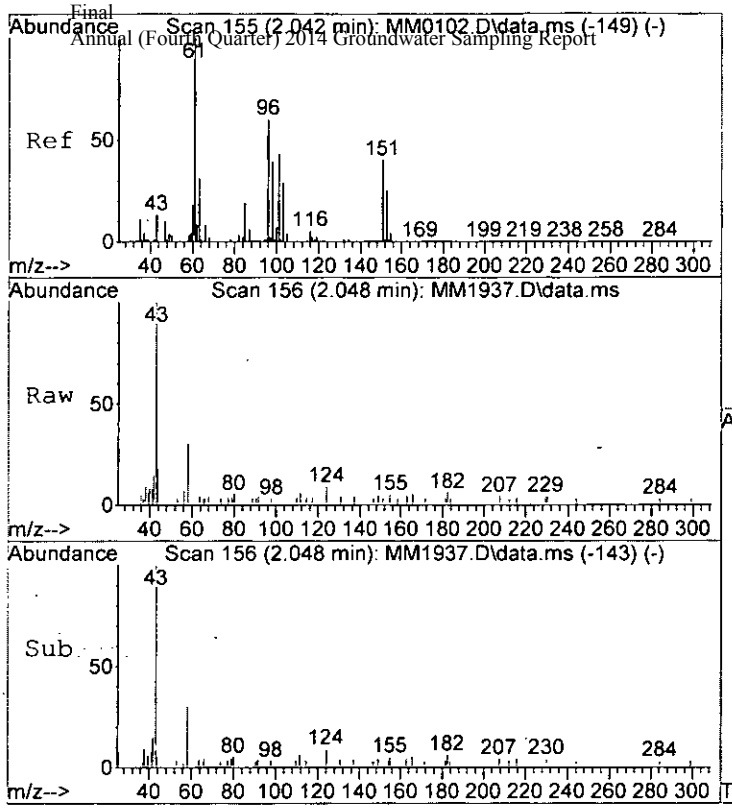
Quantitation Report (QT Reviewed)

Sample : R1410307-016|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1937.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 8:21 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 15:49:41 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



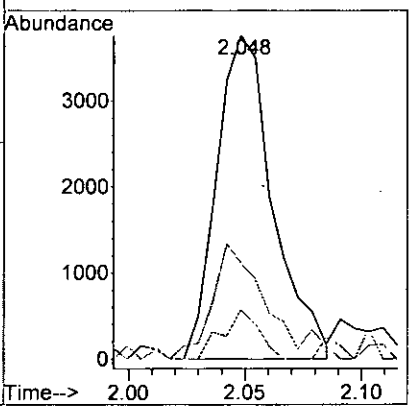
W102714.M Mon Jan 05 15:50:44 2015 Page: 2

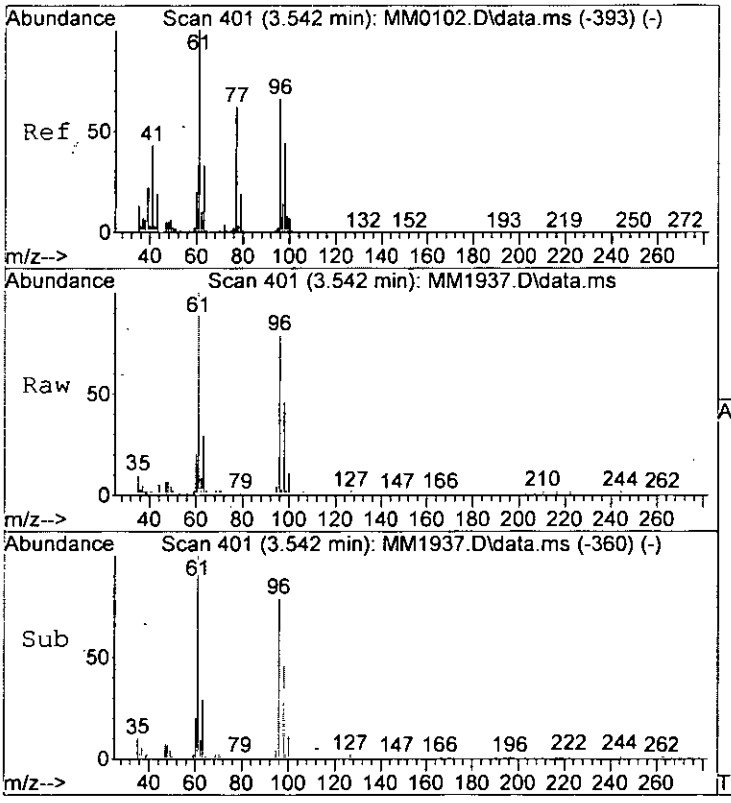


#15
Acetone
Concen: 3.32 ppb
RT: 2.048 min Scan# 156
Delta R.T. 0.006 min
Lab File: MM1937.D
Acq: 31 Dec 2014 8:21 am

Tgt Ion: 43 Resp: 6290

Ion	Ratio	Lower	Upper
43	100		
58	29.7	6.2	46.2
42	15.2	0.0	27.2

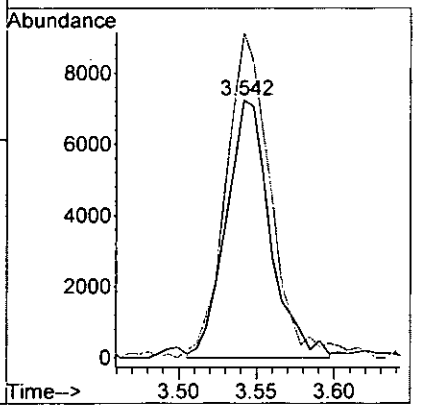


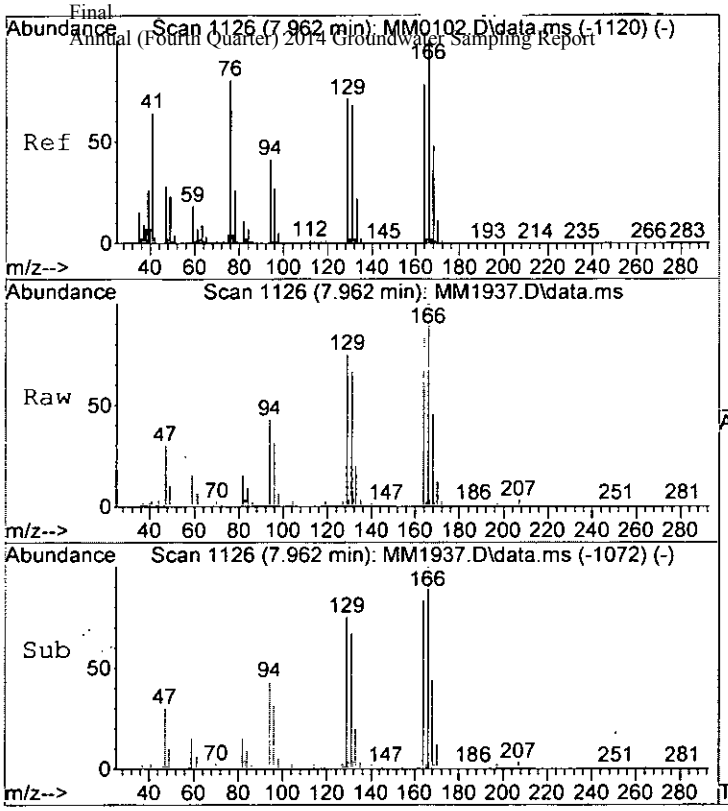


#34
cis-1,2-Dichloroethene
Concen: 1.57 ppb
RT: 3.542 min Scan# 401
Delta R.T. -0.006 min
Lab File: MM1937.D
Acq: 31 Dec 2014 8:21 am

Tgt Ion: 96 Resp: 14212

Ion	Ratio	Lower	Upper
96	100		
61	126.3	130.9	170.9#

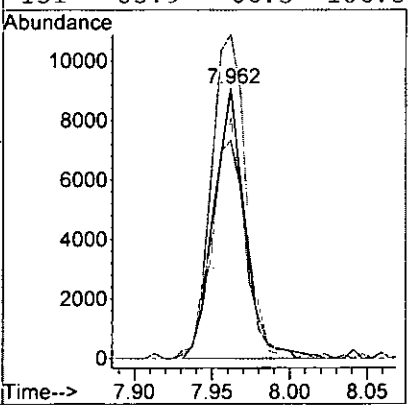




#72
Tetrachloroethene
Concen: 1.73 ppb
RT: 7.962 min Scan# 1126
Delta R.T. -0.000 min
Lab File: MM1937.D
Acq: 31 Dec 2014 8:21 am

Tgt Ion:164 Resp: 12537

Ion	Ratio	Lower	Upper
164	100		
166	123.4	107.7	147.7
129	89.4	70.1	110.1
131	85.9	66.3	106.3



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1937.D
Acq On : 31 Dec 2014 8:21 am
Operator : K.Ruest
Sample : R1410307-016|1.0
Misc : PARSONS 11603 T4
ALS Vial : 42 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1937.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.542	395	401	408	rBV	31162	60808	1.37%	0.251%
2	4.152	491	501	508	rBV	551180	1310226	29.55%	5.417%
3	4.243	508	516	528	rVB	1017608	2499823	56.38%	10.335%
4	4.658	573	584	599	rBV	487024	1279543	28.86%	5.290%
5	5.444	703	713	729	rBV	1357214	3163983	71.36%	13.081%
6	7.316	1013	1020	1030	rBV	2914526	4434103	100.00%	18.332%
7	7.962	1118	1126	1134	rVB2	65699	106547	2.40%	0.440%
8	8.742	1248	1254	1268	rBV	3041518	3954938	89.19%	16.351%
9	9.785	1420	1425	1436	rBV	2622783	3114960	70.25%	12.878%
10	10.120	1476	1480	1486	rBV	39388	51986	1.17%	0.215%
11	10.748	1578	1583	1592	rBV	3739293	4211186	94.97%	17.410%

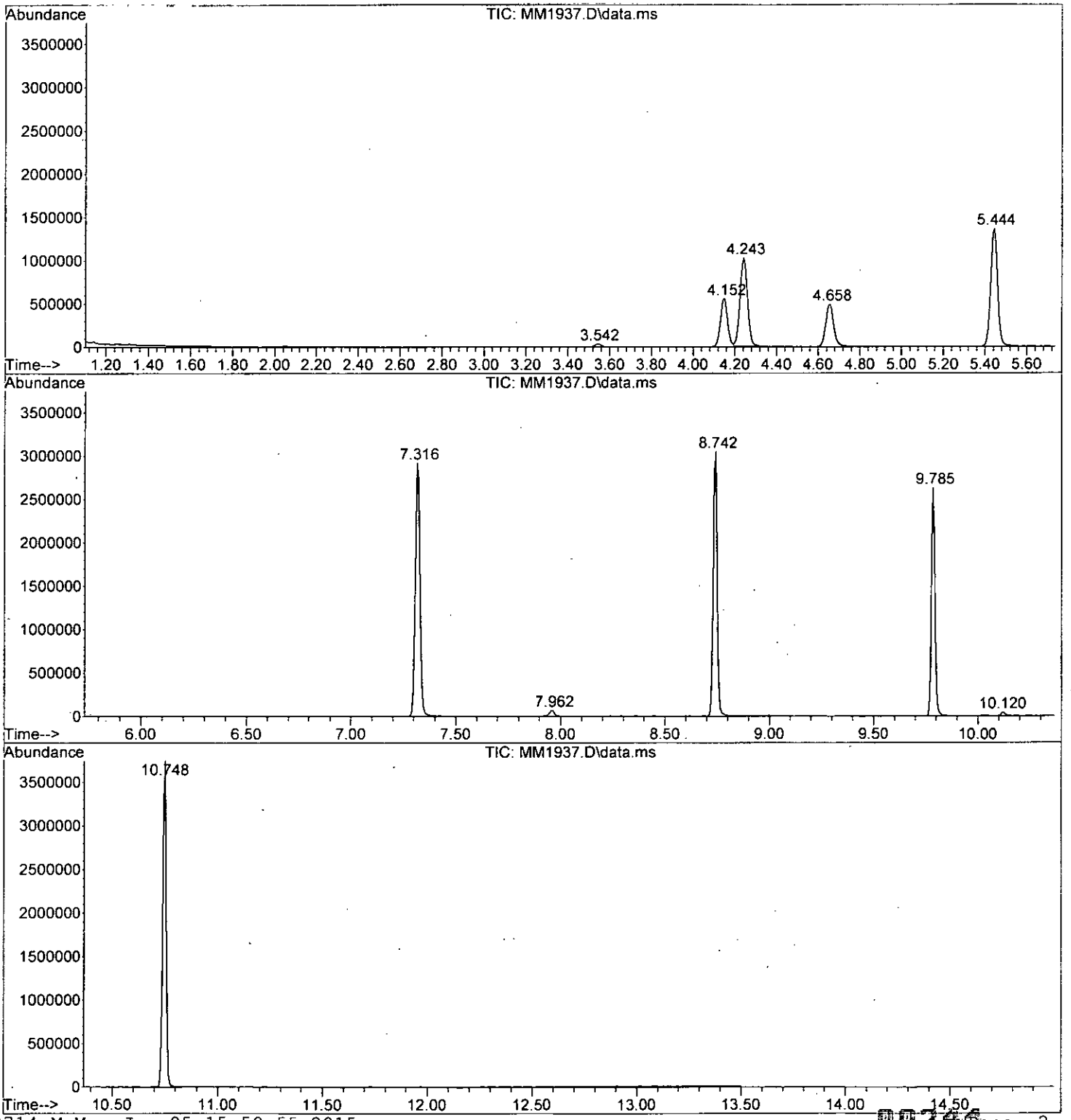
Sum of corrected areas: 24188103

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1937.D
Acq On : 31 Dec 2014 8:21 am
Operator : K.Ruest
Sample : R1410307-016|1.0
Misc : PARSONS 11603 T4
ALS Vial : 42 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W102714.M Mon Jan 05 15:50:55 2015 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1937.D
Acq On : 31 Dec 2014 8:21 amm
Operator : K.Ruestt
Sample : R1410307-016|1.00
Misc : PARSONS 11603 T44
ALS Vial : 42 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0834
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 08:53
Sample Name:	FTMM-5-GW-M5MW23-10.82	**Units:**	µg/L
Lab Code:	R1410307-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1938.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**1.4**	**J**	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0834
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 08:53
Sample Name:	FTMM-5-GW-M5MW23-10.82	**Units:**	µg/L
Lab Code:	R1410307-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1938.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**23**		5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**2.1**	J	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0834
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 08:53
Sample Name:	FTMM-5-GW-M5MW23-10.82	**Units:**	µg/L
Lab Code:	R1410307-017	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1938.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/31/14 08:53	
Dibromofluoromethane	99	85-115	12/31/14 08:53	
Toluene-d8	100	85-120	12/31/14 08:53	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 0853

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-5-GW-M5MW23-10.82	**Units:**	µg/L
Lab Code:	R1410307-017	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-017|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1938.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 8:53 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 15:52:01 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.243	168	875097	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.444	114	1344732	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1244333	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	672756	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.146	113	389380	49.72	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.44%			
48) surr1,1,2-dichloroetha...	4.658	65	453609	47.57	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 95.14%			
65) SURR3,Toluene-d8	7.316	98	1642296	49.82	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.64%			
70) SURR2,BFB	9.785	95	602046	47.06	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 94.12%			
Target Compounds						Qvalue
15) Acetone	2.042	43	2652	1.43	ppb	89
54) Trichloroethene	5.828	130	19059	2.12	ppb	95
72) Tetrachloroethene	7.962	164	162862	22.74	ppb	99

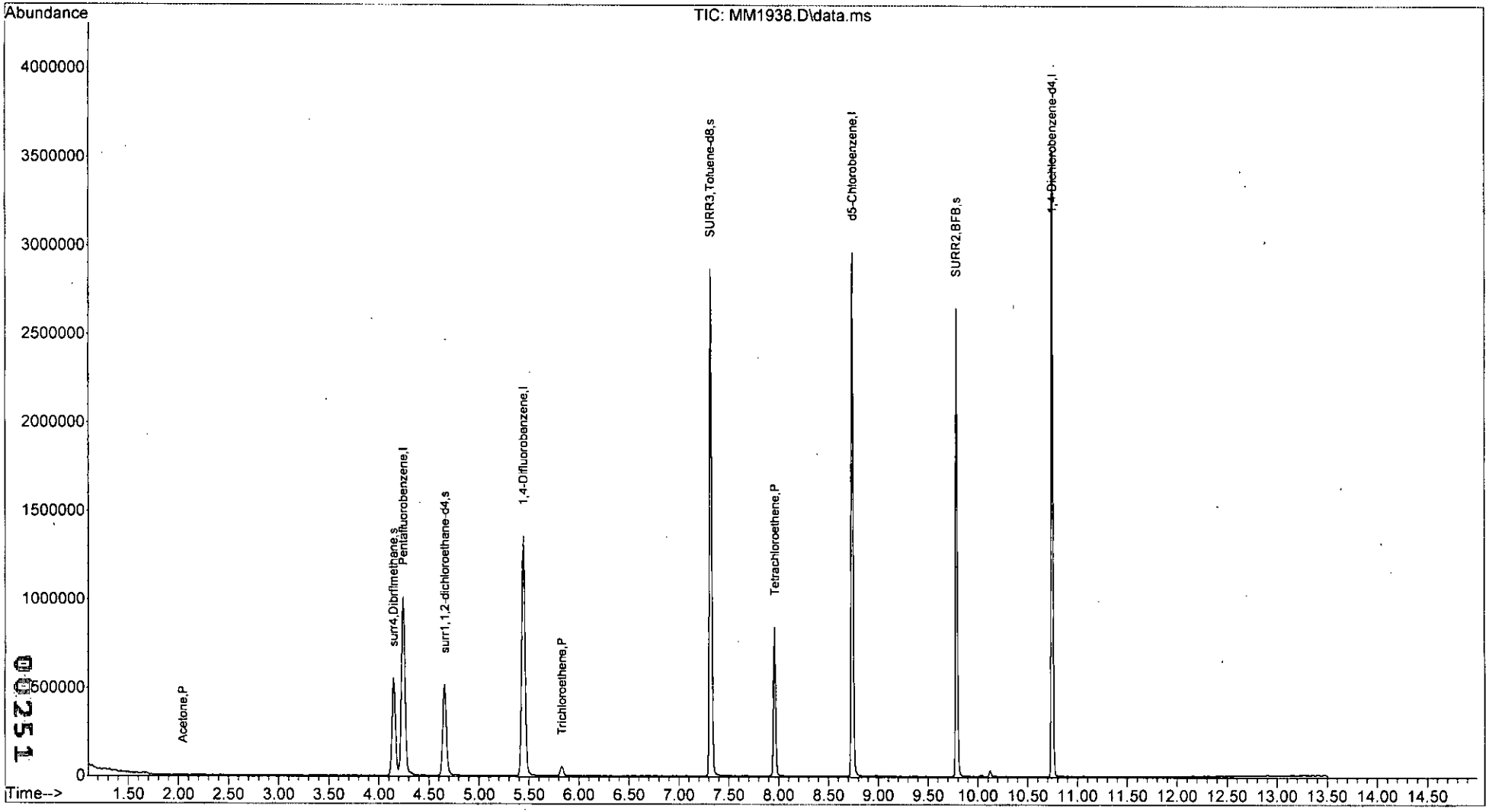
KR 1/5/15

(#) = qualifier out of range (m) = manual integration (+) = signals summed

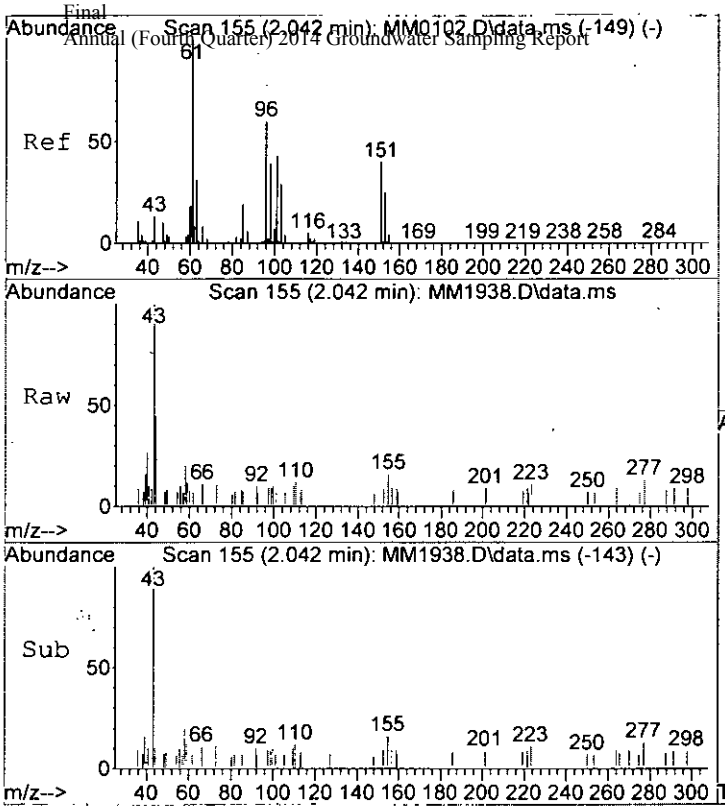
Quantitation Report (QT Reviewed)

Sample : R1410307-017|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1938.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 8:53 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 15:52:01 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



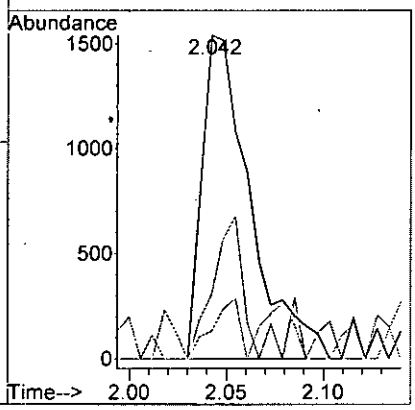
W102714.M Mon Jan 05 15:52:49 2015 Page: 2

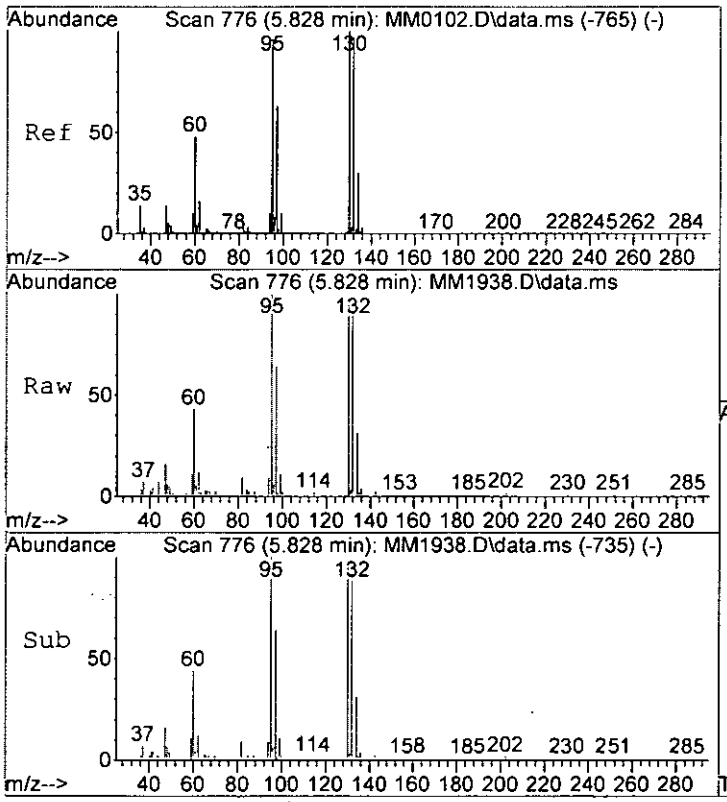


#15
Acetone
Concen: 1.43 ppb
RT: 2.042 min Scan# 155
Delta R.T. 0.000 min
Lab File: MM1938.D
Acq: 31 Dec 2014 8:53 am

Tgt Ion: 43 Resp: 2652

Ion	Ratio	Lower	Upper
43	100		
58	19.9	6.2	46.2
42	8.6	0.0	27.2

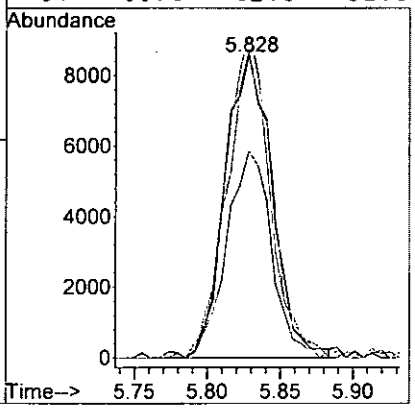


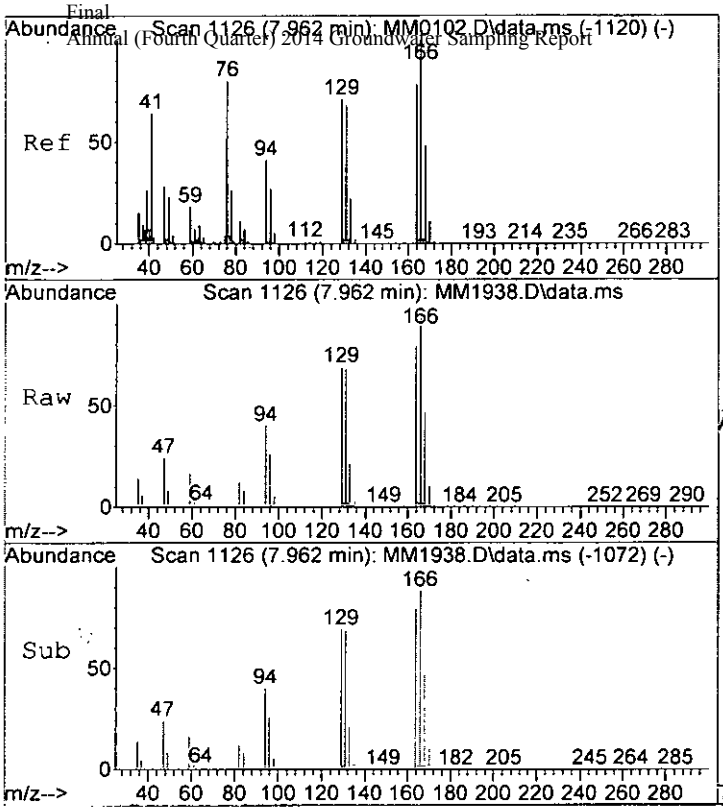


#54
Trichloroethene
Concen: 2.12 ppb
RT: 5.828 min Scan# 776
Delta R.T. 0.000 min
Lab File: MM1938.D
Acq: 31 Dec 2014 8:53 am

Tgt Ion:130 Resp: 19059

Ion	Ratio	Lower	Upper
130	100		
132	98.5	76.9	116.9
95	104.4	76.5	116.5
97	66.4	42.8	82.8

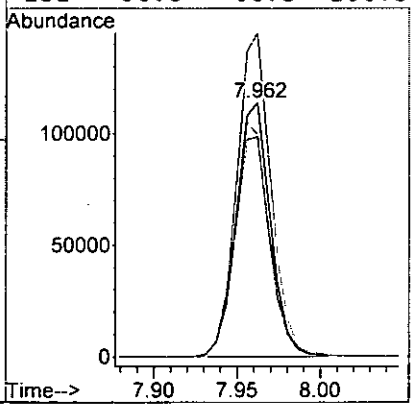




#72
Tetrachloroethene
Concen: 22.74 ppb
RT: 7.962 min Scan# 1126
Delta R.T. 0.000 min
Lab File: MM1938.D
Acq: 31 Dec 2014 8:53 am

Tgt Ion:164 Resp: 162862

Ion	Ratio	Lower	Upper
164	100		
166	127.3	107.7	147.7
129	87.3	70.1	110.1
131	86.5	66.3	106.3



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1938.D
Acq On : 31 Dec 2014 8:53 am
Operator : K.Ruest
Sample : R1410307-017|1.0
Misc : PARSONS 11603 T4
ALS Vial : 43 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1938.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.146	490	500	508	rBV	549168	1298295	29.53%	5.144%
2	4.243	508	516	534	rVB2	1006718	2527182	57.48%	10.013%
3	4.658	569	584	596	rBV	512614	1279760	29.11%	5.071%
4	5.444	704	713	729	rBV	1351962	3120613	70.98%	12.364%
5	5.828	768	776	786	rBV3	50283	113687	2.59%	0.450%
6	7.316	1014	1020	1041	rBV	2867153	4396554	100.00%	17.420%
7	7.962	1117	1126	1139	rBV	841871	1251556	28.47%	4.959%
8	8.742	1248	1254	1269	rBV	2962668	3918665	89.13%	15.526%
9	9.785	1420	1425	1438	rBV	2644555	3096674	70.43%	12.270%
10	10.120	1476	1480	1486	rBV	34179	46066	1.05%	0.183%
11	10.748	1578	1583	1594	rBV	3537665	4189528	95.29%	16.600%

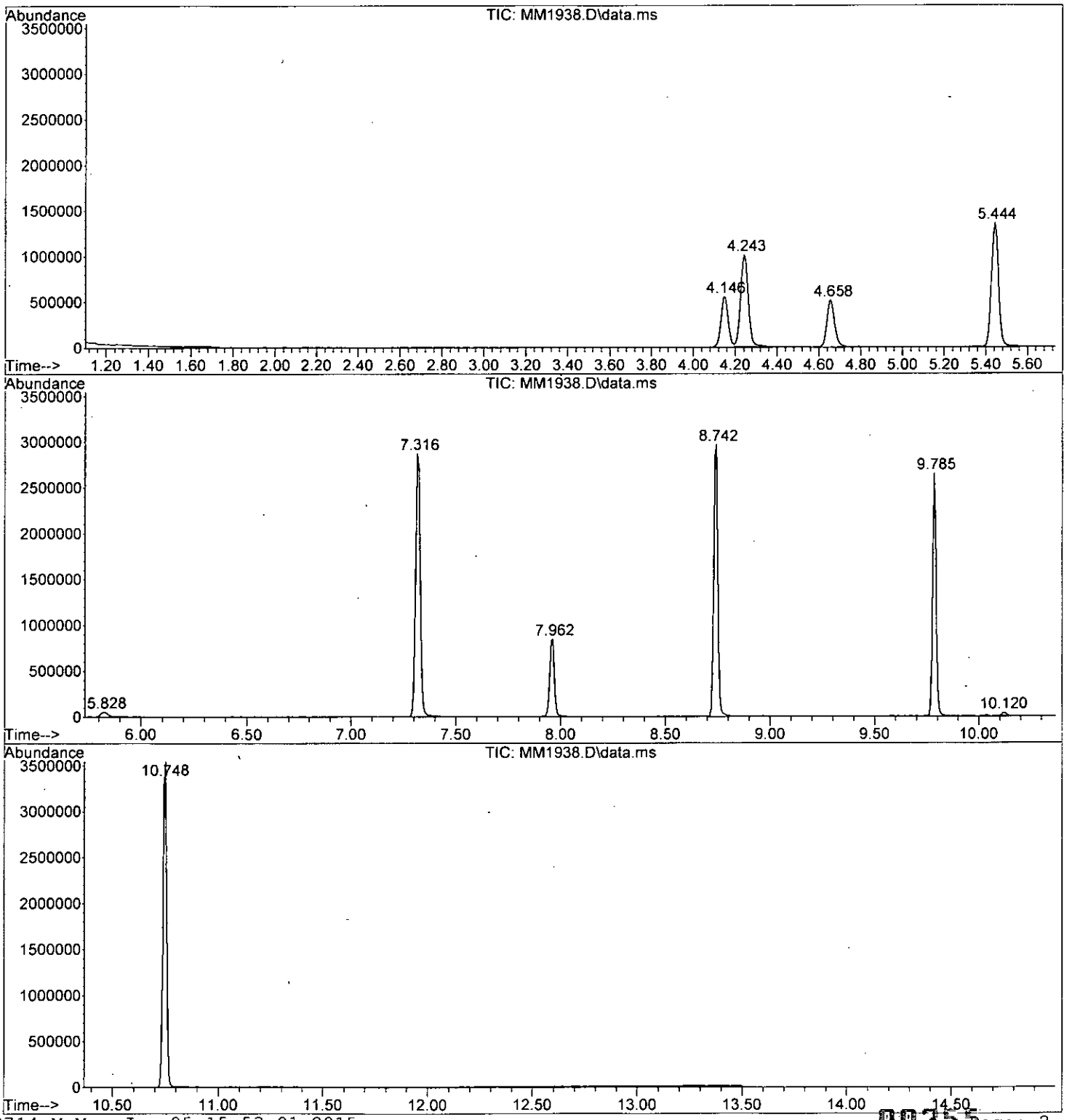
Sum of corrected areas: 25238580

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1938.D
Acq On : 31 Dec 2014 8:53 am
Operator : K.Ruest
Sample : R1410307-017|1.0
Misc : PARSONS 11603 T4
ALS Vial : 43 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W102714.M Mon Jan 05 15:53:01 2015 00255 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1938.D
Acq On : 31 Dec 2014 8:53 amm
Operator : K.Ruestt
Sample : R1410307-017|1.00
Misc : PARSONS 11603 T44
ALS Vial : 43 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0835
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 09:25
Sample Name:	FTMM-5-GW-M5MW20-13.65	**Units:**	µg/L
Lab Code:	R1410307-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1939.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.1**	**J**	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0835
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 09:25
Sample Name:	FTMM-5-GW-M5MW20-13.65	**Units:**	µg/L
Lab Code:	R1410307-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1939.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**1.2**	J	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**0.73**	J	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**2.5**	J	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0835
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 09:25
Sample Name:	FTMM-5-GW-M5MW20-13.65	**Units:**	µg/L
Lab Code:	R1410307-018	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1939.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	12/31/14 09:25	
Dibromofluoromethane	101	85-115	12/31/14 09:25	
Toluene-d8	99	85-120	12/31/14 09:25	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 0925

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-5-GW-M5MW20-13.65	**Units:**	µg/L
Lab Code:	R1410307-018	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-018|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1939.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 9:25 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 16:02:15 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	886979	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1352771	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1250361	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	666426	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	395923	50.26	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.52%				
48) surr1,1,2-dichloroetha...	4.652	65	447644	46.67	ppb		-0.01
Spiked Amount 50.000	Range 78 - 122		Recovery = 93.34%				
65) SURR3,Toluene-d8	7.316	98	1639614	49.44	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.88%				
70) SURR2,BFB	9.785	95	608618	47.29	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 94.58%				
Target Compounds							Qvalue
15) Acetone	2.048	43	3973	2.12	ppb		72
34) cis-1,2-Dichloroethene	3.542	96	22078	2.46	ppb	#	79
54) Trichloroethene	5.822	130	6634	0.73	ppb	#	85
72) Tetrachloroethene	7.962	164	8848	1.23	ppb	#	79

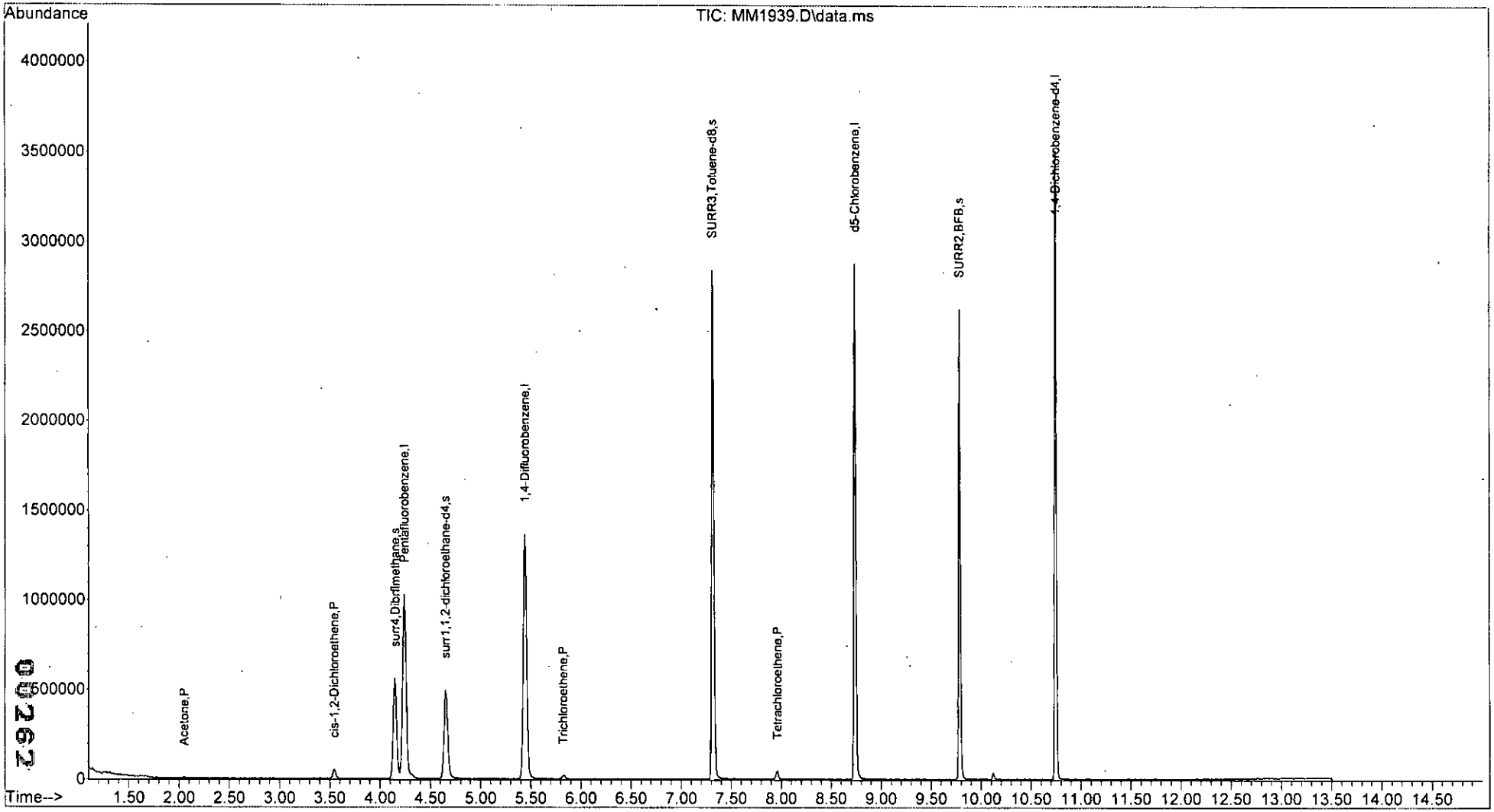
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR 1/5/15

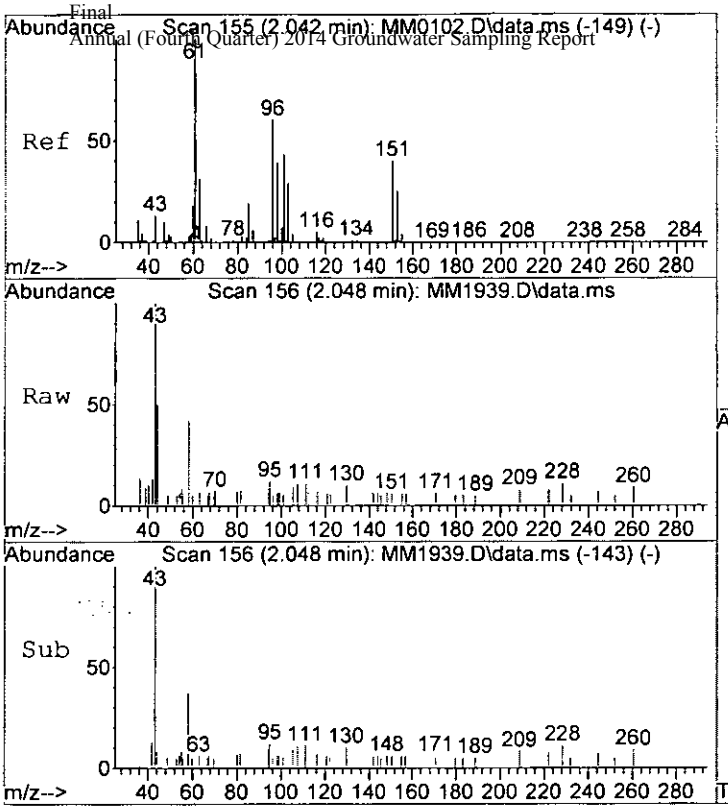
Quantitation Report (QT Reviewed)

Sample : R1410307-018|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1939.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 9:25 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 16:02:15 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



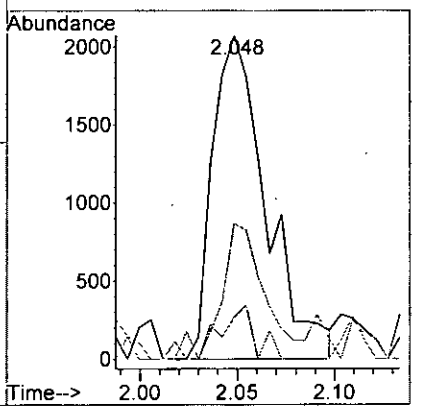
W102714.M Mon Jan 05 16:03:00 2015 Page: 2

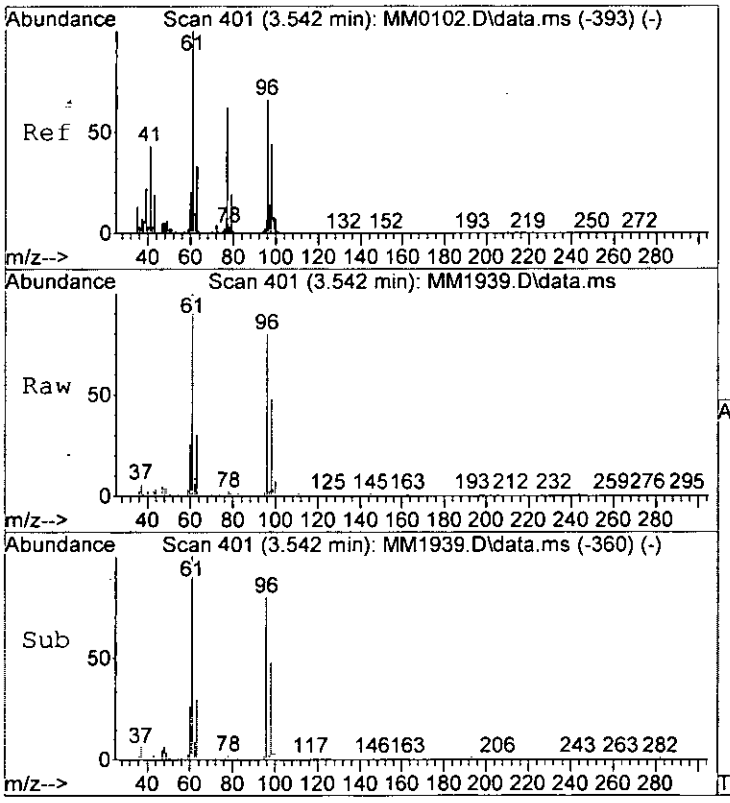


#15
Acetone
Concen: 2.12 ppb
RT: 2.048 min Scan# 156
Delta R.T. 0.006 min
Lab File: MM1939.D
Acq: 31 Dec 2014 9:25 am

Tgt Ion: 43 Resp: 3973

Ion	Ratio	Lower	Upper
43	100		
58	41.8	6.2	46.2
42	12.9	0.0	27.2

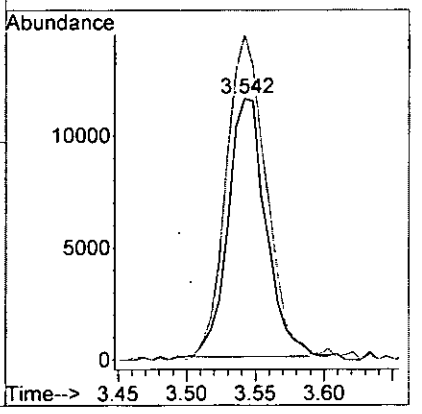


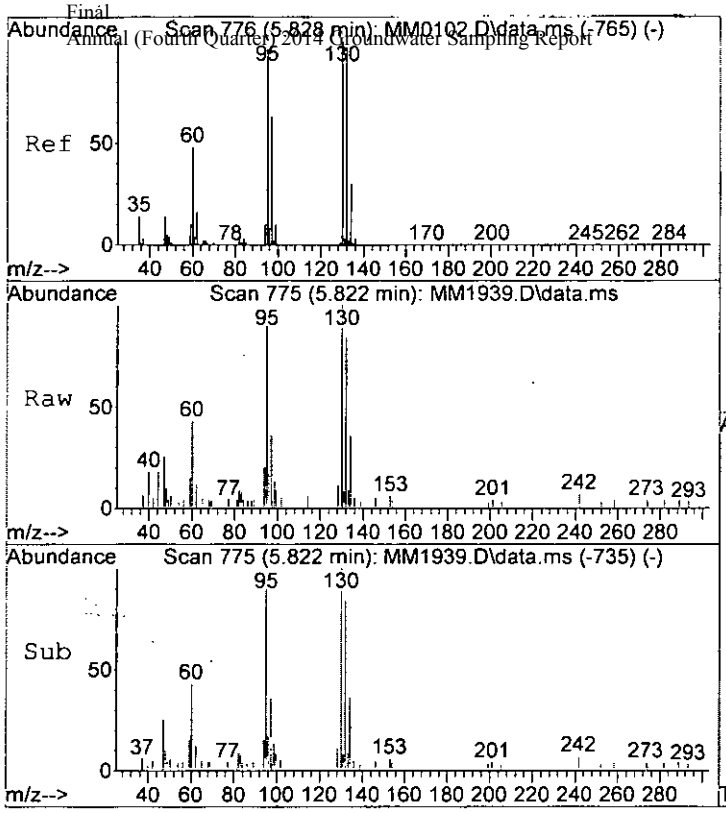


#34
cis-1,2-Dichloroethene
Concen: 2.46 ppb
RT: 3.542 min Scan# 401
Delta R.T. -0.006 min
Lab File: MM1939.D
Acq: 31 Dec 2014 9:25 am

Tgt Ion: 96 Resp: 22078

Ion	Ratio	Lower	Upper
96	100		
61	124.4	130.9	170.9#

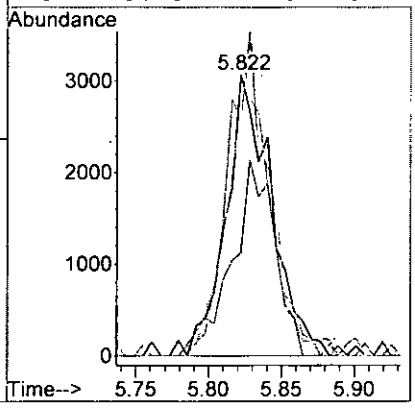


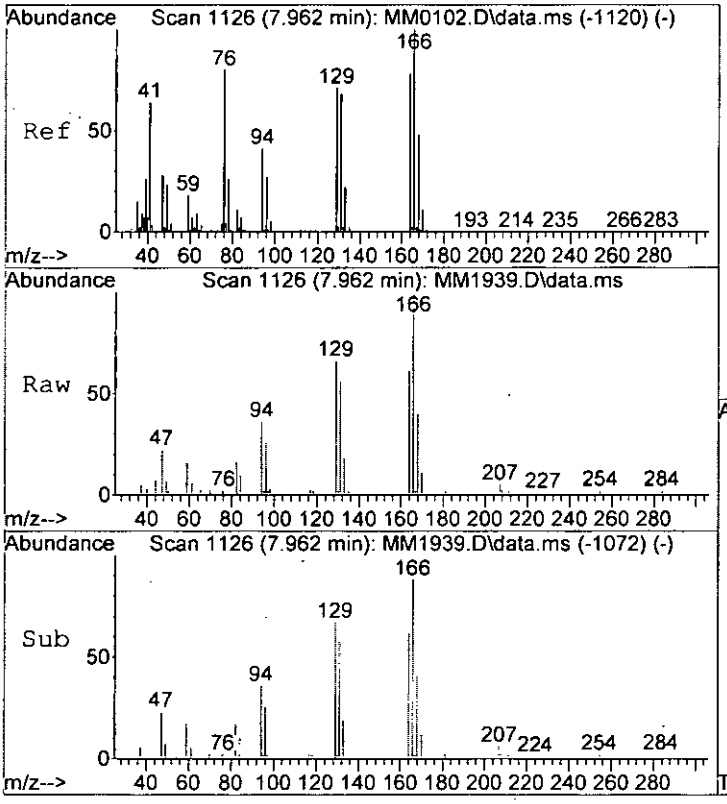


#54
Trichloroethene
Concen: 0.73 ppb
RT: 5.822 min Scan# 775
Delta R.T. -0.006 min
Lab File: MM1939.D
Acq: 31 Dec 2014 9:25 am

Tgt Ion:130 Resp: 6634

Ion	Ratio	Lower	Upper
130	100		
132	84.4	76.9	116.9
95	90.8	76.5	116.5
97	36.5	42.8	82.8#

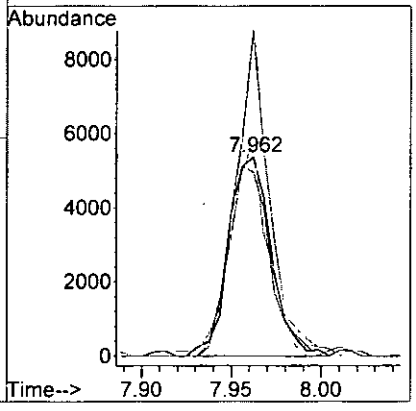




#72
Tetrachloroethene
Concen: 1.23 ppb
RT: 7.962 min Scan# 1126
Delta R.T. 0.000 min
Lab File: MM1939.D
Acq: 31 Dec 2014 9:25 am

Tgt Ion:164 Resp: 8848

Ion	Ratio	Lower	Upper
164	100		
166	163.7	107.7	147.7#
129	107.9	70.1	110.1
131	92.5	66.3	106.3



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1939.D
Acq On : 31 Dec 2014 9:25 am
Operator : K.Ruest
Sample : R1410307-018|1.0
Misc : PARSONS 11603 T4
ALS Vial : 44 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1939.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.542	395	401	408	rBV	49094	100245	2.28%	0.419%
2	4.146	490	500	508	rBV	558913	1313400	29.86%	5.490%
3	4.243	508	516	526	rVB	1006666	2426049	55.15%	10.140%
4	4.652	573	583	595	rBV2	493082	1258563	28.61%	5.261%
5	5.444	702	713	730	rBV	1363711	3137679	71.33%	13.115%
6	7.316	1014	1020	1038	rBV	2840747	4398890	100.00%	18.386%
7	7.962	1116	1126	1133	rBV2	47112	89481	2.03%	0.374%
8	8.742	1248	1254	1265	rBV	2877526	3905887	88.79%	16.326%
9	9.785	1420	1425	1436	rBV	2621362	3085478	70.14%	12.897%
10	10.120	1476	1480	1486	rBV	37535	49471	1.12%	0.207%
11	10.748	1578	1583	1592	rBV	3502505	4159626	94.56%	17.386%

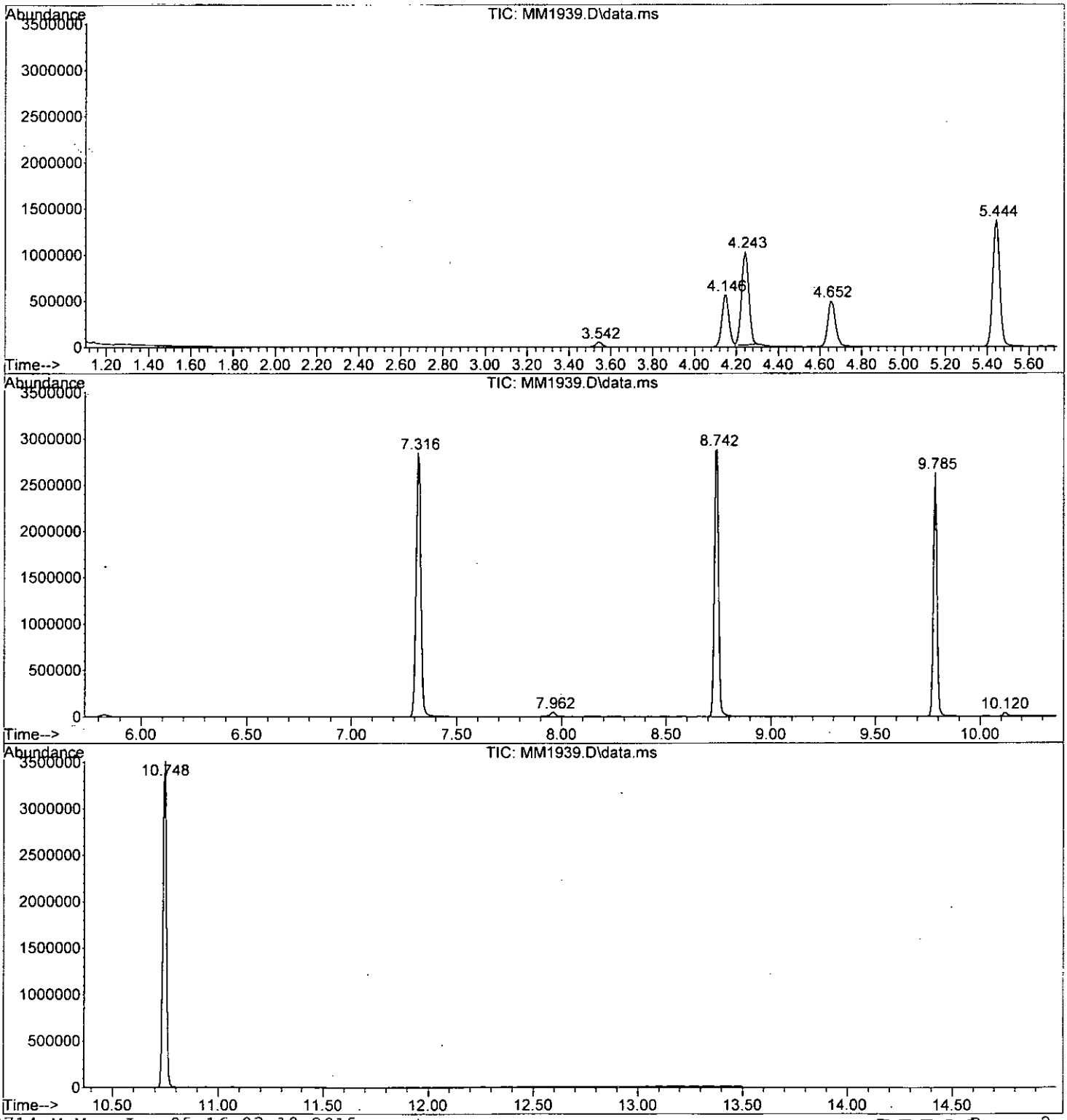
Sum of corrected areas: 23924769

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1939.D
Acq On : 31 Dec 2014 9:25 am
Operator : K.Ruest
Sample : R1410307-018|1.0
Misc : PARSONS 11603 T4
ALS Vial : 44 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W102714.M Mon Jan 05 16:03:10 2015 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1939.D
Acq On : 31 Dec 2014 9:25 amm
Operator : K.Ruestt
Sample : R1410307-018|1.00
Misc : PARSONS 11603 T44
ALS Vial : 44 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0857
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 09:57
Sample Name:	FTMM-18-GW-M18MW23-9.28	**Units:**	µg/L
Lab Code:	R1410307-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1940.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	9.1		5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0857
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 09:57
Sample Name:	FTMM-18-GW-M18MW23-9.28	**Units:**	µg/L
Lab Code:	R1410307-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1940.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0857
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 09:57
Sample Name:	FTMM-18-GW-M18MW23-9.28	**Units:**	µg/L
Lab Code:	R1410307-019	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1940.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/31/14 09:57	
Dibromofluoromethane	100	85-115	12/31/14 09:57	
Toluene-d8	100	85-120	12/31/14 09:57	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 0957

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-18-GW-M18MW23-9.28	**Units:**	µg/L
Lab Code:	R1410307-019	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-019|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1940.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 9:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 16:03:58 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.243	168	896696	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.444	114	1355756	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1244991	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	661087	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.146	113	393457	49.83	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.66%			
48) surr1,1,2-dichloroetha...	4.658	65	449324	46.74	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 93.48%			
65) SURR3,Toluene-d8	7.316	98	1663861	50.06	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.12%			
70) SURR2,BFB	9.785	95	603258	46.78	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 93.56%			
Target Compounds						Qvalue
15) Acetone	2.048	43	1708	0.90	ppb	# 66
49) Benzene	4.780	78	316243	9.11	ppb	93

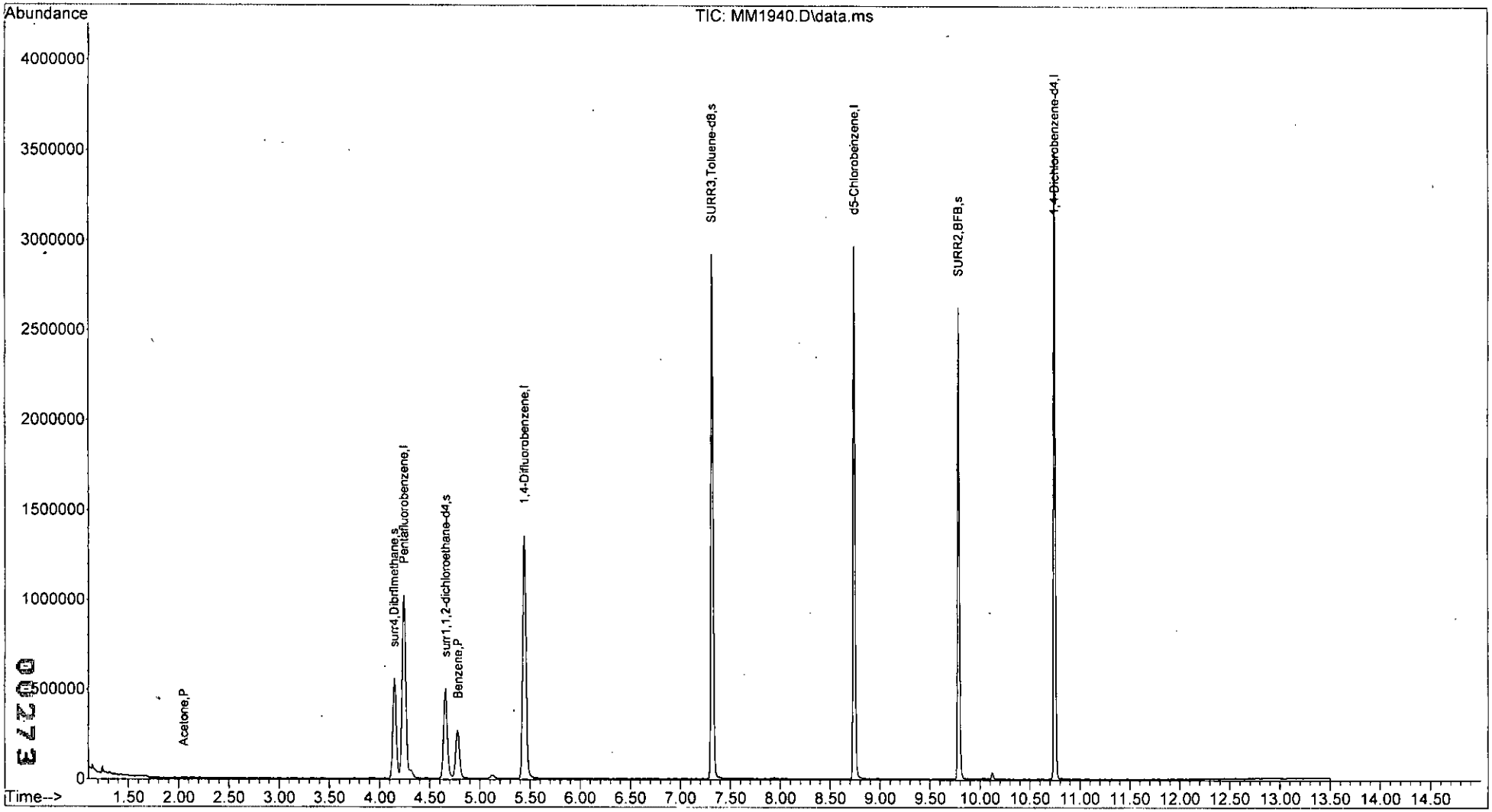
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KL 1/5/15

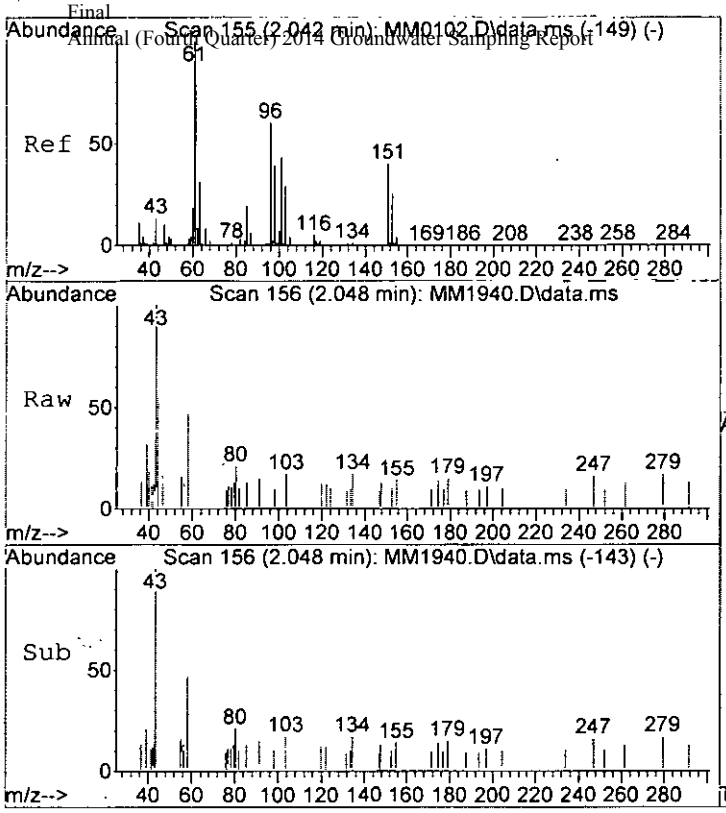
Quantitation Report (QT Reviewed)

Sample : R1410307-019|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1940.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 9:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 16:03:58 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



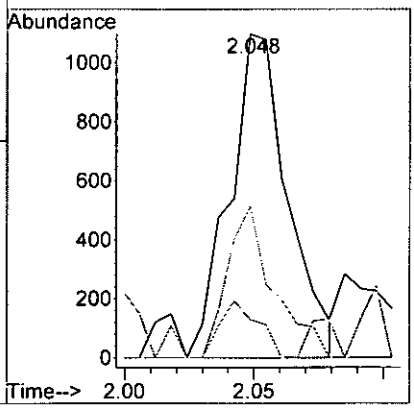
W102714.M Mon Jan 05 16:05:06 2015 Page: 2

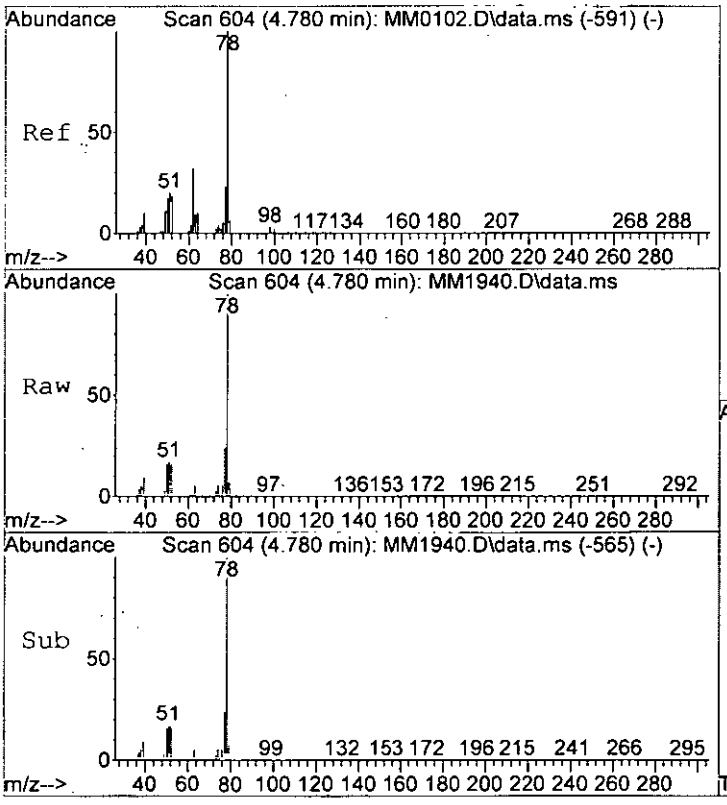


#15
Acetone
Concen: 0.90 ppb
RT: 2.048 min Scan# 156
Delta R.T. 0.006 min
Lab File: MM1940.D
Acq: 31 Dec 2014 9:57 am

Tgt Ion: 43 Resp: 1708

Ion	Ratio	Lower	Upper
43	100		
58	46.8	6.2	46.2#
42	11.8	0.0	27.2

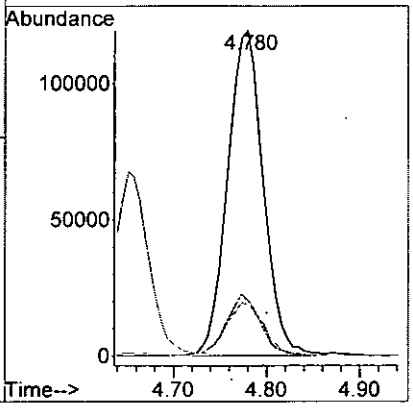




#49
Benzene
Concen: 9.11 ppb
RT: 4.780 min Scan# 604
Delta R.T. -0.006 min
Lab File: MM1940.D
Acq: 31 Dec 2014 9:57 am

Tgt Ion: 78 Resp: 316243

Ion	Ratio	Lower	Upper
78	100		
51	17.2	1.2	41.2
52	15.7	0.0	37.6



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1940.D
Acq On : 31 Dec 2014 9:57 am
Operator : K.Ruest
Sample : R1410307-019|1.0
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1940.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.140	6	7	16	rVB2	44862	62177	1.41%	0.253%
2	4.146	490	500	508	rBV	555877	1320282	29.89%	5.376%
3	4.243	508	516	525	rVV	994776	2399296	54.32%	9.770%
4	4.658	573	584	595	rBV	501519	1251492	28.34%	5.096%
5	4.780	595	604	617	rVB2	264789	710046	16.08%	2.891%
6	5.127	653	661	669	rVB2	18595	51194	1.16%	0.208%
7	5.444	701	713	728	rBV	1354327	3165833	71.68%	12.892%
8	7.316	1014	1020	1041	rBV	2920069	4416604	100.00%	17.985%
9	8.742	1248	1254	1268	rBV	2968430	3925715	88.89%	15.986%
10	9.785	1420	1425	1434	rBV	2625768	3078900	69.71%	12.538%
11	10.120	1476	1480	1487	rBV	37793	50723	1.15%	0.207%
12	10.748	1578	1583	1590	rVB	3492325	4124694	93.39%	16.796%

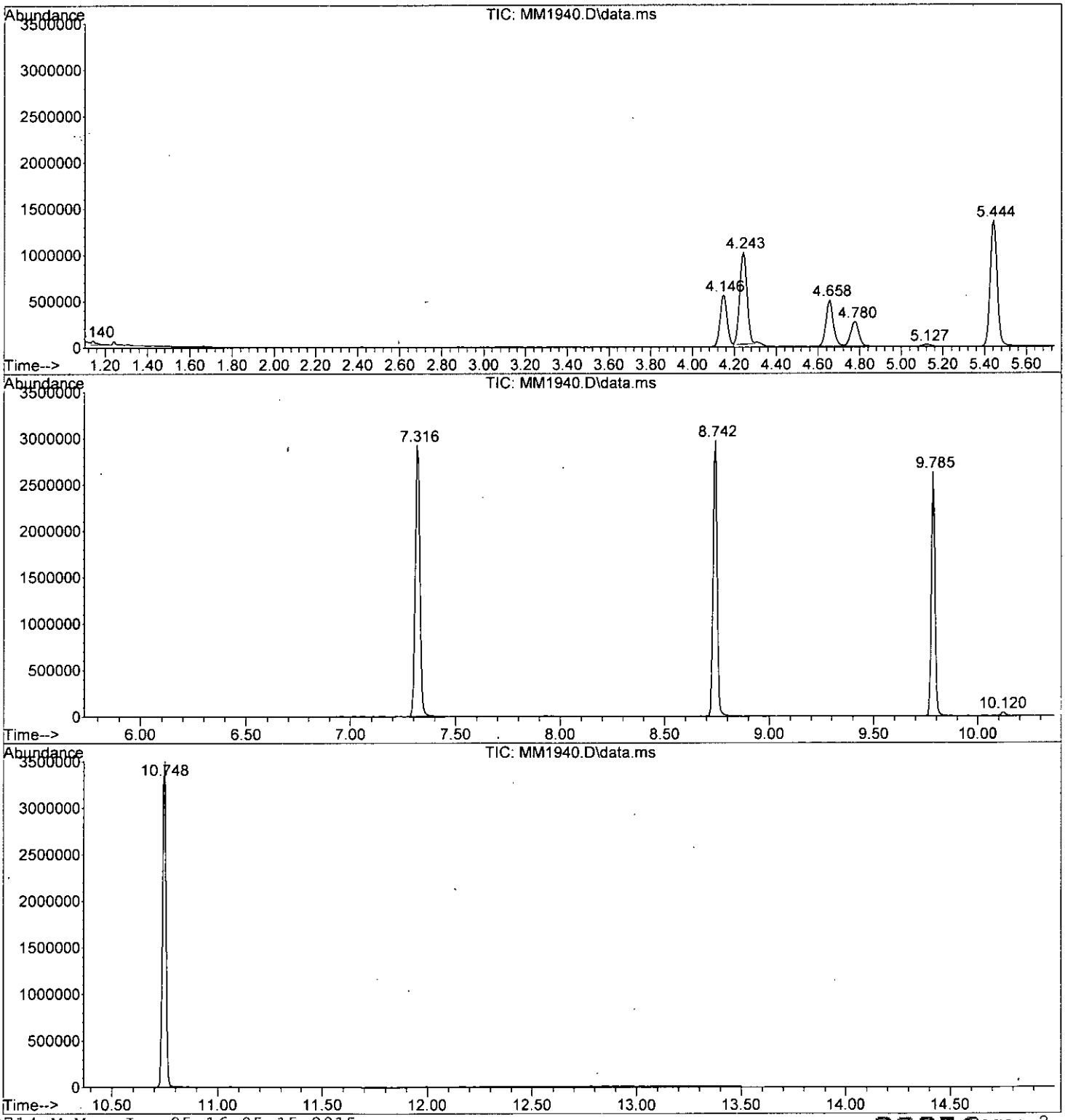
Sum of corrected areas: 24556956

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1940.D
Acq On : 31 Dec 2014 9:57 am
Operator : K.Ruest
Sample : R1410307-019|1.0
Misc : PARSONS 11603 T4
ALS Vial : 45 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W102714.M Mon Jan 05 16:05:15 2015 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1940.D
Acq On : 31 Dec 2014 9:57 amm
Operator : K.Ruestt
Sample : R1410307-019|1.00
Misc : PARSONS 11603 T44
ALS Vial : 45 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0858
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 10:29
Sample Name:	FTMM-18-GW-M18MW23-16.22	**Units:**	µg/L
Lab Code:	R1410307-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1941.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	**6.5**		5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0858
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 10:29
Sample Name:	FTMM-18-GW-M18MW23-16.22	**Units:**	µg/L
Lab Code:	R1410307-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1941.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0858
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 10:29
Sample Name:	FTMM-18-GW-M18MW23-16.22	**Units:**	µg/L
Lab Code:	R1410307-020	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1941.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	95	75-120	12/31/14 10:29	
Dibromofluoromethane	103	85-115	12/31/14 10:29	
Toluene-d8	100	85-120	12/31/14 10:29	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 1029

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-18-GW-M18MW23-16.22	**Units:**	µg/L
Lab Code:	R1410307-020	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-020|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1941.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 10:29 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 16:05:50 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	885083	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1332549	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1228265	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	669951	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	397959	51.28	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.56%				
48) surr1,1,2-dichloroetha...	4.658	65	456204	48.28	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 96.56%				
65) SURR3,Toluene-d8	7.316	98	1635314	50.06	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.12%				
70) SURR2,BFB	9.785	95	603565	47.61	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 95.22%				
Target Compounds							Qvalue
15) Acetone	2.048	43	2186	1.17	ppb		89
23) TBA	2.408	59	978	1.59	ppb	#	12
49) Benzene	4.780	78	220404	6.46	ppb		95

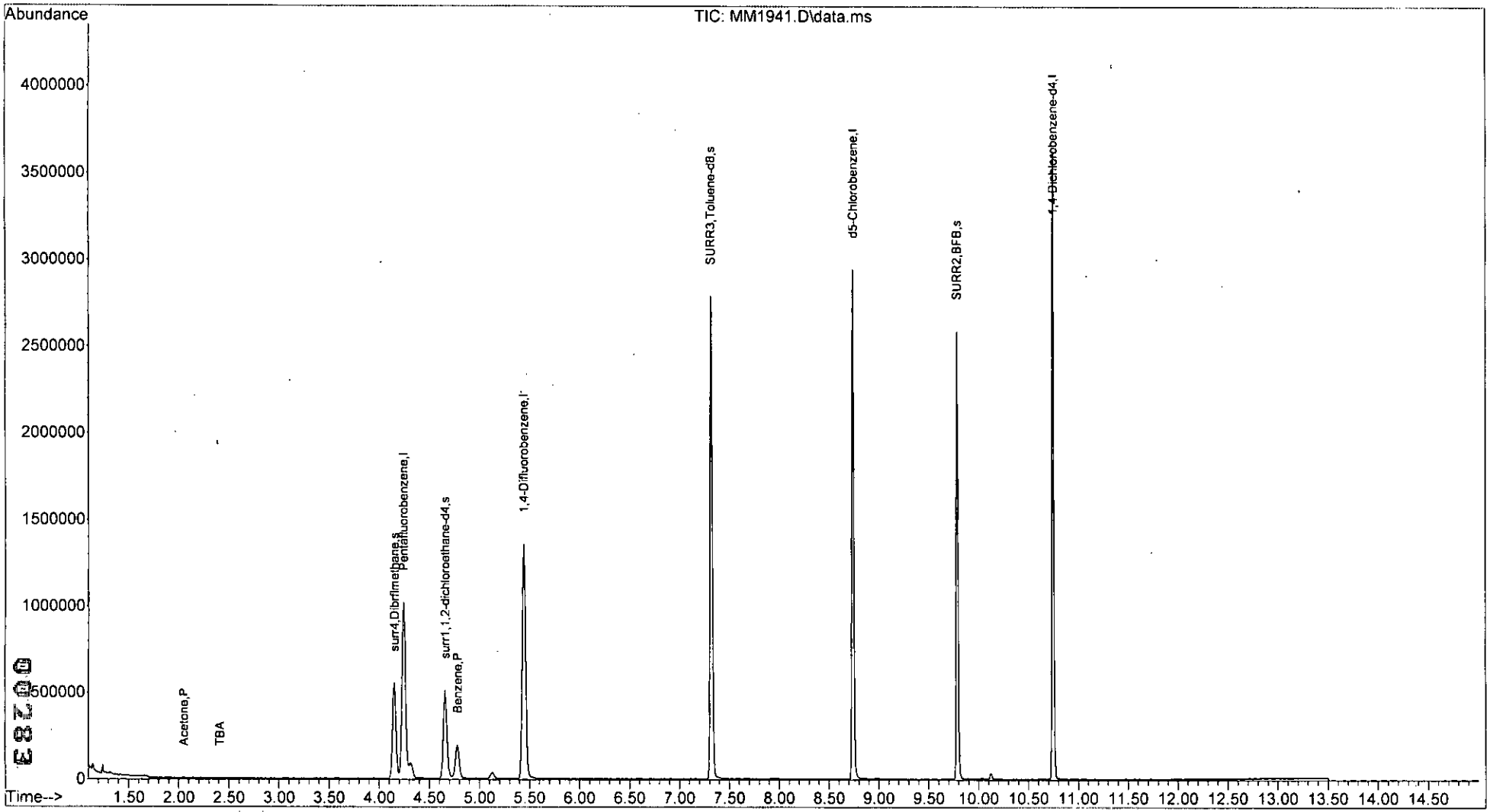
(#) = qualifier out of range (m) = manual integration (+) = signals summed

KR 1/5/15

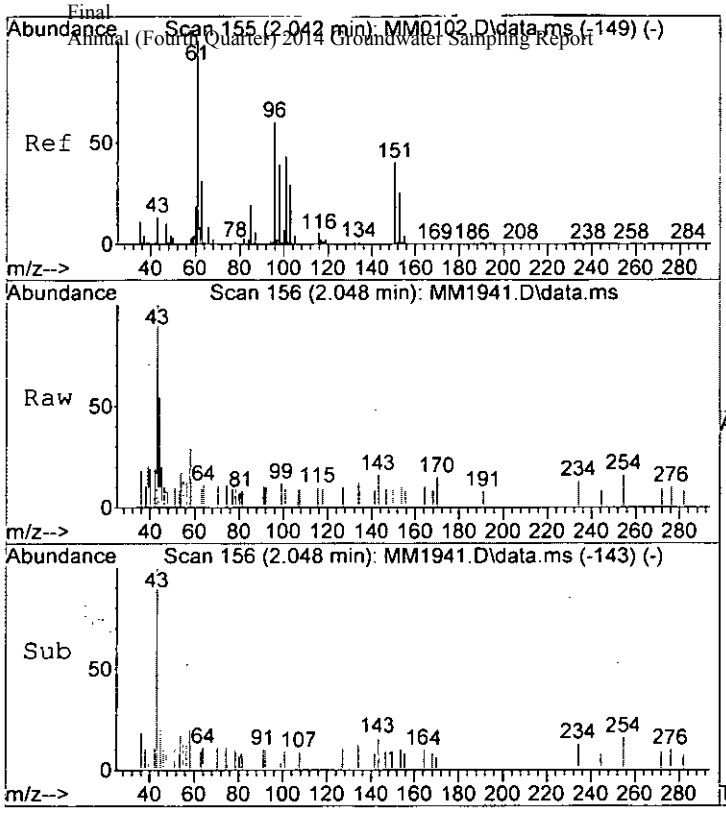
Quantitation Report (QT Reviewed)

Sample : R1410307-020|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1941.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 10:29 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 16:05:50 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



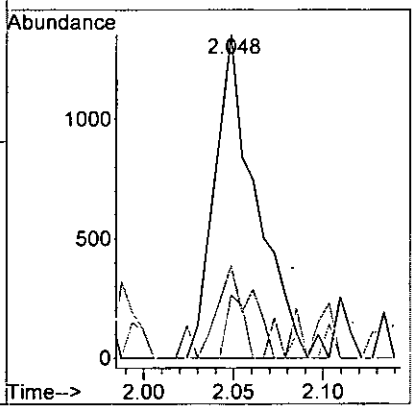
W102714.M Mon Jan 05 16:07:01 2015 Page: 2

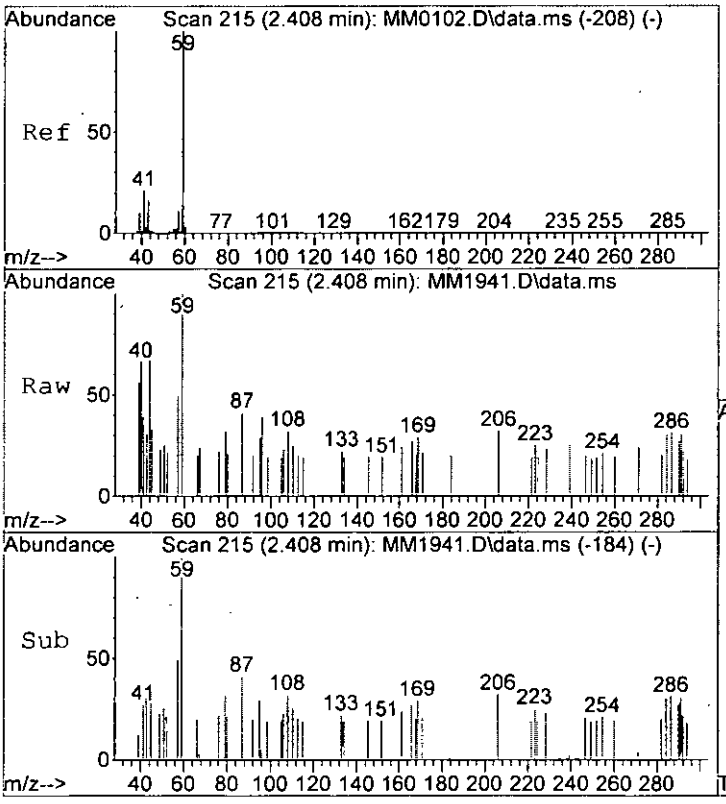


#15
Acetone
Concen: 1.17 ppb
RT: 2.048 min Scan# 156
Delta R.T. 0.006 min
Lab File: MM1941.D
Acq: 31 Dec 2014 10:29 am

Tgt Ion: 43 Resp: 2186

Ion	Ratio	Lower	Upper
43	100		
58	28.5	6.2	46.2
42	19.5	0.0	27.2

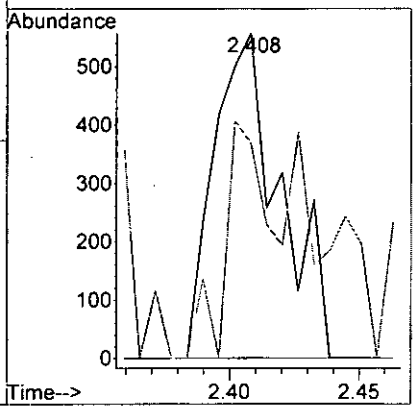


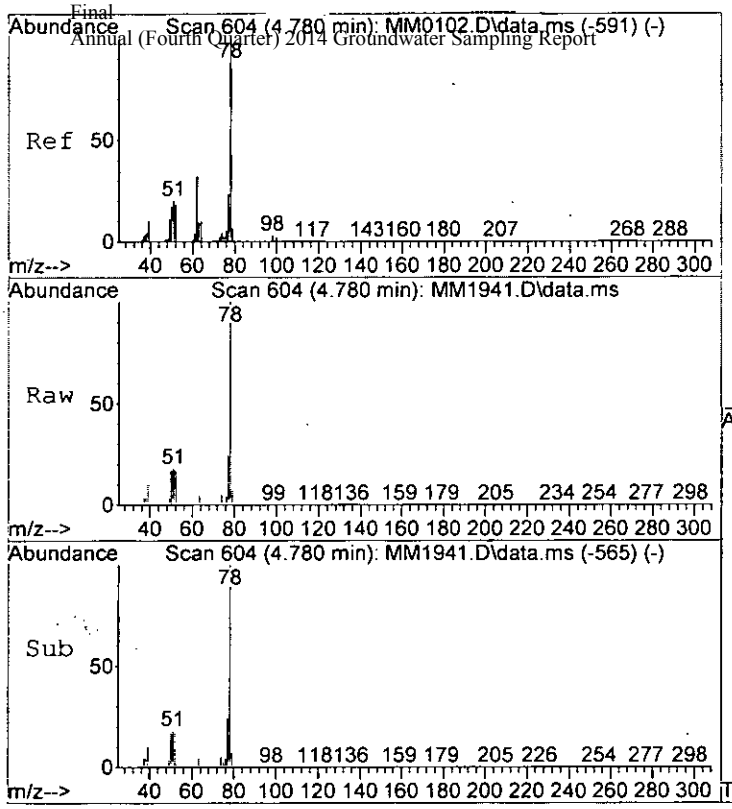


#23
TBA
Concen: 1.59 ppb
RT: 2.408 min Scan# 215
Delta R.T. 0.000 min
Lab File: MM1941.D
Acq: 31 Dec 2014 10:29 am

Tgt Ion: 59 Resp: 978

Ion	Ratio	Lower	Upper
59	100		
41	66.2	3.4	43.4#

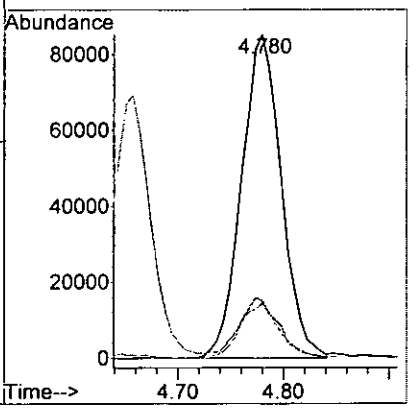




#49
Benzene
Concen: 6.46 ppb
RT: 4.780 min Scan# 604
Delta R.T. -0.006 min
Lab File: MM1941.D
Acq: 31 Dec 2014 10:29 am

Tgt Ion: 78 Resp: 220404

Ion	Ratio	Lower	Upper
78	100		
51	17.7	1.2	41.2
52	16.9	0.0	37.6



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1941.D
Acq On : 31 Dec 2014 10:29 am
Operator : K.Ruest
Sample : R1410307-020|1.0
Misc : PARSONS 11603 T4
ALS Vial : 46 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1941.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.146	6	8	17	rVB	50502	65156	1.49%	0.264%
2	1.244	21	24	28	rBV2	52714	45692	1.04%	0.185%
3	4.152	491	501	508	rBV	550609	1301464	29.75%	5.281%
4	4.243	508	516	524	rVV	1015255	2521707	57.64%	10.233%
5	4.310	524	527	535	rVB2	81876	194646	4.45%	0.790%
6	4.658	575	584	595	rBV	507386	1256537	28.72%	5.099%
7	4.780	595	604	618	rVB	191846	514346	11.76%	2.087%
8	5.127	653	661	669	rBV2	35086	89445	2.04%	0.363%
9	5.444	702	713	725	rBV	1354522	3124677	71.43%	12.679%
10	7.316	1014	1020	1034	rBV	2783119	4374588	100.00%	17.751%
11	8.742	1248	1254	1266	rBV	2939268	3865330	88.36%	15.685%
12	9.785	1420	1425	1440	rBV	2583379	3083104	70.48%	12.511%
13	10.120	1475	1480	1484	rBV	36268	52118	1.19%	0.211%
14	10.748	1578	1583	1591	rBV	3619070	4155275	94.99%	16.861%

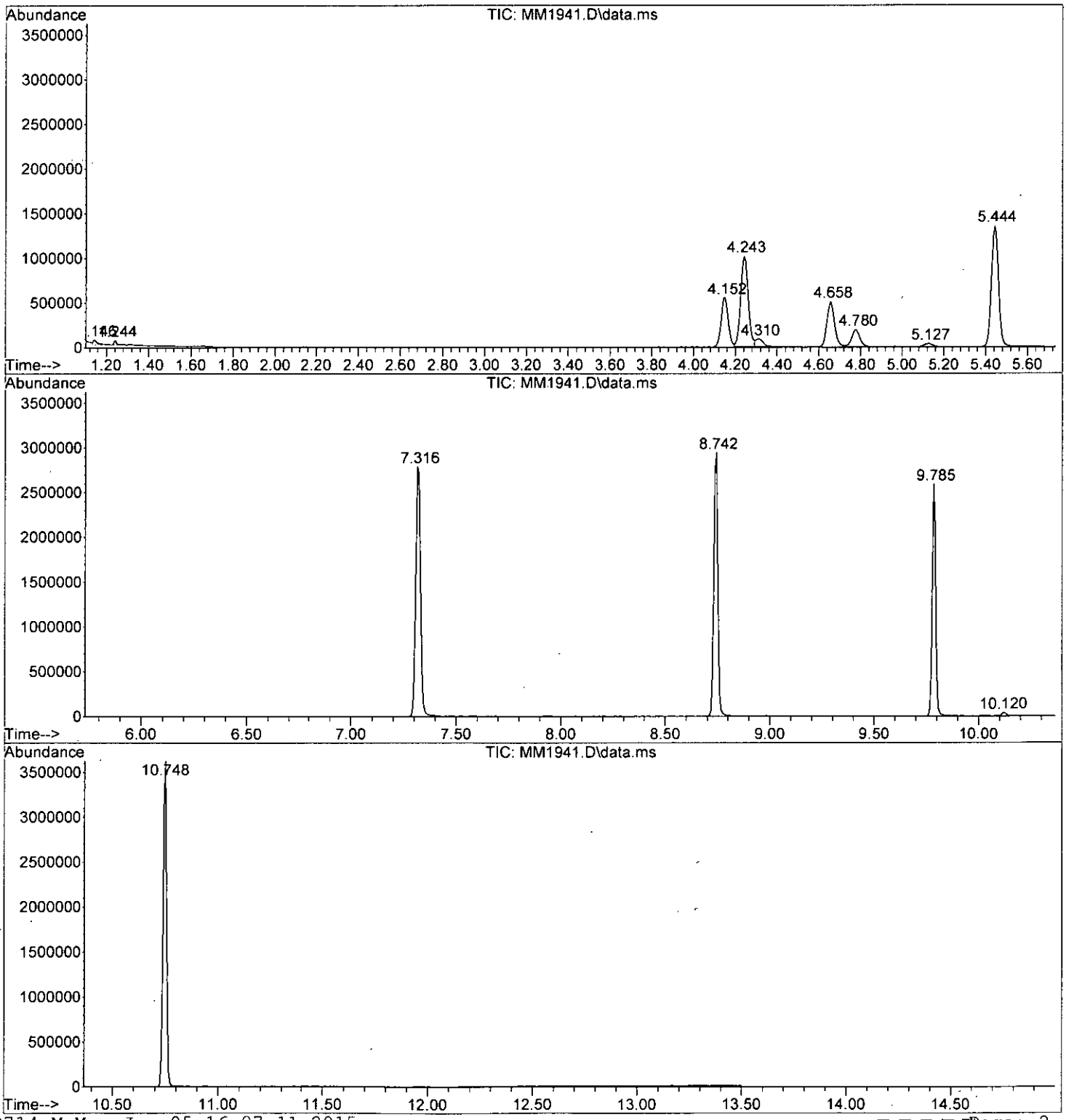
Sum of corrected areas: 24644085

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1941.D
Acq On : 31 Dec 2014 10:29 am
Operator : K.Ruest
Sample : R1410307-020|1.0
Misc : PARSONS 11603 T4
ALS Vial : 46 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W102714.M Mon Jan 05 16:07:11 2015 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1941.D
Acq On : 31 Dec 2014 10:29 amm
Operator : K.Ruestt
Sample : R1410307-020|1.00
Misc : PARSONS 11603 T44
ALS Vial : 46 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0851
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 11:01
Sample Name:	FTMM-18-GW-M18MW22-18.91	**Units:**	µg/L
Lab Code:	R1410307-021	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1942.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	ND	U	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	**2.6**	J	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0851
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 11:01
Sample Name:	FTMM-18-GW-M18MW22-18.91	**Units:**	µg/L
Lab Code:	R1410307-021	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1942.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	ND	U	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14 0851
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 11:01
Sample Name:	FTMM-18-GW-M18MW22-18.91	**Units:**	µg/L
Lab Code:	R1410307-021	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1942.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	96	75-120	12/31/14 11:01	
Dibromofluoromethane	101	85-115	12/31/14 11:01	
Toluene-d8	100	85-120	12/31/14 11:01	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 1101

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-18-GW-M18MW22-18.91	**Units:**	µg/L
Lab Code:	R1410307-021	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : R1410307-021|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1942.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 11:01 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 16:07:44 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.243	168	883081	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.444	114	1330236	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1232382	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	668974	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	391445	50.53	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.06%			
48) surr1,1,2-dichloroetha...	4.658	65	449192	47.62	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 95.24%			
65) SURR3,Toluene-d8	7.316	98	1624466	49.81	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.62%			
70) SURR2,BFB	9.785	95	608316	48.07	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.14%			
Target Compounds						Qvalue
15) Acetone	2.048	43	4841	2.59	ppb	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

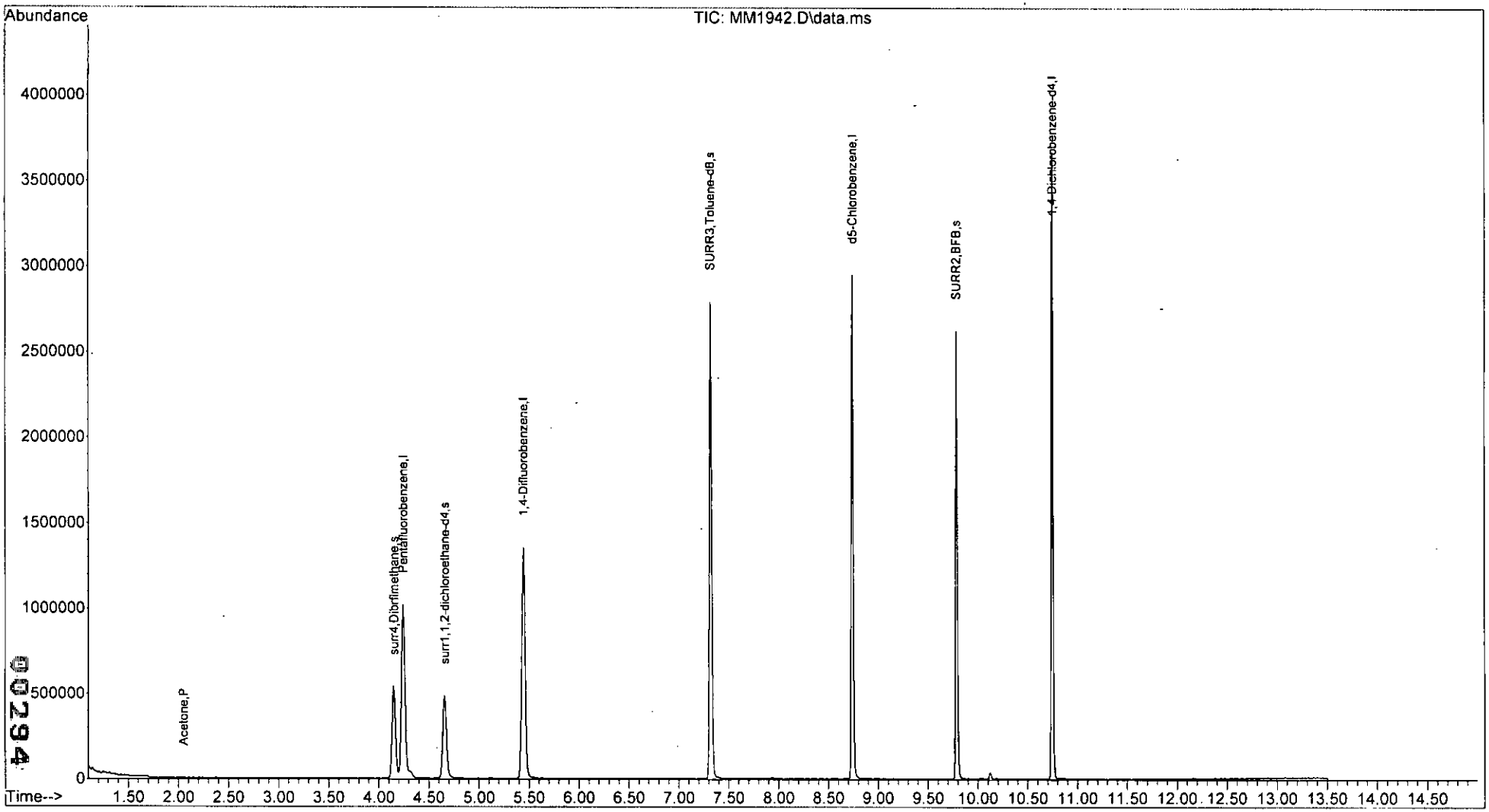
KR
1/5/15

W102714.M Mon Jan 05 16:08:55 2015 Page: 1

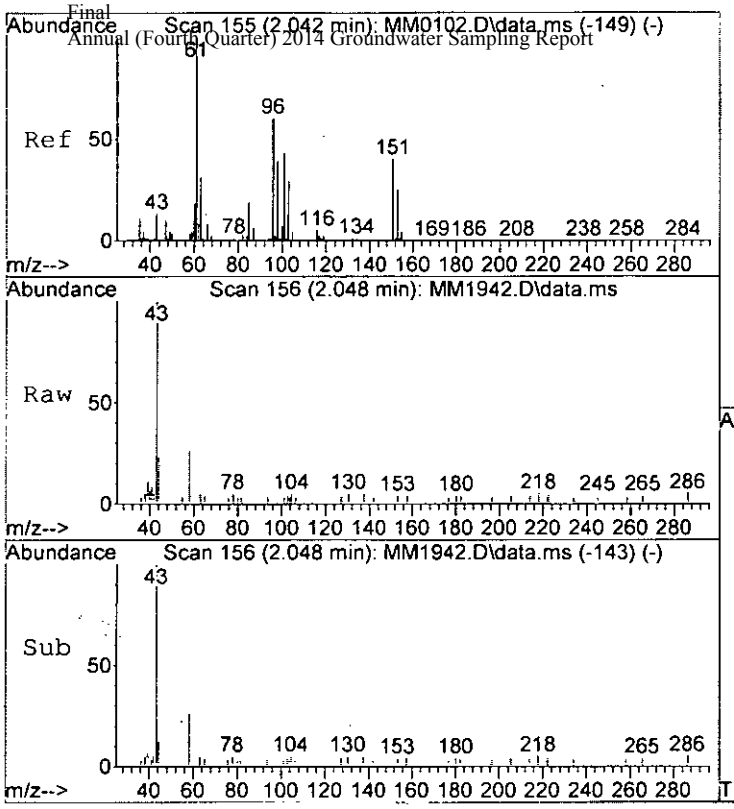
Quantitation Report (QT Reviewed)

Sample : R1410307-021|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1942.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 11:01 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 16:07:44 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



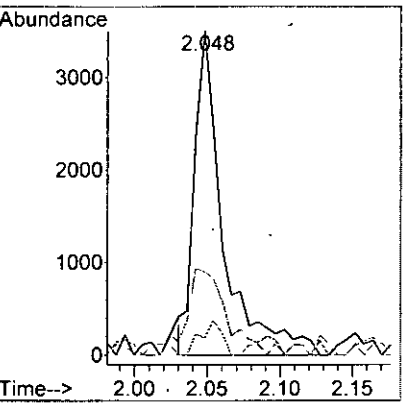
W102714.M Mon Jan 05 16:08:56 2015 Page: 2



#15
Acetone
Concen: 2.59 ppb
RT: 2.048 min Scan# 156
Delta R.T. 0.006 min
Lab File: MM1942.D
Acq: 31 Dec 2014 11:01 am

Tgt Ion: 43 Resp: 4841

Ion	Ratio	Lower	Upper
43	100		
58	25.7	6.2	46.2
42	5.2	0.0	27.2



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1942.D
Acq On : 31 Dec 2014 11:01 am
Operator : K.Ruest
Sample : R1410307-021|1.0
Misc : PARSONS 11603 T4
ALS Vial : 47 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1942.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.145	491	500	508	rBV	542808	1287418	29.65%	5.476%
2	4.243	508	516	526	rVV	989882	2373766	54.67%	10.098%
3	4.658	574	584	600	rBV	482365	1245379	28.68%	5.298%
4	5.444	704	713	729	rBV	1350471	3105458	71.52%	13.210%
5	7.316	1014	1020	1031	rBV	2788405	4342298	100.00%	18.471%
6	8.742	1248	1254	1265	rBV	2947310	3851076	88.69%	16.382%
7	9.785	1420	1425	1435	rBV	2618415	3081949	70.98%	13.110%
8	10.120	1477	1480	1487	rBV	37611	49597	1.14%	0.211%
9	10.748	1578	1583	1592	rBV	3663380	4171214	96.06%	17.744%

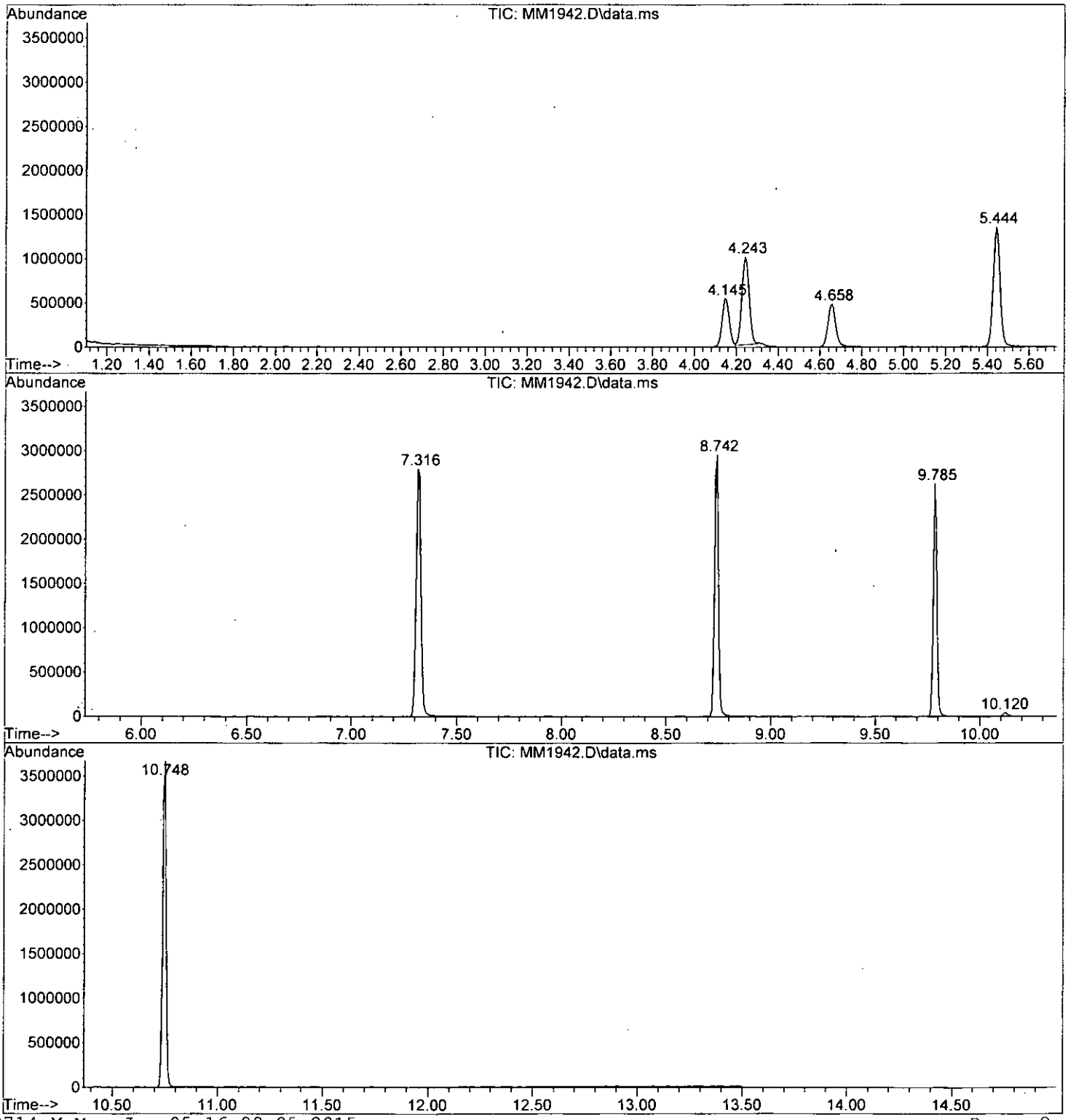
Sum of corrected areas: 23508155

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1942.D
Acq On : 31 Dec 2014 11:01 am
Operator : K.Ruest
Sample : R1410307-021|1.0
Misc : PARSONS 11603 T4
ALS Vial : 47 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W102714.M Mon Jan 05 16:09:05 2015 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1942.D
Acq On : 31 Dec 2014 11:01 amm
Operator : K.Ruestt
Sample : R1410307-021|1.00
Misc : PARSONS 11603 T44
ALS Vial : 47 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 03:33
Sample Name:	FTMM-TB-121914	**Units:**	µg/L
Lab Code:	R1410307-022	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1928.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.29**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 03:33
Sample Name:	FTMM-TB-121914	**Units:**	µg/L
Lab Code:	R1410307-022	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1928.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	ND	U	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	**0.21**	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 03:33
Sample Name:	FTMM-TB-121914	**Units:**	µg/L
Lab Code:	R1410307-022	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1928.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/31/14 03:33	
Dibromofluoromethane	100	85-115	12/31/14 03:33	
Toluene-d8	98	85-120	12/31/14 03:33	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/19/14
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/31/14 0333

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	FTMM-TB-121914	**Units:**	µg/L
Lab Code:	R1410307-022	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Sample : R1410307-022|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1928.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 3:33 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 11:37:45 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	904557	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1375849	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1265842	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	641239	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.145	113	401474	50.11	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.22%				
48) surr1,1,2-dichloroetha...	4.658	65	462051	47.36	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 94.72%				
65) SURR3,Toluene-d8	7.316	98	1651431	48.96	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 97.92%				
70) SURR2,BFB	9.785	95	611923	46.75	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 93.50%				
Target Compounds							Qvalue
18) Carbon Disulfide	2.201	76	7172	0.27	ppb		92
115) 1,2,4-Tcbenzene	12.162	180	2728	0.29	ppb		92
116) Hexachlorobt	12.260	225	1289	0.34	ppb	#	77
117) Naphthalen	12.302	128	3707	0.21	ppb		93
118) 1,2,3-Tclbenzene	12.437	180	2499	0.31	ppb		88

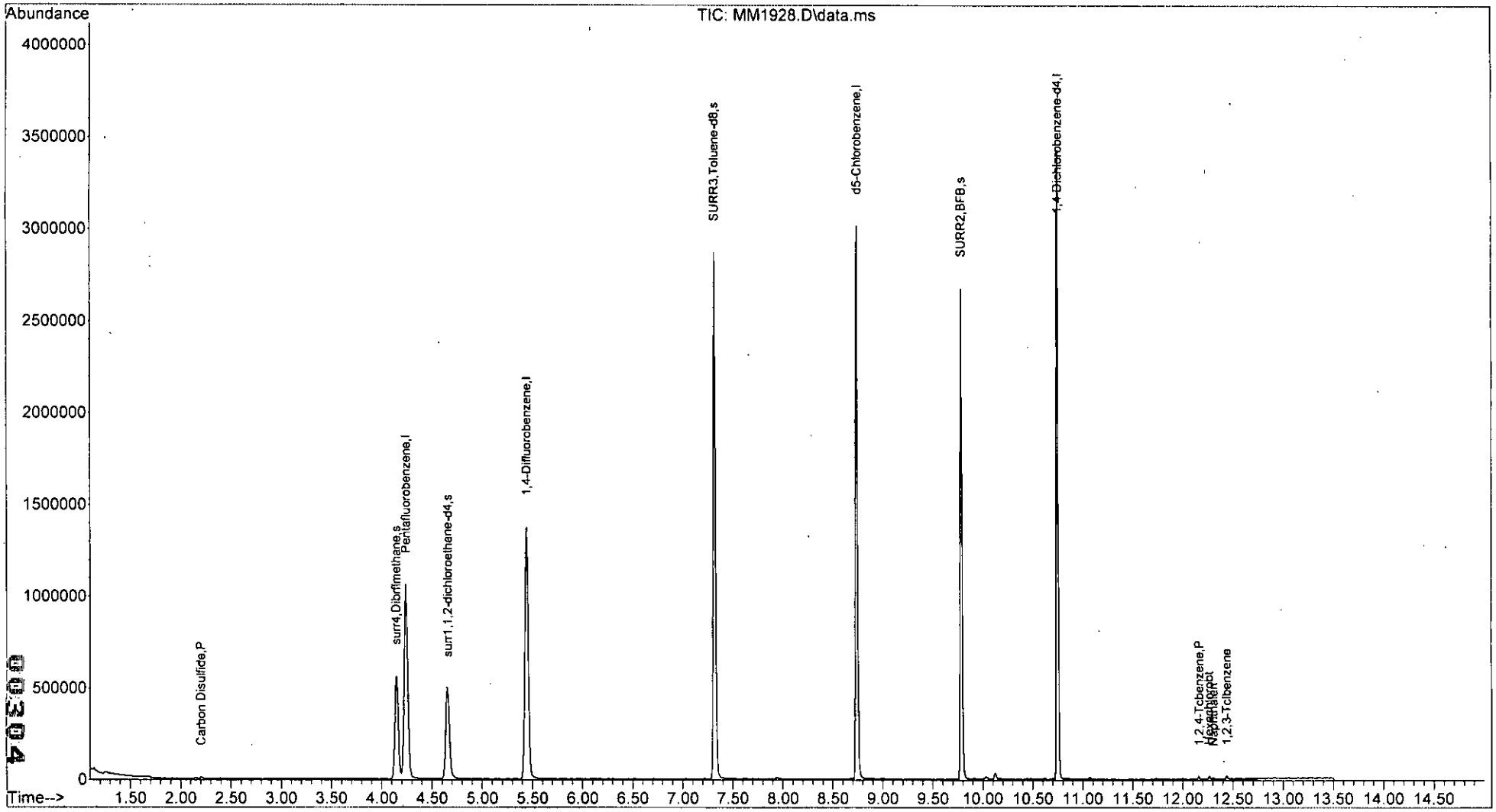
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1/5/15

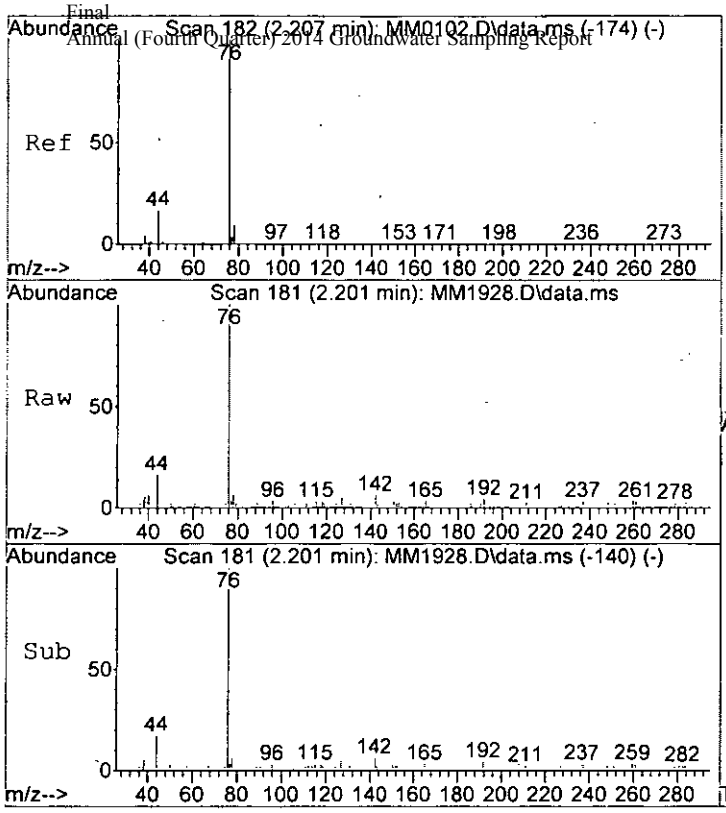
Quantitation Report (QT Reviewed)

Sample : R1410307-022|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1928.D
Misc : PARSONS 11603 T4
Acq On : 31 Dec 2014 3:33 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 11:37:45 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



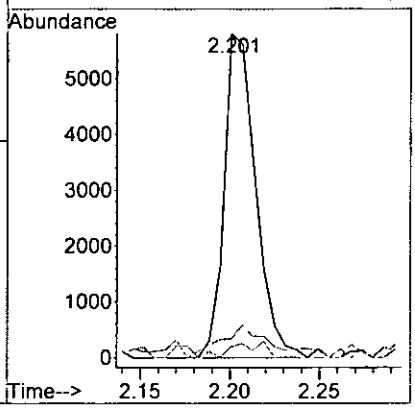
W102714.M Mon Jan 05 11:39:01 2015 Page: 2

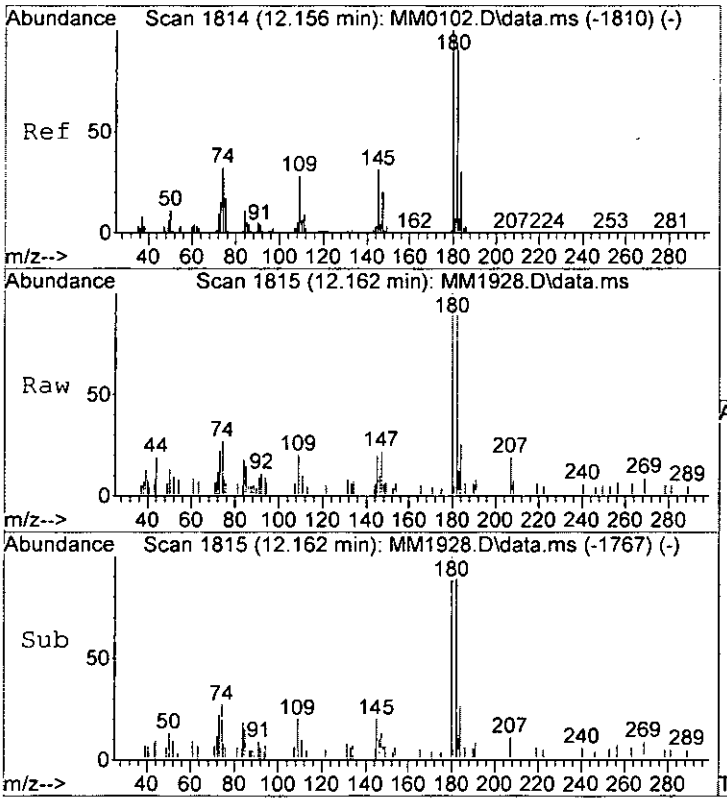


#18
Carbon Disulfide
Concen: 0.27 ppb
RT: 2.201 min Scan# 181
Delta R.T. -0.006 min
Lab File: MM1928.D
Acq: 31 Dec 2014 3:33 am

Tgt Ion: 76 Resp: 7172

Ion	Ratio	Lower	Upper
76	100		
78	5.8	0.0	29.1
77	3.4	0.0	22.6

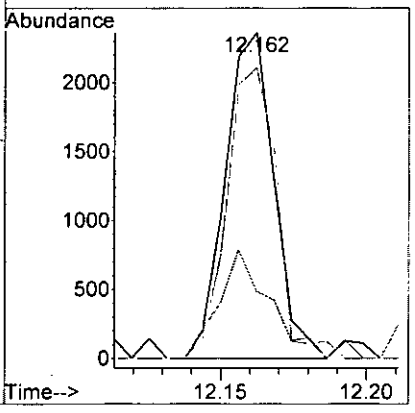


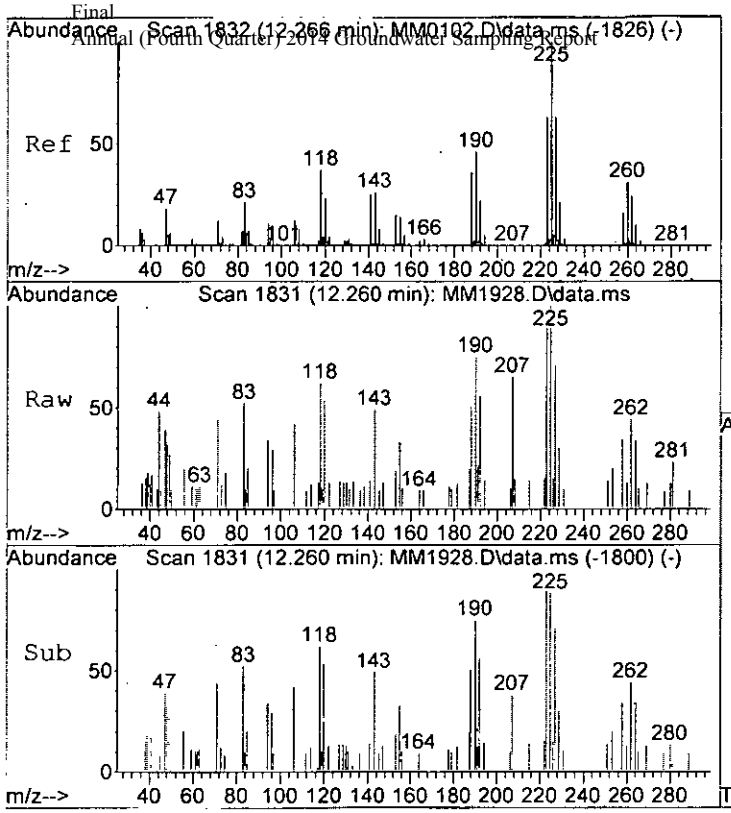


#115
1,2,4-Tcbenzene
Concen: 0.29 ppb
RT: 12.162 min Scan# 1815
Delta R.T. -0.000 min
Lab File: MM1928.D
Acq: 31 Dec 2014 3:33 am

Tgt Ion:180 Resp: 2728

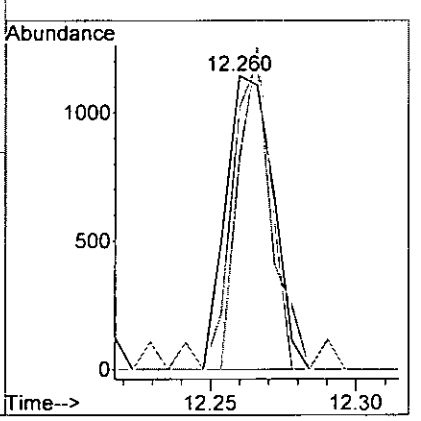
Ion	Ratio	Lower	Upper
180	100		
182	89.4	74.0	114.0
145	20.5	11.2	51.2

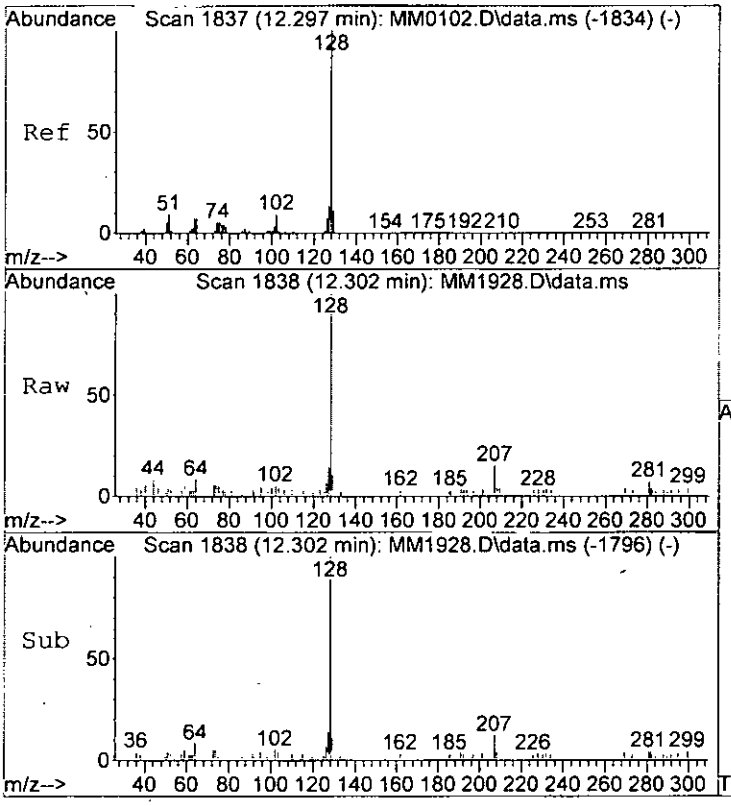




#116
Hexachlorobt
Concen: 0.34 ppb
RT: 12.260 min Scan# 1831
Delta R.T. -0.006 min
Lab File: MM1928.D
Acq: 31 Dec 2014 3:33 am

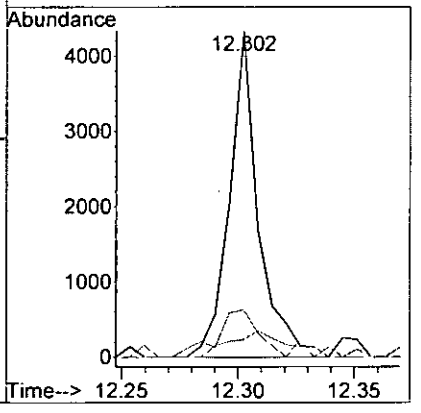
Tgt Ion:225	Resp:	1289	
Ion	Ratio	Lower	Upper
225	100		
223	89.2	42.5	82.5#
227	71.5	42.6	82.6

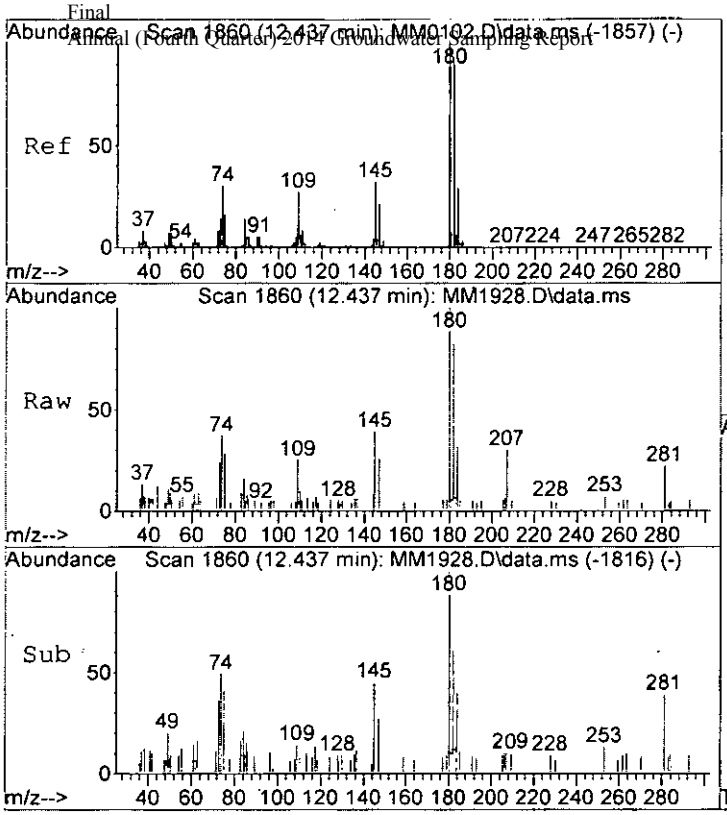




#117
Naphthalen
Concen: 0.21 ppb
RT: 12.302 min Scan# 1838
Delta R.T. -0.000 min
Lab File: MM1928.D
Acq: 31 Dec 2014 3:33 am

Tgt Ion:128	Resp:	3707	
Ion	Ratio	Lower	Upper
128	100		
127	14.5	0.0	32.6
102	5.3	0.0	28.9

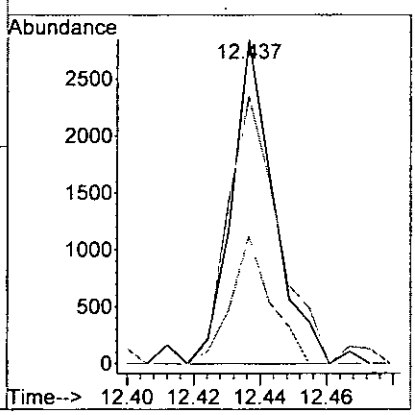




#118
1,2,3-Tclbenzene
Concen: 0.31 ppb
RT: 12.437 min Scan# 1860
Delta R.T. -0.000 min
Lab File: MM1928.D
Acq: 31 Dec 2014 3:33 am

Tgt Ion:180 Resp: 2499

Ion	Ratio	Lower	Upper
180	100		
182	82.5	73.0	113.0
145	39.3	11.8	51.8



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1928.D
Acq On : 31 Dec 2014 3:33 am
Operator : K.Ruest
Sample : R1410307-022|1.0
Misc : PARSONS 11603 T4
ALS Vial : 33 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1928.D\data.ms

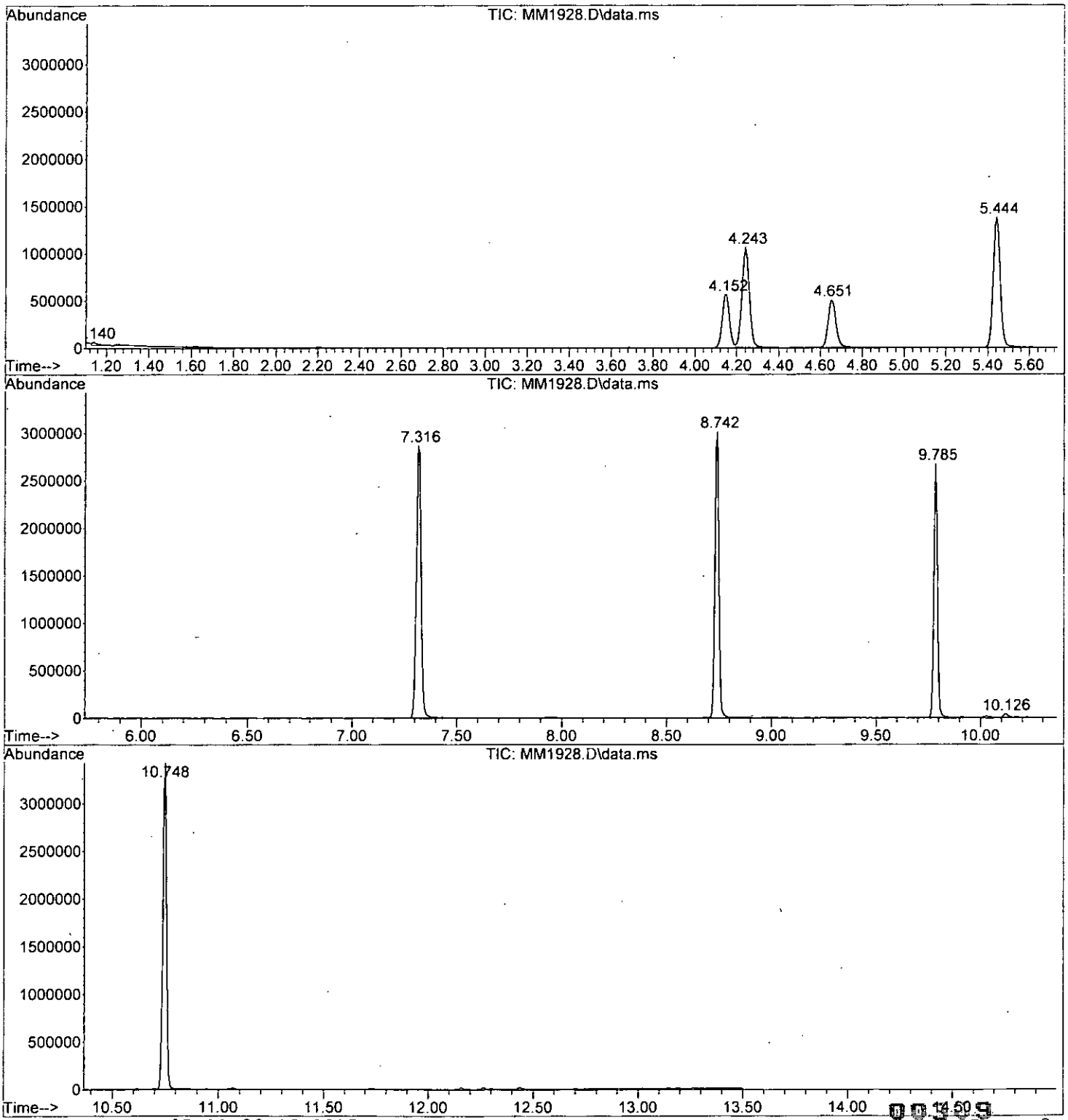
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.140	5	7	18	rVB	30610	47229	1.07%	0.197%
2	4.152	491	501	508	rBV	561080	1347176	30.54%	5.609%
3	4.243	508	516	532	rVB	1056534	2572514	58.32%	10.711%
4	4.651	574	583	598	rBV	501805	1294783	29.35%	5.391%
5	5.444	703	713	727	rBV	1372390	3192068	72.37%	13.291%
6	7.316	1014	1020	1038	rBV	2865576	4410802	100.00%	18.365%
7	8.742	1248	1254	1265	rBV	3012020	3963651	89.86%	16.504%
8	9.785	1420	1425	1433	rBV	2670721	3108066	70.46%	12.941%
9	10.126	1476	1481	1485	rBV	34481	48588	1.10%	0.202%
10	10.748	1578	1583	1593	rBV	3424988	4032143	91.42%	16.789%

Sum of corrected areas: 24017020

```
Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1928.D
Acq On    : 31 Dec 2014   3:33 am
Operator  : K.Ruest
Sample    : R1410307-022|1.0
Misc      : PARSONS 11603 T4
ALS Vial  : 33   Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge

TIC Library   : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P
```



Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1928.D
Acq On : 31 Dec 2014 3:33 amm
Operator : K.Ruestt
Sample : R1410307-022|1.00
Misc : PARSONS 11603 T44
ALS Vial : 33 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

00310

ALS Environmental

VOLATILE ORGANICS STANDARDS DATA

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Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

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00311

Initial Calibration - Summary Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
8260 Waters W102714 **Column Name:** 1 KR 10/28/14

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
1,1,1,2-Tetrachloroethane	T	Average RF			0.3183	<=20	9.7
1,1,1-Trichloroethane (TCA)	T	Average RF		0.100	0.7789	<=20	7.4
1,1,2,2-Tetrachloroethane	T	Average RF		0.300	0.5200	<=20	5.1
1,1,2-Trichloroethane	T	Average RF		0.100	0.2327	<=20	4.8
1,1,2-Trichlorotrifluoroethane	T	Average RF		0.100	0.4424	<=20	3.0
1,1-Dichloroethane (1,1-DCA)	T	Average RF		0.200	0.8626	<=20	4.4
1,1-Dichloroethene (1,1-DCE)	T	Average RF		0.100	0.4319	<=20	7.7
1,1-Dichloropropene	T	Average RF			0.4368	<=20	3.0
1,2,3-Trichlorobenzene	T	Average RF			0.6298	<=20	6.8
1,2,3-Trichloropropane	T	Average RF			0.1577	<=20	14.4
1,2,4-Trichlorobenzene	T	Average RF		0.200	0.7405	<=20	6.8
1,2,4-Trimethylbenzene	T	Average RF			2.270	<=20	6.1
1,2-Dibromo-3-chloropropane (DBCP)	T	Average RF		0.050	0.08752	<=20	8.5
1,2-Dibromoethane	T	Average RF		0.100	0.2348	<=20	6.2
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123:	T	Average RF			0.5897	<=20	5.9
1,2-Dichlorobenzene	T	Average RF		0.400	1.265	<=20	2.6
1,2-Dichloroethane	T	Average RF		0.100	0.4315	<=20	4.5
1,2-Dichloropropane	T	Average RF		0.100	0.3355	<=20	4.5
1,3,5-Trichlorobenzene	T	Average RF			0.8672	<=20	3.6
1,3,5-Trimethylbenzene	T	Average RF			2.314	<=20	4.6
1,3-Dichlorobenzene	T	Average RF		0.600	1.344	<=20	3.3
1,3-Dichloropropane	T	Average RF			0.4486	<=20	4.7
1,4-Dichlorobenzene	T	Average RF		0.500	1.406	<=20	5.9
1,4-Dioxane	T	Average RF			0.002526	<=20	10.8
1-Butanol	T	Average RF			0.006254	<=20	7.5
1-Chloro-4-(trifluoromethyl)benzene	T	Average RF			0.4746	<=20	5.5
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	T	Average RF			0.6221	<=20	3.5
2,2-Dichloropropane	T	Average RF			0.7655	<=20	4.7
2,3,6-Trichlorotoluene	T	Average RF			0.3936	<=20	6.5
2,4,5-Trichlorotoluene	T	Average RF			0.4265	<=20	6.1
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	T	Average RF			1.037	<=20	4.1
2,4-Dichlorobenzotrifluoride	T	Average RF			0.5688	<=20	2.5
2,5-Dichlorobenzotrifluoride	T	Average RF			0.6438	<=20	4.4
2-Bromo-2-chloro-1,1,1-trifluoroethane	T	Average RF				<=20	
2-Butanone (MEK)	T	Average RF		0.05	0.1508	<=20	3.9
2-Chloro-1,3-butadiene	T	Average RF			0.7976	<=20	3.9
2-Chlorobenzotrifluoride	T	Average RF			0.8807	<=20	4.1
2-Chloroethyl Vinyl Ether	T	Average RF			0.1564	<=20	3.3
2-Chlorotoluene	T	Average RF			1.874	<=20	5.8
2-Hexanone	T	Average RF		0.05	0.1683	<=20	4.1
2-Methyl-1-propanol	T	Average RF			0.01014	<=20	9.8
2-Methyl-2-propanol	T	Average RF			0.03476	<=20	5.6
2-Nitropropane	T	Average RF			0.05290	<=20	12.3
2-Propanol	T	Average RF			0.02100	<=20	5.9
3,4- and 2,3-Dichlorotoluene Coelution	T	Average RF			1.086	<=20	5.5
3,4-Dichlorobenzotrifluoride	T	Average RF			0.6633	<=20	7.0
3-Chloro-1-propene	T	Average RF			0.2447	<=20	8.7
3-Chlorobenzotrifluoride	T	Average RF			0.5304	<=20	5.7
3-Chlorotoluene	T	Average RF			1.994	<=20	5.4
4-Chlorotoluene	T	Average RF			2.350	<=20	4.8
4-Isopropyltoluene	T	Average RF			2.283	<=20	6.5
4-Methyl-2-pentanone	T	Average RF		0.05	0.2284	<=20	5.5

Initial Calibration - Summary Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Columu Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
Acetone	T	Average RF		0.05	0.1059	<=20	3.7
Acetonitrile	T	Average RF			0.01684	<=20	9.2
Acrolein	T	Average RF			0.02090	<=20	16.1
Acrylonitrile	T	Average RF			0.1138	<=20	5.3
Benzene	T	Average RF		0.500	1.281	<=20	2.8
Bromobenzene	T	Average RF			0.7038	<=20	2.9
Bromochloromethane	T	Average RF			0.2863	<=20	8.0
Bromodichloromethane	T	Average RF		0.200	0.3975	<=20	3.8
Bromoform	T	Average RF		0.100	0.2484	<=20	15.3
Bromomethane	T	Average RF		0.100	0.3313	<=20	9.6
Carbon Disulfide	T	Average RF		0.100	1.452	<=20	10.1
Carbon Tetrachloride	T	Average RF		0.05	0.1306	<=20	3.7
Chlorobenzene	T	Average RF		0.500	0.9683	<=20	3.8
Chloroethane	T	Average RF		0.100	0.4268	<=20	5.6
Chloroform	T	Average RF		0.200	0.8684	<=20	7.3
Chloromethane	T	Average RF		0.100	0.6451	<=20	8.5
Cyclohexane	T	Average RF		0.100	0.3702	<=20	6.5
Cyclohexanone	T	Average RF			0.02932	<=20	17.8
Dibromochloromethane	T	Average RF		0.100	0.2690	<=20	8.9
Dibromomethane	T	Average RF			0.1587	<=20	4.0
Dichlorodifluoromethane (CFC 12)	T	Average RF		0.100	0.4730	<=20	5.4
Dichlorofluoromethane (CFC 21)	T	Average RF			1.066	<=20	7.0
Dichloromethane	T	Average RF		0.100	0.4706	<=20	7.6
Diethyl Ether	T	Average RF			0.3709	<=20	6.5
Diisopropyl Ether	T	Average RF			1.734	<=20	4.6
Ethyl Methacrylate	T	Average RF			0.3285	<=20	8.0
Ethyl tert-Butyl Ether	T	Average RF			1.505	<=20	3.7
Ethylbenzene	T	Average RF		0.100	0.5223	<=20	4.5
Hexachlorobutadiene	T	Average RF			0.2928	<=20	8.5
Iodomethane	T	Average RF			0.6235	<=20	5.9
Isopropylbenzene (Cumene)	T	Average RF		0.100	2.668	<=20	8.0
Methacrylonitrile	T	Average RF			0.1320	<=20	5.5
Methyl Acetate	T	Average RF		0.100	0.2444	<=20	5.6
Methyl Methacrylate	T	Average RF			0.1548	<=20	7.1
Methyl tert-Butyl Ether	T	Average RF		0.100	1.211	<=20	3.2
Methylcyclohexane	T	Average RF		0.100	0.4296	<=20	6.9
Naphthalene	T	Average RF			1.407	<=20	5.5
Propionitrile	T	Average RF			0.04437	<=20	8.1
Styrene	T	Average RF		0.300	1.051	<=20	10.3
Tetrachloroethene (PCE)	T	Average RF		0.200	0.2877	<=20	4.3
Tetrahydrofuran (THF)	T	Average RF			0.1015	<=20	3.6
Toluene	T	Average RF		0.400	1.381	<=20	3.2
Trichloroethene (TCE)	T	Average RF		0.200	0.3348	<=20	5.2
Trichlorofluoromethane (CFC 11)	T	Average RF		0.100	0.8147	<=20	4.6
Vinyl Acetate	T	Average RF			0.07817	<=20	7.5
Vinyl Chloride	T	Average RF		0.100	0.6851	<=20	7.7
cis-1,2-Dichloroethene	T	Average RF		0.100	0.5060	<=20	2.0
cis-1,3-Dichloropropene	T	Average RF		0.200	0.4952	<=20	4.9
m,p-Xylenes	T	Average RF		0.100	0.6320	<=20	6.5
n-Butyl Acetate	T	Average RF			0.4346	<=20	5.8
n-Butylbenzene	T	Average RF			2.020	<=20	5.2
n-Heptane	T	Average RF			0.4142	<=20	11.5

Initial Calibration - Summary Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Type	Curve Fit	Weighting	Min RF	Mean RF	Criteria	Result
n-Propylbenzene	T	Average RF			3.094	<=20	10.2
o-Xylene	T	Average RF		0.300	0.6354	<=20	6.8
sec-Butylbenzene	T	Average RF			2.628	<=20	7.3
tert-Amyl Methyl Ether	T	Average RF			1.260	<=20	3.6
tert-Butylbenzene	T	Average RF			1.869	<=20	5.2
trans-1,2-Dichloroethene	T	Average RF		0.100	0.4668	<=20	3.5
trans-1,3-Dichloropropene	T	Average RF		0.100	0.4221	<=20	8.1
trans-1,4-Dichloro-2-butene	T	Average RF			0.1604	<=20	8.2
1,2-Dichloroethane-d4	S	Average RF			0.3545	<=20	4.1
4-Bromofluorobenzene	S	Average RF			0.4756	<=20	2.1
Dibromofluoromethane	S	Average RF			0.2912	<=20	2.9
Toluene-d8	S	Average RF			1.226	<=20	3.4

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
DDeO waters W102714 **Signal ID:** 1 KR 10/28/14

#	Lab Code	Sample Name	File Location	Acquisition Date
01	RC1400098-01	0.5ppb	I:\ACQUDATA\msvoa12\Data\102714\MM0097.D	10/27/14 16:13
02	RC1400098-02	1.0ppb	I:\ACQUDATA\msvoa12\Data\102714\MM0098.D	10/27/14 16:45
03	RC1400098-03	2.0ppb	I:\ACQUDATA\msvoa12\Data\102714\MM0099.D	10/27/14 17:17
04	RC1400098-04	5.0ppb	I:\ACQUDATA\msvoa12\Data\102714\MM0100.D	10/27/14 17:49
05	RC1400098-05	20ppb	I:\ACQUDATA\msvoa12\Data\102714\MM0101.D	10/27/14 18:21
06	RC1400098-06	50ppb	I:\ACQUDATA\msvoa12\Data\102714\MM0102.D	10/27/14 18:54
07	RC1400098-07	100ppb	I:\ACQUDATA\msvoa12\Data\102714\MM0103.D	10/27/14 19:26
08	RC1400098-08	150ppb	I:\ACQUDATA\msvoa12\Data\102714\MM0104.D	10/27/14 19:58
09	RC1400098-09	200ppb	I:\ACQUDATA\msvoa12\Data\102714\MM0105.D	10/27/14 20:31

Analyte **Curve Fit** **Weighting**

1,1,1,2-Tetrachloroethane Average RF RSD = 9.7 Average RF = 0.3183

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2987	02	1.000	0.2688	03	2.000	0.2935	04	5.000	0.2938
05	20.000	0.3286	06	50.000	0.3329	07	100.000	0.3382	08	150.000	0.3475
09	200.000	0.3629									

1,1,1-Trichloroethane (TCA) Average RF RSD = 7.4 Average RF = 0.7789

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9197	02	1.000	0.7699	03	2.000	0.7901	04	5.000	0.7527
05	20.000	0.7986	06	50.000	0.7630	07	100.000	0.7310	08	150.000	0.7441
09	200.000	0.7408									

1,1,2,2-Tetrachloroethane Average RF RSD = 5.1 Average RF = 0.5200

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4712	02	1.000	0.5503	03	2.000	0.5352	04	5.000	0.5275
05	20.000	0.5519	06	50.000	0.5186	07	100.000	0.5161	08	150.000	0.4893
09	200.000	0.5203									

1,1,2-Trichloroethane Average RF RSD = 4.8 Average RF = 0.2327

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2091	02	1.000	0.2297	03	2.000	0.2289	04	5.000	0.2331
05	20.000	0.2487	06	50.000	0.2322	07	100.000	0.2380	08	150.000	0.2311
09	200.000	0.2438									

1,1,2-Trichlorotrifluoroethane Average RF RSD = 3.0 Average RF = 0.4424

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4372	02	1.000	0.4652	03	2.000	0.4266	04	5.000	0.4375
05	20.000	0.4591	06	50.000	0.4393	07	100.000	0.4267	08	150.000	0.4417
09	200.000	0.4479									

1,1-Dichloroethane (1,1-DCA) Average RF RSD = 4.4 Average RF = 0.8626

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8883	02	1.000	0.9305	03	2.000	0.8679	04	5.000	0.8560
05	20.000	0.8974	06	50.000	0.8560	07	100.000	0.8199	08	150.000	0.8237
09	200.000	0.8235									

1,1-Dichloroethene (1,1-DCE) Average RF RSD = 7.7 Average RF = 0.4319

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5117	02	1.000	0.4421	03	2.000	0.4132	04	5.000	0.3957
05	20.000	0.4319	06	50.000	0.4177	07	100.000	0.4119	08	150.000	0.4259
09	200.000	0.4375									

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

1,1-Dichloropropene Average RF RSD = 3.0 Average RF = 0.4368

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4479	02	1.000	0.4568	03	2.000	0.4332	04	5.000	0.4238
05	20.000	0.4553	06	50.000	0.4335	07	100.000	0.4241	08	150.000	0.4274
09	200.000	0.4294									

1,2,3-Trichlorobenzene Average RF RSD = 6.8 Average RF = 0.6298

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6427	02	1.000	0.7150	03	2.000	0.6081	04	5.000	0.6188
05	20.000	0.6715	06	50.000	0.6422	07	100.000	0.5997	08	150.000	0.5853
09	200.000	0.5847									

1,2,3-Trichloropropane Average RF RSD = 14.4 Average RF = 0.1577

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2078	02	1.000	0.1745	03	2.000	0.1460	04	5.000	0.1687
05	20.000	0.1528	06	50.000	0.1454	07	100.000	0.1463	08	150.000	0.1337
09	200.000	0.1442									

1,2,4-Trichlorobenzene Average RF RSD = 6.8 Average RF = 0.7405

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8196	02	1.000	0.6583	03	2.000	0.7456	04	5.000	0.7518
05	20.000	0.7898	06	50.000	0.7756	07	100.000	0.7114	08	150.000	0.7102
09	200.000	0.7022									

1,2,4-Trimethylbenzene Average RF RSD = 6.1 Average RF = 2.270

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.220	02	1.000	2.400	03	2.000	2.234	04	5.000	2.309
05	20.000	2.472	06	50.000	2.384	07	100.000	2.226	08	150.000	2.160
09	200.000	2.022									

1,2-Dibromo-3-chloropropane (DBCP) Average RF RSD = 8.5 Average RF = 0.08752

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.07249	02	1.000	0.08449	03	2.000	0.08218	04	5.000	0.08677
05	20.000	0.09012	06	50.000	0.09217	07	100.000	0.09738	08	150.000	0.08723
09	200.000	0.09486									

1,2-Dibromoethane Average RF RSD = 6.2 Average RF = 0.2348

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2170	02	1.000	0.2150	03	2.000	0.2176	04	5.000	0.2386
05	20.000	0.2535	06	50.000	0.2433	07	100.000	0.2439	08	150.000	0.2359
09	200.000	0.2481									

1,2-Dichloro-1,1,2-trifluoroethane (CFC Average RF RSD = 5.9 Average RF = 0.5897

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6251	02	1.000	0.6394	03	2.000	0.6262	04	5.000	0.5868
05	20.000	0.5933	06	50.000	0.5772	07	100.000	0.5411	08	150.000	0.5525
09	200.000	0.5655									

1,2-Dichlorobenzene Average RF RSD = 2.6 Average RF = 1.265

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.252	02	1.000	1.287	03	2.000	1.194	04	5.000	1.254
05	20.000	1.311	06	50.000	1.276	07	100.000	1.266	08	150.000	1.262
09	200.000	1.283									

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** Average RF **Weighting** RSD = 4.5 **Average RF = 0.4315**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4722	02	1.000	0.4183	03	2.000	0.4188	04	5.000	0.4390
05	20.000	0.4504	06	50.000	0.4248	07	100.000	0.4215	08	150.000	0.4115
09	200.000	0.4273									

1,2-Dichloroethane-d4 Average RF RSD = 4.1 **Average RF = 0.3545**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.3603	03	60.000	0.3696	04	70.000	0.3686	05	100.000	0.3481
07	125.000	0.3487	08	150.000	0.3319						

1,2-Dichloropropane Average RF RSD = 4.5 **Average RF = 0.3355**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3373	02	1.000	0.3705	03	2.000	0.3380	04	5.000	0.3277
05	20.000	0.3435	06	50.000	0.3294	07	100.000	0.3195	08	150.000	0.3214
09	200.000	0.3323									

1,3,5-Trichlorobenzene Average RF RSD = 3.6 **Average RF = 0.8672**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8924	02	1.000	0.8966	03	2.000	0.8924	04	5.000	0.8698
05	20.000	0.8874	06	50.000	0.8851	07	100.000	0.8337	08	150.000	0.8263
09	200.000	0.8213									

1,3,5-Trimethylbenzene Average RF RSD = 4.6 **Average RF = 2.314**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.414	02	1.000	2.384	03	2.000	2.284	04	5.000	2.286
05	20.000	2.444	06	50.000	2.401	07	100.000	2.278	08	150.000	2.231
09	200.000	2.108									

1,3-Dichlorobenzene Average RF RSD = 3.3 **Average RF = 1.344**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.370	02	1.000	1.397	03	2.000	1.351	04	5.000	1.331
05	20.000	1.410	06	50.000	1.357	07	100.000	1.306	08	150.000	1.294
09	200.000	1.282									

1,3-Dichloropropane Average RF RSD = 4.7 **Average RF = 0.4486**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4843	02	1.000	0.4082	03	2.000	0.4311	04	5.000	0.4527
05	20.000	0.4621	06	50.000	0.4514	07	100.000	0.4508	08	150.000	0.4396
09	200.000	0.4574									

1,4-Dichlorobenzene Average RF RSD = 5.9 **Average RF = 1.406**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.541	02	1.000	1.523	03	2.000	1.357	04	5.000	1.363
05	20.000	1.460	06	50.000	1.409	07	100.000	1.348	08	150.000	1.331
09	200.000	1.319									

1,4-Dioxane Average RF RSD = 10.8 **Average RF = 0.002526**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	40.000	0.002918	04	100.000	0.002886	05	400.000	0.002410	06	1000.000	0.002314
07	2000.000	0.002431	08	3000.000	0.002222	09	4000.000	0.002499			

1-Butanol Average RF RSD = 7.5 **Average RF = 0.006254**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	50.000	0.006394	03	100.000	0.006237	04	250.000	0.005875	05	1000.000	0.005789
06	2500.000	0.006061	07	5000.000	0.006829	08	7500.000	0.005821	09	10000.000	0.007026

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

1-Chloro-4-(trifluoromethyl)benzene Average RF RSD = 5.5 Average RF = 0.4746

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4653	02	1.000	0.4524	03	2.000	0.4547	04	5.000	0.4386
05	20.000	0.4677	06	50.000	0.4808	07	100.000	0.4929	08	150.000	0.4991
09	200.000	0.5201									

2,2-Dichloro-1,1,1-trifluoroethane (CFC Average RF RSD = 3.5 Average RF = 0.6221

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5791	02	1.000	0.6319	03	2.000	0.6307	04	5.000	0.6250
05	20.000	0.6505	06	50.000	0.6354	07	100.000	0.6000	08	150.000	0.6125
09	200.000	0.6337									

2,2-Dichloropropane Average RF RSD = 4.7 Average RF = 0.7655

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7679	02	1.000	0.8371	03	2.000	0.7217	04	5.000	0.7428
05	20.000	0.8007	06	50.000	0.7834	07	100.000	0.7436	08	150.000	0.7523
09	200.000	0.7397									

2,3,6-Trichlorotoluene Average RF RSD = 6.5 Average RF = 0.3936

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3823	02	1.000	0.4478	03	2.000	0.3550	04	5.000	0.3963
05	20.000	0.3937	06	50.000	0.4120	07	100.000	0.3842	08	150.000	0.3797
09	200.000	0.3912									

2,4,5-Trichlorotoluene Average RF RSD = 6.1 Average RF = 0.4265

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4877	02	1.000	0.4134	03	2.000	0.4389	04	5.000	0.4277
05	20.000	0.4093	06	50.000	0.4362	07	100.000	0.4104	08	150.000	0.4027
09	200.000	0.4125									

2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut Average RF RSD = 4.1 Average RF = 1.037

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.500	1.028	02	3.000	1.072	03	6.000	1.029	04	15.000	1.047
05	60.000	1.076	06	150.000	1.091	07	300.000	1.038	08	450.000	0.9963
09	600.000	0.9560									

2,4-Dichlorobenzotrifluoride Average RF RSD = 2.5 Average RF = 0.5688

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5938	02	1.000	0.5485	03	2.000	0.5603	04	5.000	0.5616
05	20.000	0.5685	06	50.000	0.5883	07	100.000	0.5702	08	150.000	0.5619
09	200.000	0.5663									

2,5-Dichlorobenzotrifluoride Average RF RSD = 4.4 Average RF = 0.6438

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6505	02	1.000	0.7013	03	2.000	0.5929	04	5.000	0.6260
05	20.000	0.6466	06	50.000	0.6573	07	100.000	0.6422	08	150.000	0.6347
09	200.000	0.6426									

2-Butanone (MEK) Average RF RSD = 3.9 Average RF = 0.1508

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1480	04	5.000	0.1468	05	20.000	0.1477	06	50.000	0.1457
07	100.000	0.1590	08	150.000	0.1490	09	200.000	0.1595			

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

2-Chloro-1,3-butadiene Average RF RSD = 3.9 Average RF = 0.7976

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8282	02	1.000	0.8451	03	2.000	0.7575	04	5.000	0.7991
05	20.000	0.8357	06	50.000	0.7795	07	100.000	0.7684	08	150.000	0.7817
09	200.000	0.7829									

2-Chlorobenzotrifluoride Average RF RSD = 4.1 Average RF = 0.8807

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8652	02	1.000	0.9468	03	2.000	0.9240	04	5.000	0.9002
05	20.000	0.8720	06	50.000	0.8746	07	100.000	0.8554	08	150.000	0.8417
09	200.000	0.8467									

2-Chloroethyl Vinyl Ether Average RF RSD = 3.3 Average RF = 0.1564

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1587	02	1.000	0.1522	03	2.000	0.1463	04	5.000	0.1550
05	20.000	0.1601	06	50.000	0.1556	07	100.000	0.1622	08	150.000	0.1545
09	200.000	0.1628									

2-Chlorotoluene Average RF RSD = 5.8 Average RF = 1.874

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.878	02	1.000	1.971	03	2.000	1.848	04	5.000	1.912
05	20.000	2.058	06	50.000	1.926	07	100.000	1.816	08	150.000	1.767
09	200.000	1.694									

2-Hexanone Average RF RSD = 4.1 Average RF = 0.1683

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1596	04	5.000	0.1658	05	20.000	0.1710	06	50.000	0.1655
07	100.000	0.1779	08	150.000	0.1626	09	200.000	0.1759			

2-Methyl-1-propanol Average RF RSD = 9.8 Average RF = 0.01014

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	20.000	0.01006	03	40.000	0.008150	04	100.000	0.009697	05	400.000	0.01042
06	1000.000	0.01032	07	2000.000	0.01116	08	3000.000	0.009934	09	4000.000	0.01136

2-Methyl-2-propanol Average RF RSD = 5.6 Average RF = 0.03476

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.03148	03	40.000	0.03523	04	100.000	0.03649	05	400.000	0.03507
06	1000.000	0.03417	07	2000.000	0.03659	08	3000.000	0.03241	09	4000.000	0.03667

2-Nitropropane Average RF RSD = 12.3 Average RF = 0.05290

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.06311	02	2.000	0.04522	03	4.000	0.05145	04	10.000	0.04396
05	40.000	0.04998	06	100.000	0.05063	07	200.000	0.05585	08	300.000	0.05460
09	400.000	0.06129									

2-Propanol Average RF RSD = 5.9 Average RF = 0.02100

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.01921	03	40.000	0.02027	04	100.000	0.01999	05	400.000	0.02173
06	1000.000	0.02199	07	2000.000	0.02218	08	3000.000	0.02015	09	4000.000	0.02251

3,4- and 2,3-Dichlorotoluene Coelution Average RF RSD = 5.5 Average RF = 1.086

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.076	02	2.000	1.084	03	4.000	1.087	04	10.000	1.134
05	40.000	1.146	06	100.000	1.158	07	200.000	1.093	08	300.000	1.028
09	400.000	0.9679									

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

3,4-Dichlorobenzotrifluoride Average RF RSD = 7.0 Average RF = 0.6633

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6851	02	1.000	0.6154	03	2.000	0.5915	04	5.000	0.6222
05	20.000	0.6488	06	50.000	0.6788	07	100.000	0.6957	08	150.000	0.7033
09	200.000	0.7292									

3-Chloro-1-propene Average RF RSD = 8.7 Average RF = 0.2447

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2712	02	1.000	0.2180	03	2.000	0.2437	04	5.000	0.2374
05	20.000	0.2736	06	50.000	0.2611	07	100.000	0.2343	08	150.000	0.2492
09	200.000	0.2139									

3-Chlorobenzotrifluoride Average RF RSD = 5.7 Average RF = 0.5304

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5388	02	1.000	0.5009	03	2.000	0.4892	04	5.000	0.5106
05	20.000	0.5095	06	50.000	0.5380	07	100.000	0.5447	08	150.000	0.5586
09	200.000	0.5834									

3-Chlorotoluene Average RF RSD = 5.4 Average RF = 1.994

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.046	02	1.000	2.099	03	2.000	2.043	04	5.000	2.080
05	20.000	2.059	06	50.000	2.026	07	100.000	1.954	08	150.000	1.851
09	200.000	1.788									

4-Bromofluorobenzene Average RF RSD = 2.1 Average RF = 0.4756

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.4876	03	60.000	0.4840	04	70.000	0.4767	05	100.000	0.4598
07	125.000	0.4758	08	150.000	0.4699						

4-Chlorotoluene Average RF RSD = 4.8 Average RF = 2.350

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.448	02	1.000	2.414	03	2.000	2.362	04	5.000	2.344
05	20.000	2.502	06	50.000	2.409	07	100.000	2.296	08	150.000	2.245
09	200.000	2.129									

4-Isopropyltoluene Average RF RSD = 6.5 Average RF = 2.283

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.432	02	1.000	2.298	03	2.000	2.312	04	5.000	2.266
05	20.000	2.485	06	50.000	2.394	07	100.000	2.204	08	150.000	2.156
09	200.000	2.004									

4-Methyl-2-pentanone Average RF RSD = 5.5 Average RF = 0.2284

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.2060	04	5.000	0.2248	05	20.000	0.2332	06	50.000	0.2278
07	100.000	0.2426	08	150.000	0.2225	09	200.000	0.2419			

Acetone Average RF RSD = 3.7 Average RF = 0.1059

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1096	04	5.000	0.1007	05	20.000	0.1059	06	50.000	0.1021
07	100.000	0.1101	08	150.000	0.1033	09	200.000	0.1095			

Acetonitrile Average RF RSD = 9.2 Average RF = 0.01684

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.01344	03	10.000	0.01803	04	25.000	0.01803	05	100.000	0.01686
06	250.000	0.01592	07	500.000	0.01703	08	750.000	0.01781	09	1000.000	0.01756

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Acrolein Average RF RSD = 16.1 Average RF = 0.02090

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.000	0.02174	03	10.000	0.02092	04	25.000	0.01812	05	100.000	0.01778
06	250.000	0.01609	07	500.000	0.02237	08	750.000	0.02437	09	1000.000	0.02581

Acrylonitrile Average RF RSD = 5.3 Average RF = 0.1138

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.1102	02	5.000	0.1085	03	10.000	0.1019	04	25.000	0.1165
05	100.000	0.1184	06	250.000	0.1151	07	500.000	0.1188	08	750.000	0.1133
09	1000.000	0.1212									

Benzene Average RF RSD = 2.8 Average RF = 1.281

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.329	02	1.000	1.278	03	2.000	1.281	04	5.000	1.272
05	20.000	1.349	06	50.000	1.273	07	100.000	1.242	08	150.000	1.248
09	200.000	1.256									

Bromobenzene Average RF RSD = 2.9 Average RF = 0.7038

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7391	02	1.000	0.7201	03	2.000	0.7095	04	5.000	0.6872
05	20.000	0.7232	06	50.000	0.7010	07	100.000	0.6828	08	150.000	0.6785
09	200.000	0.6931									

Bromochloromethane Average RF RSD = 8.0 Average RF = 0.2863

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3406	02	1.000	0.2947	03	2.000	0.2746	04	5.000	0.2867
05	20.000	0.2944	06	50.000	0.2794	07	100.000	0.2677	08	150.000	0.2673
09	200.000	0.2715									

Bromodichloromethane Average RF RSD = 3.8 Average RF = 0.3975

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3792	02	1.000	0.4064	03	2.000	0.3789	04	5.000	0.3774
05	20.000	0.4138	06	50.000	0.3986	07	100.000	0.4032	08	150.000	0.4030
09	200.000	0.4165									

Bromoform Average RF RSD = 15.3 Average RF = 0.2484

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1787	02	1.000	0.2167	03	2.000	0.2239	04	5.000	0.2332
05	20.000	0.2597	06	50.000	0.2693	07	100.000	0.2819	08	150.000	0.2749
09	200.000	0.2976									

Bromomethane Average RF RSD = 9.6 Average RF = 0.3313

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3337	02	1.000	0.3526	03	2.000	0.2877	04	5.000	0.2967
05	20.000	0.3026	06	50.000	0.3241	07	100.000	0.3363	08	150.000	0.3689
09	200.000	0.3792									

Carbon Disulfide Average RF RSD = 10.1 Average RF = 1.452

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.814	02	1.000	1.496	03	2.000	1.412	04	5.000	1.406
05	20.000	1.485	06	50.000	1.402	07	100.000	1.354	08	150.000	1.363
09	200.000	1.336									

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Carbon Tetrachloride Average RF RSD = 3.7 Average RF = 0.1306

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1344	02	1.000	0.1354	03	2.000	0.1250	04	5.000	0.1217
05	20.000	0.1349	06	50.000	0.1290	07	100.000	0.1293	08	150.000	0.1312
09	200.000	0.1341									

Chlorobenzene Average RF RSD = 3.8 Average RF = 0.9683

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.045	02	1.000	0.9265	03	2.000	0.9319	04	5.000	0.9357
05	20.000	0.9962	06	50.000	0.9687	07	100.000	0.9641	08	150.000	0.9705
09	200.000	0.9765									

Chloroethane Average RF RSD = 5.6 Average RF = 0.4268

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4729	02	1.000	0.4430	03	2.000	0.4153	04	5.000	0.4332
05	20.000	0.4443	06	50.000	0.4230	07	100.000	0.4027	08	150.000	0.4056
09	200.000	0.4016									

Chloroform Average RF RSD = 7.3 Average RF = 0.8684

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9523	02	1.000	0.9843	03	2.000	0.8878	04	5.000	0.8430
05	20.000	0.8762	06	50.000	0.8324	07	100.000	0.8081	08	150.000	0.8148
09	200.000	0.8164									

Chloromethane Average RF RSD = 8.5 Average RF = 0.6451

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.7759	02	1.000	0.6571	03	2.000	0.6266	04	5.000	0.6014
05	20.000	0.6755	06	50.000	0.6386	07	100.000	0.6127	08	150.000	0.6041
09	200.000	0.6144									

Cyclohexane Average RF RSD = 6.5 Average RF = 0.3702

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4210	02	1.000	0.3797	03	2.000	0.3678	04	5.000	0.3698
05	20.000	0.3846	06	50.000	0.3676	07	100.000	0.3448	08	150.000	0.3432
09	200.000	0.3531									

Cyclohexanone Average RF RSD = 17.8 Average RF = 0.02932

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.000	0.03775	02	20.000	0.03583	03	40.000	0.02990	04	100.000	0.03096
05	400.000	0.02766	06	1000.000	0.02323	07	2000.000	0.02634	08	3000.000	0.02206
09	4000.000	0.03014									

Dibromochloromethane Average RF RSD = 8.9 Average RF = 0.2690

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2599	02	1.000	0.2388	03	2.000	0.2558	04	5.000	0.2347
05	20.000	0.2705	06	50.000	0.2768	07	100.000	0.2884	08	150.000	0.2898
09	200.000	0.3059									

Dibromofluoromethane Average RF RSD = 2.9 Average RF = 0.2912

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	0.2960	03	60.000	0.3008	04	70.000	0.2973	05	100.000	0.2859
07	125.000	0.2889	08	150.000	0.2782						

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Dibromomethane Average RF RSD = 4.0 Average RF = 0.1587

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1725	02	1.000	0.1512	03	2.000	0.1602	04	5.000	0.1570
05	20.000	0.1621	06	50.000	0.1577	07	100.000	0.1551	08	150.000	0.1524
09	200.000	0.1603									

Dichlorodifluoromethane (CFC 12) Average RF RSD = 5.4 Average RF = 0.4730

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4746	02	1.000	0.4562	03	2.000	0.4648	04	5.000	0.4296
05	20.000	0.5219	06	50.000	0.4966	07	100.000	0.4747	08	150.000	0.4687
09	200.000	0.4702									

Dichlorofluoromethane (CFC 21) Average RF RSD = 7.0 Average RF = 1.066

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.162	02	1.000	1.105	03	2.000	1.138	04	5.000	1.078
05	20.000	1.119	06	50.000	1.069	07	100.000	0.9825	08	150.000	0.9734
09	200.000	0.9659									

Dichloromethane Average RF RSD = 7.6 Average RF = 0.4706

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5615	02	1.000	0.4610	03	2.000	0.4711	04	5.000	0.4695
05	20.000	0.4729	06	50.000	0.4519	07	100.000	0.4360	08	150.000	0.4523
09	200.000	0.4594									

Diethyl Ether Average RF RSD = 6.5 Average RF = 0.3709

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4307	02	1.000	0.3729	03	2.000	0.3533	04	5.000	0.3564
05	20.000	0.3737	06	50.000	0.3646	07	100.000	0.3611	08	150.000	0.3521
09	200.000	0.3736									

Diisopropyl Ether Average RF RSD = 4.6 Average RF = 1.734

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.795	02	1.000	1.767	03	2.000	1.795	04	5.000	1.807
05	20.000	1.777	06	50.000	1.721	07	100.000	1.706	08	150.000	1.561
09	200.000	1.677									

Ethyl Methacrylate Average RF RSD = 8.0 Average RF = 0.3285

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3124	02	1.000	0.2802	03	2.000	0.3046	04	5.000	0.3199
05	20.000	0.3420	06	50.000	0.3427	07	100.000	0.3551	08	150.000	0.3369
09	200.000	0.3622									

Ethyl tert-Butyl Ether Average RF RSD = 3.7 Average RF = 1.505

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.515	02	1.000	1.514	03	2.000	1.527	04	5.000	1.576
05	20.000	1.544	06	50.000	1.499	07	100.000	1.503	08	150.000	1.373
09	200.000	1.498									

Ethylbenzene Average RF RSD = 4.5 Average RF = 0.5223

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5454	02	1.000	0.5059	03	2.000	0.4745	04	5.000	0.5029
05	20.000	0.5358	06	50.000	0.5345	07	100.000	0.5234	08	150.000	0.5357
09	200.000	0.5428									

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Hexachlorobutadiene Average RF RSD = 8.5 Average RF = 0.2928

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3295	02	1.000	0.3104	03	2.000	0.2852	04	5.000	0.3021
05	20.000	0.3138	06	50.000	0.3017	07	100.000	0.2560	08	150.000	0.2722
09	200.000	0.2642									

Iodomethane Average RF RSD = 5.9 Average RF = 0.6235

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6758	03	2.000	0.5749	04	5.000	0.5793	05	20.000	0.6641
06	50.000	0.6448	07	100.000	0.6235	08	150.000	0.6158	09	200.000	0.6095

Isopropylbenzene (Cumene) Average RF RSD = 8.0 Average RF = 2.668

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.768	02	1.000	2.885	03	2.000	2.686	04	5.000	2.762
05	20.000	2.920	06	50.000	2.740	07	100.000	2.549	08	150.000	2.432
09	200.000	2.273									

Methacrylonitrile Average RF RSD = 5.5 Average RF = 0.1320

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	1.000	0.1192	03	2.000	0.1440	04	5.000	0.1309	05	20.000	0.1328
06	50.000	0.1329	07	100.000	0.1321	08	150.000	0.1269	09	200.000	0.1375

Methyl Acetate Average RF RSD = 5.6 Average RF = 0.2444

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2347	02	1.000	0.2200	03	2.000	0.2309	04	5.000	0.2566
05	20.000	0.2597	06	50.000	0.2551	07	100.000	0.2516	08	150.000	0.2397
09	200.000	0.2517									

Methyl Methacrylate Average RF RSD = 7.1 Average RF = 0.1548

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1384	02	1.000	0.1462	03	2.000	0.1414	04	5.000	0.1527
05	20.000	0.1646	06	50.000	0.1606	07	100.000	0.1644	08	150.000	0.1556
09	200.000	0.1696									

Methyl tert-Butyl Ether Average RF RSD = 3.2 Average RF = 1.211

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.260	02	1.000	1.174	03	2.000	1.148	04	5.000	1.227
05	20.000	1.248	06	50.000	1.209	07	100.000	1.214	08	150.000	1.173
09	200.000	1.245									

Methylcyclohexane Average RF RSD = 6.9 Average RF = 0.4296

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5030	02	1.000	0.4130	03	2.000	0.4288	04	5.000	0.4157
05	20.000	0.4403	06	50.000	0.4264	07	100.000	0.4041	08	150.000	0.4105
09	200.000	0.4247									

Naphthalene Average RF RSD = 5.5 Average RF = 1.407

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.372	02	1.000	1.351	03	2.000	1.353	04	5.000	1.455
05	20.000	1.519	06	50.000	1.511	07	100.000	1.453	08	150.000	1.319
09	200.000	1.330									

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Propionitrile Average RF RSD = 8.1 Average RF = 0.04437

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.500	0.05288	02	5.000	0.04358	03	10.000	0.04026	04	25.000	0.04246
05	100.000	0.04446	06	250.000	0.04342	07	500.000	0.04498	08	750.000	0.04159
09	1000.000	0.04575									

Styrene Average RF RSD = 10.3 Average RF = 1.051

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.9371	02	1.000	0.9061	03	2.000	0.9288	04	5.000	0.9923
05	20.000	1.112	06	50.000	1.124	07	100.000	1.137	08	150.000	1.160
09	200.000	1.162									

Tetrachloroethene (PCE) Average RF RSD = 4.3 Average RF = 0.2877

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.2853	02	1.000	0.2837	03	2.000	0.2623	04	5.000	0.2819
05	20.000	0.2956	06	50.000	0.2926	07	100.000	0.2848	08	150.000	0.2991
09	200.000	0.3043									

Tetrahydrofuran (THF) Average RF RSD = 3.6 Average RF = 0.1015

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	2.000	0.1072	04	5.000	0.1010	05	20.000	0.1033	06	50.000	0.1008
07	100.000	0.1014	08	150.000	0.09499	09	200.000	0.1021			

Toluene Average RF RSD = 3.2 Average RF = 1.381

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.345	02	1.000	1.397	03	2.000	1.358	04	5.000	1.381
05	20.000	1.481	06	50.000	1.400	07	100.000	1.376	08	150.000	1.360
09	200.000	1.331									

Toluene-d8 Average RF RSD = 3.4 Average RF = 1.226

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
06	50.000	1.269	03	60.000	1.266	04	70.000	1.250	05	100.000	1.207
07	125.000	1.200	08	150.000	1.164						

Trichloroethene (TCE) Average RF RSD = 5.2 Average RF = 0.3348

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3717	02	1.000	0.3156	03	2.000	0.3139	04	5.000	0.3283
05	20.000	0.3463	06	50.000	0.3324	07	100.000	0.3288	08	150.000	0.3345
09	200.000	0.3414									

Trichlorofluoromethane (CFC 11) Average RF RSD = 4.6 Average RF = 0.8147

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8486	02	1.000	0.8420	03	2.000	0.8214	04	5.000	0.8299
05	20.000	0.8686	06	50.000	0.8079	07	100.000	0.7577	08	150.000	0.7787
09	200.000	0.7774									

Vinyl Acetate Average RF RSD = 7.5 Average RF = 0.07817

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.07252	02	1.000	0.08383	03	2.000	0.06777	04	5.000	0.07162
05	20.000	0.07981	06	50.000	0.08176	07	100.000	0.08095	08	150.000	0.08232
09	200.000	0.08293									

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte **Curve Fit** **Weighting**

Vinyl Chloride Average RF RSD = 7.7 Average RF = 0.6851

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.8058	02	1.000	0.6729	03	2.000	0.6523	04	5.000	0.6512
05	20.000	0.7307	06	50.000	0.6920	07	100.000	0.6642	08	150.000	0.6496
09	200.000	0.6475									

cis-1,2-Dichloroethene Average RF RSD = 2.0 Average RF = 0.5060

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4981	02	1.000	0.4923	03	2.000	0.5066	04	5.000	0.5015
05	20.000	0.5229	06	50.000	0.5105	07	100.000	0.4962	08	150.000	0.5075
09	200.000	0.5187									

cis-1,3-Dichloropropene Average RF RSD = 4.9 Average RF = 0.4952

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4455	02	1.000	0.4905	03	2.000	0.4776	04	5.000	0.4813
05	20.000	0.5262	06	50.000	0.5126	07	100.000	0.5068	08	150.000	0.5028
09	200.000	0.5134									

m,p-Xylenes Average RF RSD = 6.5 Average RF = 0.6320

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5573	02	2.000	0.6129	03	4.000	0.5872	04	10.000	0.6137
05	40.000	0.6695	06	100.000	0.6590	07	200.000	0.6581	08	300.000	0.6691
09	400.000	0.6611									

n-Butyl Acetate Average RF RSD = 5.8 Average RF = 0.4346

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4109	02	1.000	0.3932	03	2.000	0.4230	04	5.000	0.4206
05	20.000	0.4499	06	50.000	0.4535	07	100.000	0.4675	08	150.000	0.4312
09	200.000	0.4620									

n-Butylbenzene Average RF RSD = 5.2 Average RF = 2.020

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.117	02	1.000	2.018	03	2.000	1.931	04	5.000	1.994
05	20.000	2.187	06	50.000	2.126	07	100.000	1.997	08	150.000	1.964
09	200.000	1.851									

n-Heptane Average RF RSD = 11.5 Average RF = 0.4142

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.5167	02	1.000	0.4698	03	2.000	0.3845	04	5.000	0.3759
05	20.000	0.4154	06	50.000	0.4045	07	100.000	0.3872	08	150.000	0.3879
09	200.000	0.3863									

n-Propylbenzene Average RF RSD = 10.2 Average RF = 3.094

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	3.456	02	1.000	3.211	03	2.000	3.188	04	5.000	3.211
05	20.000	3.420	06	50.000	3.202	07	100.000	2.925	08	150.000	2.733
09	200.000	2.496									

o-Xylene Average RF RSD = 6.8 Average RF = 0.6354

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.6127	02	1.000	0.6034	03	2.000	0.5751	04	5.000	0.5861
05	20.000	0.6530	06	50.000	0.6487	07	100.000	0.6568	08	150.000	0.6823
09	200.000	0.7006									

Initial Calibration - Detailed Report

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Signal ID: 1

Analyte **Curve Fit** Weighting

sec-Butylbenzene Average RF RSD = 7.3 Average RF = 2.628

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	2.741	02	1.000	2.794	03	2.000	2.687	04	5.000	2.609
05	20.000	2.850	06	50.000	2.745	07	100.000	2.544	08	150.000	2.429
09	200.000	2.256									

tert-Amyl Methyl Ether Average RF RSD = 3.6 Average RF = 1.260

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.313	02	1.000	1.285	03	2.000	1.254	04	5.000	1.270
05	20.000	1.279	06	50.000	1.245	07	100.000	1.268	08	150.000	1.149
09	200.000	1.273									

tert-Butylbenzene Average RF RSD = 5.2 Average RF = 1.869

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	1.899	02	1.000	1.874	03	2.000	1.949	04	5.000	1.923
05	20.000	2.001	06	50.000	1.911	07	100.000	1.798	08	150.000	1.774
09	200.000	1.693									

trans-1,2-Dichloroethene Average RF RSD = 3.5 Average RF = 0.4668

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.4537	02	1.000	0.4488	03	2.000	0.4570	04	5.000	0.4509
05	20.000	0.4902	06	50.000	0.4722	07	100.000	0.4594	08	150.000	0.4793
09	200.000	0.4897									

trans-1,3-Dichloropropene Average RF RSD = 8.1 Average RF = 0.4221

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.3865	02	1.000	0.3602	03	2.000	0.4058	04	5.000	0.4047
05	20.000	0.4487	06	50.000	0.4467	07	100.000	0.4481	08	150.000	0.4407
09	200.000	0.4579									

trans-1,4-Dichloro-2-butene Average RF RSD = 8.2 Average RF = 0.1604

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.500	0.1929	02	1.000	0.1594	03	2.000	0.1649	04	5.000	0.1534
05	20.000	0.1556	06	50.000	0.1535	07	100.000	0.1588	08	150.000	0.1480
09	200.000	0.1566									

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Signal ID: I

Analyte

1,1,1,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.2	02	1.000	0.84	-15.6	03	2.000	1.84	-7.8
04	5.000	4.61	-7.7	05	20.000	20.65	3.2	06	50.000	52.29	4.6
07	100.000	106.26	6.3	08	150.000	163.75	9.2	09	200.000	227.98	14.0

1,1,1-Trichloroethane (TCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	18.1	02	1.000	0.99	-1.2	03	2.000	2.03	1.4
04	5.000	4.83	-3.4	05	20.000	20.51	2.5	06	50.000	48.98	-2.0
07	100.000	93.85	-6.2	08	150.000	143.30	-4.5	09	200.000	190.22	-4.9

1,1,2,2-Tetrachloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-9.4	02	1.000	1.06	5.8	03	2.000	2.06	2.9
04	5.000	5.07	1.4	05	20.000	21.23	6.1	06	50.000	49.87	-0.3
07	100.000	99.24	-0.8	08	150.000	141.14	-5.9	09	200.000	200.09	0.0

1,1,2-Trichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-10.2	02	1.000	0.99	-1.3	03	2.000	1.97	-1.7
04	5.000	5.01	0.1	05	20.000	21.37	6.9	06	50.000	49.90	-0.2
07	100.000	102.26	2.3	08	150.000	148.93	-0.7	09	200.000	209.47	4.7

1,1,2-Trichlorotrifluoroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.2	02	1.000	1.05	5.2	03	2.000	1.93	-3.6
04	5.000	4.95	-1.1	05	20.000	20.76	3.8	06	50.000	49.66	-0.7
07	100.000	96.47	-3.5	08	150.000	149.76	-0.2	09	200.000	202.50	1.3

1,1-Dichloroethane (1,1-DCA)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	3.0	02	1.000	1.08	7.9	03	2.000	2.01	0.6
04	5.000	4.96	-0.8	05	20.000	20.81	4.0	06	50.000	49.62	-0.8
07	100.000	95.05	-4.9	08	150.000	143.23	-4.5	09	200.000	190.95	-4.5

1,1-Dichloroethene (1,1-DCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	18.5	02	1.000	1.02	2.3	03	2.000	1.91	-4.3
04	5.000	4.58	-8.4	05	20.000	20.00	0.0	06	50.000	48.35	-3.3
07	100.000	95.36	-4.6	08	150.000	147.90	-1.4	09	200.000	202.57	1.3

1,1-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.5	02	1.000	1.05	4.6	03	2.000	1.98	-0.8
04	5.000	4.85	-3.0	05	20.000	20.85	4.2	06	50.000	49.62	-0.8
07	100.000	97.08	-2.9	08	150.000	146.76	-2.2	09	200.000	196.61	-1.7

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

1,2,3-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.1	02	1.000	1.14	13.5	03	2.000	1.93	-3.5
04	5.000	4.91	-1.7	05	20.000	21.33	6.6	06	50.000	50.99	2.0
07	100.000	95.22	-4.8	08	150.000	139.41	-7.1	09	200.000	185.70	-7.2

1,2,3-Trichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.66	31.7	02	1.000	1.11	10.7	03	2.000	1.85	-7.4
04	5.000	5.35	7.0	05	20.000	19.38	-3.1	06	50.000	46.10	-7.8
07	100.000	92.76	-7.2	08	150.000	127.20	-15.2	09	200.000	182.86	-8.6

1,2,4-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.7	02	1.000	0.89	-11.1	03	2.000	2.01	0.7
04	5.000	5.08	1.5	05	20.000	21.33	6.7	06	50.000	52.37	4.7
07	100.000	96.07	-3.9	08	150.000	143.86	-4.1	09	200.000	189.67	-5.2

1,2,4-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.2	02	1.000	1.06	5.8	03	2.000	1.97	-1.6
04	5.000	5.09	1.7	05	20.000	21.78	8.9	06	50.000	52.52	5.0
07	100.000	98.06	-1.9	08	150.000	142.73	-4.8	09	200.000	178.20	-10.9

1,2-Dibromo-3-chloropropane (DBCP)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.41	-17.2	02	1.000	0.97	-3.5	03	2.000	1.88	-6.1
04	5.000	4.96	-0.9	05	20.000	20.59	3.0	06	50.000	52.65	5.3
07	100.000	111.26	11.3	08	150.000	149.49	-0.3	09	200.000	216.78	8.4

1,2-Dibromoethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.6	02	1.000	0.92	-8.4	03	2.000	1.85	-7.3
04	5.000	5.08	1.6	05	20.000	21.60	8.0	06	50.000	51.82	3.6
07	100.000	103.88	3.9	08	150.000	150.73	0.5	09	200.000	211.35	5.7

1,2-Dichloro-1,1,2-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.0	02	1.000	1.08	8.4	03	2.000	2.12	6.2
04	5.000	4.98	-0.5	05	20.000	20.12	0.6	06	50.000	48.94	-2.1
07	100.000	91.77	-8.2	08	150.000	140.53	-6.3	09	200.000	191.78	-4.1

1,2-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-1.0	02	1.000	1.02	1.7	03	2.000	1.89	-5.6
04	5.000	4.96	-0.9	05	20.000	20.72	3.6	06	50.000	50.45	0.9
07	100.000	100.06	0.1	08	150.000	149.68	-0.2	09	200.000	202.82	1.4

Initial Calibration - Detailed Report

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Analyte

1,2-Dichloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.4	02	1.000	0.97	-3.1	03	2.000	1.94	-3.0
04	5.000	5.09	1.7	05	20.000	20.87	4.4	06	50.000	49.22	-1.6
07	100.000	97.69	-2.3	08	150.000	143.04	-4.6	09	200.000	198.03	-1.0

1,2-Dichloroethane-d4

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	50.82	1.6	03	60.000	62.55	4.2	04	70.000	72.78	4.0
05	100.000	98.19	-1.8	07	125.000	122.94	-1.7	08	150.000	140.41	-6.4

1,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.5	02	1.000	1.10	10.4	03	2.000	2.01	0.7
04	5.000	4.88	-2.3	05	20.000	20.48	2.4	06	50.000	49.08	-1.8
07	100.000	95.24	-4.8	08	150.000	143.68	-4.2	09	200.000	198.08	-1.0

1,3,5-Trichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.9	02	1.000	1.03	3.4	03	2.000	2.06	2.9
04	5.000	5.01	0.3	05	20.000	20.47	2.3	06	50.000	51.03	2.1
07	100.000	96.13	-3.9	08	150.000	142.92	-4.7	09	200.000	189.42	-5.3

1,3,5-Trimethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.3	02	1.000	1.03	3.0	03	2.000	1.97	-1.3
04	5.000	4.94	-1.2	05	20.000	21.12	5.6	06	50.000	51.87	3.7
07	100.000	98.41	-1.6	08	150.000	144.57	-3.6	09	200.000	182.17	-8.9

1,3-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.9	02	1.000	1.04	3.9	03	2.000	2.01	0.5
04	5.000	4.95	-1.0	05	20.000	20.98	4.9	06	50.000	50.47	0.9
07	100.000	97.16	-2.8	08	150.000	144.43	-3.7	09	200.000	190.75	-4.6

1,3-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.0	02	1.000	0.91	-9.0	03	2.000	1.92	-3.9
04	5.000	5.05	0.9	05	20.000	20.60	3.0	06	50.000	50.31	0.6
07	100.000	100.48	0.5	08	150.000	146.98	-2.0	09	200.000	203.90	2.0

1,4-Dichlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.6	02	1.000	1.08	8.4	03	2.000	1.93	-3.5
04	5.000	4.85	-3.0	05	20.000	20.77	3.9	06	50.000	50.11	0.2
07	100.000	95.92	-4.1	08	150.000	142.06	-5.3	09	200.000	187.61	-6.2

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
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Analyte

1,4-Dioxane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	40.000	46.21	15.5	04	100.000	114.25	14.3	05	400.000	381.67	-4.6
06	1000.000	916.13	-8.4	07	2000.000	1,925.16	-3.7	08	3000.000	2,639.46	-12.0
09	4000.000	3,958.01	-1.0								

1-Butanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	50.000	51.12	2.2	03	100.000	99.72	-0.3	04	250.000	234.83	-6.1
05	1000.000	925.69	-7.4	06	2500.000	2,422.67	-3.1	07	5000.000	5,459.85	9.2
08	7500.000	6,981.08	-6.9	09	10000.000	11,235.09	12.4				

1-Chloro-4-(trifluoromethyl)benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.0	02	1.000	0.95	-4.7	03	2.000	1.92	-4.2
04	5.000	4.62	-7.6	05	20.000	19.71	-1.5	06	50.000	50.65	1.3
07	100.000	103.84	3.8	08	150.000	157.74	5.2	09	200.000	219.18	9.6

2,2-Dichloro-1,1,1-trifluoroethane (CFC

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-6.9	02	1.000	1.02	1.6	03	2.000	2.03	1.4
04	5.000	5.02	0.5	05	20.000	20.91	4.6	06	50.000	51.07	2.1
07	100.000	96.44	-3.6	08	150.000	147.68	-1.5	09	200.000	203.74	1.9

2,2-Dichloropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.3	02	1.000	1.09	9.4	03	2.000	1.89	-5.7
04	5.000	4.85	-3.0	05	20.000	20.92	4.6	06	50.000	51.17	2.3
07	100.000	97.14	-2.9	08	150.000	147.42	-1.7	09	200.000	193.25	-3.4

2,3,6-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.9	02	1.000	1.14	13.8	03	2.000	1.80	-9.8
04	5.000	5.03	0.7	05	20.000	20.01	0.0	06	50.000	52.34	4.7
07	100.000	97.61	-2.4	08	150.000	144.72	-3.5	09	200.000	198.78	-0.6

2,4,5-Trichlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	14.4	02	1.000	0.97	-3.1	03	2.000	2.06	2.9
04	5.000	5.01	0.3	05	20.000	19.19	-4.0	06	50.000	51.14	2.3
07	100.000	96.23	-3.8	08	150.000	141.62	-5.6	09	200.000	193.40	-3.3

2,4-, 2,5-, and 2,6-Dichlorotoluene Coelut

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.500	1.49	-0.9	02	3.000	3.10	3.4	03	6.000	5.95	-0.8
04	15.000	15.15	1.0	05	60.000	62.25	3.7	06	150.000	157.87	5.2
07	300.000	300.14	0.0	08	450.000	432.31	-3.9	09	600.000	553.11	-7.8

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
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Analyte

2,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.4	02	1.000	0.96	-3.6	03	2.000	1.97	-1.5
04	5.000	4.94	-1.3	05	20.000	19.99	-0.1	06	50.000	51.71	3.4
07	100.000	100.23	0.2	08	150.000	148.18	-1.2	09	200.000	199.12	-0.4

2,5-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.0	02	1.000	1.09	8.9	03	2.000	1.84	-7.9
04	5.000	4.86	-2.8	05	20.000	20.09	0.4	06	50.000	51.05	2.1
07	100.000	99.76	-0.2	08	150.000	147.88	-1.4	09	200.000	199.64	-0.2

2-Butanone (MEK)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.96	-1.9	04	5.000	4.87	-2.7	05	20.000	19.59	-2.1
06	50.000	48.31	-3.4	07	100.000	105.40	5.4	08	150.000	148.16	-1.2
09	200.000	211.56	5.8								

2-Chloro-1,3-butadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.8	02	1.000	1.06	6.0	03	2.000	1.90	-5.0
04	5.000	5.01	0.2	05	20.000	20.96	4.8	06	50.000	48.87	-2.3
07	100.000	96.34	-3.7	08	150.000	147.02	-2.0	09	200.000	196.32	-1.8

2-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.8	02	1.000	1.08	7.5	03	2.000	2.10	4.9
04	5.000	5.11	2.2	05	20.000	19.80	-1.0	06	50.000	49.65	-0.7
07	100.000	97.12	-2.9	08	150.000	143.36	-4.4	09	200.000	192.28	-3.9

2-Chloroethyl Vinyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.5	02	1.000	0.97	-2.7	03	2.000	1.87	-6.4
04	5.000	4.96	-0.9	05	20.000	20.48	2.4	06	50.000	49.76	-0.5
07	100.000	103.74	3.7	08	150.000	148.18	-1.2	09	200.000	208.20	4.1

2-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.2	02	1.000	1.05	5.2	03	2.000	1.97	-1.4
04	5.000	5.10	2.0	05	20.000	21.96	9.8	06	50.000	51.38	2.8
07	100.000	96.89	-3.1	08	150.000	141.40	-5.7	09	200.000	180.75	-9.6

2-Hexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.90	-5.2	04	5.000	4.93	-1.5	05	20.000	20.32	1.6
06	50.000	49.16	-1.7	07	100.000	105.69	5.7	08	150.000	144.87	-3.4
09	200.000	208.98	4.5								

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

2-Methyl-1-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	20.000	19.85	-0.7	03	40.000	32.16	-19.6	04	100.000	95.66	-4.3
05	400.000	410.96	2.7	06	1000.000	1,017.95	1.8	07	2000.000	2,201.77	10.1
08	3000.000	2,939.73	-2.0	09	4000.000	4,483.16	12.1				

2-Methyl-2-propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	9.06	-9.4	03	40.000	40.53	1.3	04	100.000	104.97	5.0
05	400.000	403.52	0.9	06	1000.000	982.90	-1.7	07	2000.000	2,105.10	5.3
08	3000.000	2,796.54	-6.8	09	4000.000	4,219.87	5.5				

2-Nitropropane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	1.19	19.3	02	2.000	1.71	-14.5	03	4.000	3.89	-2.7
04	10.000	8.31	-16.9	05	40.000	37.80	-5.5	06	100.000	95.72	-4.3
07	200.000	211.17	5.6	08	300.000	309.63	3.2	09	400.000	463.47	15.9

2-Propanol

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	9.15	-8.5	03	40.000	38.61	-3.5	04	100.000	95.18	-4.8
05	400.000	413.75	3.4	06	1000.000	1,046.94	4.7	07	2000.000	2,111.72	5.6
08	3000.000	2,878.75	-4.0	09	4000.000	4,286.13	7.2				

3,4- and 2,3-Dichlorotoluene Coelution

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	0.99	-1.0	02	2.000	2.00	-0.2	03	4.000	4.00	0.1
04	10.000	10.44	4.4	05	40.000	42.22	5.6	06	100.000	106.65	6.6
07	200.000	201.30	0.7	08	300.000	283.98	-5.3	09	400.000	356.48	-10.9

3,4-Dichlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.3	02	1.000	0.93	-7.2	03	2.000	1.78	-10.8
04	5.000	4.69	-6.2	05	20.000	19.56	-2.2	06	50.000	51.17	2.3
07	100.000	104.87	4.9	08	150.000	159.04	6.0	09	200.000	219.87	9.9

3-Chloro-1-propene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.8	02	1.000	0.89	-10.9	03	2.000	1.99	-0.4
04	5.000	4.85	-3.0	05	20.000	22.36	11.8	06	50.000	53.36	6.7
07	100.000	95.76	-4.2	08	150.000	152.73	1.8	09	200.000	174.78	-12.6

3-Chlorobenzotrifluoride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.6	02	1.000	0.94	-5.6	03	2.000	1.84	-7.8
04	5.000	4.81	-3.7	05	20.000	19.21	-3.9	06	50.000	50.72	1.4
07	100.000	102.70	2.7	08	150.000	157.96	5.3	09	200.000	219.99	10.0

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

3-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.6	02	1.000	1.05	5.2	03	2.000	2.05	2.4
04	5.000	5.22	4.3	05	20.000	20.65	3.3	06	50.000	50.80	1.6
07	100.000	98.00	-2.0	08	150.000	139.27	-7.2	09	200.000	179.31	-10.3

4-Bromofluorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	51.26	2.5	03	60.000	61.05	1.8	04	70.000	70.16	0.2
05	100.000	96.68	-3.3	07	125.000	125.05	0.0	08	150.000	148.20	-1.2

4-Chlorotoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.2	02	1.000	1.03	2.7	03	2.000	2.01	0.5
04	5.000	4.99	-0.3	05	20.000	21.29	6.5	06	50.000	51.26	2.5
07	100.000	97.72	-2.3	08	150.000	143.28	-4.5	09	200.000	181.20	-9.4

4-Isopropyltoluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	6.5	02	1.000	1.01	0.6	03	2.000	2.02	1.2
04	5.000	4.96	-0.7	05	20.000	21.77	8.8	06	50.000	52.43	4.9
07	100.000	96.54	-3.5	08	150.000	141.60	-5.6	09	200.000	175.52	-12.2

4-Methyl-2-pentanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	1.80	-9.8	04	5.000	4.92	-1.6	05	20.000	20.42	2.1
06	50.000	49.86	-0.3	07	100.000	106.23	6.2	08	150.000	146.12	-2.6
09	200.000	211.81	5.9								

Acetone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	2.07	3.5	04	5.000	4.75	-4.9	05	20.000	20.00	0.0
06	50.000	48.22	-3.6	07	100.000	104.00	4.0	08	150.000	146.30	-2.5
09	200.000	206.82	3.4								

Acetonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.00	-20.2	03	10.000	10.71	7.1	04	25.000	26.77	7.1
05	100.000	100.16	0.2	06	250.000	236.42	-5.4	07	500.000	505.74	1.1
08	750.000	793.46	5.8	09	1000.000	1,043.07	4.3				

Acrolein

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	5.000	5.20	4.0	03	10.000	10.01	0.1	04	25.000	21.67	-13.3
05	100.000	85.09	-14.9	06	250.000	192.45	-23.0	07	500.000	535.09	7.0
08	750.000	874.73	16.6	09	1000.000	1,234.80	23.5				

Initial Calibration - Detailed Report

Calibration ID:	RC1400098	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Acrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.42	-3.1	02	5.000	4.77	-4.6	03	10.000	8.96	-10.4
04	25.000	25.60	2.4	05	100.000	104.04	4.0	06	250.000	252.84	1.1
07	500.000	522.03	4.4	08	750.000	746.78	-0.4	09	1000.000	1,065.44	6.5

Benzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.8	02	1.000	1.00	-0.2	03	2.000	2.00	0.0
04	5.000	4.96	-0.7	05	20.000	21.07	5.4	06	50.000	49.70	-0.6
07	100.000	96.94	-3.1	08	150.000	146.13	-2.6	09	200.000	196.13	-1.9

Bromobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.53	5.0	02	1.000	1.02	2.3	03	2.000	2.02	0.8
04	5.000	4.88	-2.4	05	20.000	20.55	2.8	06	50.000	49.80	-0.4
07	100.000	97.01	-3.0	08	150.000	144.60	-3.6	09	200.000	196.94	-1.5

Bromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	19.0	02	1.000	1.03	2.9	03	2.000	1.92	-4.1
04	5.000	5.01	0.1	05	20.000	20.57	2.8	06	50.000	48.79	-2.4
07	100.000	93.51	-6.5	08	150.000	140.03	-6.6	09	200.000	189.63	-5.2

Bromodichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.6	02	1.000	1.02	2.3	03	2.000	1.91	-4.7
04	5.000	4.75	-5.0	05	20.000	20.82	4.1	06	50.000	50.14	0.3
07	100.000	101.45	1.5	08	150.000	152.10	1.4	09	200.000	209.59	4.8

Bromoform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.36	-28.1	02	1.000	0.87	-12.8	03	2.000	1.80	-9.9
04	5.000	4.69	-6.1	05	20.000	20.91	4.5	06	50.000	54.21	8.4
07	100.000	113.45	13.5	08	150.000	166.01	10.7	09	200.000	239.59	19.8

Bromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.7	02	1.000	1.06	6.4	03	2.000	1.74	-13.2
04	5.000	4.48	-10.5	05	20.000	18.27	-8.7	06	50.000	48.91	-2.2
07	100.000	101.51	1.5	08	150.000	167.01	11.3	09	200.000	228.93	14.5

Carbon Disulfide

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.62	24.9	02	1.000	1.03	3.0	03	2.000	1.94	-2.8
04	5.000	4.84	-3.2	05	20.000	20.46	2.3	06	50.000	48.29	-3.4
07	100.000	93.22	-6.8	08	150.000	140.83	-6.1	09	200.000	184.08	-8.0

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

Carbon Tetrachloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	2.9	02	1.000	1.04	3.7	03	2.000	1.92	-4.2
04	5.000	4.66	-6.8	05	20.000	20.67	3.3	06	50.000	49.41	-1.2
07	100.000	99.01	-1.0	08	150.000	150.69	0.5	09	200.000	205.47	2.7

Chlorobenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	7.9	02	1.000	0.96	-4.3	03	2.000	1.92	-3.8
04	5.000	4.83	-3.4	05	20.000	20.58	2.9	06	50.000	50.02	0.0
07	100.000	99.56	-0.4	08	150.000	150.33	0.2	09	200.000	201.69	0.8

Chloroethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	10.8	02	1.000	1.04	3.8	03	2.000	1.95	-2.7
04	5.000	5.07	1.5	05	20.000	20.82	4.1	06	50.000	49.55	-0.9
07	100.000	94.34	-5.7	08	150.000	142.53	-5.0	09	200.000	188.17	-5.9

Chloroform

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.55	9.7	02	1.000	1.13	13.4	03	2.000	2.04	2.2
04	5.000	4.85	-2.9	05	20.000	20.18	0.9	06	50.000	47.93	-4.1
07	100.000	93.06	-6.9	08	150.000	140.74	-6.2	09	200.000	188.03	-6.0

Chloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.60	20.3	02	1.000	1.02	1.8	03	2.000	1.94	-2.9
04	5.000	4.66	-6.8	05	20.000	20.94	4.7	06	50.000	49.49	-1.0
07	100.000	94.97	-5.0	08	150.000	140.46	-6.4	09	200.000	190.47	-4.8

Cyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.57	13.7	02	1.000	1.03	2.6	03	2.000	1.99	-0.6
04	5.000	4.99	-0.1	05	20.000	20.78	3.9	06	50.000	49.66	-0.7
07	100.000	93.13	-6.9	08	150.000	139.06	-7.3	09	200.000	190.79	-4.6

Cyclohexanone

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	10.000	12.88	28.8	02	20.000	24.44	22.2	03	40.000	40.79	2.0
04	100.000	105.59	5.6	05	400.000	377.32	-5.7	06	1000.000	792.40	-20.8
07	2000.000	1,796.92	-10.2	08	3000.000	2,257.63	-24.7	09	4000.000	4,112.11	2.8

Dibromochloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.4	02	1.000	0.89	-11.2	03	2.000	1.90	-4.9
04	5.000	4.36	-12.7	05	20.000	20.12	0.6	06	50.000	51.45	2.9
07	100.000	107.23	7.2	08	150.000	161.64	7.8	09	200.000	227.47	13.7

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

Dibromofluoromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	50.82	1.6	03	60.000	61.99	3.3	04	70.000	71.46	2.1
05	100.000	98.18	-1.8	07	125.000	124.02	-0.8	08	150.000	143.32	-4.5

Dibromomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.7	02	1.000	0.95	-4.8	03	2.000	2.02	0.9
04	5.000	4.94	-1.1	05	20.000	20.42	2.1	06	50.000	49.68	-0.6
07	100.000	97.74	-2.3	08	150.000	144.03	-4.0	09	200.000	202.01	1.0

Dichlorodifluoromethane (CFC 12)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.3	02	1.000	0.96	-3.6	03	2.000	1.97	-1.7
04	5.000	4.54	-9.2	05	20.000	22.07	10.3	06	50.000	52.49	5.0
07	100.000	100.34	0.3	08	150.000	148.63	-0.9	09	200.000	198.82	-0.6

Dichlorofluoromethane (CFC 21)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	9.0	02	1.000	1.04	3.7	03	2.000	2.14	6.8
04	5.000	5.06	1.1	05	20.000	20.99	5.0	06	50.000	50.16	0.3
07	100.000	92.19	-7.8	08	150.000	137.00	-8.7	09	200.000	181.26	-9.4

Dichloromethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.60	19.3	02	1.000	0.98	-2.0	03	2.000	2.00	0.1
04	5.000	4.99	-0.2	05	20.000	20.10	0.5	06	50.000	48.01	-4.0
07	100.000	92.64	-7.4	08	150.000	144.16	-3.9	09	200.000	195.24	-2.4

Diethyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.58	16.1	02	1.000	1.01	0.5	03	2.000	1.90	-4.8
04	5.000	4.80	-3.9	05	20.000	20.15	0.7	06	50.000	49.15	-1.7
07	100.000	97.35	-2.7	08	150.000	142.40	-5.1	09	200.000	201.43	0.7

Diisopropyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.5	02	1.000	1.02	1.9	03	2.000	2.07	3.5
04	5.000	5.21	4.2	05	20.000	20.49	2.5	06	50.000	49.62	-0.8
07	100.000	98.36	-1.6	08	150.000	135.05	-10.0	09	200.000	193.39	-3.3

Ethyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.9	02	1.000	0.85	-14.7	03	2.000	1.85	-7.3
04	5.000	4.87	-2.6	05	20.000	20.83	4.1	06	50.000	52.17	4.3
07	100.000	108.11	8.1	08	150.000	153.86	2.6	09	200.000	220.56	10.3

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

Ethyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	0.7	02	1.000	1.01	0.6	03	2.000	2.03	1.4
04	5.000	5.23	4.7	05	20.000	20.51	2.5	06	50.000	49.77	-0.5
07	100.000	99.83	-0.2	08	150.000	136.83	-8.8	09	200.000	199.06	-0.5

Ethylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.4	02	1.000	0.97	-3.1	03	2.000	1.82	-9.1
04	5.000	4.81	-3.7	05	20.000	20.52	2.6	06	50.000	51.16	2.3
07	100.000	100.20	0.2	08	150.000	153.84	2.6	09	200.000	207.85	3.9

Hexachlorobutadiene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	12.5	02	1.000	1.06	6.0	03	2.000	1.95	-2.6
04	5.000	5.16	3.2	05	20.000	21.44	7.2	06	50.000	51.52	3.0
07	100.000	87.43	-12.6	08	150.000	139.48	-7.0	09	200.000	180.49	-9.8

Iodomethane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.54	8.4	03	2.000	1.84	-7.8	04	5.000	4.65	-7.1
05	20.000	21.30	6.5	06	50.000	51.71	3.4	07	100.000	100.00	0.0
08	150.000	148.16	-1.2	09	200.000	195.53	-2.2				

Isopropylbenzene (Cumene)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	3.7	02	1.000	1.08	8.1	03	2.000	2.01	0.7
04	5.000	5.18	3.5	05	20.000	21.89	9.4	06	50.000	51.34	2.7
07	100.000	95.52	-4.5	08	150.000	136.71	-8.9	09	200.000	170.36	-14.8

Methacrylonitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
02	1.000	0.90	-9.7	03	2.000	2.18	9.0	04	5.000	4.96	-0.8
05	20.000	20.11	0.6	06	50.000	50.34	0.7	07	100.000	100.05	0.1
08	150.000	144.11	-3.9	09	200.000	208.28	4.1				

Methyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-4.0	02	1.000	0.90	-10.0	03	2.000	1.89	-5.5
04	5.000	5.25	5.0	05	20.000	21.25	6.3	06	50.000	52.18	4.4
07	100.000	102.95	2.9	08	150.000	147.08	-1.9	09	200.000	205.91	3.0

Methyl Methacrylate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-10.6	02	1.000	0.94	-5.6	03	2.000	1.83	-8.7
04	5.000	4.93	-1.4	05	20.000	21.26	6.3	06	50.000	51.86	3.7
07	100.000	106.17	6.2	08	150.000	150.74	0.5	09	200.000	219.03	9.5

Initial Calibration - Detailed Report

Calibration ID:	RC1400098	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

Methyl tert-Butyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.1	02	1.000	0.97	-3.1	03	2.000	1.90	-5.2
04	5.000	5.07	1.3	05	20.000	20.61	3.1	06	50.000	49.93	-0.1
07	100.000	100.22	0.2	08	150.000	145.30	-3.1	09	200.000	205.69	2.8

Methylcyclohexane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	17.1	02	1.000	0.96	-3.9	03	2.000	2.00	-0.2
04	5.000	4.84	-3.2	05	20.000	20.50	2.5	06	50.000	49.63	-0.7
07	100.000	94.06	-5.9	08	150.000	143.33	-4.4	09	200.000	197.71	-1.1

Naphthalene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.5	02	1.000	0.96	-4.0	03	2.000	1.92	-3.8
04	5.000	5.17	3.4	05	20.000	21.59	8.0	06	50.000	53.69	7.4
07	100.000	103.25	3.2	08	150.000	140.66	-6.2	09	200.000	189.09	-5.5

Propionitrile

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	2.500	2.98	19.2	02	5.000	4.91	-1.8	03	10.000	9.07	-9.3
04	25.000	23.92	-4.3	05	100.000	100.19	0.2	06	250.000	244.64	-2.1
07	500.000	506.81	1.4	08	750.000	702.89	-6.3	09	1000.000	1,030.94	3.1

Styrene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-10.8	02	1.000	0.86	-13.8	03	2.000	1.77	-11.6
04	5.000	4.72	-5.6	05	20.000	21.15	5.8	06	50.000	53.47	6.9
07	100.000	108.16	8.2	08	150.000	165.60	10.4	09	200.000	221.19	10.6

Tetrachloroethene (PCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.50	-0.8	02	1.000	0.99	-1.4	03	2.000	1.82	-8.8
04	5.000	4.90	-2.0	05	20.000	20.55	2.7	06	50.000	50.85	1.7
07	100.000	98.98	-1.0	08	150.000	155.93	4.0	09	200.000	211.50	5.8

Tetrahydrofuran (THF)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
03	2.000	2.11	5.6	04	5.000	4.97	-0.5	05	20.000	20.35	1.7
06	50.000	49.64	-0.7	07	100.000	99.84	-0.2	08	150.000	140.32	-6.5
09	200.000	201.06	0.5								

Toluene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.6	02	1.000	1.01	1.2	03	2.000	1.97	-1.7
04	5.000	5.00	0.0	05	20.000	21.45	7.2	06	50.000	50.68	1.4
07	100.000	99.62	-0.4	08	150.000	147.72	-1.5	09	200.000	192.75	-3.6

Initial Calibration - Detailed Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Signal ID: 1

Analyte

Toluene-d8

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
06	50.000	51.75	3.5	03	60.000	61.96	3.3	04	70.000	71.36	1.9
05	100.000	98.50	-1.5	07	125.000	122.32	-2.1	08	150.000	142.39	-5.1

Trichloroethene (TCE)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	11.0	02	1.000	0.94	-5.7	03	2.000	1.88	-6.2
04	5.000	4.90	-1.9	05	20.000	20.69	3.4	06	50.000	49.65	-0.7
07	100.000	98.22	-1.8	08	150.000	149.87	-0.1	09	200.000	203.95	2.0

Trichlorofluoromethane (CFC 11)

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.2	02	1.000	1.03	3.4	03	2.000	2.02	0.8
04	5.000	5.09	1.9	05	20.000	21.32	6.6	06	50.000	49.58	-0.8
07	100.000	93.00	-7.0	08	150.000	143.38	-4.4	09	200.000	190.84	-4.6

Vinyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-7.2	02	1.000	1.07	7.2	03	2.000	1.73	-13.3
04	5.000	4.58	-8.4	05	20.000	20.42	2.1	06	50.000	52.30	4.6
07	100.000	103.55	3.6	08	150.000	157.97	5.3	09	200.000	212.19	6.1

Vinyl Chloride

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.59	17.6	02	1.000	0.98	-1.8	03	2.000	1.90	-4.8
04	5.000	4.75	-4.9	05	20.000	21.33	6.6	06	50.000	50.50	1.0
07	100.000	96.94	-3.1	08	150.000	142.22	-5.2	09	200.000	189.03	-5.5

cis-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-1.6	02	1.000	0.97	-2.7	03	2.000	2.00	0.1
04	5.000	4.96	-0.9	05	20.000	20.67	3.3	06	50.000	50.44	0.9
07	100.000	98.05	-1.9	08	150.000	150.45	0.3	09	200.000	205.02	2.5

cis-1,3-Dithloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.45	-10.0	02	1.000	0.99	-0.9	03	2.000	1.93	-3.6
04	5.000	4.86	-2.8	05	20.000	21.25	6.3	06	50.000	51.76	3.5
07	100.000	102.34	2.3	08	150.000	152.31	1.5	09	200.000	207.34	3.7

m,p-Xylenes

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	1.000	0.88	-11.8	02	2.000	1.94	-3.0	03	4.000	3.72	-7.1
04	10.000	9.71	-2.9	05	40.000	42.38	5.9	06	100.000	104.27	4.3
07	200.000	208.27	4.1	08	300.000	317.62	5.9	09	400.000	418.43	4.6

Initial Calibration - Detailed Report

Calibration ID:	RC1400098	**Instrument ID:**	R-MS-12
		Signal ID:	1

Analyte

n-Butyl Acetate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.47	-5.5	02	1.000	0.90	-9.5	03	2.000	1.95	-2.7
04	5.000	4.84	-3.2	05	20.000	20.70	3.5	06	50.000	52.17	4.3
07	100.000	107.57	7.6	08	150.000	148.81	-0.8	09	200.000	212.60	6.3

n-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.8	02	1.000	1.00	-0.1	03	2.000	1.91	-4.4
04	5.000	4.93	-1.3	05	20.000	21.65	8.3	06	50.000	52.60	5.2
07	100.000	98.84	-1.2	08	150.000	145.81	-2.8	09	200.000	183.23	-8.4

n-Heptane

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.62	24.7	02	1.000	1.13	13.4	03	2.000	1.86	-7.2
04	5.000	4.54	-9.2	05	20.000	20.06	0.3	06	50.000	48.82	-2.4
07	100.000	93.46	-6.5	08	150.000	140.45	-6.4	09	200.000	186.51	-6.7

n-Propylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.56	11.7	02	1.000	1.04	3.8	03	2.000	2.06	3.0
04	5.000	5.19	3.8	05	20.000	22.11	10.6	06	50.000	51.76	3.5
07	100.000	94.54	-5.5	08	150.000	132.52	-11.7	09	200.000	161.36	-19.3

o-Xylene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.48	-3.6	02	1.000	0.95	-5.0	03	2.000	1.81	-9.5
04	5.000	4.61	-7.8	05	20.000	20.55	2.8	06	50.000	51.05	2.1
07	100.000	103.36	3.4	08	150.000	161.05	7.4	09	200.000	220.52	10.3

sec-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.3	02	1.000	1.06	6.3	03	2.000	2.04	2.2
04	5.000	4.96	-0.7	05	20.000	21.69	8.4	06	50.000	52.22	4.4
07	100.000	96.78	-3.2	08	150.000	138.60	-7.6	09	200.000	171.69	-14.2

tert-Amyl Methyl Ether

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.52	4.3	02	1.000	1.02	2.0	03	2.000	1.99	-0.5
04	5.000	5.04	0.8	05	20.000	20.31	1.6	06	50.000	49.43	-1.1
07	100.000	100.69	0.7	08	150.000	136.86	-8.8	09	200.000	202.06	1.0

tert-Butylbenzene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.51	1.6	02	1.000	1.00	0.3	03	2.000	2.09	4.3
04	5.000	5.14	2.9	05	20.000	21.41	7.1	06	50.000	51.11	2.2
07	100.000	96.19	-3.8	08	150.000	142.39	-5.1	09	200.000	181.16	-9.4

Initial Calibration - Detailed Report

Calibration ID:	RC1400098	**Instrument ID:**	R-MS-12
		Signal ID:	I

Analyte

trans-1,2-Dichloroethene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.49	-2.8	02	1.000	0.96	-3.9	03	2.000	1.96	-2.1
04	5.000	4.83	-3.4	05	20.000	21.00	5.0	06	50.000	50.58	1.2
07	100.000	98.42	-1.6	08	150.000	154.02	2.7	09	200.000	209.82	4.9

trans-1,3-Dichloropropene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.46	-8.4	02	1.000	0.85	-14.7	03	2.000	1.92	-3.9
04	5.000	4.79	-4.1	05	20.000	21.26	6.3	06	50.000	52.90	5.8
07	100.000	106.16	6.2	08	150.000	156.61	4.4	09	200.000	216.93	8.5

trans-1,4-Dichloro-2-butene

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.500	0.60	20.3	02	1.000	0.99	-0.6	03	2.000	2.06	2.8
04	5.000	4.78	-4.3	05	20.000	19.40	-3.0	06	50.000	47.87	-4.3
07	100.000	99.00	-1.0	08	150.000	138.48	-7.7	09	200.000	195.38	-2.3

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0097.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:51:19 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	864640	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1308913	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1223196	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	640092	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	384713	50.47	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.94%				
48) surr1,1,2-dichloroetha...	4.658	65	482931	52.03	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 104.06%				
65) SURR3,Toluene-d8	7.322	98	1646922	51.32	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 102.64%				
70) SURR2,BFB	9.785	95	623001	50.03	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 100.06%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	4104	0.50	ppb		91
3) Chloromethane	1.262	50	6709	0.60	ppb		99
4) Vinyl Chloride	1.323	62	6967	0.59	ppb		98
5) Bromomethane	1.512	94	2885	0.50	ppb		84
6) Chloroethane	1.567	64	4089	0.55	ppb		96
7) Freon 21	1.664	67	10043	0.54	ppb		94
8) Trichlorofluoromethane	1.719	101	7337	0.52	ppb		85
9) Diethyl Ether	1.878	59	3724	0.58	ppb	#	74
10) Freon 123a	1.871	67	5405	0.53	ppb		95
11) Freon 123	1.908	83	5007	0.47	ppb		90
12) Acrolein	1.957	56	1809	5.14	ppb		87
13) 1,1-Diclethene	2.036	96	4424	0.59	ppb		89
14) Freon 113	2.036	101	3780	0.49	ppb		80
16) 2-Propanol	2.115	45	3322	9.15	ppb		89
17) Iodomethane	2.146	142	5843	0.54	ppb		98
18) Carbon Disulfide	2.207	76	15686	0.62	ppb		95
19) Acetonitrile	2.225	40	581	2.00	ppb	#	63
20) Allyl Chloride	2.280	76	2345	0.56	ppb	#	83
21) Methyl Acetate	2.280	43	2029	0.48	ppb		84
22) Methylene Chloride	2.353	84	4855	0.60	ppb		96
23) TBA	2.408	59	5444	9.06	ppb		73
24) Acrylonitrile	2.524	53	4766	2.42	ppb		91
25) Methyl-t-Butyl Ether	2.579	73	10897	0.52	ppb		94
26) trans-1,2-Dichloroethene	2.585	96	3923	0.49	ppb		90
28) 1,1-Diclethane	2.938	63	7681	0.51	ppb		94
29) Vinyl Acetate	2.981	86	627	0.46	ppb	#	70
30) DIPE	3.018	45	15520m	0.52	ppb		
31) 2-Chloro-1,3-Butadiene	3.042	53	7161	0.52	ppb		98
32) ETBE	3.396	59	13103	0.50	ppb		97
33) 2,2-Dichloropropane	3.548	77	6640	0.50	ppb		91
34) cis-1,2-Dichloroethene	3.542	96	4307	0.49	ppb	#	81
36) Propionitrile	3.603	54	2286m	3.23	ppb		
37) Bromochloromethane	3.828	130	2945	0.60	ppb		92
40) Chloroform	3.938	83	8234	0.55	ppb		84
41) 1,1,1-Trichloroethane	4.206	97	7952	0.59	ppb	#	1

KLR
10/28/14

W102714.M Tue Oct 28 09:51:38 2014

Quantitation Report (QT Reviewed)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0097.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:51:19 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42)	TAME	5.023	73	11355m	0.52	ppb		
44)	Cyclohexane	4.310	41	5511	0.57	ppb		82
46)	Carbontetrachloride	4.475	121	1759m	0.51	ppb		
47)	1,1-Dichloropropene	4.462	75	5862	0.51	ppb		90
49)	Benzene	4.779	78	17395	0.52	ppb		95
50)	1,2-Dichloroethane	4.786	62	6181	0.55	ppb		88
52)	n-Heptane	5.322	43	6763	0.62	ppb		87
54)	Trichloroethene	5.828	130	4865	0.55	ppb	#	63
55)	Methylcyclohexane	6.102	55	6584	0.59	ppb		88
56)	1,2-Diclpropane	6.121	63	4415	0.50	ppb		95
57)	Dibromomethane	6.255	93	2258	0.54	ppb		91
59)	Methyl Methacrylate	6.340	69	1812m	0.45	ppb		
60)	Bromodichloromethane	6.474	83	4964	0.48	ppb		96
61)	2-Nitropropane	6.755	41	1652	1.19	ppb	#	37
62)	2-Chloroethylvinyl Ether	6.889	63	2077	0.51	ppb		86
63)	cis-1,3-Dichloropropene	7.023	75	5831	0.45	ppb		97
66)	Toluene	7.395	91	17609	0.49	ppb		94
67)	trans-1,3-Dichloropropene	7.633	75	5059	0.46	ppb		75
68)	Ethyl Methacrylate	7.779	69	4089m	0.48	ppb		
69)	1,1,2-Trichloroethane	7.809	97	2737	0.45	ppb		90
72)	Tetrachloroethene	7.962	164	3490	0.50	ppb		83
74)	1,3-Dichloropropane	7.968	76	5924	0.54	ppb		98
75)	Dibromochloromethane	8.193	129	3179	0.48	ppb		83
76)	N-Butyl Acetate	8.248	43	5026	0.48	ppb		88
77)	1,2-Dibromoethane	8.291	107	2654	0.46	ppb		82
78)	Chlorobenzene	8.773	112	12779	0.54	ppb		90
79)	3-CBTF	8.785	180	6591	0.51	ppb		90
80)	4-CBTF	8.840	180	5692	0.49	ppb		89
81)	1,1,1,2-Tetrachloroethane	8.846	131	3654	0.47	ppb		89
82)	Ethylbenzene	8.895	106	6671	0.52	ppb	#	58
83)	(m+p)Xylene	8.998	106	13633	0.88	ppb	#	81
84)	o-Xylene	9.346	106	7495	0.48	ppb		100
85)	Styrene	9.358	104	11462	0.45	ppb		91
87)	Bromoform	9.492	173	1144	0.36	ppb		95
88)	2-CBTF	9.577	180	5538	0.49	ppb		93
89)	Isopropylbenzene	9.669	105	17715	0.52	ppb		95
90)	Cyclohexanone	9.724	55	4833	12.88	ppb		88
91)	trans-1,4-Dichloro-2-B...	9.961	53	1235	0.60	ppb	#	54
92)	1,1,2,2-Tetrachloroethane	9.913	83	3016	0.45	ppb	#	76
93)	Bromobenzene	9.913	156	4731	0.53	ppb		95
94)	1,2,3-Trichloropropane	9.937	110	1330	0.66	ppb	#	87
95)	n-Propylbenzene	10.022	91	22120	0.56	ppb		96
96)	2-Chlorotoluene	10.083	91	12018	0.50	ppb		97
97)	3-Chlorotoluene	10.132	91	13099m	0.51	ppb		
98)	4-Chlorotoluene	10.175	91	15671	0.52	ppb		92
99)	1,3,5-Trimethylbenzene	10.169	105	15450	0.52	ppb		92
100)	tert-Butylbenzene	10.437	119	12158	0.51	ppb		97
101)	1,2,4-Trimethylbenzene	10.480	105	14207	0.49	ppb		90
102)	3,4-DCBTF	10.534	214	4385	0.52	ppb	#	87
103)	sec-Butylbenzene	10.620	105	17547	0.52	ppb		97
104)	p-Isopropyltoluene	10.742	119	15565	0.53	ppb		90
105)	1,3-Dclbenz	10.699	146	8768	0.51	ppb		99

W102714.M Tue Oct 28 09:51:38 2014

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0097.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:13 pm
Operator : K.Ruest
InstName : MSVOA-12

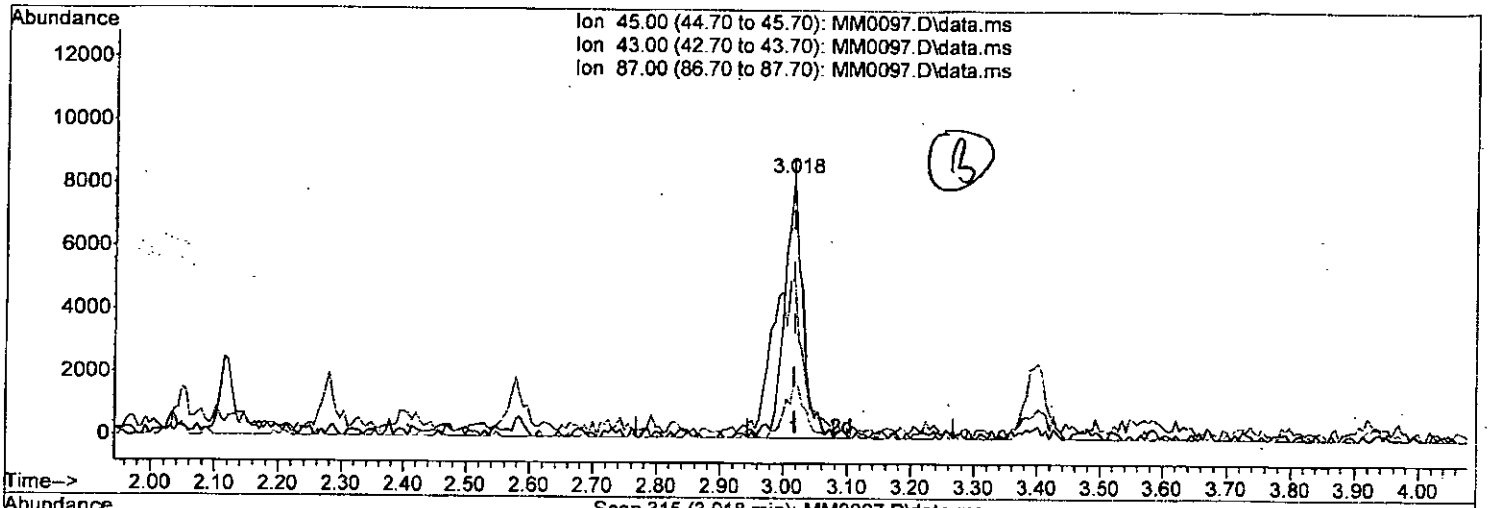
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:51:19 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

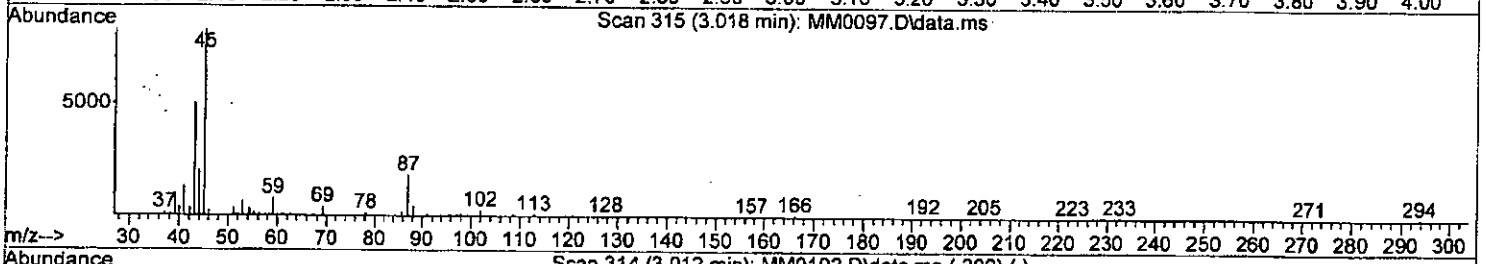
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
106)	1,4-Dclbenz	10.766	146	9862	0.55	ppb		86
107)	2,4-DCBTF	10.821	214	3801	0.52	ppb		97
108)	2,5-DCBTF	10.858	214	4164	0.51	ppb	#	86
109)	n-Butylbenzene	11.065	91	13550	0.52	ppb		98
110)	1,2-Dclbenz	11.065	146	8016	0.50	ppb		93
111)	1,2-Dibromo-3-chloropr...	11.626	157	464	0.41	ppb	#	58
112)	Trielution Dichlorotol...	11.735	125	19733	1.49	ppb		93
113)	1,3,5 Trichlorobenzene	11.778	180	5712	0.51	ppb		88
114)	Coelution Dichlorotoluene	11.998	125	13771	0.99	ppb		98
115)	1,2,4-Tcbenzene	12.162	180	5246	0.55	ppb		84
116)	Hexachlorobt	12.266	225	2109	0.56	ppb	#	82
117)	Naphthalen	12.302	128	8785	0.49	ppb		91
118)	1,2,3-Tclbenzene	12.443	180	4114	0.51	ppb		94
119)	2,4,5-Trichlorotolene	12.851	159	3122m	0.57	ppb		
120)	2,3,6-Trichlorotoluene	12.912	159	2447	0.49	ppb		91

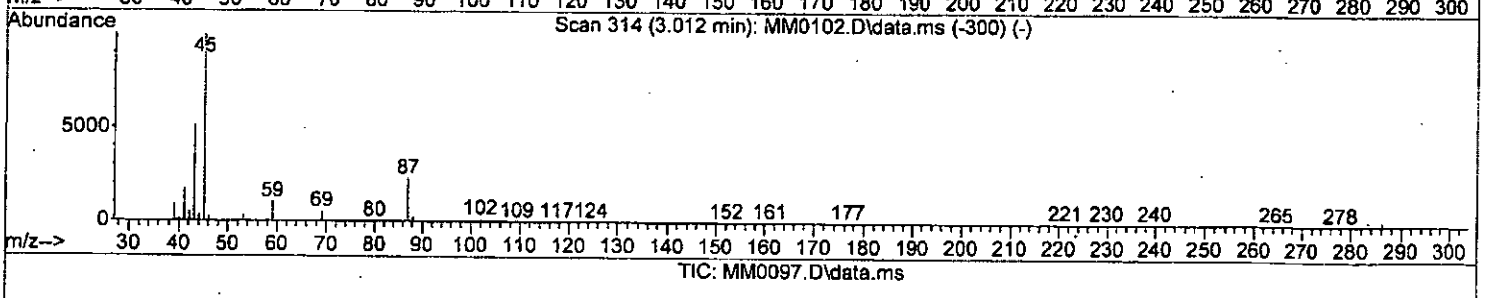
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0097.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:25 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0097.D\data.ms

(30) DIPE

3.018min (-0.000) 0.54 ppb

response 16124

Ion	Exp%	Act%
45.00	100	100
43.00	51.40	60.81
87.00	23.30	22.71
0.00	0.00	0.00

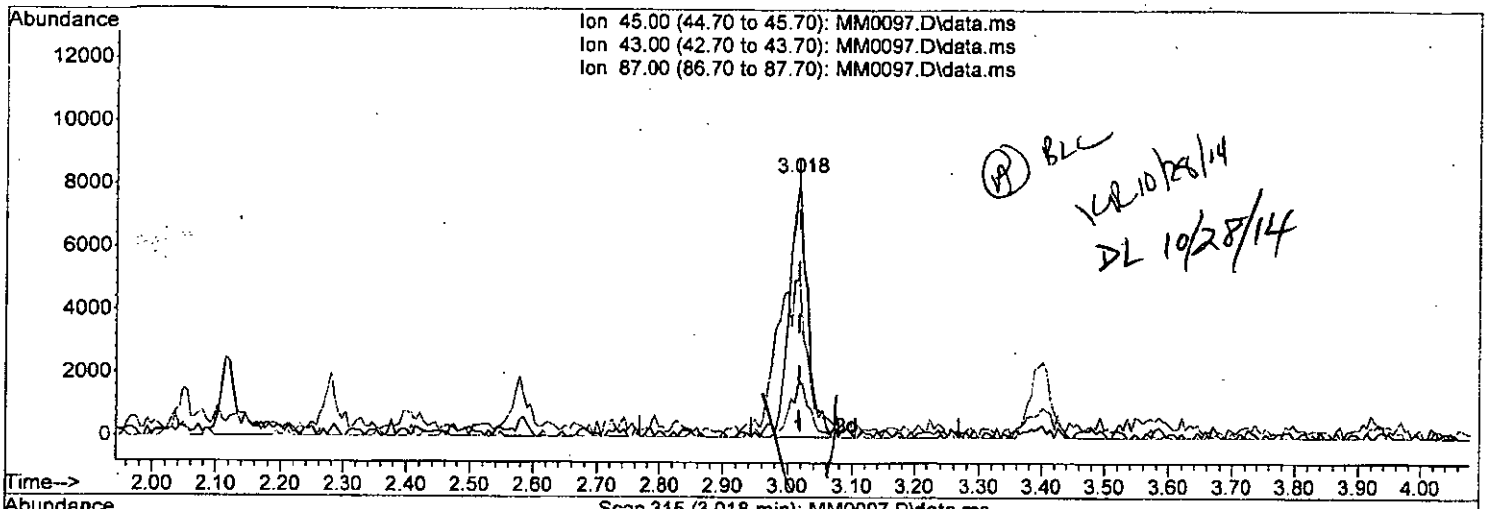
W102714.M Tue Oct 28 09:46:53 2014 Page: 1

00346

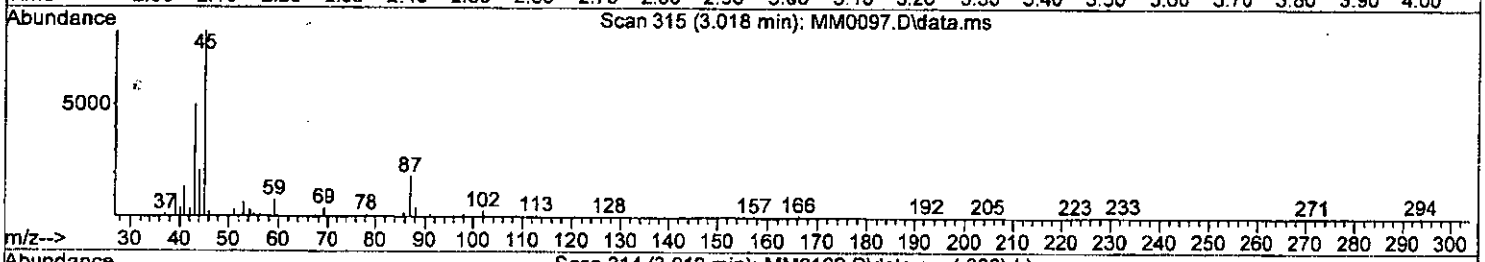
Quantitation Report (Qedit)

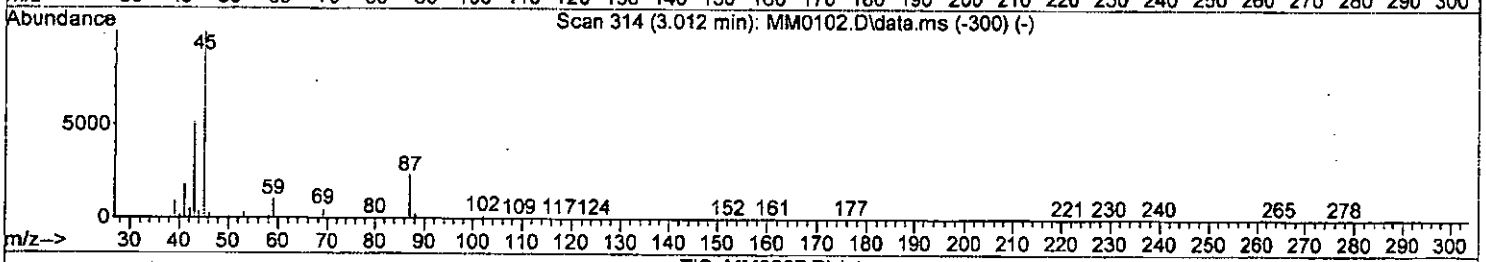
Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0097.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:25 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



(R) BLC 10/28/14
KLR 10/28/14
DL 10/28/14





TIC: MM0097.D\data.ms

(30) DIPE

3.018min (-0.000) 0.52 ppb m

response 15520

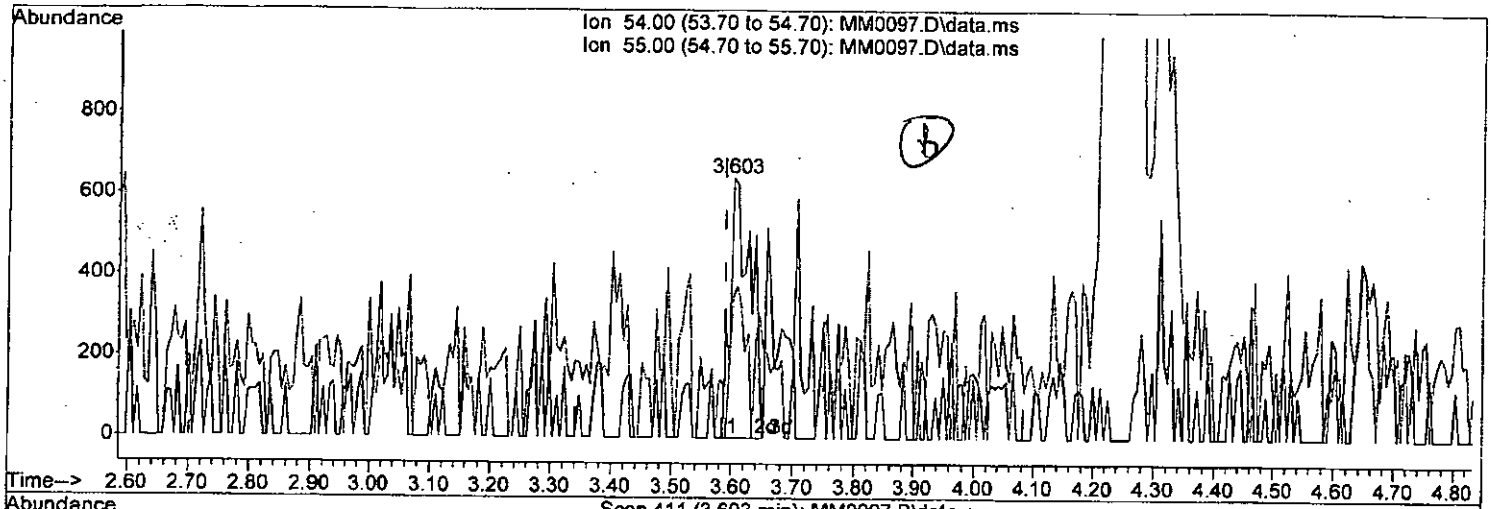
Ion	Exp%	Act%
45.00	100	100
43.00	51.40	60.81
87.00	23.30	22.71
0.00	0.00	0.00

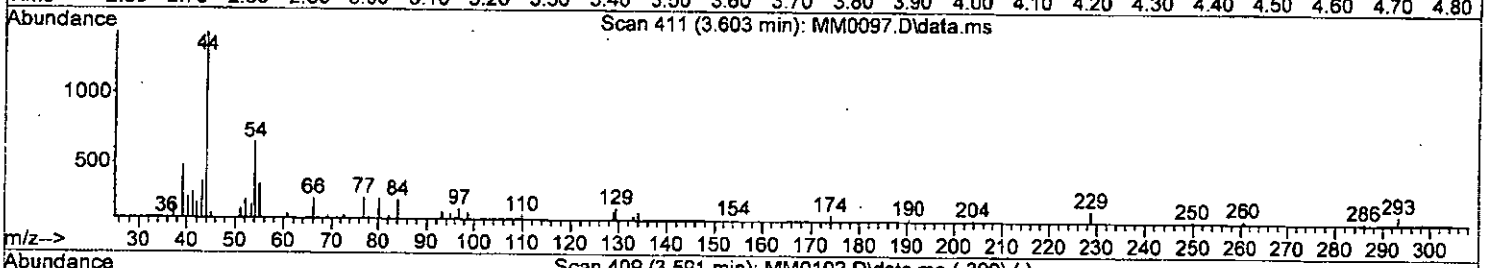
W102714.M Tue Oct 28 09:47:05 2014 Page: 1

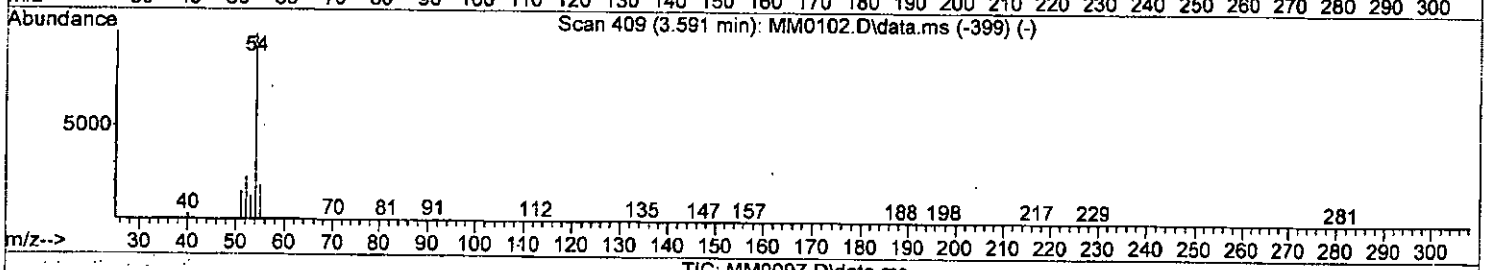
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0097.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:25 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0097.D\data.ms

(36) Propionitrile

3.603min (+0.013) 2.07 ppb

response 1467

Ion	Exp%	Act%
54.00	100	100
55.00	18.80	53.89#
0.00	0.00	0.00
0.00	0.00	0.00

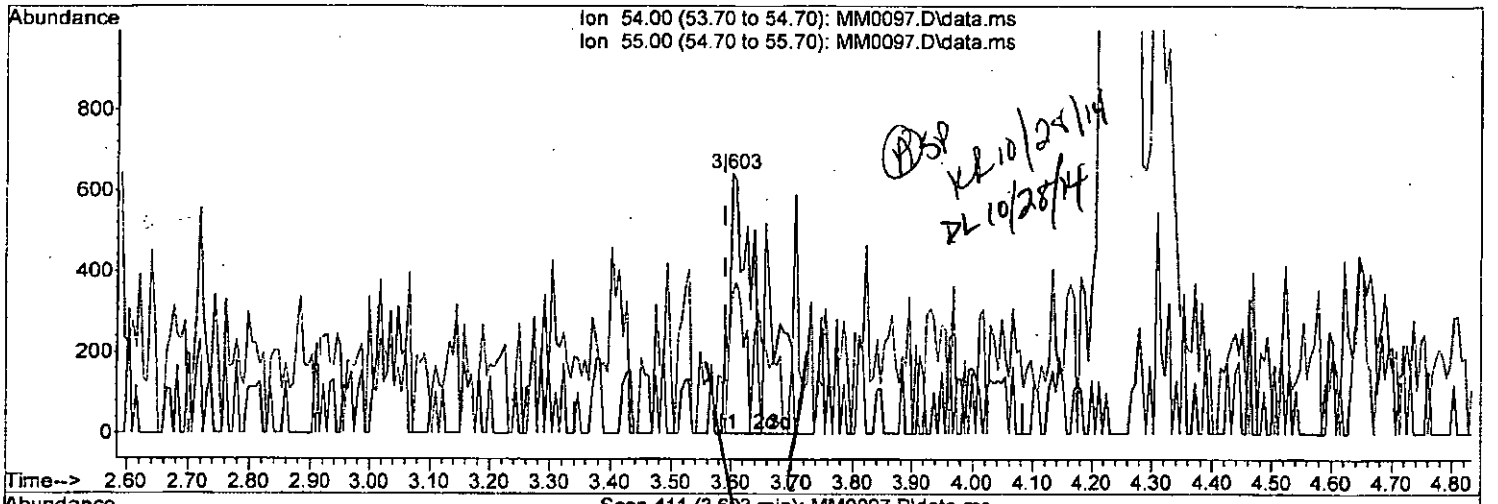
W102714.M Tue Oct 28 09:47:20 2014 Page: 1

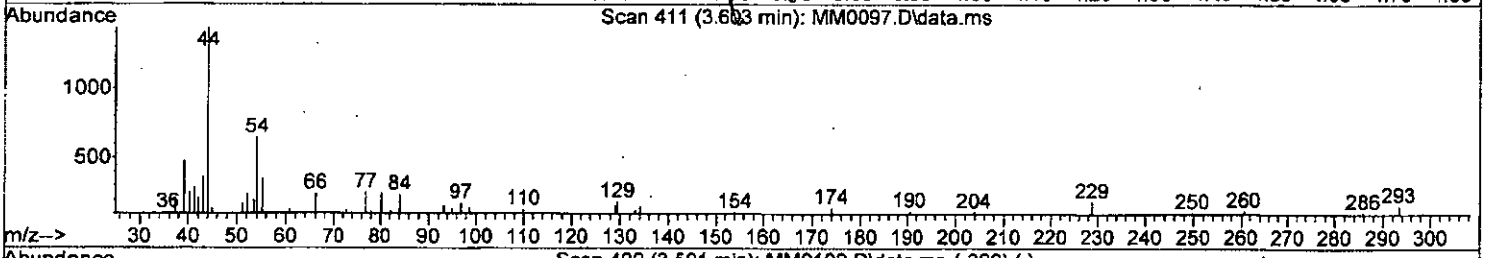
00348

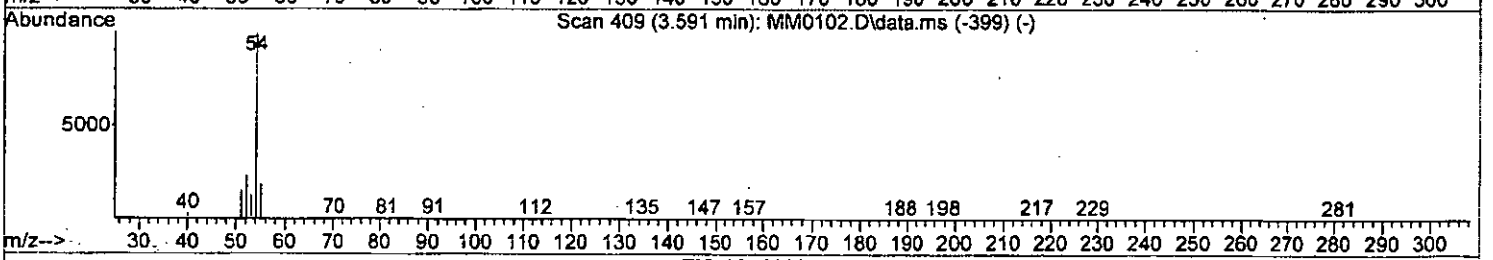
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0097.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:25 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0097.D\data.ms

(36) Propionitrile

3.603min (+0.013) 3.23 ppb m

response 2286

Ion	Exp%	Act%
54.00	100	100
55.00	18.80	53.89#
0.00	0.00	0.00
0.00	0.00	0.00

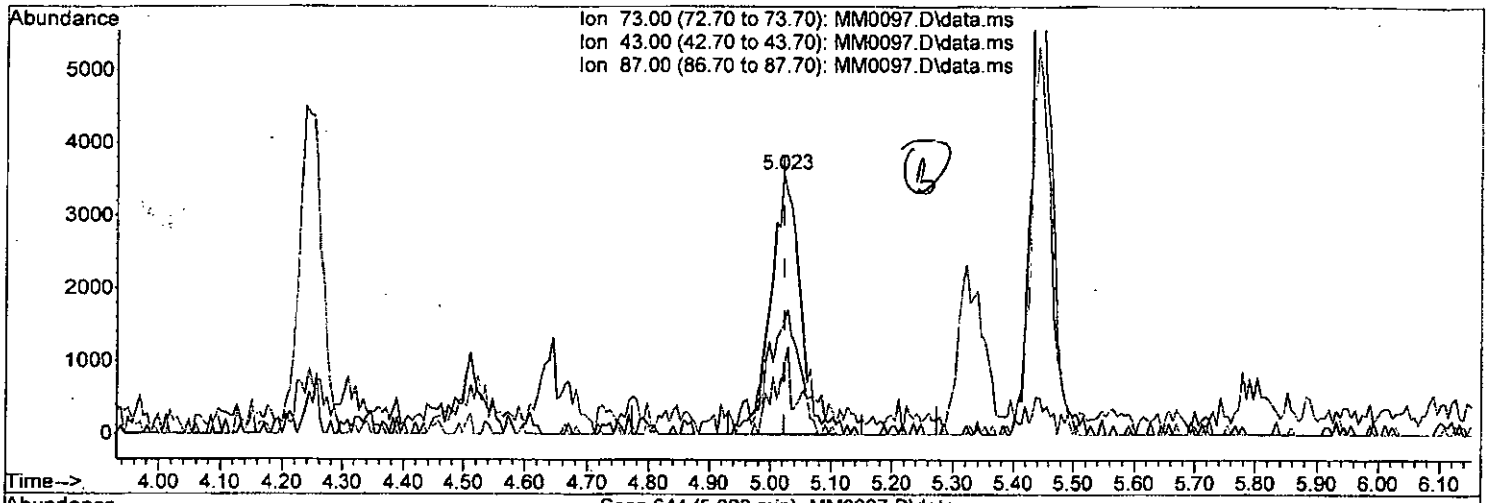
W102714.M Tue Oct 28 09:47:27 2014 Page: 1

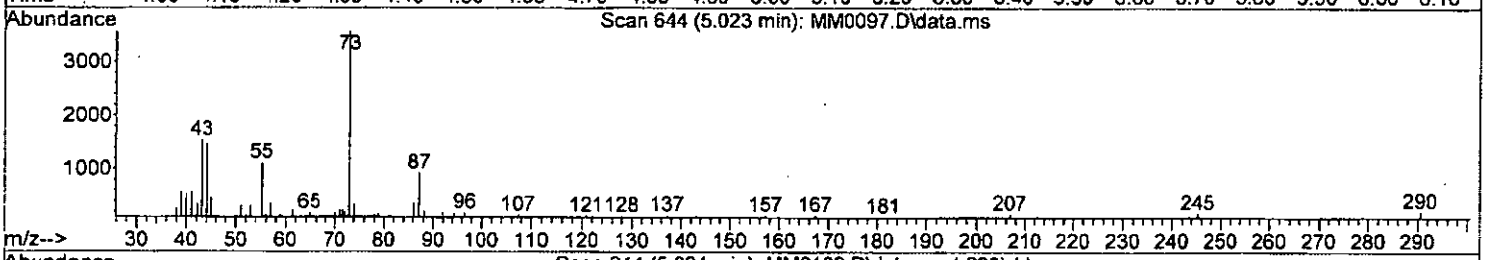
00349

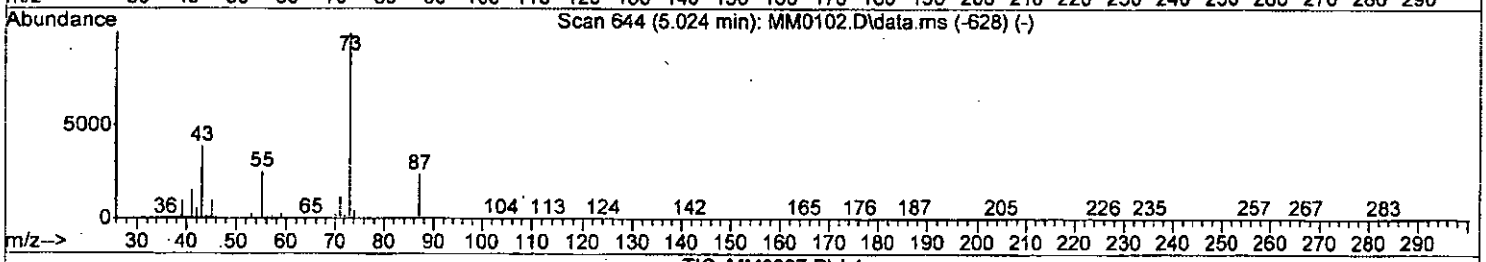
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0097.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:25 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0097.D\data.ms

(42) TAME

5.023min (-0.000) 0.55 ppb

response 12088

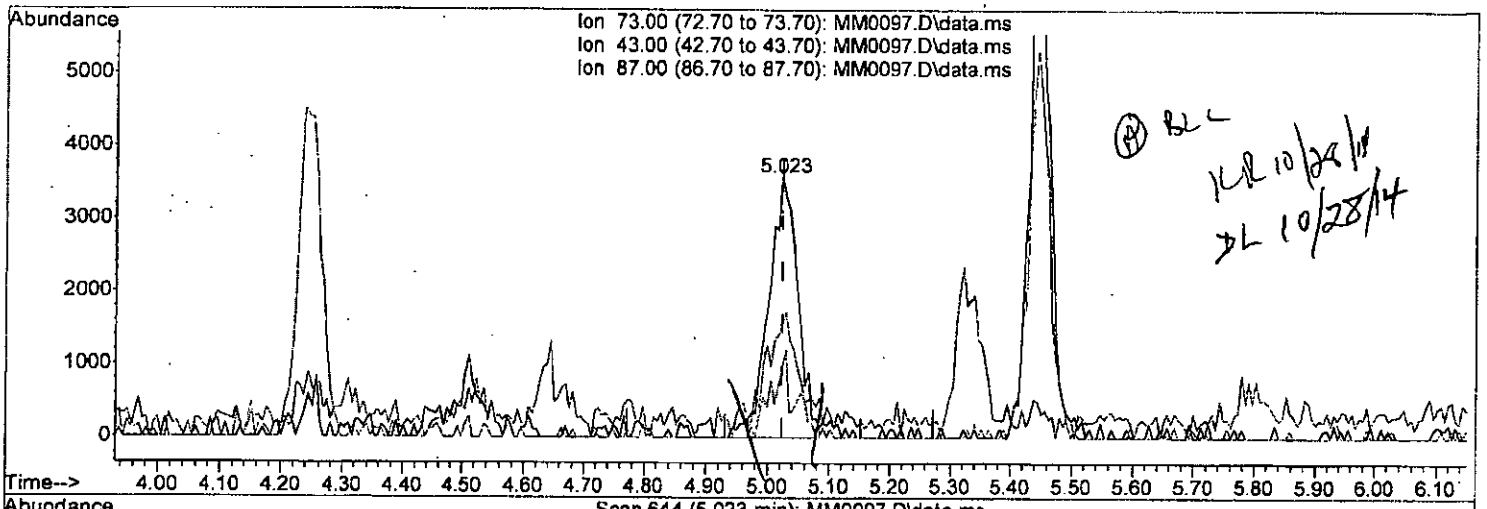
Ion	Exp%	Act%
73.00	100	100
43.00	38.80	42.82
87.00	23.60	25.60
0.00	0.00	0.00

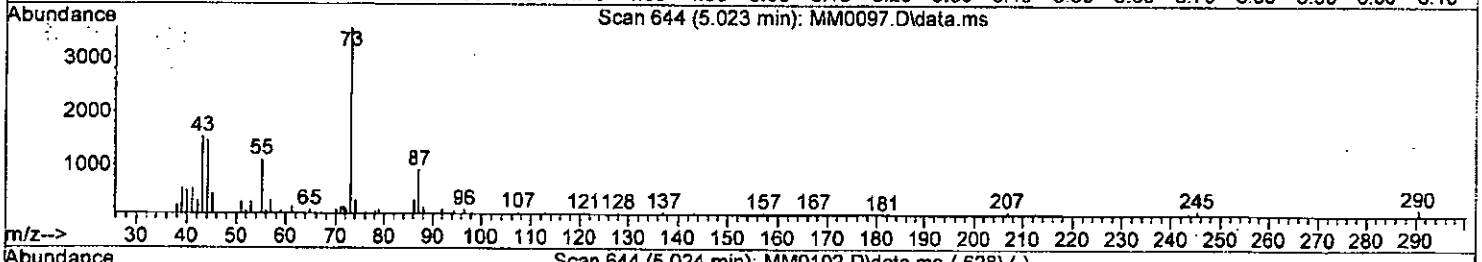
W102714.M Tue Oct 28 09:48:17 2014 Page: 1

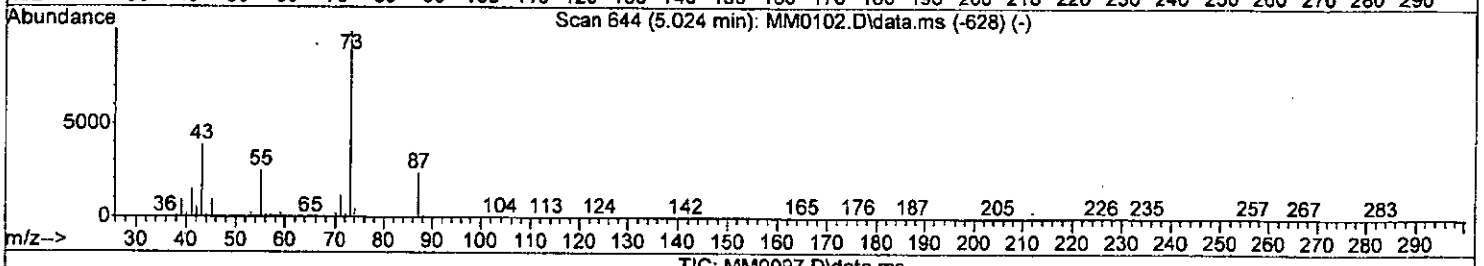
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0097.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:25 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0097.D\data.ms

(42) TAME

5.023min (-0.000) 0.52 ppb m

response 11355

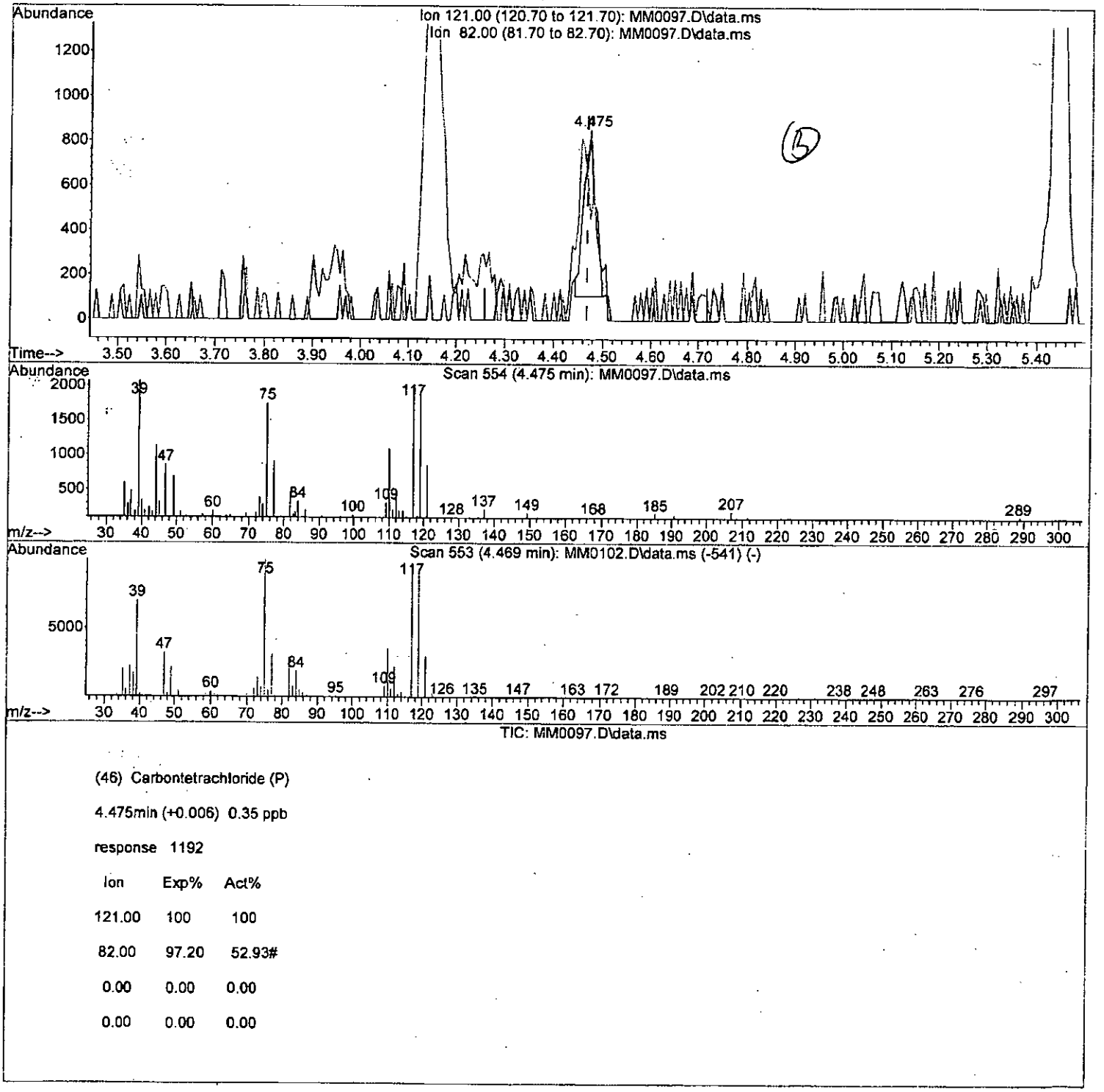
Ion	Exp%	Act%
73.00	100	100
43.00	38.80	42.82
87.00	23.60	25.60
0.00	0.00	0.00

W102714.M Tue Oct 28 09:48:23 2014 Page: 1

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0097.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:25 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



TIC: MM0097.D\data.ms

(46) Carbontetrachloride (P)

4.475min (+0.006) 0.35 ppb

response 1192

Ion	Exp%	Act%
121.00	100	100
82.00	97.20	52.93#
0.00	0.00	0.00
0.00	0.00	0.00

W102714.M Tue Oct 28 09:48:33 2014

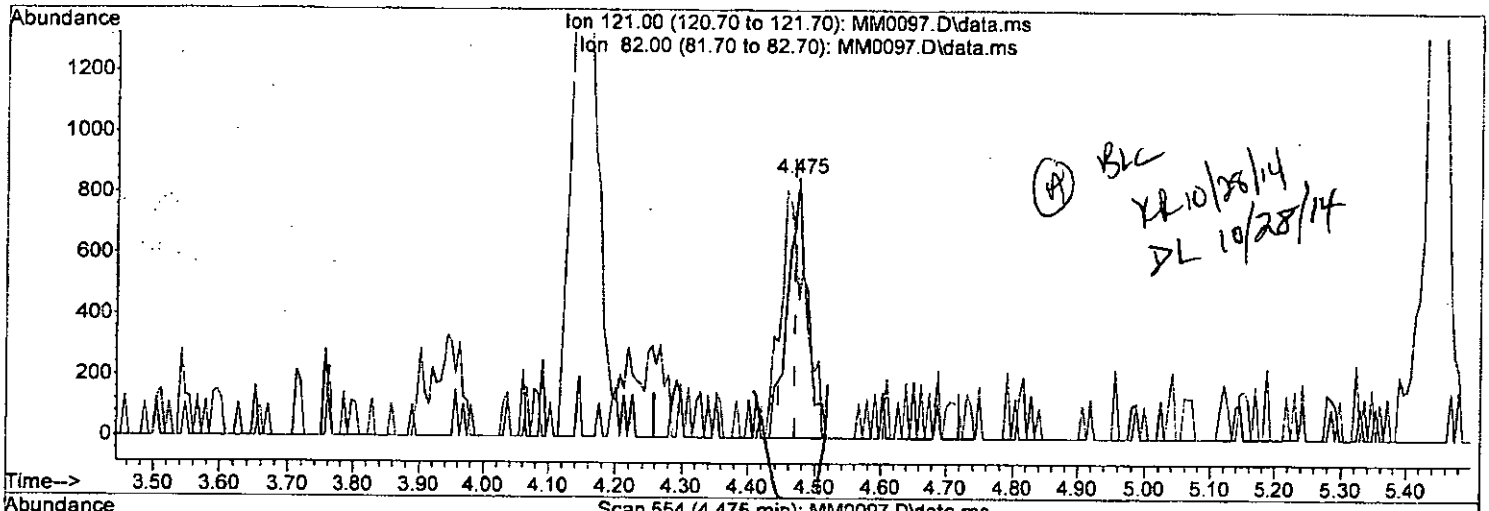
Page: 1

00352

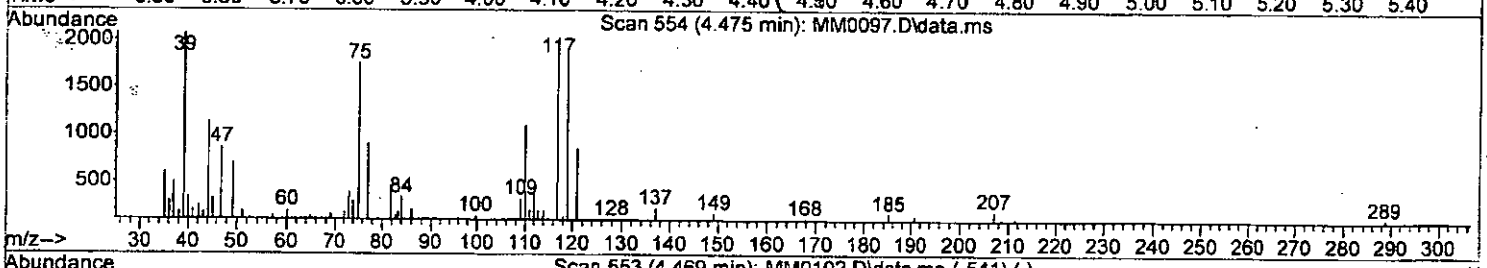
Quantitation Report (Qedit)

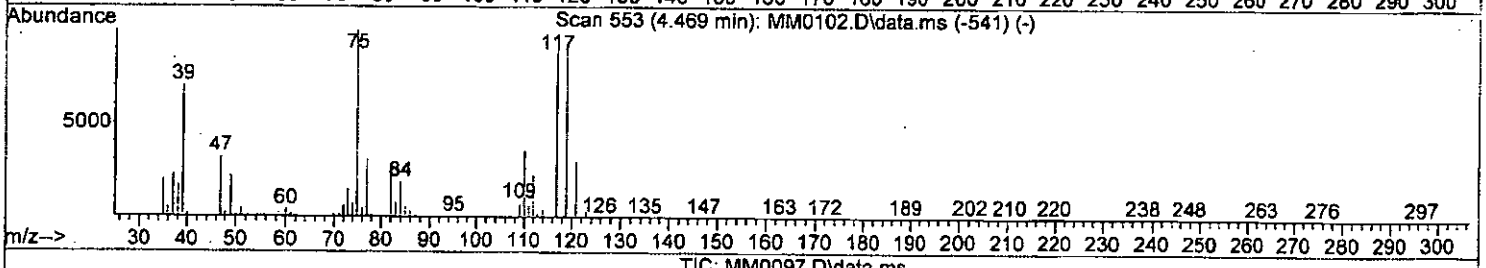
Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0097.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:25 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



(A) BLC 10/28/14 DL 10/28/14





TIC: MM0097.D\data.ms

(46) Carbontetrachloride (P)

4.475min (+0.006) 0.51 ppb m

response 1759

Ion	Exp%	Act%
121.00	100	100
82.00	97.20	52.93#
0.00	0.00	0.00
0.00	0.00	0.00

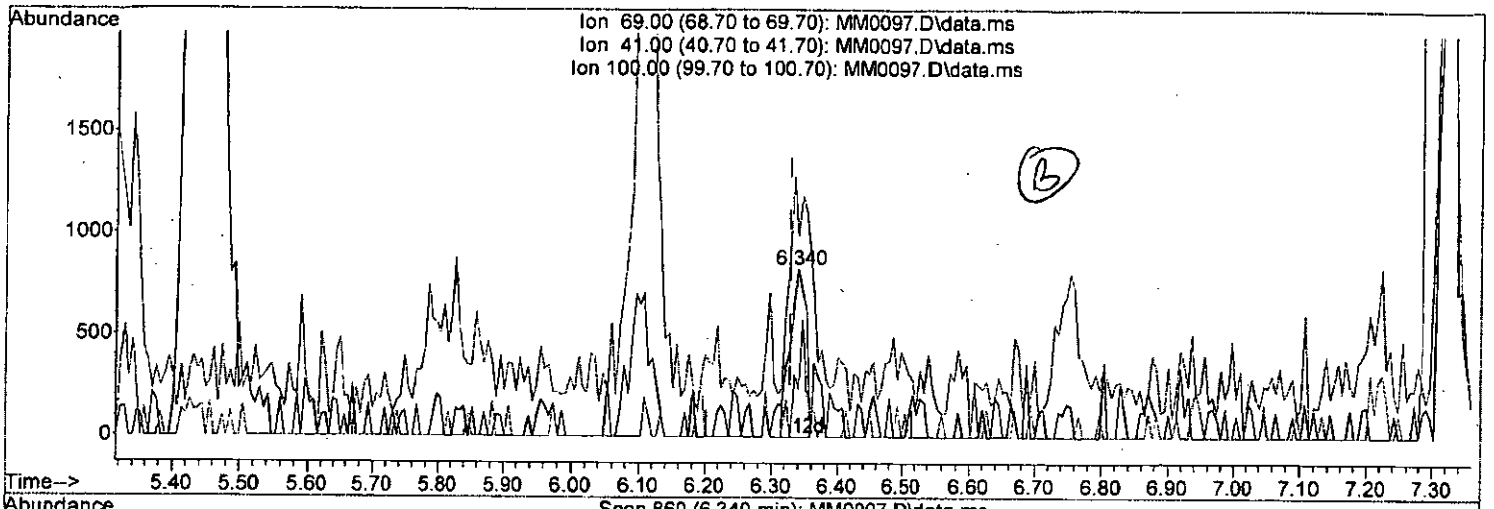
W102714.M Tue Oct 28 09:48:39 2014 Page: 1

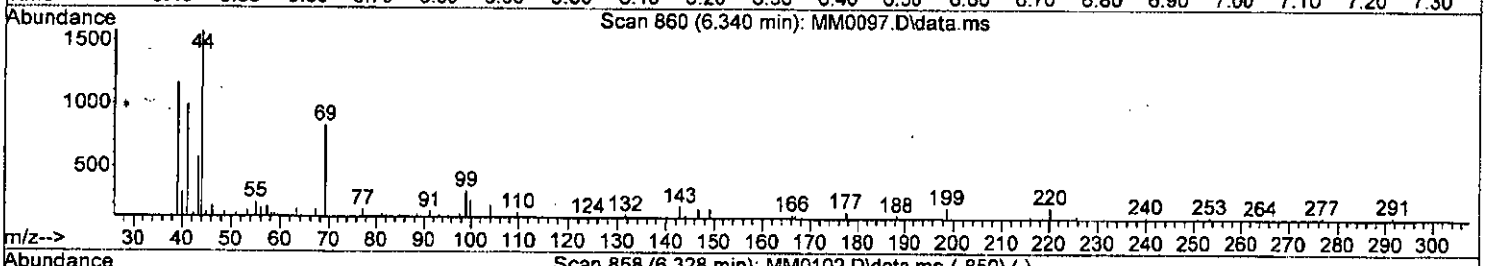
00353

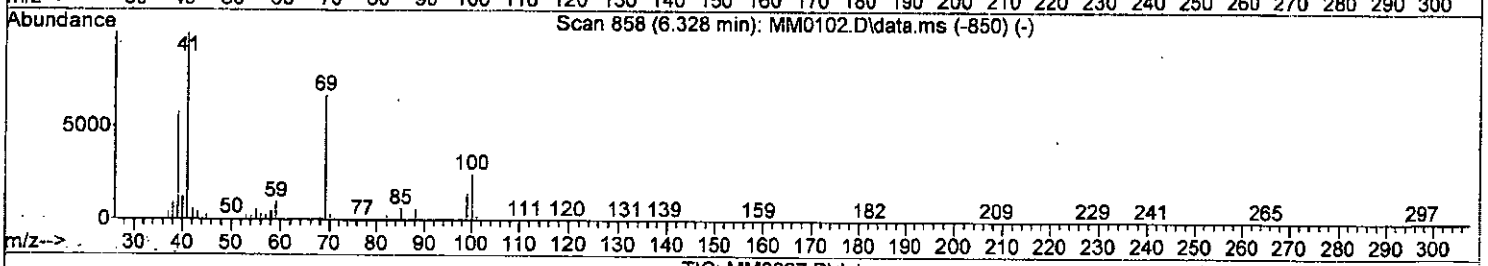
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0097.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:25 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0097.D\data.ms

(59) Methyl Methacrylate

6.340min (+0.012) 0.33 ppb

response 1321

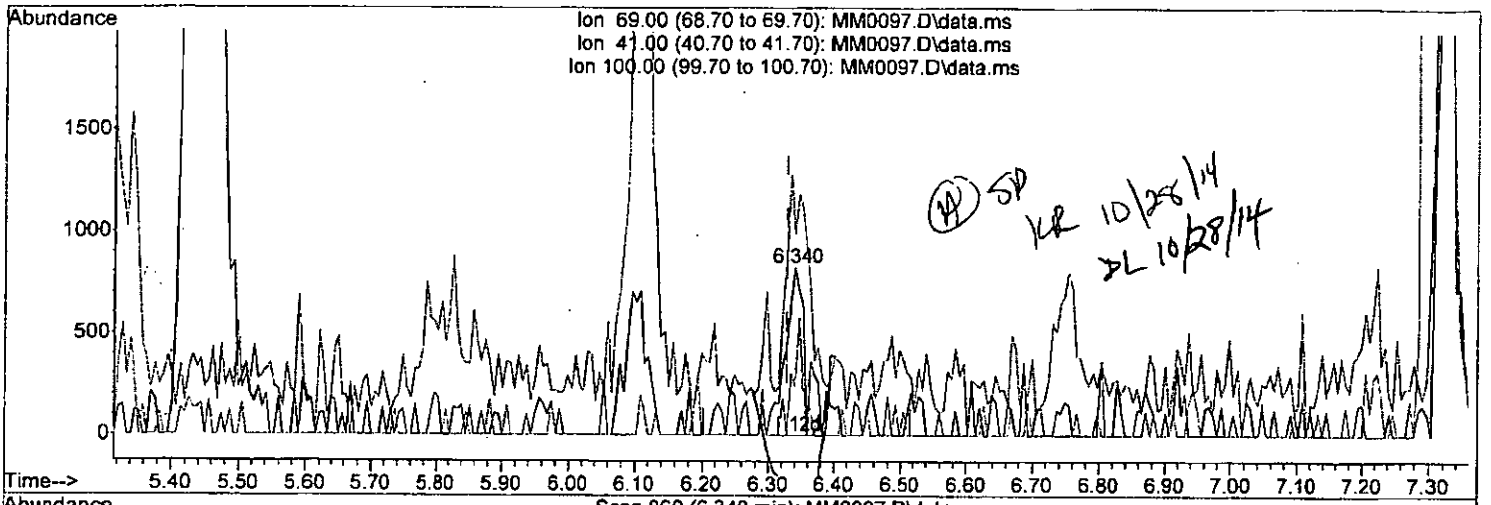
Ion	Exp%	Act%
69.00	100	100
41.00	150.30	119.78#
100.00	36.80	28.64
0.00	0.00	0.00

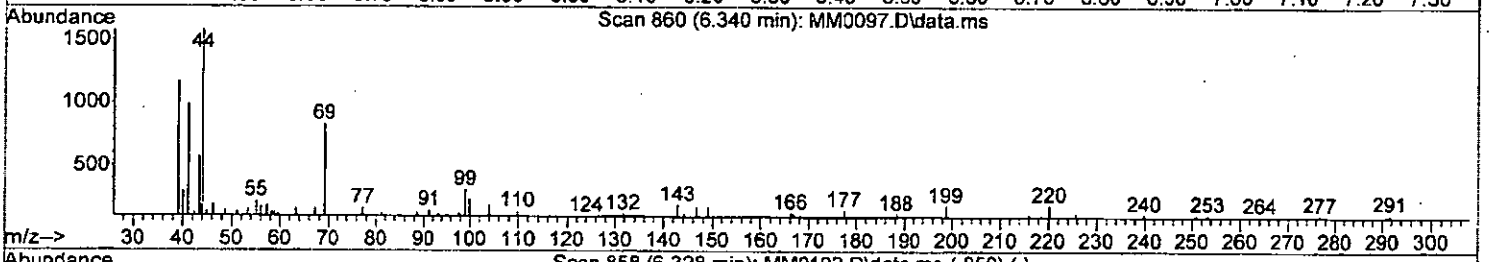
W102714.M Tue Oct 28 09:49:52 2014 Page: 1

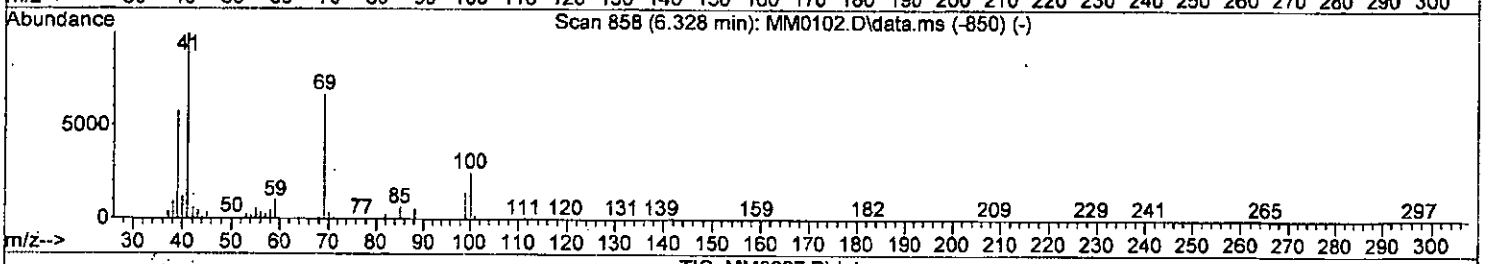
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0097.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:25 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0097.D\data.ms

(59) Methyl Methacrylate

6.340min (+0.012) 0.45 ppb m

response 1812

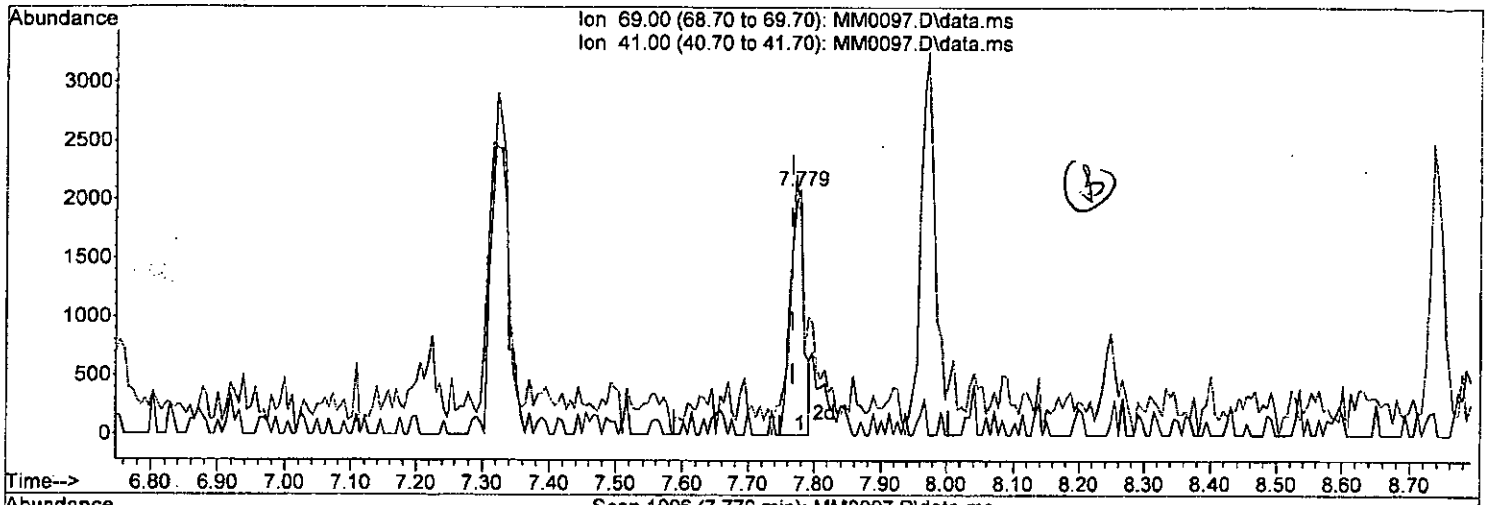
Ion	Exp%	Act%
69.00	100	100
41.00	150.30	119.78#
100.00	36.80	28.64
0.00	0.00	0.00

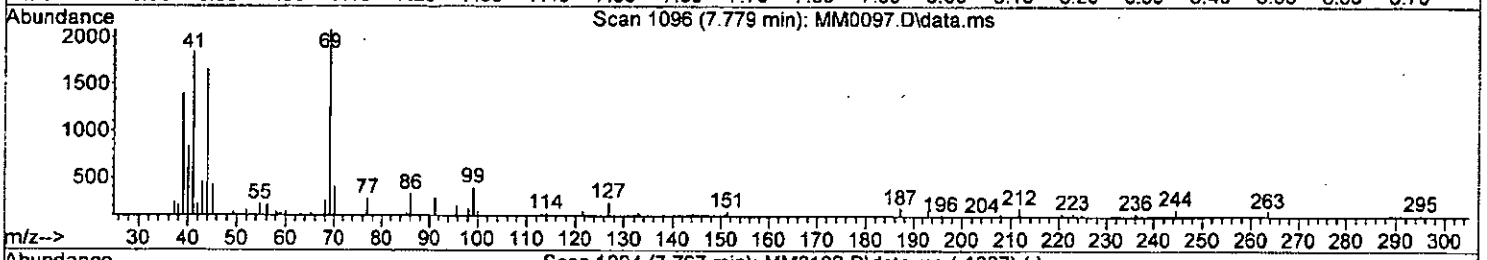
W102714.M Tue Oct 28 09:49:59 2014 Page: 1

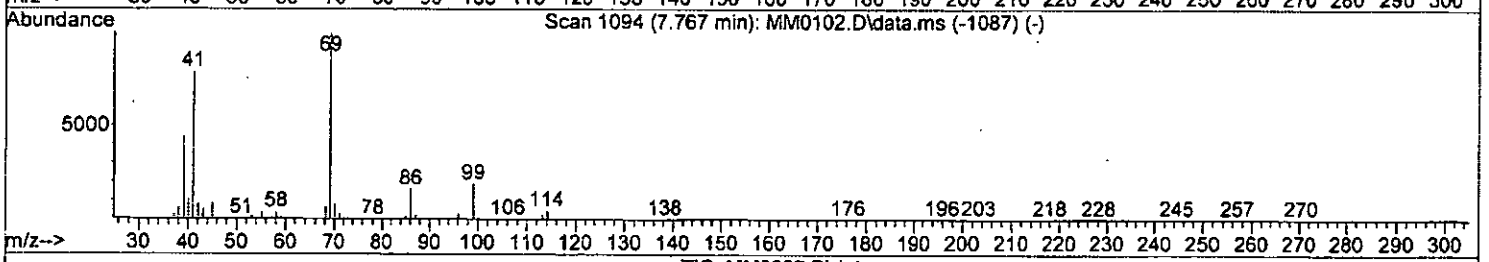
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0097.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:25 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0097.D\data.ms

(68) Ethyl Methacrylate

7.779min (+0.012) 0.35 ppb

response 2965

Ion	Exp%	Act%
69.00	100	100
41.00	79.20	88.65
0.00	0.00	0.00
0.00	0.00	0.00

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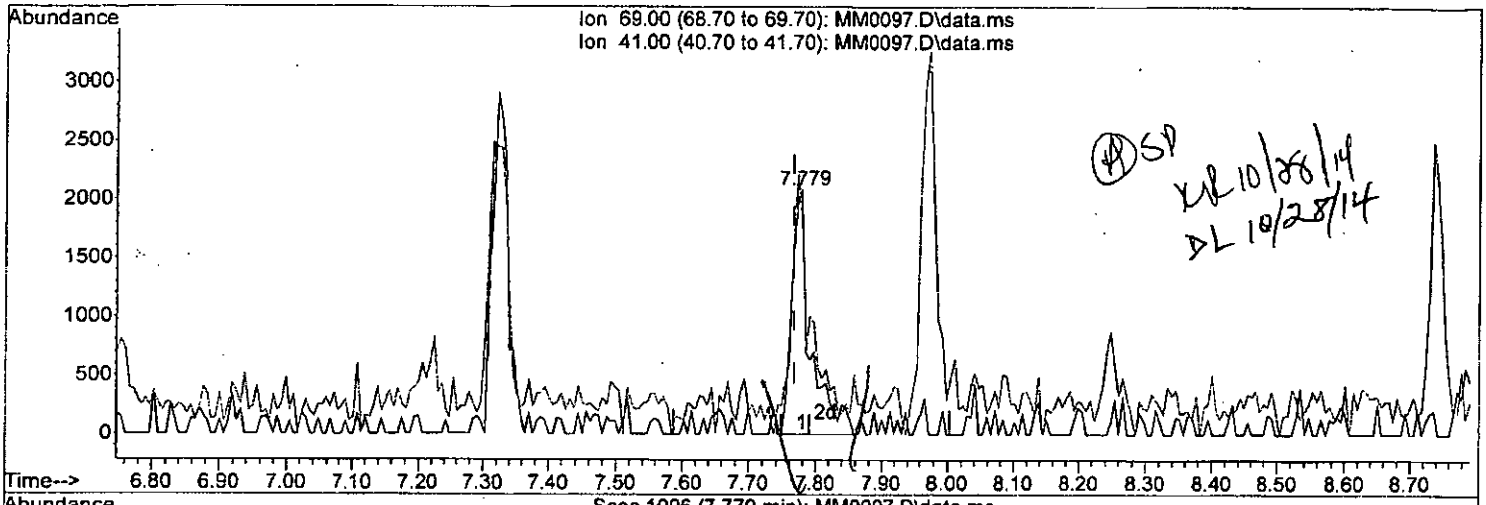
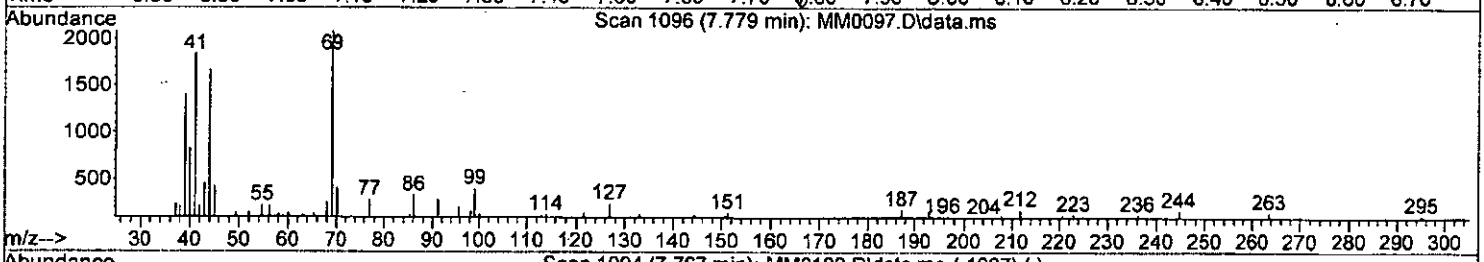
00356

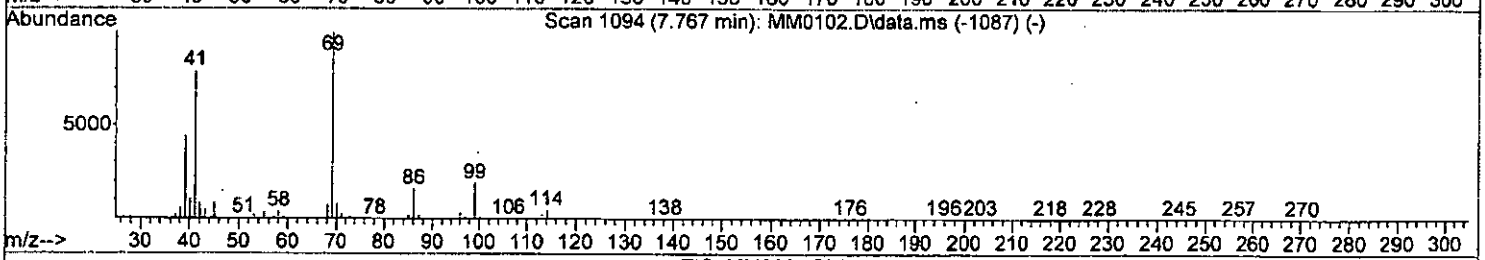
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0097.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:25 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0097.D\data.ms

(68) Ethyl Methacrylate

7.779min (+0.012) 0.48 ppb m

response 4089

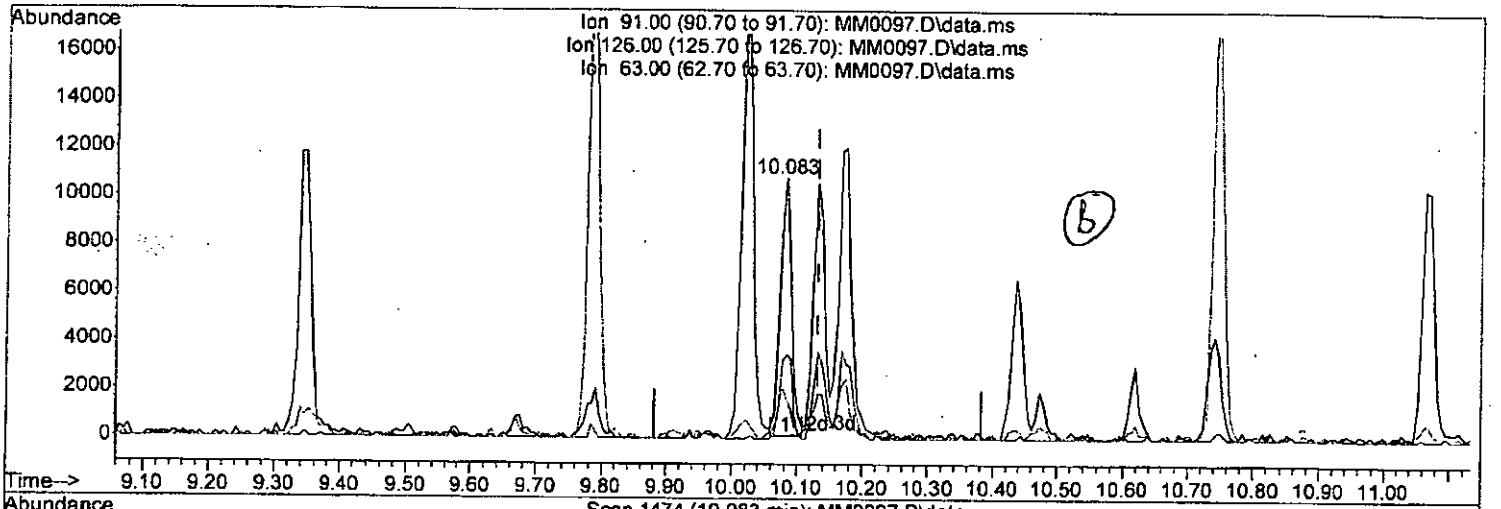
Ion	Exp%	Act%
69.00	100	100
41.00	79.20	88.65
0.00	0.00	0.00
0.00	0.00	0.00

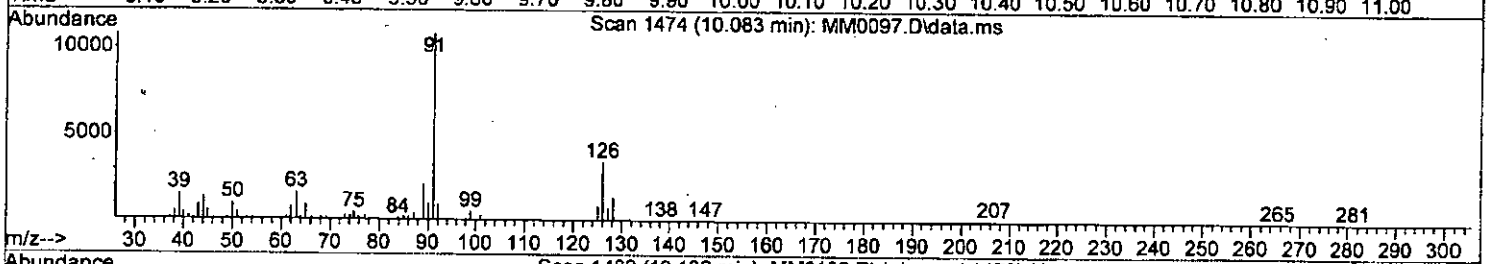
W102714.M Tue Oct 28 09:50:26 2014 Page: 1

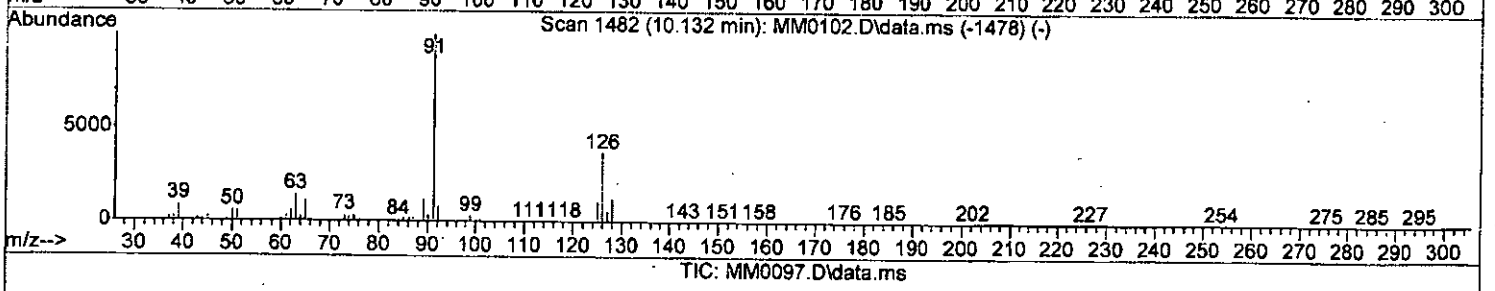
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0097.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:25 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0097.D\data.ms

(97) 3-Chlorotoluene

10.083min (-0.049) 0.50 ppb

response 12732

Ion	Exp%	Act%
91.00	100	100
126.00	36.90	32.15
63.00	14.00	15.10
0.00	0.00	0.00

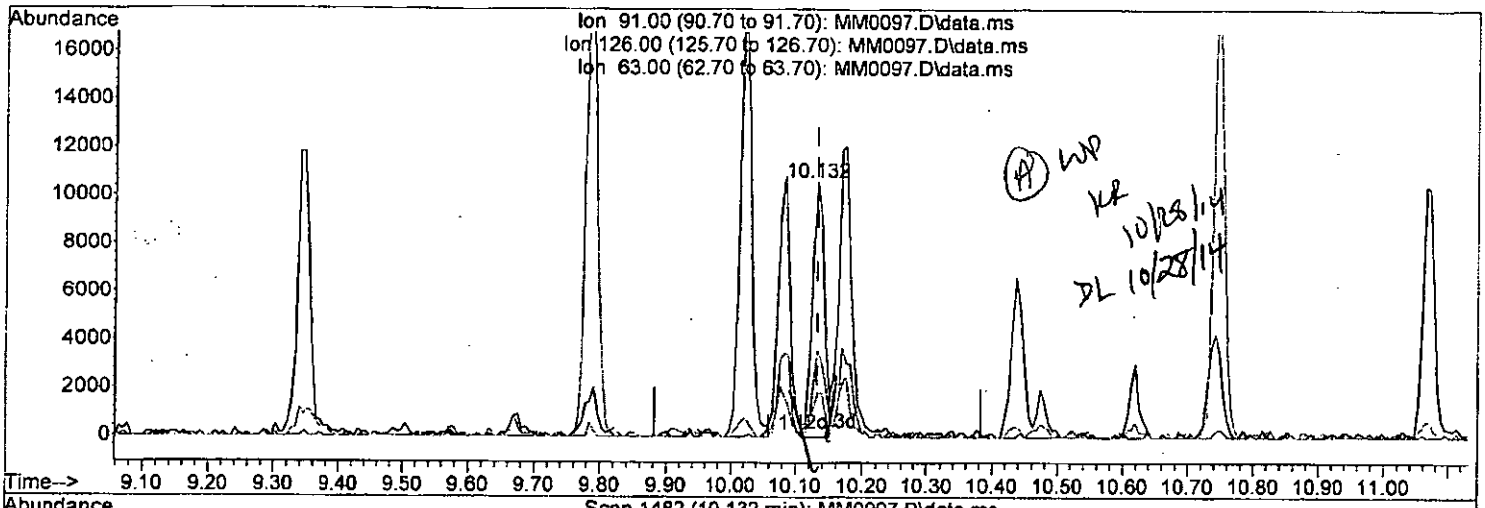
W102714.M Tue Oct 28 09:50:49 2014 Page: 1

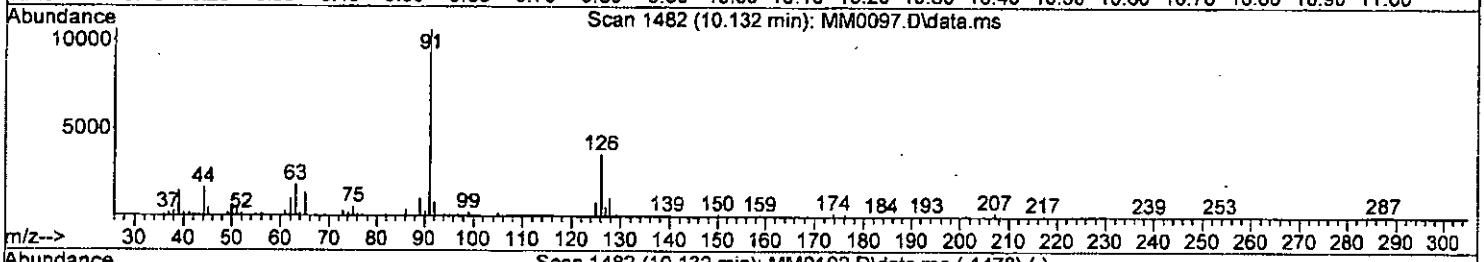
00358

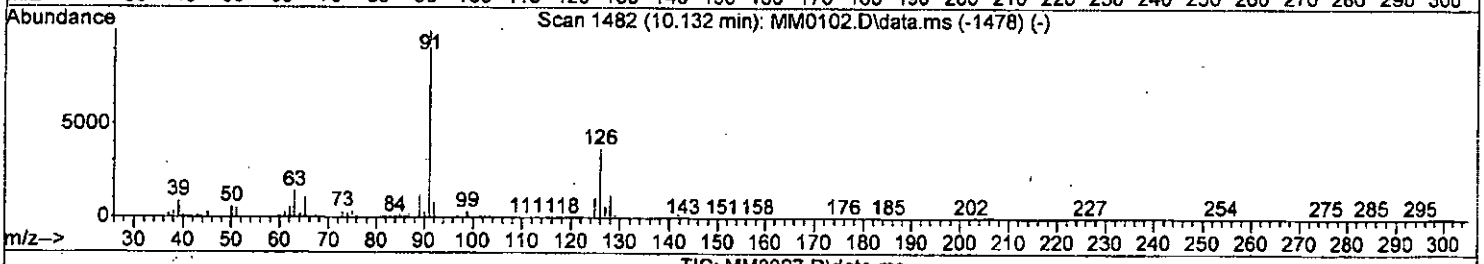
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0097.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:25 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0097.D\data.ms

(97) 3-Chlorotoluene

10.132min (-0.000) 0.51 ppb m

response 13099

Ion	Exp%	Act%
91.00	100	100
126.00	36.90	33.80
63.00	14.00	17.26#
0.00	0.00	0.00

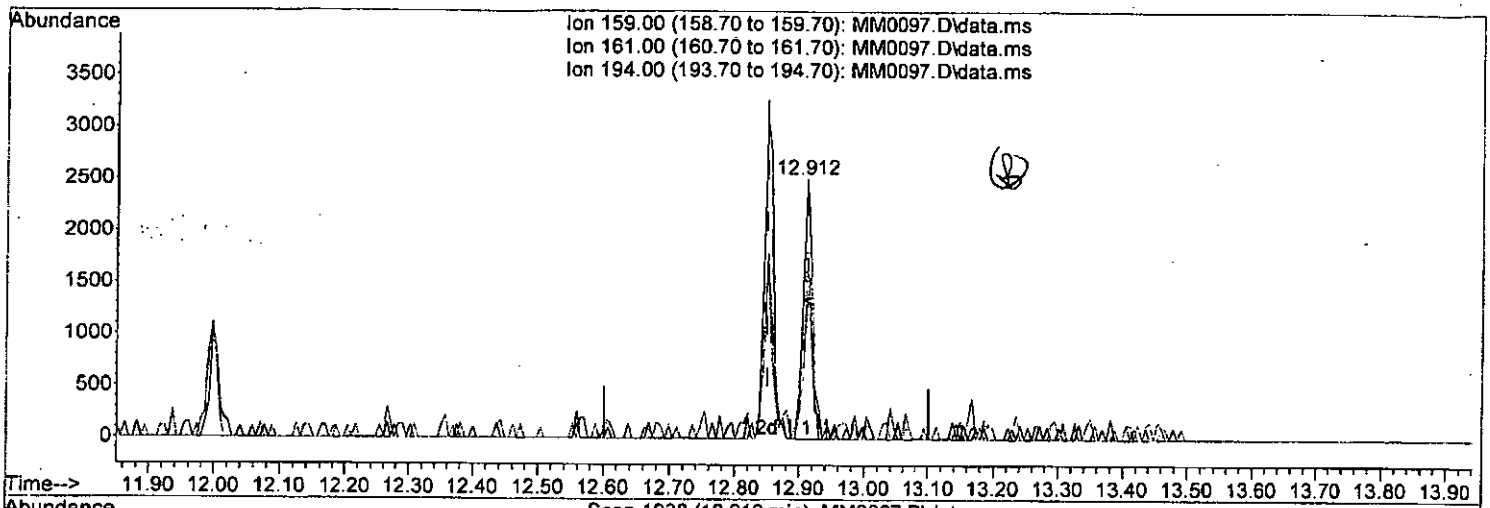
W102714.M Tue Oct 28 09:50:57 2014 Page: 1

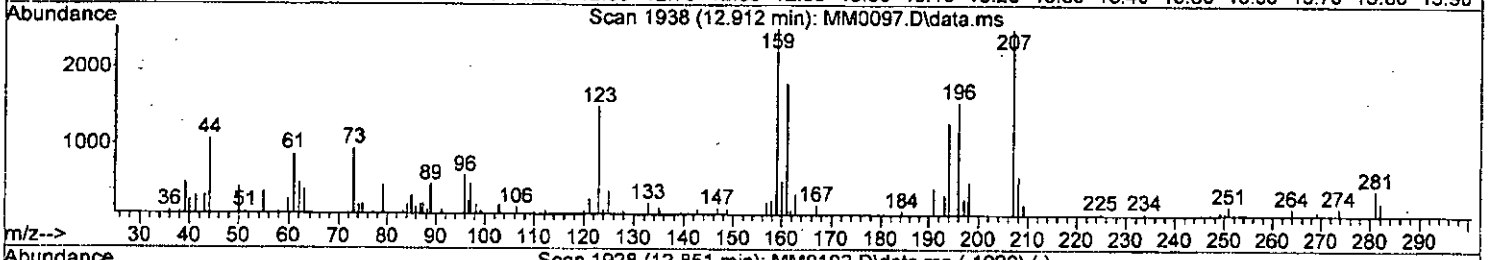
00359

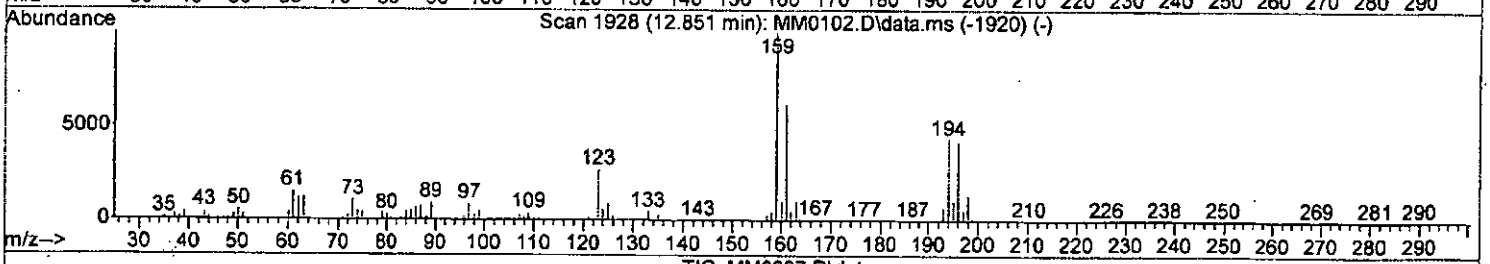
Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0097.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:25 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0097.D\data.ms

(119) 2,4,5-Trichlorotolene

12.912min (+0.061) 0.45 ppb

response 2447

Ion	Exp%	Act%
159.00	100	100
161.00	62.10	71.92
194.00	43.70	51.62
0.00	0.00	0.00

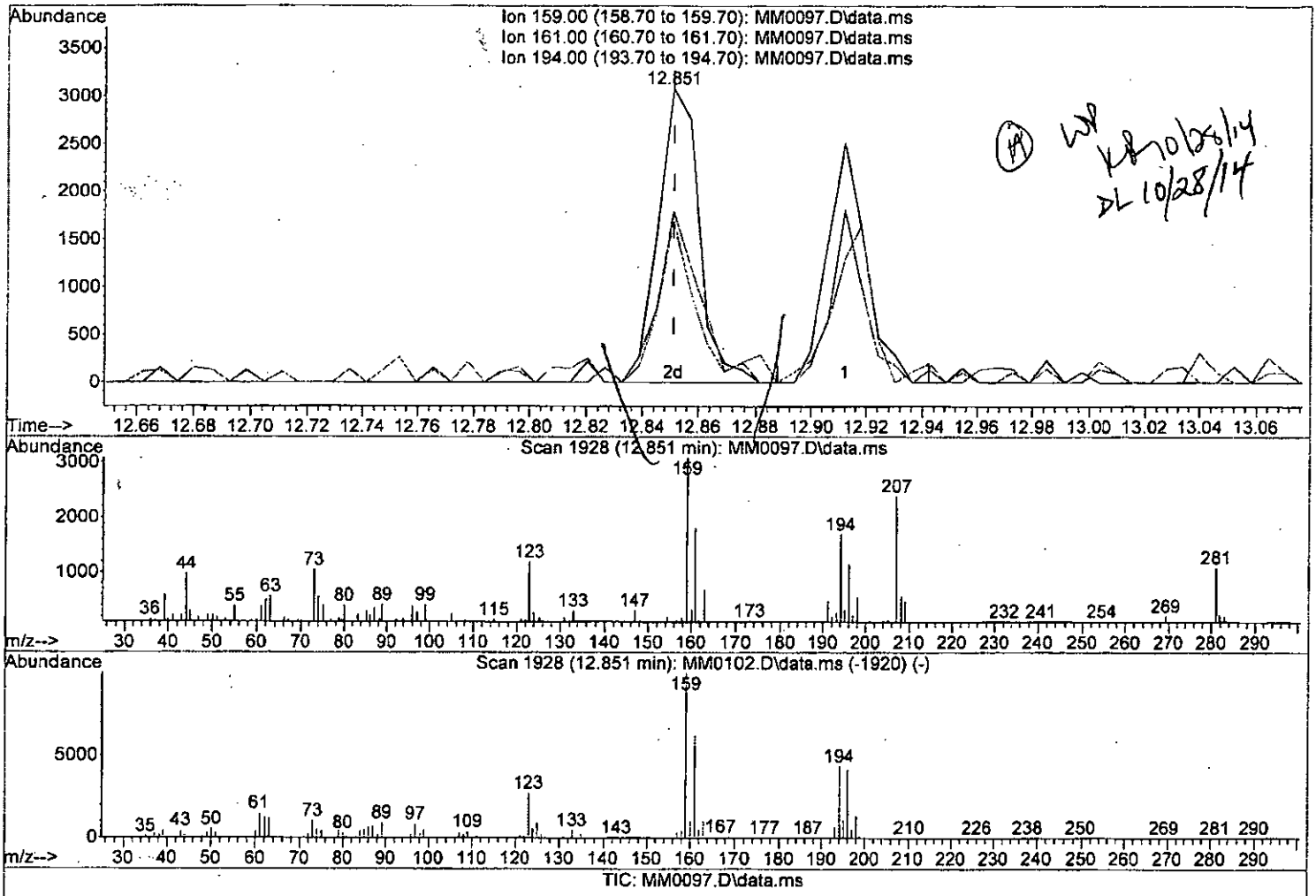
W102714.M Tue Oct 28 09:51:13 2014

Page: 1

Quantitation Report (Qedit)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0097.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:25 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



TIC: MM0097.D\data.ms

(119) 2,4,5-Trichlorotolene

12.851min (-0.000) 0.57 ppb m

response 3122

Ion	Exp%	Act%
159.00	100	100
161.00	62.10	58.22
194.00	43.70	54.78#
0.00	0.00	0.00

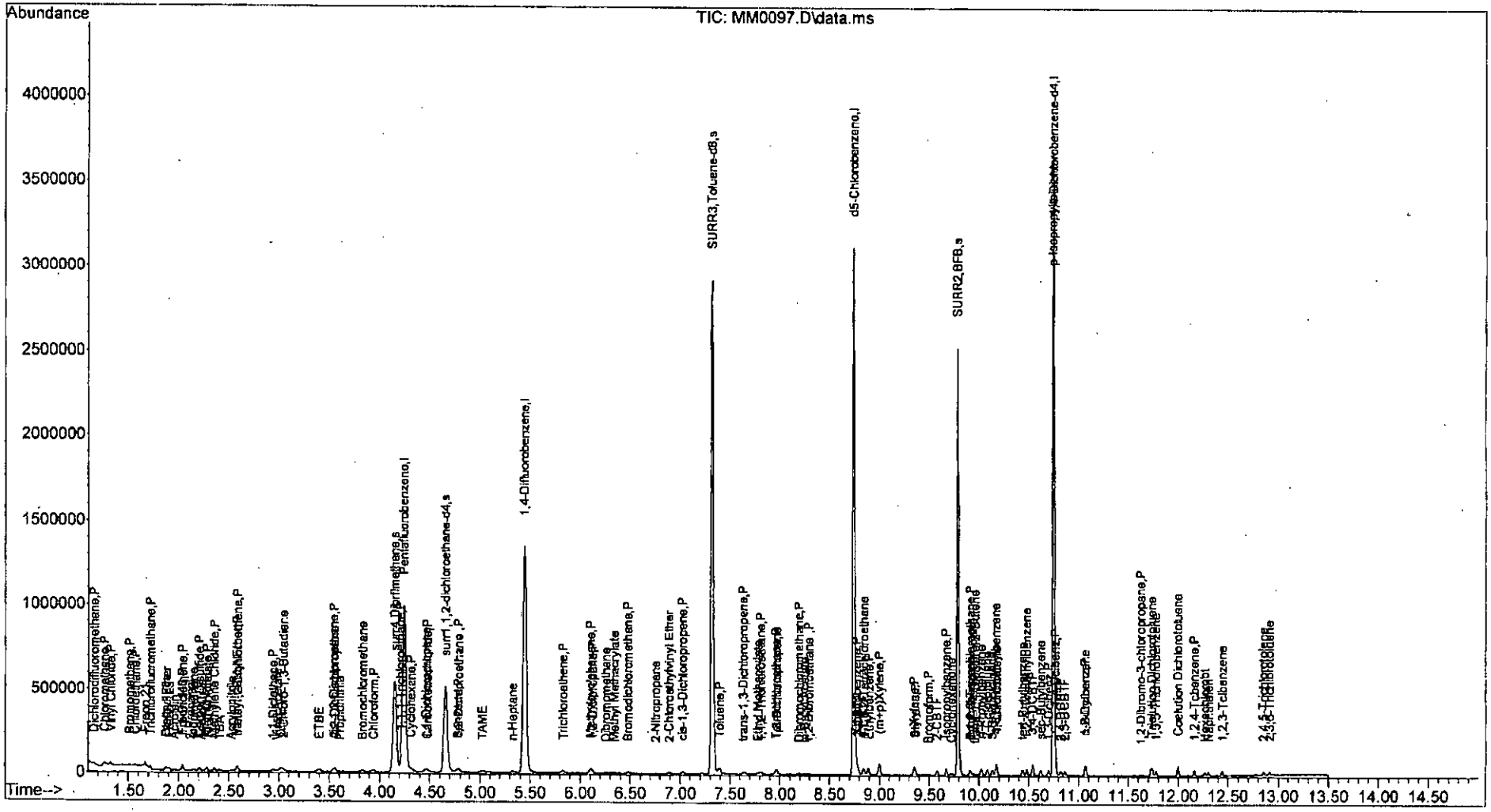
W102714.M Tue Oct 28 09:51:26 2014 Page: 1

00361

Quantitation Report (QT Reviewed)

Sample : 0.5ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0097.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:13 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:51:19 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



W102714.M Tue Oct 28 09:51:41 2014 Page: 4

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0098.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:57:15 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	860124	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1311491	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1217171	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	632587	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	383041	50.15	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.30%				
48) surr1,1,2-dichloroetha...	4.658	65	483385	51.98	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 103.96%				
65) SURR3,Toluene-d8	7.322	98	1636322	50.89	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.78%				
70) SURR2,BFB	9.785	95	618958	49.61	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.22%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	7847	0.96	ppb		91
3) Chloromethane	1.262	50	11303	1.02	ppb		96
4) Vinyl Chloride	1.323	62	11576	0.98	ppb		95
5) Bromomethane	1.512	94	6066	1.06	ppb		87
6) Chloroethane	1.567	64	7621	1.04	ppb		92
7) Freon 21	1.664	67	19015	1.04	ppb		93
8) Trichlorofluoromethane	1.719	101	14485	1.03	ppb		92
9) Diethyl Ether	1.884	59	6415	1.01	ppb		95
10) Freon 123a	1.865	67	11000	1.09	ppb		94
11) Freon 123	1.902	83	10870	1.02	ppb		97
12) Acrolein	1.951	56	1870	5.34	ppb		99
13) 1,1-Diclethene	2.036	96	7605	1.02	ppb		97
14) Freon 113	2.036	101	8003	1.05	ppb		89
15) Acetone	2.048	43	2477	1.35	ppb		88
16) 2-Propanol	2.115	45	7008	19.40	ppb		79
17) Iodomethane	2.146	142	9677	0.90	ppb		100
18) Carbon Disulfide	2.207	76	25729	1.03	ppb		97
19) Acetonitrile	2.231	40	1061	3.66	ppb	#	89
20) Allyl Chloride	2.274	76	3751	0.89	ppb	#	44
21) Methyl Acetate	2.274	43	3784	0.90	ppb		90
22) Methylene Chloride	2.359	84	7931	0.98	ppb		94
23) TBA	2.408	59	10640	17.79	ppb		87
24) Acrylonitrile	2.530	53	9336	4.77	ppb	#	81
25) Methyl-t-Butyl Ether	2.579	73	20192	0.97	ppb		97
26) trans-1,2-Dichloroethene	2.585	96	7721	0.96	ppb		96
28) 1,1-Diclethane	2.938	63	16007	1.08	ppb		97
29) Vinyl Acetate	2.987	86	1442	1.07	ppb		98
30) DIPE	3.012	45	30404	1.01	ppb		88
31) 2-Chloro-1,3-Butadiene	3.036	53	14537	1.06	ppb		86
32) ETBE	3.396	59	26051	1.01	ppb		96
33) 2,2-Dichloropropane	3.554	77	14401	1.09	ppb		97
34) cis-1,2-Dichloroethene	3.548	96	8468	0.97	ppb	#	82
36) Propionitrile	3.615	54	3748m	5.33	ppb		
37) Bromochloromethane	3.835	130	5069m	1.03	ppb		
38) Methacrylonitrile	3.804	67	2051	0.94	ppb		97

KP 10/28/14

W102714.M Tue Oct 28 09:57:35 2014

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0098.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:57:15 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40)	Chloroform	3.932	83	16933	1.13	ppb		83
41)	1,1,1-Trichloroethane	4.206	97	13244	0.99	ppb	#	1
42)	TAME	5.011	73	22112	1.01	ppb		95
44)	Cyclohexane	4.316	41	9960m	1.03	ppb		
46)	Carbontetrachloride	4.463	121	3552	1.04	ppb	#	78
47)	1,1-Dichloropropene	4.469	75	11981	1.05	ppb		82
49)	Benzene	4.780	78	33510	1.00	ppb		97
50)	1,2-Dichloroethane	4.786	62	10972	0.97	ppb		88
51)	Iso-Butyl Alcohol	4.639	43	5279m	20.52	ppb		
52)	n-Heptane	5.334	43	12324	1.13	ppb		86
53)	1-Butanol	5.804	56	8386m	50.41	ppb		
54)	Trichloroethene	5.828	130	8277	0.94	ppb		90
55)	Methylcyclohexane	6.102	55	10834	0.96	ppb		93
56)	1,2-Diclpropane	6.109	63	9719	1.10	ppb		100
57)	Dibromomethane	6.261	93	3965	0.95	ppb	#	84
58)	1,4-Dioxane	6.383	88	1617m	24.42	ppb		
59)	Methyl Methacrylate	6.334	69	3835	0.95	ppb		95
60)	Bromodichloromethane	6.487	83	10660	1.02	ppb		95
61)	2-Nitropropane	6.749	41	2372	1.70	ppb		84
62)	2-Chloroethylvinyl Ether	6.889	63	3991	0.97	ppb		70
63)	cis-1,3-Dichloropropene	7.023	75	12867	0.99	ppb		89
64)	4-Methyl-2-pentanone	7.212	43	5944	0.99	ppb		86
66)	Toluene	7.395	91	36645	1.01	ppb		93
67)	trans-1,3-Dichloropropene	7.633	75	9447	0.85	ppb		74
68)	Ethyl Methacrylate	7.767	69	7350	0.86	ppb		93
69)	1,1,2-Trichloroethane	7.809	97	6026	0.99	ppb		90
72)	Tetrachloroethene	7.962	164	6906	0.99	ppb		97
73)	2-Hexanone	8.090	43	4246m	1.05	ppb		
74)	1,3-Dichloropropane	7.974	76	9936	0.91	ppb		93
75)	Dibromochloromethane	8.187	129	5814	0.89	ppb		96
76)	N-Butyl Acetate	8.242	43	9572	0.92	ppb		97
77)	1,2-Dibromoethane	8.285	107	5233	0.92	ppb		95
78)	Chlorobenzene	8.773	112	22554	0.96	ppb		96
79)	3-CBTF	8.785	180	12193	0.94	ppb		93
80)	4-CBTF	8.840	180	11014	0.95	ppb		91
81)	1,1,1,2-Tetrachloroethane	8.852	131	6543	0.84	ppb		89
82)	Ethylbenzene	8.888	106	12315	0.97	ppb		94
83)	(m+p)Xylene	8.998	106	29838	1.94	ppb		95
84)	o-Xylene	9.346	106	14690	0.95	ppb		89
85)	Styrene	9.358	104	22057	0.86	ppb		98
87)	Bromoform	9.498	173	2741	0.87	ppb		88
88)	2-CBTF	9.577	180	11979	1.08	ppb		96
89)	Isopropylbenzene	9.669	105	36500	1.08	ppb		98
90)	Cyclohexanone	9.724	55	9065	24.44	ppb		93
91)	trans-1,4-Dichloro-2-B...	9.961	53	2017	0.99	ppb	#	72
92)	1,1,2,2-Tetrachloroethane	9.913	83	6962	1.06	ppb		98
93)	Bromobenzene	9.913	156	9111	1.02	ppb		92
94)	1,2,3-Trichloropropane	9.943	110	2208	1.11	ppb	#	85
95)	n-Propylbenzene	10.022	91	40630	1.04	ppb		98
96)	2-Chlorotoluene	10.077	91	24939	1.05	ppb		93
97)	3-Chlorotoluene	10.132	91	26550	1.05	ppb		97
98)	4-Chlorotoluene	10.175	91	30536	1.03	ppb		97

W102714.M Tue Oct 28 09:57:35 2014

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0098.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:57:15 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

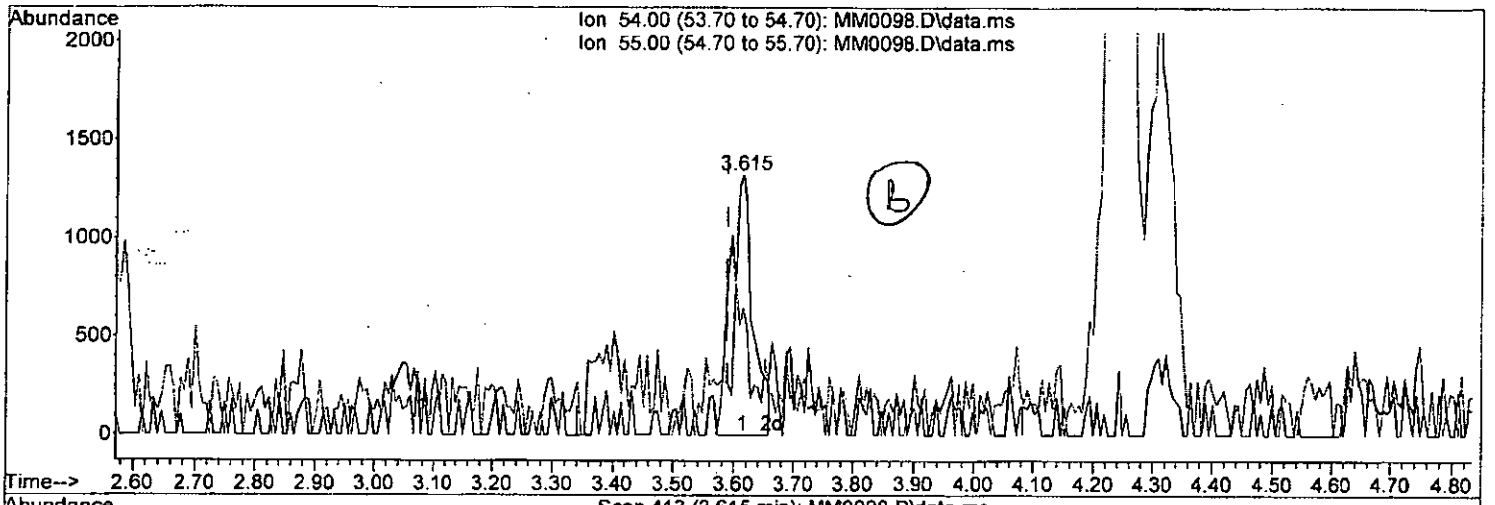
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
99)	1,3,5-Trimethylbenzene	10.169	105	30162	1.03	ppb		97
100)	tert-Butylbenzene	10.437	119	23711	1.00	ppb		99
101)	1,2,4-Trimethylbenzene	10.480	105	30367	1.06	ppb		98
102)	3,4-DCBTF	10.535	214	7786	0.93	ppb		94
103)	sec-Butylbenzene	10.620	105	35355	1.06	ppb		95
104)	p-Isopropyltoluene	10.742	119	29069	1.01	ppb		90
105)	1,3-Dclbenz	10.699	146	17670	1.04	ppb		91
106)	1,4-Dclbenz	10.766	146	19271	1.08	ppb		94
107)	2,4-DCBTF	10.821	214	6940	0.96	ppb		94
108)	2,5-DCBTF	10.858	214	8873	1.09	ppb		90
109)	n-Butylbenzene	11.065	91	25525	1.00	ppb		91
110)	1,2-Dclbenz	11.065	146	16281	1.02	ppb		93
111)	1,2-Dibromo-3-chloropr...	11.620	157	1069	0.97	ppb		91
112)	Trielution Dichlorotol...	11.729	125	40701	3.10	ppb		92
113)	1,3,5 Trichlorobenzene	11.778	180	11344	1.03	ppb		90
114)	Coelution Dichlorotoluene	11.998	125	27433	2.00	ppb		92
115)	1,2,4-Tcbenzene	12.162	180	8329	0.89	ppb		90
116)	Hexachlorobt	12.266	225	3927	1.06	ppb	#	80
117)	Naphthalen	12.302	128	17097	0.96	ppb		94
118)	1,2,3-Tclbenzene	12.437	180	9046	1.14	ppb		80
119)	2,4,5-Trichlorotolene	12.851	159	5230m	0.97	ppb		
120)	2,3,6-Trichlorotoluene	12.912	159	5666	1.14	ppb		93

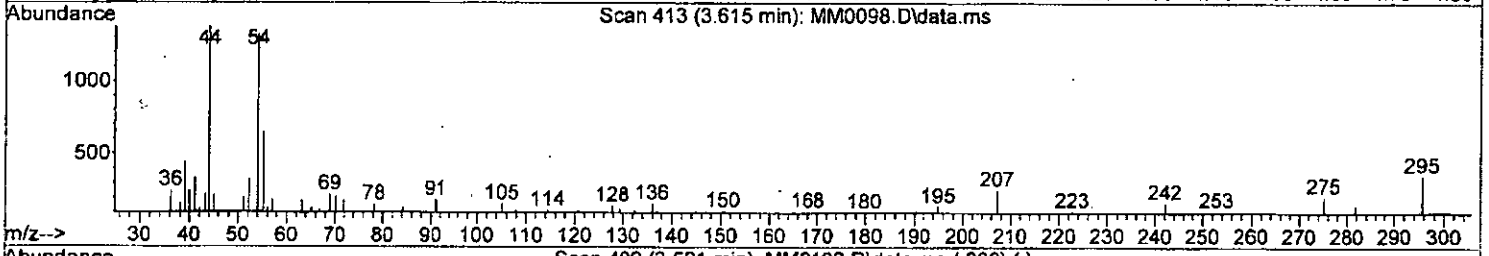
(#) = qualifier out of range (m) = manual integration (+) = signals summed

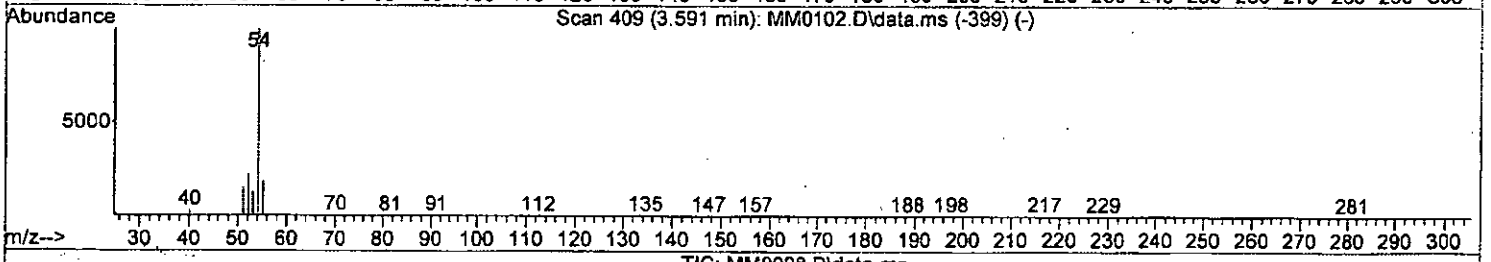
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0098.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:30 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0098.D\data.ms

(36) Propionitrile

3.615min (+0.025) 4.83 ppb

response 3396

Ion	Exp%	Act%
54.00	100	100
55.00	18.80	49.02#
0.00	0.00	0.00
0.00	0.00	0.00

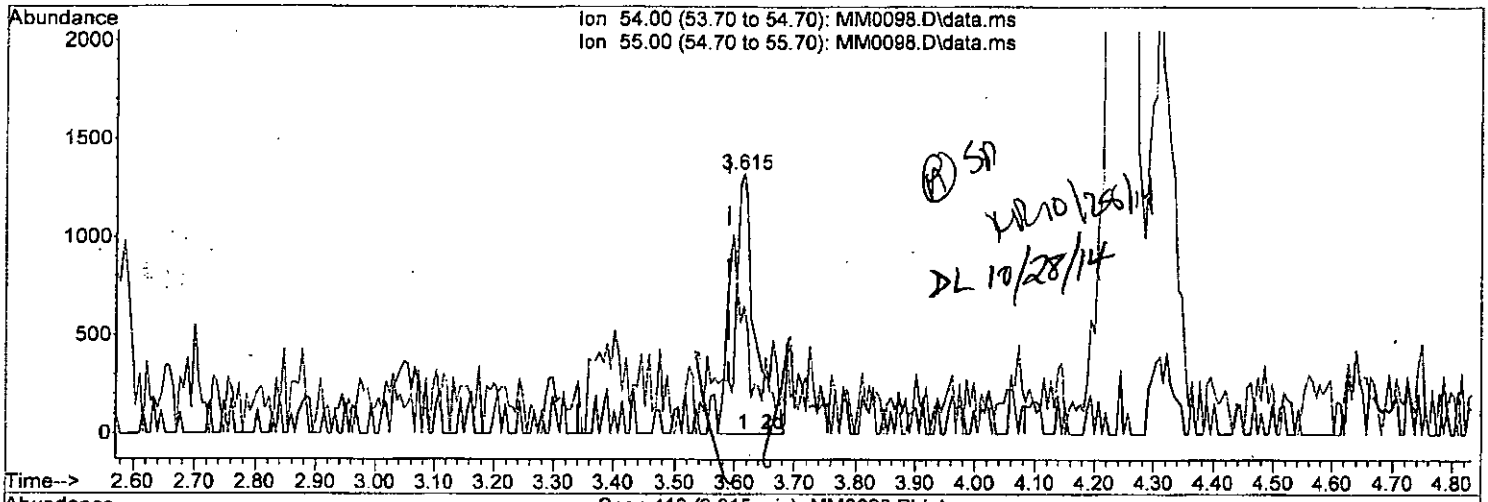
W102714.M Tue Oct 28 09:53:50 2014 Page: 1

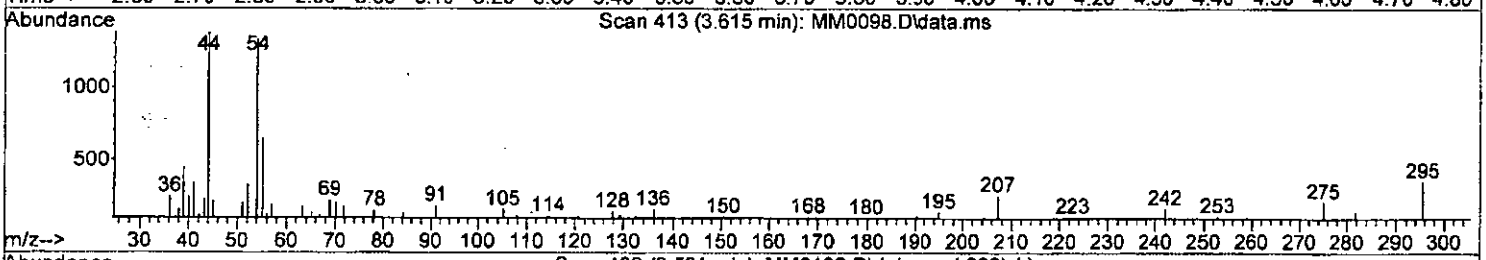
00366

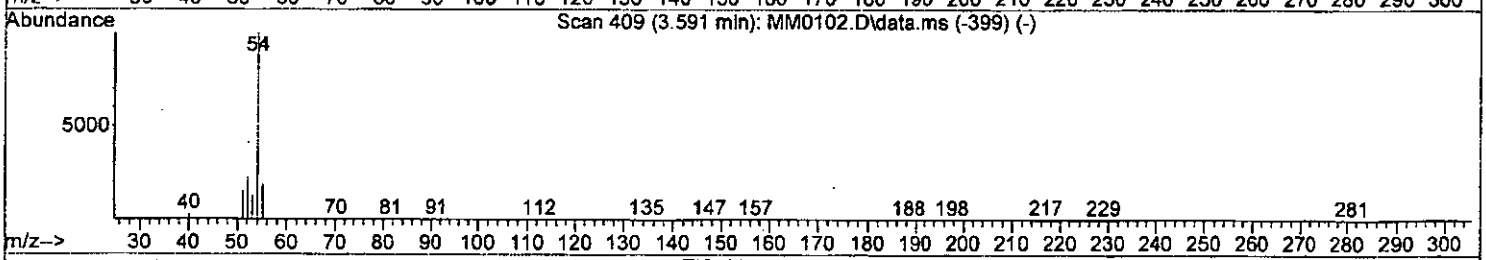
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0098.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:30 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0098.D\data.ms

(36). Propionitrile

3.615min (+0.025) 5.33 ppb m

response 3748

Ion	Exp%	Act%
54.00	100	100
55.00	18.80	49.02#
0.00	0.00	0.00
0.00	0.00	0.00

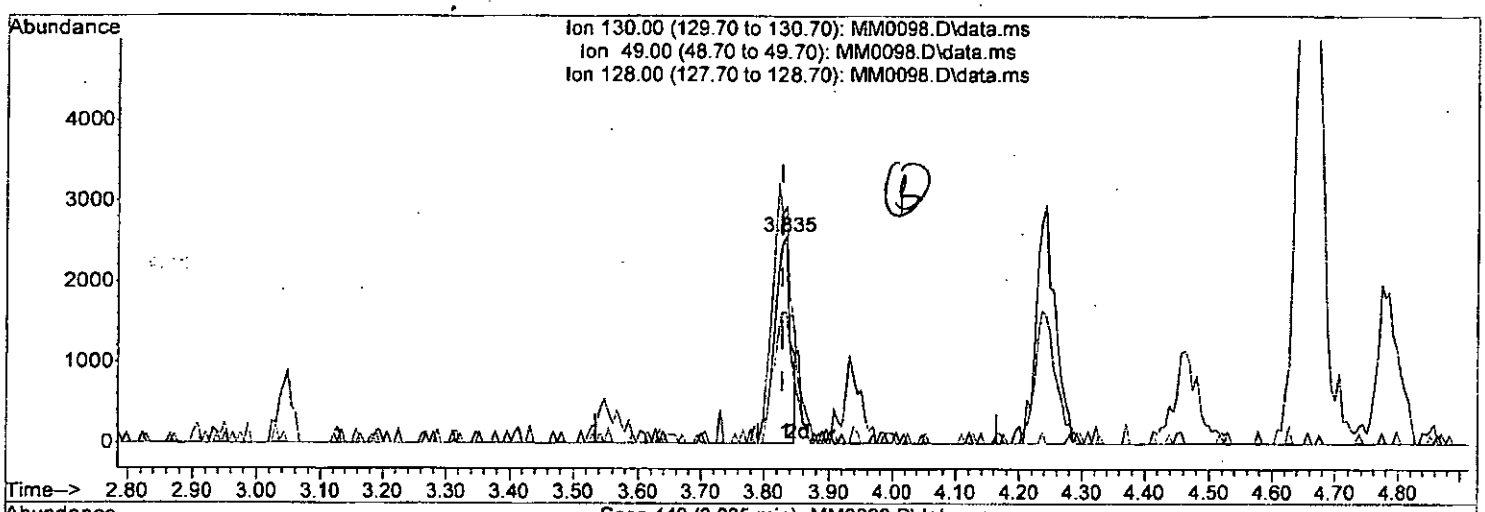
W102714.M Tue Oct 28 09:53:58 2014 Page: 1

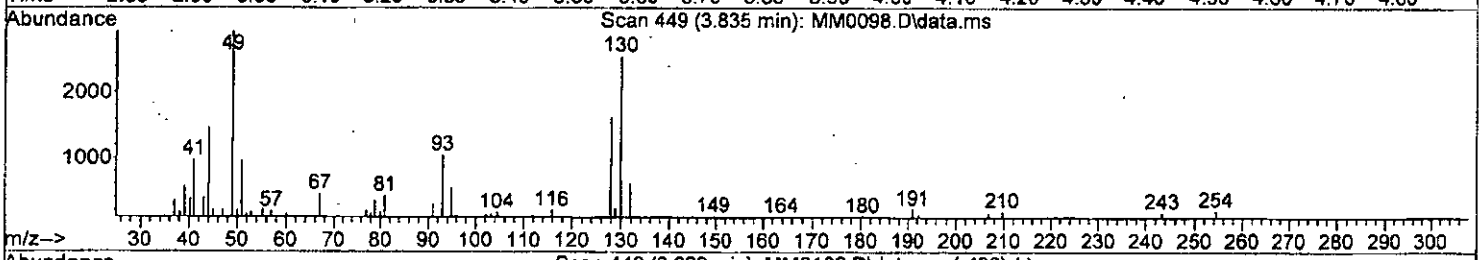
00367

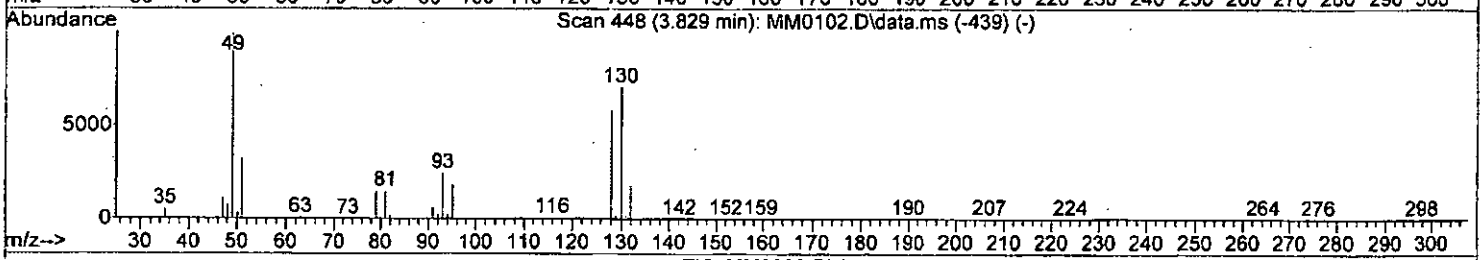
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0098.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:30 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0098.D\data.ms

(37) Bromochloromethane

3.835min (+0.006) 0.90 ppb

response 4442

Ion	Exp%	Act%
130.00	100	100
49.00	141.80	114.65#
128.00	81.80	63.35
0.00	0.00	0.00

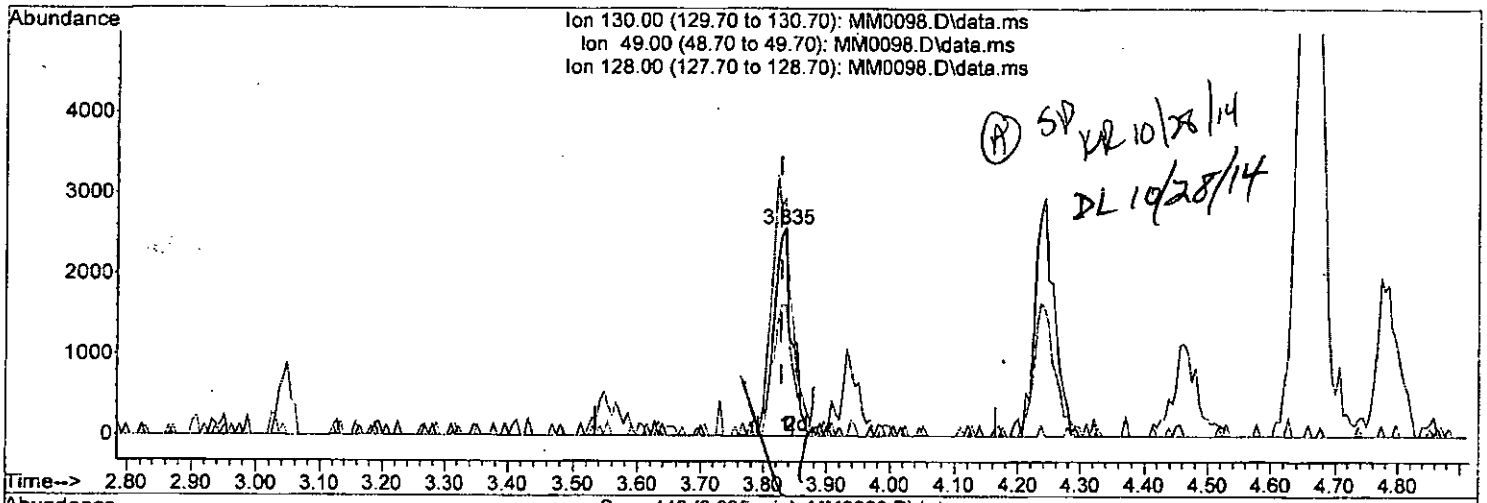
W102714.M Tue Oct 28 09:54:03 2014 Page: 1

00368

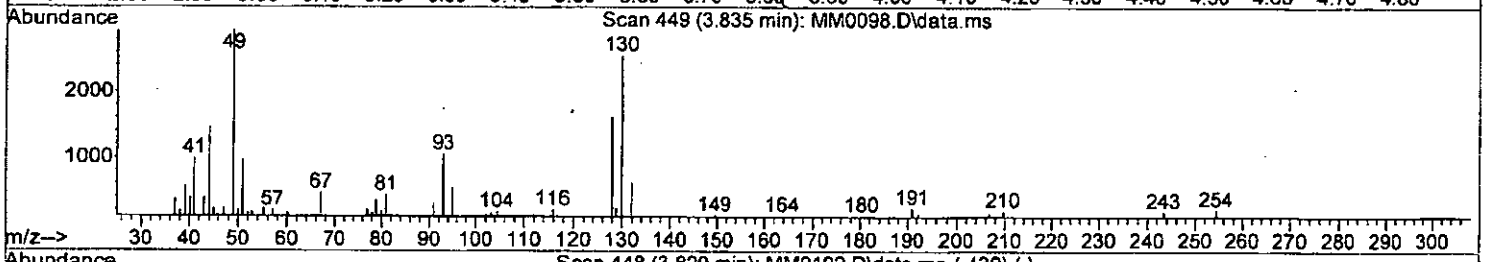
Quantitation Report (Qedit)

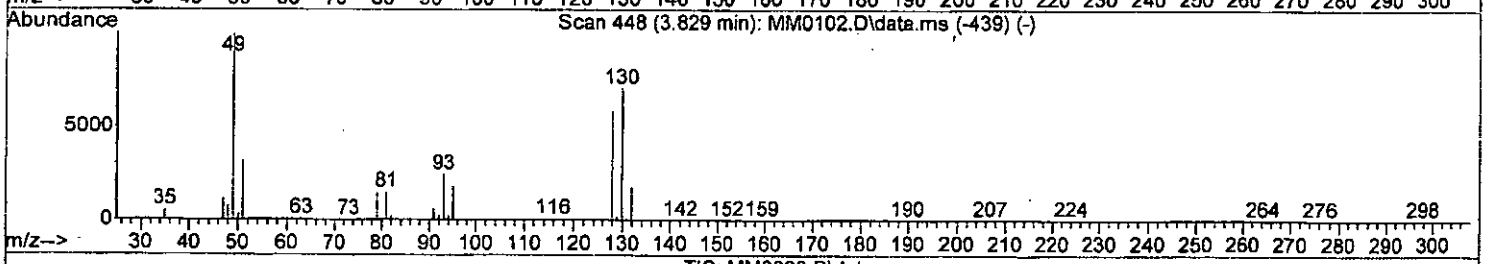
Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0098.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:30 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



(A) SP KR 10/28/14
DL 10/28/14





TIC: MM0098.D\data.ms

(37) Bromochloromethane

3.835min (+0.006) 1.03 ppb m

response 5069

Ion	Exp%	Act%
130.00	100	100
49.00	141.80	114.65#
128.00	81.80	63.35
0.00	0.00	0.00

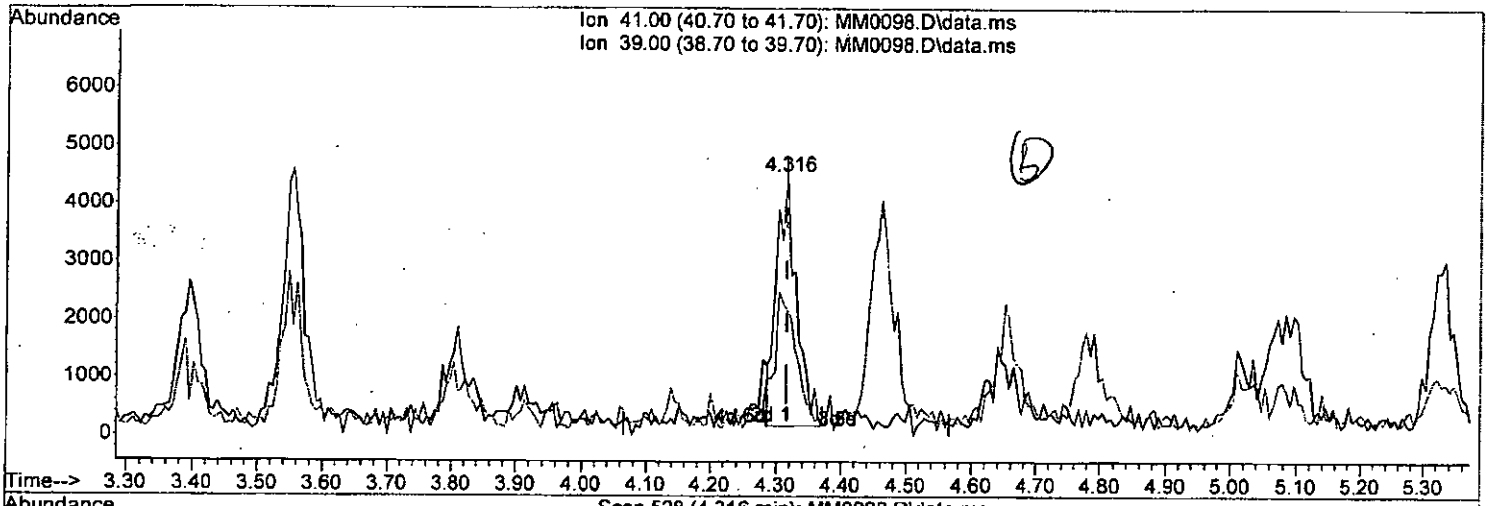
W102714.M Tue Oct 28 09:54:09 2014 Page: 1

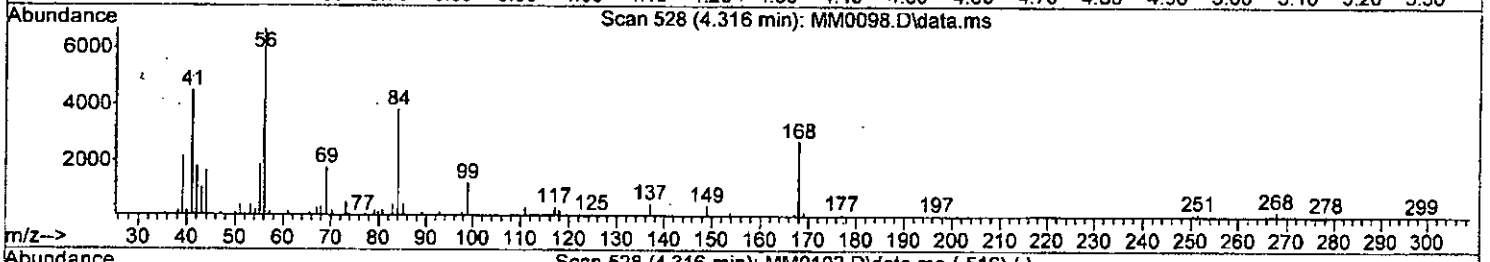
00369

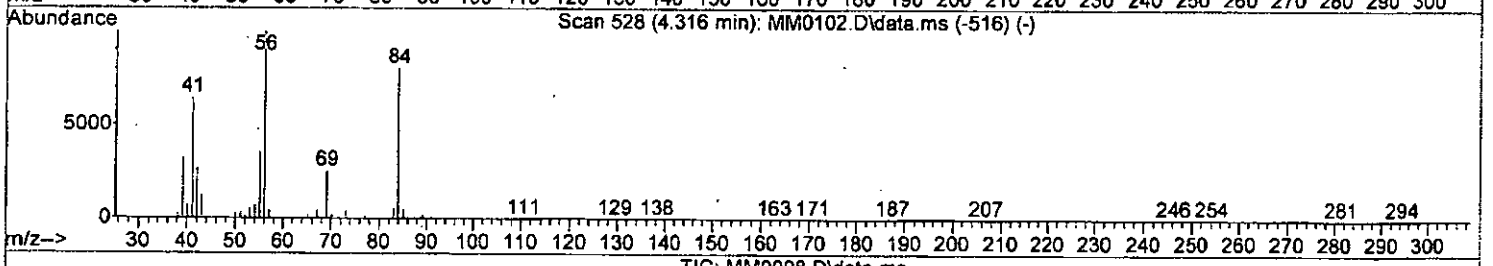
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0098.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:30 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0098.D\data.ms

(44) Cyclohexane (P)

4.316min (-0.000) 0.94 ppb

response 9065

Ion	Exp%	Act%
41.00	100	100
39.00	49.70	48.32
0.00	0.00	0.00
0.00	0.00	0.00

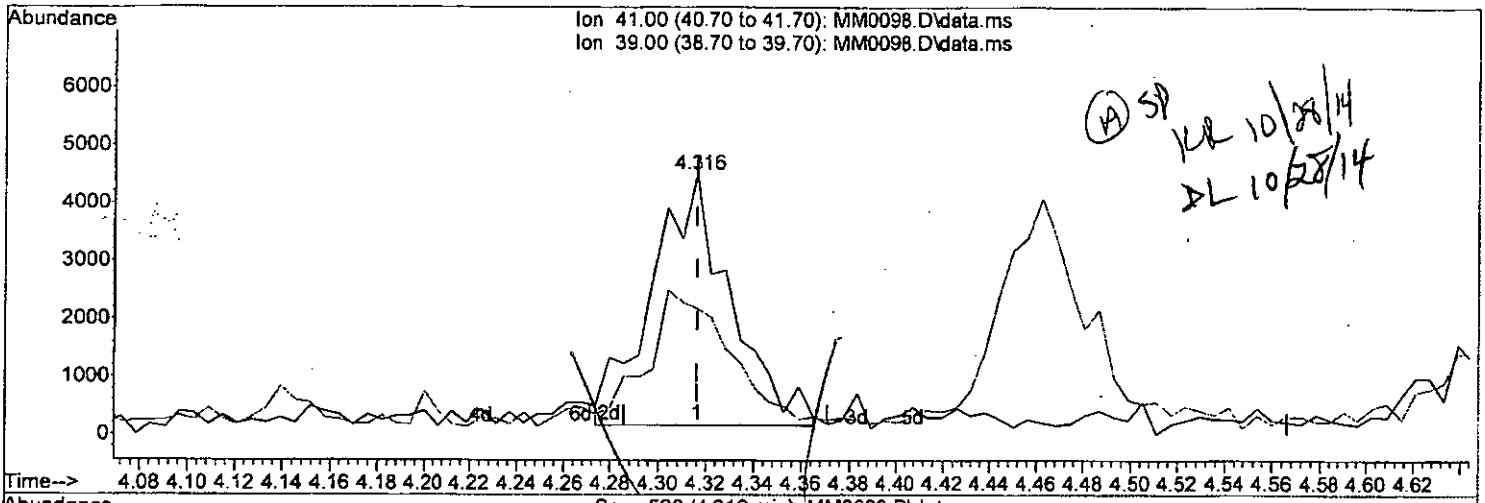
W102714.M Tue Oct 28 09:54:28 2014 Page: 1

00370

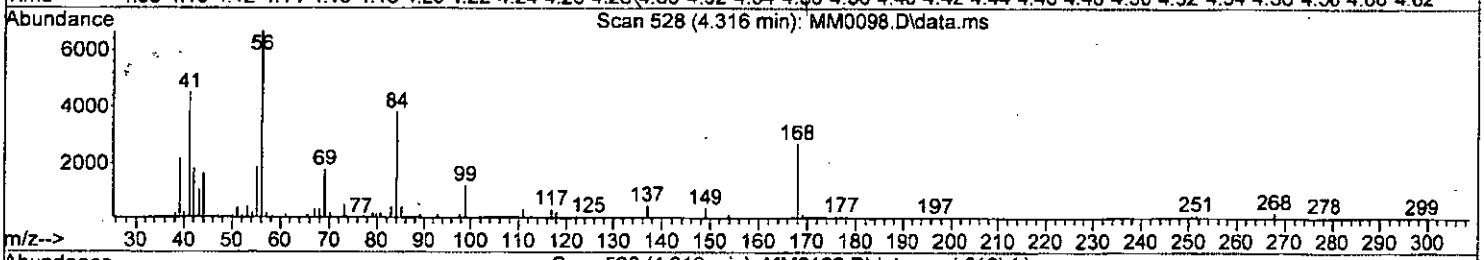
Quantitation Report (Qedit)

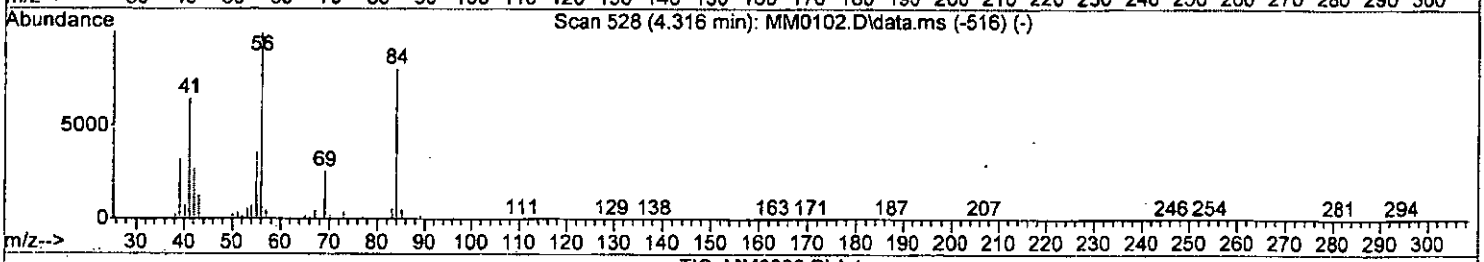
Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0098.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:30 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



(A) SP KL 10/28/14 DL 10/28/14





TIC: MM0098.D\data.ms

(44) Cyclohexane (P)

4.316min (-0.000) 1.03 ppb m

response 9960

Ion	Exp%	Act%
41.00	100	100
39.00	49.70	48.32
0.00	0.00	0.00
0.00	0.00	0.00

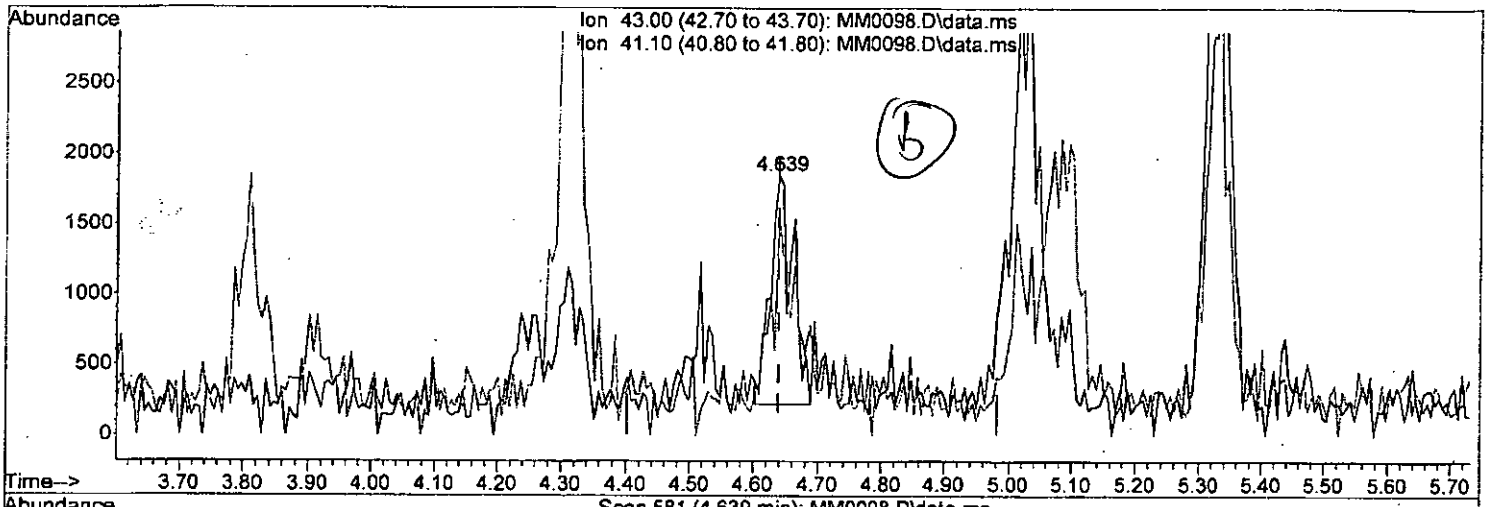
W102714.M Tue Oct 28 09:55:05 2014 Page: 1

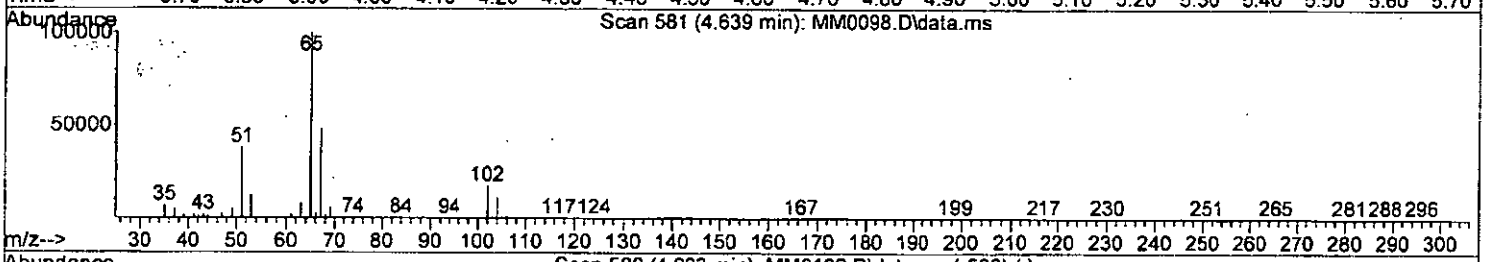
00371

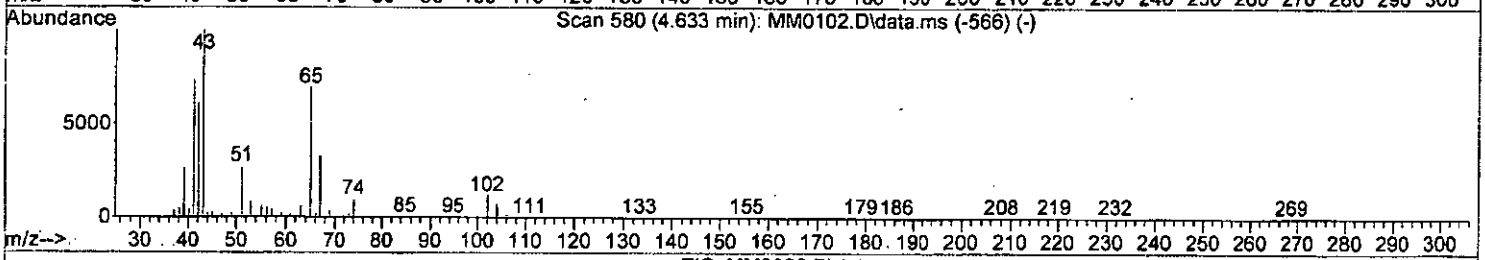
Quantitation Report (Qedit)

```
Sample     : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0098.D
Misc       : 8260 WATER ICAL
Acq On     : 27 Oct 2014    4:45 pm
Operator   : K.Ruest
InstName   : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:30 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration
```







TIC: MM0098.D\data.ms

(51) Iso-Butyl Alcohol

4.639min (+0.000) 15.10 ppb

response 3885

Ion	Exp%	Act%
43.00	100	100
41.10	73.90	84.01
0.00	0.00	0.00
0.00	0.00	0.00

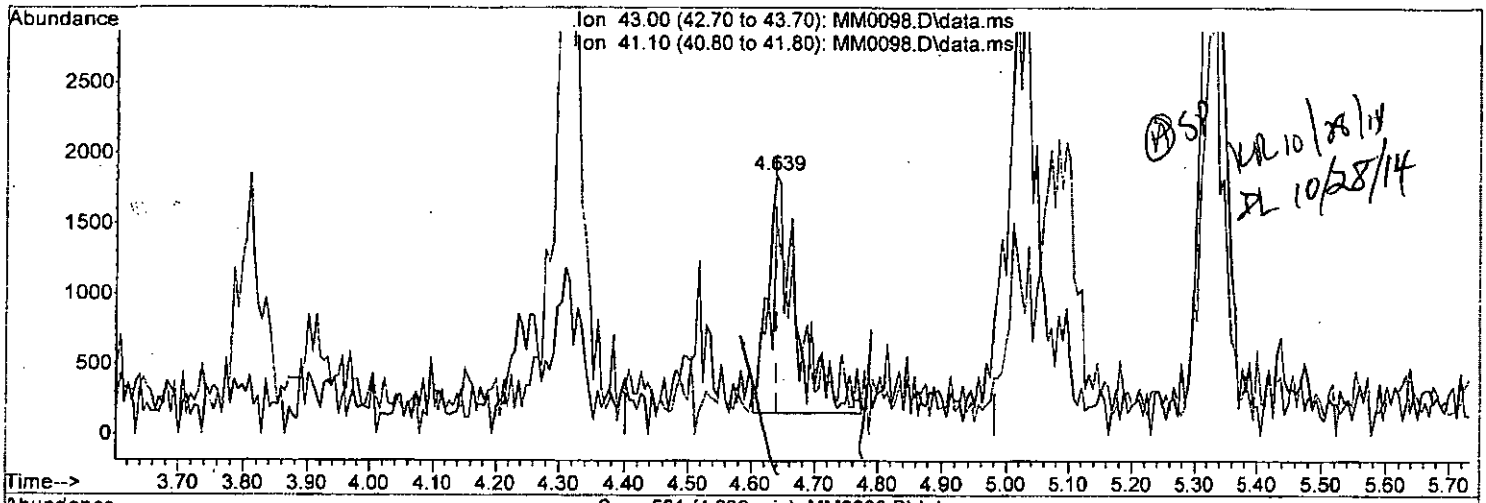
W102714.M Tue Oct 28 09:55:20 2014 Page: 1

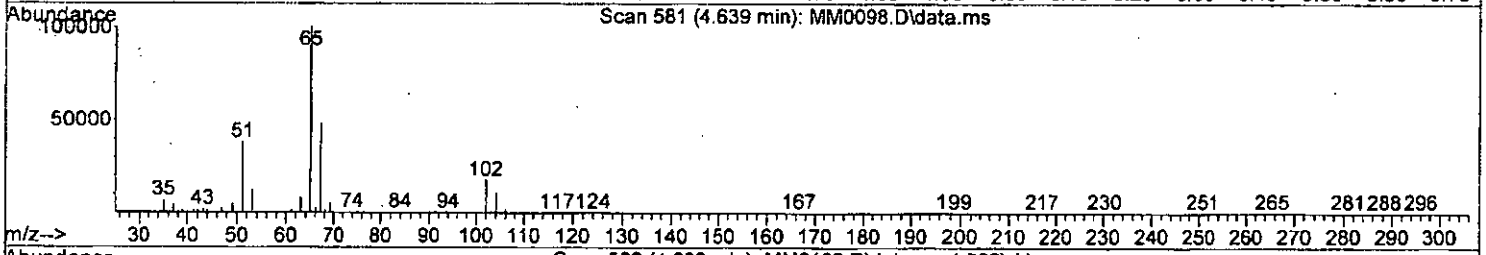
00372

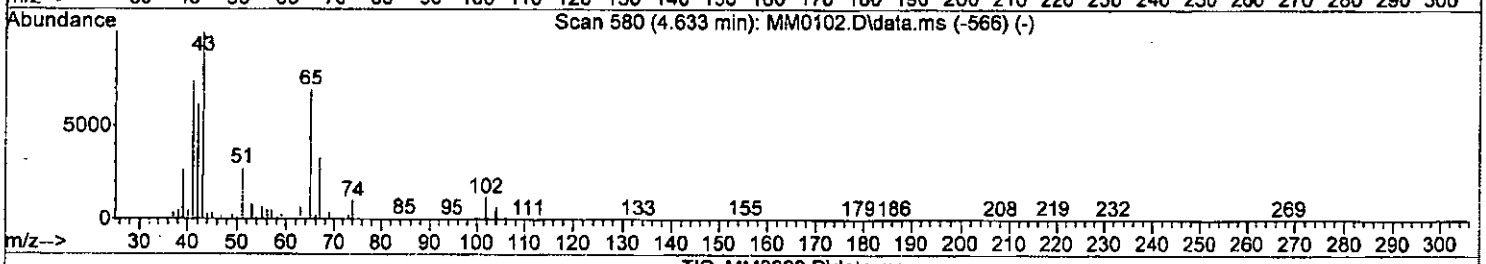
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0098.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:30 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0098.D\data.ms

(51) Iso-Butyl Alcohol

4.639min (+0.000) 20.52 ppb m

response 5279

Ion	Exp%	Act%
43.00	100	100
41.10	73.90	84.01
0.00	0.00	0.00
0.00	0.00	0.00

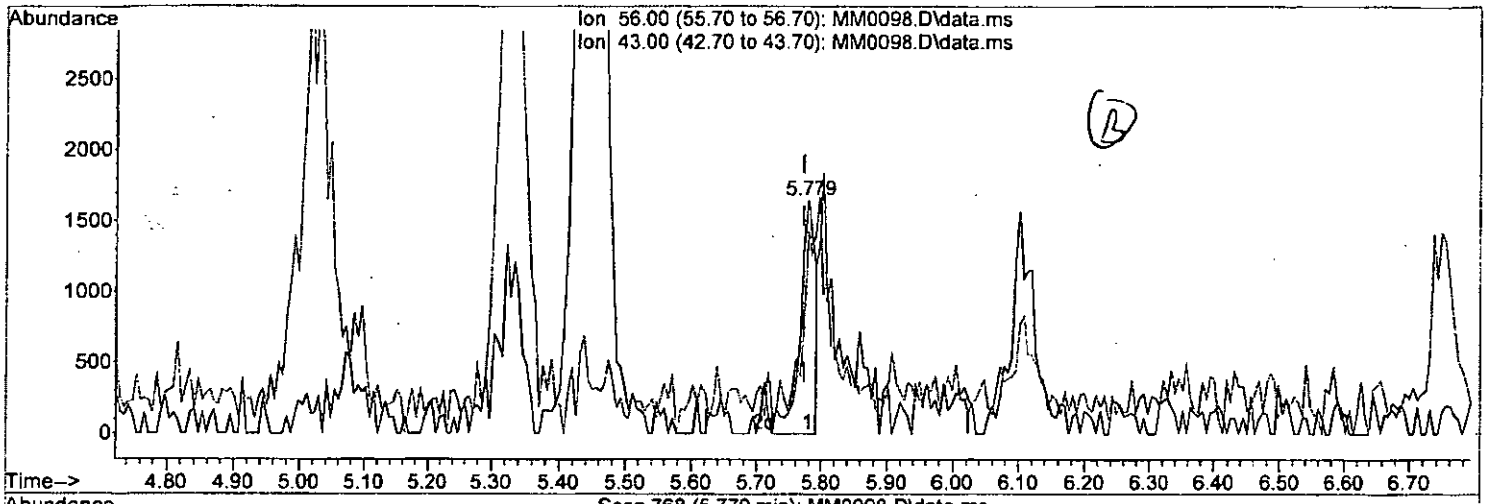
W102714.M Tue Oct 28 09:55:41 2014 Page: 1

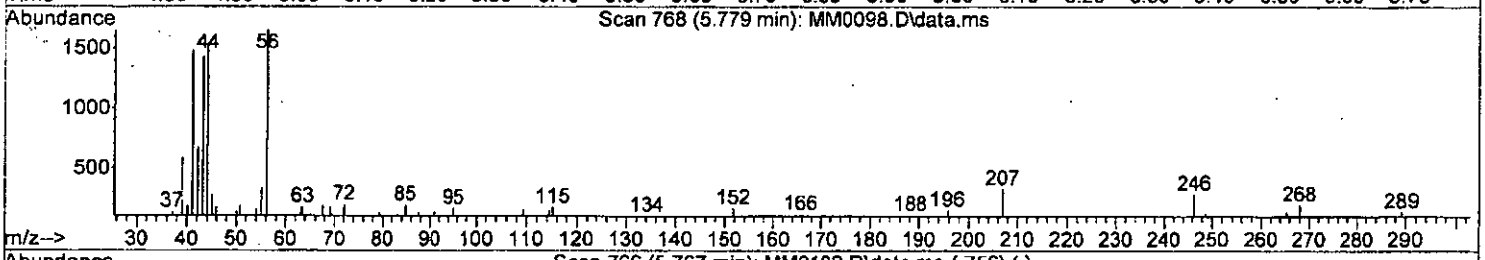
00373

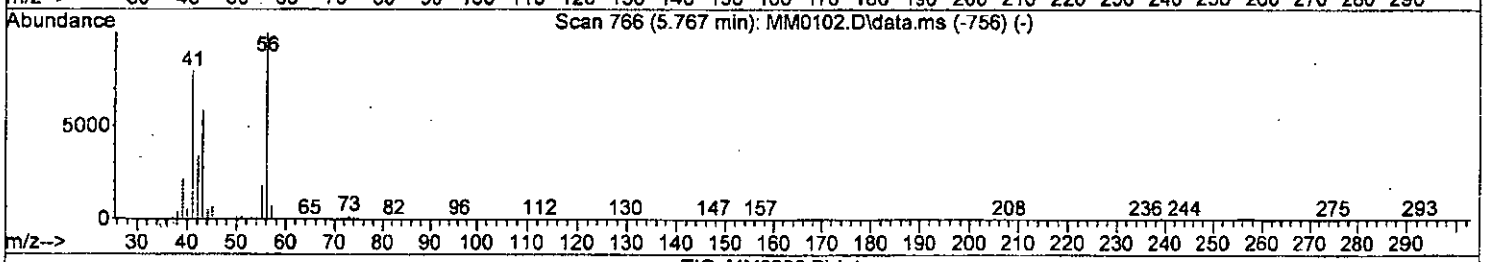
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0098.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:30 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0098.D\data.ms

(53) 1-Butanol

5.779min (+0.006) 16.21 ppb

response 2697

Ion	Exp%	Act%
56.00	100	100
43.00	56.20	151.98#
0.00	0.00	0.00
0.00	0.00	0.00

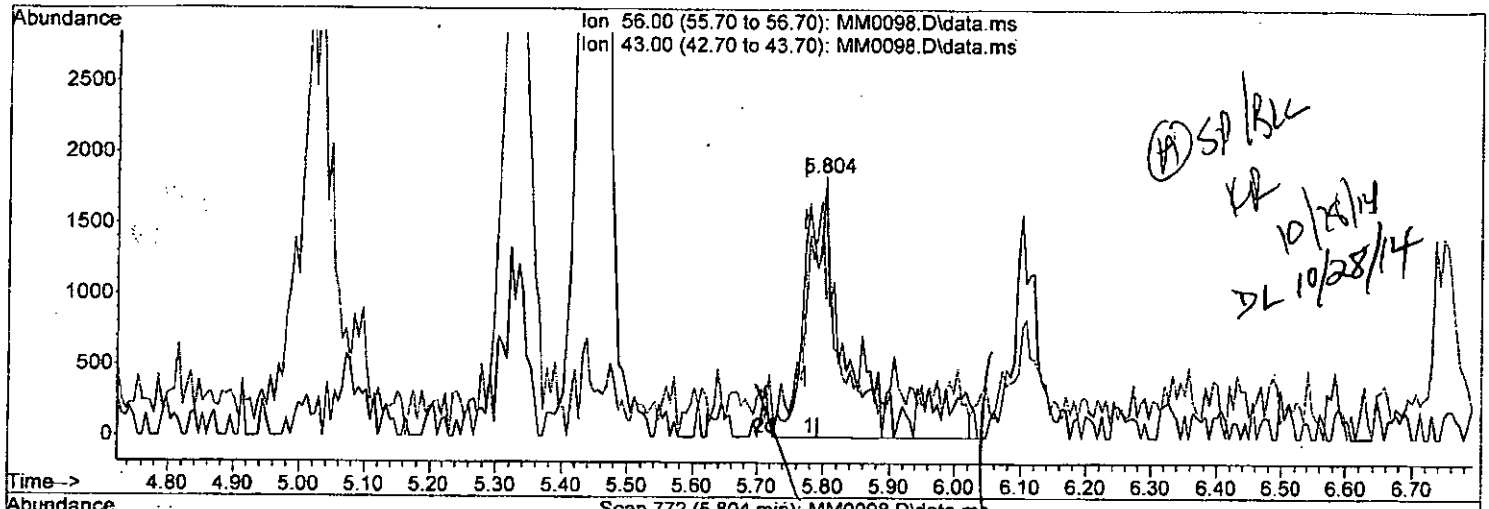
W102714.M Tue Oct 28 09:55:47 2014 Page: 1

00374

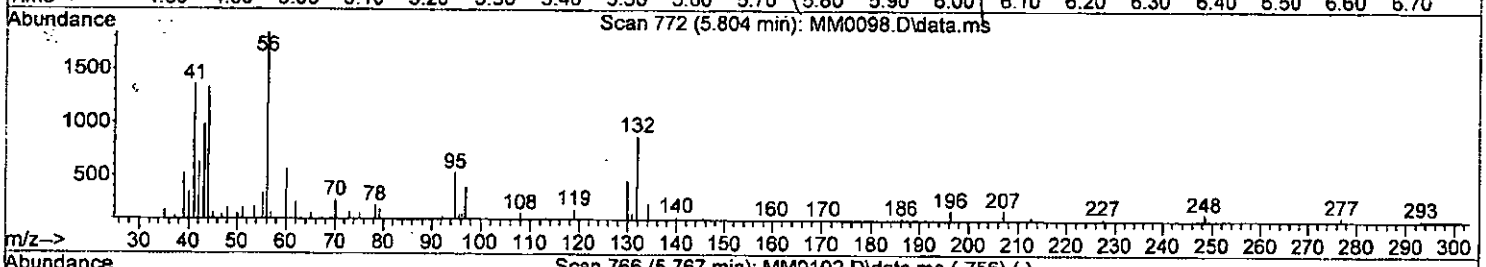
Quantitation Report (Qedit)

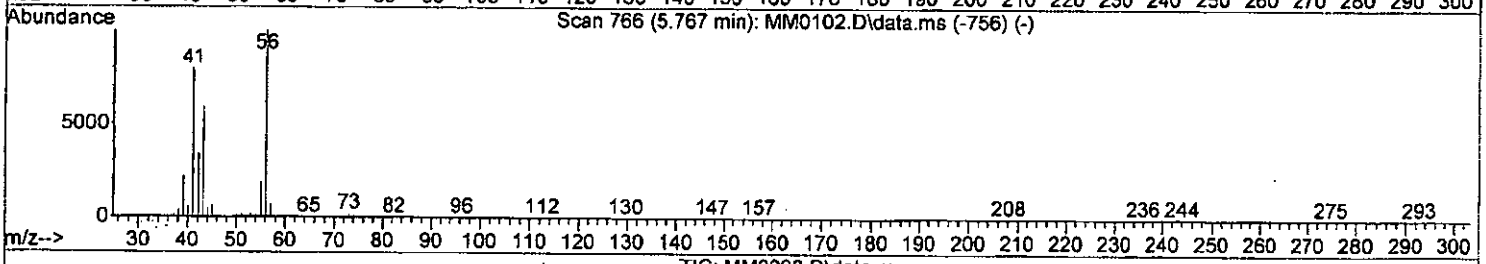
Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0098.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:30 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



(49) SP/BLC KP 10/28/14 DL 10/28/14





TIC: MM0098.D\data.ms

(53) 1-Butanol

5.804min (+0.031) 50.41 ppb m

response 8386

Ion	Exp%	Act%
56.00	100	100
43.00	56.20	48.88
0.00	0.00	0.00
0.00	0.00	0.00

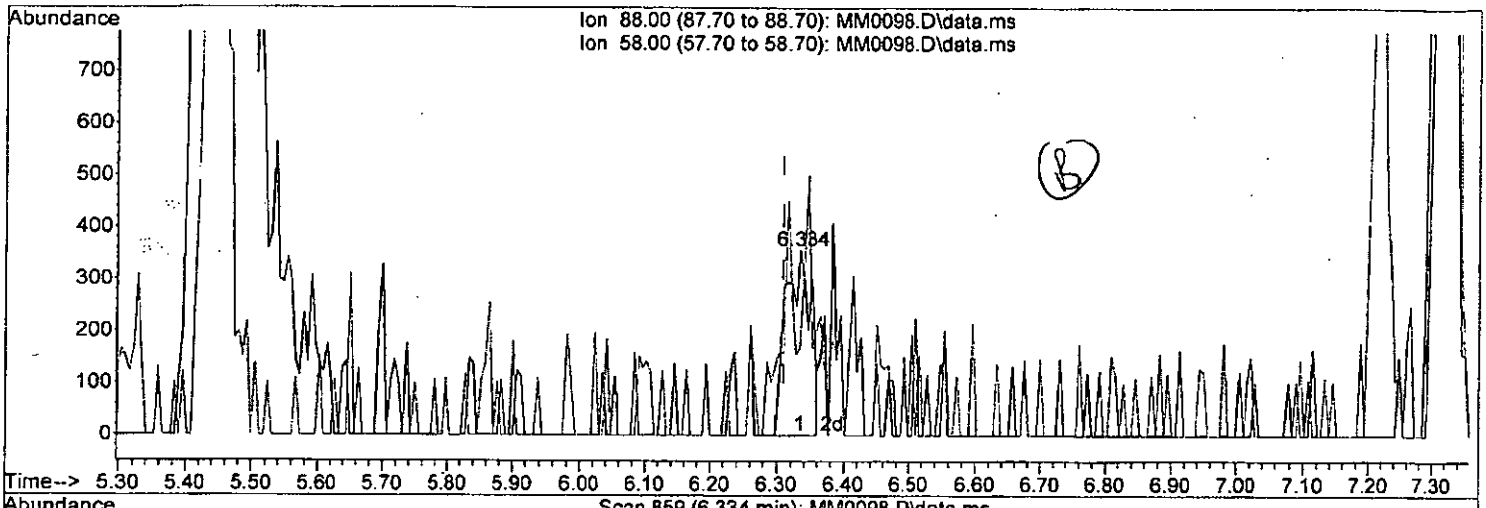
W102714.M Tue Oct 28 09:55:57 2014 Page: 1

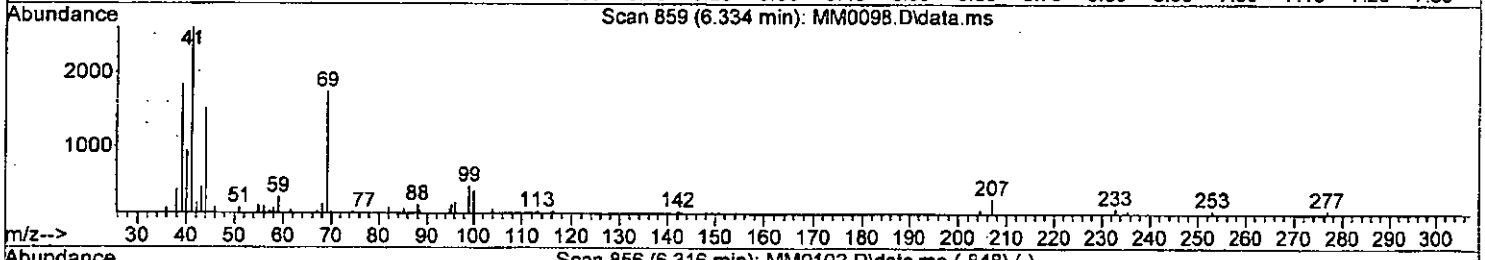
00375

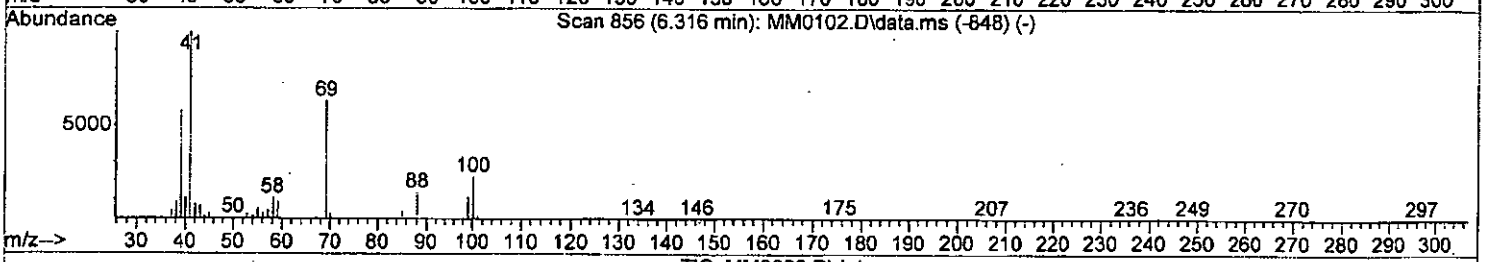
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0098.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:30 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0098.D\data.ms

(58) 1,4-Dioxane

6.334min (+0.025) 13.88 ppb

response 919

Ion	Exp%	Act%
88.00	100	100
58.00	77.40	47.61#
0.00	0.00	0.00
0.00	0.00	0.00

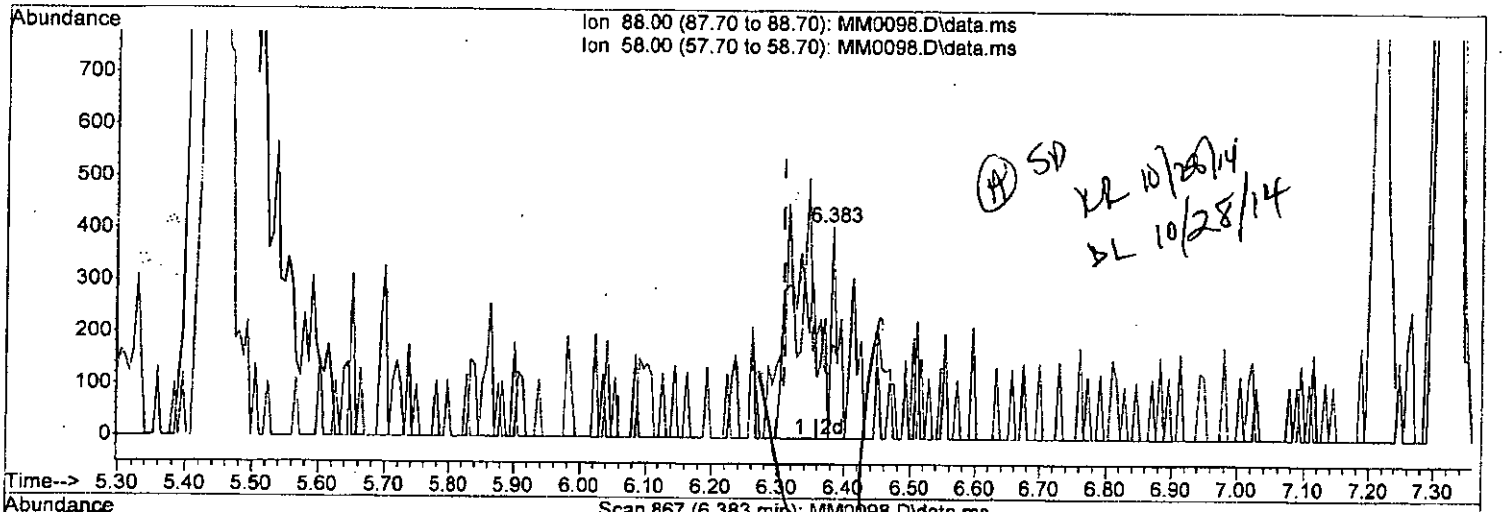
W102714.M Tue Oct 28 09:56:04 2014 Page: 1

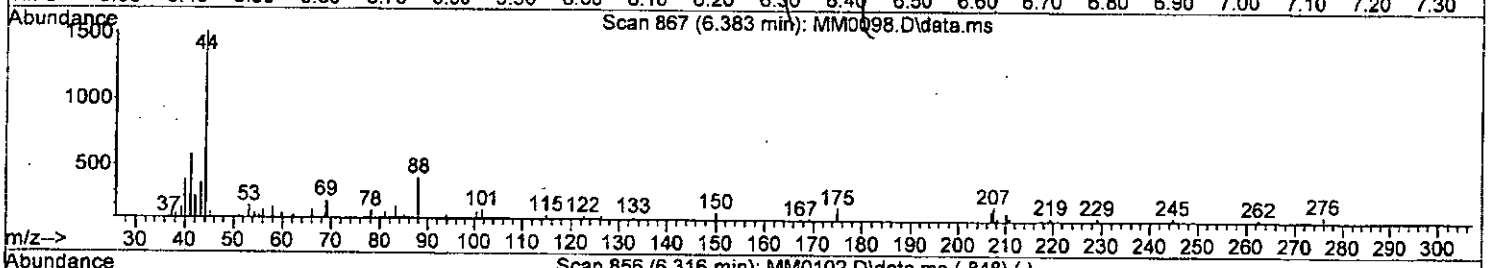
00376

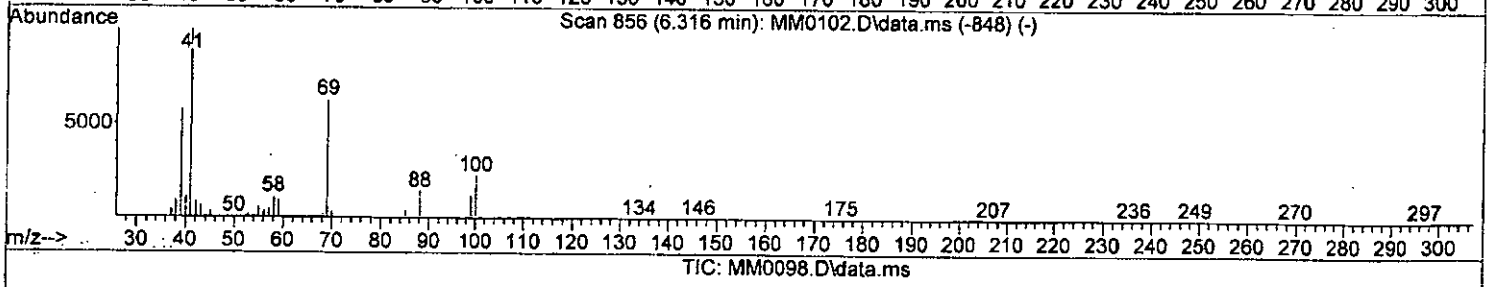
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0098.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:30 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0098.D\data.ms

(58) 1,4-Dioxane

6.383min (+0.074) 24.42 ppb m

response 1617

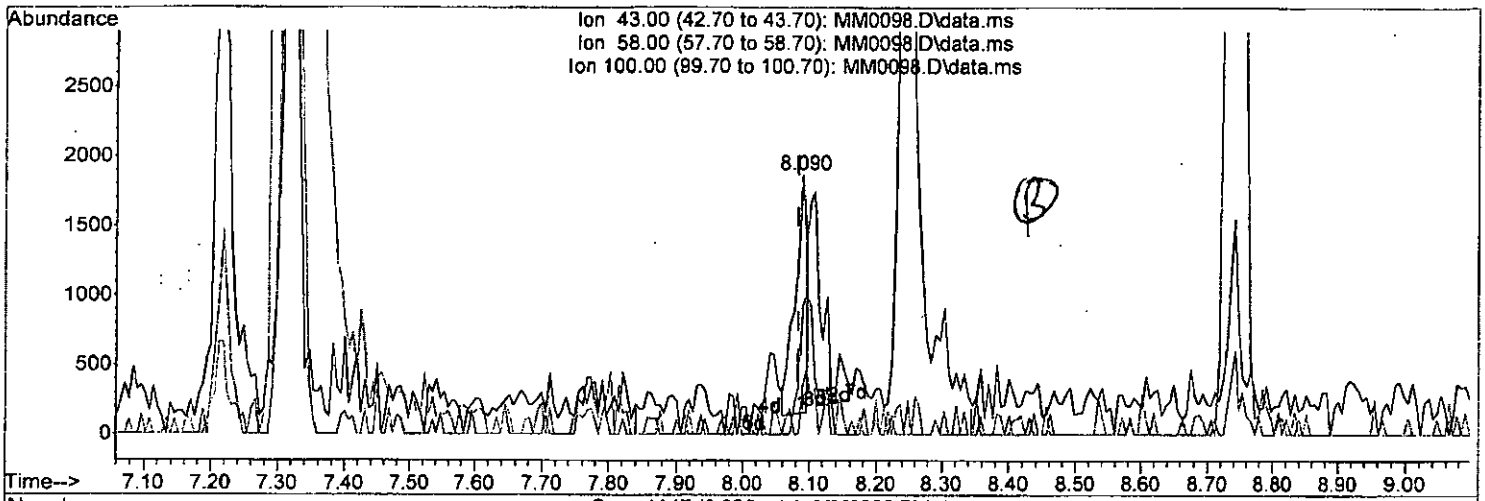
Ion	Exp%	Act%
88.00	100	100
58.00	77.40	44.23#
0.00	0.00	0.00
0.00	0.00	0.00

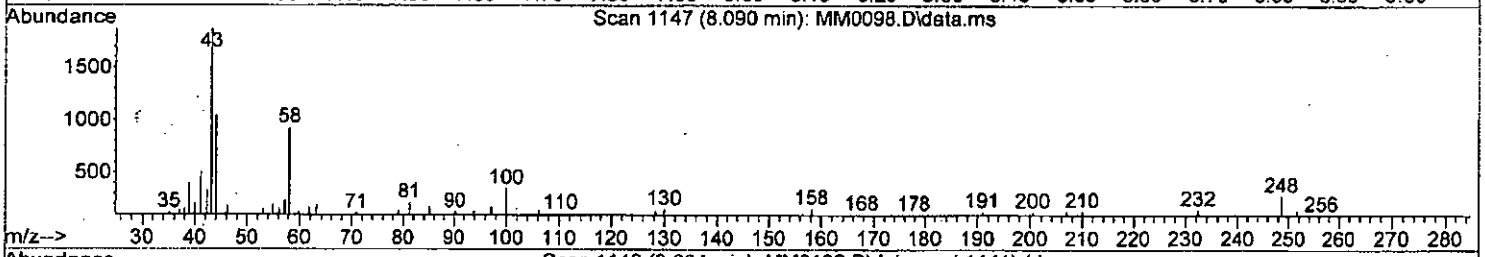
W102714.M Tue Oct 28 09:56:21 2014 Page: 1

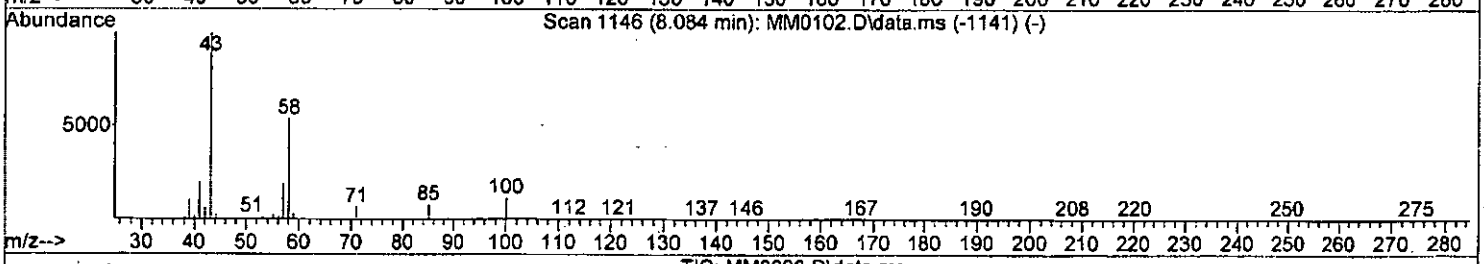
00377

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0098.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:30 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0098.D\data.ms

(73) 2-Hexanone (P)

8.090min (+0.006) 0.52 ppb

response 2113

Ion	Exp%	Act%
43.00	100	100
58.00	53.40	49.65
100.00	11.20	18.75
0.00	0.00	0.00

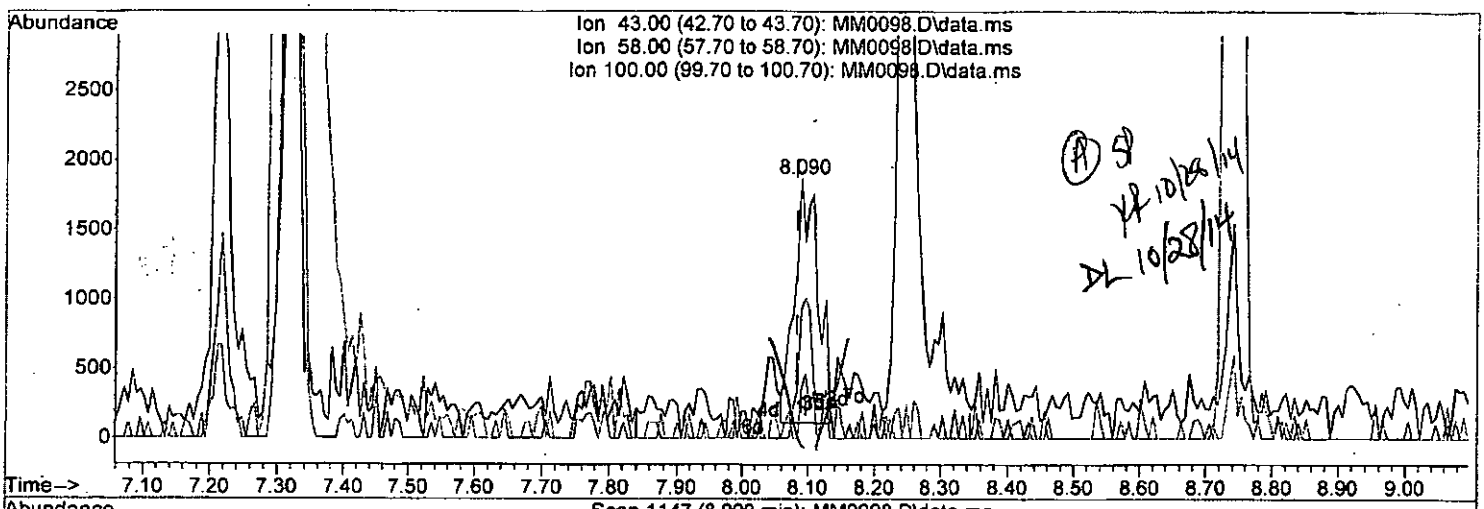
W102714.M Tue Oct 28 09:56:40 2014 Page: 1

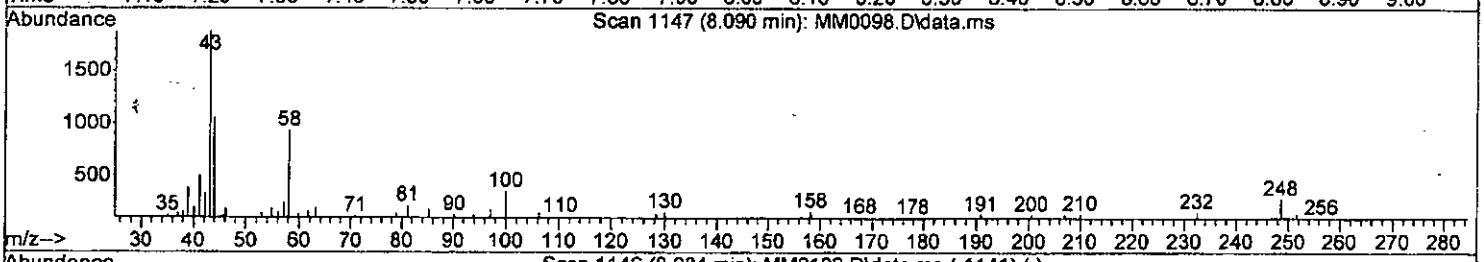
00378

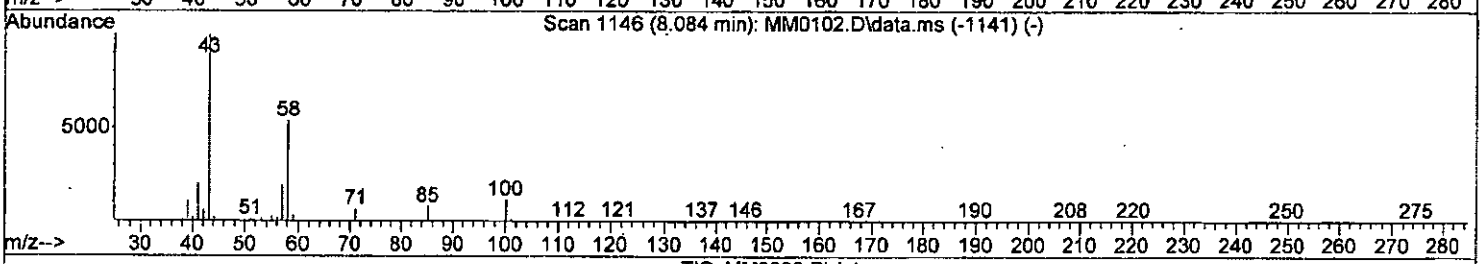
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0098.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:30 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0098.D\data.ms

(73) 2-Hexanone (P)

8.090min (+0.006) 1.05 ppb m

response 4246

Ion	Exp%	Act%
43.00	100	100
58.00	53.40	49.65
100.00	11.20	18.75
0.00	0.00	0.00

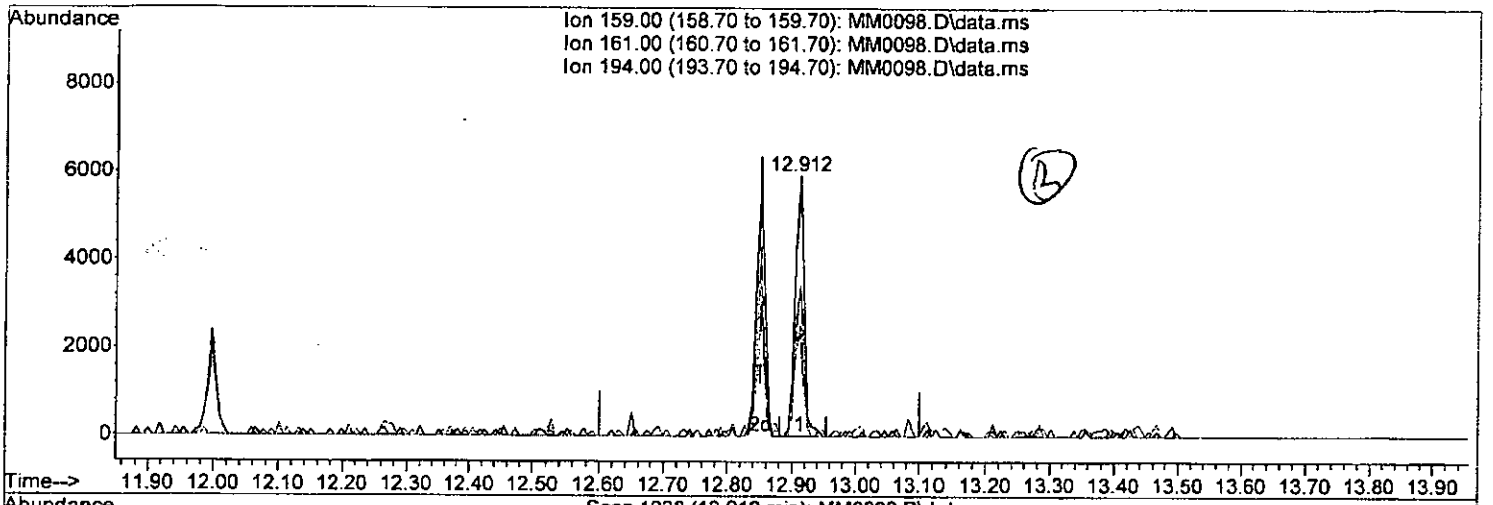
W102714.M Tue Oct 28 09:56:48 2014 Page: 1

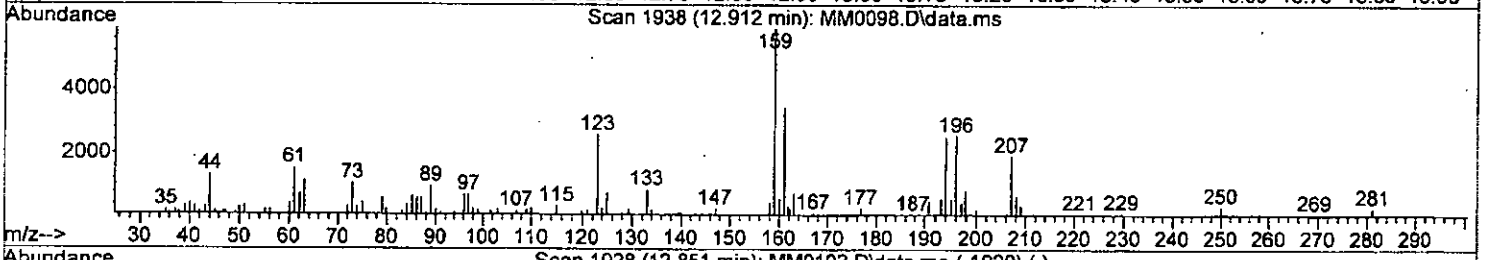
00379

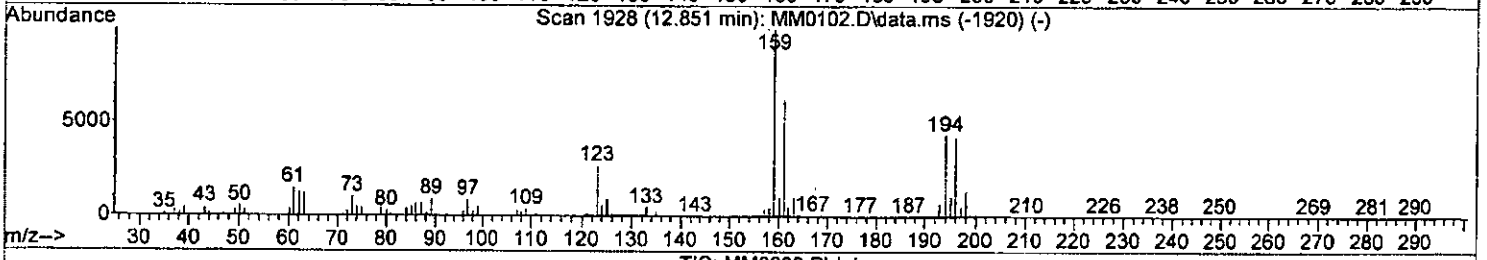
Quantitation Report (Qedit)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0098.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:30 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0098.D\data.ms

(119) 2,4,5-Trichlorotolene

12.912min (+0.061) 1.05 ppb

response 5666

Ion	Exp%	Act%
159.00	100	100
161.00	62.10	58.05
194.00	43.70	42.41
0.00	0.00	0.00

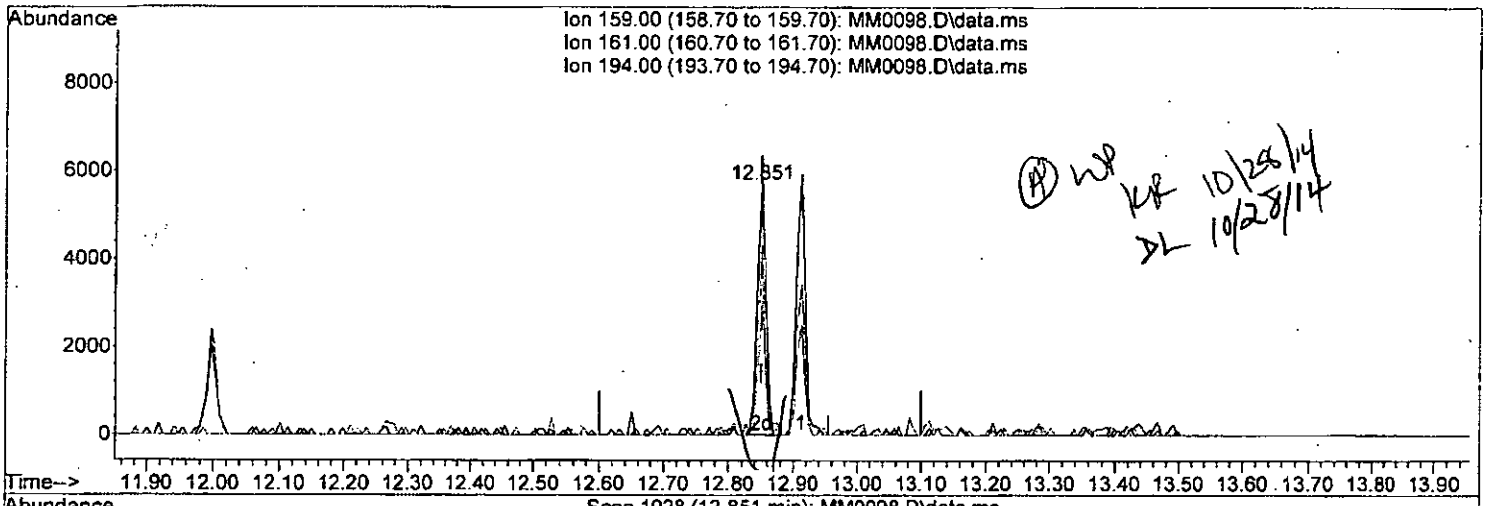
W102714.M Tue Oct 28 09:57:14 2014 Page: 1

00380

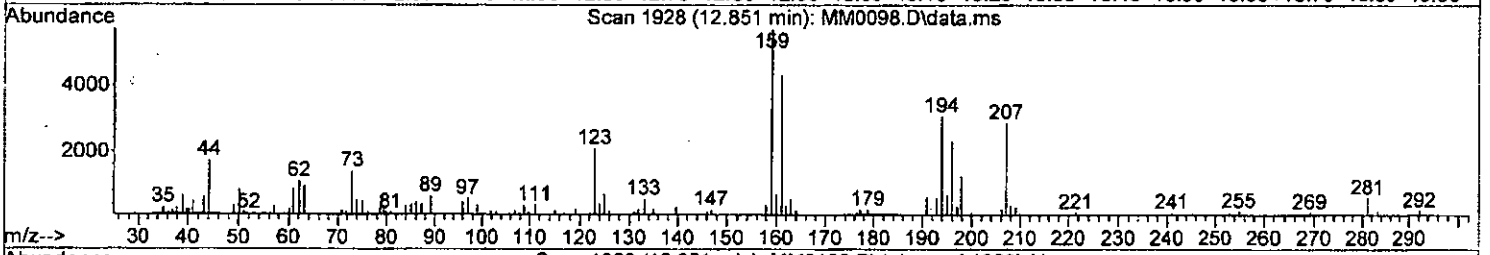
Quantitation Report (Qedit)

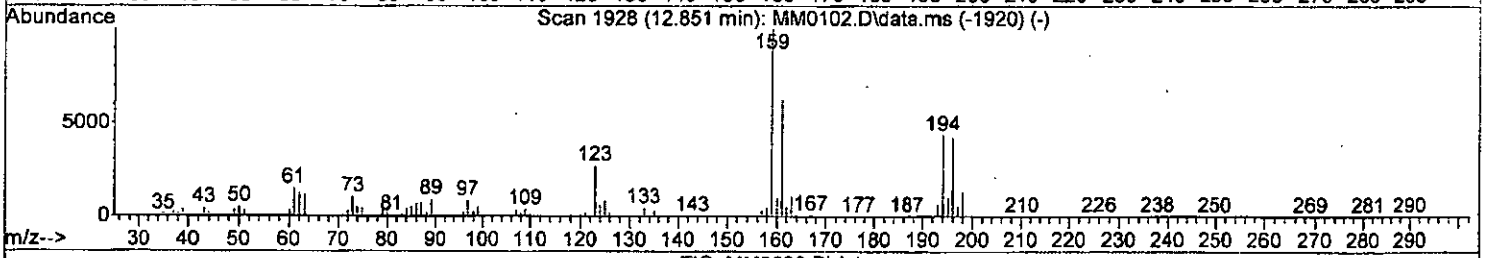
Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0098.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:30 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



WP KF 10/28/14 DL 10/28/14





TIC: MM0098.D\data.ms

(119) 2,4,5-Trichlorotolene

12.851min (-0.000) 0.97 ppb m

response 5230

Ion	Exp%	Act%
159.00	100	100
161.00	62.10	75.76#
194.00	43.70	53.68#
0.00	0.00	0.00

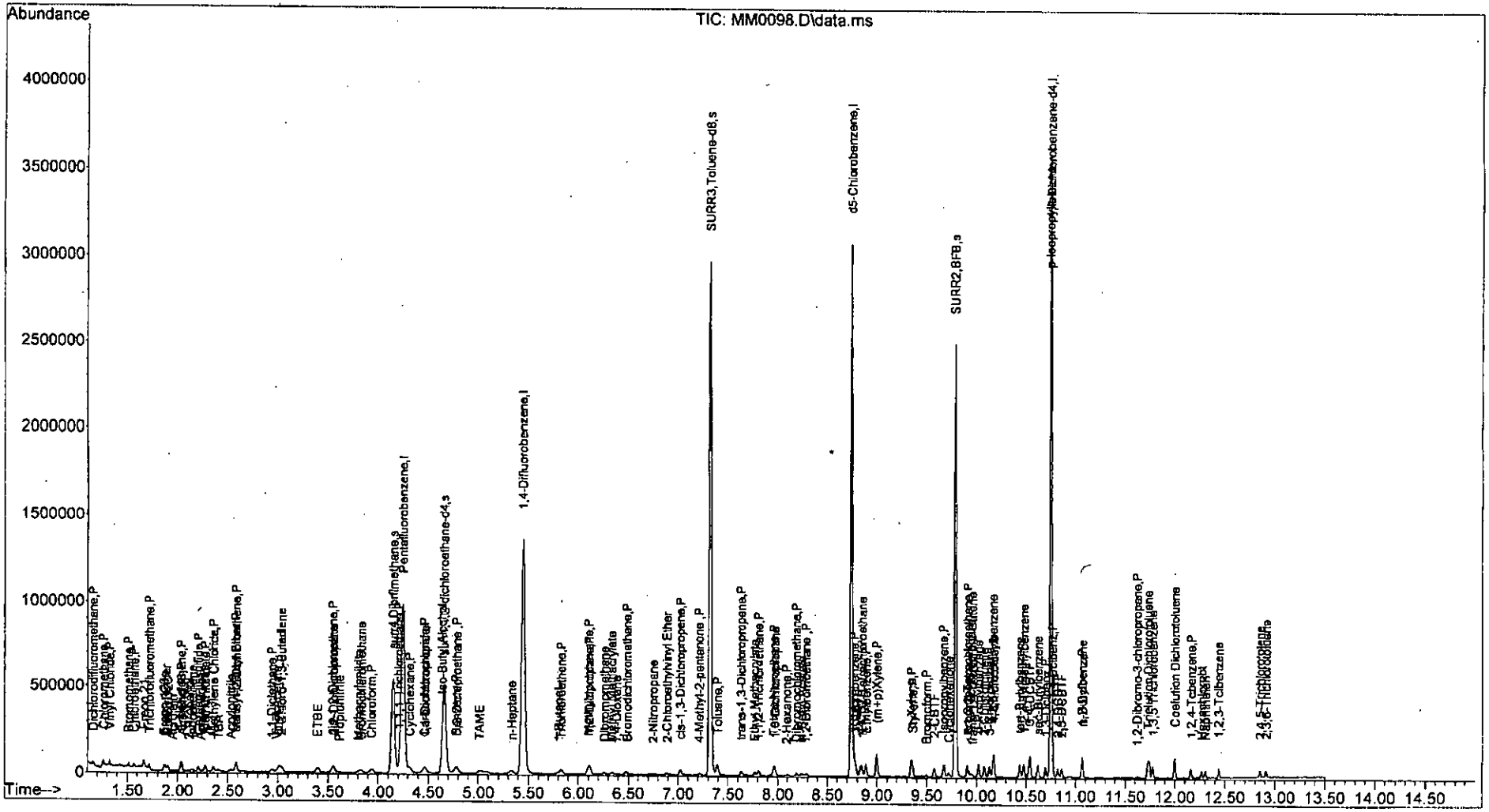
W102714.M Tue Oct 28 09:57:19 2014 Page: 1

00381

Quantitation Report (QT Reviewed)

Sample : 1.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0098.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 4:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:57:15 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



Z8500

W102714.M Tue Oct 28 09:57:37 2014

Page: 4

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:12:02 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	870593	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1310493	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1222188	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	650686	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	473075	61.99	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 123.98%#				
48) surr1,1,2-dichloroetha...	4.658	65	581229	62.55	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 125.10%#				
65) SURR3,Toluene-d8	7.322	98	1990755	61.96	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 123.92%#				
70) SURR2,BFB	9.785	95	761099	61.05	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 122.10%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	16186	1.97	ppb		94
3) Chloromethane	1.262	50	21819	1.94	ppb		99
4) Vinyl Chloride	1.323	62	22715	1.90	ppb		99
5) Bromomethane	1.512	94	10018	1.74	ppb		86
6) Chloroethane	1.567	64	14461	1.95	ppb		88
7) Freon 21	1.664	67	39621	2.14	ppb		97
8) Trichlorofluoromethane	1.719	101	28605	2.02	ppb		97
9) Diethyl Ether	1.878	59	12302	1.90	ppb		93
10) Freon 123a	1.865	67	21806	2.14	ppb		99
11) Freon 123	1.902	83	21963	2.03	ppb		94
12) Acrolein	1.957	56	3642m	10.28	ppb		
13) 1,1-Diclethene	2.042	96	14389	1.91	ppb		98
14) Freon 113	2.036	101	14857	1.93	ppb		88
15) Acetone	2.048	43	3817m	2.05	ppb		
16) 2-Propanol	2.115	45	14120	38.61	ppb		81
17) Iodomethane	2.146	142	20019	1.84	ppb		95
18) Carbon Disulfide	2.207	76	49159	1.94	ppb		99
19) Acetonitrile	2.225	40	3140	10.71	ppb	#	81
20) Allyl Chloride	2.280	76	8486	2.00	ppb		92
21) Methyl Acetate	2.274	43	8040	1.89	ppb		88
22) Methylene Chloride	2.353	84	16405	2.00	ppb		96
23) TBA	2.408	59	24535	40.53	ppb		96
24) Acrylonitrile	2.524	53	17742	8.96	ppb		86
25) Methyl-t-Butyl Ether	2.579	73	39970	1.90	ppb		99
26) trans-1,2-Dichloroethene	2.585	96	15914	1.96	ppb		92
28) 1,1-Diclethane	2.938	63	30224	2.01	ppb		96
29) Vinyl Acetate	2.981	86	2360	1.72	ppb	#	71
30) DIPE	3.012	45	62520	2.06	ppb		88
31) 2-Chloro-1,3-Butadiene	3.042	53	26378	1.90	ppb		97
32) ETBE	3.402	59	53176	2.03	ppb		89
33) 2,2-Dichloropropane	3.554	77	25131	1.89	ppb		92
34) cis-1,2-Dichloroethene	3.548	96	17640	2.00	ppb		88
35) 2-Butanone	3.554	43	5154	2.00	ppb		91
36) Propionitrile	3.597	54	7010	9.85	ppb		81
37) Bromochloromethane	3.835	130	9561	1.92	ppb	#	89

KR 10/28/14

W102714.M Tue Oct 28 10:14:10 2014 Page: 1

00383

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:12:02 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
38) Methacrylonitrile	3.804	67	5013m	2.28 ppb		
39) Tetrahydrofuran	3.914	42	3734	2.11 ppb		94
40) Chloroform	3.938	83	30918	2.04 ppb		97
41) 1,1,1-Trichloroethane	4.206	97	27515	2.03 ppb	#	38
42) TAME	5.017	73	43658	1.98 ppb		98
44) Cyclohexane	4.304	41	19281	2.00 ppb		93
46) Carbontetrachloride	4.469	121	6555m	1.92 ppb		
47) 1,1-Dichloropropene	4.462	75	22710	1.98 ppb		94
49) Benzene	4.779	78	67129	2.00 ppb		95
50) 1,2-Dichloroethane	4.786	62	21952	1.94 ppb		93
51) Iso-Butyl Alcohol	4.639	43	8544	33.24 ppb		90
52) n-Heptane	5.334	43	20156	1.86 ppb		88
53) 1-Butanol	5.773	56	16346m	98.32 ppb		
54) Trichloroethene	5.828	130	16457	1.87 ppb		94
55) Methylcyclohexane	6.102	55	22475	2.00 ppb		93
56) 1,2-Diclpropane	6.109	63	17716	2.01 ppb		91
57) Dibromomethane	6.261	93	8398	2.02 ppb		94
58) 1,4-Dioxane	6.310	88	3059m	46.24 ppb		
59) Methyl Methacrylate	6.334	69	7414	1.83 ppb		94
60) Bromodichloromethane	6.474	83	19862	1.91 ppb		97
61) 2-Nitropropane	6.749	41	5394m	3.88 ppb		
62) 2-Chloroethylvinyl Ether	6.883	63	7670	1.87 ppb		90
63) cis-1,3-Dichloropropene	7.023	75	25035	1.93 ppb		95
64) 4-Methyl-2-pentanone	7.218	43	10800	1.80 ppb		86
66) Toluene	7.395	91	71185	1.97 ppb		94
67) trans-1,3-Dichloropropene	7.633	75	21271	1.92 ppb		93
68) Ethyl Methacrylate	7.767	69	15968	1.87 ppb		94
69) 1,1,2-Trichloroethane	7.809	97	11997	1.97 ppb		97
72) Tetrachloroethene	7.962	164	12824	1.82 ppb		91
73) 2-Hexanone	8.090	43	7803m	1.92 ppb		
74) 1,3-Dichloropropane	7.974	76	21073	1.92 ppb		91
75) Dibromochloromethane	8.193	129	12506	1.90 ppb		93
76) N-Butyl Acetate	8.242	43	20680m	1.98 ppb		
77) 1,2-Dibromoethane	8.285	107	10639	1.85 ppb		93
78) Chlorobenzene	8.767	112	45557	1.92 ppb		97
79) 3-CBTF	8.785	180	23916	1.84 ppb		98
80) 4-CBTF	8.840	180	22229	1.92 ppb		93
81) 1,1,1,2-Tetrachloroethane	8.846	131	14349	1.84 ppb		94
82) Ethylbenzene	8.888	106	23199	1.82 ppb	#	88
83) (m+p)Xylene	8.998	106	57409	3.72 ppb		93
84) o-Xylene	9.346	106	28116	1.81 ppb		95
85) Styrene	9.358	104	45407	1.77 ppb		98
87) Bromoform	9.492	173	5827	1.80 ppb		83
88) 2-CBTF	9.577	180	24049	2.10 ppb		91
89) Isopropylbenzene	9.669	105	69911	2.01 ppb		97
90) Cyclohexanone	9.724	55	15564	40.79 ppb		87
91) trans-1,4-Dichloro-2-B...	9.961	53	4291	2.06 ppb		79
92) 1,1,2,2-Tetrachloroethane	9.913	83	13930	2.06 ppb		92
93) Bromobenzene	9.913	156	18467	2.02 ppb	#	82
94) 1,2,3-Trichloropropane	9.943	110	3799	1.85 ppb	#	70
95) n-Propylbenzene	10.022	91	82972	2.06 ppb		99
96) 2-Chlorotoluene	10.083	91	48086	1.97 ppb		98

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:12:02 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

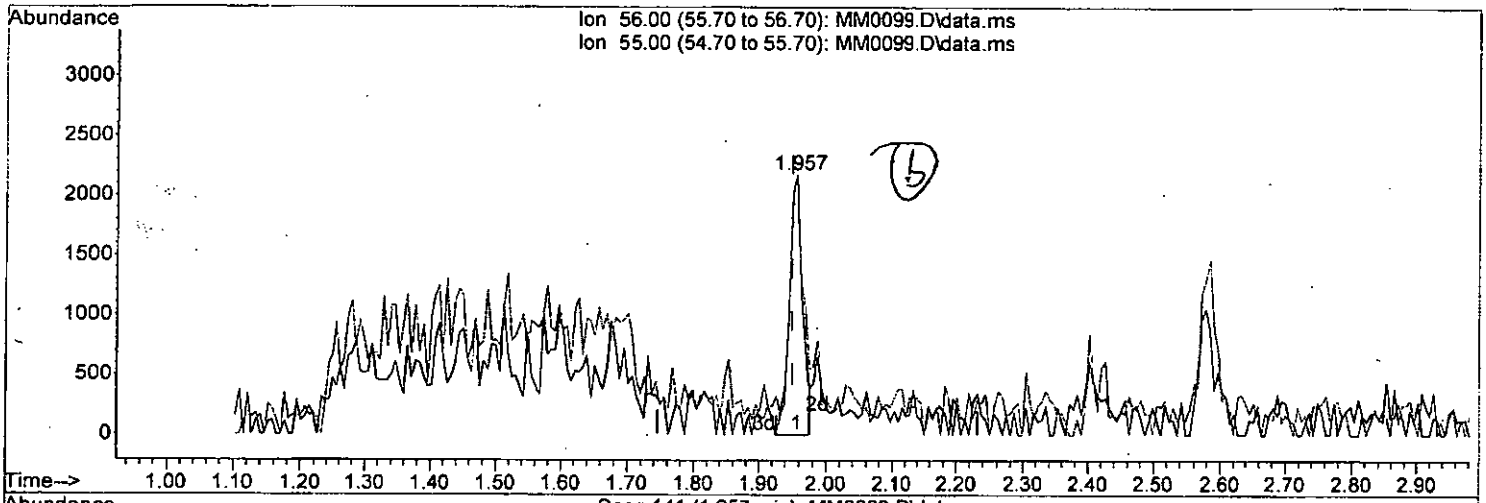
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
97)	3-Chlorotoluene	10.132	91	53165	2.05	ppb		92
98)	4-Chlorotoluene	10.175	91	61484	2.01	ppb		98
99)	1,3,5-Trimethylbenzene	10.169	105	59455	1.97	ppb		96
100)	tert-Butylbenzene	10.437	119	50717	2.09	ppb		98
101)	1,2,4-Trimethylbenzene	10.480	105	58155	1.97	ppb		98
102)	3,4-DCBTF	10.534	214	15396	1.78	ppb		98
103)	sec-Butylbenzene	10.620	105	69936	2.04	ppb		98
104)	p-Isopropyltoluene	10.742	119	60169	2.02	ppb		94
105)	1,3-Dclbenz	10.699	146	35161	2.01	ppb		96
106)	1,4-Dclbenz	10.766	146	35309	1.93	ppb		98
107)	2,4-DCBTF	10.821	214	14584	1.97	ppb		95
108)	2,5-DCBTF	10.864	214	15432	1.84	ppb		92
109)	n-Butylbenzene	11.065	91	50247	1.91	ppb		90
110)	1,2-Dclbenz	11.065	146	31074	1.89	ppb		96
111)	1,2-Dibromo-3-chloropr...	11.626	157	2139	1.88	ppb		92
112)	Trielution Dichlorotol...	11.729	125	80339	5.95	ppb		96
113)	1,3,5 Trichlorobenzene	11.778	180	23227	2.06	ppb		91
114)	Coelution Dichlorotoluene	11.998	125	56580	4.00	ppb		98
115)	1,2,4-Tcbenzene	12.156	180	19405	2.01	ppb		98
116)	Hexachlorobt	12.266	225	7422	1.95	ppb		96
117)	Naphthalen	12.302	128	35217	1.92	ppb		99
118)	1,2,3-Tclbenzene	12.437	180	15826	1.93	ppb		94
119)	2,4,5-Trichlorotolene	12.851	159	11423	2.06	ppb		89
120)	2,3,6-Trichlorotoluene	12.912	159	9239	1.80	ppb	#	86

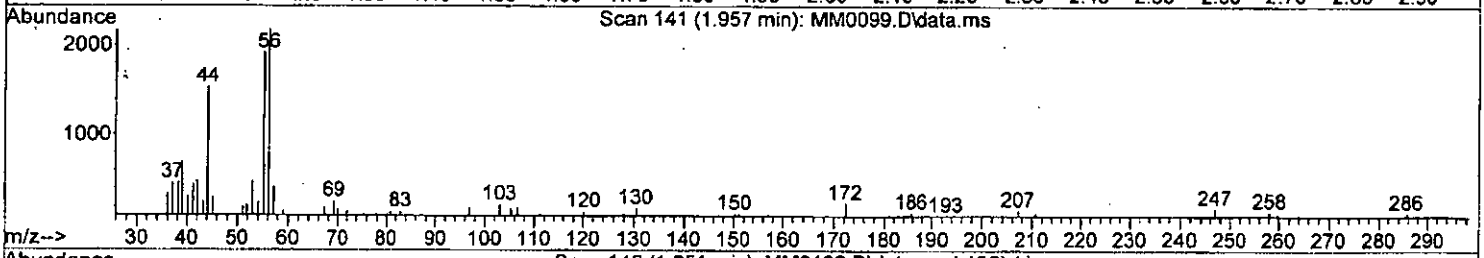
(#) = qualifier out of range (m) = manual integration (+) = signals summed

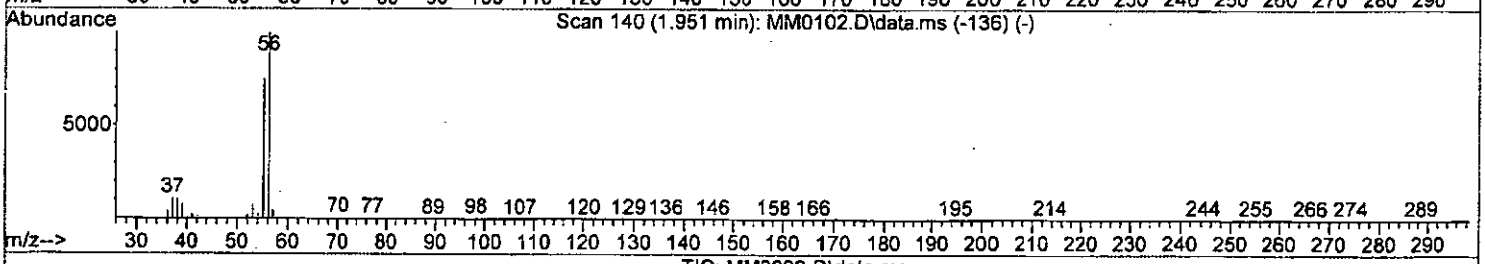
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:34 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0099.D\data.ms

(12) Acrolein

1.957min (+0.007) 8.14 ppb

response 2885

Ion	Exp%	Act%
56.00	100	100
55.00	75.70	88.09
0.00	0.00	0.00
0.00	0.00	0.00

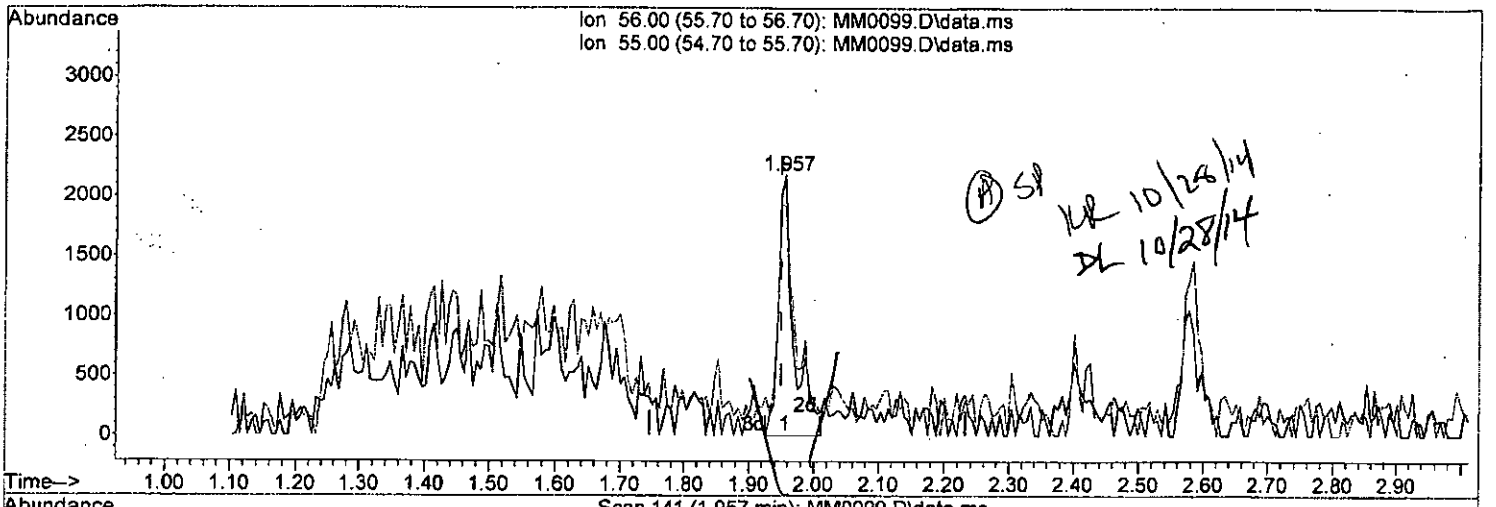
W102714.M Tue Oct 28 10:06:21 2014 Page: 1

00386

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:34 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



TIC: MM0099.D\data.ms

(12) Acrolein

1.957min (+0.007) 10.28 ppb m

response 3642

Ion	Exp%	Act%
56.00	100	100
55.00	75.70	88.09
0.00	0.00	0.00
0.00	0.00	0.00

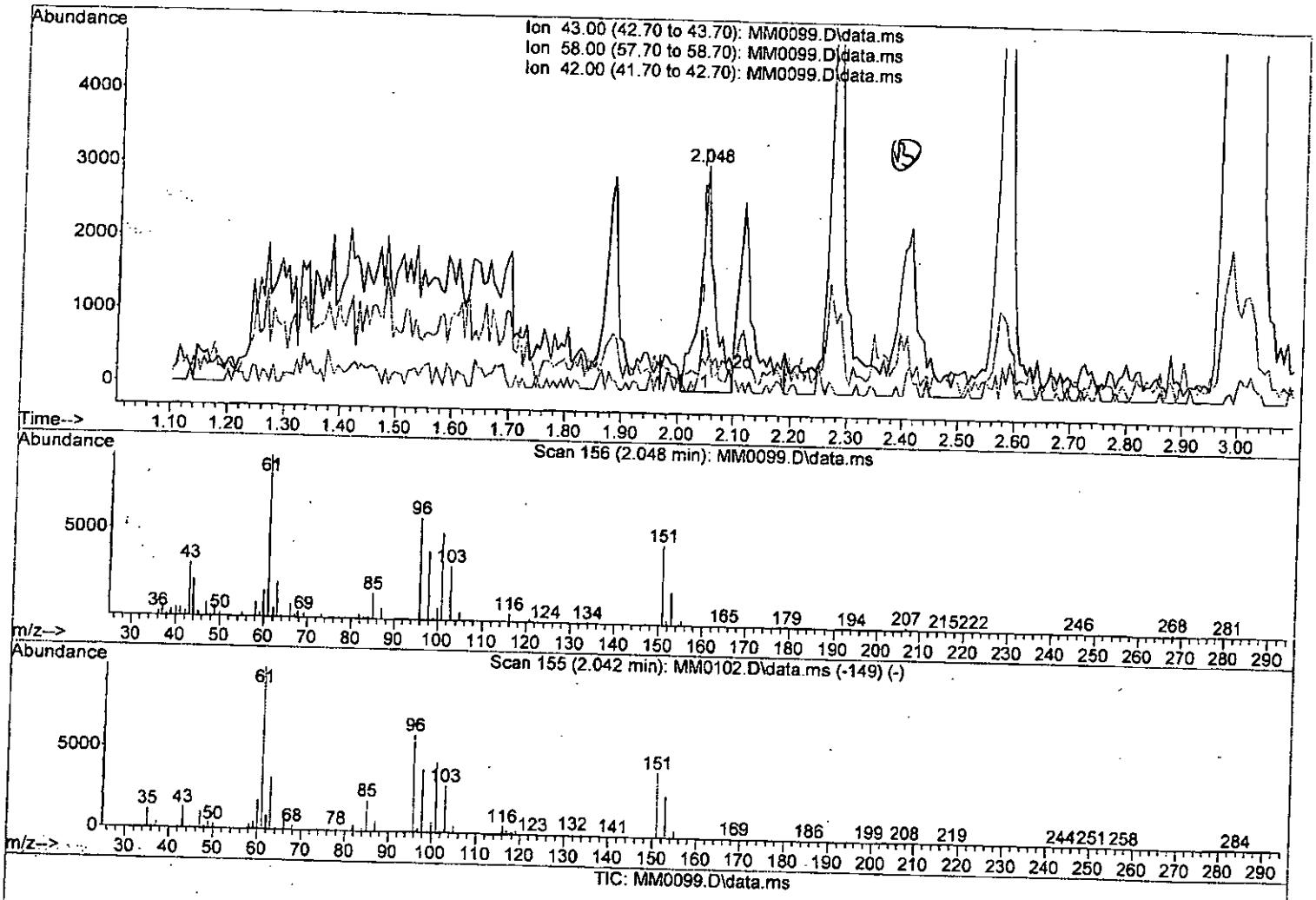
W102714.M Tue Oct 28 10:06:52 2014 Page: 1

00387

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:34 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



(15) Acetone (P)

2.048min (+0.006) 3.04 ppb

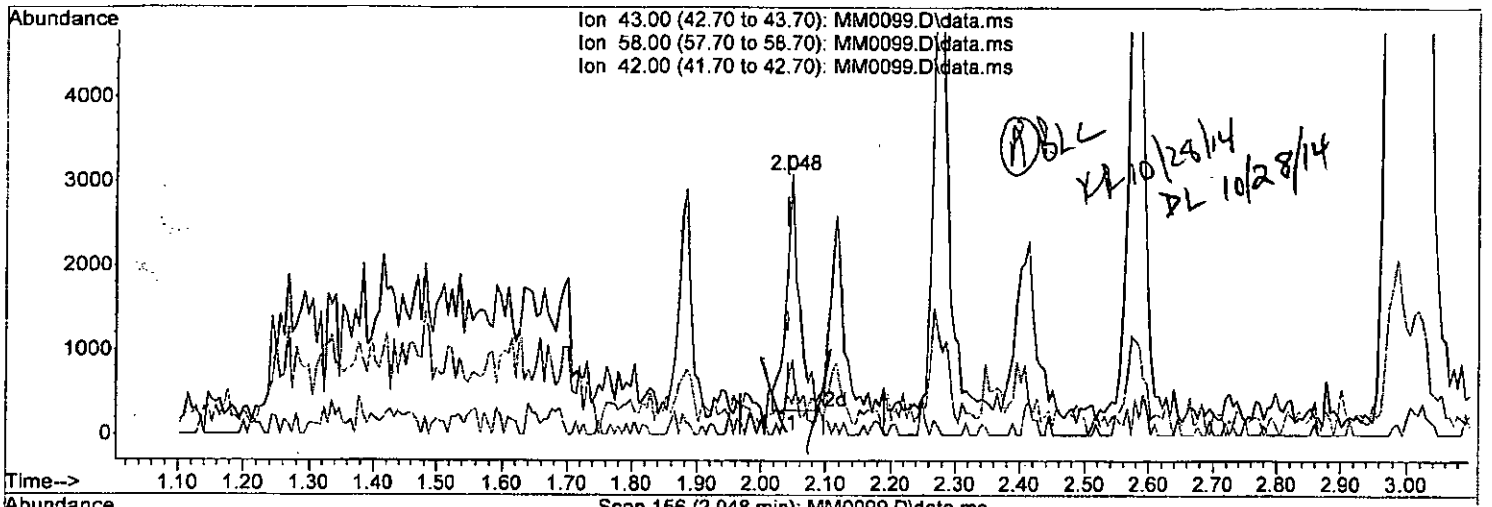
response 5657

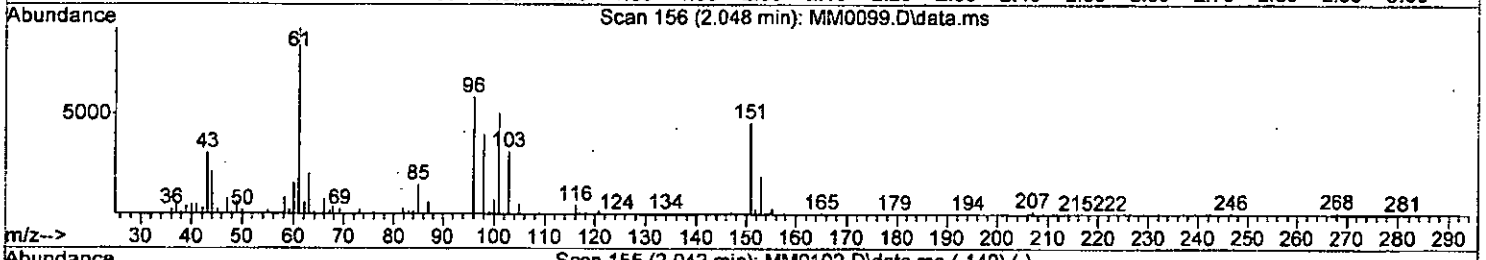
Ion	Exp%	Act%
43.00	100	100
58.00	26.20	28.86
42.00	7.20	11.83
0.00	0.00	0.00

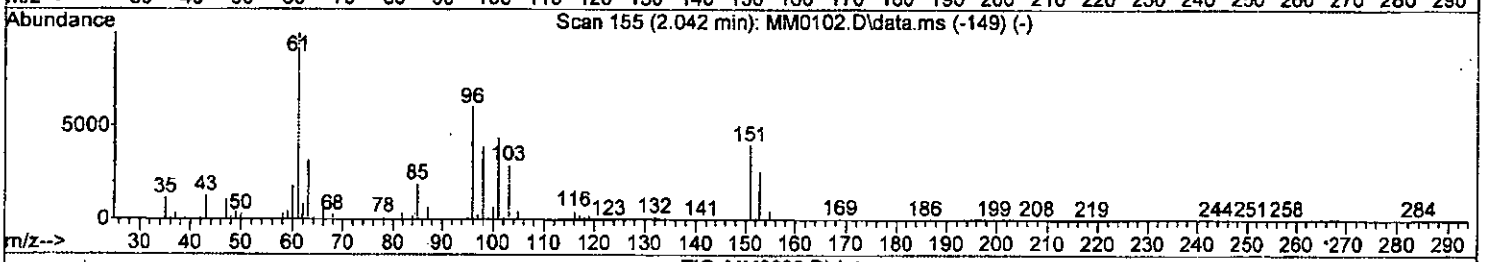
W102714.M Tue Oct 28 10:07:20 2014

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:34 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0099.D\data.ms

(15) Acetone (P)

2.048min (+0.006) 2.05 ppb m

response 3817

Ion	Exp%	Act%
43.00	100	100
58.00	26.20	28.86
42.00	7.20	11.83
0.00	0.00	0.00

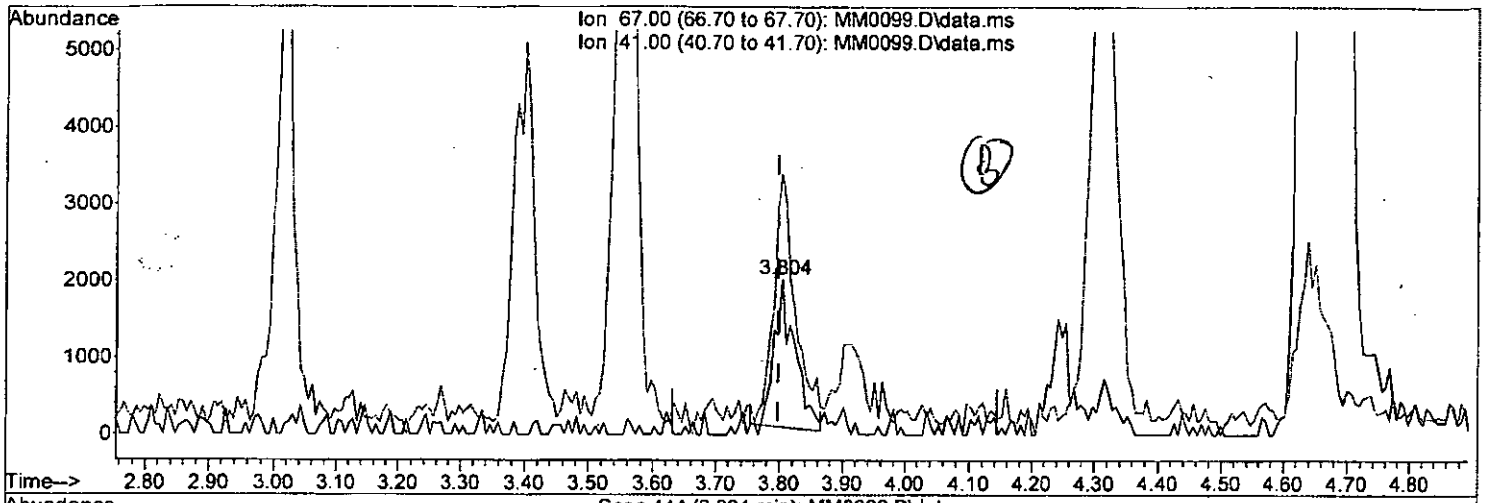
W102714.M Tue Oct 28 10:07:33 2014 Page: 1

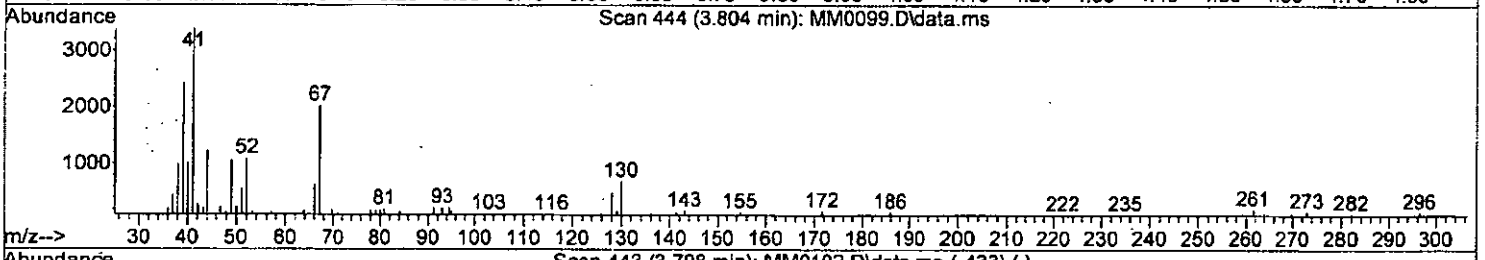
00389

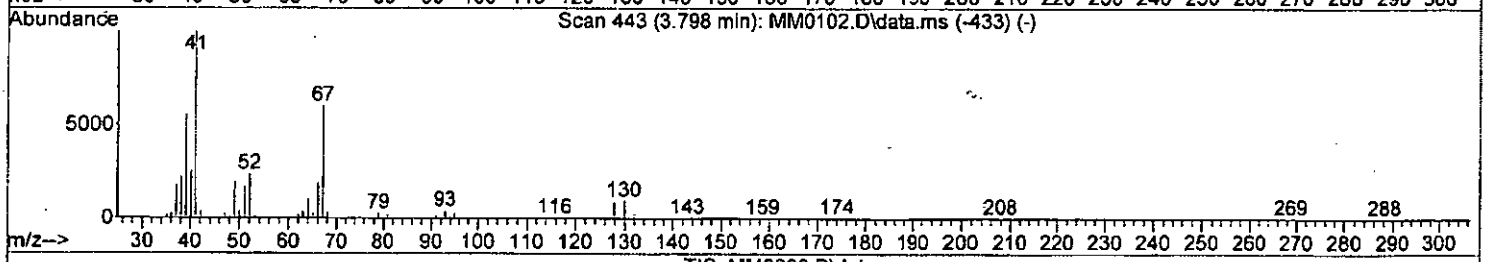
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:34 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0099.D\data.ms

(38) Methacrylonitrile

3.804min (+0.006) 1.91 ppb

response 4206

Ion	Exp%	Act%
67.00	100	100
41.00	166.40	167.29
0.00	0.00	0.00
0.00	0.00	0.00

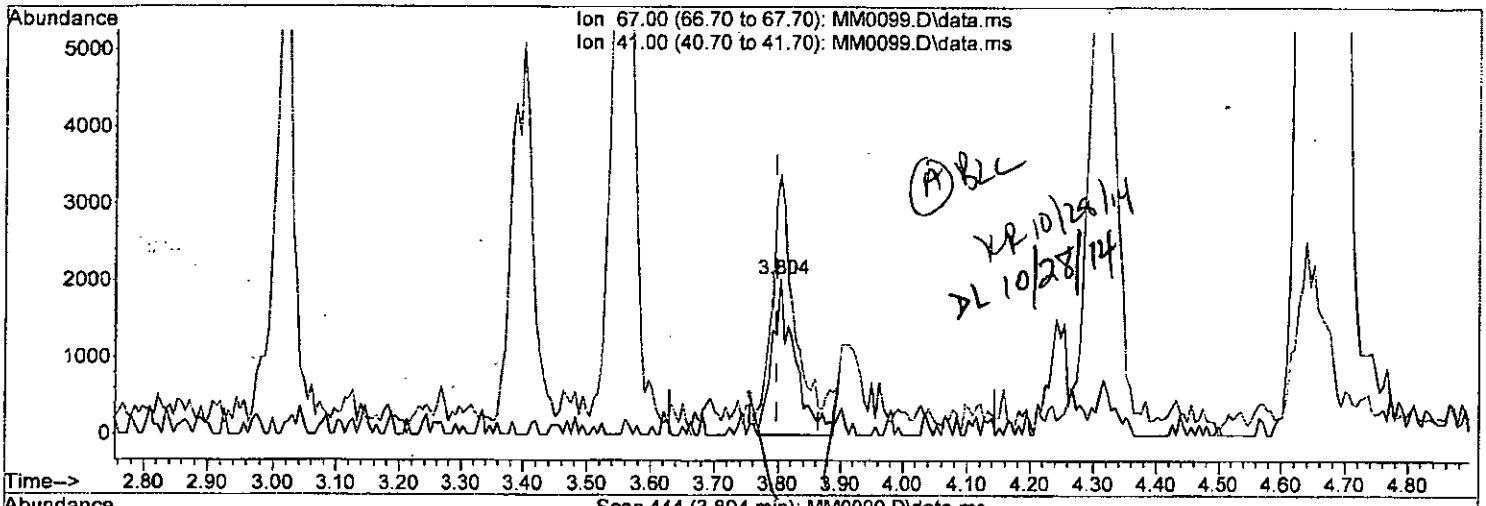
W102714.M Tue Oct 28 10:08:14 2014 Page: 1

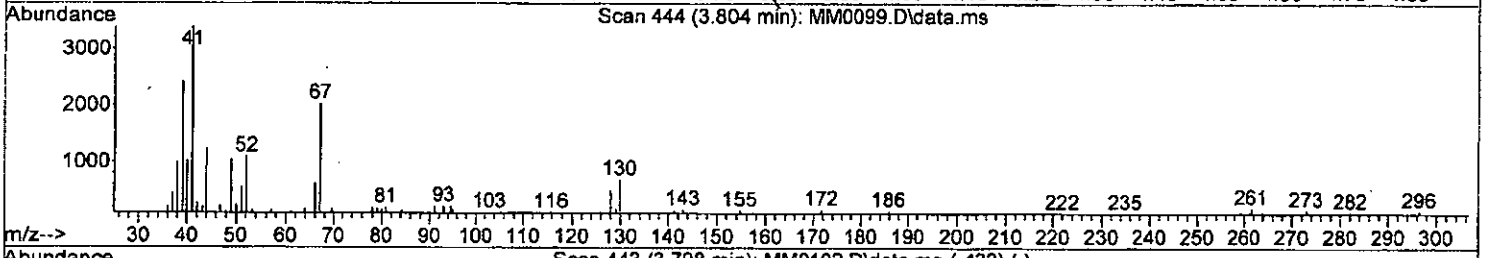
00390

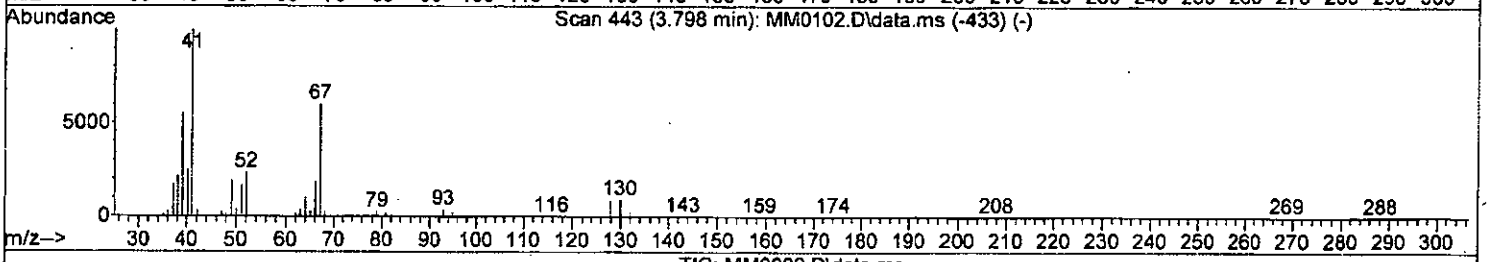
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:34 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0099.D\data.ms

(38) Methacrylonitrile

3.804min (+0.006) 2.28 ppb m

response 5013

Ion	Exp%	Act%
67.00	100	100
41.00	166.40	167.29
0.00	0.00	0.00
0.00	0.00	0.00

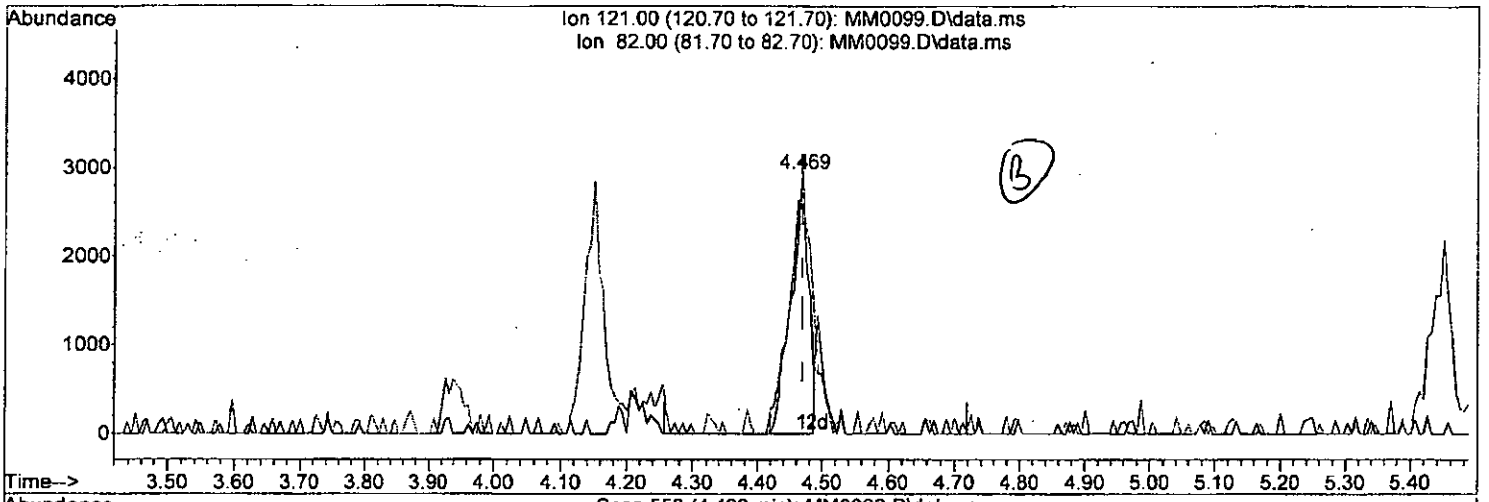
W102714.M Tue Oct 28 10:08:23 2014 Page: 1

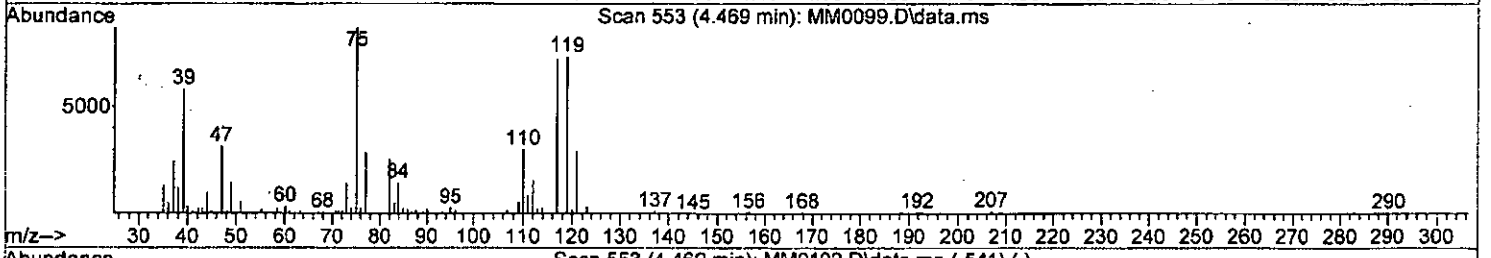
00391

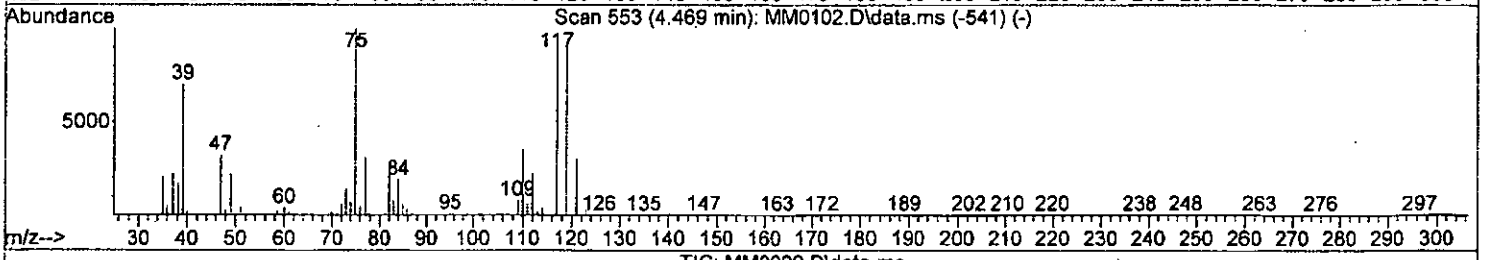
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:34 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0099.D\data.ms

(46) Carbontetrachloride (P)

4.469min (-0.000) 1.59 ppb

response 5431

Ion	Exp%	Act%
121.00	100	100
82.00	97.20	87.75
0.00	0.00	0.00
0.00	0.00	0.00

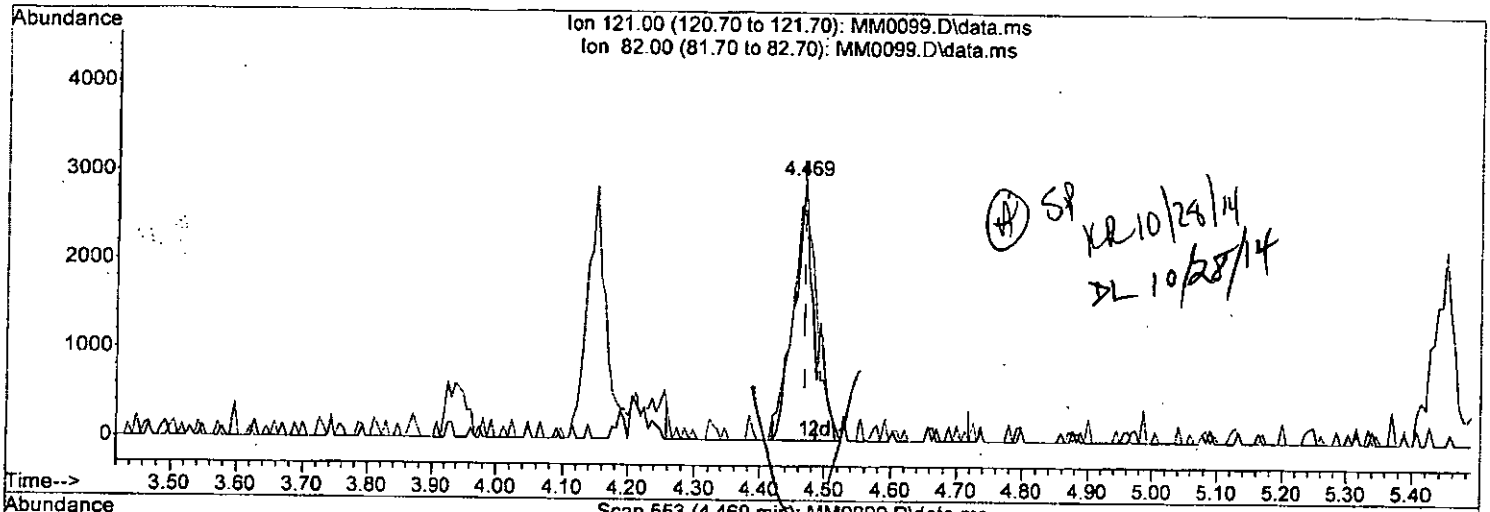
W102714.M Tue Oct 28 10:09:15 2014 Page: 1

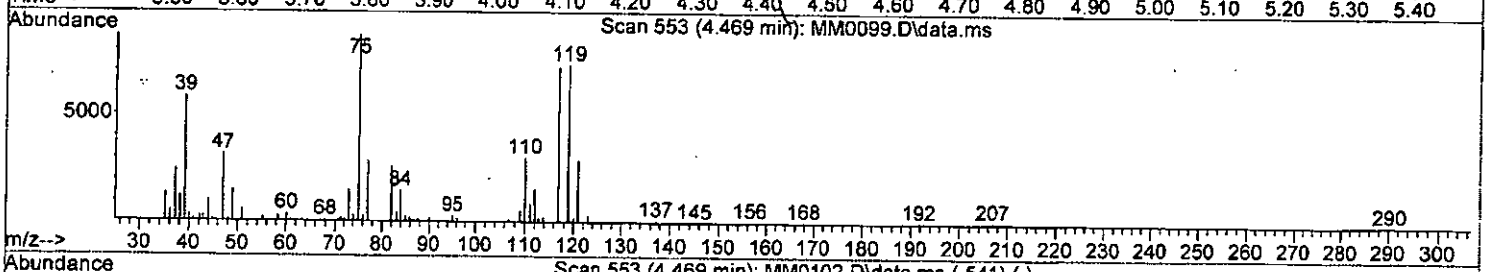
00392

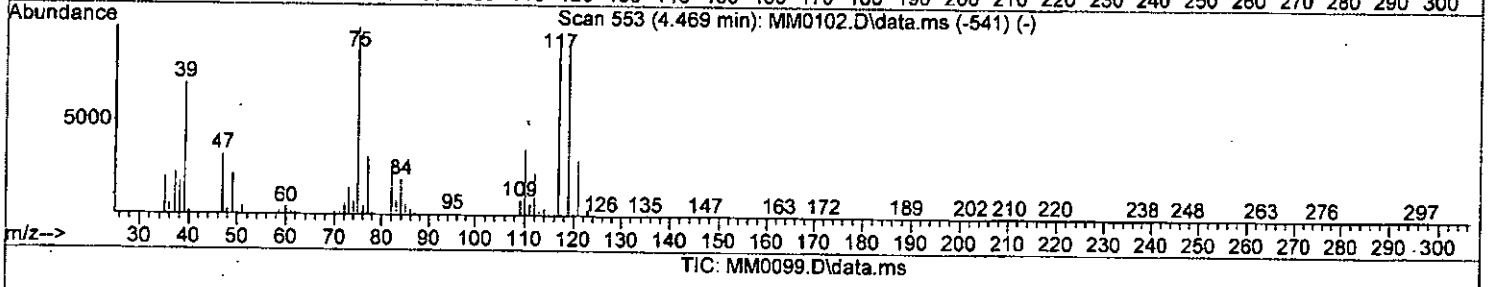
Quantification Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:34 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0099.D\data.ms

(46) Carbontetrachloride (P)

4.469min (-0.000) 1.92 ppb m

response 6555

Ion	Exp%	Act%
121.00	100	100
82.00	97.20	87.75
0.00	0.00	0.00
0.00	0.00	0.00

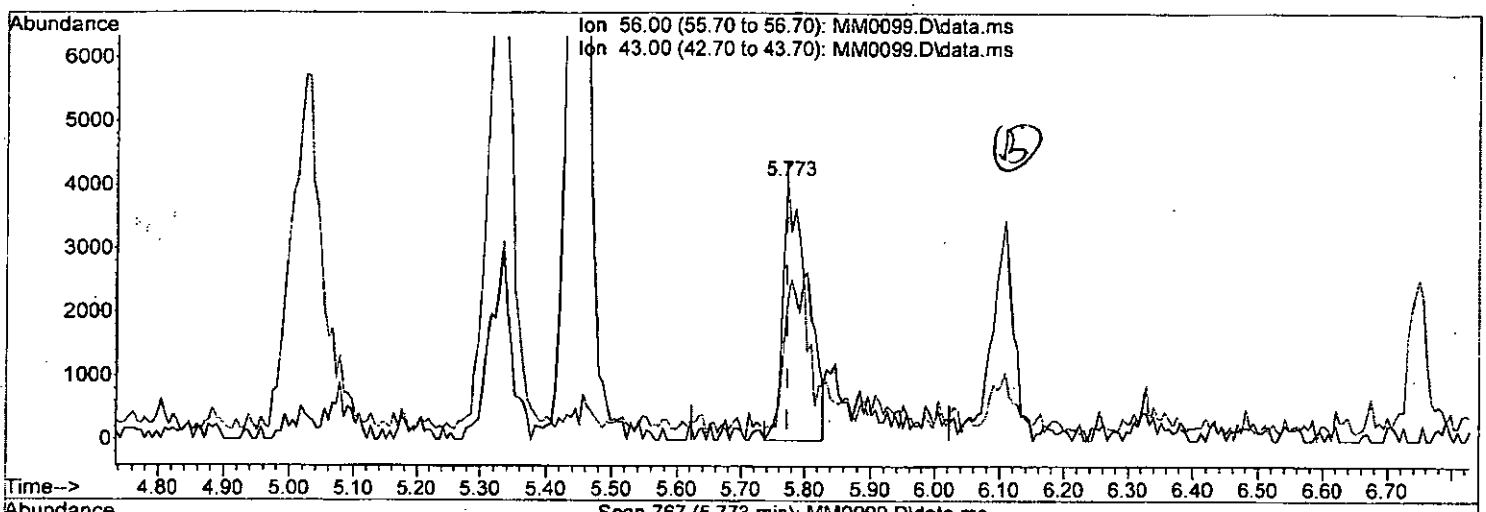
W102714.M Tue Oct 28 10:09:22 2014 Page: 1

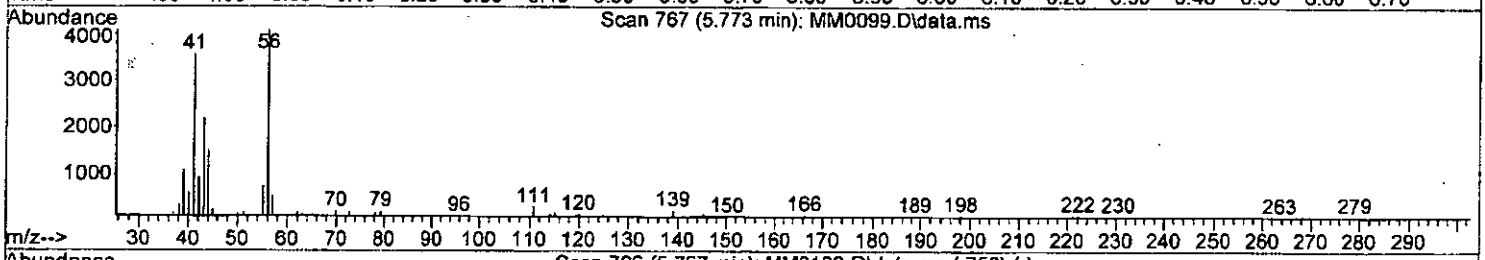
00393

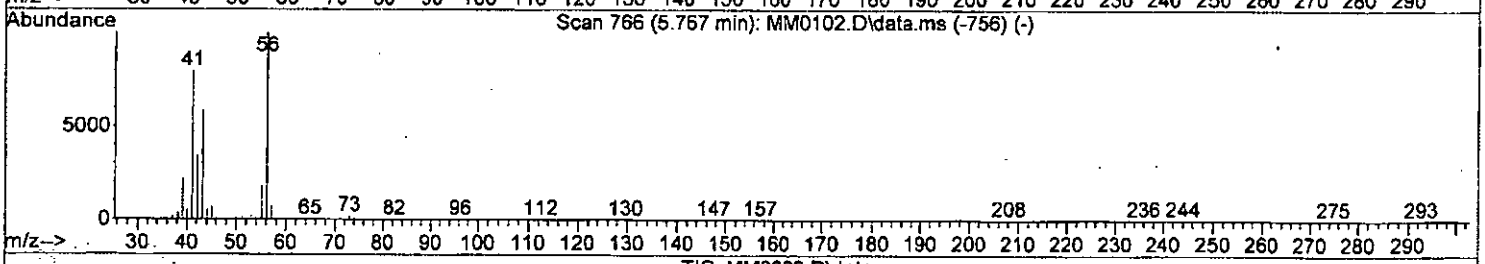
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:34 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0099.D\data.ms

(53) 1-Butanol

5.773min (+0.000) 64.53 ppb

response 10727

Ion	Exp%	Act%
56.00	100	100
43.00	56.20	55.01
0.00	0.00	0.00
0.00	0.00	0.00

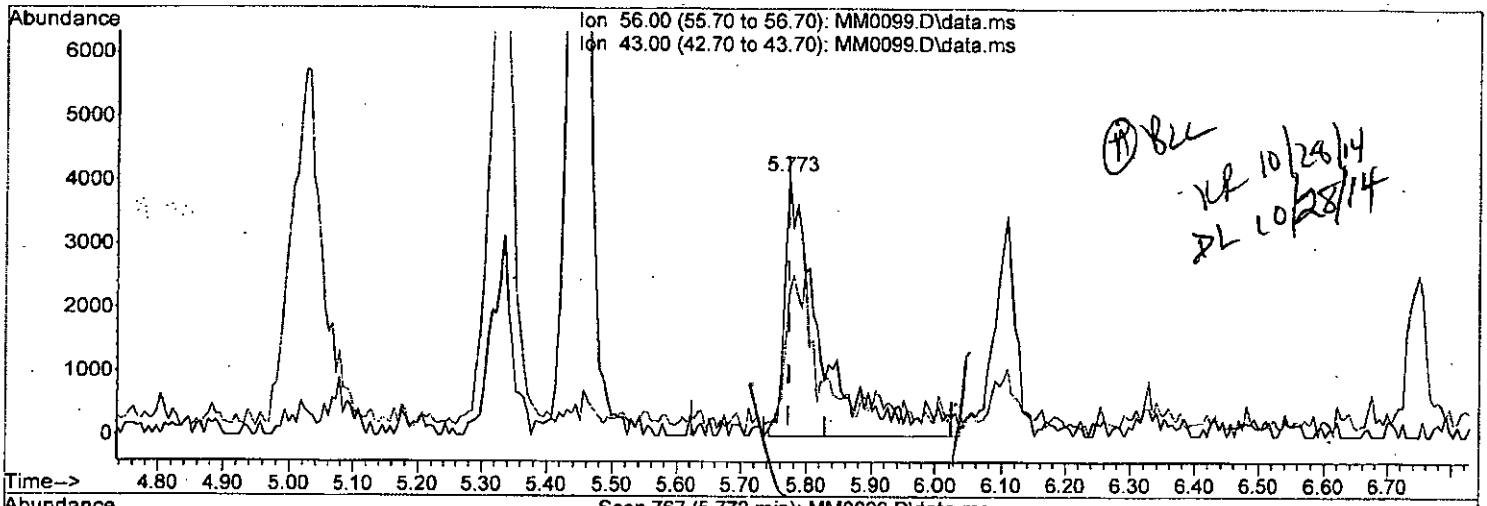
W102714.M Tue Oct 28 10:10:00 2014 Page: 1

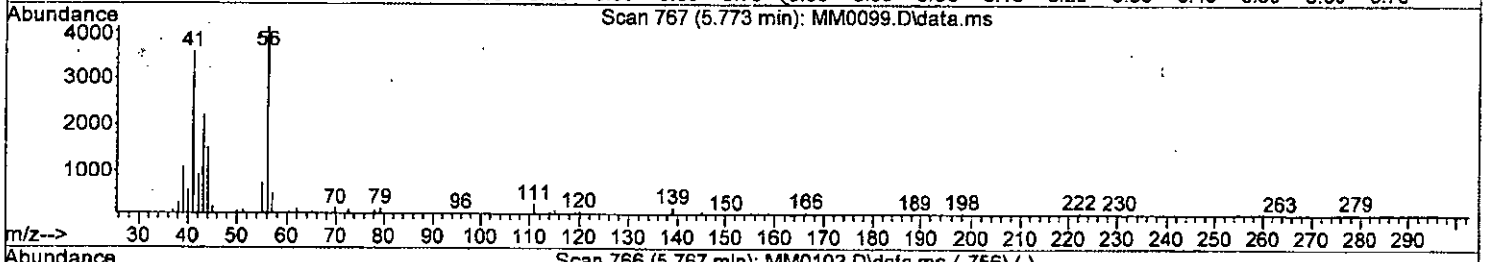
00394

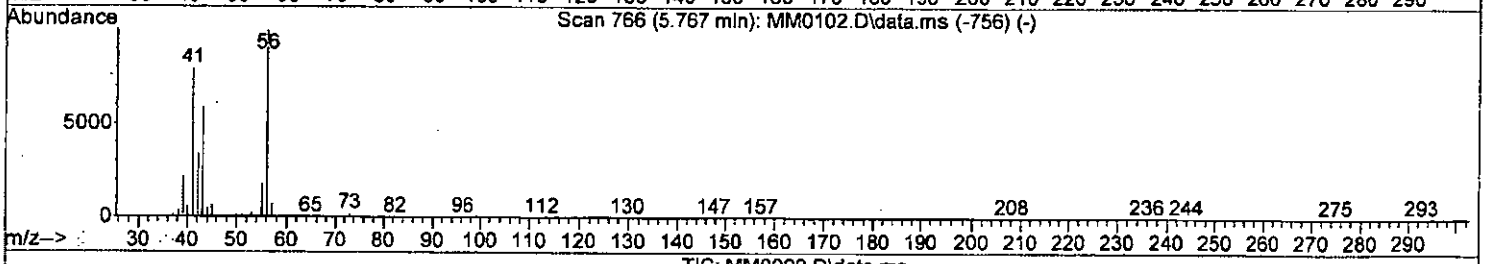
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:34 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0099.D\data.ms

(53) 1-Butanol

5.773min (+0.000) 98.32 ppb m

response 16346

Ion	Exp%	Act%
56.00	100	100
43.00	56.20	36.10#
0.00	0.00	0.00
0.00	0.00	0.00

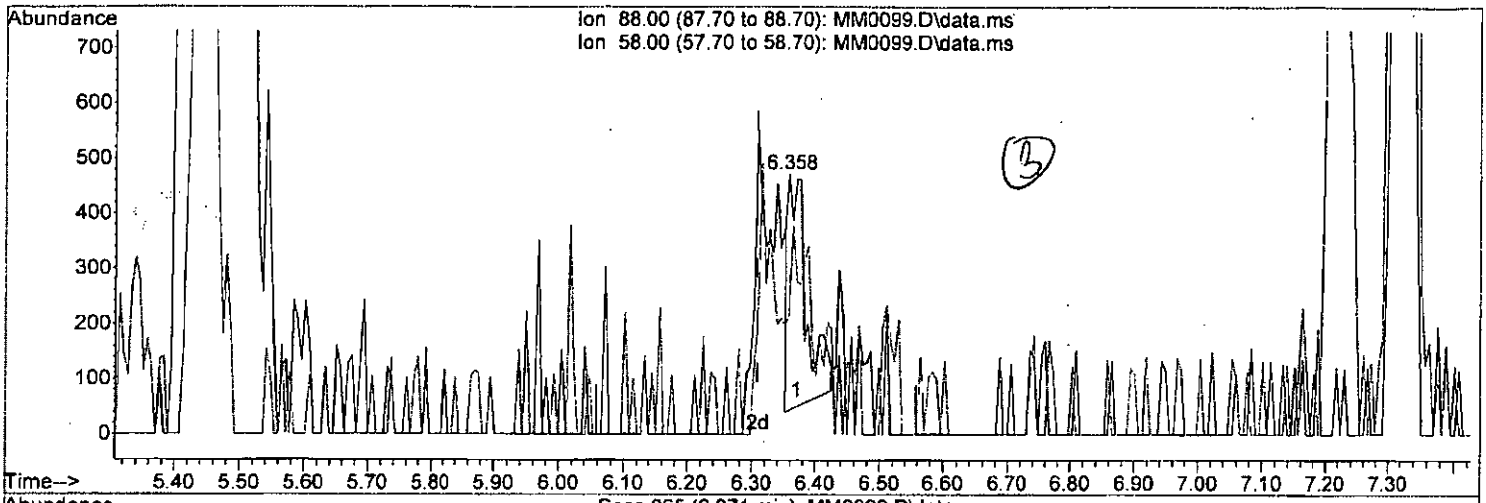
W102714.M Tue Oct 28 10:10:20 2014 Page: 1

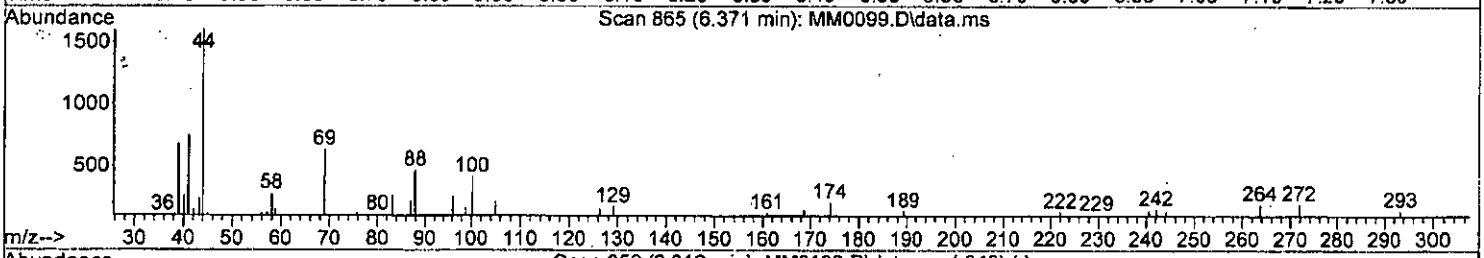
00395

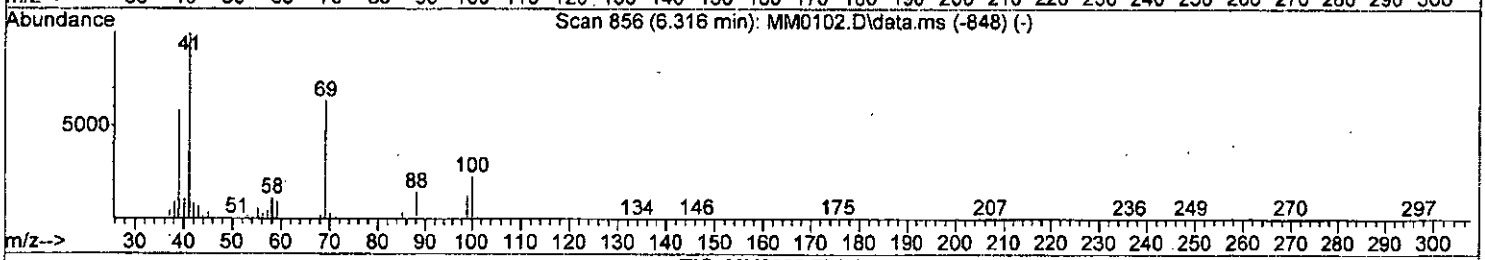
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:34 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0099.D\data.ms

(58) 1,4-Dioxane

6.371min (+0.062) 12.76 ppb

response 844

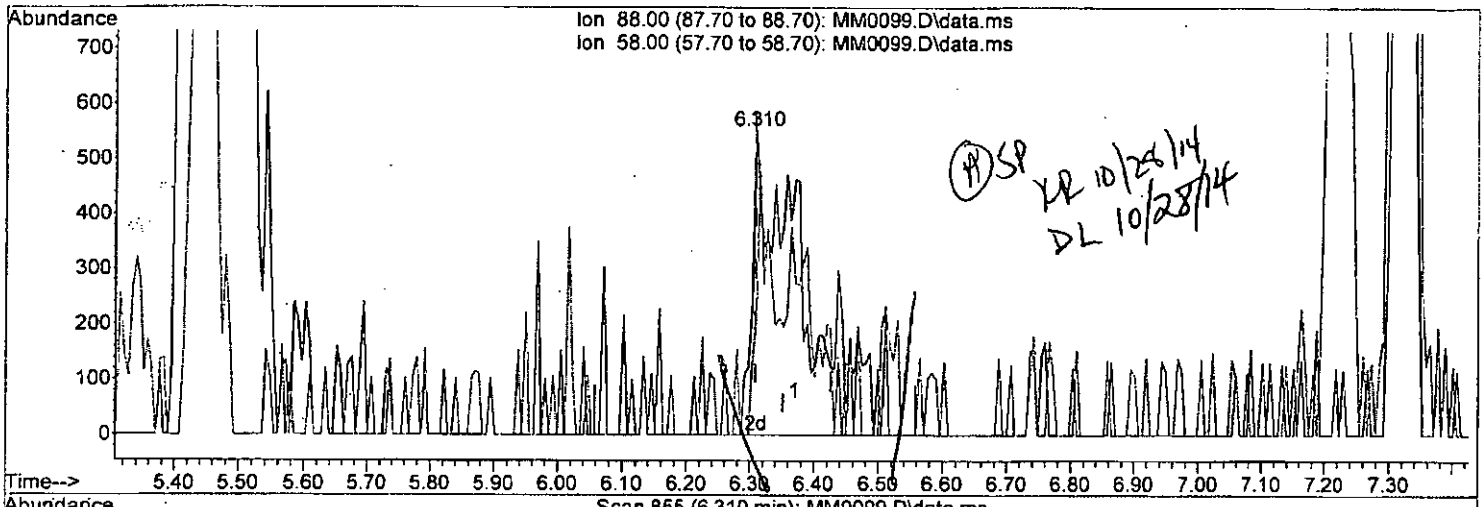
Ion	Exp%	Act%
88.00	100	100
58.00	77.40	59.74
0.00	0.00	0.00
0.00	0.00	0.00

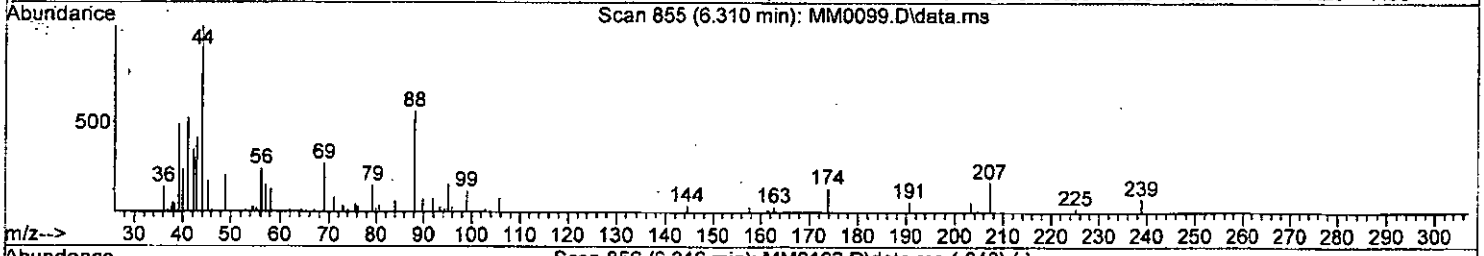
W102714.M Tue Oct 28 10:10:28 2014 Page: 1

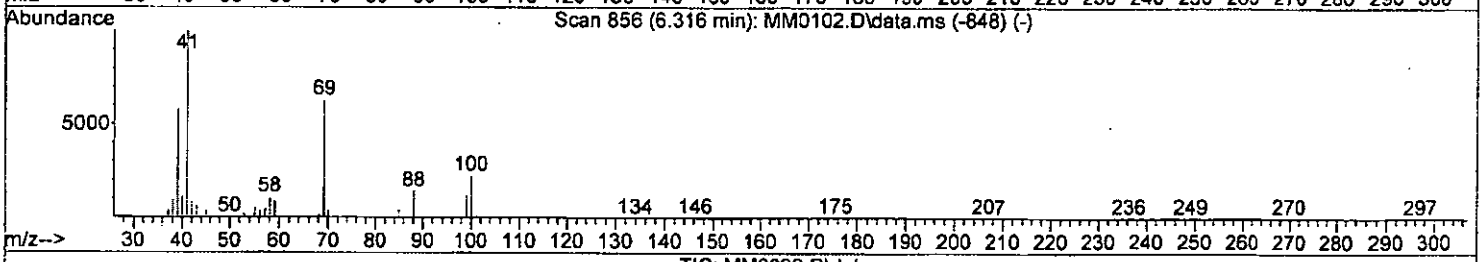
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:34 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0099.D\data.ms

(58) 1,4-Dioxane

6.310min (+0.001) 46.24 ppb m

response 3059

Ion	Exp%	Act%
88.00	100	100
58.00	77.40	36.66#
0.00	0.00	0.00
0.00	0.00	0.00

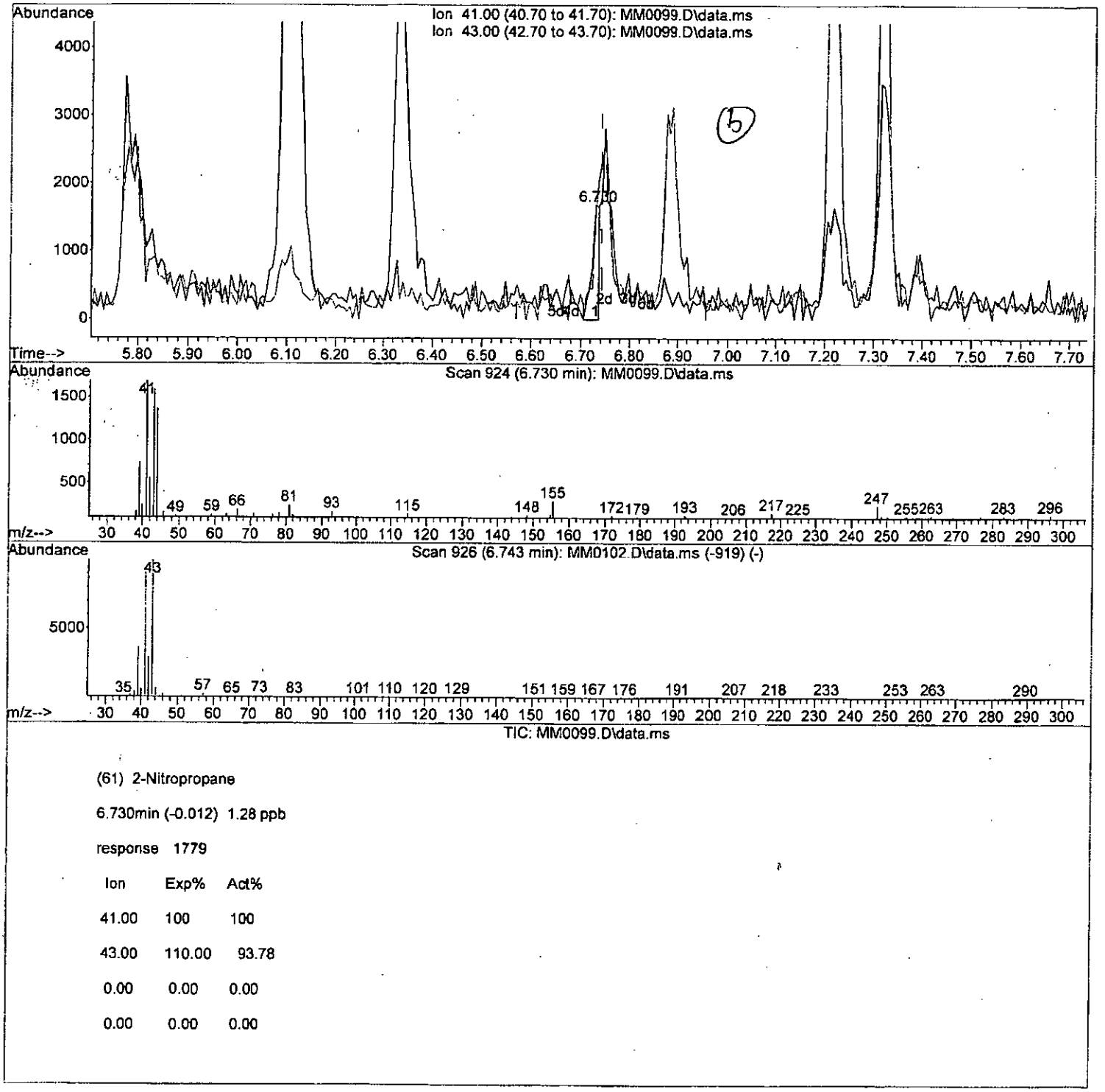
W102714.M Tue Oct 28 10:10:36 2014 Page: 1

00397

Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:34 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



TIC: MM0099.D\data.ms

(61) 2-Nitropropane

6.730min (-0.012) 1.28 ppb

response 1779

Ion	Exp%	Act%
41.00	100	100
43.00	110.00	93.78
0.00	0.00	0.00
0.00	0.00	0.00

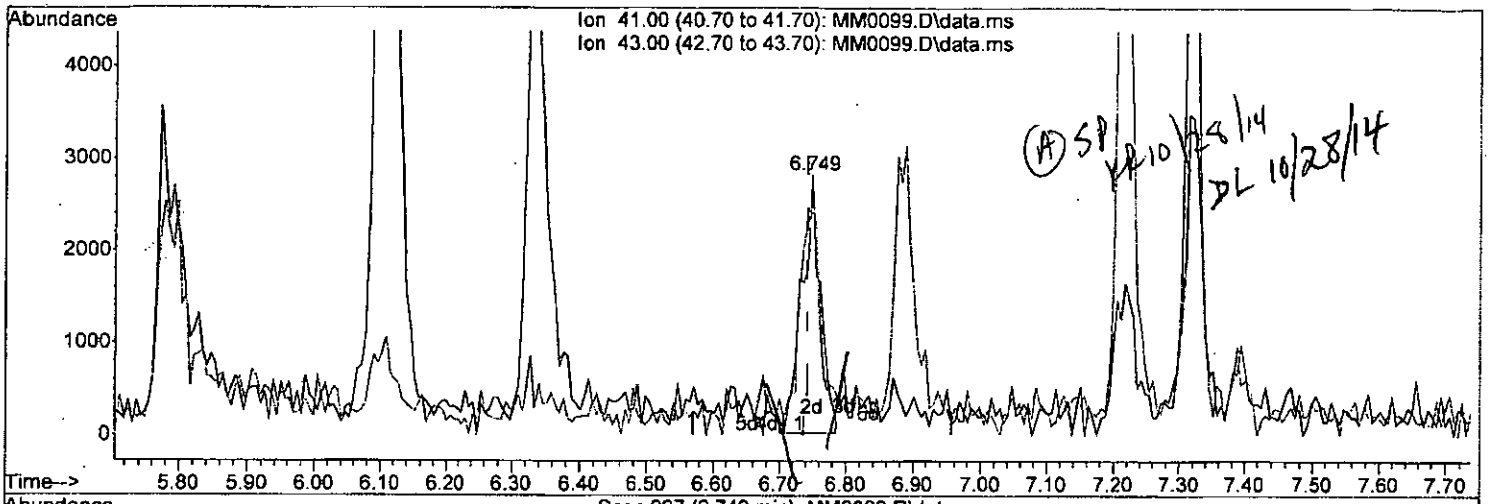
W102714.M Tue Oct 28 10:10:43 2014 Page: 1

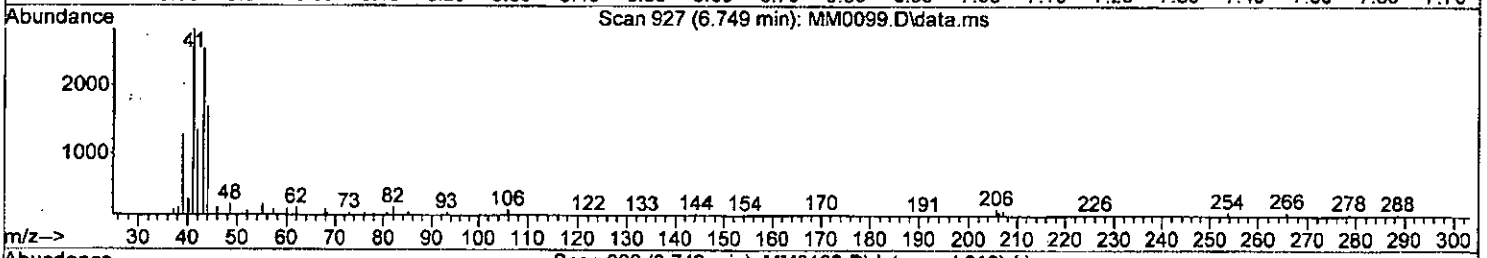
00398

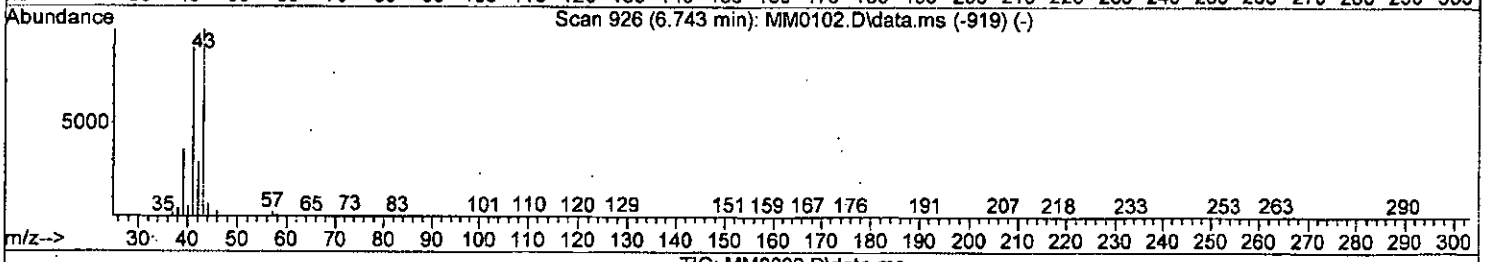
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:34 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0099.D\data.ms

(61) 2-Nitropropane

6.749min (+0.007) 3.88 ppb m

response 5394

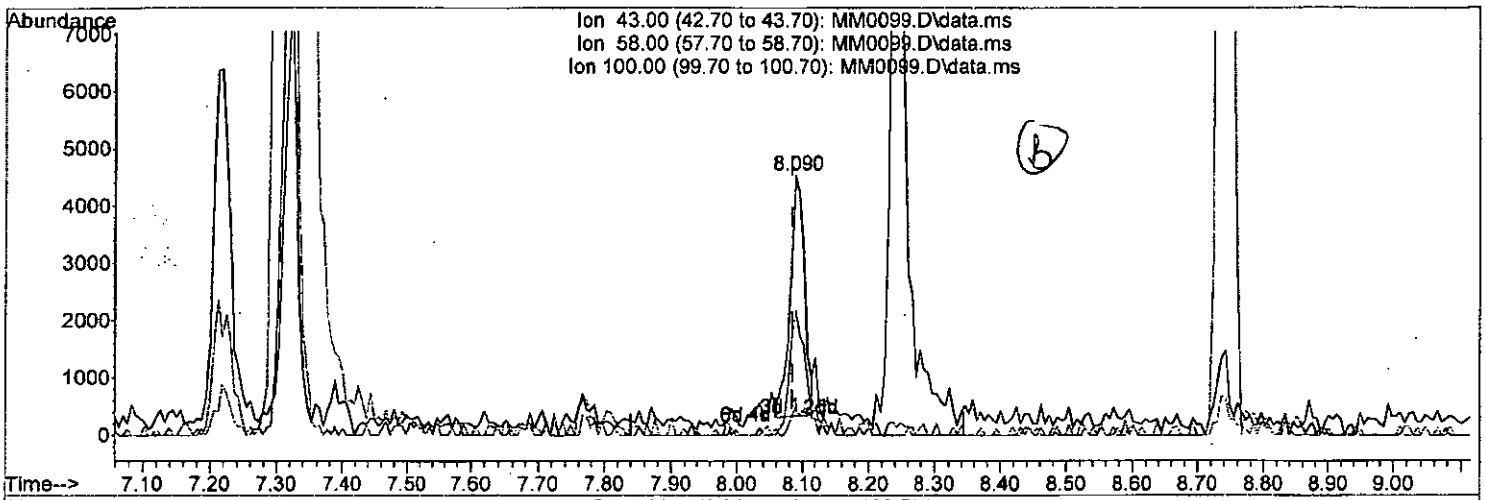
Ion	Exp%	Act%
41.00	100	100
43.00	110.00	89.98#
0.00	0.00	0.00
0.00	0.00	0.00

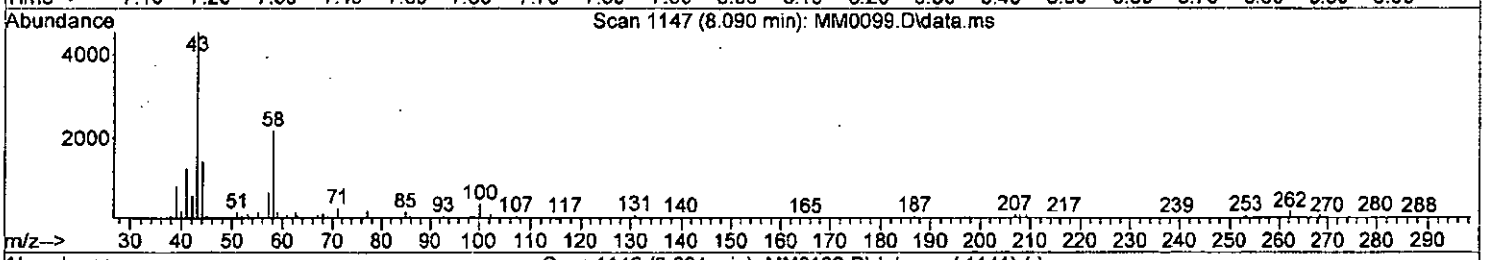
W102714.M Tue Oct 28 10:10:56 2014 Page: 1

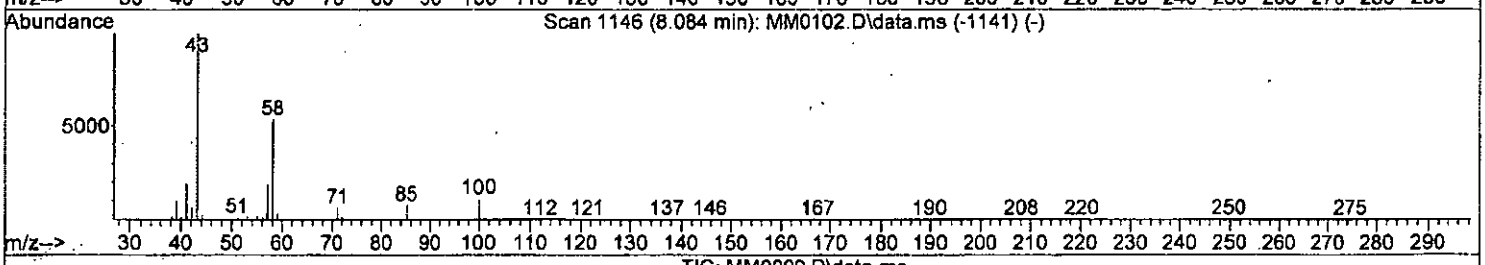
00399

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:34 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0099.D\data.ms

(73) 2-Hexanone (P)

8.090min (+0.006) 1.61 ppb

response 6523

Ion	Exp%	Act%
43.00	100	100
58.00	53.40	47.86
100.00	11.20	11.63
0.00	0.00	0.00

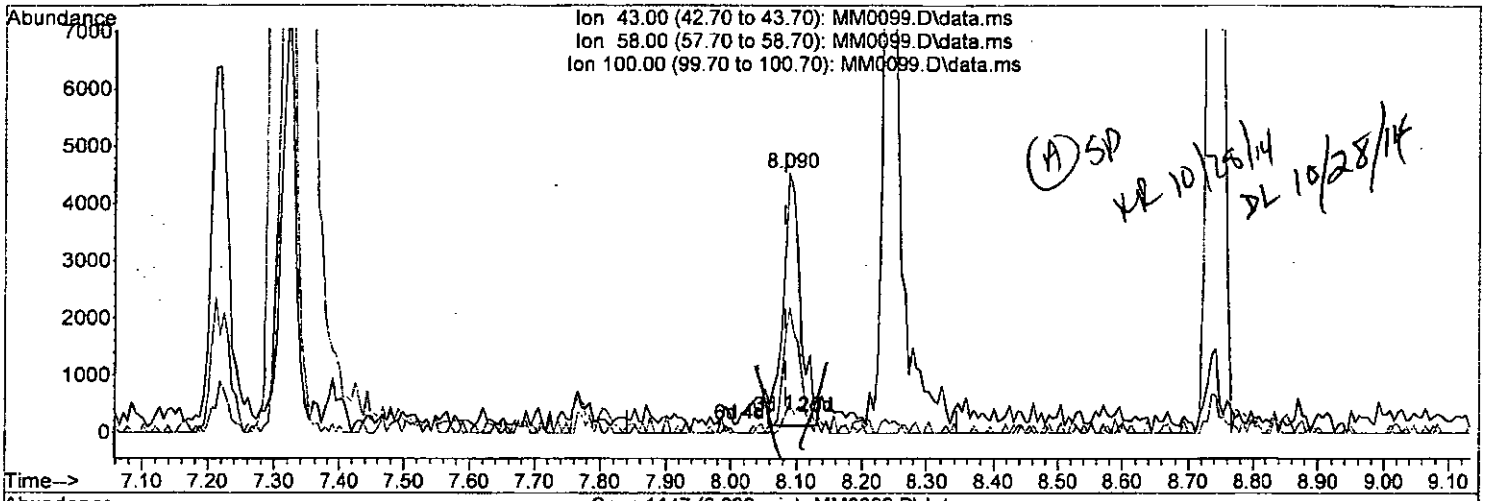
W102714.M Tue Oct 28 10:11:22 2014 Page: 1

00400

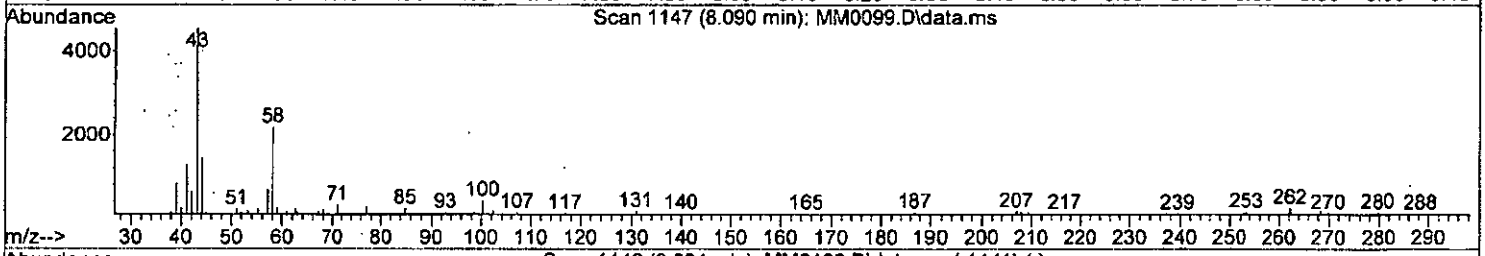
Quantitation Report (Qedit)

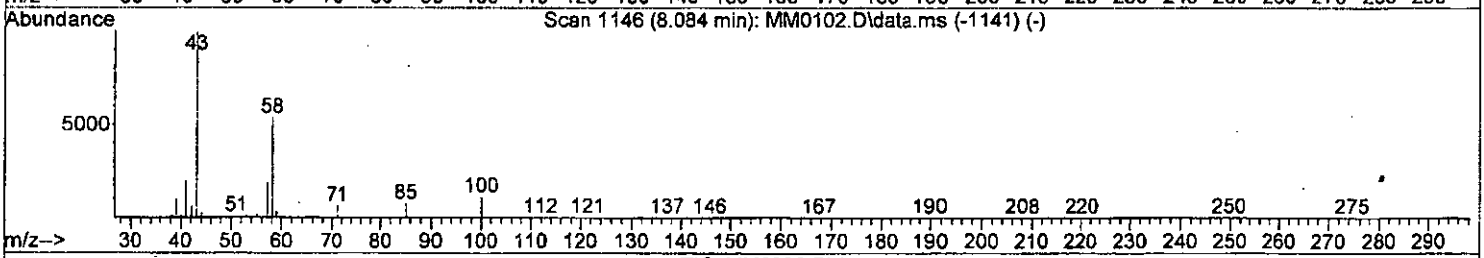
Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:34 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



(A) SP KL 10/28/14 DL 10/28/14





TIC: MM0099.D\data.ms

(73) 2-Hexanone (P)

8.090min (+0.006) 1.92 ppb m

response 7803

Ion	Exp%	Act%
43.00	100	100
58.00	53.40	47.86
100.00	11.20	9.36
0.00	0.00	0.00

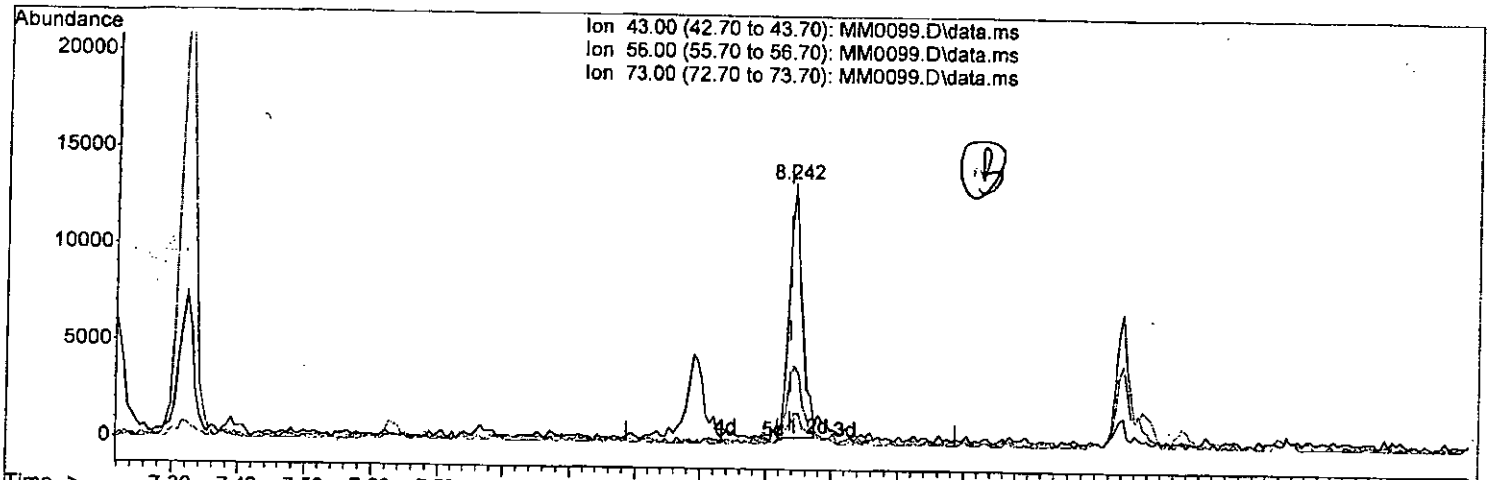
W102714.M Tue Oct 28 10:11:41 2014 Page: 1

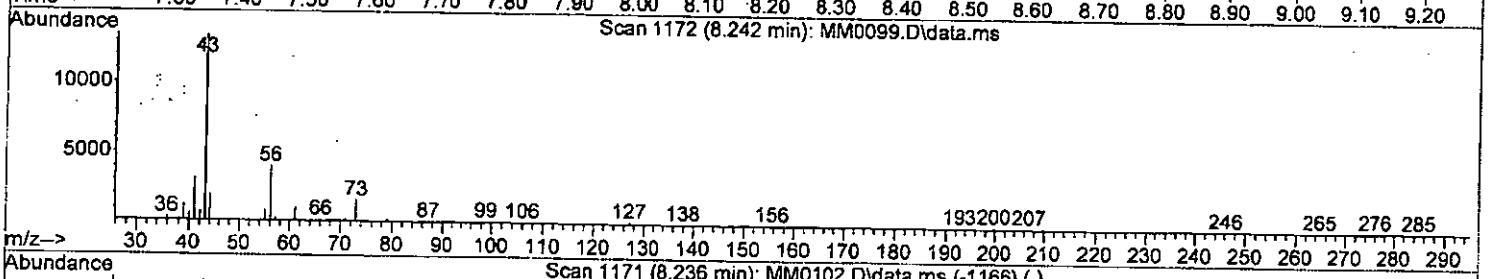
00401

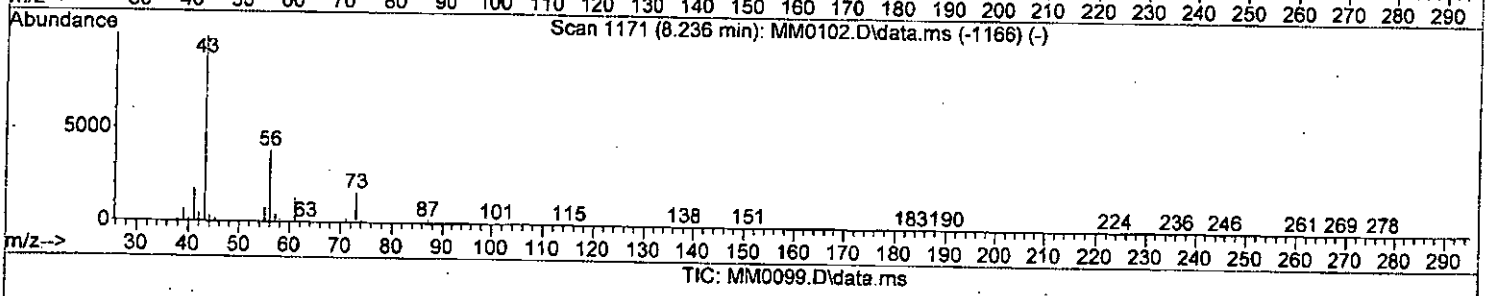
Quantitation Report (Qedit)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:34 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0099.D\data.ms

(76) N-Butyl Acetate

8.242min (+0.006) 1.67 ppb

response 17430

Ion	Exp%	Act%
43.00	100	100
56.00	37.90	29.76
73.00	15.90	11.76
0.00	0.00	0.00

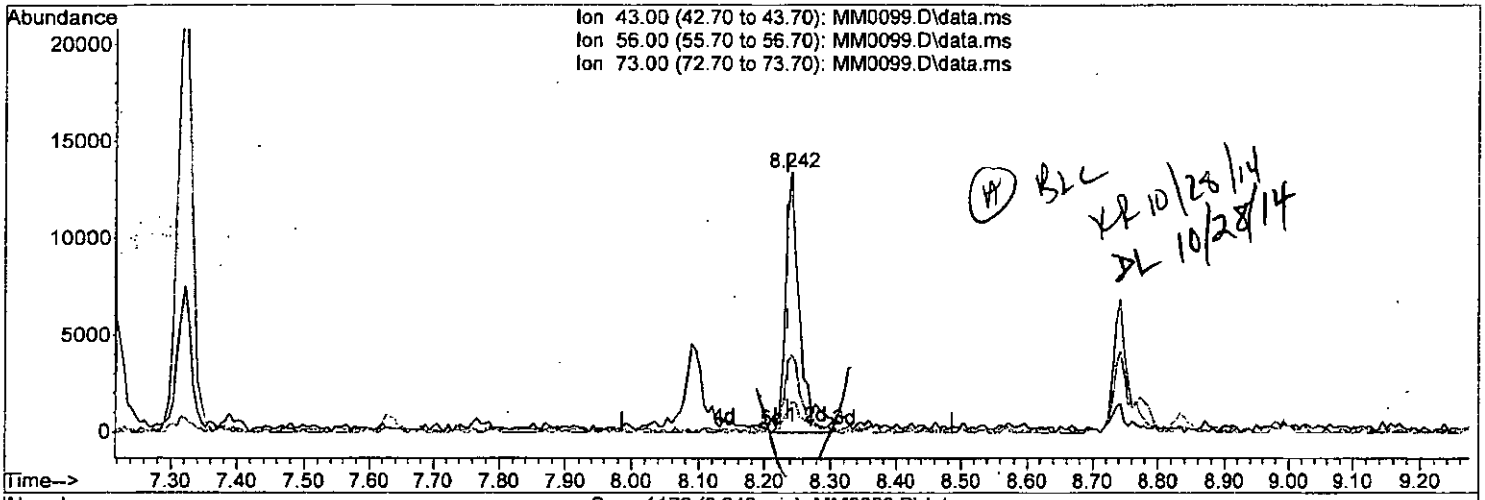
W102714.M Tue Oct 28 10:11:58 2014

Page: 1

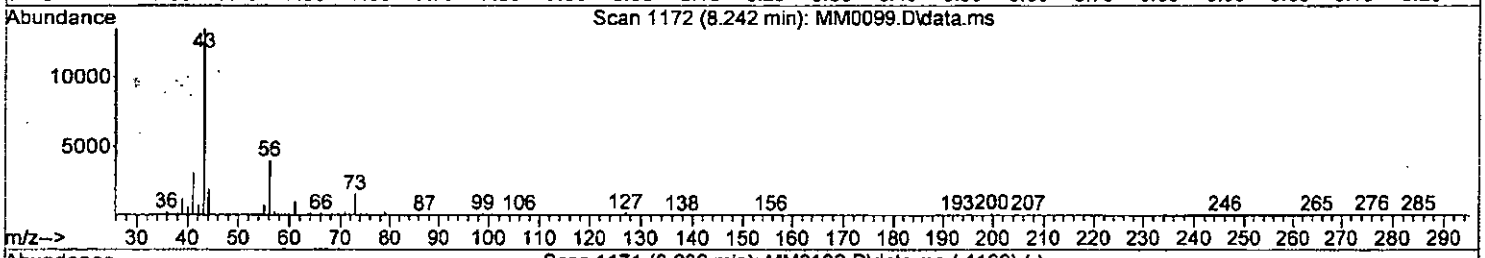
00402

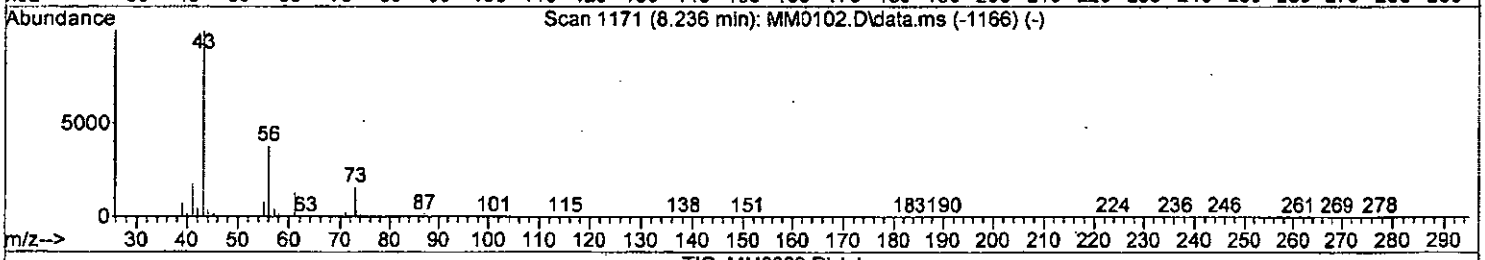
Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:34 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



(H) BLC KL 10/28/14 DL 10/28/14





TIC: MM0099.D\data.ms

(76) N-Butyl Acetate

8.242min (+0.006) 1.98 ppb m

response 20680

Ion	Exp%	Act%
43.00	100	100
56.00	37.90	29.76
73.00	15.90	11.76
0.00	0.00	0.00

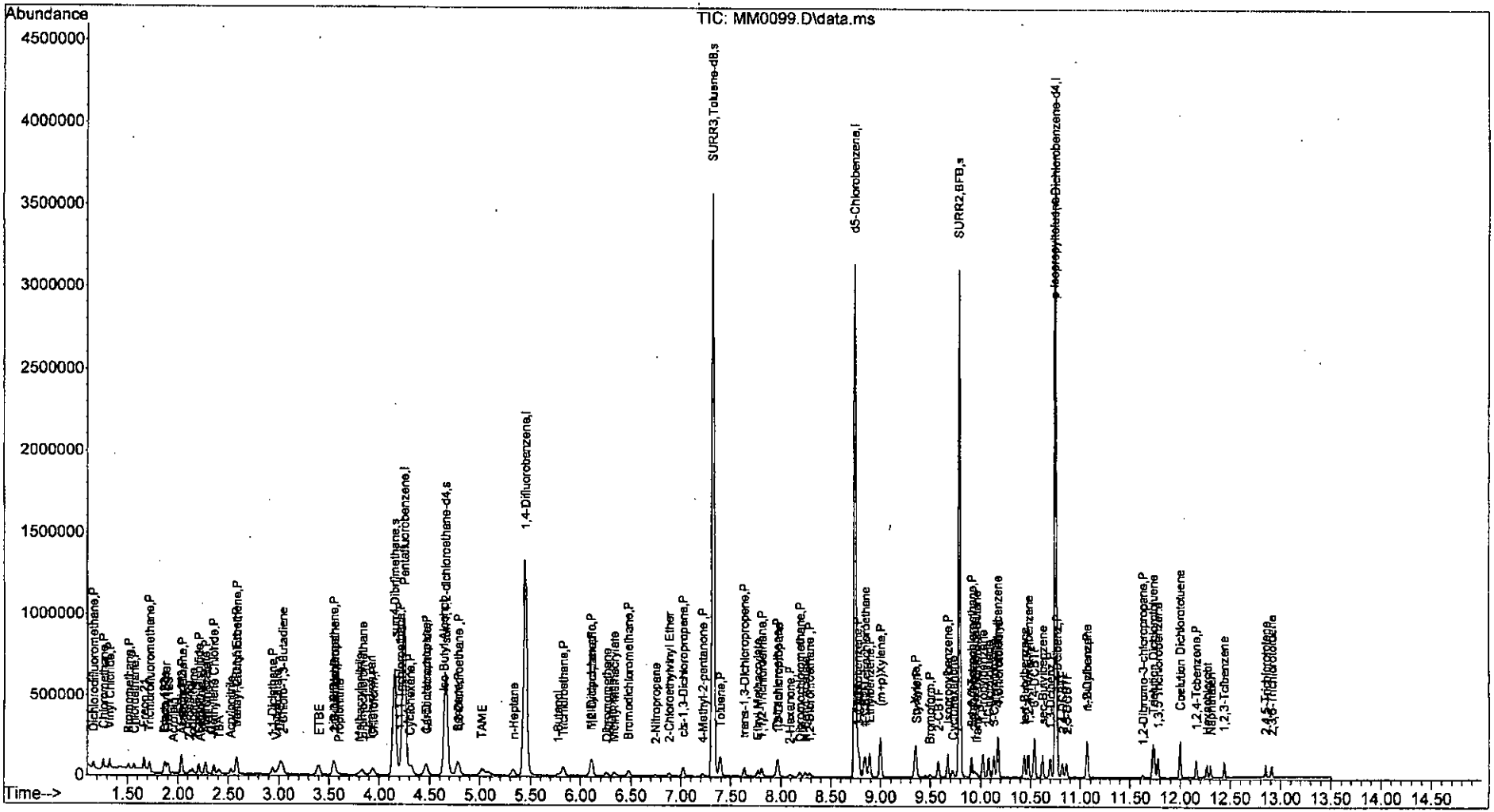
W102714.M Tue Oct 28 10:12:06 2014 Page: 1

00493

Quantitation Report (QT Reviewed)

Sample : 2.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0099.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:12:02 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



W102714.M Tue Oct 28 10:14:13 2014

Page: 4

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0100.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:49 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:28:02 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	862320	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1305461	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1218173	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	667035	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	543306	71.46	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 142.92%#				
48) surr1,1,2-dichloroetha...	4.658	65	673748	72.78	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 145.56%#				
65) SURR3,Toluene-d8	7.322	98	2283804	71.36	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 142.72%#				
70) SURR2,BFB	9.785	95	871240	70.16	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 140.32%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	37045	4.54	ppb		94
3) Chloromethane	1.262	50	51861	4.66	ppb		96
4) Vinyl Chloride	1.323	62	56158	4.75	ppb		98
5) Bromomethane	1.512	94	25583	4.48	ppb		98
6) Chloroethane	1.567	64	37353	5.07	ppb		96
7) Freon 21	1.664	67	92928	5.06	ppb		97
8) Trichlorofluoromethane	1.719	101	71564	5.09	ppb		98
9) Diethyl Ether	1.878	59	30731	4.80	ppb		95
10) Freon 123a	1.872	67	50603	5.02	ppb		91
11) Freon 123	1.902	83	53895	5.02	ppb		97
12) Acrolein	1.951	56	7811	22.25	ppb		86
13) 1,1-Diclethene	2.042	96	34120	4.58	ppb		99
14) Freon 113	2.036	101	37727	4.95	ppb		100
15) Acetone	2.048	43	8681	4.72	ppb		90
16) 2-Propanol	2.115	45	34477	95.18	ppb		90
17) Iodomethane	2.146	142	49956	4.65	ppb		93
18) Carbon Disulfide	2.207	76	121228	4.84	ppb		99
19) Acetonitrile	2.225	40	7772	26.77	ppb		94
20) Allyl Chloride	2.274	76	20469	4.87	ppb		96
21) Methyl Acetate	2.274	43	22124	5.25	ppb		99
22) Methylene Chloride	2.359	84	40486	4.99	ppb		93
23) TBA	2.408	59	62934	104.97	ppb		94
24) Acrylonitrile	2.524	53	50235	25.60	ppb		100
25) Methyl-t-Butyl Ether	2.579	73	105794	5.07	ppb		97
26) trans-1,2-Dichloroethene	2.585	96	38881	4.83	ppb		96
28) 1,1-Diclethane	2.938	63	73815	4.96	ppb		98
29) Vinyl Acetate	2.981	86	6176	4.55	ppb	#	30
30) DIPE	3.018	45	155804	5.19	ppb		97
31) 2-Chloro-1,3-Butadiene	3.042	53	68907	5.01	ppb		90
32) ETBE	3.396	59	135880	5.23	ppb		96
33) 2,2-Dichloropropane	3.554	77	64054	4.85	ppb		94
34) cis-1,2-Dichloroethene	3.548	96	43243	4.96	ppb		99
35) 2-Butanone	3.554	43	12659	4.96	ppb		92
36) Propionitrile	3.603	54	18307m	25.96	ppb		
37) Bromochloromethane	3.829	130	24724	5.01	ppb		93

KP 10/28/14

W102714.M Tue Oct 28 10:28:56 2014 Page: 1

00405

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0100.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:49 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:28:02 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Methacrylonitrile	3.810	67	11292	5.18	ppb	#	70
39)	Tetrahydrofuran	3.908	42	8709	4.97	ppb		78
40)	Chloroform	3.938	83	72692	4.85	ppb		96
41)	1,1,1-Trichloroethane	4.213	97	64906	4.83	ppb	#	31
42)	TAME	5.029	73	109472	5.00	ppb		99
44)	Cyclohexane	4.316	41	48271	5.02	ppb		91
46)	Carbontetrachloride	4.469	121	15888	4.66	ppb		88
47)	1,1-Dichloropropene	4.463	75	55329	4.85	ppb		97
49)	Benzene	4.780	78	166001	4.96	ppb		99
50)	1,2-Dichloroethane	4.786	62	57304	5.09	ppb		99
51)	Iso-Butyl Alcohol	4.633	43	25319	98.90	ppb		99
52)	n-Heptane	5.328	43	49077	4.54	ppb		96
53)	1-Butanol	5.773	56	38345m	231.54	ppb		
54)	Trichloroethene	5.828	130	42861	4.89	ppb		96
55)	Methylcyclohexane	6.102	55	54265	4.84	ppb		99
56)	1,2-Diclpropane	6.115	63	42785	4.88	ppb		100
57)	Dibromomethane	6.255	93	20491	4.94	ppb		94
58)	1,4-Dioxane	6.322	88	7534m	114.32	ppb		
59)	Methyl Methacrylate	6.334	69	19933	4.93	ppb		98
60)	Bromodichloromethane	6.474	83	49271	4.75	ppb		97
61)	2-Nitropropane	6.743	41	11477	8.29	ppb		88
62)	2-Chloroethylvinyl Ether	6.883	63	20231	4.96	ppb		92
63)	cis-1,3-Dichloropropene	7.023	75	62835	4.86	ppb		97
64)	4-Methyl-2-pentanone	7.212	43	29351	4.92	ppb		93
66)	Toluene	7.395	91	180291	5.00	ppb		98
67)	trans-1,3-Dichloropropene	7.627	75	52827	4.79	ppb		96
68)	Ethyl Methacrylate	7.767	69	41763	4.90	ppb		98
69)	1,1,2-Trichloroethane	7.809	97	30425	5.01	ppb		91
72)	Tetrachloroethene	7.962	164	34339	4.90	ppb		89
73)	2-Hexanone	8.090	43	20202	4.99	ppb		91
74)	1,3-Dichloropropane	7.968	76	55152	5.05	ppb		98
75)	Dibromochloromethane	8.187	129	28588	4.36	ppb		96
76)	N-Butyl Acetate	8.242	43	51231	4.92	ppb		94
77)	1,2-Dibromoethane	8.285	107	29063	5.08	ppb		95
78)	Chlorobenzene	8.767	112	113982	4.83	ppb		97
79)	3-CBTF	8.785	180	62196	4.81	ppb		98
80)	4-CBTF	8.834	180	53427	4.62	ppb		95
81)	1,1,1,2-Tetrachloroethane	8.846	131	35790	4.61	ppb		98
82)	Ethylbenzene	8.888	106	61264	4.81	ppb		97
83)	(m+p)Xylene	8.998	106	149529	9.71	ppb		96
84)	o-Xylene	9.346	106	71399	4.61	ppb		95
85)	Styrene	9.352	104	120875	4.72	ppb		98
87)	Bromoform	9.498	173	15555	4.69	ppb		96
88)	2-CBTF	9.577	180	60047	5.11	ppb		98
89)	Isopropylbenzene	9.669	105	184224	5.18	ppb		100
90)	Cyclohexanone	9.718	55	41298	105.59	ppb		92
91)	trans-1,4-Dichloro-2-B...	9.961	53	10233	4.78	ppb		93
92)	1,1,2,2-Tetrachloroethane	9.913	83	35184	5.07	ppb		99
93)	Bromobenzene	9.907	156	45836	4.88	ppb		95
94)	1,2,3-Trichloropropane	9.943	110	11252	5.35	ppb	#	77
95)	n-Propylbenzene	10.022	91	214176	5.19	ppb		99
96)	2-Chlorotoluene	10.077	91	127512	5.10	ppb		96

W102714.M Tue Oct 28 10:28:56 2014 Page: 2

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0100.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:49 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:28:02 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

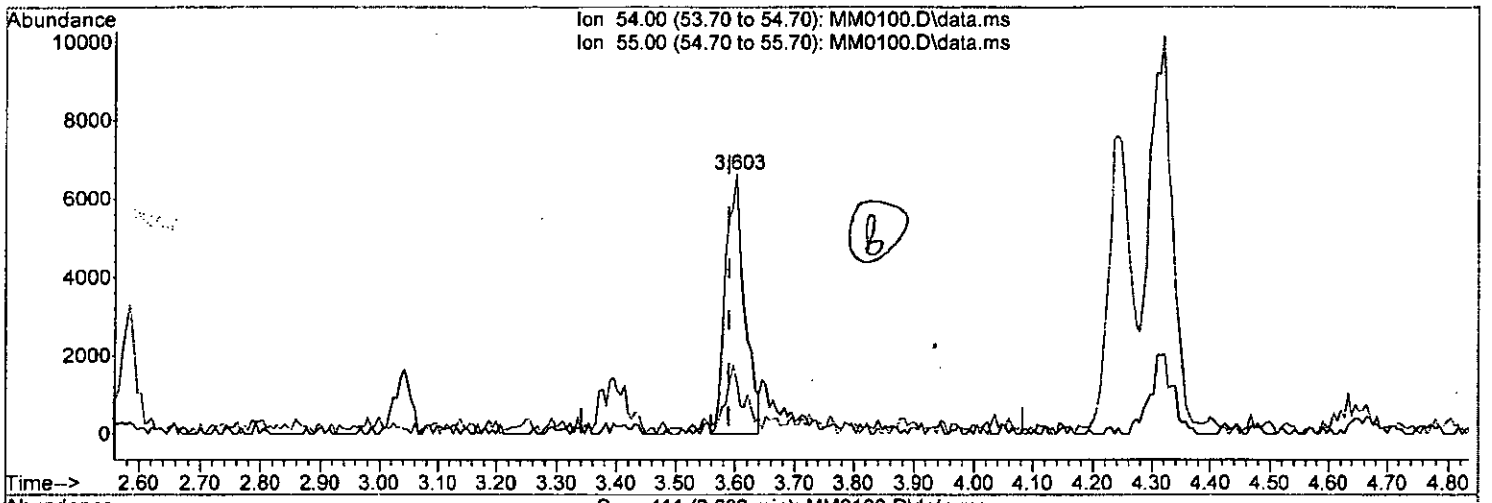
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
97)	3-Chlorotoluene	10.132	91	138750	5.22	ppb		95
98)	4-Chlorotoluene	10.175	91	156335	4.99	ppb		99
99)	1,3,5-Trimethylbenzene	10.169	105	152511	4.94	ppb		96
100)	tert-Butylbenzene	10.437	119	128268	5.14	ppb		96
101)	1,2,4-Trimethylbenzene	10.474	105	154027	5.09	ppb		100
102)	3,4-DCBTF	10.535	214	41501	4.69	ppb		92
103)	sec-Butylbenzene	10.620	105	174021	4.96	ppb		99
104)	p-Isopropyltoluene	10.742	119	151170	4.96	ppb		98
105)	1,3-Dclbenz	10.699	146	88792	4.95	ppb		96
106)	1,4-Dclbenz	10.766	146	90938	4.85	ppb		95
107)	2,4-DCBTF	10.821	214	37461	4.94	ppb		94
108)	2,5-DCBTF	10.858	214	41754	4.86	ppb		98
109)	n-Butylbenzene	11.065	91	133014	4.93	ppb		97
110)	1,2-Dclbenz	11.065	146	83622	4.96	ppb		98
111)	1,2-Dibromo-3-chloropr...	11.626	157	5788	4.96	ppb	#	86
112)	Trielution Dichlorotol...	11.729	125	209612	15.15	ppb		99
113)	1,3,5 Trichlorobenzene	11.778	180	58017	5.01	ppb		99
114)	Coelution Dichlorotoluene	11.998	125	151274	10.44	ppb		98
115)	1,2,4-Tcbenzene	12.156	180	50150	5.08	ppb		98
116)	Hexachlorobt	12.266	225	20149	5.16	ppb		99
117)	Naphthalen	12.302	128	97021	5.17	ppb		98
118)	1,2,3-Tclbenzene	12.437	180	41274	4.91	ppb		96
119)	2,4,5-Trichlorotolene	12.851	159	28526	5.02	ppb		97
120)	2,3,6-Trichlorotoluene	12.912	159	26435	5.03	ppb		98

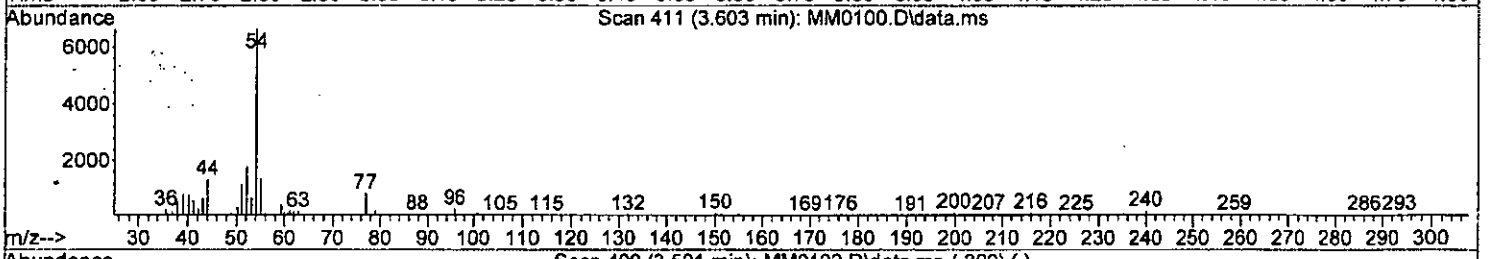
(#) = qualifier out of range (m) = manual integration (+) = signals summed

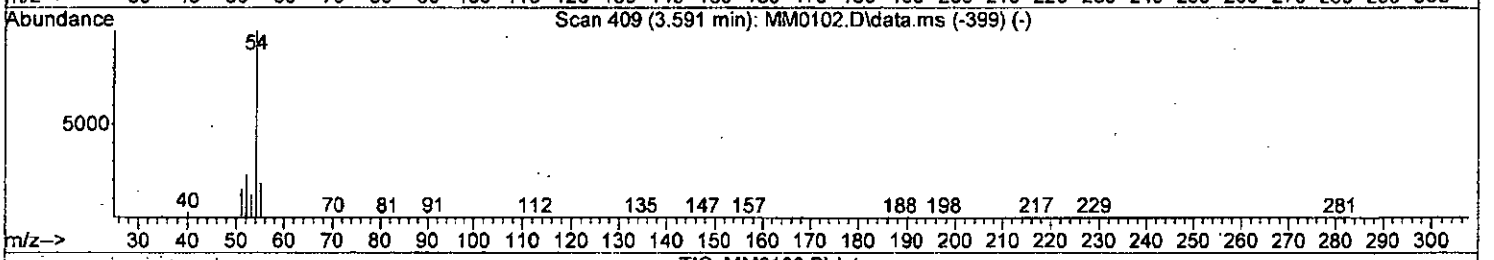
Quantitation Report (Qedit)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0100.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:49 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:38 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0100.D\data.ms

(36) Propionitrile

3.603min (+0.013) 20.86 ppb

response 14707

Ion	Exp%	Act%
54.00	100	100
55.00	18.80	20.57
0.00	0.00	0.00
0.00	0.00	0.00

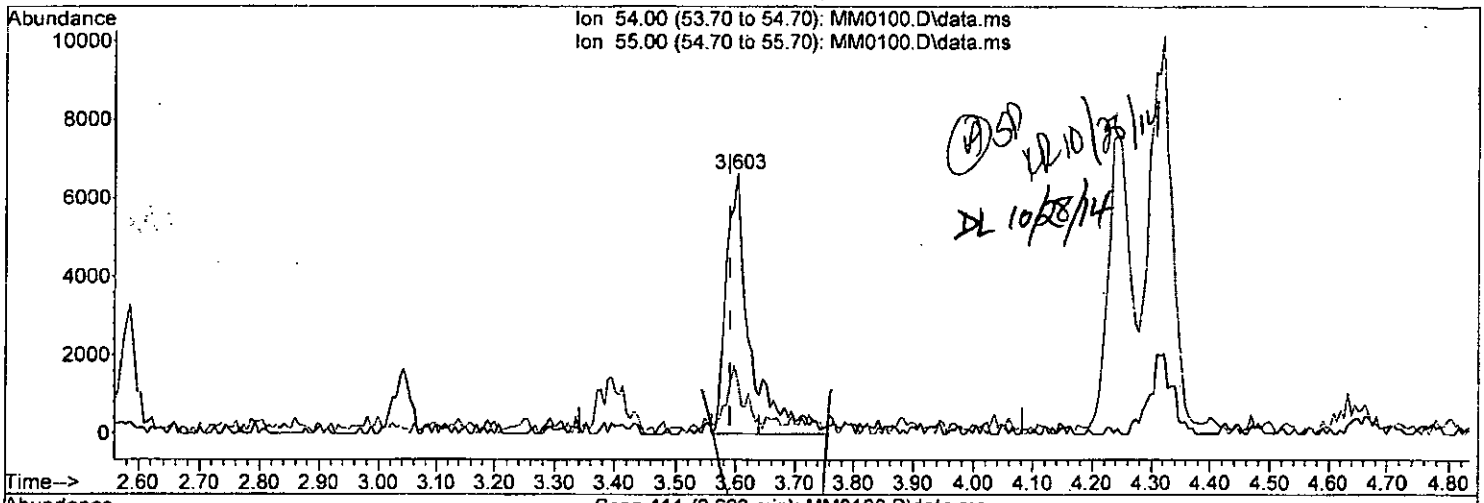
W102714.M Tue Oct 28 10:26:50 2014 Page: 1

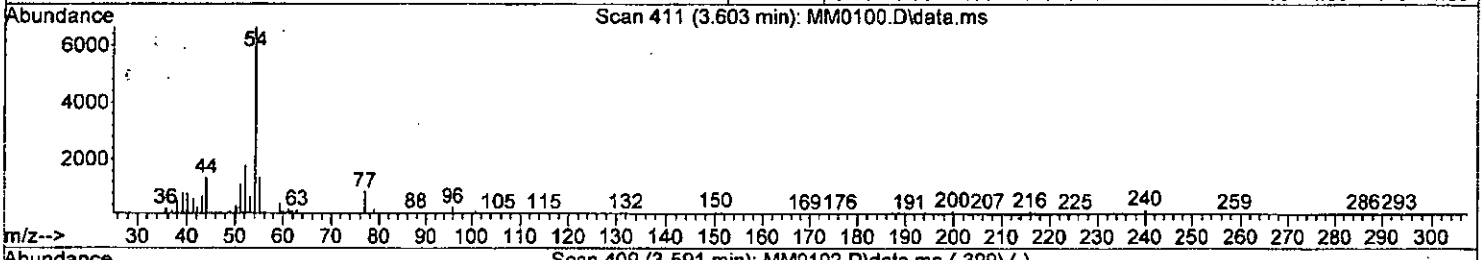
00408

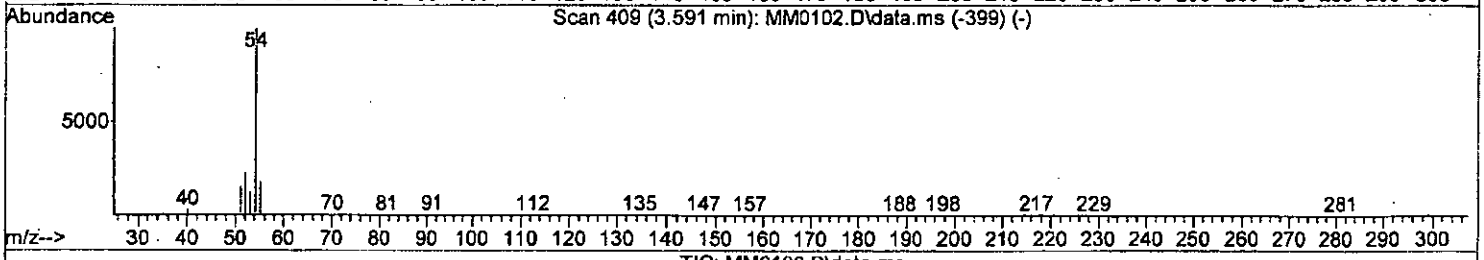
Quantitation Report (Qedit)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0100.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:49 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:38 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0100.D\data.ms

(36) Propionitrile

3.603min (+0.013) 25.96 ppb m

response 18307

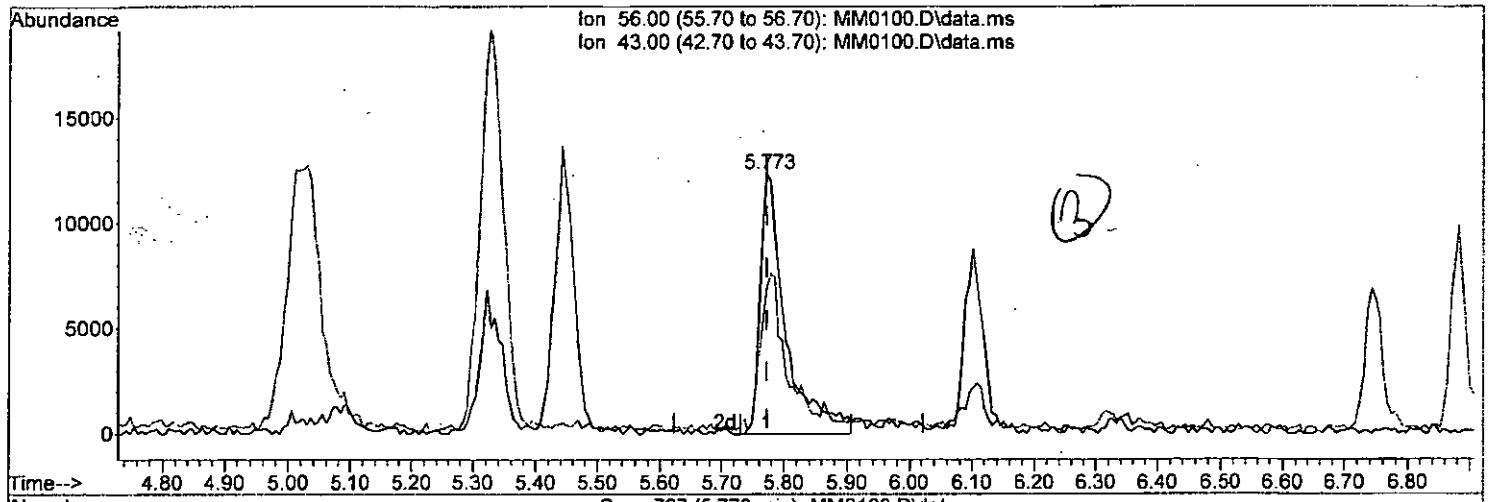
Ion	Exp%	Act%
54.00	100	100
55.00	18.80	20.57
0.00	0.00	0.00
0.00	0.00	0.00

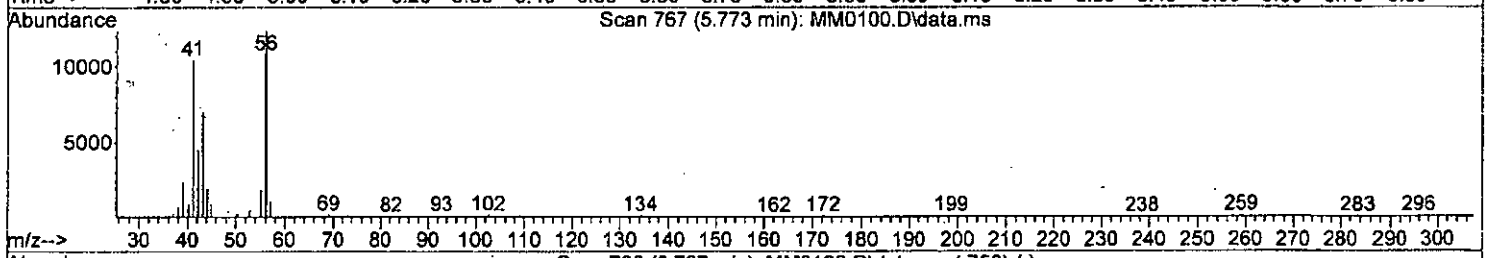
W102714.M Tue Oct 28 10:27:00 2014 Page: 1

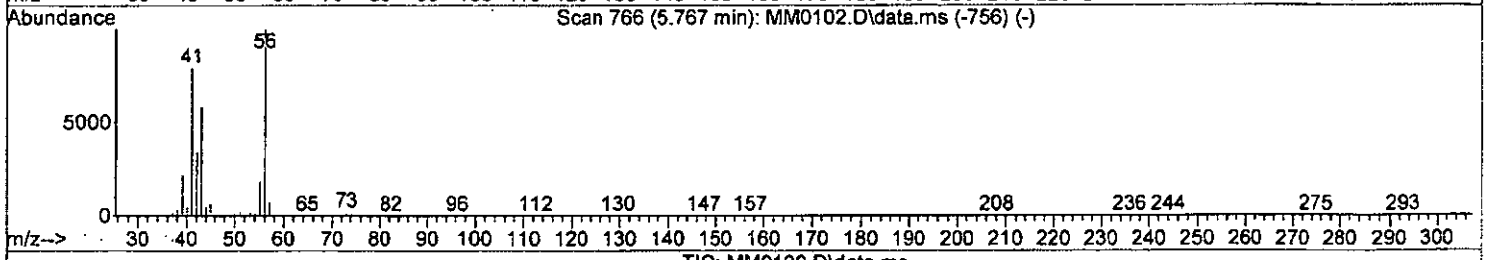
00409

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0100.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:49 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:38 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0100.D\data.ms

(53) 1-Butanol

5.773min (+0.000) 211.06 ppb

response 34953

Ion	Exp%	Act%
56.00	100	100
43.00	56.20	59.67
0.00	0.00	0.00
0.00	0.00	0.00

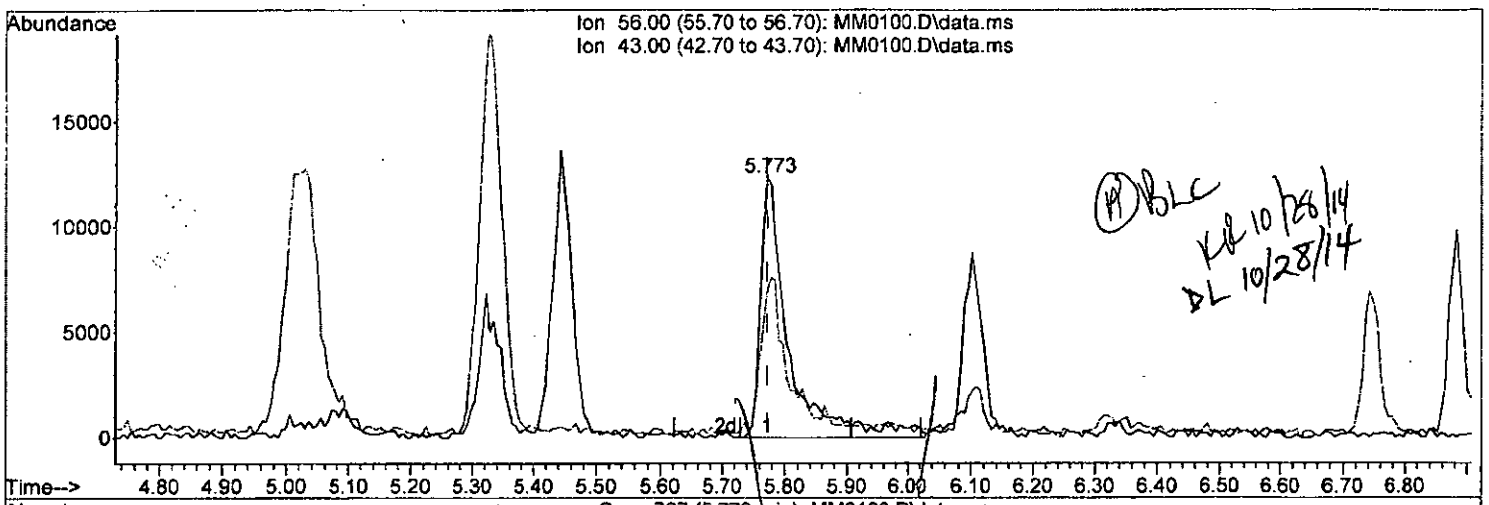
W102714.M Tue Oct 28 10:27:24 2014 Page: 1

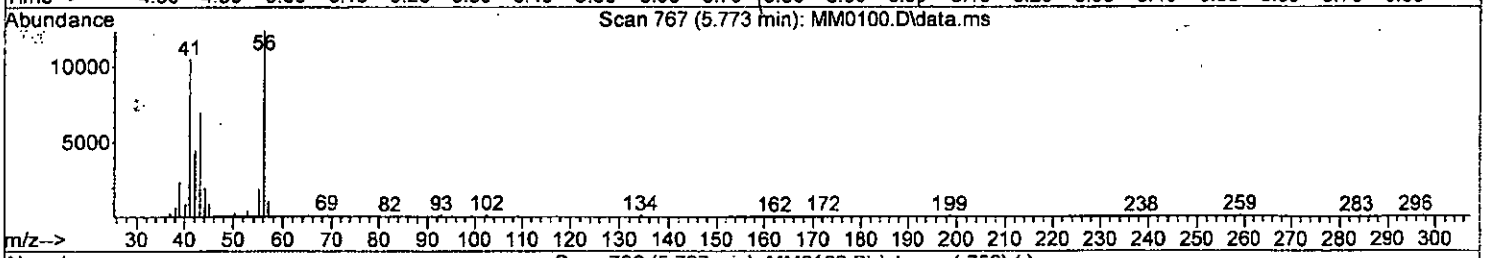
00410

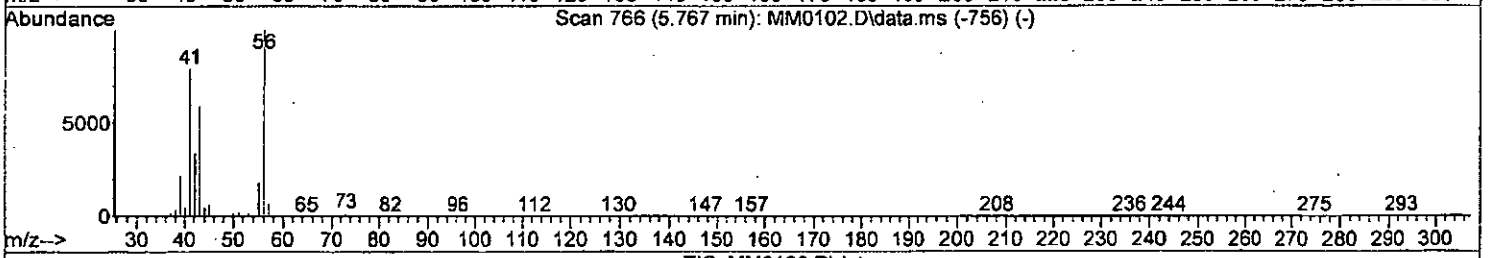
Quantitation Report (Qedit)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0100.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:49 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:38 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0100.D\data.ms

(53) 1-Butanol

5.773min (+0.000) 231.54 ppb m

response 38345

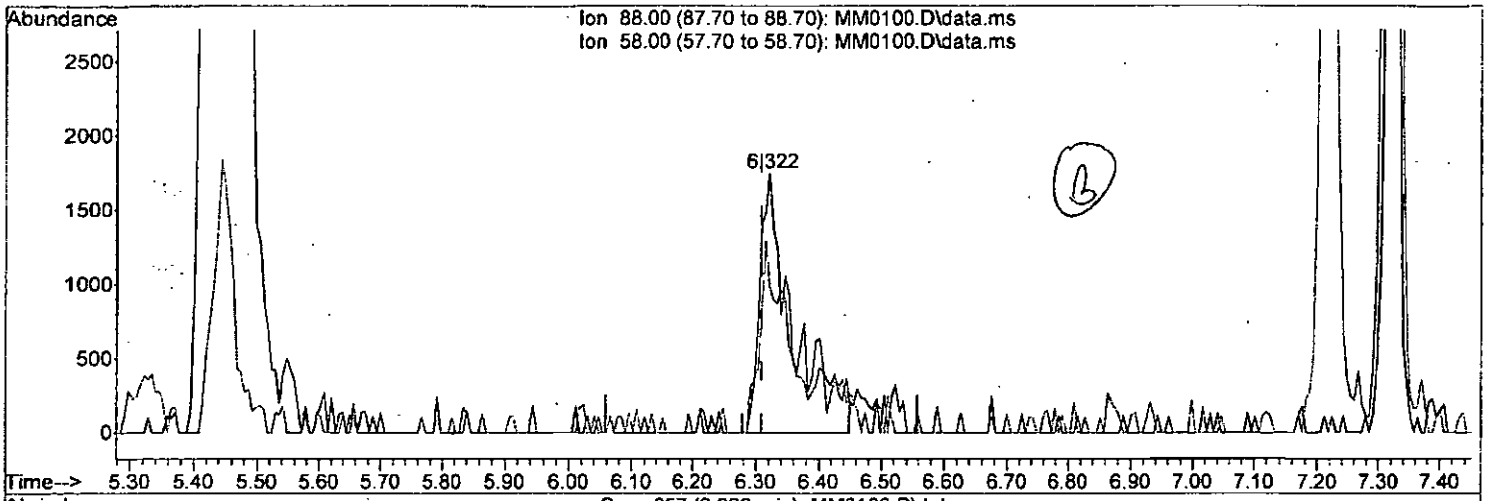
Ion	Exp%	Act%
56.00	100	100
43.00	56.20	54.39
0.00	0.00	0.00
0.00	0.00	0.00

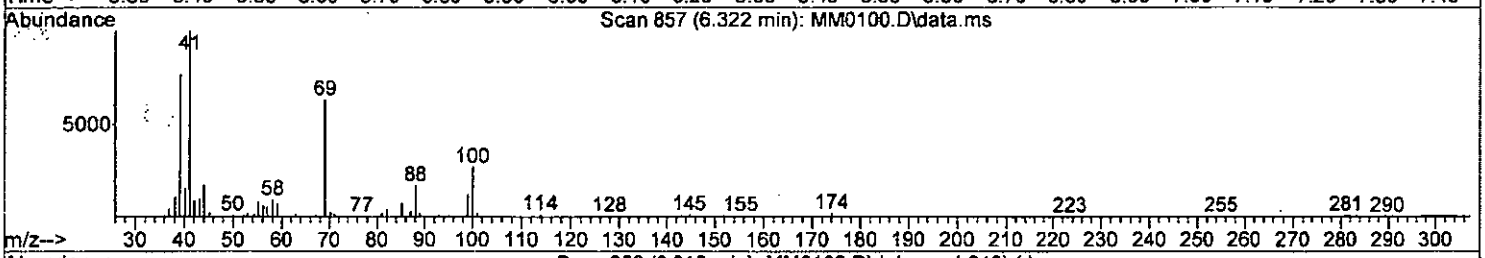
W102714.M Tue Oct 28 10:27:34 2014 Page: 1

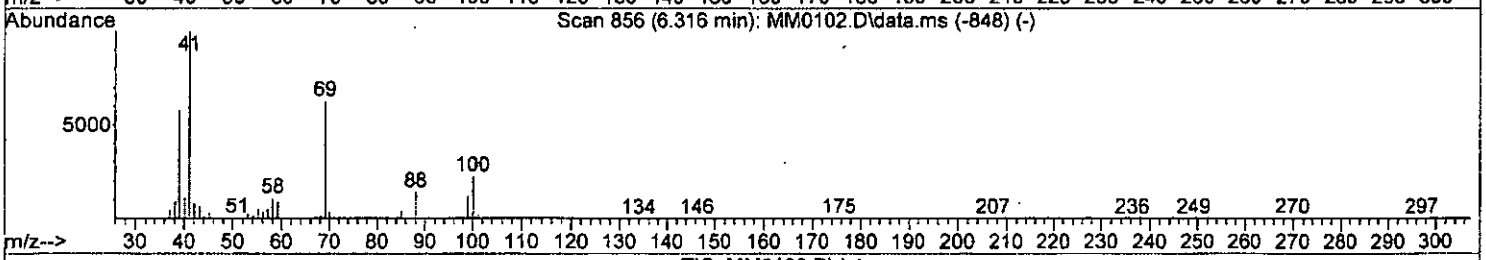
00411

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0100.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:49 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:38 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0100.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.013) 99.50 ppb

response 6557

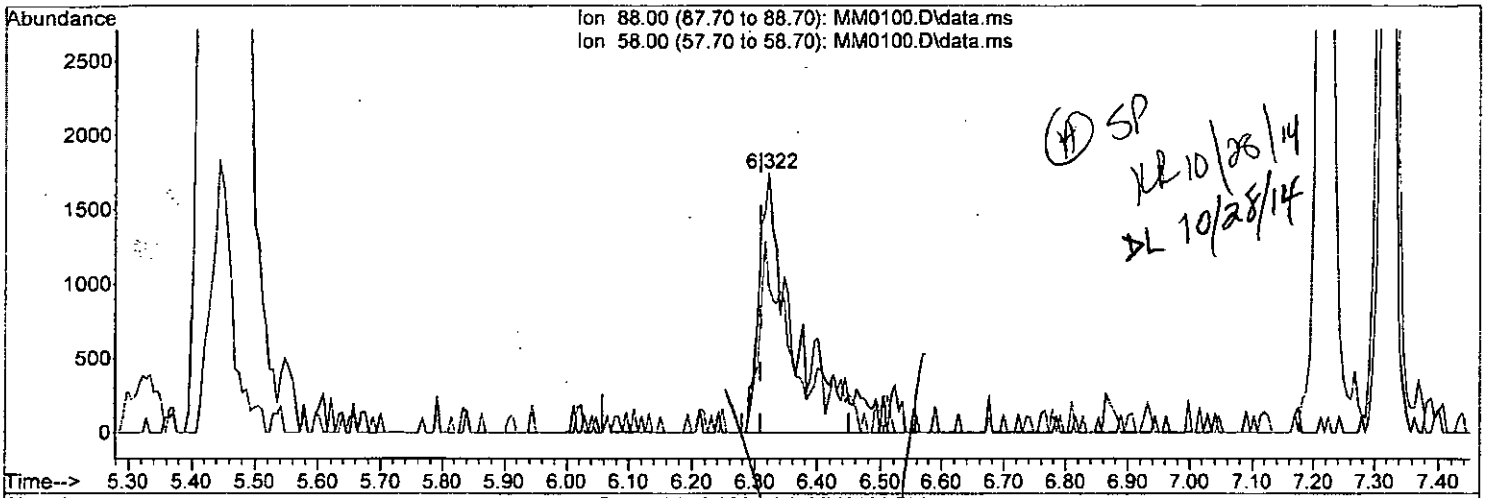
Ion	Exp%	Act%
88.00	100	100
58.00	77.40	56.33#
0.00	0.00	0.00
0.00	0.00	0.00

W102714.M Tue Oct 28 10:27:59 2014 Page: 1

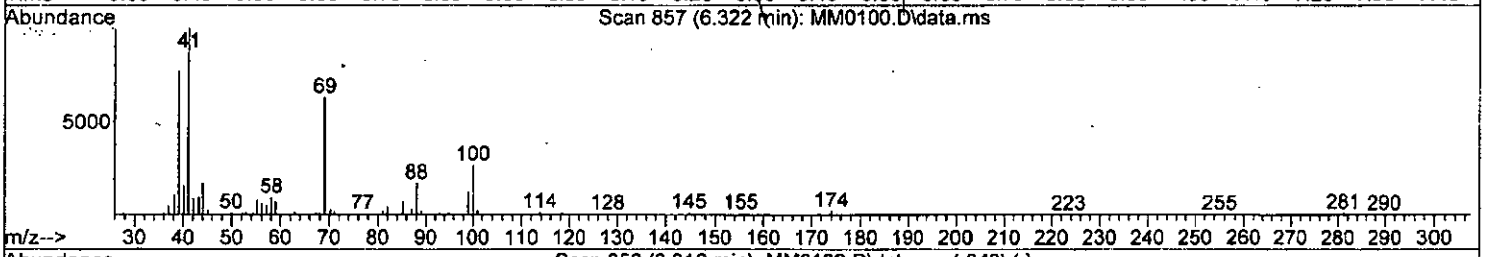
00412

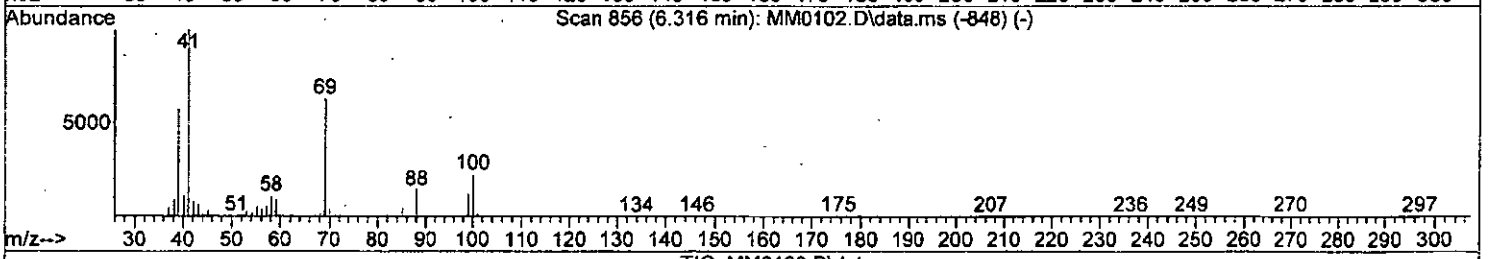
Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0100.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:49 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:38 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



(58) SP KL 10/28/14 DL 10/28/14





TIC: MM0100.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.013) 114.32 ppb m

response 7534

Ion	Exp%	Act%
88.00	100	100
58.00	77.40	56.33#
0.00	0.00	0.00
0.00	0.00	0.00

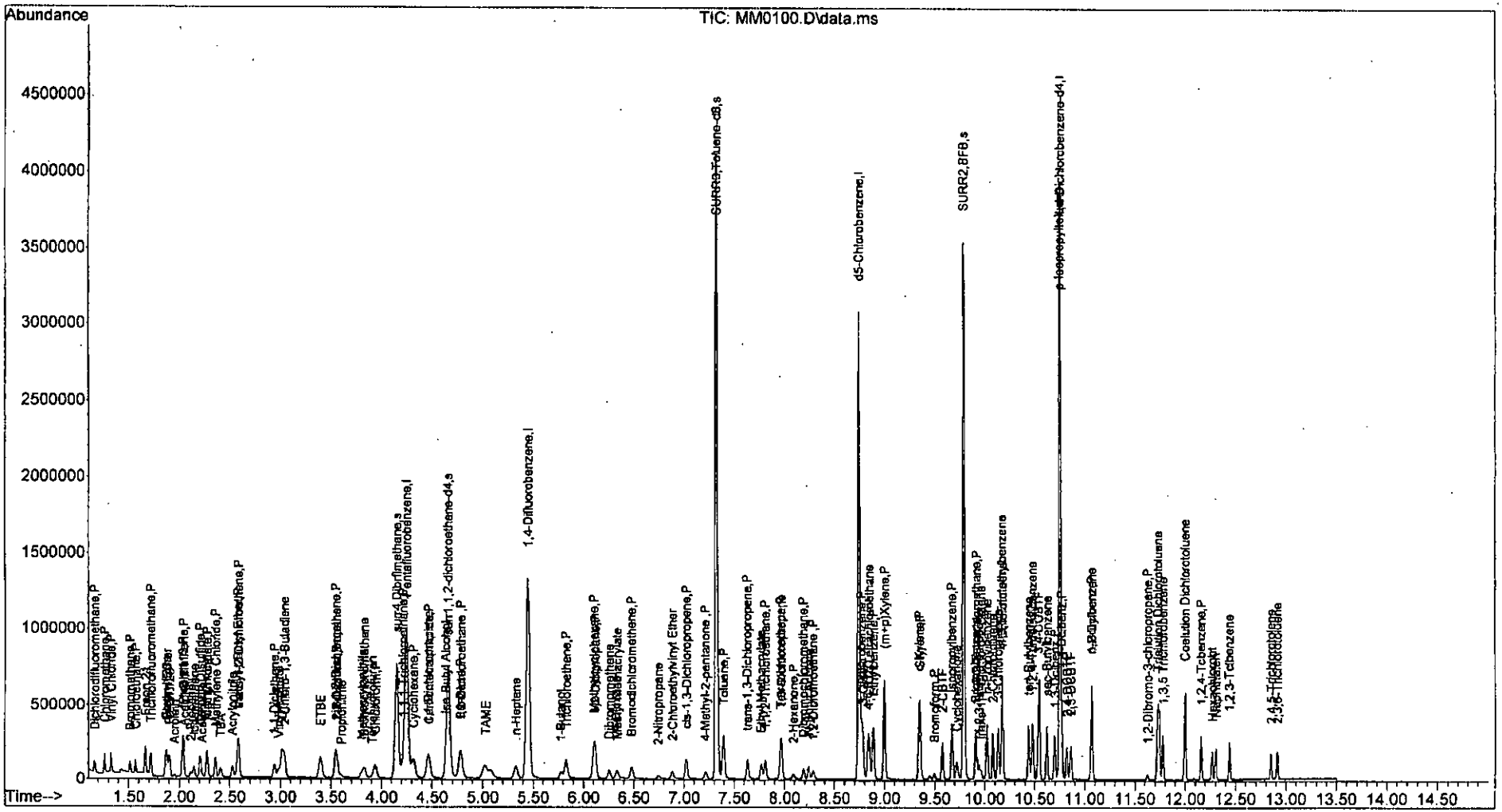
W102714.M Tue Oct 28 10:28:06 2014 Page: 1

00413

Quantitation Report (QT Reviewed)

Sample : 5.0ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0100.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 5:49 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:28:02 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



W102714.M Tue Oct 28 10:28:59 2014

Page: 4

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0101.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 6:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:29:45 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.249	168	879258	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.444	114	1325531	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1245376	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	705017	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	757923	98.18	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 196.36%#			
48) surr1,1,2-dichloroetha...	4.658	65	922901	98.19	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 196.38%#			
65) SURR3,Toluene-d8	7.322	98	3200714	98.50	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 197.00%#			
70) SURR2,BFB	9.785	95	1219038	96.68	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 193.36%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.164	85	183557	22.07	ppb	100
3) Chloromethane	1.262	50	237579	20.94	ppb	99
4) Vinyl Chloride	1.323	62	256985	21.33	ppb	99
5) Bromomethane	1.512	94	106438	18.27	ppb	100
6) Chloroethane	1.567	64	156265	20.82	ppb	98
7) Freon 21	1.664	67	393424	20.99	ppb	97
8) Trichlorofluoromethane	1.719	101	305493	21.32	ppb	99
9) Diethyl Ether	1.878	59	131425	20.15	ppb	95
10) Freon 123a	1.872	67	208683	20.30	ppb	92
11) Freon 123	1.902	83	228769	20.91	ppb	99
12) Acrolein	1.951	56	31272	87.36	ppb	99
13) 1,1-Diclethene	2.036	96	151898	20.00	ppb	99
14) Freon 113	2.036	101	161458	20.76	ppb	95
15) Acetone	2.048	43	37242	19.84	ppb	93
16) 2-Propanol	2.115	45	152817	413.75	ppb	96
17) Iodomethane	2.146	142	233583	21.30	ppb	99
18) Carbon Disulfide	2.207	76	522301	20.46	ppb	99
19) Acetonitrile	2.225	40	29654	100.16	ppb	99
20) Allyl Chloride	2.274	76	96217	22.44	ppb	94
21) Methyl Acetate	2.274	43	91352	21.25	ppb	95
22) Methylene Chloride	2.359	84	166332	20.10	ppb	98
23) TBA	2.408	59	246679	403.52	ppb	99
24) Acrylonitrile	2.524	53	208144	104.04	ppb	97
25) Methyl-t-Butyl Ether	2.579	73	438950	20.61	ppb	98
26) trans-1,2-Dichloroethene	2.585	96	172405	21.00	ppb	98
28) 1,1-Diclethane	2.938	63	315620	20.81	ppb	100
29) Vinyl Acetate	2.975	86	28070	20.30	ppb	97
30) DIPE	3.012	45	624889	20.40	ppb	98
31) 2-Chloro-1,3-Butadiene	3.042	53	293913	20.96	ppb	97
32) ETBE	3.396	59	542913	20.51	ppb	100
33) 2,2-Dichloropropane	3.554	77	281622	20.92	ppb	98
34) cis-1,2-Dichloroethene	3.542	96	183891	20.67	ppb	100
35) 2-Butanone	3.548	43	51954	19.96	ppb	97
36) Propionitrile	3.585	54	78179	108.73	ppb	96
37) Bromochloromethane	3.829	130	103548	20.59	ppb	90

KP 10/28/14

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0101.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 6:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:29:45 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Methacrylonitrile	3.798	67	46701	21.00 ppb	99
39) Tetrahydrofuran	3.902	42	36330	20.34 ppb	92
40) Chloroform	3.938	83	308171	20.18 ppb	99
41) 1,1,1-Trichloroethane	4.213	97	280864	20.51 ppb	87
42) TAME	5.023	73	449995	20.16 ppb	98
44) Cyclohexane	4.316	41	203937	20.88 ppb	95
46) Carbontetrachloride	4.469	121	71529	20.67 ppb	99
47) 1,1-Dichloropropene	4.463	75	241398	20.85 ppb	98
49) Benzene	4.780	78	715398	21.07 ppb	99
50) 1,2-Dichloroethane	4.786	62	238812	20.87 ppb	96
51) Iso-Butyl Alcohol	4.639	43	110450	424.88 ppb	96
52) n-Heptane	5.328	43	220247	20.05 ppb	94
53) 1-Butanol	5.773	56	153477	912.72 ppb	91
54) Trichloroethene	5.828	130	183597	20.65 ppb	98
55) Methylcyclohexane	6.103	55	233460	20.50 ppb	97
56) 1,2-Diclpropane	6.115	63	182119	20.48 ppb	99
57) Dibromomethane	6.255	93	85943	20.42 ppb	96
58) 1,4-Dioxane	6.322	88	25555m	381.91 ppb	
59) Methyl Methacrylate	6.328	69	87282	21.28 ppb	98
60) Bromodichloromethane	6.480	83	219377	20.82 ppb	99
61) 2-Nitropropane	6.743	41	53003	37.69 ppb	99
62) 2-Chloroethylvinyl Ether	6.877	63	84884	20.48 ppb	96
63) cis-1,3-Dichloropropene	7.023	75	278999	21.25 ppb	100
64) 4-Methyl-2-pentanone	7.212	43	123666	20.41 ppb	96
66) Toluene	7.389	91	785171	21.45 ppb	100
67) trans-1,3-Dichloropropene	7.627	75	237930	21.26 ppb	99
68) Ethyl Methacrylate	7.767	69	181352	20.94 ppb	99
69) 1,1,2-Trichloroethane	7.803	97	131876	21.37 ppb	99
72) Tetrachloroethene	7.962	164	147241	20.55 ppb	98
73) 2-Hexanone	8.084	43	85208	20.58 ppb	94
74) 1,3-Dichloropropane	7.968	76	230209	20.60 ppb	96
75) Dibromochloromethane	8.187	129	134773	20.12 ppb	96
76) N-Butyl Acetate	8.236	43	224112	21.06 ppb	97
77) 1,2-Dibromoethane	8.285	107	126296	21.60 ppb	95
78) Chlorobenzene	8.767	112	496265	20.58 ppb	99
79) 3-CBTF	8.785	180	253821	19.21 ppb	99
80) 4-CBTF	8.834	180	232964	19.71 ppb	99
81) 1,1,1,2-Tetrachloroethane	8.846	131	163700	20.65 ppb	98
82) Ethylbenzene	8.889	106	266907	20.52 ppb	93
83) (m+p)Xylene	8.998	106	667073	42.38 ppb	96
84) o-Xylene	9.346	106	325310	20.55 ppb	95
85) Styrene	9.352	104	553728	21.15 ppb	97
87) Bromoform	9.492	173	73234	20.91 ppb	96
88) 2-CBTF	9.577	180	245913	19.80 ppb	97
89) Isopropylbenzene	9.669	105	823516	21.89 ppb	100
90) Cyclohexanone	9.718	55	155982	377.32 ppb	98
91) trans-1,4-Dichloro-2-B...	9.961	53	43871	19.40 ppb	91
92) 1,1,2,2-Tetrachloroethane	9.913	83	155647	21.23 ppb	99
93) Bromobenzene	9.907	156	203951	20.55 ppb	98
94) 1,2,3-Trichloropropane	9.937	110	43094	19.38 ppb	98
95) n-Propylbenzene	10.022	91	964489	22.11 ppb	99
96) 2-Chlorotoluene	10.077	91	580266	21.96 ppb	98

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0101.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 6:21 pm
Operator : K.Ruest
InstName : MSVOA-12

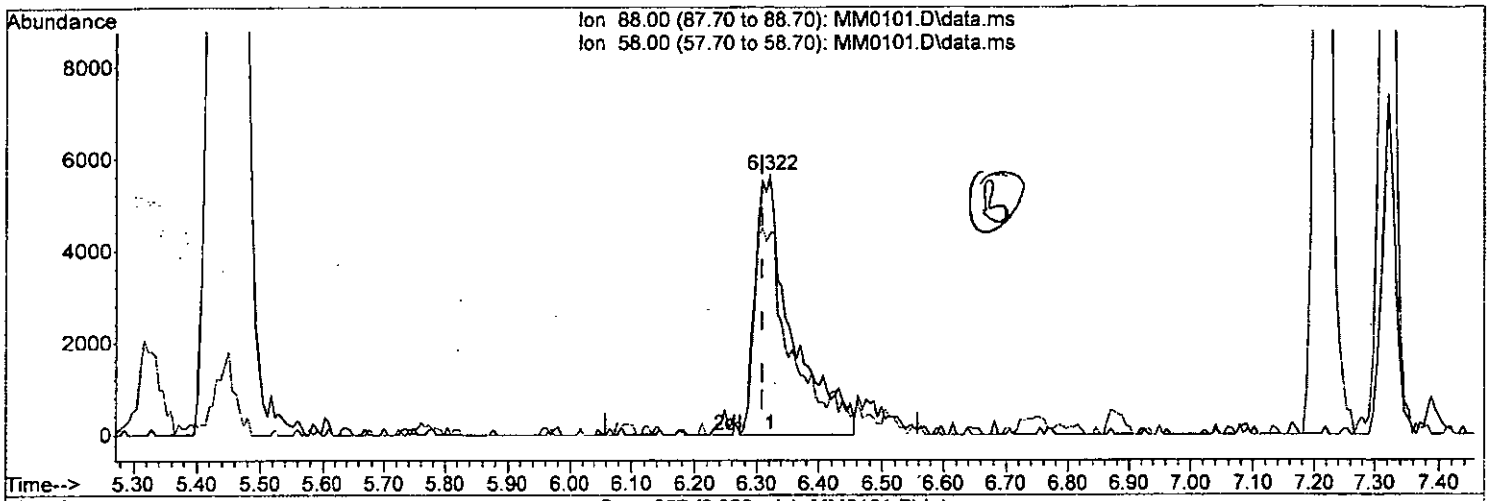
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:29:45 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

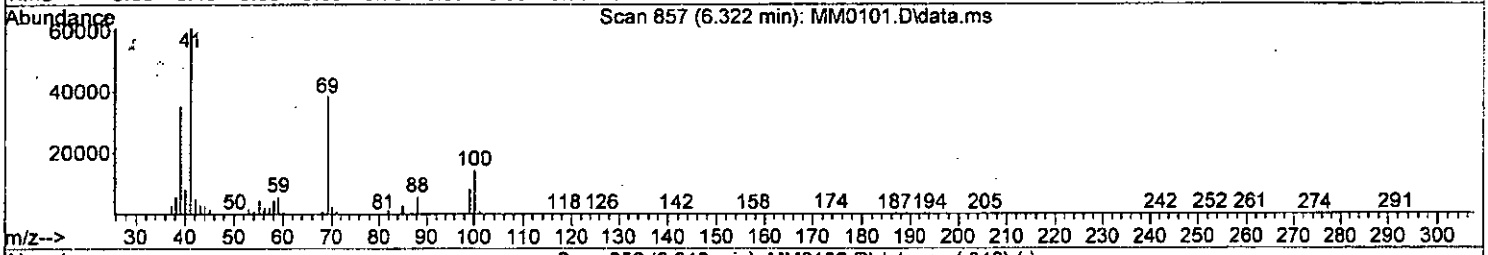
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	580649	20.66	ppb	97
98)	4-Chlorotoluene	10.169	91	705578	21.29	ppb	98
99)	1,3,5-Trimethylbenzene	10.169	105	689159	21.12	ppb	99
100)	tert-Butylbenzene	10.437	119	564350	21.41	ppb	100
101)	1,2,4-Trimethylbenzene	10.474	105	697124	21.78	ppb	99
102)	3,4-DCBTF	10.535	214	182957	19.56	ppb	99
103)	sec-Butylbenzene	10.620	105	803667	21.69	ppb	100
104)	p-Isopropyltoluene	10.742	119	700787	21.77	ppb	98
105)	1,3-Dclbenz	10.693	146	397745	20.98	ppb	100
106)	1,4-Dclbenz	10.766	146	411694	20.77	ppb	99
107)	2,4-DCBTF	10.821	214	160320	19.99	ppb	97
108)	2,5-DCBTF	10.858	214	182336	20.09	ppb	98
109)	n-Butylbenzene	11.065	91	616862	21.65	ppb	99
110)	1,2-Dclbenz	11.065	146	369570	20.72	ppb	99
111)	1,2-Dibromo-3-chloropr...	11.626	157	25414	20.59	ppb	88
112)	Trielution Dichlorotol...	11.729	125	910249	62.25	ppb	100
113)	1,3,5 Trichlorobenzene	11.778	180	250263	20.47	ppb	97
114)	Coelution Dichlorotoluene	11.998	125	646557	42.22	ppb	100
115)	1,2,4-Tcbenzene	12.156	180	222721	21.33	ppb	98
116)	Hexachlorobt	12.266	225	88493	21.44	ppb	97
117)	Naphthalen	12.296	128	428404	21.59	ppb	99
118)	1,2,3-Tclbenzene	12.437	180	189376	21.33	ppb	98
119)	2,4,5-Trichlorotolene	12.851	159	115424	19.21	ppb	99
120)	2,3,6-Trichlorotoluene	12.912	159	111038	20.01	ppb	97

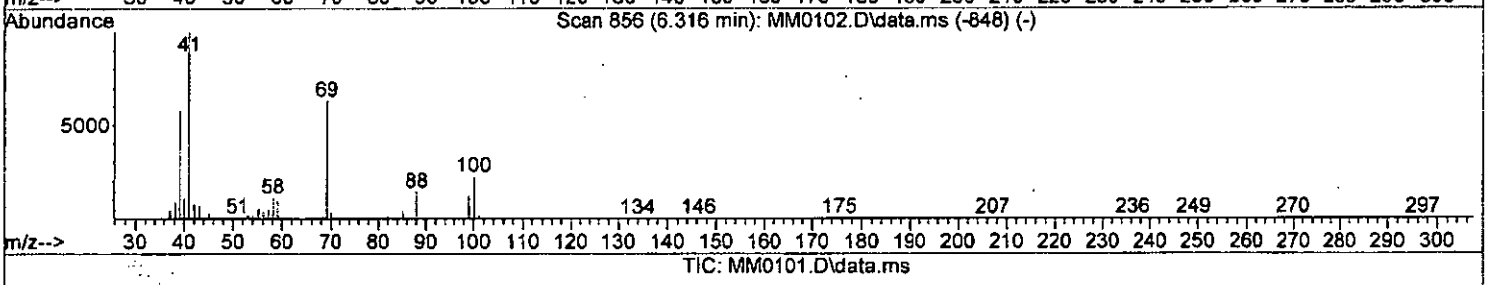
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0101.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 6:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:42 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0101.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.013) 342.04 ppb

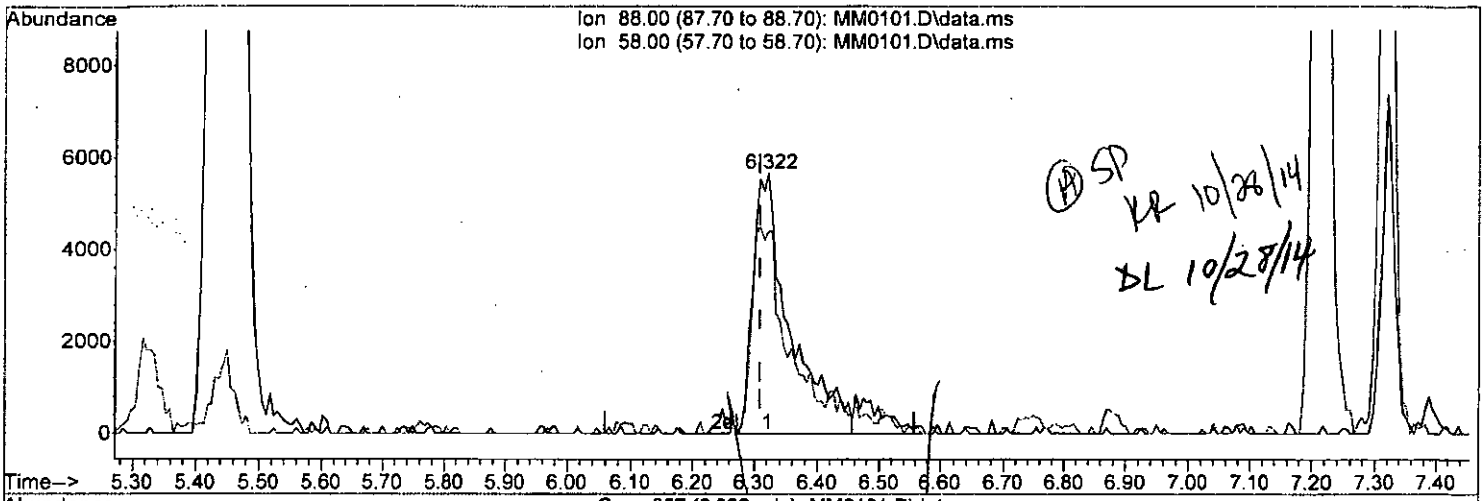
response 22887

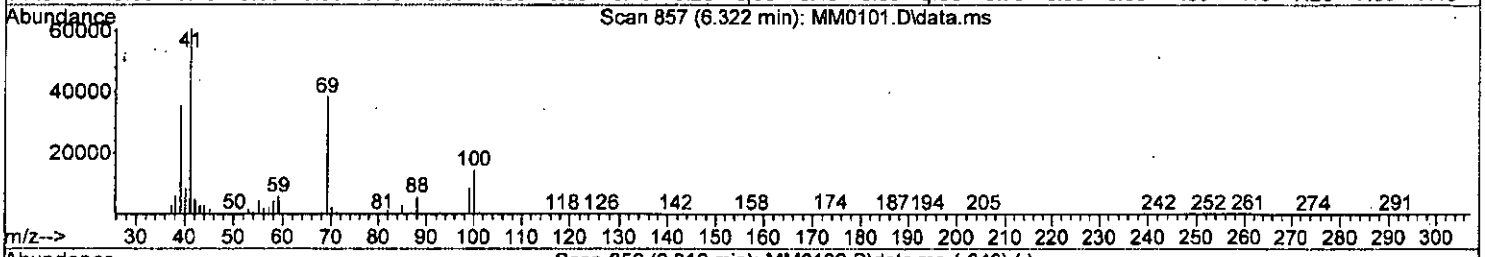
Ion	Exp%	Act%
88.00	100	100
58.00	77.40	77.68
0.00	0.00	0.00
0.00	0.00	0.00

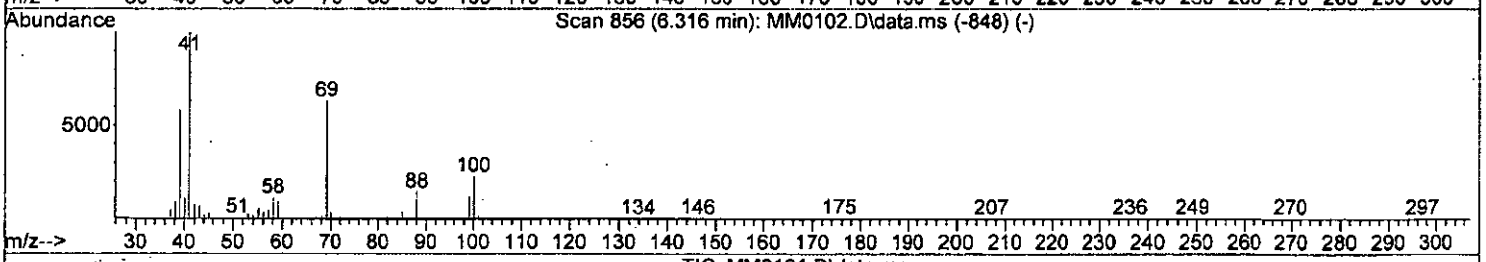
Quantitation Report (Qedit)

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0101.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 6:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:42 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0101.D\data.ms

(58) 1,4-Dioxane

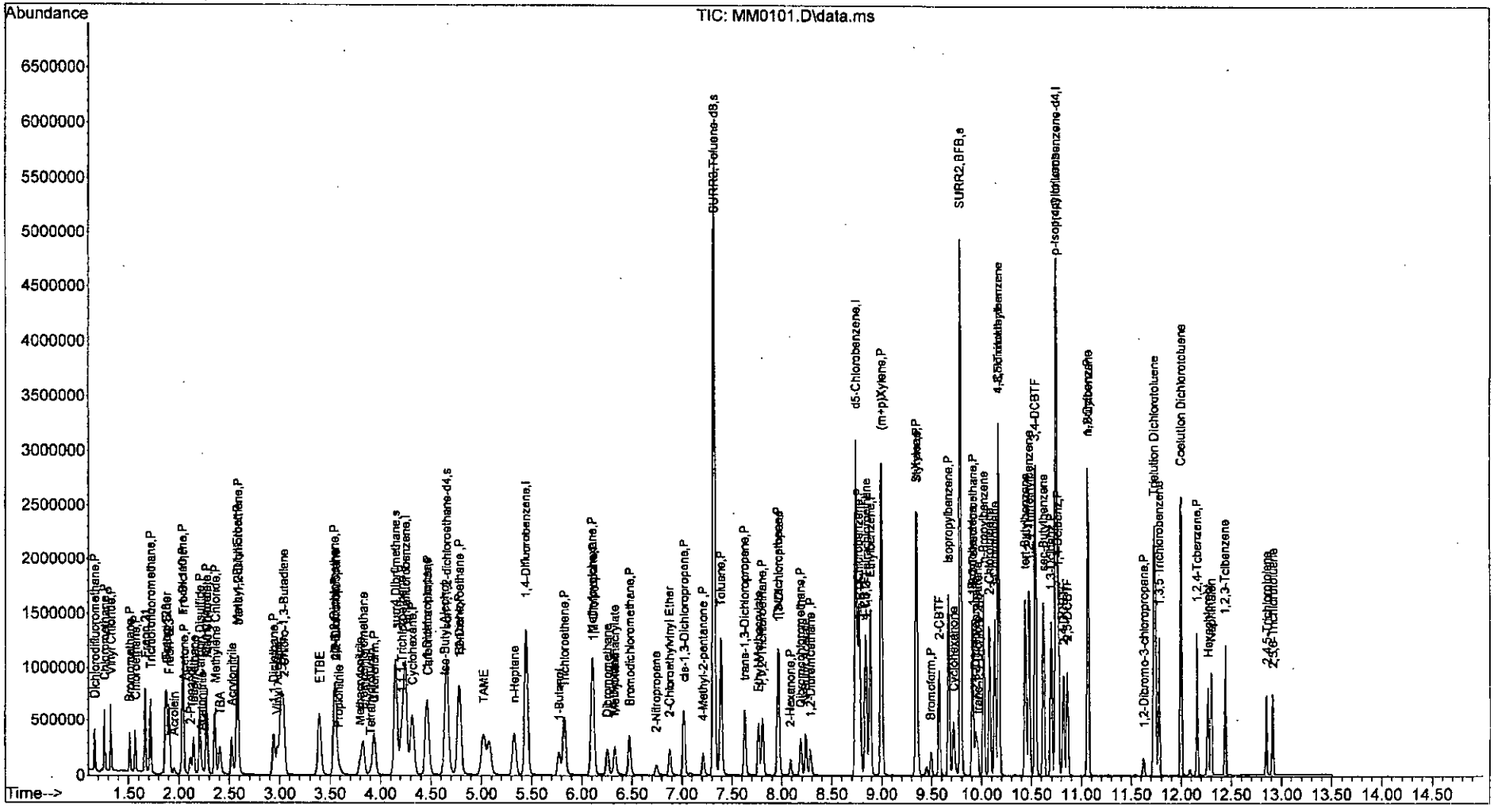
6.322min (+0.013) 381.91 ppb m

response 25555

Ion	Exp%	Act%
88.00	100	100
58.00	77.40	77.68
0.00	0.00	0.00
0.00	0.00	0.00

Sample : 20ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0101.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 6:21 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:29:45 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration


Abundance
TIC: MM0101.D\data.ms
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6000000
5500000
5000000
4500000
4000000
3500000
3000000
2500000
2000000
1500000
1000000
500000
0
Time-->
1.50 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 6.00 6.50 7.00 7.50 8.00 8.50 9.00 9.50 10.00 10.50 11.00 11.50 12.00 12.50 13.00 13.50 14.00 14.50
Dichlorodifluoromethane,P
Vinyl Chloride,P
Bromomethane,P
Chloroethane,P
Trichlorofluoromethane,P
Acrolein
Acetone,P
Methyl Iodide,P
TBA
Methylene Chloride,P
Acrylonitrile
Methyl-t-Butyl Ether,P
Vinyl Acetate,P
Allyl Alcohol
Carbon Disulfide,P
Allyl Chloride,P
Acetonitrile,P
Methyl Acrylate,P
Dibromofluoromethane,S
Vinyl Chloride-d3,I
Chloroethane-d5,S
Methylene Chloride-d2,I
Acrylonitrile-d3,I
Methyl Methacrylate,P
Propionitrile
Dibromofluoromethane,S
Methacrylonitrile
Tetrahydrofuran,P
Ethyl Methacrylate,P
1,1-Dichloroethene-d2,I
1,1-Dichloroethene,P
Carbon Disulfide-d4,I
Acrylonitrile-d3,S
Methylene Chloride,P
Allyl Chloride,P
Methyl-t-Butyl Ether

Quantitation Report (QT Reviewed)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0102.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 6:54 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:32:14 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.243	168	896470	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.450	114	1362156	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1272285	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	744954	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.152	113	403155	50.82	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 101.64%			
48) surr1,1,2-dichloroetha...	4.658	65	490824	50.82	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 101.64%			
65) SURR3,Toluene-d8	7.322	98	1728247	51.75	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 103.50%			
70) SURR2,BFB	9.785	95	664156	51.26	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.52%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.165	85	445165	52.49	ppb	100
3) Chloromethane	1.262	50	572441	49.49	ppb	100
4) Vinyl Chloride	1.323	62	620342	50.50	ppb	100
5) Bromomethane	1.512	94	290555	48.91	ppb	100
6) Chloroethane	1.567	64	379190	49.55	ppb	100
7) Freon 21	1.665	67	958416	50.16	ppb	100
8) Trichlorofluoromethane	1.719	101	724273	49.58	ppb	100
9) Diethyl Ether	1.878	59	326874	49.15	ppb	100
10) Freon 123a	1.866	67	517474	49.37	ppb	100
11) Freon 123	1.902	83	569640	51.07	ppb	100
12) Acrolein	1.951	56	72113	197.59	ppb	100
13) 1,1-Diclethene	2.036	96	374441	48.35	ppb	100
14) Freon 113	2.036	101	393848	49.66	ppb	100
15) Acetone	2.042	43	91542	47.83	ppb	100
16) 2-Propanol	2.116	45	394249	1046.94	ppb	100
17) Iodomethane	2.146	142	578047	51.71	ppb	100
18) Carbon Disulfide	2.207	76	1257208	48.29	ppb	100
19) Acetonitrile	2.219	40	71364	236.42	ppb	100
20) Allyl Chloride	2.274	76	234107	53.54	ppb	100
21) Methyl Acetate	2.274	43	228686	52.18	ppb	100
22) Methylene Chloride	2.359	84	405140	48.01	ppb	100
23) TBA	2.408	59	612631	982.90	ppb	100
24) Acrylonitrile	2.524	53	515729	252.84	ppb	100
25) Methyl-t-Butyl Ether	2.579	73	1083953	49.93	ppb	100
26) trans-1,2-Dichloroethene	2.585	96	423296	50.58	ppb	100
28) 1,1-Diclethane	2.939	63	767350	49.62	ppb	100
29) Vinyl Acetate	2.975	86	73295	51.98	ppb	100
30) DIPE	3.012	45	1542759	49.40	ppb	100
31) 2-Chloro-1,3-Butadiene	3.042	53	698818	48.87	ppb	100
32) ETBE	3.396	59	1343512	49.77	ppb	100
33) 2,2-Dichloropropane	3.554	77	702319	51.17	ppb	100
34) cis-1,2-Dichloroethene	3.542	96	457622	50.44	ppb	100
35) 2-Butanone	3.542	43	130641	49.22	ppb	100
36) Propionitrile	3.591	54	194638	265.51	ppb	100
37) Bromochloromethane	3.829	130	250443	48.83	ppb	100

KR 10/28/14

W102714.M Tue Oct 28 10:33:17 2014 Page: 1

00421

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0102.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 6:54 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:32:14 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.798	67	119180	52.56	ppb	100
39) Tetrahydrofuran	3.908	42	90378	49.62	ppb	100
40) Chloroform	3.938	83	746211	47.93	ppb	100
41) 1,1,1-Trichloroethane	4.213	97	684047	48.98	ppb	100
42) TAME	5.024	73	1116368	49.06	ppb	100
44) Cyclohexane	4.316	41	500786	49.89	ppb	100
46) Carbontetrachloride	4.469	121	175732	49.41	ppb	100
47) 1,1-Dichloropropene	4.463	75	590556	49.62	ppb	100
49) Benzene	4.780	78	1734163	49.70	ppb	100
50) 1,2-Dichloroethane	4.786	62	578607	49.22	ppb	100
51) Iso-Butyl Alcohol	4.633	43	281142	1052.43	ppb	100
52) n-Heptane	5.328	43	550943	48.81	ppb	100
53) 1-Butanol	5.767	56	412772	2388.74	ppb	100
54) Trichloroethene	5.828	130	452764	49.55	ppb	100
55) Methylcyclohexane	6.103	55	580880	49.63	ppb	100
56) 1,2-Diclpropane	6.109	63	448630	49.08	ppb	100
57) Dibromomethane	6.255	93	214802	49.68	ppb	100
58) 1,4-Dioxane	6.316	88	63035m	916.71	ppb	
59) Methyl Methacrylate	6.328	69	218739	51.90	ppb	100
60) Bromodichloromethane	6.475	83	542953	50.14	ppb	100
61) 2-Nitropropane	6.743	41	137939	95.45	ppb	100
62) 2-Chloroethylvinyl Ether	6.877	63	211971	49.76	ppb	100
63) cis-1,3-Dichloropropene	7.017	75	698240	51.76	ppb	100
64) 4-Methyl-2-pentanone	7.212	43	310242	49.82	ppb	100
66) Toluene	7.389	91	1906441	50.68	ppb	100
67) trans-1,3-Dichloropropene	7.627	75	608427	52.90	ppb	100
68) Ethyl Methacrylate	7.767	69	466796	52.46	ppb	100
69) 1,1,2-Trichloroethane	7.804	97	316354	49.90	ppb	100
72) Tetrachloroethene	7.962	164	372314	50.85	ppb	100
73) 2-Hexanone	8.084	43	210562	49.78	ppb	100
74) 1,3-Dichloropropane	7.968	76	574300	50.31	ppb	100
75) Dibromochloromethane	8.188	129	352108	51.45	ppb	100
76) N-Butyl Acetate	8.236	43	576975	53.07	ppb	100
77) 1,2-Dibromoethane	8.285	107	309516	51.82	ppb	100
78) Chlorobenzene	8.767	112	1232478	50.02	ppb	100
79) 3-CBTF	8.785	180	684493	50.72	ppb	100
80) 4-CBTF	8.834	180	611723	50.65	ppb	100
81) 1,1,1,2-Tetrachloroethane	8.846	131	423508	52.29	ppb	100
82) Ethylbenzene	8.889	106	680015	51.16	ppb	100
83) (m+p)Xylene	8.998	106	1676831	104.27	ppb	100
84) o-Xylene	9.346	106	825346	51.05	ppb	100
85) Styrene	9.352	104	1430057	53.47	ppb	100
87) Bromoform	9.492	173	200642	54.21	ppb	100
88) 2-CBTF	9.578	180	651564	49.65	ppb	100
89) Isopropylbenzene	9.669	105	2041076	51.34	ppb	100
90) Cyclohexanone	9.718	55	346132	792.40	ppb	100
91) trans-1,4-Dichloro-2-B...	9.962	53	114365	47.87	ppb	100
92) 1,1,2,2-Tetrachloroethane	9.913	83	386370	49.87	ppb	100
93) Bromobenzene	9.907	156	522207	49.80	ppb	100
94) 1,2,3-Trichloropropane	9.937	110	108315	46.10	ppb	100
95) n-Propylbenzene	10.023	91	2385646	51.76	ppb	100
96) 2-Chlorotoluene	10.084	91	1434836	51.38	ppb	100

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0102.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 6:54 pm
Operator : K.Ruest
InstName : MSVOA-12

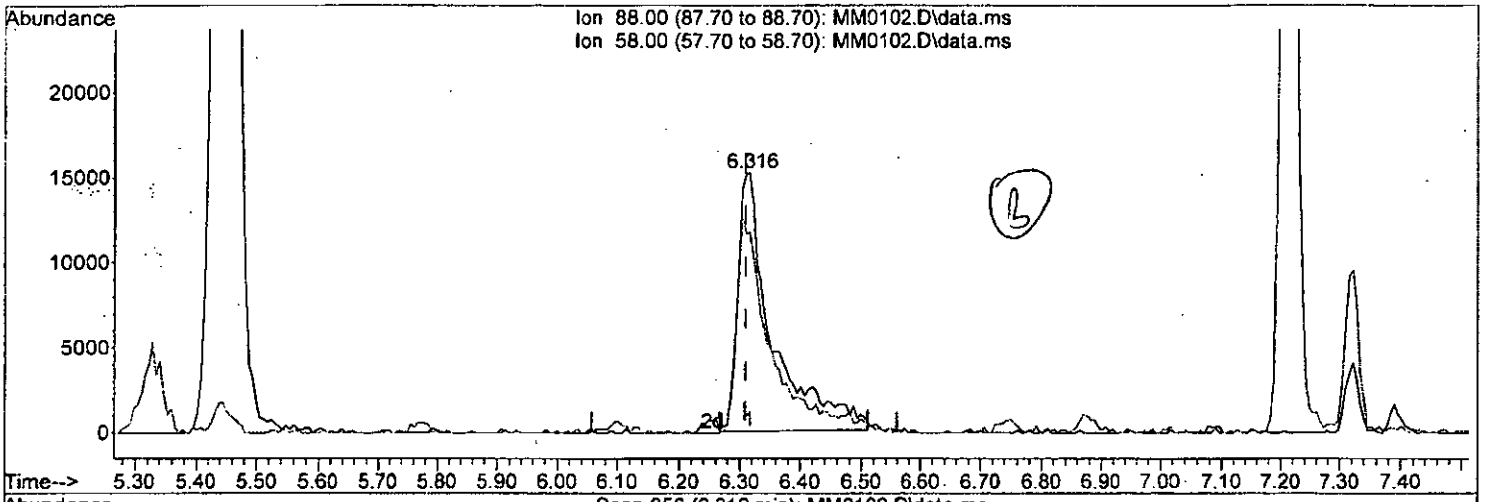
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:32:14 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

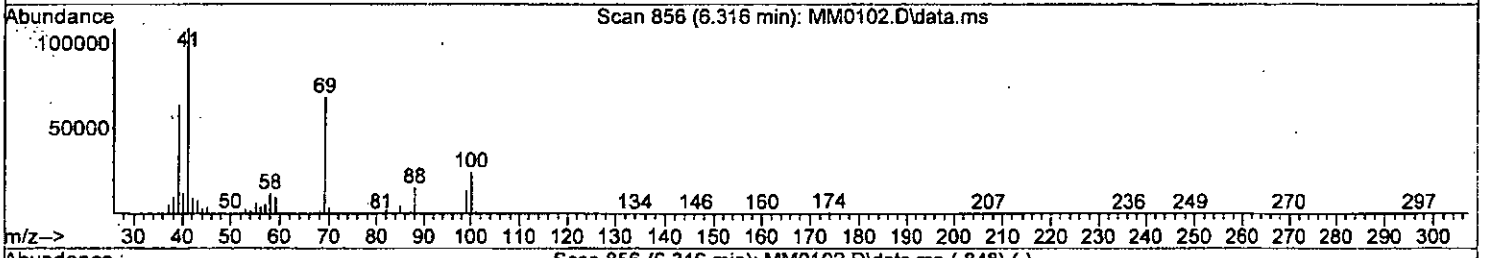
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	1509248	50.81	ppb	100
98)	4-Chlorotoluene	10.169	91	1794798	51.26	ppb	100
99)	1,3,5-Trimethylbenzene	10.169	105	1788499	51.87	ppb	100
100)	tert-Butylbenzene	10.437	119	1423251	51.11	ppb	100
101)	1,2,4-Trimethylbenzene	10.474	105	1776031	52.52	ppb	100
102)	3,4-DCBTF	10.535	214	505700	51.17	ppb	100
103)	sec-Butylbenzene	10.620	105	2044869	52.22	ppb	100
104)	p-Isopropyltoluene	10.742	119	1783755	52.43	ppb	100
105)	1,3-Dclbenz	10.693	146	1010822	50.47	ppb	100
106)	1,4-Dclbenz	10.766	146	1049502	50.11	ppb	100
107)	2,4-DCBTF	10.821	214	438246	51.71	ppb	100
108)	2,5-DCBTF	10.858	214	489637	51.05	ppb	100
109)	n-Butylbenzene	11.065	91	1583441	52.60	ppb	100
110)	1,2-Dclbenz	11.065	146	950713	50.45	ppb	100
111)	1,2-Dibromo-3-chloropr...	11.626	157	68659	52.65	ppb	100
112)	Trielution Dichlorotol...	11.730	125	2439306	157.87	ppb	100
113)	1,3,5 Trichlorobenzene	11.778	180	659392	51.03	ppb	100
114)	Coelution Dichlorotoluene	11.998	125	1725672	106.65	ppb	100
115)	1,2,4-Tcbenzene	12.156	180	577805	52.37	ppb	100
116)	Hexachlorobt	12.266	225	224718	51.52	ppb	100
117)	Naphthalen	12.297	128	1125518	53.69	ppb	100
118)	1,2,3-Tclbenzene	12.437	180	478444	50.99	ppb	100
119)	2,4,5-Trichlorotolene	12.851	159	324971	51.20	ppb	100
120)	2,3,6-Trichlorotoluene	12.912	159	306902	52.34	ppb	100

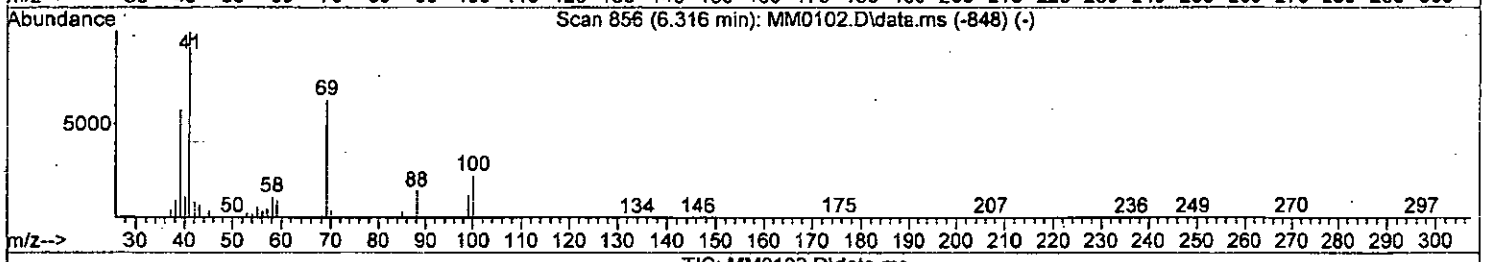
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0102.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 6:54 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:46 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0102.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.007) 881.93 ppb

response 60643

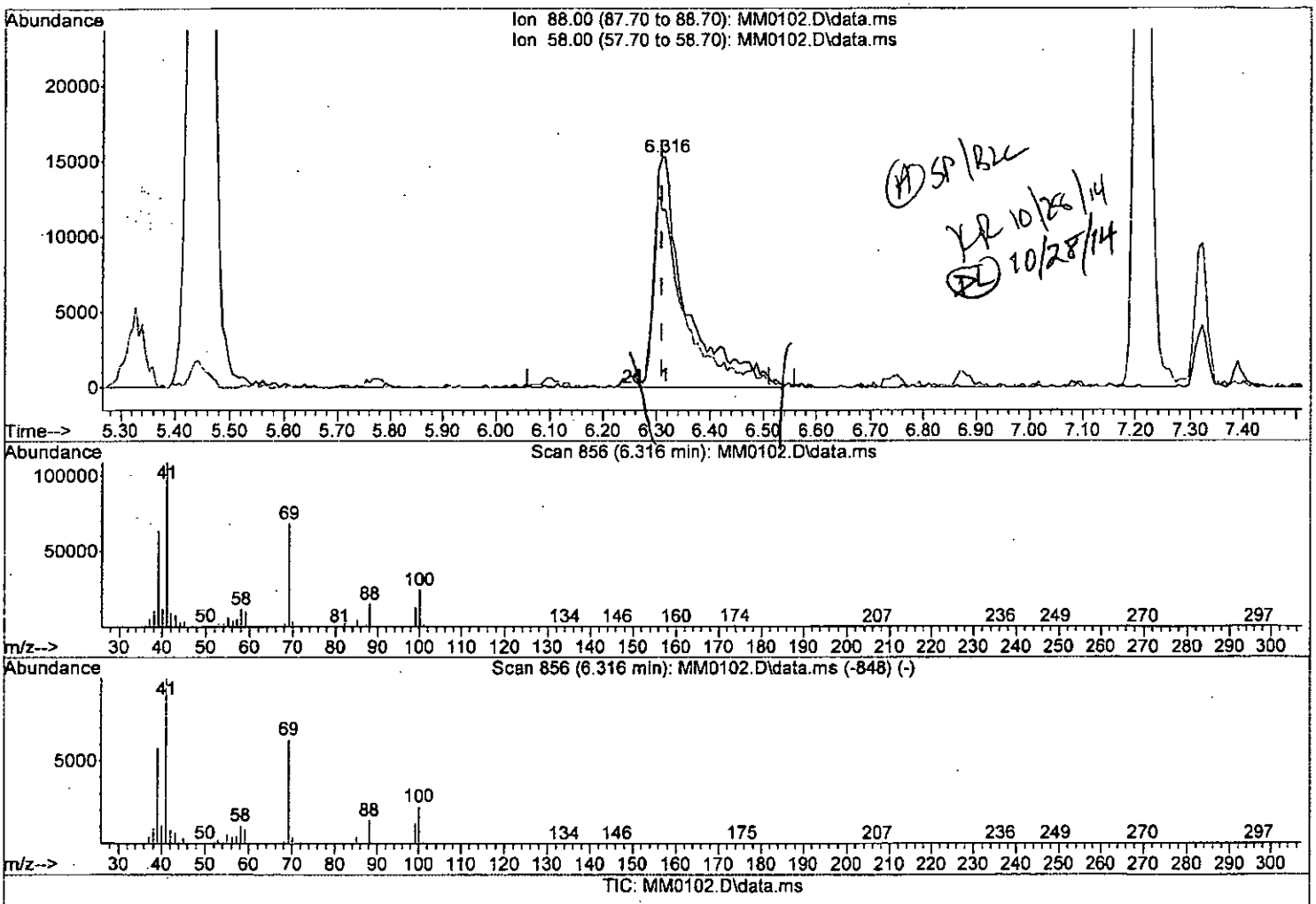
Ion	Exp%	Act%
88.00	100	100
58.00	77.40	77.39
0.00	0.00	0.00
0.00	0.00	0.00

W102714.M Tue Oct 28 10:32:11 2014 Page: 1

00424

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0102.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 6:54 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:46 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



TIC: MM0102.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.007) 916.71 ppb m

response 63035

Ion	Exp%	Act%
88.00	100	100
58.00	77.40	77.39
0.00	0.00	0.00
0.00	0.00	0.00

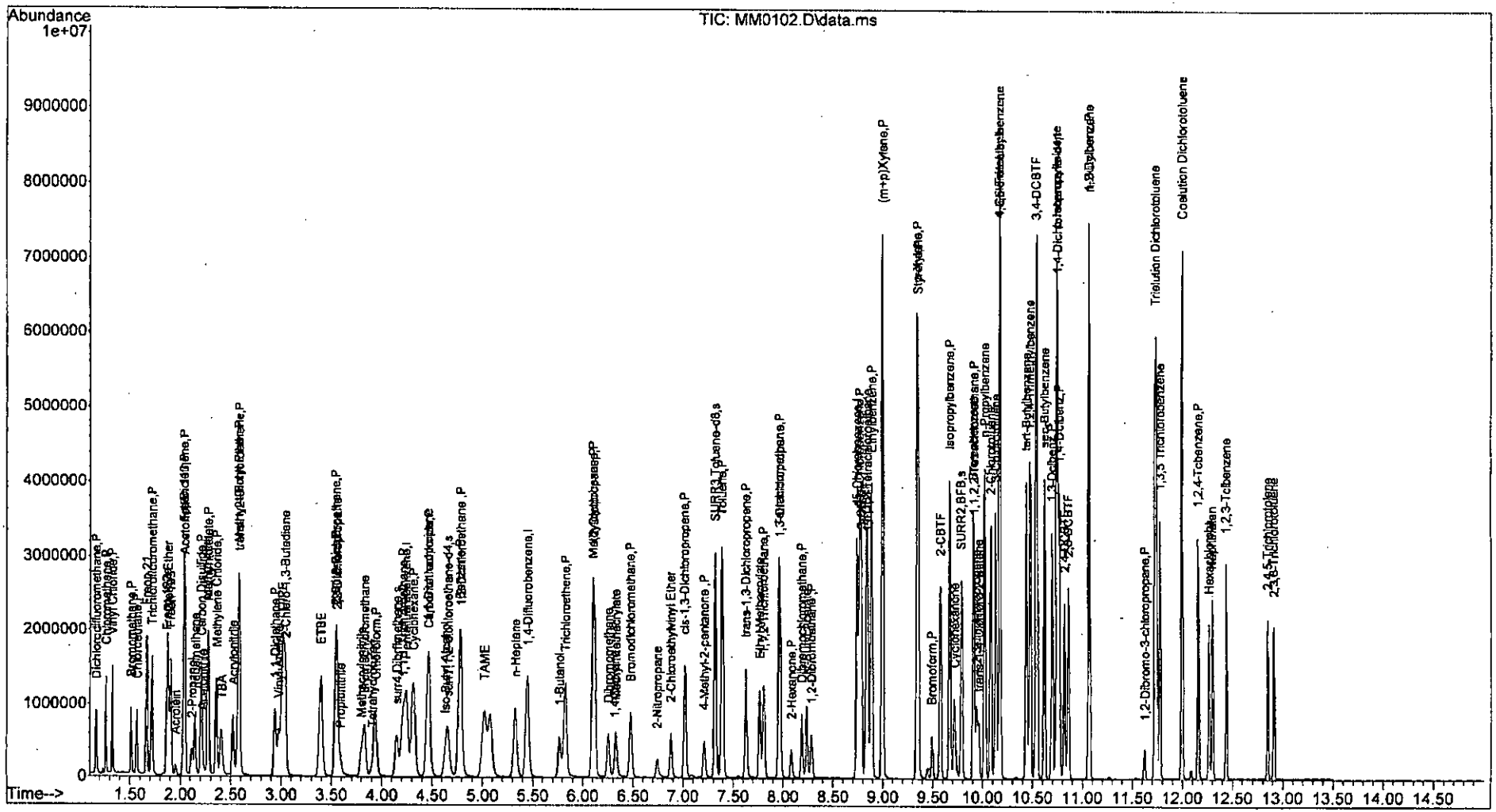
W102714.M Tue Oct 28 10:32:18 2014 Page: 1

00425

Quantitation Report (QT Reviewed)

Sample : 50ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0102.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 6:54 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:32:14 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



W102714.M Tue Oct 28 10:33:20 2014

Page: 4

Quantitation Report (QT Reviewed)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0103.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 7:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:49:07 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	920623	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1374510	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1294552	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	789787	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	992748	124.02	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 248.04%#				
48) surr1,1,2-dichloroetha...	4.658	65	1198187	122.94	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 245.88%#				
65) SURR3,Toluene-d8	7.322	98	4121871	122.32	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 244.64%#				
70) SURR2,BFB	9.791	95	1635051	125.05	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 250.10%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	873972	100.34	ppb		99
3) Chloromethane	1.262	50	1128050	94.97	ppb		97
4) Vinyl Chloride	1.323	62	1222924	96.94	ppb		100
5) Bromomethane	1.512	94	619249	101.51	ppb		99
6) Chloroethane	1.567	64	741459	94.34	ppb		100
7) Freon 21	1.664	67	1809034	92.19	ppb		97
8) Trichlorofluoromethane	1.719	101	1395070	93.00	ppb		99
9) Diethyl Ether	1.878	59	664836	97.35	ppb		99
10) Freon 123a	1.872	67	996356	92.57	ppb		92
11) Freon 123	1.902	83	1104665	96.44	ppb		99
12) Acrolein	1.951	56	205902	549.37	ppb		97
13) 1,1-Diclethene	2.042	96	758394	95.36	ppb		91
14) Freon 113	2.036	101	785738	96.47	ppb		97
15) Acetone	2.042	43	202759	103.17	ppb		96
16) 2-Propanol	2.115	45	816641	2111.72	ppb		99
17) Iodomethane	2.146	142	1147977	100.00	ppb		100
18) Carbon Disulfide	2.207	76	2492175	93.22	ppb		99
19) Acetonitrile	2.225	40	156771	505.74	ppb		98
20) Allyl Chloride	2.274	76	431472	96.09	ppb		94
21) Methyl Acetate	2.274	43	463334	102.95	ppb		98
22) Methylene Chloride	2.359	84	802742	92.64	ppb		99
23) TBA	2.408	59	1347437	2105.10	ppb		99
24) Acrylonitrile	2.524	53	1093482	522.03	ppb		99
25) Methyl-t-Butyl Ether	2.579	73	2234468	100.22	ppb		99
26) trans-1,2-Dichloroethene	2.585	96	845923	98.42	ppb		98
28) 1,1-Diclethane	2.945	63	1509641	95.05	ppb		99
29) Vinyl Acetate	2.975	86	149040	102.93	ppb	#	91
30) DIPE	3.018	45	3140277	97.92	ppb		98
31) 2-Chloro-1,3-Butadiene	3.042	53	1414814	96.34	ppb		99
32) ETBE	3.396	59	2767157	99.83	ppb		98
33) 2,2-Dichloropropane	3.554	77	1369146	97.14	ppb		98
34) cis-1,2-Dichloroethene	3.548	96	913553	98.05	ppb		97
35) 2-Butanone	3.548	43	292679	107.37	ppb		93
36) Propionitrile	3.591	54	414076	550.03	ppb		100
37) Bromochloromethane	3.829	130	492947	93.60	ppb		97

KR 10/28/14

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0103.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 7:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:49:07 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.798	67	243252	104.47	ppb		98
39) Tetrahydrofuran	3.902	42	186668	99.80	ppb		94
40) Chloroform	3.938	83	1487923	93.06	ppb		100
41) 1,1,1-Trichloroethane	4.213	97	1345859	93.85	ppb		97
42) TAME	5.023	73	2335377	99.94	ppb		99
44) Cyclohexane	4.316	41	947751	93.57	ppb		98
46) Carbontetrachloride	4.469	121	355340	99.01	ppb		98
47) 1,1-Dichloropropene	4.463	75	1165825	97.08	ppb		96
49) Benzene	4.780	78	3412917	96.94	ppb		99
50) 1,2-Dichloroethane	4.786	62	1158848	97.69	ppb		98
51) Iso-Butyl Alcohol	4.639	43	613612	2276.36	ppb		97
52) n-Heptane	5.328	43	1064298	93.45	ppb		98
53) 1-Butanol	5.773	56	938682	5383.39	ppb		96
54) Trichloroethene	5.828	130	903879	98.03	ppb		99
55) Methylcyclohexane	6.109	55	1110871	94.06	ppb		94
56) 1,2-Diclpropane	6.115	63	878379	95.24	ppb		97
57) Dibromomethane	6.255	93	426464	97.74	ppb		98
58) 1,4-Dioxane	6.310	88	133664m	1926.40	ppb		
59) Methyl Methacrylate	6.328	69	451915	106.26	ppb		98
60) Bromodichloromethane	6.474	83	1108493	101.45	ppb		98
61) 2-Nitropropane	6.743	41	307087	210.59	ppb		97
62) 2-Chloroethylvinyl Ether	6.877	63	445933	103.74	ppb		99
63) cis-1,3-Dichloropropene	7.017	75	1393117	102.34	ppb		99
64) 4-Methyl-2-pentanone	7.212	43	667016	106.15	ppb		99
66) Toluene	7.395	91	3781725	99.62	ppb		99
67) trans-1,3-Dichloropropene	7.627	75	1231922	106.14	ppb		100
68) Ethyl Methacrylate	7.767	69	976108	108.71	ppb		98
69) 1,1,2-Trichloroethane	7.809	97	654244	102.26	ppb		98
72) Tetrachloroethene	7.962	164	737368	98.98	ppb		98
73) 2-Hexanone	8.084	43	460637	107.02	ppb		94
74) 1,3-Dichloropropane	7.968	76	1167070	100.48	ppb		99
75) Dibromochloromethane	8.187	129	746707	107.23	ppb		100
76) N-Butyl Acetate	8.236	43	1210523	109.43	ppb		99
77) 1,2-Dibromoethane	8.285	107	631369	103.88	ppb		98
78) Chlorobenzene	8.773	112	2496110	99.56	ppb		96
79) 3-CBTF	8.785	180	1410362	102.70	ppb		97
80) 4-CBTF	8.840	180	1276096	103.84	ppb		98
81) 1,1,1,2-Tetrachloroethane	8.852	131	875753	106.26	ppb		97
82) Ethylbenzene	8.889	106	1355080	100.20	ppb		94
83) (m+p)Xylene	8.998	106	3407805	208.27	ppb		90
84) o-Xylene	9.346	106	1700531	103.36	ppb		96
85) Styrene	9.352	104	2943249	108.16	ppb		98
87) Bromoform	9.492	173	445207	113.45	ppb		100
88) 2-CBTF	9.577	180	1351125	97.12	ppb		99
89) Isopropylbenzene	9.675	105	4025714	95.52	ppb		97
90) Cyclohexanone	9.718	55	832162	1796.92	ppb		98
91) trans-1,4-Dichloro-2-B...	9.961	53	250765	99.00	ppb		96
92) 1,1,2,2-Tetrachloroethane	9.913	83	815159	99.24	ppb		99
93) Bromobenzene	9.907	156	1078473	97.01	ppb		99
94) 1,2,3-Trichloropropane	9.943	110	231090	92.76	ppb	#	88
95) n-Propylbenzene	10.022	91	4619817	94.54	ppb		98
96) 2-Chlorotoluene	10.083	91	2868565	96.89	ppb		98

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0103.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 7:26 pm
Operator : K.Ruest
InstName : MSVOA-12

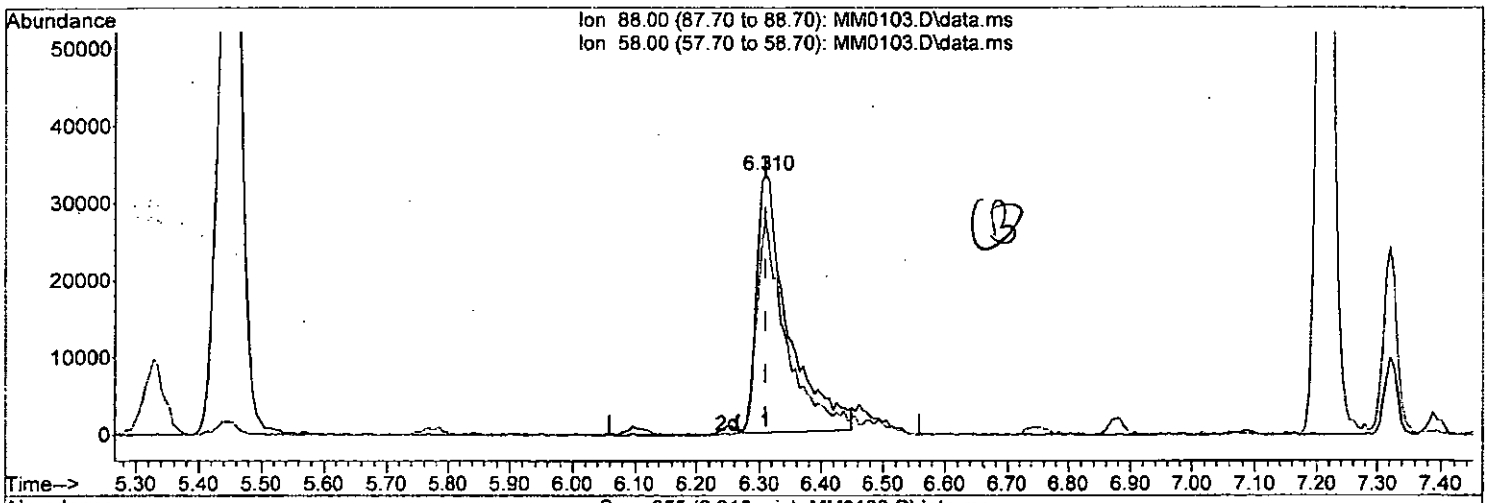
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:49:07 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

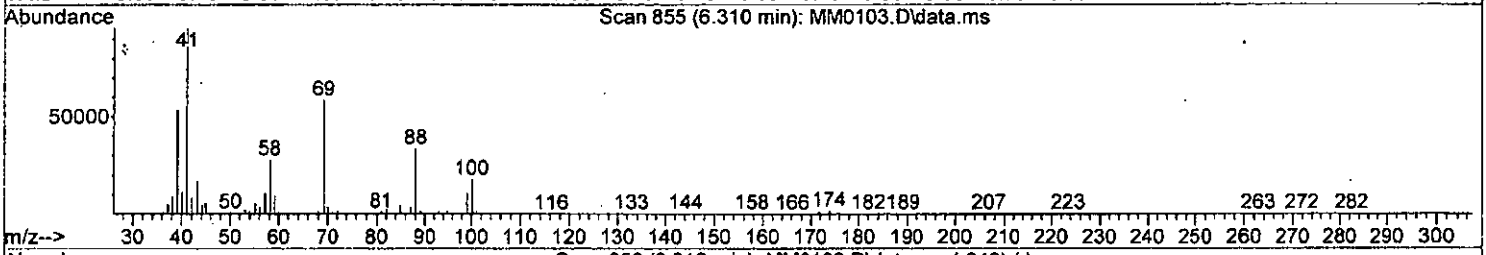
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	3086736	98.03	ppb	100
98)	4-Chlorotoluene	10.175	91	3627234	97.71	ppb	95
99)	1,3,5-Trimethylbenzene	10.175	105	3597702	98.41	ppb	95
100)	tert-Butylbenzene	10.437	119	2840071	96.19	ppb	99
101)	1,2,4-Trimethylbenzene	10.480	105	3515365	98.06	ppb	96
102)	3,4-DCBTF	10.535	214	1098850	104.87	ppb	99
103)	sec-Butylbenzene	10.620	105	4017873	96.78	ppb	99
104)	p-Isopropyltoluene	10.742	119	3481956	96.54	ppb	98
105)	1,3-Dclbenz	10.693	146	2063175	97.16	ppb	99
106)	1,4-Dclbenz	10.766	146	2129678	95.92	ppb	98
107)	2,4-DCBTF	10.821	214	900603	100.23	ppb	100
108)	2,5-DCBTF	10.858	214	1014477	99.76	ppb	99
109)	n-Butylbenzene	11.065	91	3154293	98.84	ppb	99
110)	1,2-Dclbenz	11.065	146	1999215	100.06	ppb	99
111)	1,2-Dibromo-3-chloropr...	11.626	157	153816	111.26	ppb	95
112)	Trielution Dichlorotol...	11.729	125	4916671	300.14	ppb	99
113)	1,3,5 Trichlorobenzene	11.778	180	1316881	96.13	ppb	99
114)	Coelution Dichlorotoluene	11.998	125	3453344	201.30	ppb	95
115)	1,2,4-Tcbenzene	12.156	180	1123715	96.07	ppb	99
116)	Hexachlorobt	12.266	225	404337	87.43	ppb	98
117)	Naphthalen	12.302	128	2294798	103.25	ppb	98
118)	1,2,3-Tclbenzene	12.437	180	947260	95.22	ppb	98
119)	2,4,5-Trichlorotolene	12.851	159	648315	96.34	ppb	98
120)	2,3,6-Trichlorotoluene	12.912	159	606817	97.61	ppb	99

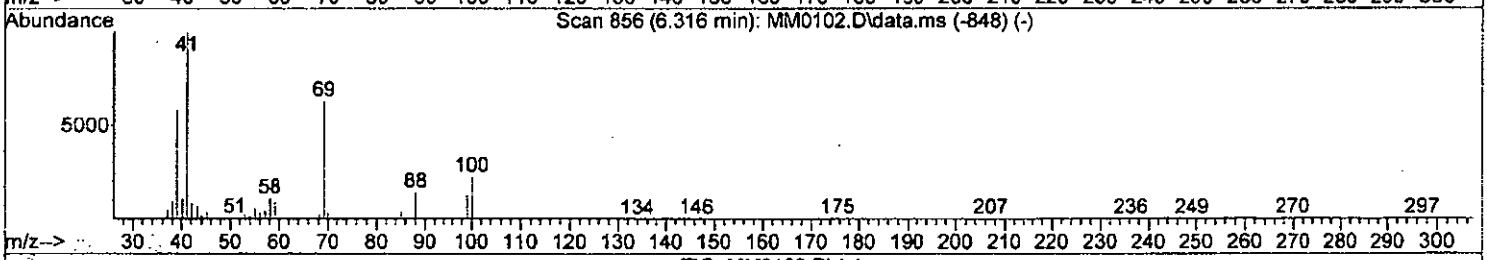
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0103.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 7:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:50 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0103.D\data.ms

(58) 1,4-Dioxane

6.310min (+0.001) 1717.52 ppb

response 119171

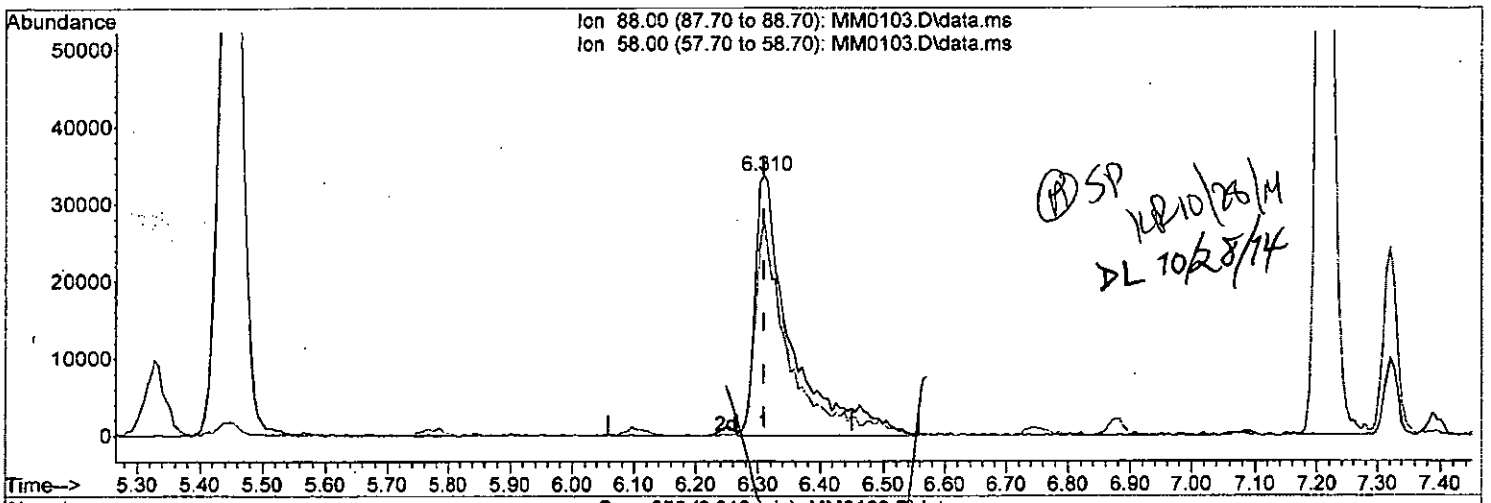
Ion	Exp%	Act%
88.00	100	100
58.00	77.40	83.04
0.00	0.00	0.00
0.00	0.00	0.00

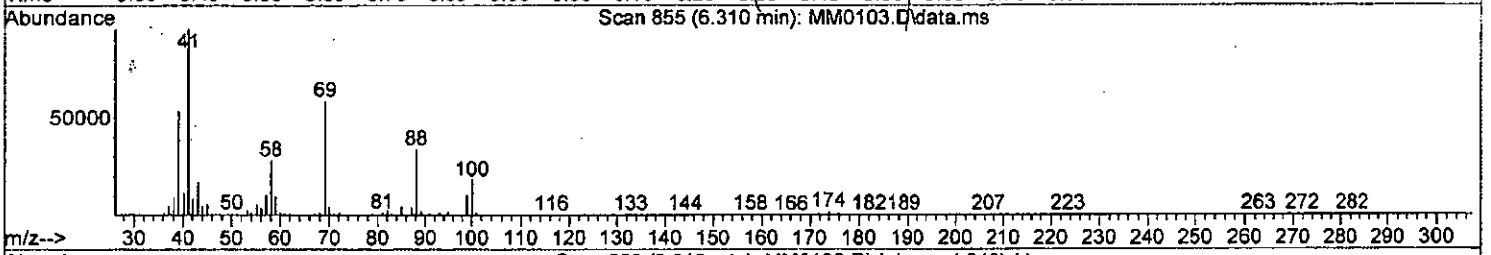
W102714.M Tue Oct 28 10:49:03 2014 Page: 1

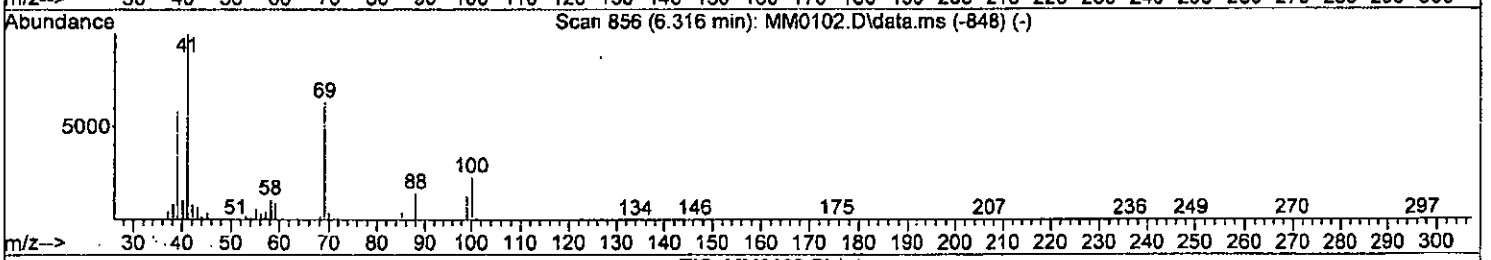
00430

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0103.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 7:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:50 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0103.D\data.ms

(58) 1,4-Dioxane

6.310min (+0.001) 1926.40 ppb m

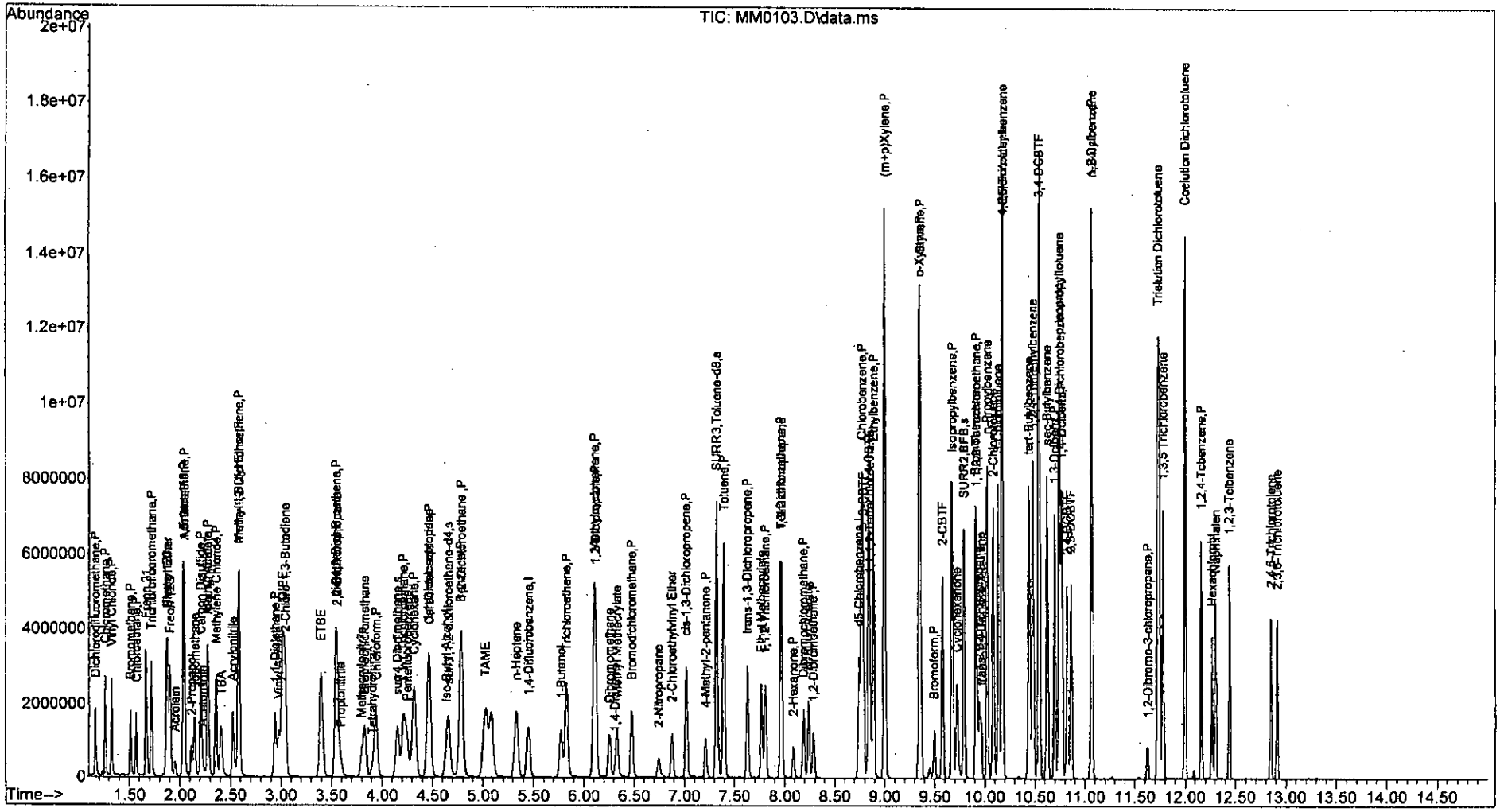
response 133664

Ion	Exp%	Act%
88.00	100	100
58.00	77.40	83.04
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Sample : 100ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0103.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 7:26 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:49:07 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



W102714.M Tue Oct 28 10:49:53 2014 Page: 4

Sample : 150ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0104.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 7:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:50:51 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	939913	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1417996	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1331100	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	835963	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	1183540	143.32	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 286.64%#				
48) surr1,1,2-dichloroetha...	4.658	65	1411829	140.41	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 280.82%#				
65) SURR3,Toluene-d8	7.322	98	4949801	142.39	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 284.78%#				
70) SURR2,BFB	9.791	95	1999008	148.20	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 296.40%#				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.158	85	1321664	148.63	ppb		97
3) Chloromethane	1.262	50	1703423	140.46	ppb		96
4) Vinyl Chloride	1.323	62	1831726	142.22	ppb		97
5) Bromomethane	1.512	94	1040138	167.01	ppb		100
6) Chloroethane	1.567	64	1143652	142.53	ppb		99
7) Freon 21	1.664	67	2744751	137.00	ppb		95
8) Trichlorofluoromethane	1.719	101	2195800	143.38	ppb		97
9) Diethyl Ether	1.878	59	992940	142.40	ppb		98
10) Freon 123a	1.865	67	1557843	141.77	ppb		97
11) Freon 123	1.902	83	1726966	147.68	ppb		99
12) Acrolein	1.951	56	343650	898.08	ppb		98
13) 1,1-Diclethene	2.036	96	1200952	147.90	ppb		94
14) Freon 113	2.036	101	1245371	149.76	ppb		99
15) Acetone	2.042	43	291194	145.13	ppb		100
16) 2-Propanol	2.115	45	1136594	2878.75	ppb		97
17) Iodomethane	2.146	142	1736495	148.16	ppb		100
18) Carbon Disulfide	2.207	76	3843943	140.83	ppb		98
19) Acetonitrile	2.219	40	251112	793.46	ppb		98
20) Allyl Chloride	2.274	76	702552	153.25	ppb		96
21) Methyl Acetate	2.274	43	675819	147.08	ppb		99
22) Methylene Chloride	2.353	84	1275419	144.16	ppb		98
23) TBA	2.408	59	1827525	2796.54	ppb		99
24) Acrylonitrile	2.524	53	1597045	746.78	ppb		99
25) Methyl-t-Butyl Ether	2.579	73	3307412	145.30	ppb		99
26) trans-1,2-Dichloroethene	2.585	96	1351524	154.02	ppb		95
28) 1,1-Diclethane	2.938	63	2322556	143.23	ppb		99
29) Vinyl Acetate	2.975	86	232128	157.02	ppb	#	88
30) DIPE	3.012	45	4401903	134.45	ppb		99
31) 2-Chloro-1,3-Butadiene	3.036	53	2204213	147.02	ppb		100
32) ETBE	3.396	59	3872246	136.83	ppb		98
33) 2,2-Dichloropropane	3.554	77	2121403	147.42	ppb		98
34) cis-1,2-Dichloroethene	3.542	96	1431109	150.45	ppb		97
35) 2-Butanone	3.542	43	420042	150.93	ppb		93
36) Propionitrile	3.591	54	586312	762.84	ppb		99
37) Bromochloromethane	3.828	130	753679	140.17	ppb		97

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W102714.M Tue Oct 28 10:52:02 2014 Page: 1

00433

Sample : 150ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0104.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 7:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:50:51 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.798	67	357705	150.47	ppb		98
39) Tetrahydrofuran	3.902	42	267849	140.26	ppb		100
40) Chloroform	3.932	83	2297495	140.74	ppb		100
41) 1,1,1-Trichloroethane	4.213	97	2098190	143.30	ppb		96
42) TAME	5.023	73	3240728	135.84	ppb		99
44) Cyclohexane	4.316	41	1459942	139.72	ppb		98
46) Carbontetrachloride	4.469	121	557941	150.69	ppb		97
47) 1,1-Dichloropropene	4.462	75	1818147	146.76	ppb		98
49) Benzene	4.779	78	5307576	146.13	ppb		99
50) 1,2-Dichloroethane	4.786	62	1750588	143.04	ppb		98
51) Iso-Butyl Alcohol	4.639	43	845193	3039.31	ppb		99
52) n-Heptane	5.328	43	1649982	140.43	ppb		96
53) 1-Butanol	5.773	56	1238190	6883.32	ppb		95
54) Trichloroethene	5.828	130	1422845	149.58	ppb		98
55) Methylcyclohexane	6.109	55	1746330	143.33	ppb		95
56) 1,2-Diclpropane	6.115	63	1367151	143.68	ppb		96
57) Dibromomethane	6.255	93	648296	144.03	ppb		94
58) 1,4-Dioxane	6.310	88	189055m	2641.14	ppb		
59) Methyl Methacrylate	6.328	69	661902	150.86	ppb		97
60) Bromodichloromethane	6.474	83	1714396	152.10	ppb		98
61) 2-Nitropropane	6.743	41	464508	308.78	ppb		94
62) 2-Chloroethylvinyl Ether	6.877	63	657108	148.18	ppb		99
63) cis-1,3-Dichloropropene	7.017	75	2138996	152.31	ppb		99
64) 4-Methyl-2-pentanone	7.212	43	946558	146.02	ppb		99
66) Toluene	7.395	91	5784987	147.72	ppb		96
67) trans-1,3-Dichloropropene	7.627	75	1874867	156.58	ppb		98
68) Ethyl Methacrylate	7.767	69	1433168	154.71	ppb		100
69) 1,1,2-Trichloroethane	7.803	97	982988	148.93	ppb		100
72) Tetrachloroethene	7.962	164	1194428	155.93	ppb		99
73) 2-Hexanone	8.084	43	649233	146.70	ppb		96
74) 1,3-Dichloropropane	7.968	76	1755376	146.98	ppb		99
75) Dibromochloromethane	8.187	129	1157405	161.64	ppb		100
76) N-Butyl Acetate	8.236	43	1721869	151.38	ppb		99
77) 1,2-Dibromoethane	8.285	107	941966	150.73	ppb		99
78) Chlorobenzene	8.767	112	3875321	150.33	ppb		98
79) 3-CBTF	8.785	180	2230532	157.96	ppb		96
80) 4-CBTF	8.840	180	1993174	157.74	ppb		97
81) 1,1,1,2-Tetrachloroethane	8.852	131	1387648	163.75	ppb		97
82) Ethylbenzene	8.888	106	2139176	153.84	ppb	#	84
83) (m+p)Xylene	8.998	106	5343943	317.62	ppb	#	76
84) o-Xylene	9.346	106	2724444	161.05	ppb		89
85) Styrene	9.352	104	4633665	165.60	ppb		95
87) Bromoform	9.492	173	689544	166.01	ppb		99
88) 2-CBTF	9.577	180	2110998	143.36	ppb		99
89) Isopropylbenzene	9.675	105	6098553	136.71	ppb		92
90) Cyclohexanone	9.718	55	1106649	2257.63	ppb		98
91) trans-1,4-Dichloro-2-B...	9.961	53	371259	138.48	ppb		98
92) 1,1,2,2-Tetrachloroethane	9.913	83	1227168	141.14	ppb		100
93) Bromobenzene	9.913	156	1701592	144.60	ppb	#	87
94) 1,2,3-Trichloropropane	9.943	110	335413	127.20	ppb		94
95) n-Propylbenzene	10.022	91	6854473	132.52	ppb		92
96) 2-Chlorotoluene	10.083	91	4430758	141.40	ppb		96

Sample : 150ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0104.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 7:58 pm
Operator : K.Ruest
InstName : MSVOA-12

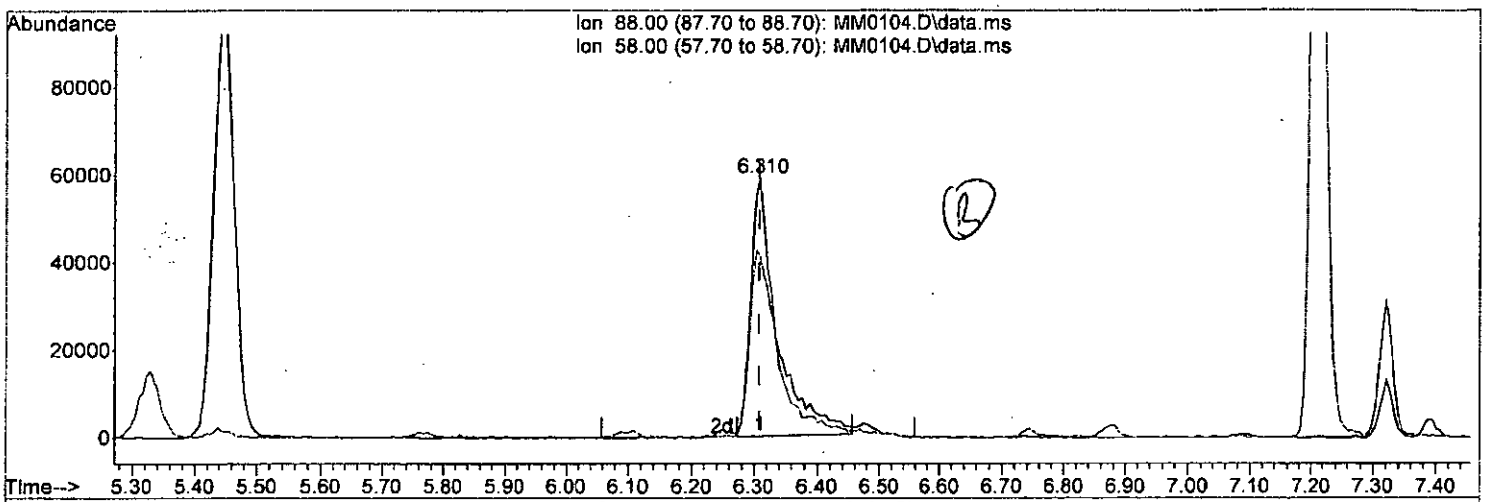
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:50:51 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

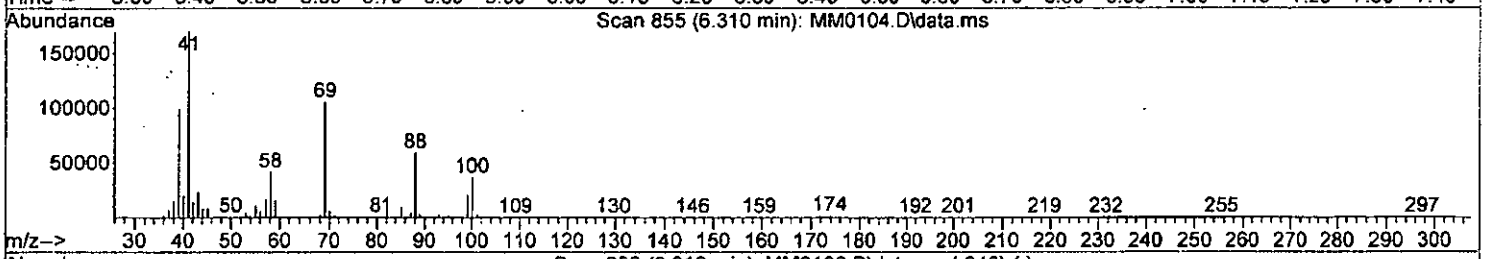
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	4643111	139.31	ppb	98
98)	4-Chlorotoluene	10.175	91	5629177	143.27	ppb	91
99)	1,3,5-Trimethylbenzene	10.175	105	5594262	144.58	ppb	90
100)	tert-Butylbenzene	10.443	119	4449940	142.39	ppb	97
101)	1,2,4-Trimethylbenzene	10.480	105	5416214	142.73	ppb	93
102)	3,4-DCBTF	10.534	214	1763882	159.04	ppb	99
103)	sec-Butylbenzene	10.620	105	6090432	138.60	ppb	95
104)	p-Isopropyltoluene	10.742	119	5406039	141.60	ppb	94
105)	1,3-Dclbenz	10.699	146	3246197	144.43	ppb	98
106)	1,4-Dclbenz	10.766	146	3338650	142.06	ppb	96
107)	2,4-DCBTF	10.821	214	1409289	148.18	ppb	100
108)	2,5-DCBTF	10.864	214	1591712	147.88	ppb	96
109)	n-Butylbenzene	11.065	91	4925609	145.81	ppb	94
110)	1,2-Dclbenz	11.065	146	3165417	149.68	ppb	99
111)	1,2-Dibromo-3-chloropr...	11.626	157	218754	149.49	ppb	94
112)	Trielution Dichlorotol...	11.729	125	7495783	432.31	ppb	95
113)	1,3,5 Trichlorobenzene	11.778	180	2072340	142.92	ppb	99
114)	Coelution Dichlorotoluene	11.998	125	5156489	283.98	ppb	88
115)	1,2,4-Tcbenzene	12.156	180	1781032	143.86	ppb	99
116)	Hexachlorobt	12.266	225	682734	139.48	ppb	98
117)	Naphthalen	12.302	128	3309080	140.66	ppb	98
118)	1,2,3-Tclbenzene	12.437	180	1467913	139.41	ppb	98
119)	2,4,5-Trichlorotolene	12.851	159	1009944	141.78	ppb	98
120)	2,3,6-Trichlorotoluene	12.912	159	952316	144.73	ppb	98

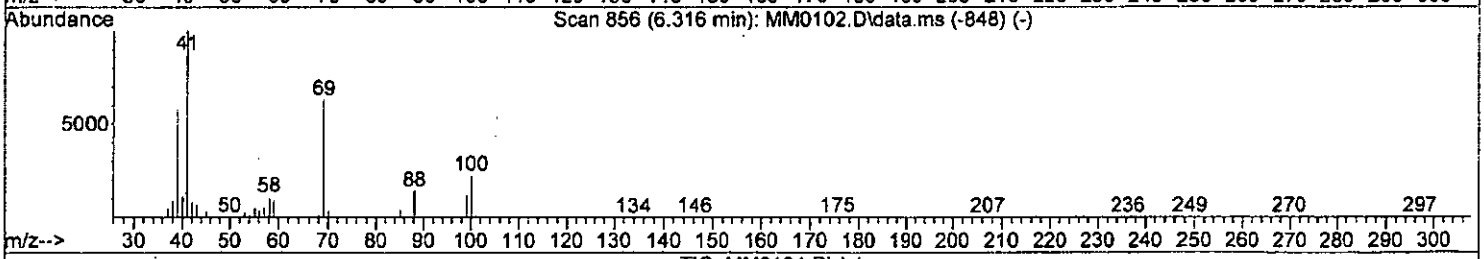
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 150ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0104.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 7:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:54 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0104.D\data.ms

(58) 1,4-Dioxane

6.310min (+0.001) 2447.29 ppb

response 175179

Ion	Exp%	Act%
88.00	100	100
58.00	77.40	69.80
0.00	0.00	0.00
0.00	0.00	0.00

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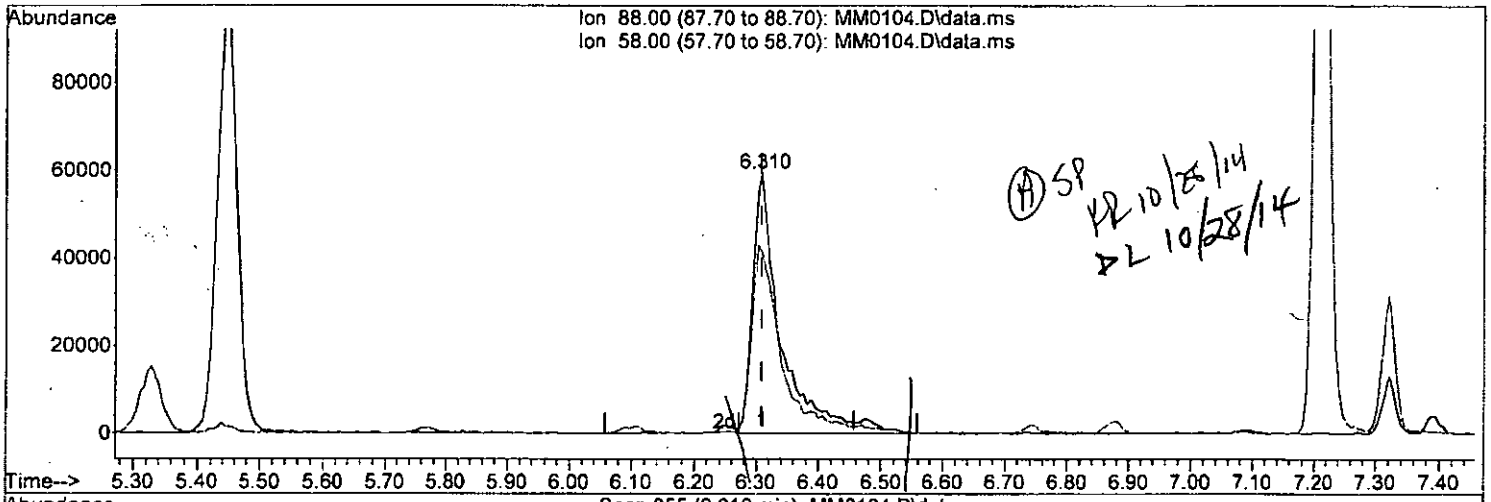
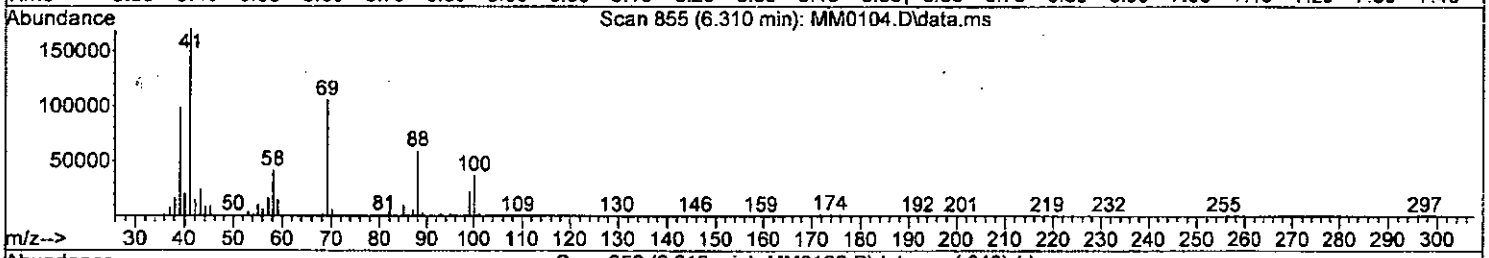
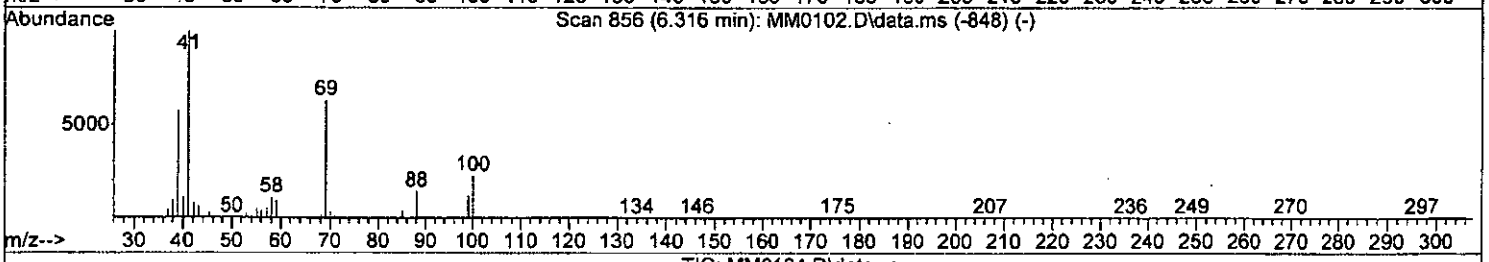
00436

Sample : 150ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0104.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 7:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:54 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0104.D\data.ms

(58) 1,4-Dioxane

6.310min (+0.001) 2641.14 ppb m

response 189055

Ion	Exp%	Act%
88.00	100	100
58.00	77.40	69.80
0.00	0.00	0.00
0.00	0.00	0.00

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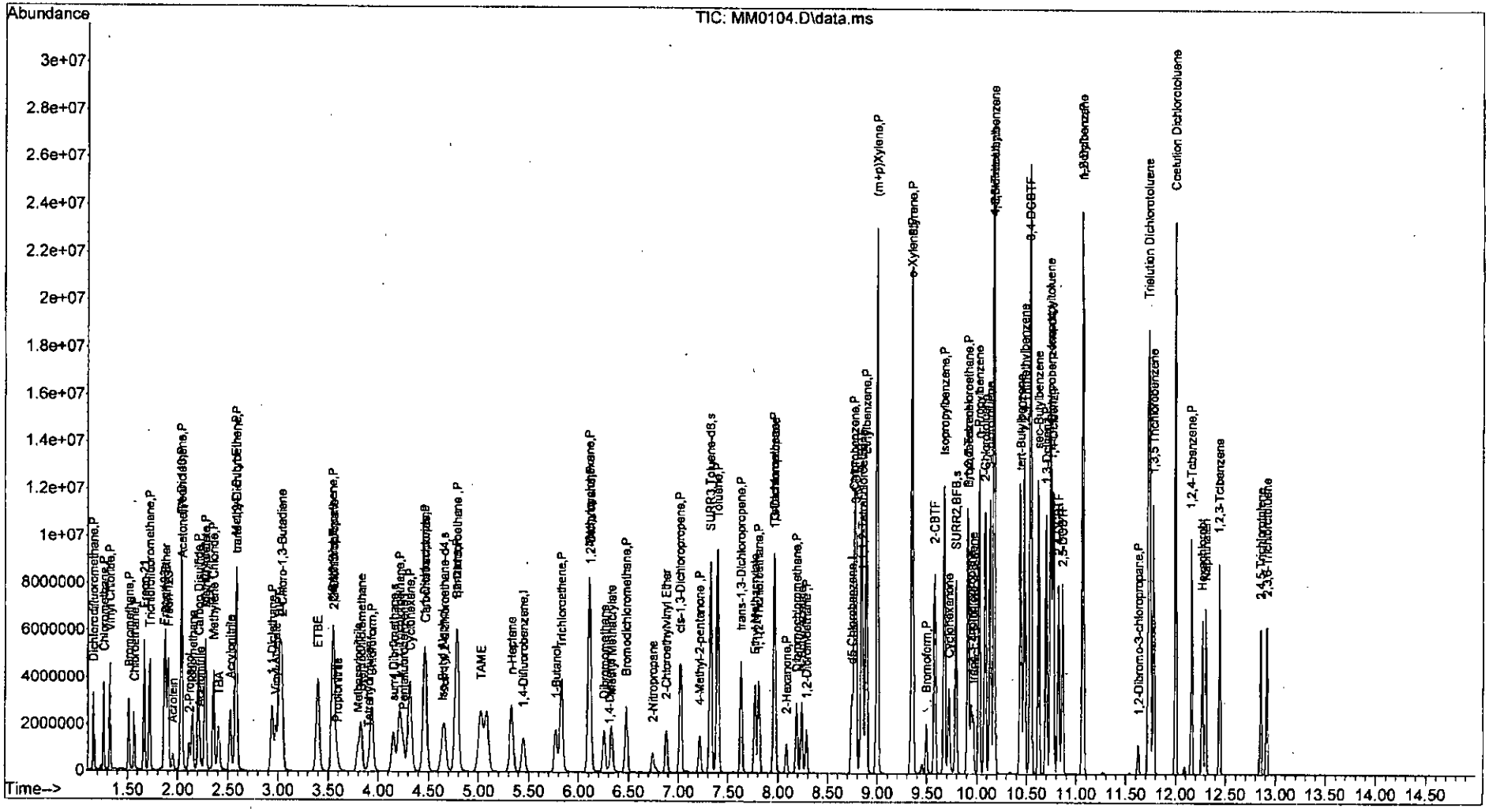
00437

Quantitation Report (QT Reviewed)

Sample : 150ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0104.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 7:58 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:50:51 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



85708

W102714.M Tue Oct 28 10:52:04 2014

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Quantitation Report (QT Reviewed)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0105.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 8:31 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:53:21 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.249	168	938361	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1405088	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1336420	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	856875	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	419684	51.29	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.58%				
48) surr1,1,2-dichloroetha...	4.664	65	511522	51.34	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 102.68%				
65) SURR3,Toluene-d8	7.322	98	1773951	51.50	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 103.00%				
70) SURR2,BFB	9.791	95	719916	53.86	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 107.72%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	1765054	198.82	ppb		98
3) Chloromethane	1.262	50	2306111	190.47	ppb		95
4) Vinyl Chloride	1.323	62	2430512	189.03	ppb		97
5) Bromomethane	1.512	94	1423463	228.93	ppb		98
6) Chloroethane	1.567	64	1507341	188.17	ppb		99
7) Freon 21	1.664	67	3625419	181.26	ppb		94
8) Trichlorofluoromethane	1.719	101	2917845	190.84	ppb		96
9) Diethyl Ether	1.878	59	1402184	201.43	ppb		99
10) Freon 123a	1.872	67	2122391m	193.46	ppb		
11) Freon 123	1.902	83	2378566	203.74	ppb		99
12) Acrolein	1.951	56	484305	1267.76	ppb		96
13) 1,1-Diclethene	2.042	96	1642096	202.57	ppb	#	87
14) Freon 113	2.036	101	1681141	202.50	ppb		98
15) Acetone	2.042	43	410958	205.15	ppb		97
16) 2-Propanol	2.115	45	1689463	4286.13	ppb		98
17) Iodomethane	2.146	142	2287822	195.53	ppb		98
18) Carbon Disulfide	2.207	76	5016245	184.08	ppb		97
19) Acetonitrile	2.219	40	329561	1043.07	ppb		95
20) Allyl Chloride	2.274	76	802686	175.39	ppb		98
21) Methyl Acetate	2.274	43	944569	205.91	ppb		98
22) Methylene Chloride	2.359	84	1724511	195.24	ppb		96
23) TBA	2.408	59	2753110	4219.87	ppb		100
24) Acrylonitrile	2.524	53	2274753	1065.44	ppb		98
25) Methyl-t-Butyl Ether	2.579	73	4674222	205.69	ppb		99
26) trans-1,2-Dichloroethene	2.585	96	1838177	209.82	ppb		95
28) 1,1-Diclethane	2.945	63	3091140	190.95	ppb		98
29) Vinyl Acetate	2.975	86	311276	210.91	ppb	#	81
30) DIPE	3.018	45	6293277	192.53	ppb		98
31) 2-Chloro-1,3-Butadiene	3.042	53	2938546	196.32	ppb		98
32) ETBE	3.396	59	5624174	199.06	ppb		97
33) 2,2-Dichloropropane	3.554	77	2776291	193.25	ppb		98
34) cis-1,2-Dichloroethene	3.548	96	1946936	205.02	ppb		93
35) 2-Butanone	3.548	43	598805	215.52	ppb		89
36) Propionitrile	3.591	54	858539	1118.87	ppb		96
37) Bromochloromethane	3.828	130	1018903	189.80	ppb		97

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W102714.M Tue Oct 28 10:54:05 2014 Page: 1

00439

Quantitation Report (QT Reviewed)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0105.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 8:31 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:53:21 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.798	67	516142	217.47	ppb		95
39) Tetrahydrofuran	3.908	42	383136	200.96	ppb		89
40) Chloroform	3.938	83	3064265	188.03	ppb		99
41) 1,1,1-Trichloroethane	4.213	97	2780520	190.22	ppb		95
42) TAME	5.023	73	4776860	200.56	ppb		100
44) Cyclohexane	4.316	41	1984749	191.69	ppb		96
46) Carbontetrachloride	4.469	121	753848	205.47	ppb		96
47) 1,1-Dichloropropene	4.463	75	2413481	196.61	ppb		98
49) Benzene	4.786	78	7058812	196.13	ppb		99
50) 1,2-Dichloroethane	4.786	62	2401468	198.03	ppb		97
51) Iso-Butyl Alcohol	4.639	43	1277205	4635.02	ppb		99
52) n-Heptane	5.328	43	2171110	186.49	ppb		97
53) 1-Butanol	5.773	56	1974558	11077.76	ppb		95
54) Trichloroethene	5.828	130	1918652	203.55	ppb		99
55) Methylcyclohexane	6.109	55	2386890	197.71	ppb		93
56) 1,2-Diclpropane	6.115	63	1867598	198.08	ppb		96
57) Dibromomethane	6.255	93	901034	202.01	ppb		97
58) 1,4-Dioxane	6.310	88	280918m	3960.55	ppb		
59) Methyl Methacrylate	6.328	69	953046	219.21	ppb		95
60) Bromodichloromethane	6.474	83	2340913	209.59	ppb		98
61) 2-Nitropropane	6.743	41	688965	462.19	ppb		96
62) 2-Chloroethylvinyl Ether	6.877	63	914869	208.20	ppb		98
63) cis-1,3-Dichloropropene	7.023	75	2885276	207.34	ppb		98
64) 4-Methyl-2-pentanone	7.212	43	1359586	211.66	ppb		98
66) Toluene	7.395	91	7479987	192.75	ppb		92
67) trans-1,3-Dichloropropene	7.627	75	2573387	216.89	ppb		98
68) Ethyl Methacrylate	7.767	69	2035765	221.79	ppb		98
69) 1,1,2-Trichloroethane	7.809	97	1369977	209.47	ppb		98
72) Tetrachloroethene	7.962	164	1626582	211.50	ppb		100
73) 2-Hexanone	8.084	43	940326	211.63	ppb		98
74) 1,3-Dichloropropane	7.974	76	2444934	203.90	ppb		97
75) Dibromochloromethane	8.187	129	1635278	227.47	ppb		99
76) N-Butyl Acetate	8.236	43	2469918	216.28	ppb		98
77) 1,2-Dibromoethane	8.285	107	1326101	211.35	ppb		100
78) Chlorobenzene	8.773	112	5219945	201.69	ppb		97
79) 3-CBTF	8.785	180	3118772	219.99	ppb		96
80) 4-CBTF	8.840	180	2780493	219.18	ppb		100
81) 1,1,1,2-Tetrachloroethane	8.852	131	1939716	227.98	ppb		97
82) Ethylbenzene	8.888	106	2901724	207.85	ppb	#	71
83) (m+p)Xylene	8.998	106	7068047	418.43	ppb	#	68
84) o-Xylene	9.346	106	3745287	220.52	ppb	#	83
85) Styrene	9.358	104	6213685	221.19	ppb		96
87) Bromoform	9.498	173	1020037	239.59	ppb		100
88) 2-CBTF	9.577	180	2902201	192.28	ppb		98
89) Isopropylbenzene	9.675	105	7790115	170.36	ppb		86
90) Cyclohexanone	9.718	55	2066106	4112.11	ppb		98
91) trans-1,4-Dichloro-2-B...	9.961	53	536912	195.38	ppb		96
92) 1,1,2,2-Tetrachloroethane	9.913	83	1783205	200.09	ppb		100
93) Bromobenzene	9.913	156	2375429	196.94	ppb	#	87
94) 1,2,3-Trichloropropane	9.943	110	494219	182.86	ppb	#	90
95) n-Propylbenzene	10.022	91	8554939	161.36	ppb		85
96) 2-Chlorotoluene	10.083	91	5805537	180.75	ppb		93

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0105.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 8:31 pm
Operator : K.Ruest
InstName : MSVOA-12

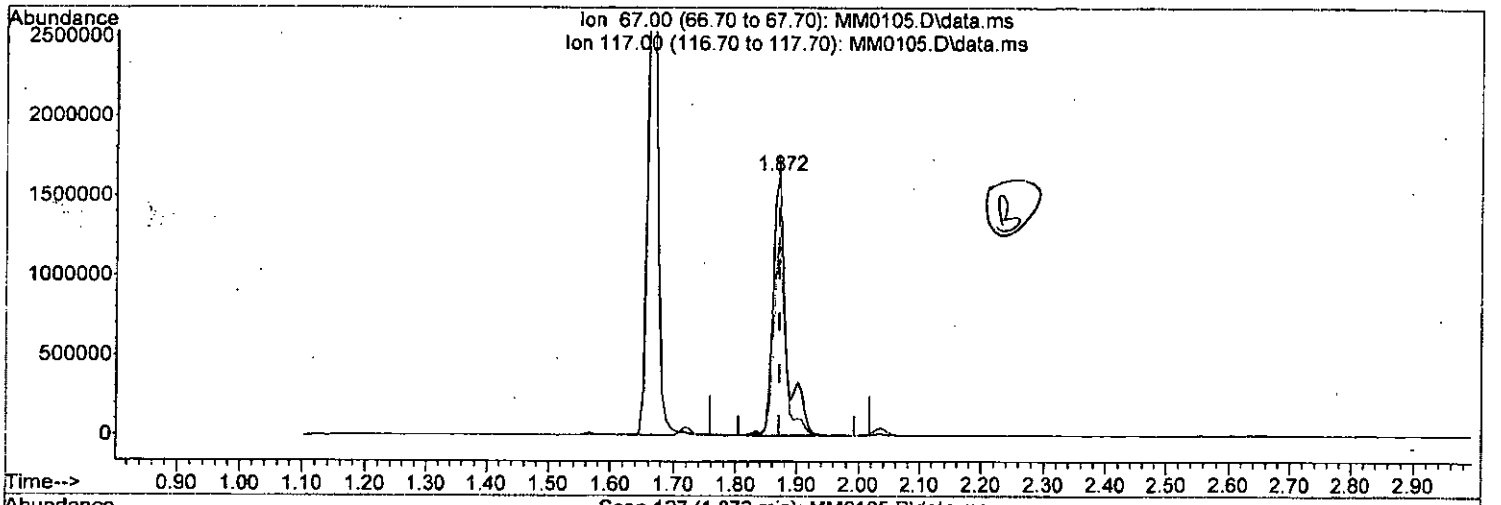
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:53:21 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration

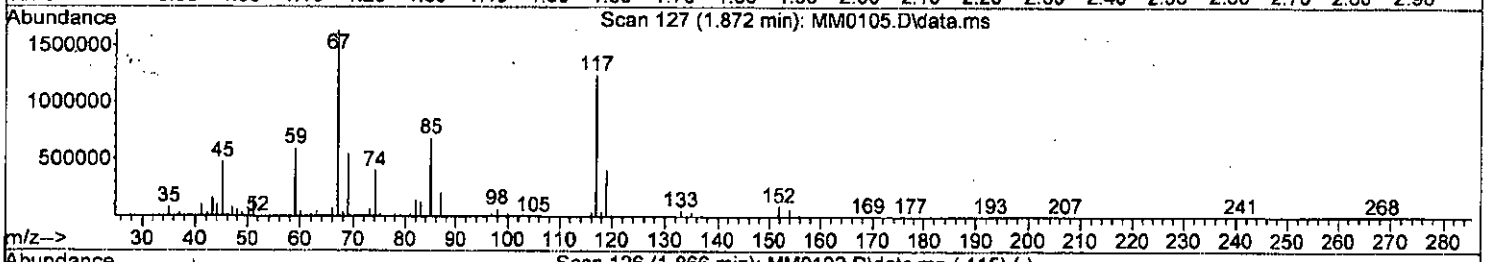
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
97)	3-Chlorotoluene	10.132	91	6127307	179.35	ppb		94
98)	4-Chlorotoluene	10.175	91	7297335	181.19	ppb		86
99)	1,3,5-Trimethylbenzene	10.175	105	7225388	182.18	ppb		83
100)	tert-Butylbenzene	10.443	119	5803111	181.16	ppb		93
101)	1,2,4-Trimethylbenzene	10.480	105	6931393	178.20	ppb		85
102)	3,4-DCBTF	10.541	214	2499503	219.87	ppb		98
103)	sec-Butylbenzene	10.620	105	7733275	171.69	ppb		91
104)	p-Isopropyltoluene	10.742	119	6868515	175.52	ppb		87
105)	1,3-Dclbenz	10.699	146	4394482	190.75	ppb		97
106)	1,4-Dclbenz	10.772	146	4519219	187.61	ppb		96
107)	2,4-DCBTF	10.821	214	1941048	199.12	ppb		98
108)	2,5-DCBTF	10.864	214	2202602	199.64	ppb		95
109)	n-Butylbenzene	11.065	91	6344494	183.23	ppb		88
110)	1,2-Dclbenz	11.065	146	4396618	202.82	ppb		96
111)	1,2-Dibromo-3-chloropr...	11.626	157	325145	216.78	ppb		96
112)	Trielution Dichlorotol...	11.735	125	9830201	553.11	ppb	#	86
113)	1,3,5 Trichlorobenzene	11.778	180	2815163	189.42	ppb		98
114)	Coelution Dichlorotoluene	11.998	125	6634802	356.48	ppb	#	81
115)	1,2,4-Tcbenzene	12.162	180	2406928	189.67	ppb		97
116)	Hexachlorobt	12.266	225	905589	180.49	ppb		99
117)	Naphthalen	12.302	128	4559849	189.09	ppb		96
118)	1,2,3-Tclbenzene	12.437	180	2004227	185.70	ppb		97
119)	2,4,5-Trichlorotolene	12.851	159	1413693	193.62	ppb		99
120)	2,3,6-Trichlorotoluene	12.912	159	1340727	198.78	ppb		98

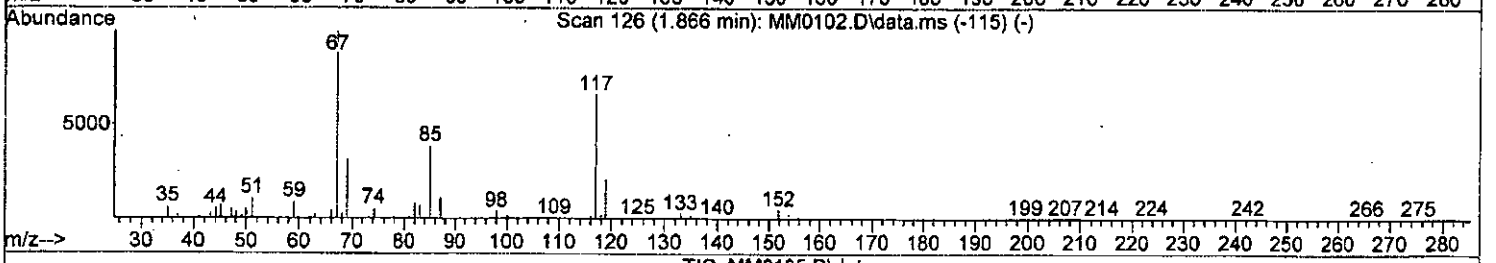
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0105.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 8:31 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:58 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0105.D\data.ms

(10) Freon 123a

1.872min (-0.000) 231.26 ppb

response 2537105

Ion	Exp%	Act%
67.00	100	100
117.00	66.20	76.10
0.00	0.00	0.00
0.00	0.00	0.00

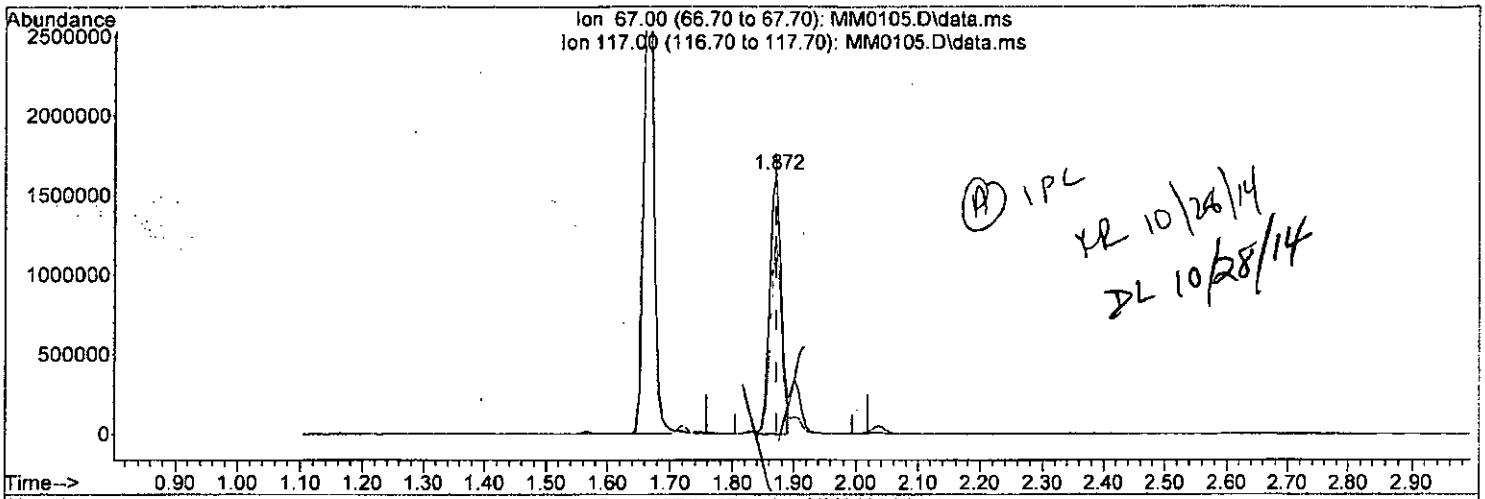
W102714.M Tue Oct 28 10:52:32 2014 Page: 1

00442

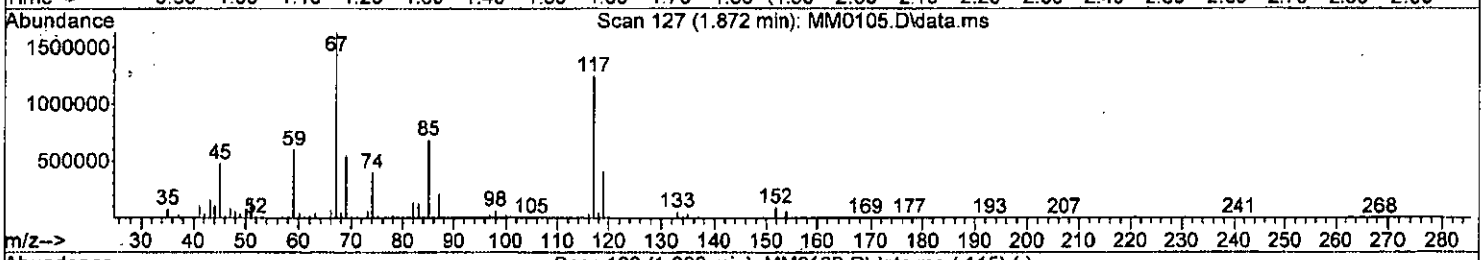
Quantitation Report (Qedit)

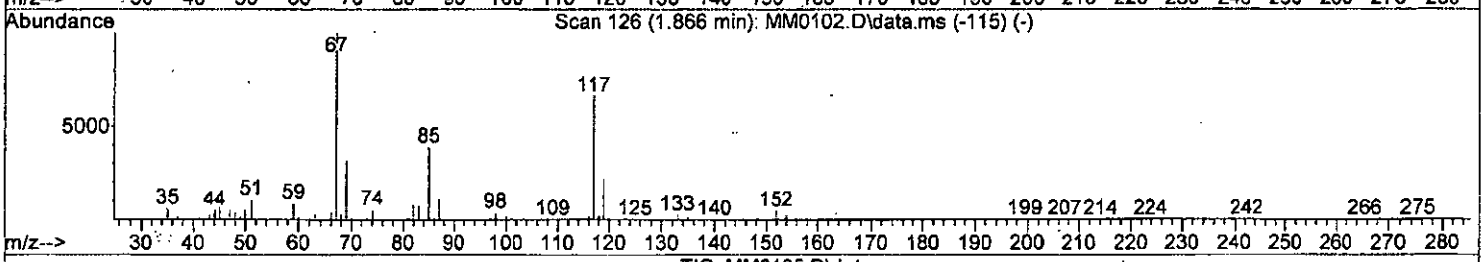
Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0105.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 8:31 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:58 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



(A) IPC
KR 10/28/14
DL 10/28/14





TIC: MM0105.D\data.ms

(10) Freon 123a

1.872min (-0.000) 193.46 ppb m

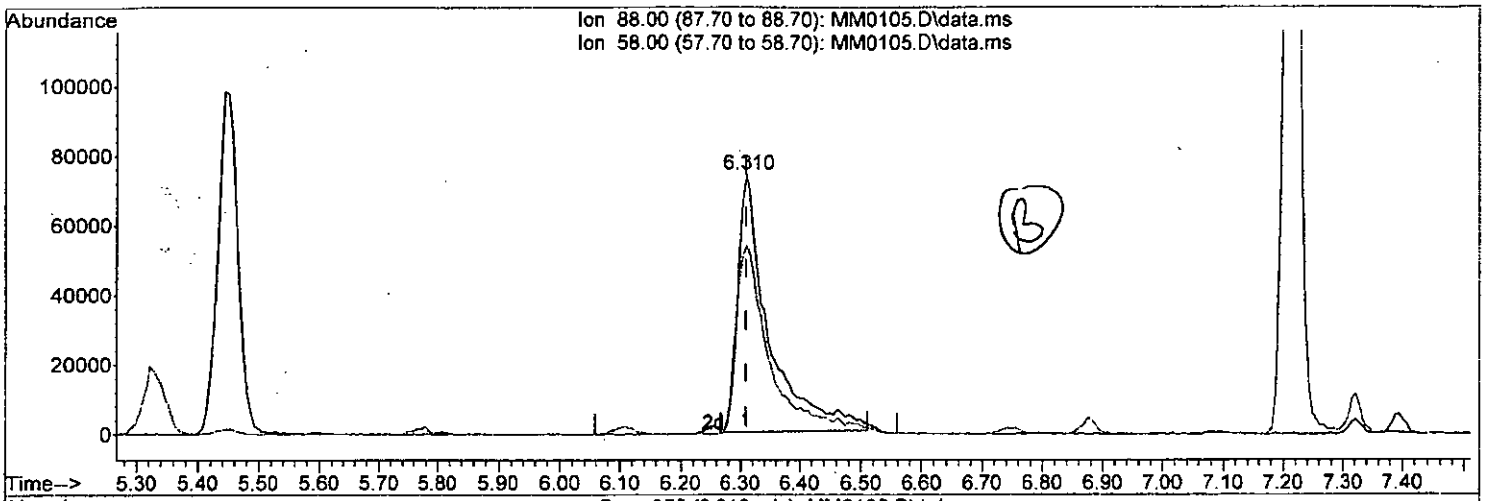
response 2122391

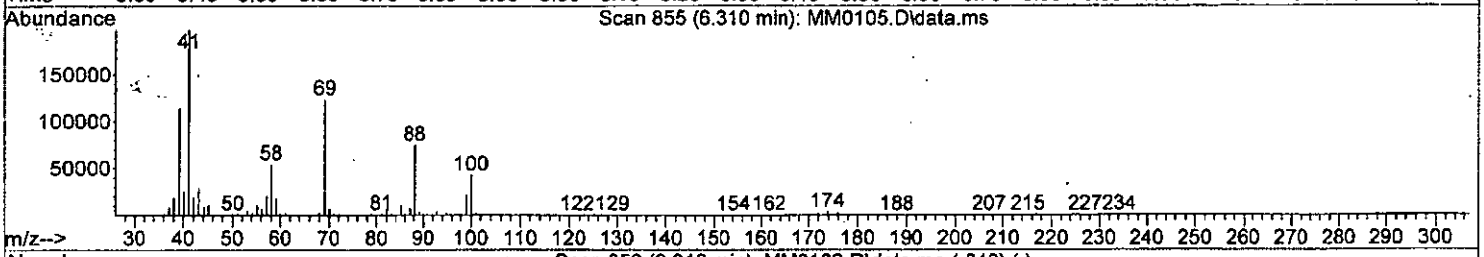
Ion	Exp%	Act%
67.00	100	100
117.00	66.20	76.10
0.00	0.00	0.00
0.00	0.00	0.00

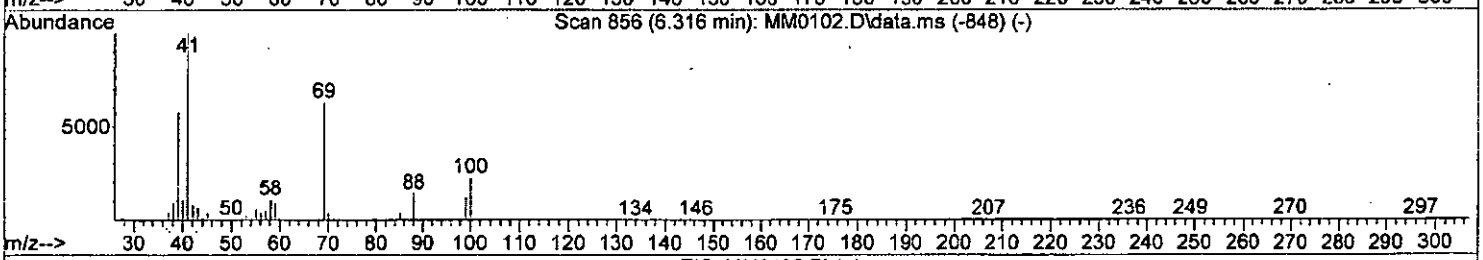
Quantitation Report (Qedit)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0105.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 8:31 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:58 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0105.D\data.ms

(58) 1,4-Dioxane

6.310min (+0.001) 3760.25 ppb

response 266711

Ion	Exp%	Act%
88.00	100	100
58.00	77.40	72.47
0.00	0.00	0.00
0.00	0.00	0.00

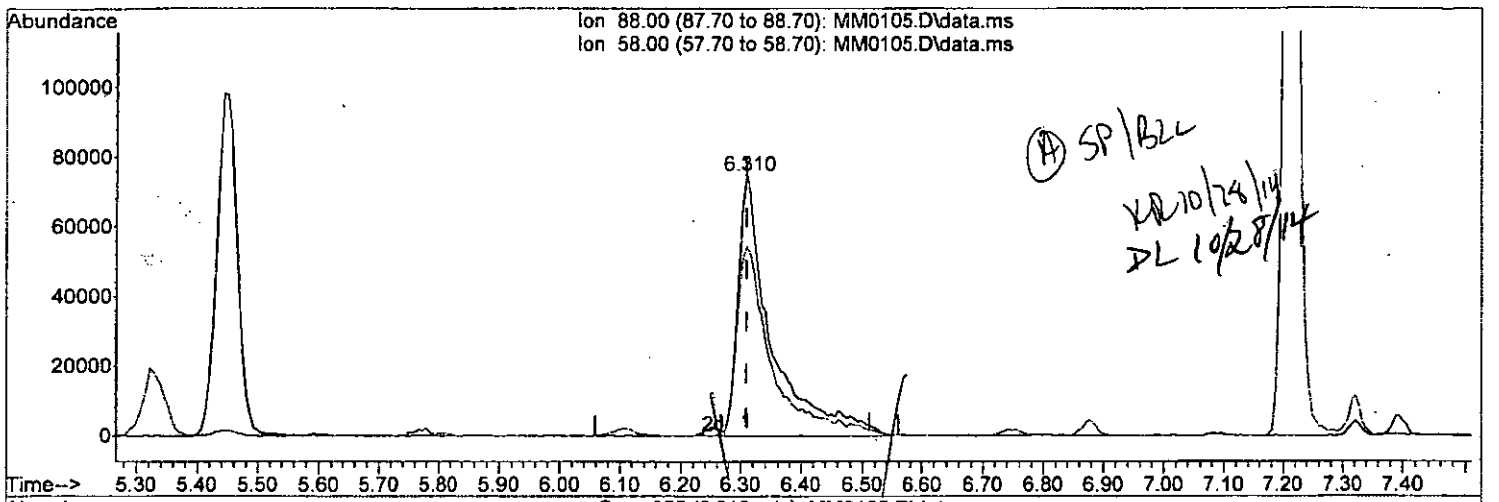
W102714.M Tue Oct 28 10:53:18 2014 Page: 1

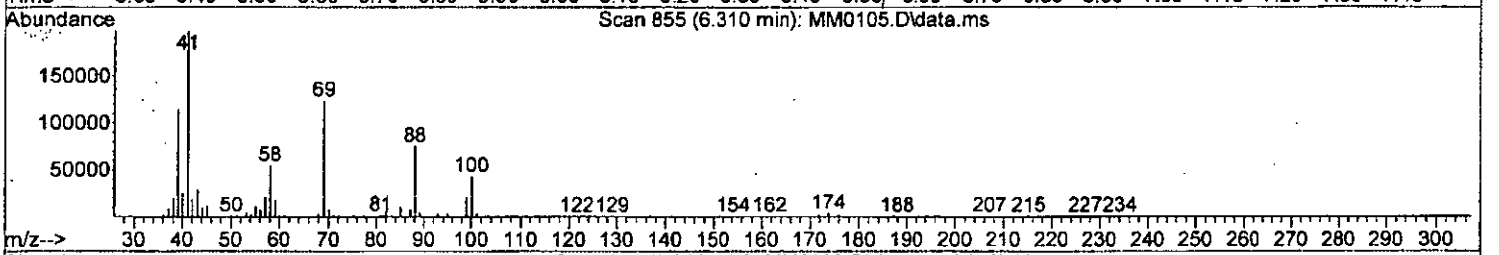
00444

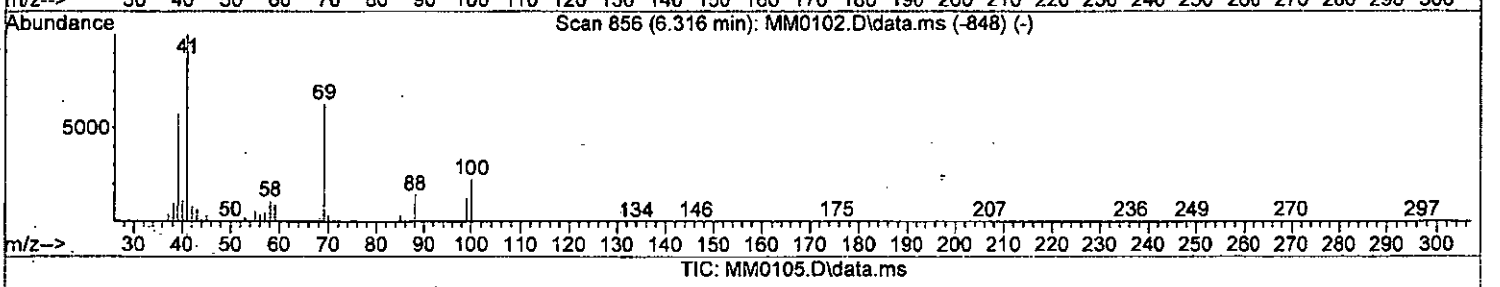
Quantitation Report (Qedit)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0105.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 8:31 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 09:42:58 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration







TIC: MM0105.D\data.ms

(58) 1,4-Dioxane

6.310min (+0.001) 3960.55 ppb m

response 280918

Ion	Exp%	Act%
88.00	100	100
58.00	77.40	72.47
0.00	0.00	0.00
0.00	0.00	0.00

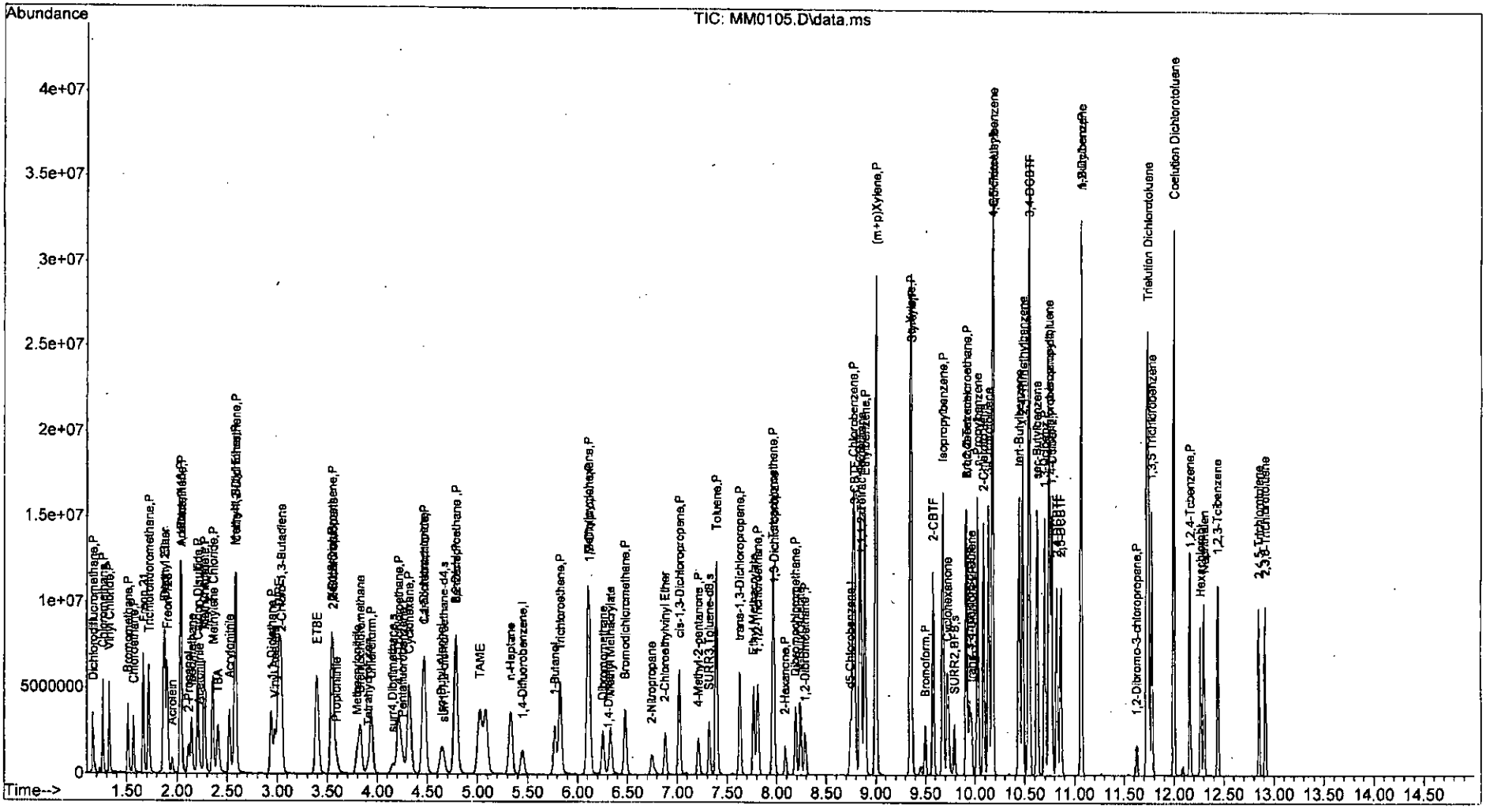
W102714.M Tue Oct 28 10:53:26 2014 Page: 1

00445

Quantitation Report (QT Reviewed)

Sample : 200ppb
Data File: I:\ACQUDATA\msvoa12\Data\102714\MM0105.D
Misc : 8260 WATER ICAL
Acq On : 27 Oct 2014 8:31 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 10:53:21 2014
QLast Update : Tue Oct 28 09:37:04 2014
Response via : Initial Calibration



W102714.M Tue Oct 28 10:54:07 2014 Page: 4

Initial Calibration Verification Summary Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
5260 Waters W102714 **Column Name:** 1 KF 10/28/14

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
1,1,1,2-Tetrachloroethane	RC1400098-10	T	Average RF	50	50.81	ppm	1.6	<=30
1,1,1-Trichloroethane (TCA)	RC1400098-10	T	Average RF	50	47.16	ppm	-5.7	<=30
1,1,2,2-Tetrachloroethane	RC1400098-10	T	Average RF	50	47.68	ppm	-4.6	<=30
1,1,2-Trichloroethane	RC1400098-10	T	Average RF	50	47.59	ppm	-4.8	<=30
1,1,2-Trichlorotrifluoroethane	RC1400098-10	T	Average RF	50	45.84	ppm	-8.3	<=30
1,1-Dichloroethane (1,1-DCA)	RC1400098-10	T	Average RF	50	47.13	ppm	-5.7	<=30
1,1-Dichloroethene (1,1-DCE)	RC1400098-10	T	Average RF	50	44.23	ppm	-11.5	<=30
1,1-Dichloropropene	RC1400098-10	T	Average RF	50	45.83	ppm	-8.3	<=30
1,2,3-Trichlorobenzene	RC1400098-10	T	Average RF	50	49.89	ppm	-0.2	<=30
1,2,3-Trichloropropane	RC1400098-10	T	Average RF	50	45.36	ppm	-9.3	<=30
1,2,4-Trichlorobenzene	RC1400098-10	T	Average RF	50	52.47	ppm	4.9	<=30
1,2,4-Trimethylbenzene	RC1400098-10	T	Average RF	50	51.18	ppm	2.4	<=30
1,2-Dibromo-3-chloropropane (DBCP)	RC1400098-10	T	Average RF	50	51.40	ppm	2.8	<=30
1,2-Dibromoethane	RC1400098-10	T	Average RF	50	49.29	ppm	-1.4	<=30
1,2-Dichloro-1,1,2-trifluoroethane (CFC 123	RC1400098-10	T	Average RF	50	49.76	ppm	-0.5	<=30
1,2-Dichlorobenzene	RC1400098-10	T	Average RF	50	49.33	ppm	-1.3	<=30
1,2-Dichloroethane	RC1400098-10	T	Average RF	50	46.57	ppm	-6.9	<=30
1,2-Dichloropropane	RC1400098-10	T	Average RF	50	47.54	ppm	-4.9	<=30
1,3,5-Trichlorobenzene	RC1400098-10	T	Average RF	50	50.75	ppm	1.5	<=30
1,3,5-Trimethylbenzene	RC1400098-10	T	Average RF	50	50.55	ppm	1.1	<=30
1,3-Dichlorobenzene	RC1400098-10	T	Average RF	50	49.00	ppm	-2.0	<=30
1,3-Dichloropropane	RC1400098-10	T	Average RF	50	47.48	ppm	-5.0	<=30
1,4-Dichlorobenzene	RC1400098-10	T	Average RF	50	48.82	ppm	-2.4	<=30
1,4-Dioxane	RC1400098-10	T	Average RF	1000	905.0	ppm	-9.5	<=30
1-Butanol	RC1400098-10	T	Average RF	2500	2549	ppm	1.9	<=30
1-Chloro-4-(trifluoromethyl)benzene	RC1400098-10	T	Average RF	50	50.95	ppm	1.9	<=30
2,2-Dichloro-1,1,1-trifluoroethane (CFC 123	RC1400098-10	T	Average RF	50	50.14	ppm	0.3	<=30
2,2-Dichloropropane	RC1400098-10	T	Average RF	50	49.20	ppm	-1.6	<=30
2,3,6-Trichlorotoluene	RC1400098-10	T	Average RF	50	56.31	ppm	12.6	<=30
2,4,5-Trichlorotoluene	RC1400098-10	T	Average RF	50	52.75	ppm	5.5	<=30
2,4-, 2,5-, and 2,6-Dichlorotoluene Coelution	RC1400098-10	T	Average RF	150	157.0	ppm	4.7	<=30
2,4-Dichlorobenzotrifluoride	RC1400098-10	T	Average RF	50	51.68	ppm	3.4	<=30
2,5-Dichlorobenzotrifluoride	RC1400098-10	T	Average RF	50	51.37	ppm	2.7	<=30
2-Butanone (MEK)	RC1400098-10	T	Average RF	50	47.96	ppm	-4.1	<=30
2-Chloro-1,3-butadiene	RC1400098-10	T	Average RF	50	55.43	ppm	10.9	<=30
2-Chlorobenzotrifluoride	RC1400098-10	T	Average RF	50	49.25	ppm	-1.5	<=30
2-Chloroethyl Vinyl Ether	RC1400098-10	T	Average RF	50	50.32	ppm	0.6	<=30
2-Chlorotoluene	RC1400098-10	T	Average RF	50	50.40	ppm	0.8	<=30
2-Hexanone	RC1400098-10	T	Average RF	50	49.61	ppm	-0.8	<=30
2-Methyl-1-propanol	RC1400098-10	T	Average RF	1000	1017	ppm	1.7	<=30
2-Methyl-2-propanol	RC1400098-10	T	Average RF	1000	973.6	ppm	-2.6	<=30
2-Nitropropane	RC1400098-10	T	Average RF	100	99.21	ppm	-0.8	<=30
2-Propanol	RC1400098-10	T	Average RF	1000	1052	ppm	5.2	<=30
3,4- and 2,3-Dichlorotoluene Coelution	RC1400098-10	T	Average RF	100	106.5	ppm	6.5	<=30
3,4-Dichlorobenzotrifluoride	RC1400098-10	T	Average RF	50	50.88	ppm	1.8	<=30
3-Chloro-1-propene	RC1400098-10	T	Average RF	50	51.10	ppm	2.2	<=30
3-Chlorobenzotrifluoride	RC1400098-10	T	Average RF	50	50.41	ppm	0.8	<=30
3-Chlorotoluene	RC1400098-10	T	Average RF	50	50.45	ppm	0.9	<=30
4-Chlorotoluene	RC1400098-10	T	Average RF	50	50.27	ppm	0.5	<=30
4-Isopropyltoluene	RC1400098-10	T	Average RF	50	52.45	ppm	4.9	<=30
4-Methyl-2-pentanone	RC1400098-10	T	Average RF	50	48.79	ppm	-2.4	<=30

Initial Calibration Verification Summary Report

Calibration ID: RC1400098 **Instrument ID:** R-MS-12
Column Name: 1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Acetone	RC1400098-10	T	Average RF	50	44.04	ppm	-11.9	<=30
Acetonitrile	RC1400098-10	T	Average RF	250	243.3	ppm	-2.7	<=30
Acrolein	RC1400098-10	T	Average RF	100	161.1	ppm	61.1	<=30
Acrylonitrile	RC1400098-10	T	Average RF	250	239.2	ppm	-4.3	<=30
Benzene	RC1400098-10	T	Average RF	50	48.45	ppm	-3.1	<=30
Bromobenzene	RC1400098-10	T	Average RF	50	48.75	ppm	-2.5	<=30
Bromochloromethane	RC1400098-10	T	Average RF	50	48.20	ppm	-3.6	<=30
Bromodichloromethane	RC1400098-10	T	Average RF	50	50.16	ppm	0.3	<=30
Bromoform	RC1400098-10	T	Average RF	50	53.76	ppm	7.5	<=30
Bromomethane	RC1400098-10	T	Average RF	50	56.67	ppm	13.3	<=30
Carbon Disulfide	RC1400098-10	T	Average RF	50	52.10	ppm	4.2	<=30
Carbon Tetrachloride	RC1400098-10	T	Average RF	50	48.70	ppm	-2.6	<=30
Chlorobenzene	RC1400098-10	T	Average RF	50	48.97	ppm	-2.1	<=30
Chloroethane	RC1400098-10	T	Average RF	50	47.43	ppm	-5.1	<=30
Chloroform	RC1400098-10	T	Average RF	50	47.00	ppm	-6.0	<=30
Chloromethane	RC1400098-10	T	Average RF	50	48.91	ppm	-2.2	<=30
Cyclohexane	RC1400098-10	T	Average RF	50	45.05	ppm	-9.9	<=30
Cyclohexanone	RC1400098-10	T	Average RF	1000	653.5	ppm	-34.6	<=30
Dibromochloromethane	RC1400098-10	T	Average RF	50	52.06	ppm	4.1	<=30
Dibromomethane	RC1400098-10	T	Average RF	50	47.45	ppm	-5.1	<=30
Dichlorodifluoromethane (CFC 12)	RC1400098-10	T	Average RF	50	51.33	ppm	2.7	<=30
Dichlorofluoromethane (CFC 21)	RC1400098-10	T	Average RF	50	50.33	ppm	0.7	<=30
Dichloromethane	RC1400098-10	T	Average RF	50	46.24	ppm	-7.5	<=30
Diethyl Ether	RC1400098-10	T	Average RF	50	47.80	ppm	-4.4	<=30
Diisopropyl Ether	RC1400098-10	T	Average RF	50	47.23	ppm	-5.5	<=30
Ethyl Methacrylate	RC1400098-10	T	Average RF	50	50.32	ppm	0.6	<=30
Ethyl tert-Butyl Ether	RC1400098-10	T	Average RF	50	46.92	ppm	-6.2	<=30
Ethylbenzene	RC1400098-10	T	Average RF	50	45.67	ppm	-8.7	<=30
Hexachlorobutadiene	RC1400098-10	T	Average RF	50	51.56	ppm	3.1	<=30
Iodomethane	RC1400098-10	T	Average RF	50	50.49	ppm	1.0	<=30
Isopropylbenzene (Cumene)	RC1400098-10	T	Average RF	50	50.33	ppm	0.7	<=30
Methacrylonitrile	RC1400098-10	T	Average RF	50	48.23	ppm	-3.5	<=30
Methyl Acetate	RC1400098-10	T	Average RF	50	47.48	ppm	-5.0	<=30
Methyl Methacrylate	RC1400098-10	T	Average RF	50	50.48	ppm	1.0	<=30
Methyl tert-Butyl Ether	RC1400098-10	T	Average RF	50	48.66	ppm	-2.7	<=30
Methylcyclohexane	RC1400098-10	T	Average RF	50	46.37	ppm	-7.3	<=30
Naphthalene	RC1400098-10	T	Average RF	50	52.21	ppm	4.4	<=30
Propionitrile	RC1400098-10	T	Average RF	250	222.8	ppm	-10.9	<=30
Styrene	RC1400098-10	T	Average RF	50	51.95	ppm	3.9	<=30
Tetrachloroethene (PCE)	RC1400098-10	T	Average RF	50	49.75	ppm	-0.5	<=30
Tetrahydrofuran (THF)	RC1400098-10	T	Average RF	50	46.69	ppm	-6.6	<=30
Toluene	RC1400098-10	T	Average RF	50	49.36	ppm	-1.3	<=30
Trichloroethene (TCE)	RC1400098-10	T	Average RF	50	49.04	ppm	-1.9	<=30
Trichlorofluoromethane (CFC 11)	RC1400098-10	T	Average RF	50	45.13	ppm	-9.7	<=30
Vinyl Acetate	RC1400098-10	T	Average RF	50	49.10	ppm	-1.8	<=30
Vinyl Chloride	RC1400098-10	T	Average RF	50	49.37	ppm	-1.3	<=30
cis-1,2-Dichloroethene	RC1400098-10	T	Average RF	50	49.06	ppm	-1.9	<=30
cis-1,3-Dichloropropene	RC1400098-10	T	Average RF	50	48.93	ppm	-2.1	<=30
m,p-Xylenes	RC1400098-10	T	Average RF	100	103.7	ppm	3.7	<=30
n-Butyl Acetate	RC1400098-10	T	Average RF	50	47.98	ppm	-4.0	<=30
n-Butylbenzene	RC1400098-10	T	Average RF	50	52.64	ppm	5.3	<=30

Initial Calibration Verification Summary Report

Calibration ID:	RC1400098	**Instrument ID:**	R-MS-12
		Column Name:	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
n-Heptane	RC1400098-10	T	Average RF	50	45.74	ppm	-8.5	<=30
n-Propylbenzene	RC1400098-10	T	Average RF	50	50.73	ppm	1.5	<=30
o-Xylene	RC1400098-10	T	Average RF	50	50.90	ppm	1.8	<=30
sec-Butylbenzene	RC1400098-10	T	Average RF	50	51.22	ppm	2.4	<=30
tert-Amyl Methyl Ether	RC1400098-10	T	Average RF	50	48.19	ppm	-3.6	<=30
tert-Butylbenzene	RC1400098-10	T	Average RF	50	50.52	ppm	1.0	<=30
trans-1,2-Dichloroethene	RC1400098-10	T	Average RF	50	48.49	ppm	-3.0	<=30
trans-1,3-Dichloropropene	RC1400098-10	T	Average RF	50	50.64	ppm	1.3	<=30
trans-1,4-Dichloro-2-butene	RC1400098-10	T	Average RF	50	43.19	ppm	-13.6	<=30
1,2-Dichloroethane-d4	RC1400098-10	S	Average RF	50	49.64	ppm	-0.7	<=30
4-Bromofluorobenzene	RC1400098-10	S	Average RF	50	51.49	ppm	3.0	<=30
Dibromofluoromethane	RC1400098-10	S	Average RF	50	51.59	ppm	3.2	<=30
Toluene-d8	RC1400098-10	S	Average RF	50	51.62	ppm	3.2	<=30

Exceptions

QAP	Method
CRA-OXY	8260C

Compound	Type	Criteria	Result
Acrolein	Percent Difference	<= 30	61.10
Cyclohexanone	Percent Difference	<= 30	-34.65

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\102814\MM0112.D
Misc : 50ppb
Acq On : 28 Oct 2014 11:34 am
Operator : K.Ruest
InstName : MSVOA-12

KR 10/28/14

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 11:49:50 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	942917	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.450	114	1419933	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1331669	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	783683	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.152	113	426611	51.59	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.18%				
48) surr1,1,2-dichloroetha...	4.658	65	499853	49.64	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 99.28%				
65) SURR3,Toluene-d8	7.322	98	1796948	51.62	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 103.24%				
70) SURR2,BFB	9.785	95	695509	51.49	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 102.98%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	457869	51.33	ppb		99
3) Chloromethane	1.262	50	595075	48.91	ppb		99
4) Vinyl Chloride	1.323	62	637845	49.37	ppb		99
5) Bromomethane	1.512	94	354073	56.67	ppb		98
6) Chloroethane	1.567	64	381754	47.43	ppb		98
7) Freon 21	1.664	67	1011524	50.33	ppb		98
8) Trichlorofluoromethane	1.719	101	693291	45.13	ppb		98
9) Diethyl Ether	1.878	59	334342	47.80	ppb		97
10) Freon 123a	1.865	67	553348	49.76	ppb		99
11) Freon 123	1.902	83	588218	50.14	ppb		96
12) Acrolein	1.951	56	63493	161.10	ppb		99
13) 1,1-Diclethene	2.036	96	360299	44.23	ppb		99
14) Freon 113	2.036	101	382396	45.84	ppb		96
15) Acetone	2.048	43	87928	44.04	ppb		97
16) 2-Propanol	2.128	45	416714	1052.08	ppb		99
17) Iodomethane	2.146	142	593585	50.49	ppb		99
18) Carbon Disulfide	2.207	76	1426748	52.10	ppb		99
19) Acetonitrile	2.225	40	77246	243.30	ppb		95
20) Allyl Chloride	2.274	76	235825	51.10	ppb		99
21) Methyl Acetate	2.274	43	218861	47.48	ppb		99
22) Methylene Chloride	2.359	84	410394	46.24	ppb		98
23) TBA	2.414	59	638250	973.56	ppb		98
24) Acrylonitrile	2.524	53	513252	239.23	ppb		98
25) Methyl-t-Butyl Ether	2.579	73	1111212	48.66	ppb		99
26) trans-1,2-Dichloroethene	2.585	96	426894	48.49	ppb		96
28) 1,1-Diclethane	2.938	63	766656	47.13	ppb		98
29) Vinyl Acetate	2.981	86	72385	49.10	ppb	#	86
30) DIPE	3.012	45	1544536	47.23	ppb		98
31) 2-Chloro-1,3-Butadiene	3.042	53	833770	55.43	ppb		99
32) ETBE	3.396	59	1332038	46.92	ppb		98
33) 2,2-Dichloropropane	3.554	77	710302	49.20	ppb		98
34) cis-1,2-Dichloroethene	3.542	96	468151	49.06	ppb		98
35) 2-Butanone	3.548	43	136396	47.96	ppb		93
36) Propionitrile	3.591	54	186469	222.83	ppb		98
37) Bromochloromethane	3.828	130	260223	48.20	ppb		94

W102714.M Tue Oct 28 11:50:38 2014

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\102814\MM0112.D
Misc : 50ppb
Acq On : 28 Oct 2014 11:34 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 11:49:50 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.798	67	120104	48.23	ppb	91
39) Tetrahydrofuran	3.902	42	89415	46.69	ppb	93
40) Chloroform	3.938	83	769626	47.00	ppb	99
41) 1,1,1-Trichloroethane	4.213	97	692759	47.16	ppb	99
42) TAME	5.023	73	1144817	48.19	ppb	98
44) Cyclohexane	4.316	41	473633	45.05	ppb	97
46) Carbontetrachloride	4.462	121	180570	48.70	ppb	95
47) 1,1-Dichloropropene	4.462	75	568484	45.83	ppb	98
49) Benzene	4.779	78	1762197	48.45	ppb	100
50) 1,2-Dichloroethane	4.786	62	570681	46.57	ppb	97
51) Iso-Butyl Alcohol	4.651	43	292792	1016.99	ppb	98
52) n-Heptane	5.328	43	538080	45.74	ppb	98
53) 1-Butanol	5.779	56	452641	2548.57	ppb	94
54) Trichloroethene	5.828	130	466244	49.04	ppb	98
55) Methylcyclohexane	6.102	55	565715	46.37	ppb	96
56) 1,2-Diclpropane	6.108	63	452957	47.54	ppb	97
57) Dibromomethane	6.255	93	213867	47.45	ppb	94
58) 1,4-Dioxane	6.322	88	64914m	905.05	ppb	
59) Methyl Methacrylate	6.328	69	221957	50.48	ppb	94
60) Bromodichloromethane	6.474	83	566148	50.16	ppb	99
61) 2-Nitropropane	6.742	41	149044	99.21	ppb	97
62) 2-Chloroethylvinyl Ether	6.877	63	223464	50.32	ppb	98
63) cis-1,3-Dichloropropene	7.017	75	688107	48.93	ppb	98
64) 4-Methyl-2-pentanone	7.212	43	316516	48.79	ppb	98
66) Toluene	7.389	91	1935529	49.36	ppb	99
67) trans-1,3-Dichloropropene	7.626	75	607062	50.64	ppb	99
68) Ethyl Methacrylate	7.767	69	469406	50.32	ppb	100
69) 1,1,2-Trichloroethane	7.809	97	314525	47.59	ppb	98
72) Tetrachloroethene	7.962	164	381277	49.75	ppb	98
73) 2-Hexanone	8.084	43	222431	49.61	ppb	96
74) 1,3-Dichloropropane	7.968	76	567306	47.48	ppb	99
75) Dibromochloromethane	8.187	129	372957	52.06	ppb	99
76) N-Butyl Acetate	8.236	43	555367	47.98	ppb	100
77) 1,2-Dibromoethane	8.285	107	308172	49.29	ppb	98
78) Chlorobenzene	8.767	112	1262882	48.97	ppb	99
79) 3-CBTF	8.785	180	712114	50.41	ppb	99
80) 4-CBTF	8.834	180	644089	50.95	ppb	99
81) 1,1,1,2-Tetrachloroethane	8.846	131	430743	50.81	ppb	99
82) Ethylbenzene	8.888	106	635274	45.67	ppb	96
83) (m+p)Xylene	8.998	106	1746106	103.74	ppb	99
84) o-Xylene	9.346	106	861363	50.90	ppb	98
85) Styrene	9.352	104	1454346	51.95	ppb	99
87) Bromoform	9.492	173	209330	53.76	ppb	99
88) 2-CBTF	9.577	180	679818	49.25	ppb	99
89) Isopropylbenzene	9.669	105	2104650	50.33	ppb	99
90) Cyclohexanone	9.718	55	300306	653.51	ppb	99
91) trans-1,4-Dichloro-2-B...	9.961	53	108545	43.19	ppb	99
92) 1,1,2,2-Tetrachloroethane	9.913	83	388617	47.68	ppb	100
93) Bromobenzene	9.907	156	537758	48.75	ppb	99
94) 1,2,3-Trichloropropane	9.943	110	112131	45.36	ppb	93
95) n-Propylbenzene	10.022	91	2459940	50.73	ppb	100
96) 2-Chlorotoluene	10.083	91	1480490	50.40	ppb	98

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\102814\MM0112.D
Misc : 50ppb
Acq On : 28 Oct 2014 11:34 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 11:49:50 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	1576716	50.45	ppb	99
98)	4-Chlorotoluene	10.169	91	1851599	50.27	ppb	100
99)	1,3,5-Trimethylbenzene	10.169	105	1833826	50.55	ppb	99
100)	tert-Butylbenzene	10.437	119	1480067	50.52	ppb	99
101)	1,2,4-Trimethylbenzene	10.473	105	1820594	51.18	ppb	100
102)	3,4-DCBTF	10.534	214	528944	50.88	ppb	100
103)	sec-Butylbenzene	10.620	105	2110226	51.22	ppb	99
104)	p-Isopropyltoluene	10.742	119	1877023	52.45	ppb	99
105)	1,3-Dclbenz	10.693	146	1032346	49.00	ppb	99
106)	1,4-Dclbenz	10.766	146	1075495	48.82	ppb	99
107)	2,4-DCBTF	10.821	214	460780	51.68	ppb	99
108)	2,5-DCBTF	10.858	214	518365	51.37	ppb	97
109)	n-Butylbenzene	11.065	91	1666960	52.64	ppb	99
110)	1,2-Dclbenz	11.065	146	977926	49.33	ppb	97
111)	1,2-Dibromo-3-chloropr...	11.626	157	70506	51.40	ppb	93
112)	Trielution Dichlorotol...	11.729	125	2552099	157.01	ppb	99
113)	1,3,5 Trichlorobenzene	11.778	180	689868	50.75	ppb	100
114)	Coelution Dichlorotoluene	11.998	125	1812374	106.47	ppb	99
115)	1,2,4-Tcbenzene	12.156	180	609007	52.47	ppb	99
116)	Hexachlorobt	12.266	225	236614	51.56	ppb	98
117)	Naphthalen	12.296	128	1151418	52.21	ppb	99
118)	1,2,3-Tclbenzene	12.437	180	492466	49.89	ppb	98
119)	2,4,5-Trichlorotolene	12.851	159	352622	52.75	ppb	98
120)	2,3,6-Trichlorotoluene	12.912	159	347379	56.31	ppb	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

```
Sample     : ICV/ICS
Data File: I:\ACQUDATA\msvoa12\Data\102814\MM0112.D
Misc       : 50ppb
Acq On     : 28 Oct 2014  11:34 am
Operator   : K.Ruest
InstName   : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 11:48:28 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration
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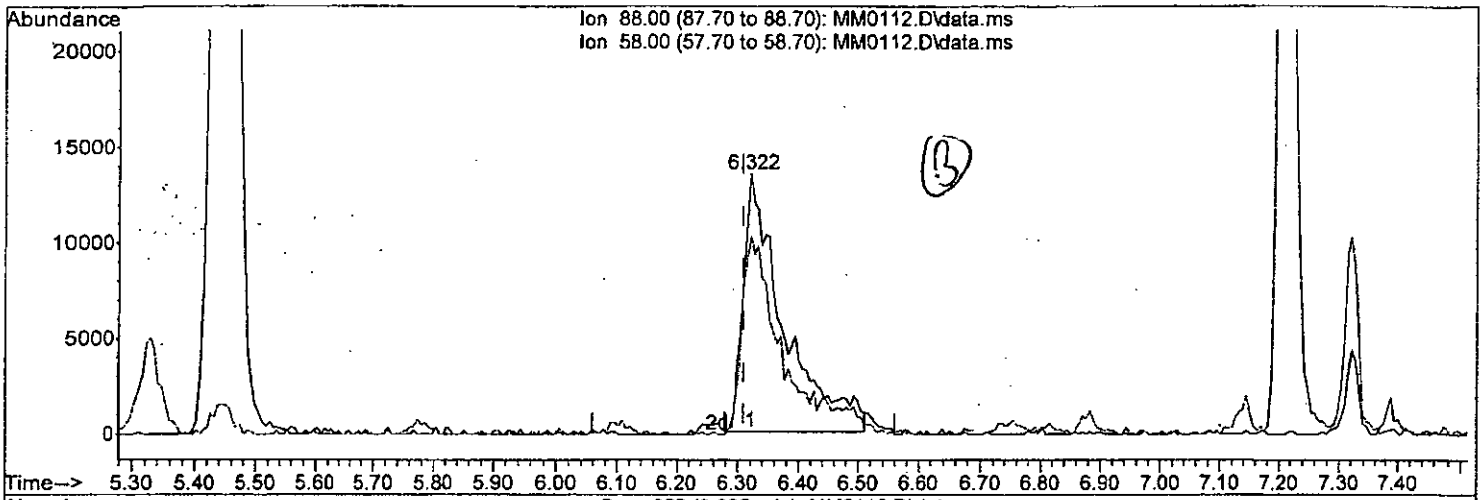

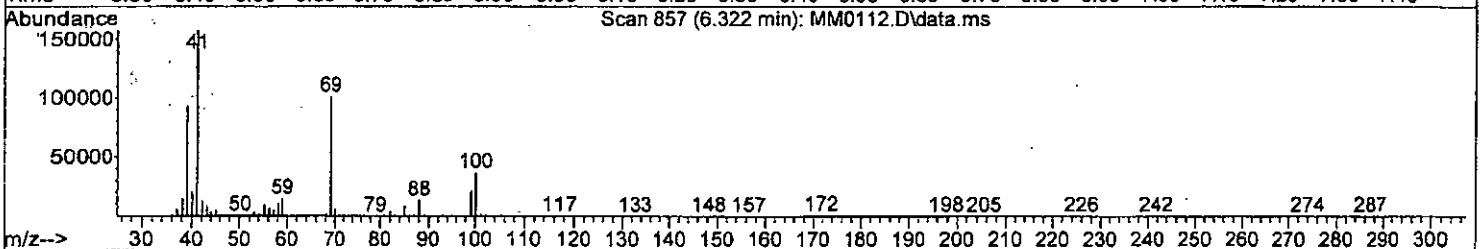

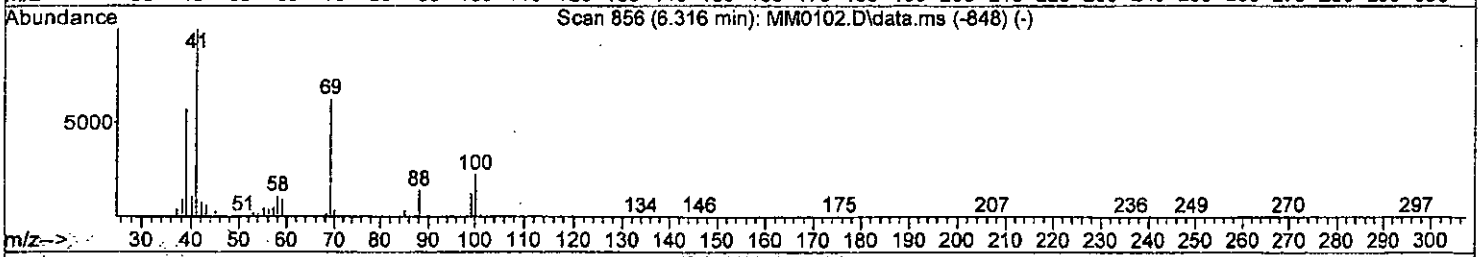

TIC: MM0112.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.012) 859.71 ppb

response 61662

Ion	Exp%	Act%
88.00	100	100
58.00	77.40	76.18
0.00	0.00	0.00
0.00	0.00	0.00

W102714.M Tue Oct 28 11:49:46 2014 Page: 1

00453

```
Sample   : ICV/ICS
Data File: I:\ACQUDATA\msvoa12\Data\102814\MM0112.D
Misc     : 50ppb
Acq On   : 28 Oct 2014  11:34 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title  : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 11:48:28 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration
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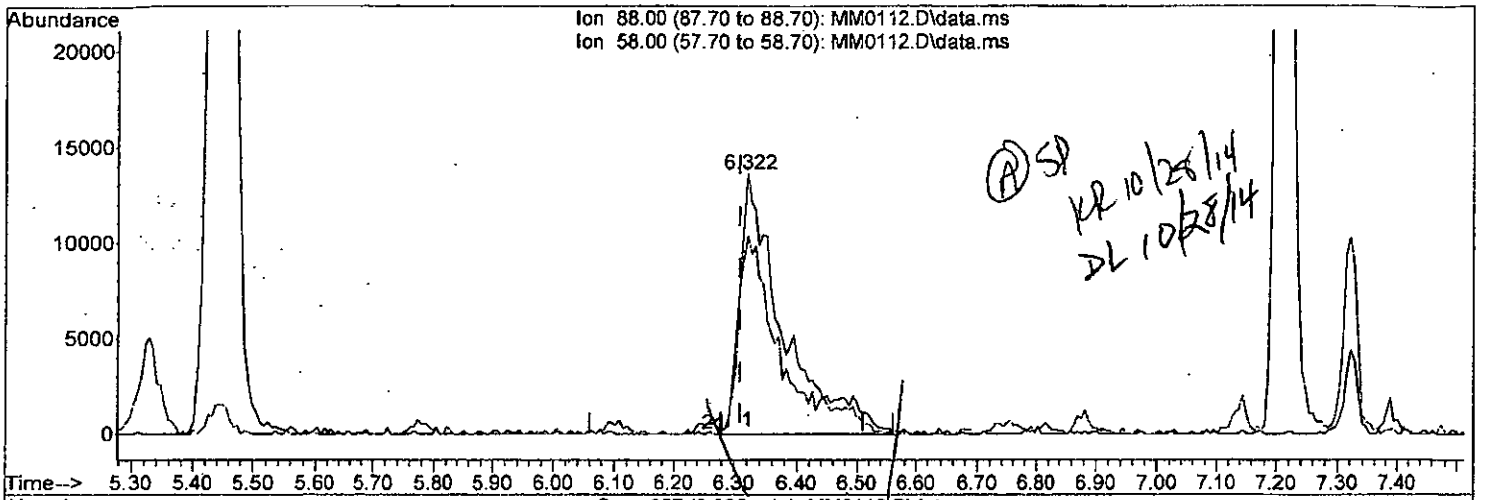
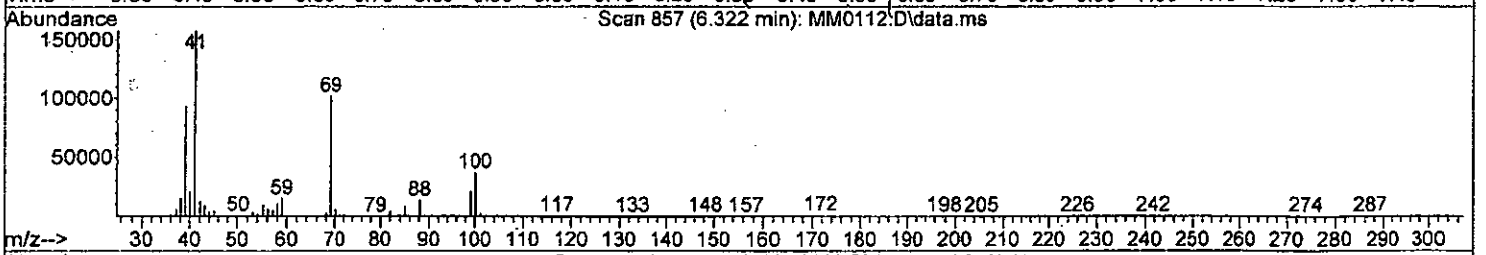
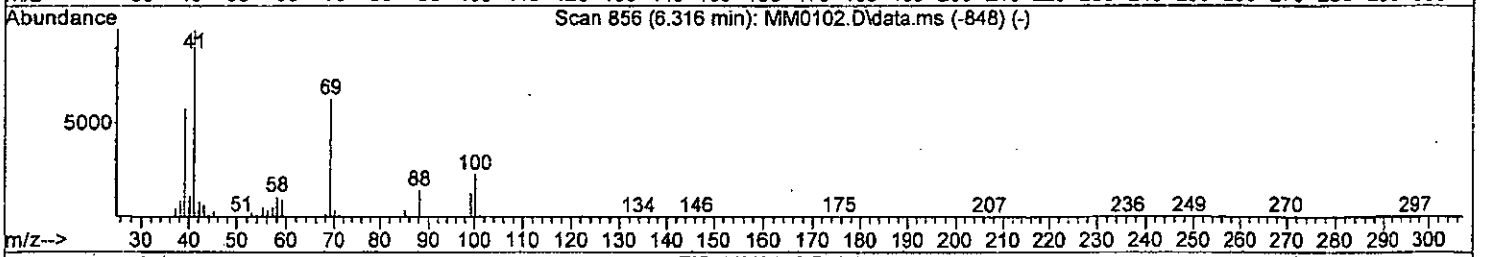






TIC: MM0112.D\data.ms

(58) 1,4-Dioxane

6.322min (+0.012) 905.05 ppb m

response 64914

Ion	Exp%	Act%
88.00	100	100
58.00	77.40	76.18
0.00	0.00	0.00
0.00	0.00	0.00

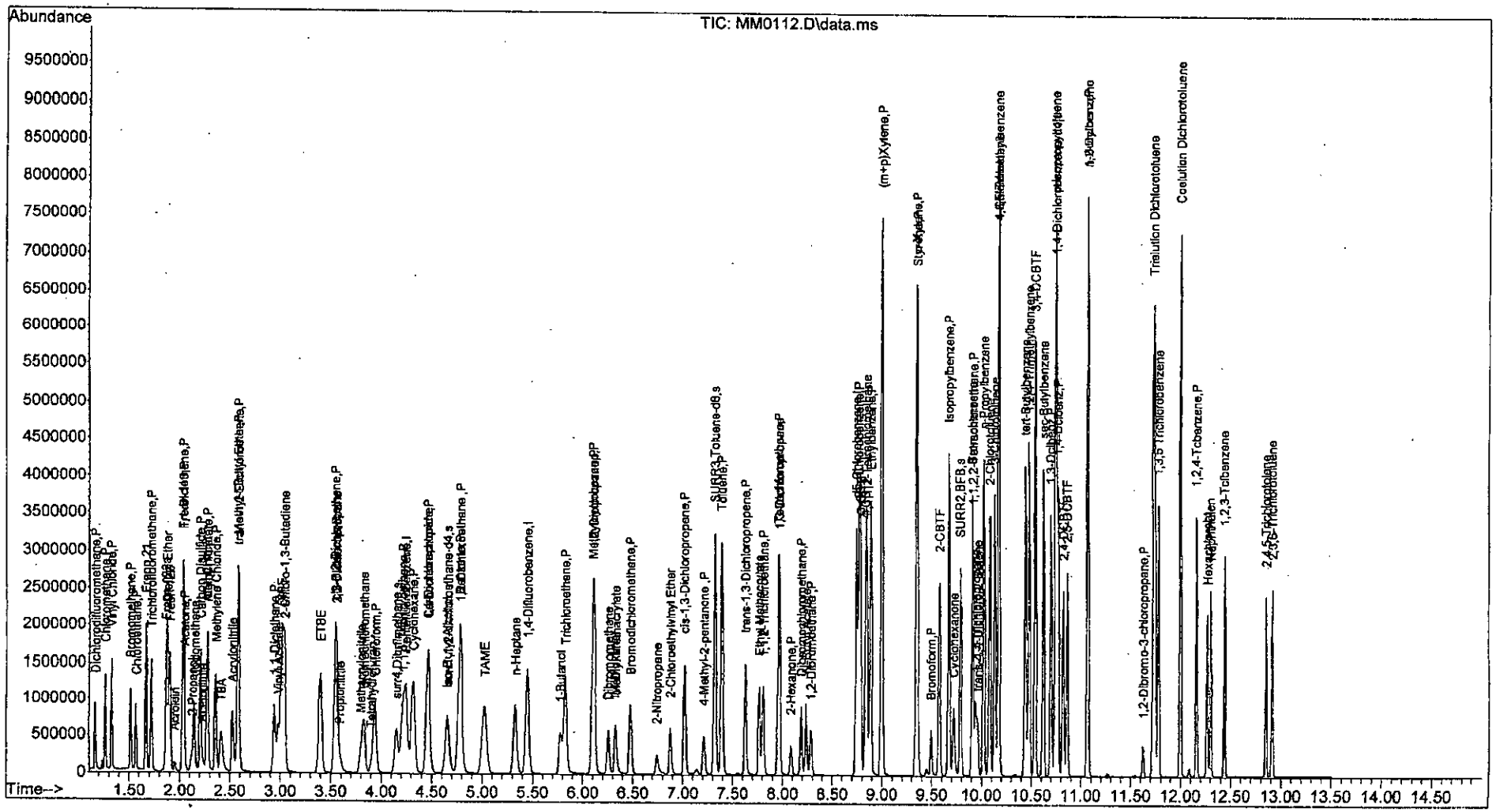
W102714.M Tue Oct 28 11:49:54 2014 Page: 1

00454

Quantitation Report (QT Reviewed)

Sample : ICV/LCS
Data File: I:\ACQUDATA\msvoa12\Data\102814\MM0112.D
Misc : 50ppb
Acq On : 28 Oct 2014 11:34 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Oct 28 11:49:50 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410307
Date Analyzed: 12/30/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\MSVOA12\DATA\123014\MM1899.D\

Calibration Date: 10/27/14
Calibration ID: RC1400098
Analysis Lot: 427512
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	51.3	0.3183	0.3264	2.5	NA	± 20 %	Average RF
1,1,1-Trichloroethane (TCA)	50.0	44.8	0.7789	0.6981	-10.4	NA	± 20 %	Average RF
1,1,2,2-Tetrachloroethane	50.0	46.6	0.5200	0.4844	-6.9	NA	± 20 %	Average RF
1,1,2-Trichloroethane	50.0	48.8	0.2327	0.2271	-2.4	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	46.3	0.8626	0.7991	-7.4	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	46.9	0.4319	0.4049	-6.3	NA	± 20 %	Average RF
1,1-Dichloropropene	50.0	48.1	0.4368	0.4202	-3.8	NA	± 20 %	Average RF
1,2,3-Trichlorobenzene	50.0	49.9	0.6298	0.6289	-0.1	NA	± 20 %	Average RF
1,2,3-Trichloropropane	50.0	43.2	0.1577	0.1363	-13.6	NA	± 20 %	Average RF
1,2,4-Trichlorobenzene	50.0	52.3	0.7405	0.7742	4.5	NA	± 20 %	Average RF
1,2,4-Trimethylbenzene	50.0	51.1	2.270	2.322	2.3	NA	± 20 %	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	45.4	0.08752	0.07942	-9.3	NA	± 20 %	Average RF
1,2-Dibromoethane	50.0	49.0	0.2348	0.2300	-2.0	NA	± 20 %	Average RF
1,2-Dichlorobenzene	50.0	50.1	1.265	1.266	0.1	NA	± 20 %	Average RF
1,2-Dichloroethane	50.0	45.2	0.4315	0.3903	-9.5	NA	± 20 %	Average RF
1,2-Dichloropropane	50.0	47.2	0.3355	0.3170	-5.5	NA	± 20 %	Average RF
1,3,5-Trimethylbenzene	50.0	51.0	2.314	2.362	2.1	NA	± 20 %	Average RF
1,3-Dichlorobenzene	50.0	50.1	1.344	1.347	0.2	NA	± 20 %	Average RF
1,3-Dichloropropane	50.0	48.5	0.4486	0.4347	-3.1	NA	± 20 %	Average RF
1,4-Dichlorobenzene	50.0	49.0	1.406	1.376	-2.1	NA	± 20 %	Average RF
2,2-Dichloropropane	50.0	44.5	0.7655	0.6812	-11.0	NA	± 20 %	Average RF
2-Butanone (MEK)	50.0	48.2	0.1508	0.1454	-3.6	NA	± 20 %	Average RF
2-Chlorotoluene	50.0	48.9	1.874	1.831	-2.3	NA	± 20 %	Average RF
2-Hexanone	50.0	42.5	0.1683	0.1430	-15.1	NA	± 20 %	Average RF
tert-Butyl Alcohol	1000	710	0.03476	0.02467	-29.0 *	NA	± 20 %	Average RF
4-Chlorotoluene	50.0	49.0	2.350	2.302	-2.0	NA	± 20 %	Average RF
p-Isopropyltoluene	50.0	53.1	2.283	2.424	6.1	NA	± 20 %	Average RF
4-Methyl-2-pentanone	50.0	43.3	0.2284	0.1978	-13.4	NA	± 20 %	Average RF
Acetone	50.0	53.3	0.1059	0.1129	6.6	NA	± 20 %	Average RF
Benzene	50.0	48.4	1.281	1.240	-3.2	NA	± 20 %	Average RF
Bromobenzene	50.0	48.4	0.7038	0.6807	-3.3	NA	± 20 %	Average RF
Bromochloromethane	50.0	47.1	0.2863	0.2700	-5.7	NA	± 20 %	Average RF
Bromodichloromethane	50.0	48.1	0.3975	0.3822	-3.8	NA	± 20 %	Average RF
Bromoform	50.0	49.7	0.2484	0.2471	-0.5	NA	± 20 %	Average RF
Bromomethane	50.0	56.3	0.3313	0.3728	12.5	NA	± 20 %	Average RF
Carbon Tetrachloride	50.0	46.6	0.1306	0.1216	-6.9	NA	± 20 %	Average RF
Chlorobenzene	50.0	50.3	0.9683	0.9749	0.7	NA	± 20 %	Average RF
Chloroethane	50.0	54.8	0.4268	0.4676	9.6	NA	± 20 %	Average RF
Chloroform	50.0	46.2	0.8684	0.8015	-7.7	NA	± 20 %	Average RF
Chloromethane	50.0	64.2	0.6451	0.8288	28.5 *	NA	± 20 %	Average RF
Dibromochloromethane	50.0	50.5	0.2690	0.2716	1.0	NA	± 20 %	Average RF

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410307
Date Analyzed: 12/30/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\MSVOA12\DATA\123014\MM1899.D\

Calibration Date: 10/27/14
Calibration ID: RC1400098
Analysis Lot: 427512
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane (CFC 12)	50.0	50.0	0.4730	0.4733	0.1	NA	± 20 %	Average RF
Methylene Chloride	50.0	47.1	0.4706	0.4432	-5.8	NA	± 20 %	Average RF
Ethylbenzene	50.0	50.0	0.5223	0.5222	0.0	NA	± 20 %	Average RF
Hexachlorobutadiene	50.0	55.7	0.2928	0.3259	11.3	NA	± 20 %	Average RF
Isopropylbenzene (Cumene)	50.0	49.8	2.668	2.655	-0.5	NA	± 20 %	Average RF
Methyl tert-Butyl Ether	50.0	44.9	1.211	1.086	-10.3	NA	± 20 %	Average RF
Naphthalene	50.0	50.5	1.407	1.422	1.1	NA	± 20 %	Average RF
Styrene	50.0	50.6	1.051	1.063	1.1	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	50.7	0.2877	0.2917	1.4	NA	± 20 %	Average RF
Toluene	50.0	49.5	1.381	1.367	-1.0	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	49.2	0.3348	0.3293	-1.6	NA	± 20 %	Average RF
Trichlorofluoromethane (CFC 11)	50.0	46.9	0.8147	0.7645	-6.2	NA	± 20 %	Average RF
Vinyl Chloride	50.0	59.6	0.6851	0.8161	19.1	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	49.4	0.5060	0.5002	-1.2	NA	± 20 %	Average RF
cis-1,3-Dichloropropene	50.0	47.4	0.4952	0.4696	-5.2	NA	± 20 %	Average RF
m,p-Xylenes	100	104	0.6320	0.6552	3.7	NA	± 20 %	Average RF
n-Butylbenzene	50.0	54.2	2.020	2.190	8.4	NA	± 20 %	Average RF
n-Propylbenzene	50.0	51.0	3.094	3.157	2.0	NA	± 20 %	Average RF
o-Xylene	50.0	50.0	0.6354	0.6349	-0.1	NA	± 20 %	Average RF
sec-Butylbenzene	50.0	51.6	2.628	2.714	3.2	NA	± 20 %	Average RF
tert-Butylbenzene	50.0	50.8	1.869	1.899	1.6	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	48.3	0.4668	0.4511	-3.4	NA	± 20 %	Average RF
trans-1,3-Dichloropropene	50.0	46.5	0.4221	0.3924	-7.0	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	49.7	0.4756	0.4728	-0.6	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	50.4	0.2912	0.2937	0.9	NA	± 20 %	Average RF
Toluene-d8	50.0	50.8	1.226	1.245	1.5	NA	± 20 %	Average RF

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1899.D
Misc :
Acq On : 30 Dec 2014 12:10 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 12:41:09 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

KR 12/30/14

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	
1	I	Pentafluorobenzene	1.0000	1.0000	0.0	100	0.00	
2	P	Dichlorodifluoromethane	0.4730	0.4733	-0.1	96	0.00	
3	P	Chloromethane	0.6451	0.8288	-28.5#	130	0.00	⊗
4	P	Vinyl Chloride	0.6851	0.8161	-19.1	118	0.00	
5	P	Bromomethane	0.3313	0.3728	-12.5	115	0.00	
6	P	Chloroethane	0.4268	0.4676	-9.6	111	0.00	
7		Freon 21	1.0658	1.1332	-6.3	106	0.00	
8	P	Trichlorofluoromethane	0.8147	0.7645	6.2	95	0.00	
9		Diethyl Ether	0.3709	0.3353	9.6	92	0.00	
10		Freon 123a	0.5897	0.5472	7.2	95	0.00	
11		Freon 123	0.6221	0.5998	3.6	95	0.00	
12		Acrolein	0.0209	0.0479	-129.2#	299#	0.00	⊗
13	P	1,1-Diclethene	0.4319	0.4049	6.3	97	0.00	
14	P	Freon 113	0.4424	0.4339	1.9	99	0.00	
15	P	Acetone	0.1059	0.1129	-6.6	111	0.00	
16		2-Propanol	0.0210	0.0146	30.5#	67	0.00	⊗
17		Iodomethane	0.6235	0.6496	-4.2	101	0.00	
18	P	Carbon Disulfide	1.4520	1.4184	2.3	102	0.00	
19		Acetonitrile	0.0168	0.0150	10.7	94	0.00	
20		Allyl Chloride	0.2447	0.2522	-3.1	97	0.00	
21	P	Methyl Acetate	0.2444	0.2176	11.0	86	0.00	
22	P	Methylene Chloride	0.4706	0.4432	5.8	98	0.00	
23		TBA	0.0348	0.0247	29.0#	73	0.00	⊗
24		Acrylonitrile	0.1138	0.1040	8.6	91	0.00	
25	P	Methyl-t-Butyl Ether	1.2109	1.0863	10.3	90	0.00	
26	P	trans-1,2-Dichloroethene	0.4668	0.4511	3.4	96	0.00	
27		Halothane	0.0000	0.0000	0.0	0#	-3.01#	
28	P	1,1-Diclethane	0.8626	0.7991	7.4	94	0.00	
29		Vinyl Acetate	0.0782	0.0669	14.5	82	0.00	
30		DIPE	1.7339	1.5460	10.8	90	0.00	
31		2-Chloro-1,3-Butadiene	0.7976	0.8760	-9.8	113	0.00	
32		ETBE	1.5055	1.2874	14.5	86	0.00	
33		2,2-Dichloropropane	0.7655	0.6812	11.0	87	0.00	
34	P	cis-1,2-Dichloroethene	0.5060	0.5002	1.1	98	0.00	
35	P	2-Butanone	0.1508	0.1454	3.6	100	0.00	
36		Propionitrile	0.0444	0.0373	16.0	86	0.00	
37		Bromochloromethane	0.2863	0.2700	5.7	97	0.00	
38		Methacrylonitrile	0.1320	0.1184	10.3	89	0.00	
39		Tetrahydrofuran	0.1015	0.0837	17.5	83	0.00	
40	P	Chloroform	0.8684	0.8015	7.7	97	0.00	
41	P	1,1,1-Trichloroethane	0.7789	0.6981	10.4	92	0.00	
42		TAME	1.2597	1.0420	17.3	84	0.00	
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	99	0.00	
44	P	Cyclohexane	0.3702	0.3275	11.5	88	0.00	
45	s	surr4,Dibrflmethane	0.2912	0.2937	-0.9	98	0.00	
46	P	Carbontetrachloride	0.1306	0.1216	6.9	93	0.00	
47		1,1-Dichloropropene	0.4368	0.4202	3.8	96	0.00	

W102714.M Tue Dec 30 12:45:34 2014 Page: 1

Sample : GCV
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1899.D
Misc :
Acq On : 30 Dec 2014 12:10 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 12:41:09 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
48	s	surr1,1,2-dichloroethane-d4	0.3545	0.3278	7.5	90	0.00
49	P	Benzene	1.2807	1.2400	3.2	97	-0.01
50	P	1,2-Dichloroethane	0.4315	0.3903	9.5	91	0.00
51		Iso-Butyl Alcohol	0.0101	0.0076	24.8#	73	0.00
52		n-Heptane	0.4142	0.3834	7.4	94	0.00
53		1-Butanol	0.0063	0.0044	30.2#	71	0.00
54	P	Trichloroethene	0.3348	0.3293	1.6	98	0.00
55	P	Methylcyclohexane	0.4296	0.3957	7.9	92	0.00
56	P	1,2-Diclpropane	0.3355	0.3170	5.5	95	0.00
57		Dibromomethane	0.1587	0.1473	7.2	93	0.00
58		1,4-Dioxane	0.0025	0.0020	20.0	88	0.00
59		Methyl Methacrylate	0.1548	0.1391	10.1	86	0.00
60	P	Bromodichloromethane	0.3975	0.3822	3.8	95	0.00
61		2-Nitropropane	0.0529	0.0373	29.5#	73	0.00
62		2-Chloroethylvinyl Ether	0.1564	0.1505	3.8	96	0.00
63	P	cis-1,3-Dichloropropene	0.4952	0.4696	5.2	91	0.00
64	P	4-Methyl-2-pentanone	0.2284	0.1978	13.4	86	0.00
65	s	SURR3,Toluene-d8	1.2258	1.2446	-1.5	97	0.00
66	P	Toluene	1.3809	1.3668	1.0	97	0.00
67	P	trans-1,3-Dichloropropene	0.4221	0.3924	7.0	87	0.00
68		Ethyl Methacrylate	0.3285	0.2910	11.4	84	0.00
69	P	1,1,2-Trichloroethane	0.2327	0.2271	2.4	97	0.00
70	s	SURR2,BFB	0.4756	0.4728	0.6	96	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000	0.0	100	0.00
72	P	Tetrachloroethene	0.2877	0.2917	-1.4	100	0.00
73	P	2-Hexanone	0.1683	0.1430	15.0	86	0.00
74		1,3-Dichloropropane	0.4486	0.4347	3.1	96	0.00
75	P	Dibromochloromethane	0.2690	0.2716	-1.0	98	0.00
76		N-Butyl Acetate	0.4346	0.3473	20.1#	77	0.00
77	P	1,2-Dibromoethane	0.2348	0.2300	2.0	95	0.00
78	P	Chlorobenzene	0.9683	0.9749	-0.7	101	0.00
79		3-CBTF	0.5304	0.5437	-2.5	101	0.00
80		4-CBTF	0.4746	0.4889	-3.0	102	0.00
81		1,1,1,2-Tetrachloroethane	0.3183	0.3264	-2.5	98	0.00
82	P	Ethylbenzene	0.5223	0.5222	0.0	98	0.00
83	P	(m+p)Xylene	0.6320	0.6552	-3.7	99	0.00
84	P	o-Xylene	0.6354	0.6349	0.1	98	0.00
85	P	Styrene	1.0510	1.0628	-1.1	95	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	102	0.00
87	P	Bromoform	0.2484	0.2471	0.5	94	0.00
88		2-CBTF	0.8807	0.8768	0.4	103	0.00
89	P	Isopropylbenzene	2.6682	2.6550	0.5	99	0.00
90		Cyclohexanone	0.0293	0.0485	-65.5#	214#	0.00
91		trans-1,4-Dichloro-2-Butene	0.1604	0.1275	20.5#	85	0.00
92	P	1,1,2,2-Tetrachloroethane	0.5200	0.4844	6.8	96	0.00
93		Bromobenzene	0.7038	0.6807	3.3	99	0.00

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1899.D
Misc :
Acq On : 30 Dec 2014 12:10 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 12:41:09 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
94		1,2,3-Trichloropropane	0.1577	0.1363	13.6	96	0.00
95		n-Propylbenzene	3.0936	3.1566	-2.0	101	0.00
96		2-Chlorotoluene	1.8742	1.8312	2.3	97	0.00
97		3-Chlorotoluene	1.9940	1.9480	2.3	98	0.00
98		4-Chlorotoluene	2.3499	2.3022	2.0	98	0.00
99		1,3,5-Trimethylbenzene	2.3144	2.3624	-2.1	101	0.00
100		tert-Butylbenzene	1.8691	1.8989	-1.6	102	0.00
101		1,2,4-Trimethylbenzene	2.2696	2.3216	-2.3	100	0.00
102		3,4-DCBTF	0.6633	0.6703	-1.1	101	0.00
103		sec-Butylbenzene	2.6283	2.7135	-3.2	101	0.00
104		p-Isopropyltoluene	2.2834	2.4238	-6.1	104	0.00
105	P	1,3-Dclbenz	1.3443	1.3473	-0.2	102	0.00
106	P	1,4-Dclbenz	1.4056	1.3763	2.1	100	0.00
107		2,4-DCBTF	0.5688	0.6001	-5.5	104	0.00
108		2,5-DCBTF	0.6438	0.6672	-3.6	104	0.00
109		n-Butylbenzene	2.0204	2.1902	-8.4	105	0.00
110	P	1,2-Dclbenz	1.2649	1.2664	-0.1	101	0.00
111	P	1,2-Dibromo-3-chloropropane	0.0875	0.0794	9.3	88	0.00
112		Trielution Dichlorotoluene	1.0371	1.1004	-6.1	103	0.00
113		1,3,5 Trichlorobenzene	0.8672	0.9008	-3.9	104	0.00
114		Coelution Dichlorotoluene	1.0860	1.1650	-7.3	103	0.00
115	P	1,2,4-Tcbenzene	0.7405	0.7742	-4.6	102	0.00
116		Hexachlorobt	0.2928	0.3259	-11.3	110	0.00
117		Naphthalen	1.4071	1.4221	-1.1	96	0.00
118		1,2,3-Tclbenzene	0.6298	0.6289	0.1	100	0.00
119		2,4,5-Trichlorotolene	0.4265	0.4413	-3.5	103	0.00
120		2,3,6-Trichlorotoluene	0.3936	0.4585	-16.5	114	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1899.D
Misc :
Acq On : 30 Dec 2014 12:10 pm
Operator : K.Ruest
InstName : MSVOA-12 RQM116037-02

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 12:41:09 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	900058	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1350444	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1272956	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	761777	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.146	113	396674	50.44	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.88%				
48) surr1,1,2-dichloroetha...	4.658	65	442626	46.22	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 92.44%				
65) SURR3,Toluene-d8	7.316	98	1680793	50.77	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.54%				
70) SURR2,BFB	9.785	95	638470	49.70	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.40%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	426012	50.03	ppb		99
3) Chloromethane	1.262	50	745946	64.23	ppb		100
4) Vinyl Chloride	1.323	62	734581	59.56	ppb		100
5) Bromomethane	1.512	94	335538	56.26	ppb		98
6) Chloroethane	1.567	64	420884	54.78	ppb		98
7) Freon 21	1.664	67	1019963	53.16	ppb		99
8) Trichlorofluoromethane	1.719	101	688122	46.92	ppb		98
9) Diethyl Ether	1.878	59	301765	45.19	ppb		99
10) Freon 123a	1.865	67	492501	46.40	ppb		98
11) Freon 123	1.902	83	539873	48.21	ppb		99
12) Acrolein	1.951	56	215366	572.47	ppb		96
13) 1,1-Diclethene	2.036	96	364462	46.87	ppb		96
14) Freon 113	2.036	101	390527	49.04	ppb		98
15) Acetone	2.042	43	101602	53.31	ppb		97
16) 2-Propanol	2.109	45	263702	697.48	ppb		94
17) Iodomethane	2.146	142	584640	52.09	ppb		99
18) Carbon Disulfide	2.207	76	1276600	48.84	ppb		100
19) Acetonitrile	2.219	40	67373	222.31	ppb		98
20) Allyl Chloride	2.274	76	227014	51.54	ppb	#	91
21) Methyl Acetate	2.274	43	195871	44.52	ppb		98
22) Methylene Chloride	2.353	84	398894	47.08	ppb		99
23) TBA	2.402	59	444171	709.78	ppb		90
24) Acrylonitrile	2.524	53	468005	228.53	ppb		97
25) Methyl-t-Butyl Ether	2.579	73	977701	44.86	ppb		99
26) trans-1,2-Dichloroethene	2.579	96	406001	48.32	ppb		99
28) 1,1-Diclethane	2.938	63	719244	46.32	ppb		99
29) Vinyl Acetate	2.975	86	60254	42.82	ppb	#	92
30) DIPE	3.012	45	1391515	44.58	ppb		99
31) 2-Chloro-1,3-Butadiene	3.036	53	788492	54.92	ppb		98
32) ETBE	3.396	59	1158692	42.76	ppb		98
33) 2,2-Dichloropropane	3.554	77	613086	44.49	ppb		98
34) cis-1,2-Dichloroethene	3.542	96	450175	49.42	ppb		92
35) 2-Butanone	3.542	43	130831	48.19	ppb		90
36) Propionitrile	3.591	54	167890	210.18	ppb		94
37) Bromochloromethane	3.829	130	242973	47.14	ppb		92

KR 12/30/14

W102714.M Tue Dec 30 12:45:24 2014 Page: 1

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1899.D
Misc :
Acq On : 30 Dec 2014 12:10 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 12:41:09 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.792	67	106558	44.83	ppb	95
39) Tetrahydrofuran	3.902	42	75313	41.20	ppb	95
40) Chloroform	3.932	83	721365	46.15	ppb	99
41) 1,1,1-Trichloroethane	4.207	97	628325	44.81	ppb	98
42) TAME	5.017	73	937895	41.36	ppb	97
44) Cyclohexane	4.310	41	442232	44.23	ppb	100
46) Carbontetrachloride	4.469	121	164187	46.56	ppb	95
47) 1,1-Dichloropropene	4.456	75	567472	48.10	ppb	98
49) Benzene	4.773	78	1674488	48.41	ppb	98
50) 1,2-Dichloroethane	4.780	62	527132	45.23	ppb	97
51) Iso-Butyl Alcohol	4.633	43	204744	747.76	ppb	98
52) n-Heptane	5.322	43	517733	46.28	ppb	94
53) 1-Butanol	5.767	56	294435	1743.10	ppb	93
54) Trichloroethene	5.822	130	444737	49.19	ppb	97
55) Methylcyclohexane	6.102	55	534339	46.05	ppb	92
56) 1,2-Diclpropane	6.109	63	428056	47.24	ppb	99
57) Dibromomethane	6.255	93	198922	46.40	ppb	93
58) 1,4-Dioxane	6.304	88	55308m	810.80	ppb	
59) Methyl Methacrylate	6.328	69	187810	44.91	ppb	94
60) Bromodichloromethane	6.474	83	516199	48.09	ppb	99
61) 2-Nitropropane	6.737	41	100827	70.57	ppb	97
62) 2-Chloroethylvinyl Ether	6.877	63	203286	48.13	ppb	99
63) cis-1,3-Dichloropropene	7.017	75	634211	47.42	ppb	99
64) 4-Methyl-2-pentanone	7.212	43	267183	43.31	ppb	98
66) Toluene	7.389	91	1845811	49.49	ppb	99
67) trans-1,3-Dichloropropene	7.627	75	529957	46.48	ppb	98
68) Ethyl Methacrylate	7.767	69	392969	44.30	ppb	96
69) 1,1,2-Trichloroethane	7.803	97	306752	48.80	ppb	99
72) Tetrachloroethene	7.962	164	371347	50.69	ppb	98
73) 2-Hexanone	8.084	43	182011	42.47	ppb	94
74) 1,3-Dichloropropane	7.968	76	553320	48.45	ppb	91
75) Dibromochloromethane	8.187	129	345775	50.50	ppb	97
76) N-Butyl Acetate	8.236	43	442158	39.96	ppb	96
77) 1,2-Dibromoethane	8.285	107	292784	48.99	ppb	99
78) Chlorobenzene	8.767	112	1241023	50.34	ppb	96
79) 3-CBTF	8.779	180	692165	51.26	ppb	96
80) 4-CBTF	8.834	180	622371	51.51	ppb	98
81) 1,1,1,2-Tetrachloroethane	8.846	131	415444	51.26	ppb	96
82) Ethylbenzene	8.882	106	664753	49.99	ppb	99
83) (m+p)Xylene	8.992	106	1667958	103.67	ppb	99
84) o-Xylene	9.340	106	808156	49.96	ppb	97
85) Styrene	9.352	104	1352861	50.56	ppb	98
87) Bromoform	9.492	173	188265	49.74	ppb	100
88) 2-CBTF	9.571	180	667937	49.78	ppb	97
89) Isopropylbenzene	9.669	105	2022480	49.75	ppb	99
90) Cyclohexanone	9.712	55	739395	1655.31	ppb	100
91) trans-1,4-Dichloro-2-B...	9.955	53	97093	39.74	ppb	84
92) 1,1,2,2-Tetrachloroethane	9.907	83	369002	46.57	ppb	99
93) Bromobenzene	9.907	156	518576	48.36	ppb	93
94) 1,2,3-Trichloropropane	9.937	110	103834	43.21	ppb	96
95) n-Propylbenzene	10.016	91	2404589	51.02	ppb	97
96) 2-Chlorotoluene	10.077	91	1394944	48.85	ppb	99

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1899.D
Misc :
Acq On : 30 Dec 2014 12:10 pm
Operator : K.Ruest
InstName : MSVOA-12

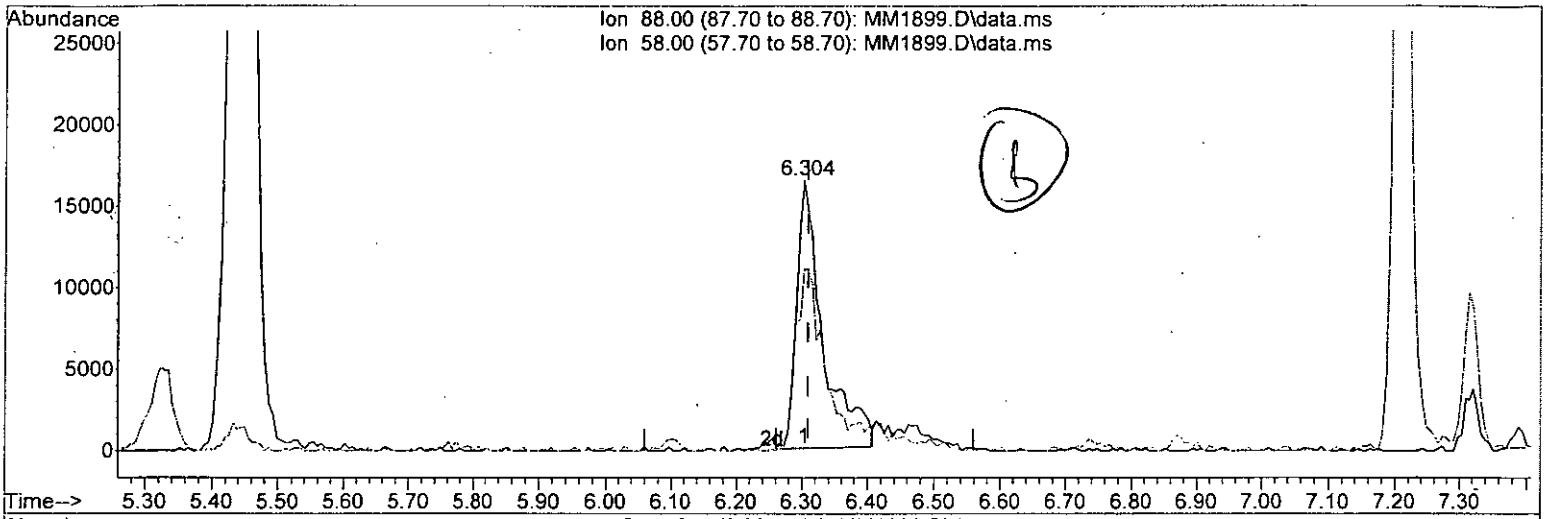
Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 12:41:09 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

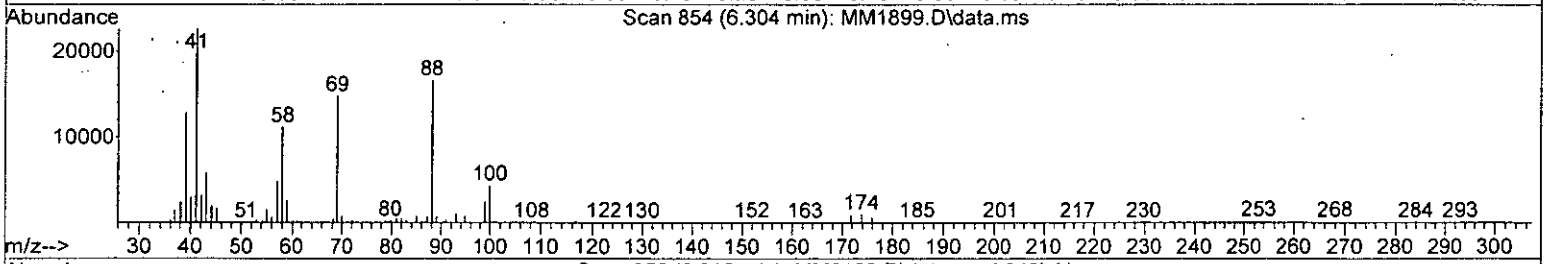
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	1483962	48.85	ppb	98
98)	4-Chlorotoluene	10.169	91	1753768	48.99	ppb	99
99)	1,3,5-Trimethylbenzene	10.169	105	1799638	51.04	ppb	99
100)	tert-Butylbenzene	10.437	119	1446504	50.79	ppb	99
101)	1,2,4-Trimethylbenzene	10.474	105	1768516	51.14	ppb	100
102)	3,4-DCBTF	10.535	214	510599	50.52	ppb	99
103)	sec-Butylbenzene	10.620	105	2067111	51.62	ppb	99
104)	p-Isopropyltoluene	10.736	119	1846423	53.07	ppb	100
105)	1,3-Dclbenz	10.693	146	1026327	50.11	ppb	99
106)	1,4-Dclbenz	10.766	146	1048450	48.96	ppb	99
107)	2,4-DCBTF	10.821	214	457141	52.75	ppb	99
108)	2,5-DCBTF	10.858	214	508263	51.82	ppb	98
109)	n-Butylbenzene	11.065	91	1668465	54.20	ppb	99
110)	1,2-Dclbenz	11.065	146	964691	50.06	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.620	157	60501	45.37	ppb	88
112)	Trielution Dichlorotol...	11.729	125	2514741	159.16	ppb	98
113)	1,3,5 Trichlorobenzene	11.778	180	686187	51.93	ppb	97
114)	Coelution Dichlorotoluene	11.992	125	1774972	107.27	ppb	94
115)	1,2,4-Tcbenzene	12.156	180	589737	52.27	ppb	98
116)	Hexachlorobt	12.266	225	248253	55.65	ppb	98
117)	Naphthalen	12.296	128	1083348	50.53	ppb	98
118)	1,2,3-Tclbenzene	12.437	180	479047	49.93	ppb	97
119)	2,4,5-Trichlorotolene	12.845	159	336177	51.73	ppb	96
120)	2,3,6-Trichlorotoluene	12.906	159	349247	58.24	ppb	96

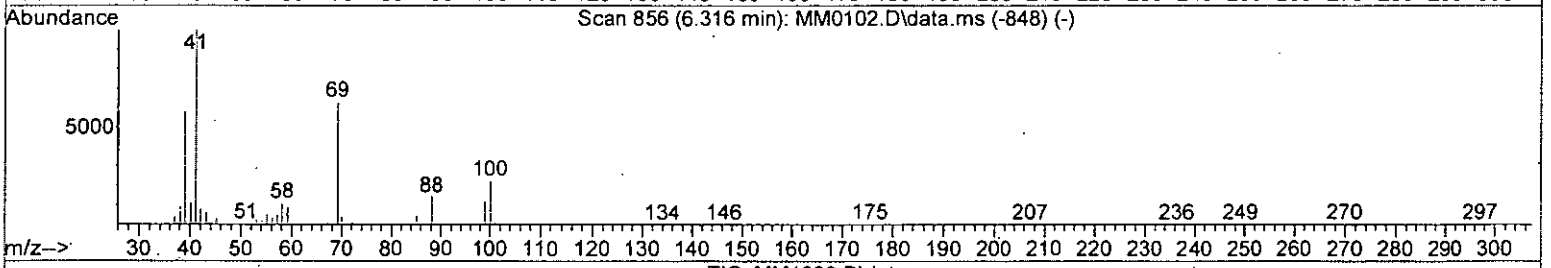
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1899.D
Misc :
Acq On : 30 Dec 2014 12:10 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 12:24:21 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1899.D\data.ms

(58) 1,4-Dioxane

6.304min (-0.006) 671.24 ppb

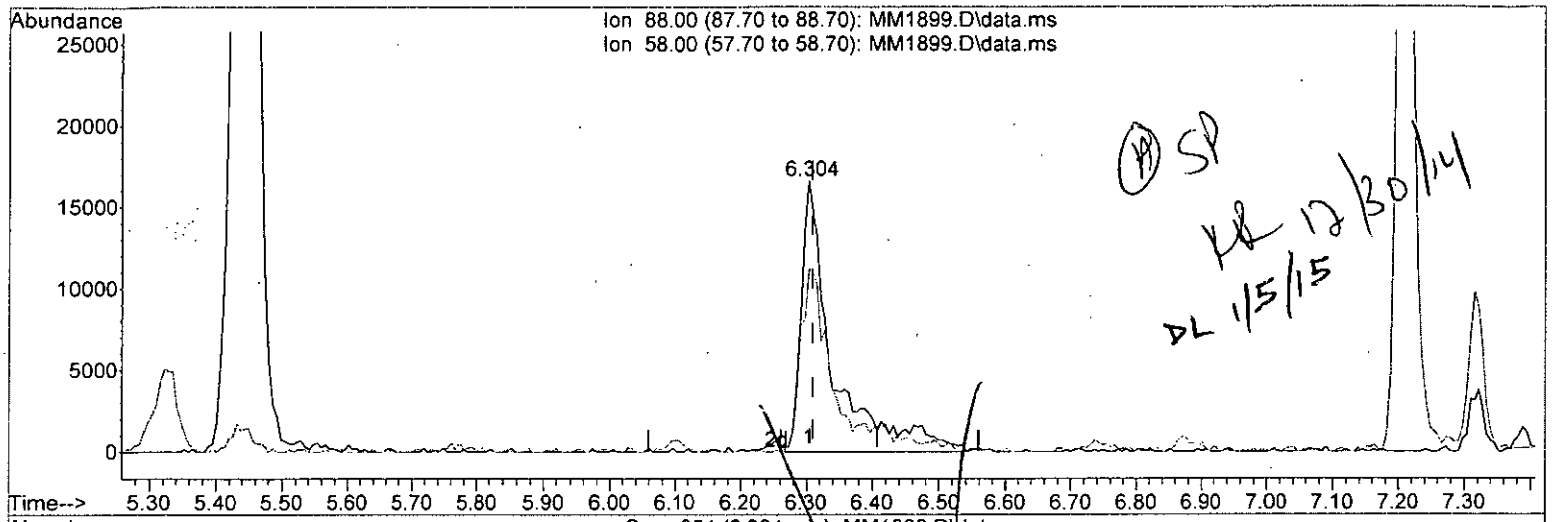
response 45788

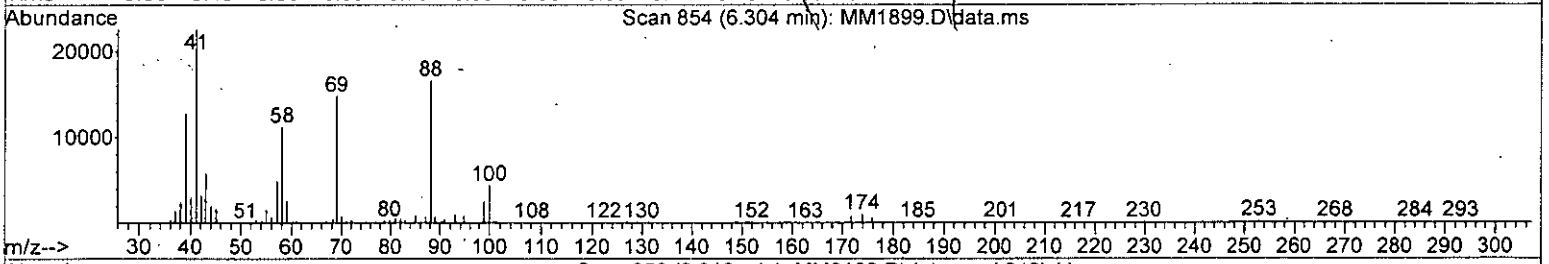
Ion	Exp%	Act%
88.00	100	100
58.00	77.40	67.37
0.00	0.00	0.00
0.00	0.00	0.00

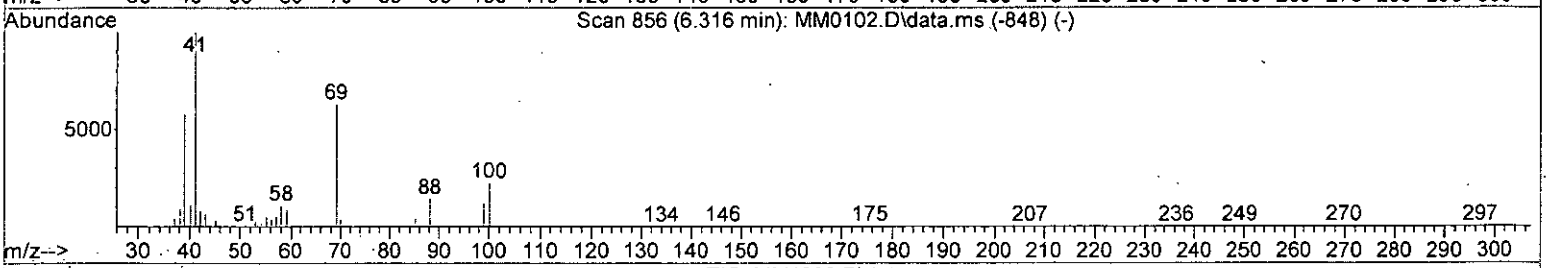
W102714.M Tue Dec 30 12:41:06 2014 Page: 1

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1899.D
Misc :
Acq On : 30 Dec 2014 12:10 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 12:24:21 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1899.D\data.ms

(58) 1,4-Dioxane

6.304min (-0.006) 810.80 ppb m

response 55308

Ion	Exp%	Act%
88.00	100	100
58.00	77.40	67.37
0.00	0.00	0.00
0.00	0.00	0.00

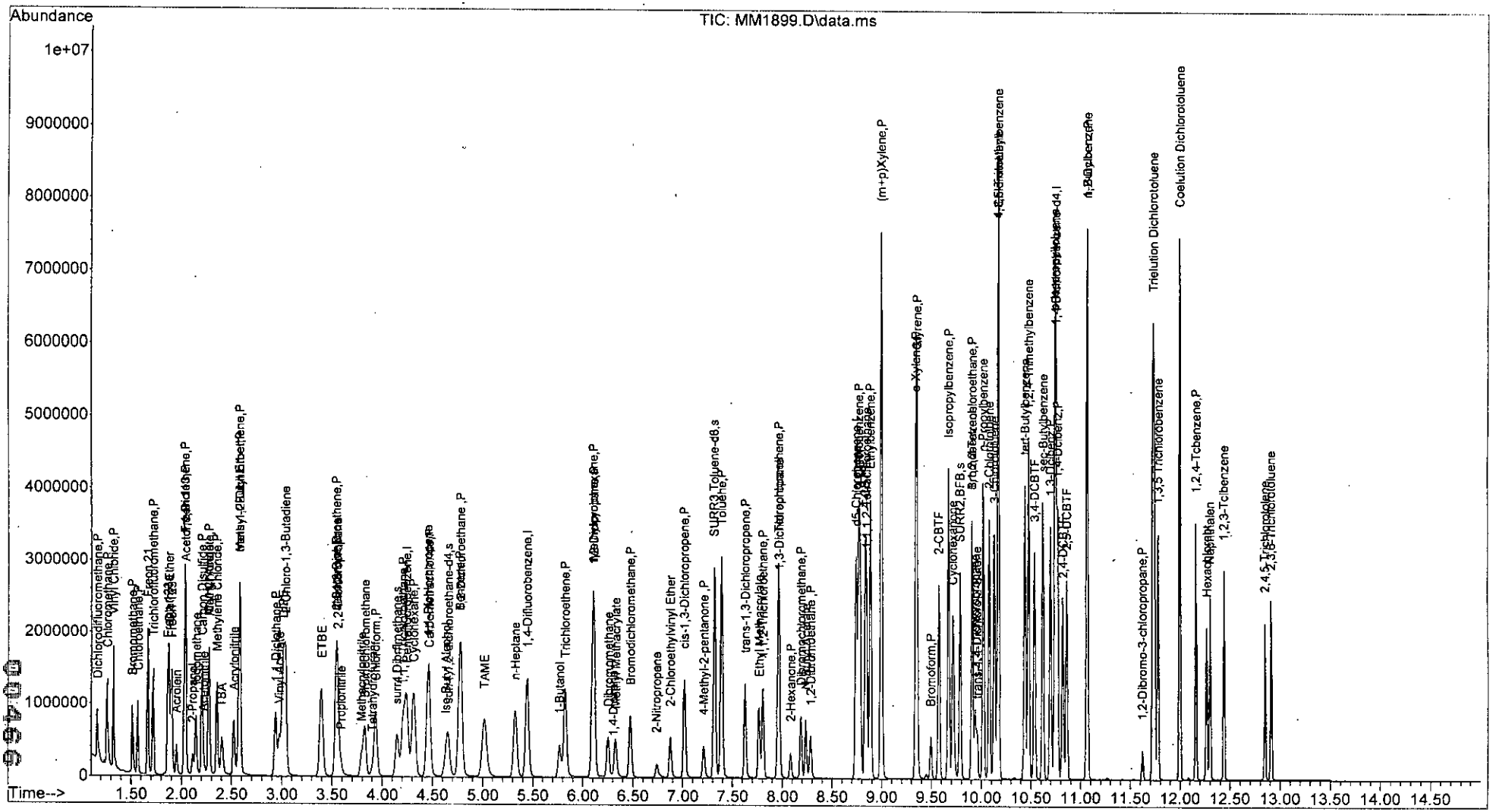
W102714.M Tue Dec 30 12:41:12 2014 Page: 1

00465

Quantitation Report (QT Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1899.D
Misc :
Acq On : 30 Dec 2014 12:10 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 12:41:09 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



W102714.M Tue Dec 30 12:45:28 2014 Page: 4

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410307
Date Analyzed: 12/31/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\msvoa12\Data\123014\MM1923.D\

Calibration Date: 10/27/14
Calibration ID: RC1400098
Analysis Lot: 427514
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,1,1,2-Tetrachloroethane	50.0	46.7	0.3183	0.2971	-6.7	NA	± 20 %	Average RF
1,1,1-Trichloroethane (TCA)	50.0	43.2	0.7789	0.6733	-13.5	NA	± 20 %	Average RF
1,1,2,2-Tetrachloroethane	50.0	44.2	0.5200	0.4597	-11.6	NA	± 20 %	Average RF
1,1,2-Trichloroethane	50.0	46.2	0.2327	0.2150	-7.6	NA	± 20 %	Average RF
1,1-Dichloroethane (1,1-DCA)	50.0	44.4	0.8626	0.7664	-11.1	NA	± 20 %	Average RF
1,1-Dichloroethene (1,1-DCE)	50.0	45.2	0.4319	0.3903	-9.6	NA	± 20 %	Average RF
1,1-Dichloropropene	50.0	45.3	0.4368	0.3953	-9.5	NA	± 20 %	Average RF
1,2,3-Trichlorobenzene	50.0	47.5	0.6298	0.5986	-5.0	NA	± 20 %	Average RF
1,2,3-Trichloropropane	50.0	43.3	0.1577	0.1366	-13.4	NA	± 20 %	Average RF
1,2,4-Trichlorobenzene	50.0	48.6	0.7405	0.7200	-2.8	NA	± 20 %	Average RF
1,2,4-Trimethylbenzene	50.0	48.6	2.270	2.204	-2.9	NA	± 20 %	Average RF
1,2-Dibromo-3-chloropropane (DBCP)	50.0	46.1	0.08752	0.08068	-7.8	NA	± 20 %	Average RF
1,2-Dibromoethane	50.0	46.7	0.2348	0.2194	-6.5	NA	± 20 %	Average RF
1,2-Dichlorobenzene	50.0	48.8	1.265	1.234	-2.4	NA	± 20 %	Average RF
1,2-Dichloroethane	50.0	43.4	0.4315	0.3742	-13.3	NA	± 20 %	Average RF
1,2-Dichloropropane	50.0	44.1	0.3355	0.2957	-11.9	NA	± 20 %	Average RF
1,3,5-Trimethylbenzene	50.0	48.7	2.314	2.254	-2.6	NA	± 20 %	Average RF
1,3-Dichlorobenzene	50.0	47.2	1.344	1.268	-5.7	NA	± 20 %	Average RF
1,3-Dichloropropane	50.0	46.7	0.4486	0.4192	-6.6	NA	± 20 %	Average RF
1,4-Dichlorobenzene	50.0	47.6	1.406	1.339	-4.7	NA	± 20 %	Average RF
2,2-Dichloropropane	50.0	34.9	0.7655	0.5349	-30.1 *	NA	± 20 %	Average RF
2-Butanone (MEK)	50.0	47.0	0.1508	0.1418	-6.0	NA	± 20 %	Average RF
2-Chlorotoluene	50.0	47.3	1.874	1.774	-5.3	NA	± 20 %	Average RF
2-Hexanone	50.0	42.3	0.1683	0.1422	-15.5	NA	± 20 %	Average RF
tert-Butyl Alcohol	1000	734	0.03476	0.02553	-26.6 *	NA	± 20 %	Average RF
4-Chlorotoluene	50.0	47.7	2.350	2.244	-4.5	NA	± 20 %	Average RF
p-Isopropyltoluene	50.0	50.1	2.283	2.286	0.1	NA	± 20 %	Average RF
4-Methyl-2-pentanone	50.0	42.3	0.2284	0.1933	-15.4	NA	± 20 %	Average RF
Acetone	50.0	50.4	0.1059	0.1068	0.9	NA	± 20 %	Average RF
Benzene	50.0	45.6	1.281	1.169	-8.7	NA	± 20 %	Average RF
Bromobenzene	50.0	46.8	0.7038	0.6583	-6.5	NA	± 20 %	Average RF
Bromochloromethane	50.0	45.4	0.2863	0.2600	-9.2	NA	± 20 %	Average RF
Bromodichloromethane	50.0	45.1	0.3975	0.3581	-9.9	NA	± 20 %	Average RF
Bromoform	50.0	50.4	0.2484	0.2504	0.8	NA	± 20 %	Average RF
Bromomethane	50.0	45.3	0.3313	0.2999	-9.5	NA	± 20 %	Average RF
Carbon Tetrachloride	50.0	44.7	0.1306	0.1166	-10.7	NA	± 20 %	Average RF
Chlorobenzene	50.0	46.8	0.9683	0.9072	-6.3	NA	± 20 %	Average RF
Chloroethane	50.0	51.5	0.4268	0.4398	3.0	NA	± 20 %	Average RF
Chloroform	50.0	44.3	0.8684	0.7693	-11.4	NA	± 20 %	Average RF
Chloromethane	50.0	54.7	0.6451	0.7051	9.3	NA	± 20 %	Average RF
Dibromochloromethane	50.0	49.9	0.2690	0.2684	-0.2	NA	± 20 %	Average RF

00467

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000

Service Request: R1410307
Date Analyzed: 12/31/14

Continuing Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Analytical Method: 8260C

File ID: I:\ACQUDATA\msvoa12\Data\123014\MM1923.D\

Calibration Date: 10/27/14
Calibration ID: RC1400098
Analysis Lot: 427514
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Dichlorodifluoromethane (CFC 12)	50.0	47.7	0.4730	0.4510	-4.7	NA	± 20 %	Average RF
Methylene Chloride	50.0	45.2	0.4706	0.4253	-9.6	NA	± 20 %	Average RF
Ethylbenzene	50.0	46.9	0.5223	0.4903	-6.1	NA	± 20 %	Average RF
Hexachlorobutadiene	50.0	49.4	0.2928	0.2892	-1.2	NA	± 20 %	Average RF
Isopropylbenzene (Cumene)	50.0	48.5	2.668	2.590	-2.9	NA	± 20 %	Average RF
Methyl tert-Butyl Ether	50.0	43.8	1.211	1.060	-12.5	NA	± 20 %	Average RF
Naphthalene	50.0	48.9	1.407	1.375	-2.3	NA	± 20 %	Average RF
Styrene	50.0	47.6	1.051	1.001	-4.8	NA	± 20 %	Average RF
Tetrachloroethene (PCE)	50.0	48.1	0.2877	0.2768	-3.8	NA	± 20 %	Average RF
Toluene	50.0	46.0	1.381	1.269	-8.1	NA	± 20 %	Average RF
Trichloroethene (TCE)	50.0	47.9	0.3348	0.3206	-4.2	NA	± 20 %	Average RF
Trichlorofluoromethane (CFC 11)	50.0	45.4	0.8147	0.7391	-9.3	NA	± 20 %	Average RF
Vinyl Chloride	50.0	56.8	0.6851	0.7778	13.5	NA	± 20 %	Average RF
cis-1,2-Dichloroethene	50.0	46.7	0.5060	0.4730	-6.5	NA	± 20 %	Average RF
cis-1,3-Dichloropropene	50.0	43.6	0.4952	0.4315	-12.9	NA	± 20 %	Average RF
m,p-Xylenes	100	98.5	0.6320	0.6222	-1.5	NA	± 20 %	Average RF
n-Butylbenzene	50.0	49.9	2.020	2.014	-0.3	NA	± 20 %	Average RF
n-Propylbenzene	50.0	48.9	3.094	3.022	-2.3	NA	± 20 %	Average RF
o-Xylene	50.0	47.2	0.6354	0.5998	-5.6	NA	± 20 %	Average RF
sec-Butylbenzene	50.0	48.9	2.628	2.572	-2.1	NA	± 20 %	Average RF
tert-Butylbenzene	50.0	49.4	1.869	1.845	-1.3	NA	± 20 %	Average RF
trans-1,2-Dichloroethene	50.0	46.0	0.4668	0.4296	-8.0	NA	± 20 %	Average RF
trans-1,3-Dichloropropene	50.0	42.9	0.4221	0.3620	-14.2	NA	± 20 %	Average RF
4-Bromofluorobenzene	50.0	49.3	0.4756	0.4692	-1.4	NA	± 20 %	Average RF
Dibromofluoromethane	50.0	51.3	0.2912	0.2988	2.6	NA	± 20 %	Average RF
Toluene-d8	50.0	50.1	1.226	1.229	0.2	NA	± 20 %	Average RF

Evaluate Continuing Calibration Report

Sample COV
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1923.D
Misc :
Acq On : 31 Dec 2014 12:53 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 09:04:16 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

KR 12/31/14

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	
1	I	Pentafluorobenzene	1.0000	1.0000	0.0	103	0.00	
2	P	Dichlorodifluoromethane	0.4730	0.4510	4.7	94	0.00	
3	P	Chloromethane	0.6451	0.7051	-9.3	114	0.00	
4	P	Vinyl Chloride	0.6851	0.7778	-13.5	116	0.00	
5	P	Bromomethane	0.3313	0.2999	9.5	96	0.00	
6	P	Chloroethane	0.4268	0.4398	-3.0	107	0.00	
7		Freon 21	1.0658	1.1454	-7.5	111	0.00	
8	P	Trichlorofluoromethane	0.8147	0.7391	9.3	94	0.00	
9		Diethyl Ether	0.3709	0.3367	9.2	95	0.00	
10		Freon 123a	0.5897	0.5581	5.4	100	0.00	
11		Freon 123	0.6221	0.6130	1.5	100	0.00	
12		Acrolein	0.0209	0.0293	-40.2#	188	0.00	
13	P	1,1-Diclethene	0.4319	0.3903	9.6	96	0.00	
14	P	Freon 113	0.4424	0.4086	7.6	96	0.00	
15	P	Acetone	0.1059	0.1068	-0.8	108	0.00	
16		2-Propanol	0.0210	0.0164	21.9#	77	0.00	
17		Iodomethane	0.6235	0.5144	17.5	82	0.00	
18	P	Carbon Disulfide	1.4520	1.3481	7.2	99	0.00	
19		Acetonitrile	0.0168	0.0155	7.7	101	0.00	
20		Allyl Chloride	0.2447	0.2100	14.2	83	0.00	
21	P	Methyl Acetate	0.2444	0.2155	11.8	87	0.00	
22	P	Methylene Chloride	0.4706	0.4253	9.6	97	0.00	
23		TBA	0.0348	0.0255	26.7#	77	0.00	⊗
24		Acrylonitrile	0.1138	0.1033	9.2	93	0.00	
25	P	Methyl-t-Butyl Ether	1.2109	1.0595	12.5	90	0.00	
26	P	trans-1,2-Dichloroethene	0.4668	0.4296	8.0	94	0.00	
27		Halothane	0.0000	0.0000	0.0	0#	-3.01#	
28	P	1,1-Diclethane	0.8626	0.7664	11.2	92	0.00	
29		Vinyl Acetate	0.0782	0.0502	35.8#	63	0.00	
~~30~~		~~DIPE~~	~~1.7339~~	~~0.0013~~	~~99.9#~~	~~0#~~	~~0.02~~	
31		2-Chloro-1,3-Butadiene	0.7976	0.8352	-4.7	111	0.00	
~~32~~		~~ETBE~~	~~1.5055~~	~~0.0005~~	~~100.0#~~	~~0#~~	~~0.00~~	
33		2,2-Dichloropropane	0.7655	0.5349	30.1#	70	0.00	⊗
34	P	cis-1,2-Dichloroethene	0.5060	0.4730	6.5	96	0.00	
35	P	2-Butanone	0.1508	0.1418	6.0	100	0.00	
36		Propionitrile	0.0444	0.0376	15.3	89	0.00	
37		Bromochloromethane	0.2863	0.2600	9.2	96	0.00	
38		Methacrylonitrile	0.1320	0.1144	13.3	89	0.00	
39		Tetrahydrofuran	0.1015	0.0835	17.7	86	0.00	
40	P	Chloroform	0.8684	0.7693	11.4	95	0.00	
41	P	1,1,1-Trichloroethane	0.7789	0.6733	13.6	91	0.00	
~~42~~		~~TAME~~	~~1.2597~~	~~0.0006~~	~~100.0#~~	~~0#~~	~~0.00~~	
43	I	1,4-Difluorobenzene	1.0000	1.0000	0.0	103	0.00	
44	P	Cyclohexane	0.3702	0.3250	12.2	91	0.00	
45	s	surr4,Dibrflmethane	0.2912	0.2988	-2.6	104	0.00	
46	P	Carbontetrachloride	0.1306	0.1166	10.7	93	0.00	
47		1,1-Dichloropropene	0.4368	0.3953	9.5	94	0.00	

W102714.M Wed Dec 31 09:04:52 2014

Evaluate Continuing Calibration Report

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1923.D
Misc :
Acq On : 31 Dec 2014 12:53 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 09:04:16 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
48	s	surr1,1,2-dichloroethane-d4	0.3545	0.3284	7.4	94	0.00
49	P	Benzene	1.2807	1.1690	8.7	95	-0.01
50	P	1,2-Dichloroethane	0.4315	0.3742	13.3	91	0.00
51		Iso-Butyl Alcohol	0.0101	0.0075	25.7#	75	0.00
52		n-Heptane	0.4142	0.3180	23.2#	81	0.00
~~53~~		~~1-Butanol~~	~~0.0063~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~-5.77#~~
54	P	Trichloroethene	0.3348	0.3206	4.2	100	0.00
55	P	Methylcyclohexane	0.4296	0.3840	10.6	93	0.00
56	P	1,2-Diclpropane	0.3355	0.2957	11.9	93	0.00
57		Dibromomethane	0.1587	0.1453	8.4	95	0.00
58		1,4-Dioxane	0.0025	0.0020	20.0	90	0.00
59		Methyl Methacrylate	0.1548	0.1298	16.1	84	0.00
60	P	Bromodichloromethane	0.3975	0.3581	9.9	93	0.00
61		2-Nitropropane	0.0529	0.0364	31.2#	74	0.00
62		2-Chloroethylvinyl Ether	0.1564	0.1405	10.2	93	0.00
63	P	cis-1,3-Dichloropropene	0.4952	0.4315	12.9	87	0.00
64	P	4-Methyl-2-pentanone	0.2284	0.1933	15.4	88	0.00
65	s	SURR3,Toluene-d8	1.2258	1.2285	-0.2	100	0.00
66	P	Toluene	1.3809	1.2691	8.1	94	0.00
67	P	trans-1,3-Dichloropropene	0.4221	0.3620	14.2	84	0.00
68		Ethyl Methacrylate	0.3285	0.2830	13.9	85	0.00
69	P	1,1,2-Trichloroethane	0.2327	0.2150	7.6	96	0.00
70	s	SURR2,BFB	0.4756	0.4692	1.3	99	0.00
71	I	d5-Chlorobenzene	1.0000	1.0000	0.0	103	0.00
72	P	Tetrachloroethene	0.2877	0.2768	3.8	97	0.00
73	P	2-Hexanone	0.1683	0.1422	15.5	88	0.00
74		1,3-Dichloropropane	0.4486	0.4192	6.6	96	0.00
75	P	Dibromochloromethane	0.2690	0.2684	0.2	100	0.00
76		N-Butyl Acetate	0.4346	0.3597	17.2	82	0.00
77	P	1,2-Dibromoethane	0.2348	0.2194	6.6	93	0.00
78	P	Chlorobenzene	0.9683	0.9072	6.3	96	0.00
~~79~~		~~3-CBTF~~	~~0.5304~~	~~0.0006~~	~~99.9#~~	~~0#~~	~~0.00~~
~~80~~		~~4-CBTF~~	~~0.4746~~	~~0.0006~~	~~99.9#~~	~~0#~~	~~0.06~~
81		1,1,1,2-Tetrachloroethane	0.3183	0.2971	6.7	92	0.00
82	P	Ethylbenzene	0.5223	0.4903	6.1	94	0.00
83	P	(m+p)Xylene	0.6320	0.6222	1.6	97	0.00
84	P	o-Xylene	0.6354	0.5998	5.6	95	0.00
85	P	Styrene	1.0510	1.0006	4.8	92	0.00
86	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	102	0.00
87	P	Bromoform	0.2484	0.2504	-0.8	95	0.00
~~88~~		~~2-CBTF~~	~~0.8807~~	~~0.0008~~	~~99.9#~~	~~0#~~	~~0.00~~
89	P	Isopropylbenzene	2.6682	2.5902	2.9	97	0.00
90		Cyclohexanone	0.0293	0.0450	-53.6#	198	0.00
91		trans-1,4-Dichloro-2-Butene	0.1604	0.1109	30.9#	74	0.00
92	P	1,1,2,2-Tetrachloroethane	0.5200	0.4597	11.6	91	0.00
93		Bromobenzene	0.7038	0.6583	6.5	96	0.00

Evaluate Continuing Calibration Report

Sample CCV
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1923.D
Misc :
Acq On : 31 Dec 2014 12:53 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 09:04:16 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
94		1,2,3-Trichloropropane	0.1577	0.1366	13.4	96	0.00
95		n-Propylbenzene	3.0936	3.0225	2.3	96	0.00
96		2-Chlorotoluene	1.8742	1.7740	5.3	94	0.00
~~97~~		~~3-Chlorotoluene~~	~~1.9940~~	~~0.0000~~	~~100.0#~~	~~0#~~	~~10.13#~~
98		4-Chlorotoluene	2.3499	2.2437	4.5	95	0.00
99		1,3,5-Trimethylbenzene	2.3144	2.2541	2.6	96	0.00
100		tert-Butylbenzene	1.8691	1.8451	1.3	99	0.00
101		1,2,4-Trimethylbenzene	2.2696	2.2040	2.9	94	0.00
~~102~~		~~3,4-DCBTF~~	~~0.6633~~	~~0.0013~~	~~99.8#~~	~~0#~~	~~0.01~~
103		sec-Butylbenzene	2.6283	2.5723	2.1	96	0.00
104		p-Isopropyltoluene	2.2834	2.2861	-0.1	98	0.00
105	P	1,3-Dclbenz	1.3443	1.2683	5.7	95	0.00
106	P	1,4-Dclbenz	1.4056	1.3389	4.7	97	0.00
~~107~~		~~2,4-DCBTF~~	~~0.5688~~	~~0.0014~~	~~99.8#~~	~~0#~~	~~0.00~~
~~108~~		~~2,5-DCBTF~~	~~0.6438~~	~~0.0011~~	~~99.8#~~	~~0#~~	~~0.00~~
109		n-Butylbenzene	2.0204	2.0144	0.3	97	0.00
110	P	1,2-Dclbenz	1.2649	1.2342	2.4	99	0.00
111	P	1,2-Dibromo-3-chloropropane	0.0875	0.0807	7.8	89	0.00
~~112~~		~~Trielution Dichlorotoluene~~	~~1.0371~~	~~0.0025~~	~~99.8#~~	~~0#~~	~~0.00~~
~~113~~		~~1,3,5 Trichlorobenzene~~	~~0.8672~~	~~0.0031~~	~~99.6#~~	~~0#~~	~~0.00~~
~~114~~		~~Coelution Dichlorotoluene~~	~~1.0860~~	~~0.0030~~	~~99.7#~~	~~0#~~	~~0.00~~
115	P	1,2,4-Tcbenzene	0.7405	0.7200	2.8	95	0.00
116		Hexachlorobt	0.2928	0.2892	1.2	98	0.00
117		Naphthalen	1.4071	1.3750	2.3	93	0.00
118		1,2,3-Tclbenzene	0.6298	0.5986	5.0	95	0.00
~~119~~		~~2,4,5-Trichlorotolene~~	~~0.4265~~	~~0.0071~~	~~98.3#~~	~~2#~~	~~0.00~~
~~120~~		~~2,3,6-Trichlorotoluene~~	~~0.3936~~	~~0.0071~~	~~98.2#~~	~~2#~~	~~0.06~~

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\123014\MM1923.D
Misc :
Acq On : 31 Dec 2014 12:53 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 01:08:01 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	925294	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1407637	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1309719	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	760958	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.145	113	420598	51.31	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.62%				
48) surr1,1,2-dichloroetha...	4.658	65	462308	46.32	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 92.64%				
65) SURR3,Toluene-d8	7.316	98	1729320	50.11	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.22%				
70) SURR2,BFB	9.785	95	660437	49.32	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.64%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	417322	47.67	ppb		99
3) Chloromethane	1.262	50	652429	54.65	ppb		98
4) Vinyl Chloride	1.323	62	719724	56.76	ppb		100
5) Bromomethane	1.512	94	277523	45.26	ppb		99
6) Chloroethane	1.567	64	406962	51.52	ppb		97
7) Freon 21	1.664	67	1059847	53.74	ppb		99
8) Trichlorofluoromethane	1.719	101	683889	45.36	ppb		98
9) Diethyl Ether	1.878	59	311557	45.39	ppb		98
10) Freon 123a	1.865	67	516369	47.32	ppb		100
11) Freon 123	1.902	83	567188	49.27	ppb		99
12) Acrolein	1.951	56	135448	350.22	ppb		95
13) 1,1-Diclethene	2.036	96	361151	45.18	ppb		96
14) Freon 113	2.036	101	378037	46.18	ppb		99
15) Acetone	2.042	43	98825	50.44	ppb		98
16) 2-Propanol	2.115	45	304336	783.00	ppb		95
17) Iodomethane	2.146	142	475993	41.25	ppb		99
18) Carbon Disulfide	2.207	76	1247400	46.42	ppb		99
19) Acetonitrile	2.219	40	71923	230.85	ppb		99
20) Allyl Chloride	2.274	76	194277	42.90	ppb		92
21) Methyl Acetate	2.274	43	199444	44.09	ppb		99
22) Methylene Chloride	2.353	84	393540	45.18	ppb		96
23) TBA	2.408	59	472394	734.29	ppb		92
24) Acrylonitrile	2.524	53	478029	227.06	ppb		99
25) Methyl-t-Butyl Ether	2.579	73	980368	43.75	ppb		99
26) trans-1,2-Dichloroethene	2.579	96	397481	46.01	ppb		98
28) 1,1-Diclethane	2.938	63	709183	44.43	ppb		99
29) Vinyl Acetate	2.975	86	46405	32.08	ppb	#	72
31) 2-Chloro-1,3-Butadiene	3.036	53	772776	52.36	ppb		99
33) 2,2-Dichloropropane	3.554	77	494916	34.94	ppb		97
34) cis-1,2-Dichloroethene	3.542	96	437646	46.74	ppb		95
35) 2-Butanone	3.548	43	131186	47.00	ppb		93
36) Propionitrile	3.591	54	173764	211.60	ppb		98
37) Bromochloromethane	3.828	130	240620	45.41	ppb		94
38) Methacrylonitrile	3.792	67	105865	43.32	ppb		93
39) Tetrahydrofuran	3.902	42	77288	41.13	ppb		89

12/31/14

W102714.M Wed Dec 31 01:08:03 2014

00472

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\123014\MM1923.D
Misc :
Acq On : 31 Dec 2014 12:53 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 01:08:01 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Chloroform	3.932	83	711795	44.29	ppb	100
41) 1,1,1-Trichloroethane	4.206	97	623042	43.23	ppb	98
44) Cyclohexane	4.316	41	457483	43.90	ppb	98
46) Carbontetrachloride	4.463	121	164160	44.66	ppb	97
47) 1,1-Dichloropropene	4.456	75	556502	45.25	ppb	98
49) Benzene	4.773	78	1645500	45.64	ppb	98
50) 1,2-Dichloroethane	4.779	62	526784	43.36	ppb	98
51) Iso-Butyl Alcohol	4.633	43	211411	740.74	ppb	97
52) n-Heptane	5.328	43	447651	38.39	ppb	96
~~53) 1-Butanol~~	~~5.779~~	~~56~~	~~203~~	~~1.15~~	~~ppb #~~	~~23~~
54) Trichloroethene	5.822	130	451342	47.89	ppb	99
55) Methylcyclohexane	6.102	55	540521	44.69	ppb	93
56) 1,2-Diclpropane	6.109	63	416190	44.06	ppb	99
57) Dibromomethane	6.249	93	204551	45.78	ppb	96
58) 1,4-Dioxane	6.310	88	~~51517~~ 3246	~~724.54~~ 801.17	ppb	90
59) Methyl Methacrylate	6.328	69	182701	41.91	ppb	94
60) Bromodichloromethane	6.474	83	504133	45.05	ppb	98
61) 2-Nitropropane	6.743	41	102354	68.73	ppb	95
62) 2-Chloroethylvinyl Ether	6.877	63	197743	44.92	ppb	96
63) cis-1,3-Dichloropropene	7.017	75	607390	43.57	ppb	98
64) 4-Methyl-2-pentanone	7.212	43	272122	42.32	ppb	98
66) Toluene	7.389	91	1786501	45.95	ppb	99
67) trans-1,3-Dichloropropene	7.627	75	509629	42.88	ppb	98
68) Ethyl Methacrylate	7.767	69	398296	43.07	ppb	97
69) 1,1,2-Trichloroethane	7.803	97	302695	46.20	ppb	97
72) Tetrachloroethene	7.962	164	362477	48.09	ppb	96
73) 2-Hexanone	8.084	43	186307	42.25	ppb	95
74) 1,3-Dichloropropane	7.968	76	549005	46.72	ppb	93
75) Dibromochloromethane	8.187	129	351491	49.89	ppb	97
76) N-Butyl Acetate	8.236	43	471050	41.37	ppb	99
77) 1,2-Dibromoethane	8.285	107	287405	46.74	ppb	97
78) Chlorobenzene	8.767	112	1188155	46.84	ppb	95
81) 1,1,1,2-Tetrachloroethane	8.846	131	389131	46.67	ppb	97
82) Ethylbenzene	8.882	106	642208	46.94	ppb	94
83) (m+p)Xylene	8.992	106	1629855	98.45	ppb	100
84) o-Xylene	9.340	106	785589	47.20	ppb	99
85) Styrene	9.352	104	1310503	47.60	ppb	98
87) Bromoform	9.492	173	190535	50.39	ppb	99
89) Isopropylbenzene	9.669	105	1971019	48.54	ppb	100
90) Cyclohexanone	9.711	55	685393	1536.06	ppb	99
91) trans-1,4-Dichloro-2-B...	9.955	53	84389	34.58	ppb	89
92) 1,1,2,2-Tetrachloroethane	9.907	83	349829	44.20	ppb	97
93) Bromobenzene	9.907	156	500976	46.77	ppb	92
94) 1,2,3-Trichloropropane	9.937	110	103980	43.32	ppb	96
95) n-Propylbenzene	10.016	91	2299995	48.85	ppb	98
96) 2-Chlorotoluene	10.077	91	1349943	47.33	ppb	100
~~97) 3-Chlorotoluene~~	~~10.169~~	~~91~~	~~1711655~~	~~56.40~~	~~ppb~~	~~91~~
98) 4-Chlorotoluene	10.169	91	1707395	47.74	ppb	98
99) 1,3,5-Trimethylbenzene	10.169	105	1715313	48.70	ppb	98
100) tert-Butylbenzene	10.437	119	1404065	49.36	ppb	98
101) 1,2,4-Trimethylbenzene	10.474	105	1677187	48.55	ppb	100
103) sec-Butylbenzene	10.620	105	1957397	48.93	ppb	99

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\123014\MM1923.D
Misc :
Acq On : 31 Dec 2014 12:53 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 01:08:01 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

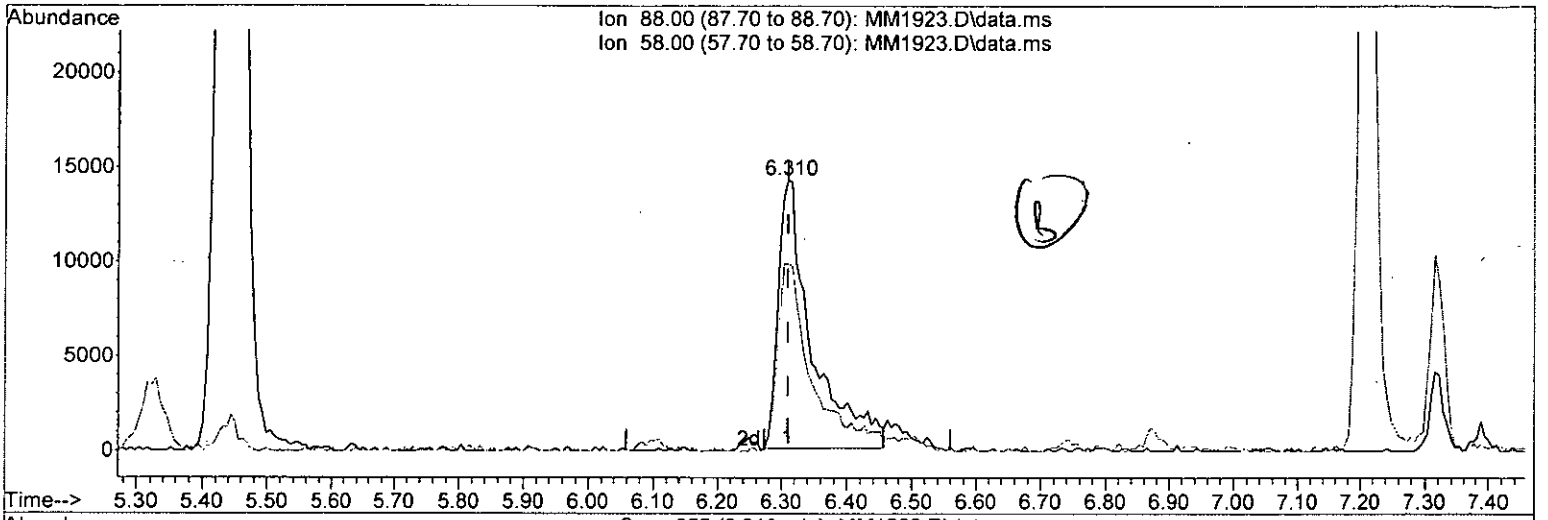
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
104) p-Isopropyltoluene	10.736	119	1739651	50.06	ppb		99
105) 1,3-Dclbenz	10.693	146	965126	47.17	ppb		99
106) 1,4-Dclbenz	10.766	146	1018864	47.63	ppb		99
109) n-Butylbenzene	11.065	91	1532871	49.85	ppb		99
110) 1,2-Dclbenz	11.065	146	939157	48.79	ppb		98
111) 1,2-Dibromo-3-chloropr...	11.620	157	61395	46.09	ppb		98
112) Trielution Dichlorotol...	11.729	125	5621	0.36	ppb	#	85
114) Coelution Dichlorotoluene	11.998	125	4581	0.28	ppb		91
115) 1,2,4-Tcbenzene	12.156	180	547927	48.62	ppb		99
116) Hexachlorobt	12.266	225	220093	49.39	ppb		98
117) Naphthalen	12.296	128	1046352	48.86	ppb		99
118) 1,2,3-Tclbenzene	12.437	180	455482	47.52	ppb		97
119) 2,4,5-Trichlorotolene	12.851	159	5368	0.83	ppb		94
120) 2,3,6-Trichlorotoluene	12.851	159	5368	0.90	ppb		91

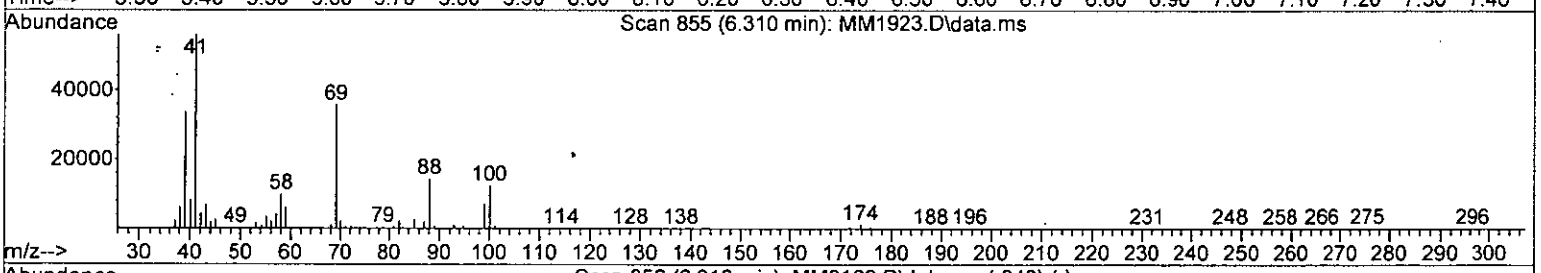
(#) = qualifier out of range (m) = manual integration (+) = signals summed

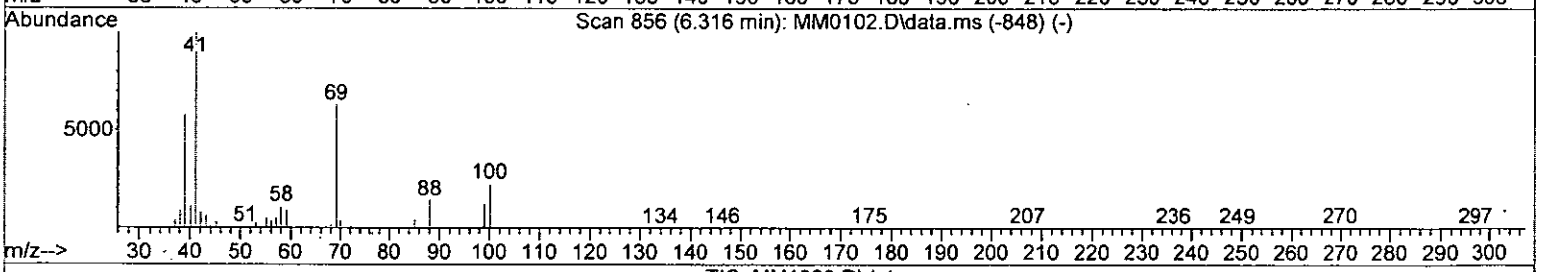
Quantitation Report (Qedit)

Sample ICV
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1923.D
Misc :
Acq On : 31 Dec 2014 12:53 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 01:08:01 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1923.D\data.ms

(58) 1,4-Dioxane

6.310min (0.000) 724.54 ppb

response 51517

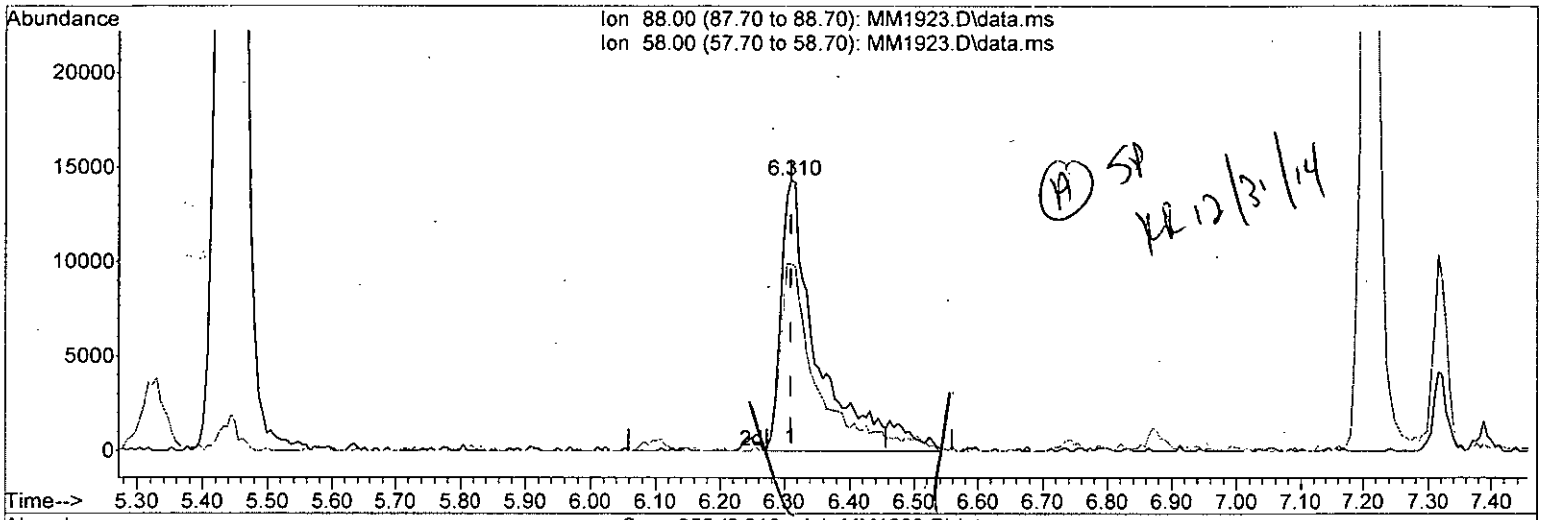
Ion	Exp%	Act%
88.00	100	100
58.00	77.40	68.93
0.00	0.00	0.00
0.00	0.00	0.00

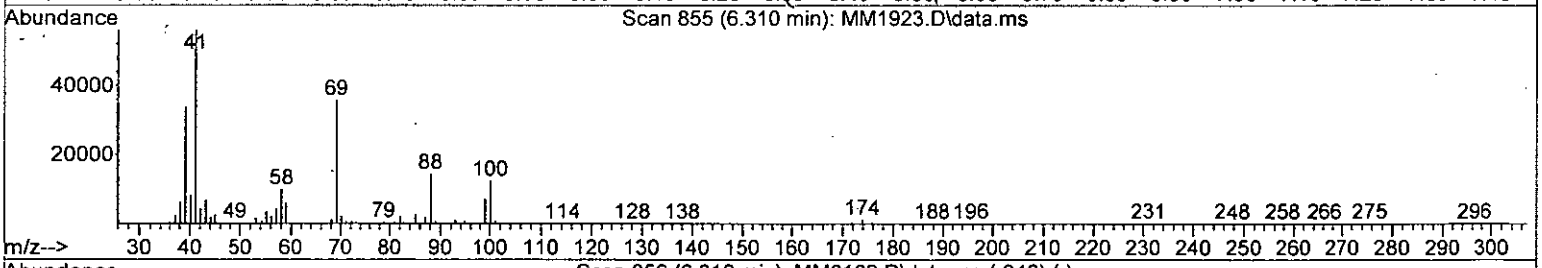
W102714.M Wed Dec 31 09:02:42 2014 Page: 1

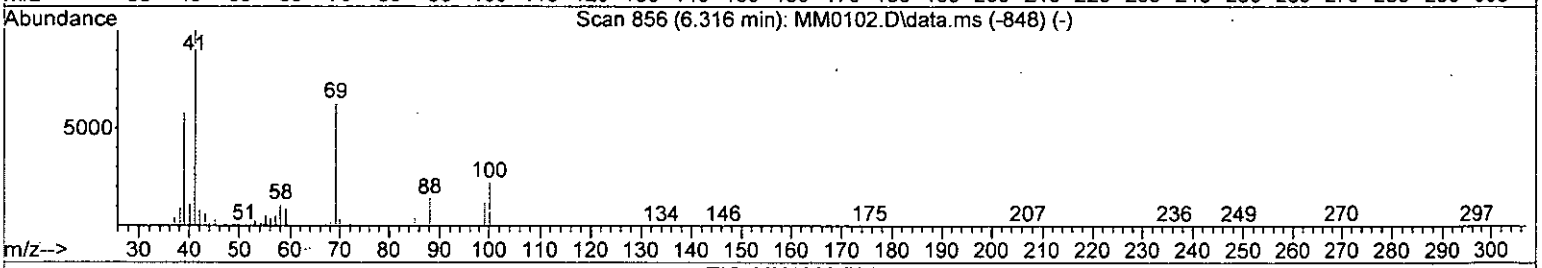
Quantitation Report (Qedit)

Sample : CCV
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1923.D
Misc :
Acq On : 31 Dec 2014 12:53 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 01:08:01 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1923.D\data.ms

(58) 1,4-Dioxane

6.310min (0.000) 801.17 ppb m

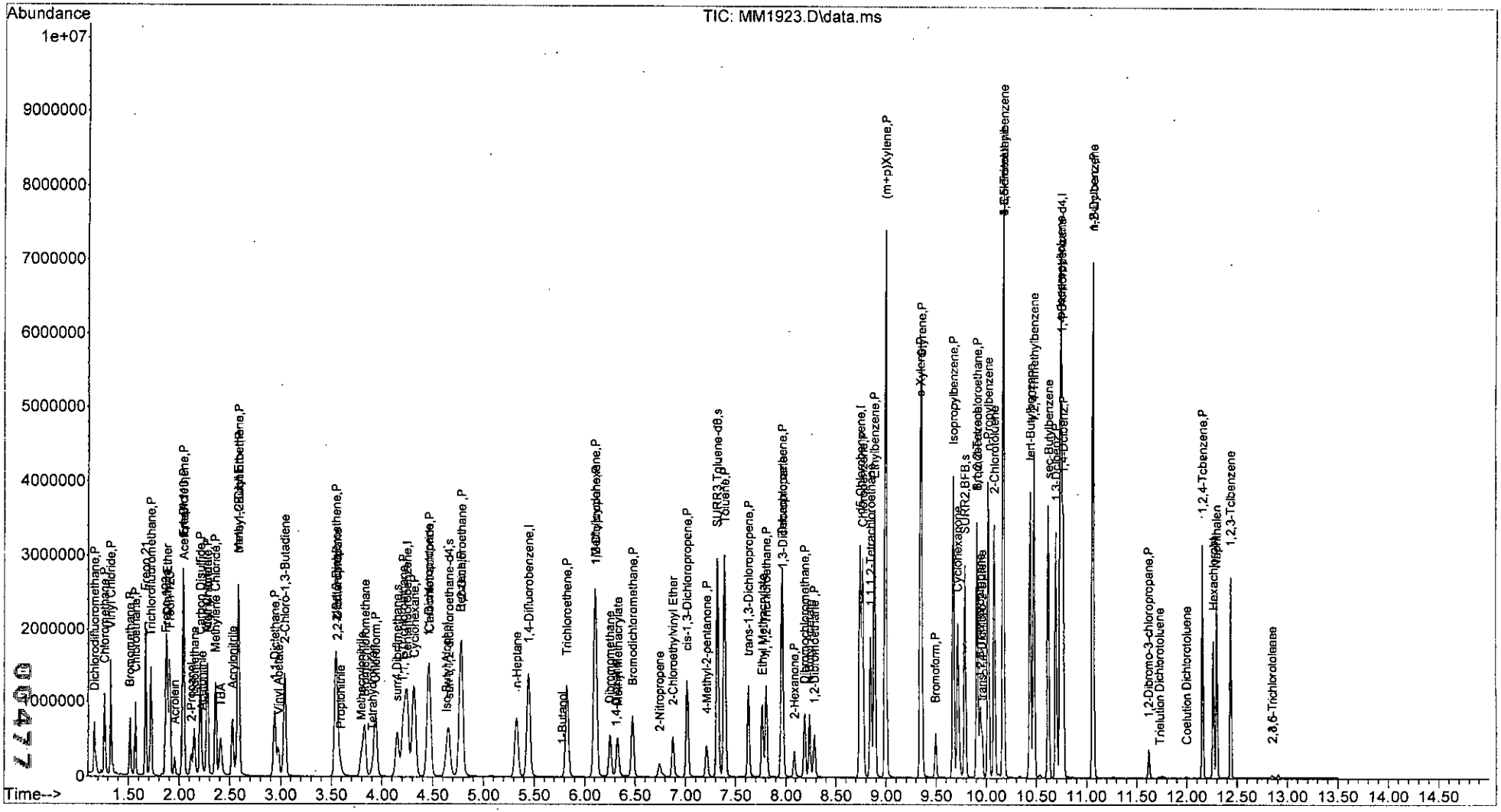
response 56966

Ion	Exp%	Act%
88.00	100	100
58.00	77.40	68.93
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Sample : CCV
Data File: I:\ACQUDATA\MSVOA12\DATA\123014\MM1923.D
Misc :
Acq On : 31 Dec 2014 12:53 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 01:08:01 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



W102714.M Wed Dec 31 01:08:07 2014 Page: 4

ALS Environmental

VOLATILE ORGANICS
RAW QC DATA

ALS Environmental - Rochester, NY
1565 Jefferson Rd, Bldg. 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

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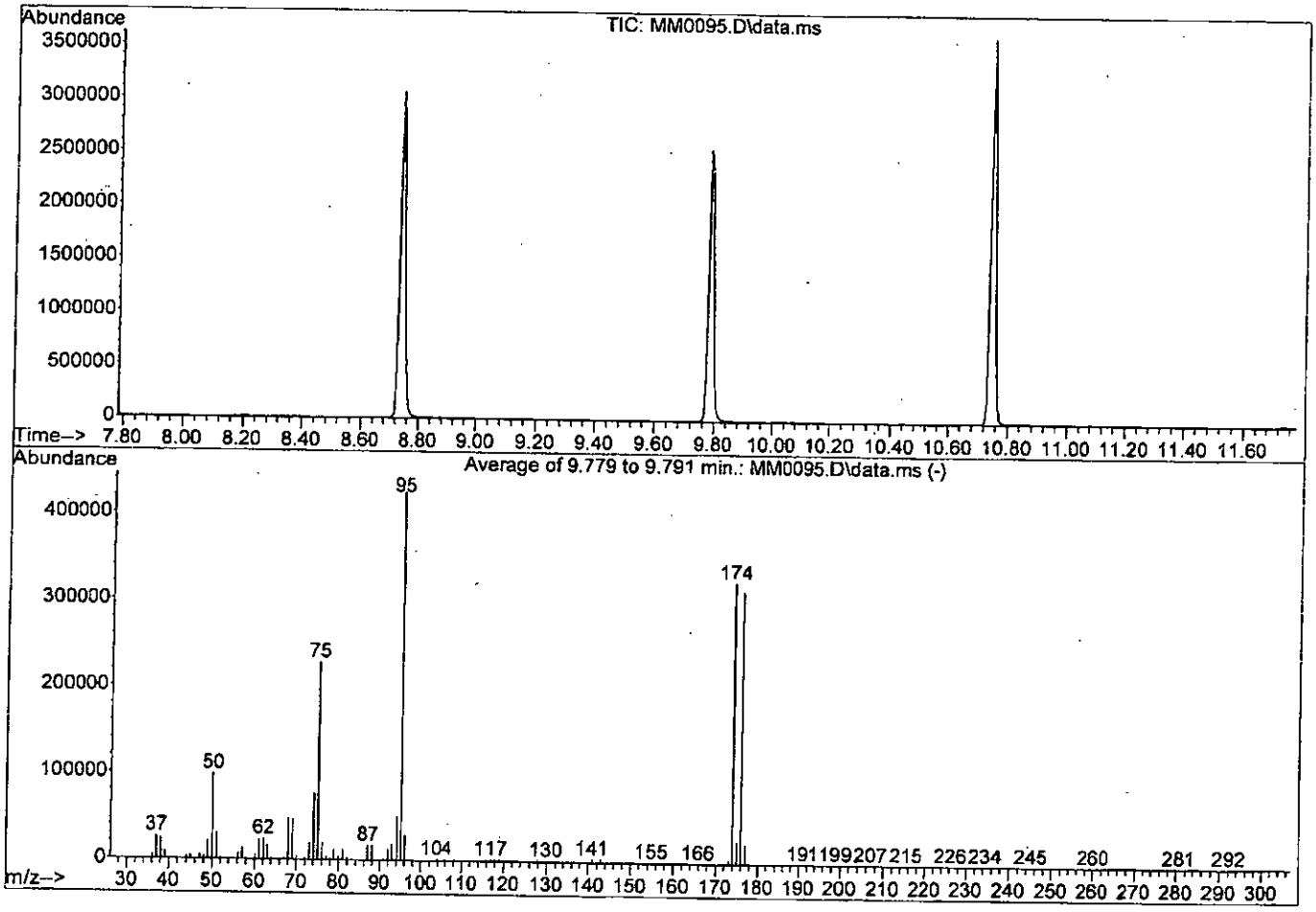
00478

Data Path : I:\ACQUDATA\MSVOA12\DATA\102714\
Data File : MM0095.D
Acq On : 27 Oct 2014 3:08 pm
Operator : K.Ruest
Sample : TUNE
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Mon Oct 27 15:07:21 2014

KP 10/27/14



AutoFind: Scans 1424, 1425, 1426; Background Corrected with Scan 1419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.1	98133	PASS
75	95	30	60	53.6	227669	PASS
95	95	100	100	100.0	424533	PASS
96	95	5	9	6.7	28573	PASS
173	174	0.00	2	1.1	3648	PASS
174	95	50	120	76.3	324011	PASS
175	174	5	9	7.7	25107	PASS
176	174	95	101	96.8	313536	PASS
177	176	5	9	6.8	21386	PASS

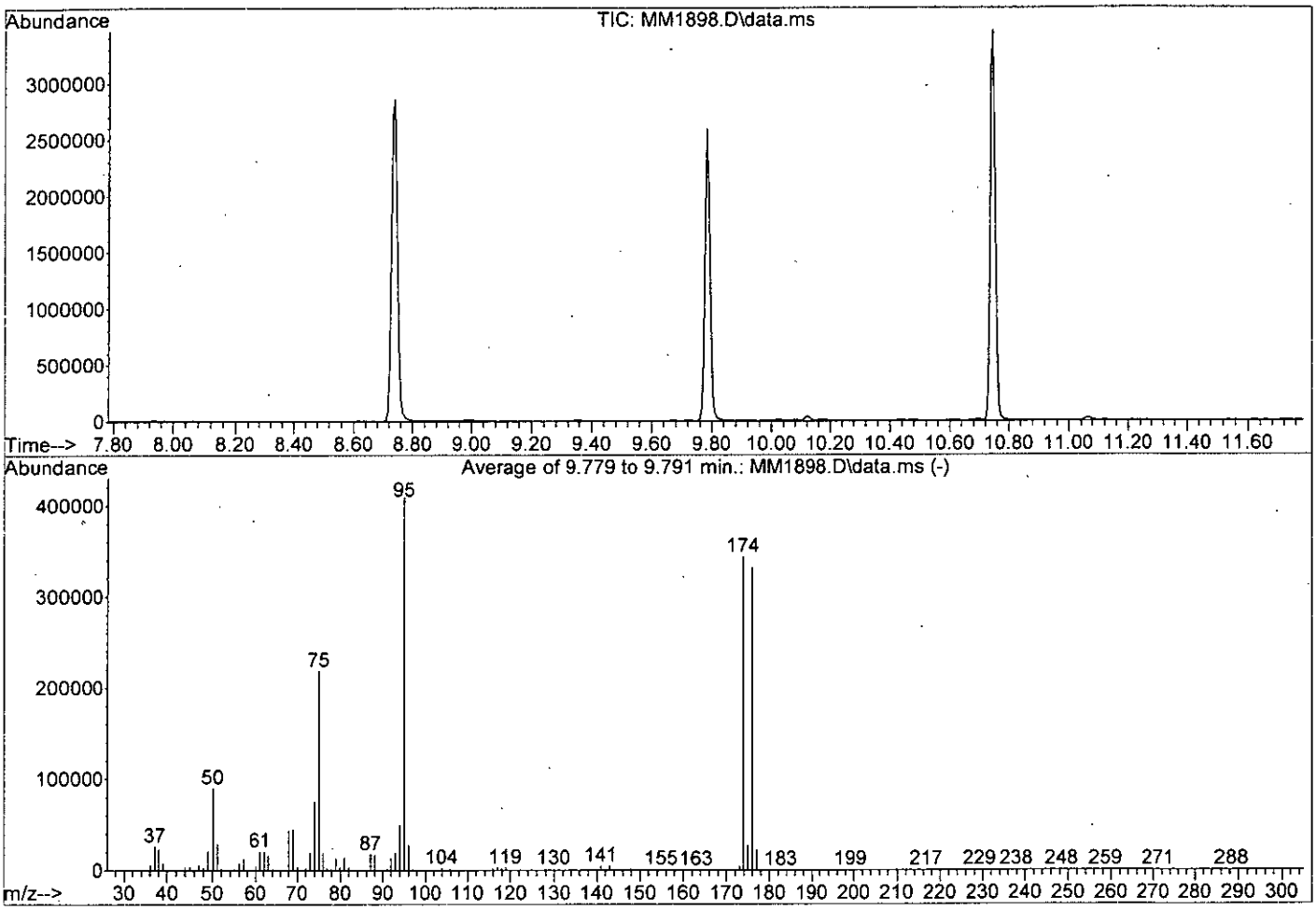
W102714.M Mon Oct 27 16:29:58 2014

Data Path : I:\ACQUDATA\MSVOA12\DATA\123014\
Data File : MM1898.D
Acq On : 30 Dec 2014 11:39 am
Operator : K.Ruest
Sample : TUNE RQ1416037-01
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Tue Oct 28 10:54:16 2014

KF 12/30/14



AutoFind: Scans 1424, 1425, 1426; Background Corrected with Scan 1419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.9	89688	PASS
75	95	30	60	53.3	218176	PASS
95	95	100	100	100.0	409515	PASS
96	95	5	9	6.6	27107	PASS
173	174	0.00	2	1.1	3738	PASS
174	95	50	120	83.9	343403	PASS
175	174	5	9	7.6	26195	PASS
176	174	95	101	96.6	331605	PASS
177	176	5	9	6.5	21621	PASS

W102714.M Tue Dec 30 12:05:51 2014 Page: 1

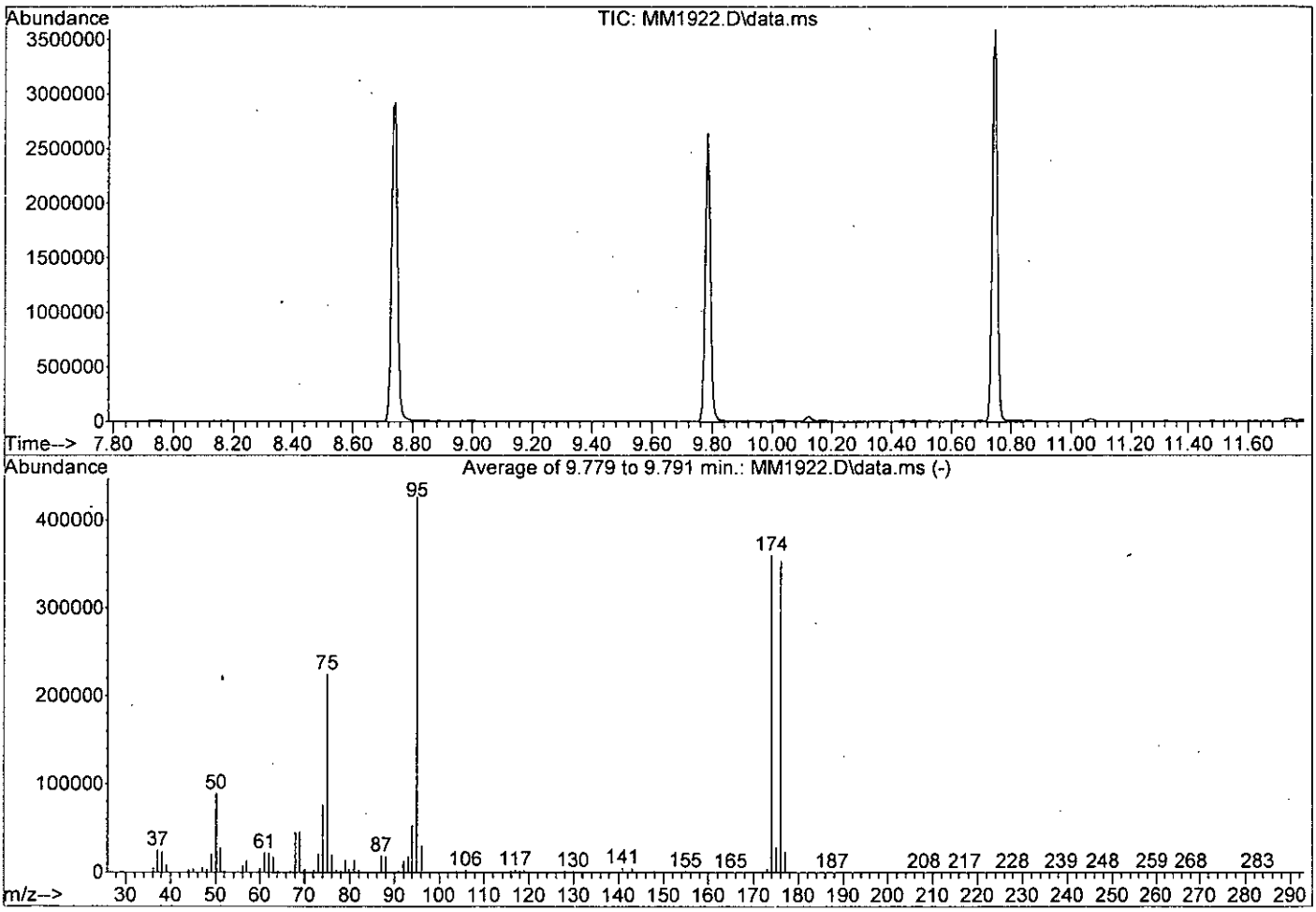
BFB

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1922.D
Acq On : 31 Dec 2014 12:21 am
Operator : K.Ruest
Sample : TUNE 280-141160/38-01
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File: INTP60.P

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge
Last Update : Tue Oct 28 10:54:16 2014

KR 12/31/14



AutoFind: Scans 1424, 1425, 1426; Background Corrected with Scan 1419

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.8	88740	PASS
75	95	30	60	52.7	224384	PASS
95	95	100	100	100.0	425963	PASS
96	95	5	9	7.0	29992	PASS
173	174	0.00	2	1.2	4144	PASS
174	95	50	120	84.6	360235	PASS
175	174	5	9	7.7	27844	PASS
176	174	95	101	98.0	353109	PASS
177	176	5	9	6.5	22797	PASS

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: NA
Date Received: NA
Date Analyzed: 12/30/14 13:43

Sample Name: Method Blank
Lab Code: RQ1416037-04

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\123014\MM1902.D\

Analysis Lot: 427512
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**0.35**	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/30/14 13:43
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1416037-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1902.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	0.63	J	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	0.24	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/30/14 13:43
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1416037-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1902.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/30/14 13:43	
Dibromofluoromethane	100	85-115	12/30/14 13:43	
Toluene-d8	99	85-120	12/30/14 13:43	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/30/14 1343

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1416037-04	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Sample : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1902.D
Misc :
Acq On : 30 Dec 2014 1:43 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ1416037-04

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 15:54:04 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.243	168	885105	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.444	114	1354117	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1240114	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	671626	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.146	113	394108	49.98	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 99.96%			
48) surr1,1,2-dichloroetha...	4.658	65	448263	46.68	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 93.36%			
65) SURR3,Toluene-d8	7.316	98	1645586	49.57	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 99.14%			
70) SURR2,BFB	9.785	95	603171	46.83	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 93.66%			
Target Compounds						Qvalue
15) Acetone	2.048	43	1339	0.71	ppb	70
115) 1,2,4-Tcbenzene	12.156	180	3526	0.35	ppb	86
116) Hexachlorobt	12.266	225	2469	0.63	ppb	79
117) Naphthalen	12.303	128	4450	0.24	ppb	94
118) 1,2,3-Tclbenzene	12.437	180	3339	0.39	ppb	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

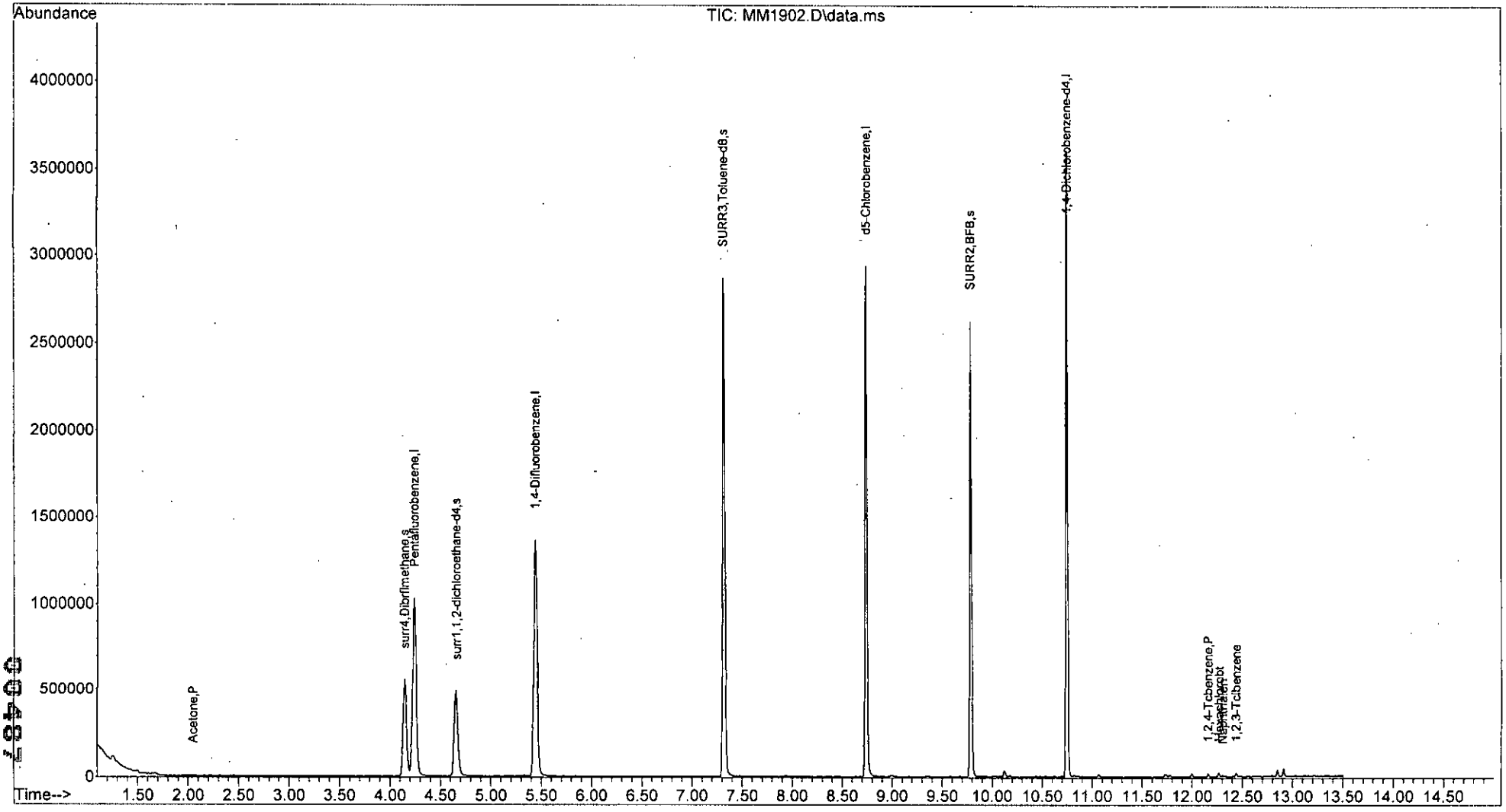
KL 12/31/14

W102714.M Wed Dec 31 15:55:27 2014 Page: 1

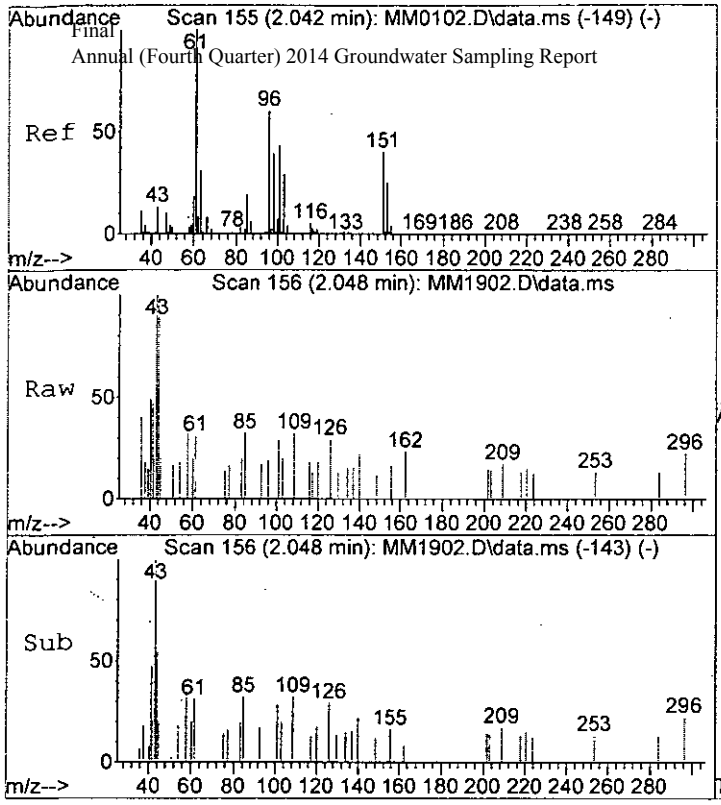
Quantitation Report (QT Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1902.D
Misc :
Acq On : 30 Dec 2014 1:43 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 15:54:04 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



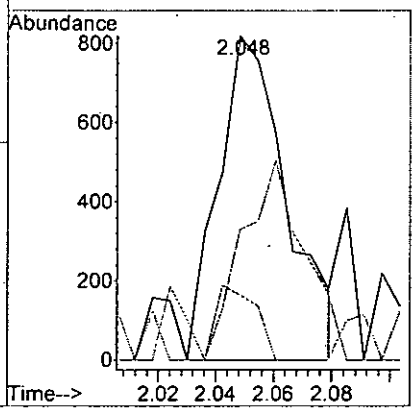
W102714.M Wed Dec 31 15:55:29 2014 Page: 2

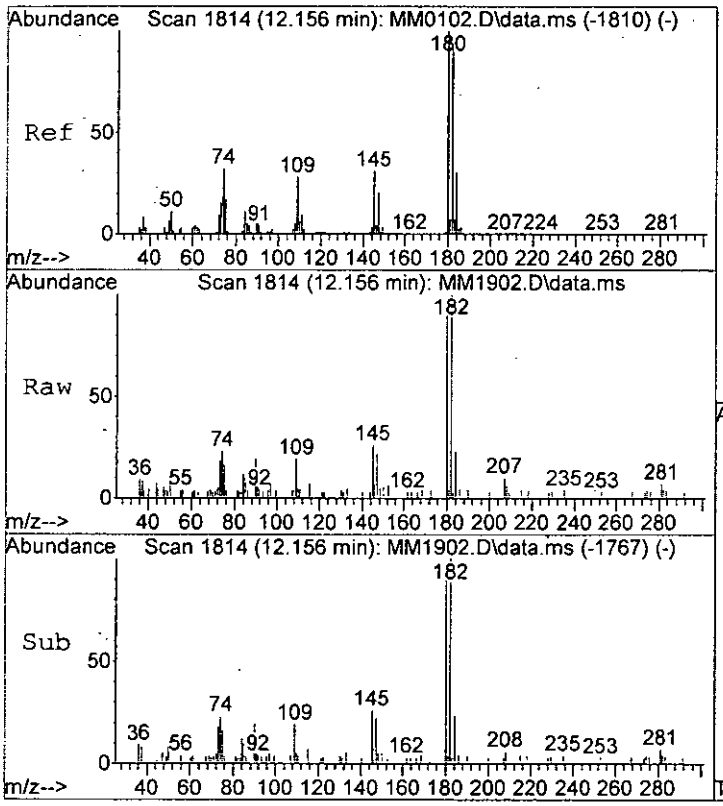


#15
Acetone
Concen: 0.71 ppb
RT: 2.048 min Scan# 156
Delta R.T. 0.006 min
Lab File: MM1902.D
Acq: 30 Dec 2014 1:43 pm

Tgt Ion: 43 Resp: 1339

Ion	Ratio	Lower	Upper
43	100		
58	40.3	6.2	46.2
42	20.0	0.0	27.2

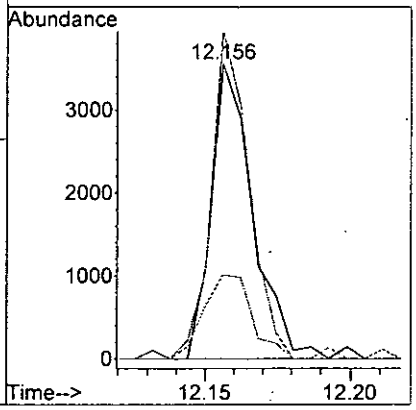


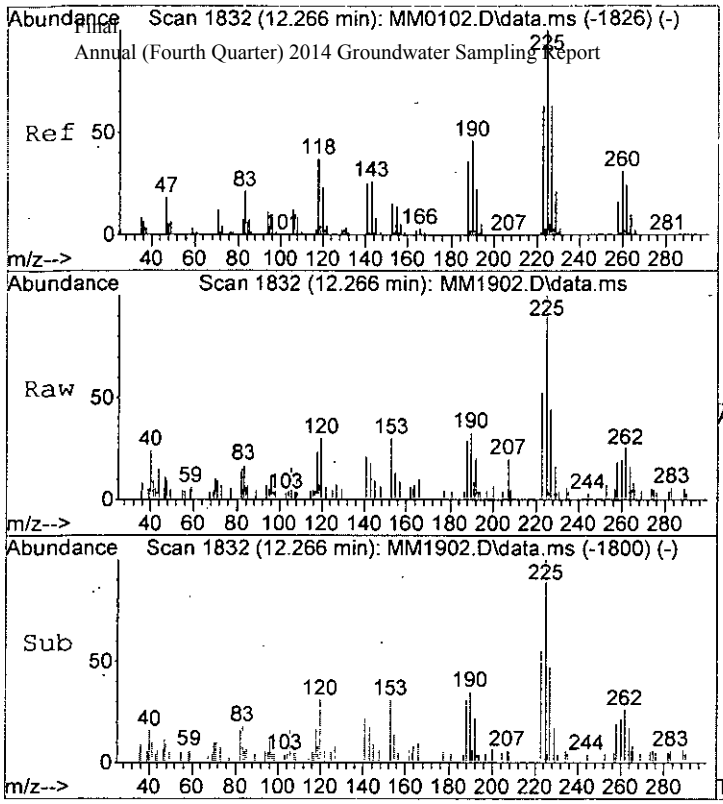


#115
1,2,4-Tcbenzene
Concen: 0.35 ppb
RT: 12.156 min Scan# 1814
Delta R.T. -0.006 min
Lab File: MM1902.D
Acq: 30 Dec 2014 1:43 pm

Tgt Ion:180 Resp: 3526

Ion	Ratio	Lower	Upper
180	100		
182	111.0	74.0	114.0
145	28.4	11.2	51.2

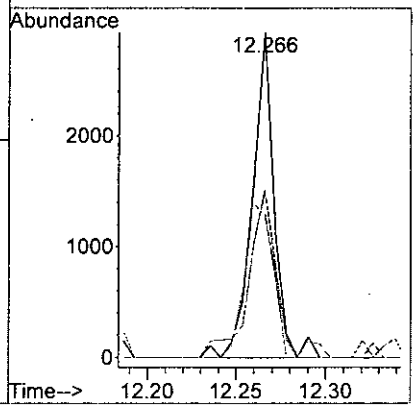


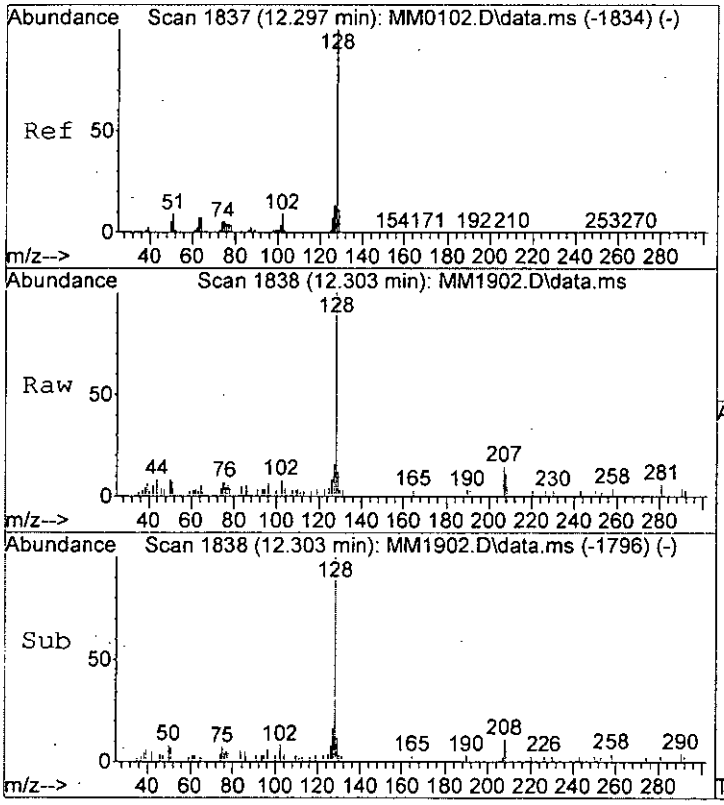


#116
Hexachlorobt
Concen: 0.63 ppb
RT: 12.266 min Scan# 1832
Delta R.T. 0.000 min
Lab File: MM1902.D
Acq: 30 Dec 2014 1:43 pm

Tgt Ion:225 Resp: 2469

Ion	Ratio	Lower	Upper
225	100		
223	49.7	42.5	82.5
227	42.7	42.6	82.6

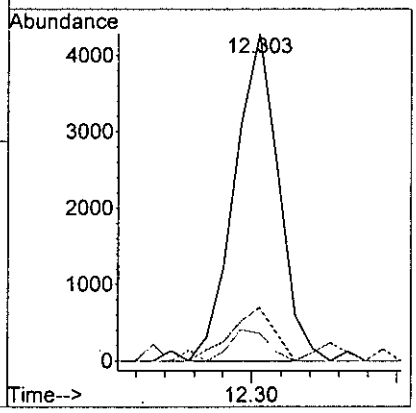


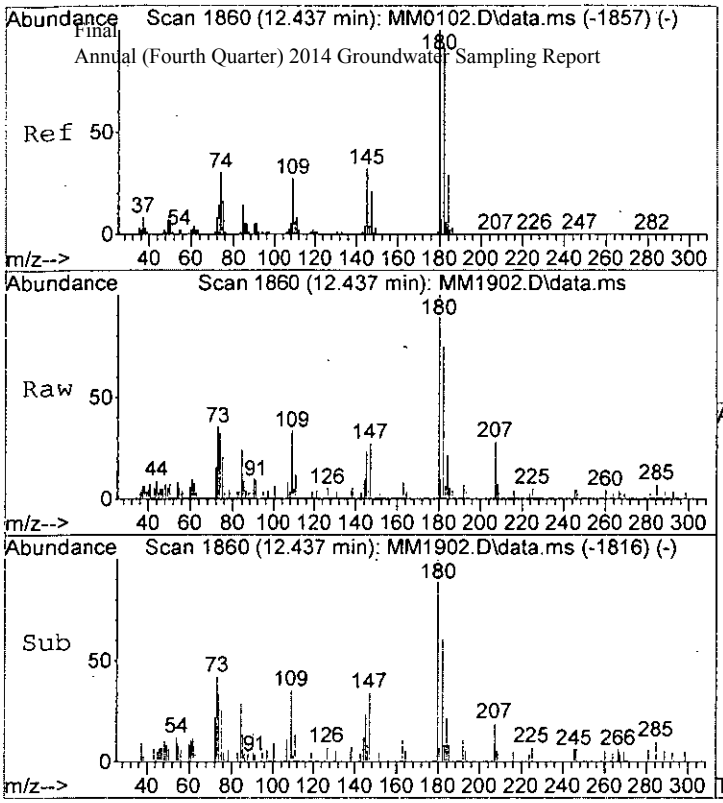


#117
Naphthalen
Concen: 0.24 ppb
RT: 12.303 min Scan# 1838
Delta R.T. 0.000 min
Lab File: MM1902.D
Acq: 30 Dec 2014 1:43 pm

Tgt Ion:128 Resp: 4450

Ion	Ratio	Lower	Upper
128	100		
127	16.1	0.0	32.6
102	8.4	0.0	28.9

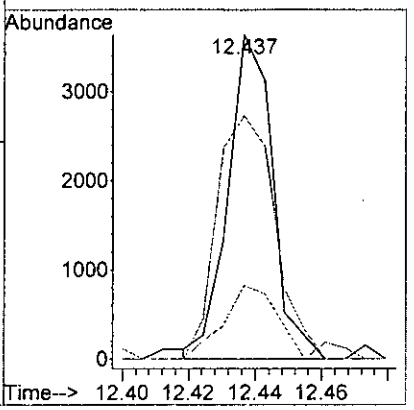




#118
1,2,3-Tclbenzene
Concen: 0.39 ppb
RT: 12.437 min Scan# 1860
Delta R.T. 0.000 min
Lab File: MM1902.D
Acq: 30 Dec 2014 1:43 pm

Tgt Ion:180 Resp: 3339

Ion	Ratio	Lower	Upper
180	100		
182	75.1	73.0	113.0
145	28.0	11.8	51.8



ESS Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1902.D
Acq On : 30 Dec 2014 1:43 pm
Operator : K.Ruest
Sample : VBLK
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1902.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.262	23	27	33	rVB	32906	63731	1.45%	0.267%
2	4.146	489	500	508	rBV	552637	1307177	29.69%	5.475%
3	4.243	508	516	531	rVB	1018218	2491364	56.58%	10.435%
4	4.658	575	584	598	rBV	487558	1242755	28.23%	5.205%
5	5.444	702	713	730	rBV	1355947	3164882	71.88%	13.257%
6	7.316	1014	1020	1039	rBV	2861910	4402906	100.00%	18.442%
7	8.742	1248	1254	1267	rBV	2934114	3886072	88.26%	16.277%
8	9.785	1420	1425	1435	rBV	2617098	3077153	69.89%	12.889%
9	10.120	1477	1480	1485	rBV	35507	48167	1.09%	0.202%
10	10.748	1578	1583	1591	rBV	3599528	4189763	95.16%	17.550%

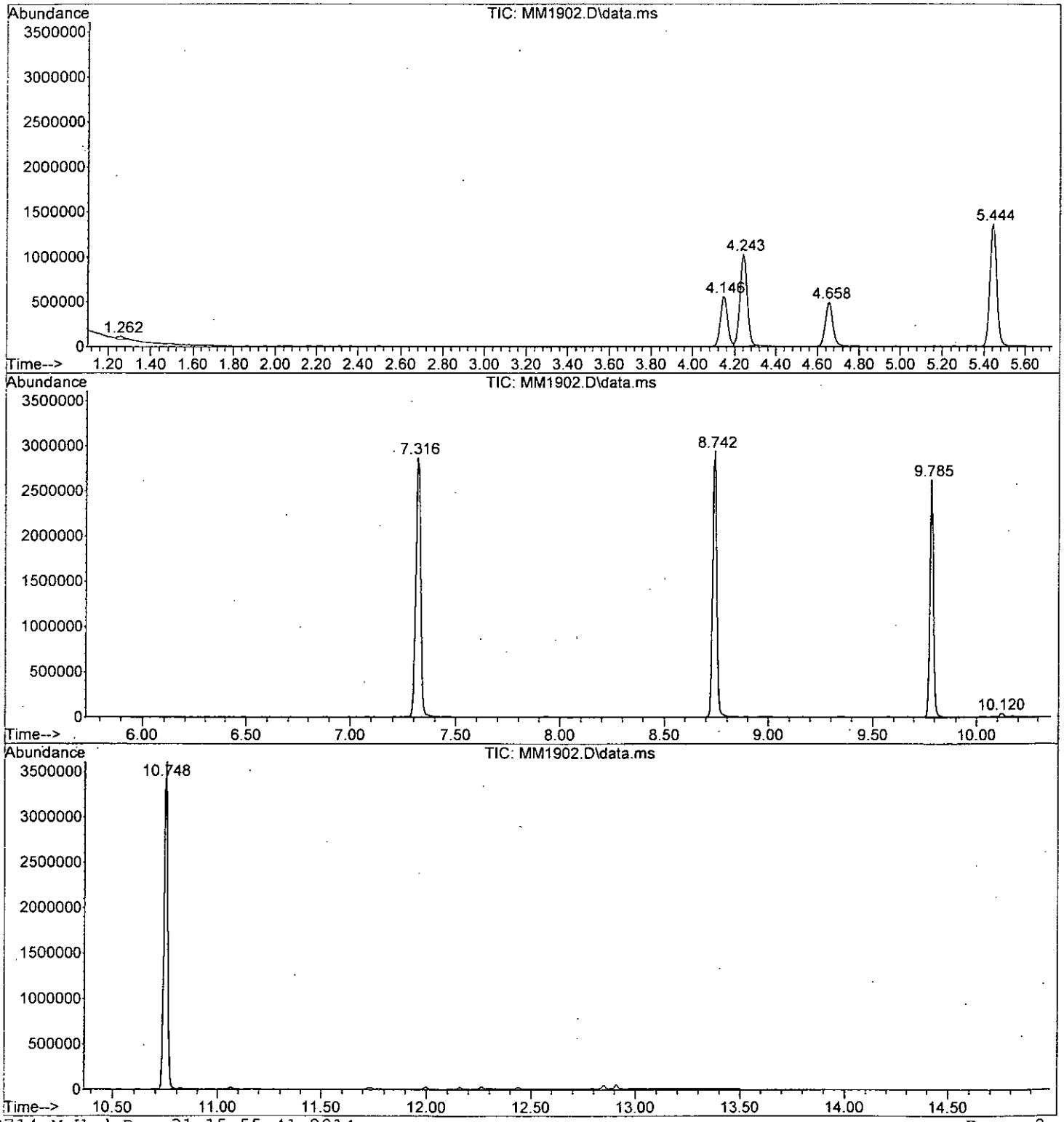
Sum of corrected areas: 23873970

LCS Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1902.D
Acq On : 30 Dec 2014 1:43 pm
Operator : K.Ruest
Sample : VBLK
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W102714.M Wed Dec 31 15:55:41 2014 Page: 2

0049

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1902.D
Acq On : 30 Dec 2014 1:43 pmm
Operator : K.Ruestt
Sample : VBLKK
Misc :
ALS Vial : 6 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

						Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc	

No Library Search Compounds Detected
****

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/31/14 03:01
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1416038-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1927.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	ND	U	5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	ND	U	5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	ND	U	5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	ND	U	5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	ND	U	5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	ND	U	5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	ND	U	5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	ND	U	5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	0.36	J	5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	ND	U	5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	ND	U	5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	ND	U	5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	ND	U	5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	ND	U	5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	ND	U	5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	ND	U	5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	ND	U	5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	ND	U	5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	ND	U	5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	ND	U	5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	ND	U	5.0	1.0	0.20	
591-78-6	2-Hexanone	ND	U	5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	ND	U	100	20	11	
106-43-4	4-Chlorotoluene	ND	U	5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	ND	U	5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	ND	U	5.0	1.0	0.67	
67-64-1	Acetone	ND	U	5.0	5.0	1.3	
71-43-2	Benzene	ND	U	5.0	1.0	0.20	
108-86-1	Bromobenzene	ND	U	5.0	1.0	0.28	
74-97-5	Bromochloromethane	ND	U	5.0	1.0	0.32	
75-27-4	Bromodichloromethane	ND	U	5.0	1.0	0.32	
75-25-2	Bromoform	ND	U	5.0	1.0	0.42	
74-83-9	Bromomethane	ND	U	5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/31/14 03:01
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1416038-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1927.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	ND	U	5.0	1.0	0.45	
108-90-7	Chlorobenzene	ND	U	5.0	1.0	0.29	
75-00-3	Chloroethane	ND	U	5.0	1.0	0.24	
67-66-3	Chloroform	ND	U	5.0	1.0	0.25	
74-87-3	Chloromethane	ND	U	5.0	1.0	0.21	
124-48-1	Dibromochloromethane	ND	U	5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	U	5.0	1.0	0.46	
75-09-2	Methylene Chloride	ND	U	5.0	1.0	0.60	
100-41-4	Ethylbenzene	ND	U	5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	0.67	J	5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	ND	U	5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	ND	U	5.0	1.0	0.29	
91-20-3	Naphthalene	0.28	J	5.0	1.0	0.20	
100-42-5	Styrene	ND	U	5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	ND	U	5.0	1.0	0.30	
108-88-3	Toluene	ND	U	5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	ND	U	5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	U	5.0	1.0	0.20	
75-01-4	Vinyl Chloride	ND	U	5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	ND	U	5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	ND	U	5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	ND	U	10	2.0	0.33	
104-51-8	n-Butylbenzene	ND	U	5.0	1.0	0.21	
103-65-1	n-Propylbenzene	ND	U	5.0	1.0	0.20	
95-47-6	o-Xylene	ND	U	5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	ND	U	5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	ND	U	5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	U	5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	ND	U	5.0	1.0	0.20	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/31/14 03:01
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1416038-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1927.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	94	75-120	12/31/14 03:01	
Dibromofluoromethane	99	85-115	12/31/14 03:01	
Toluene-d8	99	85-120	12/31/14 03:01	

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/31/14 0301

Tentatively Identified Compounds (TIC)
Volatile Organic Compounds by GC/MS

Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	RQ1416038-05	**Basis:**	NA

Analytical Method: 8260C

CAS #	Analyte Name	RT	Result	Q

No Tentatively Identified Compounds Detected.

Comments:

Quantitation Report (QT Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1927.D
Misc :
Acq On : 31 Dec 2014 3:01 am
Operator : K.Ruest
InstName : MSVOA-12 RQ1411603S-05

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 11:35:01 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

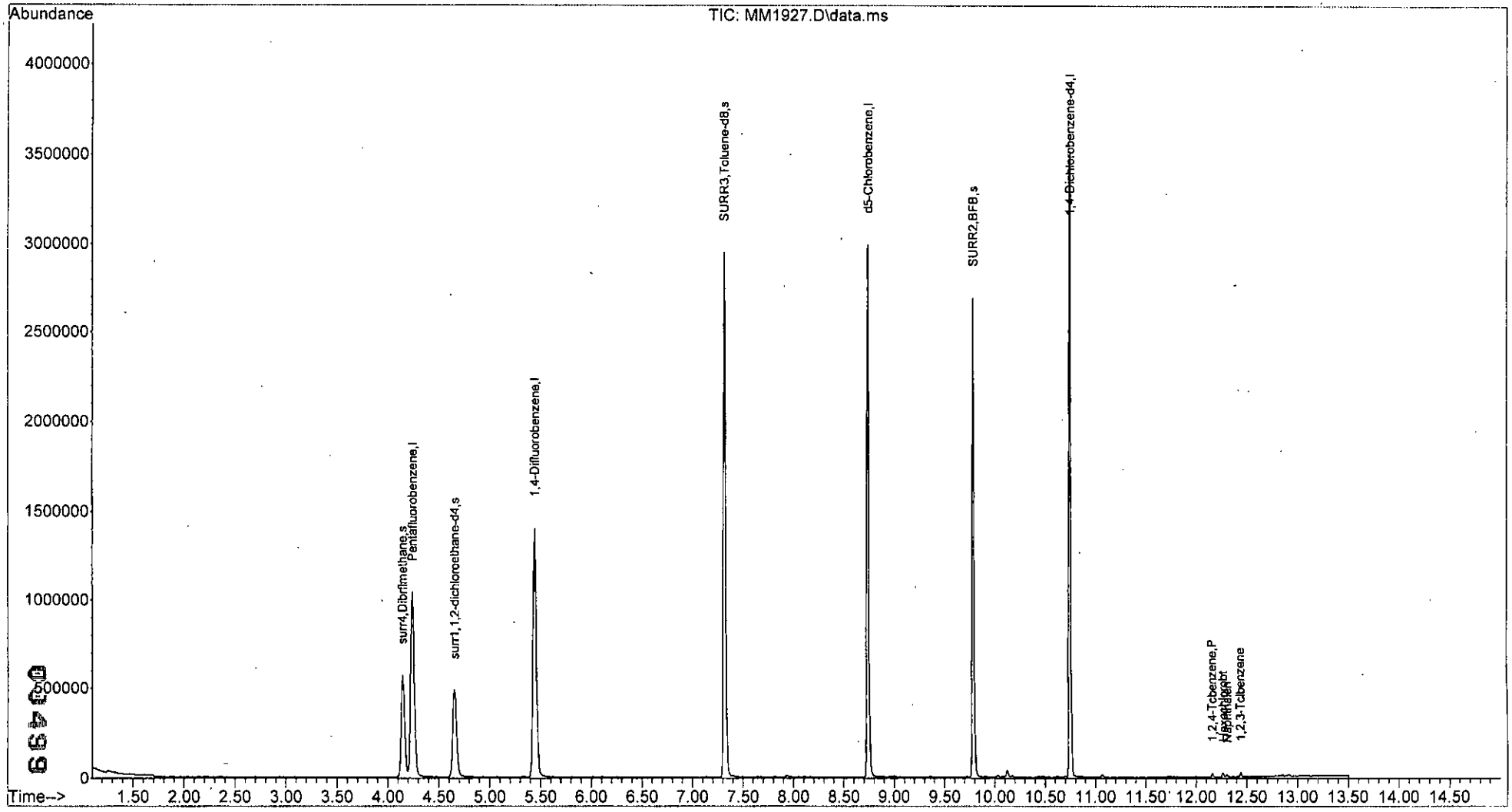
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.243	168	918066	50.00	ppb	0.00
43) 1,4-Difluorobenzene	5.444	114	1388459	50.00	ppb	0.00
71) d5-Chlorobenzene	8.742	117	1267908	50.00	ppb	0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	682351	50.00	ppb	0.00
System Monitoring Compounds						
45) surr4,Dibrflmethane	4.146	113	399182	49.37	ppb	0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 98.74%			
48) surr1,1,2-dichloroetha...	4.658	65	462530	46.98	ppb	0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 93.96%			
65) SURR3,Toluene-d8	7.316	98	1677575	49.28	ppb	0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 98.56%			
70) SURR2,BFB	9.785	95	619003	46.87	ppb	0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 93.74%			
Target Compounds						Qvalue
115) 1,2,4-Tcbenzene	12.156	180	3619	0.36	ppb	84
116) Hexachlorobt	12.266	225	2692	0.67	ppb	89
117) Naphthalen	12.303	128	5346	0.28	ppb	90
118) 1,2,3-Tclbenzene	12.437	180	3634	0.42	ppb	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

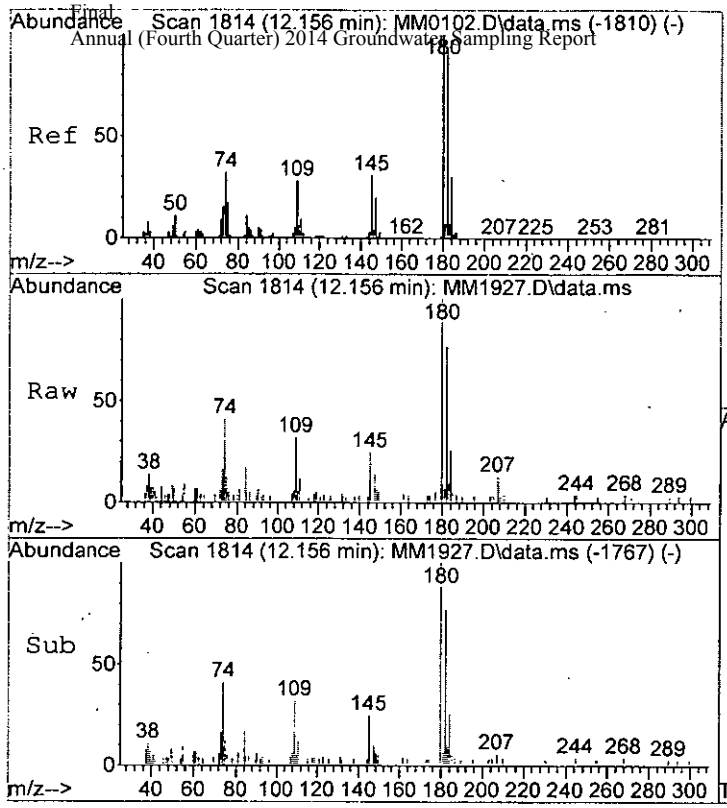
Quantitation Report (QT Reviewed)

Sample : VBLK
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1927.D
Misc :
Acq On : 31 Dec 2014 3:01 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Jan 05 11:35:01 2015
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



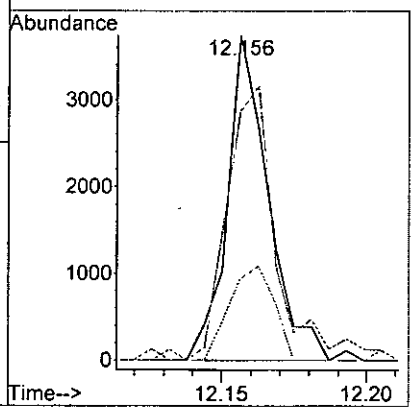
W102714.M Mon Jan 05 11:36:47 2015 Page: 2

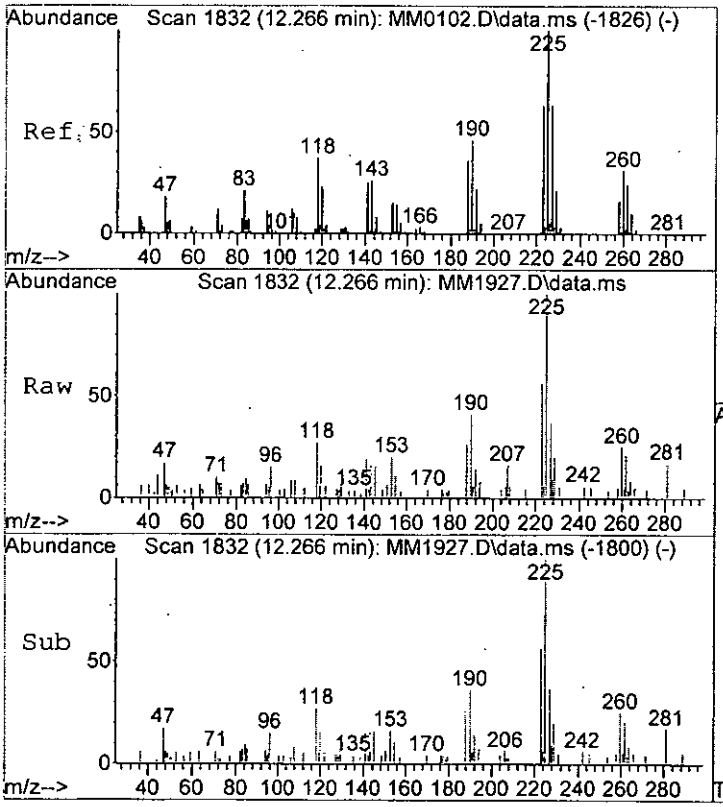


#115
1,2,4-Tcbenzene
Concen: 0.36 ppb
RT: 12.156 min Scan# 1814
Delta R.T. -0.006 min
Lab File: MM1927.D
Acq: 31 Dec 2014 3:01 am

Tgt Ion:180 Resp: 3619

Ion	Ratio	Lower	Upper
180	100		
182	76.7	74.0	114.0
145	25.1	11.2	51.2

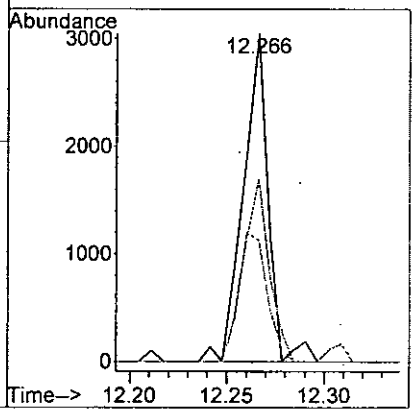


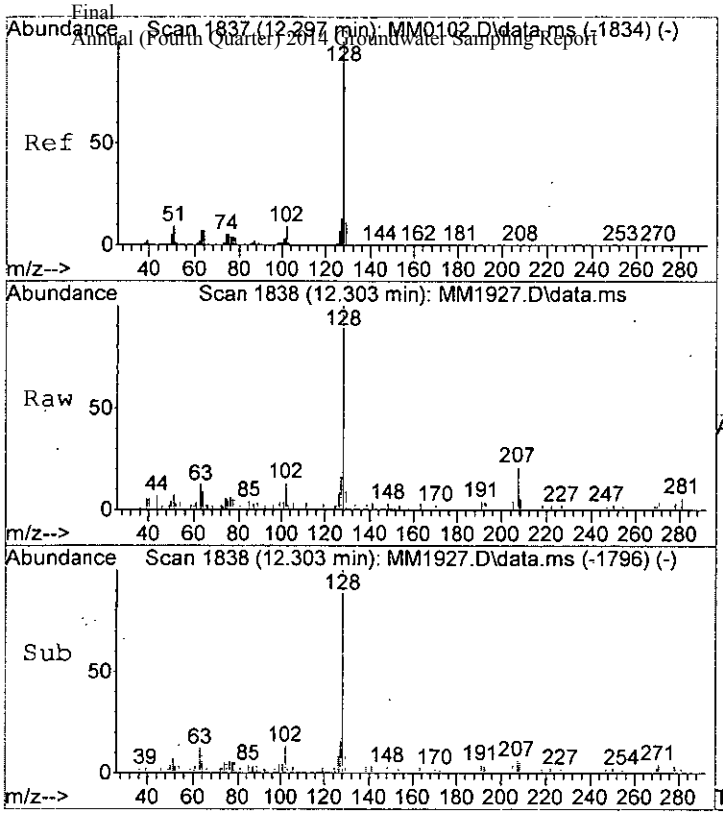


#116
Hexachlorobt
Concen: 0.67 ppb
RT: 12.266 min Scan# 1832
Delta R.T. 0.000 min
Lab File: MM1927.D
Acq: 31 Dec 2014 3:01 am

Tgt Ion:225 Resp: 2692

Ion	Ratio	Lower	Upper
225	100		
223	62.2	42.5	82.5
227	45.9	42.6	82.6

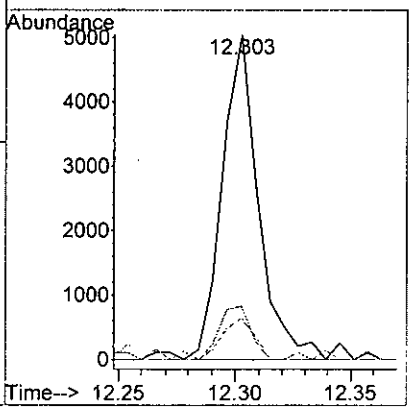


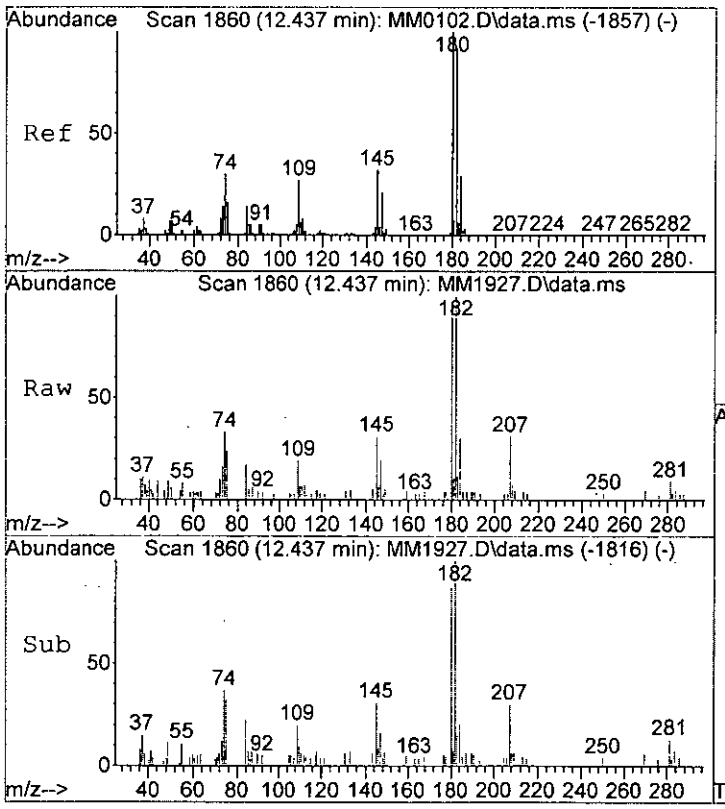


#117
Naphthalen
Concen: 0.28 ppb
RT: 12.303 min Scan# 1838
Delta R.T. 0.000 min
Lab File: MM1927.D
Acq: 31 Dec 2014 3:01 am

Tgt Ion:128 Resp: 5346

Ion	Ratio	Lower	Upper
128	100		
127	16.4	0.0	32.6
102	12.6	0.0	28.9

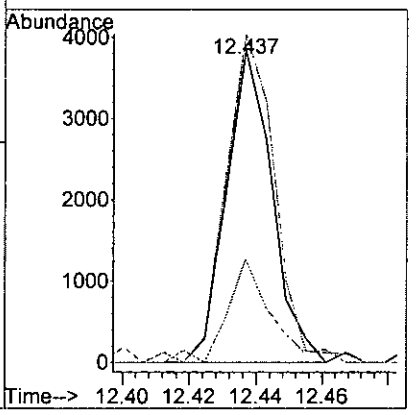




#118
1,2,3-Tclbenzene
Concen: 0.42 ppb
RT: 12.437 min Scan# 1860
Delta R.T. 0.000 min
Lab File: MM1927.D
Acq: 31 Dec 2014 3:01 am

Tgt Ion:180 Resp: 3634

Ion	Ratio	Lower	Upper
180	100		
182	105.2	73.0	113.0
145	33.0	11.8	51.8



LSC Area Percent Report

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1927.D
Acq On : 31 Dec 2014 3:01 am
Operator : K.Ruest
Sample : VBLK
Misc :
ALS Vial : 32 Sample Multiplier: 1

Integration Parameters: INTP60.P
Integrator: RTE
Smoothing : OFF Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Title : MS#12 - 8260B WATERS 10mL Purge

Signal : TIC: MM1927.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.146	490	500	508	rBV	572819	1337943	29.76%	5.485%
2	4.243	508	516	530	rVB	1038728	2574956	57.27%	10.556%
3	4.652	574	583	601	rBV	487879	1296030	28.82%	5.313%
4	5.444	704	713	730	rBV	1403041	3215625	71.51%	13.182%
5	7.316	1013	1020	1031	rBV	2952387	4496455	100.00%	18.432%
6	8.742	1248	1254	1265	rBV	2997640	3997070	88.89%	16.385%
7	9.785	1420	1425	1434	rBV	2699244	3148620	70.02%	12.907%
8	10.120	1475	1480	1485	rBV2	37361	48973	1.09%	0.201%
9	10.748	1578	1583	1598	rVB	3515475	4278727	95.16%	17.540%

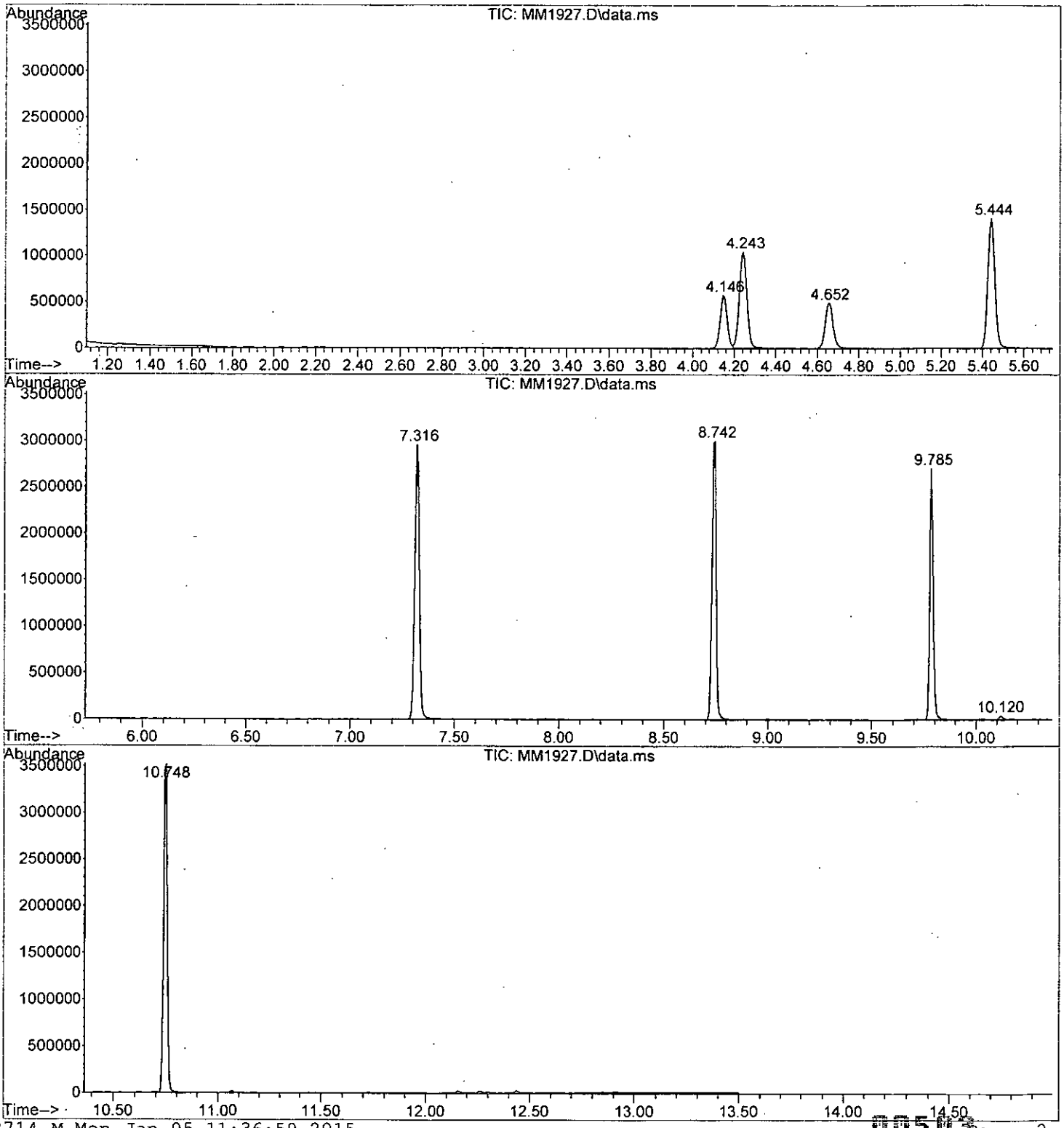
Sum of corrected areas: 24394399

LSC Report - Integrated Chromatogram

Data Path : I:\ACQUDATA\msvoa12\Data\123014\
Data File : MM1927.D
Acq On : 31 Dec 2014 3:01 am
Operator : K.Ruest
Sample : VBLK
Misc :
ALS Vial : 32 Sample Multiplier: 1

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



W102714.M Mon Jan 05 11:36:59 2015 Page: 2

Tentatively Identified Compound (LSC) summary

Data Path : I:\ACQUDATA\msvoa12\Data\123014\\
Data File : MM1927.D
Acq On : 31 Dec 2014 3:01 amm
Operator : K.Ruestt
Sample : VBLKK
Misc :
ALS Vial : 32 Sample Multiplier: 11

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.MM
Quant Title : MS#12 - 8260B WATERS 10mL Purgee

TIC Library : I:\ACQUDATA\DATABASE\NBS75K.LL
TIC Integration Parameters: LSCINT.PP

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: NA
Date Received: NA
Date Analyzed: 12/30/14 12:40

Sample Name: Lab Control Sample
Lab Code: RQ1416037-03

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\MSVOA12\DATA\123014\MM1900.D\

Analysis Lot: 427512
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**19.5**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**17.8**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**18.6**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**18.8**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**18.4**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**18.8**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**18.2**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**21.7**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**18.4**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**21.8**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**20.0**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**17.8**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**19.4**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**19.4**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**17.5**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**18.3**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**19.9**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**19.4**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**18.4**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**19.3**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**17.1**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**18.2**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**19.7**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**17.4**		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	**288**		100	20	11	
106-43-4	4-Chlorotoluene	**19.4**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**21.6**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**16.2**		5.0	1.0	0.67	
67-64-1	Acetone	**19.3**		5.0	5.0	1.3	
71-43-2	Benzene	**18.9**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**19.3**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**19.6**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**18.2**		5.0	1.0	0.32	
75-25-2	Bromoform	**19.0**		5.0	1.0	0.42	
74-83-9	Bromomethane	**23.1**		5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/30/14 12:40
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1416037-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1900.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**18.1**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**19.3**		5.0	1.0	0.29	
75-00-3	Chloroethane	**21.4**		5.0	1.0	0.24	
67-66-3	Chloroform	**18.5**		5.0	1.0	0.25	
74-87-3	Chloromethane	**26.9**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**19.3**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**24.1**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**18.4**		5.0	1.0	0.60	
100-41-4	Ethylbenzene	**18.0**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**23.8**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**20.4**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**17.6**		5.0	1.0	0.29	
91-20-3	Naphthalene	**21.4**		5.0	1.0	0.20	
100-42-5	Styrene	**18.7**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**19.8**		5.0	1.0	0.30	
108-88-3	Toluene	**19.1**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**19.3**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**18.6**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**22.6**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**19.2**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**17.6**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**39.5**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**21.0**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**20.6**		5.0	1.0	0.20	
95-47-6	o-Xylene	**19.2**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**20.4**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**20.6**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**19.5**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**17.4**		5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/30/14 12:40
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1416037-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1900.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	99	75-120	12/30/14 12:40	
Dibromofluoromethane	103	85-115	12/30/14 12:40	
Toluene-d8	101	85-120	12/30/14 12:40	

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1900.D
Misc :
Acq On : 30 Dec 2014 12:40 pm
Operator : K.Ruest
InstName : MSVOA-12 RQM16037.03

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 13:34:20 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	901412	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1362508	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1269424	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	726945	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.145	113	406761	51.26	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.52%				
48) surr1,1,2-dichloroetha...	4.651	65	451085	46.69	ppb		-0.01
Spiked Amount 50.000	Range 78 - 122		Recovery = 93.38%				
65) SURR3,Toluene-d8	7.316	98	1695011	50.74	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.48%				
70) SURR2,BFB	9.785	95	644549	49.73	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 99.46%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	205587	24.11	ppb		98
3) Chloromethane	1.262	50	312627	26.88	ppb		100
4) Vinyl Chloride	1.323	62	279425	22.62	ppb		98
5) Bromomethane	1.512	94	138061	23.11	ppb		95
6) Chloroethane	1.567	64	164830	21.42	ppb		97
7) Freon 21	1.664	67	467875	24.35	ppb		100
8) Trichlorofluoromethane	1.719	101	273060	18.59	ppb		97
9) Diethyl Ether	1.878	59	123458	18.46	ppb		98
10) Freon 123a	1.865	67	219486	20.65	ppb		95
11) Freon 123	1.902	83	233530	20.82	ppb		100
12) Acrolein	1.951	56	35173	93.35	ppb		98
13) 1,1-Diclethene	2.036	96	146200	18.77	ppb		94
14) Freon 113	2.036	101	153977	19.31	ppb		96
15) Acetone	2.042	43	36851	19.31	ppb		98
16) 2-Propanol	2.109	45	119203	314.81	ppb		99
17) Iodomethane	2.146	142	222271	19.77	ppb		97
18) Carbon Disulfide	2.207	76	519550	19.85	ppb		100
19) Acetonitrile	2.219	40	27042	89.10	ppb		94
20) Allyl Chloride	2.274	76	84947	19.26	ppb	#	90
21) Methyl Acetate	2.274	43	74447	16.89	ppb		98
22) Methylene Chloride	2.353	84	155839	18.37	ppb		97
23) TBA	2.408	59	180357	287.78	ppb		91
24) Acrylonitrile	2.524	53	176807	86.21	ppb		97
25) Methyl-t-Butyl Ether	2.579	73	384728	17.62	ppb		99
26) trans-1,2-Dichloroethene	2.579	96	163945	19.48	ppb		96
28) 1,1-Diclethane	2.938	63	285605	18.37	ppb		99
29) Vinyl Acetate	2.975	86	27342	19.40	ppb	#	63
30) DIPE	3.012	45	505922	16.18	ppb		96
31) 2-Chloro-1,3-Butadiene	3.036	53	288881	20.09	ppb		96
32) ETBE	3.396	59	425198	15.67	ppb		98
33) 2,2-Dichloropropane	3.554	77	235321	17.05	ppb		98
34) cis-1,2-Dichloroethene	3.542	96	174795	19.16	ppb		90
35) 2-Butanone	3.548	43	49376	18.16	ppb		98
36) Propionitrile	3.591	54	64823	81.03	ppb		96
37) Bromochloromethane	3.828	130	101087	19.58	ppb		89

W102714.M Tue Dec 30 13:35:09 2014 Page: 1

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1900.D
Misc :
Acq On : 30 Dec 2014 12:40 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 13:34:20 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Methacrylonitrile	3.792	67	38945	16.36	ppb	93
39) Tetrahydrofuran	3.908	42	30794	16.82	ppb	94
40) Chloroform	3.932	83	289747	18.51	ppb	99
41) 1,1,1-Trichloroethane	4.206	97	249813	17.79	ppb	91
42) TAME	5.017	73	351297	15.47	ppb	97
44) Cyclohexane	4.310	41	181256	17.97	ppb	100
46) Carbontetrachloride	4.469	121	64372	18.09	ppb	87
47) 1,1-Dichloropropene	4.456	75	216262	18.17	ppb	99
49) Benzene	4.773	78	661012	18.94	ppb	98
50) 1,2-Dichloroethane	4.779	62	205329	17.46	ppb	96
51) Iso-Butyl Alcohol	4.633	43	75918	274.81	ppb	95
52) n-Heptane	5.322	43	192257	17.03	ppb	97
53) 1-Butanol	5.767	56	107794	632.51	ppb	96
54) Trichloroethene	5.822	130	176233	19.32	ppb	95
55) Methylcyclohexane	6.102	55	217020	18.54	ppb	98
56) 1,2-Diclpropane	6.108	63	167297	18.30	ppb	99
57) Dibromomethane	6.249	93	79390	18.36	ppb	98
58) 1,4-Dioxane	6.304	88	25271m	367.18	ppb	
59) Methyl Methacrylate	6.328	69	70825	16.79	ppb	92
60) Bromodichloromethane	6.474	83	196914	18.18	ppb	98
61) 2-Nitropropane	6.742	41	36467	25.30	ppb	97
62) 2-Chloroethylvinyl Ether	6.877	63	80012	18.78	ppb	99
63) cis-1,3-Dichloropropene	7.017	75	237664	17.61	ppb	99
64) 4-Methyl-2-pentanone	7.212	43	100611	16.16	ppb	98
66) Toluene	7.389	91	718588	19.10	ppb	99
67) trans-1,3-Dichloropropene	7.626	75	200092	17.39	ppb	98
68) Ethyl Methacrylate	7.767	69	146080	16.32	ppb	99
69) 1,1,2-Trichloroethane	7.803	97	119238	18.80	ppb	99
72) Tetrachloroethene	7.956	164	144488	19.78	ppb	97
73) 2-Hexanone	8.084	43	74441	17.42	ppb	91
74) 1,3-Dichloropropane	7.968	76	209435	18.39	ppb	94
75) Dibromochloromethane	8.187	129	131515	19.26	ppb	97
76) N-Butyl Acetate	8.236	43	176012	15.95	ppb	98
77) 1,2-Dibromoethane	8.285	107	115342	19.35	ppb	94
78) Chlorobenzene	8.767	112	474247	19.29	ppb	95
79) 3-CBTF	8.785	180	271151	20.14	ppb	98
80) 4-CBTF	8.834	180	246012	20.42	ppb	98
81) 1,1,1,2-Tetrachloroethane	8.846	131	157639	19.51	ppb	98
82) Ethylbenzene	8.882	106	238328	17.97	ppb	91
83) (m+p)Xylene	8.992	106	633466	39.48	ppb	95
84) o-Xylene	9.340	106	309812	19.20	ppb	98
85) Styrene	9.352	104	500108	18.74	ppb	99
87) Bromoform	9.492	173	68498	18.96	ppb	99
88) 2-CBTF	9.577	180	262562	20.50	ppb	96
89) Isopropylbenzene	9.669	105	790864	20.39	ppb	99
90) Cyclohexanone	9.718	55	247814	581.37	ppb	96
91) trans-1,4-Dichloro-2-B...	9.955	53	31862	13.67	ppb	85
92) 1,1,2,2-Tetrachloroethane	9.907	83	140538	18.59	ppb	98
93) Bromobenzene	9.907	156	197528	19.30	ppb	93
94) 1,2,3-Trichloropropane	9.937	110	42237	18.42	ppb	96
95) n-Propylbenzene	10.016	91	925388	20.57	ppb	97
96) 2-Chlorotoluene	10.077	91	535406	19.65	ppb	98

W102714.M Tue Dec 30 13:35:09 2014 Page: 2

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1900.D
Misc :
Acq On : 30 Dec 2014 12:40 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 13:34:20 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

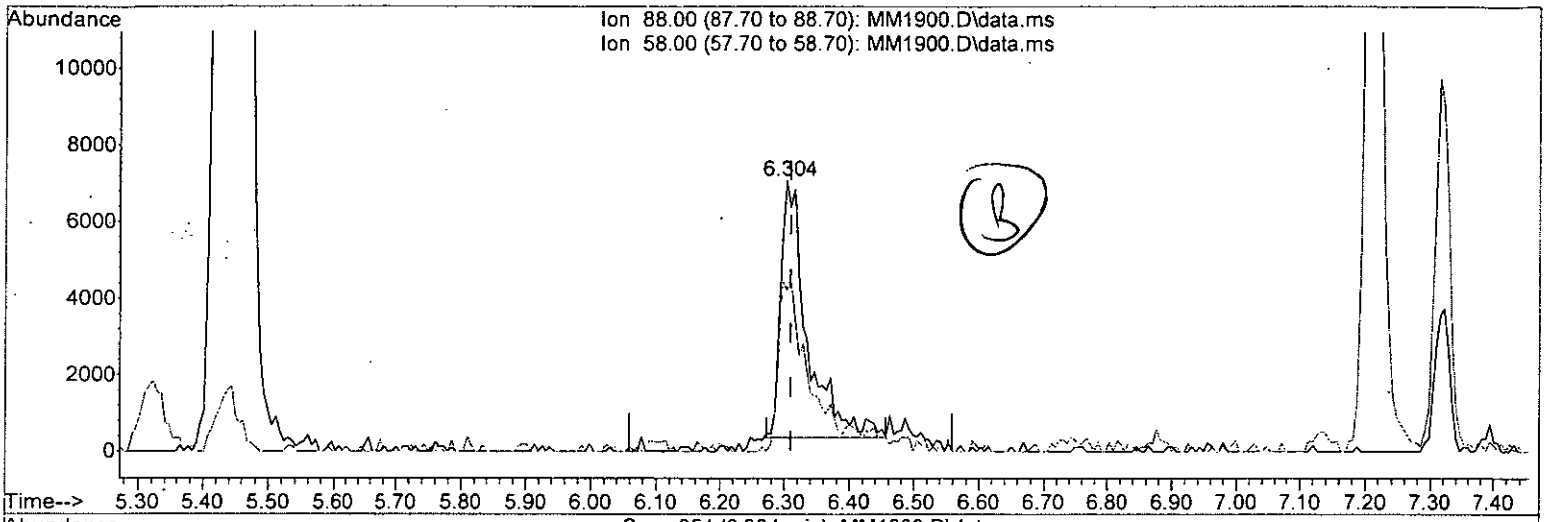
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	3-Chlorotoluene	10.132	91	583226	20.12	ppb	99
98)	4-Chlorotoluene	10.169	91	663826	19.43	ppb	98
99)	1,3,5-Trimethylbenzene	10.169	105	668394	19.86	ppb	99
100)	tert-Butylbenzene	10.437	119	558978	20.57	ppb	99
101)	1,2,4-Trimethylbenzene	10.473	105	658767	19.96	ppb	98
102)	3,4-DCBTF	10.534	214	196512	20.38	ppb	98
103)	sec-Butylbenzene	10.620	105	780126	20.42	ppb	100
104)	p-Isopropyltoluene	10.736	119	716607	21.59	ppb	98
105)	1,3-Dclbenz	10.693	146	379753	19.43	ppb	98
106)	1,4-Dclbenz	10.766	146	393422	19.25	ppb	99
107)	2,4-DCBTF	10.821	214	180757	21.86	ppb	98
108)	2,5-DCBTF	10.858	214	199912	21.36	ppb	95
109)	n-Butylbenzene	11.065	91	615322	20.95	ppb	99
110)	1,2-Dclbenz	11.065	146	356851	19.40	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.620	157	22591	17.75	ppb	87
112)	Trielution Dichlorotol...	11.729	125	973203	64.55	ppb	98
113)	1,3,5 Trichlorobenzene	11.778	180	281114	22.30	ppb	98
114)	Coelution Dichlorotoluene	11.991	125	703313	44.54	ppb	94
115)	1,2,4-Tcbenzene	12.156	180	235005	21.83	ppb	97
116)	Hexachlorobt	12.266	225	101313	23.80	ppb	95
117)	Naphthalen	12.296	128	438032	21.41	ppb	99
118)	1,2,3-Tclbenzene	12.437	180	198563	21.69	ppb	96
119)	2,4,5-Trichlorotolene	12.851	159	167212	26.96	ppb	96
120)	2,3,6-Trichlorotoluene	12.912	159	179556	31.38	ppb	98

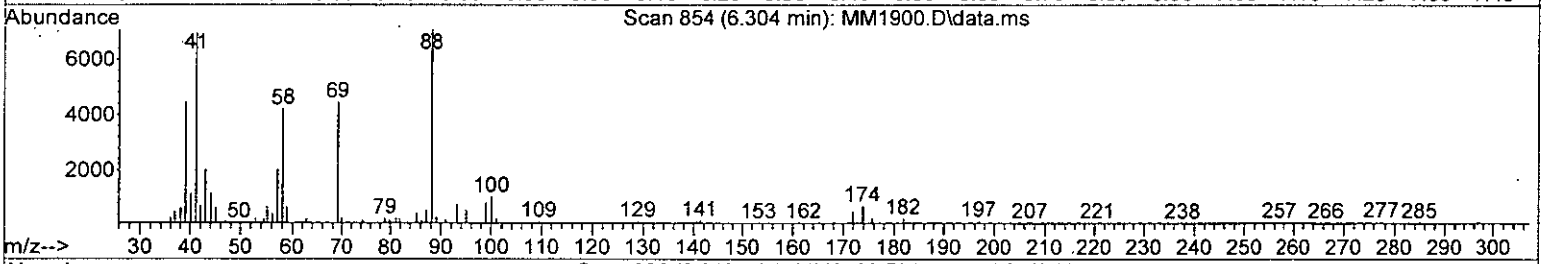
(#) = qualifier out of range (m) = manual integration (+) = signals summed

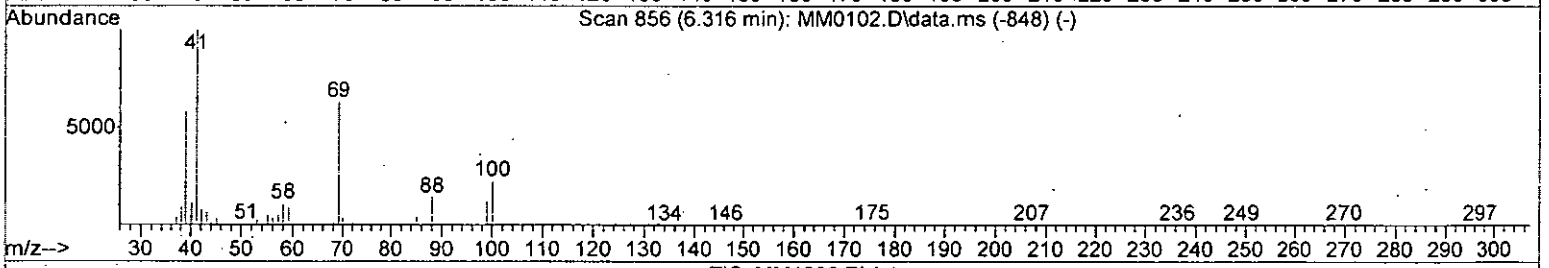
Quantitation Report (Qedit)

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1900.D
Misc :
Acq On : 30 Dec 2014 12:40 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 12:54:49 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1900.D\data.ms

(58) 1,4-Dioxane

6.304min (-0.006) 272.17 ppb

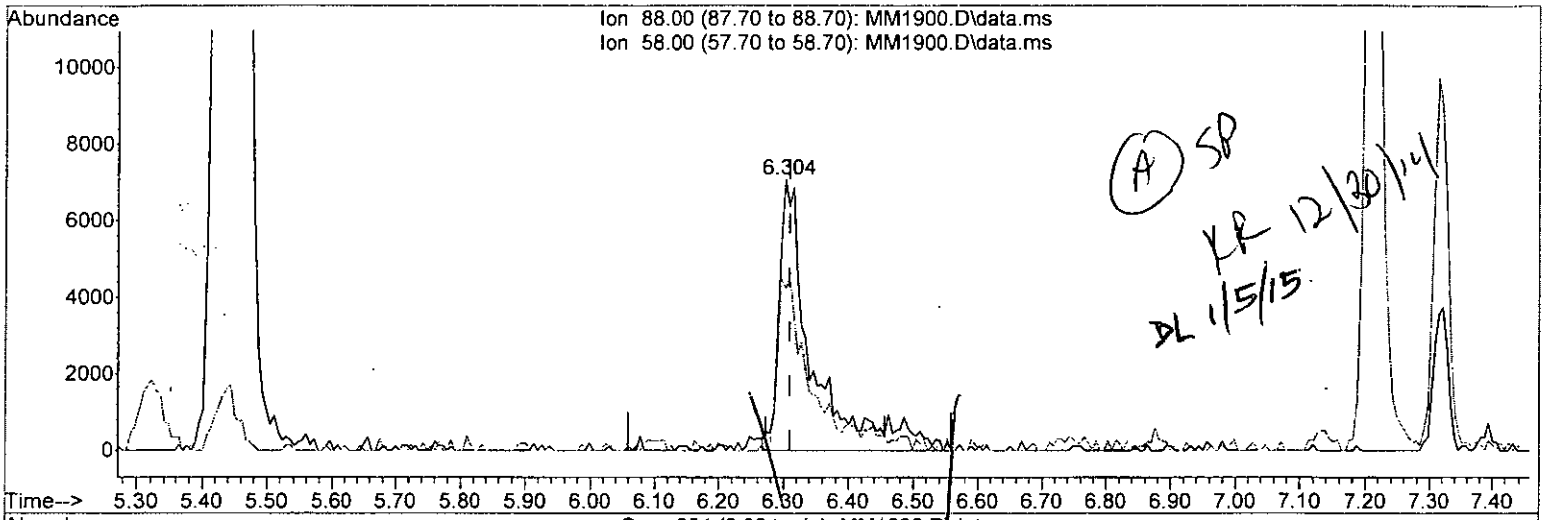
response 18732

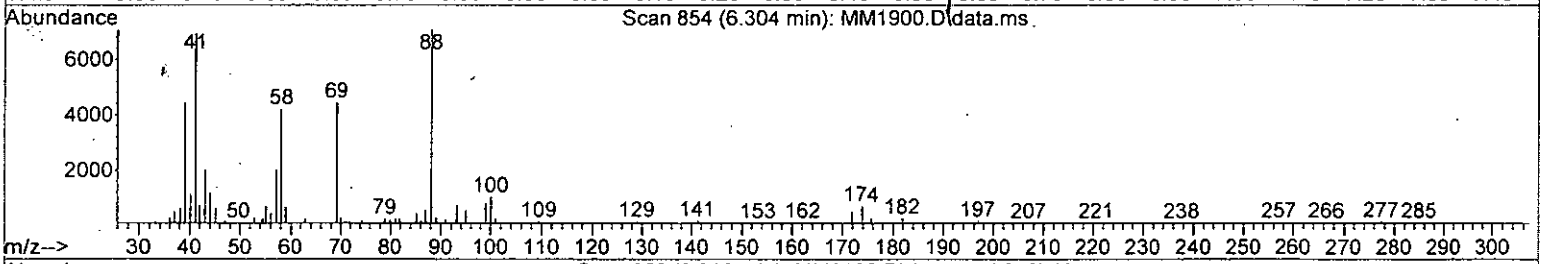
Ion	Exp%	Act%
88.00	100	100
58.00	77.40	59.46
0.00	0.00	0.00
0.00	0.00	0.00

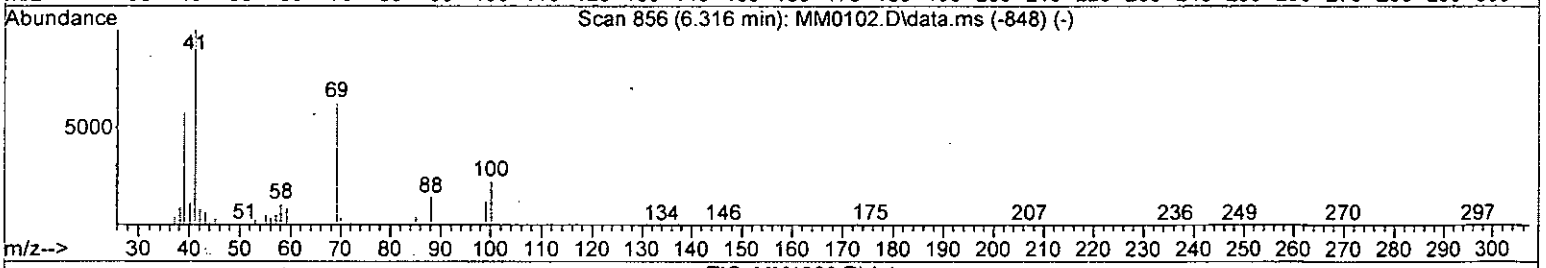
W102714.M Tue Dec 30 13:34:12 2014 Page: 1

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1900.D
Misc :
Acq On : 30 Dec 2014 12:40 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 12:54:49 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1900.D\data.ms

(58) 1,4-Dioxane

6.304min (-0.006) 367.18 ppb m

response 25271

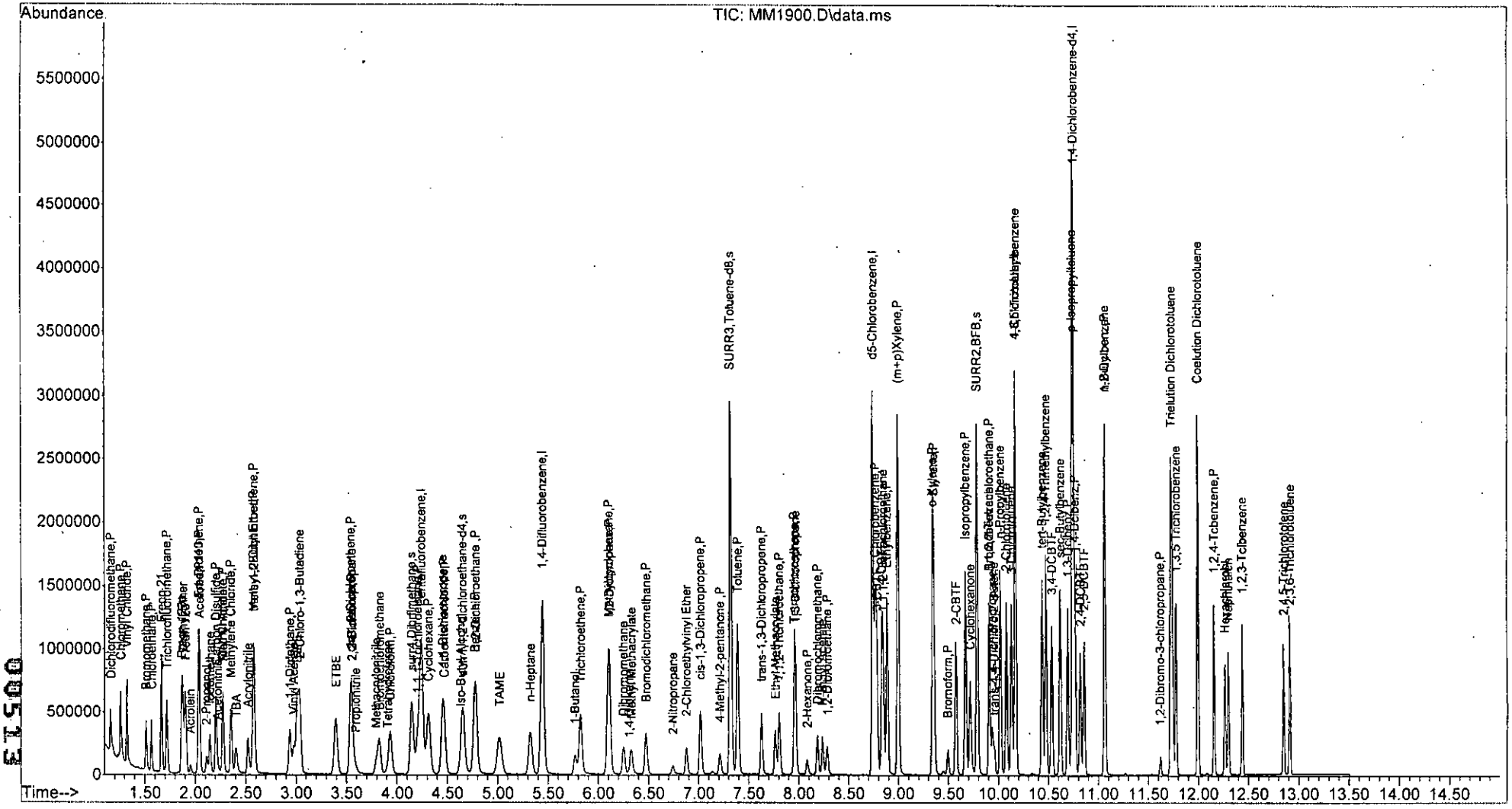
Ion	Exp%	Act%
88.00	100	100
58.00	77.40	59.46
0.00	0.00	0.00
0.00	0.00	0.00

W102714.M Tue Dec 30 13:34:23 2014 Page: 1

Quantitation Report (QT Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1900.D
Misc :
Acq On : 30 Dec 2014 12:40 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 13:34:20 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



W102714.M Tue Dec 30 13:35:11 2014 Page: 4

Client: Parsons Engineering Science
Project: FTMM 4Q GW/748810-03000
Sample Matrix: Water

Service Request: R1410307
Date Collected: NA
Date Received: NA
Date Analyzed: 12/31/14 01:25

Sample Name: Lab Control Sample
Lab Code: RQ1416038-03

Units: µg/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analytical Method: 8260C
Data File Name: I:\ACQUDATA\msvoa12\Data\123014\MM1924.D\

Analysis Lot: 427514
Instrument Name: R-MS-12
Dilution Factor: 1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**20.2**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**19.9**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**19.5**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**20.3**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**19.9**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**20.3**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**19.3**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**22.6**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**19.5**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**22.4**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**21.6**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**19.5**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**21.0**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**21.0**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**19.2**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**19.6**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**20.9**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**20.7**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**20.7**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**20.6**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**15.5**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**19.5**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**21.3**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**16.7**		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	**341**		100	20	11	
106-43-4	4-Chlorotoluene	**20.8**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**22.7**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**16.8**		5.0	1.0	0.67	
67-64-1	Acetone	**20.5**		5.0	5.0	1.3	
71-43-2	Benzene	**20.3**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**21.2**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**21.0**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**19.9**		5.0	1.0	0.32	
75-25-2	Bromoform	**20.8**		5.0	1.0	0.42	
74-83-9	Bromomethane	**20.4**		5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/31/14 01:25
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1416038-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1924.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**19.5**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**20.9**		5.0	1.0	0.29	
75-00-3	Chloroethane	**23.3**		5.0	1.0	0.24	
67-66-3	Chloroform	**20.0**		5.0	1.0	0.25	
74-87-3	Chloromethane	**26.2**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**20.9**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**26.5**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**20.4**		5.0	1.0	0.60	
100-41-4	Ethylbenzene	**19.6**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**24.1**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**21.6**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**19.3**		5.0	1.0	0.29	
91-20-3	Naphthalene	**22.6**		5.0	1.0	0.20	
100-42-5	Styrene	**20.2**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**21.6**		5.0	1.0	0.30	
108-88-3	Toluene	**20.5**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**21.8**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**20.1**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**24.3**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**20.6**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**18.8**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**43.4**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**21.8**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**21.8**		5.0	1.0	0.20	
95-47-6	o-Xylene	**20.7**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**21.8**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**22.0**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**20.9**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**18.2**		5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/31/14 01:25
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1416038-03	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1924.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	12/31/14 01:25	
Dibromofluoromethane	100	85-115	12/31/14 01:25	
Toluene-d8	100	85-120	12/31/14 01:25	

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\123014\MM1924.D
Misc :
Acq On : 31 Dec 2014 1:25 am
Operator : K.Ruest
InstName : MSVOA-12 LQ1410838-03

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 01:40:02 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	931142	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1414788	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1304066	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	749820	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.146	113	413126	50.14	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 100.28%				
48) surr1,1,2-dichloroetha...	4.652	65	466305	46.48	ppb		-0.01
Spiked Amount 50.000	Range 78 - 122		Recovery = 92.96%				
65) SURR3,Toluene-d8	7.316	98	1735515	50.04	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.08%				
70) SURR2,BFB	9.785	95	649710	48.28	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.56%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	233775	26.54	ppb		99
3) Chloromethane	1.262	50	314721	26.20	ppb		99
4) Vinyl Chloride	1.323	62	310189	24.31	ppb		99
5) Bromomethane	1.512	94	125937	20.41	ppb		98
6) Chloroethane	1.567	64	185089	23.28	ppb		98
7) Freon 21	1.664	67	480710	24.22	ppb		100
8) Trichlorofluoromethane	1.719	101	305281	20.12	ppb		99
9) Diethyl Ether	1.878	59	138261	20.02	ppb		96
10) Freon 123a	1.866	67	231023	21.04	ppb		99
11) Freon 123	1.902	83	243334	21.00	ppb		99
12) Acrolein	1.951	56	26689	68.57	ppb		97
13) 1,1-Diclethene	2.036	96	163510	20.33	ppb		96
14) Freon 113	2.036	101	167193	20.30	ppb		99
15) Acetone	2.048	43	40345	20.46	ppb		99
16) 2-Propanol	2.116	45	133958	342.48	ppb		92
17) Iodomethane	2.146	142	180460	15.54	ppb		97
18) Carbon Disulfide	2.207	76	486385	17.99	ppb		99
19) Acetonitrile	2.225	40	32908	104.96	ppb	#	87
20) Allyl Chloride	2.274	76	87893	19.29	ppb		93
21) Methyl Acetate	2.274	43	81269	17.85	ppb		99
22) Methylene Chloride	2.353	84	178771	20.40	ppb		96
23) TBA	2.408	59	220941	341.28	ppb		91
24) Acrylonitrile	2.524	53	207686	98.03	ppb		98
25) Methyl-t-Butyl Ether	2.579	73	436190	19.34	ppb		99
26) trans-1,2-Dichloroethene	2.579	96	182020	20.94	ppb		100
28) 1,1-Diclethane	2.939	63	320187	19.93	ppb		99
29) Vinyl Acetate	2.975	86	19854	13.64	ppb	#	77
31) 2-Chloro-1,3-Butadiene	3.036	53	273486	18.41	ppb		98
33) 2,2-Dichloropropane	3.554	77	221305	15.52	ppb		98
34) cis-1,2-Dichloroethene	3.542	96	194355	20.62	ppb		95
35) 2-Butanone	3.548	43	54689	19.47	ppb		94
36) Propionitrile	3.591	54	78986	95.58	ppb		91
37) Bromochloromethane	3.822	130	112072	21.02	ppb		95
38) Methacrylonitrile	3.792	67	47156	19.18	ppb		96
39) Tetrahydrofuran	3.902	42	35294	18.66	ppb		99

KR 12/31/14

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\123014\MM1924.D
Misc :
Acq On : 31 Dec 2014 1:25 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 01:40:02 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40)	Chloroform	3.932	83	324102	20.04	ppb		99
41)	1,1,1-Trichloroethane	4.207	97	288547	19.89	ppb		94
44)	Cyclohexane	4.316	41	185235	17.68	ppb		99
46)	Carbontetrachloride	4.469	121	72151	19.53	ppb		97
47)	1,1-Dichloropropene	4.457	75	238998	19.34	ppb		99
49)	Benzene	4.774	78	736656	20.33	ppb		99
50)	1,2-Dichloroethane	4.780	62	234709	19.22	ppb		99
51)	Iso-Butyl Alcohol	4.633	43	92712	323.20	ppb		97
52)	n-Heptane	5.322	43	189904	16.20	ppb		94
~~53)~~	~~1-Butanol~~	~~5.804~~	~~56~~	~~409~~	~~2.31~~	~~ppb~~	~~#~~	~~1~~
54)	Trichloroethene	5.828	130	206533	21.80	ppb		93
55)	Methylcyclohexane	6.103	55	215435	17.72	ppb		86
56)	1,2-Diclpropane	6.109	63	186142	19.61	ppb		98
57)	Dibromomethane	6.249	93	88886	19.79	ppb		97
58)	1,4-Dioxane	6.310	88	27146 23494	~~328.75~~	ppb	379.85	80
59)	Methyl Methacrylate	6.328	69	80288	18.33	ppb		90
60)	Bromodichloromethane	6.474	83	223632	19.89	ppb		98
61)	2-Nitropropane	6.737	41	45326	30.28	ppb		94
62)	2-Chloroethylvinyl Ether	6.877	63	83290	18.82	ppb		97
63)	cis-1,3-Dichloropropene	7.017	75	263000	18.77	ppb		98
64)	4-Methyl-2-pentanone	7.212	43	108835	16.84	ppb		98
66)	Toluene	7.389	91	802120	20.53	ppb		99
67)	trans-1,3-Dichloropropene	7.627	75	217664	18.22	ppb		98
68)	Ethyl Methacrylate	7.767	69	166509	17.92	ppb		94
69)	1,1,2-Trichloroethane	7.803	97	133630	20.29	ppb		96
72)	Tetrachloroethene	7.956	164	161766	21.56	ppb		96
73)	2-Hexanone	8.084	43	73463	16.73	ppb		99
74)	1,3-Dichloropropane	7.968	76	242184	20.70	ppb		95
75)	Dibromochloromethane	8.188	129	146423	20.87	ppb		99
76)	N-Butyl Acetate	8.236	43	181989	16.05	ppb		98
77)	1,2-Dibromoethane	8.285	107	128457	20.98	ppb		96
78)	Chlorobenzene	8.767	112	526816	20.86	ppb		94
81)	1,1,1,2-Tetrachloroethane	8.846	131	167736	20.20	ppb		96
82)	Ethylbenzene	8.882	106	267226	19.62	ppb		96
83)	(m+p)Xylene	8.992	106	715044	43.38	ppb		99
84)	o-Xylene	9.340	106	343796	20.74	ppb		95
85)	Styrene	9.352	104	554557	20.23	ppb		97
87)	Bromoform	9.492	173	77572	20.82	ppb		98
89)	Isopropylbenzene	9.669	105	865531	21.63	ppb		99
90)	Cyclohexanone	9.712	55	280345	637.63	ppb		99
91)	trans-1,4-Dichloro-2-B...	9.955	53	32045	13.33	ppb		84
92)	1,1,2,2-Tetrachloroethane	9.907	83	151981.	19.49	ppb		99
93)	Bromobenzene	9.907	156	223401	21.17	ppb		95
94)	1,2,3-Trichloropropane	9.937	110	46014	19.46	ppb		94
95)	n-Propylbenzene	10.016	91	1009639	21.76	ppb		97
96)	2-Chlorotoluene	10.077	91	598007	21.28	ppb		99
~~97)~~	~~3-Chlorotoluene~~	~~10.169~~	~~91~~	~~731225~~	~~24.45~~	~~ppb~~		~~92~~
98)	4-Chlorotoluene	10.169	91	733604	20.82	ppb		97
99)	1,3,5-Trimethylbenzene	10.169	105	725664	20.91	ppb		98
100)	tert-Butylbenzene	10.437	119	615703	21.97	ppb		98
101)	1,2,4-Trimethylbenzene	10.474	105	735664	21.61	ppb		99
103)	sec-Butylbenzene	10.614	105	860414	21.83	ppb		98

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\123014\MM1924.D
Misc :
Acq On : 31 Dec 2014 1:25 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 01:40:02 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

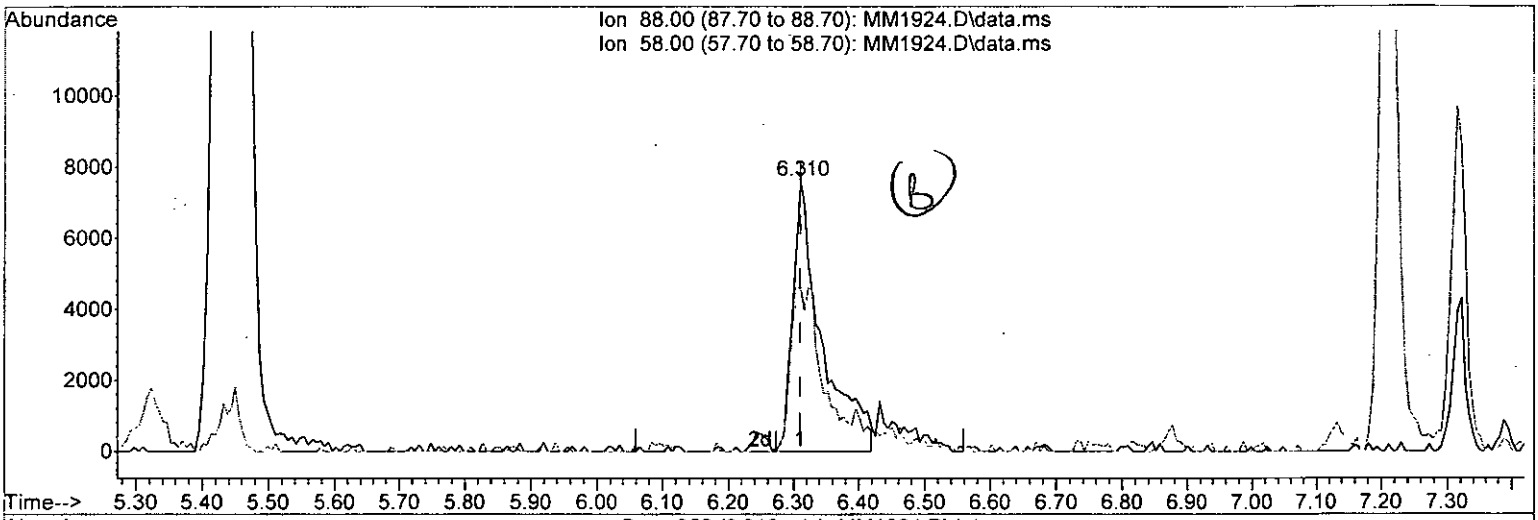
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
104) p-Isopropyltoluene	10.736	119	775747	22.65	ppb		98
105) 1,3-Dclbenz	10.693	146	416722	20.67	ppb		99
106) 1,4-Dclbenz	10.766	146	433998	20.59	ppb		99
109) n-Butylbenzene	11.065	91	659279	21.76	ppb		97
110) 1,2-Dclbenz	11.065	146	398460	21.01	ppb		96
111) 1,2-Dibromo-3-chloropr...	11.626	157	25641	19.54	ppb		90
112) Trielution Dichlorotol...	11.730	125	3558	0.23	ppb		92
115) 1,2,4-Tcbenzene	12.156	180	248709	22.40	ppb		97
116) Hexachlorobt	12.266	225	105758	24.09	ppb		97
117) Naphthalen	12.296	128	476354	22.57	ppb		99
118) 1,2,3-Tclbenzene	12.437	180	213851	22.64	ppb		97
119) 2,4,5-Trichlorotolene	12.851	159	3162	0.49	ppb	#	89
120) 2,3,6-Trichlorotoluene	12.912	159	3089	0.52	ppb	#	64

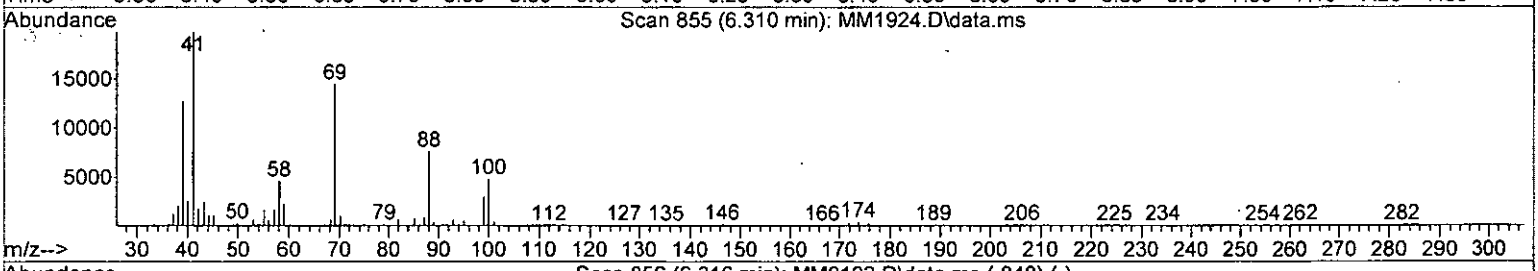
(#) = qualifier out of range (m) = manual integration (+) = signals summed

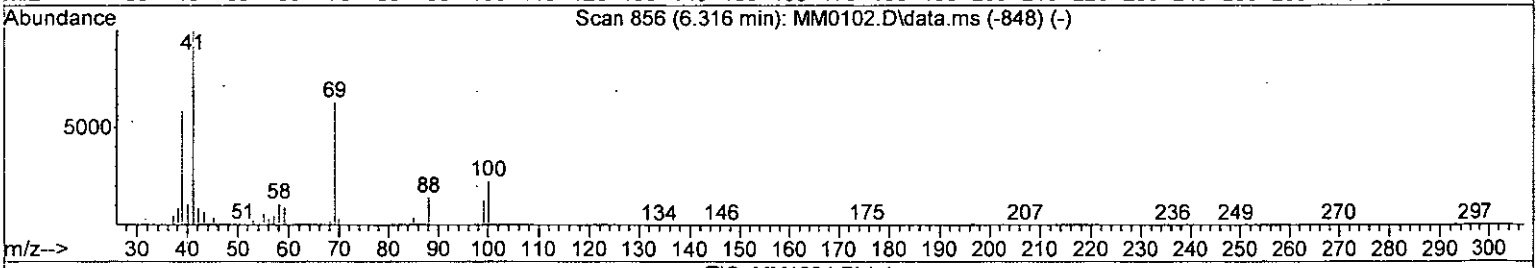
Quantitation Report (Qedit)

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1924.D
Misc :
Acq On : 31 Dec 2014 1:25 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 01:40:02 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1924.D\data.ms

(58) 1,4-Dioxane

6.310min (+0.000) 328.75 ppb

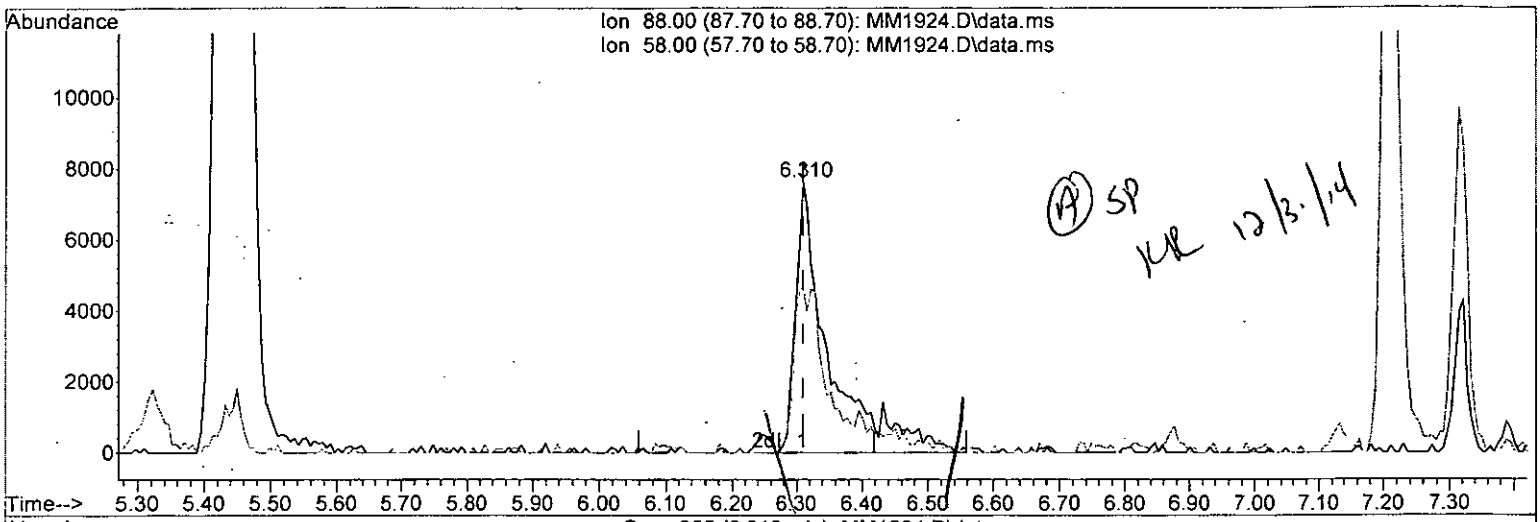
response 23494

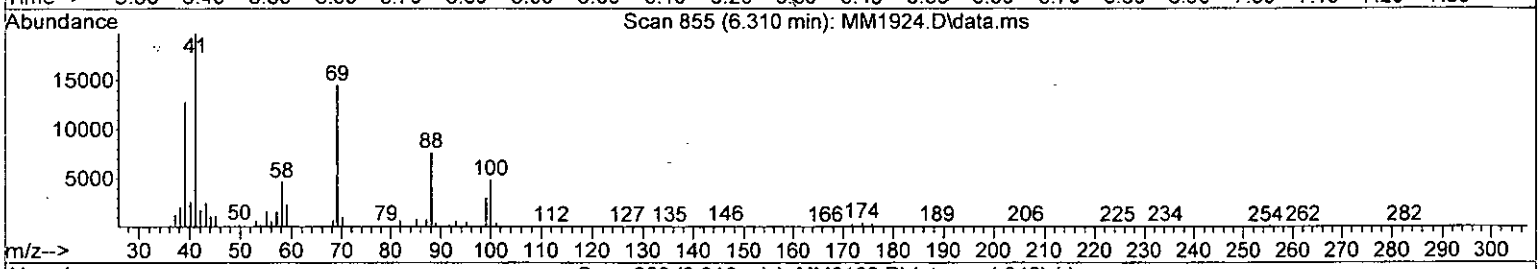
Ion	Exp%	Act%
88.00	100	100
58.00	77.40	60.48
0.00	0.00	0.00
0.00	0.00	0.00

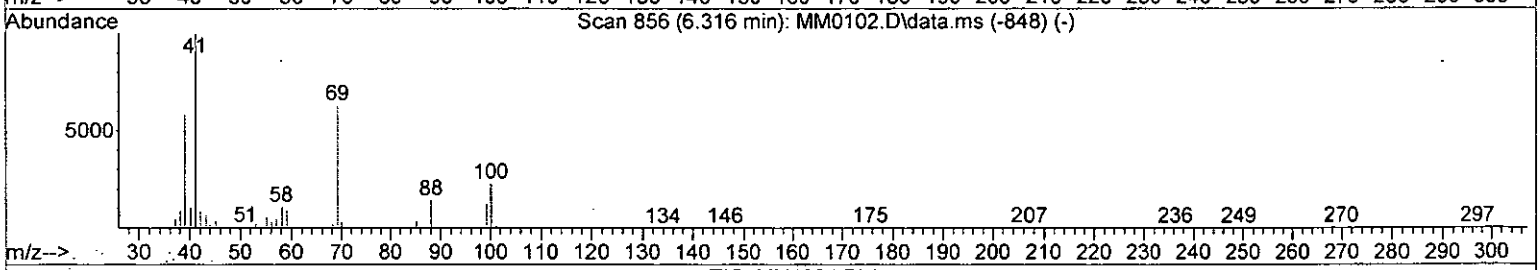
Quantitation Report (Qedit)

Sample : LCS
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1924.D
Misc :
Acq On : 31 Dec 2014 1:25 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 01:40:02 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1924.D\data.ms

(58) 1,4-Dioxane

6.310min (+0.000) 379.85 ppb m

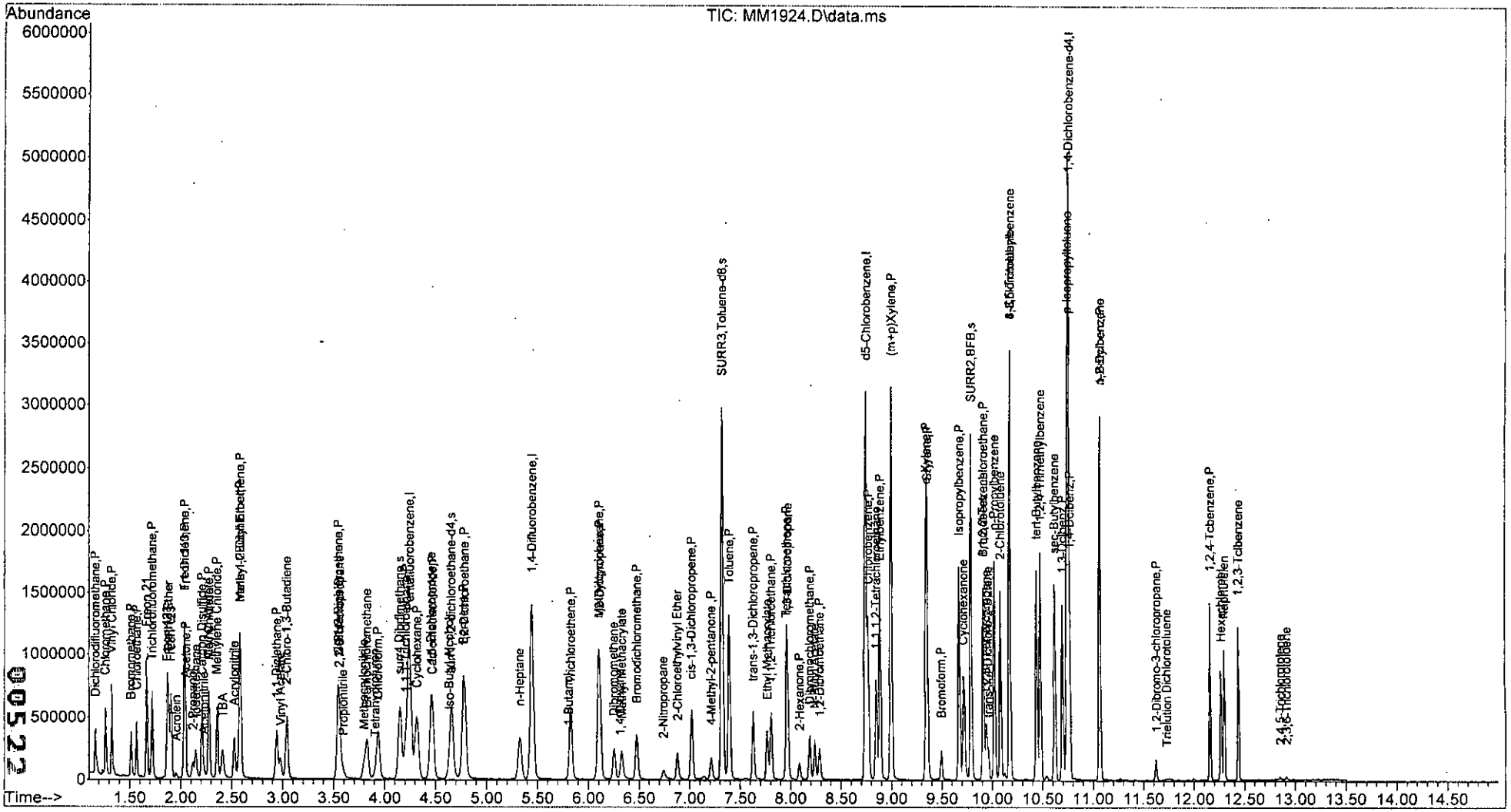
response 27146

Ion	Exp%	Act%
88.00	100	100
58.00	77.40	60.48
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Sample : LCS
Data File: I:\ACQUDATA\MSVOA12\DATA\123014\MM1924.D
Misc :
Acq On : 31 Dec 2014 1:25 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Titl e : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 01:40:02 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



W102714.M Wed Dec 31 01:40:08 2014 Page: 4

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/31/14 01:57
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1416038-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1925.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**19.8**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**18.7**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**19.3**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	20.0		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**19.3**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	19.0		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**18.8**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**22.1**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**20.1**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**22.3**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**20.7**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**20.9**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**21.1**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**20.7**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**19.3**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**19.0**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**20.0**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**20.4**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**20.7**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**20.3**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**14.6**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**20.6**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**20.8**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**17.4**		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	**338**		100	20	11	
106-43-4	4-Chlorotoluene	**19.9**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**21.6**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**17.7**		5.0	1.0	0.67	
67-64-1	Acetone	**21.7**		5.0	5.0	1.3	
71-43-2	Benzene	**19.6**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**20.7**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**20.8**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**19.7**		5.0	1.0	0.32	
75-25-2	Bromoform	**21.5**		5.0	1.0	0.42	
74-83-9	Bromomethane	**20.2**		5.0	1.0	0.29	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/31/14 01:57
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1416038-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1925.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**18.5**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**20.2**		5.0	1.0	0.29	
75-00-3	Chloroethane	**22.1**		5.0	1.0	0.24	
67-66-3	Chloroform	**19.1**		5.0	1.0	0.25	
74-87-3	Chloromethane	**25.3**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**21.0**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**24.8**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**20.3**		5.0	1.0	0.60	
100-41-4	Ethylbenzene	**18.2**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**21.8**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**20.9**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**19.3**		5.0	1.0	0.29	
91-20-3	Naphthalene	**22.7**		5.0	1.0	0.20	
100-42-5	Styrene	**19.6**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**20.6**		5.0	1.0	0.30	
108-88-3	Toluene	**19.9**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**21.4**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**18.9**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**23.5**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**19.7**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**18.3**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**40.6**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**20.9**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**20.9**		5.0	1.0	0.20	
95-47-6	o-Xylene	**19.9**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**21.0**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**21.0**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**19.7**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**18.3**		5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Analyzed:	12/31/14 01:57
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	RQ1416038-04	**Basis:**	NA

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427514
Data File Name:	I:\ACQUDATA\msvoa12\Data\123014\MM1925.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	97	75-120	12/31/14 01:57	
Dibromofluoromethane	104	85-115	12/31/14 01:57	
Toluene-d8	100	85-120	12/31/14 01:57	

Quantitation Report (Not Reviewed)

Sample : LCSD
Data File: I:\ACQUDATA\MSVOA12\DATA\123014\MM1925.D
Misc :
Acq On : 31 Dec 2014 1:57 am
Operator : K.Ruest
InstName : MSVOA-12 LQ1416038-04

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 02:12:01 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	936494	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1410291	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1309927	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	741692	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.146	113	425656	51.83	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 103.66%				
48) surr1,1,2-dichloroetha...	4.658	65	467763	46.78	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 93.56%				
65) SURR3,Toluene-d8	7.316	98	1731178	50.07	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 100.14%				
70) SURR2,BFB	9.785	95	649359	48.40	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 96.80%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	219403	24.76	ppb		99
3) Chloromethane	1.262	50	305472	25.28	ppb		100
4) Vinyl Chloride	1.323	62	301764	23.52	ppb		100
5) Bromomethane	1.512	94	125483	20.22	ppb		98
6) Chloroethane	1.567	64	176290	22.05	ppb		99
7) Freon 21	1.664	67	488748	24.48	ppb		97
8) Trichlorofluoromethane	1.719	101	288887	18.93	ppb		99
9) Diethyl Ether	1.878	59	143307	20.63	ppb		98
10) Freon 123a	1.866	67	231250	20.94	ppb		97
11) Freon 123	1.902	83	243911	20.93	ppb		99
12) Acrolein	1.951	56	24170	61.75	ppb		99
13) 1,1-Diclethene	2.036	96	153665	18.99	ppb		96
14) Freon 113	2.036	101	158334	19.11	ppb		98
15) Acetone	2.048	43	43025	21.70	ppb		96
16) 2-Propanol	2.115	45	139838	355.47	ppb		100
17) Iodomethane	2.146	142	183698	15.73	ppb		95
18) Carbon Disulfide	2.207	76	519530	19.10	ppb		99
19) Acetonitrile	2.225	40	29732	94.29	ppb		94
20) Allyl Chloride	2.274	76	84340	18.40	ppb	#	87
21) Methyl Acetate	2.274	43	83537	18.25	ppb		96
22) Methylene Chloride	2.353	84	178599	20.26	ppb		98
23) TBA	2.408	59	220384	338.47	ppb		93
24) Acrylonitrile	2.524	53	207430	97.35	ppb		99
25) Methyl-t-Butyl Ether	2.579	73	437990	19.31	ppb		98
26) trans-1,2-Dichloroethene	2.585	96	172257	19.70	ppb		98
28) 1,1-Diclethane	2.938	63	311291	19.27	ppb		96
29) Vinyl Acetate	2.975	86	15591	10.65	ppb	#	57
31) 2-Chloro-1,3-Butadiene	3.036	53	295789	19.80	ppb		100
33) 2,2-Dichloropropane	3.554	77	209105	14.58	ppb		99
34) cis-1,2-Dichloroethene	3.542	96	186985	19.73	ppb		93
35) 2-Butanone	3.548	43	58056	20.55	ppb		98
36) Propionitrile	3.591	54	78066	93.93	ppb		97
37) Bromochloromethane	3.822	130	111335	20.76	ppb		97
38) Methacrylonitrile	3.798	67	48357	19.55	ppb		94
39) Tetrahydrofuran	3.902	42	36466	19.17	ppb		93

KR 12/3/14

Quantitation Report (Not Reviewed)

Sample : LCSD
Data File: I:\ACQUDATA\MSVOA12\DATA\123014\MM1925.D
Misc :
Acq On : 31 Dec 2014 1:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 02:12:01 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) Chloroform	3.932	83	310792	19.11	ppb		98
41) 1,1,1-Trichloroethane	4.207	97	272976	18.71	ppb		96
44) Cyclohexane	4.310	41	189255	18.13	ppb		97
46) Carbontetrachloride	4.463	121	68015	18.47	ppb		100
47) 1,1-Dichloropropene	4.456	75	231911	18.82	ppb		99
49) Benzene	4.773	78	709070	19.63	ppb		98
50) 1,2-Dichloroethane	4.780	62	235119	19.32	ppb		98
51) Iso-Butyl Alcohol	4.633	43	98443	344.27	ppb		91
52) n-Heptane	5.322	43	180668	15.46	ppb		99
~~53) 1-Butanol~~	~~5.798~~	~~56~~	~~413~~	~~2.34~~	~~ppb~~	~~#~~	~~11~~
54) Trichloroethene	5.822	130	202072	21.40	ppb		97
55) Methylcyclohexane	6.102	55	225782	18.63	ppb		94
56) 1,2-Diclpropane	6.109	63	180161	19.04	ppb		97
57) Dibromomethane	6.249	93	88945	19.87	ppb		98
58) 1,4-Dioxane	6.316	88	~~24972~~	~~350.55~~	ppb		95
59) Methyl Methacrylate	6.328	69	83446	19.11	ppb		92
60) Bromodichloromethane	6.474	83	220808	19.70	ppb		99
61) 2-Nitropropane	6.743	41	42612	28.56	ppb		95
62) 2-Chloroethylvinyl Ether	6.877	63	88264	20.01	ppb		95
63) cis-1,3-Dichloropropene	7.017	75	255174	18.27	ppb		98
64) 4-Methyl-2-pentanone	7.212	43	113972	17.69	ppb		98
66) Toluene	7.389	91	773769	19.87	ppb		99
67) trans-1,3-Dichloropropene	7.627	75	217562	18.27	ppb		99
68) Ethyl Methacrylate	7.767	69	168345	18.17	ppb		93
69) 1,1,2-Trichloroethane	7.803	97	131266	20.00	ppb		94
72) Tetrachloroethene	7.956	164	155301	20.60	ppb		97
73) 2-Hexanone	8.084	43	76570	17.36	ppb		92
74) 1,3-Dichloropropane	7.968	76	243329	20.70	ppb		91
75) Dibromochloromethane	8.187	129	147598	20.95	ppb		98
76) N-Butyl Acetate	8.236	43	193226	16.97	ppb		98
77) 1,2-Dibromoethane	8.285	107	129930	21.13	ppb		99
78) Chlorobenzene	8.767	112	512150	20.19	ppb		94
81) 1,1,1,2-Tetrachloroethane	8.846	131	164895	19.77	ppb		96
82) Ethylbenzene	8.882	106	249535	18.24	ppb		93
83) (m+p)Xylene	8.992	106	671964	40.58	ppb		99
84) o-Xylene	9.340	106	330993	19.88	ppb		96
85) Styrene	9.352	104	539183	19.58	ppb		97
87) Bromoform	9.492	173	79169	21.48	ppb		96
89) Isopropylbenzene	9.669	105	825353	20.85	ppb		100
90) Cyclohexanone	9.718	55	282564	649.72	ppb		97
91) trans-1,4-Dichloro-2-B...	9.955	53	31340	13.18	ppb		90
92) 1,1,2,2-Tetrachloroethane	9.907	83	148576	19.26	ppb		97
93) Bromobenzene	9.907	156	215558	20.65	ppb		95
94) 1,2,3-Trichloropropane	9.937	110	47105	20.14	ppb		94
95) n-Propylbenzene	10.016	91	957868	20.87	ppb		97
96) 2-Chlorotoluene	10.077	91	576933	20.75	ppb		100
~~97) 3-Chlorotoluene~~	~~10.077~~	~~91~~	~~581312~~	~~19.65~~	~~ppb~~		~~96~~
98) 4-Chlorotoluene	10.169	91	692472	19.87	ppb		98
99) 1,3,5-Trimethylbenzene	10.169	105	687093	20.01	ppb		98
100) tert-Butylbenzene	10.437	119	582039	20.99	ppb		100
101) 1,2,4-Trimethylbenzene	10.474	105	697288	20.71	ppb		100
103) sec-Butylbenzene	10.620	105	818377	20.99	ppb		100

Quantitation Report (Not Reviewed)

Sample : LCSD
Data File: I:\ACQUDATA\MSVOA12\DATA\123014\MM1925.D
Misc :
Acq On : 31 Dec 2014 1:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 02:12:01 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

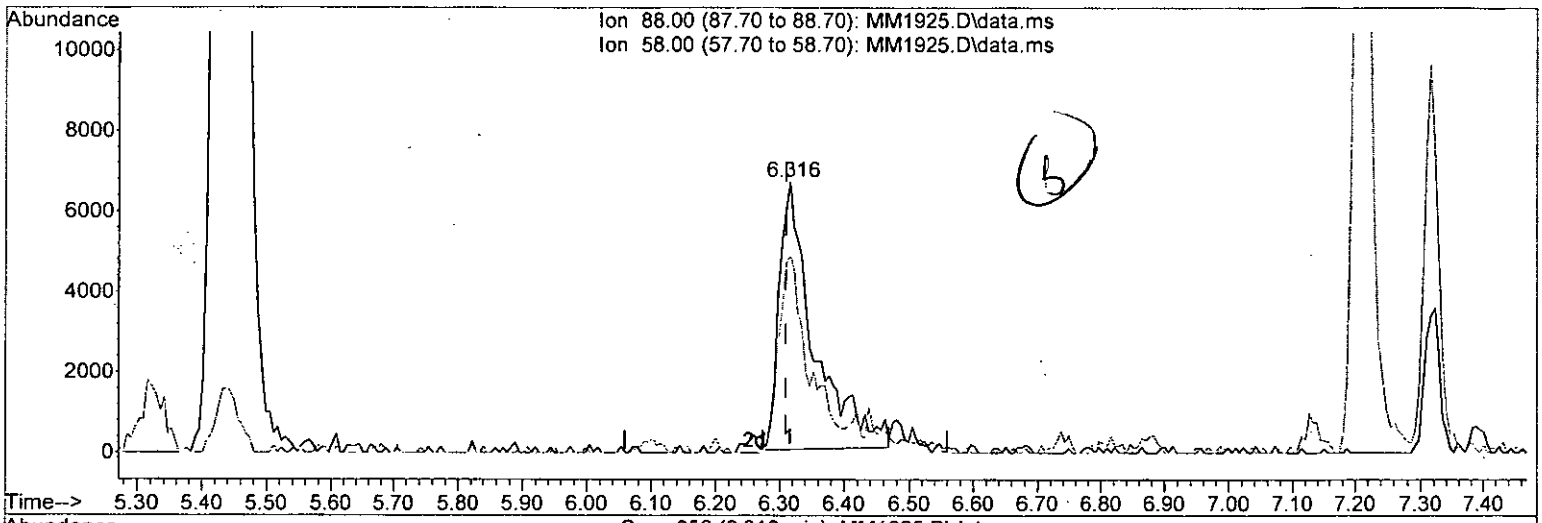
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
104) p-Isopropyltoluene	10.736	119	730309	21.56	ppb	98
105) 1,3-Dclbenz	10.693	146	406841	20.40	ppb	97
106) 1,4-Dclbenz	10.766	146	424152	20.34	ppb	98
109) n-Butylbenzene	11.065	91	625367	20.87	ppb	99
110) 1,2-Dclbenz	11.065	146	388038	20.68	ppb	95
111) 1,2-Dibromo-3-chloropr...	11.620	157	27065	20.85	ppb	98
115) 1,2,4-Tcbenzene	12.156	180	245177	22.32	ppb	99
116) Hexachlorobt	12.266	225	94623	21.79	ppb	99
117) Naphthalen	12.296	128	472951	22.66	ppb	99
118) 1,2,3-Tclbenzene	12.437	180	206663	22.12	ppb	97
119) 2,4,5-Trichlorotolene	12.912	159	1956	0.31	ppb	92
120) 2,3,6-Trichlorotoluene	12.912	159	1956	0.34	ppb	89

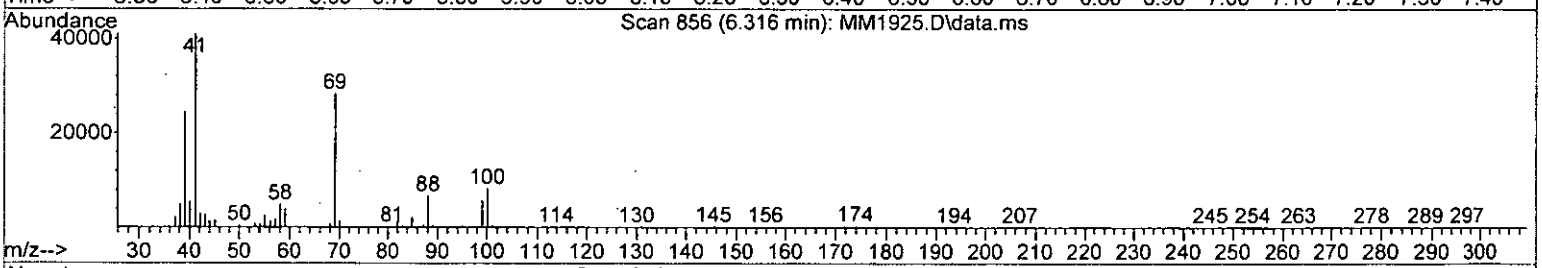
(#) = qualifier out of range (m) = manual integration (+) = signals summed

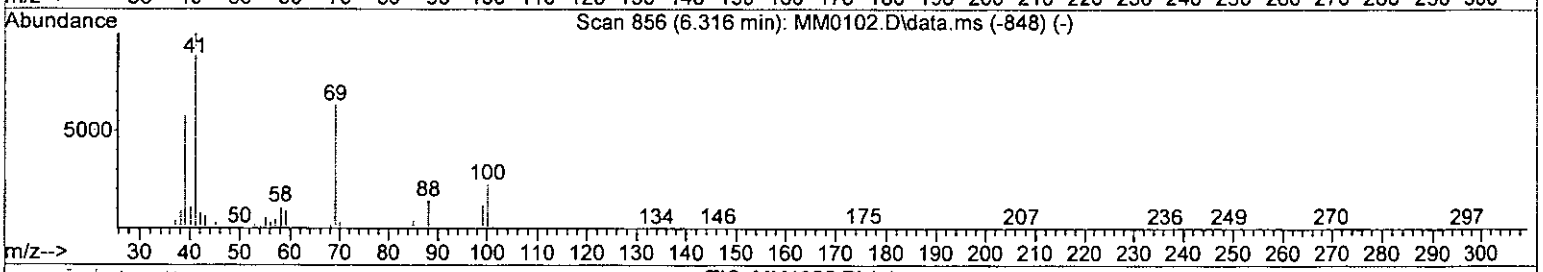
Quantitation Report (Qedit)

Sample : LCSD
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1925.D
Misc :
Acq On : 31 Dec 2014 1:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 02:12:01 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1925.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.006) 350.55 ppb

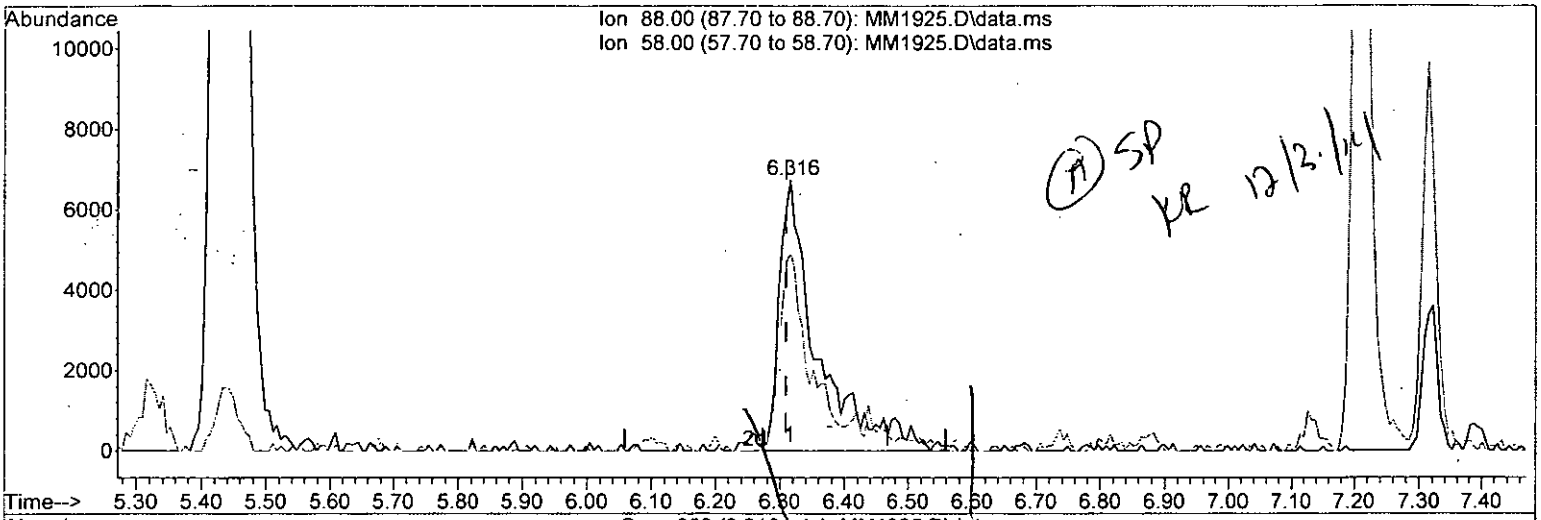
response 24972

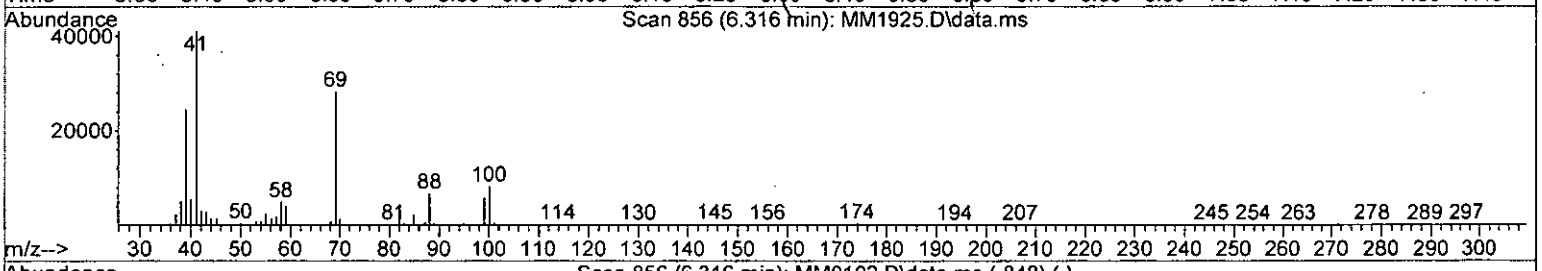
Ion	Exp%	Act%
88.00	100	100
58.00	77.40	72.70
0.00	0.00	0.00
0.00	0.00	0.00

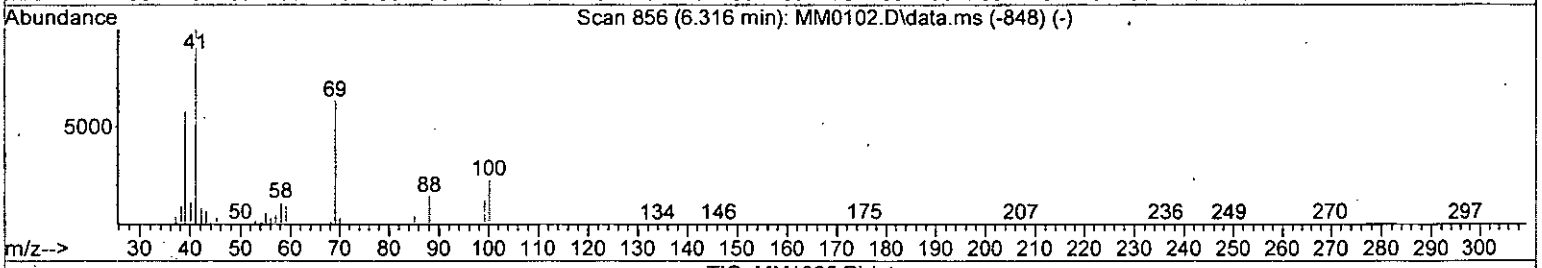
Quantitation Report (Qedit)

Sample : LCSD
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1925.D
Misc :
Acq On : 31 Dec 2014 1:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 02:12:01 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1925.D\data.ms

(58) 1,4-Dioxane

6.316min (+0.006) 392.83 ppb m

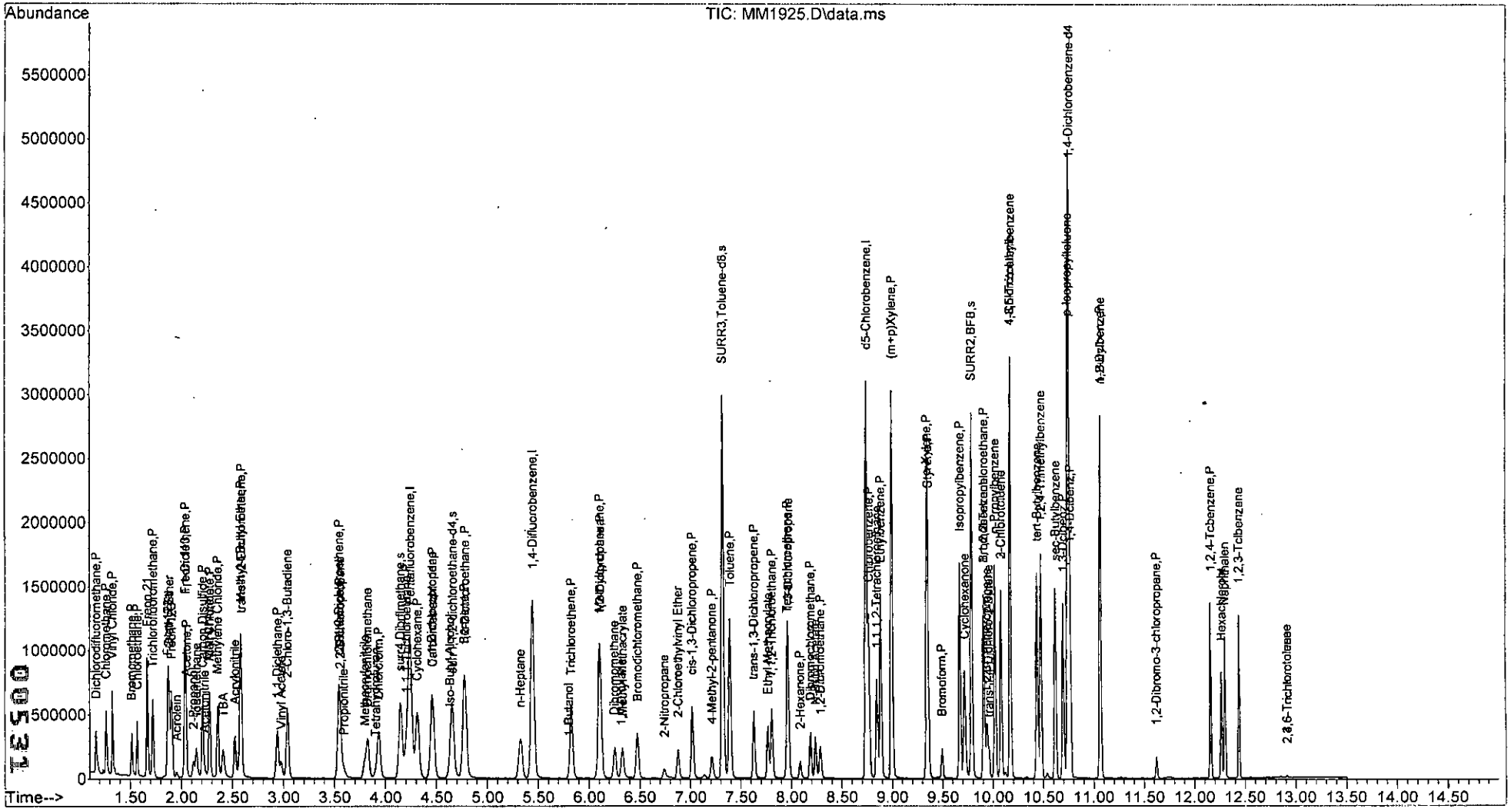
response 27984

Ion	Exp%	Act%
88.00	100	100
58.00	77.40	72.70
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Sample : LCSD
Data File: I:\ACQUDATA\MSVOA12\DATA\123014\MM1925.D
Misc :
Acq On : 31 Dec 2014 1:57 am
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 31 02:12:01 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



W102714.M Wed Dec 31 02:12:07 2014 Page: 4

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1458
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 22:45
Sample Name:	FTMM-2-GW-M2MW11-31.91	**Units:**	µg/L
Lab Code:	RQ1416037-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1919.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**51.3**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**48.0**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**48.2**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**48.7**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**48.7**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**50.0**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**47.6**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**48.2**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**45.8**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**51.0**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**50.3**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**48.0**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**50.7**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**50.5**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**46.0**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**48.4**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**51.0**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**49.5**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**50.1**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**49.3**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**40.9**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**45.7**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**49.6**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**41.4**		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	**735**		100	20	11	
106-43-4	4-Chlorotoluene	**50.0**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**53.4**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**42.6**		5.0	1.0	0.67	
67-64-1	Acetone	**42.4**		5.0	5.0	1.3	
71-43-2	Benzene	**49.7**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**49.2**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**49.7**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**46.3**		5.0	1.0	0.32	
75-25-2	Bromoform	**41.0**		5.0	1.0	0.42	
74-83-9	Bromomethane	**25.5**		5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1458
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 22:45
Sample Name:	FTMM-2-GW-M2MW11-31.91	**Units:**	µg/L
Lab Code:	RQ1416037-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1919.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**43.5**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**50.7**		5.0	1.0	0.29	
75-00-3	Chloroethane	**57.1**		5.0	1.0	0.24	
67-66-3	Chloroform	**48.1**		5.0	1.0	0.25	
74-87-3	Chloromethane	**65.6**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**45.6**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**64.4**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**50.1**		5.0	1.0	0.60	
100-41-4	Ethylbenzene	**47.3**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**49.3**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**51.0**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**46.5**		5.0	1.0	0.29	
91-20-3	Naphthalene	**50.8**		5.0	1.0	0.20	
100-42-5	Styrene	**51.2**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**52.8**		5.0	1.0	0.30	
108-88-3	Toluene	**50.1**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**50.6**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**48.7**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**61.5**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**51.1**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**41.4**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**106**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**52.3**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**51.1**		5.0	1.0	0.20	
95-47-6	o-Xylene	**51.8**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**51.3**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**51.6**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**51.7**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**41.1**		5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1458
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 22:45
Sample Name:	FTMM-2-GW-M2MW11-31.91	**Units:**	µg/L
Lab Code:	RQ1416037-05	**Basis:**	NA
Run Type:	Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1919.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	12/30/14 22:45	
Dibromofluoromethane	102	85-115	12/30/14 22:45	
Toluene-d8	101	85-120	12/30/14 22:45	

Quantitation Report (Not Reviewed)

Sample : R1410307-011MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\123014\MM1919.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 10:45 pm
Operator : K.Ruest
InstName : MSVOA-12 RQM16037-05

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 23:00:06 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	896761	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1371105	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1282655	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	764682	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.145	113	408829	51.20	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.40%				
48) surr1,1,2-dichloroetha...	4.658	65	453673	46.66	ppb		0.00
Spiked Amount 50.000	Range 78 - 122		Recovery = 93.32%				
65) SURR3,Toluene-d8	7.316	98	1703239	50.67	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.34%				
70) SURR2,BFB	9.785	95	641235	49.16	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.32%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	546309	64.39	ppb		99
3) Chloromethane	1.262	50	758406	65.55	ppb		98
4) Vinyl Chloride	1.323	62	755997	61.52	ppb		99
5) Bromomethane	1.512	94	151646	25.52	ppb		97
6) Chloroethane	1.567	64	437364	57.13	ppb		97
7) Freon 21	1.664	67	1220839	63.87	ppb		98
8) Trichlorofluoromethane	1.719	101	711326	48.68	ppb		97
9) Diethyl Ether	1.878	59	330733	49.71	ppb		97
10) Freon 123a	1.865	67	583093	55.13	ppb		98
11) Freon 123	1.902	83	620596	55.62	ppb		98
12) Acrolein	1.951	56	57089	152.31	ppb		99
13) 1,1-Diclethene	2.036	96	387246	49.99	ppb		96
14) Freon 113	2.036	101	403659	50.88	ppb		94
15) Acetone	2.042	43	80594	42.44	ppb		95
16) 2-Propanol	2.109	45	293561	779.31	ppb		92
17) Iodomethane	2.146	142	373795	33.43	ppb		98
18) Carbon Disulfide	2.207	76	832211	31.96	ppb		99
19) Acetonitrile	2.219	40	68395	226.51	ppb		95
20) Allyl Chloride	2.274	76	153365	34.94	ppb		96
21) Methyl Acetate	2.274	43	182223	41.57	ppb		99
22) Methylene Chloride	2.353	84	422523	50.06	ppb		98
23) TBA	2.402	59	457970	734.52	ppb		90
24) Acrylonitrile	2.524	53	472663	231.65	ppb		98
25) Methyl-t-Butyl Ether	2.579	73	1010741	46.54	ppb		100
26) trans-1,2-Dichloroethene	2.579	96	432909	51.71	ppb		99
28) 1,1-Diclethane	2.938	63	753179	48.68	ppb		100
29) Vinyl Acetate	2.975	86	58818	41.95	ppb	#	92
30) DIPE	3.012	45	1365271	43.90	ppb		99
31) 2-Chloro-1,3-Butadiene	3.036	53	761379	53.23	ppb		98
32) ETBE	3.396	59	1131042	41.89	ppb		97
33) 2,2-Dichloropropane	3.554	77	560815	40.85	ppb		98
34) cis-1,2-Dichloroethene	3.542	96	464087	51.14	ppb		93
35) 2-Butanone	3.542	43	123643	45.71	ppb		90
36) Propionitrile	3.591	54	177554	223.10	ppb		96
37) Bromochloromethane	3.822	130	254986	49.66	ppb		97

KL 1/2/15 (KL)

Quantitation Report (Not Reviewed)

Sample : R1410307-011MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\123014\MM1919.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 10:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 23:00:06 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Methacrylonitrile	3.792	67	108912	45.99	ppb		91
39) Tetrahydrofuran	3.902	42	76919	42.24	ppb		84
40) Chloroform	3.932	83	748310	48.05	ppb		98
41) 1,1,1-Trichloroethane	4.206	97	670235	47.98	ppb		99
42) TAME	5.017	73	947434	41.94	ppb		98
44) Cyclohexane	4.310	41	485534	47.83	ppb		98
46) Carbontetrachloride	4.463	121	155684	43.49	ppb		99
47) 1,1-Dichloropropene	4.456	75	570060	47.59	ppb		99
49) Benzene	4.779	78	1744081	49.66	ppb		98
50) 1,2-Dichloroethane	4.779	62	543810	45.96	ppb		99
51) Iso-Butyl Alcohol	4.633	43	209811	754.72	ppb		95
52) n-Heptane	5.322	43	451365	39.74	ppb		93
53) 1-Butanol	5.767	56	298840	1742.52	ppb		89
54) Trichloroethene	5.822	130	464095	50.56	ppb		96
55) Methylcyclohexane	6.102	55	560351	47.56	ppb		91
56) 1,2-Diclpropane	6.109	63	444972	48.36	ppb		98
57) Dibromomethane	6.249	93	210470	48.36	ppb		97
58) 1,4-Dioxane	6.310	88	~~46931~~ (D)	~~677.63~~	ppb	814.56	88
59) Methyl Methacrylate	6.328	69	195779	46.11	ppb		94
60) Bromodichloromethane	6.474	83	504889	46.32	ppb		97
61) 2-Nitropropane	6.743	41	106903	73.70	ppb		99
63) cis-1,3-Dichloropropene	7.017	75	562006	41.39	ppb		98
64) 4-Methyl-2-pentanone	7.212	43	266829	42.60	ppb		99
66) Toluene	7.389	91	1897469	50.11	ppb		99
67) trans-1,3-Dichloropropene	7.627	75	476022	41.12	ppb		98
68) Ethyl Methacrylate	7.767	69	404308	44.89	ppb		94
69) 1,1,2-Trichloroethane	7.803	97	310728	48.69	ppb		98
72) Tetrachloroethene	7.962	164	389714	52.80	ppb		99
73) 2-Hexanone	8.084	43	178723	41.39	ppb		97
74) 1,3-Dichloropropane	7.968	76	575964	50.05	ppb		92
75) Dibromochloromethane	8.187	129	314857	45.63	ppb		97
76) N-Butyl Acetate	8.236	43	441934	39.64	ppb		97
77) 1,2-Dibromoethane	8.285	107	305009	50.65	ppb		99
78) Chlorobenzene	8.767	112	1259827	50.72	ppb		96
79) 3-CBTF	8.779	180	681639	50.10	ppb		97
80) 4-CBTF	8.834	180	613422	50.38	ppb		99
81) 1,1,1,2-Tetrachloroethane	8.846	131	418777	51.28	ppb		98
82) Ethylbenzene	8.882	106	634154	47.33	ppb		97
83) (m+p)Xylene	8.992	106	1725387	106.42	ppb		99
84) o-Xylene	9.340	106	844309	51.80	ppb		99
85) Styrene	9.352	104	1381487	51.24	ppb		98
87) Bromoform	9.492	173	155905	41.03	ppb		98
88) 2-CBTF	9.571	180	657340	48.80	ppb		97
89) Isopropylbenzene	9.669	105	2082141	51.02	ppb		99
90) Cyclohexanone	9.718	55	155079	345.86	ppb		98
91) trans-1,4-Dichloro-2-B...	9.955	53	52498	21.41	ppb		83
92) 1,1,2,2-Tetrachloroethane	9.907	83	383061	48.16	ppb		97
93) Bromobenzene	9.907	156	529139	49.16	ppb		92
94) 1,2,3-Trichloropropane	9.937	110	110436	45.79	ppb	#	90
95) n-Propylbenzene	10.016	91	2417748	51.10	ppb		98
96) 2-Chlorotoluene	10.077	91	1421685	49.60	ppb		99
97) 3-Chlorotoluene	10.132	91	1487762	48.79	ppb		98

Quantitation Report (Not Reviewed)

Sample : R1410307-011MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\123014\MM1919.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 10:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 23:00:06 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

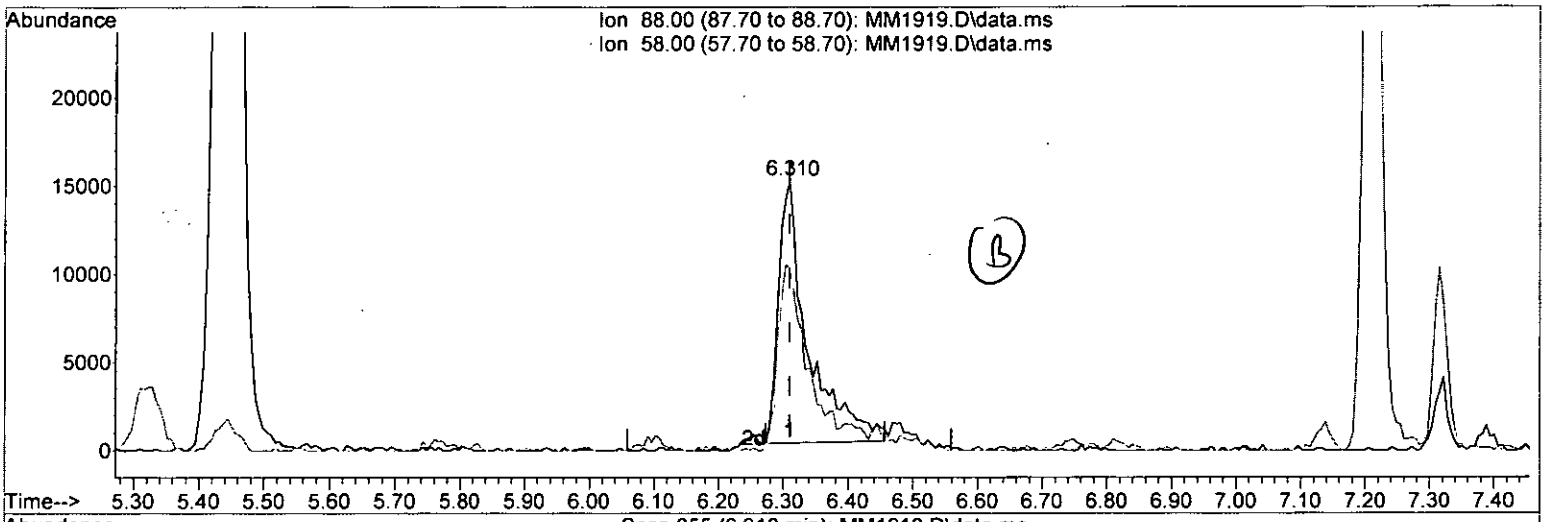
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	4-Chlorotoluene	10.169	91	1795506	49.96	ppb	98
99)	1,3,5-Trimethylbenzene	10.169	105	1803388	50.95	ppb	98
100)	tert-Butylbenzene	10.437	119	1475165	51.60	ppb	100
101)	1,2,4-Trimethylbenzene	10.474	105	1747099	50.33	ppb	100
102)	3,4-DCBTF	10.534	214	472728	46.60	ppb	98
103)	sec-Butylbenzene	10.620	105	2060672	51.26	ppb	99
104)	p-Isopropyltoluene	10.736	119	1864331	53.39	ppb	100
105)	1,3-Dclbenz	10.693	146	1016809	49.46	ppb	99
106)	1,4-Dclbenz	10.766	146	1059564	49.29	ppb	98
107)	2,4-DCBTF	10.821	214	436609	50.19	ppb	98
108)	2,5-DCBTF	10.858	214	490585	49.83	ppb	96
109)	n-Butylbenzene	11.065	91	1616078	52.30	ppb	100
110)	1,2-Dclbenz	11.065	146	977069	50.51	ppb	98
111)	1,2-Dibromo-3-chloropr...	11.626	157	64264	48.01	ppb	90
112)	Trielution Dichlorotol...	11.729	125	2416724	152.37	ppb	97
113)	1,3,5 Trichlorobenzene	11.778	180	656884	49.53	ppb	98
114)	Coelution Dichlorotoluene	11.992	125	1715379	103.28	ppb	95
115)	1,2,4-Tcbenzene	12.156	180	577539	51.00	ppb	99
116)	Hexachlorobt	12.266	225	220615	49.27	ppb	98
117)	Naphthalen	12.296	128	1092849	50.78	ppb	100
118)	1,2,3-Tclbenzene	12.437	180	464085	48.18	ppb	97
119)	2,4,5-Trichlorotolene	12.845	159	308574	47.30	ppb	97
120)	2,3,6-Trichlorotoluene	12.906	159	335241	55.70	ppb	97

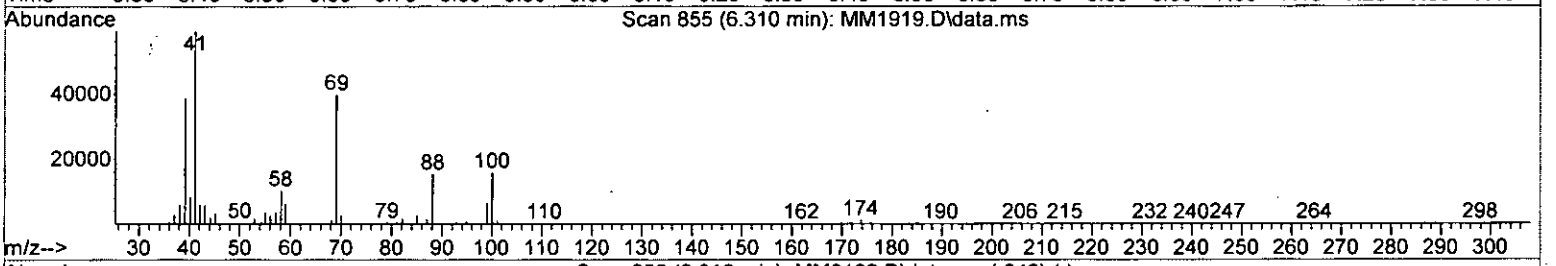
(#) = qualifier out of range (m) = manual integration (+) = signals summed

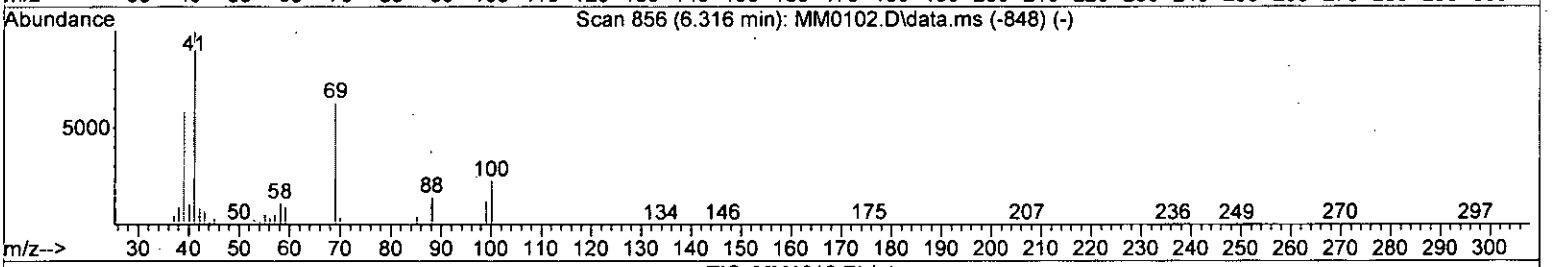
Quantitation Report (Qedit)

Sample : R1410307-011MS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1919.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 10:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 23:00:06 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1919.D\data.ms

(58) 1,4-Dioxane

6.310min (0.000) 677.63 ppb

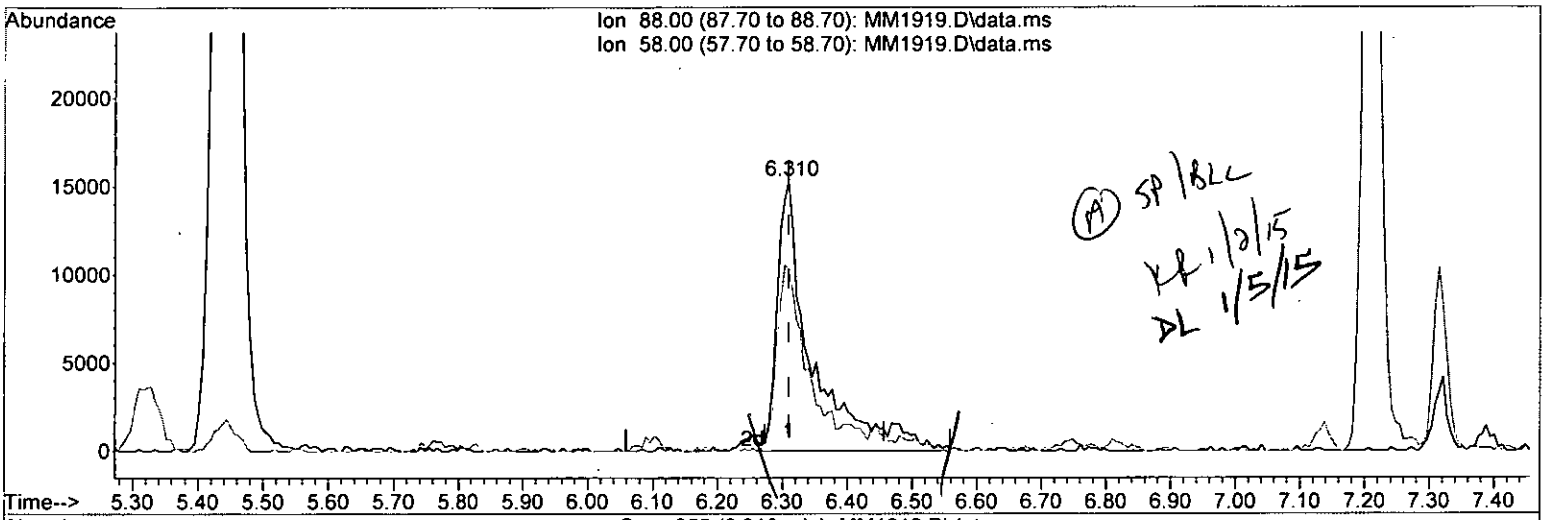
response 46931

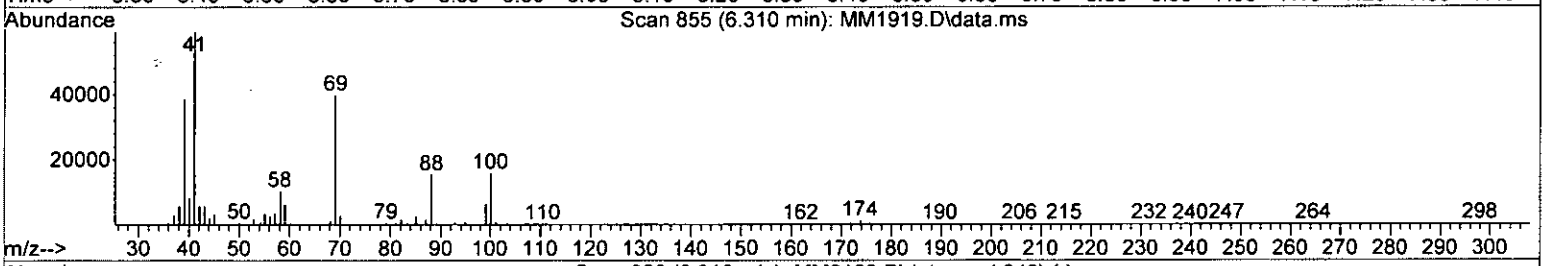
Ion	Exp%	Act%
88.00	100	100
58.00	77.40	66.75
0.00	0.00	0.00
0.00	0.00	0.00

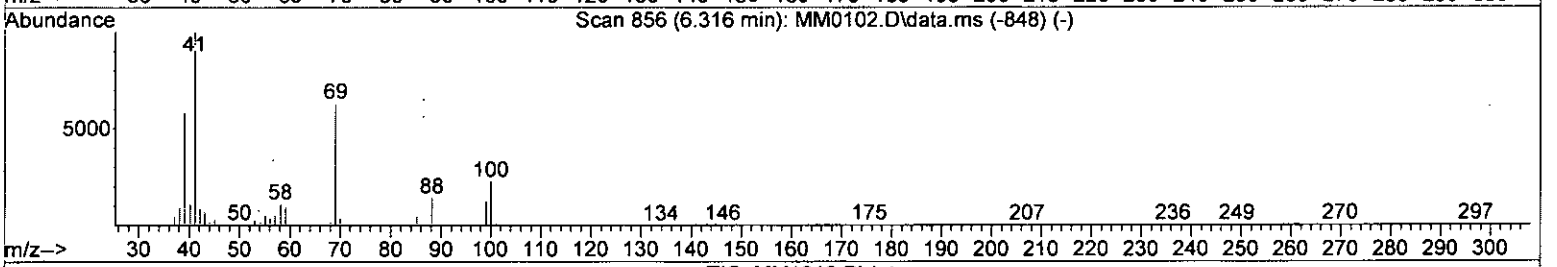
Quantitation Report (Qedit)

Sample : R1410307-011MS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1919.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 10:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 23:00:06 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration







TIC: MM1919.D\data.ms

(58) 1,4-Dioxane

6.310min (0.000) 814.56 ppb m

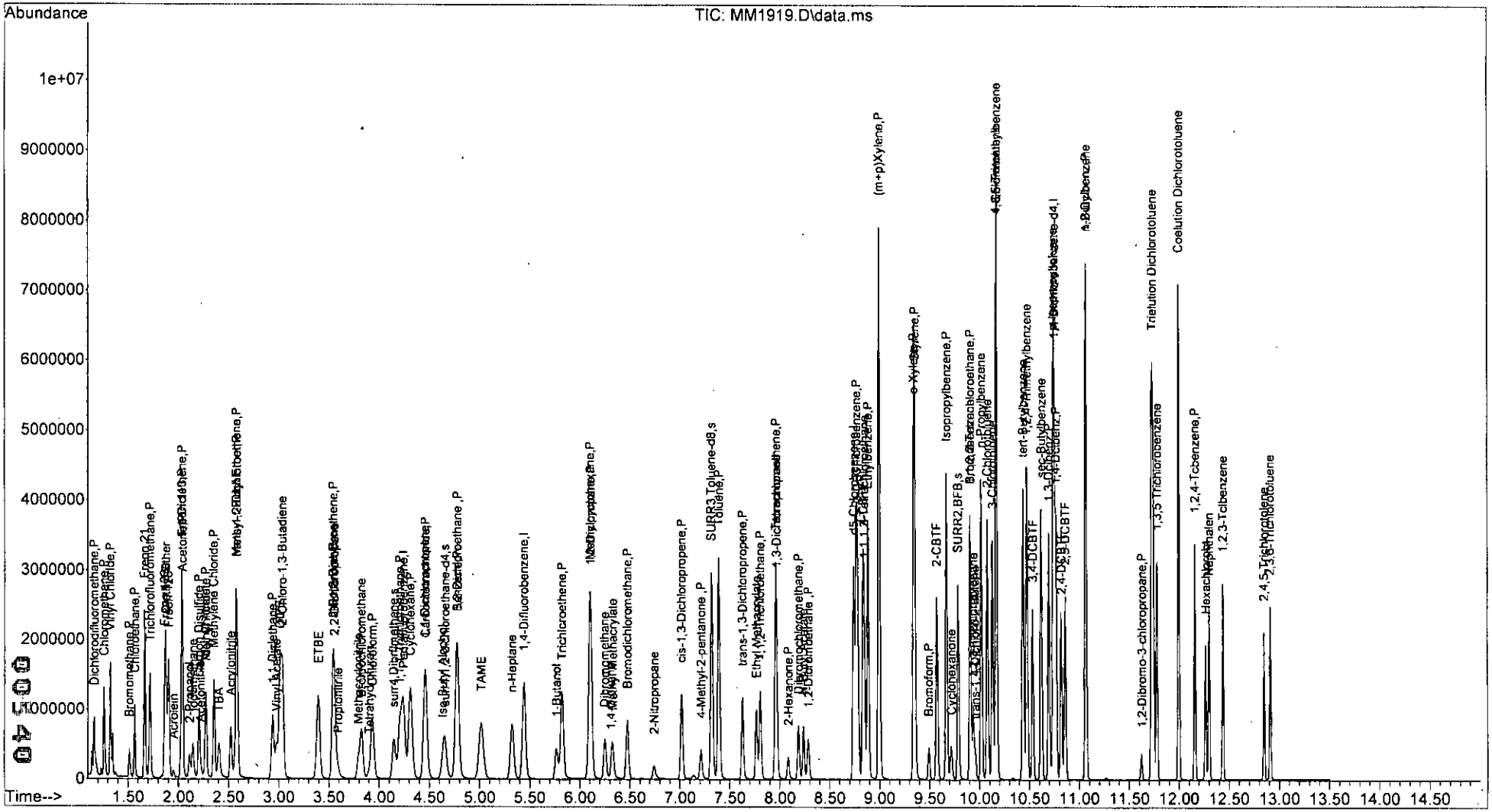
response 56415

Ion	Exp%	Act%
88.00	100	100
58.00	77.40	66.75
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Sample : R1410307-011MS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\123014\MM1919.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 10:45 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 23:00:06 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



W102714.M Tue Dec 30 23:00:13 2014 Page: 4

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1458
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 23:17
Sample Name:	FTMM-2-GW-M2MW11-31.91	**Units:**	µg/L
Lab Code:	RQ1416037-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1920.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
630-20-6	1,1,1,2-Tetrachloroethane	**50.9**		5.0	1.0	0.22	
71-55-6	1,1,1-Trichloroethane (TCA)	**46.3**		5.0	1.0	0.36	
79-34-5	1,1,2,2-Tetrachloroethane	**46.9**		5.0	1.0	0.25	
79-00-5	1,1,2-Trichloroethane	**47.0**		5.0	1.0	0.34	
75-34-3	1,1-Dichloroethane (1,1-DCA)	**46.5**		5.0	1.0	0.20	
75-35-4	1,1-Dichloroethene (1,1-DCE)	**48.8**		5.0	1.0	0.57	
563-58-6	1,1-Dichloropropene	**46.3**		5.0	1.0	0.29	
87-61-6	1,2,3-Trichlorobenzene	**49.4**		5.0	1.0	0.82	
96-18-4	1,2,3-Trichloropropane	**44.8**		5.0	1.0	0.70	
120-82-1	1,2,4-Trichlorobenzene	**51.9**		5.0	1.0	0.23	
95-63-6	1,2,4-Trimethylbenzene	**49.9**		5.0	1.0	0.20	
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	**45.9**		5.0	1.0	0.74	
106-93-4	1,2-Dibromoethane	**48.8**		5.0	1.0	0.24	
95-50-1	1,2-Dichlorobenzene	**49.3**		5.0	1.0	0.21	
107-06-2	1,2-Dichloroethane	**45.0**		5.0	1.0	0.36	
78-87-5	1,2-Dichloropropane	**47.5**		5.0	1.0	0.20	
108-67-8	1,3,5-Trimethylbenzene	**49.8**		5.0	1.0	0.20	
541-73-1	1,3-Dichlorobenzene	**48.9**		5.0	1.0	0.20	
142-28-9	1,3-Dichloropropane	**48.8**		5.0	1.0	0.27	
106-46-7	1,4-Dichlorobenzene	**48.1**		5.0	1.0	0.20	
594-20-7	2,2-Dichloropropane	**39.4**		5.0	1.0	0.27	
78-93-3	2-Butanone (MEK)	**43.5**		5.0	1.0	0.81	
95-49-8	2-Chlorotoluene	**48.8**		5.0	1.0	0.20	
591-78-6	2-Hexanone	**40.8**		5.0	5.0	1.7	
75-65-0	tert-Butyl Alcohol	**746**		100	20	11	
106-43-4	4-Chlorotoluene	**49.1**		5.0	1.0	0.24	
99-87-6	p-Isopropyltoluene	**52.3**		5.0	1.0	0.20	
108-10-1	4-Methyl-2-pentanone	**41.7**		5.0	1.0	0.67	
67-64-1	Acetone	**43.3**		5.0	5.0	1.3	
71-43-2	Benzene	**48.2**		5.0	1.0	0.20	
108-86-1	Bromobenzene	**48.7**		5.0	1.0	0.28	
74-97-5	Bromochloromethane	**47.5**		5.0	1.0	0.32	
75-27-4	Bromodichloromethane	**44.9**		5.0	1.0	0.32	
75-25-2	Bromoform	**40.3**		5.0	1.0	0.42	
74-83-9	Bromomethane	**38.1**		5.0	1.0	0.29	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1458
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 23:17
Sample Name:	FTMM-2-GW-M2MW11-31.91	**Units:**	µg/L
Lab Code:	RQ1416037-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1920.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

CAS No.	Analyte Name	Result	Q	LOQ	LOD	MDL	Note
56-23-5	Carbon Tetrachloride	**42.7**		5.0	1.0	0.45	
108-90-7	Chlorobenzene	**50.3**		5.0	1.0	0.29	
75-00-3	Chloroethane	**54.2**		5.0	1.0	0.24	
67-66-3	Chloroform	**46.0**		5.0	1.0	0.25	
74-87-3	Chloromethane	**61.2**		5.0	1.0	0.21	
124-48-1	Dibromochloromethane	**44.3**		5.0	1.0	0.31	
75-71-8	Dichlorodifluoromethane (CFC 12)	**61.3**		5.0	1.0	0.46	
75-09-2	Methylene Chloride	**47.8**		5.0	1.0	0.60	
100-41-4	Ethylbenzene	**46.0**		5.0	1.0	0.20	
87-68-3	Hexachlorobutadiene	**50.6**		5.0	1.0	0.62	
98-82-8	Isopropylbenzene (Cumene)	**50.2**		5.0	1.0	0.20	
1634-04-4	Methyl tert-Butyl Ether	**45.9**		5.0	1.0	0.29	
91-20-3	Naphthalene	**51.5**		5.0	1.0	0.20	
100-42-5	Styrene	**49.6**		5.0	1.0	0.20	
127-18-4	Tetrachloroethene (PCE)	**51.4**		5.0	1.0	0.30	
108-88-3	Toluene	**49.1**		5.0	1.0	0.20	
79-01-6	Trichloroethene (TCE)	**49.5**		5.0	1.0	0.22	
75-69-4	Trichlorofluoromethane (CFC 11)	**47.3**		5.0	1.0	0.20	
75-01-4	Vinyl Chloride	**58.0**		5.0	1.0	0.32	
156-59-2	cis-1,2-Dichloroethene	**48.3**		5.0	1.0	0.30	
10061-01-5	cis-1,3-Dichloropropene	**40.5**		5.0	1.0	0.24	
179601-23-1	m,p-Xylenes	**104**		10	2.0	0.33	
104-51-8	n-Butylbenzene	**51.4**		5.0	1.0	0.21	
103-65-1	n-Propylbenzene	**50.4**		5.0	1.0	0.20	
95-47-6	o-Xylene	**50.2**		5.0	1.0	0.20	
135-98-8	sec-Butylbenzene	**49.9**		5.0	1.0	0.27	
98-06-6	tert-Butylbenzene	**50.6**		5.0	1.0	0.20	
156-60-5	trans-1,2-Dichloroethene	**49.6**		5.0	1.0	0.33	
10061-02-6	trans-1,3-Dichloropropene	**40.0**		5.0	1.0	0.20	

Client:	Parsons Engineering Science	**Service Request:**	R1410307
Project:	FTMM 4Q GW/748810-03000	**Date Collected:**	12/18/14 1458
Sample Matrix:	Water	**Date Received:**	12/20/14
		Date Analyzed:	12/30/14 23:17
Sample Name:	FTMM-2-GW-M2MW11-31.91	**Units:**	µg/L
Lab Code:	RQ1416037-06	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Volatile Organic Compounds by GC/MS

Analytical Method:	8260C	**Analysis Lot:**	427512
Data File Name:	I:\ACQUDATA\MSVOA12\DATA\123014\MM1920.D\	**Instrument Name:**	R-MS-12
		Dilution Factor:	1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	98	75-120	12/30/14 23:17	
Dibromofluoromethane	103	85-115	12/30/14 23:17	
Toluene-d8	102	85-120	12/30/14 23:17	

Quantitation Report (Not Reviewed)

Sample : R1410307-011DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\123014\MM1920.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 11:17 pm
Operator : K.Ruest
InstName : MSVOA-12 RQ1416037-06

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 23:31:54 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Pentafluorobenzene	4.243	168	930499	50.00	ppb		0.00
43) 1,4-Difluorobenzene	5.444	114	1398918	50.00	ppb		0.00
71) d5-Chlorobenzene	8.742	117	1310767	50.00	ppb		0.00
86) 1,4-Dichlorobenzene-d4	10.748	152	775607	50.00	ppb		0.00
System Monitoring Compounds							
45) surr4,Dibrflmethane	4.145	113	418177	51.33	ppb		0.00
Spiked Amount 50.000	Range 89 - 119		Recovery = 102.66%				
48) surr1,1,2-dichloroetha...	4.651	65	466446	47.02	ppb		-0.01
Spiked Amount 50.000	Range 78 - 122		Recovery = 94.04%				
65) SURR3,Toluene-d8	7.316	98	1741207	50.77	ppb		0.00
Spiked Amount 50.000	Range 87 - 121		Recovery = 101.54%				
70) SURR2,BFB	9.785	95	655173	49.23	ppb		0.00
Spiked Amount 50.000	Range 85 - 122		Recovery = 98.46%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.164	85	540024	61.34	ppb		98
3) Chloromethane	1.262	50	735033	61.22	ppb		100
4) Vinyl Chloride	1.323	62	739647	58.01	ppb		99
5) Bromomethane	1.512	94	235010	38.12	ppb		99
6) Chloroethane	1.567	64	430213	54.16	ppb		99
7) Freon 21	1.664	67	1238634	62.45	ppb		97
8) Trichlorofluoromethane	1.719	101	717565	47.33	ppb		99
9) Diethyl Ether	1.878	59	325193	47.11	ppb		98
10) Freon 123a	1.865	67	594991	54.22	ppb		97
11) Freon 123	1.902	83	638337	55.14	ppb		98
12) Acrolein	1.951	56	59672	153.43	ppb		100
13) 1,1-Diclethene	2.036	96	392155	48.78	ppb		94
14) Freon 113	2.036	101	398143	48.36	ppb		97
15) Acetone	2.042	43	85309	43.29	ppb		98
16) 2-Propanol	2.115	45	326028	834.11	ppb		95
17) Iodomethane	2.146	142	533420	45.97	ppb		98
18) Carbon Disulfide	2.207	76	836019	30.94	ppb		99
19) Acetonitrile	2.225	40	67707	216.10	ppb		97
20) Allyl Chloride	2.274	76	152125	33.40	ppb	#	88
21) Methyl Acetate	2.274	43	185458	40.77	ppb		96
22) Methylene Chloride	2.353	84	418566	47.79	ppb		98
23) TBA	2.408	59	482856	746.36	ppb		92
24) Acrylonitrile	2.524	53	471580	222.74	ppb		100
25) Methyl-t-Butyl Ether	2.579	73	1034862	45.92	ppb		100
26) trans-1,2-Dichloroethene	2.585	96	431152	49.63	ppb		94
28) 1,1-Diclethane	2.938	63	746221	46.49	ppb		99
29) Vinyl Acetate	2.975	86	64109	44.07	ppb	#	76
30) DIPE	3.012	45	1399203	43.36	ppb		98
31) 2-Chloro-1,3-Butadiene	3.036	53	754238	50.82	ppb		97
32) ETBE	3.396	59	1169063	41.73	ppb		96
33) 2,2-Dichloropropane	3.554	77	560906	39.37	ppb		99
34) cis-1,2-Dichloroethene	3.542	96	454390	48.25	ppb		94
35) 2-Butanone	3.542	43	122098	43.50	ppb		89
36) Propionitrile	3.591	54	169524	205.29	ppb		100
37) Bromochloromethane	3.828	130	252835	47.45	ppb		95

KL 1/2/15

Quantitation Report (Not Reviewed)

Sample : R1410307-011DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\123014\MM1920.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 11:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 23:31:54 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) Methacrylonitrile	3.792	67	111239	45.27 ppb	90
39) Tetrahydrofuran	3.902	42	79613	42.13 ppb	95
40) Chloroform	3.932	83	743861	46.03 ppb	99
41) 1,1,1-Trichloroethane	4.206	97	671111	46.30 ppb	97
42) TAME	5.017	73	988466	42.17 ppb	97
44) Cyclohexane	4.310	41	506713	48.92 ppb	97
46) Carbontetrachloride	4.469	121	155782	42.65 ppb	90
47) 1,1-Dichloropropene	4.456	75	566331	46.34 ppb	96
49) Benzene	4.779	78	1727838	48.22 ppb	99
50) 1,2-Dichloroethane	4.779	62	543834	45.04 ppb	98
51) Iso-Butyl Alcohol	4.639	43	219356	773.36 ppb	97
52) n-Heptane	5.328	43	463523	39.99 ppb	94
53) 1-Butanol	5.767	56	341142	1949.63 ppb	94
54) Trichloroethene	5.822	130	463816	49.52 ppb	96
55) Methylcyclohexane	6.102	55	579893	48.24 ppb	92
56) 1,2-Diclpropane	6.109	63	445376	47.45 ppb	95
57) Dibromomethane	6.249	93	210239	47.34 ppb	98
58) 1,4-Dioxane	6.310	88	~~42943~~ 53616	~~607.72~~ ppb 9 M.09	97
59) Methyl Methacrylate	6.328	69	196559	45.37 ppb	91
60) Bromodichloromethane	6.474	83	499128	44.89 ppb	96
61) 2-Nitropropane	6.743	41	107002	72.30 ppb	96
63) cis-1,3-Dichloropropene	7.017	75	561232	40.51 ppb	98
64) 4-Methyl-2-pentanone	7.212	43	266325	41.67 ppb	97
66) Toluene	7.389	91	1896142	49.08 ppb	100
67) trans-1,3-Dichloropropene	7.627	75	471794	39.95 ppb	100
68) Ethyl Methacrylate	7.767	69	410822	44.71 ppb	97
69) 1,1,2-Trichloroethane	7.803	97	305820	46.97 ppb	99
72) Tetrachloroethene	7.962	164	387476	51.37 ppb	99
73) 2-Hexanone	8.084	43	180122	40.81 ppb	97
74) 1,3-Dichloropropane	7.968	76	573854	48.80 ppb	92
75) Dibromochloromethane	8.187	129	312361	44.30 ppb	98
76) N-Butyl Acetate	8.236	43	451949	39.66 ppb	98
77) 1,2-Dibromoethane	8.285	107	300251	48.79 ppb	99
78) Chlorobenzene	8.767	112	1275729	50.26 ppb	95
79) 3-CBTF	8.779	180	678075	48.76 ppb	96
80) 4-CBTF	8.834	180	623832	50.14 ppb	99
81) 1,1,1,2-Tetrachloroethane	8.846	131	424964	50.92 ppb	98
82) Ethylbenzene	8.882	106	629175	45.95 ppb	97
83) (m+p)Xylene	8.992	106	1716984	103.63 ppb	98
84) o-Xylene	9.340	106	835665	50.17 ppb	100
85) Styrene	9.352	104	1366217	49.58 ppb	99
87) Bromoform	9.492	173	155477	40.34 ppb	99
88) 2-CBTF	9.577	180	660708	48.36 ppb	97
89) Isopropylbenzene	9.669	105	2076667	50.17 ppb	100
90) Cyclohexanone	9.718	55	160506	352.92 ppb	98
91) trans-1,4-Dichloro-2-B...	9.955	53	54357	21.85 ppb	81
92) 1,1,2,2-Tetrachloroethane	9.907	83	378222	46.89 ppb	97
93) Bromobenzene	9.907	156	531911	48.72 ppb	93
94) 1,2,3-Trichloropropane	9.937	110	109681	44.83 ppb	93
95) n-Propylbenzene	10.016	91	2417722	50.38 ppb	97
96) 2-Chlorotoluene	10.077	91	1419887	48.84 ppb	99
97) 3-Chlorotoluene	10.132	91	1468513	47.48 ppb	98

Quantitation Report (Not Reviewed)

Sample : R1410307-011DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\123014\MM1920.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 11:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 23:31:54 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration

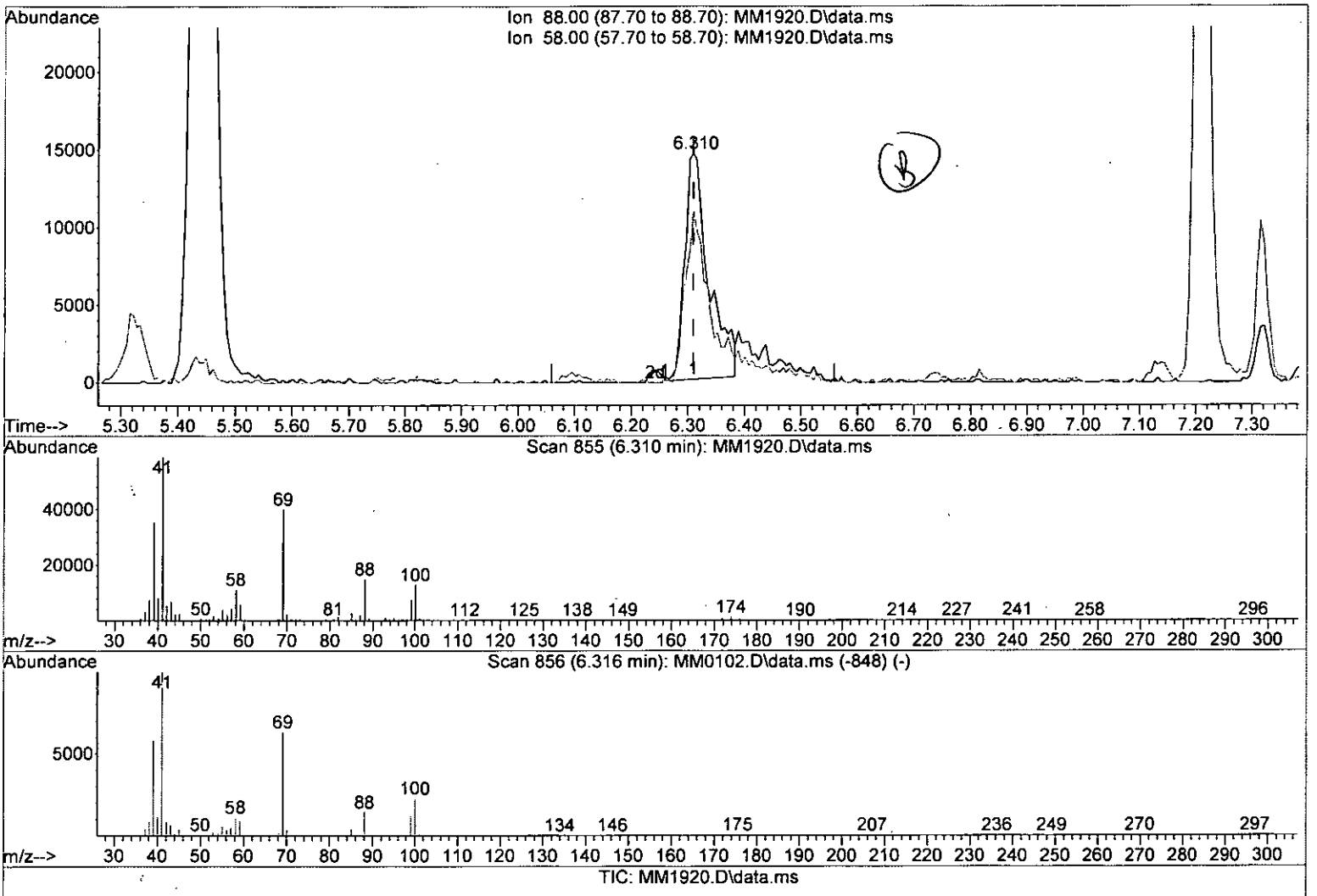
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	4-Chlorotoluene	10.169	91	1790495	49.12	ppb	98
99)	1,3,5-Trimethylbenzene	10.169	105	1786363	49.76	ppb	98
100)	tert-Butylbenzene	10.437	119	1467751	50.62	ppb	100
101)	1,2,4-Trimethylbenzene	10.474	105	1756557	49.89	ppb	99
102)	3,4-DCBTF	10.534	214	477167	46.37	ppb	98
103)	sec-Butylbenzene	10.620	105	2035138	49.92	ppb	100
104)	p-Isopropyltoluene	10.736	119	1852525	52.30	ppb	100
105)	1,3-Dclbenz	10.693	146	1019614	48.90	ppb	99
106)	1,4-Dclbenz	10.766	146	1048440	48.08	ppb	99
107)	2,4-DCBTF	10.821	214	429149	48.64	ppb	98
108)	2,5-DCBTF	10.858	214	484672	48.53	ppb	99
109)	n-Butylbenzene	11.065	91	1611618	51.42	ppb	99
110)	1,2-Dclbenz	11.065	146	966731	49.27	ppb	97
111)	1,2-Dibromo-3-chloropr...	11.626	157	62344	45.92	ppb	90
112)	Trielution Dichlorotol...	11.729	125	2407655	149.66	ppb	97
113)	1,3,5 Trichlorobenzene	11.778	180	664031	49.36	ppb	98
114)	Coelution Dichlorotoluene	11.992	125	1719363	102.06	ppb	94
115)	1,2,4-Tcbenzene	12.156	180	595602	51.85	ppb	99
116)	Hexachlorobt	12.266	225	229605	50.56	ppb	98
117)	Naphthalen	12.296	128	1123123	51.45	ppb	99
118)	1,2,3-Tclbenzene	12.437	180	482189	49.36	ppb	98
119)	2,4,5-Trichlorotolene	12.851	159	343819	51.96	ppb	99
120)	2,3,6-Trichlorotoluene	12.912	159	370008	60.61	ppb	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Qedit)

Sample : R1410307-011DMS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1920.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 11:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 23:31:54 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



TIC: MM1920.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 607.72 ppb

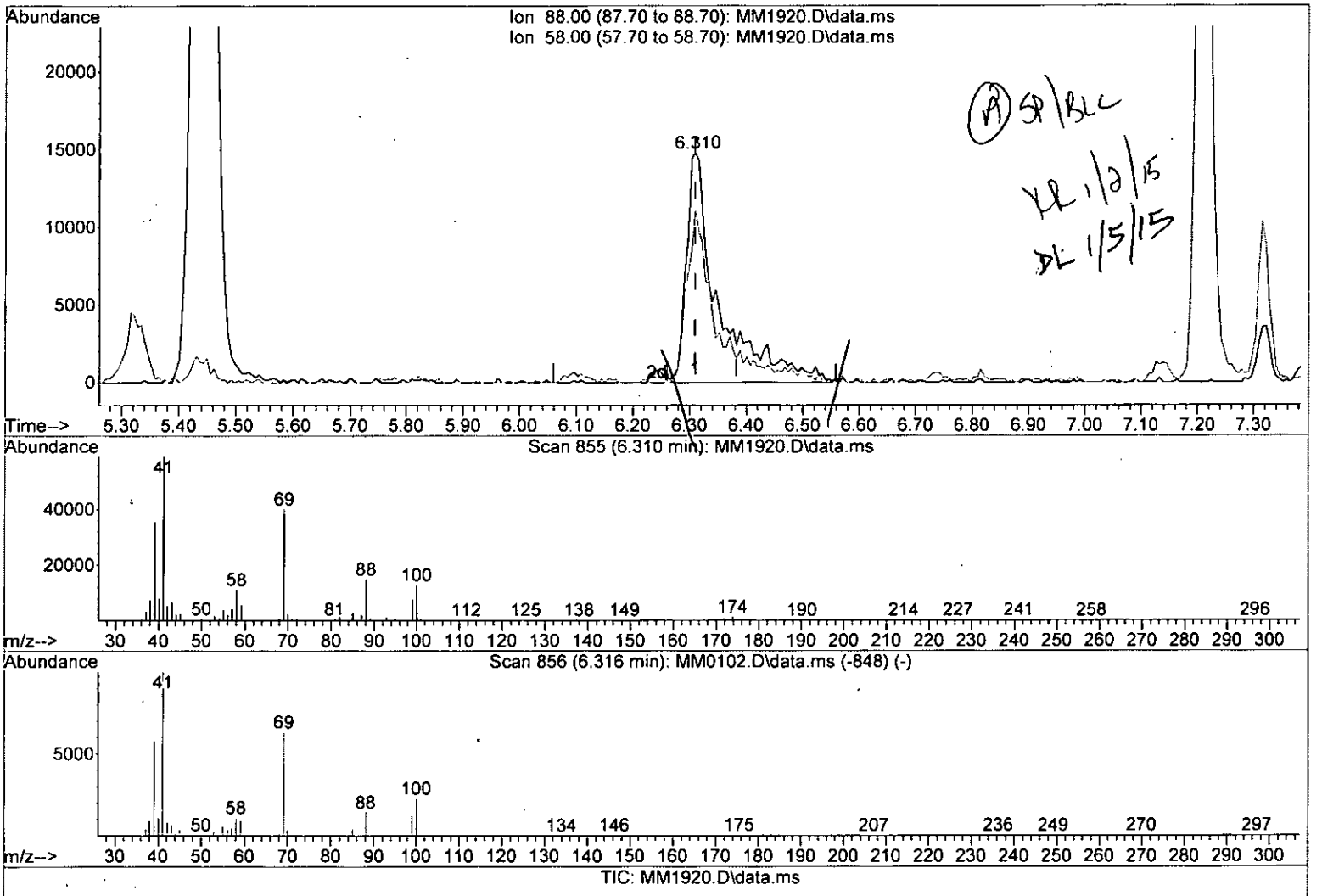
response 42943

Ion	Exp%	Act%
88.00	100	100
58.00	77.40	74.86
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Sample : R1410307-011DMS|1.0
Data File: I:\ACQUDATA\msvoa12\Data\123014\MM1920.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 11:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 23:31:54 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



TIC: MM1920.D\data.ms

(58) 1,4-Dioxane

6.310min (-0.000) 814.09 ppb m

response 57526

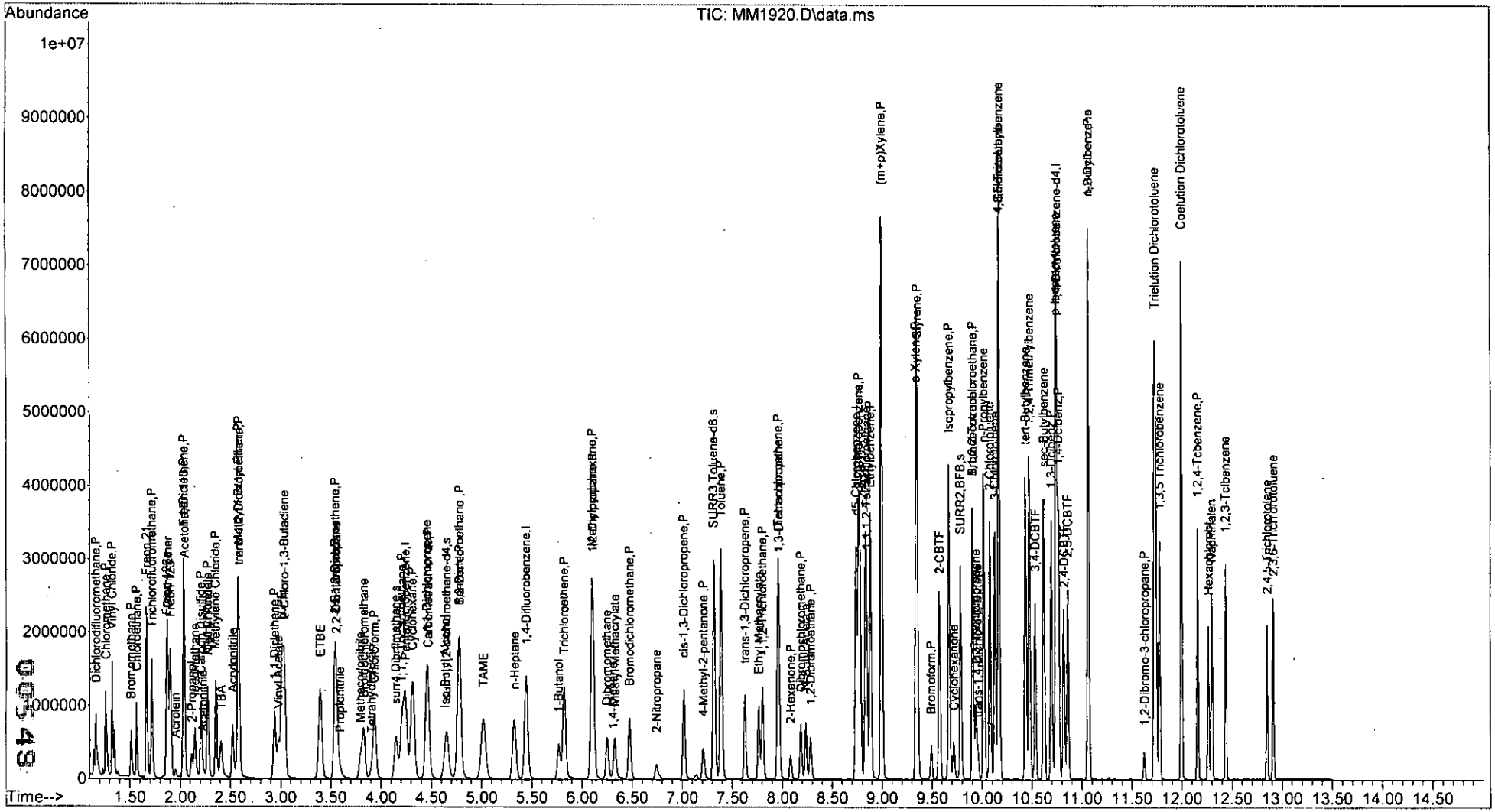
Ion	Exp%	Act%
88.00	100	100
58.00	77.40	74.86
0.00	0.00	0.00
0.00	0.00	0.00

SP/BLC
1/2/15
1/5/15

Quantitation Report (Not Reviewed)

Sample : R1410307-011DMS|1.0
Data File: I:\ACQUDATA\MSVOA12\DATA\123014\MM1920.D
Misc : PARSONS 11603 T4
Acq On : 30 Dec 2014 11:17 pm
Operator : K.Ruest
InstName : MSVOA-12

Quant Method : I:\ACQUDATA\MSVOA12\METHODS\W102714.M
Quant Title : MS#12 - 8260B WATERS 10mL Purge
Quant Time: Dec 30 23:31:54 2014
QLast Update : Tue Oct 28 10:54:16 2014
Response via : Initial Calibration



W102714.M Tue Dec 30 23:32:01 2014 Page: 4

Analysis: 8260 Waters | Analyst: KHurst | Tune Method: W102714

Date: 10/27/14 | Data Path: j:\acqudata\msvoa \ | Run Method: ↓

Instr. 12 | (source cleaned / new trap 10/25/14) | LIMS Run#: — ICAL —

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								MM0085		
2	↓								MM0086		
3	TUNE (Carbon 13/Sul)								MM0087	YT	(auto)
4	CCV								MM0088	(N)	↑ - Acrolein very ↓
5	BLK								MM0089	—	
6	↓								MM0090	—	
7	↑ Acrolein std								MM0091		
8	BLK								MM0092	—	
9	H2S 50 ppb (new std)								MM0093		
1	BLK								MM0094		
2	TUNE (Carbon 13/Sul)								MM0095	YT	(auto) 15:08
3	IBLK	5ppm	500ppm SU500 FV						MM0096	YB	
4	0.5ppb	5ml	— — 50mls						MM0097	Y	
5	1.0	10ml	— —						MM0098	Y	
6	2.0	20ml	— 1ml						MM0099	Y	
7	5.0	50ml	— 2ml						MM0100	Y	
8	20ml	~~7~~	2ml 5ml						MM0101	Y	
9	50ml	—	5ml —						MM0102	Y	
10	100ml	—	10ml 7.5ml						MM0103	Y	
11	150ml	—	15ml 10ml						MM0104	Y	
12	200ml	—	20ml — ↓						MM0105	Y	
13	— BLK								MM0106	—	
14	— BLK								MM0107	—	

All samples = 10 mL + \ uL combined IS/Surr. 10 mL purged

0550

500 ↓

Primary HBO : 76005

Primary OCC : 75766

Primary ~~Fst~~ : 76094 (H2S)

Primary ~~Fst~~ : 76076

Primary 76 : 76057

5ml → 50mls = CCV

Secondary :

Secondary :

Secondary :

Secondary :

Secondary :

Combined IS/Surr SUU : 76004

Surrogate SUU : 75340

Internal Std —

Analysis: 8260 waters | Analyst: K. Ruest | Tune Method: W102714
Date: 10/29/14 | Data Path: j:\acqudata\msvoa12\102814 | Run Method: ↓
Instr: 12 | LIMS Run#:

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	BLK								MM0108		
2	↓								MM0109		
3	TUNE (25ng/ul)								MM0110	YT	(auto) 10:31
4	CCV								MM0111	YC	Acrolein ↓
5	ICV/LCS (50ppb)								MM0112	YD	* Acrolein ↓ (↑)
6	MBLK								MM0113	(N)	ID+4D
7	↓								MM0114		

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

500 Primary OCC : 75766
Primary HBO : 76005
Primary FT : 76056 5ml → 50mls
Primary TO : 76057 = CCV
Primary HSL : 76054

200 Secondary FT : 76047 -12.5ml
500 Secondary OCC : 75268
Secondary HBO : 75265 5ml → 50mls = ICV/LCS
Secondary TO : 75816
Secondary HSL : 76045

Combined IS/Surr 500 : 76064
Surrogate :
Internal Std :

Runlog-MSVOAr2 9/20/13
Page 141

Analysis: 8260D waters | Analyst: K. Drust | Tune Method: W102714
Date: 12/30/14 | Data Path: j:\acqudata\msvoa2\123014 | Run Method: ↓
Instr. 12 | LIMS Run#: 427512

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
1	(CCV Dest-headspace)								MM1896		new trap - no peaks, check install.
~~2~~	~~BFB Tune Evaluation 15/30~~ LCS Dest (headspace)								MM1897		peaks.
2	TUNE		RQ1410037-01						MM1898	YT	(auto) 11:39
3	CCV		02						MM1899	YC	
4	LCS		03						MM1900	YB	
5	MBLK		—						MM1901	Y	rpte/o
6	↓		↓ 04						MM1902	YB	
7	R1410271-014	1.0		[redacted]	106526	3	1	12	MM1903	Y	
8	015	1.0					1	12	MM1904	Y	
9	016	1.0					1	12	MM1905	Y	
10	R1410307-011	1.0		[redacted]	116023	4	1	12	MM1906	Y	
11	R1410233-007	1.0		[redacted]	66413	2	2	12	MM1907	Y	
12	001	1.0					2	12	MM1908	Y	
13	002	1.0					2	12	MM1909	Y	
14	003	1.0					2	12	MM1910	Y	
15	004	1.0					2	12	MM1911	Y	
16	005	1.0					2	12	MM1912	Y	
17	006	1.0					2	12	MM1913	Y	
18	R1410307-001	1.0		[redacted]	116023	4	2	12	MM1914	Y	
19	002	1.0					122	12	MM1915	Y	
20	003	1.0					122	12	MM1916	Y	
21	004	1.0					122	12	MM1917	Y	
22	005	1.0					122	12	MM1918	Y	
23	MS 011	1.0	RQ1410037-05				2	12	MM1919	YQ	
24	MSD 011	1.0	↓ 06				3	12	MM1920	YQ	23:17 ✓
25	BLK							—	MM1921	—	

EOD KR 12/30/14

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

500 Primary Occ : 77316
Primary HBO : 77540
Primary Frt : 77318 5ml → 50mls
Primary HSL : 77558 = CCV
Primary TB : 77102

200 Secondary Frt : 77448 - 5ml
500 Secondary Occ : 77315
Secondary HBO : 77314 2ml
Secondary HSL : 77615
Secondary TB : 77562
50mls = LCS

-10.6ml
4.2ml
40ml vial = MS/D

Combined IS/Surr 500 : 77601
Surrogate :
Internal Std :

Runlog-MSVOAr2 9/20/13

Analysis: 8260 Waters | Analyst: K. Ruark | Tune Method: W10T714
Date: 12/30/14 - Run#2 | Data Path: j:\acqudata\msvoa12\123014 | Run Method: ↓
Instr. 12 | LIMS Run#: 427514

Pos.	Sample	Diln.	Diln. Prep.	Client	RL	Tier	Vial	pH	File#	OK?	Comments
27	DUNS (carbon is low)		LQ1411608S6-01						MM1922	YT	(auto) 00:21
28	CCV		02						1923	YC	
29	LCS		03						1924	YQ	cm↑DOD
30	LCSD		04						1925	YQ	cm↑DOD
31	VBLK		—						1926	N	VBLK/D
32	↓		↓ 05				#		1927	YQ	
33	RM10307-022	1.0		[redacted]	1.0 WB	4	DX	12	1928	Y	
34	006	1.0		(DOD)			2	12	1929	Y	
35	007	1.0					2	12	1930	Y	
36	008	1.0					2	12	1931	Y	
37	009	1.0					2	12	1932	Y	
38	010	1.0					2	12	1933	Y	
39	012	1.0					1	12	1934	Y	
40	013	1.0					1	12	1935	Y	
41	015	1.0					1	12	1936	Y	
42	016	1.0					1	12	1937	Y	
43	017	1.0					1	12	1938	Y	
44	018	1.0					1	12	1939	Y	
45	019	1.0					1	12	1940	Y	
46	020	1.0					1	12	1941	Y	
47	021	1.0					1	12	1942	Y	
48	↓ 014	1.0		↓	↓	↓	1	12	↓ 1943	Y	

EOD
YK 12/31/14

All samples = 10 mL + 1 uL combined IS/Surr. 10 mL purged

500 Primary fr+ : 77378
Primary HSL : 77558 | 5ml → 50mls
↓ Primary TO : 77102 | = CCV
Primary :
Primary :

200 Secondary fr+ : 77448-5ml
500 Secondary HSL : 77645 | 2ml } 50mls
↓ Secondary TO : 77562 | = LCS/D
Secondary :
Secondary :

Combined IS/Surr 500 : 77601
Surrogate :
Internal Std :

Runlog-MSVOAr2 9/20/13

APPENDIX Q

NJDEP CORRESPONDENCE

NJDEP letter dated July 29, 2013

State of New Jersey

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Case Management
401 East State Street
P.O. Box 420/Mail Code 401-05F
Trenton, NJ 08625-0028
Phone #: 609-633-1455
Fax #: 609-633-1439

BOB MARTIN
Commissioner

July 29, 2013

Wanda Green
BRAC Environmental Coordinator
OACSIM – U.S. Army Fort Monmouth
PO Box 148
Oceanport, NJ 07757

Re: Summer 2013 Ground Water Sampling Event – Request to Use OFPS & PDB Methods
Main Post and Charles Wood Area
Fort Monmouth, New Jersey
PI G000000032

Dear Ms. Green:

The New Jersey Department of Environmental Protection (Department) has completed review of the Summer 2013 Comprehensive Groundwater Sampling Event using LFPS & PDB Methods at Fort Monmouth, received on July 25, 2013.

1. The request to use Passive Diffusion Bag (PDB) samplers is acceptable at the following parcels: M5 Landfill, M-14 Landfill, M-18 Landfill, M-22(CW1), M-58(Building 2567), M-59(Building 1122), and M-68 (Building 700).

2. Parcel M-53 (Building 699) is the site of the Main Post gas station. The June 10, 2010 RAPR for this parcel identifies MTBE as a contaminant exceeding the Ground Water Quality Standards. The use of PDB samplers for MTBE is not recommended in the NJ Field Sampling Procedures Manual because lab studies have shown that concentrations of MTBE in the samplers are lower than what is actually in the aquifer. Therefore, the Department cannot approve of the use of PDB samplers for Parcel M-53.

3. A number of the wells proposed for PDB sampler use have screen lengths ranging from 10 to 20 feet. For any well with greater than 5 feet of screen, PDB samplers must be deployed at the midpoint of every 5 feet of saturated well screen. For example, a 10-foot well-screen would have

one PDB sampler set at the midpoint of the upper 5 feet of the screen and one PDB sampler set at the midpoint of the lower 5 feet of the screen.

4. As stated in the letter requesting the use of PDB samplers, the lab results must be compared to the lab results obtained from previous sampling methodology (i.e. Low Flow Purging and Sampling).

5. The proposal for low flow sampling is acceptable assuming adherence to the guidance in the Field Sampling Procedures Manual. Also, the letter indicates low flow has been previously used at the designated wells. Please verify same prior to utilization of the LFPS method for each of the wells.

If you have any questions regarding this matter, please contact this office at (609) 984-6606.

Sincerely,

Linda S. Range
Bureau of Case Management

C: Joe Pearson, Calibre Systems
Rich Harrison, FMERA
Julie Carver, Matrix
Daryl Clark, BGWPA

NJDEP letter dated July 3, 2014

State of New Jersey

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Case Management
401 East State Street
P.O. Box 420/Mail Code 401-05F
Trenton, NJ 08625-0028
Phone #: 609-633-1455
Fax #: 609-633-1439

BOB MARTIN
Commissioner

July 3, 2014

Wanda Green
BRAC Environmental Coordinator
OACSIM – U.S. Army Fort Monmouth
PO Box 148
Oceanport, NJ 07757

Re: Final Baseline Groundwater Sampling Report (August 2013)
Remedial Investigation/Feasibility Study/Decision Documents
Fort Monmouth
Oceanport, Monmouth County
PI G000000032

Dear Ms. Green:

The New Jersey Department of Environmental Protection (Department) has completed review of the referenced report, dated March 2014, received on April 7, 2014. The report was prepared by Parsons Government Services Inc. (Parsons), in support of the Remedial Investigation (RI), Feasibility Study (FS), and Decision Documents project at Fort Monmouth.

A baseline ground water sampling event was conducted at 21 "sites" at the Fort Monmouth property in August 2013. The purpose of the sampling event was to re-establish baseline conditions following suspension of ground water sampling in late 2011, as well as to evaluate Fort Monmouth's long-term ground water sampling program, and the current analytical conditions of the ground water at each site. Sampling methodologies used included low-flow and passive diffusion bag samplers (PDBS). At four sites (FTMM-14, 18, 59, 68), only PDBS sampling was conducted. At three sites (FTMM-05, 22, 58) both low-flow and PDBS samples were obtained for comparison purposes. Fourteen (14) sites were only sampled using low-flow. The report states that PDBS concentrations were consistently biased somewhat low compared to the low-flow concentrations. The report concludes, however, that the PDBS results were still similar to the low-flow results and are considered representative of ground water conditions at the sites. Based on this conclusion, the report states that for future ground water sampling, PDBS will be used for all sites where volatile organic compounds (VOCs) are the sole contaminants of concern. Comments are presented below.

Section 3.1; Table 6; Appendices & associated Tables - *The "background concentrations" submitted in the 1995 Weston report were not accepted by the Department as representative of background conditions for Fort Monmouth. The study was not performed in accordance with Departmental protocol and is not a consideration in our evaluations/determinations. As indicated in Section 3.1, background concentrations are evaluated on a site by site basis.*

FTMM-02 Landfill

Historic sampling at this parcel indicated levels of VOCs above the Ground Water Quality Standard (GWQS); metals were previously determined to be reflective of naturally occurring conditions. The August 2013 sampling of wells using low-flow confirmed the continued exceedance of the GWQS for VOCs. The report recommends VOC sampling of wells M2MW03, M2MW11, M2MW21, M2MW22 and M2MW24 for two additional rounds using PDBS. Well M2MW10 will be monitored as a downgradient sentinel well. Although the proposal is acceptable, for wells in which the saturated screen length exceeds 10 feet, the deployment of multiple PDBS will be required. At any point where a decision is made to terminate ground water sampling at this site, confirmatory sampling using low-flow due to PDBS biasing low as compared to low-flow results at the Fort Monmouth site will be required.

FTMM-03 Landfill

Historic sampling at this parcel revealed GWQS exceedances of vinyl chloride and metals. The August 2013 sampling of wells using low-flow confirmed the continued exceedance of the GWQS for vinyl chloride in well 3MW07. Well 3MW02 was not sampled due to low water column and silty conditions, however, Table 4 of Appendix B recommends sampling of 3MW02 for VOCs and metals. The report attributes the presence of vinyl chloride to leaching of PVC piping from well 3MW07. A temporary well point investigation was conducted in 2009 to delineate the vinyl chloride, the results were non-detect, and abandonment of 3MW07 is recommended. The recommendations are acceptable. However, a figure presenting the locations and sampling results from the 2009 temporary well point investigation must be provided to the Department.

FTMM-04 Landfill

Historic sampling at this parcel revealed GWQS exceedances of various metals. The August 2013 sampling of wells using low-flow confirmed the continued exceedance of the GWQS for metals. The metals are attributed to background conditions, and cessation of ground water sampling is recommended. The recommendation is acceptable. Monitoring wells at this parcel shall be properly abandoned if they are no longer subject to sampling or gaging for water elevation data.

FTMM-05 Landfill

Historic sampling at this parcel revealed GWQS exceedances of PCE, TCE and vinyl chloride, which the August 2013 sampling, using low-flow and PDBS, confirmed. The report recommends annual VOC sampling of wells M5MW11, M5MW16, M5MW20 and M5MW23 using PDBS. The Department finds the proposal to be acceptable. At any point where a decision is made to terminate ground water sampling at this parcel, the Department will require confirmatory sampling using low-flow due to PDBS results at this parcel biased low compared to the low-flow results.

FTMM-08 Landfill

Historic sampling at this parcel revealed GWQS exceedances of pesticides, benzene, PCE and lead. The August 2013 sampling of wells using low-flow confirmed the exceedance of the GWQS for PCE and lead. The well with historic pesticide exceedances (697MW01) could not be located and was not sampled. The report recommends annual ground water sampling of well M8MW11 for VOCs and lead, M8MW12, 15, 16 and 24 for VOCs and M8MW17 and 21 for lead only. Monitoring well 697MW01 will be located and sampled for pesticides, lead and VOCs. The recommendation is acceptable.

FTMM-12 Landfill

Historic sampling at this parcel revealed GWQS exceedances of various metals, including arsenic and lead. Historic exceedances of metals except for lead are attributed to background quality. The August 2013 sampling was conducted for lead analysis only. Lead was not detected. The report recommends discontinuing ground water sampling at this parcel. The Department finds the recommendation to be acceptable. Monitoring wells at this parcel shall be properly abandoned if they are no longer subject to sampling or gaging for water elevation data.

FTMM-14 Landfill

Historic sampling at this parcel revealed no GWQS exceedances of VOCs. The August 2013 sampling of wells using PDBS confirmed that there was no exceedance of the GWQS. The report recommends discontinuing ground water sampling at this parcel. The Department finds the recommendation to be acceptable. Monitoring wells at this parcel shall be properly abandoned if they are no longer subject to sampling or gaging for water elevation data. The Department also notes that on Table 1, well M14MW19 is listed as having 10 feet of total screen length. However, the table also lists the saturated screen length as 13.35 feet. This discrepancy should be clarified.

FTMM-18 Landfill

Historic sampling at this parcel revealed GWQS exceedances of benzene and 1,2-DCA. The August 2013 sampling results of wells using PDBS showed the exceedance of the GWQS for 1,2-DCA in well M18MW22. Well M18MW23 could not be located and was not sampled. The report recommends annual ground water sampling using PDBS for M18MW22 and M18MW23 if it can be located. Every reasonable effort, such as reviewing the NJ State Plane Coordinates of the well, must be made to locate M18MW23. The use of M18MW22 as the sole monitoring well at this parcel will not be acceptable due to the vast difference in historical concentrations between M18MW22 and M18MW23. Historic 2011 benzene concentrations for M18MW23 were 775 ppb and 664 ppb while 2011 concentrations for M18MW22 were 1.81 ppb and 1.65 ppb. The Department cannot approve the use of PDBS sampling only for this parcel. Once M18MW23 is located, the Department can approve the use of both PDBS and low-flow sampling for comparison purposes.

FTMM-22 Former Wastewater Treatment Lime Pit

Historic sampling at this parcel revealed GWQS exceedances of TCE. The August 2013 sampling of wells using low-flow and PDBS confirmed the continued exceedance of the GWQS for TCE in ground water. The report recommends quarterly VOC sampling of wells CW1MW27, CW1MW29, CW1MW31 and CW1MW281 using PDBS. The Department finds the proposal to be acceptable. At any point where a decision is made to terminate ground water sampling at this parcel, the Department will require confirmatory sampling using low-flow due to PDBS results biasing low compared to low-flow results at the Fort Monmouth site.

FTMM-25 Landfill

Historic sampling at this parcel revealed GWQS exceedances of various metals. The August 2013 sampling of wells using low-flow confirmed the continued exceedance of the GWQS for metals. The metals are attributed to background conditions. The report recommends discontinuing ground water sampling at this parcel. The Department finds the recommendation to be acceptable. Monitoring wells at this parcel shall be properly abandoned if they are no longer subject to sampling or gaging for water elevation data.

FTMM-53 Building 699

Historic sampling at this parcel revealed GWQS exceedances of benzene, PCE, TCE, TBA, VOC TICs and lead. The August 2013 sampling of wells using low-flow showed the exceedance of the GWQS for benzene, xylenes, PCE, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene and VOC TICs. The report recommends quarterly VOC sampling of wells 699MW01, 699MW04, 699MW06, 699MW09, 699MW16, 699RW03, 699RW05 and 699RW11 using PDBS. The Department finds the proposal to be acceptable. For wells in which the saturated screen length exceeds 10 feet, the deployment of multiple PDBS will be required. At any point where a

decision is made to terminate ground water sampling at this parcel, the Department will require confirmatory sampling using low-flow due to PDBS biasing low compared to low-flow at the Fort Monmouth site.

FTMM-54 Building 296

Historic sampling at this parcel revealed GWQS exceedances of benzene, lead and arsenic. The metals are attributed to background conditions. The August 2013 sampling of wells using low-flow showed an exceedance of the GWQS for benzene. The report recommends annual VOC sampling of wells 269MW04 and 296MW06 using PDBS. The Department finds the proposal to be acceptable. For wells in which the saturated screen length exceeds 10 feet, the deployment of multiple PDBS will be required. At any point where a decision is made to terminate ground water sampling at this parcel, the Department will require confirmatory sampling using low-flow due to PDBS biasing low compared to low-flow at the Fort Monmouth site.

FTMM-55 Building 290

Historic sampling at this parcel revealed GWQS exceedances of arsenic and lead. The August 2013 sampling of wells using low-flow confirmed the continued exceedance of the GWQS for lead. The metals are attributed to background conditions. The report recommends discontinuing ground water sampling at this parcel. The Department finds the recommendation to be acceptable. Monitoring wells at this parcel shall be properly abandoned if they are no longer subject to sampling or gaging for water elevation data.

FTMM-56 Building 80

Historic sampling at this parcel revealed GWQS exceedances of chlordane, arsenic, lead and cadmium. The August 2013 sampling of wells was conducted for lead only using low-flow. There were no exceedances of lead. The report recommends one additional sampling round of well 80MW02 for chlordane and 80MW05 for lead. The Department finds the recommendation for well 80MW02 to be acceptable. The Department disagrees with the recommendation to sample well 80MW05 for lead only. The last low-flow sampling event in August 2011 had lead, arsenic and cadmium exceeding both the GWQS and background concentrations. Well 80MW05 shall be sampled during the next round for TAL metals.

FTMM-57 Building 108

Historic sampling at this parcel revealed GWQS exceedances of lead. In the August 2013 sampling event, there were no exceedances of lead in ground water. The report recommends two additional sampling rounds of well 108MW04 for lead. The Department finds the recommendation acceptable.

FTMM-58 Building 2567

Historic sampling at this parcel revealed GWQS exceedances of TBA in wells 2567MW01 and 2567MW03. The August 2013 sampling results using low-flow and PDBS were below the GWQS for TBA. The report recommends two annual sampling events for TBA analyses of wells 2567MW01 and 2567MW03 using low-flow. The Department finds the proposal to be acceptable.

FTMM-59 Building 1122

Historic sampling at this parcel revealed no GWQS exceedances for VOCs. The August 2013 sampling results of wells using PDBS showed no exceedance of VOCs. The text of the report recommends VOC sampling of well 1122MW07 for one additional sampling round to confirm the 2013 results because August 2013 was the first time this well was sampled. The Department finds the proposal to be acceptable. The Department also notes that there is a discrepancy between the recommendation in the text and the recommendation in Table 7. Table 7 recommends that sampling at this parcel be discontinued. Table 7 shall be amended to indicate well 1122MW07 will be sampled for VOCs using PDBS methodology.

FTMM-61 Building 283

Historic sampling at this parcel revealed GWQS exceedances of metals, benzene and VOC TICs in 283MW02. The August 2013 sampling of wells using low-flow for VOCs and lead showed no exceedances. The report recommends VOC sampling of well 283MW02 for one additional sampling round using PDBS methodology to confirm the 2013 results. The Department finds the proposal to be conditionally acceptable. If the saturated screen length exceeds 10 feet, the deployment of multiple PDBS will be required. If a decision is made to terminate ground water sampling at this parcel based on PDBS results, the Department will require confirmatory sampling using low-flow due to PDBS biasing low compared to low-flow at the Fort Monmouth site.

FTMM-64 Building 812

Historic sampling at this parcel revealed GWQS exceedances of benzene, vinyl chloride and metals. The August 2013 sampling of wells using low-flow for VOCs and lead showed no exceedances. The report recommends VOC sampling of well 812MW04 for one additional sampling round using PDBS methodology to confirm the 2013 results (however Section 5.0 recommends sampling be continued on an annual basis). The Department finds the proposal to be conditionally acceptable. If the saturated screen length exceeds 10 feet, the deployment of multiple PDBS will be required. If a decision is made to terminate ground water sampling at this

parcel based on PDBS results, the Department will require confirmatory sampling using low-flow due to PDBS biasing low compared to low-flow at the Fort Monmouth site.

FTMM-66 Building 886

Historic sampling at this parcel revealed GWQS exceedances of benzene, VOC TICs, arsenic and lead. The August 2013 sampling results from wells using low-flow showed the exceedance of the GWQS for SVOC TICs. The report recommends that sampling at this parcel be discontinued. The Department finds the recommendation unacceptable. Total SVOC TICs exceeded the GWQS of 500 ppb in wells 886RW01 and 886RW06. Ground water monitoring of wells 886RW01, 886RW06 and 886RW08 shall continue for SVOC+TICs using low-flow methodology.

FTMM-68 Building 700

There are no historic sampling results for this parcel. The August 2013 sampling results of wells using PDBS showed the exceedance of the GWQS for PCE, TCE, cis-1,2-DCE and vinyl chloride in wells 565MW01 and 565MW01D. The report recommends quarterly ground water sampling for VOC+TICs using PDBS for these 2 wells. The Department agrees with the recommendation of quarterly sampling, however, has concerns regarding the use of PDBS for long-term monitoring at this parcel. Unlike the other Fort Monmouth parcels, there are no historical ground water sampling data for comparison with the PDBS results. The DEP's Field Sampling Procedures Manual states that "the intended application of Passive Diffusion Bag Samplers (PDBS) is for long-term monitoring of volatile organic compounds (VOCs) in ground water at well-characterized sites." The Department would find long-term sampling of the wells using PDBS acceptable if low-flow sampling is conducted concurrently once or twice for comparison.

Finally, each of the above comments speak only to the ground water findings and recommendations included in the referenced submittal, rather than to the ground water at the entire site.

Please contact this office if you have any questions.

Sincerely,

Linda S. Range

Linda S. Range

C: Joe Pearson, Calibre
Rick Harrison, FMERA
Julie Carver, Matrix
Frank Barricelli
Daryl Clark, BGWPA

Army letter dated November 26, 2014

DEPARTMENT OF THE ARMY

OFFICE OF ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
U.S. ARMY FORT MONMOUTH
P.O. 148
OCEANPORT, NEW JERSEY 07757

November 26, 2014

Linda S. Range
State of New Jersey
Department of Environmental Protection
Bureau of Case Management
401 East Side Street
PO Box 420/Mail Code 401-05F
Trenton, NJ 08625-0028

Subject: **State of New Jersey Department of Environmental Protection Comments on the Final Baseline Groundwater Sampling Report (August 2013) Fort Monmouth, Oceanport, Monmouth County. PI G000000032**

Attachments: A. 2009 Temporary Well Points and Analytical Data

B. Revised Table 7

Dear Ms. Range:

Fort Monmouth (FTMM) and Parsons have reviewed the New Jersey Department of Environmental Protection (NJDEP) comments on the Final Baseline Groundwater Sampling Report (August 2013) as documented in your letter dated July 3, 2014. Response to your comments are provided below in the order in which they were presented in the comment letter.

A. GENERAL COMMENT/STATEMENT:

The New Jersey Department of Environmental Protection (Department) has completed review of the referenced report, dated March 2014, received on April 7, 2014. The report was prepared by Parsons Government Services Inc. (Parsons), in support of the Remedial Investigation (RI), Feasibility Study (FS), and Decision Documents project at Fort Monmouth.

A baseline ground water sampling event was conducted at 21 "sites" at the Fort Monmouth property in August 2013. The purpose of the sampling event was to re-establish baseline conditions following suspension of ground water sampling in late 2011, as well as to evaluate Fort Monmouth's long-term ground water sampling program, and the current analytical conditions of the ground water at each site. Sampling methodologies used included low-flow and passive diffusion bag samplers (PDBS). At four sites (FTMM-14, 18, 59, 68), only PDBS sampling was conducted. At three sites (FTMM-05, 22, 58) both low-flow and PDBS samples were obtained for comparison purposes. Fourteen (14) sites were only sampled using low-flow. The report states that PDBS concentrations were consistently biased somewhat low compared to the low-flow

concentrations. The report concludes, however, that the PDBS results were still similar to the low-flow results and are considered representative of ground water conditions at the sites. Based on this conclusion, the report states that for future ground water sampling, PDBS will be used for all sites where volatile organic compounds (VOCs) are the sole contaminants of concern. Comments are presented below.

Section 3.1; Table 6; Appendices & associated Tables - *The "background concentrations" submitted in the* 1995 *Weston report were not accepted by the Department as representative of background conditions for Fort Monmouth. The study was not performed in accordance with Departmental protocol and is not a consideration in our evaluations/determinations. As indicated in Section* 3.1, *background concentrations are evaluated on a site by site basis.*

A. RESPONSE: Acknowledged,

B. FTMM-02 Landfill

B. COMMENT: *Historic sampling at this parcel indicated levels of VOCs above the Ground Water Quality Standard (GWQS); metals were previously determined to be reflective of naturally occurring conditions. The August 2013 sampling of wells using low-flow confirmed the continued exceedance of the GWQS for VOCs. The report recommends VOC sampling of wells M2MW03, M2MW11, M2MW21, M2MW22 and M2MW24 for two additional rounds using PDBS. Well M2MW10 will be monitored as a down gradient sentinel well. Although the proposal is acceptable, for wells in which the saturated screen length exceeds 10 feet, the deployment of multiple PDBS will be required. At any point where a decision is made to terminate ground water sampling at this site, confirmatory sampling using low-flow due to PDBS biasing low as compared to low-flow results at the Fort Monmouth site will be required.*

B1. RESPONSE: Agreed.

C. FTMM-03 Landfill

C. COMMENT: *Historic sampling at this parcel revealed GWQS exceedances of vinyl chloride and metals. The August 2013 sampling of wells using low-flow confirmed the continued exceedance of the GWQS for vinyl chloride in well 3MW07. Well 3MW02 was not sampled due to low water column and silty conditions; however, Table 4 of Appendix B recommends sampling of 3MW02 for VOCs and metals. The report attributes the presence of vinyl chloride to leaching of PVC piping from well 3MW07. A temporary well point investigation was conducted in 2009 to delineate the vinyl chloride, the results were non-detect, and abandonment of 3MW07 is recommended. The recommendations are acceptable. However, a figure presenting the locations and sampling results from the 2009 temporary well point investigation must be provided to the Department.*

C. RESPONSE: A figure showing the location of 2009 temporary well points and the associated groundwater analytical data are provided in **Attachment A**. Therefore, FTMM will abandon 3MW07 in accordance with NJDEP well abandonment procedures.

D. FTMM-04 Landfill

D. COMMENT: *Historic sampling at this parcel revealed GWQS exceedances of various metals. The August 2013 sampling of wells using low-flow confirmed the continued exceedance of the GWQS for metals. The metals are attributed to background conditions, and cessation of ground water sampling is recommended. The recommendation is acceptable. Monitoring wells at this*

parcel shall be properly abandoned if they are no longer subject to sampling or gaging for water elevation data.

D. RESPONSE: Agreed.

E. FTMM-05 Landfill

E. COMMENT: *Historic sampling at this parcel revealed GWQS exceedances of PCE, TCE and vinyl chloride, which the August 2013 sampling, using low-flow and PDBS, confirmed. The report recommends annual VOC sampling of wells M5MW11, M5MW16, M5MW20 and M5MW23 using PDBS. The Department finds the proposal to be acceptable. At any point where a decision is made to terminate ground water sampling at this parcel, the Department will require confirmatory sampling using low-flow due to PDBS results at this parcel biased low compared to the low-flow results.*

E. RESPONSE: Agreed.

F. FTMM-08 Landfill

F. COMMENT: *Historic sampling at this parcel revealed GWQS exceedances of pesticides, benzene, PCE and lead. The August 2013 sampling of wells using low-flow confirmed the exceedance of the GWQS for PCE and lead. The well with historic pesticide exceedances (697MW01) could not be located and was not sampled. The report recommends annual ground water sampling of well M8MW11 for VOCs and lead, M8MW12, 15, 16 and 24 for VOCs and M8MW17 and 21 for lead only. Monitoring well 697MW01 will be located and sampled for pesticides, lead and VOCs. The recommendation is acceptable.*

F. RESPONSE: Agreed.

G. FTMM-12 Landfill

G. COMMENT: *Historic sampling at this parcel revealed GWQS exceedances of various metals, including arsenic and lead. Historic exceedances of metals except for lead are attributed to background quality. The August 2013 sampling was conducted for lead analysis only. Lead was not detected. The report recommends discontinuing ground water sampling at this parcel. The Department finds the recommendation to be acceptable. Monitoring wells at this parcel shall be properly abandoned if they are no longer subject to sampling or gauging for water elevation data.*

G. RESPONSE: Agreed.

H. FTMM-14 Landfill

H. COMMENT: *Historic sampling at this parcel revealed no GWQS exceedances of VOCs. The August 2013 sampling of wells using PDBS confirmed that there was no exceedance of the GWQS. The report recommends discontinuing ground water sampling at this parcel. The Department finds the recommendation to be acceptable. Monitoring wells at this parcel shall be properly abandoned if they are no longer subject to sampling or gaging for water elevation data. The Department also notes that on Table 1, well M14MW19 is listed as having 10 feet of total screen length. However, the table also lists the saturated screen length as 13.35 feet. This discrepancy should be clarified.*

H. RESPONSE: Agreed. The saturated screen thickness for M14MW19 is 10 feet.

I. FTMM-18 Landfill

I. COMMENT: *Historic sampling at this parcel revealed GWQS exceedances of benzene and 1,2-DCA. The August 2013 sampling results of wells using PDBS showed the exceedance of the GWQS for 1,2-DCA in well M18MW22. Well M18MW23 could not be located and was not sampled. The report recommends annual ground water sampling using PDBS for M18MW22 and M18MW23 if it can be located. Every reasonable effort, such as reviewing the NJ State Plane Coordinates of the well, must be made to locate M18MW23. The use of M18MW22 as the sole monitoring well at this parcel will not be acceptable due to the vast difference in historical concentrations between M18MW22 and M18MW23. Historic 2011 benzene concentrations for M18MW23 were 775 ppb and 664 ppb while 2011 concentrations for M18MW22 were 1.81 ppb and 1.65 ppb. The Department cannot approve the use of PDBS sampling only for this parcel. Once M18MW23 is located, the Department can approve the use of both PDBS and low-flow sampling for comparison purposes.*

I. RESPONSE: M18MW23 has been located and will be sampled using PDB methodology during the 2014 annual sampling event, as the historical concentrations of benzene are appropriate for the use of PDBs. FTMM believes that there is enough low flow data (four sampling events over two years) to characterize the concentrations of the volatile constituents in M18MW23 and that a low-flow PDB comparison is not needed for this well. FTMM will vertically profile this well using PDBs should the saturated screen be greater than 10 feet. In addition to the sampling of M18MW23, M18MW22 will also be sampled using PDB methodology and analyzed for VOCs.

J. FTMM-22 Former Wastewater Treatment Lime Pit

J. COMMENT: *Historic sampling at this parcel revealed GWQS exceedances of TCE. The August 2013 sampling of wells using low-flow and PDBS confirmed the continued exceedance of the GWQS for TCE in ground water. The report recommends quarterly VOC sampling of wells CWlMW27, CWlMW29, CWlMW31 and CWlMW281 using PDBS. The Department finds the proposal to be acceptable. At any point where a decision is made to terminate ground water sampling at this parcel, the Department will require confirmatory sampling using low-flow due to PDBS results biasing low compared to low-flow results at the Fort Monmouth site.*

J. RESPONSE: Agreed.

K. FTMM-25 Landfill

K. COMMENT: *Historic sampling at this parcel revealed GWQS exceedances of various metals. The August 2013 sampling of wells using low-flow confirmed the continued exceedance of the GWQS for metals. The metals are attributed to background conditions. The report recommends discontinuing ground water sampling at this parcel. The Department finds the recommendation to be acceptable. Monitoring wells at this parcel shall be properly abandoned if they are no longer subject to sampling or gauging for water elevation data.*

K. RESPONSE: Agreed.

L. FTMM-53 Building 699

L. COMMENT: *Historic sampling at this parcel revealed GWQS exceedances of benzene, PCE, TCE, TBA, VOC TICs and lead. The August 2013 sampling of wells using low-flow showed the exceedance of the GWQS for benzene, xylenes, PCE, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene and VOC TICs. The report recommends quarterly VOC sampling of wells*

699MW01, 699MW04, 699MW06, 699MW09, 699MW16, 699RW03, 699RW05 and 699RW11 using PDBS. The Department finds the proposal to be acceptable. For wells in which the saturated screen length exceeds 10 feet, the deployment of multiple PDBS will be required. At any point where a decision is made to terminate ground water sampling at this parcel, the Department will require confirmatory sampling using low-flow due to PDBS biasing low compared to low-flow at the Fort Monmouth site.

L. RESPONSE: Agreed.

M. FTMM-54 Building 296

M. COMMENT: *Historic sampling at this parcel revealed GWQS exceedances of benzene, lead and arsenic. The metals are attributed to background conditions. The August 2013 sampling of wells using low-flow showed an exceedance of the GWQS for benzene. The report recommends annual VOC sampling of wells 269MW04 and 296MW06 using PDBS. The Department finds the proposal to be acceptable. For wells in which the saturated screen length exceeds 10 feet, the deployment of multiple PDBS will be required. At any point where a decision is made to terminate ground water sampling at this parcel, the Department will require confirmatory sampling using low-flow due to PDBS biasing low compared to low-flow at the Fort Monmouth site.*

M. RESPONSE: Agreed.

N. FTMM-55 Building 290

N. COMMENT: *Historic sampling at this parcel revealed GWQS exceedances of arsenic and lead. The August 2013 sampling of wells using low-flow confirmed the continued exceedance of the GWQS for lead. The metals are attributed to background conditions. The report recommends discontinuing ground water sampling at this parcel. The Department finds the recommendation to be acceptable. Monitoring wells at this parcel shall be properly abandoned if they are no longer subject to sampling or gauging for water elevation data.*

N. RESPONSE: Agreed.

O. FTMM-56 Building 80

O. COMMENT: *Historic sampling at this parcel revealed GWQS exceedances of chlordane, arsenic, lead and cadmium. The August 2013 sampling of wells was conducted for lead only using low-flow. There were no exceedances of lead. The report recommends one additional sampling round of well 80MW02 for chlordane and 80MW05 for lead. The Department finds the recommendation for well 80MW02 to be acceptable. The Department disagrees with the recommendation to sample well 80MW05 for lead only. The last low-flow sampling event in August 2011 had lead, arsenic and cadmium exceeding both the GWQS and background concentrations. Well 80MW05 shall be sampled during the next round for TAL metals.*

O. RESPONSE: Acknowledged. FTMM will modify the analysis method from lead only to lead, arsenic and cadmium at well 80MW05.

P. FTMM-57 Building 108

P. COMMENT: *Historic sampling at this parcel revealed GWQS exceedances of lead. In the August 2013 sampling event, there were no exceedances of lead in ground water. The report recommends two additional sampling rounds of well 108MW04 for lead. The Department finds the recommendation acceptable.*

P. RESPONSE: Agreed.

Q. FTMM-58 Building 2567

Q. COMMENT: *Historic sampling at this parcel revealed GWQS exceedances of TBA in wells 2567MW01 and 2567MW03. The August 2013 sampling results using low-flow and PDBS were below the GWQS for TBA. The report recommends two annual sampling events for TBA analyses of wells 2567MW01 and 2567MW03 using low-flow. The Department finds the proposal to be acceptable.*

Q. RESPONSE: Agreed.

R. FTMM-59 Building 1122

R. COMMENT: *Historic sampling at this parcel revealed no GWQS exceedances for VOCs. The August 2013 sampling results of wells using PDBS showed no exceedance of VOCs. The text of the report recommends VOC sampling of well 1122MW07 for one additional sampling round to confirm the 2013 results because August 2013 was the first time this well was sampled. The Department finds the proposal to be acceptable. The Department also notes that there is a discrepancy between the recommendation in the text and the recommendation in Table 7. Table 7 recommends that sampling at this parcel be discontinued. Table 7 shall be amended to indicate well 1122MW07 will be sampled for VOCs using PDBS methodology.*

R. RESPONSE: Monitoring well 1122MW07 will be sampled for one additional round during the 2014 annual sampling event using PDB methods. The sample will be analyzed for VOCs. Table 7 has been amended and provided as **Attachment B**.

S. FTMM-61 Building 283

S. COMMENT: *Historic sampling at this parcel revealed GWQS exceedances of metals, benzene and VOC TICs in 283MW02. The August 2013 sampling of wells using low-flow for VOCs and lead showed no exceedances. The report recommends VOC sampling of well 283MW02 for one additional sampling round using PDBS methodology to confirm the 2013 results. The Department finds the proposal to be conditionally acceptable. If the saturated screen length exceeds 10 feet, the deployment of multiple PDBS will be required. If a decision is made to terminate ground water sampling at this parcel based on PDBS results, the Department will require confirmatory sampling using low-flow due to PDBS biasing low compared to low-flow at the Fort Monmouth site.*

S. RESPONSE: Acknowledged. Because the next annual sampling round is intended to be the last round, FTMM will sample 283MW02 using LFPS method.

T. FTMM-64 Building 812

T. COMMENT: *Historic sampling at this parcel revealed GWQS exceedances of benzene, vinyl chloride and metals. The August 2013 sampling of wells using low-flow for VOCs and lead showed no exceedances. The report recommends VOC sampling of well 812MW04 for one additional sampling round using PDBS methodology to confirm the 2013 results (however Section 5.0 recommends sampling be continued on an annual basis). The Department finds the proposal to be conditionally acceptable. If the saturated screen length exceeds 10 feet, the deployment of multiple PDBS will be required. If a decision is made to terminate ground water sampling at this parcel based on PDBS results, the Department will require confirmatory sampling using low-flow due to PDBS biasing low compared to low-flow at the Fort Monmouth site.*

T. RESPONSE: Acknowledged. Because the next annual sampling round is intended to be the last round, FTMM will sample 812MW04 using LFPS method.

U. FTMM-66 Building 886

U. COMMENT: *Historic sampling at this parcel revealed GWQS exceedances of benzene, VOC TICs, arsenic and lead. The August 2013 sampling results from wells using low-flow showed the exceedance of the GWQS for SVOC TICs. The report recommends that sampling at this parcel be discontinued. The Department finds the recommendation unacceptable. Total SVOC TICs exceeded the GWQS of 500 ppb in wells 886RW01 and 886RW06. Ground water monitoring of wells 886RW01, 886RW06 and 886RW08 shall continue for SVOC+TICs using low-flow methodology.*

U. RESPONSE: Agreed. FTMM will continue to monitor 886RW01, 886RW06 and 886RW08 at FTMM-66 for SVOC+TICs using the LFPS method for two additional annual rounds.

V. FTMM-68 Building 700

V. COMMENT: *There are no historic sampling results for this parcel. The August 2013 sampling results of wells using PDBS showed the exceedance of the GWQS for PCE, TCE, cis-l,2-DCE and vinyl chloride in wells 565MW01 and 565MW01D. The report recommends quarterly ground water sampling for VOC+TICs using PDBS for these 2 wells. The Department agrees with the recommendation of quarterly sampling, however, has concerns regarding the use of PDBS for long-term monitoring at this parcel. Unlike the other Fort Monmouth parcels, there are no historical ground water sampling data for comparison with the PDBS results. The DEP's Field Sampling Procedures Manual states that "the intended application of Passive Diffusion Bag Samplers (PDBS) is for long-term monitoring of volatile organic compounds (VOCs) in ground water at well-characterized sites." The Department would find long-term sampling of the wells using PDBS acceptable if low-flow sampling is conducted concurrently once or twice for comparison.*

V. RESPONSE: Fort Monmouth agrees that FTMM-68 has not been fully characterized, however a remedial investigation (RI) is proposed for this site in the near future and the sampling of existing and proposed wells using the LFPS method is proposed in the RI. In the meantime Fort Monmouth proposes to continue to use PDBs to characterize the concentrations. The two existing wells are located in the potential source area and the detected VOCs have a high enough concentration that PDBs, while they tend to bias low, can effectively capture the nature of the VOC concentrations. A work plan for the RI has been submitted to NJDEP and is awaiting approval. During the RI the two existing wells along with new wells will be sampled using LFPS methods and a PDB/LFPS comparison will be made at that time. Additionally, once the RI is complete, a revised long-term monitoring plan will be submitted.

W. GENERAL COMMENT/STATEMENT:

Finally, each of the above comments speak only to the ground water findings and recommendations included in the referenced submittal, rather than to the ground water at the entire site.

W. RESPONSE: Acknowledged.

Please contact me if you have any questions.

Sincerely,

Wanda Green

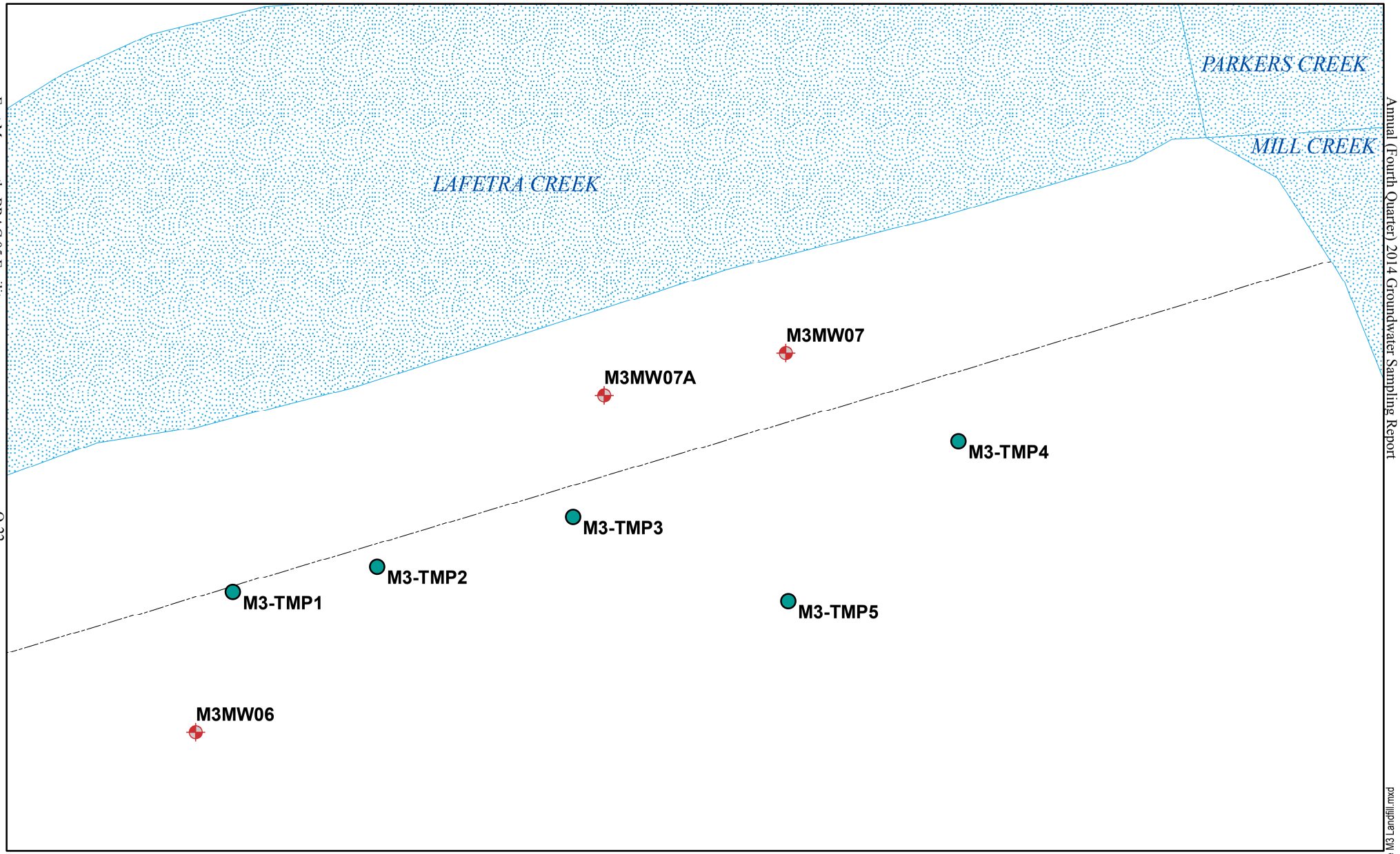
Wanda Green
BRAC Environmental Coordinator
OACSIM – U.S. Army Fort Monmouth

Cc: Parsons
USACE

Encl

ATTACHMENT A

M-3 Landfill Temporary Well Points (February 8, 2011) and Analytical Data Report (November 2, 2009)



0 10 20 40 Feet

N W E S

M-3 Landfill
Temporary Well Points
Fort Monmouth, New Jersey

Legend

- Monitoring Well
- Temp. Wells
- Water Body
- Post Boundaries

Map Created by:
Fort Monmouth Installation GIO, Environmental Division
Fort Monmouth, New Jersey
Date: February 8, 2011
New Jersey State Plane Feet, NAD83
All drawings must be field verified.

FORT MONMOUTH ENVIRONMENTAL TESTING LABORATORY

DIRECTORATE OF PUBLIC WORKS
PHONE: (732) 532-6224 FAX: (732) 532-6263
WET-CHEM - METALS - ORGANICS - FIELD SAMPLING
CERTIFICATIONS: NJDEP #13461

ANALYTICAL DATA REPORT
Fort Monmouth Environmental Laboratory
ENVIRONMENTAL DIVISION
Fort Monmouth, New Jersey
PROJECT: M3 Landfill

M3/Landfill

Field Sample Location	Laboratory Sample ID#	Matrix	Date and Time of Collection	Date Received
M3-TMP-01A	9043301	Aqueous	02-Nov-09 10:14	11/02/09
M3-TMP-01B	9043302	Aqueous	02-Nov-09 10:44	11/02/09
M3-TMP-02A	9043303	Aqueous	02-Nov-09 11:15	11/02/09
M3-TMP-02B	9043304	Aqueous	02-Nov-09 11:35	11/02/09
M3-TMP-03A	9043305	Aqueous	02-Nov-09 13:33	11/02/09
M3-TMP-03B	9043306	Aqueous	02-Nov-09 13:50	11/02/09
M3-TMP-04A	9043307	Aqueous	02-Nov-09 14:15	11/02/09
M3-TMP-04B	9043308	Aqueous	02-Nov-09 14:30	11/02/09
M3-FB	9043309	Aqueous	02-Nov-09 14:40	11/02/09
M3-TMP-05A	9043310	Aqueous	02-Nov-09 15:15	11/02/09
Trip Blank	9043311	Aqueous	02-Nov-09 08:25	11/02/09
M3-TMP-05B	9043312	Aqueous	02-Nov-09 13:40	11/02/09

ANALYSIS:
FORT MONMOUTH ENVIRONMENTAL LAB
VOA+15

Jacqueline Hamer/Date: 11/12/09
QA/QC Supervisor

The enclosed report relates only to the items tested. The report may not be reproduced, except in full, without written approval of the U.S. Army Fort Monmouth Directorate of Public Works.

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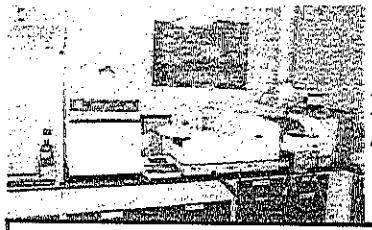
CHAIN OF CUSTODY



Fort Monmouth Environmental Testing Laboratory

Bldg. 173, SELFM-PW-EV, Fort Monmouth, NJ 07703
Tel (732)532-4359 Fax (732)532-6263 EMail:jacqueline.hamer@us.army.mil
NJDEP Certification #13461

Chain of Custody Record

Customer: Joe Fallon | **Project No:** | **Phone #:** 732-532-6223 | **Location:** M3 | ( )DERA ( )OMA ( )Other: BRAC

Samplers Name / Company: John Montgomery

LIMS/Work Order #	Sample Location	Date	Time	Sample Type	# bottles	Analysis Parameters: VOCs	Comments: Remarks / Preservation Method
40433 01	M3-TMP-01A	11-2-09	1014	AQ	2	X	
02	M3-TMP-02B	11-2-09	1044	AQ	2	X	
03	M3-TMP-02A	11-2-09	1115	AQ	2	X	
04	M3-TMP-02B	11-2-09	1135	AQ	2	X	
05	M3-TMP-03A	11-2-09	1333	AQ	2	X	
06	M3-TMP-03B	11-2-09	1350	AQ	2	X	
07	M3-TMP-04A	11-2-09	1415	AQ	2	X	
08	M3-TMP-04B	11-2-09	1430	AQ	2	X	
09	M3-FB	11-2-09	1440	AQ	2	X	
10	M3-TMP-05A	11-2-09	1515	AQ	2	X	
11	Trip Blank	11-2-09	825	AQ	2	X	
12	M3-TMP-05B	11-2-09	1340	AQ	2	X	

Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):
John Montgomery	11-2-09 1550				
Relinquished by (signature):	Date/Time:	Received by (signature):	Relinquished by (signature):	Date/Time:	Received by (signature):

Report Type: ( )Full, ( )Reduced, (X)Standard, ( )Screen / non-certified, ( )EDD Full X

Turnaround time: ( )Standard 3 wks, (X)Rush Wk., ( )ASAP Verbal ____Hrs.

Comments:

print legibly

Page 1 of 1

new coc._1.XLS10/9/2009

SAMPLE RECEIPT FORM

Date Received: 11-2-09 Work Order ID#: 90433

Site/Proj. Name: M3/Landfill Cooler Temp (°C): ICE

Received By: J. Vergona Sign:
(Print name)

Check the appropriate box

1. Did the samples come in a cooler? ☑ yes ☐ no ☐ n/a
2. Were samples rec'd in good condition? ☑ yes ☐ no
3. Was the chain of custody filled out correctly and legibly? ☑ yes ☐ no
4. Was the chain of custody signed in the appropriate place? ☑ yes ☐ no
5. Did the labels agree with the chain of custody? ☑ yes ☐ no
6. Were the correct containers/preservatives used? ☑ yes ☐ no
7. Was a sufficient amount of sample supplied? ☑ yes ☐ no
8. Were air bubbles present in VOA vials? ☐ yes ☑ no ☐ n/a
9. Were samples received on ice? ☑ yes ☐ no
10. Were analyze-immediately tests perform within 15 minutes ☐ yes ☐ no ☑ n/a

Fill out the following table for each sample bottle

Lims ID	pH	Preservative	Sample ID	pH	Preservative

Comments: _____

000003

METHOD SUMMARY

Method Summary

EPA Method 624–Aqueous
Gas Chromatographic Determination of Volatiles in Water

A 5-ml volume of sample is added to 5-ml aliquot of water. Surrogates and internal standards are added and the sample is placed on a purge and trap concentrator. The sample is purged and desorbed into a GC/MS system. Volatiles are then identified and quantitated.

LABORATORY CHRONICLE

Laboratory Chronicle

Lab ID: 90433 **Site:** M3/LANDFILL

	Date	Hold Time
Date Sampled	11/02/09	NA
Receipt/Refrigeration	11/02/09	NA
Analyses		
1. Volatile Organics	11/03/09	14 Days

CONFORMANCE/ NON-CONFORMANCE SUMMARY

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

	Indicate Yes, No, N/A
1. Chromatograms labeled/Compounds identified (Field samples and method blanks)	yes
2. Retention times for chromatograms provided	yes
3. GC/MS Tune Specifications	
a. BFB Meet Criteria	yes
b. DFTPP Meet Criteria	NA
4. GC/MS Tuning Frequency – Performed every 24 hours for 600 series and 12 hours for 8000 series	yes
5. GC/MS Calibration – Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series	yes
6. GC/MS Calibration requirements	
a. Calibration Check Compounds Meet Criteria	yes
b. System Performance Check Compounds Meet Criteria	yes
7. Blank Contamination – If yes, List compounds and concentrations in each blank:	NO
a. VOA Fraction	
b. B/N Fraction NA	
c. Acid Fraction NA	
8. Surrogate Recoveries Meet Criteria	yes
If not met, list those compounds and their recoveries, which fall outside the acceptable range:	
a. VOA Fraction	
b. B/N Fraction NA	
c. Acid Fraction NA	
If not met, were the calculations checked and the results qualified as "estimated"?	
9. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (If not met, list those compounds and their recoveries, which fall outside the acceptable range)	NO
a. VOA Fraction Some Compounds failed with high recoveries	
b. B/N Fraction NA	
c. Acid Fraction NA	

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT (cont.)

Indicate
Yes, No, N/A

10. Internal Standard Area/Retention Time Shift Meet Criteria (Yes)
(If not met, list those compounds, which fall outside the acceptable range)

a. VOA Fraction _____
b. B/N Fraction NA
c. Acid Fraction NA

11. Extraction Holding Time Met NA

If not met, list the number of days exceeded for each sample: _____

12. Analysis Holding Time Met Yes

If not met, list the number of days exceeded for each sample: _____

Additional Comments:

Laboratory Manager: [signature] Date: 11/12/09

VOLATILE ORGANICS

US ARMY FT. MONMOUTH ENVIRONMENTAL LABORATORY
NJDEP CERTIFICATION # 13461

Definition of Qualifiers

U: The compound was analyzed for but not detected.

B: Indicates that the compound was found in the associated method blank as well as in the sample.

J: Indicates an estimated value. This flag is used:
(1) When the mass spec and retention time data indicate the presence of a compound however the result is less than the reporting limit but greater than the MDL.
(2) When estimating the concentration of a tentatively identified compound (TIC), where a 1:1 response is assumed.

D: This flag is used to identify all compounds (target or TIC) that required a dilution.

E: Indicates the compound's concentration exceeds the calibration range of the instrument for that specific analysis.

N: This flag is only used for TICs. It indicates the presumptive evidence of a compound. For a generic characterization of a TIC, such as unknown hydrocarbon, the flag is not used.

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VA4808.D	Sample Name	MB11030901
Operator	ROBERTS	Field ID	METHOD 624 11/3/09
Date Acquired	3 Nov 2009 3:24 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	5	2.09 ug/L	5.00 ug/L	
107131	Acrylonitrile			not detected	2	1.64 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	1.89 ug/L	5.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.18 ug/L	0.50 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.12 ug/L	0.50 ug/L	
75718	Dichlorodifluoromethane			not detected	1000	0.22 ug/L	1.00 ug/L	
74-87-3	Chloromethane			not detected	nle	0.10 ug/L	1.00 ug/L	
75-01-4	Vinyl Chloride			not detected	1	0.22 ug/L	1.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.25 ug/L	1.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.22 ug/L	1.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	2000	0.18 ug/L	1.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	1	0.20 ug/L	0.50 ug/L	
67-64-1	Acetone			not detected	6000	0.18 ug/L	0.50 ug/L	
75-15-0	Carbon Disulfide			not detected	700	0.18 ug/L	0.50 ug/L	
75-09-2	Methylene Chloride			not detected	3	0.16 ug/L	0.50 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.20 ug/L	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	50	0.19 ug/L	0.50 ug/L	
108-05-4	Vinyl Acetate			not detected	7000	0.20 ug/L	0.50 ug/L	
78-93-3	2-Butanone			not detected	300	0.16 ug/L	1.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	70	0.14 ug/L	0.50 ug/L	
67-66-3	Chloroform			not detected	70	0.21 ug/L	0.50 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.17 ug/L	0.50 ug/L	
56-23-5	Carbon Tetrachloride			not detected	1	0.27 ug/L	0.50 ug/L	
71-43-2	Benzene			not detected	1	0.16 ug/L	0.50 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.19 ug/L	0.50 ug/L	
79-01-6	Trichloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.16 ug/L	0.50 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.25 ug/L	1.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	1	0.16 ug/L	0.50 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	nle	0.26 ug/L	1.00 ug/L	
108-88-3	Toluene			not detected	1000	0.15 ug/L	0.50 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	1	0.12 ug/L	0.50 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.14 ug/L	0.50 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.20 ug/L	0.50 ug/L	
126-48-1	Dibromochloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
108-90-7	Chlorobenzene			not detected	50	0.15 ug/L	0.50 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.16 ug/L	0.50 ug/L	
630-20-6	1,1,1,2-tetrachloroethane			not detected	1	0.15 ug/L	0.50 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.27 ug/L	1.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.14 ug/L	0.50 ug/L	
100-42-5	Styrene			not detected	100	0.12 ug/L	0.50 ug/L	
75-25-2	Bromoform			not detected	4	0.14 ug/L	1.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1	0.12 ug/L	0.50 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.12 ug/L	0.50 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	

*Results between MDL and RL are estimated values

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9C 07Nov2005

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
J= Estimated concentration, value falls between R.L. and M.D.L.
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time
R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
MB11030901

Lab Name: FMETL Contract:
Lab Code: 13461 Case No.: MW SAS No.: SDG No.: 90433
Matrix: (soil/water) WATER Lab Sample ID: MB11030901
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VA4808.D
Level: (low/med) LOW Date Received: 11/2/2009
% Moisture: not dec. Date Analyzed: 11/3/2009
GC Column: RTX-VM ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 3/90

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VA4820.D	Sample Name	9043311
Operator	ROBERTS	Field ID	M-3 TRIP BLANK
Date Acquired	3 Nov 2009 9:35 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	5	2.09 ug/L	5.00 ug/L	
107131	Acrylonitrile			not detected	2	1.64 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	1.89 ug/L	5.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.18 ug/L	0.50 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.12 ug/L	0.50 ug/L	
75718	Dichlorodifluoromethane			not detected	1000	0.22 ug/L	1.00 ug/L	
74-87-3	Chloromethane			not detected	nle	0.10 ug/L	1.00 ug/L	
75-01-4	Vinyl Chloride			not detected	1	0.22 ug/L	1.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.25 ug/L	1.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.22 ug/L	1.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	2000	0.18 ug/L	1.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	1	0.20 ug/L	0.50 ug/L	
67-64-1	Acetone			not detected	6000	0.18 ug/L	0.50 ug/L	
75-15-0	Carbon Disulfide			not detected	700	0.18 ug/L	0.50 ug/L	
75-09-2	Methylene Chloride			not detected	3	0.16 ug/L	0.50 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.20 ug/L	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	50	0.19 ug/L	0.50 ug/L	
108-05-4	Vinyl Acetate			not detected	7000	0.20 ug/L	0.50 ug/L	
78-93-3	2-Butanone			not detected	300	0.16 ug/L	1.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	70	0.14 ug/L	0.50 ug/L	
67-66-3	Chloroform			not detected	70	0.21 ug/L	0.50 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.17 ug/L	0.50 ug/L	
56-23-5	Carbon Tetrachloride			not detected	1	0.27 ug/L	0.50 ug/L	
71-43-2	Benzene			not detected	1	0.16 ug/L	0.50 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.19 ug/L	0.50 ug/L	
79-01-6	Trichloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.16 ug/L	0.50 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.25 ug/L	1.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	1	0.16 ug/L	0.50 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	nle	0.26 ug/L	1.00 ug/L	
108-88-3	Toluene			not detected	1000	0.15 ug/L	0.50 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	1	0.12 ug/L	0.50 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.14 ug/L	0.50 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.20 ug/L	0.50 ug/L	
126-48-1	Dibromochloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
108-90-7	Chlorobenzene			not detected	50	0.15 ug/L	0.50 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.16 ug/L	0.50 ug/L	
630-20-6	1,1,1,2-tetrachloroethane			not detected	1	0.15 ug/L	0.50 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.27 ug/L	1.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.14 ug/L	0.50 ug/L	
100-42-5	Styrene			not detected	100	0.12 ug/L	0.50 ug/L	
75-25-2	Bromoform			not detected	4	0.14 ug/L	1.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1	0.12 ug/L	0.50 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.12 ug/L	0.50 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	

*Results between MDL and RL are estimated values

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9C 07Nov2005

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
J= Estimated concentration, value falls between R.L. and M.D.L.

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time
R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
M3-TRIP BLANK

Lab Name: FMETL Contract:
Lab Code: 13461 Case No.: MW SAS No.: SDG No.: 90433
Matrix: (soil/water) WATER Lab Sample ID: 9043311
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VA4820.D
Level: (low/med) LOW Date Received: 11/2/2009
% Moisture: not dec. Date Analyzed: 11/3/2009
GC Column: RTX-VM ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 3/90

000016

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VA4818.D	Sample Name	9043309
Operator	ROBERTS	Field ID	M-3 FB
Date Acquired	3 Nov 2009 8:33 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	5	2.09 ug/L	5.00 ug/L	
107131	Acrylonitrile			not detected	2	1.64 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	1.89 ug/L	5.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.18 ug/L	0.50 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.12 ug/L	0.50 ug/L	
75718	Dichlorodifluoromethane			not detected	1000	0.22 ug/L	1.00 ug/L	
74-87-3	Chloromethane			not detected	nle	0.10 ug/L	1.00 ug/L	
75-01-4	Vinyl Chloride			not detected	1	0.22 ug/L	1.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.25 ug/L	1.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.22 ug/L	1.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	2000	0.18 ug/L	1.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	1	0.20 ug/L	0.50 ug/L	
67-64-1	Acetone			not detected	6000	0.18 ug/L	0.50 ug/L	
75-15-0	Carbon Disulfide			not detected	700	0.18 ug/L	0.50 ug/L	
75-09-2	Methylene Chloride			not detected	3	0.16 ug/L	0.50 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.20 ug/L	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	50	0.19 ug/L	0.50 ug/L	
108-05-4	Vinyl Acetate			not detected	7000	0.20 ug/L	0.50 ug/L	
78-93-3	2-Butanone			not detected	300	0.16 ug/L	1.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	70	0.14 ug/L	0.50 ug/L	
67-66-3	Chloroform			not detected	70	0.21 ug/L	0.50 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.17 ug/L	0.50 ug/L	
56-23-5	Carbon Tetrachloride			not detected	1	0.27 ug/L	0.50 ug/L	
71-43-2	Benzene			not detected	1	0.16 ug/L	0.50 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.19 ug/L	0.50 ug/L	
79-01-6	Trichloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.16 ug/L	0.50 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.25 ug/L	1.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	1	0.16 ug/L	0.50 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	nle	0.26 ug/L	1.00 ug/L	
108-88-3	Toluene			not detected	1000	0.15 ug/L	0.50 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	1	0.12 ug/L	0.50 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.14 ug/L	0.50 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.20 ug/L	0.50 ug/L	
126-48-1	Dibromochloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
108-90-7	Chlorobenzene			not detected	50	0.15 ug/L	0.50 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.16 ug/L	0.50 ug/L	
630-20-6	1,1,1,2-tetrachloroethane			not detected	1	0.15 ug/L	0.50 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.27 ug/L	1.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.14 ug/L	0.50 ug/L	
100-42-5	Styrene			not detected	100	0.12 ug/L	0.50 ug/L	
75-25-2	Bromoform			not detected	4	0.14 ug/L	1.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1	0.12 ug/L	0.50 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.12 ug/L	0.50 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	

*Results between MDL and RL are estimated values

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9C 07Nov2005

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
J= Estimated concentration, value falls between R.L. and M.D.L.

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time
R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
M3-FB

Lab Name: FMETL Contract:
Lab Code: 13461 Case No.: MW SAS No.: SDG No.: 90433
Matrix: (soil/water) WATER Lab Sample ID: 9043309
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VA4818.D
Level: (low/med) LOW Date Received: 11/2/2009
% Moisture: not dec. Date Analyzed: 11/3/2009
GC Column: RTX-VM ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 3/90

000018

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VA4810.D	Sample Name	9043301
Operator	ROBERTS	Field ID	M-3 TMP-01A
Date Acquired	3 Nov 2009 4:26 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	5	2.09 ug/L	5.00 ug/L	
107131	Acrylonitrile			not detected	2	1.64 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	1.89 ug/L	5.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.18 ug/L	0.50 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.12 ug/L	0.50 ug/L	
75718	Dichlorodifluoromethane			not detected	1000	0.22 ug/L	1.00 ug/L	
74-87-3	Chloromethane			not detected	nle	0.10 ug/L	1.00 ug/L	
75-01-4	Vinyl Chloride			not detected	1	0.22 ug/L	1.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.25 ug/L	1.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.22 ug/L	1.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	2000	0.18 ug/L	1.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	1	0.20 ug/L	0.50 ug/L	
67-64-1	Acetone			not detected	6000	0.18 ug/L	0.50 ug/L	
75-15-0	Carbon Disulfide			not detected	700	0.18 ug/L	0.50 ug/L	
75-09-2	Methylene Chloride			not detected	3	0.16 ug/L	0.50 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.20 ug/L	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	50	0.19 ug/L	0.50 ug/L	
108-05-4	Vinyl Acetate			not detected	7000	0.20 ug/L	0.50 ug/L	
78-93-3	2-Butanone			not detected	300	0.16 ug/L	1.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	70	0.14 ug/L	0.50 ug/L	
67-66-3	Chloroform			not detected	70	0.21 ug/L	0.50 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.17 ug/L	0.50 ug/L	
56-23-5	Carbon Tetrachloride			not detected	1	0.27 ug/L	0.50 ug/L	
71-43-2	Benzene			not detected	1	0.16 ug/L	0.50 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.19 ug/L	0.50 ug/L	
79-01-6	Trichloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.16 ug/L	0.50 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.25 ug/L	1.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	1	0.16 ug/L	0.50 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	nle	0.26 ug/L	1.00 ug/L	
108-88-3	Toluene			not detected	1000	0.15 ug/L	0.50 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	1	0.12 ug/L	0.50 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.14 ug/L	0.50 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.20 ug/L	0.50 ug/L	
126-48-1	Dibromochloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
108-90-7	Chlorobenzene			not detected	50	0.15 ug/L	0.50 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.16 ug/L	0.50 ug/L	
630-20-6	1,1,1,2-tetrachloroethane			not detected	1	0.15 ug/L	0.50 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.27 ug/L	1.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.14 ug/L	0.50 ug/L	
100-42-5	Styrene			not detected	100	0.12 ug/L	0.50 ug/L	
75-25-2	Bromoform			not detected	4	0.14 ug/L	1.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1	0.12 ug/L	0.50 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.12 ug/L	0.50 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	

*Results between MDL and RL are estimated values

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9C 07Nov2005

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
J= Estimated concentration, value falls between R.L. and M.D.L.

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time
R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M3-TMP-01A

Lab Name: FMETL Contract:

Lab Code: 13461 Case No.: MW SAS No.: SDG No.: 90433

Matrix: (soil/water) WATER Lab Sample ID: 9043301

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VA4810.D

Level: (low/med) LOW Date Received: 11/2/2009

% Moisture: not dec. Date Analyzed: 11/3/2009

GC Column: RTX-VM ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 3/90

000020

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VA4811.D	Sample Name	9043302
Operator	ROBERTS	Field ID	M-3 TMP-01B
Date Acquired	3 Nov 2009 4:57 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	5	2.09 ug/L	5.00 ug/L	
107131	Acrylonitrile			not detected	2	1.64 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	1.89 ug/L	5.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.18 ug/L	0.50 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.12 ug/L	0.50 ug/L	
75718	Dichlorodifluoromethane			not detected	1000	0.22 ug/L	1.00 ug/L	
74-87-3	Chloromethane			not detected	nle	0.10 ug/L	1.00 ug/L	
75-01-4	Vinyl Chloride			not detected	1	0.22 ug/L	1.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.25 ug/L	1.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.22 ug/L	1.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	2000	0.18 ug/L	1.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	1	0.20 ug/L	0.50 ug/L	
67-64-1	Acetone			not detected	6000	0.18 ug/L	0.50 ug/L	
75-15-0	Carbon Disulfide			not detected	700	0.18 ug/L	0.50 ug/L	
75-09-2	Methylene Chloride			not detected	3	0.16 ug/L	0.50 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.20 ug/L	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	50	0.19 ug/L	0.50 ug/L	
108-05-4	Vinyl Acetate			not detected	7000	0.20 ug/L	0.50 ug/L	
78-93-3	2-Butanone			not detected	300	0.16 ug/L	1.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	70	0.14 ug/L	0.50 ug/L	
67-66-3	Chloroform			not detected	70	0.21 ug/L	0.50 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.17 ug/L	0.50 ug/L	
56-23-5	Carbon Tetrachloride			not detected	1	0.27 ug/L	0.50 ug/L	
71-43-2	Benzene			not detected	1	0.16 ug/L	0.50 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.19 ug/L	0.50 ug/L	
79-01-6	Trichloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.16 ug/L	0.50 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.25 ug/L	1.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	1	0.16 ug/L	0.50 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	nle	0.26 ug/L	1.00 ug/L	
108-88-3	Toluene			not detected	1000	0.15 ug/L	0.50 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	1	0.12 ug/L	0.50 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.14 ug/L	0.50 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.20 ug/L	0.50 ug/L	
126-48-1	Dibromochloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
108-90-7	Chlorobenzene			not detected	50	0.15 ug/L	0.50 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.16 ug/L	0.50 ug/L	
630-20-6	1,1,1,2-tetrachloroethane			not detected	1	0.15 ug/L	0.50 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.27 ug/L	1.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.14 ug/L	0.50 ug/L	
100-42-5	Styrene			not detected	100	0.12 ug/L	0.50 ug/L	
75-25-2	Bromoform			not detected	4	0.14 ug/L	1.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1	0.12 ug/L	0.50 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.12 ug/L	0.50 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	

*Results between MDL and RL are estimated values

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9C 07Nov2005

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
J= Estimated concentration, value falls between R.L. and M.D.L.

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time
R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
M3-TMP-01B

Lab Name: FMETL Contract:
Lab Code: 13461 Case No.: MW SAS No.: SDG No.: 90433
Matrix: (soil/water) WATER Lab Sample ID: 9043302
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VA4811.D
Level: (low/med) LOW Date Received: 11/2/2009
% Moisture: not dec. Date Analyzed: 11/3/2009
GC Column: RTX-VM ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

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000022

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VA4812.D	Sample Name	9043303
Operator	ROBERTS	Field ID	M-3 TMP-02A
Date Acquired	3 Nov 2009 5:27 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	5	2.09 ug/L	5.00 ug/L	
107131	Acrylonitrile			not detected	2	1.64 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	1.89 ug/L	5.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.18 ug/L	0.50 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.12 ug/L	0.50 ug/L	
75718	Dichlorodifluoromethane			not detected	1000	0.22 ug/L	1.00 ug/L	
74-87-3	Chloromethane			not detected	nle	0.10 ug/L	1.00 ug/L	
75-01-4	Vinyl Chloride			not detected	1	0.22 ug/L	1.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.25 ug/L	1.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.22 ug/L	1.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	2000	0.18 ug/L	1.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	1	0.20 ug/L	0.50 ug/L	
67-64-1	Acetone			not detected	6000	0.18 ug/L	0.50 ug/L	
75-15-0	Carbon Disulfide			not detected	700	0.18 ug/L	0.50 ug/L	
75-09-2	Methylene Chloride			not detected	3	0.16 ug/L	0.50 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.20 ug/L	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	50	0.19 ug/L	0.50 ug/L	
108-05-4	Vinyl Acetate			not detected	7000	0.20 ug/L	0.50 ug/L	
78-93-3	2-Butanone			not detected	300	0.16 ug/L	1.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	70	0.14 ug/L	0.50 ug/L	
67-66-3	Chloroform			not detected	70	0.21 ug/L	0.50 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.17 ug/L	0.50 ug/L	
56-23-5	Carbon Tetrachloride			not detected	1	0.27 ug/L	0.50 ug/L	
71-43-2	Benzene			not detected	1	0.16 ug/L	0.50 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.19 ug/L	0.50 ug/L	
79-01-6	Trichloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.16 ug/L	0.50 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.25 ug/L	1.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	1	0.16 ug/L	0.50 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	nle	0.26 ug/L	1.00 ug/L	
108-88-3	Toluene			not detected	1000	0.15 ug/L	0.50 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	1	0.12 ug/L	0.50 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.14 ug/L	0.50 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.20 ug/L	0.50 ug/L	
126-48-1	Dibromochloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
108-90-7	Chlorobenzene			not detected	50	0.15 ug/L	0.50 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.16 ug/L	0.50 ug/L	
630-20-6	1,1,1,2-tetrachloroethane			not detected	1	0.15 ug/L	0.50 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.27 ug/L	1.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.14 ug/L	0.50 ug/L	
100-42-5	Styrene			not detected	100	0.12 ug/L	0.50 ug/L	
75-25-2	Bromoform			not detected	4	0.14 ug/L	1.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1	0.12 ug/L	0.50 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.12 ug/L	0.50 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	

*Results between MDL and RL are estimated values

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9C 07Nov2005

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
J= Estimated concentration, value falls between R.L. and M.D.L.

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time
R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
M3-TMP-02A

Lab Name: FMETL Contract:

Lab Code: 13461 Case No.: MW SAS No.: SDG No.: 90433

Matrix: (soil/water) WATER Lab Sample ID: 9043303

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VA4812.D

Level: (low/med) LOW Date Received: 11/2/2009

% Moisture: not dec. Date Analyzed: 11/3/2009

GC Column: RTX-VM ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 3/90

000024

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VA4813.D	Sample Name	9043304
Operator	ROBERTS	Field ID	M-3 TMP-02B
Date Acquired	3 Nov 2009 5:58 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	5	2.09 ug/L	5.00 ug/L	
107131	Acrylonitrile			not detected	2	1.64 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	1.89 ug/L	5.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.18 ug/L	0.50 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.12 ug/L	0.50 ug/L	
75718	Dichlorodifluoromethane			not detected	1000	0.22 ug/L	1.00 ug/L	
74-87-3	Chloromethane			not detected	nle	0.10 ug/L	1.00 ug/L	
75-01-4	Vinyl Chloride			not detected	1	0.22 ug/L	1.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.25 ug/L	1.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.22 ug/L	1.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	2000	0.18 ug/L	1.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	1	0.20 ug/L	0.50 ug/L	
67-64-1	Acetone			not detected	6000	0.18 ug/L	0.50 ug/L	
75-15-0	Carbon Disulfide			not detected	700	0.18 ug/L	0.50 ug/L	
75-09-2	Methylene Chloride			not detected	3	0.16 ug/L	0.50 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.20 ug/L	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	50	0.19 ug/L	0.50 ug/L	
108-05-4	Vinyl Acetate			not detected	7000	0.20 ug/L	0.50 ug/L	
78-93-3	2-Butanone			not detected	300	0.16 ug/L	1.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	70	0.14 ug/L	0.50 ug/L	
67-66-3	Chloroform			not detected	70	0.21 ug/L	0.50 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.17 ug/L	0.50 ug/L	
56-23-5	Carbon Tetrachloride			not detected	1	0.27 ug/L	0.50 ug/L	
71-43-2	Benzene			not detected	1	0.16 ug/L	0.50 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.19 ug/L	0.50 ug/L	
79-01-6	Trichloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.16 ug/L	0.50 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.25 ug/L	1.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	1	0.16 ug/L	0.50 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	nle	0.26 ug/L	1.00 ug/L	
108-88-3	Toluene			not detected	1000	0.15 ug/L	0.50 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	1	0.12 ug/L	0.50 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.14 ug/L	0.50 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.20 ug/L	0.50 ug/L	
126-48-1	Dibromochloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
108-90-7	Chlorobenzene			not detected	50	0.15 ug/L	0.50 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.16 ug/L	0.50 ug/L	
630-20-6	1,1,1,2-tetrachloroethane			not detected	1	0.15 ug/L	0.50 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.27 ug/L	1.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.14 ug/L	0.50 ug/L	
100-42-5	Styrene			not detected	100	0.12 ug/L	0.50 ug/L	
75-25-2	Bromoform			not detected	4	0.14 ug/L	1.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1	0.12 ug/L	0.50 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.12 ug/L	0.50 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	

*Results between MDL and RL are estimated values

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9C 07Nov2005

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
J= Estimated concentration, value falls between R.L. and M.D.L.
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time
R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
M3-TMP-02B

Lab Name: FMETL Contract:
Lab Code: 13461 Case No.: MW SAS No.: SDG No.: 90433
Matrix: (soil/water) WATER Lab Sample ID: 9043304
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VA4813.D
Level: (low/med) LOW Date Received: 11/2/2009
% Moisture: not dec. Date Analyzed: 11/3/2009
GC Column: RTX-VM ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 3/90

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VA4814.D	Sample Name	9043305
Operator	ROBERTS	Field ID	M-3 TMP-03A
Date Acquired	3 Nov 2009 6:29 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	5	2.09 ug/L	5.00 ug/L	
107131	Acrylonitrile			not detected	2	1.64 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	1.89 ug/L	5.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.18 ug/L	0.50 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.12 ug/L	0.50 ug/L	
75718	Dichlorodifluoromethane			not detected	1000	0.22 ug/L	1.00 ug/L	
74-87-3	Chloromethane			not detected	nle	0.10 ug/L	1.00 ug/L	
75-01-4	Vinyl Chloride			not detected	1	0.22 ug/L	1.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.25 ug/L	1.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.22 ug/L	1.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	2000	0.18 ug/L	1.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	1	0.20 ug/L	0.50 ug/L	
67-64-1	Acetone			not detected	6000	0.18 ug/L	0.50 ug/L	
75-15-0	Carbon Disulfide			not detected	700	0.18 ug/L	0.50 ug/L	
75-09-2	Methylene Chloride			not detected	3	0.16 ug/L	0.50 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.20 ug/L	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	50	0.19 ug/L	0.50 ug/L	
108-05-4	Vinyl Acetate			not detected	7000	0.20 ug/L	0.50 ug/L	
78-93-3	2-Butanone			not detected	300	0.16 ug/L	1.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	70	0.14 ug/L	0.50 ug/L	
67-66-3	Chloroform			not detected	70	0.21 ug/L	0.50 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.17 ug/L	0.50 ug/L	
56-23-5	Carbon Tetrachloride			not detected	1	0.27 ug/L	0.50 ug/L	
71-43-2	Benzene			not detected	1	0.16 ug/L	0.50 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.19 ug/L	0.50 ug/L	
79-01-6	Trichloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.16 ug/L	0.50 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.25 ug/L	1.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	1	0.16 ug/L	0.50 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	nle	0.26 ug/L	1.00 ug/L	
108-88-3	Toluene			not detected	1000	0.15 ug/L	0.50 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	1	0.12 ug/L	0.50 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.14 ug/L	0.50 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.20 ug/L	0.50 ug/L	
126-48-1	Dibromochloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
108-90-7	Chlorobenzene	15.75	7105	0.20 ug/L	50	0.15 ug/L	0.50 ug/L	J
100-41-4	Ethylbenzene			not detected	700	0.16 ug/L	0.50 ug/L	
630-20-6	1,1,1,2-tetrachloroethane			not detected	1	0.15 ug/L	0.50 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.27 ug/L	1.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.14 ug/L	0.50 ug/L	
100-42-5	Styrene	16.89	10649	0.29 ug/L	100	0.12 ug/L	0.50 ug/L	J
75-25-2	Bromoform			not detected	4	0.14 ug/L	1.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1	0.12 ug/L	0.50 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.12 ug/L	0.50 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	

*Results between MDL and RL are estimated values

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9C 07Nov2005

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
J= Estimated concentration, value falls between R.L. and M.D.L.

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time
R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
M3-TMP-03A

Lab Name: FMETL Contract:
Lab Code: 13461 Case No.: MW SAS No.: SDG No.: 90433
Matrix: (soil/water) WATER Lab Sample ID: 9043305
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VA4814.D
Level: (low/med) LOW Date Received: 11/2/2009
% Moisture: not dec. Date Analyzed: 11/3/2009
GC Column: RTX-VM ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 3

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1.	Alkene: Branched	11.47	5	J
2.	Alkane: Cyclic	12.84	4	J
3.	Alkane: Cyclic	13.41	3	J

FORM I VOA-TIC 3/90

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VA4815.D	Sample Name	9043306
Operator	ROBERTS	Field ID	M-3 TMP-03B
Date Acquired	3 Nov 2009 7:00 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	5	2.09 ug/L	5.00 ug/L	
107131	Acrylonitrile			not detected	2	1.64 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	1.89 ug/L	5.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.18 ug/L	0.50 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.12 ug/L	0.50 ug/L	
75718	Dichlorodifluoromethane			not detected	1000	0.22 ug/L	1.00 ug/L	
74-87-3	Chloromethane			not detected	nle	0.10 ug/L	1.00 ug/L	
75-01-4	Vinyl Chloride			not detected	1	0.22 ug/L	1.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.25 ug/L	1.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.22 ug/L	1.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	2000	0.18 ug/L	1.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	1	0.20 ug/L	0.50 ug/L	
67-64-1	Acetone			not detected	6000	0.18 ug/L	0.50 ug/L	
75-15-0	Carbon Disulfide			not detected	700	0.18 ug/L	0.50 ug/L	
75-09-2	Methylene Chloride			not detected	3	0.16 ug/L	0.50 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.20 ug/L	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	50	0.19 ug/L	0.50 ug/L	
108-05-4	Vinyl Acetate			not detected	7000	0.20 ug/L	0.50 ug/L	
78-93-3	2-Butanone			not detected	300	0.16 ug/L	1.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	70	0.14 ug/L	0.50 ug/L	
67-66-3	Chloroform			not detected	70	0.21 ug/L	0.50 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.17 ug/L	0.50 ug/L	
56-23-5	Carbon Tetrachloride			not detected	1	0.27 ug/L	0.50 ug/L	
71-43-2	Benzene			not detected	1	0.16 ug/L	0.50 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.19 ug/L	0.50 ug/L	
79-01-6	Trichloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.16 ug/L	0.50 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.25 ug/L	1.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	1	0.16 ug/L	0.50 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	nle	0.26 ug/L	1.00 ug/L	
108-88-3	Toluene			not detected	1000	0.15 ug/L	0.50 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	1	0.12 ug/L	0.50 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.14 ug/L	0.50 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.20 ug/L	0.50 ug/L	
126-48-1	Dibromochloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
108-90-7	Chlorobenzene	15.75	18444	0.48 ug/L	50	0.15 ug/L	0.50 ug/L	J
100-41-4	Ethylbenzene			not detected	700	0.16 ug/L	0.50 ug/L	
630-20-6	1,1,1,2-tetrachloroethane			not detected	1	0.15 ug/L	0.50 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.27 ug/L	1.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.14 ug/L	0.50 ug/L	
100-42-5	Styrene	16.89	16127	0.40 ug/L	100	0.12 ug/L	0.50 ug/L	J
75-25-2	Bromoform			not detected	4	0.14 ug/L	1.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1	0.12 ug/L	0.50 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.12 ug/L	0.50 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	

*Results between MDL and RL are estimated values

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9C 07Nov2005

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
J= Estimated concentration, value falls between R.L. and M.D.L.

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time
R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
M3-TMP-03B

Lab Name: FMETL Contract:
Lab Code: 13461 Case No.: MW SAS No.: SDG No.: 90433
Matrix: (soil/water) WATER Lab Sample ID: 9043306
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VA4815.D
Level: (low/med) LOW Date Received: 11/2/2009
% Moisture: not dec. Date Analyzed: 11/3/2009
GC Column: RTX-VM ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 13

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1.	Alkane: Cyclic	9.14	11	J
2.	unknown hydrocarbon	10.24	4	J
3.	Alkane: Cyclic	10.39	8	J
4.	Alkane: Cyclic	10.47	9	J
5.	Alkane: Cyclic	10.55	14	J
6.	Alkane: Cyclic	11.47	32	J
7.	Alkane: Cyclic	11.78	3	J
8.	Alkane: Cyclic	11.99	4	J
9.	Alkane: Cyclic	12.83	18	J
10.	Alkane: Cyclic	13.15	6	J
11.	Alkane: Cyclic	13.41	14	J
12.	Alkane: Cyclic	13.55	7	J
13.	Alkane: Cyclic	14.24	8	J

FORM I VOA-TIC 3/90

000030

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VA4816.D	Sample Name	9043307
Operator	ROBERTS	Field ID	M-3 TMP-04A
Date Acquired	3 Nov 2009 7:31 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	5	2.09 ug/L	5.00 ug/L	
107131	Acrylonitrile			not detected	2	1.64 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	1.89 ug/L	5.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.18 ug/L	0.50 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.12 ug/L	0.50 ug/L	
75718	Dichlorodifluoromethane			not detected	1000	0.22 ug/L	1.00 ug/L	
74-87-3	Chloromethane			not detected	nle	0.10 ug/L	1.00 ug/L	
75-01-4	Vinyl Chloride			not detected	1	0.22 ug/L	1.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.25 ug/L	1.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.22 ug/L	1.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	2000	0.18 ug/L	1.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	1	0.20 ug/L	0.50 ug/L	
67-64-1	Acetone			not detected	6000	0.18 ug/L	0.50 ug/L	
75-15-0	Carbon Disulfide			not detected	700	0.18 ug/L	0.50 ug/L	
75-09-2	Methylene Chloride			not detected	3	0.16 ug/L	0.50 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.20 ug/L	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	50	0.19 ug/L	0.50 ug/L	
108-05-4	Vinyl Acetate			not detected	7000	0.20 ug/L	0.50 ug/L	
78-93-3	2-Butanone			not detected	300	0.16 ug/L	1.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	70	0.14 ug/L	0.50 ug/L	
67-66-3	Chloroform			not detected	70	0.21 ug/L	0.50 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.17 ug/L	0.50 ug/L	
56-23-5	Carbon Tetrachloride			not detected	1	0.27 ug/L	0.50 ug/L	
71-43-2	Benzene			not detected	1	0.16 ug/L	0.50 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.19 ug/L	0.50 ug/L	
79-01-6	Trichloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.16 ug/L	0.50 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.25 ug/L	1.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	1	0.16 ug/L	0.50 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	nle	0.26 ug/L	1.00 ug/L	
108-88-3	Toluene			not detected	1000	0.15 ug/L	0.50 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	1	0.12 ug/L	0.50 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.14 ug/L	0.50 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.20 ug/L	0.50 ug/L	
126-48-1	Dibromochloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
108-90-7	Chlorobenzene	15.75	13791	0.39 ug/L	50	0.15 ug/L	0.50 ug/L	J
100-41-4	Ethylbenzene			not detected	700	0.16 ug/L	0.50 ug/L	
630-20-6	1,1,1,2-tetrachloroethane			not detected	1	0.15 ug/L	0.50 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.27 ug/L	1.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.14 ug/L	0.50 ug/L	
100-42-5	Styrene			not detected	100	0.12 ug/L	0.50 ug/L	
75-25-2	Bromoform			not detected	4	0.14 ug/L	1.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1	0.12 ug/L	0.50 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.12 ug/L	0.50 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	

*Results between MDL and RL are estimated values

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9C 07Nov2005

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
J= Estimated concentration, value falls between R.L. and M.D.L.

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time
R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M3-TMP-04A

Lab Name: FMETL Contract:

Lab Code: 13461 Case No.: MW SAS No.: SDG No.: 90433

Matrix: (soil/water) WATER Lab Sample ID: 9043307

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VA4816.D

Level: (low/med) LOW Date Received: 11/2/2009

% Moisture: not dec. Date Analyzed: 11/3/2009

GC Column: RTX-VM ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 3/90

000032

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VA4817.D	Sample Name	9043308
Operator	ROBERTS	Field ID	M-3 TMP-04B
Date Acquired	3 Nov 2009 8:02 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result		Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not	detected	5	2.09 ug/L	5.00 ug/L	
107131	Acrylonitrile			not	detected	2	1.64 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol			not	detected	100	1.89 ug/L	5.00 ug/L	
1634044	Methyl-tert-Butyl ether			not	detected	70	0.18 ug/L	0.50 ug/L	
108203	Di-isopropyl ether			not	detected	20000	0.12 ug/L	0.50 ug/L	
75718	Dichlorodifluoromethane			not	detected	1000	0.22 ug/L	1.00 ug/L	
74-87-3	Chloromethane			not	detected	nle	0.10 ug/L	1.00 ug/L	
75-01-4	Vinyl Chloride			not	detected	1	0.22 ug/L	1.00 ug/L	
74-83-9	Bromomethane			not	detected	10	0.25 ug/L	1.00 ug/L	
75-00-3	Chloroethane			not	detected	nle	0.22 ug/L	1.00 ug/L	
75-69-4	Trichlorofluoromethane			not	detected	2000	0.18 ug/L	1.00 ug/L	
75-35-4	1,1-Dichloroethene			not	detected	1	0.20 ug/L	0.50 ug/L	
67-64-1	Acetone			not	detected	6000	0.18 ug/L	0.50 ug/L	
75-15-0	Carbon Disulfide			not	detected	700	0.18 ug/L	0.50 ug/L	
75-09-2	Methylene Chloride			not	detected	3	0.16 ug/L	0.50 ug/L	
156-60-5	trans-1,2-Dichloroethene			not	detected	100	0.20 ug/L	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not	detected	50	0.19 ug/L	0.50 ug/L	
108-05-4	Vinyl Acetate			not	detected	7000	0.20 ug/L	0.50 ug/L	
78-93-3	2-Butanone			not	detected	300	0.16 ug/L	1.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not	detected	70	0.14 ug/L	0.50 ug/L	
67-66-3	Chloroform			not	detected	70	0.21 ug/L	0.50 ug/L	
75-55-6	1,1,1-Trichloroethane			not	detected	30	0.17 ug/L	0.50 ug/L	
56-23-5	Carbon Tetrachloride			not	detected	1	0.27 ug/L	0.50 ug/L	
71-43-2	Benzene			not	detected	1	0.16 ug/L	0.50 ug/L	
107-06-2	1,2-Dichloroethane			not	detected	2	0.19 ug/L	0.50 ug/L	
79-01-6	Trichloroethene	11.42	8647	0.63	ug/L	1	0.18 ug/L	0.50 ug/L	
78-87-5	1,2-Dichloropropane			not	detected	1	0.16 ug/L	0.50 ug/L	
75-27-4	Bromodichloromethane			not	detected	1	0.14 ug/L	0.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not	detected	nle	0.25 ug/L	1.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not	detected	1	0.16 ug/L	0.50 ug/L	
108-10-1	4-Methyl-2-Pentanone			not	detected	nle	0.26 ug/L	1.00 ug/L	
108-88-3	Toluene			not	detected	1000	0.15 ug/L	0.50 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not	detected	1	0.12 ug/L	0.50 ug/L	
79-00-5	1,1,2-Trichloroethane			not	detected	3	0.14 ug/L	0.50 ug/L	
127-18-4	Tetrachloroethene			not	detected	1	0.18 ug/L	0.50 ug/L	
591-78-6	2-Hexanone			not	detected	nle	0.20 ug/L	0.50 ug/L	
126-48-1	Dibromochloromethane			not	detected	1	0.14 ug/L	0.50 ug/L	
108-90-7	Chlorobenzene			not	detected	50	0.15 ug/L	0.50 ug/L	
100-41-4	Ethylbenzene			not	detected	700	0.16 ug/L	0.50 ug/L	
630-20-6	1,1,1,2-tetrachloroethane			not	detected	1	0.15 ug/L	0.50 ug/L	
1330-20-7	m+p-Xylenes			not	detected	nle	0.27 ug/L	1.00 ug/L	
1330-20-7	o-Xylene			not	detected	nle	0.14 ug/L	0.50 ug/L	
100-42-5	Styrene			not	detected	100	0.12 ug/L	0.50 ug/L	
75-25-2	Bromoform			not	detected	4	0.14 ug/L	1.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not	detected	1	0.12 ug/L	0.50 ug/L	
541-73-1	1,3-Dichlorobenzene			not	detected	600	0.12 ug/L	0.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not	detected	75	0.12 ug/L	0.50 ug/L	
95-50-1	1,2-Dichlorobenzene			not	detected	600	0.12 ug/L	0.50 ug/L	

*Results between MDL and RL are estimated values

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9C 07Nov2005

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
J= Estimated concentration, value falls between R.L. and M.D.L.

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time
R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

M3-TMP-04B

Lab Name: FMETL Contract:

Lab Code: 13461 Case No.: MW SAS No.: SDG No.: 90433

Matrix: (soil/water) WATER Lab Sample ID: 9043308

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VA4817.D

Level: (low/med) LOW Date Received: 11/2/2009

% Moisture: not dec. Date Analyzed: 11/3/2009

GC Column: RTX-VM ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 3/90

000034

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VA4819.D	Sample Name	9043310
Operator	ROBERTS	Field ID	M-3 TMP-05A
Date Acquired	3 Nov 2009 9:04 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	5	2.09 ug/L	5.00 ug/L	
107131	Acrylonitrile			not detected	2	1.64 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	1.89 ug/L	5.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.18 ug/L	0.50 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.12 ug/L	0.50 ug/L	
75718	Dichlorodifluoromethane			not detected	1000	0.22 ug/L	1.00 ug/L	
74-87-3	Chloromethane			not detected	nle	0.10 ug/L	1.00 ug/L	
75-01-4	Vinyl Chloride			not detected	1	0.22 ug/L	1.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.25 ug/L	1.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.22 ug/L	1.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	2000	0.18 ug/L	1.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	1	0.20 ug/L	0.50 ug/L	
67-64-1	Acetone			not detected	6000	0.18 ug/L	0.50 ug/L	
75-15-0	Carbon Disulfide			not detected	700	0.18 ug/L	0.50 ug/L	
75-09-2	Methylene Chloride			not detected	3	0.16 ug/L	0.50 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.20 ug/L	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	50	0.19 ug/L	0.50 ug/L	
108-05-4	Vinyl Acetate			not detected	7000	0.20 ug/L	0.50 ug/L	
78-93-3	2-Butanone			not detected	300	0.16 ug/L	1.00 ug/L	
156-59-2	cis-1,2-Dichloroethene			not detected	70	0.14 ug/L	0.50 ug/L	
67-66-3	Chloroform			not detected	70	0.21 ug/L	0.50 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.17 ug/L	0.50 ug/L	
56-23-5	Carbon Tetrachloride			not detected	1	0.27 ug/L	0.50 ug/L	
71-43-2	Benzene			not detected	1	0.16 ug/L	0.50 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.19 ug/L	0.50 ug/L	
79-01-6	Trichloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.16 ug/L	0.50 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.25 ug/L	1.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	1	0.16 ug/L	0.50 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	nle	0.26 ug/L	1.00 ug/L	
108-88-3	Toluene			not detected	1000	0.15 ug/L	0.50 ug/L	
10061-02-6	trans-1,3-Dichloropropene			not detected	1	0.12 ug/L	0.50 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.14 ug/L	0.50 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.20 ug/L	0.50 ug/L	
126-48-1	Dibromochloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
108-90-7	Chlorobenzene			not detected	50	0.15 ug/L	0.50 ug/L	
100-41-4	Ethylbenzene			not detected	700	0.16 ug/L	0.50 ug/L	
630-20-6	1,1,1,2-tetrachloroethane			not detected	1	0.15 ug/L	0.50 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.27 ug/L	1.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.14 ug/L	0.50 ug/L	
100-42-5	Styrene			not detected	100	0.12 ug/L	0.50 ug/L	
75-25-2	Bromoform			not detected	4	0.14 ug/L	1.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1	0.12 ug/L	0.50 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.12 ug/L	0.50 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	

*Results between MDL and RL are estimated values

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9C 07Nov2005

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
J= Estimated concentration, value falls between R.L. and M.D.L.

MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time
R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
M3-TMP-05A

Lab Name: FMETL Contract:

Lab Code: 13461 Case No.: MW SAS No.: SDG No.: 90433

Matrix: (soil/water) WATER Lab Sample ID: 9043310

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VA4819.D

Level: (low/med) LOW Date Received: 11/2/2009

% Moisture: not dec. Date Analyzed: 11/3/2009

GC Column: RTX-VM ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 0

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 3/90

Volatile Analysis Report
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEP Certification #13461

Data File	VA4821.D	Sample Name	9043312
Operator	ROBERTS	Field ID	M-3 TMP-05B
Date Acquired	3 Nov 2009 10:05 pm	Sample Multiplier	1

CAS#	Compound Name	R.T.	Response	Result	Regulatory Level (ug/l)*	MDL	RL	Qualifiers
107028	Acrolein			not detected	5	2.09 ug/L	5.00 ug/L	
107131	Acrylonitrile			not detected	2	1.64 ug/L	5.00 ug/L	
75650	tert-Butyl alcohol			not detected	100	1.89 ug/L	5.00 ug/L	
1634044	Methyl-tert-Butyl ether			not detected	70	0.18 ug/L	0.50 ug/L	
108203	Di-isopropyl ether			not detected	20000	0.12 ug/L	0.50 ug/L	
75718	Dichlorodifluoromethane			not detected	1000	0.22 ug/L	1.00 ug/L	
74-87-3	Chloromethane			not detected	nle	0.10 ug/L	1.00 ug/L	
75-01-4	Vinyl Chloride			not detected	1	0.22 ug/L	1.00 ug/L	
74-83-9	Bromomethane			not detected	10	0.25 ug/L	1.00 ug/L	
75-00-3	Chloroethane			not detected	nle	0.22 ug/L	1.00 ug/L	
75-69-4	Trichlorofluoromethane			not detected	2000	0.18 ug/L	1.00 ug/L	
75-35-4	1,1-Dichloroethene			not detected	1	0.20 ug/L	0.50 ug/L	
67-64-1	Acetone			not detected	6000	0.18 ug/L	0.50 ug/L	
75-15-0	Carbon Disulfide			not detected	700	0.18 ug/L	0.50 ug/L	
75-09-2	Methylene Chloride			not detected	3	0.16 ug/L	0.50 ug/L	
156-60-5	trans-1,2-Dichloroethene			not detected	100	0.20 ug/L	0.50 ug/L	
75-35-3	1,1-Dichloroethane			not detected	50	0.19 ug/L	0.50 ug/L	
108-05-4	Vinyl Acetate			not detected	7000	0.20 ug/L	0.50 ug/L	
78-93-3	2-Butanone			not detected	300	0.16 ug/L	1.00 ug/L	
156-59-2	cis-1,2-Dichloroethene	9.66	13115	0.94 ug/L	70	0.14 ug/L	0.50 ug/L	
67-66-3	Chloroform			not detected	70	0.21 ug/L	0.50 ug/L	
75-55-6	1,1,1-Trichloroethane			not detected	30	0.17 ug/L	0.50 ug/L	
56-23-5	Carbon Tetrachloride			not detected	1	0.27 ug/L	0.50 ug/L	
71-43-2	Benzene			not detected	1	0.16 ug/L	0.50 ug/L	
107-06-2	1,2-Dichloroethane			not detected	2	0.19 ug/L	0.50 ug/L	
79-01-6	Trichloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
78-87-5	1,2-Dichloropropane			not detected	1	0.16 ug/L	0.50 ug/L	
75-27-4	Bromodichloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
110-75-8	2-Chloroethyl vinyl ether			not detected	nle	0.25 ug/L	1.00 ug/L	
10061-01-5	cis-1,3-Dichloropropene			not detected	1	0.16 ug/L	0.50 ug/L	
108-10-1	4-Methyl-2-Pentanone			not detected	nle	0.26 ug/L	1.00 ug/L	
108-88-3	Toluene	13.37	22984	0.46 ug/L	1000	0.15 ug/L	0.50 ug/L	J
10061-02-6	trans-1,3-Dichloropropene			not detected	1	0.12 ug/L	0.50 ug/L	
79-00-5	1,1,2-Trichloroethane			not detected	3	0.14 ug/L	0.50 ug/L	
127-18-4	Tetrachloroethene			not detected	1	0.18 ug/L	0.50 ug/L	
591-78-6	2-Hexanone			not detected	nle	0.20 ug/L	0.50 ug/L	
126-48-1	Dibromochloromethane			not detected	1	0.14 ug/L	0.50 ug/L	
108-90-7	Chlorobenzene	15.75	10326	0.30 ug/L	50	0.15 ug/L	0.50 ug/L	J
100-41-4	Ethylbenzene			not detected	700	0.16 ug/L	0.50 ug/L	
630-20-6	1,1,1,2-tetrachloroethane			not detected	1	0.15 ug/L	0.50 ug/L	
1330-20-7	m+p-Xylenes			not detected	nle	0.27 ug/L	1.00 ug/L	
1330-20-7	o-Xylene			not detected	nle	0.14 ug/L	0.50 ug/L	
100-42-5	Styrene			not detected	100	0.12 ug/L	0.50 ug/L	
75-25-2	Bromoform			not detected	4	0.14 ug/L	1.00 ug/L	
79-34-5	1,1,2,2-Tetrachloroethane			not detected	1	0.12 ug/L	0.50 ug/L	
541-73-1	1,3-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	
106-46-7	1,4-Dichlorobenzene			not detected	75	0.12 ug/L	0.50 ug/L	
95-50-1	1,2-Dichlorobenzene			not detected	600	0.12 ug/L	0.50 ug/L	

*Results between MDL and RL are estimated values

*Higher of PQL's and Ground Water Quality Criteria as per N.J.A.C. 7:9C 07Nov2005

Qualifiers

B = Compound found in related blank
E = Value above linear range
D = Value from dilution
PQL = Practical Quantitation Limit
J= Estimated concentration, value falls between R.L. and M.D.L.
MDL = Method Detection Limit
NLE = No Limit Established
R.T. = Retention Time
R.L. = Reporting Limit

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
M3-TMP-05B

Lab Name: FMETL Contract:
Lab Code: 13461 Case No.: MW SAS No.: SDG No.: 90433
Matrix: (soil/water) WATER Lab Sample ID: 9043312
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: VA4821.D
Level: (low/med) LOW Date Received: 11/2/2009
% Moisture: not dec. Date Analyzed: 11/3/2009
GC Column: RTX-VM ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 1

CAS NO.	COMPOUND NAME	RT	EST. CONC.	Q
1. 000496-11-7	Indane	20.42	3	JN

FORM I VOA-TIC 3/90

000038

ATTACHMENT B

Table 7 Summary of Long Term Monitoring Recommendations August 2013 Baseline Groundwater Sampling Report

Table 7
Summary of Long Term Monitoring Recommendations
August 2013 Baseline Groundwater Sampling Report
Fort Monmouth, New Jersey

Site	Historical Exceedances		August 2013 Exceedances[1]		August 2013 Sampling				Recommended Sampling in 2014[2]				Frequency		Comments
	Monitoring Wells (MWs) Exhibiting Exceedances	Analytes	MWs Exhibiting Exceedances	Analytes	Number of MWs sampled	Monitoring wells sampled	Analysis	Sampling methodology	Number of MWs to be sampled	MWs to be sampled	Analysis	Sampling Methodology	Performance Work Statement (PWS)	August 2013 recommendation	
M2	M2MW02 to M2MW13, M2MW21 to M2MW24	Metals, benzene, chlorobenzene, TBA	M2MW03	Benzene, chlorobenzene	16	M2MW02 to M2MW13, M2MW21 to M2MW24	VOCs & TICs-EPA Method 8260C Pesticides-EPA Method 8081B	LFPS	6	M2MW03, M2MW10, M2MW11, M2MW21, M2MW22, M2MW24	VOCs-EPA Method 8260C	PDB	Two rounds	Two additional rounds of sampling - PDB	Metals sampling discontinued due to background sources. Pesticides sampling is not recommended due to no detection in August 2013. Well to be retained for downgradient monitoring of benzene.
M3	M3MW02, M3MW04 to M3MW14, M3MW07A,	Metals, VC	M3MW07	VC	12	M3MW04 to M3MW14, M3MW07A,	VOCs & TICs-EPA Method 8260C Metals-EPA Method 6010C/7470A	LFPS	1	M3MW02	VOCs-EPA Method 8260C Metals-EPA Method 6010C/7470A (M3MW02)	LFPS	Annual	One additional round - LFPS	Metals sampling discontinued due to background sources. M3MW02 not sampled due to low water column and silt. Sample for VOCs and metals in next round.
M4	M4MW07 to M4MW10	Metals	None	N/A	6	M4MW05 to M4MW10	VOCs & TICs-EPA Method 8260C Metals-EPA Method 6010C/7470A	LFPS	0	N/A	N/A	N/A	Two rounds	Discontinued	Metals sampling discontinued due to background sources. No exceedances, discontinue sampling.
M5	M5MW11, M5MW16, M5MW20, M5MW23	PCE, TCE, VC	M5MW11, M5MW16, M5MW20, M5MW23	PCE, TCE, VC	10	M5MW10 to M5MW16, M5WM18 to M5MW20, M5MW23	VOCs & TICs-EPA Method 8260C	PDB	4	M5MW11, M5MW16, M5MW20, M5MW23	VOCs-EPA Method 8260C	PDB	Annual	Annual - PDB	
M8	M8MW11 to M8MW23, RM8MW24, 697MW01	Metals, benzene	M8MW12, M8MW14	Pb, PCE	13	M8MW12 to M8MW23, RM8MW24	VOCs & TICs-EPA Method 8260C Pesticides-EPA Method 8081B Lead-EPA Method 6010C	LFPS	8	M8MW11, M8MW12, M8MW15, M8MW16, M8MW17, M8MW21, M8MW24, 697MW01	Pb-EPA Method 6010C (M8MW11, M8MW17, M8MW21, and 697MW01), VOCs-EPA Method 8260C (M8MW11, M8MW12, M8MW15, and 697MW01) Pesticides-EPA Method 8081B (697MW01)	LFPS	Annual	Annual - LFPS	Metals sampling discontinued due to background sources at the exception of Pb (M8MW11, M8MW17, and M8MW21) and Mn (M8MW14). PCE was the only VOCs exceedance in August 2013. M8MW11 was not part of the Aug 2013 baseline sampling. Due to historical exceedances for Pb, reintroduced in long term monitoring sampling program. 697MW01 not sampled in August 2013. Must locate and sample for VOC, Pb, and pesticides.
M12	M12MW11 to M12MW26	Metals	None	N/A	16	M12MW11 to M12MW26	Lead-EPA Method 6010C	LFPS	0	N/A	N/A	N/A	Two rounds	Discontinued	Metals sampling discontinued due to background sources. No Pb exceedance in August 2013, discontinue sampling
M14	M14MW19 to M14MW24	Metals	None	N/A	6	M14MW19 to M14MW24	VOCs & TICs-EPA Method 8260C	PDB	0	N/A	N/A	N/A	Annual	Discontinued	Metals sampling discontinued due to background sources. No VOCs exceedance in August 2013, discontinue sampling.
M18	M18MW22, M18MW23, MP18MW24, MP18MW25	Benzene, 1,2-DCA, carbon tetrachloride, metals	M18MW22	1,2-DCA	3	M18MW22, MP18MW24, MP18MW25	VOCs & TICs-EPA Method 8260C	PDB	2	M18MW22 M18MW23	VOCs-EPA Method 8260C	PDB	Annual	Annual - PDB	Metals sampling discontinued due to background sources. M18MW23 not sampled in August 2013. Must locate M18MW23 and sample for VOCs.
M22	CW1MW25 to CW1MW33, CW1MW35 to CW1MW40, CW1MW281, CW1MW282, CW1MW291	Metals, TCE	CW1MW29	TCE	16	CW1MW26 to CW1MW40, CW1MW282, CW1MW291	VOCs & TICs-EPA Method 8260C	PDB	4	CW1MW27, CW1MW31, CW1MW29 CW1MW281	VOCs-EPA Method 8260C	PDB	Quarterly	Quarterly - PDB	Metals sampling discontinued due to background sources. CW1MW281 not sampled in August 2013 due to obstruction in the well. Obstruction removed in January 2014.
M25	CW3AMW01 to CW3AMW04	Metals	None	N/A	4	CW3AMW01 to CW3AMW04	VOCs & TICs-EPA Method 8260C Pesticides-EPA Method 8081B Metals-EPA Method 6010C/7470A	LFPS	0	N/A	N/A	N/A	Not on PWS List	Discontinued	Metals sampling discontinued due to background sources.
M53	616MW01, 699MW01 , 699MW02, 699MW04 to 699MW06, 699MW08, 699MW09, 699MW12, 699MW15, 699MW16, 699RW03, 699RW05, 699RW11	Metals, benzene, PCE, 1,2,4-TMB, 1,3,5-TMB, xylenes,TBA, TCE, TICs	699MW06, 699MW16, 699RW03, 699RW05, 699RW11	Benzene, PCE, 1,2,4-TMB, 1,3,5-TMB, xylenes	14	616MW01, 699MW01 , 699MW02, 699MW04 to 699MW06, 699MW08, 699MW09, 699MW12, 699MW15, 699MW16, 699RW03, 699RW05, 699RW11	VOCs & TICs-EPA Method 8260C	LFPS	8	699MW01, 699MW04, 699MW06, 699MW09, 699MW16, 699RW03, 699RW05, 699RW11	VOCs-EPA Method 8260C	PDB	Quarterly	Quarterly - PDB	Metals sampling discontinued due to background sources. List of MWs based on historical and August 2013 analytical results.
M54	296MW01 to 296MW04, 296MW06 to 296MW08	Metals, benzene	296MW06	Benzene	7	296MW01 to 296MW04, 296MW06 to 296MW08	VOCs & TICs-EPA Method 8260C Lead-EPA Method 6010C/7470A	LFPS	2	296MW04, 296MW06	VOC-EPA Method 8260C (296MW06)	PDB	Annual	Annual - PDB	Metals sampling discontinued due to background sources. 296MW04 used as delineation point for 296MW06
M55	290MW01	As, Pb	None	N/A	1	290MW01	Lead-EPA Method 6010C/7470A	LFPS	0	N/A	N/A	N/A	Annual	Discontinued	Metals sampling discontinued due to background sources.
M56	80MW01 to 80MW05, 166MW01	Metals, chlordane	None	N/A	6	80MW01 to 80MW05, 166MW01	Lead-EPA Method 6010C/7470A	LFPS	2	80MW05, 80MW02	Pb-EPA Method 6010C/7470A (80MW05), Pesticides-EPA Method 8081B (80MW02)	LFPS	Annual	one additional round - LFPS	Continue Pb sampling at 80MW05. Other metals considered background concentrations. 80MW02 will be analyzed for pesticides. Monitoring wells will be sampled for one additional round.
M57	108MW01 to 108MW04	Metals	108MW01, 108MW02, 108MW03	Metals	4	108MW01 to 108MW04	VOCs & TICs-EPA Method 8260C Pesticides-EPA Method 8081B Metals-EPA Method 6010C/7470A	LFPS	1	108MW04	Pb-EPA Method 6010C/7470A	LFPS	Not on PWS List	two additional rounds - LFPS	Pb will be analyzed at 108MW04 for two more rounds.
M58	2567MW01, 2567MW03	TBA	None	N/A	7	2567MW01 to 2567MW07	VOCs & TICs-EPA Method 8260C	PDB	2	2567MW01, 2567MW03	VOC-EPA Method 8260C - TBA Only	LFPS	Annual	Two additional rounds of sampling - LFPS	Wells will be analyzed for TBA only for two rounds to confirm presence or lack of contaminant.
M59	1122MW01 to 1122MW06 1122MW07 - not available	Metals	None	N/A	7	1122MW01 to 1122MW07	VOCs & TICs-EPA Method 8260C	PDB	1	1122MW07	VOC-EPA Method 8260C	PDB	Quarterly	One additonal round	One additonal round to confirm results.
M61	283MW01 to 283MW04	Metals, benzene, TICs	None	N/A	4	283MW01 to 283MW04	VOCs & TICs-EPA Method 8260C Lead-EPA Method 6010C/7470A	LFPS	1	283MW02	VOCs-EPA Method 8260C	PDB	Annual	one additional round - PDB	Continue sampling at 283MW03 because of historical benzene exceedances.
M64	812MW01, 812MW02, 812MW04 to 812MW08, 812MW14	Metals, benzene, VC	None	N/A	8	812MW01, 812MW02, 812MW04 to 812MW08, 812MW14	VOCs & TICs-EPA Method 8260C Lead-EPA Method 6010C/7470A	LFPS	1	812MW04	VOC-EPA Method 8260C	PDB	Annual	Annual - PDB	Metals analysis discontinued due to background. VOCs analyzed an annually in 812MW04.
M66	886MW01 , 886MW03, 886MW05, 886RW01 to 886RW08	Metals, bis(2-ethylhexyl)phthalate	None	N/A	13	886MW01 to 886MW05, 886RW01 to 886RW08	VOCs & TICs-EPA Method 8260C SVOCs-EPA Method 8270D Lead-EPA Method 6010C/7470A	LFPS	0	N/A	N/A	N/A	Quarterly	Discontinued	Bis(2-ethylhexyl)phthalate result is anomalous. Metals sampling discontinued due to background sources.
M68	N/A	N/A	565MW01, 565MW01D	PCE, TCE, cis-1,2-DCE, VC	2	565MW01, 565MW01D	VOCs & TICs-EPA Method 8260C	PDB	2	565MW01, 565MW01D	VOC-EPA Method 8260C	PDB	Quarterly	Quarterly - PDB	No historical data available, continue sampling.

Notes:

MWs - monitoring wells
N/A - not applicable
VOCs - volatile organics compounds
SVOCs - semivolatiles organic compounds
TMB - trimethhylbenzene
VC - vinyl chloride
TCE - tetrachloroethene
PCE - tetrachloroethene
1,1-DCA - 1,1-dichloroethane
1,2-DCA - 1,2-dichloroethane
1.1.1-TCA - 1.1.1-trichloroethane
1,2,4-TMB - 1,2,4-trimethylbenzene
1,3,5-TMB - 1,3,5-trimethylbenzene
TICs - tentatively identified compounds
TBA - tert-butyl-alcohol
LFPS - low flow purging and sampling
PDB - passive diffusion bags

1. Exceedance is defined as a parameter that was greater than NJDEP GWQS.
2. The recommendations are for sampling in 2014 to allow for the continued monitoring of groundwater conditions. Remedial investigations are ongoing at many of the sites and these recommendations may be modified based on analysis of new information and evaluation of risk.